



ARIS CONNECT ADMINISTRATOR USER MANUAL

VERSION 10.0 - SERVICE RELEASE 6

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This document applies to ARIS Version 10.0 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 ARIS Connect

This manual contains the online help that is provided for ARIS Connect users with **Administrator** function privileges.

ARIS Connect is an integrated environment in which you can create, display, and change processes, as well as discuss and improve them jointly with other ARIS Connect users. When you open ARIS Connect in your Web browser, you obtain role-based access to the process descriptions that are relevant to you.

As a process expert, you receive access to the corresponding views and options for analyzing and improving processes.

In ARIS Connect projects participants can directly enter comments pertaining to modeled processes and discuss improvement potential with others. With dashboards (page 1170) KPIs can be visualized and controlled and relevant documents can be entered and distributed. The seamless integration with existing ARIS installations is ensured, which also allows users to cooperate with regard to existing processes using the integrated social media.

The functional scope of ARIS Connect depends on the license being used.

News on ARIS is available in ARIS Community.

(http://www.ariscommunity.com/system/files/files/ARIS_10_SR6_Features_Overview.pdf)

Note: You can watch videos for some procedures in the help. If your browser is unable to open the quick videos within the help, please use a different browser. The videos are also available in ARIS Community (<http://www.ariscommunity.com/help/quick-videos>).

2 Help - quick access

The content of the online help in some way represents the user interface of the Classic view (page 613), which is delivered as standard. The help structure of the subject area **Use ARIS Connect** thus reflects the entry points of the header of ARIS Connect: **Work in the portal, Use the Catalog, Collaborate with users, Search content, and Use the repository.**

You can use the **Content** tab, the **Index** tab, and the help search (page 4) to open the relevant help pages. In addition the following links directly open the frequently used help areas.

- ARIS Connect Designer (Create and edit models) (page 857)
- Administrate (page 32)
- Catalog (page 803)
- Check models (semantic checks) (page 1057)
- Collaboration (page 806)
- Contribution (page 748)
- Dashboards (page 1068)
- Documents (Portal) (page 803)
- Documents (Repository) (page 1145)
- Favorites (page 740)
- Filter (page 699)
- Highlighting (page 667)
- Model Viewer (Diagram fact sheet) (page 652)
- Reporting (ARIS Connect Designer (page 976))
- Reporting (Portal) (page 686)
- Repository (page 837)
- Search (page 824)
- Tasks (page 776)
- Versions (page 1066)

3 Text conventions

Menu items, file names, etc. are indicated in texts as follows:

- Menu items, key combinations, dialogs, file names, entries, etc. are displayed in **bold**.
- User-defined entries are shown **<in bold and in angle brackets>**.
- Single-line example texts (for example, a long directory path that covers several lines due to a lack of space) are separated by ↵ at the end of the line.
- File extracts are shown in this font format:
This paragraph contains a file extract.
- Warnings have a colored background:

Warning

This paragraph contains a warning.

4 Help system

This chapter obtains information on how to use the help system.

4.1 What features does the online help offer?

The help system offers you various options for orientation and navigation. This page gives you an overview of the structure and functions of the help system. You will learn how to easily find the information you are looking for.

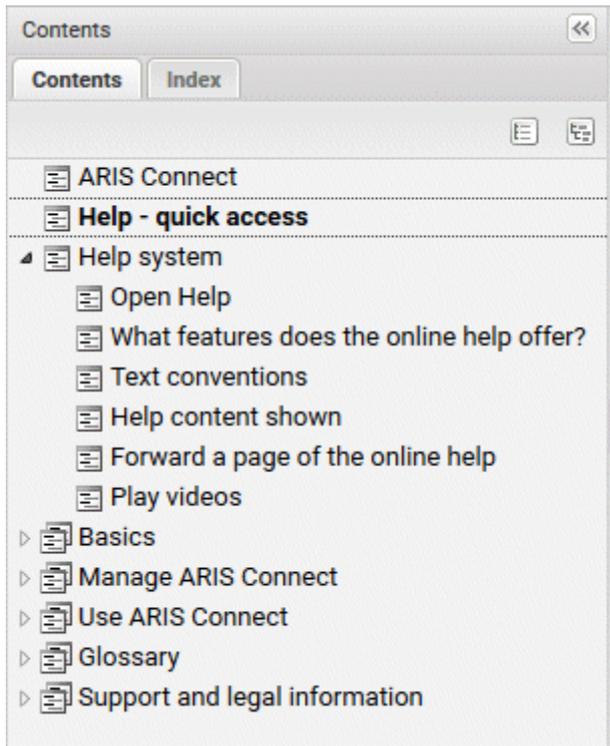
Buttons

The following buttons are available in the help viewer.

Buttons	Action
 Home	Collapses the table of contents and selects the first topic.
 Previous arrow	Selects the previous topic in the table of contents.
 Next arrow	Selects the next topic in the table of contents. If the next topic is a subordinated topic of the selected topic, the superordinate topic is expanded.
 E-mail this page	Opens an e-mail with the current help page in the subject and the link to the current help page in the body.
 Print this page	Opens the Print dialog to print the current help page.
<input type="text" value="Search"/> Search field	Records the search text.
 Search button	Searches for the text entered in the search field.
<input type="checkbox"/> Match partial words Disabled	Searches for every word of the term that matches exactly. For example, if you search for modeling convent , the topics are found with modeling , but no topics with conventions .
<input checked="" type="checkbox"/> Match partial words Enabled	Searches for every word of a term that partially matches. For example, if you search for modeling convent , the topics are found both with modeling and with conventions .
 Collapse	Collapses the table of contents.
 Expand all	Expands the table of contents.

Contents tab

The **Contents** tab contains the structure of the contents as a tree.



The **Contents** tab provides general information, such as the purpose of the product described, basic information on operating the program and the online help system, or the structure of the program interface. You can expand and collapse the tree of the **Contents** tab using the  **Expand all** and  **Collapse** buttons of the help viewer.

REPRESENTATION OF THE USER INTERFACE

To a certain extent, the tree of the **Contents** tab represents the user interface of the standard Classic view (page 613) of ARIS Connect. Depending on the license you are using, you will find the topics Work in the portal (page 612), Use the Catalog (page 803), Collaborate with users (page 806), Search content (page 824), and Use the repository (page 837) in this order, which corresponds to the arrangement of the program components.



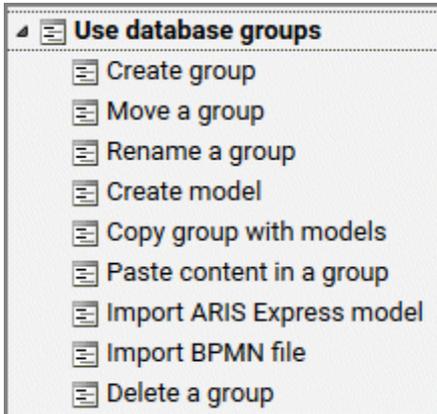
This makes it easy to assign the contents of the help to the program interface.

PROCEDURES AND CONCEPT DESCRIPTIONS

The tree provides also specific information such as procedures and concept descriptions.

THEMATICALLY GROUPED

Procedure descriptions show you how you can use the functionality of the program. They are provided with actively formulated headings such as **Create model**. Related topics are grouped thematically.



USE CASE ORIENTED

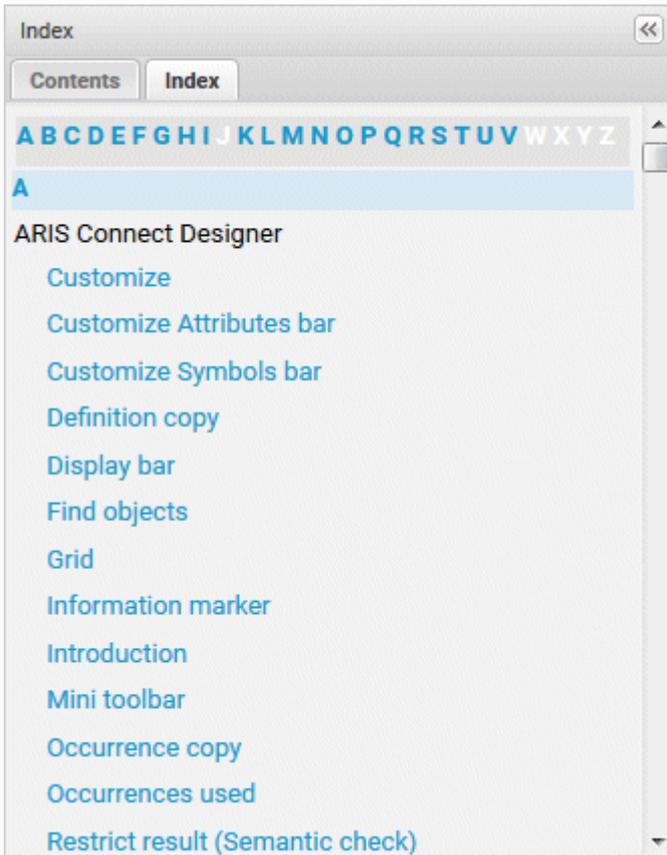
If possible, the procedure pages are arranged in such a way that they result in a use case. The following simple example shows the use case for groups: create group, manages group contents and, if no longer required, delete group.

DISTINCTION BETWEEN PROCEDURES AND CONCEPTS

You will find concept descriptions under **Valuable information**. Headings of concept descriptions are formulated as questions or marked by "How to" formulations, which makes it easy to distinguish between concept descriptions and procedure descriptions.

Index tab

The **Index** tab provides keyword links to the respective help pages in alphabetical order.



The alphabet is arranged above the keywords. For colored letters there are keywords. By clicking on these letters, you jump to the keywords that begin with this letter.

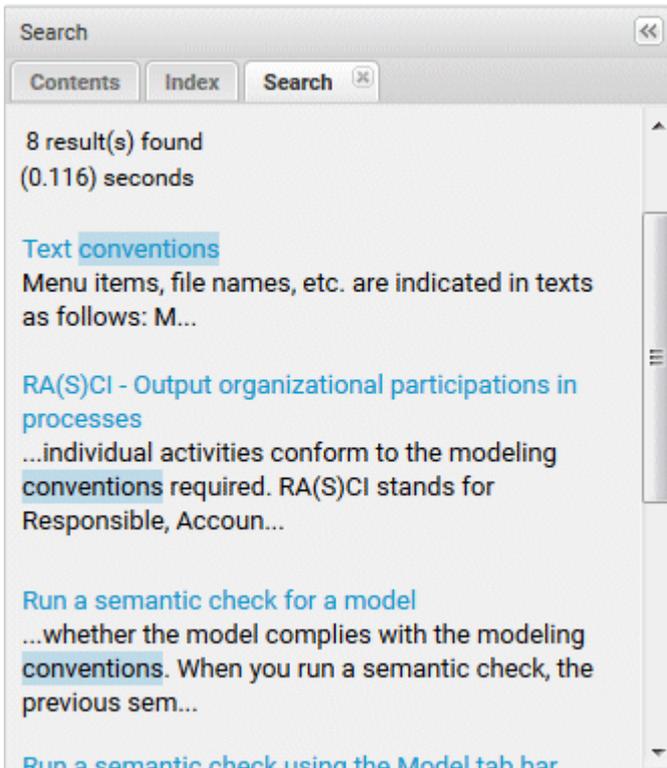
Click on a keyword to display the corresponding help page.

Search

You can insert a search term in the search input field and execute the search.



The **Search** tab appears with the search result.



The search term is highlighted. You can extend the search by enabling the **Match partial words** check box to find every word of a term that that partially matches.

Click on a page to display it.

HELP PAGES

Breadcrumb

A breadcrumb is displayed above the help pages.

[Use ARIS Connect](#) > [Use the repository](#) > [Create model](#)

The breadcrumb represents the structure in which a help page is stored in the content tree. This allows you to see the context of the information provided. You can click on the colored structure entries to navigate to a higher level.

Help page content

Help pages offers information as text, but also via videos, and illustrations.

The screenshot shows a help page window with the following content:

- Breadcrumb: [Use ARIS Connect](#) > [Use the repository](#) > [Create and edit models](#) > [Model](#) > [Basic modeling](#) > [Place object symbols](#)
- Title:

Place object symbols
- Text: You can place object symbols in the model window in various ways.
- Section: Procedure
- Link: [▶ Using the Symbols bar \(▶ quick video\)](#)
- Video Player: A video player showing a blue icon with 'ARIS Video Tutorial' and a play button. The progress bar shows 0:00 / 0:24. The software logo is visible in the bottom right of the player.
- Additional Links:
 - [▶ Using the selection box in the Symbols bar \(▶ quick video\)](#)
 - [▶ Using the mini toolbar \(▶ quick video\)](#)
 - [▶ As an occurrence copy \(▶ quick video\)](#)
 - [▶ As a definition copy \(▶ quick video\)](#)

Quick videos visualize described processes for certain functions. This enables you to follow basic and complex functions directly in the program. As the name **Quick video** says, the information is given in a short time.

Task-related processes are presented in video tutorials.

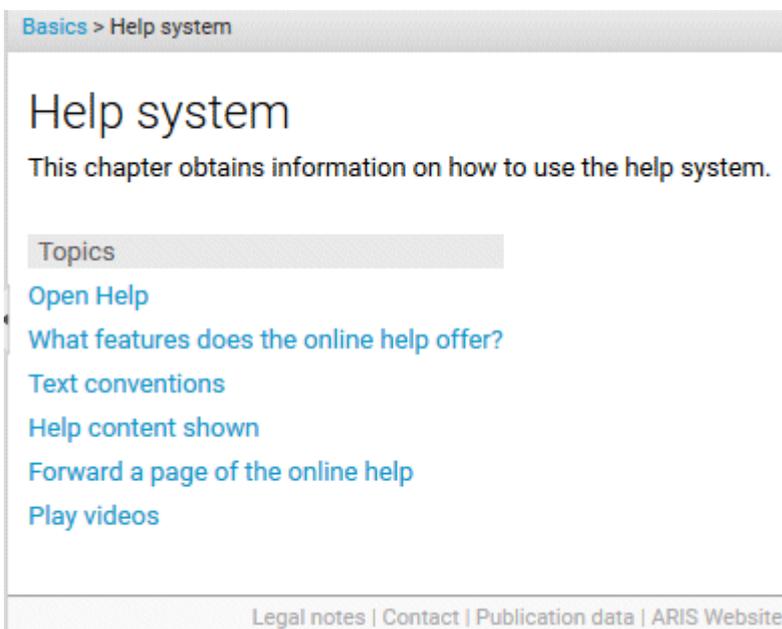


Due to the complexity of the topics, video tutorials run for several minutes. If you click on a video tutorial link, you will be redirected to the ARIS Community (<http://www.ariscommunity.com>) web site where the videos are stored.

Help pages often provides **See also** links. These links allows you to jump to content-related help pages.

Skip links

Help pages of related topics are grouped thematically under superior pages in the content tree. If you select a parent page, you can access the skip links to open the corresponding help page.



Skip links are listed under the **Topics** section. They are at the beginning of the main content, so that screen readers have immediate access to the topics for reading aloud.

FOOTER LINKS

Legal notes

Jumps to the **Legal Notices** web page of Software AG.

Contact

Jumps to the **How to contact Software AG** web page.

Publication data

Jumps to the **Impressum - Contact and regulatory information** web page of Software AG.

ARIS Website

Jumps to the **Process Transformation & Management** web page of Software AG.

For more information that goes beyond the application help, see the technical documentation.

Technical documents are available on:

- ARIS DVD (...Documents\English\5 Customizing)
- Empower (<https://empower.softwareag.com/>) (login required)
- ARIS Download Center (aris.softwareag.com)

4.2 Open Help

You can open Help to find out about the range of functions normally delivered with ARIS Connect. Since ARIS Connect is fully configurable, the range of functions and the user interface in your product may differ significantly from what is described in the Help.

Procedure

1. Click **<user name>**.
2. Click **Help**.

A new tab opens. You will be offered different content depending on your role as a viewer, designer, or administrator. You can obtain the information you want using the **Contents** tab, the **Index** tab, and the **Search** field.

4.3 Help content shown

The ARIS Connect help content shown depends on your function or license privileges.

- If you are logged in with **ARIS Connect administrator** function privileges, the whole ARIS Connect help content is shown.
- If you are logged in with **ARIS Connect Designer** license privileges, you will see all the help content you need to work with models. This means that the **Administrate ARIS Connect** content is hidden, because you do not have access to administration features such as **Manage users** functionality.
- If you are logged in with **ARIS Connect Viewer** license privileges, you will see the entire help content describing how to navigate in the  **Portal**. This means that the **Use ARIS Connect > Using the repository** content is hidden, because you do not have access to the repository to create and edit models. Even if you do not have the **Contribution** license privileges, the **Working in the portal > Contribute as viewer** descriptions are offered in the **Viewer** help. This is because the **Contribution** feature is an additional feature that is directly linked to the viewer features.

4.4 Forward a page of the online help

You can forward a link to the current page of the online help to others.

Prerequisite

- An e-mail program is associated with the **mailto** command.
- The recipients you are sending the link to can access the server on which the online help is located.

Procedure

3. Open the page of the online help that you want to refer to.
4. Click  **E-mail this page**. An e-mail opens, in which the link to the current page is already inserted.
5. Enter the e-mail recipient and send the e-mail.

The link to the help page is available to the e-mail recipients.

4.5 Play videos

You can watch videos for some procedures. The procedure pages contain links for playing the videos.

Procedure

On the procedure page, click the video link. The video plays.

Note: If your browser is unable to open the quick videos within the help, please use a different browser. The videos are also available in ARIS Community (<http://www.ariscommunity.com/help/quick-videos>). If an empty page is displayed after you have opened a video page, please press **F5** to refresh the page.

5 Basics

This area lists some basic points that make your life easier when working with the ARIS Connect and its online help.

5.1 Select language

You can change the interface language, the language for Help, and the language for models all at the same time.

Procedure

1. Click **<user name>**.
2. Click **Languages**. The available languages are listed.
3. Click the language in which the interface language, Help, and model content are to be displayed.

The language is changed.

If content such as Help or model content is not available in the selected language, it is displayed in the alternative language. The alternative language is the database language in which database content is displayed if attribute values are not specified in the database language used. Using this, for example, you prevent names from being displayed as **(Untitled)** if they have not been specified in the relevant database language. When you create a database, **English (United States)** is selected automatically.

5.2 Edit your user account

Change the data of your user account. Data from LDAP users can be edited only to a limited extent.

Procedure

1. Click **<user name> > User settings**. If the Browser window is scaled-down, click  **User icon > User settings** instead. The user data (details) is displayed.
2. Click  **Edit** to change the e-mail address, telephone number, etc. Some entries cannot be changed, such as the user name.
3. Click **Save**.
4. Click  **Change picture** to change or delete your picture. The corresponding dialog opens.
5. Click **Select file** to navigate to the picture file you want to upload.
6. In the **File Upload** dialog, select the picture file and click **Open**. The picture is displayed in the preview of the **Change picture** dialog.
7. Click **Upload**. The picture is added to your user account. If a different picture is uploaded in ARIS Connect or in Collaboration, it is automatically transferred to the other application.

You have changed your user account.

5.3 Change password

Change your password in the user profile after your first login or after the password was reset by the administrator.

Procedure

1. Click **<user name> > User settings**. If the Browser window is scaled-down, click  **User icon > User settings** instead. The user data (details) is displayed.
2. Click  **Edit**.
3. Enable the **Change password** check box. The **Old password**, **New password**, and **Confirm password** fields are displayed.
4. Enter a new password, and reenter it. If you want to use the webMethods integration, passwords must not contain a colon.
5. Click **Save**.

The password is changed. The user receives a notification by e-mail.

5.4 Switch your profile

You can switch between profiles (page 20) if more than one profile is assigned to you in ARIS Administration. Profiles provide you a profile based view of the portal. Depending on the profile, you have access to different content and functionality. Only one profile can be active at a time.

Procedure

1. Click **<user name>**.
2. Click **Profiles > <profile_xy>**.

The content and functionality of the selected profile is displayed.

5.5 Start search

Searching in ARIS Connect enables you to conveniently find items such as models, objects, documents, groups in Collaboration, etc., throughout the system.

Procedure

1. Enter a term in the **Quick search** area.
2. The search list (page 833) lists the items found.
3. Click the item you want to access.

The item opens in the appropriate context. For example, if you select a model name in the **Portal** context, the fact sheet of the model is displayed.

5.6 Open the search area

Searching in ARIS Connect enables you to conveniently find items such as models, objects, documents, groups in Collaboration, etc., throughout the system.

Procedure

4. If more than one database is provided, select the database your search is to be based on.
5. Click  Search.

The Search area (page 824) opens.

5.7 Show tasks in My tasks

In ARIS Connect you can show new tasks in My tasks without logging in again.

Prerequisite

Tasks have been assigned to you.

Procedure

1. Click  **Portal** if it is not activated yet.
2. Click  **Edit tasks**.

My tasks opens. You can open My tasks at any time by clicking  **My tasks** in Home (page 614).

5.8 Open ARIS Download Client page

You can switch to the ARIS Download Client page to download and use an ARIS product, that is, ARIS Architect/Designer.

Prerequisite

Your administrator has enabled the use of download clients.

Procedure

1. Click **<user name>**.
2. Click **Download clients**.

A new tab opens with the **Download clients** page. You can download and start the ARIS products your administrator has configured for use.

5.9 Open ARIS Administration

You can open ARIS Administration, for example, to publish databases, create users, or activate Collaboration.

Prerequisite

You are logged in as a user with the **ARIS Connect administrator** function privilege.

Procedure

1. Click **<user name>**.
2. Click **Administration**.

The administration areas, such as **User management** and **Configuration** are opened for editing.

5.10 Open information window

You can view information about ARIS Connect.

Procedure

1. Click **<user name>**.
2. Click **About**.

Information about ARIS Connect will be displayed.

5.11 Log out of ARIS Connect

You can log out of ARIS Connect when you have finished editing.

Procedure

1. Click **<user name>**.
2. Click **Log out**.

You will be logged out and the ARIS Connect Log in page will be displayed.

You can log in with your current user name or another user name, if you have different user names for different roles.

5.12 Available ARIS Connect keyboard shortcuts

The following keyboard shortcuts are available to control the program.

ARIS Connect in general (page 22)

Keyboard shortcuts for Collaboration (page 23)

PORTAL

Portal in general (page 24)

Quick start page (page 26)

Quick search (page 26)

Database selection (page 27)

Hierarchies (page 28)

List views (page 25)

Comment bar (page 27)

ARIS CONNECT DESIGNER

Model tab (page 29)

Select attribute dialog (page 875)

Collaboration bar (page 28)

Modeling table (page 1010)

Matrix model (page 1047)

5.13 Known issues

AD BLOCKERS

Some ad blockers may prevent ARIS Connect from being started correctly.

If you have logged in to ARIS Connect and a white screen is displayed instead of the start page, please configure the ad blocker to consider ARIS Connect secure.

POP-UP BLOCKERS

Under certain circumstances, if the response time is too long, a Web browser may consider the tab of ARIS Connect Designer as a pop-up. In this case, no new tab is created and no model opens.

If you attempt to open a model, but the tab with the model is not displayed, please check whether your pop-up blocker prevents the tab from opening and allow ARIS Connect pop-ups.

PERFORMANCE

The system has been tested using 30,000 documents with an average size of 5 MB. Depending on the use cases, these numbers may vary.

MICROSOFT® INTERNET EXPLORER® AND MICROSOFT® EDGE®

When you open many dashboards, switch back to the Portal and back to the dashboards again, the browser may freeze and no content is displayed. You must close and restart the browser again.

5.14 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

5.14.1 What profiles include which content?

Profiles provide users a profile based view of the portal. Depending on the profile, the information and functionality that users have access to varies. Example: For users to which the **Viewer** profile is assigned, the **Steps** fact sheet is displayed when a model is selected. They are unable to view the **Tasks** fact sheet and the **Contribute** function as they do not have an active role. Profiles are applied in addition to the function (page 71) and license (page 73) privileges. If more than one profile is assigned, the user can switch between these profiles via **<user name> > Profiles > <profile_xy>**. Only one profile can be active at a time. You can assign (page 61) the following profiles to users or user groups in ARIS Administration.

Profile name	Views and functionalities
CoE member	The Overview fact sheet is displayed when a model is selected in the  Portal .
Contributor	The Steps fact sheet is displayed when a model is selected in the  Portal . If the Steps fact sheet is not available, the Overview fact sheet is displayed.
Designer	The Diagram fact sheet is displayed when a model is selected in the  Portal .
Manager/Owner	The Dashboards fact sheet is displayed when a model is selected in the  Portal .
Viewer	<ul style="list-style-type: none"> ▪ The Steps fact sheet is displayed when a model is selected in the  Portal. If the Steps fact sheet is not available, the Overview fact sheet is displayed. ▪ The Tasks area is not available. ▪ The  Contribute function is not available.
Viewer (accessible)	<ul style="list-style-type: none"> ▪ The Steps fact sheet is displayed when a model is selected in the  Portal. If the Steps fact sheet is not available, the Overview fact sheet is displayed. ▪ The Tasks area is not available. ▪ The  Contribute function is not available. ▪ ARIS document storage and Process Governance are not available.

These profiles are predefined in the XML configuration.

5.14.2 What licenses are available in ARIS Connect?

For working with ARIS Connect, the **Designer** and **Viewer** licenses are available.

DESIGNER

- The **ARIS Connect Designer** license gives users access to the entire repository. They can access models, documents, and dashboards and feeds. In the **Models & Object** area, for example, users can create, edit, and delete models in databases.
- The **ARIS Connect Designer** license can be extended with the **ARIS Aware** license. The **ARIS Aware** license allows users to view configured dashboards (page 1170) for which they have view rights (page 397). The users can view the dashboards, for example, in the Dashboards fact sheet.

VIEWER

- The **ARIS Connect Viewer** license enables users to view models in databases. This means that these users use databases for review and information purposes.
- The **ARIS Connect Viewer** license can be extended with the **ARIS Aware** license. The **ARIS Aware** license allows users to view configured dashboards (page 1170) for which they have view rights (page 397). The users can view the dashboards, for example, in the Dashboards fact sheet.
- The **Contribution** license is an additional license to users using an **ARIS Connect Viewer** license. If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you can change values of specific items (page 757), create new or reuse existing items (page 749), as well as delete items (page 751) in the  **Portal**.

5.14.3 Keyboard shortcuts generally available

The following shortcuts are generally available in ARIS Connect.

Shortcut	Action
Alt + F4	Closes the web browser with all tabs. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Alt + left arrow	Moves backwards through previously visited areas of ARIS Connect, such as  My Activities ,  Recent Changes , but also  Search and  Catalog .
Alt + right arrow	Moves forward through previously visited areas of ARIS Connect, such as  My Activities ,  Recent Changes , but also  Search and  Catalog .
Ctrl + F	Opens the Find bar of the web browser to search the page for a term.
Ctrl + F4	Closes the ARIS Connect tab without asking.
Ctrl + Page down	Depending on the web browser: Switches to the next web browser tab from left to right if your web browser supports changing tabs using the keyboard.
Ctrl + Page up	Depending on the web browser: Switches to the next web browser tab from right to left if your web browser supports changing tabs using the keyboard.
F3	Depending on the web browser: Opens the Find bar of the web browser to search the page for a term.
F5	Updates the current view based on the database changes.
F11	Turns full screen mode on or off if your web browser supports full screen.

5.14.4 Keyboard shortcuts for Collaboration

The following shortcuts are available in Collaboration (page 806).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
End	Moves to the lower entries if they cannot be displayed completely due to the window size or the screen resolution.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Home	Moves to the upper entries if they cannot be displayed completely due to the window size or the screen resolution.
Tab	<ul style="list-style-type: none"> Focuses the next control in the navigation or enters the next input field. Jumps from the Comment box to the  Tag,  Link, and  File symbols that you can use to attach tags, links, or files to your comment. It also jumps to the other input fields and to the Post button.
Shift + Tab	Focuses the previous control in the navigation or enters the next previous input field.
Right arrow/ Left arrow	Moves the cursor in input fields through the text.
Up arrow/ Down arrow	Moves the selection of items in lists.
Enter	<p>Opens the attachment fields and places the cursor in the input field if the Tag or Link symbol is selected. Opens the Select document dialog when the File symbol is selected.</p> <ul style="list-style-type: none"> Posts the comment when the Post button is selected. Executes the focused button. Opens the dialog/the selection list of the focused item.
Ctrl + Enter	Posts a comment when the Post button is active.

5.14.5 Keyboard shortcuts for the Portal

The following shortcuts are generally available for the  **Portal**.

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Alt + J	Shows previously displayed fact sheets and hierarchy levels (page 681) in backward direction. Use the keyboard shortcut Shift + Alt + J for Mozilla Firefox® instead of Alt + J .
Alt + K	Shows previously displayed fact sheets and hierarchy levels (page 681) in forward direction. Use the keyboard shortcut Shift + Alt + K for Mozilla Firefox® instead of Alt + K .
Down arrow	Opens the focused drop-down menu, selects the first menu item, and jumps down through the menu items.
Enter	Invokes the action of the selected menu item.
Esc	Closes the drop-down menu.
Left arrow	Closes the submenu of a menu item.
Right arrow	Opens the submenu of a menu item.
Shift + tab	Focuses the previous control, such as  Portal ,  Search , a menu, or an input field, that you can select with the Enter key, open with the Down arrow or Up arrow keys (menus) or enable with the Space key (check boxes). In Edit mode for users with Contribution license privileges, jumps from one input field to the previous one.
Space	Opens a menu and selects the first menu item. Invokes the action of a selected item, for example, My favorites .
Tab	Focuses the next control, such as  Portal ,  Search , a menu, or an input field, that you can select with the Enter key, open with the Down arrow or Up arrow keys (menus) or enable with the Space key (check boxes). In Edit mode for users with Contribution license privileges, jumps from one input field to the next.
Up arrow	Opens the drop-down menu, selects the last menu item, and jumps up through the menu items.

5.14.6 Keyboard shortcuts for list views

Elements are listed in list views. List views are, for example, areas such as My favorites, My activities, Recent changes, and Catalog (page 803).

Shows all links to models that were changed recently. In addition, for each model the time elapsed since the last change and the path are shown.

Provides direct access to saved filter criteria (page 682) of the **Favorites** area of the search as well as to models and groups a user selected as personal favorites (page 743).

The following shortcuts are available for these areas.

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Moves the entries down one entry if they cannot be displayed completely due to the window size or the screen resolution.
End	Moves to the lower entries if the contents cannot be displayed completely due to the window size or the screen resolution.
F5	Updates the current view.
Home	Moves to the upper entries if the contents cannot be displayed completely due to the window size or the screen resolution.
Left arrow	Moves the entries to the left if they cannot be displayed completely due to the window size or the screen resolution.
Page down	Moves to the lower entries if they cannot be displayed completely due to the window size or the screen resolution.
Page up	Moves to the upper entries if they cannot be displayed completely due to the window size or the screen resolution.
Right arrow	Moves the entries to the right if they cannot be displayed completely due to the window size or the screen resolution.
Up arrow	Moves the entries up one entry if they cannot be displayed completely due to the window size or the screen resolution.

5.14.7 Keyboard shortcuts for the Quick start page

The following shortcuts are available for the Quick start page (page 627).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Moves the quick access buttons (page 627) up if they cannot be displayed completely due to the window size or the screen resolution.
End	Moves to the lower quick access buttons (page 627) if they cannot be displayed completely due to the window size or the screen resolution.
F5	Updates the current view.
Home	Moves to the upper quick access buttons (page 627) if they cannot be displayed completely due to the window size or the screen resolution.
Page down	Displays in the visible area as many of the next quick access buttons (page 627) as possible if they cannot be displayed completely due to the window size or the screen resolution.
Page up	Displays in the visible area as many of the previous quick access buttons (page 627) as possible if they cannot be displayed completely due to the window size or the screen resolution.
Up arrow	Moves the quick access buttons (page 627) down if they cannot be displayed completely due to the window size or the screen resolution.

5.14.8 Keyboard shortcuts for the quick search

The following shortcuts are available for the quick search (page 825).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow/Right arrow	Jumps down to the next result entry.
Enter	Opens the selected result entry.
Esc	Closes the result entry list and removes the search term from the quick search field.
Up arrow/Left arrow	Jumps up to the next result entry.

5.14.9 Keyboard shortcuts for the database selection

The following shortcuts are available for the database selection (page 678).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Opens the database selection menu, selects the first entry. If the down arrow is pressed again, the next entry below is selected.
Enter/Space	Opens the selected database.
Up arrow	Opens the database selection menu, selects the first entry. If the down arrow is pressed again, the last entry is selected. Each further press marks the next entry above.

5.14.10 Keyboard shortcuts for the Comment bar

The following shortcuts are available in the Comment bar (page 642) when the cursor is in the **Comment** field.

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Tab	Jumps from the Comment box to the Tag , Link , and File symbols that you can use to attach tags, links, or files to your comment. It also jumps to the other input fields and to the Post button.
Enter	Opens the attachment fields and places the cursor in the input field if the Tag or Link symbol is selected. Opens the Select document dialog when the File symbol is selected. Posts the comment when the Post button is marked.

5.14.11 Keyboard shortcuts for hierarchies

The following shortcuts are available for hierarchies.

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Jumps down to the next entry.
Left arrow	Closes the selected hierarchy.
Right arrow	Opens the selected hierarchy.
Space	Toggles the selected hierarchy.
Up arrow	Jumps up to the next the entry.
1 - 9	Jumps to one of the first nine items of the current level.
0	Jumps to the parent item of the selected item.

5.14.12 Keyboard shortcuts for the Collaboration bar

The following shortcuts are available in the Collaboration bar when the cursor is in the **Comment** field.

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Tab	Jumps from the Comment box to the  Tag ,  Link , and  File symbols that you can use to attach tags, links, or files to your comment. It also jumps to the other input fields and to the Post button.
Enter	Opens the attachment fields and places the cursor in the input field if the Tag or Link symbol is selected. Opens the Select document dialog when the File symbol is selected. Posts the comment when the Post button is selected.

5.14.13 Keyboard shortcuts for ARIS Connect Designer

The following shortcuts are available in ARIS Connect Designer (page 857).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Alt	Temporarily switches off Guided Modeling and grid (page 895) when you drag items.
Alt + down arrow	Moves selected objects down four grid lines.
Alt + F4	Closes the web browser. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Alt + left arrow	Moves selected objects four grid lines to the left.
Alt + - (minus)	Inserts an optional hyphen (page 897) at the cursor position in a text.
Alt + right arrow	Moves selected objects four grid lines to the right.
Alt + up arrow	Moves selected objects up four grid lines.
Ctrl + A	Selects all items.
Ctrl + C	Copies selected items to the clipboard. This enables you to paste copied items from the clipboard into models/diagrams and into other Windows programs.
Ctrl + down arrow	Moves selected items downwards by increments of one pixel.
Ctrl + End	Displays the bottom right pane of the model window.
Ctrl + Enter	Inserts a line break for text attributes, such as free-form texts, object names, etc.
Ctrl + F	Opens the Find bar.
Ctrl + F4	Closes the model tab. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Ctrl + Home	Displays the upper left pane of the model window.
Ctrl + left arrow	Moves selected items to the left by increments of one pixel.
Ctrl + Page down	Switches to the next web browser tab from left to right if your web browser supports changing tabs using the keyboard.
Ctrl + Page up	Switches to the next web browser tab from right to left if your web browser supports changing tabs using the keyboard.
Ctrl + right arrow	Moves selected items to the right by increments of one pixel.

Shortcut	Action
Ctrl + S	Saves your changes.
Ctrl + Shift + V	Inserts a definition copy of an object if an object is in the clipboard.
Ctrl + up arrow	Moves selected items upwards by increments of one pixel.
Ctrl + V	Pastes the content of the clipboard, if this is content that can be placed in the model window. If an object is in the clipboard, an occurrence copy of the object is inserted.
Ctrl + X	Cuts selected items and copies them to the clipboard.
Ctrl + Y	Redoes editing steps that were undone.
Ctrl + Z	Undoes preceding editing steps.
Del	Removes selected object symbols or deletes selected items, such as free-form text and graphic objects.
Down arrow	Moves the model window contents up (the contents of the model window that are further down will be displayed).
Enter	Ends the input.
ESC	Removes selections and closes dialogs. Closing dialogs with the ESC key is the same as clicking Cancel .
F2	Selects the selected text attribute of an element or the object name of a selected object for editing.
F3	Opens the Find bar. When the find bar is open, pressing the F3 key jumps to the next occurrence of the searched term.
F5	Updates the current view based on the database changes.
F11	Turns full screen mode on or off if your web browser supports full screen.
Left arrow	Moves the model window contents to the right (the contents of the model window that are further left will be displayed).
- (minus)	Reduces the display of the model content by 10%.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
+ (plus)	Enlarges the display of the model content by 10%.
Right arrow	Moves the model window contents to the left (the contents of the model window that are further right will be displayed).
Shift	Keeps the shapes of a circle and a square (page 938) when you place and scale the graphic objects Circle/Elipse and Square/Rectangle .

Shortcut	Action
Shift + Page down	Moves the contents of the model window page by page to the right (the contents of the model window that are further left will be displayed).
Shift + Page up	Moves the contents of the model window page by page to the left (the contents of the model window that are further right will be displayed).
Up arrow	Moves the model window contents down (the contents of the model window that are further up will be displayed).

6 Manage ARIS Connect

Manage users, user groups, privileges, licenses, documents, configurations, and processes for all ARIS products. This ensures single sign-on for various ARIS products. Users can also be created using an LDAP system.

Depending on which administrator privileges you have, you will have access to the areas described here where you can make the appropriate settings. For example, you can only see the user administration if you have the **User administrator** function privileges.

6.1 Open ARIS Administration

Centrally manage users, user groups, privileges, licenses, documents, and configurations for all ARIS products. This ensures single sign-on for various ARIS products. Users can also be created using an LDAP system.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click the link that was provided to you by e-mail or that you have saved as a bookmark in your browser. The **Login** dialog opens.
2. Enter your user name and your password.
3. Click **Log in**.
4. Click **<user name> > Administration**.

ARIS Administration opens.

ARIS video tutorial

ARIS Architect 'Administration' tab versus ARIS Administration

(<http://www.ariscommunity.com/videos/aris-architect-administration-tab-versus-aris-administration>) (approx. 2 minutes)

6.2 Manage licenses



Centrally manage licenses for all ARIS products to grant users the privileges required for the programs they use.

6.2.1 Import and display license file

Import a license file to give users the required privileges for the programs.

Prerequisite

You have the **License administrator** function privilege.

Procedure

1. Click  **Licenses**.
2. Click  **Import license file**. The corresponding dialog opens.
3. Select the relevant license file.
4. Click **Upload**.

The license file is transferred. It is shown how many licenses were imported, as well as which licenses could not be installed and why.

You can now assign users the required license privileges. If you need additional licenses later, simply import the new license file as described above. To display imported license files, click the relevant license, and select  **Open license file**.

6.2.2 Delete licenses

You can delete license files when they have expired. Before deleting licenses, back up user data, if required, in order to be able to reuse (page 66) them when new license are available. In the configuration, you can specify that administrators are notified before a license expires. Expired licenses are marked in the license overview: . Users or groups can no longer be assigned. Login is impossible with an expired license.

Prerequisite

You have the **License administrator** function privilege.

Procedure

1. Click  **Licenses**.
2. Click the relevant product or a subgroup.
3. Move the mouse pointer over the relevant license. The buttons of the available functions are displayed.
4. Click  **Delete license file**.

The license file is deleted.

6.2.3 Display information about licenses/license file

You can display information about licenses, such as the expiration date, number of licenses, etc. You can also open the imported license files.

Prerequisite

You have the **License administrator** function privilege.

Procedure

1. Click  **Licenses**.
2. Click the relevant product or a subgroup.
3. Move the mouse pointer over the relevant license. The buttons of the available functions are displayed.
4. Click  **Open license file**.

The imported license file is displayed as an XML file.

If license exhaustion notification is activated in **Configuration (User management > User-defined notifications > Licenses > Notify about license exhaustion)**, license administrators receive a notification once the specified number of licenses is reached.

6.2.4 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.2.4.1 What license types exist?

You can use only one license type for each product. Exceptions are the **Named user** and **Cross-client** license types.

LICENSE TYPES FOR CLIENT PRODUCTS

The license types for client products must be assigned manually to users or user groups. You can increase the number of licenses by installing additional licenses.

NAMED USER

Users assigned to this license type have guaranteed login as the license is registered in their name. The number of licenses that can be assigned is specified in the license file.

CONCURRENT USER

For this license type, the number of users who can log in at the same time is specified. The assigned users share the available licenses. If the number of users logged in is the same as the number of available licenses, no other users can log in. The user must wait until another user logs off. However, the administrator can end (page 49) the sessions of users.

CROSS-CLIENT

This license type corresponds to a license of the **Named user** type. However, it can be imported and used for various tenants. It is intended for administrators who manage several tenants. The assigned users can log in with all tenants.

SERVER LICENSES

The license types for server products are activated automatically after the import.

6.2.4.2 What happens when a license expires?

Expired licenses are marked in the license overview: . Users or groups can no longer be assigned. Login is impossible with an expired license.

Before deleting licenses, back up user data, if required, in order to be able to reuse (page 66) them when new license are available. In the configuration, you can specify that administrators are notified before a license expires.

6.2.4.3 What is the difference between the license types 'Named user' and 'Concurrent user'?

	Concurrent user	Named user
Assignment	Via user or user group	Via user or user group
License volume	Unlimited	Limited number
Guaranteed login	No	Yes
Term of guaranteed login	Current session	Unlimited

6.2.4.4 What dependencies exist within the privileges?

There are certain license privileges that you cannot assign to a user in combination with others. For example, you cannot assign ARIS Architect and ARIS Designer to a user at the same time.

You can only activate the subgroups of a license privilege if the superior license privilege is activated. If you remove a superior license privilege of a user, the user also automatically loses the assignment to the subgroups.

6.3 Manage users



Users and privileges are managed centrally in ARIS Administration for all ARIS products. The role-dependent data access is controlled by privileges and filters that are assigned per database in ARIS Architect on the **Administration** tab.

6.3.1 Use case - Manage users

This use case provides a comprehensive description of all procedures that administrators must carry out for a tenant (page 1179) so that all authorized employees can work with ARIS Architect. We recommend that you use ARIS Administration to manage users, user groups, privileges, licenses, documents, configurations, and processes in ARIS Connect. This is what the use case is based on. Using User Management is advisable only for users of ARIS Risk & Compliance Manager, ARIS Publisher, PPM, and MashZone.

Scenario

After installation, the following system users exist: 'superuser (page 1178)' and 'system (page 1178)'. They are responsible for the user management of an activated tenant (page 1179). The server was started, the password for the system user (page 1178) **superuser** has not been changed yet.

USER MANAGEMENT IN ARIS ADMINISTRATION

1. Open ARIS Administration and log in as 'superuser'.
2. Click the link that was provided to you by e-mail or that you have saved as a bookmark in your browser. The **Login** dialog opens.
3. Enter your user name and your password.
4. Click **Log in**.
5. Click **<user name> > Administration**.

ARIS Administration opens.

1. Change the passwords for the users 'superuser' and 'system'.
 - a. Change the passwords of the users **superuser** and **system** (page 1178) to prevent unauthorized access to the system. These users are created automatically after installation and have comprehensive function privileges and authorizations.
 - b. Click the user whose password you want to change.
 - c. Click  **Edit**.
 - d. Enable the **Change password** check box. The **Old password**, **New password**, and **Confirm password** fields are displayed.

- e. Enter a new password, and reenter it. If you want to use the webMethods integration, passwords must not contain a colon.
 - f. Click **Save**.
The password is changed. The user receives a notification by e-mail.
2. Import the license purchased.
 - g. Click  **Licenses**.
 - h. Click  **Import license file**. The corresponding dialog opens.
 - i. Select the relevant license file.
 - j. Click **Upload**.
The license file is transferred. It is shown how many licenses were imported, as well as which licenses could not be installed and why.
3. Create users or synchronize them from your LDAP system.
 - a. Click  **Add user**. The **Create user** form opens.
 - b. Enter the user name, first and last name, e-mail address, if applicable, and password. If a user that already exists in the LDAP system is created, the user name must match. The e-mail address is transferred automatically. For the other specifications you can enter any characters you wish because this information will automatically be transferred from the LDAP system after the user is created.

The user name does not necessarily have to correspond to a person's first or last name. In many cases, a randomly selected character string is used, or an abbreviation of the first and/or last name.
 - c. Click **Save**. The detail view of the user is displayed.
The user has been created.
4. Create user groups or synchronize them from your LDAP system.
 - a. Click  **User management**, and select **User groups**. The list of user groups opens.
 - b. Click  **Add user group**.
 - c. Enter the name of the user group and an optional description.
 - d. Click **Save**.
 - e. The user group is created.
5. Assign a user group to the user.
 - a. Click the user whose user group association you want to change.
 - b. Click **Associated user groups**.
 - c. Click  **Edit assignment**. The **Associate user groups** dialog opens.
 - d. Enable the check boxes of the relevant items in the **Available user groups** box, and click  **Add**. The user groups are transferred to the **Associated user groups** box.
 - e. Click **OK**.

6. Assign function privileges to the user, if required.
 - a. Click the user you wish to assign function privileges to. The user data (details) is displayed.
 - b. Click **Privileges**. The list of function privileges is displayed.
 - c. Enable/disable the check boxes of the privileges whose assignment you want to add/remove.

The user is assigned the selected privileges. This provides the user with privileges for functions (for example, the **Database administrator** function privilege).
7. Assign license privileges to the user.
 - a. Click the user you wish to assign license privileges to. The user data (details) is displayed.
 - b. Click **Privileges**. The list of function privileges is displayed.
 - c. Click **License privileges**.
 - d. Enable/disable the check boxes of the privileges whose assignment you want to add/remove.

The user is assigned the selected privileges. This provides the user with access to the ARIS products relevant to him.

Users can now log in with their assigned privileges. Product-specific privileges are assigned in each ARIS product.

USER MANAGEMENT IN ARIS ARCHITECT

These actions can also be carried out by users with the **Database administrator** and **User administrator** function privileges.

1. Start ARIS Architect.
2. Log in as **system** user and connect to the **default** tenant.

Please use the new password that you just changed in ARIS Administration. ARIS Architect starts.
3. Create databases. All users with the **Database administrator** function privilege can do so.
4. Click **ARIS >  Administration** or **ARIS >  Explorer**.
5. Click  **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
6. In the Explorer tree, right-click your connection to the ARIS Server and select  **New >  Database**.
7. Enter a name. Do not use any special characters.
8. Enable the **Versionable** check box if you want the content of the new database to be versioned.
9. Click **OK**. The database is created and displayed in the **Navigation** bar, either as a  non-versionable or  versionable database.

All users and user groups are automatically transferred from ARIS Administration.

10. Change the password of the system user **system**.
11. Assign access privileges.
12. Assign function privileges to users and user groups.
13. Assign filters to users and user groups.

The database is available to authorized users.

1. Assign access privileges for database groups. These actions can be carried out by all users with the **User administrator** function privilege.
2. Click **ARIS >  Explorer**.
3. Log in to the database.
4. Click  **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
5. Right-click the group for which you want to edit the access privileges, and select  **Properties**.
6. Click **Access privileges (users)** or **Access privileges (user groups)** on the **Selection** tab.
7. Select the users/user groups for which you want to assign privileges.
8. Select the required access privileges. You can assign **Read (r)**, **Write (w)**, and **Delete (d)** access privileges. The **Version (v)** access privilege is available for versionable databases only. The selection is displayed in the **Privileges** column.
9. If you click the **Pass on privileges** button, the selected access privileges are applied to all subgroups. This also applies to all new subgroups created below this group in the future.
10. Click **OK**.

After the user logs in to the database again the changed access privileges will be in effect.

1. Assign database-specific function privileges to users and user groups.
2. Click **ARIS >  Administration**.
3. Click  **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
4. Log in to the database.
5. In the **Navigation** bar, click  **Users** or  **User groups**.
6. In the table, right-click the user or user group, and select  **Properties**.
7. Click **Function privileges** on the **Selection** tab.
8. In the **Assign** column, click the relevant function privileges. You can assign only function privileges that are assigned to you, too.

You cannot change function privileges for system users.

If you selected **User** in the **Navigation** bar and are logged on as system user, you can enable the **System user** check box. This user receives all function and access privileges.

9. Click **OK**.

The function privileges are now assigned.

For users to be able to view specific content of the database, you assign access privileges to them.

1. Assign filters to users and user groups.
2. Click **ARIS >  Administration**.
3. Click  **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
4. Log in to the database.
5. In the **Navigation** bar, click  **Users** or  **User groups**.
6. In the table, right-click the user or user group, and select  **Properties**.
7. Click **Method filter** on the **Selection** tab.
8. In the **Assign** column, enable the checkboxes of the relevant filters.
9. Click **OK**.

The selected filters are assigned. Users can now log in using these filters.

You can select a default filter for each database. This filter is automatically assigned when you create users and user groups.

All users with the corresponding privileges can work with ARIS Architect.

For new databases, these privileges must be assigned by authorized users.

ARIS video tutorial

ARIS Architect 'Administration' tab versus ARIS Administration

(<http://www.ariscommunity.com/videos/aris-architect-administration-tab-versus-aris-administration>) (approx. 2 minutes)

6.3.2 Create user

Create a user for authorized employees. The default users system (page 69), superuser (page 69), arisservice (page 69), and guest (page 69) are created automatically. You can create additional system users (page 44).

Prerequisite

You have the **User administrator** function privilege.

Warning

If this user is also modeled in an organizational chart, all differing data and assignments are overwritten when the executable process is subsequently generated or the organizational chart is updated. This does not apply to LDAP users.

To prevent this, enable the attribute **Consider user group association from user management**.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Add user**. The **Create user** form opens.
3. Enter the user name, first and last name, e-mail address, if applicable, and password. If a user that already exists in the LDAP system is created, the user name must match. The e-mail address is transferred automatically. For the other specifications you can enter any characters you wish because this information will automatically be transferred from the LDAP system after the user is created.
The user name does not necessarily have to correspond to a person's first or last name. In many cases, a randomly selected character string is used, or an abbreviation of the first and/or last name.
4. Click **Save**. The detail view of the user is displayed.
5. Assign a user group to the user, if required.
6. Click **Associated user groups**.
7. Click  **Edit assignment**. The **Associate user groups** dialog opens.
8. Enable the check boxes of the relevant items in the box of the available items, and click ► **Add**. The items are transferred to the box of the associated items. To remove items from the associated items box, enable the check boxes of the relevant items in this box, and click ◀ **Remove**.
9. Click  **Save**.
10. Enable (page 59) the required function and license privileges for the user under **Privileges**.

In order to make a user a system user, enable all function privileges.

The user is created with the corresponding user group and privilege assignments. The user cannot be created if a mandatory field was not filled out or a user name was entered that is already in use by another user in the system. LDAP users are indicated by a different symbol:



Additional information about the user is displayed under Attributes.

Tip

- To associate all available items, click  **Add all**, and click  **Remove all** to remove all associations.
- To transfer a user's group and privilege assignments to a new user, go to the overview of users and click **Copy user** in the row of the relevant user. Enable the check box of assignments to be transferred and add the remaining data, such as user name, first and last name, etc. of the new user.

6.3.3 Edit user

Edit user accounts. You cannot change the user name. If you are using an LDAP system, you cannot change the password either.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user whose data you want to change. The user data (details) is displayed.
3. Click  **Edit**.
4. Change the relevant information, such as name, e-mail address, etc.
5. To change a password, enable **Change password**. The **Old password**, **New password**, and **Confirm password** fields are displayed.
6. Enter a new password, and reenter it. If you want to use the webMethods integration, passwords must not contain a colon.
7. Change the user group association (page 48), if necessary.
8. If required, change the profile or the function, license, and database privileges for the user.
9. Click **Save**.

The user's data is changed. After you have changed the password, the user is informed per e-mail about the new password.

Tip

To change or delete a user's picture, click  **Change picture**. If a different picture is uploaded in ARIS Administration or in Collaboration, it is automatically transferred to the other application.

6.3.4 How to make a user a system user

Create additional system (page 69) users. Having more than one system user can avoid problems, if, for example, your single system user has forgotten his password.

Prerequisite

You have the **User administrator** function privilege. If all users including the system users are deleted, use the superuser. The superuser cannot be deleted.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the relevant user. The user data (details) is displayed.
3. Click  **Edit**.
4. Click **Privileges**. The list of function privileges is displayed.
5. Enable all check boxes.

Now, the user is a system user. The **system** user has all function privileges. This user can log in to process administration, ARIS Administration, User Management, and My tasks. In ARIS Architect and ARIS Designer, this user has all access privileges for all database groups of all databases.

If your only system user was deleted accidentally, create a new one by using the superuser (page 69).

6.3.5 Copy a system user

Copy an existing system (page 69) user. Having more than one system user can avoid problems, if, for example, your single system user has forgotten his password.

Prerequisite

You have the **User administrator** function privilege.

Warning

If this user is also modeled in an organizational chart, all differing data and assignments are overwritten when the executable process is subsequently generated or the organizational chart is updated. This does not apply to LDAP users.

To prevent this, enable the attribute **Consider user group association from user management**.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the relevant user. The user data (details) is displayed.
3. Click  **Copy**. The **Copy user** form opens.
4. Enable **Transfer function privileges**.
5. Enable **Transfer user group associations** and/or **Transfer license privileges**, if required.
6. Enter the user name, first and last name, e-mail address, if applicable, and password. If a user that already exists in the LDAP system is created, the user name must match. The e-mail address is transferred automatically. For the other specifications you can enter any characters you wish because this information will automatically be transferred from the LDAP system after the user is created.

The user name does not necessarily have to correspond to a person's first or last name. In many cases, a randomly selected character string is used, or an abbreviation of the first and/or last name.

7. Click  **Save**.

An additional system user is created. The **system** user has all function privileges. This user can log in to process administration, ARIS Administration, User Management, and My tasks. In ARIS Architect and ARIS Designer, this user has all access privileges for all database groups of all databases.

6.3.6 How to make a user a system user for a specific database in ARIS Architect

You can assign users system user function privileges for a specific database in ARIS Architect.

Prerequisite

- You have the **User administrator** function privilege.
- The user is already created (page 42) in ARIS Administration.

Procedure

1. Start ARIS Architect.
2. Click **ARIS >  Administration**. The **Administration** tab opens.
3. Log in to the database for which you want to create a system user.
4. Double-click the database name to expand the tree.
5. Click  **Users**.
6. In the user list, right-click the user's name you want to assign system user privileges to and click  **Properties**. The **Properties** dialog opens.
7. Click **Function privileges**.
8. At the bottom of the dialog, enable the **System user** check box.
9. Click **OK**.

The user receives all function and access privileges for this database in ARIS Architect. This affects the privileges in ARIS only. The user's function privileges in ARIS Connect are not changed.

6.3.7 Find users/user groups

You can search for users and user groups.

Prerequisite

You have the **User administrator** function privilege.

Procedure

In the Find box, enter the characters contained in the user name, user group name, first or last name, or e-mail address you want to find.

If there are hits for the search query, the first fifty items are displayed. LDAP users are indicated by a different symbol: .

6.3.8 Display assignment of users to a privilege

Obtain an overview of what privileges are assigned to which users. License privileges can be assigned through the group or directly to the user. The type of assignment is displayed in the user management.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click **Privileges**.
3. Click the privileges for which you want to display the assignment.

The associated users are displayed.

Note

To obtain an overview of the privileges assigned, you can also export (page 66) a user statistics.

6.3.9 Display information on users/user groups

You can retrieve history and information on all users and their active sessions.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user you want to retrieve information about.
3. Click **Active sessions** to obtain information on the time the user was logged in. This is where you can also log out (page 49) the user.
4. Click the relevant user/user group.
5. Click History (page 76) to retrieve information on the events and details of a user/user group, for example, the privilege assigned to a user.

The requested information is displayed.

6.3.10 Change association of user groups to a user

You can change the association of user groups for a user. License privileges can be assigned through the group or directly to the user. The type of assignment is displayed in the user management. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user whose user group association you want to change.
3. Click **Associated user groups**.
4. Click  **Edit assignment**. The **Associate user groups** dialog opens.
5. Enable the check boxes of the relevant user groups in the **Available user groups** box, and click ► **Add**. The user groups are transferred to the **Associated user groups** box. To remove user groups from the **Associated user groups** box, enable the check boxes of the relevant user groups in this box, and click ◀ **Remove**.
6. Click **OK**.

The user groups assigned to the user have been changed.

Tip

To associate all available items, click ► **Add all**, and click ◀ **Remove all** to remove all associations.

6.3.11 Log out user

You can end the sessions of users. This can be necessary, for example, if all licenses of the **Concurrent user** license type (page 35) are used up because users have forgotten to log out. It can also be useful to end sessions if the assignment of function or license privileges was changed, as these privileges only take effect after users have logged in again.

Prerequisite

You have the **User administrator** function privilege.

LOG OUT SINGLE USER

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user you wish to log out. The user data (details) is displayed.
3. Click **Active sessions**.
4. Click  **Log out user**.
5. Click **OK**.

The user is logged out and can log back in again.

LOG OUT MULTIPLE USERS USING A SPECIFIC LICENSE

Procedure

1. Click **Privileges**, and select **License privileges**.
2. Click the license privilege for which you want to log out users.
3. Click **Active sessions**.
4. Enable the check boxes of the users you want to log out.
5. Click  **Log out user**.
6. Click **OK**.

The users are logged out.

Note

To obtain an overview of all users currently logged in, export (page 66) a user statistics.

6.3.12 Delete user

Delete users when they are no longer relevant.

Prerequisite

You have the **User administrator** function privilege.

Warning

Do not delete your system user (page 69). Having more than one system user can avoid problems. If your single system user was deleted accidentally, create a new one by using the superuser (page 69). The superuser cannot be deleted.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Move the mouse pointer to the relevant user name. The buttons of the available functions are displayed.
3. Click  **Delete**. The **Confirmation** dialog opens.
4. Click **OK**. The user data is deleted. It takes about 30 minutes until the deletion is written to the log files.
5. To comply with GDPR (page 1172), delete the log files of ARIS Administration/User Management 30 minutes after deletion of the user data. You can find them in this path:
<Your installation folder>\ARIS<version>\server\bin\work\work_umcadmin_<size>\base\logs
6. Delete the log files.

The user data and the log files are deleted.

To anonymize users according to GDPR (page 1172), refer to the online help of the respective component (page 70).

Tip

To delete several users at the same time, enable the check boxes for the relevant users, and click  **Delete**.

6.3.13 Delete all users and user groups

If you want to set up user management from scratch, you should delete all users and user groups. This is recommended before you change to or deactivate LDAP, for example. The default users system (page 69), superuser (page 69), arisservice (page 69), and guest (page 69) are retained.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Remove all**. The **Confirmation** dialog opens.
4. Click **OK**.

All users and user groups are deleted except for the default users.

6.3.14 Refresh items

Refresh items in user management. This can be useful if several users are working in user management simultaneously.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Refresh**.

The users and user groups are refreshed.

6.3.15 Manage user groups

User groups define the tasks or functions that a person performs in a company. A certain set of function, license and database privileges, as well as profiles, is assigned to different user groups. If a user group is assigned to a user, the user has all privileges and profiles assigned to that user group. You can combine different user groups, that is, a user can belong to several different user groups at the same time, or the user's user groups may change, depending on the context.

6.3.15.1 Create user group

Create a new user group. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click  **Add user group**.
3. Enter the name of the user group and an optional description. If a user group that already exists in the LDAP system is created, the user group names must match. This is the only way to assign an existing ARIS user group with the LDAP user group.
4. Click **Save**.

The user group is created.

Tip

To transfer user and privilege assignments of a group to a new group, go to the overview of groups and click **Copy group** in the row of the relevant group. Enable the check box of assignments to be transferred and add the remaining data, such as group name, etc. of the new group.

6.3.15.2 Copy user group

You can copy user groups. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Move the mouse pointer over the user group you want to copy. The buttons of the available functions are displayed.
3. Click  **Copy user group**.
4. Click **Transfer user associations** to assign the users of the group copied to the new group.
5. Click **Transfer privilege assignments** to assign the function privileges of the group copied to the new group. License privileges are transferred only with the **Concurrent user** license type. For the other license types, the license privileges must be assigned (page 57) in a separate step.
6. Enter the name of the user group.
7. Click **Save**.

The user group is created based on the group copied.

If applicable, assign the group the required license privileges.

6.3.15.3 Edit user group

You can change user group data. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click the user group whose data you want to change.
3. Click  **Edit**.
4. Change the description, if necessary.
5. Click **Save**.
6. Change the user association (page 55), if necessary.
7. Change the function privileges for the user group, if necessary.

The user group data is changed.

6.3.15.4 Find users/user groups

You can search for users and user groups.

Prerequisite

You have the **User administrator** function privilege.

Procedure

In the Find box, enter the characters contained in the user name, user group name, first or last name, or e-mail address you want to find.

If there are hits for the search query, the first fifty items are displayed. LDAP users are indicated by a different symbol: .

6.3.15.5 Display information on users/user groups

You can retrieve history and information on all users and their active sessions.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user you want to retrieve information about.
3. Click **Active sessions** to obtain information on the time the user was logged in. This is where you can also log out (page 49) the user.
4. Click the relevant user/user group.
5. Click History (page 76) to retrieve information on the events and details of a user/user group, for example, the privilege assigned to a user.

The requested information is displayed.

6.3.15.6 Change association of users to a user group

You can change the association of users for a user group. License privileges can be assigned through the group or directly to the user. The type of assignment is displayed in the user management. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click the user group whose user association you want to change.
3. Click **Associated users**.
4. Click  **Edit assignment**. The **Associate users** dialog opens.
5. Add all users you want to assign to the group. Use the  **Filter** to limit the list of users, based on specific search criteria.

Enable the check boxes of the relevant items in the box of the available items, and click  **Add**. The items are transferred to the box of the associated items. To remove items from the associated items box, enable the check boxes of the relevant items in this box, and click  **Remove**.

6. Click **OK**.

The users associated to the user group have been changed.

Tip

To associate all available items, click  **Add all**, and click  **Remove all** to remove all associations.

6.3.15.7 Delete user group

You can delete user groups that are no longer relevant. If required, product-specific groups must be created and assigned in each ARIS product.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Move the mouse pointer over the relevant user group name. The buttons of the available functions are displayed.
3. Click  **Delete**. The **Confirmation** dialog opens.
4. Click **OK**.

The user group is deleted.

Tip

To delete several user groups at the same time, enable the check boxes for the relevant groups, and click  **Delete**.

6.3.15.8 Delete all users and user groups

If you want to set up user management from scratch, you should delete all users and user groups. This is recommended before you change to or deactivate LDAP, for example. The default users system (page 69), superuser (page 69), arisservice (page 69), and guest (page 69) are retained.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Remove all**. The **Confirmation** dialog opens.
4. Click **OK**.

All users and user groups are deleted except for the default users.

6.3.16 Assign privileges and profiles

6.3.16.1 Assign a license privilege to new users/user groups

Assign license privileges to new users or user groups.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click **Privileges**.
3. Click the privilege you want to assign to the user or user groups. The current assignment is displayed.
4. Click  **Edit assignment**. The **Associate user groups** dialog opens.
5. Click  **Edit assignment**. The **Associate users/user groups** dialog opens.
6. Enable the check boxes of the relevant items in the box of the available items, and click ► **Add**. The items are transferred to the box of the associated items. To remove users/user groups from the **Associated users/user groups** box, enable the check boxes of the relevant users/user groups in this box, and click ◀ **Remove**.

The user/user group is assigned the corresponding privileges. If users are assigned a privilege directly and via associated user groups, this is detected automatically so that the user only uses one license.

Tip

To associate all available items, click ► **Add all**, and click ◀ **Remove all** to remove all associations.

6.3.16.2 Assign a license pool to a user group

Assign a number of licenses (license pool) exclusively to a user group.

Prerequisite

- You have the **User administrator** function privilege.
- License pools at user group level is enabled in ARIS Administration configuration (**Security > Advanced settings**).
- The used license type (page 35) is **Concurrent user**.

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click the user group whose license limit you want to change.
3. Click **Privileges > License privileges**.
4. Move the mouse pointer over the relevant license. The buttons of the available functions are displayed.
5. Click  **Change licenses**. The corresponding dialog opens.
6. Enable the **Granted** check box.
7. Enter the number of licenses you want to assign in the **Assigned licenses** box.
8. Click **Save**.

The licenses are assigned to the user group.

6.3.16.3 Change function, license, and database privileges for users or user groups

Assign the relevant function, license, and database privileges to allow usage of specific programs and functions. Product-specific privileges are assigned in each ARIS product.

There are certain license privileges that you cannot assign to a user in combination with others. For example, you cannot assign ARIS Architect and ARIS Designer to a user at the same time.

You can only activate the subgroups of a license privilege if the superior license privilege is activated. If you remove a superior license privilege of a user, the user also automatically loses the assignment to the subgroups.

Prerequisite

You have the **User administrator** function privilege.

CHANGE FUNCTION, LICENSE, AND DATABASE PRIVILEGES FOR INDIVIDUAL USERS

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user whose privileges you want to change.
3. Click **Privileges**. The list of function privileges is displayed. A distinction is made between privileges assigned directly and those assigned via a user group.
4. Enable/disable the check boxes of the privileges whose assignment you want to add/remove. In order to make a user a system user, enable all function privileges.
5. Click **License privileges**. A distinction is made between privileges assigned directly and those assigned via a user group.
6. Enable/disable the check boxes of the privileges whose assignment you want to add/remove.
7. Click **Database privileges**.
8. Enable/disable the check boxes of the privileges whose assignment you want to add/remove. No database privileges are assigned yet.
9. Click  **Edit**. The **Edit database privileges** dialog opens.
10. Assign the relevant privilege.
11. Click **OK**.

The user is assigned the selected privileges. The assignment of these privileges is displayed as **Granted** in the overview of function and license privileges for a user.

CHANGE FUNCTION PRIVILEGES FOR ALL MEMBERS OF A USER GROUP

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click the user group whose privileges you want to change.
3. Click **Privileges**. The list of function privileges is displayed.
4. Enable/disable the check boxes of the privileges whose assignment you want to add/remove.
5. Click **License privileges**.
6. Enable/disable the check boxes of the privileges whose assignment you want to add/remove.
7. Click **Database privileges**.
8. Enable/disable the check boxes of the privileges whose assignment you want to add/remove. No database privileges are assigned yet.
9. Click  **Edit**. The **Edit database privileges** dialog opens.
10. Assign the relevant privilege.
11. Click **OK**.

All members of the user group are assigned the selected privileges. The assignment of these privileges is displayed as **Via user group** in the overview of function and license privileges for a user.

Product-specific privileges are assigned in each ARIS product.

The following special features apply for process automation:

If the **Process Governance administrator** function privilege has been assigned to the user in the model but not in user management, the user is also assigned the **Process Governance administrator** function privilege in user management the next time the executable process is generated. If the user has the **Process Governance administrator** function privilege from user management but not from the model, the **Process Governance administrator** function privilege is removed from the user in user management the next time the executable process is generated.

6.3.16.4 Assign profiles to users or user groups

Assign the relevant profile (page 20) in order to enable a profile-based view of the portal. Depending on the profile, the information and functionality that users have access to varies. Example: For users to which the **Viewer** profile is assigned, the **Steps** fact sheet is displayed when a model is selected. They are unable to view the **Tasks** fact sheet and the **Contribute** function as they do not have an active role. Profiles are applied in addition to the function (page 71) and license (page 73) privileges.

Prerequisite

- Assignment of profiles is enabled in ARIS Administration configuration.
- You have the **User administrator** function privilege.

ASSIGN PROFILES TO INDIVIDUAL USERS

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user you want to assign a profile to. The user data (details) is displayed.
3. Click **Privileges > Profiles**. The list of profiles is displayed. A distinction is made between profiles assigned directly and those assigned via a user group.
4. Enable/disable the check boxes of the profiles whose assignment you want to add/remove. The user is assigned the selected profiles.

If more than one profile is assigned, the user can switch between these profiles via **<user name> > Profiles > <profile_xy>**. Only one profile can be active at a time.

ASSIGN PROFILES TO ALL MEMBERS OF A USER GROUP

Procedure

1. Click  **User management**, and select **User groups**. The list of user groups opens.
2. Click the user group you want to assign a profile to. The user data (details) is displayed.
3. Click **Privileges > Profiles**. The list of profiles is displayed.
4. Enable/disable the check boxes of the profiles whose assignment you want to add/remove. All members of the user group are assigned the selected profiles. The assignment of these profiles is displayed in the overview of profiles for a user as **Via user group**.

If more than one profile is assigned, the user can switch between these profiles via **<user name> > Profiles > <profile_xy>**. Only one profile can be active at a time.

6.3.17 Handle password

Assign a new password to a user or generate it automatically. You can request a new password if you have forgotten your current password.

6.3.17.1 Change user password

Assign a new password to a user or generate it automatically. Passwords of LDAP users cannot be changed.

Prerequisite

You have the **User administrator** function privilege.

CHANGE PASSWORD MANUALLY

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user whose password you want to change. The user data (details) is displayed.
3. Click  **Edit**.
4. Enable the **Change password** check box. The **Old password**, **New password**, and **Confirm password** fields are displayed.
5. Enter a new password, and reenter it. If you want to use the webMethods integration, passwords must not contain a colon.
6. Click **Save**.

The password is changed. The user receives a notification by e-mail.

GENERATE PASSWORD

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user whose password you want to change. The user data (details) is displayed.
3. Click  **Generate password**. The button is only displayed for users who are not LDAP users.

The password is changed. The user receives a notification by e-mail.

6.3.17.2 Request new password

You can request a new password if you have forgotten your current password. If an LDAP system is used for user management, please contact your LDAP administrator to request a new password.

Procedure

1. Click **Reset password** in the **Login** dialog. The corresponding dialog opens.
2. Enter your user name.
3. Click **Reset password**.

Depending on your configuration, you will either receive an e-mail with a new password immediately or you must first confirm your password change using a link.

6.3.18 Apply LDAP

You can import users from the LDAP system and you can synchronize user and user group data with the data stored in the LDAP system.

6.3.18.1 Import LDAP users

You can import users from the LDAP system.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Start LDAP import**. The button is active only if an LDAP system is configured on the server.
4. Select whether you want to import only users or user groups and associated users.
5. Select if you want to use the default filter or create a custom one.
6. Click **Preview** to check how many users or user groups are imported. The number is displayed, as well as up to 100 elements to be imported in alphabetical order.
7. Click **Start import**.

The users or user groups and associated users are transferred from the LDAP system according to the selected options.

6.3.18.2 Synchronize users with the LDAP system

You can synchronize user and user group data with the data stored in the LDAP system. LDAP users are indicated by a different symbol: .

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click the user you wish to synchronize.
3. Click  **Synchronize with LDAP**. The button is active only if an LDAP system is configured on the server.

Data is transferred from the LDAP system for the selected item.

6.3.19 Manage user data

You can backup and restore management data, export user statistics and generate reports (page 78) about users, user groups, privileges, licenses, assignments, etc.

6.3.19.1 Back up user management data

You can create a backup file based on the data in user management.

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Back up data**. The **Back up user management data** dialog opens.
4. Enter a password and confirm it. The password is required for restoring this file.
5. Optionally, you can include the user's photos in the data backup.
6. Click **Start**.

The user management data is saved in JSON format in a ZIP file. The file is separated into several areas to enable even large data volumes to be saved easily: Users, User groups, Licenses, Pictures, Privileges, Configuration, and Charts. Backups from an ARIS installation version 9.7 and older can be restored. Backups from the current ARIS installation cannot be restored in older versions.

6.3.19.2 Restore user management data

You can restore previously backed up user management data in Administration. Deactivate LDAP before restoring the data to speed up the process. Backups from an ARIS installation version 9.7 and older can be restored. Backups from the current ARIS installation cannot be restored in older versions.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Restore data**. The corresponding dialog opens.
4. Select the backup file.
5. Enter the password to open the file.
6. Click **Start**.

The user management data is restored.

6.3.19.3 Export user statistics

Export statistics about users. Optionally, you can export usage patterns, assignments, changes to data and database items made by the user, the information used most often or the information used last, etc.

Prerequisites

- You have the **User administrator** function privilege.
- **Generate user statistics (com.aris.umc.audit.enabled)** is enabled in the configuration (page 291) (**User management > Security > Advanced settings**).

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Export user statistics**. The corresponding dialog opens.
4. Select the information that the report should output (event type).
5. Select the output format.
6. Select the time period over which the statistics should be created.
7. Click **OK**.

The user statistics are output in the selected format.

6.3.19.4 Generate report

Generate reports (page 78) about users, user groups, privileges, licenses, assignments, etc.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Click  **User management**. The list of users is displayed.
2. Click  **Additional functions**.
3. Click  **Generate report**. The corresponding dialog opens.
4. Select the relevant report.
5. Select the output format.
6. Click **Start**.
7. Click **OK**.

The report is output as an Excel file.

6.3.20 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.3.20.1 What is the difference between ARIS Architect 'Administration' tab and ARIS Administration?

Users and privileges are managed centrally for all databases and ARIS products of an activated tenant. The role-dependent data access is controlled by access privileges and filters that are assigned per database in ARIS Architect on the **Administration** tab.

MANAGEMENT IN ARIS ADMINISTRATION

You can use User Management to manage users, user groups, privileges, licenses, and configurations for all ARIS products. This ensures single sign-on for various ARIS products. Users can also be created using an LDAP system.

MANAGEMENT IN ARIS ARCHITECT

When you create a database, all users and user groups from the user management are automatically imported into the database. Administrators assign function and access privileges, as well as filters to users and user groups in each database so that only authorized users can view certain database content or perform specified actions. Use the prefix management to track which user created or changed database items.

If you are using the server LOCAL, you can log in only with the user **system**.

ARIS video tutorial

ARIS Architect 'Administration' tab versus ARIS Administration

(<http://www.ariscommunity.com/videos/aris-architect-administration-tab-versus-aris-administration>) (approx. 2 minutes)

6.3.20.2 What is the 'system' user?

The **system** user is created automatically. By default, the system user has all function privileges. This user can log in to process administration, ARIS Administration, User Management, and My tasks. In ARIS Architect and ARIS Designer, this user has all access privileges for all database groups of all databases. This user only uses up a license if a license privilege is activated for this user. The default password is **manager**. You should change the default password to prevent unauthorized access. You can change all user data except for the user name.

Having more than one system user can avoid problems, if, for example, your single system user has forgotten his password. You can create (page 44) additional system users or copy (page 45) the existing system user. If your only system user was deleted accidentally, create a new one by using the superuser (page 69).

6.3.20.3 What is the user superuser?

The user **superuser** is created automatically. By default, this user is assigned the **User management, License management, and Configuration administrator** function privileges. This user can also enable this function privilege for other users. Users of the **superuser** type do not use up a license. They manage the system administration, but cannot use ARIS products due to license restrictions. The default password is **superuser**. You should change the default password to prevent unauthorized access. The password of the superuser is very important, as it is the only user who cannot be deleted. You can change all user data except for the user name.

6.3.20.4 What is the user 'arisservice'?

The user **arisservice** is created automatically. By default, this user is assigned the **Database administrator and Process Governance administrator** function privileges. This user only uses up a license if a license privilege is activated for this user. The default password is **arisservice**. You should change the default password to prevent unauthorized access. You can change all user data except for the user name.

6.3.20.5 What is the user 'guest'?

The user **guest** is created automatically. By default, no function or license privileges are assigned to this user. This user serves technical purposes only. It is not for use by end users. Logging in to ARIS Connect or other Software AG products with this user is not allowed. Further information is available in the Software AG license terms (<http://softwareag.com/licenses>).

6.3.20.6 How can user accounts be deleted and anonymized?

Users can only be deleted (page 50) in ARIS Administration. To anonymize users in the different ARIS components according to GDPR (page 1172), follow the instructions of the respective online help or manual:

- **ARIS Cloud Controller (ACC) Command-line Tool** manual
- **ARIS Server Administrator Command-line Tool** manual
- **ARIS document storage Command-Line Tool** manual
- **ARIS Process Governance Command-Line Tool** manual
- **User Management Command-Line Tool** manual
- **ARIS Risk & Compliance Manager online help > Procedures > Use ARIS Risk & Compliance Manager administration > Anonymize users** and **Specify anonymization patterns**
- **Collaboration > online help > Administrate Collaboration > How can user accounts be deleted and anonymized?**

After anonymization, users and their activities are shown with **Anonymized user** instead of with the user name.

6.3.20.7 What are user groups used for?

User groups define the tasks or functions that a person performs in a company. A certain set of function, license and database privileges, as well as profiles, is assigned to different user groups. If a user group is assigned to a user, the user has all privileges and profiles assigned to that user group. You can combine different user groups, that is, a user can belong to several different user groups at the same time, or the user's user groups may change, depending on the context.

6.3.20.8 What function privileges can be assigned?

Function privileges provide users with specific functions and control their privileges. Additionally the user must be assigned to a license privilege. You can assign (page 59) the following function privileges to users or user groups. Additional privileges can be assigned in each ARIS product at the database level.

ARCM administrator

Manage ARIS Risk & Compliance Manager system settings and run data exports/imports.

ARIS Connect administrator

Specify which version of which database is to be published in the portal, and manage the corporate design.

Analysis administrator

Back up, restore, and manage the analysis database of a tenant. Import and export queries and ad hoc analyses.

Analysis publisher

Publish and delete ad hoc analyses and queries for other users. Back up ad hoc analyses and queries.

ARIS Cloud Controller configuration administrator

Edit the ARIS Cloud Controller server configuration including registered nodes and application types.

Collaboration administrator

Manage private groups, flagged posts, announcements and e-mail templates.

Component administrator

Add, start, stop, and remove components on the ARIS Cloud Controller server.

Configuration administrator

Configure ARIS Design Server or ARIS Connect server, export and import a tenant's configuration files, for example, ARIS filters, templates, and XML structures.

Dashboard administrator

Create and manage visual content in ARIS Connect, for example, dashboards.

Database administrator

Manage tenant databases. System user (page 69) in all databases.

Document administrator

Manage documents, document versions, folders, and access privileges in ARIS document storage.

Impersonation

Manage data in other tenants using impersonated users and their privileges.

License administrator

Use ARIS Administration/User Management to import, export, or delete licenses.

Portal administrator

Manage the portal's corporate design.

PPM user

Use PPM.

Process Governance administrator

Manage Process Governance processes.

Publisher administrator

Generate, update, and delete ARIS Publisher exports.

Publishing administrator

Specify which version of which database is to be published in the portal.

Script administrator

Manage report scripts and macros of ARIS Design Server or ARIS Connect Server.

Server administrator

Query and terminate sessions on ARIS Design Server or ARIS Connect Server. Back up and update the system database, and display database statistics and all databases.

Service administrator

Register external systems and services (for example, external database systems, mail servers, or proxy servers) on the ARIS Cloud Controller server.

Technical configuration administrator

Configure systems, such as LDAP or SMTP, use ARIS Administration/User Management to import or export configuration files, and manage documents.

Tenant administrator

Create, back up, restore, and delete tenants on the ARIS Cloud Controller server.

UML Viewer

View UML content in ARIS Connect.

User administrator

Manage users, user groups, and privileges in ARIS Administration/User Management.

ARIS video tutorial

ARIS Architect 'Administration' tab versus ARIS Administration

(<http://www.ariscommunity.com/videos/aris-architect-administration-tab-versus-aris-administration>) (approx. 2 minutes)

6.3.20.9 What license privileges can be assigned?

License privileges provide users with specific products and components. You can assign (page 59) the following license privileges to users or user groups. Additional privileges can be assigned in each ARIS product at the database level.

ARCM CONTRIBUTE

Perform tasks in ARIS Risk & Compliance Manager that do not require GRC-specific knowledge.

ARCM OPERATE

Perform all administrative and operative GRC-specific tasks in ARIS Risk & Compliance Manager.

ARIS API FULL ACCESS (ARIS CONNECT)

View and edit ARIS data of ARIS Connect Server using external applications.

ARIS API FULL ACCESS (ARIS DESIGN SERVER)

View and edit ARIS data of ARIS Design Server using external applications.

ARIS API MOBILE ACCESS (ARIS CONNECT)

View and edit ARIS data of ARIS Connect Server using mobile applications.

ARIS API MOBILE ACCESS (ARIS DESIGN SERVER)

View and edit ARIS data of ARIS Design Server using mobile applications.

ARIS API READ ACCESS (ARIS CONNECT)

View ARIS data of ARIS Connect Server using external applications.

ARIS API READ ACCESS (ARIS DESIGN SERVER)

View ARIS data of ARIS Design Server using external applications.

ARIS API SYSTEM ACCESS (ARIS CONNECT)

Retrieve ARIS data of ARIS Connect Server using external applications.

ARIS API SYSTEM ACCESS (ARIS DESIGN SERVER)

Retrieve ARIS data of ARIS Design Server using external applications.

ARIS ALFABET INTEROPERABILITY

Exchange information between ARIS and Alfabet.

ARIS ARCHITECT

Develop, model, analyze, control, and manage the corporate process architecture.

- **ARIS Access**
Access ARIS data and ARIS Repository content via external applications.
- **Business Strategy**
Define, analyze, and control corporate strategies, business models, and KPIs.
- **Enterprise Architecture Management**
Create a uniform inventory of systems and technologies to align business requirements with IT changes.
- **Process Governance**
Design and deploy BPM governance processes to coordinate, automate, and monitor BPM projects.
- **SAP®**
Support SAP® projects by means of process design (business blueprints), test design, and process implementation, and by connecting ARIS with SAP® Solution Manager.
- **Simulation**
Identify process bottlenecks and run what-if analyses in order to obtain valuable decision support for process improvement programs.
- **Test Designer**
Create end-to-end test paths based on business processes.
- **webMethods integration**
Develop, model, and improve business processes, and make them available for implementation by IT via an automated process.

ARIS CONNECT DESIGNER

Create, modify, and maintain models in the Web browser and make them available in the cloud.

- **ARIS Aware**
Use ARIS Aware.

ARIS CONNECT VIEWER

View ARIS Connect content.

- **Contribution**
View and add ARIS Connect content.
- **ARIS Aware**
Use ARIS Aware.

ARIS DESIGNER

Provide models for business process management representing aspects such as business processes, business organization, data modeling, IT landscapes, or workflows.

- **Business Strategy**
Define, analyze, and control corporate strategies, business models, and KPIs.
- **Enterprise Architecture Management**
Create a uniform inventory of systems and technologies to align business requirements with IT changes.
- **SAP®**
Support SAP® projects by means of process design (business blueprints), test design, and process implementation, and by connecting ARIS with SAP® Solution Manager.
- **Test Designer**
Create end-to-end test paths based on business processes.

ARIS OPTIMIZER

Calculate meaningful business process data and plan your operational structure and process organization based on these calculations.

ARIS SMART INPUT

Record data to be processed using ARIS Optimizer, or record the duration of processes.

ARIS UML DESIGNER

Use ARIS UML Designer to integrate business processes and UML in software development processes and develop and supply high-quality software.

- **ARIS Access**
Access ARIS UML data and UML Repository content via external applications.

ARIS VIEWER

View published process content in ARIS Publisher, participate in Process Governance workflows using the Web-based My tasks, and edit content in IT Inventory.

ARIS CLOUD ADVANCED ADMINISTRATION

Manage databases.

ARIS CLOUD ADVANCED ARCHITECT

Develop, model, analyze, control, and manage the corporate process architecture.

ARIS CLOUD ADVANCED BUSINESS STRATEGY

Define, analyze, and control corporate strategies, business models, and KPIs.

ARIS CLOUD ADVANCED ENTERPRISE ARCHITECTURE MANAGEMENT

Create a uniform inventory of systems and technologies to align business requirements with IT changes.

ARIS CLOUD BASIC DESIGNER

Create models.

ARIS CLOUD BASIC VIEWER

View ARIS Cloud content.

ARIS CLOUD ADVANCED DESIGNER

Create models.

ARIS CLOUD ADVANCED VIEWER

Check models.

WEBMETHODS INTEGRATION (FOR SOFTWARE AG DESIGNER)

Make business processes available for implementation and optimization by IT via an automated process.

6.3.20.10 What information does the history of users and user groups show?

Various events including their timestamp are shown in the history.

USERS

- User created
- User updated
- Privilege assigned
- User assigned to a group
- Synchronized with LDAP
- Login failed
- Password changed

USER GROUPS

- User group created
- User group updated
- Privilege assigned
- User assigned
- Synchronized with LDAP

6.3.20.11 How can the password be changed?

There are several possibilities for changing a user's password. Passwords of LDAP users cannot be changed.

PASSWORD IS CHANGED BY THE ADMINISTRATOR

A user with the **User management** function privilege can change the passwords of other users.

CHANGE PASSWORD MANUALLY

A password can be changed (page 62) manually in the user management (**Change password**).

GENERATE PASSWORD

Alternatively, a password can be generated (page 62) automatically in the user management (**Generate password**).

PASSWORD IS CHANGED BY THE USER

The user has two possibilities for changing his password in the login dialog.

CHANGE PASSWORD

If a user's password has expired, he will be asked to change it in the login dialog (**Change password**). The user will receive an e-mail containing the new password.

RESET PASSWORD

If the user has forgotten his password, he can request a new one (**Reset password**). The rest of the procedure depends upon whether a one-stage or two-stage password change is enabled (**Administration > Configuration > User management**). For the one-stage change the user immediately receives an e-mail with the new password. For a two-stage change the user first receives an e-mail asking him to confirm the resetting of his password within a specific period of time. The user receives a new password after he has confirmed.

6.3.20.12 Which reports exist?

You can generate the following reports as Excel files.

USER GROUPS WITH ASSIGNED USERS AND PRIVILEGES

Outputs a list of the selected user groups and the users assigned to them, along with the function and license privileges granted to the user via the group.

ACTIVE USER SESSIONS

Outputs a list of all users currently logged in to ARIS, along with the start date and time of the session.

ASSIGNED AND UNUSED ARIS LICENSES

Outputs the total number of products and licenses, along with the number of licenses used and available.

USERS WITH ASSIGNED PRIVILEGES

Outputs a list of the selected users with their assigned function and license privileges.

6.3.20.13 What profiles include which content?

Profiles provide users a profile based view of the portal. Depending on the profile, the information and functionality that users have access to varies. Example: For users to which the **Viewer** profile is assigned, the **Steps** fact sheet is displayed when a model is selected. They are unable to view the **Tasks** fact sheet and the **Contribute** function as they do not have an active role. Profiles are applied in addition to the function (page 71) and license (page 73) privileges. If more than one profile is assigned, the user can switch between these profiles via **<user name> > Profiles > <profile_xy>**. Only one profile can be active at a time. You can assign (page 61) the following profiles to users or user groups in ARIS Administration.

Profile name	Views and functionalities
CoE member	The Overview fact sheet is displayed when a model is selected in the  Portal .
Contributor	The Steps fact sheet is displayed when a model is selected in the  Portal . If the Steps fact sheet is not available, the Overview fact sheet is displayed.
Designer	The Diagram fact sheet is displayed when a model is selected in the  Portal .
Manager/Owner	The Dashboards fact sheet is displayed when a model is selected in the  Portal .
Viewer	<ul style="list-style-type: none"> ▪ The Steps fact sheet is displayed when a model is selected in the  Portal. If the Steps fact sheet is not available, the Overview fact sheet is displayed. ▪ The Tasks area is not available. ▪ The  Contribute function is not available.
Viewer (accessible)	<ul style="list-style-type: none"> ▪ The Steps fact sheet is displayed when a model is selected in the  Portal. If the Steps fact sheet is not available, the Overview fact sheet is displayed. ▪ The Tasks area is not available. ▪ The  Contribute function is not available. ▪ ARIS document storage and Process Governance are not available.

These profiles are predefined in the XML configuration.

6.3.20.14 What licenses are available in ARIS Connect?

For working with ARIS Connect, the **Designer** and **Viewer** licenses are available.

DESIGNER

- The **ARIS Connect Designer** license gives users access to the entire repository. They can access models, documents, and dashboards and feeds. In the **Models & Object** area, for example, users can create, edit, and delete models in databases.
- The **ARIS Connect Designer** license can be extended with the **ARIS Aware** license. The **ARIS Aware** license allows users to view configured dashboards (page 1170) for which they have view rights (page 397). The users can view the dashboards, for example, in the Dashboards fact sheet.

VIEWER

- The **ARIS Connect Viewer** license enables users to view models in databases. This means that these users use databases for review and information purposes.
- The **ARIS Connect Viewer** license can be extended with the **ARIS Aware** license. The **ARIS Aware** license allows users to view configured dashboards (page 1170) for which they have view rights (page 397). The users can view the dashboards, for example, in the Dashboards fact sheet.
- The **Contribution** license is an additional license to users using an **ARIS Connect Viewer** license. If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you can change values of specific items (page 757), create new or reuse existing items (page 749), as well as delete items (page 751) in the  **Portal**.

ARIS API

ARIS API is a programming interface with which you can access ARIS and its data from external applications.

6.4 Manage documents



ARIS document storage enables you to manage and temporarily or permanently save documents. Access restriction on folder level is possible in ARIS document storage.

ARIS document storage was tested with 40.000 document items. We recommend monitoring the number and overall size of stored document items and archiving some document items if needed.

6.4.1 Configure jobs for ARIS document storage

You can configure jobs for ARIS document storage, which are executed regularly at a defined time.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Document storage**.
4. Click **Infrastructure**.
5. In the **Batch job schedule** field, enter the time at which a lock should be removed automatically. The time defined in the string must be a CRON (page 1169) expression (for example, '0 0 2 * * ?' if this is to happen every night at 2:00 a.m.).

You have defined the point in time at which the automatic jobs should be run.

6.4.2 Display charts for documents

You can display various charts for documents.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Charts**.
3. Click **Documents**.

The charts for documents are displayed.

6.4.3 Use ARIS document storage with WebDAV

ARIS document storage supports WebDAV. You can connect only one tenant with a specific repository.

To grant users without the **Document management** role access to ARIS document storage content, ARIS document storage can be used as a WebDAV network drive.

With a Microsoft® Windows 7 operating system you just need to connect the relevant network and access ARIS document storage directly. With older operating systems, you need to use Web folders (select **Tools > Map Network Drive > Sign up for online storage connect to a network server** in Microsoft® Windows Explorer). If this does not work you need to configure your computer as follows.

Procedure

1. Open the Registry Editor.
2. Navigate to **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters** and find the DWORD entry **BasicAuthLevel**.
3. Check if the value of this entry is **2**. If the value of this entry differs, please change it to **2**. If the DWORD entry does not exist, create it.
4. With operating systems older than Microsoft® Windows 7 you also need to find the DWORD entry **UseBasicAuth**. If it does not exist, create it.
5. Change the value of this entry to the hexadecimal value **1**. Thus, you enable HTTP Basic Access Authentication for SSL and non-SSL connections.
6. Close the Registry Editor.
7. Restart Microsoft® Windows.

You can now use ARIS document storage as a WebDAV network drive.

6.4.4 Export statistics

You can export statistics for documents if **Generate usage statistics** is configured (page 317) for ARIS document storage.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Documents**.
4. Click **Administrative actions**.
5. Click **Export statistics**. If you want to export all event types, enable the check box in front of **Event types**.

You can save the document statistics file of ARIS document storage at the relevant location for further use.

6.4.5 Use metadata

Metadata can be used to classify documents and is displayed in the properties (page 85) of a document.

6.4.5.1 Define custom metadata for documents

You can define custom metadata for documents saved in ARIS document storage. You can define attributes of type **String** or **Value**. If you define an attribute of type **Value**, you need to specify the allowed value range. For example, this user-defined metadata could be the color (green, blue, yellow) or the company size (small, medium, large). This metadata can be used to classify documents and is displayed in the properties (page 85) of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Documents**.
3. Click the arrow next to ARIS document storage.
4. Click  **Open properties**. The details (page 110) of the folder are displayed.
5. Click **Attribute types**.
6. Click  **Add new attributes**. The **Add attribute type** dialog opens. Add the relevant attribute type.

You have defined custom metadata.

A user-defined attribute type cannot be changed. You can add or delete values.

6.4.5.2 Delete custom metadata

You can delete custom metadata.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Documents**.
3. Click the arrow next to ARIS document storage.
4. Click  **Open properties**. The details (page 110) of the folder are displayed.
5. Click **Attribute types**.
6. Move the mouse pointer over the attribute type to be deleted.
7. Click  **Delete**.

You have deleted custom metadata.

6.4.5.3 Display document properties

You can view the properties of a document or a folder.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.

The properties of the document are displayed.

6.4.5.4 Edit document properties

You can edit the properties of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Edit the document properties, for example, change the description.
6. Click **OK**.

You have edited the properties of the document.

6.4.5.5 Generate a dashboard link

You can generate a link to a permanent document (page 95) located in ARIS document storage. This link can be used in data feeds or dashboards for ARIS Aware.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) or ARIS Connect Viewer license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the document for which you want to generate a link to the document location in ARIS document storage.
4. Click **Show server location**.
5. Click **Copy to clipboard**.

The link to the document is copied to the clipboard and can be used in data feeds or dashboards for ARIS Aware.

6.4.5.6 Edit document tags

You can edit the tags of a document. You cannot edit an existing tag, you can only delete it and replace it with a new one.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Edit**.
6. Enter a new tag. You can separate multiple tags by a comma.
7. Click **Save**.

You have edited the tags of the document.

6.4.5.7 Delete tags of a document

You can delete the tags of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Edit**.
6. Click the little cross beside the tag name.
7. Click **Save**.

You have deleted a tag.

6.4.5.8 Change the document owner

You can change the owner of a document.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Edit**.
6. Next to the **Owner** field, click  **Edit**. The **Select owner** dialog opens.
7. Enter a character string that is part of the user name of the new owner. The matching users are displayed.
8. Enable the relevant user.

You have changed the owner of a document.

6.4.6 Use folders

The folder structure of ARIS document storage provides a better overview and the possibility to specify access privileges (page 91).

6.4.6.1 Create folder in ARIS document storage

You can manage documents in your ARIS document storage. For a better overview, create a folder structure.

Prerequisite

You have the license right **ARIS Connect Designer** and have the corresponding permissions (**Document administrator**, **Local administrator**, or write permission).

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the arrow next to a folder to open the menu.
5. Click  **Add folder**.
6. Enter a name for the folder, and click **OK**.

You have created a new folder.

6.4.6.2 Display folder details

You can view the details of a folder.

Prerequisite

You have the license right **ARIS Connect Designer** and have the corresponding permissions (**Document administrator**, **Local administrator**, or write permission).

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant folder, and click the arrow to open the menu.
4. Click  **Open properties**.

The details (page 110) of the folder are displayed.

6.4.6.3 Edit folder details

You can edit the properties of a folder.

Prerequisite

You have the license right **ARIS Connect Designer** and have the corresponding permissions (**Document administrator**, **Local administrator**, or write permission).

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant folder, and click the arrow to open the menu.
4. Click  **Open properties**. The details (page 110) of the folder are displayed.
5. Click  **Edit**.

You can edit the properties (page 110) of the folder.

6.4.6.4 Move folders in ARIS document storage

You can move folders in your ARIS document storage. The subfolders contained are also moved to the target folder.

Prerequisite

You have the **Document administrator** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the arrow next to a folder to open the menu.
5. Click  **Move to another folder**.
6. Select the folder and click **OK**.

You have moved a folder and its subfolders.

6.4.6.5 Manage folder access for user groups

By default, no access privileges are defined in ARIS document storage. All users have access to all folders - including the root folder - and documents. You can limit the access (page 94) to individual folders of ARIS document storage so that not all ARIS document storage users can access all folders and their contents.

Warning

If you edit the access of a user or a user group to a folder for the first time, you also have to adapt the access privileges of the remaining users or user groups accordingly. Otherwise, all the remaining users or user groups will have no access at all.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant folder, and click the arrow to open the menu.
4. Click  **Open properties**.
5. Click **Access privileges**.
6. Click **Users groups**.
7. Enable the check boxes of the user groups whose access privileges you want to change.
8. Click  **Edit access privileges**. The **Edit access privileges** dialog opens.
9. Enable **Pass access privileges on to all subfolders** if users or user groups should have access to the subfolders below the selected folder. Select the relevant access privilege from the list.
10. Click **OK**.

You have restricted the access to ARIS document storage folders.

Tip

If you want to change the access privileges for a single user group, move the mouse pointer to the row of the relevant user group and click  **Edit access privileges**.

6.4.6.6 Manage folder access for users

By default, no access privileges are defined in ARIS document storage. All users have access to all folders - including the root folder - and documents. You can limit the access (page 94) to individual folders of ARIS document storage so that not all ARIS document storage users can access all folders and their contents.

Warning

If you edit the access of a user or a user group to a folder for the first time, you also have to adapt the access privileges of the remaining users or user groups accordingly. Otherwise, all the remaining users or user groups will have no access at all.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant folder, and click the arrow to open the menu.
4. Click  **Open properties**.
5. Click **Access privileges**.
6. Click **Users**.
7. Enable the check boxes of the users whose access privileges you want to change.
8. Click  **Edit access privileges**. The **Edit access privileges** dialog opens.
9. Enable **Pass access privileges on to all subfolders** if users or user groups should have access to the subfolders below the selected folder. Select the relevant access privilege from the list.
10. Click **OK**.

You have restricted the access to ARIS document storage folders.

Tip

If you want to change the access privileges for a single user, move the mouse pointer to the row of the relevant user and click  **Edit access privileges**.

6.4.6.7 Show assigned users or user groups

You can restrict the view to those users or user groups who have access privileges to the selected folder.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant folder, and click the arrow to open the menu.
4. Click  **Open properties**.
5. Click **Access privileges**.
6. Click **Users** or **User groups**.
7. Enable **Show assigned users**.

Users or user groups who have access privileges to folders in ARIS document storage are displayed.

6.4.6.8 Delete folder in ARIS document storage

You can manage documents in your ARIS document storage. For a better overview, create a folder structure.

Prerequisite

You have the license right **ARIS Connect Designer** and have the corresponding permissions (**Document administrator**, **Local administrator**, or write permission).

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the arrow next to a folder to open the menu.
5. Click  **Delete**. The **Confirmation** dialog opens.
6. Click **OK**.

You have deleted the folder.

6.4.7 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.4.7.1 What are the access privileges for folders?

By default, no access privileges are defined in ARIS document storage. All users have access to all folders - including the root folder - and documents. You can limit the access to individual folders of ARIS document storage so that not all ARIS document storage users can access all folders and their contents. The following access privileges exist:

- All access privileges

The users or user groups with this privilege have full access to the folder and can view, edit, create subfolders and delete the folder but cannot assign privileges to users or user groups. They can upload new documents, new document versions, and delete documents.

- Folder administration access

The users or user groups members with this privilege are local administrators for the folder and can view, edit, create subfolders, delete the folder, and assign privileges to the users and groups. But they cannot assign the **Folder administration access** privilege to other users or user groups. They can upload new documents, new document versions, and delete documents.

When the **Folder administration** access privilege of a folder is revoked, the user also loses the **Folder administration** access privilege for all the subfolders that have implicit pass-on behavior. Thus, if no other restrictions apply, all users have access to these folders again.

- Reset access privileges

The users or user groups with this privilege can revoke the permission on the folder if already assigned.

- 'Read' access privilege

The users or user groups with this privilege can view the folder but are unable to upload new documents and new document versions or delete documents in the folder nor create new subfolders.

- 'Read + Write' Access privilege

The users or user groups with this privilege can view and edit the properties of the folder and create subfolders. They can upload new documents, new document versions, and delete documents.

6.4.7.2 What are permanent documents?

Permanent documents remain in the ARIS document storage until they are explicitly deleted.

You can set up (page 91) access restrictions on the folder level for permanent documents.

If you use Process Governance, it is recommended that you specify that documents are to be saved permanently in ARIS document storage when modeling a dialog for an executable process, otherwise the location for these documents within ARIS document storage cannot be specified in the dialog. These documents are called temporary documents (page 95).

You can restrict access privileges on folder level only, not for individual documents. Users having the **Document management** function privilege can access all folders. If no roles are defined for access to a folder, all users have access to it.

6.4.7.3 What are temporary documents?

Temporary documents are documents that were not explicitly uploaded to ARIS document storage, but were added to the process during process instance runtime if you use Process Governance. They can be transformed into permanent documents and added (page 1157) to ARIS document storage, if required.

Temporary documents are also saved in the safe area of ARIS document storage when you use an external document management system. These documents are deleted when the process instance is terminated.

You can transform a temporary document into a permanent document by moving it to ARIS document storage.

6.4.7.4 Which options are available for models or objects?

There are two options to connect documents with an object or model: The first is using the **ARIS document storage** attribute of an object or model. In the document details, documents connected with an object are preceded by the  symbol, and documents connected with a model are preceded by the  symbol.

The second option is to assign documents to an object or model in ARIS Connect Designer. The assignment is marked by the  link symbol for objects and  for models.

In this case, the document details show that this document is connected via attributes with an object () or a model (.

The second option includes direct attachment to an object or model in ARIS Connect Designer (page 857). This is marked by the  or  link symbols.

6.4.7.5 Which external document management systems can you use?

This is where permanent documents (page 95) are managed. The storage for temporary documents (page 95) is not affected by this.

Available is Microsoft® SharePoint 2013.

6.4.7.6 What is the folder Dashboarding used for?

Data is collected by scheduled reports (page 97) and form the basis for data feeds that are stored in the **Dashboarding** folder in ARIS document storage.

These reports generate XML files.

By default, all users have access to the **Dashboarding** folder. Therefore, it is strongly recommended that you restrict the access (page 91) to the **Dashboarding** folder and all its subfolders to the user that is configured in the URL alias (page 351).

The **United Motor Group** database is supplied with your ARIS installation by default. With this database, you receive a set of default dashboards that can be displayed within ARIS Connect.

By default, at least the following folders are available in the **Dashboarding** folder:

- Collaboration - containing the dashboard data for Collaboration
- Governance - containing the dashboard data for Process Governance
- Piwik - containing the dashboard data collected by Piwik (page **Error! Bookmark not defined.**)

Under United Motor Group folders

- CoE - containing the dashboard data for Center of Excellence (page **Error! Bookmark not defined.**)
- CXM - containing the dashboard data for Customer Experience Management (page **Error! Bookmark not defined.**)
- EA - containing the dashboard data for Enterprise Architecture (page **Error! Bookmark not defined.**)
- Exported Tables - containing the dashboard data for meta data, for example, for the person responsible for a process
- Piwik - containing the dashboard data collected by Piwik (page **Error! Bookmark not defined.**) from the **United Motor Group** database

6.4.7.7 What are scheduled reports?

Scheduled reports are reports that start automatically at a defined point in time.

They run in the background and you can view the results later. For example, you can define that a report that strongly affects system performance is to run only at night when no one is working with the system.

You specify the schedule for reports in ARIS Architect. For further information please refer to the **Evaluate data > Use reports > Create schedule for report** chapter of the ARIS Architect online help.

6.4.7.8 What charts are available for documents?

6.4.7.8.1 What does the 'Number of documents' chart show?

This chart only displays information.

It shows the total number of all documents per repository in ARIS document storage, if multiple repositories exist. Otherwise, the total number of documents is displayed.

6.4.7.8.2 What does the 'Used space' chart show?

This chart is a speedometer display.

If memory space (in kilobyte) for ARIS document storage for a tenant is restricted, the memory used is shown in the form of a speedometer. If no maximum memory space has been defined, the memory used is shown in megabytes.

6.4.7.8.3 What does the 'Most viewed documents' chart show?

This chart is a bar chart.

It shows the 15 most viewed or downloaded documents including their file size.

6.4.7.8.4 What does the 'Most changed documents' chart show?

This chart is a bar chart.

It shows the 15 most changed documents including their file size.

6.4.7.8.5 What does the 'Largest documents' chart show?

This chart is a bar chart.

It shows the 20 largest documents including their file size.

6.4.7.8.6 What does the 'Latest documents' chart show?

This chart is a simple list.

This chart shows the 15 latest documents.

6.4.7.8.7 What does the 'Document status overview' chart show?

This chart is a pie chart.

It shows the distribution and number of documents in the various document statuses. Document statuses are **In progress**, **Under review**, **Reviewed**, **Rejected**, and **Published**.

6.4.7.8.8 What does the 'Outdated documents' chart show?

This chart is a simple list.

This chart shows the 15 oldest documents.

6.4.7.9 How can user accounts be deleted and anonymized?

Users can only be deleted (page 50) in ARIS Administration. Then, they must be anonymized according to GDPR (page 1172). Users are anonymized either with `y-admintool.bat` for Windows operating systems or `y-admintool.sh` for Unix operating systems. For detailed information, refer to **ARIS document storage Command-Line Tool**.

After anonymization, activities of ARIS document storage users, such as uploads of documents, downloads of documents, changes to metadata, are shown with **Anonymous** instead of with the user name.

6.4.8 What pages are available in ARIS document storage?

6.4.8.1 ARIS document storage attribute types

Enables the definition of custom metadata for documents saved in ARIS document storage. This page is available only for the root folder.

GENERAL BUTTONS

Add new attributes

Opens the **Add attributes types** dialog in which you can enter new attribute types for documents.

TABLE

Key

Specifies the key of the attribute. This is the name that is displayed in front of the box of allowed values.

Type

Specifies the type of the attribute.

Value range

Specifies the values that a user-defined attribute may have.

Edit

Opens the **Change attribute type** dialog. This is only available for attributes of the **Value** data type.

Delete

Deletes a value from the list of allowed values for an attribute of the **Value** type.

6.4.8.2 Document details

Displays document details.

GENERAL BUTTONS

Buttons on the top right, whose functionality applies to the entire document including its versions.

Upload new version

Uploads a new version of the current document and creates the versioning information.

Download

Downloads the selected document to the local directory.

Lock

Locks the selected document for editing by other users. This symbol is displayed if the document is not locked.

Unlock

Unlocks the selected document and enables editing by other users. This symbol is displayed if the document is locked.

Delete

Deletes the current document and all its versions.

A confirmation prompt is shown. The document will be deleted if you click **Delete**. If you decide not to delete the document, click **Cancel**.

Edit

Enables the editing of a document.

TABLE

File name

Displays the name of the document.

Path

Displays the path to the document.

Title

Displays the title of the document.

Current version

Displays the current version of the document. During a new upload of the document the last number is increased. When the document status is changed, the number in the middle is increased. The states **Approved**, **Rejected**, **In process**, and **To be approved** exist.

Revision

Shows the number of the revision for the selected document. Each time a document is checked out and changed, a new revision number is assigned.

Status

Shows the status of the document. The states **Approved**, **Rejected**, **In process**, and **To be approved** exist.

ID

Displays the ID of the document.

File size

Displays the size of the file.

Owner

Displays the name of this document's owner.

Locked by

Displays who has opened or locked the selected document.

Created by

Displays who created the document in ARIS document storage.

Created on

Displays the creation date of the document.

Description

Displays a detailed description of the document if the description is specified.

List of tags

Displays tags, if they exist. You can add new tags and edit or delete existing ones.

Link

Displays the link to the physical location.

Optional: Custom metadata

Displays the custom metadata, if defined.

6.4.8.3 Document history

Displays the history of a document.

GENERAL BUTTONS

Buttons on the top right, whose functionality applies to the entire document including its versions.

Upload new version

Uploads a new version of the current document and creates the versioning information.

Download

Downloads the selected document to the local directory.

Lock

Locks the selected document for editing by other users. This symbol is displayed if the document is not locked.

Unlock

Unlocks the selected document and enables editing by other users. This symbol is displayed if the document is locked.

Delete

Deletes the current document and all its versions.

A confirmation prompt is shown. The document will be deleted if you click **Delete**. If you decide not to delete the document, click **Cancel**.

TABLE

Timestamp

Shows the timestamp of the change to a document to the second, as well as the date of the change.

User name

Shows the user name that the user who performed the change was logged in with.

Event

Shows the change made, for example, an update of the document relationship or a change to a document's metadata.

Details

Shows the event in detail.

6.4.8.4 Document relations

Displays the relationships of a document.

GENERAL BUTTONS

Buttons on the top right, whose functionality applies to the entire document including its versions.

Upload new version

Uploads a new version of the current document and creates the versioning information.

Download

Downloads the selected document to the local directory.

Lock

Locks the selected document for editing by other users. This symbol is displayed if the document is not locked.

Unlock

Unlocks the selected document and enables editing by other users. This symbol is displayed if the document is locked.

Delete

Deletes the current document and all its versions.

A confirmation prompt is shown. The document will be deleted if you click **Delete**. If you decide not to delete the document, click **Cancel**.

TABLE

Type

Shows the type of the relationship, for example, **ARIS_Model**, if the document is directly connected to a model. The following relationship types are displayed:

- The document is connected to a model via a link (**ARIS document storage** attribute type group)
- The document is connected to an object via a link (**ARIS document storage** attribute type group)
- The document is connected directly to a model (**ARIS_Model**)
- The document is connected directly to an object (**ARIS_OBJECT**)

Reference

Shows the document's reference to a model or object. The GUID of the model or object is shown, as well.

Delete

Deletes the relation of the document.

If, for example, the document is connected with a model, this relationship is deleted from the model.

A confirmation prompt is shown. Click **OK** to delete the relation. If you decide not to delete the relation, click **Cancel**.

6.4.8.5 Document versions

Displays the versions of a document.

GENERAL BUTTONS

Buttons on the top right, whose functionality applies to the entire document including its versions.

Upload new version

Uploads a new version of the current document and creates the versioning information.

Download

Downloads the selected document to the local directory.

Lock

Locks the selected document for editing by other users. This symbol is displayed if the document is not locked.

Unlock

Unlocks the selected document and enables editing by other users. This symbol is displayed if the document is locked.

Delete

Deletes the current document and all its versions.

A confirmation prompt is shown. The document will be deleted if you click **Delete**. If you decide not to delete the document, click **Cancel**.

TABLE

Revision

Shows the number of the revision for the selected document. Each time a document is checked out and changed, a new revision number is assigned.

Size

Displays the size of the file.

Changed on

Shows the date a document version was changed.

Changed by

Shows which user changed a version of a document.

Comment

Shows the comment entered when changing the version of the document.

Status

Shows the status information of the document. The following status information is possible:

- NEW
- ON_APPROVAL

- IN_PROGRESS
- APPROVED
- REJECTED
- PUBLISHED

VERSION-SPECIFIC BUTTONS

If you move the mouse pointer to the row of a version the version-specific buttons are displayed.

Open version

Downloads the version of that row to the local directory.

Delete

Deletes the version of that row.

This button is not available for the current version. This version can be deleted only together with the document itself.

A confirmation prompt is shown. The version will be deleted if you click **Delete**. If you decide not to delete the version, click **Cancel**.

6.4.8.6 Folder access privileges for user groups

Displays the folder access privileges of the associated user groups.

GENERAL BUTTONS

Delete

Deletes the selected folder, its subfolders and all documents in them.

Enter search term field

Enter the name of the user group or user you want to edit.

Pass on access privileges to all subfolders

Activates the function based on which the restriction of access privileges is extended to all subordinate folders of the selected folder.

TABLE

User group name

Displays the name of the user group.

Access type

Displays the access privilege of a folder for a user group or a user.

Edit

Opens the **Edit access privileges** dialog.

6.4.8.7 Folder access privileges for users

Displays the folder access privileges assigned to users.

GENERAL BUTTONS

Delete

Deletes the selected folder, its subfolders and all documents in them.

Enter search term field

Enter the name of the user group or user you want to edit.

Pass on access privileges to all subfolders

Activates the function based on which the restriction of access privileges is extended to all subordinate folders of the selected folder.

TABLE

User name

Displays the name of the user.

Full name

Displays the full name of a user.

Access type

Displays the access privilege of a folder for a user group or a user.

Edit

Opens the **Edit access privileges** dialog.

6.4.8.8 Folder details

Displays the details of a folder. (page 89)

GENERAL BUTTONS

Delete

Deletes the selected folder, its subfolders and all documents in them.

Edit

Enables editing mode for the folder details.

TABLE

Folder name

Displays the name of the folder.

Path

Displays the path to the folder.

ID

Displays the ID of the folder.

Created by

Displays who created the folder in ARIS document storage.

Created on

Displays the creation date of the folder.

6.4.8.9 Folder history

Displays the folder history.

GENERAL BUTTONS

Delete

Deletes the selected folder, its subfolders and all documents in them.

Refresh

Refreshes the page displayed.

TABLE

Timestamp

Displays the timestamp of the changes to the folder details.

User name

Displays the user who changed the folder details.

Event

Displays what changes were made to the folder, for example, the creation of a new subfolder.

Details

Displays a detailed comma-separated list of the changes made to the folder.

6.4.8.10 Select document page

Enables selection of the documents you want to add. Multiple selection is possible. Double-click to add a single document to the selection.

ARIS document storage

Enables you to select a document that is stored in ARIS document storage.

Microsoft® SharePoint 2013

Enables you to select a document that is stored in a third-party document management system.

Properties

Opens the **Document properties** dialog. This dialog displays document properties, such as file name, version, and file type.

Previous version

Opens the **Document versions** dialog, which displays a list of document versions with the corresponding change list numbers, the change date, and the name of the editor.

Add to selection

Adds the selected document to the document selection.

Clear selection

Clears the selection. All documents are removed from the selection.

Remove document

Removes the selected document from the selection. Multiple selection is possible. Select adjacent documents by holding down the Shift key and clicking the first and last document. Select individual objects by holding down the Shift key and clicking the relevant documents.

EXPLORER TAB

Click the small right arrow in order to navigate to further subfolders.

Selected documents

Displays the list of documents already included in the selection.

FIND TAB

Find what

Enables you to enter a term that occurs in the title, file name, description, or tags (page 795) of the document.

Search result

Displays the documents that match the search criteria.

Selected documents

Displays the list of documents already included in the selection.

6.4.8.11 Select tags page

From the available tags (page 795), select those you want to use for marking the document.

Specify tag filter...

Used for entering a search term to restrict the number of the tags (page 795) displayed existing in the system. When you enter the first letters the display is restricted to the tags that fit your input.

Select tags to be added

Enable the check box in front of the tags you wish to identify the document with.

6.4.8.12 Upload document page

Enables the upload of the required document.

File

Enter the name of the file. To search your file system, click  **Browse**.

Location

Enables you to select the location where files are to be saved in ARIS document storage. Click the small right arrow in order to navigate to further subfolders. To browse, click  **Browse** next to the box.

Comment

Enables you to enter a comment that will be displayed in the **Document versions** dialog.

Title

Used to enter the title of the document to be uploaded.

Description

Used to enter the description of the document to be uploaded.

Tags

Displays tags, if they exist. You can add new tags and edit or delete existing ones.

Enter suggestions here

Used to enter new tags. Press Enter to transfer the new tag.

Delete individual tag

Click  **Delete** to delete an individual tag or selected tags for this document. Multiple selections are allowed.

Delete all tags

Click  **Delete all tags** to delete all tags for this document.

Find

Click  **Find** to search for corresponding tags for this document in your ARIS document storage.

6.5 Administrate automated processes

Process administration (page 132) in ARIS Connect provides information and functions pertaining to automated processes.

ARIS video tutorial

6.5.1 Open process administration

You can perform different actions in process administration (page 132) and retrieve information.

Prerequisite

You have the Process Governance administrator (page 131) function privilege.

Procedure

1. Click **<user name> > Administration**.
2. Click  **Process administration**.

The functions and information of process administration are available.

Depending on whether you select Processes, an executable process, a version, or a process instance of an executable process, different information and functions are displayed.

ARIS video tutorial

Process administration

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

6.5.2 Find process instances

Find process instances that have a certain status or property.

Prerequisites

You have the Process Governance administrator (page 131) function privilege.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Instances**. The list of process instances is displayed.
3. Click  **Show/hide filter**. The filter criteria are displayed.
4. Enable () the relevant filter criteria, for example, the **QUEUED** status (page 133).
5. Click **Apply filter**.

The list of queued process instances is displayed.

You can combine different filter criteria.

6.5.3 Start governance process in process administration

You can start the executable process in process administration for processes or process versions.

Prerequisite

You have the Process Governance administrator (page 131) function privilege.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Navigate to the executable process you want to start, or to the process version.
3. Click the process or version.
4. Click  **Start governance process**. The **Select context** dialog opens. The items are displayed on which the executable process can be started depending on the specified execution context.
5. Select the relevant model.
6. Click **OK**.

The executable process is started for the selected item.

6.5.4 Export process administration content as a CSV file

You can export data of human tasks, instance monitoring, and the console, for example, for evaluation purposes.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Human tasks**, **Instances**, **Variables**, or **Console**, or go to **Processes** and click the process instance and then **History**.
3. Click  **Export as a CSV file** in the navigation bar. The corresponding dialog opens.
4. Select the output options.
5. Click **Export**.

The content is exported as a CSV file.

6.5.5 Send reminder about executing human tasks

You can send reminders about human tasks to the relevant executors.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Open the relevant human task.
3. Click  **Send reminder**.

The users assigned to the human tasks as executors receive an e-mail with the information that the task is to be edited.

If 75% of the processing time has expired, the executors automatically receive a reminder. If the task is not edited by the due date the escalation manager (page 142) is notified. Statistics data in the form of charts (page 142) for human tasks are available under **ARIS Administration > Charts > Governance > Human tasks**.

ARIS video tutorial

Process administration overview

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

(approx. 3 minutes)

6.5.6 Suspend execution of a process instance

You can suspend the execution of a process instance. This can be useful, for example, if a server outage would cause the process execution to fail.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process instance under **Processes**.
3. Click  **Suspend**.

The execution of the process instance is suspended. It has the status **Suspended**. It can be resumed (page 117) again later. Unlike the  **Suspend recurrence** function, it is not the creation of recurrences that is suspended for the entire process, but only the execution of this process instance.

Example

The **Save data** process is started at midnight each night. The process comprises the two steps **Copy data** and **Archive data**.

- **Suspend recurrence**

If  **Suspend recurrence** is selected, the process will no longer be started as of the next night and will not resume until  **Resume recurrence** is selected. However, all running process instances are completed.

- **Suspend process instances**

If  **Suspend** is selected at night for a running process instance that has just finished copying data, this specific process instance is suspended, in other words, the data will no longer be archived. Process execution stops at this point. The next night, however, a new instance of the process is started, and the data is backed up and archived. The suspended process instance will not continue to run until  **Resume** is selected.

6.5.7 Resume execution of a process instance

You can resume the execution of a process instance that was previously suspended (page 116).

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process instance under **Processes**.
3. Click  **Resume**.

The execution of the process instance is resumed.

6.5.8 Terminate execution of a process instance

You can terminate the execution of a process instance permanently if, for example, the executable process is no longer relevant.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process instance under **Processes**.
3. Click  **Terminate**.

The execution of the process instance is terminated permanently.

6.5.9 Suspend recurrence for the executable process

You can suspend the recurrence of an executable process.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. In the navigation, click the relevant process version under **Processes**. Processes for which a recurrence has been configured are identified in process administration by the symbol .
3. Click  **Suspend recurrence**.

The recurrence of the executable process is suspended. You can continue (page 118) later with the existing configuration.

Unlike the  **Suspend** function, the creation of recurrences is suspended for the entire process, not just for the execution of a given process instance.

Example

The **Save data** process is started at midnight each night. The process comprises the two steps **Copy data** and **Archive data**.

▪ Suspend recurrence

If  **Suspend recurrence** is selected, the process will no longer be started as of the next night and will not resume until  **Resume recurrence** is selected. However, all running process instances are completed.

▪ Suspend process instances

If  **Suspend** is selected at night for a running process instance that has just finished copying data, this specific process instance is suspended, in other words, the data will no longer be archived. Process execution stops at this point. The next night, however, a new instance of the process is started, and the data is backed up and archived. The suspended process instance will not continue to run until  **Resume** is selected.

6.5.10 Resume recurrence for the executable process

You can resume the recurrence of an executable process that was previously suspended.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. In the navigation, click the relevant process version under **Processes**. Processes for which a recurrence has been configured are identified in process administration by the symbol .
3. Click  **Resume recurrence**.

The recurrence of the executable process is resumed with the existing configuration.

6.5.11 Delete executable process

You can deactivate the executable process if, for example, this process is outdated and should therefore no longer be used.

Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

When a generated executable process is deactivated, the process version and all related information, such as instances, subprocesses, etc., are removed from process administration. The deactivated processes are not exported to Process Performance Manager.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Under **Processes**, click the process, process version, or process instance.
3. Click  **Delete**.

The selected item is deactivated.

6.5.12 Suspend, resume, or terminate simulation runs

You can suspend and resume active simulation runs or terminate them. This can be useful, for example, if a server outage would cause the process execution to fail.

Prerequisite

You have the Process Governance administrator (page 131) function privilege.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process and then select the version number under **Processes** in the navigation. Processes for which a Process Governance Simulation was performed are marked with .
3. To suspend a simulation run, click the relevant process instance and select  **Suspend**.
4. Use  **Resume** to continue the simulation run at a later time.
5. To stop a simulation run, select  **Terminate**. The simulation run is terminated and cannot be restarted.

The simulation run is suspended, resumed, or terminated depending on the selected action.

6.5.13 Archive process instances

Archive completed process instances regularly to avoid a large number of instances that can have a negative effect on runtime and start times in process administration and Process Governance.

Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

Prerequisites

- You have the Process Governance administrator (page 131) function privilege.
- The instances have the status (page 140) **Completed**.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Instances**. The list of process instances is displayed.
3. Click  **Show/hide filter**. The filter criteria are displayed.
4. Enable () the **COMPLETED** status.
5. Click **Apply filter**. The list of completed process instances is displayed.
6. Enable () the instances to be archived. You can archive a maximum of 100 instances in one step.
7. Click  **Archive selected instances**.

The instances are removed from the **Instances** (page 134) list and are displayed in the **Archived instances** (page 135) list.

To move instances from archive to the **Instances** list again, open the **Archived instances** list, move the mouse pointer over the relevant table row and click  **Unarchive selected instances**. To delete archived instances, open the **Archived instances** list, move the mouse pointer over the relevant table row and click  **Delete**.

Note

The archiving functionality can affect the total runtime and size of the backup.

6.5.14 Find and correct problems in processes

To ensure a smooth process flow the Process Governance administrator must be able to query information on processes and intervene, if required. Information and functions are provided in process administration (page 131) in ARIS Connect for this purpose. If problems occur during process execution, for example, if an error occurs during an automated task or the recipient of an e-mail message is not recorded as a user, the Process Governance administrator is informed by e-mail.

ARIS video tutorial

6.5.14.1 List processes and display instance/version in the Explorer tree

You can display a list of process instances in their various statuses (page 140). You can check if process instances failed so that you can correct (page 124) and restart them, if required.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Instances**. The list of process instances is displayed.
3. Click  **Filter** to restrict the number of process instances displayed based on various criteria.
4. Select filter criteria.
5. Click **Apply filter**. The list is filtered according to the selected filter criteria. To display the unfiltered list of process instances, click **Reset filter**.
6. To display a specific instance/version, move the mouse pointer over the relevant table row and click  **Display process instance** or  **Display process version**. The instance/version is selected in the Explorer tree.

The list of process instances in their various statuses is displayed.

Tip

You can also display instances or versions in the Explorer tree by using **Human tasks**.

ARIS video tutorial

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.14.2 Review input and output data of an activity

When you receive an e-mail informing you that an activity has failed you can review the input and output data of the activity to find out whether they caused the failure.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Select the process instance of the executable process containing the failed activity. You were informed about the relevant activity in the notification.
3. Click **History**.
4. Click the activity whose execution failed.

Input and output data of the activity are displayed. Review the data.

You can change the output data using the function Skip activity (page 123).

ARIS video tutorial

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.14.3 Restart activities with status FAILED

You can restart failed activities. You are notified by e-mail if an activity failed.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the process instance of the executable process containing the failed activity. You were informed about the relevant activity in the notification.
3. Click **History**.
4. Move the mouse pointer over the activity whose execution failed. The buttons of the available functions are displayed.
5. Click **Retry**.

The activity is restarted with the same data as the failed activity.

If the activity cannot be restarted, you will receive a notification. You can skip (page 123) the activity.

ARIS video tutorial

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.14.4 Skip activities with status 'Failed'

If a restart (page 122) is impossible, you can skip failed activities. You are notified by e-mail if an activity failed.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click a process instance of an executable process.
3. Click **Activities**. The process instance activities are listed.
4. Move the mouse pointer over the activity you want to skip. The buttons of the available functions are displayed.
5. Click  **Skip activity**. If output data was specified for the activity, a dialog opens for you to correct the data and thus avoid further failure. If no output data was specified for the activity, the activity is skipped immediately.
6. Change the output data.
7. Click **Save**.

The process continues with the next activity.

ARIS video tutorial

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.14.5 Correct and restart process instances with status 'Failed'

You can restart failed process instances. You are notified by e-mail if a process instance failed.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Instances**. The list of process instances is displayed.
3. Click  **Filter**, select the filter **Status** and the status **FAILED**.
4. Click **Apply filter**. The list of failed process instances is displayed.
Alternatively, you filter process instances with the filter **ID** by entering the ID of the failed process instance, which you received in the notification.
5. Move the mouse pointer over the process instance you want to correct. The buttons of the available functions are displayed.
6. Select  **Display process instance**. The instance is displayed.
7. Click **Console** to obtain further information on why the instance failed.
8. Correct the errors that led to the process instance failing.
9. Click the relevant process instance.
10. Click **History**.
11. Move the mouse pointer over the activity whose execution failed. The buttons of the available functions are displayed.
12. Click **Retry**.

The activity is restarted and the process instance continues.

ARIS video tutorial

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.15 Display information

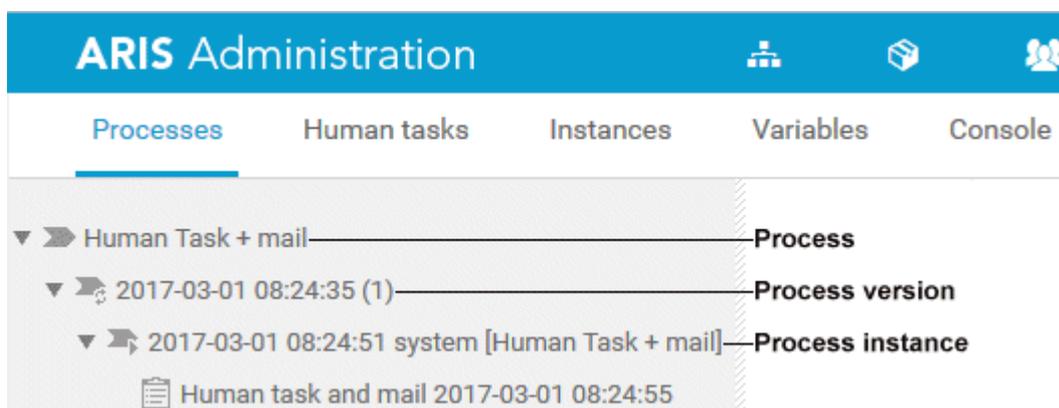
Process administration in ARIS Connect (**ARIS Administration > Process administration**) provides functions (page 131) for process automation and information about executable processes.

6.5.15.1 Display information about executable processes

In process administration, existing executable processes are displayed. You receive detailed information on processes, process versions/instances, and human tasks (Details (page 136), Context (page 136), History (page 137), Activities (page 138), Console (page 136), Assignments (page 136)).

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the process, process version, process instance, or human task.



3. Activate the required function in the navigation bar.

The information available for this item is displayed. Processes for which a Process Governance Simulation was performed are marked with . Processes for which a recurrence has been configured are identified in process administration by the symbol . Statistics data in the form of charts (page 142) for Governance processes are available under **ARIS Administration > Charts > Governance > Processes**.

ARIS video tutorial

Process administration overview

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

(approx. 3 minutes)

6.5.15.2 Display information about activities

You can display details of an activity.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Under **Processes**, click the relevant process instance.
3. Click **History**.
4. Click the relevant activity in the table.
5. Click **Input activities**.
6. Click **Show associated activity in the history** to display the corresponding activity in the history table. Then click **Input activities** again.
Alternatively, you can click **Used by** so that all activities for which the selected activity acts as an input activity are displayed.
7. Click **Input variables** or **Output variables** to show the values read (input) or stored (output) during execution of an activity.
8. Click **Input data** or **Output data** to check the data. Additionally, you can click  **Show details** to display the XML data.

The relevant details are displayed.

6.5.15.3 Display human tasks of a process instance

You can display the human tasks associated with a process instance.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the process instance whose human tasks you want to display.
3. Click  **Show tasks**.

The associated human tasks are displayed.

ARIS video tutorial

Process administration overview

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

(approx. 3 minutes)

6.5.15.4 Display information about variables

You can display detailed information of a variable (page 135), for example, value, value history, XML data.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Variables** to display the variables of all processes. Or click the relevant process version or process instance under **Processes** and then click **Variables**. The variables used with their value, timestamp, type and scope are displayed.
3. To display the XML data of the variable value, click a variable in the table.
4. To show the previous values of a variable including their timestamps, click **History**. Additionally, you can show the values read (input) or stored (output) during execution of an activity.
5. Once you selected a variable in the table, you can use  **Show details** to display or hide **Value as XML** and **History**.

The details of the variable selected are displayed.

To export (page 115) the content, click  **Export as a CSV file** in the navigation bar.

6.5.15.5 Display and delegate executors of a human task

You can display the executors of human tasks and delegate tasks.

Prerequisites

- A task must have been selected in the list.
- The task must have been assigned to a user group.
- The status of this task is **New** or **In process**.
- The user to whom the task has been transferred belongs to the allowed group (data flow: **Group of allowed delegates**).

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click **Human tasks**.
3. Move the mouse pointer over the relevant task. The buttons of the available functions are displayed.
4. Click  **Show details**. The human task is displayed in **Processes**.
5. Click **Assignments**.
6. Move the mouse pointer over the relevant task. The buttons of the available functions are displayed.
7. Click  **Delegate task**. The **Select executor** dialog is displayed.
8. Click the executor who you want to delegate the task to. Filter the list of executors if it is too large.
9. Click **Save**.

The task is passed on to the selected executor and its status (page 141) is displayed as **Delegated**.

Statistics data in the form of charts (page 142) for human tasks are available under **ARIS Administration > Charts > Governance > Human tasks**.

ARIS video tutorial

Process administration overview

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

(approx. 3 minutes)

6.5.16 Handle simulation

The simulation of executable processes (Process Governance Simulation) enables you to test the modeling of processes before release. The automated execution of all process passes and the possible data combinations is less error-prone and quicker than the manual method.

6.5.16.1 Display simulation information

In process administration, the processes for which Process Governance Simulation was performed are displayed. You receive further information and tips regarding errors. If the simulation of a process instance fails, the Process Governance administrator receives a notification and a message is displayed in Instance monitoring.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process and then select the version number under **Processes** in the navigation. Processes for which a Process Governance Simulation was performed are marked with .
3. Click the relevant process instance.
4. Click Details (page 136) to display information about the status and progress of the simulated process instances.
5. To display simulation data for simulated activities, click History (page 137), and activate the relevant activity in the table.
6. If you need an overview of the process instances a simulation was performed for, click Instances (page 134). The simulated activities are selected in the **Simulated** column.
7. To display messages regarding the process instance, activate the Console (page 136) bar. The various process passes of the instance are displayed under the process instance, for example, when an XOR operator is used in the process.

This information can be used to resolve modeling errors and optimize the process.

6.5.16.2 Release simulated process

You can release process versions that were created and checked by Process Governance Simulation, that is, transform the simulated process into a normal process. It is not possible to start a governance process for process versions generated by the simulation. These are marked with  in the ARIS Connect process administration. This can be done after the transformation into a released process.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Select the relevant process version.
3. Click  **Transform simulated version into a normal process.**

The process version is transformed into a normal process.

6.5.16.3 Delete simulation runs

You can delete terminated simulation runs to make process administration clearer.

Prerequisite

You have the Process Governance administrator (page 131) function privilege.

Procedure

1. Open (page 114)  **Process administration** in ARIS Connect.
2. Click the relevant process and then select the version number under **Processes** in the navigation. Processes for which a Process Governance Simulation was performed are marked with .
3. Click the relevant process instance.
4. Click  **Delete.**
5. Confirm the confirmation prompt by clicking **OK.**

The simulation run is deleted and removed from Process administration.

6.5.17 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.5.17.1 What tasks does the Process Governance administrator perform?

The Process Governance administrator manages (page 132) the processes. Process administration in ARIS Connect provides process automation functions and supplies information on processes. Depending on whether a process, process version, or process instance is selected, various functions and tabs are available:

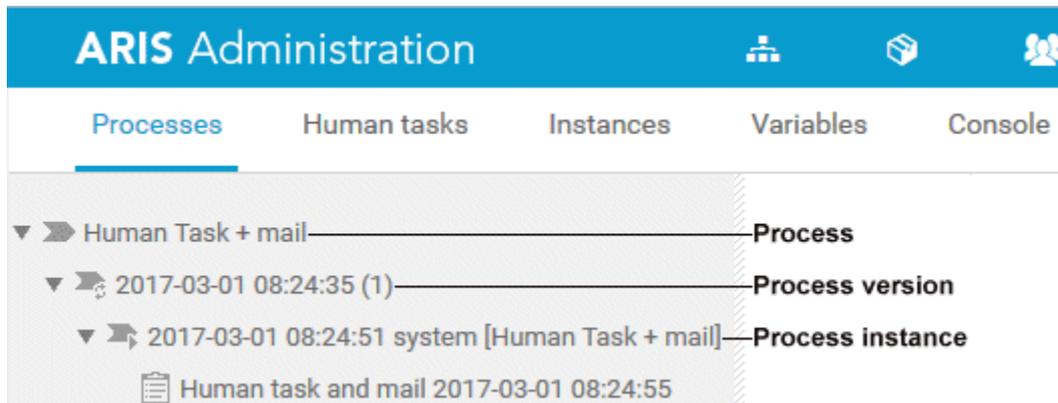
- Start (page 115) governance processes in process administration, for example, older versions of the process.
- Deactivate (page 119) executable processes.
- Restart (page 122) activities in the status **FAILED**.
- Suspend (page 116) the execution of process instances.
- Resume (page 117) the execution of process instances that were previously suspended.
- Terminate (page 117) the execution of process instances if, for example, the executable process is no longer relevant.
- Archive (page 120) instances to improve performance.
- Prioritize and deprioritize process instances
- Configure recurrences for an executable process.
- Suspend (page 118) the recurrence of an executable process.
- Resume (page 118) the recurrence of an executable process that was previously stopped.
- Suspend the recurrence of an executable process
- Resolve error in process.
- Read privileges for the Console (page 136) bar also at the process level.
- View all tasks of other users in **My tasks**.

Statistics data in the form of charts (page 142) for Governance processes are available under **ARIS Administration > Charts > Governance > Processes**.

6.5.17.2 Where do I find process administration and what does it include?

Process administration in ARIS Connect (**ARIS Administration > Process administration**) provides functions (page 131) for process automation and information about executable processes. Executable processes, process versions, process instances, and human tasks are displayed under **Processes**.

To display the path of an element in the process tree, click  **Navigate to occurrence in Explorer tree**.



Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

EXECUTABLE PROCESS

You can delete (page 119) the executable process including all versions and instances.

PROCESS VERSION

You can start (page 115) the governance process or delete (page 119) the process version. If a recurrence is configured, you can suspend (page 118) the recurrence of the process. You can transform (release (page 130)) simulated processes into a normal process.

PROCESS INSTANCE

You can display (page 126) associated tasks, and suspend (page 116), resume (page 117), terminate (page 117), or delete (page 119) the process instance.

The context selected for the process instance is displayed in the navigation tree. Further information can be found in the detailed (page 136) view.

HUMAN TASK

You can send (page 116) a reminder to the executors of the tasks.

NAVIGATION BARS

Use the navigation bars to display human tasks (page 134), instances (page 134), variables (page 135), the console (page 136), details (page 136), context (page 136), history (page 137), diagram (page 137), and activities (page 138).

ARIS video tutorial

Process administration overview

(<http://www.ariscommunity.com/videos/process-administration-aris-connect-overview>)

Find and correct problems in processes

(<http://www.ariscommunity.com/videos/learn-how-find-problems-process-and-correct-processes>) (approx. 9 minutes)

6.5.17.3 How many process instances can be started?

The number of process instances that can be processed in parallel by the engine is limited to 1000 by default (**Configuration > Process Governance > Infrastructure > Batch processing size**). However, this number can be lower depending on the workflow design and the use of custom report scripts. The process instances have the **RUNNING** status. If the specified batch processing size is reached, the process instances started additionally have the **QUEUED** status. You can display (page 114) them in **Instances**. This  **Cross-tenant** setting applies to all tenants on this server. To change it, use ARIS Cloud Controller. For further information, refer to **ARIS Cloud Controller (ACC) Command-line Tool** manual.

Archive completed process instances regularly to avoid a large number of instances that can have a negative effect on runtime and start times in process administration and Process Governance.

6.5.17.4 What functions/information does 'Human tasks' provide?

The human tasks of all executable processes are displayed. Use  **Show/hide filter** to restrict the number of process instances displayed according to various criteria. You can sort the table by different columns, for example, by status. You can export the data as a CSV file (.

You can display/delegate (page 128) the assigned executor or send (page 116) a reminder to the executors. To do so, move the mouse pointer over the relevant task and select **Show details**.

To display a specific instance/version, move the mouse pointer over the relevant table row and click  **Display process instance** or  **Display process version**.

Statistics data in the form of charts (page 142) for human tasks are available under **ARIS Administration > Charts > Governance > Human tasks**.

6.5.17.5 What functions/information does 'Instances' provide?

It provides an overview of the process instances and their various statuses (page 140). Use  **Show/hide filter** to restrict the number of process instances displayed according to various criteria. You can sort the table by different columns, for example, by status. You can export the data as a CSV file (.

You can check if process instances failed so that you can correct (page 124) and restart them, if required.

To display a specific instance/version, move the mouse pointer over the relevant table row and click  **Display process instance** or  **Display process version**.

To archive instances that have the status (page 140) **Completed**, enable the relevant instances () and click  **Archive selected instances**.

Statistics data in the form of charts (page 142) for Governance processes are available under **ARIS Administration > Charts > Governance > Processes**.

Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

6.5.17.6 What functions/information does 'Variables' provide?

The variables can be shown for all processes, for a process version, or for a process instance. The variables used and their values are listed. You can export the data as a CSV file (.

To display the XML data of the variable value, click a variable in the table. To show the previous values of a variable including their timestamps, click **History**. Additionally, you can show the values read (input) or stored (output) during execution of an activity. Once you selected a variable in the table, you can use  **Show details** to display or hide **Value as XML** and **History**.

6.5.17.7 What functions/information does 'Archive' provide?

The archived instances are listed. Use  **Show/hide filter** to restrict the number of process instances displayed according to various criteria.

To unarchive instances, move the mouse pointer over the relevant table row and click  **Unarchive selected instances**. To delete archived instances, move the mouse pointer over the relevant table row and click  **Delete**.

Click **Archive history** to display the list of archiving executions (**Archive/Unarchive**).

Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

6.5.17.8 What functions/information does 'Console' provide?

The console can be shown for all processes or for a process instance. The following messages are displayed:

- Log messages for process instance execution.
- Messages that were generated by the user interface during execution of process instances (log, server, and user management messages). You can filter the messages by their severity.

You can export the data as a CSV file ()

6.5.17.9 What functions/information do 'Details' provide?

Details (page 125) provide different information, such as ID, status, priority, depending on whether you selected a human task, a process version, or process instance. In addition, they display the assigned users for human tasks (**Assignments**).

6.5.17.10 What functions/information does 'Context' provide?

The context and the process settings can be displayed for the process version or the process instance.

The execution context determines from which items (database, group, model/object type, document), in which applications (for example, ARIS Connect), and by which users a governance process can be started. The context must be defined in ARIS before generating the executable process. The context selected for the process instance is also displayed in the navigation tree (page 132) for process administration and in instance monitoring (page 134).

The process setting **Reopen selected context item in read-only mode**, specify if the context item is closed and reopened in read-only mode automatically or not if the context item is open when the governance process is started. The user is prompted beforehand whether or not the opened item is automatically saved, closed, and reopened in read-only mode.

To guarantee governance processes to run successfully, the context items must be closed or opened in read-only mode. If **Reopen selected context item in read-only mode** is disabled and you start the governance process for an opened context item, the governance process will fail.

You must specify the process settings before generating the executable process. After this, the process settings can no longer be changed for the generated process version. If you start the governance process for an opened context item for which **Reopen selected context item in read-only mode** is disabled, the governance process will fail.

6.5.17.11 You have activated 'Diagram'.

Diagram is displayed if you have selected a version of an executable process or a process instance of an executable process. Use **Toggle between EPC and BPMN diagram** to toggle between the EPC display of the executable process and the BPMN diagram generated by the automatic model transformation.

Activities that are currently running or have failed are selected in both models (EPC and BPMN diagram). Compared to the EPC, the BPMN diagram can contain additional activities as these are required for the technical process. In this case, the last selected activity remains selected in the EPC until the next matching activity is reached.

All processes involved are displayed for executable processes that consist of multiple processes.

- If nothing is active, the start model is displayed.
- If an object is active, the models containing active objects are displayed.

To display the properties of the running activity, click the  **Show details** button.

6.5.17.12 What functions/information does a recurrence provide?

The information on recurrences is displayed for process versions for which a recurrence is configured in the model. You can suspend and resume recurrences in process administration. Recurrence configuration and cancelation of recurrences is done in ARIS Architect.

6.5.17.13 You have activated 'History'.

History is displayed if you have selected a process instance of an executable process. Activities run by process instances are listed. If an entry contains a process instance with the **Failed** status, the activity can be restarted (page 122) from here.

To display the input/output data or the simulation data for simulated activities, click the activity in the table.

To get additional details of an input activity, you can display the corresponding activity in the history table. In the row of the relevant input activity, click **Show associated activity in the history**. Alternatively, you can click **Used by** so that all activities for which the selected activity acts as an input activity are displayed.

Click **Input variables** or **Output variables** to show the values read (input) or stored (output) during execution of an activity.

Click **Input data** or **Output data** to check the data. Additionally, you can click  **Show details** to display the XML data.

6.5.17.14 What functions/information does 'Activities' provide?

Activities are displayed if you have selected a process instance of an executable process. It displays the activities of the executable process of the **BPMN process diagram (BPMN 1.x)** type. To skip (page 123) an activity, move the mouse pointer over the relevant row, and click **Skip activity**.

6.5.17.15 What is an executable process?

An executable process is a process that reflects a certain process flow in your company with all the related steps. All information relevant to Process Governance is recorded in EPCs, value-added chain diagrams, organizational charts, dialogs, and data flows (BPM process). The BPM process is automatically transformed into a technical process that can be executed by Process Governance. All relevant information for the BPM process is interpreted, transformed into a BPMN diagram, and all relevant models and objects are archived. The BPMN diagram is the basis for Process Governance. It controls the governance process. The executable process can then be started for a specified context.

Further information is available in the **Modeling conventions for automation** manual on your installation media.

6.5.17.16 Where can the executable process be started?

The executable process can be started in ARIS Architect, ARIS Designer, ARIS Connect, or in the ARIS Connect process administration. The message displayed after starting the governance process can be specified individually for each process (EPC, VACD).

6.5.17.17 What is the context for executable processes?

The execution context determines from which items (database, group, model/object type, document), in which applications (for example, ARIS Connect), and by which users a governance process can be started. The context must be defined in ARIS before generating the executable process. After this, the context can no longer be changed for the generated process version. If no execution context is defined, the governance process can be started for all items (**Without context** option). The defined execution context is displayed in process administration.

6.5.17.18 What happens when an executable process is deactivated?

When a generated executable process is deactivated, the process version and all related information, such as instances, subprocesses, etc., are removed from process administration. The deactivated processes are not exported to Process Performance Manager.

6.5.17.19 What happens when process instances are archived?

Archiving instances gives you the following advantages:

- Process Governance starts faster.
- The process runtime is reduced.
- A better overview of your process instances.

You can only archive instances that have the status (page 140) **Completed**.

During archiving, the data of the corresponding instances is moved from the Process Governance database to an archive entry of ARIS document storage. Each tenant has its own archive. The information about simulation, recurrence, and substitution is not archived.

Warning

To avoid data inconsistencies and possible data loss, you must not perform any of the following activities in parallel, neither manually nor scheduled:

- Deleting any Process Governance process instance, process version, or process
- Archiving Process Governance process instances
- Backup/restore tenant (containing Process Governance or ARIS document storage data)

6.5.17.20 How to schedule archiving

If you want to automatically archive process instances, for example every night at a certain time, write a report in ARIS Script (../..../..../..../abs/help/en/script/ba/index.htm#scripthelp.html) and schedule it. This is done in ARIS Architect (../..../..../..../abs/help/en/handling/ba/index.htm#72345.htm).

6.5.17.21 Which status can activities have?

An activity can have any of the following statuses:

- **ACTIVE**
The activity is just being performed.
- **TERMINATED**
The Process Governance administrator terminated the activity manually during process execution. This may be called for if, for example, the executable process is no longer relevant.
- **FAILED**
The activity could not be performed completely due to an error. Failed activities can be restarted after the error is fixed.
- **SUSPENDED**
The activity has been automatically canceled.
- **COMPLETED**
The activity was completely performed.

6.5.17.22 Which status can process instances have?

A process instance can have any of the following statuses:

- **Running**
The process instance is running the process.
- **Suspended**
The Process Governance administrator suspended (page 116) the process instance manually during process execution. This can be useful, for example, if a server outage would cause the process execution to fail.
- **Terminated**
The Process Governance administrator terminated (page 117) the process instance manually during process execution. This may be called for if, for example, the executable process is no longer relevant.
- **Failed**
The process instance was not able to pass through the process completely due to an error. Failed process instances can be restarted (page 124) after the error is fixed.
- **Idle**
The process instance is in wait state because something unforeseen has happened while the process was passed through. The Process Governance administrator must check and resolve this.
- **Completed**
The process instance has completely passed through the process.

6.5.17.23 What statuses can tasks have?

Tasks can have the following statuses in **My tasks**:

- **New**

The task has not been edited since it was assigned or it was reset (page 779).
- **In process**

The task was partially edited and the editor then finished editing by selecting **Save** to save the current input and resume editing at a later time.
- **Active**

Tasks to be edited, that is, tasks in the **New** or **In process** state.
- **Overdue**

The specified processing time of the task has expired. If the list contains overdue tasks, the number is displayed in the top bar .
- **Suspended**

The process instance that triggers this human task has been suspended in the process administration.
- **Being edited by another user**

This status is set automatically as long as a task that was assigned to several possible executors is currently being edited by one of them. Tasks with this status are displayed with a gray background in the list.
- **Failed**

The task could not be performed because a problem occurred.
- **Completed**

Editing of the task was completed with **OK**. Further editing is no longer possible. However, you can open the task with a double-click to view details. Tasks with this status are displayed with a gray background and with strikethrough formatting in the list.
- **Passed on**

Editing of the task was passed on from the executor to another user for a specific period of time (page 778).
- **Delegated**

Editing of the task was passed on permanently (page 782) from the original assignee to another user. The task remains in the list of the original assignee with this status.
- **Task assignment failed**

The task was not completed by any executor before its due date. The group of executors contained either no executors or no active executors.

6.5.17.24 What is the escalation manager?

The escalation manager is the user who is notified when a human task is not completed by any executor by the due date. It is specified in the data flow diagram or in the model using an organizational element and the **is escalated to** connection.

6.6 Use charts



Charts represent accumulated statistics data graphically.

6.6.1 Display charts

You can view statistics data for the **Users**, **Documents**, **Modeling**, and **Governance** areas as charts. Charts can be used, for example, to perform real-time checks.

Prerequisite

You have one of the following function privileges:

- **User administrator** (charts on user management)
- **Database administrator** (charts on modeling)
- **Document administrator** (charts on ARIS document storage)
- **Process Governance administrator** (charts on Process Governance)
- **Generate user statistics (com.aris.umc.audit.enabled)** is enabled in the configuration (page 291) (**User management > Security > Advanced settings**). Only the **Users > License usage** chart is displayed regardless of this activation.

Procedure

1. Click  **Charts**.
2. Click the relevant area (**Users**, **Documents**, **Modeling**, **Governance**).

The charts for the selected area are displayed. The user management charts do not contain any data for technical users by default (system, superuser, arisservice, and guest). Move the mouse pointer over a chart to view an explanation.

You can update the charts to reflect the current state by clicking  **Refresh**. You can also export (page 66) statistics on usage patterns, assignments, changes to data and database items made by the user, the information used most often or the information used last, etc.

6.6.2 What charts exist?

There are charts from the user management, document storage, modeling, and Process Governance (processes and human task) areas. The user management charts do not contain any data for technical users by default (system, superuser, arisservice, and guest). Move the mouse pointer over a chart to view an explanation.

6.7 Configure ARIS Connect



ARIS Connect can be configured and customized to meet specific requirements that can differ between various customers.

6.7.1 Configure Portal

By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626) as examples. Using these as basis, you can define modification sets to customize how data is displayed.

6.7.1.1 Publish database as a process portal

Select the database to be published as the process portal.

Prerequisite

You have the **Publishing administrator** function privilege.

Procedure

1. Click **<user name>**.
2. Click **Administration**.
3. Click **Portal > Publish** on the **Configuration** tab. All available databases are displayed.
4. Enable the check boxes of the databases you want to publish in the portal.
5. For versioned databases, select the relevant version.
6. Click **Apply**.

The content of the databases is published in the portal in the selected configuration or modification set (page 152). As long as the databases are available in the portal they cannot be deleted in ARIS.

6.7.1.2 Specify a default database

You can specify the database to which users with **ARIS Connect Viewer** license privileges are connected when they start ARIS Connect for the first time. The database placed at the top of the database list is the default database.

Prerequisite

You have the **Publishing administrator** function privilege.

Procedure

1. Click **<user name>**.
2. Click **Administration**.
3. Click **Portal > Publish databases** on the **Configuration** tab. All available databases are displayed. The check boxes of published databases are enabled. If you want to publish (page 144) further databases to be shown in the process portal, enable the check boxes of these databases.
4. Move the mouse pointer over the row of the published database you want to define as the default database. The move symbols are displayed.
5. Click  **Move to top** to shift the database to the top of the database list.
6. Click **Apply**.

You have defined the default database.

6.7.1.3 Change sort order of published databases

You can sort published databases that are offered by the process portal.

Prerequisite

You have the **Publishing administrator** function privilege.

Procedure

1. Click **<user name>**.
2. Click **Administration**.
3. Click **Portal > Publish** on the **Configuration** tab. All available databases are displayed. The check boxes of published databases are enabled. If you want to publish further databases to be shown in the process portal, enable the check boxes of these databases. (page 144)
4. Position the mouse pointer over the row of the database you want to move. The move symbols are displayed.
5. Click  **Move up** to shift the database one row up.
6. Click  **Move down** to shift the database one row down.
7. Click  **Move to top** to shift the database to the top of the database list.
8. Click **Apply**.

You have changed the sort order of the published databases. The published database at the top of the list is the default database (page 145).

6.7.1.4 Manage configuration and modification sets

Portal administrators select the configuration set (page 1167) to show portal data. Hierarchies determine the way you are able to navigate through the data.

By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626).

You can use the supplied configuration sets to publish databases in the portal. As an administrator, you can also create (page 149) and customize the supplied configuration sets as modification sets (page 1174).

It is recommended to save the customized modification set once it is finished. After a software update, you can restore the customized modification set to restore the look and feel of the portal. If you need extended configuration sets with different functions that you cannot configure in ARIS Administration, please contact your local Software AG sales organization (<http://www.softwareag.com>).

6.7.1.4.1 Save configuration set

You can save a configuration set. You can restore saved configuration sets at any time or provide them on other tenants.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a configuration set.
6. Click  **Backup**.
7. Save the file in any directory.

The **<name of the configuration set>.zip** backup file is downloaded.

6.7.1.4.2 Duplicate configuration set

You can generate a new modification set by duplicating a configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a configuration set.
6. Click  **Create modification set**.

The modification set is created below the selected configuration set. It contains all elements from the selected configuration set.

Change (page 153) the new modification set by adding the required items, properties, and fact sheets, or by adapting existing ones.

6.7.1.4.3 Restore configuration set

If you require further modification sets, please contact your local Software AG sales organization (<http://www.softwareag.com>). Restore a saved configuration set.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have access to the backup file.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Click **Restore** in the **Configuration and modification sets** area. The file selection dialog opens.
6. Double-click the ZIP file (syntax: **<name of the configuration set>.zip**).

The configuration set is tested, and is applied if it is an error-free configuration set. Notes are displayed in yellow, errors in red. The configuration set is displayed in the list with the original name. If a configuration set with the same name exists, an error message is displayed. An already existing configuration set cannot be overwritten. The **classic** and **default** configuration sets cannot be overwritten or deleted.

6.7.1.4.4 Delete configuration set

You can delete a configuration set. The **classic** and **default** configuration sets cannot be overwritten or deleted.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a configuration set.
6. Click  **Delete**.
7. Click **Delete** to confirm.

The configuration set is no longer available in ARIS Connect.

6.7.1.4.5 Create modification set

You can create (page 149) your own modification sets based on the classic configuration set (page 625), on the default configuration set (page 626) or based on a user-defined configuration set. If you require a user-defined configuration set, please contact your local Software AG sales organization (<http://www.softwareag.com>).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Click **Create** in the **Configuration and modification sets** area. The **Create modification set** dialog opens.
6. Enter the name for the new modification set.
7. In the **Template** box, select the configuration set that your new modification set is to be based on.
8. Click **Create**.

The modification set is created. It contains all elements from the selected template.

Change (page 153) the new modification set by adding the required items, properties, and fact sheets, or by adapting existing ones.

6.7.1.4.6 Duplicate modification set

You can create (page 149) your own modification sets based on the classic configuration set (page 625), on the default configuration set (page 626) or based on a user-defined configuration set. If you require a user-defined configuration set, please contact your local Software AG sales organization (<http://www.softwareag.com>).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a user-defined modification set.
6. Click  **Duplicate**.

The modification set is created with a technical name. It contains all elements from the selected modification set. You can rename (page 153) the modification set.

Change (page 153) the new modification set by adding the required items, properties, and fact sheets, or by adapting existing ones.

6.7.1.4.7 Save ARIS Connect modification set

Save user-defined modification sets (page 149) for data migration or before you modify them. You can restore saved modification sets at any time or provide them on other servers.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a user-defined modification set.
6. Click  **Backup**.
7. Save the file in any directory.

The **<name of the modification set>.zip** backup file is downloaded.

Based on this backup, you can restore this version of the modification set (page 151).

6.7.1.4.8 Restore ARIS Connect modification set

Restore saved modification sets (page 150).

Prerequisite

- You have the **Portal administrator** function privilege.
- You have access to the backup file.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Click **Restore** in the **Configuration and modification sets** area. The file selection dialog opens.
6. Double-click the ZIP file (syntax: **<name of the modification set>.zip**).

If a modification set with the same name exists, it is overwritten. If you want to keep the original modification set, you must define another name before the import (page 153).

6.7.1.4.9 Select modification set

Select the modification set to show the portal data. By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626). If required, user-defined modification sets (page 149) and restored modification sets (page 151) are also displayed here.

You can create (page 149) your own modification sets based on the classic configuration set (page 625), on the default configuration set (page 626) or based on a user-defined configuration set. If you require further modification sets, please contact your local Software AG sales organization (<http://www.softwareag.com>).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a user-defined modification set.
6. Click  **Activate**.

The selected configuration or modification set is marked as **(active)**.

All of the databases selected for the portal are published in the configuration or modification set selected.

6.7.1.4.10 Rename modification set

Change the names of modification sets.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**.
5. Move the mouse pointer over a user-defined modification set.
6. Click  **Rename**. The **Rename modification set** dialog opens.
7. Enter the new name.
8. Click **Rename**.

All of the databases selected for the portal are published in the configuration or modification set selected.

6.7.1.4.11 Edit modification set

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click **<user name>**.
3. Click **Administration**.
4. Click **Manage configuration sets**.
5. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**. You can edit custom (page 149) modification sets only.
6. Click  **Edit**.

The **Define modification set** page opens and you can edit the modification set.

6.7.1.4.11.1 Edit user interface

As a portal administrator, you customize the user interface.

6.7.1.4.11.1.1 Customize font and colors

Customize the settings according to the corporate design of your company.

Prerequisite

You have the **Portal administrator** function privilege.

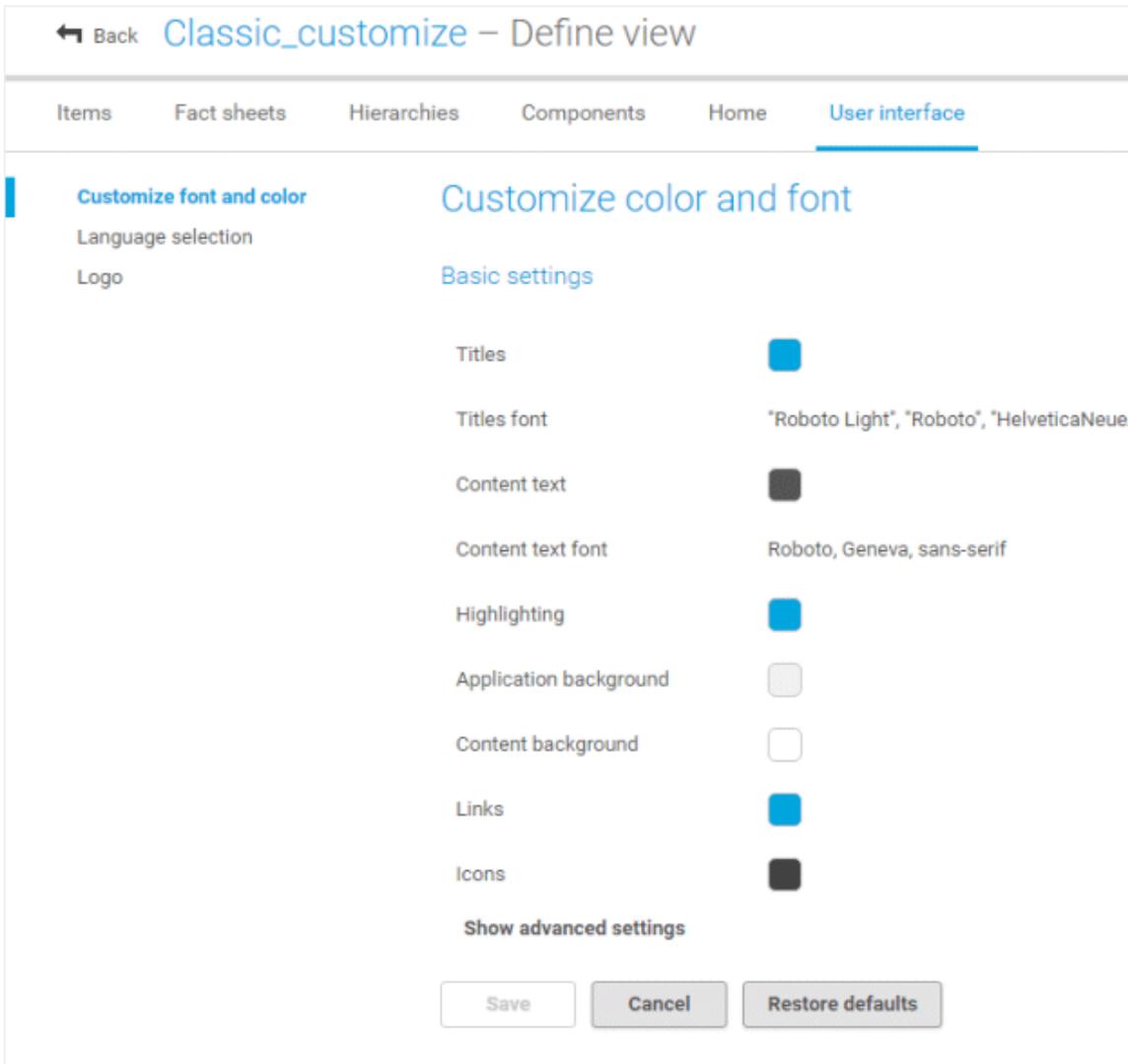
Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Customize font and color**.
4. Scroll to **Basic settings**.
5. Specify the required settings.
6. Click  **Back**.

The changes are applied. The page is refreshed if the modification set was specified as **active**.

Example

Default font and colors:



Customized font and color:

← Back **Classic_customize - Define view**

Items Fact sheets Hierarchies Components Home User interface

Customize font and color
 Language selection
 Logo

Customize color and font

Basic settings

Titles 

Titles font "MV Boli"

Content text 

Content text font "MV Boli"

Highlighting 

Application background

Content background

Links 

Icons 

Show advanced settings

Save Cancel Restore defaults

Views

classic (System)

Classic_customize (Modification set of classic) (active)    

default (System)

6.7.1.4.11.1.2 Restore default font and color

You can undo all font, color, and logo settings you have specified.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Customize font and color**.
4. Scroll to **Basic settings**.
5. Click **Restore defaults**.
6. Click **← Back**.

The default settings are loaded. The page is refreshed if the modification set was specified as **active**.

6.7.1.4.11.1.3 Select languages

Customize the settings according to the requirements of your company.

Prerequisite

You have the **Portal administrator** function privilege.

The selected languages are available as the interface, method, and database language (page 221).

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Select language**.
4. In the **Current language** list, select the languages you do not require, and then click **Deactivate**. The languages are added to the **More languages** list.
5. In the **More languages** list, select the languages you require, and then click **Activate**. The languages are added to the **Current language** list.
6. Click **Apply**.
7. Click **← Back**.

The activated languages are available for selection by ARIS Connect users.

6.7.1.4.11.1.4 Upload logo

Select the graphics file you want to display as the logo.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have access to a graphic file in PNG format.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Insert logo**.
4. Click **Browse** next to the **Logo** field, and navigate to the required PNG file.
5. Click **Open**.

The graphic is uploaded. It is shown in the header of ARIS Connect portal.

6.7.1.4.11.1.5 Restore default logo

You can undo all font, color, and logo settings you have specified.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Insert logo**.
4. Click **Restore**.

The default logo is loaded and the page is refreshed.

6.7.1.4.11.1.6 Customize the header

You can customize the header background color, as well as text and highlighting color.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Scroll to **Basic settings**.
4. In the **Basic settings** section, customize the header background color, and text and highlighting color.
5. Click **← Back**.

You have changed the header.

Example

Default header:



Header with green background, light yellow highlighting and yellow ochre text:



6.7.1.4.11.1.7 Customize the sidebars

You can customize the background color of the sidebars.

Prerequisite

You have the **Portal administrator** function privilege.

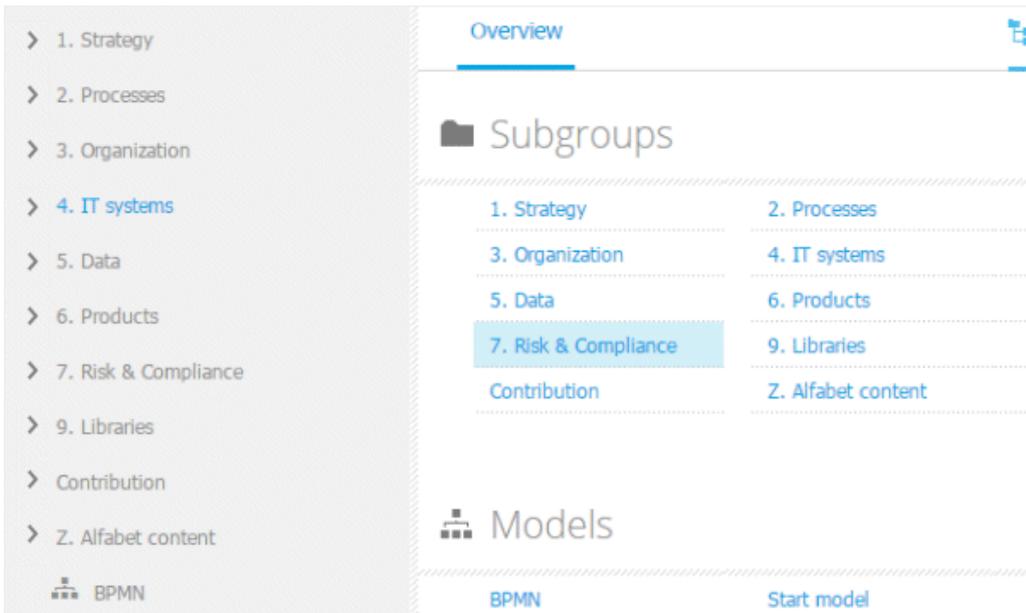
Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Scroll to **Basic settings**.
4. Click the color indicated in the **Color for sidebar background** line. Customize the sidebar background color .
5. Click **OK**.
6. Click **← Back**.

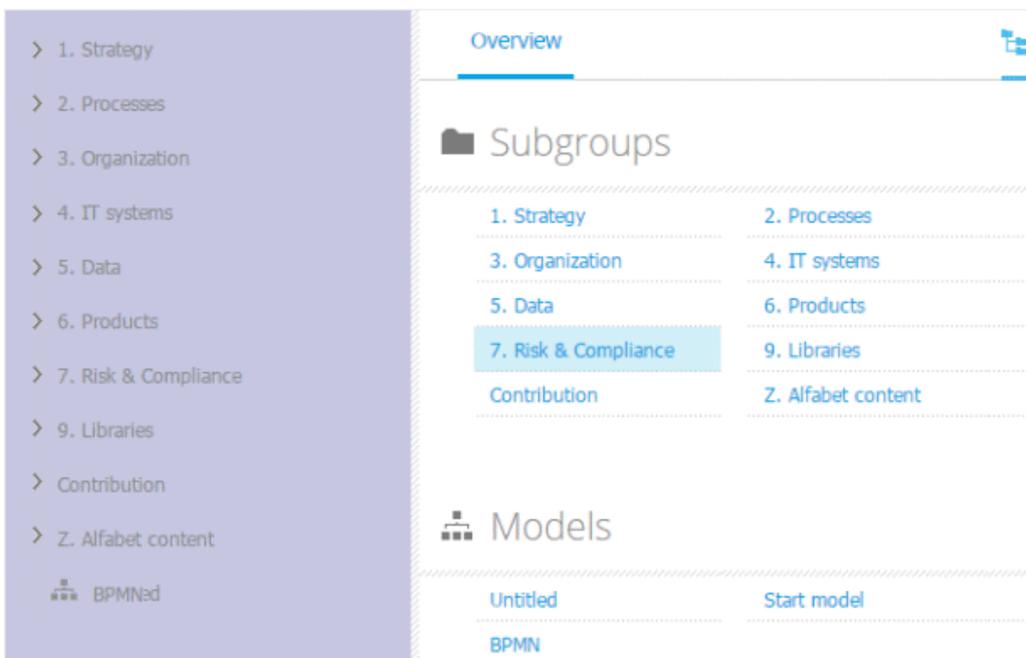
You have changed the left and right sidebar.

Example

Default sidebar:



Sidebar with light blue background:



6.7.1.4.11.1.8 Advanced customization

6.7.1.4.11.1.8.1 Customize Home elements

You can customize the elements of the **Home** page.

Prerequisite

You have the **Portal administrator** function privilege.

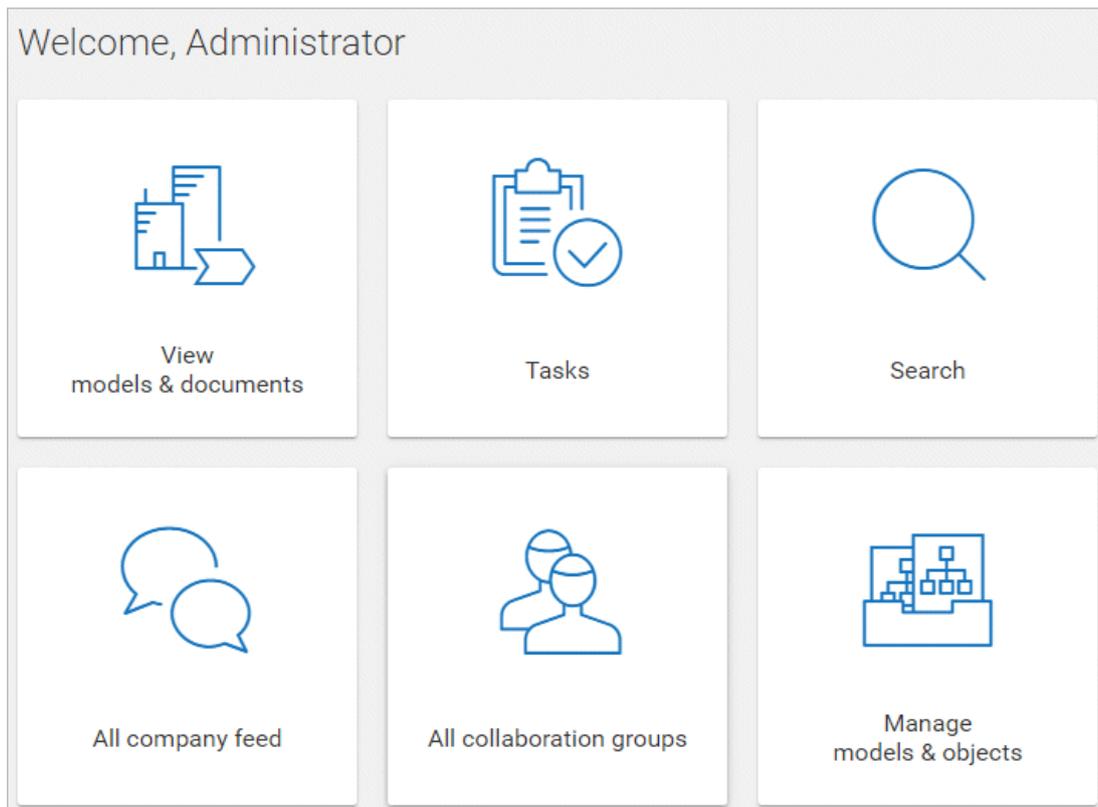
Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Home elements (Quick start, Contact)**.
5. Customize the background color and the card size, color, and font color.
6. Click **Back**.

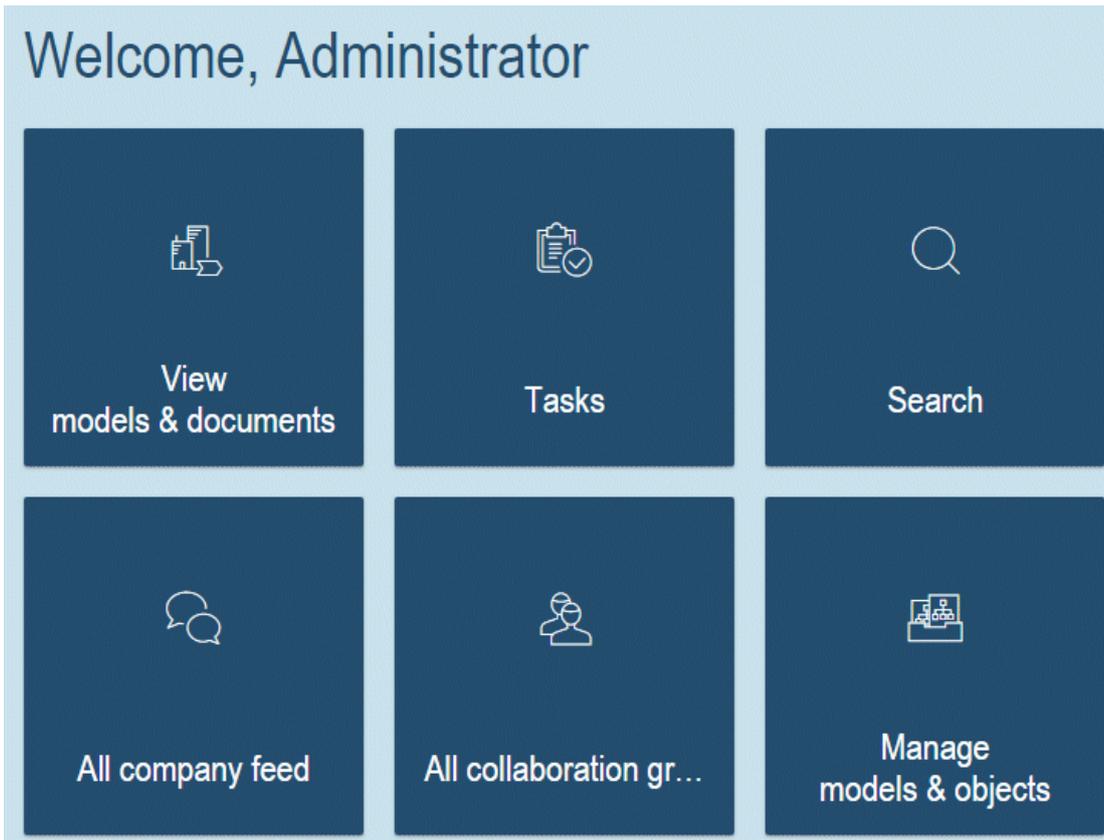
You have customized the **Home** page of ARIS Connect.

Example

Default **Home** page:



Customized **Home** page:



6.7.1.4.11.1.8.2 Customize Fact sheets (Overview)

You can customize fact sheets such as **Overview** and **Steps**.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Fact sheets (Overview, Steps)**.
5. Customize colors and font sizes.
6. Click **← Back**.

You have customized the fact sheets of ARIS Connect.

Example

Default **Overview** fact sheet:

The screenshot shows the ARIS Connect interface for a fact sheet titled "Hold in-house fair". The interface includes a navigation bar with "Overview", "Steps", "Table", and "More" tabs. The "Overview" tab is active. The fact sheet content is divided into sections: "Description" and "Activities". The "Description" section contains the text "This process describes how to hold an in-house fair". The "Activities" section contains a table with columns for "Name", "Description", "Roles", "IT systems", and "Documents". The table has one row with the activity "Prepare in-house fair" and the role "Head of sales at local dealership" listed under the "Roles" column.

Name	Description	Roles	IT systems	Documents
Prepare in-house fair		Head of sales at local dealership Local dealership sales rep		

Custom **Overview** fact sheet:

< > ↑

Hold in-house fair ☆

Edit ▾

Overview
Steps
More ▾

🔦
💡
📄
🔔
🖨
🔗
⋮
📁
📄

Aug 31, 2017
Last change

i Description

This process describes how to hold an in-house fair

🔧 Activities

↓	Name	Description	Roles	IT systems	Documents
	Prepare in-house fair		Head of sales at local dealership Local dealership sales rep		

6.7.1.4.11.1.8.3 Customize Steps

You can customize the **Steps**.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Steps**.
5. Customize colors, box, and font sizes.
6. Click **Back**.

You have customized the **Steps**.

Example

Default **Steps** fact sheet:

The screenshot displays a fact sheet interface for 'Hold in-house fair'. The interface includes a navigation bar with 'Overview', 'Steps', and 'More' tabs, and an 'Edit' button. The main content area is divided into three sections: 'Previous', 'Current', and 'Next'. The 'Previous' section contains a dashed box with the text 'Click a successor'. The 'Current' section is highlighted and contains a box with the text 'Date for in-house fair coming up' and a 'Start' button. The 'Next' section contains a box with the text 'Prepare in-house fair'. The right side of the interface shows a partial view of the fact sheet content, including the text 'Date for in-house fair c...'.

Custom **Steps** fact sheet:

The screenshot displays a user interface for a fact sheet titled "Hold in-house fair". At the top, there are navigation icons (back, forward, up) and an "Edit" button. Below the title, there are tabs for "Overview", "Steps", and "More". A toolbar with various utility icons is also present. The main content area is divided into three sections: "Previous", "Current", and "Next". The "Previous" section contains a dashed box with the text "Click a successor". The "Current" section is highlighted in a light orange color and contains a box with the text "Date for in-house fair coming up" and a "Start" button with a calendar icon. The "Next" section contains a box with the text "Prepare in-house fair". To the right of the steps, there is a large text area with the heading "Date for in-hou...".

6.7.1.4.11.1.8.4 Customize buttons

You can customize the buttons.

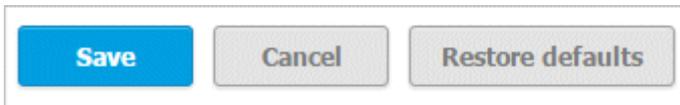
Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Buttons (for example, Save or Cancel)** section, customize the button colors and shapes.

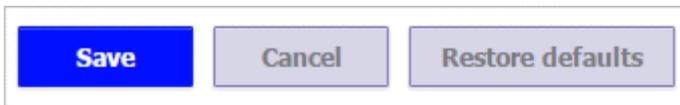
You have changed the button colors and shapes.

Example

Default buttons:



Customized buttons:



6.7.1.4.11.1.8.5 Customize font sizes in general

You can customize the general font sizes.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Font sizes**.
5. Customize the font sizes for the different text sizes.

You have customized the font sizes in general.

6.7.1.4.11.1.8.6 Customize My tasks

You can customize the logo, as well as the logo height and width of My tasks.

Procedure

1. Copy the new logo to **<installation directory>\server\bin\work\work_apg_s\base\webapps\processboard\tasklist**, for example, **C:\SoftwareAG\ARIS10\server\bin\work\work_apg_s\base\webapps\processboard\tasklist**.
2. Open a user-defined modification set for editing. (page 153)
3. Click **User interface**.
4. Click **Show advanced settings**.
5. Scroll down to **Process Governance**.
6. Enter the file name of the new logo.
7. Enter the height of the new logo in pixels.
8. Enter the width of the new logo in pixels.
9. Click **Save**.

You have changed the logo of My tasks.

6.7.1.4.11.1.8.7 Customize Legacy settings

You can customize the operation border and the color for highlighting on the header tab for older modification sets. These settings are no longer used in the current ARIS version.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Legacy settings**.
5. Customize the operation borders and the color for highlighting on the header tab.

You have customized the legacy settings.

6.7.1.4.11.2 Manage items

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

6.7.1.4.11.2.1 Add items

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Items**. All items defined in this modification set for groups, models, and objects are displayed. You can use these items in fact sheets and define which information is displayed where.
3. Click **+ Create item**. The dialog opens.
4. Enter the technical name of the new item as an identifier, for example, **Risk**.
5. For each language enter the name of the element that it is to be displayed with in the portal. By default, the first three languages defined for the modification set are displayed.
6. In the **Source** box, select the type of ARIS item, for example, **Object** or **Model**.
7. Enter the object or model type names. All types that you can use are displayed during input. Types that have already been assigned to other items are not shown.
8. Click an entry. The type is added.
9. Add further types, if necessary.
10. Optional: If you want to specify the default symbol, click **Show advanced settings**. Add further default symbols, if necessary.
11. Click **Create**. The item is displayed in the list.
12. Click **← Back**.
13. To test the changed modification set, activate (page 152) it.

As soon as a fact sheet has been configured (page 175), the changes are available to all users of the portal.

The new item is displayed in the Search area (page 834).

6.7.1.4.11.2.2 Edit items

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Items**. All items defined in this modification set for groups, models, and objects are displayed. You can use these items in fact sheets and thus define which information is displayed where.
3. Move the mouse pointer to the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit item** page opens.

Identifier, name, type, and ARIS items are shown on the overview page of the **Process** item. In this example these are various model types whose information for the **Process** item is displayed in the portal. They are model types for representing business processes.
5. Click **Edit**. The **Edit item** dialog opens.
6. If required, change the name displayed in the portal in all languages, for example, **Process** to **Business process**.
7. Click **OK**. The changes are applied and the dialog closes.
8. Next to the **ARIS items** box, click **Add**. The **Add ARIS item** dialog opens.
9. Add more items from ARIS. In the **Process** example, you can select model types that have not been used for the **Process** item yet.
10. Click **Add**. The model list is completed and the dialog closes.
11. Click  **Delete** to delete entries.
12. Optional: If you want to specify the default symbol, click **Show advanced settings**. Add further default symbols, if necessary.
13. Click  **Back**.
14. To test the changed modification set, select (page 152) it for publishing.

The changes are available to users in the portal.

6.7.1.4.11.2.3 Add item properties

Item properties determine the information available and displayable for the item in the portal. You can edit custom properties.

You cannot edit the **Classic** and the **Default** configuration set.

You can allow users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges to edit certain properties. This is also possible for properties that have already been defined in the selected template of the modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Items**. All items defined in this modification set for groups, models, and objects are displayed. You can use these items in fact sheets and define which information is displayed where.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit item** page opens.
5. Click **Properties**. All properties of the item that can be displayed in the portal are listed.
6. Click  **Create property**. The corresponding dialog opens.
7. Enter the technical name of the new property as an identifier.
8. For each language enter the name of the property that it is to be displayed with in the portal. Always specify the name in English as well, because English is used as the alternative language in the event that a language is missing.
9. In the **Data mapping** box, select the type of ARIS item whose information is to be available. This depends on the type of item for which you are defining the property.
10. For models you can select **Attributes**, **Occurrence contained**, or **Related assigned models**, while you can select **Attributes**, **Related objects**, or **Object to object** for objects. If you select **Attribute** and the attribute type, for example, **Description**, the descriptive texts for objects or models are searched and provided. For **Connected objects**, select connection and object type. This finds all objects associated with an object. **Occurrences contained** provides all objects of a model.
11. Specify the settings described depending on the item type.
12. Click **Create**. The new property is displayed in the table.
13. In order to be able to test the changed property, it must first be assigned to an area in a fact sheet. To test the changed modification set, select it for publishing.

The changes are available to users in the portal.

6.7.1.4.11.2.4 Edit item properties

Item properties determine the information available and displayable for the item in the portal. You can edit the properties.

You cannot edit the **Classic** and the **Default** configuration set.

You can allow users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges to edit certain properties. This is also possible for properties that have already been defined in the selected template of the modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Items**. All items defined in this modification set for groups, models, and objects are displayed. You can use these items in fact sheets and define which information is displayed where.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit item** page opens.
5. Click **Properties**. All properties of the item that can be displayed in the portal are listed.
6. Move the mouse pointer to the property you want to change, for example, **Process**.
7. Click  **Edit**.
8. For each language enter the name of the property that it is to be displayed with in the portal. Always specify the name in English as well, because English is used as the alternative language in the event that a language is missing.
9. In the **Data mapping** box, select the type of ARIS item whose information is to be available. This depends on the type of item for which you are defining the property.
10. For models you can select **Attributes**, **Occurrence contained**, or **Related assigned models**, while you can select **Attributes**, **Related objects**, or **Object to object** for objects. If you select **Attribute** and the attribute type, for example, **Description**, the descriptive texts for objects or models are searched and provided. For **Connected objects**, select connection and object type. This finds all objects associated with an object. **Occurrences contained** provides all objects of a model.
11. Specify the settings described depending on the item type.
12. Click **OK**.
13. Click  **Back**.
14. In order to be able to test the changed property, it must first be assigned to an area in a fact sheet. To test the changed modification set, select it for publishing.

The changes are available to users in the portal.

6.7.1.4.11.2.5 Allow Connect Viewer users to edit

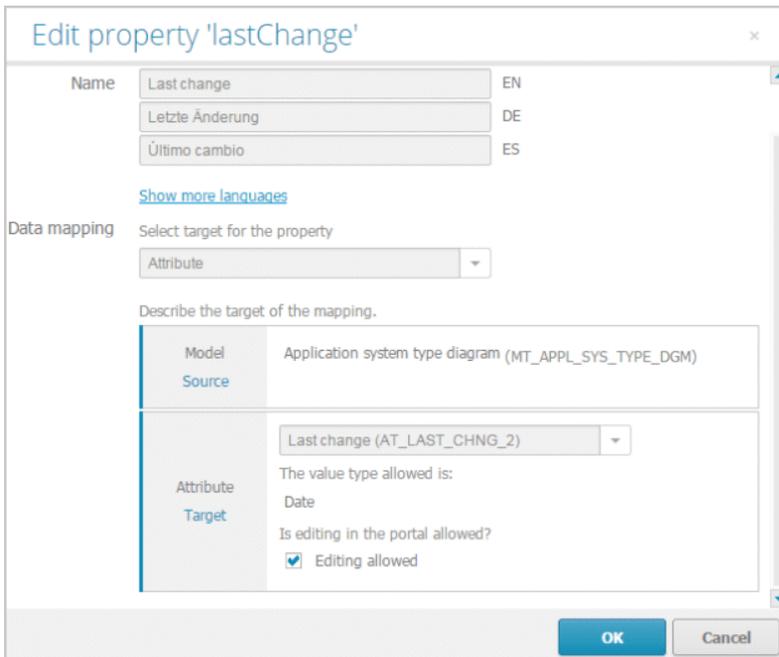
You can allow users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges along with the corresponding access privileges to edit item properties that represent attribute values in the  **Portal**.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Items**. All items defined in this modification set for groups, models, and objects are displayed. You can use these items in fact sheets and define which information is displayed where.
3. Move the mouse pointer to the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit item** page opens.
5. Click **Properties**. All properties of the item that can be displayed in the  **Portal** are listed.
6. Move the mouse pointer to the property you want to edit.
7. Click  **Edit**. The **Edit property** dialog opens.
8. Enable **Editing allowed**.



The screenshot shows a dialog box titled "Edit property 'lastChange'". It contains the following fields and options:

- Name:** A list of translations for the property name:

Last change	EN
Letzte Änderung	DE
Último cambio	ES

 A link "Show more languages" is visible below.
- Data mapping:** A dropdown menu set to "Attribute".
- Describe the target of the mapping:**
 - Model Source:** Application system type diagram (MT_APPL_SYS_TYPE_DGM)
 - Attribute Target:** Last change (AT_LAST_CHNG_2)
 - The value type allowed is:** Date
 - Is editing in the portal allowed?:** Editing allowed

At the bottom, there are "OK" and "Cancel" buttons.

9. Click **OK**.
10. Click  **Back**.
11. To test the changed modification set, activate (page 152) it.

Users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges can edit the item.

6.7.1.4.11.3 Manage Fact sheets

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

6.7.1.4.11.3.1 Define layout

For new items (page 169) to be displayed you need to define the position on the overview page where the content is to be shown in the fact sheet.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page. All items available for fact sheets are displayed.
3. Move the mouse pointer over the item you want to change the overview page for, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate sheets are listed.
5. Ensure that an overview page is available. If this is not the case, click **Add** and select **Overview**.
6. Move the mouse pointer over the **Overview** entry.
7. Click  **Edit**. The **Edit subordinate sheet** page opens. The items of the different areas are displayed.
If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is enabled.
8. Select the layout of the page. This enables you to specify how the content of the areas is to be arranged.
9. Click **Add** in the areas and select the property to be displayed in the relevant area.
If a property of the **ItemList** type is displayed in an area, this property can be edited (page 183).
10. Click  **Delete** to delete entries.
11. Click  **Back**.

The new modification set is created and adjusted.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.2 Add fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Click **+ Add fact sheet**. The **Create fact sheet** dialog opens.
4. In the **Source** box, enter the name of the item for which information is to be displayed on this fact sheet. You can use only items that have not yet been assigned to another fact sheet.
5. Click **Create**. The fact sheet is created. It includes an overview page by default. The selected item is added to the list. As long as no more item properties are assigned to this page, only the name of the item is displayed in the title bar. The overview itself is empty.
6. Click **← Back**.

The changes are available to users in the portal. To test the changed modification set, select (page 152) it for publishing.

6.7.1.4.11.3.3 Add fact sheet for a new item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have created (page 169) a new item.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Click **+ Add fact sheet**. The **Create fact sheet** dialog opens.
4. In the **Source** box, enter the name of new item (page 169) for which information is to be displayed on this fact sheet.
5. Click **Create**. The fact sheet is created. It includes an overview page by default. The selected item is added to the list. As long as no more item properties are assigned to this page, only the name of the item is displayed in the title bar. The overview itself is empty.
6. Click **← Back**.

The changes are available to users in the portal. To test the changed modification set, select (page 152) it for publishing.

6.7.1.4.11.3.4 Change order of fact sheets globally

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Click  **Edit default fact sheet**.
4. Move the mouse cursor over the fact sheet you want to move.
5. If you want to change the order of a fact sheet, click  **Up** or  **Down**.
If you want to move a fact sheet to the top, click  **Top**.
6. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display. If you change the order in a specific fact sheet (page 181), this configuration overwrites the globally defined order of the subordinate fact sheets.

6.7.1.4.11.3.5 Delete fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Move the mouse cursor over the fact sheet you want to delete.
3. Click  **Delete**. A confirmation prompt is displayed.
4. Click **Delete**.

The fact sheet and its overview page is deleted.

The changes are available to users in the portal. To test the changed modification set, select (page 152) it for publishing.

6.7.1.4.11.3.6 Edit fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. Click **Add**. The **Add subordinate sheet** dialog opens. All pages you can add are displayed. Typically, the pages **Overview**, **Table**, **RACI**, **Diagram**, **Tasks**, **Documents**, and **Dashboards** of ARIS Aware (page **Error! Bookmark not defined.**) are offered.
6. Select an entry and click **Add**.
7. Specify the contents to be displayed in the fact sheet.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.1 Customize fonts and colors

You can customize fact sheets such as **Overview** and **Steps**.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Fact sheets (Overview, Steps)**.
5. Customize colors and font sizes.
6. Click **Back**.

You have customized the fact sheets of ARIS Connect.

Example

Default **Overview** fact sheet:

Name	Description	Roles	IT systems	Documents
Prepare in-house fair		Head of sales at local dealership Local dealership sales rep		

Custom **Overview** fact sheet:

The screenshot shows a mobile interface for a fact sheet titled "Hold in-house fair". At the top, there are navigation arrows and an "Edit" button. Below the title, there are tabs for "Overview", "Steps", and "More". A date "Aug 31, 2017" and "Last change" are displayed. The "Description" section contains the text "This process describes how to hold an in-house fair". The "Activities" section contains a table with the following data:

Name	Description	Roles	IT systems	Documents
Prepare in-house fair		Head of sales at local dealership Local dealership sales rep		

6.7.1.4.11.3.6.2 Enable/Disable toolbars for a fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click **Edit**. The **Edit fact sheet** page opens.
5. Click **Toolbars**.
6. Enable/Disable the toolbars to be displayed on the fact sheet.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.3 Add a subordinate sheet to a fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. Click **Add**.
6. Select a subordinate sheet from the list.
7. Click **Add**.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.4 Change order of the subordinate sheets

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. Move the mouse cursor over a subordinate sheet you want to move.
6. If you want to change the order of a subordinate sheet, click  **Up** or  **Down**.
If you want to move a subordinate sheet to the top, click  **Top**.
7. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display. This configuration overwrites the globally defined order (page 177) of the subordinate fact sheets.

6.7.1.4.11.3.6.5 Remove a subordinate sheet from a fact sheet

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. Move the mouse pointer to the subordinate sheet you want to remove, for example, **Overview**.
6. Click  **Delete**.
7. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.6 Edit a property of ItemList type of the Overview tab

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the row of an item of the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be changed.
6. Select a custom layout. If you keep the **System** layout, the properties cannot be changed.
7. Move the mouse pointer over the relevant item of the **ItemList** type and click  **Edit**.
8. Select a custom layout.

The **Table** option displays the items in a table. The first row in the table displays the item name. You can configure the display of additional properties. These appear as additional rows.

The **List** option displays the items that were previously shown in a table or an embedded page as a simple list. In the overview, all properties except the item name are hidden. If you have selected the **List** option and activated the modification set, you cannot switch back to the table modification set.

9. Click  **Back**.
10. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.7 Edit a property for a single value of the Overview tab

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626). You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the row of an item of the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be changed.
6. Select a custom layout. If you keep the **System** layout, the properties cannot be changed.
7. Move the mouse pointer over a property that contains a single value and click  **Edit**. The **Select property template** page is displayed.
8. Enable the **Custom** layout. If you keep the **System** layout, the properties cannot be changed.
9. Select a template from the **Template** list.
10. Optional: Select the label position from the list.
11. Optional: Click **Browse** to select an icon. The icon is displayed in front of the label.
12. Click  **Back**.
13. Click  **Back**.

The preview is displayed in the **Preview** area. For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

To remove the icon from the property, click **Remove**.

6.7.1.4.11.3.6.8 Add a dashboard to the Overview item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be altered.
6. Scroll to **Dashboards**.
7. Click **Add**. The **Add Dashboard** dialog is displayed.
8. Enter a name. You can enter a name in multiple languages.
9. Select the database in which the dashboard is to be displayed.
10. Select a dashboard.
11. Click **Add**. The dashboard is added to the **Overview** item.
12. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.9 Edit a dashboard of the Overview item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be altered.
6. Scroll to **Dashboards**.
7. Move the mouse cursor over the dashboard you want to edit.
8. Click  **Edit**. The corresponding dialog opens.
9. Make your changes.
10. Click **Update**.
11. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.10 Remove a dashboard from the Overview item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be altered.
6. Scroll to **Dashboards**.
7. Move the mouse pointer over the dashboard you want to delete.
8. Click  **Delete**. The dashboard is removed from the **Overview** item.
9. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.11 Add a dashboard to the Diagram item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Diagram** item, click  **Edit**.
6. Click **Add**.
7. The **Add Dashboard** dialog is displayed.
8. Select a dashboard.
9. Enter a name in the relevant languages.
10. Click **Add**. The dashboard is added to the **Diagram** item.
11. Select the database in which the dashboard is to be displayed.
12. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.12 Edit a dashboard of the Diagram item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Diagram** item, click  **Edit**.
6. Move the mouse cursor over the dashboard you want to edit.
7. Click  **Edit**. The corresponding dialog opens.
8. Make your changes.
9. Click **Update**.
10. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.13 Remove a dashboard from the Diagram item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Diagram** item, click  **Edit**.
6. Select a dashboard.
7. Click  **Delete**. The dashboard is removed from the **Diagram** item.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.14 Add a dashboard to the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Dashboards** item, click  **Edit**.
6. Click **Add**. The **Add Dashboard** dialog is displayed.
7. Select a dashboard.
8. Enter a name in the relevant languages.
9. Click **Add**. The dashboard is added to the **Dashboards** item.
10. Select the database in which the dashboard is to be displayed.
11. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.15 Edit a dashboard of the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Dashboards** item, click  **Edit**.
6. Move the mouse cursor over the dashboard you want to edit.
7. Click  **Edit**. The corresponding dialog opens.
8. Make your changes.
9. Click **Update**.
10. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.3.6.16 Remove a dashboard from the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Dashboards** item, click  **Edit**.
6. Select a dashboard.
7. Click  **Delete**. The dashboard is removed from the **Dashboards** item.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.7.1.4.11.4 Manage hierarchies

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

6.7.1.4.11.4.1 Create navigation hierarchy

Define your own navigation options for the portal. You can use hierarchies (page 223) to control how portal users can quickly navigate to relevant information. These hierarchies map the relationships between superior and subordinate item types.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

- You have the **Portal administrator** function privilege.
- If you want to use a root element (page 225), the GUID or the item ID of the root element must be available on the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Hierarchies** on the **Define modification set** page.

All hierarchies defined in this modification set for navigation are displayed. By default, these are the hierarchies from the template from which the user-defined modification set was derived, for example, **Processes**, **Organizations**, **IT systems**, or **Groups**. You can activate or deactivate these hierarchies marked with **system**, or change the order in which they are displayed in the portal.

Unused hierarchies are shown in strikethrough formatting and are not displayed in the portal.
3. Click **Create**. The corresponding dialog opens.
4. Specify the name for the hierarchy to be displayed in the portal in all languages. This name is shown in the portal as another navigation option. If the name is not specified in a language, it is displayed in English in the portal.
5. Click **Next**. The **Create hierarchy – Specify hierarchy structure** page opens.
6. Click **Select item**. All items that are defined in the modification set are displayed.
7. Select the first item. The item is inserted.
8. Move the mouse pointer over the item and click **+ Add**.
9. Click **Select item/property** and select an entry. The second item must be of the same type as the first item. If it is not, a hierarchy cannot be created. The selected property or the item is made subordinate without space. The name of the property of the subordinate item is shown in parentheses.
10. Add further items in the same manner. The hierarchy is symbolized by indents.
11. Click **Finish** if you do not want to insert a root element (page 225). Otherwise click **Next** to insert a root element.

- a. Click **Add**. The **Specify root element** dialog opens.
- b. Paste the GUID or item ID from the clipboard.
- c. Click **OK**. The GUID of the item is displayed in the list.
- d. Click **Finish**.

12. Activate (page 196) the hierarchy.

The navigation is available to users in the portal. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.4.2 Edit navigation hierarchy

Use hierarchies to define the navigation (page 679) in the portal. These hierarchies map the relationships between superior and subordinate items.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Hierarchies** on the **Define modification set** page.

All hierarchies defined in this modification set for navigation are displayed. By default, these are the hierarchies from the template from which the user-defined modification set was derived, for example, **Processes**, **Organizations**, **IT systems**, or **Groups**. You can activate or deactivate these hierarchies marked with **system**, or change the order in which they are displayed in the portal.

Unused hierarchies are shown in strikethrough formatting and are not displayed in the portal.

3. To edit a hierarchy, move the mouse pointer over the row for a deactivated hierarchy and click  **Edit**.
4. Change the hierarchy.
5. Click **Finish**.

The changed navigation is available to users in the portal. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.4.3 Enable navigation hierarchy

Use hierarchies to define the navigation (page 679) in the portal. These hierarchies map the relationships between superior and subordinate items.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Hierarchies** on the **Define modification set** page.

All hierarchies defined in this modification set for navigation are displayed. By default, these are the hierarchies from the template from which the user-defined modification set was derived, for example, **Processes**, **Organizations**, **IT systems**, or **Groups**. You can activate or deactivate these hierarchies marked with **system**, or change the order in which they are displayed in the portal.

Unused hierarchies are shown in strikethrough formatting and are not displayed in the portal.

3. To display a hierarchy, move the mouse pointer over the row for a deactivated hierarchy and click  **Enable**.

The **Groups** hierarchy from the classic configuration set cannot be combined with any other hierarchy. If the **Groups** hierarchy is activated, all other hierarchies are automatically deactivated. If you activate another hierarchy, the **Groups** hierarchy is automatically hidden.

The changed navigation is available to users in the portal. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.4.4 Disable navigation hierarchy

Use hierarchies to define the navigation (page 679) in the portal. These hierarchies map the relationships between superior and subordinate items.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Hierarchies** on the **Define modification set** page.

All hierarchies defined in this modification set for navigation are displayed. By default, these are the hierarchies from the template from which the user-defined modification set was derived, for example, **Processes**, **Organizations**, **IT systems**, or **Groups**. You can activate or deactivate these hierarchies marked with **system**, or change the order in which they are displayed in the portal.

Unused hierarchies are shown in strikethrough formatting and are not displayed in the portal.

3. To disable a hierarchy, move the mouse pointer over the row for an activated hierarchy and click  **Disable**.

The navigation hierarchy is disabled.

6.7.1.4.11.4.5 Delete navigation hierarchy

Use hierarchies to define the navigation (page 679) in the portal. These hierarchies map the relationships between superior and subordinate items.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Hierarchies** on the **Define modification set** page.

All hierarchies defined in this modification set for navigation are displayed. By default, these are the hierarchies from the template from which the user-defined modification set was derived, for example, **Processes**, **Organizations**, **IT systems**, or **Groups**. You can activate or deactivate these hierarchies marked with **system**, or change the order in which they are displayed in the portal.

Unused hierarchies are shown in strikethrough formatting and are not displayed in the portal.

3. To delete a hierarchy, move the mouse pointer over the row for a deactivated hierarchy and click  **Delete**.

The navigation hierarchy is deleted.

6.7.1.4.11.5 Edit components

You can configure global settings for certain components, for example, diagrams or steps.

6.7.1.4.11.5.1 Customize Dashboard component

You can configure global settings for dashboards.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Dashboards** row. The **Edit component** page is displayed.
4. Click **Edit** to change the name of the **Dashboard** component. The **Edit component property** dialog opens. Edit the name of the Dashboard component in different languages.
5. Click  **Back**.

You have configured the name of the **Dashboards** component.

6.7.1.4.11.5.1.1 Add a dashboard

You add dashboards to the **Dashboard** component.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Dashboards** row. The **Edit component** page is displayed.
4. Click **Add**. The **Add Dashboard** dialog opens. Enter the name of the dashboard in the different languages.
5. Select the database in which the dashboard is to be displayed.
6. Select the location on which the dashboard shall be displayed.
7. Enter the identifier of the dashboard.
8. Click **Add**.
9. Click  **Back**.

You have added a dashboard to the **Dashboards** component.

6.7.1.4.11.5.1.2 Edit a dashboard

You can add dashboards to the **Dashboard** component.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Dashboards** row. The **Edit component** page is displayed.
4. Click  **Edit** in the dashboard's row. The **Edit Dashboard** dialog opens. Enter the name of the dashboard in the different languages.
5. Select the location on which the dashboard shall be displayed.
6. Enter the identifier of the dashboard.
7. Click **Update**.
8. Click  **Back**.

You have edited a dashboard of the **Dashboards** component.

6.7.1.4.11.5.1.3 Delete a dashboard

You can remove dashboards from the **Dashboard** component.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Delete** in the dashboard's row. The dashboard is deleted from the list of dashboards to be displayed.
4. Click  **Back**.

You have deleted a dashboard from the **Dashboards** component.

6.7.1.4.11.5.2 Customize diagrams

You can configure global settings for diagrams.

6.7.1.4.11.5.2.1 Customize display options

You can configure global settings for diagrams.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Diagram** row. The **Edit component** dialog opens.
4. If you want to rename the **Diagram** component, click **Edit** in the **Edit component property** area. The dialog opens.
5. Change the name in the required languages, and click **OK**.
6. Configure the display of diagrams in the **Display options** area.

To begin with, the ARIS Connect default settings are used. As soon as you disable these, you can configure the diagram graphic size and the assignment filter.

You can optionally adjust the representation of a model in the portal to the dimensions of the model, or specify any size for it. For example, if you select **Fit to window**, the zoom factor is selected such that the entire model is displayed. Selecting **Fit width** displays the model so that its full width can be seen.

If you activate the assignment filter, the diagrams show an assignment icon only for objects that have a diagram assigned to them which can also be accessed via the navigation hierarchy. For example, if a user-defined hierarchy includes value-added chains and processes only, the assignment icon is not displayed for functions to which only a model of the Function allocation diagram type is assigned.

To reset the changed component properties and display options to their initial state, click **Restore default settings** and confirm **Restore default settings**.

7. Click  **Back**.

You have customized the display option of the diagram on the **Component** tab.

6.7.1.4.11.5.2.2 Customize the assignment filter

You can configure global settings for diagrams.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Diagram** row. The **Edit component** dialog opens.
4. Scroll to the **Display options** area.
5. If you activate the assignment filter, the diagrams show an assignment icon only for objects that have a diagram assigned to them which can also be accessed via the navigation hierarchy. For example, if a user-defined hierarchy includes value-added chains and processes only, the assignment icon is not displayed for functions to which only a model of the Function allocation diagram type is assigned.

To reset the changed component properties and display options to their initial state, click **Restore default settings** and confirm **Restore default settings**.

6. Click  **Back**.

You have customized the assignment filter of the diagram on the **Component** tab.

6.7.1.4.11.5.2.3 Enable/Disable the change view functionality

You can configure global settings for diagrams.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Diagram** row. The **Edit component** dialog opens.
4. Scroll to the **Display options** area.
5. Configure (page 659) whether the **Change view** functionality is enabled. To do so enable **Enable view generation**.

To reset the changed component properties and display options to their initial state, click **Restore default settings** and confirm **Restore default settings**.

6. Click  **Back**.

You have enabled/disabled the change view functionality of the diagram on the **Component** tab.

6.7.1.4.11.5.3 Customize extended search component

You can configure the settings for the extended search (page 834).

6.7.1.4.11.5.3.1 Add items and properties to filter

You can configure the settings for the extended search (page 834).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Extended search** row. The **Edit component** page is displayed.
4. In the **Specify item filter** area, click **Edit**. The corresponding dialog opens.
5. Under **Available filters**, enable the items you want to be displayed in the filter list of the search and click **Add**. To enable all items, click **Add all**. You can enter the first characters in the **Enter a search term** field to reduce the number of items displayed.
6. Click **OK**.
7. In the **Specify property filter** area, click **Edit**. The corresponding dialog opens.
8. Under **Available filters**, enable the properties you want to be displayed in the properties list of the search and click **Add**. To enable all properties, click **Add all**. You can enter the first characters in the **Enter a search term** field to reduce the number of properties displayed.
9. Click **OK**.
10. Click  **Back**.

You have configured the settings for the extended search (page 834).

6.7.1.4.11.5.3.2 Change order of filter items and properties

You can change the order of items or properties of the filter for the extended search (page 834).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Extended search** row. The **Edit component** page is displayed.
4. In the **Specify item filter** or in the **Specify property filter** area, click **Edit**.
5. If you want to change the order of filter items or properties, click  **Up** or  **Down**. If you want to move a filter item or a property to the top, click  **Top**.
6. Click  **Back**.

You have changed the order of items or properties of the filter for the extended search (page 834).

6.7.1.4.11.5.3.3 Remove items and properties from filter

You can configure the settings for the extended search (page 834).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Extended search** row. The **Edit component** page is displayed.
4. In the **Specify item filter** area, click **Edit**. The corresponding dialog opens.
5. Under **Assigned filters**, enable the items you want to be removed from the filter list of the search and click **Remove**. To disable all items, click **Remove all**.
6. Click **OK**.
7. In the **Specify property filter** area, click **Edit**. The corresponding dialog opens.
8. Under **Assigned filters**, enable the properties you want to be removed from the properties list of the search and click **Remove**. To disable all properties, click **Remove all**.
9. Click **OK**.
10. Click  **Back**.

You have configured the settings for the extended search (page 834).

6.7.1.4.11.5.4 Customize steps

You can configure global settings for steps.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Steps** row.
4. Click **Details**. The **Edit component** page is displayed. Add or delete properties for processes, functions, and events and define their hierarchy.
5. Optional: Edit the properties of processes, functions, and events.
 - a. Move the mouse pointer over a property that you want to change.
 - b. Click  **Edit**. The **Select property template** page is displayed.
 - c. Enable the **Custom** layout. If you keep the **System** layout, the properties cannot be changed.
 - d. Select a template from the **Template** list.
 - e. Optional: Select the label position from the list.
 - f. Optional: Click **Browse** to select an icon. The icon is displayed in front of the label.
 - g. Click  **Back**.
6. Click  **Back**.

You have configured the steps on the **Component** tab.

6.7.1.4.11.5.4.1 Exclude symbols

You can exclude symbols from the **Steps** fact sheet.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Steps** row.
4. Click **Overview**. The **Excluded symbols** page opens.
5. Click **Add**. The corresponding dialog opens.
6. Enter the first characters of the symbol name and select the symbol.
7. Press **Enter**.
8. Continue with steps six to remove additional symbols from the **Steps** fact sheet.
9. Click **Add**.
10. Click  **Back**.

You have excluded symbols from the **Steps** fact sheet.

6.7.1.4.11.5.4.2 Include excluded symbols again

You can include excluded symbols in the **Steps** fact sheet.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Steps** row.
4. Click **Overview**. The **Excluded symbols** page opens.
5. Move the mouse pointer to the symbol you want to include in the **Steps** fact sheet again and click  **Delete**.
6. Click  **Back**.

You have included symbols in the **Steps** fact sheet again.

6.7.1.4.11.5.4.3 Add group property

You can add a group of independent properties.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Steps** row.
4. Click **Details**. The **Edit component** page is displayed. Add or delete group properties for processes, functions and events, and define their hierarchy.
5. Click **Add group**. The **Edit embedded sheet** page is displayed.
6. Select a template from the **Template** list. You can specify different settings depending on the selected template.
7. Optional: Click **Edit group properties** to specify the group properties. The corresponding dialog opens.
8. Enter a name. You can specify the name in multiple languages.
9. Optional: Select the label position from the list.
10. Optional: Click **Browse** to select an icon. The icon is displayed in front of the label.
11. Click **OK**.
12. Click  **Back**.

You have added a group of independent properties to the steps of a component.

6.7.1.4.11.5.4.4 Change order of the properties

You can change the order of items or properties of the filter for the extended search (page 834).

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Component** on the **Define modification set** page.
3. Click  **Edit** in the **Steps** row.
4. Click **Details**. The **Edit component** page is displayed.
5. If you want to change the order of the properties, click  **Up** or  **Down**.
6. Click  **Back**.

You have changed the order of items or properties of the filter for the extended search (page 834).

6.7.1.4.11.5.4.5 Customize colors for steps

You can customize the text color.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the Fact sheets (Overview, Steps) customize the text colors.
5. In the **Steps** section, customize the colors.
6. Click **Save**.

You have changed the text color.

Example

Default colors on **Steps** page:

< > ↑ Hold in-house fair (to-be)

Overview **Steps** Table More ▾

Previous

Click a successor

Current

Date for in-house fair coming up

Start

Next

Prepare in-house fair (to-be)

Customized colors on **Steps** page:

< > ↑ Hold in-house fair (to-be)

Overview **Steps** Table RACI More ▾

Previous

Click a successor

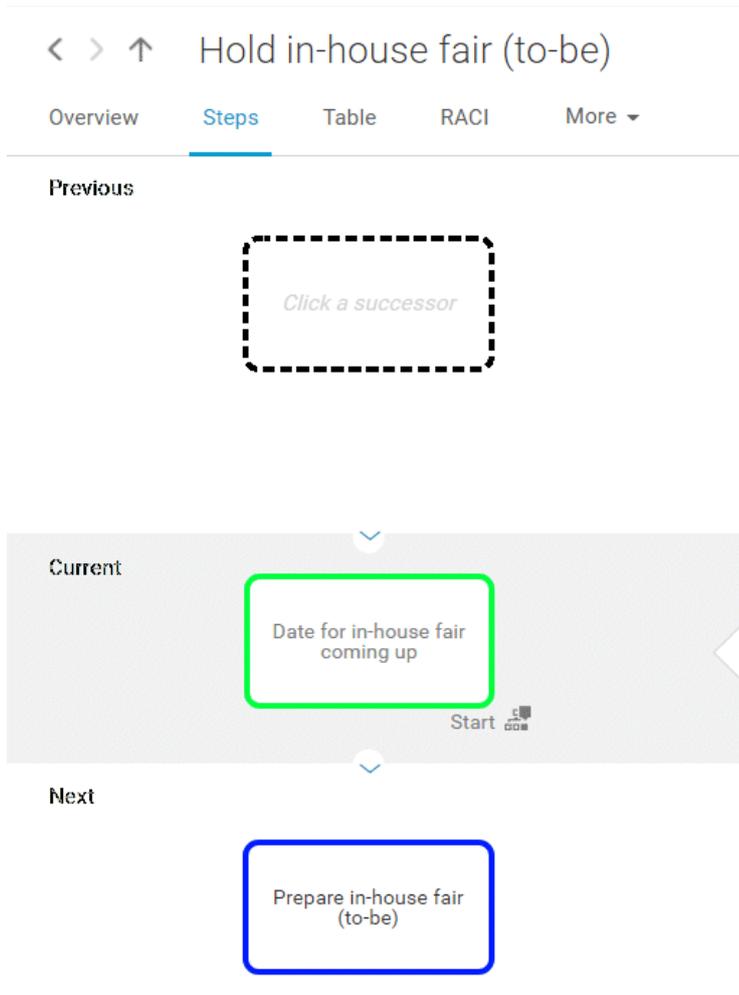
Current

Date for in-house fair coming up

Start 

Next

Prepare in-house fair (to-be)



6.7.1.4.11.6 Edit Home

Customize the start page (**Home**) of the portal.

6.7.1.4.11.6.1 Customize icons and text

You can customize the elements of the **Home** page.

Prerequisite

You have the **Portal administrator** function privilege.

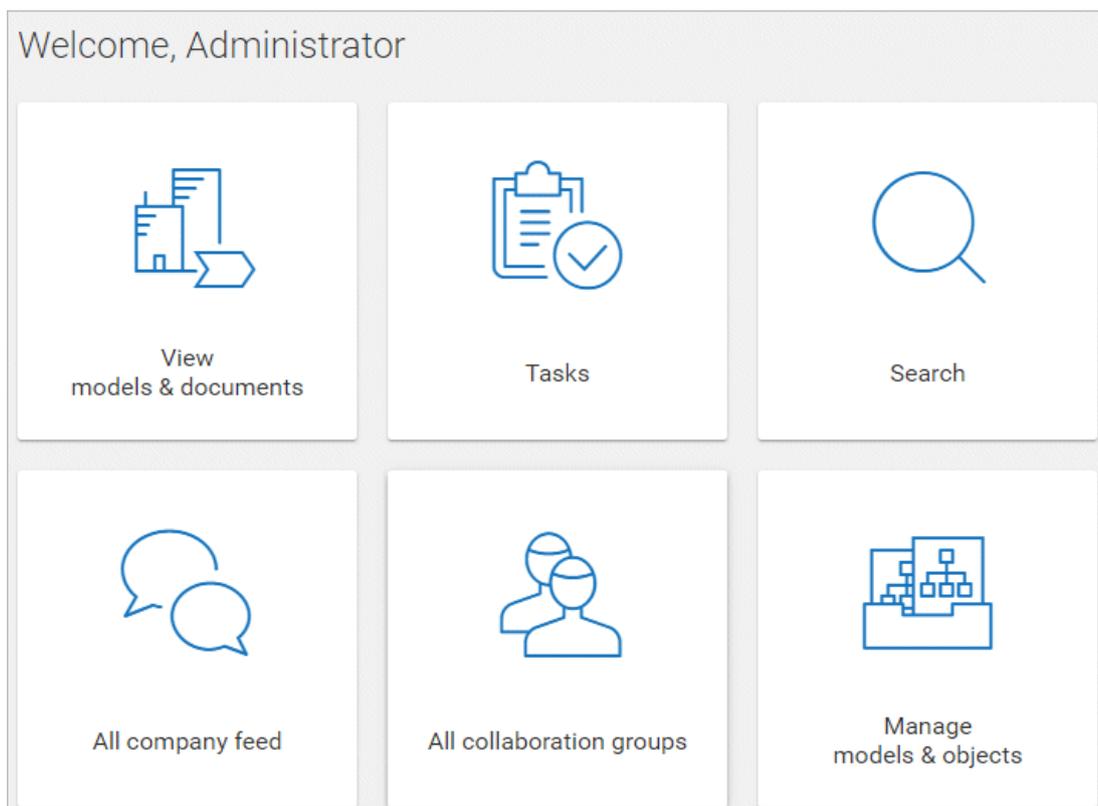
Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. Scroll down to **Home elements (Quick start, Contact)**.
5. Customize the background color and the card size, color, and font color.
6. Click **← Back**.

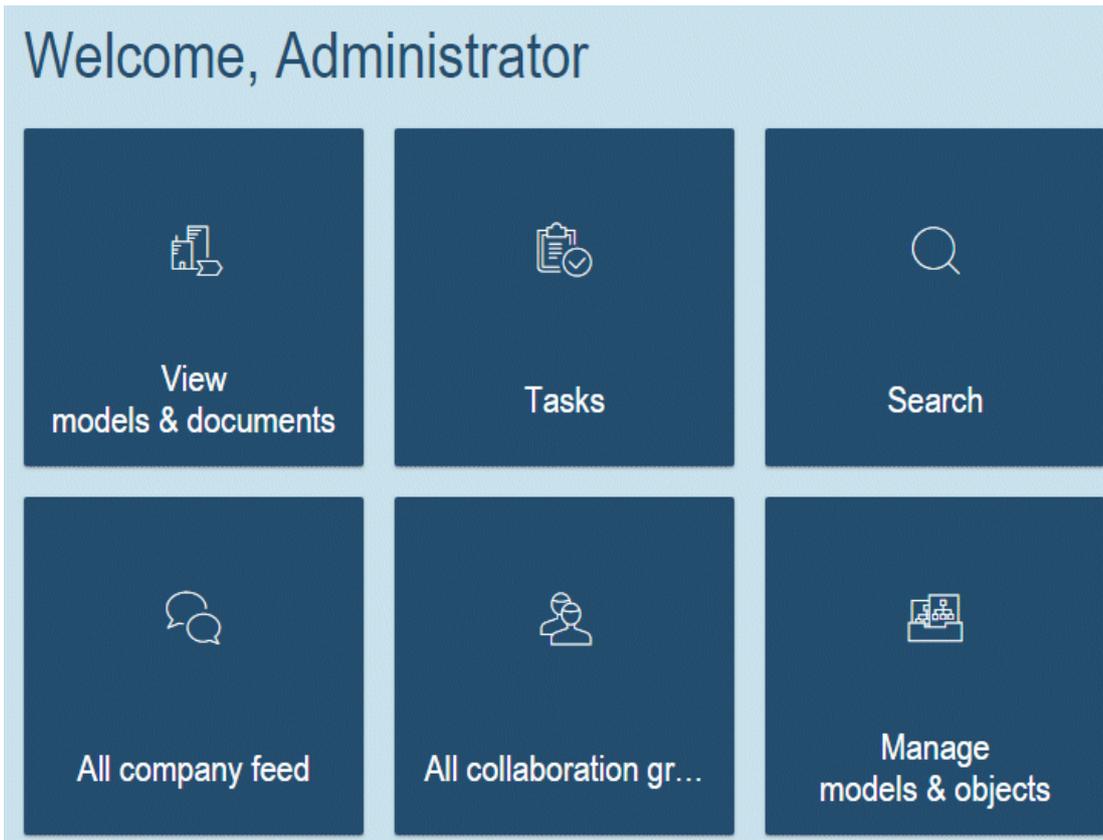
You have customized the **Home** page of ARIS Connect.

Example

Default **Home** page:



Customized **Home** page:



6.7.1.4.11.6.2 Change layout

Define your own layout for the portal. You can select layouts with one, two, or three columns.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
By default, the **System** layout is activated which cannot be altered. The components that are initially displayed in the **Home** view appear below the layout options.
3. Select the relevant layout. You are offered more detailed configuration options depending on the layout you select.
4. Define the size and appearance of the areas. If you specify the size of the areas in percent, all areas of the **Home** view will become smaller when the size of the browser window is reduced. If you specify the size in pixels, only one area may vary. You must explicitly indicate which area this is. The sizes of the other areas can be freely selected.
To begin with, the areas of a user-defined layout are empty.
Click **Add** to select components that are to be displayed on the **Home** page.
5. Click the arrow keys to specify the order of the components.
6. Click **← Back**.

The new layout is available to users in the portal. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.3 Add 'Contacts' component

Define your own layout for the portal. You can add contacts.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Contacts**.
5. Click **Add**.

The contacts are now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.4 Add 'Diagram' component

Define your own layout for the portal. You can configure the appearance of diagrams.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have copied the item identifier (page 212) to the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Diagram**.
5. Click **Add**.
6. Click  **Edit** in the **Diagram** row. The **Edit diagram** dialog opens.
7. Specify the name of the diagram in the various languages. You can display more languages.
8. Click **+ Add new start item** to define a model for the **Home** page. The **Add item identifier** dialog opens. Enter an identifier for a model, for example, **c.group.UnitedMotorGroup.SnE94FOCEeMP2v2B6YbX4g**.
9. Double-click **OK**.

The configured diagrams are now displayed on the **Home** page of the database. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.5 Find item identifier

You can find item identifiers for diagrams so that diagrams can be displayed on the ARIS Connect **Home** page.

Procedure

1. Start ARIS Connect.
2. Click  **Portal**.
3. Select the database in which the relevant diagram is stored.
4. Click **Groups**.
5. Navigate to the required diagram and click it. The model is displayed.
6. In the address bar of your browser, select the last part of the URL, immediately after the entry **item/**.
7. Copy the selected text to the clipboard by pressing **Ctrl + C**.

You can use the item identifier of this diagram (page 212) to configure the **Home** page.

Tip

If you want to configure multiple diagrams later, it is recommended to copy the various identifiers into a text file, and then copy them into the configuration from there.

Example

```
server:1080/#default/item/c.default.UnitedMotorGroup.vyqdYHy4EdwnKQALzQzOTg
```

6.7.1.4.11.6.6 Add 'Dashboard' component

Define your own layout for the portal. You can configure the appearance of diagrams.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have copied the item identifier (page 212) to the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Dashboard**.
5. Click **Add**.
6. Click  **Edit** in the **Dashboard** row.
7. Click **Add**. The **Add Dashboard** dialog is displayed.
8. Enter a name. You can enter a name in multiple languages.
9. Select a dashboard.
10. Select the database in which the dashboard is to be displayed.
11. Click **Add**.
12. Click  **Back**.

The configured dashboards are now displayed on the **Home** page of the database. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.7 Add 'My content' component

Define your own layout for the portal. You can create a **My content** area.

In the **System** default configuration, information is displayed in the **My content** area regarding the processes in which a function that is connected to a role or via a function allocation diagram is modeled. The user currently logged in must have been specified in this role in the **User/User group association** attribute.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **My content**.
5. Click **Add**.

The **My content** item is now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.8 Add 'Recent changes' component

Define your own layout for the portal. You can create a **Recent changes** area. You can also define another name for this area. Moreover, the languages, the number of changes displayed, and a time interval for changes can also be configured.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Recent changes**.
5. Click **Add**.
6. Click  **Edit** in the **Recent changes** row. The **Edit recent changes** dialog opens. Configure the name, the languages, the number of changes displayed, and a time interval for changes.
7. Click **OK**.

The recent changes are now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.9 Add and configure 'Quick start' component

Define your own layout for the portal. You can configure an **App gallery** area, in which you provide references to apps.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Quick start**.
5. Click **Add**.
6. Click  **Edit** in the **Quick start** row. The **Edit 'Quick start'** dialog opens.
7. Enter a name for the gallery in the various languages.
8. Click **Browse** to select a background image for the app gallery. The background image must not be bigger than 256 KB.
9. By default, all preconfigured apps are already in the app gallery and the **Add** button is disabled. Move the mouse pointer to the app you want to delete and click  **Delete**. You can make a deleted app accessible in the app gallery again.
10. Click **Add** if you want to display a preconfigured app you had removed before.
Click **New** to add a new app.
11. Change the order of the apps by clicking the up or down arrow.
12. Click **OK**.

The configured apps are now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.10 Add new app to Quick start

Define your own layout for the portal. You can configure an **App gallery** area, in which you provide references to apps.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **Quick start**.

5. Click **Add**.
6. Click  **Edit** in the **Quick start** row. The **Edit 'Quick start'** dialog opens.
7. Enter a name for the gallery in the various languages.
8. Click **New** to add a new app. The **Add app** dialog opens.
9. Enter the name in the various languages.
10. Enter the URL under which the app can be found. Enter the entire URL in the form **http://<server>:<port>/<app path>**.
11. Enable **In a new tab** if the app is to be displayed on a new tab in the browser.
12. Select a symbol for the app.
13. Double-click **OK**.
14. Change the order of the apps by clicking the arrow keys.

The configured apps are now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.11 Add external web page

Define your own layout for the **Home** page of the portal. You can add an external web page, for example, your company's home page.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **IFrame**.
5. Click **Add**.
6. Click  **Edit** in the **IFrame** row. The **Edit IFrame** dialog opens.
7. Enter the name in the various languages.
8. Enter the entire IFrame URL in the form **http://<server>:<port>/<web page>**.
9. Click **OK**.

The configured IFrame item is now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.12 Add 'My activities' component

Define your own layout for the portal. You can add an overview of your activities.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Click **Add** in the relevant area. The **Add component** dialog opens.
4. Click the **Component** box and then click **My activities**.
5. Click **Add**.

The **My activities** component is now displayed on the **Home** page. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.13 Edit a component of the Home tab

Define your own layout for the portal. You can configure the appearance of diagrams.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have copied the item identifier (page 212) to the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Move the mouse pointer over the component you want to edit. If a component can be edited, the  **Edit** icon is displayed.
4. Click  **Edit**. The corresponding dialog opens.
5. Make your changes.
6. Click **OK**.

The changed components are now displayed on the **Home** page of the database. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.6.14 Edit the dashboard component of the Home tab

Define your own layout for the portal. You can configure the appearance of diagrams.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have copied the item identifier (page 212) to the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Home** on the **Define modification set** page.
3. Move the mouse pointer over the dashboard component you want to edit.
4. Click  **Edit**.
5. Make your changes.
6. Click **OK**.

The changed dashboard components are now displayed on the **Home** page of the database. To test the changed modification set, activate (page 152) it.

6.7.1.4.11.7 Manage plugins

As a portal administrator, you customize the plugins. Portal administrators select the configuration set (page 1167) to show portal data. Hierarchies determine the way you are able to navigate through the data.

By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626). If you want to use plugins in the portal, you need extended configuration sets with plugins enabled that you cannot configure in ARIS Administration, please contact your local Software AG sales organization (<http://www.softwareag.com>).

6.7.1.4.11.7.1 Activate a plugin

You can activate a plugin predefined in a configuration set.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have a customized configuration that allows plugins.
- You have created a customized modification (page 149) set based on the customized configuration set that allows plugins.

Procedure

1. Open a user-defined modification set that allows plugins for editing. (page 153)
2. Click **Plugins** on the **Define modification set** page.
3. Click  **Activate**.

The plugin is active. The configuration set (page 146) defines the view in which the plugin is displayed.

6.7.1.4.11.7.2 Disable a plugin

You can activate a plugin predefined in a configuration set.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have a customized configuration that allows plugins.
- You have created a customized modification (page 149) set based on the customized configuration set that allows plugins.

Procedure

1. Open a user-defined modification set that allows plugins for editing. (page 153)
2. Click **Plugins** on the **Define modification set** page.
3. Click  **Deactivate**.

The plugin is disabled.

6.7.1.4.11.8 Delete modification set

Delete modification sets that are no longer needed.

Prerequisite

You have the **Portal administrator** function privilege.

Warning

The configurations of deleted modification sets will be lost.

Procedure

1. Click the arrow next to your user name.
2. Click **Administration**.
3. Click **Portal > Manage views** on the **Configuration** tab. All available configuration and modification sets are displayed. The current configuration or modification set is marked.
4. Move the mouse pointer over the relevant modification set.
5. Click  **Delete**.
The configurations of deleted modification sets will be lost.
6. Click **Delete** to confirm.

The modification set is deleted.

6.7.1.4.12 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.7.1.4.12.1 What to consider with customized configuration sets?

Configuration sets are based on XML files and allow a comprehensive customization of ARIS Connect.

By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626).

Advanced configuration changes require the use of XML configuration. Please contact Software AG (<https://empower.softwareag.com/>) for a customization request or participate in the **742-xx ARIS Connect Portal Configuration training** (<https://knowledge.softwareag.com/course/view.php?id=16>). Please note that customization and training services are not covered by the standard Software AG software maintenance agreement. Configuration changes can only be performed by Software AG if you request and agree to them. Errors in XML configuration may have serious impact. You may not be able to start ARIS Connect again.

6.7.1.4.12.2 What are the special features in terms of languages?

You can select all languages (page 157) that ARIS supports. When a user selects a language, they specify which interface, method, and database language is used. Ideally, these are available in the selected language. If a language is not available, the procedure is as follows.

INTERFACE LANGUAGE IS NOT AVAILABLE IN SELECTED LANGUAGE

Available interface languages are installed.

If you have selected the language **Quechua (Bolivia)** and this language is not available as the interface language, the interface items, for example, the links, are displayed in English.

METHOD LANGUAGE IS NOT AVAILABLE IN SELECTED LANGUAGE

The interface language is used.

For example, if you have selected the language **Quechua (Bolivia)** and this language is not available, model, object, and attribute names are displayed in English if you have selected English as the interface language.

DATABASE LANGUAGE IS NOT AVAILABLE IN SELECTED LANGUAGE

The alternative language (page 1165) for the database is used.

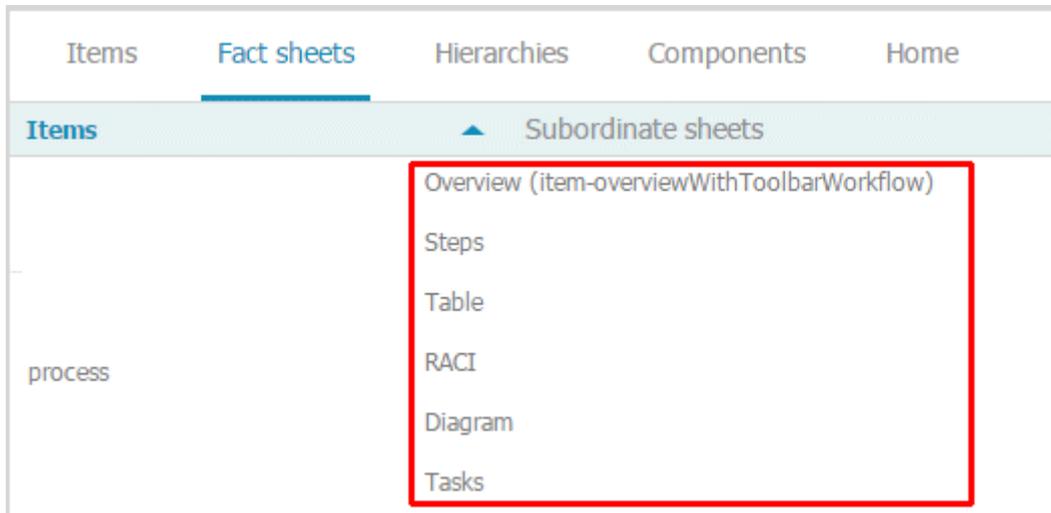
For example, if you have selected the language **Quechua (Bolivia)** and this language is not available, all entries you specify for attributes are added in the English database language if you have selected English as the alternative language. In ARIS Connect Designer, for example, the current database language is displayed after the model name using a language code.

6.7.1.4.12.3 What can be configured in fact sheets?

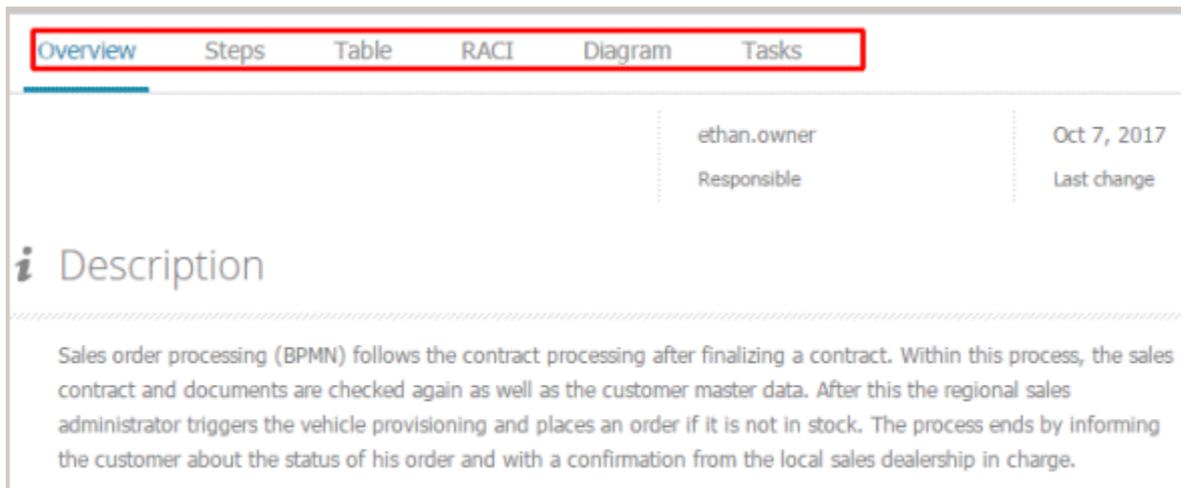
Using fact sheets, you configure how the pages are displayed that open when you click a process in the navigation. The fact sheet for a process includes the subordinate pages you defined in the fact sheet configuration (page 175).

Example

The subordinate pages shown are configured for a process:



The result of configuring the fact sheet for a process looks like this:



6.7.1.4.12.4 What property templates exist?

There are four different templates for properties:

- Text (value_meta_text)
This template is used for attribute values that consists of text.
- E-Mail (value_meta_email)
This template is used for attribute values that consists of text.
- Link (value_meta_link)
This template is used for attribute values that are links.
- Image (value_meta_image)
This template is used for attribute values that are images or links to images.

You can configure a label and/or an icon for each template can. The icon is displayed in front of the label.

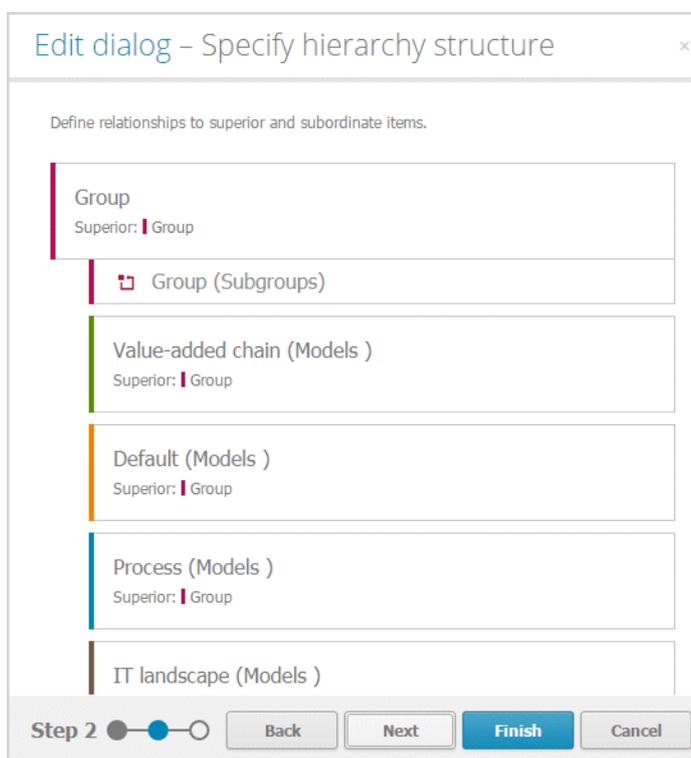
6.7.1.4.12.5 What does the navigation hierarchy define?

Using the navigation hierarchy, you define the navigation options for the portal. The example shows the configuration of the hierarchy for a group.

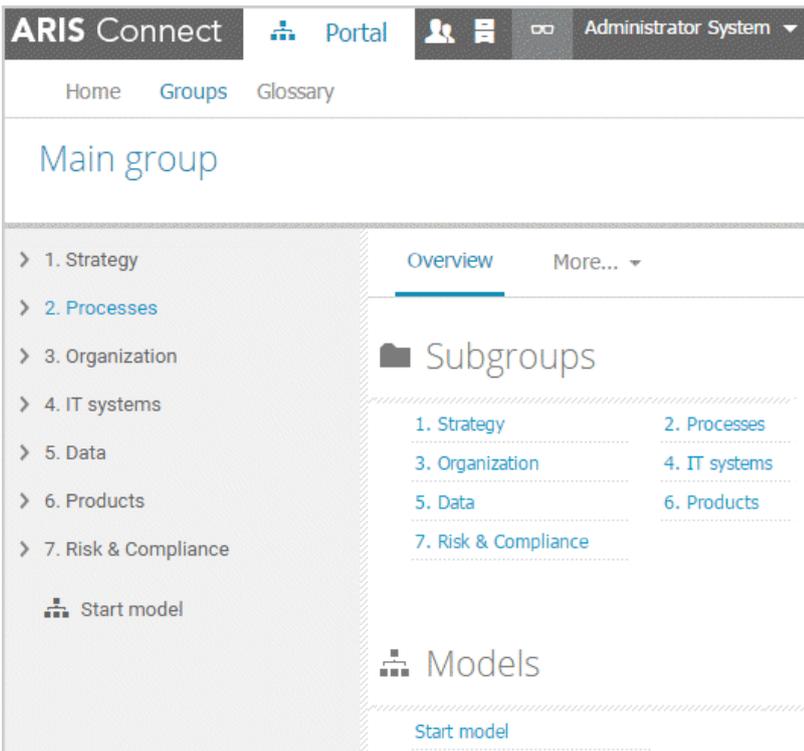
The second item must be of the same type as the first item. If it is not, a hierarchy cannot be created. Items of the same type are arranged without space.

Example

Subgroups and processes are configured for the group:

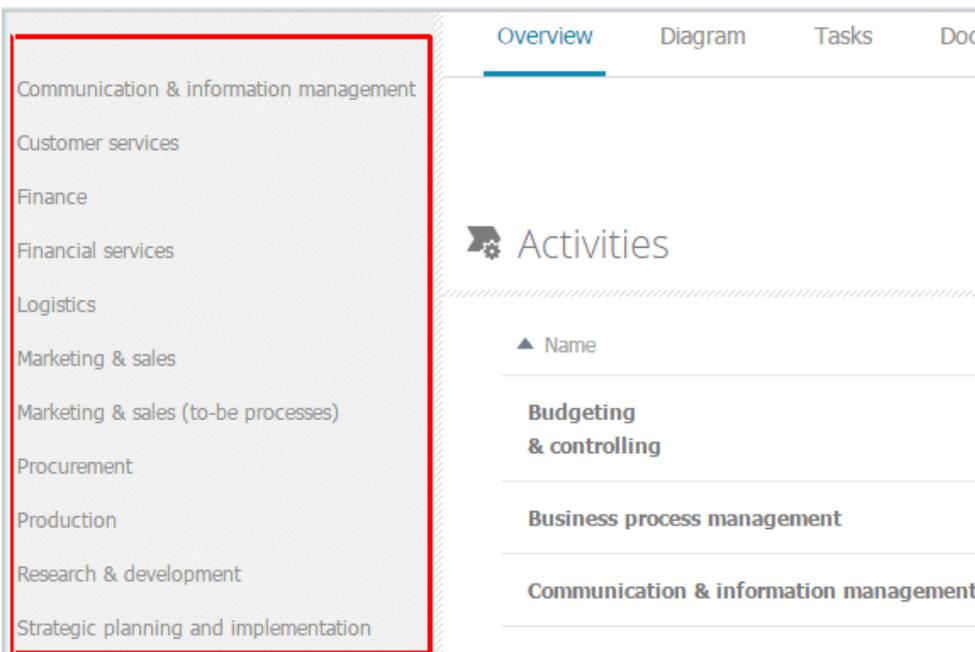


The result looks like this in the portal:

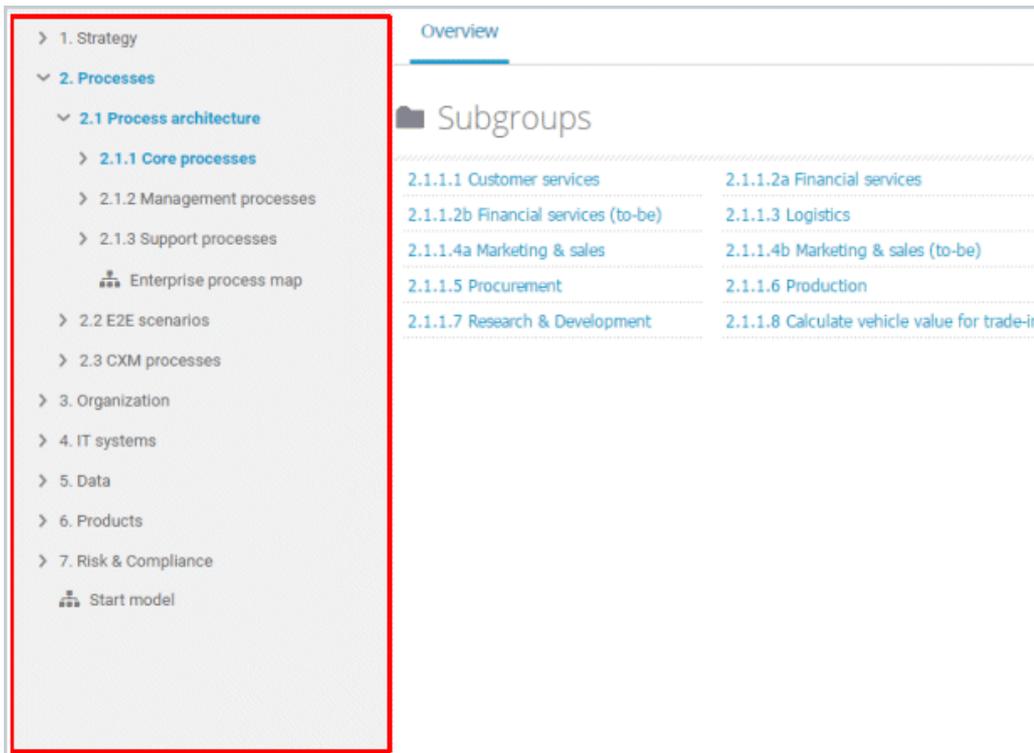


6.7.1.4.12.6 What to remember regarding hierarchies

Hierarchies define the way in which portal users receive relevant information. Hierarchies that are based on the **default** template have only one level.



Hierarchies that are based on the **classic** template have multiple levels, and you can expand and collapse groups.



From a technical perspective, a hierarchy always has a tree structure and is level-based. A level can be made up of models, objects, or groups. It may contain a superior item and multiple subordinate items. In contrast, a level can have multiple subordinate items.

You can use multiple hierarchy definitions in a hierarchy configuration. For example, you can specify the following hierarchy definitions in a configuration:

Navigation in process models (value-added chain diagrams, EPCs, and function allocation diagrams), navigation in the organization (organizational charts, organizational units, roles, and groups), and navigation in the IT systems within an organization.

6.7.1.4.12.7 What is a hierarchy root element?

A root element is the model or object that is used as the top-level element in the hierarchy (page 194) you have defined. This element is displayed when you open the hierarchy in the portal.

If you want to use a specific item from an ARIS database as the top-level hierarchy element, for example, a specific model or object, this must be defined as the root element. You require the GUID, which you can copy from the Properties dialog for the model or object in ARIS Architect, for example.

6.7.1.4.12.8 What is ARIS Viewer Contribution?

If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you are able to change items and values for the following predefined items in the  **Portal**. 'Predefined' means that these items and their values were configured to be editable in the program by default.

This means that not all items of the following model and object types can be changed. Only those can be changed that were designed to be editable by the underlying concept and were set up accordingly by the configuration.

Please note that this is a sample configuration, which means that other items may have been configured to be editable in your installation.

MODEL TYPES

- Application system type diagram
- BPMN collaboration diagram (BPMN 2.0)
- BPMN process diagram (BPMN 2.0)
- Business controls diagram
- Enterprise BPMN collaboration diagram
- Enterprise BPMN process diagram
- EPC
- EPC (material flow)
- EPC (column display)
- EPC (table display)
- EPC (horizontal table display)
- EPC (row display)
- Function allocation diagram
- Organizational chart
- Process schedule
- Risk diagram
- KPI allocation diagram

OBJECT TYPES

- Application system
- Application system class
- Application system type
- Cluster/Data model
- Entity type
- Event
- Technical term
- Function

- Information carrier
- KPI instance
- Class
- Lane
- List
- Message
- Organizational unit
- Participant
- Person
- Risk
- Risk category
- Role
- Location
- Position
- System organizational unit
- System organizational unit type
- Test definition

ATTRIBUTES

ARIS Viewer Contribution enables you to edit attributes (page 760) that are based on the following base types:

- Boolean
- Value
- Floating point number domain
- Integer domain
- Floating point number
- Integer
- Date
- One-liner
- Multi-line text
- Link/File

Text formatting is ignored and cannot be assigned. If you are expected to enter numbers, the field is colored red (page 760) if you do not enter a numerical value.

Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

6.7.1.4.12.9 What are plugins?

A plugin is a software extension or an optional module that adds functionality to ARIS Connect. Plugins cannot run without the main software they are integrated in.

If you want to use plugins in the portal, you need extended configuration sets with plugins enabled that you cannot configure in ARIS Administration, please contact your local Software AG sales organization (<http://www.softwareag.com>).

Plugins used together with ARIS Connect must be written in Java Script and must have a valid signature. This signature is generated by Software AG and must be copied to the server.

6.7.1.4.12.10 What states exist for plugins?

A plugin can have the following states:

- Active
The plugin can be used.
- Disabled
The plugin was manually disabled.
- Development
Either the plugin has no signature yet, or an incorrect signature was applied less than two weeks ago and needs to be adjusted.
- Invalid
Either the plugin has no signature yet, or an incorrect signature was applied more than two weeks ago and can no longer be adjusted.

6.7.2 Set up user management

You can customize general settings of your system's user management.

6.7.2.1 Export configuration

You can export configurations in order to import them into any tenant or installation and use them there. Only changed properties will be exported. Also, cross-tenant properties will not be exported as they cannot be changed using the graphical user interface.

Prerequisite

- You have the **Technical configuration administrator** function privilege.
- You have allowed pop-ups for the pages of ARIS Administration.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click  **Export current configuration as a file**.

You can save the configuration file at the relevant location for further use.

6.7.2.2 Import configuration

You can import configurations, which were, for example, exported from a different tenant, into any tenant or installation and use them there.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click  **Import configuration file**.

The **Import configuration file** dialog opens. Navigate to the location where the configuration file is stored and import it. The new configuration is active immediately and no system restart is required.

6.7.2.3 Configure user for impersonation

Impersonation enables a user to assume another user account. The user can then perform operations that are actually only permitted for the other account. This configuration must be set for each tenant.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Log in to User Management.
Click the link that was provided to you or that you have saved as a bookmark in your browser, for example, **http://myServer:1080/#myTenant/adminUsers**. The **Log in** dialog opens.
2. Enter the name of the infrastructure tenant in the  **Tenant** field, for example, **master**.
3. Enter your user name and your password.
4. Click the user for which you want to allow impersonation.
5. Click **Privileges**. The list of function privileges is displayed.
6. Click the user for which you want to allow impersonation.
7. Activate the **Impersonation** function privilege.
8. Log out.
9. Log in (page 32) to ARIS Connect.
10. Click the arrow next to your user name, and select **Administration**.
11. Click  **Configuration**.
12. Click  **User management**.
13. Click the arrow next to **Users**.
14. Click **General**.
15. Click  **Edit**.
16. Click in the **Impersonation target users** field.
17. Enter the users for which you want to allow impersonation as a comma-separated list.

Warning

If the ARIS server was updated, make sure to reenter the user names for all operational tenants in the **Impersonation target users** field again.

18. Click  **Save**.

You have allowed users to use impersonation.

6.7.2.4 Customize infrastructure

You can customize general settings of your system infrastructure, for example, format of e-mail in HTML.

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click **Infrastructure**. To configure further settings, click a configuration category (page 254).
6. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

7. Adjust your settings.
8. Click  **Save**.

You have customized your system configuration.

6.7.2.5 Customize Kerberos settings

Kerberos is a computer network authentication protocol that works on the basis of tickets to allow nodes communicating over a non-secure network to prove their identity to one another in a secure manner.

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **Kerberos**.

6. Click a configuration category (page 258).
7. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.6 Upload Kerberos configuration files

You can upload the Kerberos configuration file or the key table.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **Kerberos**. The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.
6. Activate the **General** configuration category.
7. To upload the key table file, click  **Upload** under the **Key table** field. To upload the configuration file, click  **Upload** under the **Configuration file** field. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a configuration file.

6.7.2.7 Add LDAP server

LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

You can use multiple LDAP servers with ARIS.

The migration to multiple LDAP servers is irreversible. Any existing LDAP data needs to be deleted manually before the migration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Click **General settings**.
7. Click  **Edit**.
8. Enable **Activate LDAP**.
9. Enable **Activate multiple LDAP integration**.
10. Click  **Save**.
11. Click  **Add**. The **Add LDAP server** dialog opens.
12. Enter the following (page 260):
 - ID of the LDAP server
 - Display name of the LDAP server
 - LDAP server URL
 - LDAP server fallback URL
 - User name of the user who has access to the LDAP content
 - Password of this user
 - Specify whether or not SSL should be used and in which mode
 - Specify whether or not host names and certificates should be verified
 - Specify the connection timeout
13. Specify the read timeout
14. Click  **Save**.

You have added an LDAP server.

If you want to specify more than one LDAP server, proceed with step 10 of the procedure steps mentioned above.

6.7.2.8 Test connection to an LDAP server

LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

You can use multiple LDAP servers with ARIS.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Select the relevant LDAP server.
7. Click **Connection**.
8. Click  **Test connection**.

A message is displayed, whether or not the connection to the LDAP server specified is valid.

6.7.2.9 Edit connection to an LDAP server

LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

You can use multiple LDAP servers with ARIS.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Select the relevant LDAP server.
7. Click **Connection**.
8. Click  **Edit**.

9. Enter the following (page 260):
 - ID of the LDAP server
 - Display name of the LDAP server
 - LDAP server URL
 - LDAP server fallback URL
 - User name of the user who has access to the LDAP content
 - Password of this user
 - Specify whether or not SSL should be used and in which mode
 - Specify whether or not host names and certificates should be verified
 - Specify the connection timeout
 - Specify the read timeout
 10. Click  **Save**.
- You have edited an LDAP server connection.

6.7.2.10 Upload LDAP truststore file

You can upload the truststore file.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Click **General settings**.
7. Click **Truststore**.
8. Click  **Upload**. The **Truststore** dialog opens.
9. Select the relevant file.

You have uploaded a truststore file

6.7.2.11 Customize LDAP settings

LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Click a configuration category (page 260).
7. Select the relevant LDAP server.
8. Click a configuration category (page 260).
9. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

10. Adjust your settings.
11. Click  **Save**.

You have customized your system configuration.

6.7.2.12 Customize ARIS for LDAP server operations

You can configure ARIS for LDAP server operations.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **LDAP**.
6. Click **General settings**.
7. Click  **Edit**.
8. Enable **Activate LDAP**.
9. If you want to upload a configuration, ensure that you have disabled pop-up blockers in the browser.
Click **Truststore**.
10. Click  **Upload**. The **Truststore** dialog opens.
11. Select the relevant LDAP server.
12. Configure the URL for the LDAP system. Click **Connection**.
13. Enter an ID, a name, and the URL in the **Server URL** field, for example:
`ldap://hgcc.mycompany.com:3168.`
14. Configure the path to the backup system in the **Server URL (fallback)** field. This backup system takes over automatically if the LDAP server cannot be reached via its primary URL.
15. Click **Behavior**.
16. Enter the Path to the user group in the **Group search paths** field.
17. Enter the Path to the users in the **User search paths** field.
To enable the function of following referrals of users to other directories, enter **follow** in the **Referral** field.
To disable the above behavior, enter **ignore** in the **Referral** field.
If you leave this entry blank, referrals are not followed.
Optional: To ensure that the import of LDAP users is carried out despite any errors that might occur, for example, if names are redundant, click **Global settings > Advanced settings** and enable **Skip errors**.
Please note that system performance is significantly deteriorated if you enable this option.

You have configured ARIS for LDAP server operations.

You have configured ARIS for LDAP server operations.

6.7.2.12.1 Configure secure communication between ARIS and LDAP server

You can encrypt the communication between ARIS and the LDAP server.

To do so, you have two mutually exclusive options:

- **STARTTLS**

This transforms a connection that was originally untrusted into an encrypted connection without using a specific port.

- **SSL**

The connection between ARIS and the LDAP server is established using a specific port.

Prerequisite

- The LDAP server has a valid SSL certificate and LDAPS is activated.
- ARIS Administration trusts the LDAP server (the SSL certificate of the LDAP server or the certification authority is stored in the JRE database of trustworthy certificates).

STARTTLS

You can use STARTTLS to configure encrypted communication between ARIS and the LDAP server.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **LDAP**.
6. Select the relevant LDAP server.
7. Click **Connection**.
8. Click  **Edit**.
9. Configure the URL for the LDAP system. To do so, enter the URL as in the **Server URL** field, for example:
`ldap://hggc.mycompany.com:3168.`
10. Configure the path to the backup system in the **Server URL (fallback)** field. This backup system takes over automatically if the LDAP server cannot be reached via its primary URL.
11. Enable **Use SSL**.
12. Select **STARTTLS** from the **SSL mode** list.
13. ARIS must trust the LDAP server used. Therefore, we recommend that you use the LDAP server with a certificate signed by a public certification authority. If your certificate is signed

by a public certification authority and stored in the list of trustworthy certificates of your JRE, you do not need to configure anything else.

14. Upload LDAP truststore file (page 235).

SSL

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **LDAP**.
6. Select the relevant LDAP server.
7. Click **Connection**.
8. Click  **Edit**.
9. Configure the URL for the LDAP system. To do so, enter the URL as in the **Server URL** field, for example:
`ldap://hggc.mycompany.com:3168.`
10. Configure the path to the backup system in the **Server URL (fallback)** field. This backup system takes over automatically if the LDAP server cannot be reached via its primary URL.
11. Enable **Use SSL**.
12. Select **SSL** from the **SSL mode** list.
13. ARIS must trust the LDAP server used. Therefore, we recommend that you use the LDAP server with a certificate signed by a public certification authority. If your certificate is signed by a public certification authority and stored in the list of trustworthy certificates of your JRE, you do not need to configure anything else.
14. Upload LDAP truststore file (page 235)

6.7.2.12.2 Allow login for LDAP users only

To allow only LDAP users to log in to ARIS Architect and My tasks, you need to configure the system accordingly.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **LDAP**.
6. Click the arrow next to **General settings**.
7. Click **Advanced settings**.
8. Enable **Prevent login of manually created users**.

Only LDAP users and the following users can log in: **system**, **superuser**, **arisservice**, and **guest**.

6.7.2.12.3 Configure single sign-on

If you are using Microsoft® Active Directory Domain Services, you can configure SSO (single sign-on) (page 1177). This allows users to work with all ARIS components as soon as they are logged in to the domain. Separate login to ARIS components is not required.

Please contact your LDAP administrator for this.

Prerequisite

Server

- Users who want to use SSO must have a valid Microsoft® Active Directory Domain Services user login.
- This user is available in ARIS Administration.
- ARIS Administration authenticates against LDAP.
- Microsoft® Active Directory Domain Services supports Kerberos-based authentication (default) and the service principal name of the ARIS Server is entered in the following format: **HTTP/<hostname>**, for example, **HTTP/mypc01.my.domain.com**.

Client

- The client computers and servers are connected to the same Microsoft® Active Directory Domain Services.
- The browser used supports a Kerberos-based authentication.
- The browser has been configured accordingly.

CONFIGURATION IN ARIS ADMINISTRATION USING KERBEROS

SSO must be configured for the servers.

Kerberos is a network authentication, allowing nodes to communicate using an invisible network and to securely make their identity known to each other. Kerberos is the recommended method for user authentication in Microsoft® Windows networks. In addition, it is widely used with Linux operating systems and is designed for use with all major platforms.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **Kerberos**.
6. Activate the **General** configuration category.

If you do not have a Kerberos configuration file, take the **kbr5.conf** from your installation media under **Add-ons\Kerberos**. Name it, for example, **krb5.conf**, add the following lines, and adjust the configuration to meet your requirements.

```
[libdefaults]
default_tgs_enctypes = des-cbc-md5 des-cbc-crc des3-cbc-sha1 aes128-cts
aes128-cts-hmac-sha1-96 aes256-cts aes256-cts-hmac-sha1-96 rc4-hmac
arcfour-hmac arcfour-hmac-md5
default_tkt_enctypes = des-cbc-md5 des-cbc-crc des3-cbc-sha1 aes128-cts
aes128-cts-hmac-sha1-96 aes256-cts aes256-cts-hmac-sha1-96 rc4-hmac
arcfour-hmac arcfour-hmac-md5
permitted_enctypes = des-cbc-md5 des-cbc-crc des3-cbc-sha1 aes128-cts
aes128-cts-hmac-sha1-96 aes256-cts aes256-cts-hmac-sha1-96 rc4-hmac
arcfour-hmac arcfour-hmac-md5
```

7. To upload the configuration file, click  **Upload** under the **Configuration file** field.
8. Click  **Edit**.
9. Enable **Use Kerberos**.
10. In the **Principal** field, enter the technical user name given by the administrator.

If the Service Principal Name in the keytab is, for example, **mypc01@MY.DOMAIN.COM**, the values of the property **com.company.aris.umc.kerberos.servicePrincipalName** must contain the Service Principal Name exactly as specified in the keytab file.

11. In the **Realm** field, configure the realm for the Kerberos service. Enter the fully qualified domain name in uppercase letters.

Example: **MYDOMAIN.COM**.

12. In the **KDC** field, configure the fully qualified name of the KDC to be used.

13. **Optional:**

- a. Click **Advanced settings**.
- b. Enable **Debug output**.

The debug output of the program that the user wishes to log in to is saved in the file **system.out** of the respective program. For user management, for example, this is located in the directory **<ARIS installation directory/work_umcadmin_m/base/logs**.

You have configured SSO using Kerberos in ARIS Administration.

CONFIGURATION IN ARIS ADMINISTRATION USING SAML

SSO must be configured for the servers.

Prerequisite

- You have the **Technical configuration administrator** function privilege.
- If you use multiple LDAP systems, the user names must be unambiguous through all LDAP systems. Otherwise no SSO is possible.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click  **User management**.
5. Click the arrow next to **SAML**.
6. Click **General**.
7. Click  **Edit**.
8. Enable **Use SAML**.
9. Enter the ID of the identity provider in the **Identity provider ID** field.
10. Enter the ID of the service provider in the **Service provider ID** field.
11. Enter the end point of the identity provider that is used for single sign-on in the **Single sign-on URL** field.
12. Enter the end point of the identity provider that is used for single log-out in in the **Single logout URL** field.

You have configured SSO using SAML in ARIS Administration. If you use multiple LDAP systems, the user names must be unambiguous through all LDAP systems. Otherwise no SSO is possible. Please note that SSO (single sign-on) (page 1177) using SAML will not work in case of multiple LDAP servers and same login names (even with different entities) in different LDAP systems.

CLIENT CONFIGURATION

Configure the browser settings to allow SSO. SSO has been tested with the following browsers:

- Microsoft® Internet Explorer® (version 11 or higher)
- Mozilla Firefox®

You need to empty the Kerberos ticket cache of each client first in order to avoid obsolete tickets if Microsoft® Active Directory Domain Services were changed. Delete the Kerberos ticket cache by executing the command **klist.exe purge**. If the purge program is not available on the client computer, you can also simply log off the client computer from the domain and log it back in.

MICROSOFT® INTERNET EXPLORER®

Microsoft® Internet Explorer® supports Kerberos authentication only if the ARIS Server is part of your local intranet.

Procedure

1. Start Microsoft® Internet Explorer®.
2. Click **Tools > Internet Options**.
3. Activate the **Security** tab and click **Local Intranet**.
4. Click **Sites**, and select **Advanced**.
5. Add the URL of the ARIS Server that was configured for SSO. Add the DNS host name and the IP address of the ARIS Server.
6. Optional: Disable the **Require server verification (https:) for all sites in this zone** check box.
7. Click **Close**, and select **OK**.
8. Click **Custom level** and make sure that no user-defined settings affect your new settings.
9. Find the **User Authentication** section. Verify whether the **Automatic logon only in Intranet zone** option is enabled.
10. Click **OK**.
11. Close and restart Microsoft® Internet Explorer®.

MOZILLA FIREFOX®

In Mozilla Firefox®, you can define trustworthy sites using the computer name, IP address, or a combination of both. You can use wildcards.

Procedure

1. Start Mozilla Firefox®.
2. Enter **about:config** in the address box and press Enter. Confirm a message, if required.
3. Enter **network.negotiate** in the **Search** box and press Enter, if required.
4. Double-click **network.negotiate-auth.trusted-uris**.
5. Enter the computer name or the IP address of the ARIS Server that you configured for SSO, and click **OK**.
6. Close and restart Mozilla Firefox®.

If you prefer to use an encryption stronger than AES 128bit and this is allowed in your country, replace the JCE Policy file of the JDK of your ARIS Server with the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 6 (<http://www.oracle.com/technetwork/java/javase/downloads/index.html>). This allows unlimited key length.

If you cannot replace the Policy files, but still want to use SSO, you need to apply a procedure allowed by the JDK for encrypting Kerberos tickets, for example, AES 128bit.

6.7.2.13 Delete LDAP server

LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

Prerequisite

- You have the **Technical configuration administrator** function privilege.
- Your system is configured to allow multiple LDAP servers.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **LDAP**.
6. Select the relevant LDAP server.
7. Click **Connection**.
8. Click  **Delete**.

You have deleted an LDAP server.

6.7.2.14 Customize user-defined notifications

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Variables (page 281) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body.

Prerequisite

- You have the **Technical configuration administrator** function privilege.
- You have uploaded (page 245) the relevant templates for user-defined notifications.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **User-defined notifications**.
6. Click a configuration category (page 270).
7. Click  **Edit**.
8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.14.1 Upload templates for notifications

You can upload the templates for user-defined notifications.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **User-defined notifications**.
6. Click a category.
7. Click  **Upload**. The dialog for uploading a file opens.
8. Click **Select file**. Select the relevant file.

9. Click **Upload**. A confirmation prompt is displayed.
10. Click **Close**.

You have uploaded a template for notifications.

6.7.2.14.2 Customize default HTML templates for notifications

You can customize the templates for user-defined notifications. Variables (page 281) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **User-defined notifications**.
6. Click a category.
7. Click  **Upload**. The corresponding dialog opens.
8. Enable **Advanced template configuration**.
9. Select **Default**.
10. Adjust your settings.
11. If you want to preview the HTML template, click **Preview**. An e-mail is sent to your user and you can check the template you are customizing. If you want to exchange the logo, make sure that the logo is saved on the server to grant access whenever e-mails are automatically sent.
12. Click **Save**.

You have customized the default HTML e-mail template.

6.7.2.14.3 Customize HTML templates for multiple locales

You can customize the templates for user-defined notifications. Variables (page 281) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **User-defined notifications**.
6. Click a category.
7. Click  **Upload**. The corresponding dialog opens.
8. Enable **Advanced template configuration**.
9. Select a locale.
10. Adjust your settings.
11. If you want to preview the HTML template, click **Preview**. An e-mail is sent to your user and you can check the template you are customizing. If you want to exchange the logo, make sure that the logo is saved on the server to grant access whenever e-mails are automatically sent.
12. Click **Save**.

You have customized the HTML e-mail template for a locale. If an e-mail is sent to a user and a notification language is specified for this user, the corresponding HTML template is now used for this language.

6.7.2.15 Customize password policy

You can customize the password policies such as length or strength of a password depending on the use of special characters, numbers, etc.

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **Password policy**.
6. Click a configuration category (page 282).
7. Click  **Edit**.
8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.16 Customize SAML

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration. ARIS supports SAML 2.0.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **SAML**.
6. Click a configuration category (page 285).
7. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.16.1 Upload keystore file

You can upload the keystore file.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **SAML**.
6. Click **Keystore**.
7. Click  **Upload**. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a keystore file.

6.7.2.16.2 Upload truststore file

You can upload the truststore file.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **SAML**.
6. Click **Truststore**.
7. Click  **Upload**. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a truststore file

6.7.2.17 Customize security settings

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **Security**.
6. Click a configuration category (page 291).
7. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.18 Customize SMTP settings

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **SMTP**.
6. Click a configuration category (page 299).
7. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.19 Customize user settings

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Activate **User Management**.
5. Click the arrow next to **Users**.
6. Click a configuration category (page 303).
7. Click  **Edit**.
8. Adjust your settings.
9. Click  **Save**.

You have customized your system configuration.

6.7.2.20 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.7.2.20.1 What is impersonation?

Users manage tenants on behalf of the user **superuser**. This requires the **creation** of these users in the user management for the infrastructure tenant, for example, master (page 230). To use impersonation, users require the **Impersonation** function privilege in the infrastructure tenant. For Tenant Management, they also require the **User administrator**, **Tenant administrator**, and **Technical configuration administrator** function privileges.

In all other operational tenants, for example, **default**, the user **superuser** must be defined as the target for impersonation (page 605). Impersonation enables users to back up tenants in which they do not exist as a user.

To back up and restore the data, the user **superuser** requires the following function privileges in all operational tenants:

- Analysis administrator
- ARCM administrator
- Collaboration administrator
- Database administrator
- Dashboard administrator
- Document administrator
- License administrator
- Portal administrator
- Process Governance administrator
- Server administrator
- Technical configuration administrator
- User administrator

6.7.2.20.2 What infrastructure properties are available?

You can customize your system infrastructure (page 231) as required.

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure umcadmin_<size of your installation, s, m, or l> JAVA-D<property name>=<value>
```

Example

```
reconfigure umcadmin_m JAVA-Dcom.aris.umc.loadbalancer.url="https://myserver.com"
```

Key	Description	Valid input	Example
com.aris.umc.version	<p>Build number</p> <p>Build number of ARIS Administration. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	String	10.0.4-SNAPSHOT
com.aris.umc.loadbalancer.url	<p>Load balancer URL</p> <p>Specifies the URL of the load balancer. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		
com.aris.umc.notification.useHttpLinks	<p>E-mails with HTTP URLs only</p> <p>Specifies whether or not the HTTP protocol is used instead of the HTTPS protocol in e-mails.</p>	true, false.	

HTTP CLIENT

Key	Description	Valid input	Example
com.aris.umc.client.connect.timeout	Connection timeout (in milliseconds) Specifies the duration after which a client's connection attempt is canceled. This is defined in milliseconds. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual .	Integer > 0	
com.aris.umc.client.idle.timeout	Idle timeout (in milliseconds) Specifies the wait time timeout of the ARIS Administration REST client. This is defined in milliseconds.	Integer > 0	
com.aris.umc.client.read.timeout	Read timeout (in milliseconds) Specifies the wait time timeout of the REST client for read access. This is defined in milliseconds.	Integer > 0	
com.aris.umc.client.connections.max	Maximum connections (total) Specifies the maximum number of connections that may be established simultaneously. If additional connections are to be established, they are refused.	Integer > 0	
com.aris.umc.client.connections.perhost	Maximum connections (per host) Specifies the maximum number of connections that may be established simultaneously per host. If additional connections are to be established, they are refused.	Integer > 0	
com.aris.umc.client.retry.max	Number of retries Specifies the maximum number of retries.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.ssl.host.verification.active	<p>Host name verification</p> <p>Specifies whether the verification of the SSL (page 1177) host name is activated. Verification is enabled by default.</p>	true, false	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.remote.clients	<p>Allowed remote clients</p> <p>Comma-separated list of client IPs that uses the remote interface of ARIS Administration.</p>	String	
com.aris.umc.config.cache.ttl	<p>Configuration cache lifetime</p> <p>Specifies the lifetime of the configuration cache in seconds. The configuration is reloaded after the time set here. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	
com.aris.umc.config.encrypted	<p>Encrypted properties</p> <p>Specifies a comma-separated list of encrypted property keys.</p>	List of strings	com.softwareag.aris.umc.ldap.service.pwd
com.aris.umc.jaas.login.context	<p>JAAS login context</p> <p>Specifies the login name for the JAAS (page 1173) context. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	String	UMC-DB

Key	Description	Valid input	Example
com.aris.umc.basicauth.tenant	<p>Default tenant</p> <p>Specifies that the default tenant is used for authentication. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	String	
com.aris.umc.infrastructure.tenant	<p>Infrastructure tenant</p> <p>Specifies the tenant with special privileges for managing other tenants, components, and the configuration in ARIS Administration.</p> <p>By default, the master tenant is the infrastructure tenant. The system users system and superuser have administrative privileges, that is, they can access ARIS Administration and Tenant Management.</p> <p>Users with the relevant privileges can specify other infrastructure tenants in ARIS Administration. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		

6.7.2.20.3 What Kerberos properties are available?

You can configure Kerberos (page 231) as required.

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure umcadmin_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure umcadmin_m JAVA-Dcom.aris.umc.loadbalancer.url="https://myserver.com"
```

GENERAL

Key	Description	Valid input	Example
com.aris.umc.kerberos.active	Use Kerberos Specifies whether a Kerberos-based login is allowed.	true, false	
com.aris.umc.kerberos.kdc	KDC Specifies the fully qualified name of the central Key Distribution Center (KDC) . This is usually the fully qualified host name of the LDAP server.	String	049bfs01.me.corp.soft wareag.com
com.aris.umc.kerberos.realm	Realm Specifies the realm of Kerberos tickets. Fully qualified domain name in uppercase letters.	String	MY.CORP.SOFTWAREA G.COM
com.aris.umc.kerberos.servicePrincipalName	Principal Specifies the name of the user used for verifying Kerberos tickets. If Kerberos is used, each user, computer or service provided by a server must be defined as a principal.	String	MyLogin

Key	Description	Valid input	Example
com.aris.umc.kerberos.keyTab	<p>Key table</p> <p>Specifies the location of the keytab file that is used for Kerberos tickets.</p> <p>The file can be uploaded directly.</p>	String	C:/safePlace/krb-umc.keytab
com.aris.umc.kerberos.config	<p>Configuration file</p> <p>Storage location of the configuration file for Kerberos.</p> <p>The file can be uploaded directly.</p>	String	./config/Kerberos/krb5.conf

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.kerberos.debug	<p>Debug output</p> <p>Specifies whether debug output is allowed for Kerberos operations.</p>	true, false	
com.aris.umc.kerberos.allowLocalUsers	<p>Allow local users</p> <p>Specifies whether the LDAP connection is mandatory for Kerberos-based login. If this option is enabled, Kerberos is used for the login of local users also.</p>	true, false	
com.aris.umc.kerberos.validateuser	<p>Ignore realm from service ticket</p> <p>Specifies whether or not the realm defined for the user principal name provided in the kerberos ticket is to be ignored. The default value is false.</p>	true, false	

Key	Description	Valid input	Example
com.aris.umc.kerberos.tenant	<p>Default tenant</p> <p>Specifies the default tenant for a Kerberos-based login. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	

6.7.2.20.4 What LDAP properties are available?

You can customize LDAP (page 236) as required.

GENERAL SETTINGS

Key	Description	Valid input	Example
com.aris.umc.ldap.active	<p>Activate LDAP</p> <p>Specifies whether or not the LDAP integration is enabled.</p>	true, false	
com.aris.umc.ldap.multi.active	<p>Activate multiple LDAP integration</p> <p>Specifies whether or not integration of multiple LDAP servers is to be activated. The default value is false.</p>	true, false	
com.aris.umc.ldap.connection.count	<p>Configured LDAP server count</p> <p>Displays the number of LDAP servers allowed.</p>	Integer	2

TRUSTSTORE

Key	Description	Valid input	Example
com.aris.umc.ldap.ssl.truststore.location	Truststore Specifies where to look for the truststore.	String	
com.aris.umc.ldap.ssl.truststore.password	Password Specifies the truststore password.	String	
com.aris.umc.ldap.ssl.truststore.type	Type Specifies the truststore type to be used.	String	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.ldap.debug	Debug output Specifies whether or not debug information for LDAP operations are output.	true, false	false
com.aris.umc.ldap.group.import.parent.enabled	Import superior group Specifies whether the superior group is to be imported automatically when the group is imported.	true, false	false
com.aris.umc.ldap.user.importOnLogin	Import user at login Specifies whether an LDAP user is to be imported automatically during the login attempt.	true, false	false
com.aris.umc.ldap.sync.user.importGroups	Import user groups when synchronizing Specifies whether additional user groups are to be imported during user synchronization.	true, false	false

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.memberof.resolveOnFirstLogin	<p>Update group associations at login</p> <p>Specifies whether the memberOf attribute is read (true) or not (false). If the value of the property is true, the memberOf attribute is read and the referenced groups are automatically imported. The import of the groups occurs when a user from the group logs in for the first time.</p>	true, false	
com.aris.umc.ldap.attributes.paging.enabled	<p>Use attribute value pagination</p> <p>Specifies whether a page break is to be inserted if the server-side limit for valid values is exceeded for attributes, for example, if more than 1,500 attribute values exist.</p>	true, false	
com.aris.umc.ldap.auth.only	<p>Prevent login of manually created users</p> <p>Specifies that only LDAP users may log in. This does not apply to the arisservice, guest, superuser, and system users.</p>	true, false	
com.aris.umc.ldap.entity.cache.size	<p>Cache size</p> <p>Specifies the maximum number of LDAP entities that are cached during an import.</p>	Integer > 0	3500
com.aris.umc.ldap.connection.current.timeout	<p>Pool wait time (in milliseconds)</p> <p>Specifies the maximum amount of time in milliseconds that a connection request may take if the maximum number of connections to the LDAP server was exceeded.</p>	Integer > 0	
com.aris.umc.ldap.connection.pool.size	<p>Pool size</p> <p>Specifies the maximum number of connections that are ready for reuse in a pool. The connection that was used last is discarded when the pool is full.</p>	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.ldap.connection.pool.timeout	<p>Pool time (in milliseconds)</p> <p>Specifies the maximum amount of time that a connection remains in a pool. The connection is removed from the pool at the latest after this period of time. This is defined in milliseconds.</p>	Integer > 0	
com.aris.umc.ldap.sync.skipOnFault	<p>Skip errors</p> <p>Specifies whether the LDAP import ignores users or user groups for which errors occurred without showing an error message.</p>	true (without message), false (with error message)	
com.aris.umc.ldap.sync.members.searchBottomUp	<p>Use bottom-up method</p> <p>Specifies whether the bottom-up method (memberOf attribute) or the top-down method (hasMember attribute) is applied when associating users to user groups.</p>	true, false	false
com.aris.umc.ldap.sync.useDnAsGuid	<p>Use DN as GUID</p> <p>Specifies that the fully qualified name (distinguished name) is used as GUID.</p>	true, false	false

INDIVIDUAL LDAP SERVER

You can specify the properties of each individual LDAP server.

CONNECTION

Key	Description	Valid input	Example
com.aris.umc.ldap.connection.id plus the ID defined.	ID Specifies the unique ID of this specific LDAP connection.	String	
com.aris.umc.ldap.connection.name plus the ID defined.	Name Specifies the name of this specific LDAP connection.	String	
com.aris.umc.ldap.url	Server URL Specifies the URL of the LDAP server.	String	
com.aris.umc.ldap.backup.url	Server URL (fallback) Specifies the fallback URL of the LDAP server. This URL is only used if the server cannot be reached via its primary URL.	String	
com.aris.umc.ldap.service.user	User name Specifies the user name of the LDAP user.	String	arisldap service
com.aris.umc.ldap.service.pwd	Password Specifies the password of the LDAP user.	String	
com.aris.umc.ldap.ssl	Use SSL Specifies if SSL is to be used.	true, false	
com.aris.umc.ldap.ssl.mode	SSL mode Specifies the SSL mode (page 238).	String	STARTTLS

Key	Description	Valid input	Example
com.aris.umc.ldap.ssl.host.verification.active	Verify host names Specifies if an SSL host is to be verified.	true, false	
com.aris.umc.ldap.ssl.certificate.verification.active	Verify certificates Specifies whether an SSL certificate is to be verified.	true, false	
com.aris.umc.ldap.connection.concurrent	Simultaneous connections Specifies the maximum number of simultaneous connections to the same LDAP server. If additional connections are to be established, they are refused.	Integer > 0	
com.aris.umc.ldap.timeout	Connection timeout (in milliseconds) Specifies the duration after which the attempt to connect to the LDAP server is canceled. This is defined in milliseconds.	Integer > 0	
com.aris.umc.ldap.read.timeout	Read timeout (in milliseconds) Specifies the maximum amount of time that read access may take. This is defined in milliseconds.	Integer > 0	

ATTRIBUTE MAPPINGS

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.objectclass	objectClass Specifies the attribute that contains the object class.	String	objectClass
com.aris.umc.ldap.attribute.distinguishedname	DN Specifies the fully qualified name (distinguished name).	String	distinguishedName
com.aris.umc.ldap.attribute.guid	GUID Specifies the LDAP GUID (page 1172).	String	Object GUID

GROUP ATTRIBUTE MAPPINGS

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.group.name	Name Specifies the group name.	String	Group name
com.aris.umc.ldap.attribute.hasmember	hasMember Specifies the attribute that references the members of a group.	String	hasMember
com.aris.umc.ldap.group.attributes.userdefined	User-defined Specifies a comma-separated list of LDAP attributes that are to be imported as user-defined attributes of a user group.	String	Description, operating system

USER ATTRIBUTE MAPPINGS

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.user.name	Name Specifies the user name of a user.	String	Fragment
com.aris.umc.ldap.attribute.user.firstname	First name Specifies the first name of a user.	String	John
com.aris.umc.ldap.attribute.user.lastname	Last name Specifies the last name of a user.	String	Smith
com.aris.umc.ldap.attribute.user.email	E-mail address Specifies the e-mail address of a user.	String	john.smith@softwareag.com
com.aris.umc.ldap.attribute.user.phone	Telephone number Specifies the telephone number of a user.	String	+491234567

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.user.picture	Picture Specifies the picture of a user.	Location of an image	
com.aris.umc.ldap.attribute.memberof	memberOf Specifies the attribute that references the groups of a user.	String	memberOf
com.aris.umc.ldap.user.attributes.userdefined	User-defined Specifies a comma-separated list of LDAP attributes that are to be imported as user-defined attributes of a user.	String	Description, operating system

BEHAVIOR

Key	Description	Valid input	Example
com.aris.umc.ldap.group.objectclasses	Group object class Object class of the LDAP groups.	String	Group
com.aris.umc.ldap.user.objectclasses	User object class Specifies the object class of the LDAP user.	String	Organizational unit
com.aris.umc.ldap.searchpath	Search paths Specifies a semicolon-separated list of all LDAP search paths.	String	OU=stadt\,OU=location\,OU=employees\,DC=my\,DC=corp\,DC=company\,DC=com

Key	Description	Valid input	Example
com.aris.umc.ldap.group.searchpath	<p>Group search paths</p> <p>Specifies a semicolon-separated list of all LDAP search paths for user groups. Overwrites the list of general search paths.</p>	String	OU\=distribution lists\,DC\=my ,DC\=corp\,D C\=company\ DC\=com
com.aris.umc.ldap.user.searchpath	<p>User search paths</p> <p>Specifies a semicolon-separated list of LDAP search paths for users. Overwrites the list of general search paths.</p>	String	OU\=employees\ DC\=my\ DC\=corp\ DC\=company \,DC\=com
com.aris.umc.ldap.filter.group	<p>Group search filter</p> <p>Specifies the query filter for LDAP groups.</p>	String	(&(objectClass=role)(name=y*))
com.aris.umc.ldap.filter.user	<p>User search filter</p> <p>Specifies the query filter for LDAP users.</p>	String	(&(sAMAccountName=*))
com.aris.umc.ldap.recursion.depth	<p>Recursion depth</p> <p>Specifies the recursion depth that is to be used for nested groups and users.</p>	1 means one level, 0 means all	1
com.aris.umc.ldap.pagesize	<p>Page size</p> <p>Specifies the maximum number of entries that are loaded in a single LDAP query.</p>	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.ldap.referral	Referrals Defines how referrals to other LDAP systems are processed.	follow means that the referral is automaticall y	ignore

6.7.2.20.5 What properties are available for user-defined notifications?

You can customize the user-defined notifications (page 245) as required.

Variables (page 281) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body.

USERS

Key	Description	Valid input	Example
com.aris.umc.notification.userCreated.message	Notify about creation Specifies whether users are to be notified after they have been created.	true, false	
com.aris.umc.notification.userCreated.subject	User created - Subject Subject of the notification that is sent when a user has been created.	String	
com.aris.umc.notification.userCreated.message	User created - Message Specifies the text of the notification that is sent when a user has been created.	String	
com.aris.umc.notification.userCreated.template	User created - HTML template Specifies the HTML template used for the notification that is sent when users are notified that they have been created. The template must have been uploaded previously.		
com.aris.umc.notification.userDisabled.enabled	Notify about deactivation Specifies whether users are to be notified after they have been deactivated.	true, false	
com.aris.umc.notification.userDisabled.subject	User deactivated - Subject Specifies the subject of the notification that is sent when a user has been deactivated.	String	

Key	Description	Valid input	Example
com.aris.umc.notification.userDisabled.message	User deactivated - Message Specifies the text of the notification that is sent when a user has been deactivated.	String	
com.aris.umc.notification.userDisabled.template	User deactivated - HTML template Specifies the HTML template used for the notification that is sent when users are notified that they have been deactivated. The template must have been uploaded previously.		
com.aris.umc.notification.userEnabled.enabled	Notify about activation Specifies whether users are to be notified after they have been activated.	true, false	
com.aris.umc.notification.userEnabled.subject	User activated - Subject Specifies the subject of the notification that is sent when a user has been activated.	String	
com.aris.umc.notification.userEnabled.message	User activated - Message Specifies the text of the notification that is sent when a user has been activated.	String	
com.aris.umc.notification.userEnabled.template	User activated - HTML template Specifies the HTML template used for the notification that is sent when users are notified that they have been activated. The template must have been uploaded previously.	String	

PASSWORDS

Key	Description	Valid input	Example
com.aris.umc.notification.passwordChanged.enabled	Notify about password change Specifies whether users are to be notified after their password has been changed.	true, false	
com.aris.umc.notification.passwordChanged.subject	Password change - Subject Specifies the subject of the notification that is sent when a password has been changed.	String	
com.aris.umc.notification.passwordChanged.message	Password change - Message Specifies the text of the notification that is sent when a password has been changed.	String	
com.aris.umc.notification.passwordChanged.template	Password change - HTML template Specifies the HTML template used for the notification that is sent when a user is to be notified about a password change. The template must have been uploaded previously.		
com.aris.umc.notification.passwordReset.enabled	Notify about password reset Specifies whether users are to be notified after their password has been reset.	true, false	
com.aris.umc.notification.passwordReset.subject	Password reset - Subject Specifies the subject of the notification that is sent when a password has been reset.	String	
com.aris.umc.notification.passwordReset.message	Password reset - Message Specifies the text of the notification that is sent when a password has been reset.	String	

Key	Description	Valid input	Example
com.aris.umc.notification.passwordReset.template	<p>Password reset - HTML template</p> <p>Specifies the HTML template used for the notification that is sent when a user is to be notified about a password reset. The template must have been uploaded previously.</p>		
com.aris.umc.notification.passwordResetRequested.enabled	<p>Notify about password reset request</p> <p>Specifies that users are to be notified if they have requested a password reset.</p>	true, false	
com.aris.umc.notification.passwordResetRequested.subject	<p>Password reset request - Subject</p> <p>Specifies the subject of the notification that is sent when a user has requested a password reset.</p>	String	
com.aris.umc.notification.passwordResetRequested.message	<p>Password reset request - Message</p> <p>Specifies the text of the notification that is sent when a user has requested a password reset.</p>	String	
com.aris.umc.notification.passwordResetRequested.template	<p>Password reset request - HTML template</p> <p>Specifies the HTML template used for the notification that is sent when a user has requested a password reset. The template must have been uploaded previously.</p>		

LICENSES

Key	Description	Valid input	Example
com.aris.umc.notification.licenseExpired.enabled	Notify about license expiration Specifies whether administrators with the License management privilege are to be notified when a license has expired.	true, false	true
com.aris.umc.notification.licenseExpired.subject	License has expired - Subject Specifies the subject of the notification that is sent when a license has expired.	String	
com.aris.umc.notification.licenseExpired.message	License has expired - Message Specifies the text of the notification that is sent when a license has expired.	String	
com.aris.umc.notification.licenseExpired.template	License has expired - HTML template Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a license has expired. The template must have been uploaded previously.		
com.aris.umc.notification.licenseExpiring.enabled	Notify before license expiration Specifies whether administrators with the License management privilege are to be notified when a license is about to expire.	true, false	true
com.aris.umc.notification.licenseExpiring.threshold	Days before expiration Specifies how many days before license expiration a notification is sent.	Integer > 0	14
com.aris.umc.notification.licenseExpiring.subject	License will expire soon - Subject Specifies the subject of the notification that is sent when a license is about to expire.	String	

Key	Description	Valid input	Example
com.aris.umc.notification.licenseExpiring.message	<p>License will expire soon - Message</p> <p>Specifies the text of the notification that is sent when a license is about to expire.</p>	String	
com.aris.umc.notification.licenseExpiring.template	<p>License will expire soon - HTML template</p> <p>Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a license will soon expire. The template must have been uploaded previously.</p>		
com.aris.umc.notification.licenseSeatsConsumed.enabled	<p>Notify about license exhaustion</p> <p>Specifies whether administrators with the License management privilege are to be notified when the total number of logins allowed for the license is reached.</p>	true, false	true
com.aris.umc.notification.licenseSeatsConsumed.threshold	<p>Remaining license seats</p> <p>Defines how many license seats are allowed to be left before a notification is sent to inform users about the upcoming expiration of a license.</p> <p>In the case of named licenses, a notification is sent as soon as only the specified number of licenses are left from the total number of licenses available.</p> <p>In the case of concurrent licenses, a notification is sent as soon as only the specified number of logins are left.</p>	Integer > 0	5
com.aris.umc.notification.licenseSeatsConsumed.subject	<p>License exhaustion - Subject</p> <p>Specifies the subject of the notification that is sent when the total number of logins allowed for the license is reached.</p>	String	

Key	Description	Valid input	Example
com.aris.umc.notification.licenseSeatsConsumed.message	License exhaustion - Message Specifies the text of the notification that is sent when a license has expired.	String	
com.aris.umc.notification.licenseSeatsConsumed.template	License exhaustion - HTML template Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a license will soon expire. The template must have been uploaded previously.		

TENANTS

Key	Description	Valid input	Example
com.aris.umc.notification.tenantDeleted.enabled	Notify about deletion Specifies whether a notification is sent if a tenant was deleted.	true, false	true
com.aris.umc.notification.tenantDeleted.sendToAll.enabled	Notify all users about deletion Specifies whether a notification is to be sent to all users.	true, false	true
com.aris.umc.notification.tenantDeleted.subject	Tenant deleted - Subject Specifies the subject of the notification that is sent if a tenant was deleted.	String	
com.aris.umc.notification.tenantDeleted.message	Tenant deleted - Message Specifies the text of the notification that is sent if a tenant was deleted.	String	

Key	Description	Valid input	Example
com.aris.umc.notification.tenantDeleted.template	Tenant deleted - HTML template Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a tenant has been deleted. The template must have been uploaded previously.		
com.aris.umc.notification.tenantDisabled.enabled	Notify about deactivation Specifies whether a notification is sent if a tenant was deactivated.	true, false	true
com.aris.umc.notification.tenantDisabled.sendToAll.enabled	Notify all users about deactivation Specifies whether a notification is sent to all users if a tenant was deactivated.	true, false	true
com.aris.umc.notification.tenantDisabled.subject	Tenant deactivated - Subject Specifies the subject of the notification that is sent if a tenant was deactivated.	String	
com.aris.umc.notification.tenantDisabled.enabled	Tenant deactivated - Message Specifies the text of the notification that is sent if a tenant was deactivated.	String	
com.aris.umc.notification.tenantDisabled.template	Tenant deactivated - HTML template Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a tenant has been deactivated. The template must have been uploaded previously.		
com.aris.umc.notification.tenantEnabled.enabled	Notify about activation Specifies whether a notification is sent if a tenant was activated.	true, false	true

Key	Description	Valid input	Example
com.aris.umc.notification.tenantEnabled.sendToAll.enabled	Notify all users about activation Specifies whether a notification is sent to all users if a tenant was activated.	true, false	true
com.aris.umc.notification.tenantEnabled.subject	Tenant activated - Subject Specifies the subject of the notification that is sent if a tenant was activated.	String	
com.aris.umc.notification.tenantEnabled.message	Tenant activated - Message Specifies the text of the notification that is sent if a tenant was activated.	String	
com.aris.umc.notification.tenantEnabled.template	Tenant activated - HTML template Specifies the HTML template used for the notification that is sent when an administrator is to be notified that a tenant has been activated. The template must have been uploaded previously.		

MULTI-FACTOR AUTHENTICATION

Key	Description	Valid input	Example
com.aris.umc.notification.otpRequested.enabled	Notify about one-time password request Specifies whether users are to be notified if they have requested a one-time password.	true, false	
com.aris.umc.notification.otpRequested.subject	One-time password request - Subject Subject of the notification that is sent when a user has requested a one-time password.	String	
com.aris.umc.notification.otpRequested.message	One-time password request - Message Text of the notification that is sent when a user has requested a one-time password.	String	
com.aris.umc.notification.otpRequested.template	One-time password request - HTML template Specifies the HTML template used for the notification that is sent when a user has requested a one-time password. The template must have been uploaded previously.		
com.aris.umc.notification.otpSecretChanged.enabled	Notify about token secret change Specifies whether users are to be notified if their token secret has been changed.	true, false	
com.aris.umc.notification.otpSecretChanged.subject	Token secret change - Subject Subject of the notification that is sent when the token secret has been changed by a user.	String	

Key	Description	Valid input	Example
com.aris.umc.notification.otpSecretChanged.message	Token secret change - Message Text of the notification that is sent when the token secret has been changed by a user.	String	
com.aris.umc.notification.otpSecretChanged.template	Token secret change - HTML template Specifies the HTML template used for the notification that is sent when a user has changed the token secret. The template must have been uploaded previously.		

OAUTH

Key	Description	Valid input	Example
com.aris.umc.notification.signupCompleted.enabled	Notify about signup Specifies whether administrators are to be notified if a new user has signed up.	true, false	
com.aris.umc.notification.signupCompleted.subject	Signup complete - Subject Subject of the notification that is sent when a new user has signed up.	String	
com.aris.umc.notification.signupCompleted.message	Signup complete - Message Text of the notification that is sent when a new user has signed up.	String	
com.aris.umc.notification.signupCompleted.template	Signup complete - HTML template Specifies the HTML template used for the notification that is sent when a new user has signed up. The template must have been uploaded previously.		

6.7.2.20.6 What variables can be used for user-defined notifications?

Variables (page 281) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body. The following variables are supported:

TEXT NOTIFICATIONS

- @tenant.name - Name of the tenant the user belongs to
- @user.login - Login of a user receiving notifications
- @user.givenName - First name of a user receiving notifications
- @user.lastName - Last name of a user receiving notifications
- @user.password - (New) password of a user receiving notifications

The following variables are supported for license-related events:

- @license.serial - Serial number of a license
- @license.productName - Name of a licensed product
- @license.expiry - Expiration date of a licensed product in the format YYYY-MM-DD

HTML NOTIFICATION

- \${tenant.name} - Name of the tenant the user belongs to
- \${user.login} - Login of a user receiving notifications
- \${user.givenName} - First name of a user receiving notifications
- \${user.lastName} - Last name of a user receiving notifications
- \${user.password} - (New) password of a user receiving notifications

The following variables are supported for license-related events:

- `${license.serial}` - Serial number of a license
- `${license.productName}` - Name of a licensed product
- `${license.expiry}` - Expiration date of a licensed product in the format YYYY-MM-DD

6.7.2.20.7 What properties are available for password policies?

You can customize your password policies (page 248) as required.

GENERAL

Key	Description	Valid input	Example
<code>com.aris.umc.password.length.min</code>	Minimum length Specifies the minimum length of a password.	Integer > 0	
<code>com.aris.umc.password.length.max</code>	Maximum length Specifies the maximum length of a password.	0 < Integer > 47	
<code>com.aris.umc.password.characters.lowercase.min</code>	Minimum number of lowercase letters Specifies the minimum number of lowercase letters in a password.	Integer > 0	
<code>com.aris.umc.password.characters.uppercase.allowed</code>	Allow uppercase letters Specifies whether uppercase letters are allowed in a password.	true, false	
<code>com.aris.umc.password.characters.uppercase.min</code>	Minimum number of uppercase letters Specifies the minimum number of uppercase letters in a password.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.password.characters.numeric.allowed	Allow numbers Specifies whether numbers are allowed in a password.	true, false	
com.aris.umc.password.characters.numeric.min	Minimum number of numbers Specifies the minimum number of numbers that must be contained in a password.	Integer > 0	
com.aris.umc.password.characters.special.allowed	Allow special characters Specifies whether special characters are allowed in a password.	true, false	
com.aris.umc.password.characters.special.min	Minimum number of special characters Specifies the minimum number of special characters in a password.	Integer > 0	
com.aris.umc.password.characters.special.set	Special characters Specifies which characters are special characters.	String	*\$-+?&=!% {}/ _

EXPIRING PASSWORDS

Key	Description	Valid input	Example
com.aris.umc.password.expiry.activate	Activate expiring passwords Specifies whether passwords are set to be valid only for a specific amount of time. This is defined for a single tenant. Once the password has expired, the user is directed to a Web site enabling the password to be changed. Thereafter, the user is redirected to the application.	true, false	
com.aris.umc.password.expiry.days	Password lifetime Specifies the period of time in days after which a password expires. This is defined for a single tenant.	Integer > 0	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.password.change.forceAfterReset	Force change after reset Specifies whether a user must change the password if it was reset (and sent via e-mail). This is defined for a single tenant.	true, false	
com.aris.umc.password.change.forceDifference	Force different password Specifies whether the new password must differ from the old one. This is defined for a single tenant.	true, false	
com.aris.umc.password.change.forceOnFirstLogin	Force change before first login Specifies whether a user must change the password upon first login. This is defined for a single tenant.	true, false	
com.aris.umc.password.reset.confirmation.active	Activate reset confirmation Specifies whether a user must confirm a password reset.	true, false	
com.aris.umc.password.reset.confirmation.ttl	Link lifetime Specifies the time in minutes during which a user can click the link sent by e-mail in order to confirm the password.	Integer > 0	30

6.7.2.20.8 What SAML properties are available?

You can configure SAML (page 249) as required.

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure umcadmin_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure umcadmin_m JAVA-Dcom.aris.umc.loadbalancer.url="https://myserver.com"
```

GENERAL

Key	Description	Valid input	Example
com.aris.umc.saml.active	Use SAML Specifies whether an SAML (page 1177)-based login is allowed.	true, false	
com.aris.umc.saml.binding	Binding Specifies the binding used for sending authentication requests to the identity provider. Defines how the redirecting of the authentication is performed. The options are Redirect or POST .		
com.aris.umc.saml.identity.provider.id	Identity provider ID Specifies the ID of the identity provider.	String	
com.aris.umc.saml.service.provider.id	Service provider ID Specifies the ID of the service provider.	String	
com.aris.umc.saml.identity.provider.sso.url	Single sign-on URL Specifies the end point of the identity provider that is used for single sign-on (page 1177).		

Key	Description	Valid input	Example
com.aris.umc.saml.identity.provider.logout.url	<p>Single logout URL</p> <p>Specifies the end point of the identity provider that is used for single log-out (page 1177).</p>		

SIGNATURE

Key	Description	Valid input	Example
com.aris.umc.saml.signature.assertion.active	<p>Enforce signing of assertions</p> <p>Enforces that SAML assertions must be signed. If set, all assertions received by the application must be signed. Assertions sent by the application are signed.</p>	true, false	
com.aris.umc.saml.signature.request.active	<p>Enforce signing of requests</p> <p>Enforces that the SAML authentication requests must be signed. If set, all requests received by the application must be signed. Requests sent by the application are signed.</p>	true, false	
com.aris.umc.saml.signature.response.active	<p>Enforce signing of responses</p> <p>Enforces that the SAML response must be signed. If set, all responses received by the application must be signed. Responses sent by the application are signed.</p>	true, false	
com.aris.umc.saml.signature.metadata.active	<p>Enforce signing of metadata</p> <p>Enforces that the SAML metadata must be signed. If set, the service provider metadata file provided by the application is signed.</p>	true, false	

Key	Description	Valid input	Example
com.aris.umc.saml.signature.algorithm	<p>Signature algorithm</p> <p>Specifies the algorithm for the signature. The algorithm can be selected from the list.</p>	String	

KEYSTORE

Key	Description	Valid input	Example
com.aris.umc.saml.keystore.location	<p>Keystore</p> <p>Specifies the location of the keystore file used for validating SAML assertions. The keystore must have been uploaded previously.</p>		
com.aris.umc.saml.keystore.alias	<p>Alias</p> <p>Specifies the alias name that is used to access the keystore.</p>	String	
com.aris.umc.saml.keystore.password	<p>Password</p> <p>Specifies the password that is used to access the keystore.</p>	String	
com.aris.umc.saml.keystore.type	<p>Type</p> <p>Specifies the type of the keystore to be used. The keystore type can be selected from a list.</p>	String	

TRUSTSTORE

Key	Description	Valid input	Example
com.aris.umc.saml.truststore.location	Truststore Specifies the location of the truststore file used for validating SAML assertions. The truststore must have been uploaded previously.		
com.aris.umc.saml.truststore.alias	Alias Specifies the alias to be used for accessing the truststore.	String	
com.aris.umc.saml.truststore.password	Password Specifies the password to be used for accessing the truststore.	String	
com.aris.umc.saml.truststore.type	Type Specifies the type of the truststore.	String	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.saml.login.mode.dn.active	Login using DN Specifies whether login is to be tried using the fully qualified name instead of the user name.	true, false	
com.aris.umc.saml.login.mode.keyword.active	Decompose DN Specifies whether the fully qualified name is to be decomposed.	true, false	
com.aris.umc.saml.login.mode.keyword.name	Keyword Specifies which part of the fully qualified name is to be used for login.	true, false	

Key	Description	Valid input	Example
com.aris.umc.saml.auth.context.class.refs	<p>Authentication context classes</p> <p>Specifies the authentication context classes to request, meaning which strength of the authentication is defined. For example, you specify that users must use Kerberos if you define Microsoft® Windows as the Authentication context class and the Authentication context comparison as exact.</p>	String	
com.aris.umc.saml.auth.context.comparison	<p>Authentication context comparison</p> <p>Specifies the authentication context comparison to request, meaning you specify whether other authentication procedures are allowed or not. For example, you specify that users must use Kerberos if you define Microsoft® Windows as the Authentication context class and the Authentication context comparison as exact.</p>	String	
com.aris.umc.saml.auth.nameid.format	<p>NameID format</p> <p>Specifies in which format the user ID is transferred to ARIS Administration.</p>	String	
com.aris.umc.saml.login.users.create	<p>Automatically create user</p> <p>Defines whether or not the user specified in the SAML assertion should be created automatically if the user does not already exist. The default value is false. The following restrictions apply to automatically created users:</p> <ul style="list-style-type: none"> ▪ The Login attribute is set to the name specified in the assertion. ▪ The distinguished name attribute is set to the name specified in the assertion (only if the name is in an appropriate format). ▪ A manual login is not possible if the password and e-mail attributes are not maintained. 	true, false	

Key	Description	Valid input	Example
com.aris.umc.saml.assertion.time.offset	<p>Clock skew (in seconds)</p> <p>Specifies the time offset between identity provider and service provider in seconds. Assertions are accepted if they are received within the permitted time frame.</p>		
com.aris.umc.saml.assertion.ttl	<p>Assertion lifetime (in seconds)</p> <p>Specifies the maximum lifetime of a SAML assertion in seconds.</p>		
com.aris.umc.saml.service.provider.assertion.consumer.url.override	<p>Assertion consumer service URL</p> <p>Specifies that the Assertion Consumer Service URL used in SAML authentication requests can be overwritten. The URL must be specified in the format of http(s)://hostname/umc/rest/saml/initso. If no specification is made, the URL is derived from the HTTP request.</p>		
com.aris.umc.saml.tenant	<p>Default tenant</p> <p>Specifies the default tenant that is to be used for the SAML-based login.</p> <p>Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	String	

6.7.2.20.9 What security properties are available?

You can customize the security settings (page 250) as required.

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure umcadmin_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure umcadmin_m JAVA-Dcom.aris.umc.loadbalancer.url="https://myserver.com"
```

ACCOUNT LOCKOUT

Key	Description	Valid input	Example
com.aris.umc.authentication.lock.enabled	Lock users after failed login attempts Specifies whether a user login is temporarily locked when a user causes too many failed logins. The default value is false .	true, false	
com.aris.umc.authentication.lock.counter.limit	Attempt limit Specifies the number of failed login attempts that are allowed before user login is locked.	Integer > 0	
com.aris.umc.authentication.lock.timeout	Lockout duration (in seconds) Specifies how long a user login is temporarily locked when a user causes too many failed logins. This is defined in seconds.	Integer > 0	
com.aris.umc.authentication.lock.counter.ttl	Lock counter duration (in seconds) Time that must elapse before the number of failed login attempts is reset. This is defined in seconds.	Integer > 0	

USER SESSIONS

Key	Description	Valid input	Example
com.aris.umc.session.renewal.cache.size	<p>Session cache size</p> <p>Specifies how many session IDs are saved in the session renewal cache. When the cache is full, the least recently used sessions are removed. This is defined in seconds. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	
com.aris.umc.session.renewal.cache.ttl	<p>Session cache lifetime (in seconds)</p> <p>Specifies the maximum duration in seconds that a renewed session remains in the session renewal cache. A session can be renewed at the earliest after this period of time. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	
com.aris.umc.session.identifier.generator	<p>Session ID generator</p> <p>Specifies the random number generator used for generating session IDs.</p>	String	
com.aris.umc.session.identifier.length.min	<p>Minimum length of session ID (in bytes)</p> <p>Specifies the minimum length of a session ID in bytes. For security reasons this value should not be less than 32.</p>	Integer > 0	
com.aris.umc.session.identifier.length.max	<p>Maximum length of session ID (in bytes)</p> <p>Specifies the maximum length of a session ID in bytes.</p>	Integer > 0	
com.aris.umc.session.concurrent.max	<p>Maximum concurrent sessions</p> <p>Specifies the maximum number of concurrent sessions that can be active for a single user. This does not apply to the arisservice and superuser users.</p>	Integer > 0	

MULTI-FACTOR AUTHENTICATION

Key	Description	Valid input	Example
com.aris.umc.authentication.multiFactor.active	<p>Use multi-factor authentication</p> <p>Specifies whether multi-factor authentication is required. The default value is false. You can use the multi-factor authentication only in API Portal and ARIS Cloud.</p>	true, false	
com.aris.umc.authentication.multiFactor.clockSkew	<p>Clock skew intervals</p> <p>Specifies the clock skew in number of intervals. One-time passwords (OTPs) that are within the valid range [currentTimeStep - clock_skew, currentTimeStep + clock_skew] are permitted. This is defined in milliseconds. You can use the multi-factor authentication only in API Portal and ARIS Cloud.</p>	Integer > 0	
com.aris.umc.authentication.multiFactor.excludedUsers	<p>Excluded users</p> <p>Specifies a comma-separated list of users for whom the multi-factor authentication is not required. You can use the multi-factor authentication only in API Portal and ARIS Cloud.</p>	String	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.audit.enabled	<p>Generate user statistics</p> <p>Activates the user statistics. The default value is false. If you specify this as true, the following properties for distinct user statistics are enabled as default:</p> <ul style="list-style-type: none"> ▪ Log authentication ▪ Log changes to configuration ▪ Log changes to licenses/privileges ▪ Log changes to users/user groups ▪ You can disable/enable the properties mentioned above. 	true, false	false
com.aris.umc.audit.log.auth.enabled	<p>Log authentication</p> <p>Enables authentication logging. The default value is true but this property is only enabled when Generate user statistics is specified as true. The following user statistics are logged and can be exported (page 66):</p> <ul style="list-style-type: none"> ▪ Login failed ▪ Login successful ▪ Logged out ▪ Logged out by administrator 	true, false	true

Key	Description	Valid input	Example
com.aris.umc.audit.log.conf.enabled	<p>Log changes to configuration</p> <p>Enables logging of changes to the configuration. The default is allowed (default value true). The following user statistics are logged and can be exported (page 66):</p> <ul style="list-style-type: none">▪ Organizational chart deleted▪ Organizational chart updated▪ One-time password requested▪ Password changed▪ Password reset▪ Password transferred between users▪ Profile picture deleted▪ Profile picture imported▪ Privilege assigned▪ Privilege assignment removed▪ Configuration option changed▪ Configuration file deleted▪ Configuration file imported▪ Data backup imported▪ Tenant created▪ Tenant deleted▪ Tenant updated	true, false	true

Key	Description	Valid input	Example
com.aris.umc.audit.log.license.privilege.enabled	<p>Log changes to licenses/privileges</p> <p>Enables logging of changes to licenses or privileges. The default is allowed (default value true). The following user statistics are logged and can be exported (page 66):</p> <ul style="list-style-type: none">▪ License deleted▪ License imported▪ License consumed▪ License released▪ Violation of user group license limit▪ Violation of user license limit▪ Replace license file for tenant	true, false	true

Key	Description	Valid input	Example
com.aris.umc.audit.log.user.group.enabled	<p>Log changes to users/user groups</p> <p>Enables logging of changes to users or user groups. The default is allowed (default value true). The following user statistics are logged and can be exported (page 66):</p> <ul style="list-style-type: none"> ▪ User created ▪ User deleted ▪ Escalation manager assignment removed ▪ User group created ▪ User group deleted ▪ Group assigned to group ▪ Group unassigned from group ▪ User group updated ▪ LDAP data imported ▪ Synchronized with LDAP 	true, false	true
com.aris.umc.authentication.sso.only	<p>Force SSO</p> <p>Specifies that only an SSO login is allowed. The default value is false.</p>	true, false	false
com.aris.umc.authentication.sso.for.downloadclient.only	<p>Force SSO for ARIS Download Client</p> <p>If this option is enabled, a user must be logged in to the portal to be able to start ARIS Download Client. The default value is false.</p>	true, false	false
com.aris.umc.authentication.delay.min	<p>Minimum authentication delay (in milliseconds)</p> <p>Specifies the minimum delay that is added at each login. This is defined in milliseconds.</p>	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.authentication.delay.max	Maximum authentication delay (in milliseconds) Specifies the maximum delay that is added at each login. This is defined in milliseconds.	Integer > 0	
com.aris.umc.otp.active	Use OTPs Specifies whether or not the generation of one-time passwords (OTPs) is allowed.	true, false	
com.aris.umc.otp.ttl	Lifetime (in seconds) Specifies the lifetime of a one-time password (OTP) in seconds. Passwords become invalid after this time period at the latest.		
com.aris.umc.license.distribution.handling	License pools at user group-level Specifies that license pools are assigned at the user group level (page 58). If this option is enabled, licenses must not be assigned to users directly, but are to be assigned via user groups only.	true, false	false

6.7.2.20.10 What SMTP properties are available?

You can configure SMTP (page 251) as required.

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure umcadmin_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure umcadmin_m JAVA-Dcom.aris.umc.loadbalancer.url="https://myserver.com"
```

CONNECTION

Key	Description	Valid input	Example
com.aris.umc.notification.smtp.host	<p>Host name</p> <p>Specifies the host name or IP address of the SMTP server. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	String	localsmtp.my.corp.softw areag.com
com.aris.umc.notification.smtp.port	<p>Port</p> <p>Specifies the port for the SMTP server.</p>	Integer greater than or equal to 0, but less than or equal to 65535	
com.aris.umc.notification.sender	<p>Sender address</p> <p>Specifies the sender address for notifications. This must be a valid e-mail address.</p>	String	

Key	Description	Valid input	Example
com.aris.umc.notification.type	E-mail format Specifies the default type used for sending notifications.	String	
com.aris.umc.notification.language	Default language Specifies the default language in which notifications are sent. If this property is not defined, the server operating system language is used. If a user prefers a different locale, this locale is given preference. Otherwise, the global settings are considered.	en	
com.aris.umc.notification.smtp.authentication	Use authentication Specifies whether authentication to the SMTP server is to be used.	true, false	
com.aris.umc.notification.smtp.userName	User name Specifies the user name that is used for authentication.	String	
com.aris.umc.notification.smtp.password	Password Specifies the password that is used for authentication to the SMTP server.	String	smtppassword
com.aris.umc.notification.smtp.ssl	Use SSL Specifies whether TLS is to be used for the connection to the SMTP server.	true, false	false

Key	Description	Valid input	Example
com.aris.umc.notification.smtp.ssl.mode	<p>SSL mode</p> <p>Specifies the method to be used for a trusted connection. STARTTLS or SSL can be used. STARTTLS transforms a connection that was originally untrusted into an encrypted connection without requiring a specific port for the trusted connection. SSL establishes a trusted connection with a dedicated port immediately.</p>	STARTTLS, SSL	STARTTLS
com.aris.umc.notification.smtp.timeout	<p>Connection timeout (in milliseconds)</p> <p>Specifies the duration after which the attempt to connect to the SMTP server is canceled. This is defined in milliseconds.</p>	Integer > 0	

ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.umc.notification.debug	<p>Debug output</p> <p>Activates debugging output.</p>	true, false	
com.aris.umc.notification.smtp.retry.count	<p>Number of retries</p> <p>Specifies the number of retries for sending notifications.</p>	Integer > 0	
com.aris.umc.notification.smtp.retry.sleep.min	<p>Minimum wait time (in milliseconds)</p> <p>Specifies the minimum wait time between the retries. This is defined in milliseconds.</p>	Integer > 0	
com.aris.umc.notification.smtp.retry.sleep.max	<p>Maximum wait time (in milliseconds)</p> <p>Specifies the maximum wait time between the retries. This is defined in milliseconds.</p>	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.notification.smtp.sendrate	<p>Send rate (per second)</p> <p>Specifies the maximum number of messages sent per second. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	
com.aris.umc.notification.smtp.replyto	<p>Reply-to addresses</p> <p>Specifies a comma-separated list of reply-to addresses.</p>		
com.aris.umc.notification.threads	<p>Number of threads</p> <p>Specifies the maximum number of threads that are used for sending notifications. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	
com.aris.umc.notification.queue	<p>Maximum queue length</p> <p>Specifies the maximum number of notifications allowed in a send queue. If the send queue is too full, all subsequent notifications are refused. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	

6.7.2.20.11 What user settings properties are available?

You can customize the configuration for users (page 252) as required.

GENERAL

Key	Description	Valid input	Example
com.aris.umc.users.email.required	E-mail address required Specifies whether the E-mail address box must be specified for a user.	true, false	
com.aris.umc.users.email.validation.active	Validate e-mail address Specifies whether a check is performed when entering the e-mail address of a user to determine whether the e-mail address is valid.	true, false	
com.aris.umc.users.name.length.max	Maximum login name length Specifies the maximum length of the login names.	Integer > 0	
com.aris.umc.collaboration.picture.size.max	Maximum picture size (in bytes) Specifies the maximum size of a profile picture in bytes. The default setting is 1048576 bytes.	Integer > 0	1048576
com.aris.umc.session.system.ttl	Initial session duration (in minutes) Specifies the initial duration of a system user session in minutes.	Integer > 0	
com.aris.umc.session.system.ttl.max	Maximum session duration (in minutes) Specifies the maximum duration of a system user session in minutes.	Integer > 0	
com.aris.umc.impersonation.targets	Impersonation target users Specifies the users for which you want to allow impersonation (page 253).	String	

Key	Description	Valid input	Example
com.aris.umc.default.group	Default user group name Specifies an existing user group as default user group to which all users created afterwards will be assigned.	String	
com.aris.umc.chart.display.technicalUsers.enabled	Display technical users Specifies whether or not user statistics and charts are also displayed for technical users such as system , arisservice , superuser , and guest .	true, false	

ARISSERVICE

Key	Description	Valid input	Example
com.aris.umc.users.service.create	Generate, if not available Specifies whether the user arisservice is generated at startup, if not yet available.	true, false	
com.aris.umc.users.service.name	User name Specifies the login name of the user arisservice .	String	
com.aris.umc.users.service.email	E-mail address Specifies the e-mail address of the user arisservice .	String	
com.aris.umc.users.service.password	Initial password Specifies the initial password of the user arisservice .	String	

GUEST

Key	Description	Valid input	Example
com.aris.umc.users.guest.create	Generate, if not available Specifies whether the user guest is generated at startup, if not yet available.	true, false	
com.aris.umc.users.guest.name	User name Specifies the login name of the user guest .	String	
com.aris.umc.users.guest.email	E-mail address Specifies the e-mail address of the user guest .	String	
com.aris.umc.users.guest.password	Initial password Specifies the initial password of the user guest .	String	
com.aris.umc.users.guest.allow.auto.login	Automatically log in visitors Specifies that visitors are automatically logged in as a guest when accessing the ARIS Connect portal.	Integer > 0 true, false	

SUPERUSER

Key	Description	Valid input	Example
com.aris.umc.users.admin.name	User name Specifies the login name of the administrator in ARIS Administration.	String	
com.aris.umc.users.admin.email	E-mail address Specifies the e-mail address of the administrator.	String	
com.aris.umc.users.admin.password	Initial password Specifies the initial password of the administrator in ARIS Administration.	String	

SYSTEM

Key	Description	Valid input	Example
com.aris.umc.users.system.create	Generate, if not available Specifies whether the user system is generated at startup, if not yet available.	true, false	
com.aris.umc.users.system.name	User name Specifies the login name of the user system .	String	
com.aris.umc.users.system.email	E-mail address Specifies the e-mail address of the user system .	String	
com.aris.umc.users.system.password	Initial password Specifies the initial password of the user system .	String	

Key	Description	Valid input	Example
com.aris.umc.session.system.ttl	Initial session duration (in minutes) Specifies the initial life span of the system user session in minutes.	Integer > 0	
com.aris.umc.system.session.ttl.max	Mximum session duration (in minutes) Specifies the maximum life span of the system user session in minutes.	Integer > 0	

6.7.2.20.12 What is the default user group?

You can configure (page 252) a default user group in the ARIS Administration. This group must exist in the ARIS Administration. A user is automatically assigned to this default user group whenever a user is created.

All local users who were created after specifying a default user group are automatically assigned to this group.

You can specify an LDAP user group as default user group. All LDAP users in the LDAP group are assigned to this group.

Hidden users such as, for example, arisservice, are never assigned to the default user group.

6.7.3 Set up Document storage

You can customize general settings of ARIS document storage.

6.7.3.1 Export configuration

You can export configurations in order to import them into any tenant or installation and use them there.

Prerequisite

- You have the **Technical configuration administrator** function privilege.
- You have allowed pop-ups for the pages of ARIS Administration.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click  **Export current configuration as a file**.

You can save the configuration file of ARIS document storage at the relevant location for further use.

6.7.3.2 Import configuration

You can import configurations, which were, for example, exported from a different tenant, into any tenant or installation and use them there.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click  **Import configuration file**.

The **Import configuration file** dialog opens. Navigate to the location where the configuration file is stored and import it. The new configuration is active immediately and no system restart is required.

6.7.3.3 Customize infrastructure settings

You can customize the infrastructure for your document storage, for example, the path for mobile uploads.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click **Infrastructure**. To configure advanced settings, click the arrow next to **Infrastructure** and click **Advanced settings**.
6. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

7. Adjust your settings.
8. Click  **Save**.

You have customized your document storage configuration (page 317).

6.7.3.4 Add third-party document management system

You can configure a third-party document management system.

The system available is Microsoft® SharePoint 2013. Please contact your local Software AG sales organization (<http://www.softwareag.com>) for other third-party document management systems.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click the arrow next to **Document management system**.
6. Click **General settings**.
7. Click  **Edit**.

8. Enable **Use third-party document management system**.
9. Optional: If you want to use more than one third-party document management system, enable **Support for multiple document management systems**.
10. Click  **Save**.
11. Click  **Add**. The **Add document management system server** dialog opens.
12. Enter the following (page 322):
 - the server ID
 - the display name of the server
 - the type of the third-party document management system
 - the server URL
 - the user name of the user allowed to access the third-party document management system content
 - the password of this user
 - the path to the root folder
 - the site collection
13. Click **Save**.

You have added a third-party document management system.

If you want to specify more than one third-party document management system, proceed with step 12 of the procedure steps mentioned above.

6.7.3.5 Test connection to a third-party document management system

You can test the connection to a third-party document management system.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click the arrow next to the relevant document management system.
6. Click **Connection**.
7. Click  **Test connection**.

A message is displayed, whether or not the connection to a third-party document management system server specified is valid.

6.7.3.6 Edit document management system

The system available is Microsoft® SharePoint 2013. Please contact your local Software AG sales organization (<http://www.softwareag.com>) for other third-party document management systems.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click the arrow next to **Document management system**.
6. Click the arrow next to the relevant document management system.
7. Click a configuration category (page 322).
8. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

9. Adjust your settings.
10. Click  **Save**.

You have customized your document storage configuration.

6.7.3.7 Delete third-party document management system

The system available is Microsoft® SharePoint 2013. Please contact your local Software AG sales organization (<http://www.softwareag.com>) for other third-party document management systems.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click the arrow next to **Document management system**.
6. Click the arrow next to the relevant document management system.

7. Click **Connection**.
8. Click  **Delete**. The **Confirmation** dialog opens.
9. Click **OK**.

You have deleted a third-party document management system.

6.7.3.8 Customize quota and restrictions

You can configure the quota and restrictions for your document storage.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click **Quota and restrictions**.
6. Click  **Edit**.
7. Adjust your settings.
8. Click  **Save**.

You have configured the quota and restrictions (page 326) for your document storage.

6.7.3.9 Configure full-text search

You can display the settings for the full-text search (page 315) in your document storage.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click **Full-text search**.
6. Click  **Edit**.
7. Adjust your settings.
8. Click  **Save**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

6.7.3.10 Configure WebDAV

You can display the WebDAV settings (page 327) in your document storage.

Prerequisite

You have the **Technical configuration administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Document storage**.
5. Click **WebDAV**.
6. Click  **Edit**.
7. Adjust your settings.
8. Click  **Save**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

6.7.3.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.7.3.11.1 What properties for the full-text search are available?

You can display (page 314) the settings for the full-text search in your document storage.

Properties that are highlighted as cross-tenant properties (🔒) can only be changed using ARIS Cloud Controller Command-line Tool (ACC). To change these settings enter the following:

```
reconfigure adsadmin_<size of your installation, s, m, or l> JAVA-D<property name>=<value>
```

Example

```
reconfigure adsadmin_m JAVA-Dcom.aris.ads.thumbnails.queue.size="40"
```

Key	Description	Valid input	Example
com.aris.ads.thumbnails.queue.size	<p>Maximum size of thumbnail scaling queue</p> <p>Specifies the maximum size of the queue for scaling document thumbnails. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	50
com.idsscheer.aris.ads.search.elastic.document.maxsize.kb	<p>Maximum document size (in kilobytes)</p> <p>Specifies the maximum document size in Elasticsearch. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	2000
com.idsscheer.aris.ads.search.elastic.parser.memory.threshold.kb	<p>Storage limit (in kilobytes)</p> <p>Specifies the storage limit for the Elasticsearch parser. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information,</p>	Integer > 0	500

Key	Description	Valid input	Example
	refer to ARIS Cloud Controller (ACC) Command-line Tool manual .		
com.idsscheer.aris.ads.search.elastic.parser.queue.size	<p>Maximum queue size</p> <p>Specifies the maximum size of the queue for indexing documents. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0, default value is 10.	40
com.idsscheer.aris.ads.search.elastic.parser.thread.count	<p>Maximum number of parallel threads</p> <p>Specifies the maximum number of threads for parallel processing when indexing documents. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	10
com.aris.ads.search.restriction.byrole	<p>Enable search restriction</p> <p>Enables or disables whether or not only the last approved version of a document is displayed for users with the ARIS Connect Viewer or ARIS Connect Designer license privilege.</p> <p>Approved means that the document has the metadata status approved. For a user with the ARIS Connect Designer license privilege, two links are displayed additionally, one to open the document and one to display the document details.</p>	True, False	True
com.aris.ads.search.term.consolidation.threshold	<p>Threshold for word consolidation</p> <p>Number of recurrent words the application collects before performing an in-memory word consolidation.</p>	Integer > 0	10000

Key	Description	Valid input	Example
com.aris.ads.search.parser.always embedded	<p>Use in-memory parsing for all documents</p> <p>Specifies that in-memory parsing is to be used for all documents regardless of their file size. The default value is false. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	

6.7.3.11.2 What infrastructure properties are available?

You can configure the infrastructure (page 310) for your document storage.

Properties that are highlighted as cross-tenant properties () can only be changed using ARIS Cloud Controller Command-line Tool (ACC). To change these settings enter the following:

```
reconfigure adsadmin_<size of your installation, s, m, or l> JAVA-D<property name>=<value>
```

Example

```
reconfigure adsadmin_m JAVA-Dcom.aris.ads.thumbnails.queue.size="40"
```

GENERAL

Key	Description	Valid input	Example
com.aris.ads.filesystem.active	<p>Enable use of network share</p> <p>Specifies whether a network share or a local directory is used for storing document content. If enabled, only meta data is stored in the ARIS document storage database. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	false, true	
com.aris.ads.filesystem.path	Path to the network share		

Key	Description	Valid input	Example
	<p>Path to a network share or a local directory where the document content is stored. If enabled, in distributed systems, all ARIS document storage instances must have access in the same way to this share or local directory. You must enter the network share in the following form: <code>\\<servername>\<directory></code>, for example, <code>\\myServer\data</code>. If you leave the preconfigured path, all data is stored in the local file system under <ARIS installation directory>\server\bin\work\work_adsadmin_m\data. You can use an absolute path to the local file system as well, for example, C:\docdata. The default is allowed (default value true). Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		
com.aris.ads.audit.enabled	<p>Generate usage statistics</p> <p>Enables the generation of usage statistics. The default is allowed (default value true).</p>	true, false	
com.aris.ads.anonymous.access.allowed	<p>Allow anonymous access by link</p> <p>Specifies that API Portal allows users to anonymously access all documents by the corresponding document link. The default is allowed (default value true). Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	
com.aris.ads.link.display.document.inline	<p>Display document content in the browser</p> <p>Specifies whether the content of a document is displayed in the browser by default. If displaying the content in the browser is not possible or the option is disabled, the document is downloaded.</p>	true, false	

Key	Description	Valid input	Example
com.aris.ads.thumbnails.size	<p>Thumbnail width (in pixels)</p> <p>If the picture width is smaller than the thumbnail width specified, no thumbnail is displayed for this picture. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	160
com.aris.ads.thumbnails.thread.count	<p>Maximum number of parallel scaling threads</p> <p>Specifies the maximum number of parallel threads for scaling document thumbnails.</p>	Integer > 0	
com.aris.ads.migration.skip	<p>Skip migration</p> <p>Specifies that data migration is to be skipped when the application is started for the first time after an update. The default value is false. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	
com.aris.ads.ignore.invalid.dms.config	<p>Do not validate configuration</p> <p>Specifies that the migration process ignores corrupt document management system configurations. The default value is false. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	
com.aris.ads.page.size	<p>Page size (default)</p> <p>Number of items that are retrieved by a single query. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	2500

Key	Description	Valid input	Example
com.aris.ads.page.size.max	<p>Page size (max)</p> <p>Maximum number of items that can be retrieved by a single query. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	5000
com.aris.ads.mobile.upload.path	<p>Folder for mobile uploads</p> <p>Specifies the path where to store files uploaded from mobile devices.</p>	Folder	/mobileuploads
com.aris.ads.mobile.upload.path	<p>Read timeout (in milliseconds)</p> <p>Specifies the read timeout in milliseconds.</p>	Integer > 0	
com.aris.ads.dao.statistics.enabled	<p>Collect database statistics</p> <p>Collects statistics (for example, on query execution times) for all database queries. The default is allowed (default value true). Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	
com.aris.ads.version	<p>Build version</p> <p>This ARIS document storage version is currently installed. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Number	11.0.1.123456
com.aris.ads.config.cache.ttl	<p>Configuration cache lifetime (in seconds)</p> <p>Specifies the time to live (TTL) for internal caches in seconds. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Integer > 0	

Key	Description	Valid input	Example
com.aris.ads.config.encrypted	Encrypted properties Specifies a comma-separated list of encrypted property keys.	List	

6.7.3.11.3 What document management system properties are available?

You can configure a third-party document management system (page 312).

The system available is Microsoft® SharePoint 2013. Please contact your local Software AG sales organization (<http://www.softwareag.com>) for other third-party document management systems.

GENERAL

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.active	<p>Use third-party document management system</p> <p>Specifies whether or not a third-party document management system can be used.</p>	true, false	
com.idsscheer.aris.ads.dms.multiple.active	<p>Support for multiple document management systems</p> <p>Specifies whether or not more than one third-party document management system can be used.</p>	true, false	
com.idsscheer.aris.ads.dms.configuration count	<p>Number of configured document management system servers</p> <p>Displays the number of third-party document management systems configured. If you add an additional document management system server, the count is increased by one.</p>	Integer	2

CONNECTION

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.connection.id	ID Specifies the ID of the third-party documents management system.	String	
com.idsscheer.aris.ads.dms.display.name	Name Specifies the name of the third-party document management system.	String	
com.idsscheer.aris.ads.dms.type	Type Specifies which third-party document management system is to be used, for example, Microsoft® SharePoint 2013.	SP2013, SP2016	SP2013
com.idsscheer.aris.ads.dms.url	Server URL Specifies the URL of the server on which the third-party document management system is installed.	URL	
com.idsscheer.aris.ads.dms.user	User name Specifies the user that is granted access to the third-party document management system.	String	

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.password	Password Specifies the password for accessing a third-party document management system.	String	
com.idsscheer.aris.ads.dms.root	Root folder Specifies the name under which access to a third-party document management system is granted.	String	
com.idsscheer.aris.ads.dms.sitecollection	Site collection Specifies a Microsoft® SharePoint site collection or a subsite containing the document library.	Comma-separated list	

Connection

Document attribute mappings

Advanced settings

Use third-party document management system

Type	<input type="text" value="SP2013"/>
Server URL	<input type="text" value="http://sbrbluebird03"/>
User name	<input type="text" value="Bluebird"/>
Password	<input type="password" value="*****"/>
Root folder	<input type="text" value="DocLibAds"/>
Site collection	<input type="text"/>

DOCUMENT ATTRIBUTE MAPPINGS

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.document.description	<p>Description</p> <p>Specifies the description field for a document in the third-party document management system.</p>	String	
com.idsscheer.aris.ads.dms.document.owner	<p>Person responsible</p> <p>Specifies a document owner in the third-party document management system.</p>	String	
com.idsscheer.aris.ads.dms.tags.holder	<p>Tags</p> <p>Specifies a third-party document management system property containing the tags of the document (metadata).</p>	Comma-separated list	
com.idsscheer.aris.ads.dms.search.fields	<p>Search fields</p> <p>Specifies a comma-separated list of strings that contains the names of the fields used to search for documents in a repository of a third-party document management system. The assistance of an administrator knowing which fields were configured is required.</p>	Comma-separated list	FileLeafRef, Title

Connection

Document attribute mappings

Advanced settings

Description

Description0

Owner

Owner

Tags

Keywords

Search fields

FileLeafRef,Title

6.7.3.11.4 What properties are available for quota and restrictions?

You can configure the quota and restrictions (page 313) for your document storage.

Key	Description	Valid input	Example
com.aris.ads.config.max.filesize	Maximum file size Specifies the maximum allowed size (in kilobytes) for file uploads.	Integer > 0	0
com.aris.ads.config.storage.quota.limit	Quota limit Specifies the maximum total size (in kilobytes) of the document storage available to a tenant.	Integer > 0	0
com.aris.ads.config.storage.quota.usage	Quota usage Amount of storage already used (in kilobytes) by uploaded documents.	Integer > 0	9678
com.aris.ads.config.supported.filetypes.filter	Valid file extensions Specifies the list of allowed file extensions.	String	jpeg,jpg,png,gif,pdf,doc,docx,ppt,pptx,pps,ppsx,odt,xls,xlsx
com.aris.ads.config.supported.filetypes.filter.active	Restrict file extensions Specifies whether or not the file type filter (file extensions) is activated. The default is not enabled (default value false).	true, false	false
com.aris.ads.config.supported.mimetypes.filter	Allowed file types Specifies the list of allowed file types (MIME types).	String	text/plain,txt/pdf

Key	Description	Valid input	Example
com.aris.ads.config.supported.mimetypes.filter.active	<p>Restrict file types</p> <p>Specifies whether or not the file type filter (MIME types) is activated. The default is not enabled (default value false).</p>	true, false	false

6.7.3.11.5 What WebDAV properties are available?

You can display the WebDAV settings (page 314) in your document storage.

Key	Description	Valid input	Example
com.softwareag.ads.webdav.repository	<p>Repository</p> <p>Specifies the name of the repository for which WebDAV is to be available. There can only ever be one repository per tenant.</p>	String	apg
com.softwareag.ads.webdav.tenant	<p>Tenant</p> <p>Specifies the tenant for which a WebDAV mapping exists. Please note that when you use multiple LDAP servers (page 233), WebDAV works for local users only.</p>	String	default

6.7.4 Set up Process Governance

You can customize general settings of Process Governance.

6.7.4.1 Export configuration

You can export configurations in order to import them into any tenant or installation and use them there.

Prerequisite

- You have the **Process Governance administrator** function privilege.
- You have allowed pop-ups for the pages of ARIS Administration.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click  **Export current configuration as a file**.

You can save the configuration file of Process Governance at the relevant location for further use.

6.7.4.2 Import configuration

You can import configurations, which were, for example, exported from a different tenant, into any tenant or installation and use them there.

Prerequisite

- You have the **Process Governance administrator** function privilege.
- You have allowed pop-ups for the pages of ARIS Administration.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click  **Import configuration file**.

The **Import configuration file** dialog opens. Navigate to the location where the configuration file is stored and import it. The new configuration is active immediately and no system restart is required.

6.7.4.3 Customize infrastructure settings

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the **Process Governance administrator** function privilege.

Procedure

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click **Infrastructure**.
5. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

6. Adjust your settings (page 332).
7. Click  **Save**.

You have customized your system configuration.

6.7.4.4 Customize Publishing

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the Process Governance administrator **function privilege.****Procedure**

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click **Publishing**.
5. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

6. Adjust your settings (page 336).
7. Click  **Save**.

You have customized your system configuration.

6.7.4.5 Customize Reporting

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the Process Governance administrator **function privilege.****Procedure**

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click **Reporting**.
5. Click  **Edit**.
6. Adjust your settings (page 337).
7. Click  **Save**.

You have customized your system configuration.

6.7.4.6 Customize workflow policies

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the Process Governance administrator **function privilege.****Procedure**

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click **Workflow policies**.
5. Click  **Edit**.
6. Adjust your settings (page 338).
7. Click  **Save**.

You have customized your system configuration.

6.7.4.7 Customize pools

You can customize your system configuration as required. You carry out this part of the configuration in ARIS Administration.

Prerequisite

You have the Process Governance administrator **function privilege.****Procedure**

1. Click <user name> and select **Administration**.
2. Click  **Configuration**.
3. Click **Process Governance**.
4. Click **Pools**.
5. Click  **Edit**.

The **Cross-tenant** symbol  indicates that the settings made apply to all tenants on this server and cannot be changed.

6. Adjust your settings (page 339).
7. Click  **Save**.

You have customized your system configuration.

6.7.4.8 Set up sending notifications to Process Governance administrators

You can specify that Process Governance administrators receive e-mail notifications if problems occur during process execution for users modeled in an organizational chart relevant to Process Governance.

Prerequisite

You have the **User administrator** function privilege.

Procedure

1. Assign the relevant users Process Governance administrator privileges.
2. Also, specify (page 42) the **E-mail address** attribute for the Process Governance administrators.

The Process Governance administrators will automatically receive an e-mail if problems occur during process execution, for example, if an error occurs during execution of an automated task or if the recipient of an e-mail message has not been entered as a user.

6.7.4.9 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.7.4.9.1 What infrastructure properties are available?

You can configure your Process Governance the infrastructure (page 329).

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure apg_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure apg_m JAVA-Dcom.idsscheer.age.activity.ws.call.timeout="https://myserver.com"
```

This is where you find an overview of keys and value pairs:

Key	Description	Valid input	Example
com.idsscheer.age.config.encrypted	Encrypted properties Specifies the configuration properties with encrypted values in a comma-separated list.	String	
com.idsscheer.age.activity.ws.call.timeout	Web service read timeout Specifies the timeout for read access to a Web service in milliseconds.	43200000	Number > 0
com.idsscheer.age.log.dblogger.severity	Log level Specifies the log level relevant for logging messages in a log file. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual .		Number > 0

Key	Description	Valid input	Example
com.idsscheer.age.log.monitoring.output.path	<p>Log file output path</p> <p>Specifies the output path for the system monitoring log files. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	Path on a server	
com.idsscheer.age.query.maxResults	<p>Maximum query result size</p> <p>Specifies the maximum number of items that are to be returned by a single query. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		
com.idsscheer.age.xe.maxExecutionDuration	<p>Maximum execution time</p> <p>Specifies the maximum execution time in milliseconds for activities that support a timeout. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	43200000	Number > 0
com.idsscheer.age.autodeploy.archive	<p>Archive folder</p> <p>Specifies the location of the folder used for archiving automatically generated processes. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		
com.idsscheer.age.autodeploy.model	<p>Input folder</p> <p>Specifies the location of the folder used for storing automatically generated processes. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		

Key	Description	Valid input	Example
com.aris.age.email.fail.instance.on.error	<p>Stop process instance if notification fails</p> <p>Specifies that running a process instance should fail if a notification cannot be successfully sent. The default is allowed (default value true).</p>	true, false	true
com.aris.age.email.simulate.only	<p>Simulate notifications</p> <p>Specifies that notifications are not to be sent to their recipients. The default value is false.</p>	true, false	false
com.idsscheer.age.version	<p>Build number</p> <p>Process Governance build number. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>		
com.idsscheer.age.node.assignment.strategy	<p>Node assignment strategy</p> <p>Indicates the node assignment strategy that is currently active. The default value is TENANT_BASED. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	TENANT_BASED, PROCESS_INSTANCE_BASED	TENANT_BASED
com.idsscheer.retry.failed.instances.on.restart	<p>Restart failed process instances</p> <p>Specifies that a failed activity of an executable process instance is restarted with the same data if the system is available again. The default value is false.</p>	true, false	false

Key	Description	Valid input	Example
com.idsscheer.age.automatic.node.rebalance	<p>Redistribute process instances using the PROCESS_INSTANCE_BASED node assignment strategy</p> <p>Specifies that process instances are to be automatically redistributed across all active Process Governance nodes every time a new Process Governance node is added to the ARIS environment. The default is allowed (default value true). Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual.</p>	true, false	true
com.idsscheer.age.batch.processing.size	<p>Batch processing size</p> <p>Specifies the number of process instances to be processed by the engine. Instances move to QUEUED state if the current processing instances count exceeds the configured value. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual. The default value is 1000.</p>	Integer > 0	
com.idsscheer.age.priority.queue.size	<p>Priority queue size</p> <p>Specifies the size of the priority queue. The priority queue contains the instances that are to be run with high priority. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual. The default value is 100.</p>	Integer > 0	

6.7.4.9.2 What Publishing properties are available?

You can configure Process Governance Publishing (page 329).

Properties that are highlighted as cross-tenant properties can only be changes using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure apg_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure apg_m JAVA-Dcom.idsscheer.age.activity.ws.call.timeout=https://myserver.com
```

This is where you find an overview of keys and value pairs:

Key	Description	Valid input	Example
com.idsscheer.age.serviceenabling.staticExport.exportToDisk	<p>Export to server hard drive</p> <p>Specifies that a static export is to be saved on a hard drive of the server. This works only in a non-distributed scenario in which everything is installed on a single server. If this value is set to false, the export is saved as a ZIP file to ARIS document storage and a link is generated.</p>	true, false; the default value is true.	true
com.idsscheer.age.serviceenabling.staticExport.exportDir	<p>Static export directory</p> <p>Specifies the directory for the static export.</p>	<Installation directory>/server/bin/work/work_apg_m/base/webapps/aris/apgstatic	D:/ARIS9.5/server/bin/work/work_apg_m/base/webapps/aris/apgstatic
com.idsscheer.age.serviceenabling.staticExport.wsServer	<p>Static export link template</p> <p>Specifies the template for the link to a static export that is generated via Web service.</p>	http://Process	http://Process

Key	Description	Valid input	Example
	Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual .	Governance _server/aris /apgstatic/< GUID>	Governance _server/aris /apgstatic/2 34ekmfhkds au4w58

6.7.4.9.3 What Reporting properties are available?

You can configure Process Governance Reporting (page 330). This is where you find an overview of keys and value pairs:

Key	Description	Valid input	Example
com.idsscheer.age.serviceenabling.scriptrunner.defaultLanguage	Default method language Specifies the default method language for the ARIS services.	en_US	en_US, de_DE

6.7.4.9.4 What properties are available for workflow policies?

You can configure the workflow policies (page 330) for Process Governance.

Key	Description	Valid input	Example
com.idsscheer.age.days.workingdays.enabled	Exclude weekend Specifies whether only work days are to be considered in an escalation.	true, false	
com.idsscheer.age.days.off	Weekend days Specifies which days of the week represent the weekend in a five-day week. The week starts on Sunday (day 1) and ends on Saturday (day 7).	String	1,7 Weekends Saturday and Sunday.
com.idsscheer.age.days.public.holidays	Public holidays Specifies the public holidays. The format is DD.MM., for example, 01.01.,24.12.	Date	01.01,07.01,08.03,...
com.idsscheer.age.e.signature.enabled	E-signature (double authentication) Specifies whether or not reentering the password is necessary when completing tasks.	true, false	false
com.idsscheer.age.reminder.notification.time	Reminder notification threshold Specifies when a reminder notification is to be sent when X% of the amount of time that is expected to elapse until the due date have already been consumed. The default value is 75 %.	Number > 0	75
com.idsscheer.age.substitution.notification.enabled	Notify when a substitute is activated Specifies whether or not a notification is sent when a substitute is configured for My tasks.	true, false	false

Key	Description	Valid input	Example
com.idsscheer.age.taskList.delegation.enabled	Allow task delegation Specifies whether or not delegation of tasks to other users (Delegate/Substitution) is allowed.	true, false	true
com.idsscheer.age.taskList.startTaskConfirmation.enabled	Confirm start of task execution Specifies centrally for all users whether or not the confirmation dialog is displayed when a task is started in My tasks for the first time.	true, false	true

6.7.4.9.5 What properties are available for pools?

You can configure thread pools (page 331) for Process Governance.

Properties that are highlighted as cross-tenant properties can only be changed using ARIS Cloud Controller Command-line Tool. To change these settings enter the following:

```
reconfigure apg_<size of your installation, s, m, or l> JAVA-D<property name>="<value>"
```

Example

```
reconfigure apg_m JAVA-Dcom.idsscheer.age.activity.ws.call.timeout="https://myserver.com"
```

This is where you find an overview of keys and value pairs:

Key	Description	Valid input	Example
com.idsscheer.age.job.service.threadsNumber	Job service thread pool size Specifies the number of threads to be used by the job service. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual . The default value is 8.	Integer > 0	8

Key	Description	Valid input	Example
com.idsscheer.age.simulation.instanceExecutorsPool.size	Simulation pool size Specifies the size of the pool containing simulated process instances. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual . The default value is 5.	Integer > 0	5
com.idsscheer.age.xe.dispatch.h.workersPool.size	Dispatch worker thread pool size Specifies the pool size for dispatch worker threads. Cross-tenant property that can only be changed using ARIS Cloud Controller. For further information, refer to ARIS Cloud Controller (ACC) Command-line Tool manual . The default value is 10.	Integer > 0	10
com.idsscheer.age.xe.webservice.jobs.pool.size	Web service worker thread pool size Specifies the pool size for web service worker threads. The default value is 15.	Integer > 0	15

6.7.5 Set up Collaboration

You can customize general settings of Collaboration.

6.7.5.1 Customize Collaboration

You can customize Collaboration.

Prerequisite

You have the **Collaboration administrator** function privilege.

Procedure

1. Click  **Configuration**.
2. Click **Collaboration**.
3. Click a configuration category (page 343).
4. Click  **Edit property** in the row of the property you want to configure.

If Collaboration is deactivated, the properties are also deactivated and cannot be edited.

You have configured your Collaboration.

6.7.5.2 Refresh list of published databases

You can refresh the list of published databases.

Prerequisite

You have the **Collaboration administrator** function privilege.

Procedure

1. Click  **Configuration**.
2. Click **Collaboration**. If Collaboration is deactivated, the properties are also deactivated and cannot be edited.
3. Click **Configure database**.
4. Click  **Refresh database list**.

You have refreshed the list of published databases..

6.7.5.3 Manually synchronize database

If a user name is set for the **Person responsible** model attribute of a model in an ARIS database, this user automatically becomes a follower (page 820) of this model. Once the automatic following is activated in Collaboration), this user can see all model activities in **My feed**, and receives notifications about them. However, this only applies if this user has at least the **Read (r---)** access privilege in the corresponding ARIS database.

You can synchronize a database manually at any time.

Prerequisite

You have the **Collaboration administrator** function privilege.

Procedure

1. Click  **Configuration**.
2. Click **Collaboration**. If Collaboration is deactivated, the properties are also deactivated and cannot be edited.
3. Click **Configure database**.
4. Move the mouse cursor in the row of the database you want to synchronize.
5. Click  **Refresh database list**.

You have refreshed the content of a database for Collaboration.

6.7.5.4 What properties are available for Collaboration?

The following can be customized in Collaboration.

GENERAL SETTINGS

Key	Description	Valid input
collaboration.optionsPage.enableECP	Activate Collaboration Activates Collaboration. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowCreationOfGroups	Create groups Specifies whether or not creating groups in Collaboration is allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowCreationOfFilters	Create filters Specifies whether or not creating filters in Collaboration is allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.enableLikeButton	Enable Like button Specifies whether or not the Like button is displayed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowCommenting	Create comments Specifies whether or not comments on content are allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowSharing	Share content Specifies whether or not sharing of content is allowed. The default is allowed (default value true).	true, false

Key	Description	Valid input
collaboration.optionsPage.allowBookmarks	Create bookmarks Specifies whether or not creating bookmarks is allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowTags	Create tags Specifies whether or not creating tags is allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowFlags	Flag activities Specifies whether or not flagging content is allowed. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowTagFilterInMainStream	Allow tag filtering (My feed) Specifies whether or not filtering using tags is allowed on the Collaboration start page.	true, false
collaboration.optionsPage.allowTagFilterInFullStream	Allow tag filtering (Portal) Specifies whether or not filtering using tags is allowed in the My activities area. The default is allowed (default value true).	true, false
collaboration.optionsPage.allowTagFilterInCommentStream	Allow tag filtering (My portal feeds) Specifies whether or not filtering using tags is allowed in the portal. The default is allowed (default value true).	true, false
collaboration.optionsPage.filterPrivateFeeds	Public access to portal feeds Specifies whether posts to model feeds are visible only if a user is following the model feed or is a member of a group that is following the model feed. The default is allowed (default value true).	true, false

Key	Description	Valid input
collaboration.optionsPage.tagsCloudSearchOperator	<p>Use search operator 'OR' instead of 'AND'</p> <p>Specifies whether or not filtering using tags is allowed in  My feed. If an additional tag is activated, more entries are displayed in the list. The default is allowed (default value true).</p>	true, false
collaboration.optionsPage.enableAttachment	<p>Enable attachments</p> <p>Specifies whether or not documents from ARIS document storage can be accessed as new attachments for activities.</p>	true, false
collaboration.optionsPage.exportActivitiesAsZipFileInstantly	<p>Export activities as ZIP file instantly</p> <p>Specifies whether activities are exported as a ZIP file instantly or whether the ZIP file will be stored in ARIS document storage and you can download it later.</p>	true, false
collaboration.optionsPage.autoFollowGroup	<p>Automatically follow groups</p> <p>Specifies whether or not users are automatically followers of groups they have posted to or whose content they have commented on. The default value is false.</p>	true, false
collaboration.optionsPage.autoFollowUser	<p>Automatically follow users</p> <p>Specifies whether or not users are automatically followers of users they have posted to or whose content they have commented on. The default value is false.</p>	true, false
collaboration.optionsPage.autoFollowModel	<p>Automatically follow models</p> <p>Specifies whether or not users are automatically followers of models they have posted to or whose content they have commented on. The default value is false.</p>	true, false

CONFIGURE USER GROUP

Key	Description	Valid input
enableAllUserGroups	<p>Enable all user groups</p> <p>Enables the function based on which all ARIS user groups are displayed when users are posting in Collaboration.</p>	true, false
userGroupsToHaveOwnFeedInCollaboration	<p>Configure visibility of user groups in the collaboration</p> <p>Enables the function based on which a single ARIS user group is displayed when users are posting in Collaboration.</p>	true, false

CONFIGURE DATABASE

Key	Description	Valid input
Database	<p>Synchronize daily at</p> <p>Enables that the database is synchronized at a certain time every day if Automatically follow users/Automatically follow groups/Automatically follow models is enabled.</p> <p>If a user name is set for the Person responsible model attribute of a model in an ARIS database, this user automatically becomes a follower (page 820) of this model. Once the automatic following is activated in Collaboration), this user can see all model activities in My feed, and receives notifications about them. However, this only applies if this user has at least the Read (r---) access privilege in the corresponding ARIS database.</p> <p>If a different user name is set for the Person responsible model attribute at a later point in time, the automatic following remains activated for the previous user until this user manually stops following (page 809) this model (Unfollow).</p>	time

6.8 Manage server tasks



Centrally checkserver tasks, such as reports, merge operations, and backups. You can cancel report executions. This might be necessary, for example, if incorrect reports are executed.

6.8.1 Display server tasks

You can check which server tasks, such as reports, merge operations, and backups, are performed and which server tasks are completed.

Prerequisite

You have the **ARIS Connect administrator** and **Server administrator** function privileges.

Procedure

1. Click  **Server tasks**.
2. Click **Running tasks** or **Completed tasks**.

Running tasks or completed tasks are listed.

6.8.2 Toggle auto-refresh

You can switch auto-refresh on and off. If you have enabled auto-refresh, new tasks are displayed immediately after they are created.

Prerequisite

You must have the **ARIS Connect administrator** and **Server administrator** function privileges to view **server tasks**.

Procedure

1. Click  **Server tasks**.
2. Click  **Toggle auto-refresh** to enable auto-refresh. A dash below the icon indicates that auto-refresh is enabled and new tasks are displayed immediately after they are created.
3. Click  **Toggle auto-refresh** again if you want to disable auto-refresh. The dash below the icon is removed. To view new tasks from now on, click  **Refresh**.

You have defined whether the tasks are updated automatically or manually.

6.8.3 Cancel report

You can cancel the execution of a task of the **Report** category, that is, the execution of running reports.

Prerequisite

You must have the **ARIS Connect administrator** and **Server administrator** function privileges to view **server tasks**.

Warning

Canceling a report execution "kills" the report, that is, canceling a report does not guarantee data consistency. If, for example, a report has changed data, these changes are not rolled back by the cancelation.

Procedure

1. Click  **Server tasks**. The tasks currently running are listed.
2. Determine the name of the user who started the report from the user column. Inform the user that the report is to be canceled and he must press **F5** to continue working in ARIS Connect when the cancel dialog opens. This closes the cancel dialog and the work in the program is possible again.
3. In the row of the report you want to cancel, click  **Cancel**. The confirmation dialog opens.
4. Click **Yes**.

The report is canceled and displayed in **Completed tasks** with the status **Canceled**. The user who started the report is informed of the cancelation by a cancelation dialog.

6.8.4 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.8.4.1 What is the Server tasks area for?

The **Server tasks** area lists current and completed server tasks, such as reports, merge operations, and backups, of a tenant. You can see which tasks are running in the background of the tenant and which tasks have been completed and no longer consume resources.

You can use the **Running tasks** list to cancel a task (page 348) of the category **Report**. Canceled tasks are listed in the **Completed tasks** list with the status **Canceled**.

The **Completed task** list displays a maximum of 1.000 tasks. When more tasks are completed, the oldest tasks are deleted. Entries older than seven days are automatically deleted.

6.8.4.2 How is the Running tasks list structured?

The **Running tasks** list has the following columns. You can sort the columns in the table in ascending and descending order.

Column	Content
Category	Outputs the category of the server task, such as XML Import , DB Restore , Merge and Report .
Name	Name of the task.
User	Name of the user who started the task.
State	Status of the task, for example, Initializing and Running . Depending on the category of the task, additional information is provided, for example, The request is in the processing queue for reports.
Server	Server on which the task is executed.
Start time	Month, day, and time at which the task was started.
Duration	Duration of the task in milliseconds, seconds, minutes, etc.

6.8.4.3 How is the Completed tasks list structured?

The **Completed tasks** list has the following columns. You can sort the columns in the table in ascending and descending order.

Column	Content
Category	Outputs the category of the server task, such as XML Import , DB Restore , Merge and Report .
Name	Name of the task.
User	Name of the user who started the task.
State	Status of the task, for example, Completed or Canceled .
Server	Server on which the task was executed.
Start time	Month, day, and time at which the task was started.
Duration	Duration of the task in milliseconds, seconds, minutes, etc.

6.9 Administrate dashboards (ARIS Aware)

You can use the product ARIS Aware as visualizing component of ARIS Connect. Using ARIS Aware enables you to combine information from many sources and visualize data as KPIs by means of dashboards. ARIS Aware supports users in various departments across the enterprise by providing dashboards for evaluating a wide variety of data. It improves the transparency of the business and enables you to make the best decisions based on reliable data analyses. ARIS Aware is equipped with ready-to-go templates for common scenarios in the context of business process management, including Center of Excellence (CoE) (page **Error! Bookmark not defined.**), Business Usage Monitoring (page **Error! Bookmark not defined.**), Enterprise Architecture Management (page **Error! Bookmark not defined.**), Customer Experience Management (CXM) (page **Error! Bookmark not defined.**), Process Performance Management, and Governance Risk and Compliance Management. These templates can be extended and customized according to the individual requirements of a company.

6.9.1 Configure dashboards

Specify a URL alias for the server where data for dashboards and data feeds are stored. You can specify a URL alias for the Process Performance Manager server as well.

6.9.1.1 Add an alias URL for dashboards

Define the alias URL to be used within data feeds. If you specify **Feed URL**, all default data feeds will work properly.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **URL_ALIAS** from the list.
6. Click **+ Add**. The **Add property** dialog opens.
7. Enter the alias. Enter **Feed URL** for the content that is delivered with the installation.
8. Enter the protocol (http or https) to be used for the communication.

9. Enter a fully-qualified host name (FQHN (page 1171)). Enter the fully-qualified host name, for example, myserver.mydomain.ext, where ARIS Server runs for the content that is delivered with the installation, for example, copy it from your browser's URL.
10. Enter the port. Enter the port on which ARIS Server runs for the content that is delivered with the installation.
11. Enter user name and password of the user who is supposed to have access to the data feeds used by the dashboards.

If you change the password of the user who created this URL_ALIAS, you must also update the password for the **Feed URL** alias ( **Edit Property**), otherwise dashboards cannot be displayed.

12. Click  **Save**.

The alias URL is defined.

This alias URL can be used for your data feeds.

6.9.1.2 Edit an ARIS Server alias

Edit an alias of the ARIS Server where dashboard and feed data are stored.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Move the mouse pointer to the item you want to change.
6. Click  **Edit**.
7. The corresponding dialog opens.
8. Enter your changes.
9. Enter the password.
10. Click  **Save**.

You have edited the alias of the ARIS Server where dashboard and feed are stored.

6.9.1.3 Delete an ARIS Server alias

You can delete an ARIS Server alias where dashboard and feed data are stored.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **URL_ALIAS** from the list.
6. Move the mouse pointer to the item you want to change.
7. Click  **Delete property**.

The selected alias of the ARIS Server containing of dashboard and feed data is deleted without prompting for confirmation.

6.9.1.4 Create a PPM server connection

You can create a Process Performance Manager server connection.

If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you must recreate the PPM connections that were defined for ARIS Connect 10.0 Service Release 1. First delete the PPM connection (page 355) and add a new PPM connection (page 353) with the same data.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **PPM_CONNECTIONS** from the list.
6. Click  **Add**. The **Add property** dialog opens.
7. Enter the PPM client.

8. Enter the protocol (http or https) to be used for the communication.
9. Enter a fully-qualified host name (FQHN (page 1171)).
10. Enter the port.
11. Enter the client of your PPM server. A client provides you with all the configuration files and applications required to extract data from your source system and configure it for further processing.

The version information cannot be changed.

12. Click  **Save**.

You have created a connection to your Process Performance Manager server.

6.9.1.5 Edit a PPM server connection

You can edit your Process Performance Manager server connection.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **PPM_CONNECTIONS** from the list. All Process Performance Manager servers configured are displayed.
6. Move the mouse pointer to the item you want to change.
7. Click  **Edit**. The **Edit property** dialog opens.
8. Enter your changes.
9. Click  **Save**.

You have edited your Process Performance Manager server connection.

6.9.1.6 Delete a PPM server connection

You can delete a Process Performance Manager server connection.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **PPM_CONNECTIONS** from the list. All Process Performance Manager servers configured are displayed.
6. Move the mouse pointer to the item you want to delete.
7. Click  **Delete property**.

The selected Process Performance Manager server connection is deleted without prompting for confirmation.

6.9.1.7 Add a JDBC driver for dashboards

Define the JDBC driver to be used within data feeds.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC drivers** from the list.
6. Click  **Add**. The **Add property** dialog opens.
7. Enter the name of the JDBC driver.
8. Enter the driver class, for example, jar.
9. Click **Select import file**.

10. Select the driver file and click **OK**.

11. Click **Upload**.

This JDBC driver can be used for your data feeds.

6.9.1.8 Edit a JDBC driver for dashboards

You can edit your JDBC driver to be used within data feeds.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC drivers** from the list.
6. Move the mouse pointer to the item you want to change.
7. Click  **Edit**. The corresponding dialog opens.
8. Enter your changes.
9. Click  **Save**.

This JDBC driver can be used for your data feeds.

6.9.1.9 Delete a JDBC driver for dashboards

You can delete your JDBC driver.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC drivers** from the list.
6. Move the mouse pointer to the item you want to delete.
7. Click  **Delete property**.
8. Click **OK** to confirm.

This JDBC driver is deleted.

6.9.1.10 Add a JDBC data source for dashboards

Specify the JDBC data source (page 518) to be used within data feeds.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.
- You have uploaded a JDBC driver.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC data source** from the list.
6. Click  **Add**. The **Add property** dialog opens.
7. Enter the name of the JDBC data source.
8. Select the JDBC driver.
9. Enter the URL of the JDBC driver.

10. Enter the user name of the user who can access the data.
11. Enter the password of the user who can access the data.
12. Enter the initial size.
13. Enter the maximum active time.
14. Enter the maximum wait time.
15. Enter the maximum idle time.
16. Enable the pool prepared statement, if required.
17. Enter the validation query.
18. Enter the validation timeout.
19. Enter the number of eviction runs.
20. Enter the number of tests per run.
21. Enter the maximum evictable idle time.
22. Click **Save**.

This JDBC data source can be used for your data feeds.

6.9.1.11 Edit a JDBC data source for dashboards

You can edit your JDBC data source (page 518) to be used within data feeds.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC data source** from the list.
6. Move the mouse pointer to the item you want to change.
7. Click  **Edit**. The corresponding dialog opens.
8. Enter your changes.
9. Click  **Save**.

This JDBC data source can be used for your data feeds.

6.9.1.12 Delete a JDBC data source for dashboards

You can delete your JDBC data source (page 518).

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click <user name> and select **Administration**.
3. Click  **Configuration**.
4. Click **Dashboards**.
5. Select **JDBC data source** from the list.
6. Move the mouse pointer to the item you want to delete.
7. Click  **Delete property**.
8. Click **OK** to confirm.

This JDBC data source is deleted.

6.9.1.13 Make default dashboards available

This procedure explains how to restore default ARIS Aware dashboards in ARIS Connect.

Prerequisites

- Your ARIS Server is enabled for ARIS Aware that is, the **dashboarding** runnable is activated and running (see **ARIS Server Installation Guide (../..//documents/3 Installation/31 Initial installation/312 Server/3121 Basic (Single node)/ARIS Server Installation - Windows.pdf)** or **ARIS Cloud Controller (ACC) Command-Line Tool (../..//documents/3 Installation/31 Initial installation/312 Server/3121 Basic (Single node)/ARIS Cloud Controller (ACC) Command-Line Tool.pdf)** on DVD, ARIS Download Center (aris.softwareag.com) or Empower (<https://empower.softwareag.com/>)).
- A valid **ARIS Connect Server Extension Pack Aware (YCSAW)** license is available in ARIS Administration.
- You have access to the ARIS installation DVD.
- If you want to generate dashboards based on portal usage statistics of ARIS Connect content you must install and configure the external web analytics application **Piwik**, install and configure two additional ARIS runnables and configure the Piwik-related reports in ARIS Architect.

Procedure

1. Import the default xml documents. These documents are used by the default data feeds to generate dashboards. You can either do a bulk import using a command line tool (page 361) (for initial installation only) or copy the documents using WebDAV (page 362).
2. Import default dashboard content (page 360).
3. Add an alias URL (page 351).
4. Check default data feeds for issues (page 369).
5. Publish the database as a process portal (page 144) using the **default** or **classic** configuration set.
6. Keep dashboard data up to date (page 363).
7. Create (page 52) a new **dashboard_viewers** user group in ARIS Administration and assign all users which should see dashboards but are no Dashboard administrators. Otherwise, you have to assign permissions for all dashboards and the corresponding feeds separately to every user in the data feed editor.

All default dashboards, data feeds and documents are available in ARIS Connect.

6.9.1.13.1 Import default dashboard content

The default dashboards and data feeds must be imported. These default data feeds are configured to use the corresponding XML documents. Therefore make sure you have imported the required XML documents (see bulk import (page 361) or using WebDAV (page 362)).

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Copy the **Dashboards_Feeds.zip** file from the ARIS installation DVD to a temporary target directory, for example: **C:\Dashboarding**. The **Dashboards_Feeds.zip** file contains the default dashboards, data feeds, and permissions.
2. Start ARIS Connect.
3. Click  **Repository**.
4. Activate the **Dashboards & Data feeds** tab.
5. Click  **Dashboards**.
6. Click  **Import**.
7. Select the **Dashboards_Feeds.zip** file to be imported. The file contains the default dashboards and dashboard privileges.
8. If the dashboard(s) available in the repository should be replaced, activate the **Overwrite if already exists** option.
9. If the dashboard permissions contained in the dashboard file should also be imported, activate the **Import privileges** option. This option is activated by default.

10. Click **Import**. The default dashboards, data feeds, and permissions are imported and the new dashboards are listed on the **Dashboards** tab of the repository.

All default dashboards and data feeds are available.

6.9.1.13.2 Bulk Import using Command Line Tool

INITIAL INSTALLATION

For new installations, you can import documents using the Command line tool. These documents are used by the default data feeds to generate dashboards.

Procedure

1. Extract the **Documents** archive (ARIS installation DVD\Content\ARISAware) to a temporary target directory, for example: **C:\Dashboarding**. This archive contains all required xml documents used by the default data feeds.
2. Import the default ARIS document storage documents via bulk import:
3. Open a Command Prompt and navigate to <ARIS installation path>\server\bin\work\work_adsadmin_<s,m or l>\tools\bin.
4. Enter this command to import all documents into ARIS document storage of each tenant you use, for example, **default**:

```
y-admintool.bat -t <tenant name> bulkimport -u system -p manager -path "c:\Dashboarding"
```

c:\Dashboarding is the extracted structure from zip archive and location on the server storage.

5. Check for the shown message of 162 imported files in 10 folders for each tenant.
6. Close the Command Prompt window.

All default xml documents are available in ARIS document storage.

You must import the default data feeds (page 360) in order to generate default dashboards.

UPDATE INSTALLATION

Do not use the bulk import command line tool in case of an update installation.

Upload the **Conversation_Rate.csv** document manually to the **Dashboarding** folder.

Upload the following files manually to the **Dashboarding\<database name>\CXM** folder, for example, **Dashboarding\United Motor Group\CXM**, of each database:

- CXM_SEGMENTATION_AND_ASSIGNMENTS.xml
- CXM_SEGMENTATION_AND_ASSIGNMENTS_METADATA.xml

You can find these files in the **Content\ARISAware\Documents.zip** file from the ARIS installation DVD.

Procedure

1. Open ARIS Connect.
2. Click  **Repository**.
3. Click **Documents**.
4. Click a folder in the navigation.
5. Click  **Upload**. The **Upload document** (page 113) dialog opens.
6. Enter the relevant optional additional information, and click **OK**.

You have added a new content for ARIS Aware.

6.9.1.13.3 Copy documents using WebDAV

You can import the default ARIS document storage documents using WebDAV. These documents are used by the default data feeds to generate dashboards.

ARIS document storage supports WebDAV. You can connect only one tenant with a specific repository.

To grant users without the **Document management** role access to ARIS document storage content, ARIS document storage can be used as a WebDAV network drive.

With a Microsoft® Windows 7 operating system you just need to connect the relevant network and access ARIS document storage directly. With older operating systems, you need to use Web folders (select **Tools > Map Network Drive > Sign up for online storage connect to a network server** in Microsoft® Windows Explorer). If this does not work you need to configure your computer as follows.

Procedure

1. Open the Registry Editor.
2. Navigate to **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters** and find the DWORD entry **BasicAuthLevel**.
3. Check if the value of this entry is **2**. If the value of this entry differs, please change it to **2**. If the DWORD entry does not exist, create it.
4. With operating systems older than Microsoft® Windows 7 you also need to find the DWORD entry **UseBasicAuth**. If it does not exist, create it.
5. Change the value of this entry to the hexadecimal value **1**. Thus, you enable HTTP Basic Access Authentication for SSL and non-SSL connections.
6. Close the Registry Editor.
7. Restart Microsoft® Windows.

You can now use ARIS document storage as a WebDAV network drive.

8. Configure ARIS document storage for WebDAV - please refer to the ARIS Connect online help, chapter **Manage ARIS Connect > Configure ARIS Connect > Set up Document storage > Configure WebDAV**.

9. Extract the **Documents** archive (ARIS installation DVD\Content\ARISAware) to a temporary target directory, for example: **C:\Dashboarding**. This archive contains all required xml documents used by the default data feeds.
10. In order to copy the content into ARIS document storage, a network mapping using WebDAV is required.
11. Map the network drive to **http://<Fully qualified domain name of ARIS Server:load balancer port>/documents/rest/webdav**. You do not need to specify the port if the load balancer uses port 80.

Example

http://myserver.mydomain.ext:1081>/documents/rest/webdav

12. Copy extracted folder **Dashboarding** to mapped network drive.

All default documents are available in ARIS document storage.

You must import the default data feeds (page 360) in order to generate default dashboards.

6.9.1.13.4 Keep ARIS Aware dashboards up to date

This procedure describes how to define scheduled reports in ARIS Architect.

Database information to be compiled for dashboard display is gathered by different reports. These reports generate data feed (page 369) input stored in ARIS document storage. Run these reports automatically to keep all data compiled for dashboard display up to date. In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

Prerequisite

- You have the **Report automation** function privilege.
- You have access to this script. Access to scripts can be restricted to certain user groups.
- You have read access to all required database groups.

Procedure

1. Click **ARIS > Administration** or **ARIS > Explorer**. The **Administration** or **Explorer** tab opens.
2. Log in to the database.
3. Click  **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
4. In the Explorer tree, click the folder  **Scheduled reports**.
5. Click  **New >**  **Create scheduled report**. The Report Automation Wizard opens.
6. Specify the name for this schedule and enter the user's password that has **read** permission to all required database groups. Make sure that the schedule is activated.
7. Click **Next** and select the first report from the **Dashboard data** category and specify the settings as required.
8. Click **Next** and select the database to be evaluated.

9. Click **Next** and specify the schedule settings as required.
10. Click **Finish**. If the first execution is in the future, the report is automatically active and runs as soon as the defined point in time is reached.
11. Create schedules for all required reports from the **Dashboard data** category. The selection of reports depends on the data to be compiled for dashboard display.

All default data feeds used to create dashboards will be supplied with the most current data as specified.

6.9.1.14 Import dashboards

You can import one or multiple dashboards into the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To import dashboards, click the  **Import** button.
6. Select the dashboard file to be imported. The file is in **ZIP** format and can contain one or more dashboards. The file also includes the dashboard privileges.
7. If the dashboard(s) available in the repository should be replaced, activate the **Overwrite if already exists** option.
8. If the dashboard permissions contained in the dashboard file should also be imported, activate the **Import privileges** option. This option is activated by default.
9. Click **Import**.

The selected dashboard file is imported and the new dashboards are listed on the **Dashboards** tab of the repository.

6.9.1.15 Add a dashboard

You can add your own dashboard to the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. Click  **Add**.

The dashboard editor opens and you can create your own dashboard (page 390).

6.9.1.16 Export dashboards

You can export one or all dashboards available in the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To export a specific dashboard, click the  **Export** button of the relevant dashboard.
6. To export all dashboards, click the  **Export all** button in the main menu.

The dashboards are exported and downloaded directly to the browser as a single ZIP file.

6.9.1.17 Delete a dashboard

You can delete a dashboard from the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. Move the mouse pointer to the dashboard you want to delete.
6. Click  **Delete**. The **Confirmation** dialog opens.
7. Click **Yes** to confirm.

The dashboard is deleted.

6.9.1.18 Import data feeds

You can import one or multiple data feeds into the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To import data feeds, click the  **Import** button.
6. Select the data feeds file to be imported. The file is in ZIP format and can contain one or more data feeds. The file also includes the data feed permissions.
7. If the data feeds available in the repository should be replaced, enable the **Overwrite if already exists** option. Activated by default.

8. If the data feed permissions contained in the data feed file should also be imported, enable the **Import permissions** option. Activated by default.
9. Click **Import**.

The selected data feed file is imported and the new data feeds are listed on the **Data feeds** tab of the repository.

6.9.1.19 Add a data feed

You can add a data feed to the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. Click  **Add**.

The dashboard editor opens and you can create your own dashboard (page 390).

6.9.1.20 Export data feeds

You can export a data feed available in the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To export a specific data feed, click the  **Export** button of the relevant data feed.
6. To export all data feeds, click the  **Export all** button in the main menu.

The data feeds are exported and downloaded directly to the browser as a single ZIP file.

6.9.1.21 Delete a data feed

You can delete a data feed from the  Repository of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Viewer license privilege with ARIS Aware enabled or the ARIS Connect Designer license with ARIS Aware enabled.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. Move the mouse pointer to the data feed you want to delete.
6. Click  **Delete**. The **Confirmation** dialog opens.
7. Click **Yes** to confirm.

The data feed is deleted.

6.9.1.22 Check default data feeds for issues

You can open an available data feed in ARIS Connect. The data feed is opened in the data feed editor.

The available dashboards and the relevant data feeds are provided in the  **Repository** of ARIS Connect.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- You have an ARIS Connect Designer (page 73) license.
- The **Feed URL** alias URL is defined (page 351).
- The default ARIS Aware dashboards are available (page 359).

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**. The default data feeds are displayed.
5. Click a data feed name.

The selected data feed opens in the data feed editor. The data feed will work properly if the Feed URL is in use. If the **Path prefix (alias)** name is shown in red, the alias URL has not been created (page 351) properly.

6. Click  **Calculate preview**.

Data is shown in the **Calculation result of operator ARIS Table** section, the default data feeds work properly. All default dashboards can be displayed in ARIS Connect (page 376).

In case of errors check whether the prerequisites specified are met. If you change the password of the user who created this URL_ALIAS, you must also update the password for the **Feed URL** alias ( **Edit Property**), otherwise dashboards cannot be displayed.

6.9.1.23 Manage Fact sheets

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

6.9.1.23.1 Add a dashboard to the Overview item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be altered.
6. Scroll to **Dashboards**.
7. Click **Add**. The **Add Dashboard** dialog is displayed.
8. Enter a name. You can enter a name in multiple languages.
9. Select the database in which the dashboard is to be displayed.
10. Select a dashboard.
11. Click **Add**. The dashboard is added to the **Overview** item.
12. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.1.23.2 Remove a dashboard from the Overview item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Overview** item, click  **Edit**. If the overview belongs to an item that is in the package and the overview has not yet been edited, the **System** layout is activated, which cannot be altered.
6. Scroll to **Dashboards**.
7. Move the mouse pointer over the dashboard you want to delete.
8. Click  **Delete**. The dashboard is removed from the **Overview** item.
9. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.1.23.3 Add a dashboard to the Diagram item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Diagram** item, click  **Edit**.
6. Click **Add**.
7. The **Add Dashboard** dialog is displayed.
8. Select a dashboard.
9. Enter a name in the relevant languages.
10. Click **Add**. The dashboard is added to the **Diagram** item.
11. Select the database in which the dashboard is to be displayed.
12. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.1.23.4 Remove a dashboard from the Diagram item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Diagram** item, click  **Edit**.
6. Select a dashboard.
7. Click  **Delete**. The dashboard is removed from the **Diagram** item.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.1.23.5 Add a dashboard to the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Dashboards** item, click  **Edit**.
6. Click **Add**. The **Add Dashboard** dialog is displayed.
7. Select a dashboard.
8. Enter a name in the relevant languages.
9. Click **Add**. The dashboard is added to the **Dashboards** item.
10. Select the database in which the dashboard is to be displayed.
11. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.1.23.6 Remove a dashboard from the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 625) or the default configuration set (page 626).

You cannot edit the **Classic** and the **Default** configuration set.

Prerequisite

You have the **Portal administrator** function privilege.

Procedure

1. Open a user-defined modification set for editing. (page 153)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer over the item you want to change, for example, **Process**.
4. Click  **Edit**. The **Edit fact sheet** page opens. All subordinate pages shown on the fact sheet are listed.
5. In the **Dashboards** item, click  **Edit**.
6. Select a dashboard.
7. Click  **Delete**. The dashboard is removed from the **Dashboards** item.
8. Click  **Back**.

For the portal to be displayed with this modification set, you need to select (page 152) the new modification set for display.

6.9.2 Manage dashboards and data feeds

If you have **Dashboard administrator** function privileges, you can access the **Dashboards & Data feed** area to manage dashboards and data feeds.

6.9.2.1 Open a dashboard

You can open an existing dashboard from the  Repository of ARIS Connect. The dashboard is displayed in view mode provided by the dashboard editor.

Prerequisite

- You have the **View** permission for the dashboard. See Manage dashboard permissions (page 397) for details.
- You have the **View** permission for the assigned data feeds. See Manage data feed permissions (page 457) for details.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To open a dashboard, click the relevant dashboard name.

The selected dashboard opens in view mode of the dashboard editor.

In edit mode, you can edit the dashboard (page 391) currently opened, provided you have the **Dashboard administrator** function privilege. Click  **Edit dashboard** in the main menu.

6.9.2.2 Create a dashboard

ARIS Connect allows you to create your own dashboards (page 461).

By default, dashboards and the relevant data feeds are provided in the  Repository of ARIS Connect.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. Click  **New**.
The dashboard editor is opened in edit mode.
6. Configure and save your dashboard using the dashboard editor (page 391).
7. Click  **Refresh**.

Your dashboard is created and available in the **Dashboards** list in the  Repository of ARIS Connect.

6.9.2.3 Delete a dashboard

You can delete an existing dashboard from the  Repository of ARIS Connect.

Warning

Deleted dashboards cannot be restored.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To delete a dashboard, move the mouse pointer over a dashboard in the dashboard list and click the  **Delete** icon in the corresponding row.
6. To delete one or more dashboards, select the dashboards you want to delete and click the  **Delete** icon on the toolbar.
7. Click **Yes** to confirm the deletion.

The selected dashboards are deleted.

6.9.2.4 Specify dashboard privileges in the Repository

You can specify dashboard view privileges in the  Repository of ARIS Connect. You can assign view privileges to individual users or to user groups. If you assign privileges to a user group, the privileges are automatically assigned to all members of that group.

All users and user groups with the **View** privilege for the dashboard are listed in the **Associated users/user groups** box. Initially, only the creator of the dashboard has the **View** privilege for the dashboard. All not yet assigned users and user groups are listed in the **Available users/users groups** box.

All users and user groups with the **View** privilege for the dashboard has automatically the **View** privilege for all associated assets of the dashboard, such as data feeds and aliases.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To specify dashboard privileges, move the mouse pointer over a dashboard in the dashboard list and click the  **Specify privileges** icon in the corresponding row.
6. Enter a term in the  filter box to filter the list of available users and user groups.
7. In the **Available users/users groups** box, select the users and user user groups you want to assign to the dashboard and click **Add**.
8. Click **Add all** to assign all available users and user groups to the dashboard.
9. In the **Associated users/user groups** box, select the users and user user groups from whom you want to revoke the **View** privilege and click **Remove**.
10. Click **Remove all** to revoke the **View** privilege of all users and user groups.
11. Click **OK**.

The selected users and user groups have now the **View** privileges for the dashboard and the associated assets.

6.9.2.5 Open a data feed

You can open an available data feed in the  Repository of ARIS Connect. The data feed is opened in the data feed editor.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To open a data feed, click the relevant data feed name.

The selected data feed opens in the data feed editor.

You can edit the data feed currently open using the data feed editor (page 451), provided you have the **Dashboard administrator** function privilege.

6.9.2.6 Create a data feed

ARIS Connect allows you to create your own data feeds (page 461).

By default, the available dashboards and the relevant data feeds are provided in the  Repository of ARIS Connect.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. Click  **New**.
The data feed editor is opened.
6. Configure and save your data feeds using the data feed editor (page 451).
7. Click  **Refresh**.

Your data feed is created and available in the **Data feeds** list in the  Repository of ARIS Connect.

6.9.2.7 Delete a data feed

You can delete an available data feed in the  Repository of ARIS Connect.

Warning

Deleted data feeds cannot be restored.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To delete a data feed, move the mouse pointer over a data feed in the data feed list and click the  **Delete** icon in the corresponding row.
6. To delete one or more data feeds, select the data feeds you want to delete and click the  **Delete** icon on the toolbar.
7. Click **Yes** to confirm the deletion.

The selected data feeds are deleted.

6.9.2.8 Specify data feed privileges

You can specify data feed view privileges in the  Repository of ARIS Connect. You can assign view privileges to individual users or to user groups. If you assign privileges to a user group, the privileges are automatically assigned to all members of that group.

All users and user groups with the **View** privilege for the data feed are listed in the **Associated users/user groups** box. Initially, only the creator of the data feed has the **View** privilege for the dashboard. All not yet assigned users and user groups are listed in the **Available users/users groups** box.

All users and user groups with the **View** privilege for the data feed has automatically the **View** privilege for all associated assets of the data feed, such as other data feeds and aliases.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To specify data feed privileges, move the mouse pointer over a data feed in the data feed list and click the  **Specify privileges** icon in the corresponding row.
6. Enter a term in the  filter box to filter the list of available users and user groups.
7. In the **Available users/users groups** box, select the users and user user groups you want to assign to the data feed and click **Add**.
8. Click **Add all** to assign all available users and user groups to the data feed.
9. In the **Associated users/user groups** box, select the users and user user groups from whom you want to revoke the **View** privilege and click **Remove**.
10. Click **Remove all** to revoke the **View** privilege of all users and user groups.
11. Click **OK**.

The selected users and user groups have now the **View** privileges for the data feed and the associated assets.

6.9.2.9 Use the dashboard editor

The dashboard editor as a graphical user interface is an easy-to-use tool to create, manage, and view your dashboards. The dashboard editor offers edit mode and view mode. In edit mode, you can create, edit and manage your dashboards. The view mode allows you to view and use your dashboards interactively.

- To use the edit mode, the **Dashboard administrator** function privilege is required.
- To display a dashboard in view mode, the **View** permission is required. See Manage dashboard permissions (page 397) for details.

6.9.2.9.1 Use dashboards in view mode

You can display and use your dashboards interactively in view mode.

To use a dashboard in view mode, you need the **View** permission for the dashboard. See Manage dashboard permissions (page 397) for details.

6.9.2.9.1.1 Display a dashboard in view mode

You can switch from edit mode to view mode in the dashboard editor. Your currently opened dashboards are displayed with real data in view mode.

Procedure

1. Create (page 390) or open (page 390) a dashboard in edit mode in the dashboard editor.
2. Click  **View dashboard** in the dashboard editor main menu.

The dashboard is displayed with real data in view mode in the dashboard editor.

To switch from view mode to edit mode, click  **Edit dashboard** in the main menu.

6.9.2.9.1.2 Use interactive filters in dashboards

You can use interactive filters for charts and tables if the relevant filter conditions have been defined for these widgets. You can set a filter by clicking a data element of a widget, for example, a data point in a line chart. The selected data element of this widget takes effect as a filter for all associated widgets.

MULTIPLE SELECTION

Some widgets allow you to select multiple values at the same time to filter other widgets. You can select, for example, multiple rows in a table or multiple data points in a chart. Multiple selection is available if the corresponding **Multiple selection** option is enabled for a widget. The widgets providing the **Multiple selection** option are Column chart (page 470), Bar chart (page 465), Pie chart (page 488), Grid (page 477), and List (page 486). The widget to be filtered must also support multiple selection. For details, see Define filters for widgets (page 439).

Procedure

1. Display a dashboard in dashboard view mode (page 383).
2. Click a data element of a widget, for example, a coordinate of a line chart or a cell in a table. The selected data element is applied as a filter to all associated widgets.
3. Click the  **Menu** icon > **Clear selection** to clear your filter settings. In charts, you can also click in the background of a widget to cancel the selection of your filter. The menu is available if the **Show menu** option is enabled for the widget.

The widgets are displayed with the filters selected.

You can define filters for specific widgets. See Define filters for widgets (page 439).

6.9.2.9.1.3 Use the filter panel of Process Mining context-based widgets

You can display and configure the filter panel in dashboard view mode.

Using the filter panel, you can filter widgets of a dashboard whose data are based on a Process Mining context. The filter panel replaces the (page 439) standard filter method used for non-context-based widgets. (page 384) The filter provides all text-based and filterable numeric data columns that are not yet assigned to any other context-based widget.

- Text-based filter criteria are displayed as list.
- Numeric filter criteria are provided as slider in the filter panel. The basic settings are automatically preconfigured, these are range, initial selection, step width, and numeric format. You can manually adjust the minimum and maximum values of the slider widget. See **Slider (page 495)** widget for details.

Prerequisites

The filter panel is enabled (page 405).

Procedure

1. Open a dashboard in dashboard view mode (page 376).
2. Click the << icon to show the filter panel on the right-hand side of the dashboard.
The panel is hidden by default and no filter columns are specified.
3. To hide the filter panel, click the >> icon.
4. If no filter is specified, add filter criteria to the filter panel.
 - a. Click the **Add filter** icon to add an initial filter.
 - b. Click the  **Filter settings** icon to display filter options.
 - c. Enter a term in the  **Search** box to filter the column list.
The list includes all data columns of text type that have not been assigned as filter columns to the Process Mining context-based widgets. See Assign data columns to Process Mining context-based widgets (page 402).
 - d. Enable the **Selected** option to display only the data columns that have already been selected.
 - e. Select the data columns you want to use as filter criteria.
 - f. Click **OK**.
Your settings are applied. An appropriate filter criterion is added to the filter panel for each selected data column.
5. Specify further filter criteria to be used in the panel.
 - a. Click **Edit filter panel**.
 - b. Click the  **Filter settings** icon to display filter options.
 - c. Enter a term in the  **Search** box to filter the values of a filter criterion.

- d. Enable the **Selected** option to display only the filter values that have already been selected.
 - e. Select the data columns you want to use as filter criteria.
 - f. You can use the filter criteria configured for context-based widgets (page 403) in the filter panel. As long as such a filter criterion is enabled in the filter panel, the filter criterion is not longer available in the widget. These filter criteria are hidden by default.
 1. Enable the option **Show configured context filters from dashboard widgets**. The filter criteria are displayed and marked in bold.
 2. Select the context filter criteria that you want to use in the filter panel.
 - g. Click **OK**.

Your settings are applied. An appropriate filter criterion is added to the filter panel for each selected data column.
6. Click the name of a text-base filter criterion to sort the values of the criterion.
 7. Select the individual values of the text-base criteria by which you want to filter the widgets.
 8. Adjust the slider using the mouse pointer to select the numeric filter values. You can adjust the minimum and maximum values and you can move the entire selected data range with the mouse pointer.

The filter panel is configured and the filter values for the widgets are specified. The values of all widgets are filtered according to your filter settings.

6.9.2.9.1.4 Refresh data of widgets

You can manually refresh the data currently displayed in a widget.

The data is extracted from the cache or recalculated if the refresh rate of the data source has expired. The default refresh rate value is 12 h. You can set the **Refresh rate** in the Assign data (page 407) dialog.

The use of the manual **Refresh** option is independent of the **Auto Refresh** function.

Procedure

1. Display a dashboard in dashboard view mode. (page 383)
2. Click a widget.
3. Click the  **Menu** icon > **Refresh**.

The widgets are displayed with the refreshed data.

Most of the widgets provide the **Auto refresh** option. Use this option to enable automatic data retrieval for a widget. The source data is reimported and recalculated automatically based on the refresh rate set. The **Auto refresh** option is available on the **Config** tab in the widget properties.

To display the properties dialog in dashboard edit mode () , click an inserted widget.

6.9.2.9.1.5 Pause automatic data refreshing

You can pause the automatic refreshing of widget data.

The data is automatically extracted from the cache or recalculated if the refresh rate of the data source has expired. The default refresh rate value is 12 h. You can set the **Refresh rate** in the Assign data (page 407) dialog.

Procedure

1. Display a dashboard in dashboard view mode. (page 383)
2. Click a widget.
3. Click the  **Menu** icon > **Pause** to pause the automatic data update.
4. Click the  **Menu** icon > **Resume** to restart the automatic data update.

The automatic refreshing of widget data is paused.

Most of the widgets provide the **Auto refresh** option. Use this option to enable automatic data retrieval for a widget. The source data is reimported and recalculated automatically based on the refresh rate set. The **Auto refresh** option is available on the **Config** tab in the widget properties.

To display the properties dialog in dashboard edit mode () , click an inserted widget.

6.9.2.9.1.6 Change column width and sort order

In dashboard view mode, you can change the initial table column width and sort order of a **Grid** widget.

Procedure

1. Open a dashboard in view mode. (page 383)
2. Click a table column header of an inserted **Grid** widget.

The first click changes the sort order to 'ascending', the second click to 'descending', and the third click to 'unsorted' if this was the initial state.

You can sort several columns simultaneously. To select more than one column, press the **Shift** key and click the required column headings. The rows are sorted by the first column header.
3. To change the width of a column, drag the boundary on the right side of the column header accordingly using the mouse.

Your settings are applied.

6.9.2.9.1.7 Save widget data as a CSV file

You can save the current data visualized in a widget as a CSV file.

- The data are saved in the default data format or in the format set in data assignment (page 407) (Assign data 2/2 dialog).
- The aggregation and the value rounding are taken from the column configuration set in data assignment (page 407) on page 78 (Assign data 2/2 dialog).
- The sorting is taken from the data feed result based on the feed definition.
- The default separator is ,.
- The default masking is ".

Procedure

1. Open a dashboard in dashboard view mode. (page 383)
2. Click a widget.
3. Click the  **Menu** icon.

The menu is available if the **Widget menu** option is enabled for the widget.

4. Click **Save as CSV**.
5. Make your settings.

Depending on which Web browser you are using, you can select an application that you want to open to view the data, or you can save the data directly as a CSV file.

The widget data is saved as a CSV file.

Note that CSV files can pose a security risk when they are opened in MS Excel. Certain characters in the CSV file can be used for unwanted code execution.

Enclose all values beginning with =, +, -, or @ in single quotation mark before exporting as CSV file. For details, refer to

<https://www.contextis.com//resources/blog/comma-separated-vulnerabilities/>.

6.9.2.9.1.8 Use lists for multiple selection

You can use the List widget for the multiple selection of values.

In particular, a dashboard can provide lists for selecting individual or multiple values. The List widget (page 486) provides the multiple selection option by default. The values selected are mainly used to filter values of other widgets (page 384).

A list can contain one or two columns. The main column on the left can be used to sort the list, for example, it can contain product names. The second column provides only additional values, such as the product prices. A list also provides check boxes to select multiple values if the **Multiple selection** option is enabled for the widget.

Procedure

1. Open a dashboard in view mode. (page 383)
2. Click a row in a **List** widget to select the contained value.
3. Click a row, press the Shift key, and click another row to select multiple values at the same time.
4. Click the check box in the column header to select all values in the list. Click the check box again to clear all list values.
5. Click the name in the header of the main column to sort the list.
The first click changes the sort order to ascending, the second click to descending, and the third click to unsorted, if this was the initial state.
6. You can filter the list values.
 - a. Click the  **Search** icon in the list header.
 - b. Enter your filter term in the **Search** box.
 - c. Click **Selected** to show only the selected values in the filtered list.

Your settings are applied.

Multiple selection is also available in the widgets Column chart (page 470), Bar chart (page 465), Pie chart (page 488), and Grid (page 477).

Assign data columns to lists

6.9.2.9.2 Manage dashboards

In the dashboard editor, you can manage your dashboards in edit mode.

6.9.2.9.2.1 Open a dashboard in the dashboard editor

In the dashboard editor, you can open an existing dashboard in edit mode.

Procedure

1. Click **Manage > Open** in the dashboard editor main menu.
2. Select a dashboard in the list of available dashboards.
You can also search for a dashboard using your keyboard.
3. Click **OK**.

The selected dashboard opens in the dashboard editor.

6.9.2.9.2.2 Create a dashboard in the dashboard editor

In the dashboard editor, you can create and configure your dashboards.

Procedure

1. Click **Manage > Create dashboard** in the dashboard editor main menu.
A new dashboard opens.
2. Configure your dashboard.
3. Click **Manage > Save** in the dashboard main menu. The **Properties** dialog of the dashboard opens.
4. Enter a dashboard name in the **Name** box.
5. Optionally, enter a dashboard description in the **Description** box.
6. Optionally, enter comma-separated search tags in the **Tags** box. The search tags help you to find your dashboard when you are using the search function.
7. Click **OK**.

Your changes are applied.

You can edit the dashboard properties (page 397) later as needed.

To display the dashboard in view mode, click  **View dashboard** in the main menu.

6.9.2.9.2.3 Use smart dashboard edit mode

The edit mode of the dashboard editor is an easy-to-use tool to create, manage and edit your dashboards.

The edit mode provides two different dashboard workspaces, that is, a smart dashboard and a fixed-grid dashboard.

Unlike a fixed-grid dashboard, the size of a smart dashboard is automatically adapted to the screen resolutions in dashboard view mode. Depending on the space available, widgets are stretched or compressed. In case there is not enough space available, widgets are automatically re-positioned. See Use dashboards in view mode (page 383) for details.

The smart dashboard workspace is displayed by default when you create a new dashboard (page 390) or when you open an existing smart dashboard.

The workspace is divided in three rows and 12 columns in which you can place your widgets (page 407).

6.9.2.9.2.3.1 Insert new row

You can insert a new row in the dashboard.

Procedure

1. Click a row in the smart dashboard workspace.
2. Click **Insert row** in the properties dialog of the row.

A new line is inserted below the row selected.

6.9.2.9.2.3.2 Delete a row

You can delete a row from the dashboard.

Procedure

1. Click a row in the smart dashboard workspace.
2. Click **Delete** in the properties dialog of the row.

The row is deleted.

6.9.2.9.2.3.3 Resize a row

You can change the height of a row.

Procedure

1. Move the cursor to the lower boundary of a row. The cursor will change to a resize symbol.
2. Click and drag the row boundary using your mouse. The height of all widgets located in the row is automatically resized.

The row height is resized.

6.9.2.9.2.3.4 Lock row height

You can lock the row height set in the dashboard workspace.

By default, the row height is adapted dynamically to the screen resolution of the dashboard view mode and therefore the size of the widgets contained in the dashboard is adapted as well. If you lock the row height, the widget size is also fixed.

Procedure

1. Click a row in the workspace.
2. Enable the **Lock height** option in the properties dialog of the row.

The row height is fixed.

6.9.2.9.2.3.5 Change a row order

You can change the row order on the smart dashboard.

Procedure

1. Click a row in the workspace.
2. Move the row selected up or down using drag and drop

The row order is changed.

6.9.2.9.2.3.6 Place a widget

You can place a widget in any empty field in the dashboard workspace.

Procedure

1. Click a widget in the dashboard workspace.
2. Move the widget selected using drag and drop and place it in an empty field on the dashboard.

You cannot place more than one widget in one field.

The widget is placed in an empty field.

6.9.2.9.2.3.7 Resize widgets

You can scale the size of widgets up or down.

Procedure

1. Click a widget on the dashboard. The widget is displayed with a frame.
2. Resize the widget width by dragging the anchor point of the frame with your mouse pointer.
A widget width can be resized across multiple empty fields.
3. Resize the widget height by resizing the height of the row containing the widget. To resize the row height, drag the upper or lower row border with your mouse pointer.

The height of all widgets inserted into the same row is resized automatically.

The selected widgets are resized.

6.9.2.9.2.3.8 Avoid line break in dashboard view mode

You can avoid the automatic line break of the widgets if there is not enough space available in dashboard view mode.

Procedure

1. Click a row in the workspace.
2. Enable the **Do not break** option in the properties dialog of the row.

In view mode, the widgets are compressed and kept in the same row.

6.9.2.9.2.3.9 Group widgets

You can group widgets on the dashboard using the Layout group.

The **Layout group** () consists of two rows and 12 columns. Grouped widgets can be handled as one single widget. You can insert, move, resize, or copy a layout group like any other widget. The **Layout group** is available in the widget bar.

Procedure

1. Insert the  **Layout group** into the dashboard using drag and drop. See Insert widgets in a dashboard (page 407).
2. Resize the layout group. See Resize widgets (page 443).
3. Insert widgets in the layout group.

The layout group is placed on the dashboard.

Use the selection mode if a layout group overlaps its host cells completely and the underlying row and cells cannot be selected. Click **Options > Selection mode ON** in the dashboard main menu.

6.9.2.9.2.3.10 Set row style

You can change the style applied to a single row. The selected style specifies, for example, the background color of the row.

Procedure

1. Click a row in the workspace.
You can also select a single row in a layout group
2. Select a style template in the **Style** drop-down menu in the row properties dialog.
- 3.

The row style is set.

6.9.2.9.2.3.11 Set layout group style

You can change the style applied to a layout group. The selected style specifies, for example, the background color of the layout group.

Procedure

1. Click **Group** inside a layout group.
2. Select a style template in the **Style** drop-down menu in the layout group properties dialog.

The layout group style is set.

6.9.2.9.2.3.12 Set dashboard tab style

You can change the style applied to a dashboard tab. The selected style specifies, for example, the background color of the tab.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click the  **Show menu** icon beside the tab title of the relevant tab.
3. Click the **Style** selection box and select a style.

The dashboard tab style is set.

6.9.2.9.2.3.13 Switch to fixed-grid workspace

You can switch from the smart dashboard workspace to the fixed-grid workspace.

You can only switch if you have not already inserted a widget in the smart dashboard, and you cannot switch from a fixed-grid dashboard to a smart dashboard workspace. If a dashboard was created using the fixed-grid workspace, it is automatically opened in the fixed-grid workspace.

Procedure

1. Create a dashboard (page 390).
2. Click **Manage > Switch to fixed grid** in the dashboard main menu.

The fixed-grid workspace is displayed.

6.9.2.9.2.4 Edit a dashboard

You can edit existing dashboards in the dashboard editor.

Depending on the dashboard edit mode used to create the dashboard, the dashboard selected is opened in smart dashboard mode or fixed-grid mode. See Using smart dashboard edit mode (page 391) for details.

Procedure

1. Click **Manage > Open** in the dashboard editor main menu.
2. Select an **Available dashboard** and click **OK**. The selected dashboard is opened in edit mode in the dashboard editor.

A warning message is displayed if local changes exist for the dashboard selected. To open the dashboard with the local changes, click **Continue with unsaved local version**.

3. Configure the dashboard.
4. Click **Manage > Save** in the dashboard main menu.

Your changes are applied.

To display the dashboard in view mode, click the  **View dashboard** icon in the dashboard main menu.

6.9.2.9.2.5 Edit dashboard properties

You can edit the properties (name, description and tags) of existing dashboards in the dashboard editor.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Manage > Properties** in the dashboard main menu. The dashboard **Properties** dialog is displayed.
3. The dashboard name is mandatory and is entered in the **Name** box.
4. The dashboard description is optional and entered in the **Description** box.
5. Comma-separated search tags are optional and are entered in the **Tags** box.
6. Click **OK**.
7. Click **Manage > Save** in the dashboard main menu.

Your changes are applied.

6.9.2.9.2.6 Delete a dashboard

You can delete dashboards from the dashboard editor.

Warning

Deleted dashboards cannot be restored.

Procedure

1. Open a dashboard to be deleted. (page 395)
2. Click **Manage > Delete** in the dashboard main menu.
3. Click **Yes**.

The selected dashboard is deleted.

6.9.2.9.2.7 Manage dashboard permissions

You can manage dashboard permissions in the dashboard editor. You can assign specific access permissions to individual users or to user groups. If you assign permissions to a user group, the permissions are automatically assigned to all members of that group.

For new users and user groups of a dashboard, you can automatically assign view permissions to all associated assets of the dashboard, such as data feeds and aliases. It is not required to assign the permissions to each asset manually. A user requires the view permission for all associated assets to display the corresponding source data in the dashboard. If view permissions are not assigned to all associated assets, a corresponding option to assign the missing view permissions is additionally displayed in the dialog.

You can assign the following access permissions for saved dashboards only.

- **Edit**
Users can display and edit dashboards in the dashboard editor.
- **View**
Users can view dashboards in the dashboard editor view mode.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Manage > Permissions** in the dashboard main menu. The **Manage dashboard permissions** dialog is displayed.
3. Enter a term in the search box and click **Search**. Clicking **Search** without any input values results in a list of all users and groups.
4. Click **Show MashZone NextGen default groups** to show only default users or user groups in the **Search results** box.
5. Drag a user or a user group from the **Search result** box and drop it on the **Principals with permissions** box.
By default, the creator of the dashboard already exists in the **Principals with permissions** list.
6. Enable or disable the **View** or **Edit** permissions of a user or a user group.
7. Click **Save**.
The button is available if the option **Assign the relevant view permissions to related assets** is disabled, or view permissions are already assigned to all associated assets.
8. Enable the option **Assign the relevant view permissions to related assets** to assign the required view permissions to all associated data feeds and aliases.
The option is available if view permissions are not assigned to all associated assets.
9. Click **Next**.
A new dialog opens. The first list in the dialog contains the assets whose view permissions you can update. The second list contains the assets whose view permissions you cannot change. At least one of the following prerequisites must apply to change the view permissions for data feeds or aliases.

You are an administrator who can edit the permissions for aliases.

You have permissions to view and to edit data feeds.

You have permissions to create and to edit data feeds.

Your changes are applied.

If you want to remove a user or a user group from the **Principals with permissions** list, click the **Delete** icon. Deleted permissions for a dashboard do not affect the associated data feeds or aliases.

6.9.2.9.2.8 Change dashboard style template

You can assign another style template to an available dashboard. Style templates allow you to customize the look and feel of your dashboards, for example, colors schemes, fonts or background color.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Manage > Change style template** in the dashboard main menu.
3. Select a style template in the **Dashboard** drop-down menu.
4. Click **Update**.
5. Click **OK**.

The selected style template is applied to the current dashboard.

6.9.2.9.2.9 Use the Process Mining context

The Process Mining context is an easy way to use PPM analyses as data sources for your widgets. With a Process Mining context, you can easily create dashboards based on data from a PPM sever. This allows you to directly access analytics results, such as measures and dimensions, without creating any favorite in PPM itself. In addition, dashboards based on a Process Mining context are automatically filterable, that is, it is no longer required to manually define filters across different widgets.

6.9.2.9.2.9.1 Create a Process Mining context

You can create a Process Mining context (page 398) for a new dashboard or for an already existing dashboard. The Process Mining context is automatically assigned to all new widgets on the dashboard. Widgets that have already been inserted on the dashboard retain their assigned data sources.

Prerequisites

- A PPM connection has been created for each PPM system to be used.
- The appropriate PPM client server must be running to connect to PPM. See the PPM documentation **PPM Installation** for details.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Options > Process Mining > Create context** on the dashboard main menu. The **Create Process Mining context** wizard opens.
3. Select an available PPM connection from the **PPM connection (alias)** drop-down menu. The alias is the name of the PPM connection that contains the PPM client connection data defined in ARIS Connect. See Configure PPM server (page 353) for details. Only PPM connections for which you have the appropriate permissions are displayed.
4. Specify the authentication details to connect to the PPM client server. Select one of the following options.
 - a. Enable the **Single Sign-On** option to log in to the PPM client server via single sign-on (SSO) using your current ARIS Connect credentials.
 - b. Enable the HTTP basic authentication and enter the required user name and password of a PPM user.
5. Click **Next**.

Your settings are applied.
6. Select the language in which you want to display the PPM data.

Only the languages specified for the PPM client of the selected PPM connection are available.
7. Select the processes to be analyzed in the **Process type** drop-down menu.

The menu provides the process types specified for the PPM client of the selected PPM connection. Depending on the process type you can select various measures and dimensions.
8. Select the relation to be analyzed from the **Relation** drop-down menu.

The menu provides the relations specified for the PPM client of the selected PPM connection.
9. Select the measures and dimensions to be analyzed.

The measures and dimensions provided depend on the process type you have selected. By default, all available measures and dimensions are preselected.

 - a. Click **Measures** and select the required measures.
 - b. Click **Dimensions** and select the required dimensions.
10. Click **OK** to exit the **Create Process Mining context** wizard.

Your settings are applied. For each element selected, for example, measures and dimensions, the corresponding data columns are created in the Process Mining context. You can now use the context as a data source for your widgets.

11. Click **Next** to manually edit the data columns of the context.
12. Enter a term in the **Search** field to filter the data columns list.
13. If required, you can add a new data column to the Process Mining context.
 - a. Click **Add column**.
 - b. Select the data column type, that is, measure or dimension, from the **Type** drop-down menu.
 - c. Select a measure or dimension from the **Measure** or **Dimension** drop-down menu.
 - d. Enter a column name.
 - e. Click **Add**.

The new data column is added.

14. Click the **Edit** icon to change the settings of a data column. Make your settings and click **Change**.

Besides the type, all other properties can be changed.

15. Click the **Copy** icon to create a new data column based on the copy of the selected one. You must change at least one property. Make your settings and click **Add**.
16. Click the **Delete** icon to delete a data column from the Process Mining context.
17. Click **OK** to exit the **Create Process Mining context** wizard.

Your settings are applied.

The data columns are added to the Process Mining context and can now be assigned as data source columns.

6.9.2.9.2.9.2 Edit a Process Mining context

You can change the settings of the Process Mining context (page 398) configured for a dashboard. Changes in the Process Mining context settings can cause an incorrect data source configuration. Therefore, the data on the dashboard might not be displayed correctly.

If the dashboard uses an older context, you may need to manually migrate the context to the current context version. See [Migrate context-based dashboard](#).

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Options** > **Process Mining** > **Edit context** on the dashboard main menu.

The last page of the **Create Process Mining context** wizard opens. The page lists all configured data columns of the Process Mining context. See [Create a Process Mining context](#) (page 399). By clicking **Previous**, you can navigate to page two and one of the wizard and change the settings.
3. Select an available PPM connection from the **PPM connection (alias)** drop-down menu.

The alias is the name of the PPM connection that contains the PPM client connection data defined in ARIS Connect. See [Configure PPM server](#) (page 353) for details. Only PPM connections for which you have the appropriate permissions are displayed.
4. Enter a term in the **Search** field to filter the data column list.
5. If required, you can add a new data column to the Process Mining context.
 - a. Click **Add column**.
 - b. Select the data column type, that is, measure or dimension, from the **Type** drop-down menu.
 - c. Select a measure or dimension from the **Measure** or **Dimension** drop-down menu.
 - d. Enter a column name.
 - e. Click **Add**.

The new data column is created.
6. Click the **Edit** icon to change the settings of a data column. Make your settings and click **Change**.

You can change all properties except the type.
7. Click the **Copy** icon to create a new data column based on the copy of the selected one. You must change at least one property. Make your settings and click **Add**.
8. Click the **Delete** icon to delete a data column from the Process Mining context.
9. Click **OK** to exit the wizard.

Your settings are applied.

If new data columns are added to the Process Mining context, they can now be assigned as data source columns.

6.9.2.9.2.9.3 Delete a Process Mining context

You can delete a Process Mining context (page 398) configured for a dashboard.

If you delete the Process Mining context of a dashboard, the corresponding data is no longer displayed. The configured context cannot be restored.

Procedure

1. Open a dashboard in the dashboard editor (page 390).
2. Click **Options** > **Process Mining** > **Delete context** in the dashboard main menu.
3. Click **Yes**.

The Process Mining context is deleted.

6.9.2.9.2.9.4 Assign data columns to Process Mining context-based widgets

You can assign the data columns provided by a Process Mining context to widgets.

The Process Mining context is automatically assigned as a data source to all new widgets on the dashboard. You do not need to assign the data source to each widget manually (Assign data (1/2) dialog). Widgets that have already been inserted on the dashboard retain their assigned data sources. The data columns that are provided by the Process Mining context depend on your context configuration (page 399). The procedure to assign data columns is similar to the standard method for assigning data columns to widgets (page 407) (Assign data (2/2) dialog). If you do not want to use context-based data columns, you can assign any other data source provided.

Prerequisites

You have created a Process Mining context for the dashboard (page 399).

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click an inserted widget on the dashboard. The relevant properties dialog is displayed.
3. Click  **Assign data** to edit the data source assignment.

The Assign data (2/2) dialog opens.

4. Assign the data columns of the Process Mining context to the widget elements using drag and drop.

For details on the assignment of data columns to specific widgets, see the chapter Assign data sources to widgets (page 407) and the following chapters.

5. Click **OK** to save your settings.

The data columns are assigned to the widget elements.

- If required, you can adjust the list of data columns provided for the data columns assignment. Click **Edit context** to edit the data columns specified in the Process Mining context.

- If required, you can change the data source assigned. Click **Use other data** to assign another data source. The **Assign data (1/2)** dialog opens. For details on the assignment of a data source to a widget, see the chapter Assign data sources to widgets (page 407). If you assign another data source, you cannot reassign the Process Mining context to the widget.

6.9.2.9.2.9.5 Configure filters for Process Mining context-based widgets

You can configure filter settings for Process Mining context-based widgets.

All widgets on a dashboard that use the Process Mining context are automatically filtered by the selection that was specified for any context-based widget. That is, if you select a data point in a context-based widget, such as a column in a chart, all other context-based widgets on the dashboard are filtered by this selection. The selections are directly passed to PPM and the corresponding filtered data is returned to the dashboard and used as a filter for the relevant widgets.

By default, the filter conditions are also automatically set when you assign data columns of the Process Mining context to the widgets (page 402). Data columns of text and date type assigned to the widget elements are automatically used as filter columns. You do not have to configure the filter conditions manually.

A data column can be used only once in a dashboard as a filter column. Therefore, the filter column is enabled only once on the dashboard to filter across all widgets. By default, this filter column is provided by the widget to which the data column is assigned first. The filter columns used by a widget are listed on the **Context** tab in the properties dialog of the widget. Here you can enable or disable the filter columns that are based on the Process Mining context.

Prerequisites

You have created a Process Mining context for the dashboard (page 399).

Procedure

1. Open a dashboard in the dashboard editor (page 390).
2. Assign data columns to Process Mining context-based widgets (page 402).
3. Click an inserted widget on the dashboard. The relevant properties dialog is displayed.
4. Click **Context** in the properties dialog.

The **Context** tab is available when you have assigned data columns to the elements of the widget. The tab lists all data columns that are assigned to any context-based widget on the dashboard and that can be used as filter columns. The filter columns that can be used by the selected widget are enabled. The filter columns that are used by other widgets are disabled.

5. Enable a filter column for a widget.

You can enable a filter column for a widget that is already used by another widget.

- a. Move the mouse pointer over the  icon to display a tool tip. The tool tip shows the name of the widget that uses the filter column.

- b. Click the name of the widget that uses the filter column. The **Context** tab of the referenced widget opens.
 - c. Disable the filter column that you want to reassign.
 - d. On the dashboard, click the widget to which you want to assign the filter column.
 - e. Click **Context** in the corresponding properties dialog.
 - f. Enable the filter column that you want to use for the selected widget.
6. Cancel the selection of a filter column to disable it for filtering, if required.

The filters are configured and can be used in view mode.

You can use the filter criteria configured for context-based widgets in the filter panel (page 405). As long as such a filter criterion is enabled in the filter panel, the filter criterion is not longer available in the widget. In this case you can only select the filter values in the filter panel and not in the widget. For details, see Use the filter panel of Process Mining context-based widgets (page 385).

6.9.2.9.2.9.5.1 Configure a date filter for a Process Mining context

You can configure a filter column of **date** type for a Process Mining context-based dashboard. You can use the Date filter (page 472) widget to specify a filter column of date type for a Process Mining context-based dashboard. Only one context column of date type can be specified for filtering.

Procedure

1. Click a Date filter widget on the dashboard. The relevant properties dialog is displayed.
2. Click **Context** in the properties dialog to open the tab.
3. Click the drop-down menu and select a filter column.

The menu provides all filterable context columns of date type. **None** is selected if a data column of date type is already used in another widget as a filter column. If you select a filter column from the drop-down menu, the column is used only by the **Date filter** widget.

The filter column is enabled for the **Date filter** widget and can be used in view mode.

6.9.2.9.2.9.6 Enable the filter panel

You can enable the filter panel for a Process Mining context-based dashboard.

Prerequisites

You have created a Process Mining context for the dashboard (page 399).

Procedure

1. Open a dashboard in the dashboard editor (page 390).
2. Click **Options > Process Mining > Filter panel** on the dashboard main menu.

The **Filter panel** option is available if you have created a Process Mining context (page 399).

The filter panel is enabled and available in view mode.

You can configure the filter panel in dashboard edit mode.

You can configure and use the panel for filtering in dashboard view mode. (page 385)

Warning

If you disable the filter panel, all your settings are lost.

6.9.2.9.3 Configure widgets

You can configure the visualization and the behavior for all widgets. Additionally, you can assign data sources and set filters for most widgets.

Depending on the widget type, for example, line chart, grid, or image, various options are available.

The appendix lists all available widgets (page 464) and the relevant configurable parameters:

-  Line chart (page 484)
-  Column chart (page 470)
-  Bar chart (page 465)
-  Pie chart (page 488)
-  Bubble chart (page 467)
-  Grid (page 477)
-  Circular gauge chart (page 469)
-  Horizontal and vertical gauge chart (page 478)
-  Traffic light (page 500)
-  Drop-down box (page 474)
-  Input field (page 481)
-  Image (page 480)
-  Label (page 483)
-  Function flow diagram (page 475)
-  Jump to PPM (page 498)

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. The relevant widget properties dialog is displayed.
3. Click  **Assign data** to edit the data source assignment. See Assign data sources to widgets (page 407) for details.
4. Click  **Configure filter** to specify filter conditions. See Define filters for widgets (page 439) for details.
5. Click the **Config** tab and set the widget display options. See the list of widgets (page 464) for details.
6. Specify **Actions** for the widget, if required. See Specify actions for widgets (page 441) for details.
7. Specify **URL selections** for the widget, if required. See Use dynamic URL selection (page 449) for details.

Your settings are applied.

6.9.2.9.3.1 Insert widgets in a dashboard

Using widgets you can create your individual dashboards and visualize your source data interactively. The dashboard editor provides you with various widgets, for example, line chart, bar chart, speedometer chart, grid, or input field.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget icon in the widget bar. The widget selected is inserted as a blank box on the dashboard and placed in the next empty field. The relevant widget properties dialog is displayed.

Alternatively, place the widget using drag and drop in any empty field on the dashboard. The relevant widget properties dialog is displayed.

3. Click the widget inserted and place it in a empty field on the dashboard using drag and drop. The widget selected is inserted and placed on the dashboard.

6.9.2.9.3.2 Assign data sources to widgets

Before you can display content in a widget, you must first assign a data source to this widget. You can define dynamical and reusable input parameters for several data sources, for example, XML, JSON, or ARIS Table. See Create input parameters (page 436). Data sources are not required for **Input field** and **Image** widgets.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. The relevant properties dialog is displayed.
3. Click  **Assign data** to edit the data source assignment.

The **Assign data (1/2)** dialog is displayed. Here you can edit the **Data flow** and create dynamic **Input parameters** for the widget selected. The **Data flow** box shows an overview of the data source configuration.

4. Optionally, you can create input parameters for the selected widget.
Input parameters are dynamic and reusable parameters used in several data source operators and data transformation operators. See Create input parameters (page 436).
5. Select a data source operator in the **Add a data source** bar and specify your settings. See Data source operators (page 501) for a list of available data source operators.
6. In addition to the data source operator you can add further operators to transform the source data. In the **Add data operations** bar, select a data transformation operator, for example, **Change data type**, and specify the settings.

See Data transformation operators (page 521) for a list of available data transformation operators.

7. Click the  **Calculate preview** icon of an operator to display a preview of the transformed source data of the operator. This allows you to track all data changes step by step.
8. Click **Next**.
The **Assign data (2/2)** dialog is displayed.
9. If you want to return to the **Assign data (1/2)** dialog to change the data source settings, click **Previous**.

The data source and transformation operators are assigned to the selected widget.

To display data in a widget (for example, line chart) you must assign the relevant data source columns to the required widget elements. In the **Assign data (2/2)** dialog you can assign data source columns to the individual widget elements. For example, you can assign separate columns to the chart axes as a dimension (X-axis) or KPI (Y-axis).

6.9.2.9.3.2.1 Assign data columns to line, column or bar charts

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

In a line chart (page 484), column chart (page 470), or bar chart (page 465), you can display one dimension (X-axis) and several KPIs (Y-axis), or two dimensions (x-axis and partition) and one KPI (Y-axis).

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click an inserted widget on the dashboard. The relevant properties dialog is displayed.
2. Click  **Assign data** to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a **Data column** as a dimension to the **X-axis** using drag and drop.
4. Assign one or more **Data columns** as KPIs to the **Y-axis** using drag and drop.
If you have assigned a column to the **X-axis** and a column to the **Partition**, you cannot assign more than one column to the **Y-axis**.
5. Optionally, assign a **Data column** as a second dimension to the **Partition** using drag and drop.
If you have assigned more than a column to the **Y-axis** the **Partition** is no longer available.
6. Optionally, assign one or more columns to the **More columns (invisible)** element using drag and drop. The columns are not displayed in the widget. They are used for filtering widgets only. See Define filters for widgets (page 439) for details.

The data source columns are assigned to the widget elements.

6.9.2.9.3.2.1.1 Set properties of widget elements

For each widget element, such as axis, dimensions or measures, you can edit the settings, for example, axis title, display name or format.

Various settings are available depending on the data type of the assigned data source column. See the Options list below for details.

Procedure

1. Click a source column assigned to the **X-axis** and specify the axis and column settings.
2. Click **Y-axis** to specify the axis settings.
 - a. Click the **Text** tab to specify the **Axis title** and **Axis format**.
 - b. Click the **Data range** tab to limit the KPI value range.
3. Click a source column assigned to the **Y-axis** and specify the settings.
4. Click the source column assigned to the **Partition** and specify the settings.
5. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
6. Click **Coloring** and then click the **Thresholds** tab to specify the KPI thresholds. See Configure KPI thresholds (page 411) for details.
7. Click **Coloring** and then click the **Rating** tab to specify the KPI rating. See Configure KPI rating (page 412) for details.
8. Click **OK** to save your settings and to close the dialog.

The chart is displayed in the dashboard with real data of the assigned data source.

Options list

Option	Description
Axis title	Title of the X- or Y-axis. Enable the title field and enter an Axis title . By default, the Automatic option is selected and the axis title consists of the concatenated names of the assigned columns.
Axis format	Output format of the X- or Y-axis. The selected format overwrites the formats of the assigned columns. By default, Auto is selected and the individual formats are used for tooltips. Optionally, you can add a prefix or postfix to the format, for example, \$ 1,234 or 1,234 mm.
Display name (data point)	New column name displayed in the widget, for example, used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, for example, used for data points or tool tip. Available for columns of date and numeric type.
Sorting	Sorts the labels of the X-axis data points in ascending or descending

Option	Description
	order or it sorts the labels of the X-axis data points according to the order of a data column that is assigned to the chart. The option is not available in a line chart if a date column is assigned to the X-axis. The "Sort by" option is not available if a partition is assigned.
Sort by	Sorts the labels of the X-axis data points by any column assigned to the chart. The option is not available if a column is assigned to the Partition .
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Text tab	Enables you to specify the Axis title and Axis format .
Data range tab	Enables you to specify the minimum value (From) and the maximum value (To) of the KPI value range. If the values are not set the values are calculated automatically. You can enter specific values manually or assign data source columns for a dynamic value assignment using drag and drop.
Coloring	Enables you to specify KPI thresholds and ratings. You can set the background or the graphic color depending on the KPI values.
Thresholds tab	Enables you to specify the thresholds values range and to set the background and graphic color accordingly. You must assign at least one KPI to the Y-axis.
Rating tab	Enables you to specify the KPI rating and to set the data point color accordingly. You must assign a single KPI to the Y-axis.

6.9.2.9.3.2.1.2 Configure KPI thresholds

You can define thresholds for numeric and text KPIs to display their status. A colored background and graphic show the threshold range in which a KPI value is located.

Procedure

1. Click **Coloring**.
 2. Click **Thresholds** to specify the KPI thresholds.
The tab is only available if at least one column is assigned to the Y-axis.
 3. Click **Background** to set the chart background color or click **Graphic** to set the color scheme.
The **Graphic** tab is only available if a single KPI is assigned to the Y-axis.
 4. Click a **Color** box to select a background color for each threshold.
 5. Select an operator for each threshold to define the KPI value range, for example, < (less than).
 6. Enter a value for each threshold.
You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only numeric values are valid as dynamic threshold values. Assign the required numeric data column from the data source to a threshold field using drag and drop.
 7. Click the **+** **Plus** button to add a threshold or click the **-** **Minus** button to remove a threshold.
 8. Select a threshold view style in the **Style** drop-down menu.
This option is only available for the background.
 9. Enable the **Colorize axis labels** to apply the specified color scheme to the axis labels.
- The thresholds are configured for the selected widget.

6.9.2.9.3.2.1.3 Configure KPI rating

You can define a rating for numeric KPIs to display their status. A colored data point shows the rating range in which a KPI value is located.

For example, you can color the ten poorest or worst KPI values, either as an absolute or as a percentage rating.

Prerequisites

You have assigned a single KPI to the Y-axis.

Procedure

1. Click **Coloring**.
 2. Click **Rating** to specify the KPI rating.
The tab is only available if a single column is assigned to the Y-axis.
 3. Enable the **Absolute** or **Percentage** option to set an absolute or a percentage rating, for example, to color the top three or 30% KPI values.
The highest value is considered as 100%
 4. Click a **Color** box to select a color for each rating range.
 5. Select **Top** or **Bottom** in the drop-down menu to assign the selected color to the best respectively the poorest KPI values.
 6. Enter a value for the rating range, for example, 5 for the five best KPI values.
 7. Click the **+** **Plus** button to add a rating range or click the **-** **Minus** button to remove a rating range.
 8. To color the remaining, unassigned KPI values, enable the **Others** option and select a color.
 9. Enable the **Colorize axis labels** to apply the specified color scheme to the axis labels.
- The rating is configured for the selected widget.

6.9.2.9.3.2.2 Assign data columns to pie charts

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A pie chart (page 488) can display one numeric KPI iterated via a dimension (text or date dimension).

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click an inserted widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a numeric **Data column** to the **KPI** using drag and drop.
4. Assign a text or date **Data column** as a dimension to the **Partition** using drag and drop.
5. Optionally, assign one or more columns to the **More columns (invisible)** element using drag and drop. The columns are not displayed in the widget. They are used for filtering widgets only. See Define filters for widgets (page 439) for details.

The data source columns are assigned to the widget elements.

6.9.2.9.3.2.2.1 Set properties of widget elements

You can edit the settings, for example, display name or format, for each widget element, such as measure or dimension.

Various settings are available depending on the data type of the assigned data source column. See the Option list below for details.

1. Click the source column assigned to the **KPI** and specify the settings.
2. Click the source column assigned to the **Partition** and specify the settings.
3. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
4. Click **OK** to save your settings and to close the dialog.

The chart is displayed with real data of the assigned data source.

Options list

Option	Description
Display name (data point)	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, for example, used for data points or tooltip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.

6.9.2.9.3.2.3 Assign data columns to bubble charts

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

In the bubble chart (page 467) you can display one dimension and two KPIs. The two KPIs are plotted on the x- and Y-axis. The dimension is represented by various colors of the individual bubble areas. Optionally, a third KPI can be incorporated; its values determine the size of the bubble areas.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click  **Assign data** to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a **Data column** as a KPI to the **X-axis** using drag and drop.
4. Assign a **Data column** as a KPI to the **Y-axis** using drag and drop.
5. Optionally, assign a **Data column** as a KPI to the **Size by** element using drag and drop.
6. Assign a **Data column** as a dimension to the **Partition** using drag and drop.
7. Optionally, assign one or more columns to the **More columns (invisible)** element using drag and drop. The columns are not displayed in the widget. They are used for filtering widgets only. See Define filters for widgets (page 439) for details.

The data source columns are assigned to the widget elements.

6.9.2.9.3.2.3.1 Set properties of widget elements

You can edit the settings, for example, axis title, display name or format, for each widget element, such as axis, dimensions or measures.

Various settings are available depending on the data type of the assigned data source column. See the Options list below for details.

1. Click the **X-axis** or **Y-axis** to specify the axis settings.
 - a. Click the **Text** tab to specify the **Axis title** and **Axis format**.
 - b. Click the **Data range** tab to limit the KPI value range.
2. Click the source column assigned to the **X-axis** and specify the axis and column settings.
3. Click the source column assigned to the **Y-axis** and specify the settings.
4. Click the source column assigned to the **Size by** element and specify the settings.
5. Click the source column assigned to the **Partition** and specify the settings.
6. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
7. Click **Coloring** to specify the KPI thresholds. See Configure KPI thresholds (page 418) for details.
8. Click **OK** to save your settings and to close the dialog.

The chart is displayed with real data of the assigned data source.

Options list

Option	Description
Axis title	Title of the X- or Y-axis. Enable the title field and enter an Axis title . By default, the Automatic option is selected and the axis title consists of the concatenated names of the assigned columns.
Axis format	Output format of X- or Y-axis. The selected format overwrites the formats of the assigned columns. By default, Auto is selected and the individual formats are used for tooltips. Optionally, you can add a prefix or postfix to the format, for example, \$ 1,234 or 1,234 mm.
Display name (data point)	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric

Option	Description
	columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Text tab	Allows you to specify the Axis title and Axis format .
Data range tab	Allows you to specify the minimum value (From) and the maximum value (To) of the KPI value range. If the values are not set the values are calculated automatically. You can enter specific values manually or assign data source columns for a dynamic value assignment using drag and drop.
Coloring > Thresholds	Allows you to specify the thresholds values range and to set the background color accordingly. You must assign at least one KPI to the Y-axis.

6.9.2.9.3.2.3.2 Configure KPI thresholds

You can define thresholds for numeric and text KPIs to display their status. A colored background shows the threshold range in which a KPI value is located.

Procedure

1. Click **Coloring**.
2. Select the axis for which you want to define thresholds.
3. Click a **Color** box to select a background color for each threshold.
4. Select an operator for each threshold to define the KPI value range, for example, < (less than).
5. Enter a value for each threshold.

You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only numeric data columns are allowed for dynamic threshold values. Assign the required numeric data column from the data source to a threshold field using drag and drop.

6. Click the **+** **Plus** button to add a threshold or click the **-** **Minus** button to remove a threshold.
7. Select a threshold view style in the **Style** drop-down menu.

This option is only available for the background.

The thresholds are configured for the widget selected.

6.9.2.9.3.2.4 Assign data columns to grids

To display data in the Grid (page 477) widget, you must assign the relevant data source columns to the grid columns required.

You can assign any number of data source columns as grid columns.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign one or more **Data columns** to the **Y-axis** using drag and drop.
4. Optionally, assign one or more columns to the **More columns (invisible)** element using drag and drop. The columns are not displayed in the widget. They are used for filtering widgets only. See Define filters for widgets (page 439) for details.

The data source columns are assigned to the widget elements.

6.9.2.9.3.2.4.1 Set properties of widget elements

You can edit the settings for each widget element, for example, column name or format.

Various settings are available depending on the data type of the assigned data source column. See the Options list below for details.

Procedure

1. Click one of the assigned **Grid columns** to specify the settings.
 - a. Click the **Text** tab and specify the settings.
 - b. Click the **Thresholds** tab and specify the KPI thresholds. See Configure thresholds (page 422) for details.
2. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
3. Click **OK** to save your settings and to close the dialog.

The grid is displayed with real data of the assigned data source.

Options list

Option	Description
Axis title	Title of the X- or Y-axis. Enable the title field and enter an Axis title . By default, the Automatic option is selected and the axis title consists of the concatenated names of the assigned columns.
Axis format	Output format of X- or Y-axis. The selected format overwrites the formats of the assigned columns. By default, Auto is selected and the individual formats are used for tool tip. Optionally, you can add a prefix or postfix to the format, for example, \$ 1,234 or 1,234 mm.
New column name	Replaces the data source column name, used for tooltips. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the grid. Available for numeric columns. Enabled by default.
Show cell value	Displays the values of the column. Enabled by default.
Make clickable (for actions)	Makes the column clickable for triggering actions. See Specify actions for widgets (page 441) for details.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value.

Option	Description
	The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Set as key column for selection	Sets the selected column as key column. When a selection is made and new data arrives, the selection is automatically recreated with the new data. The key column is used to ensure that the new data matches the selection. This means that if values in non-key columns have changed, the selected row remains selected even after new data arrives. You can select one or more columns as key columns.
Text tab	Allows you to specify the New column name, Format and Aggregation .
Thresholds tab	Allows you to specify the thresholds values range.

6.9.2.9.3.2.4.2 Configure thresholds

You can define thresholds for numeric and text grid columns to display the status of a KPI. A colored marker shows the threshold range in which a KPI value is located.

Procedure

1. Click an assigned **Grid columns** to specify the settings.
2. Click the **Thresholds** tab.
3. Click **Background** or **Foreground** to set the KPI values and the background or foreground colors of the grid.

You can define a KPI value range for the thresholds and the corresponding colors of the grid cells background or foreground.

- a. Click a **Color** box to select a color for each threshold.
- b. Select an operator for each threshold to define the KPI value range, for example, < (less than).

The available operators differ for numeric values (for example, < (**less than**) or = (**equals to**)) and text columns (for example, **starts with** or **is equal to**).

- c. Enter a value for each threshold.

You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only text data columns are allowed for dynamic threshold values. Assign the required text data column from the data source to a threshold field using drag and drop.

- d. Click the  **Plus** button to add a threshold or the  **Minus** button to remove a threshold.
- e. Enable the **Colorize row** option to apply the background or foreground color scheme to all cells in the row.

4. Click **Traffic Lights** to set KPI values and to define traffic lights.

You can define a KPI value range for the thresholds and corresponding traffic lights. The traffic lights are displayed in each cell of the rows. By default, there are three traffic light stages and one inactive stage. Additionally, you can select a different shape for each traffic light stage.

- a. Click a **Color** box to select a color and a shape for each traffic light stage.
To use custom images instead of the colored shapes for the traffic light stages, enable the **Image based Traffic Light** option, click the drop-down menu and enter an **Image URL**.
- b. Enable the **Multi State** option to show multiple states of traffic lights instead of a single traffic light.
- c. Select an operator for each threshold to define the KPI value range, for example, is equal to.
- d. Enter a value for each threshold.

You can either enter specific threshold values or you can choose numeric columns from your data source representing the threshold values. Assign a data column from the data source to a threshold field using drag and drop.

- e. Click the **+** **Plus** button to add a traffic light stage or click the **-** **Minus** button to remove a stage.
- f. Enable the **Switch position** option to place the traffic light symbol to the right of the values.
- g. Enable the **Make clickable (for actions)** option to make the traffic lights clickable for triggering actions. See Specify actions for widgets (page 441) for details.
- h. Enable the **Show tooltip** option to show tool tips for each traffic light symbol.
- i. By default, the traffic light stage is also visible if it is inactive (that is, a KPI value is not available.). Disable the **Inactive state** option if the traffic light stage should not be visible. You can also change the color of the inactive traffic light stage. If you use custom images, you cannot change the color. You can only deactivate the **Show inactive state** option.

5. Click **OK**.

The thresholds are configured for the selected widget.

6.9.2.9.3.2.5 Assign data columns to circular gauge charts

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A circular gauge chart (page 469) displays a set of aggregated KPI values. The value ranges are arranged in a semicircle with a red pointer that indicates the actual value of the KPI.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a numeric **Data column** to the aggregated **KPI** using drag and drop.

A data source column is assigned to the **KPI** element.

6.9.2.9.3.2.5.1 Set properties of widget elements

You can define a minimum and a maximum value for the displayed KPI value range. Additionally, you can compare the actual KPI value to several threshold values. The value ranges in the speedometer are indicated by various colors.

See the Options list below for details.

1. Click the source column assigned to the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 426) for details.
3. Click **OK** to save your settings and to close the dialog.

The chart is displayed with real data of the assigned data source.

Options list

Option	Description
Display name	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Min value	Minimum value of the displayed KPI value range. If the value is not set the value is calculated automatically.
Max value	Maximum value of the displayed KPI value range. If the value is not set the value is calculated automatically.

6.9.2.9.3.2.5.2 Configure thresholds

You can define thresholds for a numeric KPI to display their status. A colored marker shows the threshold range in which a KPI value is located.

1. Click **Thresholds**.
2. Click a **Color** box to select a color for each threshold.
3. Select an operator for each threshold to define the KPI value range, for example, < (less than).
4. Enter a value for each threshold.

You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only numeric data columns are allowed for dynamic threshold values. Assign the required numeric data column from the data source to a threshold field using drag and drop.

5. Click the  **Plus** button to add a threshold or click the  **Minus** button to remove a threshold.

The thresholds are configured for the selected widget.

6.9.2.9.3.2.6 Assign data columns to horizontal and vertical gauge charts

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A horizontal and vertical gauge chart (page 478) displays a set of aggregated KPI values. The value ranges are arranged in a horizontal or vertical bar with a pointer that indicates the actual value of the KPI.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a numeric **Data column** to the aggregated **KPI** using drag and drop.

A data source column is assigned to the **KPI** element.

6.9.2.9.3.2.6.1 Set properties of widget elements

You can define a minimum and a maximum value for the displayed KPI value range. Additionally you can compare the actual KPI value to several threshold values. The value ranges in the speedometer are indicated by various colors.

See the Options list below for details.

1. Click the source column assigned to the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 428) for details.
3. Click **OK** to save your settings and to close the dialog.

The chart is displayed with real data of the assigned data source.

Options list

Option	Description
Display name	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Min value	Minimum value of the displayed KPI value range. If the value is not set the value is calculated automatically.
Max value	Maximum value of the displayed KPI value range. If the value is not set the value is calculated automatically.
Thresholds tab	Allows you to specify the thresholds values range.

6.9.2.9.3.2.6.2 Configure thresholds

You can define thresholds for a numeric KPI to display their status. A colored marker shows the threshold range in which a KPI value is located.

1. Click **Thresholds**.
2. Click a **Color** box to select a color for each threshold.
3. Select an operator for each threshold to define the KPI value range, for example, < (less than).
4. Enter a value for each threshold.

You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only numeric data columns are allowed for dynamic threshold values. Assign the required numeric data column from the data source to a threshold field using drag and drop.

5. Click the  **Plus** button to add a threshold or the click  **Minus** button to remove a threshold.

The thresholds are configured for the selected widget.

6.9.2.9.3.2.7 Assign data columns to traffic lights

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A traffic light (page 500) displays the status of a KPI. A colored marker shows the threshold range in which a KPI value is located.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a numeric or text **Data column** to the **KPI** element.

A data source column is assigned to the **KPI** element.

6.9.2.9.3.2.7.1 Set properties of widget elements

For the displayed KPI value range you can define a minimum and a maximum value. Additionally you can compare the actual KPI value against several threshold values. The value ranges in the speedometer are indicated by various colors.

See the Options list below for details.

Procedure

1. Click the source column assigned to the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 430) for details.
3. Click **OK** to save your settings and to close the dialog.

The traffic light is displayed using the real data of the assigned data source.

Options list

Option	Description
Display name	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.

6.9.2.9.3.2.7.2 Configure thresholds

You can define thresholds for numeric and text columns to display the status of a KPI. A colored marker shows the threshold range in which a KPI value is located.

By default, there are three traffic light stages plus the inactive stage.

Procedure

1. Click **Thresholds**.

The option is only available if a column has been assigned to the KPI.

2. Select **Color and shape** in the drop-down menu to display the traffic light stages with various colored shapes.
3. Click a color box to select a color and a shape for each threshold stage.
4. Select **Image** in the drop-down menu to use custom images instead of the colored shapes for each traffic light stage.
5. Select an operator for each threshold to define the KPI value range, for example, < (less than).

The available operators differ for numeric values (for example, < (**less than**) or = (**equals to**)) and text columns (for example, **starts with** or **is equal to**).

6. Enter a value for each threshold.

You can either enter specific threshold values or you can choose columns from your data source representing dynamic threshold values. Only numeric data columns are allowed for dynamic threshold values. Assign the required numeric data column from the data source to a threshold field using drag and drop.

7. Click the  **Plus** button to add a threshold or the  **Minus** button to remove a threshold.
8. By default, the traffic light stage is also visible if it is inactive (A KPI value is not available.). Disable the **Inactive state** option if the traffic light stage should not be visible. You can also change the color of the inactive traffic light stage. If you use custom images, you cannot change the color. You can only deactivate the **Show inactive state** option.

The thresholds are configured for the selected widget.

6.9.2.9.3.2.8 Assign data columns to a drop-down box

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A drop-down box (page 474) provides you with a selection of values in a drop-down menu for you to filter other widgets.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a **Data column** to the **Visible column** element using drag and drop.
4. Optionally, assign one or more columns to the **More columns (invisible)** element using drag and drop. The columns are not displayed in the widget. They are used for filtering widgets only. See Define filters for widgets (page 439) for details.

The data source columns are assigned to the widget elements.

6.9.2.9.3.2.8.1 Set properties of widget elements

For each widget element you can edit the settings, for example, display name or format.

See the Options list below for details.

1. Click the source column assigned to the **Visible column** element and specify the settings.
2. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
3. Click **OK** to save your settings and to close the dialog.

The drop-down menu is displayed with real data of the assigned data source.

Options list

Option	Description
Display name	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is Average value. The number of aggregation types provided by context-based widgets may differ to non-context-based widgets.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.

6.9.2.9.3.2.9 Assign data columns to labels

To display data in a widget, you must assign the relevant data source columns to the required widget elements (for example, to the X-axis).

A label (page 483) displays a fixed text you have entered, or a text that is supplied dynamically by a data source.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign a source **Data column** to the **Data column** element using drag and drop.

A data source column is assigned to the widget element.

If you have assigned a text or date column to the widget the values are retrieved from the first data row.

6.9.2.9.3.2.9.1 Set properties of widget elements

You can edit the settings, for example, display name or format for each widget element.

See the Options list below for details.

Procedure

1. Click the source column assigned to the **Visible column** element and specify the settings.
2. Click a source column assigned to the **More columns (invisible)** box and specify the settings.
3. Click **OK**.

Your settings are applied. The drop-down menu in the dashboard is displayed with real data of the assigned data source.

Options list

Option	Description
Display name	New column name displayed in the widget, that is for instance used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, that is for instance used for data points or tool tip. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. Enabled by default.
Initial selected value	Specifies the initial selected column value. By default, the first column value is selected.
Sort descending	Displays the column values in a descending order in the drop-down menu.

6.9.2.9.3.2.10 Assign data columns to a rich text area

To display data in the Rich text area (page 491) widget, you must assign the relevant data source columns to the required widget elements.

Prerequisite

You have assigned a data source to the widget (page 407).

Procedure

1. Click a Rich text area (page 491) widget in the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (2/2)** dialog is displayed.
3. Assign one or more data source columns to the **Data column** box using drag and drop.
The data source columns are assigned to the widget elements.

6.9.2.9.3.2.10.1 Set properties of widget elements

You can edit the settings, for example, the display name or the format for each widget element. Settings differ depending on the data type of the assigned data source column. See the option list below for details.

Procedure

1. Click an assigned column in the **Data column** box to specify the settings.
2. Click **OK**.

Your settings are applied. The drop-down menu in the dashboard is displayed with data of the assigned data source.

Options list

Option	Description
New column name	Replaces the default name of the data source column. The column name is also used for the tool tip.
Format	Output format of the column values, that is used for data points or tool tips. Available for columns of date and numeric type.
Round numerically	Displays rounded KPI values. Available for numeric columns. Enabled by default.

6.9.2.9.3.2.11 Create input parameters

You can create input parameters to enter dynamic values that are passed to the data transformation step (for example, for filtering) or passed to the data source itself.

You can use parameter sets to create dynamic URLs for your XML source and RAQL queries. The parameters are used to dynamically pass context from dashboards to applications using the URL. You can create dynamic URLs and query parameters that provide the required context to open URLs, to invoke web services, etc.

Procedure

1. Click a widget on the dashboard. The relevant properties dialog is displayed.
2. Click the  **Assign data** icon to edit the data source assignment.
The **Assign data (1/2)** dialog is displayed.
3. Click the **Input parameters** box.
4. Click the input parameter type required in the **Add input parameters** bar.
The data types **Text**, **Number** and **Date** are available for input parameters. They allow the dynamic entry of text, date or numerical values in data feed processing.
5. Enter a **Name** for your parameter set.
6. Enter an optional **Default value**.
The default value is used if no value is passed from the dashboard to the input parameter.
7. Enter a **Preview value**.
The preview value is used to calculate a data preview (debug run) in the data assignment dialog. See Assign data sources to widgets (page 407).
8. Click the **Data flow** box to display the data source assignment overview.

The input parameter is displayed in the **Input parameters** box. The defined input parameters are only available for the currently selected widget.

You can use the input parameters for the **XML**, **CSV**, **MS Excel**, and **ARIS Table** data sources. Available input parameters are provided by the data source operator via an additional button.

If you use the input parameter in an XML data source URL, you can specify that the value of the parameter must be URL encoded. For an input parameter of **Date** or **Number** type, you can additionally specify the format pattern in the data source operator.

To specify the parameter properties click the inserted input parameter and select the option required.

Input parameters can also be used as filter elements for several data transformation operators, for example, Insert column, to enter dynamic values in columns. The list of parameters provided, depends on the selected data type of the relevant column.

The input parameters are also provided as filter elements by the widget. See Define filters for widgets (page 439) for details.

6.9.2.9.3.2.12 Data source operators

You must first assign a data source to the widget to display content (for example, charts, or tables) in a widget. The following data source operators are available.

ARIS Table (page 501)

PPM (page 503)

MS Excel (page 509)

CSV (page 506)

JSON (page 512)

XML (page 515)

Data feed (page 517)

6.9.2.9.3.2.13 Data transformation operators

In addition to the data source operators, you can add further operators to transform the source data. The following data transformation operators are available in the dashboard editor.

Change data type (page 528)

Delete column (page 556)

Rename column (page 573)

Duplicate column (page 557)

Insert column (page 568)

Concatenate texts (page 549)

Filter rows (page 561)

Conditional replace (page 550)

Arithmetic (page 525)

Aggregate (page 521)

Round up/down date (page 578)

Average (page 527)

Goal accomplishment (page 566)

Move date (page 570)

Round up/down (page 576)

Filter by date (page 560)

Find text index (page 565)

Replace text (page 574)

Extract text (page 558)

The feed editor provides a wider variety of data transformation operators to create more complex transformation rules in data feed definitions. See the Data transformation operators (page 521) listed in appendix.

6.9.2.9.3.3 Set up widgets

You can configure the visualization and the behavior in dashboard view mode for all widgets. Additionally, you can assign data sources and set filters for most widgets.

Various options are available depending on the widget type, for example, line chart, grid or image.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. The relevant widget properties dialog is displayed.
3. Click the  **Assign data** icon to edit the data source assignment. See Assign data sources to widgets (page 407) for details.
4. Click the  **Configure filter** icon to specify filter conditions. See Define filters for widgets (page 439) for details.
5. Click the **Config** tab and set the widget display options. See the list of widget (page 464) for details.
6. Optionally, specify **Actions** for the widget. See Specify actions for widgets (page 441) for details.
7. Optionally, specify **URL selections** for the widget. See Use dynamic URL selection (page 449) for details.

Your settings are applied.

6.9.2.9.3.4 Remove widgets from dashboard

You can remove widgets from a dashboard.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Select one or more widgets on the dashboard. A corresponding pop-up menu is displayed.
3. Click the **Delete** icon in the pop-up menu.
4. Click **Delete**.

The widgets selected are deleted from the dashboard.

6.9.2.9.3.5 Define filters for widgets

In dashboard edit mode, you can define relations between widgets by specifying filter conditions for selected widgets. The defined filters can be used in dashboard view mode (See Use interactive filters in your dashboards (page 384)).

Most widgets support data filters. Especially, the **Drop-down box** (page 474), **Input field** (page 481) and **List** (page 486) widgets can be used for filtering other widgets. (See Insert widgets to a dashboard (page 407)).

FILTERING USING MULTIPLE SELECTION

Multiple selection allows you to filter widgets by selecting multiple values, such as multiple rows or data points, in a widget. See Use interactive filters in dashboards (page 384) for details. In particular, the List (page 486) widget is provided for filtering using multiple selection.

The values selected in a widget are processed as a list and passed on to the widget to be filtered. The widget to be filtered must also support multiple selection. This means that the filtered widget is enabled to process a list of values

and not only a single value. You can enable a widget and, respectively, the assigned data feed to receive and process a value list by inserting user inputs (input parameters (page 436)) of **List** type in the data feed, Date user input (List) (page 584), Number user input (List) (page 586), and Text user input (List) (page 588).

If user inputs (input parameters) of List type have been defined, they are listed below the **Source columns** of a widget. They are identified by their own list icon.

Note that user inputs (input parameters) of **List** type cannot be used to filter single values. For details see Configure filters for Process Mining context-based widgets (page 403) and Use the filter panel of Process Mining context-based widgets (page 385).

PROCESS MINING CONTEXT-BASED DASHBOARDS

The filter definition method described below is not supported by Process Mining context based widgets. The filter conditions are automatically set when you assign data columns of the Process Mining context to the widgets.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. If you have placed a widget on several tabs, select the tab containing the widget for which you want to set a filter. You cannot change the tab in the filter dialog. See Display widgets on several dashboard views (page 445) for details.
3. Click a widget on the dashboard. The relevant properties dialog is displayed.
4. Click the  **Filter** icon to edit the filter configuration. The filter dialog of the selected widget displays the **Source columns** assigned to the widget and the **Select filter widget** bar. See Assign data sources to widgets (page 407) for details.

If applicable, input parameters are displayed as additional filter widgets. If input parameters have been defined, they are listed below the **Source columns** of a widget. See Create input parameters (page 436) for details.

If invisible columns have been defined, they are listed as **Source columns**. Invisible columns are not displayed in the widget, but they can be used as a filter criterion. See Assign data sources to widgets (page 407) for details.

5. Drag the column that you want to filter from the **Source columns** box and drop it into the **Drop here to define a new filter** field. The **Define filter condition** dialog is displayed. All widgets that can be used as a filter are highlighted. The columns in the **Available coordinates** box for each widget can be used as filter condition values.

6. Define the filter condition.

You can use a column or a constant value as filter condition.

- a. Select a condition from the drop-down menu, for example, **is equal to**.
- b. Drag a coordinate from the **Available coordinates** box of the widget that you want to use as filter widget and drop the selected coordinate into the empty filter condition field.
- c. Alternatively, you can enter a constant value as filter condition.
- d. To enable case sensitivity, click the **Aa Match case / Ignore case** icon. This option is available only for coordinates or values of type **Text**.
- e. If the filter conditions are considered to be fulfilled, even if the selected values are empty, click the  **Empty compare values are accepted** icon.
- f. Click the **Add** icon to add a filter condition.
- g. Enable the **block values** option to block the rows that meets the condition.

7. Click **Add an additional filter** to add filters to other source columns.

8. Click **Save filter**.

Your filter conditions are saved and can be applied to your dashboards (page 384).

6.9.2.9.3.6 Specify actions for widgets

You can assign actions to specific widgets (for example, charts, traffic light, label, image). The actions either select and apply data in widgets, or open an other dashboard tab, or open a specific URL.

You can specify a data selection for a specific widget on a dashboard tab, for example, a column in a table. The widget is then displayed with the selected data applied. If the selected data also serves as a filter for other widgets, these widgets are filtered accordingly.

Depending on the selected widget, the actions are triggered by clicking a widget, by a mouse over event or by a selection change event.

On mouse over events are performed if you move your mouse pointer over a data point of a widget, for example, a coordinate of a line chart. **On selection change** events are performed if you click a data point in a chart or if you delete a data selection in a widget.

Depending on the widget, you can delete a selection by clicking in the background or selecting the **Clear selection** option in the pop-up menu () of the widget.

Depending on your Grid widget settings, the additional trigger options "On "item" click and On "item" traffic light click are available. "Item" is a placeholder for a column name. In the Grid widget settings, you can define column cells to trigger actions when clicked.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a chart widget that supports actions. The relevant properties dialog is displayed.
3. Click the **Action** tab.
4. Select the action trigger event in the **Trigger** drop-down menu.

The menu items vary depending on the selected widget.

5. Enable the **Change tab** option and select the tab from the drop-down menu that is to be opened when the action is triggered

The action is only available if you have added one or more views to the dashboard. See Add dashboard tabs (page 447) for details.

If you disable the option, the action will not be deleted but disabled in view mode.

6. Enable the **Set selection** option to specify a data selection. When triggered, this action selects the specified data in one or several of the widgets on the same dashboard tab.

If you disable the option, the action will not be deleted but disabled in view mode.

7. Configure the **Set selection** action.
 - a. Click **Configure** to set the action configuration.

Initially all **Available coordinates** of the target widgets are displayed.
 - b. Set the coordinates of the widget you want the action to select. Drag the relevant coordinate and drop it on the field of the **Select selection widget** area.

- c. Set the values that should be selected. You can enter a constant value or you can assign the values of a coordinate of another widget. Drag the relevant widget coordinate and drop it on the **Selection** field of the previously set coordinate.

Only coordinates with fitting values are provided.

- d. Click **Add an additional selection** to define a further selection.
- e. Click **Save action**.

8. Enable the **Call URL** option to specify a specific URL that should be opened when the action is triggered.

If you disable the option, the action will not be deleted but disabled in view mode.

- a. Click **Configure** to set the action configuration.
- b. Enter the target URL in the **URL** input field of the **Enter target URL** area.

You can create a dynamic URL by adding **Available coordinates** to the URL. You can insert the coordinates from several widgets using drag and drop. A selected coordinate is placed at the current cursor position in the **URL** input field.

If you insert a coordinate of type number or date, click the inserted coordinate and select **Format pattern**.

To ensure that a coordinate is URL encoded, click the inserted coordinate and enable the **Use URL encoding** option.

- c. In the **Target window** field you can enter a name of the window in which the URL should be opened, or you can select a target attribute in the drop-down menu. Available attributes are **_blank** (new window), **_self** (current window), **_parent** (parent window) and **_top** (entire window).
- d. Click **Save action**.

Your action is specified for the selected widget.

You can use the defined action in dashboard view mode. See Use dashboards in view mode (page 383).

6.9.2.9.3.7 Hide or display widget header and border

You can hide the header and the outline of the widget container.

The header and the outline of certain widgets are hidden by default, for example, Input field and Combobox.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. A corresponding pop-up menu is displayed.
3. Click the **Config** tab to set the display options.
4. Click **More options**.
5. Set the **Container** header and border.
 - Click the **Hide header** icon. This option hides the header and the title of the widget and resizes the content. To unhide the header, click the icon again.
 - Click the Hide border icon. This option hides the outline of the widget container. To unhide the outline, click the icon again.

The header and outline of the widget are hidden or displayed.

6.9.2.9.3.8 Resize widgets

You can scale the size of widgets.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. The widget is displayed with a frame.
3. In smart dashboards
 - a. Resize the widget width by dragging the anchor point of the frame with your mouse pointer.

A widget width can be resized across multiple empty fields.
 - b. Resize the widget height by resizing the height of the row in which the widget is inserted. To resize the row height, drag the upper or lower row border with your mouse pointer.

The height of all widgets that are inserted into the same row is resized automatically.
4. In fixed-grid dashboards drag the anchor point of the frame with your mouse pointer.

The selected widgets are resized.

6.9.2.9.3.9 Move widgets to the foreground or background

On the dashboard, you can move widgets to the foreground or background. For example, you can display a chart in the background of the dashboard and place several widgets on top of it.

This option is only available in fixed-grid dashboard mode. See [Switch to fixed-grid workspace](#) (page 395) for details.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Select one or more inserted widgets in the dashboard. A corresponding pop-up menu is displayed.
3. Set **Layering**
 - Click **Bring to front**. Displays the widget in front of one or more other widgets.
 - Click **Bring forward**. Brings the widget one level forward.
 - Click **Send backward**. Brings the widget one level backward.
 - Click **Send back**. Displays the widget behind one or more other widgets.

The selected widgets are moved forward or backward on the dashboard.

6.9.2.9.3.10 Copy and paste widgets in dashboards

You can copy or cut widgets and paste them in the same or in any other tab of the dashboard.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. A corresponding pop-up menu is displayed.
3. Click the **Copy** icon in the pop-up menu to copy the selected widgets to the clipboard.
4. Click the **Paste** icon in the pop-up menu to insert the copied widgets in the same tab of the dashboard.
5. Click the **Cut** icon in the pop-up menu to cut the selected widget and copy it to the clipboard.
6. Open any tab of the dashboard and press **Ctrl+V**.
Filter relations between copied widgets are retained.

The widget selected is copied to the clipboard and pasted in the selected dashboard tab.

6.9.2.9.3.11 Display widgets on multiple dashboard tabs

You can display a widget on multiple views of a dashboard.

A widget that is placed on multiple tabs can be used for filtering other widgets and for triggering selection events across multiple tabs. At the same time, the global placed widget can be filtered and triggered by other widgets. If a global widget is selected (for example, if you click a data point of a line chart), the selection is shown on all tabs on which the widget is placed. The dependent filters and actions are triggered for the entire dashboard.

The option is only available for dashboards that use the fixed grid work space.

On each tab, the widget has the same features such as position, size, configuration and filter conditions etc., except for the widget layering. See [Move widgets to the foreground or background](#) (page 444).

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget. The relevant properties dialog is displayed.
3. Click **More options**.
4. Click **Select tabs** and select the tabs on which the widget should be placed.
Before you can display a widget on several views, you must first add one or more tabs. See [Add dashboard tabs](#) (page 447) for details.
5. To remove a widget from a tab, deselect the relevant tab in the **Select tabs** menu.
You cannot remove a widget from the currently activated tab.
6. To delete a widget click **Delete** in the pop-up menu.
If you delete a widget on a tab, the widget is deleted on all tabs on which it is used.

The widget is placed on several tabs and displayed on the corresponding dashboard tabs.

You can use an action defined in dashboard view mode. See [Use dashboards in view mode](#) (page 383).

6.9.2.9.3.12 Change widget style template

You can assign an other style template to a widget on your dashboard. Style templates let you customize the look and feel of your widgets, for example, colors schemes, fonts or background color.

The style templates provided for the selected widget are part of the style template that is assigned to the current dashboard (page 398).

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget on the dashboard. The relevant properties dialog is displayed.
3. Click **More options**.
4. Select a style template in the **Style** drop-down menu.

The selected style template is applied to the current widget.

6.9.2.9.4 Configure dashboard tabs

You can configure the individual dashboard tabs in the dashboard editor.

6.9.2.9.4.1 Add dashboard tabs

You can add additional dashboard tabs. The individual views are displayed on separate tabs.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click the  **New tab** icon beside the tab name.

A new tab is added. The tab is displayed as a separate dashboard tab in view mode.

6.9.2.9.4.2 Delete dashboard tabs

You can delete any view from a dashboard. A dashboard tab is displayed as a separate tab in the dashboard editor.

Warning

Deleted dashboard tabs cannot be restored.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click  **Show menu** beside the relevant tab title.
3. Click **Delete** in the pop-up menu.
4. Click **Delete**.

The selected dashboard tab is deleted.

6.9.2.9.4.3 Set dashboard tab properties

You can set the properties of a dashboard tab. You can specify a name for the dashboard tab, select a style and set the selected view as default.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a dashboard tab.
3. Click the  **Settings** icon beside the tab title.
4. Enter a text in the **Name** box in the pop-up menu.
5. To set the dashboard tab style, click the **Style** selection box and select a style.
This option is only available for smart dashboards.
6. To set the dashboard tab background, click the color selection box and select a background color.
This option is only available for fixed-grid dashboards.
7. Click **Set tab as default** to set the current selected tab as the default view.
The default view is displayed initially when you open the dashboard in view mode.

The dashboard tab properties are set.

6.9.2.9.4.4 Set dashboard tab style

You can change the style, for example, the background color, applied to the dashboard tab.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click  **Show menu** beside the tab title of the relevant tab.
3. Click the **Style** selection box and select a style.

The dashboard tab style is set.

6.9.2.9.4.5 Set dashboard tab as default

You can set the current selected tab as the default tab. The default tab is displayed initially when you open the dashboard in view mode.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click  **Show menu** beside the tab title of the relevant tab.
3. Click **Make default**.

The dashboard tab is set as default view.

6.9.2.9.5 Other

6.9.2.9.5.1 Use dynamic URL selection

You can select specific elements of widgets (for example, a grid row, a combobox entry, a pie slice, etc.) dynamically by specifying URL parameters. When you use the URL to open a dashboard in view mode, the elements are automatically preselected and, if applicable, the preselected elements are used as a filter or an action trigger.

You can select the URL parameters required for dynamic URL selection in the properties menu of a widget and copy them to the clipboard. You can set a data column preselection for each widget that supports data preselection, for example, Grid, Input field, or several charts.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click a widget that supports data preselection. The relevant properties dialog is displayed. Before you set a preselection you must assign the relevant data columns to the widget. See [Assign data sources to widgets \(page 407\)](#).
3. Click the **URL selection** tab.
4. You can enter a widget ID in the **URL-ID** input field. If you change the preset ID, you must choose a unique ID within your dashboard and you must save the dashboard to keep the new **URL-ID**.
5. The **URL example** field contains a URL selection of the widgets including all assigned data columns and corresponding dummy values.
6. You can edit the URL selection according to your requirements in the **URL example** field.
Expected formats:
Number: Do not use thousands separators and use dots as decimal separators.
Date / time: yyyy-MM-ddThh:mm:ss
Text: no restrictions (URL-encoded)
7. Copy the URL selection to the clipboard. If your browser supports this function, a **Copy to clipboard** button is available.
The URL parameters are copied to the clipboard of your operating system (URL-encoded).
8. Add the parameters to a URL that you want to use to open a dashboard and enter the URL in your web browser.
9. To open a specific dashboard tab, add the corresponding tab parameter to the dashboard URL.
 - a. Click  **Show menu** beside the tab title of the relevant tab.
 - b. Click the **URL selection** tab.
 - c. You can enter a tab ID in the **URL-ID** input field. If you change the preset ID, you must choose a unique ID within your dashboard.
 - d. Save your settings.

- e. Copy the URL selection to the clipboard. If your browser supports this function, a **Copy to clipboard** button is available.
- f. Add the URL selection that was copied to the clipboard to your dashboard URL.

The dashboard is displayed in view mode with the specified selection.

Example

Dashboard preselection parameters

```
&cn16.Time=2015-12-23&cn16.Location=New%20York
```

Tab preselection parameter

```
&tab=tab1
```

URL with parameters added

```
http://<local
```

```
host>:8080/mashzone/hub/dashboard/dashboard.jsp?editmode=false&guid=0bd1cbcc-49d2-4cb1-a5fe-72cfdc624cda
```

```
&cn16.Time=2015-12-23&cn16.Location=New%20York&tab=tab1
```

These URL parameters are applied when you open the dashboard. To apply a modified preselection, you must reload the dashboard page. However, you can also apply a selection in an open dashboard without reloading the entire page. In this case, the selection string must begin with #... instead of &...

```
...#cn16.Time=2015-12-23&cn16.Location=New%20York
```

6.9.2.9.5.2 Hide tab bar in view mode

You can hide the tab bar in dashboard view mode.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Manage** in the dashboard main menu.
3. Click **Properties**.
4. Enable the **Hide tab bar in view mode** option.
5. Click **OK**.

Your settings are applied.

The tab bar is hidden when you open the dashboard in view mode. Only the active tab is displayed.

6.9.2.9.5.3 Set display size

You can set the display size for the current displayed dashboard. Set the zoom factor to improve the legibility of a dashboard.

The option is only available in fixed-grid dashboards. See [Switch to fixed-grid workspace](#) (page 395) for details.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Options** in the dashboard main menu.
 - Click **Zoom In** to increase the display size.
 - Click **Zoom Out** to decrease the display size.
 - Click **Set Zoom to 100%** to restore the default display size.

The display size of the current dashboard is adjusted accordingly.

6.9.2.9.5.4 Set grid lines

You can set the grid lines in the desktop background. The grid lines help you to arrange the individual widgets more easily. The widgets are automatically aligned to the grid lines.

These options are only available in fixed-grid dashboards. See [Switch to fixed-grid workspace](#) (page 395) for details.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Options** in the dashboard main menu.
3. Click **Increase Grid Space**.
4. Click **Reset Grid** to restore the default grid space.
5. Click **Decrease Grid Space**.

The grid lines of the current dashboard are adjusted accordingly.

6.9.2.10 Use the data feed editor

The data feed editor as a graphical user interface is an easy-to-use tool to create, manage and view your data feeds without any programming knowledge.

To use the data feed editor, the **Dashboard administrator** function privilege is required.

To use data feeds on dashboards and in other data feeds, and to see the data on a dashboard, the **View** permission is required. See [Manage data feed permissions](#) (page 457) for details.

6.9.2.10.1 Create a data feed

You can create data feeds in the feed editor.

A data feed is a table that contains processed data. The data in the data feed table is calculated using a feed definition, which combines data from various data sources.

To create a data feed definition you must perform the following steps.

- Open a new data feed (page 452)
- Select data sources (page 453)
- Calculate the feed data (page 453)
- Add further operators (page 454)
- Connect the operators (page 454)
- Save the data feed (page 455)

6.9.2.10.1.1 Open a new data feed

You can create a new data feed by using the data feed editor.

Procedure

Click **Manage > New data feed** in the data feed editor main menu.

An new data feed is opened.

When creating a data feed, the **Output** element that finalizes the feed definition, is already set. The element is mandatory and cannot be deleted.

6.9.2.10.1.2 Select data sources

You can set one or more data sources for the data feed definition, for example, MS Excel, CSV, or XML files. The data sources for a data feed can be located locally, in the LAN, or on the Internet.

The data sources are represented by data source operators. Various options are available for setting the data source depending on the data source type.

See Data source operators (page 501) for a list of data sources and the relevant settings supported by the data feed editor.

The source files can be selected by specifying the path, and must be stored in the  Repository of ARIS Connect.

Procedure

1. Click the  symbol in the **Add data operations** bar if the symbol is not selected.
2. Click a data source, for example,  XML.
The selected operator is displayed in the data feed editor workspace.
3. Select the data source or connection type of the data source file required, for example, an URL or a local path to a XML file.
4. Enter a URL or a path to the data source file, for example, for an XML file. Or select a data source or a connection in a selection box, for example, a PPM connection.
5. Specify your additional settings.

The selected data source operator is inserted and the source data can be extracted.

6.9.2.10.1.3 Calculate the feed data

You can calculate the data for all operators of the feed definition and display the corresponding preview in the data feed table.

Procedure

1. Click the  **Calculate preview** icon in the header of an operator.
2. To read out the raw source data click the  **Calculate preview** icon in the data source operator.

The data feed is calculated up to the selected operator of the feed definition. The result is displayed in a preview table at the lower edge of the workspace.

6.9.2.10.1.4 Add further operators

Insert optional operators in the data feed definition to convert, calculate or transform data. For this the feed editor provides additional data transformation and user input operators.

You can use various operators to create calculation rules for calculating the data of your feeds. See Data transformation operators (page 521) for a list of transformation operators and the relevant settings supported by the data feed editor.

Procedure

1. Click the  **Transformation** or  **Single values** icon in the **Add data operations** bar.
2. Click an operator or insert an operator using drag and drop.
The operator is displayed in the feed editor workspace.
3. Specify your settings.

The selected operator is inserted and configured.

6.9.2.10.1.5 Connect the operators

Connect the inserted operators to define the data flow of the data feed definition.

The data of an operator is forwarded to another operator using a link. The link is created as a connection between outgoing and incoming  anchor points of the individual operator. The permitted incoming anchor points are marked in blue for a selected outgoing anchor point.

User input operators are only connectable with **Single value** operators.

Procedure

1. Click the outgoing anchor point of a data source and drag it to an incoming anchor point of a transformation operator.
2. To disconnect two operators click an incoming or outgoing anchor point and drop it in the workspace.
3. Define the data flow among the inserted operators in a similar manner.
4. Connect the last transformation operator with the **Output** operator to finalize the data feed definition.

Your data feed definition is configured.

To view the calculation result of the completed data feed definition click the  **Calculate preview** symbol of the **Output** operator.

6.9.2.10.1.6 Save the data feed

You can save the data feed and give it a unique name.

Procedure

1. Click **Manage > Save** in the main menu.

You can create a copy of the current opened data feed with the **Save as** option.

2. Specify your settings.

The data feed is saved on the server.

You can change your settings by editing the data feed (page 455).

6.9.2.10.2 Edit a data feed

You can edit a data feed that is available in the data feed editor.

Procedure

1. Click **Manage > Open** in the data feed editor main menu.
2. Select an **Available data feed**.
3. Specify your settings.
4. Click **Manage > Save** in the data feed editor main menu.

Your settings are applied.

6.9.2.10.3 Delete data feeds

You can delete data feeds in the data feed editor.

Warning

Deleted data feeds cannot be restored.

Procedure

1. Create a dashboard (page 390) or open a dashboard (page 395) in the dashboard editor.
2. Click **Manage > Delete** in the data feed editor main menu.
3. Click **Delete**.

The selected data feed is deleted.

6.9.2.10.4 Edit data feed properties

You can edit the properties (name, description and tags) of existing data feeds.

Procedure

1. Create a new data feed (page 452) or open an existing data feed (page 455).
2. Click **Manage > Properties** in the feed editor main menu. The **Dashboard properties** dialog is displayed.
3. Enter the **Name** of the data feed.
4. Enter an optional **Description**.
5. Optionally, enter comma-separated search tags in the **Tags** field.
6. Click **OK**.

Your changes are applied.

6.9.2.10.5 Manage data feed permissions

You can manage the permissions of data feeds in the data feed editor. You can assign specific access permissions to individual users or user groups. If you assign permissions to a user group, the permissions are automatically assigned to all members of the user group.

For new users and user groups of a data feed, you can automatically assign view permissions to all associated assets of the data feed, such as aliases or other data feeds. It is not required to assign the permissions to each asset manually. A user requires the view permission for all associated assets to display the corresponding source data in the data feed. If view permissions are not assigned to all associated assets, a corresponding option to assign the missing view permissions is additionally displayed in the dialog.

You can specify the following access rights for saved data feeds.

- **Edit**
The user can use data feeds to create dashboards or to include them in other data feeds. The user can edit data feeds in the data feed editor.
- **View**
The user can use data feeds to create dashboards or to include them in other data feeds. The user can view the data of the data feed in view mode on the related dashboard.

Procedure

1. Create a new data feed (page 452) or open an existing data feed (page 455).
2. Click **Manage > Permissions** in the data feed editor main menu. The **Manage dashboard permissions** dialog is displayed.
3. Enter a term in the search field and click **Search**. If you click **Search** without specifying a search term, all users and user groups are listed.
4. Click **Show MashZone NextGen default groups** to show only default users or user group in the **Search results** field.
5. Drag a user or a user group from the **Search result** field and drop it on the **Principals with permissions** field.

By default, the creator of the data feed is shown in the **Principals with permissions** list.

6. Enable or disable the **View** or **Edit** privileges of a user or a user group.
7. Click **Save**.

The button is available if the option **Assign the relevant view permissions to related assets** is disabled, or the view permissions are already assigned to all associated assets.

8. Enable the option **Assign the relevant view permissions to related assets** to assign the required view permissions to all associated data feeds and aliases.

The option is available if the view permissions are not assigned to all associated assets.

9. Click **Next**.

A new dialog opens. The first list in the dialog contains assets whose view permissions you can update. The second list contains assets whose view permissions you cannot change. At

least one of the following prerequisites must apply to change the view permissions for data feeds or aliases.

You are an administrator who can edit the permissions for aliases.

You have permissions to view and edit data feeds.

You have permissions to create and edit data feeds.

Your changes are applied.

If you want to remove a user or a user group from the Principals with permissions list, click the **Delete** icon. Deleted permissions for a data feed do not affect the associated data feeds or aliases.

6.9.2.10.6 Data feed operators

The data feed editor provides a wide range of data source and data transformation operators for creating data feed definitions (page 452).

- Data source operators (page 501)
- Data transformation operators (page 521)

6.9.2.10.7 Upload file based data sources

You can use data sources in the dashboard and data feed editor that are file-based, such as Excel spreadsheets, CSV files or XML files. You must store the files in a resource directory in the ARIS document storage that is accessible in the  Repository of ARIS Connect.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Documents** tab.
4. In ARIS document storage navigation tree, select the folder where you want to store your source file.
5. Click  **Upload**. The **Upload new document** dialog is displayed.
6. Click **Select** and select the relevant resource file.
7. Enter a title in the **Title** input box.
8. Enter a description in the **Description** input box.
9. Enter a number of terms comma separated in the **Tags** input box. Tags are used for the search function.
10. Click **Upload**.

The source file is stored in the resource directory selected.

The URL of the data source file is required for the data source operator in the data feed editor. You can copy the file URL to the clipboard. For this, click the relevant data source file name to display the document details. In the document details right click the **Link** at the end of the page and select **Copy Link Location** in the context menu. The file URL is copied to the clipboard.

6.9.2.10.8 Other

6.9.2.10.8.1 Make your dashboards context-sensitive

You can make your dashboards context-sensitive by assigning dashboards to specific ARIS models or objects. For example, if you select a model in ARIS Connect, the dashboards assigned to the model are displayed and you can open any dashboard from the list.

The **Input field** widget allows you to insert variables in a dashboard. The variables are used to connect ARIS models or objects with the dashboard. The dashboard variables required are **contextguid** for the GUID of an open model and **selectionguid** for the GUID of a selected object.

When you open a model, the **selectionguid** variable is not set. However, when you make a selection in the open model, the **selectionguid** variable is set to the GUID of the selected object. When you remove the focus from the selected object, the **selectionguid** variable is set to the GUID of the opened model.

Procedure

1. Click the  **Input field** widget icon to insert an input field for each required variable.
2. Click an input field to open the properties dialog.
3. Enter the variable names **contextguid** and **selectionguid** in the **Name** input box of the relevant input field.
4. On the **URL selection** tab of the **contextguid** input field, enter **contextguid** in the **URL ID** input field.
5. On the **URL selection** tab of the **selectionguid** input field, enter **selectionguid** in the **URL ID** input field.

The relevant variables **contextguid** and **selectionguid** are inserted into the dashboard.

Tip

ARIS Aware provides the predefined data feed **Context GUID** containing the variables required. The variables defined always deliver the current selection, either the model GUID or the object GUID. You can use the data feed as an example for creating your own context-sensitive dashboards.

6.9.3 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

6.9.3.1 What are dashboards?

Dashboards are interactive applications that collect, combine, and visualize data from different data sources, for example, ARIS table or CSV files. Dashboards are composed of individual widgets (for example, line chart or grid). They obtain their data from data sources and display it. Dashboards make it easy to visualize and analyze information. You can combine data from any original source and visualize them by means of graphic elements, filter the displayed results interactively and thus analyze them intuitively.

The dashboard editor as a graphical user interface gives you an easy graphic way to create, manage and view your dashboards. The dashboard editor provides the edit mode and the view mode. In the edit mode you can create and manage your dashboards. The view mode enables you to view and use your dashboards interactively.

See Use dashboards in view mode (page 383) for instructions.

See Create a dashboard (page 390) for instructions.

6.9.3.2 What are data feeds?

A data feed is a table containing prepared data. It consists of several columns that contain numerical values (for example, figures), text, or date values. Each row in the calculated result of a data feed corresponds to one data record.

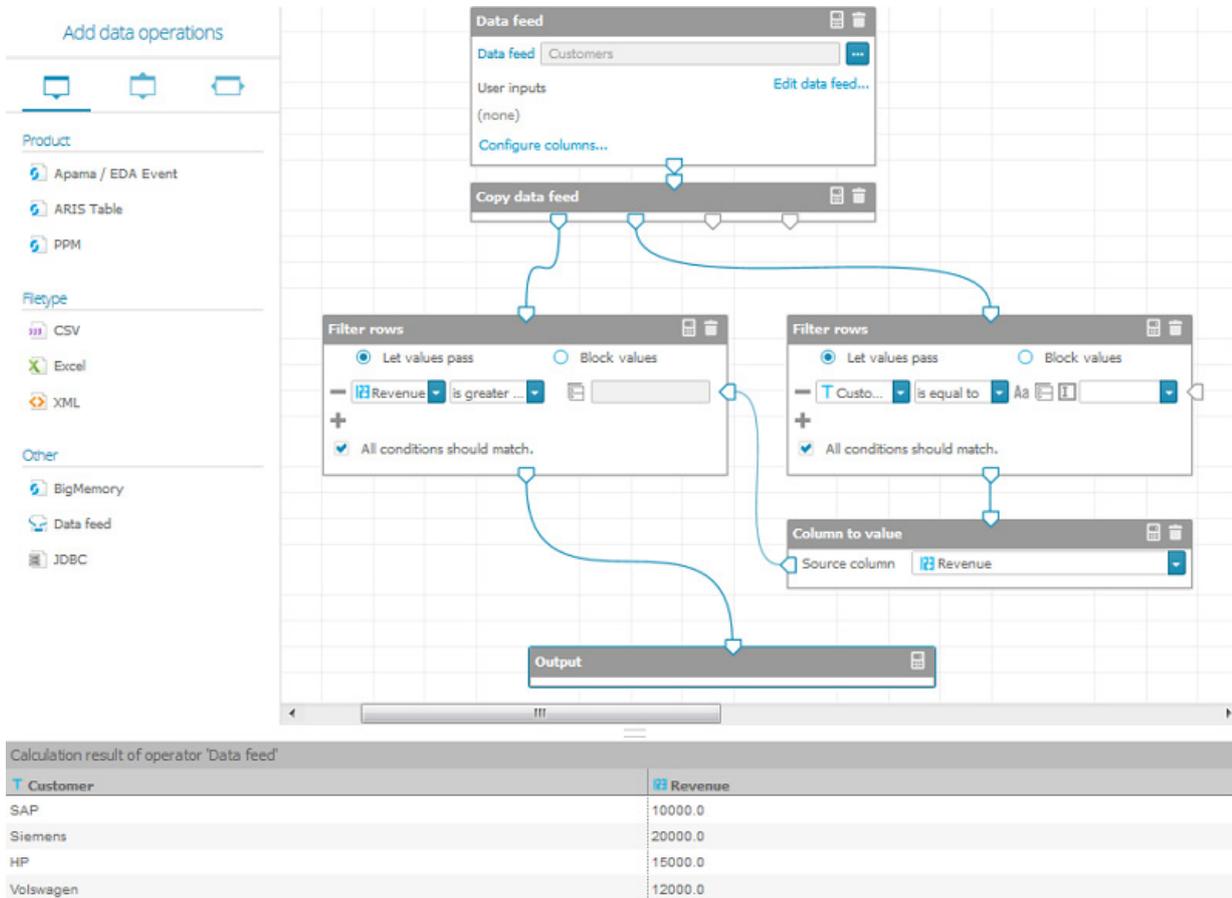
The data in a data feed is calculated based on various data sources (for example, data from MS Excel, CSV, or XML files) by means of feed definitions. The source data is not an integral part of the data feed, but remains in its original sources, ensuring that it is constantly up-to-date. In addition to the external data sources, direct user entries in the data feeds can also be processed. Data feeds are used as data sources for dashboards.

Only one data feed can be assigned to each widget, with the same data feed being able to supply the data for multiple widgets. See Assign data sources to widgets (page 407) for details. Feed definitions aggregate, extend, transform, or calculate data from one or more data sources. A feed definition can consist of any number of operators and data sources that are linked by connections. Data is calculated for each data source and each operator and then passed on to the operators linked to them for further processing. A feed definition delivers a data structure in the form of a list table as its result. All individual processing steps in the feed definition are based on this data structure.

The feed editor as a graphical user interface offers you an easy, visual way to create, manage, and view your data feeds, without programming knowledge being required. The feed editor

provides you with all supported data source operators, all relevant data transformation, and user input operators. The rule definitions can be created using drag and drop. See Create data feeds (page 452) for instructions.

Data feed definition and feed table



6.9.3.3 What is the data source for default dashboards?

In ARIS Architect, users with the **Script administrator** function privilege will find all standard reports available in this category. The reports are shown on the **Administration** > **Evaluations** > **Report** tab. If in the **General** properties dialog of a report script the **Available to users** option is selected, the report can be selected in the Report Wizard for execution.

In this category, you find reports required to generate data feed input for default ARIS Aware dashboards. You can not modify the code of these reports. If you want to modify the code in order to define your own dashboards (page 377), import the required reports from the ARIS installation DVD.

For some reports parameters can be specified. These parameterized reports are to be started frequently using report schedules (page 363). This keeps the dashboards up to date. The scheduled reports themselves trigger related reports. Each report collects specific pieces of

information. The results are stored in ARIS document storage as XML report output files. These pieces of information are formed into dashboards. That is why dashboards correlate very closely to the set of executed reports.

6.9.3.4 How to make default dashboards visible

ARIS provides several default dashboards. In ARIS Connect these sample dashboards can be accessed using the most recent version of the **United Motor Group** ARIS database. You can either use these dashboards (page 359) created for demonstration purposes, or create your own dashboards (page 377).

In order to make the default dashboards available in ARIS Connect, the following prerequisites must be met:

- The **dashboarding** runnable is in the **ACTIVE** state.
It is already activated if ARIS Aware has been installed. If the runnable is not active, your server administrator must activate the runnable using ARIS Cloud Controller (ACC) (see **ARIS Server Installation Guide (./../documents/3 Installation/31 Initial installation/312 Server/3121 Basic (Single node)/ARIS Server Installation - Windows.pdf)** or **ARIS Cloud Controller (ACC) Command-Line Tool (./../documents/3 Installation/31 Initial installation/312 Server/3121 Basic (Single node)/ARIS Cloud Controller (ACC) Command-Line Tool.pdf)** on DVD, ARIS Download Center (aris.softwareag.com) or Empower (https://empower.softwareag.com/)).
- In the User Management, a valid ARIS Server license of type **YCSAW** is available in the ARIS Administration (see ARIS Connect online help).
- In ARIS Connect, the **Feed URL** alias URL must be defined (see ARIS Connect online help; Add an alias URL for dashboards (page 351)).
- The required content has been made available from the ARIS installation DVD (page 359).
- In ARIS Connect, check default data feeds for issues (page 369).

6.9.3.5 What is an alias of a URL?

Defining a URL alias enables you to shorten the link used in dashboards and data feeds. If you use an alias, you do not have to enter the entire URL, but only the path to the location where the data is stored.

Furthermore, adapting the alias enables you to import this kind of data to a different server.

If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you need to recreate the URL alias that have been defined for ARIS Connect 10.0 Service Release 1. Delete the URL alias (page 353) at first and add a new URL alias (page 351) with the same data.

6.9.3.6 Widgets

The dashboard editor provides a number of widgets.

See also [Insert widgets in a dashboard \(page 407\)](#).

6.9.3.6.1 Action button

Can be used to trigger an action.

The following widget options are available.

General options	Description
Name	Optional widget name.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.

Specific bar chart options	Description
Label	Label that is displayed in the widget.

6.9.3.6.2 Bar chart

A bar chart can display values for two iterations:

- Two dimensions and one KPI
- One dimension and multiple KPIs

The second iteration is displayed in the form of several stacked bars. If multiple KPIs are used, these are displayed in bars of different colors.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific bar chart options	Description
Chart title	Optional chart title of the chart displayed in the component.
Column type	Selects the bar type of the bar chart. This option is only available if a data source has been assigned. Bars available are Stacked or Grouped .
Legend position	Displays a legend in the component and sets the legend's position. The default is None , that is, no legend is displayed.

Specific bar chart options	Description
Axis	<p>Specifies the visualization of the X- and Y-axis.</p> <p>Show all: Displays the axis titles and labels. Enabled by default.</p> <p>Hide title: Hides the axis titles and displays only the axis labels.</p> <p>Hide all: Hides the axes completely.</p>
Multiple selection	<p>In view mode, the user can select multiple values at the same time in the corresponding component, for example, multiple rows in a table or multiple coordinates in a chart. The multiple selection can be used, for example, to filter other dashboard components. See Use interactive filters in dashboards (page 384) for details. The values selected are processed as a list. If the option is enabled, columns of List type are provided in the filter configuration dialog to configure filter conditions. See Define filters for dashboard components (page 439) for details.</p>

6.9.3.6.3 Bubble chart

A bubble chart displays one dimension and two KPIs. The two KPIs are plotted on the X- and Y-axis. The dimension is represented by different colors of the individual bubble areas. Optionally, a third KPI can be incorporated; its values determine the radii of the bubble areas.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific bubble chart options	Description
Chart title	Optional chart title of the chart displayed in the component.
Data points	Selects the data point shape. The default is Circle . The option is available only if a Partition is assigned. See Assign data columns to bubble chart. (page 415)
Data point size	Selects the data point size. The default is Medium .
Legend position	Displays a legend in the component and sets the legend's position. The default is None , that is, no legend is displayed.

Specific bubble chart options	Description
Axis	<p>Specifies the visualization of the X- and Y-axis.</p> <p>Show all: Displays the axis titles and labels. Enabled by default.</p> <p>Hide title: Hides the axis titles and displays only the axis labels.</p> <p>Hide all: Hides the axes completely.</p>

6.9.3.6.4 Circular gauge chart

A circular gauge chart displays a set of aggregated KPI values. The value ranges are arranged in a semicircle with a red pointer being displayed that indicates the actual value of the KPI.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific circular gauge chart options	Description
Scale	Displays a scale in the chart.
Scale value	Displays the scale values in the chart.
KPI name	Displays the KPI name in the chart.
KPI value	Displays the KPI value in the chart.
Threshold	Displays the threshold in the chart.
Threshold value	Displays the threshold value in the chart.
Level meter	Displays a level meter in the chart.
Percentage	Displays a scale from 0 to 100% in the chart. The KPI value is also displayed in percent.

6.9.3.6.5 Column chart

A column chart can display values for two iterations:

- Two dimensions and one KPI
- One dimension and multiple KPIs

The second iteration is displayed in the form of several stacked columns. If multiple KPIs are used, these are displayed in columns of different colors.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific column chart options	Description
Chart title	Optional chart title of the chart displayed in the component.
Rotate X-axis labels	Rotates the labels of the X-axis 90 degrees.
Column type	Selects the column type of the column chart. This option is only available if a data source has been assigned. Columns available are Stacked or Grouped .
Legend position	Displays a legend in the component and sets the legend's position. The default is None , that is, no legend is displayed.
Axis	<p>Specifies the visualization of the X- and Y-axis.</p> <p>Show all: Displays the axis titles and labels. Enabled by default.</p> <p>Hide title: Hides the axis titles and displays only the axis labels.</p> <p>Hide all: Hides the axes completely.</p>
Multiple selection	<p>In view mode, the user can select multiple values at the same time in the corresponding component, for example, multiple rows in a table or multiple coordinates in a chart. The multiple selection can be used, for example, to filter other dashboard components. See Use interactive filters in dashboards (page 384) for details. The values selected are processed as a list. If the option is enabled, columns of List type are provided in the filter configuration dialog to configure filter conditions. See Define filters for dashboard components (page 439) for details.</p>

6.9.3.6.6 Date filter

Provides an interactive calendar for configuring a date filter. The calendar filters the values in a given date range.

In view mode, you can adjust the date range by clicking the **+** symbol and **-** symbol in the widget.

The **Date filter** widget supports values only of date type.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific date filter options	Description
Granularity	<p>Specifies the structure of the time range.</p> <ul style="list-style-type: none"> ▪ There are three possible time granularities: ▪ Year ▪ Quarter ▪ Month
Allow range selection	<p>Enables the selection of multiple time periods in the calendar. To define a time range in view mode, select multiple periods by holding the mouse button.</p> <p>The option is enabled by default. If the option is disabled, the From and To values of the default selection are set to the same value.</p>
Compact	<p>Hides the selected range label above the time filter.</p>
Range	<p>Specifies the initially displayed date range with a start value (From) and an end value (To).</p> <p>You can either enter the date value manually or extract it from a data feed. This option is disabled for manual entry if the date value is extracted from a data feed.</p> <p>If no data source columns are assigned to the widget, you can enter the initial range values manually.</p> <p>If data source columns are assigned, the range values are taken from the corresponding columns. The first values of the corresponding data source columns are always taken as the start or the end value of the range.</p>
Default selection	<p>Specifies the range values that are preselected by default.</p> <p>You can either enter the date value manually or extract it from a data feed. This option is disabled for manual entry if the date value is extracted from a data feed.</p> <p>If no data source columns are assigned to the widget, you can enter the default range values manually.</p> <p>If data source columns are assigned, the default values are taken from the corresponding columns.</p> <p>The first values of the corresponding data source columns are always taken as the minimum or the maximum.</p>

6.9.3.6.7 Drop-down box

The drop-down box provides you with a selection of values in a drop-down menu for you to filter other widgets.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific drop-down box options	Description
No selection	Adds the No selection value to the value list as the first entry. By default, the first entry of the value list is preselected in the drop-down box for filtering. Selecting the No selection value has no effect on filtering other widgets.
No selection label	Alternative text for No selection default. The text is displayed in the drop-down box.

6.9.3.6.8 Function flow diagram

The **function flow diagram** enables you to analyze the sequence of activities within your business processes. Using the function flow diagram, you can clearly display and evaluate the process structure and the relationships between the activities.

A function flow diagram begins with a start function that is indicated by a green symbol and has only outgoing connections (except for self loops). The end function has only incoming connections (except for self loops) and is indicated by a red symbol. All other functions are represented by white symbols and have at least one incoming and one outgoing connection.

The weight of a connection is defined by its relevance value.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific function flow diagram options	Description
Edit widget	<p>Activates the interactive mode. The interactive mode () enables you to perform the following actions.</p> <ul style="list-style-type: none"> - You can resize the diagram using the mouse wheel. - You can move the entire diagram or the individual function symbols using drag and drop. To move the complete graph, click an empty space within the widget and hold down the mouse button. You can move the graph until you release the mouse button. - You can select a connection value. You can select a value in the widget  Settings menu if you have set at least one value using the Additional connection values option in the Assign data (2/2) dialog. See Assign data sources (page 415). - You can enable the magnifier. Click  Settings and select Enable magnifier. - You can modify the relevance slider view and the relevance slider value. The slider value is not saved in the dashboard configuration.
Layout	Reset initial: Restores the initial diagram layout.
Zoom	Reset: Restores the initial diagram size.
Relevance slider	Activates the relevance slider in dashboard view and edit mode.
Connection labels	Displays the connection values in the diagram. The connection values defined in the data assignment (page 415) can be displayed or hidden beside the connections. By default, the relevance values are displayed beside the connections. If an additional connection value is defined, it is displayed as a the connection value instead. If more than one additional connection value is defined, a drop-down menu is provided in the settings menu for you to select the values that are to be displayed beside the connections. By default, the first additional connection value is displayed.
Connection weight	Displays the connection weight in the diagram. The connection weight is indicated by the connection thickness.

6.9.3.6.9 Grid

You can use the **Grid** widget to insert a table in your dashboard.

The following widget options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific grid options	Description
Edit columns	Enables you to edit the Grid widget interactively. Click the Configuration icon. In edit mode, the Grid widget has a blue frame. You can set the initial widths and the initial sort order of the columns. You can change the sort order by clicking the column header. To adapt the column width, drag the column borders using the mouse. You can change the defined column width and column sort order in dashboard view mode (page 387).
Auto column width	Automatically adapts the column width to the column content. The horizontal scroll bar is no longer displayed in the widget.
Multiple selection	In view mode, the user can select multiple values at the same time in the corresponding component, for example, multiple rows in a table or multiple coordinates in a chart. The multiple selection can be used, for example, to filter other dashboard components. See Use interactive filters in dashboards (page 384) for details. The values selected are processed as a list. If the option is enabled, columns of List type are provided in the filter configuration dialog to configure filter conditions. See Define filters for dashboard components (page 439) for details.

6.9.3.6.10 Horizontal and vertical gauge chart

A gauge chart displays a set of aggregated KPI values. The value ranges are arranged in a horizontal or vertical bar with a pointer being displayed that indicates the actual value of the KPI. The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header. Hide border: Hides the outline of the component container. Click the icon again to display the outline.
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current

General options	Description
	dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific circular gauge chart options	Description
Scale	Displays a scale in the chart.
Scale value	Displays the scale values in the chart.
KPI name	Displays the KPI name in the chart.
KPI value	Displays the KPI value in the chart.
Threshold	Displays the threshold in the chart.
Threshold value	Displays the threshold value in the chart.
Level meter	Displays a level meter in the chart.
Percentage	Displays a scale from 0 to 100% in the chart. The KPI value is also displayed in percent.
Scale size	Selects the scale size of the gauge chart. The default is Medium .

6.9.3.6.11 Image

The **Image** widget supports the file format PNG, GIF, and JPEG. The image file can be selected using a Web URL or a URL Alias.

For information about specifying the image source URL, see Specify an image source URL.

General options	Description
Name	Optional component name.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.

Specific image options	Description
Image sizing	<p>Original: Displays the image in the original size.</p> <p>Scaled: Fits the display of the image to the widget frame size.</p> <p>Aspect ratio: Keeps the aspect ratio of the image.</p>
Horizontal alignment	Aligns the image horizontally within the widget frame.
Vertical alignment	Aligns the image vertically within the widget frame.

6.9.3.6.12 Input field

The input field enables you to manually enter values in order to filter other widgets.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific input field options	Description
Data type	<p>Data type of the user input. The user can insert only values of the selected data type.</p> <p> Text</p> <p> Number</p> <p> Date</p> <p>If the input field data type is set to DATE, a  calendar icon that you can use to open a date picker is shown in the input field.</p>
Date format	<p>Format of the user input. The user can insert only values that comply with the selected format.</p> <p>The option is available only for data type Date.</p>
Prompt text	Displays a prompt text in the input field.
Initial value	<p>Initial value is displayed in the input field and used as preset value.</p> <p>Optional</p>
Current date/time	<p>Uses the current date as the value that is preset by default.</p> <p>The widget always uses the current date and time of the dashboard at runtime. The option is available only for data type Date. The value displayed depends on the format selected.</p>
Submit button text	Alternative text for the submit button. The default text is Ok .
Show submit button	Displays the submit button in the input field.
Submit value with each keystroke	<p>Immediately submits the entered values with each keystroke.</p> <p>The input field only submits valid date or number values for Date and Number.</p>

6.9.3.6.13 Label

A label displays a fixed text you have entered, or a text that is supplied dynamically by a data source.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific label options	Description
Style	Style to be used for the text displayed in the drop-down menu.
Alignment	Alignment of the text that is displayed. The default is left aligned .

6.9.3.6.14 Line chart

A line chart can display values for two iterations:

- Two dimensions and one KPI
- One dimension and multiple KPIs

The second iteration is displayed in the form of several stacked lines. If multiple KPIs are used, these are displayed in lines of different colors.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific line chart options	Description
Chart title	Optional chart title of the chart displayed in the component.
Line type	Selects the line type of the line chart. Linear , Curved or Step line types are available. The default is Linear .
Data points	Selects the size of displayed data points. Line types available are Large , Small or None . The default is Large .
Interpolate	Enabled: A lack of values results in a continuous line. Disabled: A lack of values results in gaps within the line.
Rotate X-axis labels	Rotates the labels of the X-axis 90 degrees.
Legend position	Displays a legend in the component and sets the legend's position. The default is None , that is, no legend is displayed.
Axis	Specifies the visualization of the X- and Y-axis. Show all : Displays the axis titles and labels. Enabled by default. Hide title : Hides the axis titles and displays only the axis labels. Hide all : Hides the axes completely.

6.9.3.6.15 List

The **List** widget lists the values of one or two assigned data source columns.

You can use the **List** widget to select values, for example, to filter multiple values in other widgets.

In view mode, the widget provides check boxes for selection when multiple selection is enabled. You can select multiple values by pressing the **Shift** key and clicking several rows.

The following widget options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific list options	Description
Edit columns	<p>Enables you to edit the List widget interactively. Click the Configuration icon. In edit mode, the List widget has a blue frame. You can set the initial widths and the initial sort order of the columns. You can change the sort order by clicking the column header. To adapt the column width, drag the column borders using the mouse. You can change the defined column width and column sort order in dashboard view mode (page 387).</p>
Multiple selection	<p>In view mode, the user can select multiple values at the same time in the corresponding component, for example, multiple rows in a table or multiple coordinates in a chart. The multiple selection can be used, for example, to filter other dashboard components. See Use interactive filters in dashboards (page 384) for details. The values selected are processed as a list. If the option is enabled, columns of List type are provided in the filter configuration dialog to configure filter conditions. See Define filters for dashboard components (page 439) for details. The option is enabled by default.</p>

6.9.3.6.16 Pie chart

A pie chart can display one numerical KPI iterated over a dimension (text or date dimension). The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific pie chart options	Description
Chart title	Optional chart title of the chart displayed in the component.
Inner radius	Specifies a inner radius in % to display an inner circle using the specified radius.
Values	Selects the display type of the KPIs.
Values position	Selects the position of the displayed KPI values. Positions available are Inside and Outside .
Legend position	Displays a legend in the component and sets the legend's position. The default is None , that is, no legend is displayed.
Multiple selection	In view mode, the user can select multiple values at the same time in the corresponding component, for example, multiple rows in a table or multiple coordinates in a chart. The multiple selection can be used, for example, to filter other dashboard components. See Use interactive filters in dashboards (page 384) for details. The values selected are processed as a list. If the option is enabled, columns of List type are provided in the filter configuration dialog to configure filter conditions. See Define filters for dashboard components (page 439) for details.

6.9.3.6.17 PPM variants

The variants component enables the PPM process variants feature in MashZone NextGen. The component adapts the PPM variants feature to MashZone NextGen and makes the **PPM variants** component available in the MashZone NextGen component bar.

The **PPM variants** component is available from PPM version 10.1.0.2.

For general use of MashZone NextGen dashboards and components, see the MashZone NextGen online help.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific PPM variant options	Description
Scaling	Scaling type of the primary measure values. Select the type of scaling, Linear or Logarithmic . The bars are scaled depending on the selected scaling type.

6.9.3.6.18 Rich text area

The **Rich text area** widget displays a fixed text that you have entered, or a text that is supplied dynamically by a data source or a selected element of another widget.

The widget provides a text editor in which you can enter and format text. You can also insert variable data fields to dynamically display values of a data source.

Double-click the widget to open the text editor.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific Rich text area options	Description
Text style	<p>Provides options for text layout.</p> <ul style="list-style-type: none">▪ Text format, for example, Heading, Titel, or Normal, provided in the drop-down menu.▪ Increase and decrease text size▪ Bold▪ Italic▪ Underline▪ Strikethrough▪ Text color▪ Clear text style
Paragraph	<p>Provides options for paragraph layout.</p> <ul style="list-style-type: none">▪ Text alignment▪ Text indent▪ Ordered and unordered list
Insert dynamic values	<p>Inserts variable data fields at the cursor position. The variable data fields allow you to display values that are dynamically supplied by assigned columns of the data source. See Assign data columns to rich text editors.</p>

6.9.3.6.19 Rich text editor

The **Rich text editor** component displays a fixed text that you have entered, or a text that is supplied dynamically by a data source or a selected element of another component.

The component provides a text editor in which you can enter and format text. You can also insert variable data fields to dynamically display values of a data source.

Double-click the component to open the text editor.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Editor options	Description
Text style	<p>Provides options for text layout.</p> <ul style="list-style-type: none">▪ Text format, for example, Heading, Titel, or Normal, provided in the drow-down menu.▪ Increase and decrease text size▪ Bold▪ Italic▪ Underline▪ Strikethrough▪ Text color▪ Clear text style <p>You can configure the text format and the provided text colors by editing the corresponding style template. See Edit style templates for details.</p>
Paragraph	<p>Provides options for paragraph layout.</p> <ul style="list-style-type: none">▪ Text alignment▪ Text indent▪ Ordered and unordered list
Insert dynamic values	<p>Inserts variable data fields at the cursor position. The variable data fields allow you to display values that are dynamically supplied by assigned columns of the data source. See Assign data columns to rich text editors for details.</p>

6.9.3.6.20 Slider

Provides the user with a selection of values in the form of a slider. The slider filters the values in a given data range. You can set the maximum and minimum of the data range using indicators.

The selected minimum and maximum values of the slider are labeled. In view mode, you can manually edit the minimum and maximum values of the labels. This allows you to enter exact values for the selected data range. Click a label of an indicator and enter a value required. In addition, you can adjust the minimum and maximum values individually or you can move the entire selected data range using the mouse pointer.

The **Slider** widget supports only numeric values.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific slider options	Description
Type	<p>Selects one of the following slider types:</p> <ul style="list-style-type: none"> ▪ Single value: With this slider, you can select a single value in a defined range of values. ▪ Range: With this slider, you can select the minimum (From) and the maximum (To) value of a data range. ▪ Range (fixed upper): With this slider, you can select the minimum (From) value of a data range. The maximum value is fixed. ▪ Range (fixed lower): With this slider, you can select the maximum (To) value of a data range. The minimum value is fixed.
Display range	<p>Specifies the data range with a minimum value (From) and a maximum value (To).</p> <p>If no data source columns are assigned to the widget, you can enter the range values manually.</p> <p>If data source columns are assigned, the range values are taken from the corresponding columns. The first values of the corresponding data source columns are always taken as minimum or maximum.</p> <p>The first value of the column assigned to the data range maximum should be greater than the first value of the column assigned to the data range minimum.</p> <p>The preset values are 0 (minimum) and 100 (maximum).</p>
Initial selection	<p>Values that are preselected by default.</p> <p>For the Single type, you specify a single value.</p> <p>For the Range type, you specify the From and To values of the data range.</p> <p>For the Range (fixed upper) type, you specify the From value.</p> <p>For the Range (fixed lower) type, you specify the To value.</p> <p>If no data source columns are assigned to the widget, you can enter the initial range values manually.</p> <p>If data source columns are assigned, the initial values are taken from the corresponding columns. The first values of the corresponding data source columns are always taken as minimum or maximum.</p> <p>By default, the slider selects the full available range.</p>
Show ticks	<p>Shows the step ticks.</p> <p>Enabled by default.</p>

Specific slider options	Description
Step width	<p>Step width of the values between minimum and maximum value. The values of the slider, starting with the minimum, are increased by this value until the maximum is reached.</p> <p>By default, the step width is set automatically.</p> <p>The minimum permissible step width is not smaller than 1/1000th of the range value. For example, if the range is 0 to 10000, the minimum step value is 10.</p> <p>You can enter your own value for the step width.</p> <p>The option is only available if the Show ticks option is enabled.</p>
Only step values	<p>Allows the user to select step values only. The indicator snaps to the nearest tick (step value) if the indicator is left between two ticks.</p> <p>Disabled by default.</p> <p>The option is only available if the Show ticks option is enabled.</p>
Enable markers	<p>Displays the selected slider value in the marker.</p> <p>The option is enabled by default.</p>
Rotate axis	<p>Displays the values at an angle of 45° on the axis if the option is enabled, otherwise otherwise displays the values horizontally.</p> <p>The option is disabled by default.</p>
Numeric format	<p>Selects the format of the values displayed in the widget.</p> <p>The slider widget supports only numeric values.</p>

6.9.3.6.21 Start PPM client

The **Start PPM client** widget displays a customizable text which can be used to jump to PPM. Optionally, you can configured a favorite which is displayed when you jump to PPM.

The following widget options are available.

General options	Description
Name	Optional component name.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. The Default widget style is preselected.

Specific Link to PPM widget options	Description
PPM Connections	Alias of the PPM Connection, containing the PPM client connection data defined in ARIS Connect.
Favorite	Path of a PPM favorite. The favorite path represents the favorites tree including favorites folder and name, for example, \Favorites\Process cycle time
Extract from URL	Determines automatically the connection data of the PPM data source, for example, alias, favorite path, and favorite type. Click Extract from URL and insert the favorite URL created in PPM.
Favorite type	Specifies the favorite as Private or Shared .

SAML AUTHENTICATION

If a user starts PPM using the Jump to PPM widget, he is automatically authenticated against the PPM system using single sign-on (SSO), provided SSO is configured correctly for PPM and ARIS Connect. The current logon language of the user is used for PPM, if available. Otherwise, the default language of PPM is used.

There are several ways the PPM client can be open:

- PPM applet always opens in a new tab.
- PPM web start opens a new client window (If no favorite jump client window is open.).
- PPM web start reuses an open client window (If a favorite client window is open, and the languages match.).
- PPM web start opens a new windows and closes an open one (If a favorite client window is open, and the languages do not match.).

6.9.3.6.22 Traffic lights

A multi-color vertical, horizontal, or single traffic light shows the threshold range in which a KPI value is located. You can define thresholds in the **Assign data** dialog.

The following component options are available.

General options	Description
Name	Optional component name.
More options	Displays additional options.
Container	<p>Hide header: Hides the header as well as the title of the component, and resizes the content of the container. Click the icon again to display the header.</p> <p>Hide border: Hides the outline of the component container. Click the icon again to display the outline.</p>
Container style	Selects the style type of the container. The container styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Style	Selects the style type of the component. The component styles available in the drop-down menu are part of the style template selected for the current dashboard. By default, the Default widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component.
Show menu	Enables the component menu in view mode. In view mode, you can display the component menu by clicking the  Menu icon in the component header. In the component menu, you can, for example, clear a selection, refresh the data displayed, or save the component data in a CSV file.

Specific traffic light options	Description
Type	Types available are Vertical , Horizontal and Single .

6.9.3.7 Operators

The dashboard and data feed editor provide a wide range of data source and data transformation operators to create dashboards and data feed definitions.

- Data source operators (page 501)
- Data transformation operators (page 521)

6.9.3.7.1 Data source operators

A data source operator enables you to specify the connection to a data source and to configure the data retrieval.

The following data source operators are available in the dashboard and data feed editor.

6.9.3.7.1.1 ARIS table

Extracts data from an ARIS model of type **Table**.

In ARIS Architect, you can export the content of a model of the **Table** type and generate a link to the export file in the form of a URL. For more information about on how to create an ARIS table see the ARIS Architect online help. See also **Generate dashboard link** in the ARIS Architect online help.

In ARIS Architect, you can run scheduled reports to create dashboards and to generate the relevant data sources. Each report output file is automatically stored in the ARIS document storage. These documents are used as the data sources for the corresponding default data feeds that are provided in ARIS Connect. In these data feeds, **ARIS table** is set as data source operator.

The following parameters are available.

Parameters	Description
Source	<p>ARIS export file in XML format. Size limit: Unlimited.</p> <ul style="list-style-type: none"> ▪ URL: HTTP address of the source file If another operator supplies the URL dynamically, the URL cannot be edited here. Example <code>http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> ▪ URL alias: Loads the file from a resource directory. Files must be located in a defined resource directory on the server. The data source files are located in a folder or a sub-folder of the ARIS document storage accessible in the ARIS Connect Repository. If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you need to recreate the URL alias

Parameters	Description
	<p>that have been defined for ARIS Connect 10.0 Service Release 1. Delete the URL alias (page 353) at first and add a new URL alias (page 351) with the same data.</p> <p>Path prefix (alias): Alias of the resource directory with the path to a directory on the server. Select an alias of the local resource directory, for example, Feed URL.</p> <p>Feed URL is the alias of the resource directory of the default data feeds provided in ARIS Connect.</p> <p>In the input box, enter a path to the relevant data source file for the Path prefix (alias) selected.</p> <p>Example</p> <pre>/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</pre> <p>To configure a Path prefix (alias), see Configure Dashboard server (page 351) for details.</p> <p>To store data source files in a resource directory, see Upload file based data sources (page 459) for details.</p> <p>To copy the source file URL, see Upload file based data sources (page 459) for details.</p>
Insert parameter ()	Inserts user defined input parameters at the cursor position. The button is clickable only if at least one user input parameter, for example, Text user input , has been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
Authentication	Specifies an HTTP basic access authentication. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL.
Parameters: Detect	Automatically reads out potential parameters of the data source. A requested parameters list is displayed that is based on the specified ARIS table source. You can enter the parameter values required to read in the data source.
Configure columns	Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

6.9.3.7.1.2 PPM

Uses the Process Performance Manager (PPM) query interface to retrieve data from favorites defined in PPM.

For every PPM system that can be used in ARIS Connect, a PPM connection must be created.

The relevant PPM client server must be running. See the PPM documentation **PPM Installation** for details.

In PPM, you can use the pop-up menu of a favorite to copy the corresponding favorite URL. Click **Use in dashboard** in the pop-up menu of a favorite. See the PPM online documentation for details.

If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you must recreate the PPM connections that were defined for ARIS Connect 10.0 Service Release 1. First delete the PPM connection (page 355) and add a new PPM connection (page 353) with the same data.

The following parameters are available.

Parameters	Description
PPM Connection	Alias of the PPM Connection, that contains the PPM client connection data defined in ARIS Connect. See Configure PPM server (page 353) for details.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
Favorite	Path of a PPM favorite. The favorite path represents the favorites tree including favorites folder and name, for example, \Favorites\Process cycle time
Extract from URL	Determines the connection data of the PPM data source automatically, for example, alias, favorite path, language and favorite type. Click Extract from URL and insert the favorite URL created in PPM.
Authentication	Specifies the credentials for authenticating the query against the PPM client server. Single Sign-On: Enables you to log in to PPM client server using single sign-on (SSO), and your current credentials. For details on how to configure SSO, see Configure single sign-on (page 240). HTTP basic auth: Requires the user name and the password of a PPM user. The returned data is filtered based on the PPM user access rights. The PPM user must have access rights for the selected favorite.
Advanced options	Specifies further connection parameters. Favorite type specifies the favorite as Private or Shared . Language of the favorite, for example, en for English Request key columns separately: Extracts all key values from the list table and writes them to separate columns of the data feed.
Configure	Configures the columns list. You can unselect a column to exclude it from the

Parameters	Description
columns	result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.
Filters: Detect	Reloads the dimensions and measures information from PPM
Add filter	Adds one or more filter criteria to filter the values of the PPM query. See Add filter (page 505) for details.

6.9.3.7.1.2.1 Add filter

You can add one or multiple filter criteria to filter the values of the PPM query.

Procedure

1. Click **Add filter**.
2. Select a **Dimension** or **Measure** provided by PPM, for example., date or process throughput time, and click **Add**. The selected criterion is added to the PPM operator.
3. Select an operator for the condition of the filter criterion in the drop-down menu, for example, is equal to.
4. Enter a constant filter value in the input field or insert an input parameter by clicking  **Insert input parameter**. The button is only clickable if there is at least one input parameter with the same data type.
5. Click the **Set filter properties icon** and specify the criterion parameters.

When specifying parameters, such as filter criterion and filter values, follow the predefined syntax of the PPM query interface (query API). See example below. For detailed information on the PPM query interface, refer to the PPM documentation **PPM Query interface**.

Filter using an expression uses criterion expressions for filtering. This option is available for criterions of data type **text**.

Key uses the criterion key as a filter value.

Description uses the criterion description as a filter value.

Set filter level allows the selection of the level you want to filter. This option is available for two level and multi level dimensions.

Example: The two level dimension **Dealer** with the levels **Region** and **City** allows you to filter the data according to Region or City.

Scaling. This option is available for criterions of data type **date** and for some numeric data types (for example, a numeric or percentage KPI value).

6. Click  **Add condition** to add further filter conditions.
7. Click **Next** to close the dialog.

Your settings are applied.

Example

The result of the PPM query depends on the syntax used in the PPM query interface. The character combination of space + (in the filter value (for example, ABC (123)) can lead to different results, depending on the filter criterion.

If you filter for "SOLDTO_NAME=ABC (123)", PPM searches for the customer with the name = "ABC" and the description = "123".

If you filter for "SOLDTO_NAME(VAL)=ABC (123)", PPM searches for the customer name "ABC (123)" and does not take the description into account.

If you filter for "SOLDTO_NAME(DESC)=ABC (123)", PPM searches for the customer whose description is "ABC (123)" and does not take the name into account.

6.9.3.7.1.3 CSV

Reads the CSV file and writes the individual values (character strings) to the table columns in the data feed based on the specified parameters. A change of column is identified by the specified separator between the individual values.

The following parameters are available.

Parameters	Description
Source	<p>Text file, with values that are separated by the same separator.</p> <ul style="list-style-type: none"> ▪ URL: HTTP address of the source file If another operator supplies the URL dynamically, the URL cannot be edited here. Example <code>http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> ▪ URL alias: Loads the file from a resource directory. Files must be located in a defined resource directory on the server. The data source files are located in a folder or a sub-folder of the ARIS document storage accessible in the ARIS Connect Repository. If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you need to recreate the URL alias that have been defined for ARIS Connect 10.0 Service Release 1. Delete the URL alias (page 353) at first and add a new URL alias (page 351) with the same data. Path prefix (alias): Alias of the resource directory with the path to a directory on the server. Select an alias of the local resource directory, for example, Feed URL. Feed URL is the alias of the resource directory of the default data feeds provided in ARIS Connect. In the input box, enter a path to the relevant data source file for the Path prefix (alias) selected. Example <code>/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> <p>To configure a Path prefix (alias), see Configure Dashboard server (page 351) for details.</p> <p>To store data source files in a resource directory, see Upload file based data sources (page 459) for details.</p> <ul style="list-style-type: none"> ▪ To copy the source file URL, see Upload file based data sources (page 459) for details.

Parameters	Description
Insert parameter ()	Inserts user defined input parameters at the cursor position. The button is clickable only if at least one user input parameter, for example, Text user input , has been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
Authentication	<p>Specifies the credentials for authenticating to access the source file.</p> <p>Single Sign-On: Enables you to access the source file using single sign-on (SSO). SSO only works within ARIS Connect and not for CSV files provided by external data sources, such as an external web page. For details on how to configure SSO, see Configure single sign-on (page 240).</p> <p>HTTP basic auth:</p> <p>Specifies an HTTP basic access authentication.</p> <p>User name and password are required for accessing the source file.</p>
HTTP headers	Adds HTTP headers to the URL.
Separator	Separates the column values in the CSV file. Comma (,), semicolon (;), space, tab and pipe () are available. Default is comma.
Get column names from row	<p>Specifies a specific row that contains the column names.</p> <p>Activate the Get column names from row option and enter the number of the relevant row.</p>
Data from row	Specifies a specific row from which the data source values extraction starts.
Advanced parsing options	<p>Charset: Character set in which the source file is coded. The default value can be changed manually if the extracted data refers to a different coding type. Default: windows-1252.</p> <p>Masking: Protects the enclosed characters against being split at the separator. If column values contain the specified separator, they can be enclosed in a pair of masking characters, for example, "1,23". Masking characters can be set as required (available masking characters: single-quote ('), double-quote ("), none).</p> <p>Remove quote characters in column value: Removes the characters used for masking from the result data. If this option is deactivated the masking characters will remain as part of the result data.</p> <p>Sanitize names: Transforms column names in such a way that they can be used as XML names, according to EMMML standards. This affects</p>

Parameters	Description
	<p>the names containing blank spaces or other special characters. If this option is deactivated, the names are left unchanged.</p> <p>Trim whitespace: Removes all leading and trailing whitespace from column values. If this option is deactivated, whitespace can be part of the result data.</p> <p>EMML parsing: Parses values in the same way as they are parsed in EMMML. This affects the parsing of numeric and date values. It affects whether a specific value is understood as a date or numeric value, because different sets of date patterns and locales are used. If this option is deactivated, dates without an explicit time zone are assigned to the server's default time zone, if this option is activated, they are assigned to GMT.</p>
Configure columns	<p>Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns, the column list is reloaded from the data source and all changes in the list are undone.</p>

If you use an absolute URL, for example,

http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication must be set. All requests to the uploaded file are made with the specified user/password combination.

If you use a relative URL, for example,

/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication is not required. All requests to the uploaded file are made with the current logged in user.

6.9.3.7.1.4 Excel

Reads a worksheet of an MS Excel file and writes the individual values to table columns in the data feed based on the specified parameters. The source table can be imported as a list or cross table.

In list tables, a corresponding column is created in the data feed for every non-empty column in the source table.

In cross tables, three columns are created in the data feed: A vertical iteration column corresponding to the first source column with the header, a horizontal iteration column defined in the operator and a value column.

MS Excel cells of data type number are extracted accurately, regardless of their formatting. Therefore, the values can be more accurate than displayed in MS Excel. MS Excel cells of data type date are extracted according to the formatting information to maintain the accuracy of the time stamp.

A cell can have a maximum of 2,000 characters.

The following parameters are available.

Parameters	Description
Source	<p>MS Excel file (xls,xlsx)</p> <ul style="list-style-type: none"> URL: HTTP address of the source file If another operator supplies the URL dynamically, the URL cannot be edited here. Example http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1 URL alias: Alias of a URL configuration. Only URL aliases for that you have the Usage privilege are available. Select a URL alias. For details, see Manage URL aliases. Local file: Loads file from a resource directory. Files must be located in a defined resource directory on the MashZone NextGen server. Path prefix (alias): Alias of the resource directory with the path to a directory on the server. Select an alias of the local resource directory. In the input box, enter a path to the relevant data source file for the Path prefix (alias) selected. Example /documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1

Parameters	Description
Browse file (alias)	Enables you to browse the resource directories with the alias defined. Click the Browse file alias (...) button and select the required source file. At least one resource directory must exist. For details, see Manage resource directories.
Insert parameter ()	Inserts user defined input parameters at the cursor position. The button is clickable only if at least one user input parameter, for example, Text user input , has been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
Sheet	Sheet in the source table to be extracted. The default value: First sheet Specification: Mandatory
List table / Cross table	Specifies the table type. The default value: List table Specification: Mandatory For cross tables, only a single vertical iteration on the left side of the table is currently supported.
Separator	Separates the column values in the CSV file. Comma (,), semicolon (;), space, tab and pipe (()) are available. Default is comma.
Column name from row	Determines the names of the individual columns from a specific row, the row number of which must be specified. This option is not available for cross tables.
Horizontal iteration from row	Determines the column names of the individual iteration steps from a specific row. The column name of the vertical iteration is also determined from this row.
Import values from row	Extracts all values from the source file starting with a specific row. The default value: 2 Specification: Mandatory
Import data range from/to	Area of the table from which data is to be extracted, specified using column and row coordinates, for example, A3 to H128 Specification: Optional You can only specify a single continuous data range that can contain empty rows or columns. If no upper limit (to) is specified for the data range, all cells above

Parameters	Description
	the lower limit (from) are extracted.
Configure columns	Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

If you use an absolute URL, for example,

http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication must be set. All requests to the uploaded file are made with the specified user/password combination.

If you use a relative URL, for example,

/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication is not required. All requests to the uploaded file are made with the current logged in user.

6.9.3.7.1.5 JSON

Extracts data from a JSON file.

The following parameters are available.

Parameters	Description
Source	<p>JSON file</p> <ul style="list-style-type: none"> ▪ URL: HTTP address of the source file If another operator supplies the URL dynamically, the URL cannot be edited here. Example <code>http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> ▪ URL alias: Loads the file from a resource directory. Files must be located in a defined resource directory on the server. The data source files are located in a folder or a sub-folder of the ARIS document storage accessible in the ARIS Connect Repository. If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you need to recreate the URL alias that have been defined for ARIS Connect 10.0 Service Release 1. Delete the URL alias (page 353) at first and add a new URL alias (page 351) with the same data. Path prefix (alias): Alias of the resource directory with the path to a directory on the server. Select an alias of the local resource directory, for example, Feed URL. Feed URL is the alias of the resource directory of the default data feeds provided in ARIS Connect. In the input box, enter a path to the relevant data source file for the Path prefix (alias) selected. Example <code>/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> <p>To configure a Path prefix (alias), see Configure Dashboard server (page 351) for details.</p> <p>To store data source files in a resource directory, see Upload file based data sources (page 459) for details.</p> <p>To copy the source file URL, see Upload file based data sources (page 459) for details.</p>
Insert parameter ()	<p>Inserts user defined input parameters at the cursor position. The button is only clickable if at least one user input parameter, for example, Text user input, has been inserted in the feed definition.</p>

Parameters	Description
Parameter options ()	Enables you to set input parameter options
Refresh rate ()	Specifies the time span before the source file is read in again. Default valueThe default value is 30 sec.
Authentication	<p>Specifies a HTTP basic access authentication or an existing authentication defined in the administration.</p> <p>User name and password are required for accessing the source file.</p>
HTTP headers	Adds HTTP headers to the URL
Repeating object: Detect	<p>Reads out the repeating object automatically. A repeating object already set by a user will not be considered. The detected columns are displayed in the Columns box depending on the repeating object.</p> <p>JSON object that is repeated for each row;</p> <p>You can edit the repeating object manually.</p> <p>Specify a valid XQuery 3.1 lookup expression, for example,</p> <pre>?catalog?journal?articles?* ?data?rows?* ?catalog?books?*</pre> <p>A JSON document is loaded as a nested structure of maps and arrays. The above expressions use the (terse form of the) map/array lookup syntax as follows:</p> <ul style="list-style-type: none"> - The initial '?' is a unary lookup operator that selects a named member of the root map - Further '?' are postfix lookup operators - '?*' selects all members of an array, for example, '?5' selects the fifth element of an array. <p>For more information about the lookup syntax, see https://www.w3.org/TR/xquery-31/#id-lookup.</p>
Advanced parsing options	<p>Charset: Character set in which the source file is coded. This can be set manually if the extracted data refers to a different coding type. By default, the HTTP response encoding is used if available, otherwise UTF-8 is used.</p> <p>EMML parsing: Parses values in the same way as they are parsed in EMML. This affects parsing of numeric and date values. It affects whether a specific value is understood as a date or numeric value, because different sets of date patterns and locales are used. If this option is activated, dates without an explicit time zone are assigned to the server's default time zone. If this option is deactivated, they are assigned to GMT.</p>

Parameters	Description
Columns: Detect	Reads out the columns of the data source automatically. The requested columns lists are displayed, based on the specified repeating object.
Configure columns	Configures the columns list. Deselect a column to exclude it from the result data. If you enter a New name for a column, it is used instead of the original column name in the result. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

If you use an absolute URL, for example,

http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication has to be set. All requests to the uploaded file are made with the specified user/password combination.

If you use a relative URL, for example,

/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication is not required. All requests to the uploaded file are made with the current logged in user.

6.9.3.7.1.6 XML

Extracts data from an XML file. The data records are identified using a recurring element. The individual values are written to the table columns in the data feed based on the specified parameters.

The following parameters are available.

Parameters	Description
Source	<p>XML file</p> <ul style="list-style-type: none"> ▪ URL: HTTP address of the source file If another operator supplies the URL dynamically, the URL cannot be edited here. Example <code>http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> ▪ URL alias: Loads the file from a resource directory. Files must be located in a defined resource directory on the server. The data source files are located in a folder or a sub-folder of the ARIS document storage accessible in the ARIS Connect Repository. If you have updated ARIS Connect 10.0 Service Release 1 to version 10.0 Service Release 2, you need to recreate the URL alias that have been defined for ARIS Connect 10.0 Service Release 1. Delete the URL alias (page 353) at first and add a new URL alias (page 351) with the same data. Path prefix (alias): Alias of the resource directory with the path to a directory on the server. Select an alias of the local resource directory, for example, Feed URL. Feed URL is the alias of the resource directory of the default data feeds provided in ARIS Connect. In the input box, enter a path to the relevant data source file for the Path prefix (alias) selected. Example <code>/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580?tenantid=default&revision=1</code> <p>To configure a Path prefix (alias), see Configure Dashboard server (page 351) for details.</p> <p>To store data source files in a resource directory, see Upload file based data sources (page 459) for details.</p> <p>To copy the source file URL, see Upload file based data sources (page 459) for details.</p>

Parameters	Description
Insert parameter ()	Inserts user defined input parameters at the cursor position. The button is clickable only if at least one user input parameter, for example, Text user input , has been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
Authentication	Specifies an HTTP basic access authentication. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL.
Repeating element: Detect	<p>Reads out the repeating element automatically. A repeating element already set by a user is not considered. The repeating element is displayed corresponding to the hierarchy of the XML elements, for example, <element>/<repeating element>. The requested columns are displayed in the Columns box depending on the repeating element.</p> <p>XML element that is repeated for each row (XPath to repeat element); You can edit the repeating element manually. Specify a valid XPath expression, for example, /catalog/journal/article /data/row /catalog/book</p>
Columns: Detect	Automatically reads out the columns of the data source. The requested columns list is displayed, based on the specified repeating element.
Configure columns	Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

If you use an absolute URL, for example,

http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication has to be set. All requests to the uploaded file are made with the specified user/password combination.

If you use a relative URL, for example,

/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580, an authentication is not required. All requests to the uploaded file are made with the current logged in user.

6.9.3.7.1.7 Data feed

Extracts data from an existing data feed.

To include a data feed as data source in a dashboard or in other data feeds, the **View** permission for the data feed selected is required. See Manage data feed permissions (page 457) for detail.

The following parameters are available.

Parameters	Description
Data feed	Data feed selected. Select data feed displays a list of available data feeds.
Edit data feed	Opens the selected data feed in a new tab.
User inputs	List of user inputs used in the selected data feed. You can enter a value in the relevant input box.
Configure columns	Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

6.9.3.7.1.8 JDBC

Extracts data from a preconfigured JDBC database.

You can configure JDBC data sources in the ARIS Connect Administration. See Add a JDBC data source for dashboards (page 357) for details.

The following parameters are available.

Parameters	Description
Data source	List of available JDBC data sources. Only JDBC data sources for which you have the required privilege are available. Select a JDBC data source.
Refresh rate ()	Specifies the time until the data source is read in again. Default value is 12 h.
SQL query	Input field to enter any SQL query command, for example, <code>SELECT * FROM <table name></code> .
Insert parameter ()	Inserts user defined input parameters at the cursor position. The button is clickable only if at least one user input parameter, for example, Text user input , has been inserted in the feed definition. See SQL statement parameters (page 519) for details.
Expand ()/ Collapse ()	Expands or collapses the query input box.
Authentication	Specifies an HTTP basic access authentication. User name and password are required for accessing the source file.
Configure columns	Configures the columns list. You can unselect a column to exclude it from the result data. If you enter a new name for a column, this name is used in the result instead of the original column name. If you click Reset columns , the column list is reloaded from the data source and all changes in the list are undone.

6.9.3.7.1.8.1 SQL statement parameters

You can insert parameter references in SQL statements of the JDBC operator. They are represented by a colon, followed by the parameter name. If the name contains special characters, it must be enclosed in double quotes.

JDBC PARAMETERS

Parameters are handed over to the database server as typed values along with the SQL statement at execution time. Before a statement is handed over to the database server, it is rewritten to use JDBC parameter markers ('?') as follows:

- A single-value parameter is replaced by a single JDBC parameter marker.
- A reference of a non-empty list is replaced by a comma-separated list of JDBC parameter markers, one for each list element. This is useful for populating the values of an **IN** predicate by a list value.

Example

```
SELECT * FROM table WHERE column IN (:list)
```

with 3 elements in the list is rewritten to

```
SELECT * FROM table WHERE column IN (?, ?, ?)
```

- A reference of an empty list is replaced by a single parameter marker that refers to a **NULL** value.

The last rule provides a valid SQL statement for an empty list. Note that if the list of values is empty, both **IN** and **NOT-IN** predicates return the same result: UNKNOWN and not FALSE.

6.9.3.7.1.9 URL parameter syntax

You can insert parameters in the input URL of the **ARIS Table**, **CSV**, **Excel**, **JSON**, and **XML** operators, as well as in the configuration of a **Call URL** action.

A parameter reference is represented by the parameter name in square brackets. If the name contains special characters, it must be enclosed in quotes.

Examples

```
http://[domain]
```

```
["web address"]
```

To represent a literal square bracket, you double the square bracket. In this way, the square bracket does not introduce a parameter reference. For example, **http://[::1]:8080** does not refer to a parameter, but represents the IPv6 loopback address literal **[::1]**.

At runtime, parameter references will be replaced by the value of their parameter.

A parameter reference can have options appended to it. Options appear inside of the square brackets and are separated by commas. The following options are supported:

- **encode-value="true"** causes URL encoding of the resulting parameter string
- **format="format string"** causes a numeric or date value to be converted to text with the given format

Examples

```
http://localhost:8080/[path,encode-value="true"]
```

```
http://localhost:[port,format="1234"]
```

6.9.3.7.2 Data transformation operators

In addition to the data source operators you can add further operators to transform the source data. The following data transformation operators are available in the data feed editor.

6.9.3.7.2.1 Aggregate

Combines rows if identical values occur multiple times in specified dimension columns. The numerical values in the remaining columns are combined using Average, Sum, Minimum, Maximum, or Number.

One or more numerical columns in a table are aggregated using none, one, or several dimension columns. In all rows with identical values in all dimension columns, the values in the columns to be aggregated are combined into one row based on an aggregation rule. That is, the result contains one row for each combination of dimension columns. This also applies if no columns are specified for aggregation. If no dimension column is specified, only a single row is created and all values in the columns to be aggregated are combined into a single value for each column. No rows are created for combinations that do not occur in the original table.

6.9.3.7.2.1.1 Behavior

Combines rows if identical values occur multiple times in specified dimension columns. The numerical values in the remaining columns are combined using Average, Sum, Minimum, Maximum, or Number.

One or more numerical columns in a table are aggregated using none, one, or several dimension columns. In all rows with identical values in all dimension columns, the values in the columns to be aggregated are combined into one row based on an aggregation rule. That is, the result contains one row for each combination of dimension columns. This also applies if no columns are specified for aggregation. If no dimension column is specified, only a single row is created and all values in the columns to be aggregated are combined into a single value for each column. No rows are created for combinations that do not occur in the original table.

6.9.3.7.2.1.2 Parameters

The following parameters are available.

Action	Result
Dimension column	<p>Name of dimension column.</p> <p>Source: Source table</p> <p>Data type: Date, Number, or Text</p> <p>The default value: {None}</p> <p>Specification: Optional</p>
Aggregation column	<p>Name of the column to be aggregated.</p> <p>Source: Aggregation column is transferred from the source table.</p> <p>Data type: Number</p> <p>The default value: {None}</p> <p>Specification: Optional</p>
Aggregation type	<p>Aggregation type for the column to be aggregated: Average value, Sum, Minimum, Maximum, Count, First row and Last row.</p> <p>The default value: Average value, if aggregation column selected.</p> <p>Specification: Mandatory, if aggregation column selected.</p>
Weighting	<p>If the aggregation type is Average value or Sum, a numerical column for weighting of the rows can be specified for each column to be aggregated.</p> <p>Specification: Optional</p>

6.9.3.7.2.1.3 Aggregation type

The following aggregation operations can be applied to the columns to be aggregated.

Data type	Comparison operators
Minimum	Finds all rows that have a specific combination of values in the dimension columns and returns the lowest value that occurs in these rows in the column to be aggregated.
Maximum	Finds all rows that have a specific combination of values in the dimension columns and returns the highest value that occurs in these rows in the column to be aggregated.
Average value	Finds all rows that have a specific combination of values in the dimension columns and returns the average of the values in the column to be aggregated. For weighting purposes, an additional column can be specified for each source column, containing a weighting factor for each row. The weighting information is combined as a pair with the source column.
Sum	Finds all rows that have a specific combination of values in the dimension columns and returns the sum of the values in the column to be aggregated. For weighting, an additional column can be specified for each source column, containing a weighting factor for each row. The weighting information is combined as a pair with the source column.
Count	Finds all rows that have a specific combination of values in the dimension columns and returns the count of values in the column to be aggregated.
First row	Finds all rows that have a specific combination of values in the dimension columns and returns the value of the row with the lowest row index (according to the index column).
Last row	Finds all rows that have a specific combination of values in the dimension columns and returns the value of the row with the highest row index (according to the index column).

At least one dimension or aggregation column, or both, must be set.

If no aggregation columns or dimension columns are specified, the incoming table remains unchanged.

6.9.3.7.2.1.4 Examples

The following table is to be aggregated based on the **Dim 1** and **Dim 2** columns. The sum is to be calculated for the Values 1 column and the average for the Values 2 column. The Weight (values 2) column is used for weighting the Values 2 column one row at a time.

Dim 1	Dim 2	Values 1	Values 2	Weight (values 2)
A	X	1	2	3
B	Y	2	4	4
C	Z	5	6	3
A	X	7	8	4
B	Y	9	10	3
C	Z	11	12	4

Result

Dim 1	Dim 2	Sum (values 1)	Average (values 2)
A	X	8 (1+7)	5,43 (2*3 + 8*4)/(3+4)
B	Y	12 (3+9)	6,57 (4*4 + 10*3)/(4+3)
C	Z	16 (5+11)	9,43 (6*3 + 12*4)/(3+4)

6.9.3.7.2.2 Arithmetic

Executes various arithmetical calculations. The operator sets any number of numerical operands against each other. The values are set against each other one row at a time according to the specified calculation type. The calculation always runs from top to bottom. In other words, two operands are always set against each other one row at a time and the result from the first two operands is then set against the third operand.

Compounding can be mapped by using a separate operator for each expression in brackets.

6.9.3.7.2.2.1 Behavior

Executes various arithmetical calculations. The operator sets any number of numerical operands against each other. The values are set against each other one row at a time according to the specified calculation type. The calculation always runs from top to bottom. In other words, two operands are always set against each other one row at a time and the result from the first two operands is then set against the third operand.

Compounding can be mapped by using a separate operator for each expression in brackets.

6.9.3.7.2.2.2 Parameters

The following parameters are available.

Action	Result
Operands	<p>One numerical operand per operation for the "Square" and "Square root" calculation types, otherwise two numerical operands.</p> <p>Source: Source table, constants, user input or incoming values from other operators.</p> <p>Data type: Number</p> <p>Specification: Mandatory</p>
Calculation type	
Addition (+)	Adds two columns row by row
Subtraction (-)	Subtracts 2 columns row by row
Division (/)	Divides the first column by the second column
Multiplication (*)	Multiplies two columns row by row
Percent (%)	Row by row, multiplies the second column with the percent value of the first column
Square (x ²)	Calculates the square of a column
Root	Calculates the square root of a column

Action	Result
Sine (sin)	Calculates for a column the sine value of an angle in degrees
Cosine (cos)	Calculates for a column the cosine value of an angle in degrees
Tangent (tan)	Calculates for a column the tangent value of an angle in degrees
Arcsine (asin)	Calculates for a column the arcsine of an angle in degrees
Arccosine (acos)	Calculates for a column the arccosine of an angle in degrees
Arctangent (atan)	Calculates for a column the arctangent of an angle in degrees
Logarithm (lg)	Calculates for a column the common logarithm
Logarithm (ln)	Calculates for a column the natural logarithm
Power (exp)	Calculates for a column S1 the S2nd power of S1 (S1 to the power of S2)
Minimum (min)	Calculates the minimum of column 1 and column 2
Maximum (max)	Calculates the maximum of column 1 and column 2
Absolute value (abs)	Calculates for a column the absolute value The default value: Addition (+) Specification: Mandatory You need to specify the source values for the trigonometric functions sin, cos, tan, asin, acos, and atan in degrees.

6.9.3.7.2.2.3 Example

Example: Result = Column 1 + Column 2 - Column 3

Column 1	Column 2	Column 3	Result
1000	2000	50	2950
2000	3000	1000	4000
3000	4000	1200	5800

6.9.3.7.2.3 Average

Calculates the average of the values from several numerical source columns one row at a time, writes the result to a target column, and overwrites any existing values there. If the target column does not exist, it is created.

6.9.3.7.2.3.1 Behavior

Calculates the average of the values from several numerical source columns one row at a time, writes the result to a target column, and overwrites any existing values there. If the target column does not exist, it is created.

6.9.3.7.2.3.2 Parameters

The following parameters are available.

Parameter	Description
Column	Name of the column for which the average value is calculated. Column is transferred from the source table. Data type: Number Specification: Mandatory
Weight	Weight factor, which can be specified for each column to be aggregated: a column with values, a single value from a feed (single-value operator), an input value or a constant. Data type: Number Specification: Optional
Target column	Name of the column to which the result is written. The column name can be transferred from the source table or freely entered. Data type: Number Default value: Result_1 Specification: Mandatory

6.9.3.7.2.4 Change data type

Changes the data types of the specified columns to the **Number**, **Text**, or **Date** data types

Action	Result
Conversion of Text to Number	<p>Numerical value of the text taking into account the decimal separator.</p> <p>If the decimal separator is set correctly, any thousands separator is detected automatically.</p>
Conversion of Number to Text	<p>Text representation of the number in the internal format, or based on the language and the specified format. You can also specify a valid number of leading zeros.</p> <p>If nothing is specified here, the results are formatted in the numerical format.</p>
Conversion of Text to Date	<p>Date value of the text in the internal format, based on the specified format and, where applicable, the language.</p> <p>The date must be in the AD era. Date values before the common era are not supported. The time format must be specified. The time format is made up of sequences of characters, which stand for date fields, for example, year, month, day of the week, or minute, in the relevant language; separated by separators. In addition, the corresponding language must be specified. Non-editable text must be enclosed in quotation marks.</p> <p>When using the Q or q symbol for quarters, all other symbols except Y and y for years are ignored. Only the order of Q/q and Y/y is relevant.</p>
Conversion of Date to Text	<p>Text representation of the date in the internal format, or based on the language and the specified format</p> <p>Non-editable text must be enclosed in quotation marks.</p> <p>The format and language specifications are optional. If no format is specified, the data is output in the internal date format. If no language is specified, English (EN) is applied as the default language.</p>
Conversion of Number to Date	Date value corresponding to the value of the number as milliseconds since 01/01/1970
Conversion of Date to Number	Number of milliseconds since 01/01/1970

Internal number format

If a user is logged in in English, the number format is Anglo-Saxon, which uses a period as the decimal separator, but no grouping characters.

Internal date format

Use yyyy-Q for specifying to the nearest quarter, otherwise use yyyy-MM-ddThh:mm:ss. The number of digits corresponds to the accuracy of the date, and the remaining digits are omitted. This is the transfer format.

Quarterly specifications

Quarterly specifications are indicated by a **Q** within the section of the format that is not in single quotation marks.

Prerequisites for conversion of text into quarterly date values:

1. It is expected that a source value containing a quarterly date consists of just two sequences of figures indicating the year and the quarter. Any non-numerical characters can occur before, after and between them, for example, Quarter 04/2009.
2. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, for example, quarter Q/y or Q Y.

Procedure:

1. The (first) two sequences of digits are determined from the source value.
2. The section of the format that is not enclosed in between single quotation marks is used to determine whether **q / Q** or **y / Y** appears first.
3. If q or Q appears first, the first sequence of digits is interpreted as the quarter and the second as the year, and vice-versa.

6.9.3.7.2.4.1 Behavior

Changes the data types of the specified columns to the **Number**, **Text**, or **Date** data types

Action	Result
Conversion of Text to Number	<p>Numerical value of the text taking into account the decimal separator.</p> <p>If the decimal separator is set correctly, any thousands separator is detected automatically.</p>
Conversion of Number to Text	<p>Text representation of the number in the internal format, or based on the language and the specified format. You can also specify a valid number of leading zeros.</p> <p>If nothing is specified here, the results are formatted in the numerical format.</p>
Conversion of Text to Date	<p>Date value of the text in the internal format, based on the specified format and, where applicable, the language.</p> <p>The date must be in the AD era. Date values before the common era are not supported. The time format must be specified. The time format is made up of sequences of characters, which stand for date fields, for example, year, month, day of the week, or minute, in the relevant language; separated by separators. In addition, the corresponding language must be specified. Non-editable text must be enclosed in quotation marks.</p> <p>When using the Q or q symbol for quarters, all other symbols except Y and y for years are ignored. Only the order of Q/q and Y/y is relevant.</p>
Conversion of Date to Text	<p>Text representation of the date in the internal format, or based on the language and the specified format</p> <p>Non-editable text must be enclosed in quotation marks.</p> <p>The format and language specifications are optional. If no format is specified, the data is output in the internal date format. If no language is specified, English (EN) is applied as the default language.</p>
Conversion of Number to Date	Date value corresponding to the value of the number as milliseconds since 01/01/1970
Conversion of Date to Number	Number of milliseconds since 01/01/1970

Internal number format

If a user is logged in in English, the number format is Anglo-Saxon, which uses a period as the decimal separator, but no grouping characters.

Internal date format

Use yyyy-Q for specifying to the nearest quarter, otherwise use yyyy-MM-ddThh:mm:ss. The number of digits corresponds to the accuracy of the date, and the remaining digits are omitted. This is the transfer format.

Quarterly specifications

Quarterly specifications are indicated by a **Q** within the section of the format that is not in single quotation marks.

Prerequisites for conversion of text into quarterly date values:

1. It is expected that a source value containing a quarterly date consists of just two sequences of figures indicating the year and the quarter. Any non-numerical characters can occur before, after and between them, for example, Quarter 04/2009.
2. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, for example, quarter Q/y or Q Y.

Procedure:

1. The (first) two sequences of digits are determined from the source value.
2. The section of the format that is not enclosed in between single quotation marks is used to determine whether **q / Q** or **y / Y** appears first.
3. If q or Q appears first, the first sequence of digits is interpreted as the quarter and the second as the year, and vice-versa.

6.9.3.7.2.4.2 Parameters

The following parameters are available.

Parameter	Description
Column	Name of the column to be changed; Source: Source table Data type: Date, Number, or Text Specification: Mandatory
New type	New column data type Default value: Text Specification: Mandatory
Format (Date type)	Time format for conversion from Date type to Text type and vice versa. The following formatting symbols are available when converting date into text: Year: y or Y Quarter: Q Month: M Calendar week: w Day of the week: E or e Day of the month: d Day of the year: D Hour: H or h Minute: m Second: s AM/PM: a Time zone: z (for example, GMT) RFC time zone: Z (for example, -0900) Era: G (must always be AD) Default value: MM/dd/yyyy The following formatting symbols are available when converting text to date: Year: y Quarter: Q Calendar week: w Week of the month: W Day of the week: E Day of the month: d

Parameter	Description
	<p>Day of the year: D</p> <p>Hour (0-23): H</p> <p>Hour (1-24): k</p> <p>Hour AM/PM (0-11): K</p> <p>Hour AM/PM (1-12): h</p> <p>Minute: m</p> <p>Second: s</p> <p>AM/PM: a</p> <p>Time zone: z</p> <p>RFC time zone: Z</p> <p>Era: G</p> <p>Default value: yyyy-MM-dd'T'HH:mm:ss;</p> <p>Permitted separators in both cases:</p> <p>Dash/minus (-), underscore (_), slash (/), period (.), colon (:), comma (,), tab character, and space.</p> <p>Specification: Mandatory</p>
Language	<p>Language if the target format is of the Date type.</p> <p>Available languages: de and en.</p> <p>Specification: Mandatory when using names of months and names of days of the week</p>
Decimal separator	<p>Separator for the decimal places, if the target format is of the Number type.</p> <p>Default value: Comma (,)</p> <p>Specification: Mandatory</p>
Format (Number source format)	<p>Number format for the conversion of the Number type to the Text type. You can select predefined formats or set your own format manually.</p> <p>If the numbers before the decimal separator are entered manually, they must have four digits in ascending order followed by digits in descending order. This combination can be followed by text (such as the unit "hours" or km/h).</p> <p>Default value: 1234</p> <p>Permitted separators:</p> <p>Thousands separator in German: period (.)</p> <p>Thousands separator in English: comma (,)</p> <p>Decimal separator in German: comma (,)</p> <p>Decimal separator in English: period (.)</p>

Parameter	Description
Leading zeros	<p>Number of leading zeros. The maximum number of leading zeros is the number of digits before the decimal separator.</p> <p>Example:</p> <p>Format: 1,234.12 and leading zeros: 5</p> <p>Number -> Text</p> <p>10,245 -> 00010,25</p> <p>12000,4 -> 12000,4</p> <p>89,7 -> 00089,70</p>
Specify type	<p>Automatically specifies the data type of the source values.</p> <p>If the content of a column does not correspond to its assigned data type, a row is created in the operator which specifies the data type determined for this column. Vice-versa, settings (lines) are removed from the operator, which would reset the data type of a column already typified correctly.</p>
Encoding (Text source format)	<p>Specifies the encoding of special characters, for the conversion of the Text type to the Text type, for example, "/", "&", "?".</p> <p>Apply UTF-8 encoding: encodes the entire text, using UTF-8 codes</p> <p>Decode UTF-8: decodes the entire text, using UTF-8 codes</p> <p>Apply URL encoding: keeps the URL specific characters</p> <p>For UTF-8 encoding/decoding the special characters must be masked in a valid URL. Only select this option if you are sure that all sections that make up the URL are already masked.</p>

The characters used for the time format can be combined in any order and repeated any number of times.

Exceptions

- For a month, the number of characters must be ≥ 3 (MMM or MMMM) if the month is specified in text format (JAN, FEB, etc.) and < 3 if it is specified as a figure. In this case, a language must also be specified so that the name of the month can be transformed correctly.
- For a year format, such as 2009, y can be specified any number of times, that is, yy and yyyy return 2009.
- For a year format, such as 09, however, yyyy returns the year 9 and yy the year 2009.
- When formatting date values as days of the week for a date-to-text conversion, an e/E number < 4 returns the day abbreviations (MON, TUE, etc.), while e/E = or > 4 returns the full name of the day.
- Only the month (M), minute (m), time zone (z), RFC time zone (Z) and calendar week (w) are case-sensitive.
- When converting text to date, if the Q or q symbol is used for quarters, all other symbols except Y and y are ignored. Only the order of Q/q and Y/y is key.

- For the reverse conversion from date to text, the Q/q can be combined with any other symbols, but may only occur once (not QQ/yy)
- Quarter entries are currently only possible in the form YYYY-Q. These strings can contain only the year, separator, and quarter.
- All other strings must be enclosed in single quotation marks ('). Spaces can be inside or outside, for example, 'On' dd.MM.yy 'at' hh:mm, or 'On 'dd.MM.yy' at 'hh:mm' '.
- The space pattern in the source and target format must match, for example, "2 .3 .09" -> "d .M .y" but not "2. 3. 09" -> "d .M .y".

6.9.3.7.2.4.3 Examples

Source format: "22.3.2009"

Time format: "d.M.y" or "DDDD.MM.YYYY",
but not "DD.MMM.YYYY "

Source format: "03/22/09 30:24 PM"

Time format: "MM/DD/YY hh:mm a" or "M/d/y HH:mm A"
but not "M/d/y HH:MM A" or "m/d/y HH:mm A"

Source format: "Time: 2009-FEBRUARY-01T22:33:44"

Time format: "Time: 'y-MMM-d'T'h:m:s" or "'Time:' y-MMMMM-d'T'h:m:s",
but not "'Time: 'y-MM-d'T'h:m:s"

Source format: "3. quarter 2009"

Time format: "QY" or "Q'. quarter' y or "QQ/yyyy";
but not "YQ"

6.9.3.7.2.5 Change data type - single value

Changes the data type of the incoming single value to the **Number**, **Text**, or **Date** data types.

Action	Result
Conversion of Text to Number	<p>Numerical value of the text taking into account the decimal separator.</p> <p>If the decimal separator is set correctly, any thousands separator is detected automatically.</p>
Conversion of Number to Text	<p>Text representation of the number in the internal format, or based on the language and the specified format. You can also specify a valid number of leading zeros.</p> <p>If nothing is specified here, the results are formatted in the numerical format.</p>
Conversion of Text to Date	<p>Date value of the text in the internal format, based on the specified format and, where applicable, the language.</p> <p>The date must be in the AD era. Date values before the common era are not supported. The time format must be specified. The time format is made up of sequences of characters, which stand for date fields, for example, year, month, day of the week, or minute, in the relevant language; separated by separators. In addition, the corresponding language must be specified. Non-editable text must be enclosed in quotation marks.</p> <p>When using the Q or q symbol for quarters, all other symbols except Y and y for years are ignored. Only the order of Q/q and Y/y is relevant.</p>
Conversion of Date to Text	<p>Text representation of the date in the internal format, or based on the language and the specified format</p> <p>Non-editable text must be enclosed in quotation marks.</p> <p>The format and language specifications are optional. If no format is specified, the data is output in the internal date format. If no language is specified, English (EN) is applied as the default language.</p>
Conversion of Number to Date	Date value corresponding to the value of the number as milliseconds since 01/01/1970
Conversion of Date to Number	Number of milliseconds since 01/01/1970

Internal number format

If the user is logged in in English, the number format is Anglo-Saxon style with a period as the decimal separator and at least one decimal place, but without grouping characters.

Internal date format

yyyy-Q for specifying to the nearest quarter, otherwise yyyy-MM-ddThh:mm:ss. The number of digits corresponds to the accuracy of the date, and the remaining digits are omitted. This is the transfer format.

Quarterly specifications

These are indicated by a **Q** within the section of the format that is not in single quotation marks.

Prerequisites for conversion of text into quarterly date values:

1. It is expected that a source value containing a quarterly date consists of just two sequences of figures indicating the year and the quarter. Any non-numerical characters can occur before, after and between them, for example, Quarter 04/2009.
2. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, for example, quarter Q/y or Q Y.

Procedure:

1. The (first) two sequences of digits are determined from the source value.
2. The section of the format that is not enclosed between single quotation marks is used to determine whether **q / Q** or **y / Y** appears first.
3. If q or Q appears first, the first sequence of digits is interpreted as the quarter and the second as the year, otherwise the reverse.

6.9.3.7.2.5.1 Behavior

Changes the data type of the incoming single value to the **Number**, **Text**, or **Date** data types.

Action	Result
Conversion of Text to Number	<p>Numerical value of the text taking into account the decimal separator.</p> <p>If the decimal separator is set correctly, any thousands separator is detected automatically.</p>
Conversion of Number to Text	<p>Text representation of the number in the internal format, or based on the language and the specified format. You can also specify a valid number of leading zeros.</p> <p>If nothing is specified here, the results are formatted in the numerical format.</p>
Conversion of Text to Date	<p>Date value of the text in the internal format, based on the specified format and, where applicable, the language.</p> <p>The date must be in the AD era. Date values before the common era are not supported. The time format must be specified. The time format is made up of sequences of characters, which stand for date fields, for example, year, month, day of the week, or minute, in the relevant language; separated by separators. In addition, the corresponding language must be specified. Non-editable text must be enclosed in quotation marks.</p> <p>When using the Q or q symbol for quarters, all other symbols except Y and y for years are ignored. Only the order of Q/q and Y/y is relevant.</p>
Conversion of Date to Text	<p>Text representation of the date in the internal format, or based on the language and the specified format</p> <p>Non-editable text must be enclosed in quotation marks.</p> <p>The format and language specifications are optional. If no format is specified, the data is output in the internal date format. If no language is specified, English (EN) is applied as the default language.</p>
Conversion of Number to Date	Date value corresponding to the value of the number as milliseconds since 01/01/1970
Conversion of Date to Number	Number of milliseconds since 01/01/1970

Internal number format

If the user is logged in in English, the number format is Anglo-Saxon style with a period as the decimal separator and at least one decimal place, but without grouping characters.

Internal date format

yyyy-Q for specifying to the nearest quarter, otherwise yyyy-MM-ddThh:mm:ss. The number of digits corresponds to the accuracy of the date, and the remaining digits are omitted. This is the transfer format.

Quarterly specifications

These are indicated by a **Q** within the section of the format that is not in single quotation marks.

Prerequisites for conversion of text into quarterly date values:

1. It is expected that a source value containing a quarterly date consists of just two sequences of figures indicating the year and the quarter. Any non-numerical characters can occur before, after and between them, for example, Quarter 04/2009.
2. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, for example, quarter Q/y or Q Y.

Procedure:

1. The (first) two sequences of digits are determined from the source value.
2. The section of the format that is not enclosed between single quotation marks is used to determine whether **q / Q** or **y / Y** appears first.
3. If q or Q appears first, the first sequence of digits is interpreted as the quarter and the second as the year, otherwise the reverse.

6.9.3.7.2.5.2 Parameters

The following parameters are available.

Parameter	Description
Single value	Source: Single-value operator Data type: Date, Number, or Text Specification: Mandatory
New type	New single-value data type Default value: Text Specification: Mandatory
Format (Date type)	<p>Time format for conversion from Date type to Text type and vice versa.</p> <p>The following formatting symbols are available when converting date into text:</p> <p>Year: y or Y</p> <p>Quarter: Q</p> <p>Month: M</p> <p>Calendar week: w</p> <p>Day of the week: E or e</p> <p>Day of the month: d</p> <p>Day of the year: D</p> <p>Hour: H or h</p> <p>Minute: m</p> <p>Second: s</p> <p>AM/PM: a</p> <p>Time zone: z (for example, GMT)</p> <p>RFC time zone: Z (for example, -0900)</p> <p>Era: G (must always be AD)</p> <p>Default value: MM/dd/yyyy</p> <p>Time format for conversion from Date type to Text type and vice versa.</p> <p>The following formatting symbols are available when converting date into text:</p> <p>Year: y or Y</p> <p>Quarter: Q</p>

Parameter	Description
Format (Date type)	<p>Month: M</p> <p>Calendar week: w</p> <p>Day of the week: E or e</p> <p>Day of the month: d</p> <p>Day of the year: D</p> <p>Hour: H or h</p> <p>Minute: m</p> <p>Second: s</p> <p>AM/PM: a</p> <p>Time zone: z (for example, GMT)</p> <p>RFC time zone: Z (for example, -0900)</p> <p>Era: G (must always be AD)</p> <p>Default value: MM/dd/yyyy</p> <p>The following formatting symbols are available when converting text to date:</p> <p>Year: y</p> <p>Quarter: Q</p> <p>Calendar week: w</p> <p>Week of the month: W</p> <p>Day of the week: E</p> <p>Day of the month: d</p> <p>Day of the year: D</p> <p>Hour (0-23): H</p> <p>Hour (1-24): k</p> <p>Hour AM/PM (0-11): K</p> <p>Hour AM/PM (1-12): h</p> <p>Minute: m</p> <p>Second: s</p> <p>AM/PM: a</p> <p>Time zone: z</p> <p>RFC time zone: Z</p> <p>Era: G</p> <p>Default value: yyyy-MM-dd'T'HH:mm:ss;</p> <p>Permitted separators in both cases:</p> <p>Dash/minus (-), underscore (_), slash (/), period (.), colon (:), comma</p>

Parameter	Description
	<p>(,), tab character, and space.</p> <p>Specification: Mandatory</p>
Language	<p>Language if the target format is of the Date type.</p> <p>Available languages: de and en.</p> <p>Specification: Mandatory when using names of months and names of days of the week</p>
Decimal separator	<p>Separator for the decimal places, if the target format is of the Number type.</p> <p>Default value: Comma (,)</p> <p>Specification: Mandatory</p>
Format (Number source format)	<p>Number format for the conversion of the Number type to the Text type.</p> <p>You can select predefined formats or set your own format manually. With manual entry, the numbers before the decimal separator must have four digits ascending and then descending, for example, 1,234.321. After this, you can add text (such as the unit "hours" or km/h).</p> <p>Default value: 1234</p> <p>Permitted separators:</p> <p>Thousands separator in German: period (.)</p> <p>Thousands separator in English: comma (,)</p> <p>Decimal separator in German: comma (,)</p> <p>Decimal separator in English: period (.)</p>
Leading zeros	<p>Number of leading zeros. The maximum number of leading zeros is the number of digits before the decimal separator.</p> <p>Example:</p> <p>Format: 1,234.12 and leading zeros: 5</p> <p>Number -> Text</p> <p>10,245 -> 00010,25</p> <p>12000,4 -> 12000,4</p> <p>89,7 -> 00089,70</p>

Parameter	Description
Specify type	<p>Automatically specifies the data type of the source values.</p> <p>If the content of a column does not correspond to its assigned data type, a row is created in the operator which specifies the data type determined for this column Vice-versa, settings (lines) are removed from the operator, which would reset the data type of a column already typified correctly.</p>
Encoding (Text source format)	<p>Specifies the encoding of special characters, for the conversion of the Text type to the Text type, for example, "/", "&", "?".</p> <p>Apply UTF-8 encoding: encodes the entire text, using UTF-8 codes</p> <p>Decode UTF-8: decodes the entire text, using UTF-8 codes</p> <p>Apply URL encoding: keeps the URL specific characters</p> <p>For UTF-8 encoding/decoding the special characters must be masked in a valid URL. Only select this option if you are sure that all sections that make up the URL are already masked.</p>

The characters in the time format can be combined in any order and repeated any number of times.

Exceptions

For a month, the number of characters must be ≥ 3 (MMM or MMMM) if the month is specified in text format (JAN, FEB, etc.) and < 3 if it is specified as a figure. In this case, a language must also be specified so that the name of the month can be transformed correctly.

For a year format such as 2009, y can be specified any number of times, that is, yy and yyyy return 2009.

For a year format such as 09, however, yyyy returns the year 9 and yy the year 2009.

When formatting date values as days of the week for a date to text conversion, an e/E number < 4 returns the day abbreviations (MON, TUE, etc.), while e/E = or > 4 returns the full name of the day.

Only the month (M), minute (m), time zone (z), RFC time zone (Z) and calendar week (w) are case-sensitive.

When converting text to date, if the Q or q symbol is used for quarters all other symbols except Y and y are ignored. Only the order of Q/q and Y/y is decisive then.

For the reverse conversion from date to text, the Q/q can be combined with any other symbols, but may only occur once (not QQ/yy)

Quarter entries are currently only possible in the form YYYY-Q. These strings can only contain the year, separator, and quarter.

All other strings must be enclosed in single quotation marks ('). Spaces can be inside or outside, for example, 'On' dd.MM.yy 'at' hh:mm, or 'On 'dd.MM.yy' 'at' 'hh:mm' '.

The space pattern in the source and target format must match, for example, "2 .3 .09" -> "d .M .y" but not "2. 3. 09" -> "d .M .y".

6.9.3.7.2.5.3 Examples

Source format: "22.3.2009"

Time format: "d.M.y" or "DDDD.MM.YYYY",
but not "DD.MMM.YYYY "

Source format: "03/22/09 30:24 PM"

Time format: "MM/DD/YY hh:mm a" or "M/d/y HH:mm A"
but not "M/d/y HH:MM A" or "m/d/y HH:mm A"

Source format: "Time: 2009-FEBRUARY-01T22:33:44"

Time format: "Time: 'y-MMM-d'T'h:m:s" or "'Time:' y-MMMMM-d'T'h:m:s",
but not "'Time: 'y-MM-d'T'h:m:s"

Source format: "3. quarter 2009"

Time format: "QY" or "Q'. quarter' y or "QQ/yyyy";
but not "YQ"

6.9.3.7.2.6 Column to value

Takes a single value from a data feed column. If the column contains multiple values, the first value found is returned.

Determines the first value found from a column in the source table and returns this as a single value.

6.9.3.7.2.6.1 Behavior

Takes a single value from a data feed column. If the column contains multiple values, the first value found is returned.

Determines the first value found from a column in the source table and returns this as a single value.

6.9.3.7.2.6.2 Parameters

The following parameters are available.

Parameter	Description
Source column	Name of the column whose values are filtered. Source: Source table Data type: Number, Text, Date; Specification: Mandatory

6.9.3.7.2.7 Combine data feeds

Merges two data feeds by comparing the values in key columns one row at a time. The key columns for the left and right table are defined in pairs. Several pairs of key columns can be specified. Both key columns must have the same data type.

One table is defined as the main table, to which all columns from the second table are added except for its key columns. The main table is linked to the upper left anchor point.

6.9.3.7.2.7.1 Behavior

Merges two data feeds by comparing the values in key columns one row at a time. The key columns for the left and right table are defined in pairs. Several pairs of key columns can be specified. Both key columns must have the same data type.

One table is defined as the main table, to which all columns from the second table are added except for its key columns. The main table is linked to the upper left anchor point.

6.9.3.7.2.7.2 Parameters

The following parameters are available.

Parameter	Description
Left/right column	Name of the left or right key column. Source: Source tables Data type: Text, Date or Number For Text data type, the Case sensitive and Ignore spaces options are additionally available.
Options	
Include key values of left data feed	Always transfers all key values from the left data feed (main data feed), regardless of whether there are matching rows in the right data feed. Rows with matching key values are merged. Rows in the right data feed whose key values do not occur in the left table are omitted. This option is selected by default.
Include identical key values of both data feeds	Transfers only the rows whose key values match in the two data feeds, and which therefore can be merged.
Include key values of both data feeds	Always transfers the key values from both data feeds, even if their key values do not occur in the other data feed. Rows with matching key values are merged.

Parameter	Description
Allow multiple values	Allows multiple occurrences of rows with identical key values in the right table. This can lead to a large number of result rows, as all combinations of the rows with identical key values are transferred to the results. This option is unselected by default.

The key columns have the name they had in the left table.

Since the individual table columns are identified by name when being imported you need to ensure that the columns of the table area to be imported have unique names.

If other columns with identical names occur in both feeds, other than the key columns, `_L` or `_R` is appended to the names of these columns.

6.9.3.7.2.8 Concatenate data feeds

Adds the rows from the right-hand table after the final row of the left-hand table and merges columns of the same name and type.

For every row in the main table, a check is made as to whether there is a row in the right table that has the same values in all key column pairs. These rows are then combined into one row.

6.9.3.7.2.8.1 Behavior

Adds the rows from the right-hand table after the final row of the left-hand table and merges columns of the same name and type.

For every row in the main table, a check is made as to whether there is a row in the right table that has the same values in all key column pairs. These rows are then combined into one row.

6.9.3.7.2.8.2 Parameters

The following parameters are available.

Parameter	Description
Left/right data feeds	Two data feeds to be combined. Specification: Mandatory

6.9.3.7.2.9 Concatenate texts

Combines the values of the specified columns or text fragments into one text.

Appends the values from the source columns or the source values to one another one row at a time, writes the results to the target column, and overwrites any existing values there. If the target column does not exist, it is created.

6.9.3.7.2.9.1 Behavior

Combines the values of the specified columns or text fragments into one text.

Appends the values from the source columns or the source values to one another one row at a time, writes the results to the target column, and overwrites any existing values there. If the target column does not exist, it is created.

6.9.3.7.2.9.2 Parameters

The following parameters are available.

Parameter	Description
Text	Value to be linked. Source: Source table, single-value operator, input value, or a constant. Data type: Number, Text, Date; Specification: Optional
Target column	Name of the column to which the linked text is written. Source: Source table or constant. Data type: Text Default value: Result_1 Specification: Optional

6.9.3.7.2.10 Conditional replace

Changes the value in the specified column one row at a time if certain conditions are met.

Replaces existing values in the column with new values. Replacement must be linked to a condition, that is, you can specify whether all or at least one condition must be met. Several conditions can be specified and these are linked to each other with "AND".

6.9.3.7.2.10.1 Behavior

Changes the value in the specified column one row at a time if certain conditions are met.

Replaces existing values in the column with new values. Replacement must be linked to a condition, that is, you can specify whether all or at least one condition must be met. Several conditions can be specified and these are linked to each other with "AND".

6.9.3.7.2.10.2 Parameters

The following parameters are available.

Action	Result
Column	Name of the column whose values are replaced. Source: Source table Data type: Number, Text, Date; Specification: Mandatory
New value	Value that replaces the value in the source column. Source: Column with values, single value from a feed (single-value operator), user input, or a constant. Default value: is equal to Specification: Mandatory
Replace	Values are replaced if one or all conditions is/are met.
Source column	Name of the column whose values are compared. Source: Source table Data type: Number, Text, Date; Specification: Mandatory

Action	Result
Comparison operator	<p>Operator that compares the values from the source column with the comparison values.</p> <p>Available comparison operators depend on the data type of the source column.</p> <p>Default value: is equal to</p> <p>Specification: Mandatory</p>
Comparison values	<p>Values that are compared with the values from the source column.</p> <p>Source: Column with values, single value from a feed (single-value operator), user input, or a constant.</p> <p>Data type: Must be identical to that of the source column.</p> <p>Comparison value missing</p> <p>Condition met: If a comparison value is missing, the condition is assumed to be met.</p> <p>Condition not met: If a comparison value is missing, the condition is assumed to not be met.</p> <p>Specification: Mandatory</p>

6.9.3.7.2.10.3 Comparison operators

The following comparison operators are available.

Data type	Comparison operators
Number	<ul style="list-style-type: none"> Is equal to Is not equal to Is less than Is less than or equal to Is greater than Is greater than or equal to Is empty Is not empty

Data type	Comparison operators
Text	Is equal to Is not equal to Starts with Ends with Contains Does not contain Is empty Is not empty
Date	Before After On Before or on On or after Is empty Is not empty

6.9.3.7.2.11 Convert text

Converts all characters in the source column one row at a time, based on the specified transformation rule. The transformation rule includes all rows in the selected source column.

6.9.3.7.2.11.1 Behavior

Converts all characters in the source column one row at a time, based on the specified transformation rule. The transformation rule includes all rows in the selected source column.

6.9.3.7.2.11.2 Parameters

The following parameters are available.

Parameter	Description
Column	Name of the column whose values are converted. Source: Source table Data type: Text Specification: Mandatory
Conversion	Transformation rule for conversion of column values: UPPER: Converts all characters into upper case, according to the rules of the specified language. LOWER: Converts all characters into lower case, according to the rules of the specified language. ONLY_LETTERS: Removes all figures (0-9) from the column values; ONLY_NUMBERS: Removes all letters from the column values. REMOVE_SPACES: Removes all spaces from the column values. REMOVE_LEADING_WHITESPACE: Removes leading whitespace from the column values. REMOVE_TRAILING_WHITESPACE: Removes trailing whitespace from the column values. Specification: Mandatory

Parameter	Description
Target column	<p>Name of the column to which the conversation search result is written. This can be either a new column (typing a column name in the text field) or existing column (selecting a column from the drop-down menu).</p> <p>Data type: Text</p> <p>Default value: Result_1</p> <p>Specification: Optional</p> <p>If the target column is identical to the source column, the values in the source column are overwritten.</p>

6.9.3.7.2.12 Copy data feeds

Creates up to four independent copies of a data feed.

6.9.3.7.2.12.1 Behavior

Creates up to four independent copies of a data feed.

6.9.3.7.2.12.2 Parameters

The following parameters are available.

Parameter	Description
Data feed	Data feed to be copied. Specification: Mandatory

6.9.3.7.2.13 Copy single value

Creates an independent copy of a single value, without changing the input value.

6.9.3.7.2.13.1 Behavior

Creates an independent copy of a single value, without changing the input value.

6.9.3.7.2.13.2 Parameters

The following parameters are available.

Parameter	Description
Single value	Single value to be copied. Specification: Mandatory

6.9.3.7.2.14 Delete column

Deletes the specified columns from the data feed.

6.9.3.7.2.14.1 Behavior

Deletes the specified columns from the data feed.

6.9.3.7.2.14.2 Parameters

The following parameters are available.

Action	Result
Column	Name of the column to be deleted. Source: Source table Data type: Date, Number, or Text Specification: Mandatory

6.9.3.7.2.15 Duplicate column

Copies the specified columns from the data feed to new or existing columns of the same type. It is possible to create multiple copies of a column, but the target columns must have different names.

If the target column does not exist, it is created. If it does exist, it is replaced. Regardless of their type, all columns can be duplicated.

6.9.3.7.2.15.1 Behavior

Copies the specified columns from the data feed to new or existing columns of the same type. It is possible to create multiple copies of a column, but the target columns must have different names.

If the target column does not exist, it is created. If it does exist, it is replaced. Regardless of their type, all columns can be duplicated.

6.9.3.7.2.15.2 Parameter

The following parameters are available.

Action	Result
Source column	Name of the column to be duplicated. Source: Source table Data type: Date, Number, or Text Specification: Mandatory
Target column	Name of the new or existing column. Source: Constant Data type: Corresponds to source column. Specification: Mandatory

6.9.3.7.2.16 Extract text

Creates an extract from each value in a text column starting from the specified position (start index), and with the specified length, and writes the result to a target column.

Searches the source column at the specified start index, using the specified length for the string, and displays it in the target column. Start index and length must be ≥ 0 , otherwise an empty entry appears in the target column.

6.9.3.7.2.16.1 Behavior

Creates an extract from each value in a text column starting from the specified position (start index), and with the specified length, and writes the result to a target column.

Searches the source column at the specified start index, using the specified length for the string, and displays it in the target column. Start index and length must be ≥ 0 , otherwise an empty entry appears in the target column.

6.9.3.7.2.16.2 Parameters

The following parameters are available.

Parameter	Description
Column	Name of the column whose values are searched. Source: Source table Data type: Text Specification: Mandatory
Start index	Start position of the string to be extracted. Source: Source column, single-value operator, input value, or constant. Size ≥ 0 ; Data type: Number Specification: Mandatory
Length	Number of characters in the string to be extracted. Source: Source column, single-value operator, user input, or constant. Number of characters ≥ 0 Data type: Number Specification: Mandatory

Parameter	Description
Target column	<p>Name of the column to which the search result is written. This can be either a new column (typing a column name in the text field) or existing column (selecting a column from the drop-down menu).</p> <p>Data type: Number</p> <p>Default value: Result_1</p> <p>Specification: Mandatory</p>

6.9.3.7.2.17 Filter by date

Searches a date column for the latest or earliest date and transfers these rows to the results table. All other rows are filtered out. The search can be limited to specific dimensions. If one or more dimensions are specified, the operator determines the feed row with the earliest or latest date within the feed rows with identical dimension values and transfers this to the result table. If there are several feed rows with the earliest or latest date, all of them are transferred to the results table.

6.9.3.7.2.17.1 Behavior

Searches a date column for the latest or earliest date and transfers these rows to the results table. All other rows are filtered out. The search can be limited to specific dimensions. If one or more dimensions are specified, the operator determines the feed row with the earliest or latest date within the feed rows with identical dimension values and transfers this to the result table. If there are several feed rows with the earliest or latest date, all of them are transferred to the results table.

6.9.3.7.2.17.2 Parameters

The following parameters are available.

Parameter	Description
Source column	Name of the source column for which the earliest or latest date values are determined. Source: Source table Data type: Date Specification: Mandatory
Earliest/latest date	Determines the earliest or latest date values in the source column. Default value: Earliest date
Dimension column	Dimension for which the earliest or latest date values are determined. Acts as a filter to restrict the values determined. Data type: Text Specification: Mandatory Multiple dimension columns can be set.

6.9.3.7.2.18 Filter rows

Filters the data feed one row at a time using specific conditions.

Column values of the Number, Text, or Date type are either let passed or blocked. An appropriate filter criterion can be selected depending on the data type.

The operator allows the processing of single values and value lists. You can connect the single-value user inputs and the user inputs of List type, see User input operators (page 583).

Action	Result
Action	<p>Executed if particular conditions are met.</p> <p>Possible actions:</p> <ul style="list-style-type: none"> ▪ Let values pass (from source table) ▪ Block values (from source table) <p>if</p> <ul style="list-style-type: none"> ▪ all conditions are met ▪ one condition is met <p>Default value: Let values pass if all conditions are met.</p> <p>Specification: Mandatory</p>
Column	<p>Name of the column whose values are filtered.</p> <p>Source: Source table</p> <p>Data type: Number, Text, Date;</p> <p>Specification: Mandatory</p>
Comparison operator	<p>Operator that compares the values from the source column with the comparison values.</p> <p>Available comparison operators depend on the data type of the source column.</p> <p>Default value: is equal to</p> <p>Specification: Mandatory</p>
Comparison values	<p>Values that are compared with the values from the source column.</p> <p>Source: Source table, single-value operator, user input, user input (List), or a constant</p> <p>Data type: Must be identical to that of the source column.</p> <p>Comparison value missing</p> <ul style="list-style-type: none"> ▪ Condition met: If a comparison value is missing, the condition is assumed to be met. ▪ Condition not met: If a comparison value is missing, the condition is assumed to not be met. <p>Specification: Mandatory</p>

Action	Result
All conditions should match.	Combines the specified filter conditions. If the option is not enabled, the result will be a concatenation of all single filter results.

6.9.3.7.2.18.1 Behavior

Filters the data feed one row at a time using specific conditions.

Column values of the Number, Text, or Date type are either let passed or blocked. An appropriate filter criterion can be selected depending on the data type.

The operator allows the processing of single values and value lists. You can connect the single-value user inputs and the user inputs of List type, see User input operators (page 583).

Action	Result
Action	<p>Executed if particular conditions are met.</p> <p>Possible actions:</p> <ul style="list-style-type: none"> ▪ Let values pass (from source table) ▪ Block values (from source table) <p>if</p> <ul style="list-style-type: none"> ▪ all conditions are met ▪ one condition is met <p>Default value: Let values pass if all conditions are met.</p> <p>Specification: Mandatory</p>
Column	<p>Name of the column whose values are filtered.</p> <p>Source: Source table</p> <p>Data type: Number, Text, Date;</p> <p>Specification: Mandatory</p>
Comparison operator	<p>Operator that compares the values from the source column with the comparison values.</p> <p>Available comparison operators depend on the data type of the source column.</p> <p>Default value: is equal to</p> <p>Specification: Mandatory</p>
Comparison values	<p>Values that are compared with the values from the source column.</p> <p>Source: Source table, single-value operator, user input, user input (List), or</p>

Action	Result
	<p>a constant</p> <p>Data type: Must be identical to that of the source column.</p> <p>Comparison value missing</p> <ul style="list-style-type: none"> ▪ Condition met: If a comparison value is missing, the condition is assumed to be met. ▪ Condition not met: If a comparison value is missing, the condition is assumed to not be met. <p>Specification: Mandatory</p>
All conditions should match.	Combines the specified filter conditions. If the option is not enabled, the result will be a concatenation of all single filter results.

6.9.3.7.2.18.2 Parameters

The following parameters are available.

Parameter	Description
Number	<p>Is equal to</p> <p>Is not equal to</p> <p>Is less than</p> <p>Is less than or equal to</p> <p>Is greater than</p> <p>Is greater than or equal to</p> <p>Is empty</p> <p>Is not empty</p>
Text	<p>Is equal to</p> <p>Is not equal to</p> <p>Starts with</p> <p>Ends with</p> <p>Contains</p> <p>Does not contain</p> <p>Is empty</p> <p>Is not empty</p>
Date	<p>Before</p> <p>After</p>

Parameter	Description
	In
	Before or on
	On or after
	Is empty
	Is not empty

COMPARISON OPERATORS PROCESSING VALUE LISTS

If a value list is processed (that is, the comparison value is a value list), either all filter values (ALL) or just a few filter values (ANY) can be applied for the filter condition (see table below). Click the () **Operator condition** icon to view the settings. The settings are also displayed in the tool tip.

- For filter conditions using the comparison operators is equal to, starts with, ends with, contains, and on the predefined applied list values are set to ANY.
- For filter conditions using the comparison operators is not equal to, does not contain, is less than, is greater than, and after the predefined applied list values are set to ALL.
- The setting of the applied filter values can be changed for all comparison operators except is equal to, is not equal to, and on. Click the () **Operator condition** icon and select the settings required.

6.9.3.7.2.19 Find text index

Finds the specified search text in a search column and writes the position of the text found to a numerical target column.

If the search text is not found, the position is -1.

6.9.3.7.2.19.1 Behavior

Finds the specified search text in a search column and writes the position of the text found to a numerical target column.

If the search text is not found, the position is -1.

6.9.3.7.2.19.2 Parameters

The following parameters operators are available.

Parameter	Description
Column	Name of the column whose values are searched. Source: Source table Data type: Text Specification: Mandatory
Search text	String for which the search is performed. Source: Column values from source table, single value from a feed (single-value operator), input value, or a constant. Data type: Text Specification: Mandatory
Target column	Name of the column to which the search result is written. This can be either a new column (typing a column name in the text field) or existing column (selecting a column from the drop-down menu). Data type: Number Default value: Result_1 Specification: Mandatory
First/last hit	If multiple results are found, the first or last hit is taken as the search result.

6.9.3.7.2.20 Goal accomplishment

Calculates the degree of goal accomplishment of column values one row at a time, based on the rating and the two planned values for 100% and 0%.

6.9.3.7.2.20.1 Behavior

Calculates the degree of goal accomplishment of column values one row at a time, based on the rating and the two planned values for 100% and 0%.

6.9.3.7.2.20.2 Parameters

The following parameters are available.

Parameter	Description
Calculation column value	Name of the column for which the goal accomplishment is calculated. Source: Source table Data type: Number Specification: Mandatory
Rating	Rating of the column values for which the goal accomplishment is calculated. Valid values: Positive or Negative Positive: Higher values are assessed as positive, for example, sales revenue Negative: Higher values are assessed as negative, for example, process throughput time. Data type: Text Default value: Positive: Specification: Mandatory
100% relates to	Target values that are compared with the source values. Source: Source table, single-value operator, input value, or a constant. Data type: Number Specification: Mandatory Goal accomplishment depends on the rating: Positive rating: Source values \geq target values Negative rating: Source values \leq target values

Parameter	Description
0% relates to	<p>Target values that are compared with the source values.</p> <p>Source: Source table, single-value operator, input value, or a constant.</p> <p>Data type: Number</p> <p>Specification: Mandatory</p> <p>Goal accomplishment depends on the rating:</p> <p>Positive rating: Target values \leq source values</p> <p>Negative rating: Target values \geq source values</p>
Target column	<p>Name of the column to which the result is written.</p> <p>Source: Source table or constant.</p> <p>Default value: Result_1</p> <p>Data type: Number</p> <p>Specification: Optional</p>

6.9.3.7.2.21 Insert column

Inserts new columns of the **Text**, **Number**, or **Date** data type into the data feed. Each of the columns can be populated with an initial value.

6.9.3.7.2.21.1 Behavior

Inserts new columns of the **Text**, **Number**, or **Date** data type into the data feed. Each of the columns can be populated with an initial value.

6.9.3.7.2.21.2 Parameter

The following parameters are available.

Action	Result
Column name	Name of the new column. Source: Constant Data type: Date, Number, or Text Specification: Mandatory
Type	New column data type; Date, Number, or Text. Default value: Text; Specification: Mandatory
Create numeric enumeration	Fills a new column with ascending values. The values start at 1 or the value entered in the Value input box and increase by a value of 1 in each subsequent row. Specification: Optional If the option is enabled the Value box is disabled and any (default) value already entered or selected is deleted. Incoming connections for dynamic values are ignored.
Value	Initial value of the new column. Source: User input, constant or source table Data type: Depends on the data type of the source column. Specification: Optional

6.9.3.7.2.22 Merge single texts

Concatenates multiple text values.

By default, the number of characters in a text cell is limited to 2,000. This limitation applies to text cells that are part of a feed result (also of a partial result). The limitation does not apply to individual values during feed calculation.

6.9.3.7.2.22.1 Behavior

Concatenates multiple text values.

By default, the number of characters in a text cell is limited to 2,000. This limitation applies to text cells that are part of a feed result (also of a partial result). The limitation does not apply to individual values during feed calculation.

6.9.3.7.2.22.2 Parameters

The following parameters are available.

Parameter	Description
Text	Any strings Source: User input, single-value operator, or constant Data type: Text Specification: Optional

Example

An SQL statement is assembled by the **Merge single texts** operator. As long as it is handled as an individual value, this value can exceed the 2,000 characters. As soon as it is used in a table, however, it is automatically shortened to 2,000 characters.

6.9.3.7.2.23 Move date

Moves a date by a specified amount of time in a given direction and writes the results to a target column.

A date can only be moved by an amount of time, the unit of which is the same as or less accurate than the unit of the date itself. If the format of the moving period is more accurate than the format of the source date, the source date is retained. If you move a date by quarters, it is moved by three months for every quarter.

If a date accurate to the nearest day with a number of days > 28 is moved to a month that has fewer days, the result is the last day of the target month.

Example

You can move a date accurate to the nearest month by months, quarters or years, but not by days. A date accurate to the nearest year can only be moved by years, a date accurate to the smallest unit by any unit.

6.9.3.7.2.23.1 Behavior

Moves a date by a specified amount of time in a given direction and writes the results to a target column.

A date can only be moved by an amount of time, the unit of which is the same as or less accurate than the unit of the date itself. If the format of the moving period is more accurate than the format of the source date, the source date is retained. If you move a date by quarters, it is moved by three months for every quarter.

If a date accurate to the nearest day with a number of days > 28 is moved to a month that has fewer days, the result is the last day of the target month.

Example

You can move a date accurate to the nearest month by months, quarters or years, but not by days. A date accurate to the nearest year can only be moved by years, a date accurate to the smallest unit by any unit.

6.9.3.7.2.23.2 Parameter

The following parameters are available.

Action	Result
Source column	<p>Name of the source column whose date values are moved.</p> <p>Source: Source table</p> <p>Data type: Date</p> <p>Specification: Mandatory</p>
Direction	<p>Direction in which the date is moved.</p> <p>Valid values: Forward or Backward</p> <p>Data type: Text</p> <p>Default value: Forward</p> <p>Specification: Mandatory</p>
Value	<p>Value by which the date is moved by the selected unit.</p> <p>Source: Manual entry, single value or source table</p> <p>Data type: Number</p> <p>Default value: 1</p> <p>Specification: Optional</p>
Unit	<p>Unit of time by which the date is moved.</p> <p>Data type: Text</p> <p>Default value: Second</p> <p>Specification: As source</p> <p>The information As source allows a move even if the unit of the date values is unknown at the time of creation or if it can vary.</p>
Target column	<p>Name of the target column to which the result is written.</p> <p>Data type: Date</p> <p>Default value: Result_1</p> <p>Specification: Optional</p> <p>The target column can be identical to the source column. The values in the target column are overwritten.</p>

6.9.3.7.2.23.3 Example

Source value	Value	Unit	Direction	Result
2009-12-24T16:23	10	YEAR	Forward	2019-12-24T16:23
2009-12-24	10	DAY	Forward	2010-01-03
2009-12-30	10	MONTH	Backward	2009-02-28
2009-11	1	QUARTER	Forward	2010-02
2009-11	1	DAY	Forward	2009-11
2009-01-01	3	As source	Forward	2011-01-04
2011-Q1	3	As source	Forward	2011-Q4

6.9.3.7.2.24 Rename column

Changes the names of the specified columns from the data feed. The data type of the column is retained.

6.9.3.7.2.24.1 Behavior

Changes the names of the specified columns from the data feed. The data type of the column is retained.

6.9.3.7.2.24.2 Parameter

The following parameters are available.

Action	Result
Column	Name of the column to be deleted. Source: Source table Data type: Date, Number, or Text Specification: Mandatory
New name	New name of the renamed column. Source: Constant Data type: Corresponds to source column. Specification: Mandatory

6.9.3.7.2.25 Replace text

Replaces text in a search column with the specified Find or Replace text one row at a time, or writes the text to a target column.

If the search text cannot be found, the search text itself is written to the target column.

6.9.3.7.2.25.1 Behavior

Replaces text in a search column with the specified Find or Replace text one row at a time, or writes the text to a target column.

If the search text cannot be found, the search text itself is written to the target column.

6.9.3.7.2.25.2 Parameters

The following parameters are available.

Parameter	Description
Column	Name of the column whose values are searched. Source: Source table Data type: Text Specification: Mandatory
Search text	String for which the search is performed. Source: Column values from source table, single value from a feed (single-value operator), input value, or a constant. Data type: Text Specification: Mandatory
Replacement text	String that replaces the search text. Source: Source table, single-value operator, input value, or constant. Data type: Text Specification: Optional If no replacement text is specified, the search text found is replaced with a empty text.
Target column	Name of the column to which the search result is written. This can be either a new column (typing a column name in the text field) or existing column (selecting a column from the drop-down menu). Data type: Number Default value: Result_1 Specification: Mandatory

Parameter	Description
First/last hit	IF multiple results are found, the first, last, or all hits is/are replaced. The specification relates to occurrence within the individual rows of the search column and not to the sequence of rows, that is, NOT "First row", "Last row" and "All rows".

6.9.3.7.2.26 Round up/down

Rounds the values from a numerical source column to the specified number of decimal places (accuracy), writes the results to the target column, and overwrites any existing values there. If the target column does not exist, it is created.

If the accuracy itself is specified as a decimal number, the decimal places are ignored, that is, the integer value is used. Values that already have the same number or fewer decimal places than specified remain unchanged.

When rounding, the value is rounded down if the next decimal place is < 5 , otherwise it is rounded up.

6.9.3.7.2.26.1 Behavior

Rounds the values from a numerical source column to the specified number of decimal places (accuracy), writes the results to the target column, and overwrites any existing values there. If the target column does not exist, it is created.

If the accuracy itself is specified as a decimal number, the decimal places are ignored, that is, the integer value is used. Values that already have the same number or fewer decimal places than specified remain unchanged.

When rounding, the value is rounded down if the next decimal place is < 5 , otherwise it is rounded up.

6.9.3.7.2.26.2 Parameter

The following parameters are available.

Action	Result
Source column	Name of the source column whose values are rounded. Source: Source table Data type: Number Specification: Mandatory
Precision	Numerical value specifying the number of decimal places; Source: Source table, single-value operator, input value, or a constant. Data type: Number Specification: Mandatory

Action	Result
Target column	Name of the column to which the result is written. The column name can be transferred from the source table or freely entered. Data type: Number Default value: Result_1 Specification: Optional

6.9.3.7.2.27 Round up/down date

Converts date values from a date column to a rougher time unit and writes the results to a target column.

6.9.3.7.2.27.1 Behavior

Converts date values from a date column to a rougher time unit and writes the results to a target column.

6.9.3.7.2.27.2 Parameter

The following parameters are available.

Action	Result
Source column	<p>Name of the source column whose values are rounded.</p> <p>Source: Source table</p> <p>Data type: Date</p> <p>Specification: Mandatory</p>
Precision	<p>Accuracy of the new date format, defined by the unit: Year, Quarter, Month, Day, Hour, Minute, or Second, and Interval: Depending on the selected unit, for example, 5 minutes or 1 year</p> <p>Data types: Numeric, Text</p> <p>Default values: 1, Minute</p> <p>If the accuracy of the source column is less accurate or the same as the target column format, the original value is retained.</p> <p>The date values are rounded according to the selected interval. Only the unit to be rounded is taken into account, for example, when rounding to minutes, the seconds are ignored.</p> <p>Rounding type: Specifies how the selected time interval is to be rounded.</p> <p>Round up for half an interval: Automatically rounds up above an interval value higher than or equal to half of the interval value</p> <p>Round down for half an interval: Automatically rounds down below an interval value lower than or equal to half of the interval value</p> <p>Always round up: Always rounds up, regardless of the interval value</p> <p>Always round down: Always rounds down, regardless of the interval value</p>
Target column	<p>Name of the target column to which the converted date is written</p> <p>Data type: Date</p> <p>Default value: Result_1</p>

Action	Result
	<p>Specification: Optional</p> <p>The target column can be identical to the source column. The values in the target column are overwritten.</p> <p>If the target column is not of the Date type, it is replaced by a new date column.</p>

6.9.3.7.2.27.3 Examples

Source value	Accuracy	Result
2009-12-24T16:23	Day	2009-12-24
2009-12-24T16:23	Hour	2009-12-24T16
2009-12-24	Month	2009-12
2009-12-24	Quarter	2009-Q4
2009-12-24	Year	2009

Rounding

2010-08-06T17:15: 27	10 seconds	2010-08-06T17:15: 30
2010-08-06T17: 07 :00	15 minutes	2010-08-06T 17 :00
2010-08-06T17: 18 :00	15 minutes	2010-08-06T 17:15
2010-08-06T 02:18:04	4 hours	2010-08-06T 04:00:00

Round up

Source value	Accuracy	Result
2010-02-28T23: 07:00:00 AM	15 minutes	2010-02-28T 23:00
2010-02-28T23: 07:30	15 minutes	2010-02-28T 11:15:00 PM
2010- 02-28 T23:30:00	1 hour	2010- 03-01 T00

Round down

Source value	Accuracy	Result
1970:01:01T09:00: 01	6 hours	1970:01:01T 12:00:00
1970:01:01T09:00: 00	6 hours	1970:01:01T 06:00:00

Always round up

Source value	Accuracy	Result
2010-02-28T 11:15:00 PM	15 minutes	2010-02-28T 11:15:00 PM
2010-02-28T 11:15:01 PM	15 minutes	2010-02-28T 11:30:00 PM
2010- 02-28T20:00:01	6 hours	2010- 03-01T00

Always round down

Source value	Accuracy	Result
2010-02-28T 11:15:00 PM	15 minutes	2010-02-28T 11:15:00 PM
2010-02-28T 11:14:59 PM	15 minutes	2010-02-28T 23:00
2010- 03-01T05:59:59	6 hours	2010- 03-01T00

6.9.3.7.2.28 Runtime info

Provides system information on the logged-in user or the current date. The operator can also generate a random number.

The value type of the resulting single value changes accordingly.

6.9.3.7.2.28.1 Behavior

Provides system information on the logged-in user or the current date. The operator can also generate a random number.

The value type of the resulting single value changes accordingly.

6.9.3.7.2.28.2 Parameters

The following parameters are available.

Parameter	Description
Information type	<p>The single-value operator can return the following types of information:</p> <ul style="list-style-type: none"> User data Today's date Random number <p>Default value: User data Specification: Mandatory</p>
Property	<p>Properties of the logged-in user; displayed if User data is selected as the information type.</p> <p>The following values can be selected: Login, First name, Last name, E-mail and Language</p> <p>Default value: User name Specification: Mandatory</p>
Precision	<p>Specifies the accuracy of the date, displayed if Today's date is selected as the information type.</p> <p>The following values can be selected: Minute, Hour, Day, Month, Year</p> <p>Default value: Day Specification: Mandatory</p>

Parameter	Description
Number range	<p>Number range of the random number; displayed if Random number is selected as the information type.</p> <p>The following values can be selected: Integers, Floating point numbers</p> <p>Default value: Integers</p> <p>Specification: Mandatory</p>
Upper/lower limit	<p>Upper or lower limit of the value range for the random number; displayed if Random number is selected as the information type.</p> <p>Default value: 0 and 10</p> <p>Specification: Mandatory</p>

6.9.3.7.2.29 Value to column

Converts an individual value into a column so that it can be connected to an operator.

Creates a feed table from a single-value operator with a column of the source operator type and a row containing the value of the source operator.

6.9.3.7.2.29.1 Behavior

Converts an individual value into a column so that it can be connected to an operator.

Creates a feed table from a single-value operator with a column of the source operator type and a row containing the value of the source operator.

6.9.3.7.2.29.2 Parameters

The following parameters are available.

Parameter	Description
Target column	<p>Name of the column to which the conversion result is written.</p> <p>The name of the column is initially Result_1. You can change the name manually if required.</p> <p>Data type: Text, Date or Number</p> <p>Default value: Result_1</p> <p>Specification: Optional</p>

6.9.3.7.3 User input operators

A user input operator is an interface to a data feed, allowing a user to enter data manually in a dashboard. The following user input operators are available in the data feed editor.

6.9.3.7.3.1 Date user input

The date user input enables the dynamic entry of date values in data feed processing. User input is an interface to a data feed, allowing a user to enter data manually in a dashboard.

The input has the format yyyy-MM-dd'T'HH:mm:ss (up to the required accuracy) or yyyy-'Q'Q.

6.9.3.7.3.1.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	Value used for a test calculation in the Feed Editor. Source: Constant Data type: Date Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Date Specification: Optional

6.9.3.7.3.2 Date user input (List)

The date user input enables the dynamic entry of date values in data feed processing. The operator is an interface to a data feed that can process multiple values (lists of values) at the same time. It enables the multiple selection in widgets.

The user input (list) operator can only be connected to operators that support the processing of list values (multiple selection). These operators are:

- Filter rows
- Data feed
- PPM
- JDBC
- Terracotta DB

The date user input has the format yyyy-MM-dd'T'HH:mm:ss (up to the required accuracy) or yyyy-'Q'Q.

6.9.3.7.3.2.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	Value used for a test calculation in the Feed Editor. Source: Constant Data type: Date Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Date Specification: Optional
Edit	Enables you to enter the relevant debug and preview values in a table.

6.9.3.7.3.3 Number user input

The number user input enables the dynamic entry of numerical values in data feed processing. User input is an interface to a data feed, allowing a user to enter data manually in a dashboard. The input is done with a period (.) as the decimal separator and with no thousand grouping character (for example, 1234.56).

6.9.3.7.3.3.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	The values is used for a test calculation in the Feed Editor. Source: Constant Data type: Number Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Number Specification: Optional

6.9.3.7.3.4 Number user input (List)

The number user input enables the dynamic entry of numerical values in data feed processing. User input is an interface to a data feed, allowing a user to enter data manually in a dashboard. The input is done with a period (.) as the decimal separator and with no thousand grouping character (for example, 1234.56).

The user input (list) operator can only be connected to operators that support the processing of list values (multiple selection). These operators are:

- Filter rows
- Data feed
- JDBC
- Terracotta DB

6.9.3.7.3.4.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	List of value used for a test calculation in the feed editor. Source: Constant Data type: Number Specification: Optional
Preview value	List of values used if the user does not provide any input. Source: Constant Data type: Number Specification: Optional
Edit	Enables you to enter the relevant debug and preview values in a table.

6.9.3.7.3.5 Text user input

The text user input enables the dynamic entry of text in data feed processing. User input is an interface to a data feed, allowing a user to enter data manually in a dashboard.

6.9.3.7.3.5.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	Value used for a test calculation in the Feed Editor. Source: Constant Data type: Text Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Text Specification: Optional

6.9.3.7.3.6 Text user input (List)

The text user input enables the dynamic entry of text in data feed processing. User input is an interface to a data feed, allowing a user to enter data manually in a dashboard.

The user input (list) operator can only be connected to operators that support the processing of list values (multiple selection). These operators are:

- Filter rows
- Data feed
- PPM
- JDBC
- Terracotta DB

6.9.3.7.3.6.1 Parameters

The following parameters are available.

Parameter	Description
Name	Name of user input Source: Constant Data type: Text Specification: Optional The names of the individual user input must be unique within the feed definition.
Debug value	Value used for a test calculation in the Feed Editor. Source: Constant Data type: Text Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Text Specification: Optional
Edit	Enables you to enter the relevant debug and preview values in a table.

6.10 Administrate Collaboration

Collaboration is the platform for cooperation across teams. With Collaboration, information can be exchanged faster, knowledge can be shared, and cooperation across borders is improved.

6.10.1 Open Collaboration

Open Collaboration to exchange information, share knowledge, etc.

Prerequisites

- Collaboration is activated in ARIS Administration configuration.
- You have at least the **ARIS Connect Viewer** license privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Collaboration**.

Collaboration opens.

6.10.2 Check activities flagged as inappropriate

Check content flagged as inappropriate and decide whether it must be deleted.

Prerequisite

- Flagging activities is enabled in ARIS Administration configuration.
- You have the **Collaboration administrator** function privilege.

Procedure

1. Under **Administration** click  **Check flagged activities**. The activities flagged as inappropriate are displayed.
2. Verify whether the Collaboration terms of use have been violated.
3. Click  **Allow** if the content does not violate the terms of use.
4. Click  **Comment** to enter a comment or further information for a post.
5. Click  **Delete** if the content violates the terms of use, and then click **OK**.

The flagged activity was checked and is either deleted or will continue to be shown depending on the result. Alternatively, you can check the flagged activities in your notifications.

6.10.3 Manage portal feeds

Edit portal feed subscriptions of Collaboration users. You can cancel subscriptions completely or just for individual users. Canceled subscriptions cannot be added here again.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Under **Administration** click  **Manage portal feeds**. The followed items are displayed.
2. Click **Delete** to unsubscribe from a portal feed. This removes the entire stream along with all activities and posts.
3. Click **OK**.
4. To cancel the subscription for individual followers, click **Edit** in the row for the relevant item. The followers are displayed.
5. Click **Unfollow** in the row for the follower whose subscription you want to cancel.
6. Click **OK**.
7. Click  **Save**.

The selected subscriptions will be canceled. The corresponding feed is no longer displayed in  **My portal feeds** for the selected users.

6.10.4 Synchronize access privileges

For some interactions in Collaboration, users need special access privileges, for example, to post on portal feeds. These access privileges are assigned in ARIS Architect. To use updated privileges at once, synchronize them manually in Collaboration.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Under **Administration** click  **Manage portal feeds**.
2. Click **Synchronize access privileges**.
3. Click **Execute**.

The access privileges from ARIS Architect are updated. The users can now work with the relevant content.

6.10.5 Manage announcements

Publish information important for all colleagues as an announcement. Announcements are always displayed on the top of any feed or stream of all users. Additionally, they are highlighted by the background color. Only one announcement is possible at a time, that is, if a new announcement is published, it replaces the previous one.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Under **Administration** click  **Manage announcements**.
2. Enter the announcement title.
3. Enter or copy your text into the text box. Up to 2000 characters are available.
4. Click **OK**.

Your announcement is published in **All company feed** and **My feed** of all colleagues. Users can hide the announcement in their feed by clicking  **Remove**.

If the announcement is outdated, delete it (**Administration >  Manage announcements**).

6.10.6 Configure ARIS document storage user

Specify a user responsible for the generation of dashboards. The data of dashboards is stored in ARIS document storage. The dashboard data from Collaboration is automatically updated to ARIS document storage every day. Only one ARIS document storage user (page 91) can be specified at a time. For detailed information about access to ARIS document storage (page 91) etc., please refer to **Manage documents** help.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have the **Dashboard administrator** function privilege.
- You have the ARIS Connect Designer license privilege.

Procedure

1. Under **Administration** click  **Configure document user**.
2. Enter the user name and the password of the relevant user.
3. Click **OK**.

The ARIS document storage user is specified.

6.10.7 Configure database user

Specify a user responsible for the interaction with ARIS Connect server. The users login information is required for processes executed in the background, for example, the activation of automatic following (**ARIS Administration > Collaboration > Configure database user**). Only one database user can be specified at a time.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have the ARIS Connect Designer license privilege.
- The user to be configured as database user must have the **Database administrator** function privilege.

Procedure

1. Under **Administration**, click  **Configure database user**.
2. Enter the user name and the password of the relevant user.
3. Click **OK**.

The database user is specified.

6.10.8 Display dashboards

You can view statistics data using dashboards. Dashboards can be used, for example, to perform controls in real time.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You have at least the **MashZone Viewer** license privilege.
- **Generate user statistics (com.aris.umc.audit.enabled)** is enabled in the configuration (page 291) (**User management > Security > Advanced settings**).
- Your ARIS Server is enabled for ARIS Aware.
- ARIS document storage user is specified (page 591).

Procedure

1. Under **Administration**, click  **Dashboards**.
2. Click the relevant area (**Overview, Content, Users, Groups**).

The dashboards for the selected area are displayed.

More information on dashboards is available in Use dashboards (page 1068), Dashboards available by default (page **Error! Bookmark not defined.**), and Set up dashboards.

6.10.9 Clean up and export activities

You can delete activities from before a specified date in order to remove outdated content from Collaboration. This makes the feed overview more transparent. To archive this data, you can create an export. These elements are stored in the export: Comments, tags including hashtags and system tags, external links, links to models, bookmarks, likes, etc.

Prerequisite

You have the **Collaboration administrator** function privilege.

Procedure

1. Under **Administration** click  **Clean up and export**.
2. Click the **Activities older than** box. The calendar opens.
3. Select the date from which all earlier activities are to be deleted or exported.
4. Click **OK**.
5. Specify whether the activities should be exported and/or deleted.
6. Depending on your selection, click **Export**, **Export and delete** or **Delete**.

According to your specifications, the activities older than the date entered are deleted and/or exported. The export is saved as a ZIP file.

Archive the ZIP file on your computer. To do so, move the mouse pointer over the relevant export. The buttons of the available functions are displayed. Click  **Download ZIP file**. If export files are outdated, you can remove them from the list by clicking on  **Delete Zip file**.

6.10.10 Configure notifications

You can specify the time for daily e-mail notifications and the day for weekly e-mail notifications. Defaults are AM 00:00 and Monday respectively. The global settings are used for all users who have not specified an e-mail frequency in their own account yet (**View notifications > Change your notification settings**).

Prerequisite

You have the **Collaboration administrator** function privilege.

Procedure

1. Under **Administration** click  **Configure notifications**.
2. Select a time for the daily digest e-mail (**Daily digest at**).
3. Select a day for the weekly digest e-mail (**Weekly digest on**).
4. Select a global frequency (**Global settings**).
5. Click **Save**.

The e-mail notifications will be sent to the users at the time and on the day you specified.

6.10.11 Customize e-mail notifications

You can customize the e-mail notification layout by editing the HTML template. You can for example, adapt font size and font color as well as the background color.

Prerequisite

- You have the **Collaboration administrator** function privilege.
- You know how to edit HTML code.

Procedure

1. Under **Administration** click  **Configure notifications**.
2. Click **Customization**. The HTML template is displayed.
3. Edit existing HTML tags or add new ones. See the example below.
4. Under the HTML template, click  **Help** to receive information about important keywords used in the HTML template.
5. Click  **Save**.
6. Under the HTML template, click  **Send preview e-mail** to receive an e-mail with a preview of your customized design.

The customized layout is created.

Click  **Restore defaults** below the HTML template to undo all the settings you have made. The default settings are loaded and the template is refreshed.

Tip

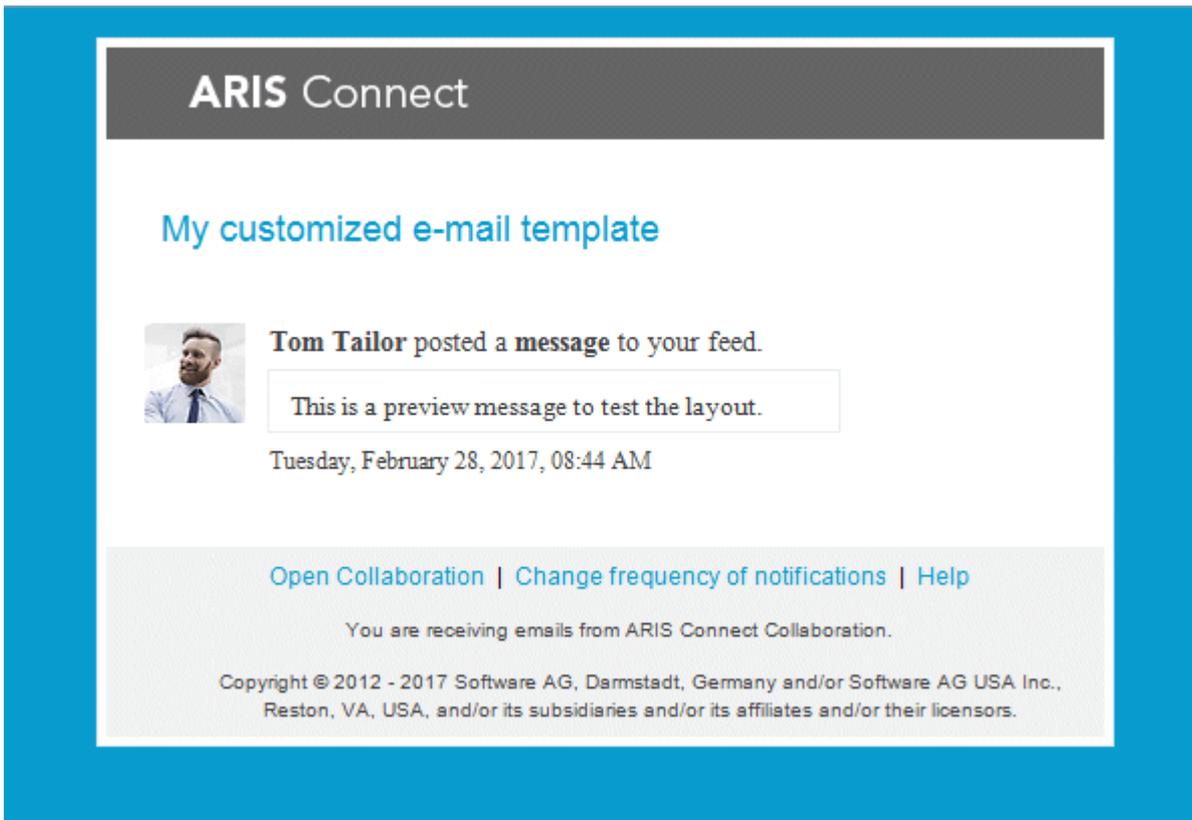
Alternatively, you can edit the template with an external HTML editor. To do so, copy the template to your clipboard ().

Example

Change the background color of the e-mail and the heading.

- Replace the tag `<body class="mail-font-family">` with `<body class="mail-font-family" style="background-color: #0899CC;">` in order to use a blue background color.
- Replace the tag `<h3 class="mail-heading body-heading">$emailTitle</h3>` with `<h3 class="mail-heading body-heading">My customized e-mail template</h3>` in order to use the heading **My customized e-mail template**.

Your preview e-mail should now look like this:



6.10.12 Keyboard shortcuts for Collaboration

The following shortcuts are available in Collaboration (page 806).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
End	Moves to the lower entries if they cannot be displayed completely due to the window size or the screen resolution.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Home	Moves to the upper entries if they cannot be displayed completely due to the window size or the screen resolution.
Tab	<ul style="list-style-type: none"> Focuses the next control in the navigation or enters the next input field. Jumps from the Comment box to the  Tag,  Link, and  File symbols that you can use to attach tags, links, or files to your comment. It also jumps to the other input fields and to the Post button.
Shift + Tab	Focuses the previous control in the navigation or enters the next previous input field.
Right arrow/ Left arrow	Moves the cursor in input fields through the text.
Up arrow/ Down arrow	Moves the selection of items in lists.
Enter	<p>Opens the attachment fields and places the cursor in the input field if the Tag or Link symbol is selected. Opens the Select document dialog when the File symbol is selected.</p> <ul style="list-style-type: none"> Posts the comment when the Post button is selected. Executes the focused button. Opens the dialog/the selection list of the focused item.
Ctrl + Enter	Posts a comment when the Post button is active.

6.10.13 What are the privileges of coordinators and Collaboration administrators?

COORDINATORS

- Are responsible for managing (page 818) the group profile, privileges, access, and feed activity facilitation.
- Can delete their groups.

As the creator of a group, you are automatically the coordinator. You can assign (page 818) coordinator privileges to other group members, as well. If there is no coordinator anymore for a group, for example, because all users with coordinator privileges for a group were deleted, Collaboration administrators can manage the group and assign coordinator privileges.

COLLABORATION ADMINISTRATORS

- Have the same privileges as coordinators.
- Manage the posts that users have flagged as inappropriate (page 589).
- Can synchronize (page 590) access privileges
- Can manage (page 591) announcements
- Can configure ARIS document storage user (page 591) and database user (page 592)
- Can display (page 592) dashboards
- Can clean up and export (page 593) activities
- Can view all posts and delete them.
- Can configure (page 593) and customize (page 594) e-mail notifications.
- Can customize (page 341) Collaboration in ARIS Administration.

Collaboration administrator is a function privilege assigned in ARIS Administration.

6.10.14 What is the synchronization user?

The synchronization user serves technical purposes only. No function or license privileges are assigned to this user. The synchronization user is required for synchronization processes executed in the background of Collaboration, for example, to synchronize the user data between ARIS Administration and Collaboration.

The synchronization user is automatically generated for every newly created tenant. If the synchronization user is not available, the **system** user (page 69) is used instead, provided that the default password of the **system** user was not changed. If the **system** user cannot be used, you must manually create the synchronization user using ARIS Cloud Controller. The technical name of the synchronization user, for example in ARIS Cloud Controller, is **_aris_tech_user_ecp_techuser**. For detailed information, refer to **ARIS Cloud Controller (ACC) Command-Line Tool > Create synchronization user**.

6.10.15 How can user accounts be deleted and anonymized?

Users can only be deleted (page 50) in ARIS Administration. To anonymize Collaboration users according to GDPR (page 1172), use ARIS Cloud Controller. For detailed information, refer to **ARIS Cloud Controller (ACC) Command-Line Tool**.

After anonymization, activities of Collaboration users, such as posts, comments, groups, are shown with **Anonymized user** instead of with the user name. The same applies to dashboards. To distinguish the anonymized users from each other, a number is automatically added to **Anonymized user**. This number is increased by one for each additional anonymized user, for example, **Anonymized user2**. Pictures of anonymized users are no longer shown. User profiles, bookmarks, filters, etc. of anonymized users in Collaboration are deleted.

6.10.16 What dashboards are there?

There are dashboards from the overview, Collaboration content, users and groups areas.

6.10.17 Which database access privileges of ARIS Architect are relevant to Collaboration?

For some interactions in Collaboration, users need special access privileges, for example, to post on portal feeds. These access privileges are assigned in ARIS Architect. You can synchronize (page 590) the privileges in Collaboration manually, after you edited them in ARIS Architect. The following database access rights are relevant to Collaboration:

- **No access (----)**
No portal content is displayed.
- **Read (r---)**
Portal content is displayed. Users can read posts added to models, and they can like, share, bookmark, tag, and flag them. However, they cannot comment on models.
- **Read + Comment (rc--), Read + Write (rw--)** (and all other types of rw access)
Portal content is displayed. Users can use all functions of Collaboration.

For detailed information about access rights, refer to the help in ARIS Architect (ARIS Configuration and Administration).

6.11 Manage SAP Solutions

ARIS for SAP® Solutions is available, if you have configured the system in ARIS Connect as well as in ARIS Architect (see **ARIS - Process-driven Management for SAP.pdf**).

ARIS video tutorial

Process-Driven SAP Management Explainer, 4 minutes

(<https://resources.softwareag.com/youtube-product-videos-for-uberflip/manage-your-digital-future-support-best-in-class-sap-solutions-with-aris>)

6.11.1 Define a portal configuration set providing SAP® content

In order to start transactions (page 696) and download SAP documents (page 697), or to have the ARIS Online Guide available (page 698), you need to create an additional configuration set for the portal and publish the database as a portal (page 144).

You can create (page 149) your own modification sets based on the classic configuration set (page 625), on the default configuration set (page 626) or based on a user-defined configuration set. If you require further modification sets, please contact your local Software AG sales organization (<http://www.softwareag.com>).

Prerequisites

- You have the **Portal administrator** function privilege.
- You have the **ARIS Connect Designer** license privilege.
- You have the **Portal publisher** function privilege.
- You have access to the ARIS Connect installation directory.

Warning

Advanced configuration changes require the use of XML configuration. Please contact Software AG (<https://empower.softwareag.com/>) for a customization request or participate in the **742-xx**

ARIS Connect Portal Configuration training

(<https://knowledge.softwareag.com/course/view.php?id=16>). Please note that customization and training services are not covered by the standard Software AG software maintenance agreement. Configuration changes can only be performed by Software AG if you request and agree to them.

Errors in XML configuration may have serious impact. You may not be able to start ARIS Connect again.

Procedure

1. Copy and paste the directory you want to use as a basis for the new configuration set. This example is based on the **classic** configuration set:

```
<ARIS installation path>\server\bin\work\work_copernicus_<s, m
or l>\base\webapps\ROOT\WEB-INF\config\classic
```

2. Rename it to **Groupview_SAP**. Do not use spaces or any language-specific special characters. This directory name will be used automatically as configuration set name in all user interface languages.

3. Open the following XML file in an editor:

```
<ARIS installation path>\server\bin\work\work_copernicus_<s, m  
or I>\base\webapps\ROOT\WEB-INF\config\Groupview_SAP\views\item.xml
```

4. Find the following entry that occurs multiple times in the file:

```
<!--Remove the following comments to enable SAP-Transactions-->
```

5. Uncomment the tags before and after the rows with the SAP-relevant content:

```
<!--SAP
```

```
...
```

```
SAP-->
```

6. Save the file.

7. Open the ARIS installation directory.

8. Copy and paste the directory that is to be used as a basis for the search in the new configuration set:

```
<ARIS installation path>\server\bin\work_abs_<s, m  
or I>\base\webapps\abs\WEB-INF\config\classic
```

Make sure to copy the directory name copied in **step 2**, as a basis for the new configuration set. In this example this is **classic**.

9. Rename the directory to **Groupview_SAP**. Make sure to use the same name as in **step 3**. Do not use spaces or any language-specific special characters.

10. Open the following XML file in an editor:

```
\bwork_abs_<s, m  
or I>\base\webapps\abs\WEB-INF\config\Groupview_SAP\search\search.xml
```

11. Find the following entry that occurs multiple times in the file:

```
<!--Remove the following comments to enable SAP-Transactions-->
```

12. Uncomment the tags before and after the rows with the SAP-relevant content:

```
<!--SAP
```

```
...
```

```
SAP-->
```

13. Save the file.

14. Open the following XML file in an editor:

```
\bwork_abs_<s, m  
or I>\base\webapps\abs\WEB-INF\config\Groupview_SAP\factsheets\processViewDetails.xml
```

15. Find the following entry that occurs multiple times in the file:

```
<!--Remove the following comments to enable SAP-Transactions-->
```

16. Uncomment the tags before and after the rows with the SAP-relevant content:

```
<!--SAP
```

```
...
```

```
SAP-->
```

17. Save the file.
18. Load the current changes using the external link:
http://<server name><:port number, if different from default port>/#<tenant>/**reloadConfig**,
for example http://connectserver.eu.comp:1080/#default/reloadConfig
19. Log in as a system user.
20. Click **Reload and validate configuration files**. The changed configuration is validated. Results will be displayed on completion.
21. If the **Groupview_SAP** entries **Groupview_SAP** **Groupview_SAP (modSet)** are not marked with the **✘ error** symbol, the new configuration set is configured properly and can be made available.
If errors were detected, resolve the logged problems and **Reload and validate configuration files** again. Any warnings about missing properties can be ignored.
22. Activate the **Groupview_SAP** configuration set via external link:
http://<server name><:port number, if different from default port>/#<tenant>/**adminSettings**
for example:
http://connectserver.eu.comp:1080/#default/adminSettings
You can also activate (page 152) the **Groupview_SAP** configuration set within ARIS Connect.

In this configuration set, the functions Run SAP transaction (page 696), Download SAP documents (page 697), and ARIS Online Guide (page 698) are now available for published databases (page 144). If you are using HD server, define a portal configuration set providing SAP content also for the **hds** runnable as described for the **abs** runnable.
Ensure you are connected to SAP Solution Manager 7.2.

6.11.2 Select the View Providing SAP® Content

Select the additionally created **classicSAP** view (page 599) to display portal data.

Prerequisite

- You own the **ARIS Connect Designer** license privilege.
- You have created additional views (page 599).
- You own the **Portal publisher** function privilege.

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your user name.
3. Click **Administration**.
4. Click **Portal > Manage views** on the **Configuration** tab. All available views are displayed. The current view is marked.
5. Move the mouse pointer over the additionally created view, for example, **classicSAP**.
6. Click  **Activate**.

All of the databases selected for the portal are published in the **classicSAP** view.

6.11.3 Configure ARIS Online Guide

If the ARIS Online Guide is used for making documents that were created in the SAP® system specially for your business processes available across the company, configure your custom settings to call the ARIS Online Guide.

Prerequisite

ARIS and the SAP® system have been configured for using the ARIS Online Guide.

Procedure

1. Log on to the SAP system.
2. Start the **/n/IDS/AOG_USER** transaction. The **ARIS Online Guide - User-specific settings** dialog opens.
3. Enable the **Use ARIS Online Guide** check box.
4. Select the **Connect** option to display the ARIS Online Guide in the portal in ARIS Connect.
5. If you also want to use the F1 help from the SAP system in addition to the ARIS Online Guide, enable the **Also show default help** check box.
6. Enter the required connection data for ARIS Server and tenant on which the database was published as a portal. You administrator might already have specified default entries that you do not need to edit.

Base URL for Connect

URL for the relevant ARIS Server:

http://<server name>

Tenant

Tenant that manages the database published as a portal.

7. Save your changes.

The settings have been applied.

If you changed the default values set by your administrator and want to restore them, click

Restore defaults.

6.11.4 Publish database in ARIS Connect portal (ARIS Online Guide)

If you plan to use ARIS Online Guide to make documents available across the company which were specially created for your business processes in the SAP® system during customizing, please make the database available as a portal using ARIS Connect.

Prerequisite

- You own the **ARIS Connect Designer** license privilege.
- You own the **Portal publisher** function privilege.

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your user name.
3. Click **Administration**.
4. Click **Portal > Publish** on the **Configuration** tab. All available databases are displayed.
5. Enable the check boxes of the databases you want to publish in the portal.
6. For versioned databases, select the version required.
7. Click **Apply**.

The content of the databases is published in the portal in the selected view (page 152). As long as the databases are available in the portal they cannot be deleted in ARIS.

6.12 Configure Tenant Management

The Tenant Management user interface has been installed using the ARIS server setup program. It is run automatically with the user account of the user **superuser**. In order for other users to be able to log in (page 608), you have to configure the infrastructure tenant (page 605). This assigns users in the infrastructure tenant privileges for impersonation (page 253), along with additional function privileges.

Once all operational tenants are configured (page 606), impersonation enables users to assume the account of the system user **superuser** in order to perform administration tasks. After the ARIS server was updated, for all operational tenants make sure to specify **superuser** in the **Impersonation target users** field again.

If you want existing tenants that were not created using Tenant Management to be managed centrally, you have to adjust the configuration of these tenants (page 607).

6.12.1 Configure infrastructure tenant

In order for users to be able to log in to Tenant Management, they must have been assigned **impersonation** privileges (page 253) by system users in this node's infrastructure tenant and also require additional function privileges. Impersonation enables users to use the account of the system user **superuser** to perform administration tasks. If this node has been accidentally removed, please make sure to add it again.

Prerequisite

You are a system user or have the **User administrator** and **Impersonation** function privileges.

Procedure

1. Click the link that was provided to you or that you have saved as a bookmark in your browser, for example, **http://myServer:1080/umc**. The User Management login dialog opens.
2. Enter the name of the infrastructure tenant in the  **Tenant** field, for example, **master**.
3. Enter the user name **superuser** and the associated password.
4. Click **Log in**. The  **User management** tab is displayed.
5. Click the user **superuser**.
6. Enter a valid e-mail address. This assures that the system administrator is informed whether backups were successfully completed or whether warnings or errors occurred.
7. Click **Privileges**. The list of function privileges is displayed.
8. Make sure that in addition to the assigned privileges at least the following function privileges are activated:
 - User administrator
 - Impersonation
 - Tenant administrator
 - Technical configuration administrator

The user **superuser** now has the required privileges in the infrastructure tenant.

If necessary, create users as substitutes and assign them the required function privileges in the same way.

For users to be able to use Tenant Management, you must configure all operational tenants (page 606).

6.12.2 Configure operational tenants

Impersonation enables users to use the account of the system user **superuser** to perform administration tasks.

To enable Tenant Management to establish connections to tenants, the user **superuser** must have all function privileges required for backup and restore in all operational tenants and must be defined as a target for impersonation.

Prerequisite

You are a system user or have the **User administrator** and **Impersonation** function privileges.

Procedure

1. Open ARIS Administration for an operational tenant, for example, `http://<server name>:<port>/#default/home`).
2. Log in as a system user or a user with the **User administrator** and **Technical configuration administrator** function privileges.
3. Click **<user name> > Administration**. ARIS Administration opens.
4. Click  **Configuration**.
5. Click  **User management**.
6. Select the **Users** entry in the drop-down list.
7. Click **General**.
8. Click  **Edit**.
9. Click in the **Impersonation target users** field.
10. Enter the user name **superuser**.

If the ARIS server was updated, make sure to reenter the user name for all operational tenants in the **Impersonation target users** field again.

11. Click  **Save**. All users that have the **Impersonation** and **Tenant administrator** function privileges on the infrastructure tenant take on the identity of **superuser** and inherit all of the **superuser** privileges.
12. Click  **User management**.
13. Select the user **superuser**. The details will be displayed.
14. Click **Privileges**. The list of function privileges is displayed.
15. Activate the function privileges required for backing up and restoring:

- Analysis administrator
- ARCM administrator
- Collaboration administrator
- Database administrator
- Dashboard administrator
- Document administrator
- License administrator
- Portal administrator
- Process Governance administrator
- Server administrator
- Technical configuration administrator
- User administrator

The function privileges depend on the license. Therefore, you may not be able to assign all of the function privileges shown.

16. Log out of ARIS Administration.

The user **superuser** has the privileges to manage data for the **default** tenant.

17. Enter the user **superuser** under **Impersonation target users** in all other operational tenants in your system in turn, and assign the required function privileges.

The user **superuser** has the privileges to manage all data for the tenants (page 610). All substitutes can log in using their user name and manage tenants on behalf of the system user **superuser**.

6.12.3 Configure existing tenants

To enable Tenant Management to establish connections to tenants that were not created using Tenant Management, you must adjust the configuration of these tenants.

Add missing permissions to the superuser, if impersonation (page 253) failed. This can occur, if tenants were added by ARIS Cloud Controller (ACC) but functional privileges are missing.

Procedure

1. Click **Tenants**. The status of the tenants is displayed. If the  **Impersonation failed** status is shown, the tenant is not accessible for users.
2. At the end of the row for the tenant, click  **More > Allow access**. The **Allow access** dialog opens.
3. Enter the user credentials of a user with sufficient privileges, for example, **system**.
4. Click **OK**.

The missing privileges are applied to the superuser. Impersonation should work and the  **Active** state is shown. If the change is not displayed, click  **Refresh**.

6.12.4 Open Tenant Management

System users and users (page 605) to whom the required privileges are assigned can log in to Tenant Management on the infrastructure tenant.

- They know the passwords for the system users **system** or **superuser**.
- They have login privileges (page 605).

Procedure

1. Click the link that was provided to you or that you have saved as a bookmark in your browser (syntax: <server name>:<port>/tm). The Tenant Management login dialog opens.
The name of the infrastructure tenant is displayed. You cannot select any other.
2. Select the interface language. You cannot change the language once you have logged in.
3. Enter your user name and your password.

Clicking **Forgot password** enables you to reset the password.

Warning

If you reset the password for the user **system** or **superuser**, other users can no longer log in with these user names. Automated processes, for example, automatic backups, can no longer be performed.

4. Click **Log in**.

You can manage all tenants in the system.

6.12.5 Which users can manage tenants?

The user **superuser** and users to which the required privileges are assigned by the user **superuser** can manage tenants.

If users with appropriate privileges start Tenant Management, they do this as the user **superuser**. This is facilitated by the **Impersonation** function privilege, which is assigned to relevant users on the infrastructure tenant (page 253).

6.12.6 What is impersonation?

Users manage tenants on behalf of the user **superuser**. This requires the **creation** of these users in the user management for the infrastructure tenant, for example, master (page 230). To use impersonation, users require the **Impersonation** function privilege in the infrastructure tenant.

For Tenant Management, they also require the **User administrator**, **Tenant administrator**, and **Technical configuration administrator** function privileges.

In all other operational tenants, for example, **default**, the user **superuser** must be defined as the target for impersonation (page 605). Impersonation enables users to back up tenants in which they do not exist as a user.

To back up and restore the data, the user **superuser** requires the following function privileges in all operational tenants:

- Analysis administrator
- ARCM administrator
- Collaboration administrator
- Database administrator
- Dashboard administrator
- Document administrator
- License administrator
- Portal administrator
- Process Governance administrator
- Server administrator
- Technical configuration administrator
- User administrator

6.12.7 What data is backed up and restored?

If you back up tenants manually or use a scheduled backup, the current state of the following data is saved in backup lists.

Tenant data is fully backed up only if the user executing the commands has sufficient privileges for all components in every tenant and if all components were selected for the backup.

Extensions, for example, SSL certificates, SAP® Java Connector, and JDBC drivers, added using the **enhance** ACC command are not backed up. In ARIS 10 all started runnables are automatically taken into account when executing tenant backup/restore commands.

Content	Required function privileges	Component (runnable)
Data from ARIS Administration, for example, users, privileges,	User administrator Technical configuration administrator	ARIS Administration/User Management (umcadmin_<s, m, or l>)
Licenses User administration audit events are not part of the tenant backup.	License administrator	
System database (page 1179) Contains filters, templates, and font formats, but also ARIS Method and all evaluation scripts, macros and scheduled reports.	Server administrator	Modeling & Publishing (abs_<s, m, or l>)
ARIS databases	Database administrator	
Ad hoc analyses and queries	Analysis administrator	Analysis (octopus_<s, m, or l>)
ARIS document storage data, including Process Governance archives Documents and access privileges	Document administrator Technical configuration administrator	ARIS document storage (adsadmin_<s, m, or l>)
Process Governance data	Process Governance administrator	Process Governance (apg_<s, m, or l>)
Collaboration data	Collaboration administrator	Collaboration (ecp_<s, m, or l>)
ARIS Risk & Compliance Manager data	ARCM administrator	ARIS Risk & Compliance Manager (arcm_<s, m, or l>)

Content	Required function privileges	Component (runnable)
Dashboards and feeds	Dashboard administrator	ARIS Aware (dashboarding_<s, m, or l>)
ARIS Connect portal views, modification sets, and configuration sets.	Portal administrator	ARIS Connect portal (copernicus_<s, m, or l>)

You require the same function privileges to restore the data.

7 Use ARIS Connect

ARIS Connect is an integrated environment in which you can create, display, and change processes, as well as discuss and improve them jointly with other ARIS Connect users. When you open ARIS Connect in your Web browser, you obtain role-based access to the process descriptions that are relevant to you.

7.1 Work in the portal



ARIS Connect is an integrated environment in which you can create, display, and change processes, as well as discuss and improve them jointly with other ARIS Connect users. When you open ARIS Connect in your Web browser, you obtain role-based access to the process descriptions that are relevant to you.

If you click  **Portal**, you can view all information relevant to you.

Depending on your role, the view, and the published databases your administrator selected, the function and content of the portal may vary. In the following, the functions of the Classic view (page 625) and the Default view (page 626) are described.

7.1.1 Views

The portal shows specific information for each user. Different views display information in different ways. By default, ARIS comes with two different views. The Classic view (page 625) and the Default view (page 626). These views are defined in configuration sets that cannot be changed. However, administrators can define multiple modification sets based on these templates.

7.1.1.1 Classic view

If the administrator provides at least one database you have access to, this view shows all content relevant to you in a clear structure.

- Home (page 614)
- Groups (page 615)

Content filters restrict the information in specific areas of the portal to content that is relevant to you. Content filters can be defined in two ways:

- Content filters can be assigned via role. If a role object is assigned (page 701) in models to an existing user group you are member, the relevant filters are added to the **My content** area automatically.
- You can add filters (page 699) and activate them as content filters (page 702) to further restrict this content.

7.1.1.1.1 Home

Depending on your license, not all described quick access buttons may be available.

There are several editing areas available:



Quick start (page 627)



My content

Opens the **My content** area (page 641) where you can filter the portal content of the databases you have access to by various categories, e. g. **Role** and **Location**.



My favorites

Provides direct access to saved filter criteria (page 682) of the **Favorites** area of the search as well as to models and groups a user selected as personal favorites (page 743).



My activities



Dashboards

Opens the **Dashboards** area where you can access various dashboards sorted in categories such as **Business usage monitoring**.



My tasks

Opens My tasks where you can edit your tasks (page 776).



My GRC tasks

Shows an overview of your current tasks from ARIS Risk & Compliance Manager (page 645) in ARIS Connect.



Recent changes

Shows all links to models that were changed recently. In addition, for each model the time elapsed since the last change and the path are shown.



Contacts

Lists all users of the current ARIS Connect server with **User administrator** function privileges. If you have any requests regarding the privileges of your user account, you can get in touch with these ARIS Connect users.

7.1.1.1.2 Groups

Use the tree to navigate to the entire contents of the portal you selected.

Depending on the contents selected and the model type, different functions and fact sheets are available.

FACT SHEETS OF ARIS MODELS

Overview (page 630)

Steps (page 632)

Table (page 634)

RACI (page 635)

Diagram (page 636)

Dashboards (page 637)

Tasks (page 638)

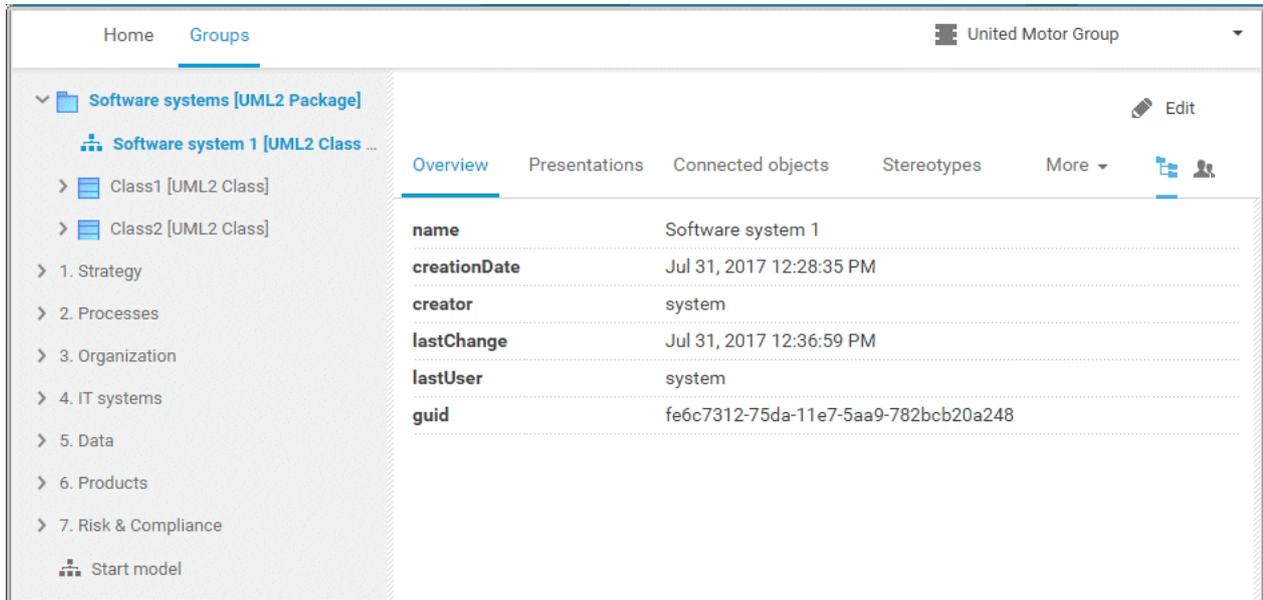
Transactions (page 639)

Documents (page 640)

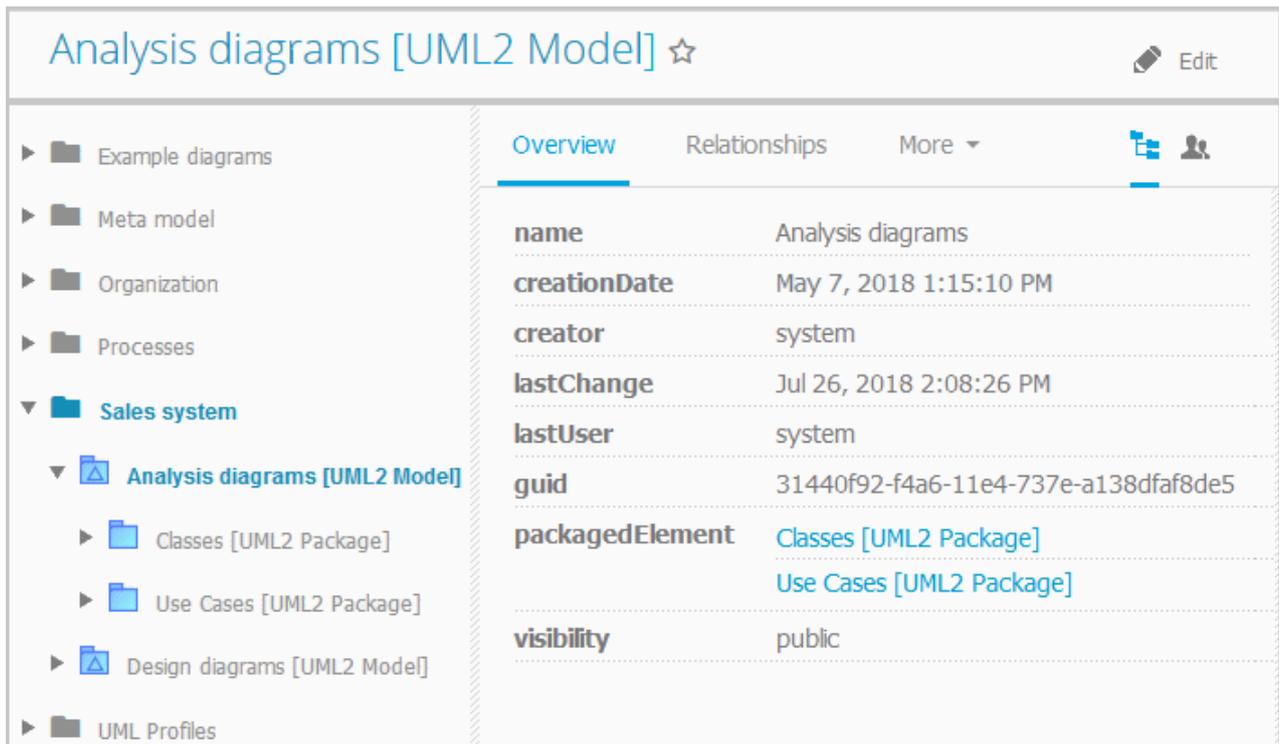
FACT SHEETS OF UML ELEMENTS

Overview

The relevant content is displayed based on the item selected. If you have selected a group, the group content is displayed. Content that can be used to navigate to other content is displayed as links.



For example, if you have selected a UML element, additional headings are shown depending on the context.



Relationships

Displays the relationships of the selected UML element as a link. If you click the link, the related element is displayed and highlighted in the tree.

Reused objects

Lists the objects that the selected element reuses as a link. If you click the link, the related element is displayed and highlighted in the tree.

Linked diagrams

Lists the diagrams with which the selected element is linked. If you click the link, the related element is displayed and highlighted in the tree.

Presentations

Lists the diagrams in which the selected element occurs as a link. If you click the link, the related element is displayed and highlighted in the tree.

Stereotypes

Lists the stereotypes that were applied to the selected element as a link. If you click the link, the related element is displayed and highlighted in the tree.

Profiles

Lists the profiles that were applied to the selected element.

Tagged values

Lists the tagged values with which the selected element is linked as a link. If you click the link, the related element is displayed and highlighted in the tree.

Diagram

This entry is displayed if you have selected a UML diagram. It displays the UML diagram in Model Viewer graphically.

7.1.1.2 Default view

If you click  **Portal**, you can view all information relevant to you.

If the administrator provides at least one database, you have access to, this view shows all content relevant to you in a clear structure:

- Home (page 614)
- Processes (page 620)
- Organization (page 621)
- IT systems (page 622)

In the default view, only assignments are shown that belong to the current hierarchy, for example, assignments from an object of Value-added chain diagrams (VAC) to process models like EPCs, but no assignments to organizational charts.

Content filters restrict the information in specific areas of the portal to content that is relevant to you. Content filters can be defined in two ways:

- Content filters can be assigned via role. If a role object is assigned (page 701) in models to an existing user group you are member, the relevant filters are added to the **My content** area automatically.
- You can add filters (page 699) and activate them as content filters (page 702) to further restrict this content.

7.1.1.2.1 Home

Depending on your license, not all described quick access buttons may be available.

There are several editing areas available:



Quick start (page 627)



My content

Opens the **My content** area (page 641) where you can filter the portal content of the databases you have access to by various categories, e. g. **Role** and **Location**.



My favorites

Provides direct access to saved filter criteria (page 682) of the **Favorites** area of the search as well as to models and groups a user selected as personal favorites (page 743).



My activities



Dashboards

Opens the **Dashboards** area where you can access various dashboards sorted in categories such as **Business usage monitoring**.



My tasks

Opens My tasks where you can edit your tasks (page 776).



My GRC tasks

Shows an overview of your current tasks from ARIS Risk & Compliance Manager (page 645) in ARIS Connect.



Recent changes

Shows all links to models that were changed recently. In addition, for each model the time elapsed since the last change and the path are shown.



Contacts

Lists all users of the current ARIS Connect server with **User administrator** function privileges. If you have any requests regarding the privileges of your user account, you can get in touch with these ARIS Connect users.

7.1.1.2.2 Processes

Quickly gain an overview of all processes that are relevant to you. Navigate via value-added chains to the process chains of the portal selected.

Name	Description	Subordinate value-added chains	Subordinate business processes
Customer service process		Customer service process	
Contact customer			
Determine requirements			

Depending on the contents selected and the type of a diagram, different fact sheets and functions are available.

Overview (page 630)

Steps (page 632)

Table (page 634)

RACI (page 635)

Diagram (page 636)

Dashboards (page 637)

Tasks (page 638)

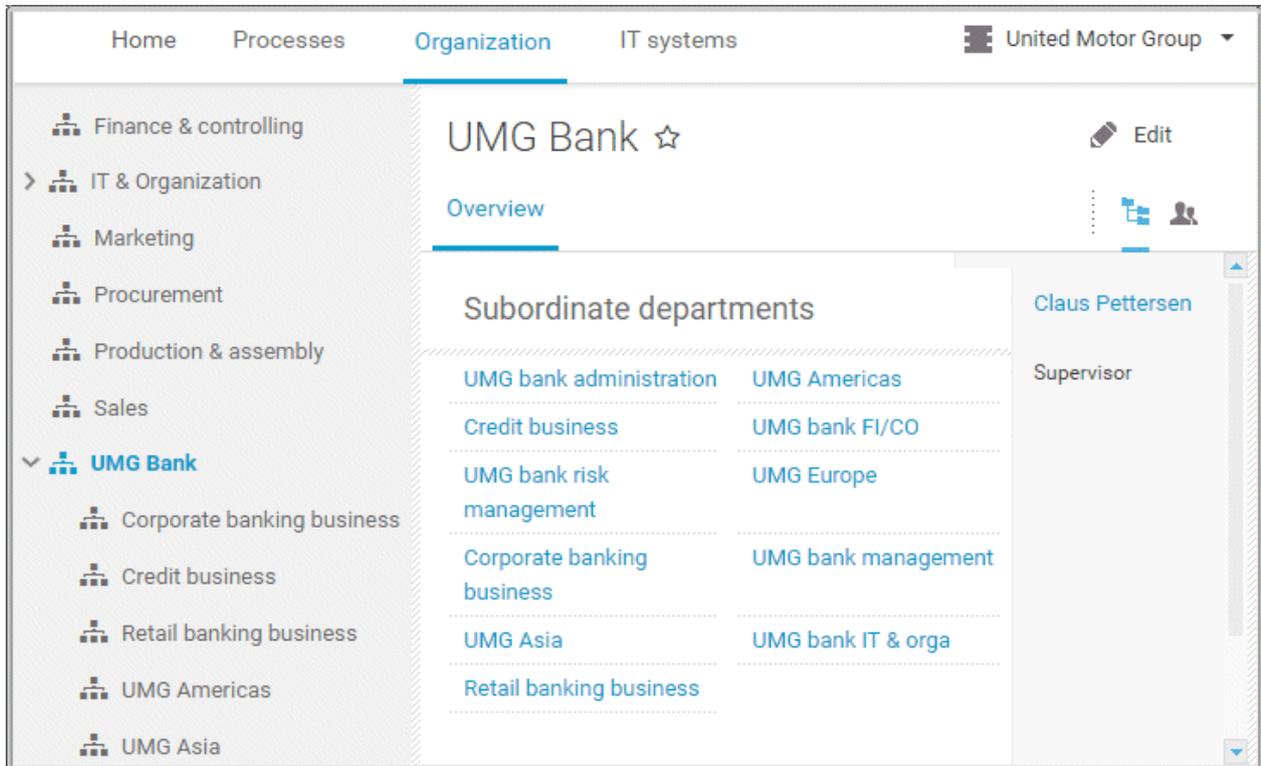
Transactions (page 639)

Documents (page 640)

7.1.1.2.3 Organization

Quickly gain an overview of the organizational structure. Navigate to all organizational elements of the portal selected.

The Overview gives you access to the relevant information. For example, if you click a supported process, the process information (page 620) is displayed. IT information (page 622) is available when clicking a system in use.



7.1.1.2.4 IT systems

Quickly obtain an overview of the IT landscape. Use the Explorer tree to navigate to all IT systems of the portal.

Depending on the contents selected, different functions are available.

Overview

The **Overview** fact sheet gives you access to the relevant information. If you do not select any items in Explorer, all IT systems are listed in alphabetical order.

The screenshot displays the 'IT systems' overview page. At the top, there is a navigation bar with 'Home', 'Processes', 'Organization', and 'IT systems' (which is highlighted). The 'United Motor Group' logo is visible in the top right corner. On the left side, there is an Explorer tree listing various IT systems: ERX-00, HEBA-2, TBA-TT, EPLU, BIWEV, ETR, OVIT-BSE, COT, JONKUSS-00, PRO-DISPO, ADC, and CEDAT. The main content area shows the 'Overview' fact sheet for a selected system, featuring a star icon, the text 'amy.architecture', 'Responsible', 'Feb 16, 2016', and 'Last change'. Below this, there is a section titled 'Subordinate IT systems' which contains a grid of system IDs: ERX-00, HEBA-2, TBA-TT, EPLU, BIWEV, ETR, OVIT-BSE, COT, JONKUSS-00, and PRO-DISPO.

Diagram

All information is also available via the **Application system type diagram** model type containing all IT systems.

Using the functions of the view bar you can change the size of appearance. Navigate in the model using the small frame of the thumbnail view above the slider. Clicking the ▼ arrow head will hide the bar.

Click **i Properties** to view all attributes specified. If you have selected an object, the attributes for that object are displayed. Click **More** to view related objects or occurrences. The model properties are shown if no object is selected.

If you navigate by clicking an assignment icon of an IT system, all diagrams assigned are offered for selection. These diagrams provide detailed information on the given IT system, as well as on the related roles, persons, and items.

The screenshot displays the ARIS software interface for the 'Diagram' view. At the top, there are four tabs: 'Overview', 'Diagram' (which is active and highlighted with a blue underline), 'Tasks', and 'Documents'. Below the tabs, a header area contains the text '2. IT systems (alphabetically)', 'Application system type diagram', and the date 'Feb 18, 2016 1:08:52 PM'. To the right of this header is the ARIS logo with the text 'powered by ARIS'. The main content area is divided into three sections labeled 'A', 'B', and 'C'. Section 'A' contains four IT system cards: 'ABB-TT', 'ADC', 'ALCHOR', and 'A-PLAN'. Section 'B' contains four IT system cards: 'BADGIN', 'BAMU', 'BCT-INT', and 'BELEG'. Section 'C' contains four IT system cards: 'COMPET-OO', 'COT', 'CSBS', and 'CTK'. Each card has a small icon on the left and a larger icon on the right. At the bottom of the interface, there is a view bar with a dropdown arrow on the left, a small thumbnail view, and a slider with a blue dot in the center and minus/plus signs at the ends.

Tasks

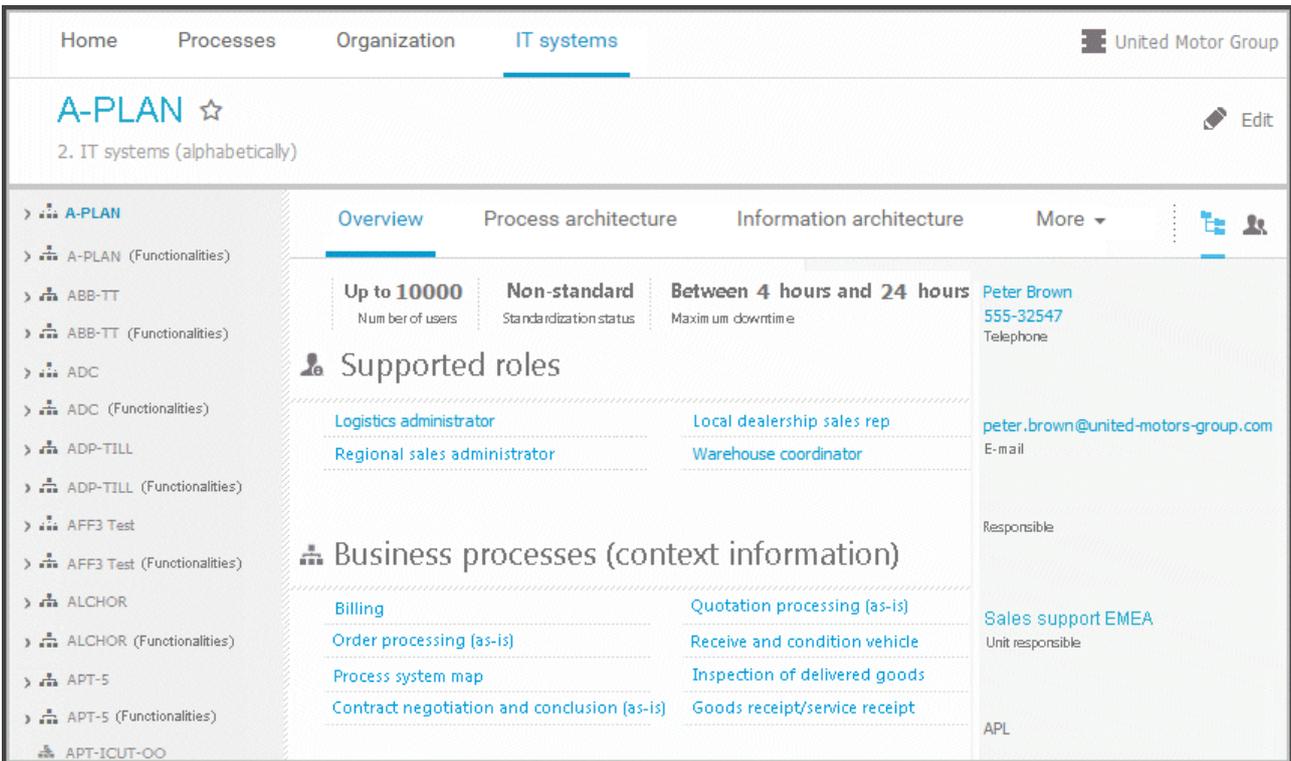
Lists the tasks for the logged in user regarding the selected item. For editing, selected tasks are opened in My tasks (page 16).

Documents

Lists the documents connected to the selected item.

IT system fact sheets

If you click an IT system in the Explorer tree, the IT system fact sheets provide you with important information at a glance. There are fact sheets like **Process architecture**, **Information architecture**, or **IT infrastructure**.



7.1.1.3 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.1.3.1 What is the portal view?

The portal shows specific information for each user. Different views display information in different ways. By default, ARIS comes with two different views. The Classic view (page 625) and the Default view (page 626). These views are defined in configuration sets that cannot be changed. However, administrators can define multiple modification sets based on these templates.

7.1.1.3.2 What is the structure of the Classic view?

If the administrator provides at least one database you have access to, this view shows all content relevant to you in a clear structure.

- Home (page 614)
- Groups (page 615)

Content filters restrict the information in specific areas of the portal to content that is relevant to you. Content filters can be defined in two ways:

- Content filters can be assigned via role. If a role object is assigned (page 701) in models to an existing user group you are member, the relevant filters are added to the **My content** area automatically.
- You can add filters (page 699) and activate them as content filters (page 702) to further restrict this content.

7.1.1.3.3 What is the structure of the default view?

If you click  **Portal**, you can view all information relevant to you.

If the administrator provides at least one database, you have access to, this view shows all content relevant to you in a clear structure:

- Home (page 614)
- Processes (page 620)
- Organization (page 621)
- IT systems (page 622)

In the default view, only assignments are shown that belong to the current hierarchy, for example, assignments from an object of Value-added chain diagrams (VAC) to process models like EPCs, but no assignments to organizational charts.

Content filters restrict the information in specific areas of the portal to content that is relevant to you. Content filters can be defined in two ways:

- Content filters can be assigned via role. If a role object is assigned (page 701) in models to an existing user group you are member, the relevant filters are added to the **My content** area automatically.
- You can add filters (page 699) and activate them as content filters (page 702) to further restrict this content.

7.1.1.3.4 What is the bar panel for?

The bar panel offers you buttons to open or close bars like the **Groups** or **Processes** bars as well as, for example, the **Reports** and **Comment** bars.



The bar buttons, that means buttons that directly trigger functionality such as  **Print graphic as PDF** are separated by a separator.

Among others the following possibilities are available:

You can use the bar panel buttons  **Collaboration** and  **Navigation** to show or hide the Collaboration functions **Follow** (page 643) and **Comment** (page 642), as well as the Explorer tree. The buttons of visible bars are indicated in color.

Click  **Share model** to share models with other users (page 709). Click  **Submit change request** to send change requests to the process manager (page 772).

7.1.1.3.5 Which quick access buttons are available?

Depending on your license, not all described quick access buttons may be available.



View models & documents



Tasks

Opens My tasks, where you can edit tasks that are assigned to you.



Search

Opens the **Search** area (page 833), where you can find items, objects, documents, groups in Collaboration, etc.



Create new model

Opens the **Create model** dialog for you to create a model in one of the databases you have access to.



Download clients

Opens the **Download client** page for you to download a java client of the products the administrator made available.



My feed

Opens the **Recent** area of the  **Collaboration** (page 806) where you have access to your own feed.



All company feed

Opens the **All company feed** area (page 808) of the  **Collaboration** (page 806).



All collaboration groups

Activates the  **Find groups** area of the  **Collaboration** (page 806) where you can find new groups (page 808).



Manage models & objects

Opens the **Models & Objects** area of the  **Repository** and enables you to manage models and objects of the databases of the current ARIS server.



Manage documents

Opens the **Documents** area of the  **Repository** and enables you to manage the content of ARIS document storage of the current ARIS server.



Manage dashboards & data feeds

Opens the **Dashboards & Data feeds** area of the  **Repository** where you can manage dashboards and data feeds.



User settings

Opens your user settings page where you can edit your data or add a picture of yourself.



Administration

Opens the **Configuration** area where you can manage the current ARIS Connect system.



User administration

Opens the **Users** area of the  **User Management** in ARIS Administration where you can administrate the users for the current server.



License administration

Opens the  **Licenses** area in ARIS Administration where you can administrate the licenses for the current server.



Process administration

Opens the  **Process administration** area in ARIS Administration where you can administrate automated processes.

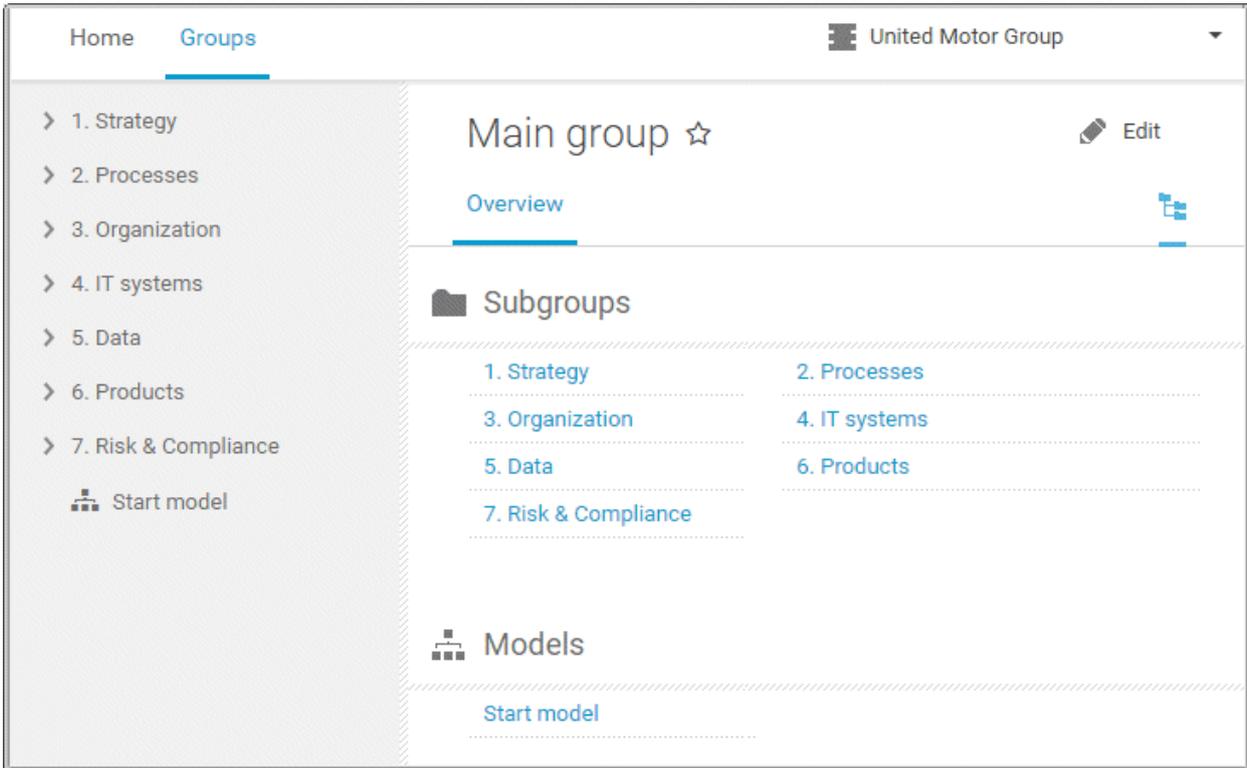


Collaboration administration

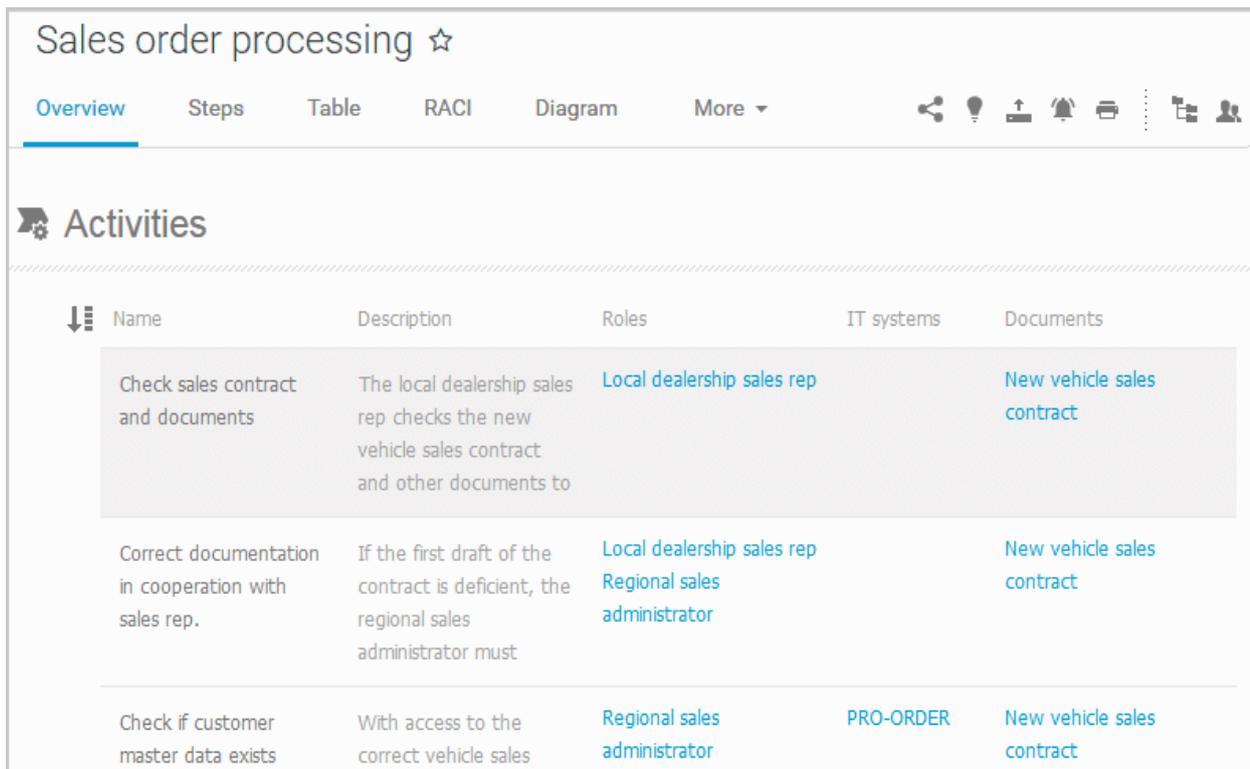
Opens the **Check flagged activities** page of the **Administration** area of the  **Collaboration** (page 806) where you can decide whether content is appropriate or not.

7.1.1.3.6 What is the Overview fact sheet for?

Gives an overview of the item selected, for example, displays variant relationships of the selected item or the content of a selected group.



If you have selected a model, additional headings are shown depending on the context.



Content that can be used to navigate to other content is displayed as links.

7.1.1.3.7 When can UML content be displayed?

You can display UML content in ARIS Connect under the following conditions:

- You use the classic configuration set (page 625).
- The database with UML content you are using has been assigned a filter (page 883) that allows UML content. This may be the **Entire method** filter or a filter you have defined in which all UML elements are available.
- The database has been published by an administrator. It is therefore available in the  **Portal**.
- You have logged in as a user with the **UML Viewer** function privilege.

7.1.1.3.8 Where is UML content displayed?

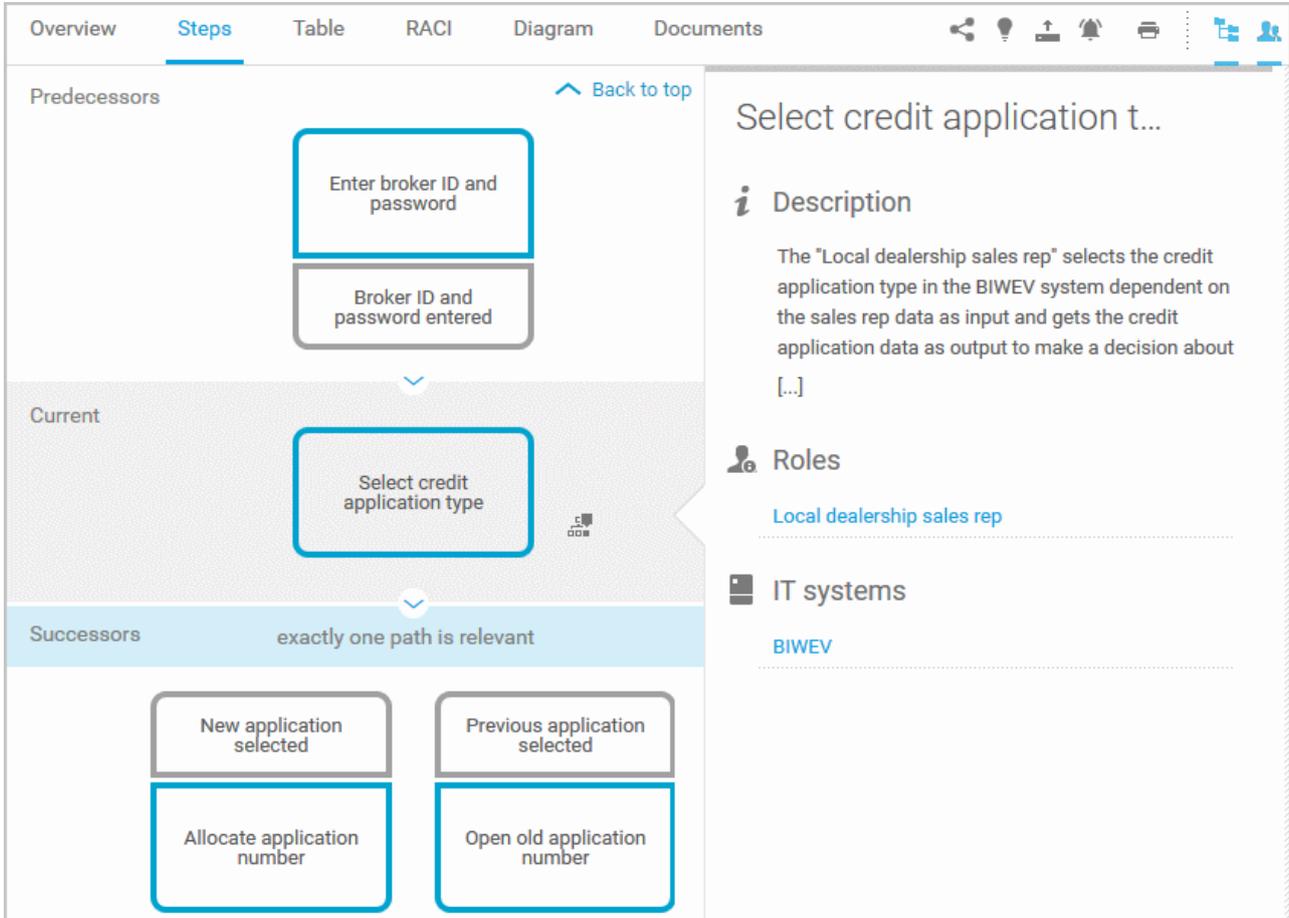
UML content is displayed in the same way as other ARIS content. You can use the groups (page 615) to navigate in the database.

As soon as you select UML content to be displayed, specific UML characteristics are taken into account.

- Thus, UML namespace hierarchies are also displayed together with the group path.
- If you select a UML element, you can display its typical UML-specific properties such as stereotypes and tagged values.
- If you select a diagram, you can of course display it graphically.
- The search also finds UML content.

7.1.1.3.9 What is the Steps fact sheet for?

Transparently displays all steps of a process (EPC) (page 680). Regardless of the process size you can view only the previous, current, and subsequent process steps. For the current step the relevant information is provided in the form of links.



You can easily navigate to the top of the **Steps** fact sheet (page 684) and you can easily navigate between the **Steps** and the **Diagram** fact sheet (page 683).

The following information is provided for operators:

Information	Operator	Symbol
all paths are relevant	AND	
	OR/AND	
	XOR/AND	
one or more paths are possible	OR	
	AND/OR	
	XOR/OR	
exactly one path is relevant	XOR	
	AND/XOR	
	OR/XOR	
	Gateway	
complex decision	Rule	

7.1.1.3.10 What is the Table fact sheet for?

Shows the functions that the process of type **EPC** and **BPMN** contains, as well as the roles assigned to them. In the tables, you can add columns (page 693) and remove added columns (page 693) again.

Overview Steps Table RACI More ▾	
↓ Functions	Roles
Check sales contract and documents	Local dealership sales rep
Correct documentation in cooperation with sal	Local dealership sales rep Regional sales administrator
Check if customer master data exists	Regional sales administrator
Create customer master data	Regional sales administrator
Enter vehicle data and details	Regional sales administrator
Check if vehicle is in stock	
Allocate vehicle	Regional sales administrator
Create sales order	Regional sales administrator

You can sort the functions (page 695) in different ways by clicking the column title.

You can open a matrix (page 694) based on the **Table** fact sheet to clearly display the interrelations between the individual roles and functions.

Overview Steps Table RACI More ▾		
↓ Functions	Roles	
	Local dealership sales rep	Regional sales administrator
Check sales contract and documents	<input checked="" type="checkbox"/>	
Correct documentation in cooperation with sales rep.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Check if customer master data exists		<input checked="" type="checkbox"/>
Create customer master data		<input checked="" type="checkbox"/>
Enter vehicle data and details		<input checked="" type="checkbox"/>

7.1.1.3.11 What is the RACI fact sheet for?

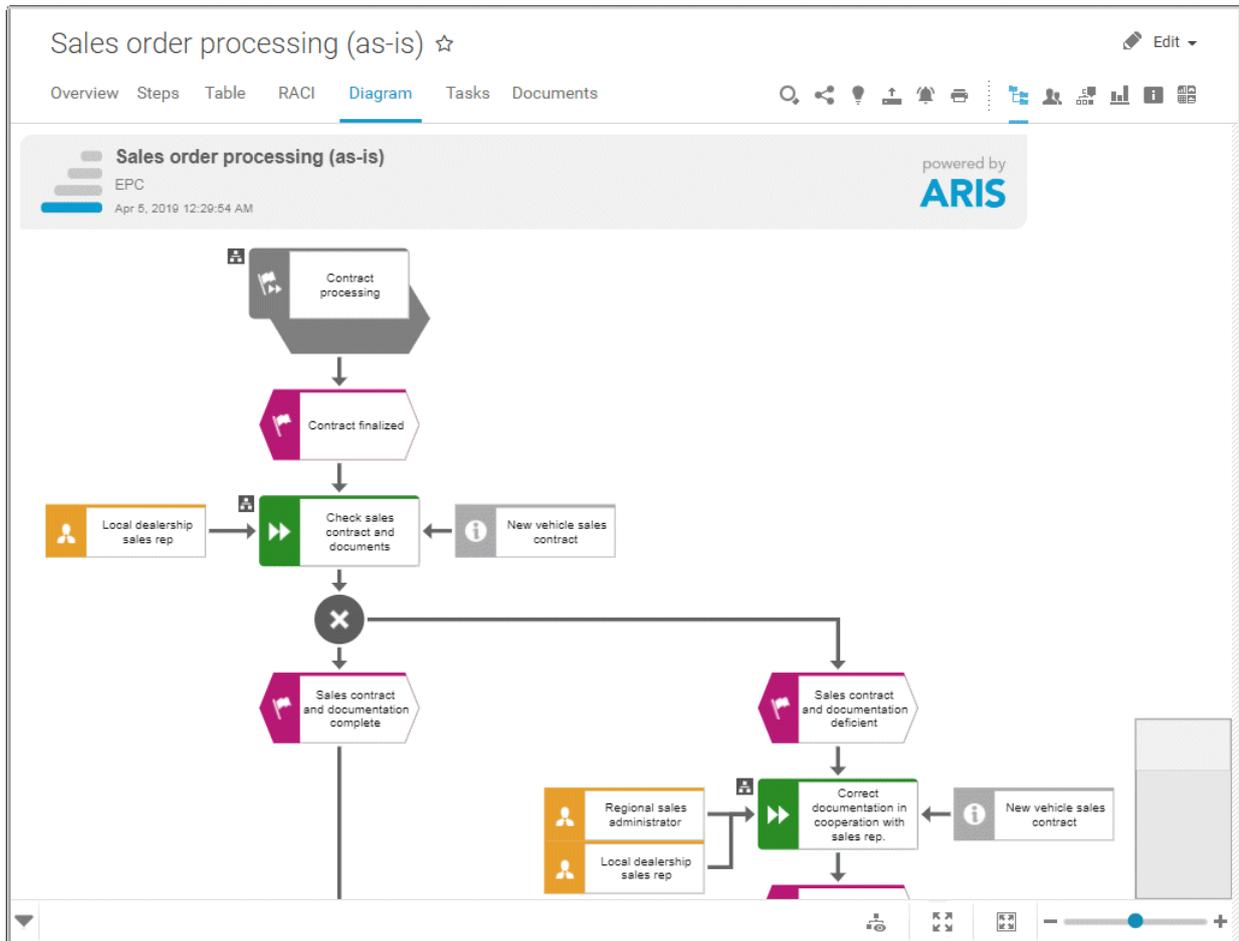
RACI matrices display the activity processes and the associated organizational responsibilities. RACI matrices are displayed only if RACI information is available for this process (page 766). You can sort the functions (page 695) of matrices.

The screenshot shows a software interface with a navigation bar at the top containing 'Overview', 'Steps', 'Table', 'RACI', and 'More'. Below the navigation bar is a table with the following structure:

Functions	Local dealership sales rep	Regional sales administrator
Check sales contract and documents	R A C I	R A C I
Correct documentation in cooperation with sales rep.	R A C I	R A C I
Check if customer master data exists	R A C I	R A C I
Create customer master data	R A C I	R A C I

7.1.1.3.12 What is the Diagram fact sheet for?

Graphically displays the diagram in Model Viewer. Depending on the diagram type, different functions are available.

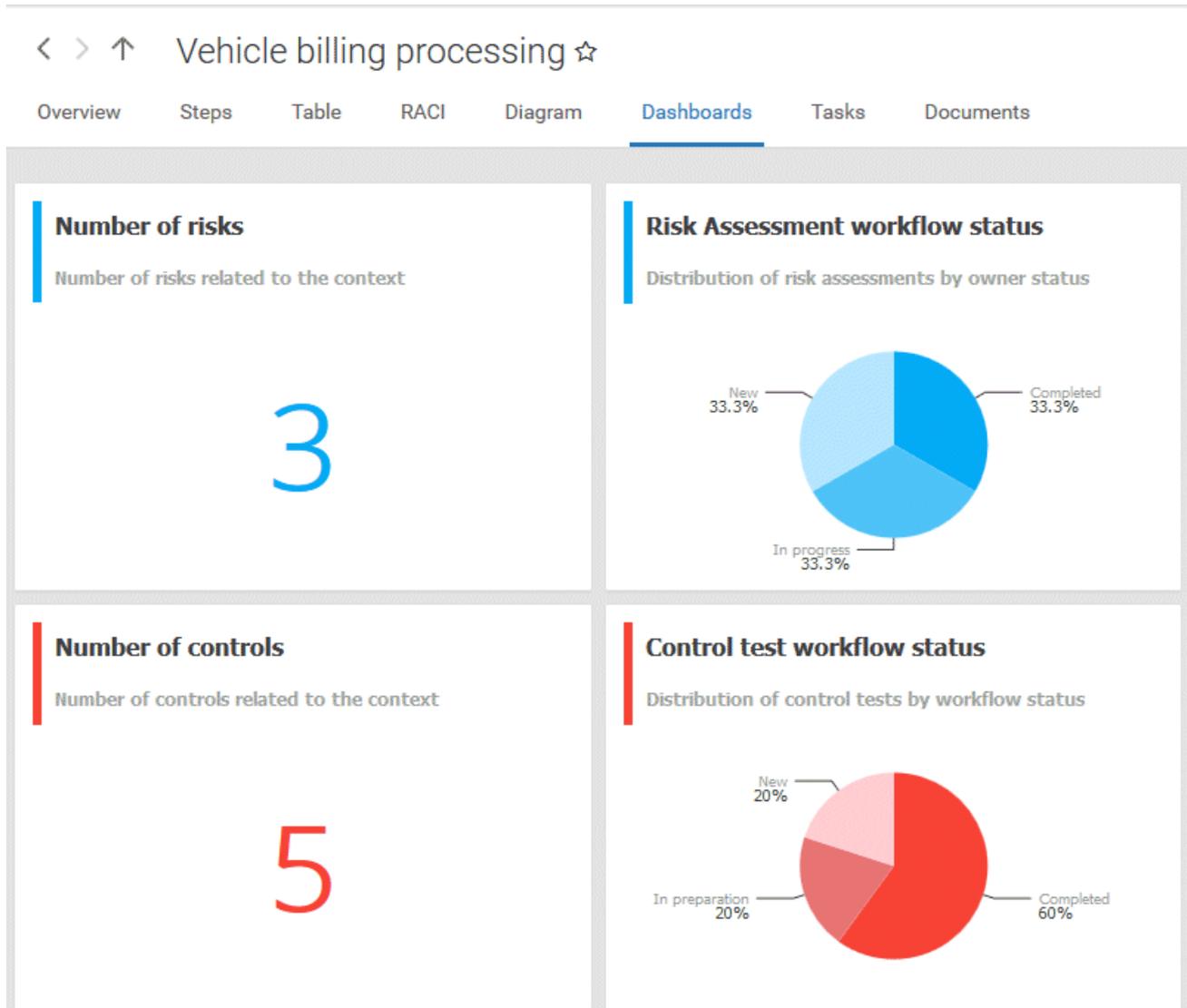


You can find model elements (page 652) (🔍) in the diagram. Click **i Properties** to show the properties of a model or a model item. (page 655) You can highlight objects in the diagram (page 656) (👉) that meet a defined condition. In addition, you can open assigned models (page 656) (📄). You can change the view of the diagram (page 659) (📺) to show the aspects you want to focus on. Using the functions of the view bar you can change the size of appearance (page 653).

7.1.1.3.13 What is the Dashboards fact sheet for?

The **Dashboards** fact sheet shows dashboards available for the selected diagram. It is shown to users who have the **ARIS Aware** license (page 21).

Dashboards visualize database internal and database external information. Information can be, for example, runtime information, performance data, and analysis data.



7.1.1.3.14 What is the Task fact sheet for?

Shows your tasks created by mini workflows or Process Governance processes. For editing, selected tasks are opened in My tasks (page 16).

Task		Priority	Status
	New document submitted: Assigned Nov 26, 2018		New

7.1.1.3.15 What is the Transactions fact sheet for?

Transactions are displayed if you are using Process-driven Management for SAP and if this function has been configured in the  **Portal**.

Transaction code	Name	Supports	Type	
	Create contract	Contract negotiation and completion in ERP Create contract	SAP transaction	
	Periodic billing	Contract negotiation and completion in ERP	SAP transaction	
	Display contract	Contract negotiation and completion in ERP Inform sales office about contract	SAP transaction	
	Change contract	Contract negotiation and completion in ERP	SAP transaction	
	Create quotation	Quotation processing in ERP (to-be)	SAP transaction	
SDQ1	Expired quotations	Quotation processing in ERP (to-be)	SAP transaction	 ▼
SDQ2	Expired quotations	Quotation processing in ERP (to-be)	SAP transaction	
SDQ3	Complete quotatio	Quotation processing in ERP (to-be)	SAP transaction	

You can start (page 696) the  transaction automatically via the default server in each row displaying a transaction code. Click the ▼ arrow head to display all registered SAP Servers. The default server selected is indicated by a check mark.



To start the transaction, click an SAP Server or a URL. The Login dialog opens.

SAP logon

Client:

User:

Password:

Log on to the SAP system in the current language and the transaction starts. The login remains valid until you log out of the portal or enter different login data (page 698). To delete the current SAP logon data, click the ▼ arrow head and then **Reset logon data**. For the next transaction start you need to log on to the SAP system again.

If you click a transaction on the **Transactions** page, such as **SDQ1**, its fact sheet including detailed information is displayed. If documents are available, you will be able to download (page 697) them.

Transaction code	Supported processes
SDQ1 (Expiring Quotations)	Customer qualification (to-be) Sales process (to-be) Contract negotiation and completion in ERP (to-be)
Type	Activities
SAP transaction	Quotation processing in ERP (to-be)
Logical component	Documents
ZSAP ECC 50	Quotation processing in ERP
	Roles
	Head of regional sales Regional sales
	Transaction siblings
	Display quotation Change quotation Create quotation List of incomplete quotations Batch processing of quotations

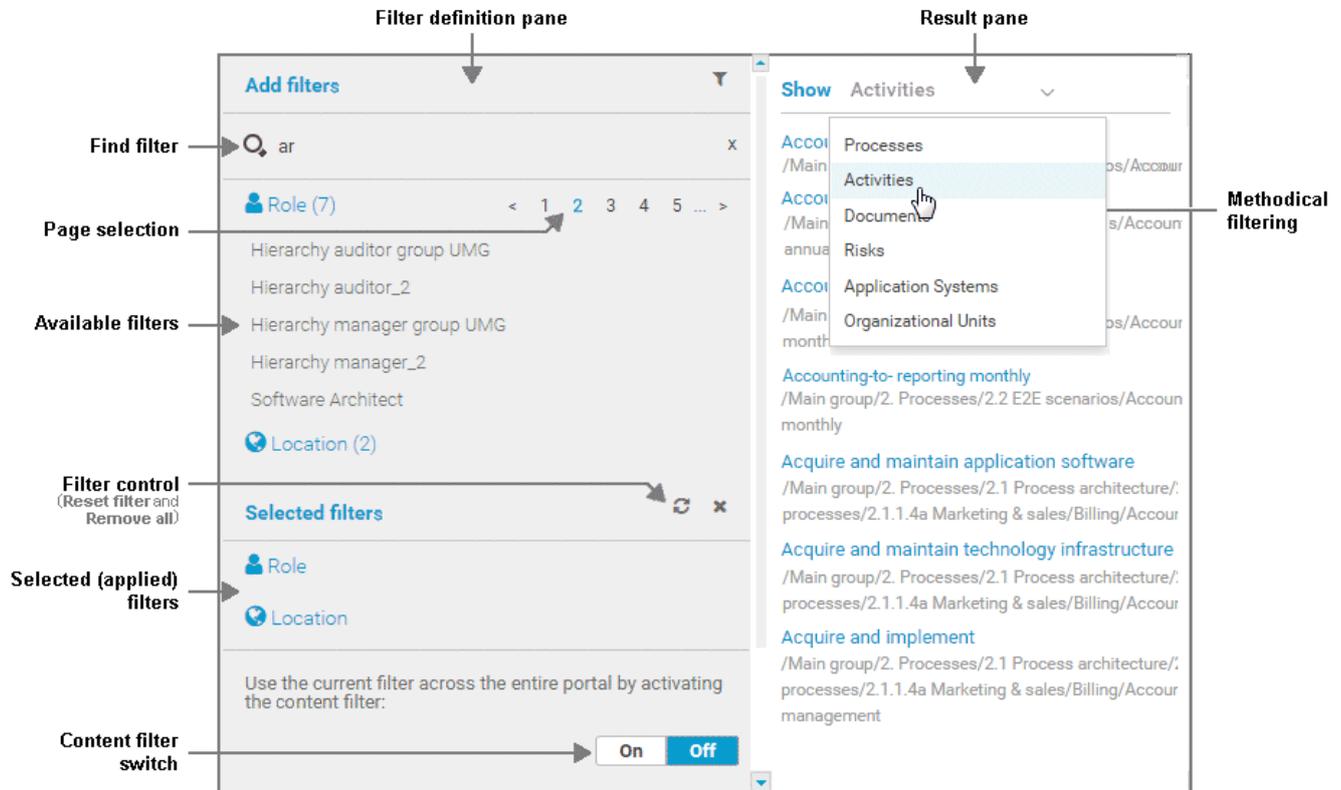
7.1.1.3.16 What is the Documents fact sheet for?

Lists documents assigned to models or objects, for example, by the **Link 1 - Link 4** attributes. The list displays the latest approved version of each document. These documents are stored in ARIS document storage.

Overview Steps Table RACI Diagram Tasks Documents			
Name	Owner	Last update	Related to
Modeling conventions	stem14	2018.11.26, 10:25:38	Sales order processing

7.1.1.3.17 What is the structure of the My content area?

If the administrator provides at least one database you have access to, the **My content** area is available. It provides a filter definition pane and a result pane. In the definition pane, you can define filters, refresh the filter result, delete filter definitions, turn on and turn off the defined filters. In the result pane, you can focus on specific aspects. Therefore you can, for example, switch between activities and processes.



In the **Add filters** section, all available filters for the current user are available. The filters assigned to the roles that are modeled for the current user are listed in the **Selected filters** section. You can add individual (page 699) or a number of filters (page 700) to the **Selected filters** section.

If the number of the selected filters is too large to be displayed, the filter category is collapsed and indicated by the number of filters contained. The category can be expanded. If the number of filters takes up more than one page, filters are offered on multiple pages. In that case, a page selection is displayed after the category name to navigate to the relevant pages.

You can remove selected filters (page 703) and selected filters can be reset (page 703), so that only those filters stay active that are assigned to you by role assignment. The **Reset filters** button is only displayed if you are logged in as user to whom a content filter is assigned via roles (page 701).

Selected filters can be used as content filter. That means that in the **Portal** only the content is shown that is allowed by the selected filters.

Finally you can remove the selected filters as well as the filters that are assigned to you (page 703) by role assignment.

7.1.2 Use the portal

In a narrower sense, the use of the  **Portal** is described here. Functionalities that have the portal as their starting point are inserted in the Work in the portal (page 612) area.

7.1.2.1 Collaborate

The following describes the collaboration features.

7.1.2.1.1 Comment on portal content

Add comments to models and post information that could be of interest to your colleagues.

Prerequisite

You have the required access privilege (page 598) in ARIS Architect.

1. Navigate to a process.
2. Click  **Comment** in the bar panel if the bar is not activated yet.
3. Enter or copy your text into the input field. Up to 250 characters are available. If you also want to add a link, note that the characters in the link are counted towards the 250 available characters.
4. Click  **Tag**.
5. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
6. Click  **Link**.
7. Insert a link to a Web site that contains more detailed information.
8. Click **Add link**. The link is checked and added.
9. Click  **File**. The **Select document** dialog is displayed.
10. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
11. Select the file you want to upload and enter the relevant additional information.
12. Click **Upload**.
13. Enable the check box of the document you want to add to your post.
14. Click **OK**.

Your comment is posted.

7.1.2.1.2 Follow processes in the portal

Follow processes or other models to be informed about updates in the  **Portal** and in Collaboration.

Procedure

1. Navigate to a process.
2. Click  **Comment** in the bar panel if the bar is not activated yet.
3. Click **Follow**.

The content you are following is displayed in the portal under **My activities** and in Collaboration under  **My portal feeds**. To stop following content, click the relevant link, and in the content displayed click **Unfollow**.

7.1.2.1.3 Request feedback on processes

You can request feedback on processes from other users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model for which you want feedback.
6. Click  **Comment** in the bar panel if the bar is not activated yet.
7. Enter your comment in the box provided.
8. Click  **Tag**.
9. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
10. Click  **Link**.
11. Insert a link to a Web site that contains more detailed information.
12. Click **Add link**. The link is checked and added.
13. Click  **File**. The **Select document** dialog is displayed.

14. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
15. Select the file you want to upload and enter the relevant additional information.
16. Click **Upload**.
17. Enable the check box of the document you want to add to your post.
18. Click **OK**.

The comment is displayed and can be commented on by other users.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.2.2 Compliance

The following describes the compliance features.

7.1.2.2.1 Open data from ARIS Connect in ARIS Risk & Compliance Manager

You can open risks and hierarchies from ARIS Connect in ARIS Risk & Compliance Manager.

Prerequisite

- The ARIS Connect integration is enabled in ARIS Risk & Compliance Manager.
- You have a role in ARIS Risk & Compliance Manager that allows you to open risks and/or hierarchy elements.
- You have the **ARIS Risk & Compliance Manager Contribute** or **ARIS Risk & Compliance Manager Operate** license privilege.
- You have the required privileges in ARIS Connect.

Procedure

1. In ARIS Connect, open the overview from which you want to display objects in ARIS Risk & Compliance Manager.
2. Click  **Open in ARIS Risk & Compliance Manager**.

The selected element is opened in ARIS Risk & Compliance Manager.

7.1.2.2.2 Show my GRC tasks

Display an overview of your current tasks from ARIS Risk & Compliance Manager in ARIS Connect. For detailed information on how to work on tasks in ARIS Risk & Compliance Manager, refer to ARIS Risk & Compliance Manager online help.

Prerequisite

- The ARIS Connect integration is enabled in ARIS Risk & Compliance Manager.
- You have a role in ARIS Risk & Compliance Manager that allows you to edit objects.
- You have the **ARIS Risk & Compliance Manager Contribute** or **ARIS Risk & Compliance Manager Operate** license privilege.
- You have the required privileges in ARIS Connect.

Procedure

1. Click **Home** >  **My GRC tasks**. Your ARIS Risk & Compliance Manager tasks are displayed.
2. Click the relevant task.

The task is displayed in ARIS Risk & Compliance Manager.

7.1.2.2.3 Show risk assessments from ARIS Risk & Compliance Manager in ARIS Connect

You can generate risk assessments in ARIS Connect.

Prerequisite

- The ARIS Connect integration is enabled in ARIS Risk & Compliance Manager.
- You have the **Risk owner** role in ARIS Risk & Compliance Manager.
- You have the **ARIS Risk & Compliance Manager Contribute** or **ARIS Risk & Compliance Manager Operate** license privilege.
- You have the required privileges in ARIS Connect.

Procedure

1. In ARIS Connect, open the risk for which you want to show the assigned risk assessments.
2. Click **Risk assessments**. The list of risk assessments is displayed in ARIS Connect.
3. Click the ID of the relevant risk assessment.

The risk assessment form is displayed below the list.

To open (page 645) the risk assessment in ARIS Risk & Compliance Manager, click  **Open in ARIS Risk & Compliance Manager**.

7.1.2.2.4 Create issue in ARIS Risk & Compliance Manager

You can generate an issue in ARIS Risk & Compliance Manager to analyze and monitor a problem relating to a particular object. It is possible to assign several objects of different object types to an issue. You can generate issues for functions (processes and controls), organizational units, application system types, risks and risk categories.

Prerequisite

- The ARIS Connect integration is enabled in ARIS Risk & Compliance Manager.
- You have a role in ARIS Risk & Compliance Manager that allows you to create issues.
- You have the **ARIS Risk & Compliance Manager Contribute** or **ARIS Risk & Compliance Manager Operate** license privilege.
- You have the required privileges in ARIS Connect.

Procedure

1. In ARIS Connect, open the overview from which you want to create an issue in ARIS Risk & Compliance Manager.
2. Click  **Create issue in ARIS Risk & Compliance Manager**.
3. The Issue form is displayed in ARIS Risk & Compliance Manager.

4. Edit the mandatory fields.
 - a. Enter the **Name** for the issue.
 - b. Enter the **Description** of the issue.
 - c. Enter a description of the **Remediation measure**.
 - d. Enter the date by which the issue is to be remediated (**Remediation planned before**) (becomes a mandatory field as soon as the **Release** creator status is selected).
 - e. Assign an **Issue owner** and an **Issue reviewer** (becomes a mandatory field as soon as the **Release** creator status is selected).
5. Edit the optional fields.
 - a. Enable **Financial details** to display the attributes for categorizing financial incidents.
 1. Select the **Business line level 2**. Level 1 is set automatically as a result.
 2. Select the **Incident type level 2**. Level 1 is set automatically as a result.
 3. Select the **Incident cause classification level 2**. Level 1 is set automatically as a result.
 4. Specify the expected loss.
 5. Select a currency. If a currency is specified at the system or environment, it is displayed here automatically, but can be changed.
 - b. To describe the incident in greater detail, add reference **documents**.
 - c. Insert a remark.
 - d. Use **Assignments** to assign the hierarchy elements that can be affected by the incident.
6. Assign an issue owner/issue reviewer.
 - a. In the Issue owner or Issue reviewer row, click  **Create assignment**. The list of assignable users opens.
 - b. Click  **Create assignment** in the row of the relevant user. The list closes.
 - c. Click  **Save**.
7. Click  **Save**.
8. Click **OK**.

Your entries are saved. An issue was generated for the selected objects and added to the **My generated issues** list in ARIS Risk & Compliance Manager. The users in charge are notified automatically by e-mail.

7.1.2.2.5 Create incident in ARIS Risk & Compliance Manager

You can create an incident for certain objects to analyze and describe a trigger that can harm the organization or lead to a loss. By default, you can create incidents in ARIS Connect for functions, processes, systems, organizational units, risks, risk categories and documents.

Prerequisite

- The ARIS Connect integration is enabled in ARIS Risk & Compliance Manager.
- You have a role in ARIS Risk & Compliance Manager that allows you to create incidents.
- You have the **ARIS Risk & Compliance Manager Contribute** or **ARIS Risk & Compliance Manager Operate** license privilege.
- You have the required privileges in ARIS Connect.

Procedure

1. In ARIS Connect, open the overview from which you want to create an incident in ARIS Risk & Compliance Manager.
2. Click  **Create incident in ARIS Risk & Compliance Manager**.
3. Depending on your assignments to owner groups and environments in ARIS Risk & Compliance Manager, you are asked to select the relevant owner group and environment.
4. Click **OK**. The **Incident** form is displayed in ARIS Risk & Compliance Manager.
5. If the object from which you create the incident is available in ARIS Risk & Compliance Manager, the object is automatically assigned to the corresponding assignments (hierarchies). Otherwise, copy the ARIS Connect URL of the object to the description field.
6. Edit the mandatory fields (*) and the optional fields.
7. Select the owner status.
8. Click  **Save**. Your entries are saved and the status is automatically set to **In progress**. If you want to continue editing the incident at a later point in time, keep the status **In progress**. If you want to finish editing the incident, select the status **Closed**.
9. If you changed the status, save your entries again ()
10. Click  **Save**. You are prompted to specify how you want to proceed.
11. Click the relevant option.
12. Click **OK**.

The incident is created. The incident is displayed to the assigned incident reviewer group for review in the **Incidents** list. The users in charge are notified automatically by e-mail. If you created the incident as a loss owner the incident is displayed only in the **Assignment between loss and incident** list and can be assigned to a loss. If you did not change the reviewer group in charge when creating the incident, you are responsible for reviewing the incident yourself as incident reviewer. (The loss owner group to which you are assigned is automatically assigned to the incident as the reviewer).

7.1.2.3 Execute processes

The following describes the execution of processes.

7.1.2.3.1 Start governance process

You can start governance processes from the portal.

Prerequisite

The  **Start governance process** function is provided only if an executable process is available, and if the item for which the governance process is to be started is defined as the execution context.

Procedure

1. Navigate to the process or object for which you want to start the governance process.
2. Click  **Start governance process**. If multiple processes are available, they will be displayed for selection.
3. Click the executable process.

The executable process will start.

7.1.2.4 Model

The following describes the use of models.

7.1.2.4.1 Create model

You can quickly and easily create new models.

Prerequisites

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click  **Create new model** on the **Quick start (page 627)** area. The corresponding dialog opens.
4. Enter a name for the new model in the **Model name** box.
5. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
6. Select the required model type. The **Target** area displays the database and group names. This is where the new model will be stored.
7. Click **Change** if you want to store the model in a different database and/or group. The **Select target group** dialog opens.
8. Select the required database in the **Database** box.
9. Select the required group.
10. Click **OK**. The **Select target group** dialog closes.
11. Check your input.
12. Click **OK**. The **Create model** dialog closes.

The model is created based on the preset template (page 883) and opens in a new tab (page 889).

7.1.2.4.2 Edit models

You can edit models in ARIS Connect.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the name of the model you want to edit.
6. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
7. Make the required changes.
8. Click  **Save**.

Your changes are saved in the model.

7.1.2.5 Model Viewer

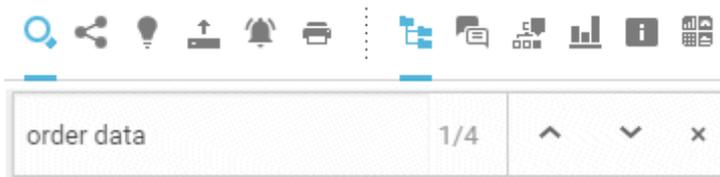
The following describes the use of the Model Viewer.

7.1.2.5.1 Find in model

In the Model Viewer, you can quickly find the required model elements.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Find in model**. The input field opens.
6. Enter the term contained in the name of the model element you want to find. The first number indicates the element selected in the diagram and the second number the total number of elements found.



7. Click **X Delete** to delete the contents of the input field and enter another term.
8. Click **Next** to highlight the next model element found.
9. Click **Previous** to highlight the previous model element found.

You have found the required model elements.

7.1.2.5.2 Use the view bar

In the Model Viewer, you can adjust the display of a model.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer. The view bar is positioned at the bottom.
5. Click  **Full screen view** to enlarge the model to the whole display range.
6. Click  **Exit full screen** to show the model in the previous display range again.
7. Click  **Fit to window** to fit in the whole model into the display range.
8. Move the slider to enlarge or reduce the display size of the model.



9. Click  **Change view** to select a specific view (page 659) of process models.
10. On the left, click the ▼ arrow down to hide the view bar.
11. On the left, click ▲ arrow up to view the view bar again.

You have used the view bar to adjust the Model Viewer.

7.1.2.5.3 Navigate using the Model Viewer

You can navigate to different areas of a model.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer. The Model Viewer shows the model. The navigation pane is placed at the bottom right. The light gray area of the navigation panel shows the visible area of the model. When you change the resolution of the model (page 653), the size of the light gray area also changes.



5. Click the light gray area and hold down the mouse key.
6. Drag the mouse pointer in the direction of the model area you want to bring into the visible area.
7. Release the mouse button when the relevant model area is visible.

You have navigated to the relevant model area.

7.1.2.5.4 Show properties

In the Model Viewer, you can display the properties of the model or of model items.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click **i Properties**. The **Property** bar opens and the **Attributes** tab is activated.

Attributes More ▾	
Attribute	Attribute value
Name	Organizational chart
Remark/Example	Organization
Type	Structural element
Time of generation	Apr 18, 2017 11:20:25 AM
Creator	w.becker
Last change	Aug 18, 2019 11:25:00 AM
Last user	system

If you have selected an object, the attributes for that object are displayed. Click **More** to view related objects or occurrences. The model properties are shown if no object is selected.

6. Click **More > Related objects** to show the related object of the selected object. The types of the connections and the names of the related objects are shown.
7. Click **More > Related models** to show the related models of the selected object. The occurrences of the selected object in the current and other models are displayed. If a model contains more than one occurrence of the selected object, you can select them directly or using arrows to the left or to the right.



You have used the **Property** bar.

7.1.2.5.5 Switch highlighting on

You can highlight model elements to focus on aspects to be monitored. This example illustrates highlighting of a process model in the default view (page 618).

Prerequisites

The highlighting is configured for the model you have selected.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Highlighting**. The **Highlighting** bar is opened. There are various criteria with criterion indicators sorted in different categories.
6. Click **On** in the **Highlighting** bar.
7. Open the relevant category and activate the check boxes of the criteria you want to be highlighted. To highlight all criteria of a category, activate the category check box.

The model elements that meet the selected highlighting criteria are colored and marked by the criterion indicator. The highlighting of process models remains active until you change the view or switch the highlighting off (page 667).

7.1.2.5.6 Open assignment

In Model Viewer, you can quickly open diagrams assigned to objects. Assigned diagrams contain detailed information on the object that the diagrams are assigned to, for example.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer. Assignment icons are displayed next to objects with assigned models.
5. Click the relevant  assignment icon, or double-click the object at which the relevant  assignment icon is shown.

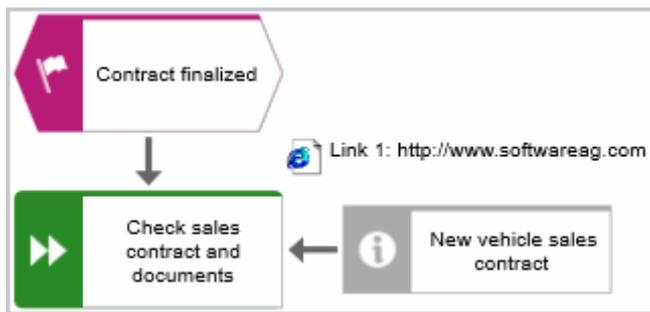
If only one diagram is assigned, it is opened directly. If more than one diagram is assigned, they are offered for selection in a dialog.

7.1.2.5.7 Open placed link attributes

In Model Viewer, you can open placed link attributes.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer together with all placed link attributes.



5. Click the relevant link attribute.

The link opens. This is how you can easily open a text document or a new e-mail with the e-mail recipient entered, for example.

7.1.2.5.8 Print the graphic of the current model

In the  **Portal**, you can print the graphic of the current model as PDF.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Click  **Print graphic as PDF**. The **Select output options** dialog opens.
5. Specify your settings.
6. Click **OK**. After the report is generated, the **Print graphic as PDF** dialog opens.
7. Click **Download result**. Using the following dialog, open the file in a PDF viewer or save it.

In the  **Portal**, you have printed the graphic of the current model as a PDF.

To the left of the user name, a  notification is inserted. Click the notification icon and  **Export graphic as PDF** to download the result again. The result is also listed on the **Reports** bar. If you select the **Diagram** fact sheet, you can open the **Reports** bar and download the printed model graphic as a PDF.

7.1.2.5.9 Change view

In the Model Viewer, you can change the view of process models. Depending on the modeling content, views can have the same result despite different criteria. If a view based on the current option settings cannot be generated, the indication **No diagram available** is shown in the model window.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Change view**. The view options (page 660) are shown. The view options displayed depend on the type of the model. The view options of model type **EPC**, for example, differ from those of a model of type **Enterprise BPMN collaboration** or of type **Customer journey map**.
6. Click the options (page 660) to change the view of the model. Based on the options, the model view is adjusted.
7. To close the **Change view** bar, click in the model window.

As long as the view options are active, the  **Change view** icon is colored in red and the selected view is indicated. You can reset the changed view (page 659).

7.1.2.5.10 Reset a changed view

In the Model Viewer, you can determine that models are displayed according to criteria you have selected (page 659). If you want to see the model without restrictions, you can reset all criteria.

Procedure

1. Click the red colored  **Change view** icon if the view options (page 660) are collapsed.
2. Click  **Reset to default** to the right of the title **Views**.
3. To close the **Change view** bar, click in the model window.

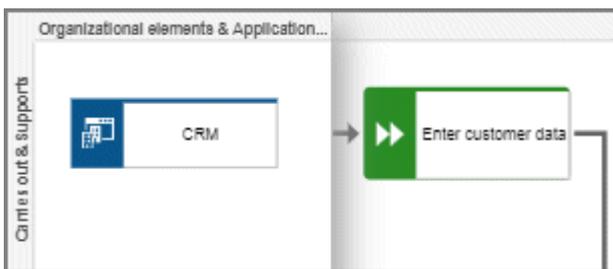
The model is shown without restrictions and the  **Change view** icon is not colored anymore.

7.1.2.5.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.2.5.11.1 What is the special feature for the Model Viewer navigation?

The first row or column of a swimlane model remains visible even if the model content is moved (page 654). If the content is moved next to the first row or column so that it is no longer visible, a shaded separator appears. In the example graphic, the content next to the first column was moved to the invisible area.



7.1.2.5.11.2 Which view options are available?

You can change the view (page 659) of all model types. For every model type at least the layout options **Horizontal** and **Vertical** are available.

The view options displayed depend on the type of the model. The view options of model type **EPC**, for example, differ from those of a model of type **Enterprise BPMN collaboration** or of type **Customer journey map**.

Group and **Layout** options can be combined with the selected view. If a view based on the current option settings cannot be generated, the indication **No diagram available** is shown in the model window.

VIEWS

Reset to default (↺)

Turns off all previous view settings and displays the model in its originally layout, in other words, how it is actually modeled. All model elements, structurally relevant objects (page 1178) and satellites (page 1177), are shown.

Lean

Displays only the structurally relevant objects (page 1178) of a model. Satellites (page 1177) are hidden.

If you have determined **Details**, **Group by**, or **Layout** options the presentation of the model is adjusted accordingly.

People view

Besides the structurally relevant objects (page 1178), all objects of the following types are displayed.

- Internal person
- External person
- Position
- Role

IT system view

Besides the structurally relevant objects (page 1178), all objects based on the **Application system type** are displayed.

- Application system type
- IT system
- IT software
- IT block

Swimlane view

Displays the whole model, but restructured in rows and columns. If row and column labels exist, the rows and columns are labeled.

If you have determined **Details**, **Group by**, or **Layout** options the presentation of the model is adjusted accordingly.

Extended process view

Displays the entire process (page 665) across model boundaries by arranging the structurally relevant objects (page 1178) of the process from left to right and the satellites (page 1177) above and below them.

The options of **Details**, **Group by**, and **Layout** are disabled and cannot be selected.

DETAILS

Select/Deselect all

You can show all details at a time (enable the check box) or hide all details at a time (disable the check box).

Roles

You can show (enable the check box) and hide (disable the check box) objects based on the **Roles** object type.

If no object of this type exists in the model, the option button is disabled.

Persons

You can show (enable the check box) and hide objects (disable the check box) based on the **Persons** object type, namely the objects **Internal person** and **External person**.

If no object of this type exists in the model, the option button is disabled.

Positions

You can show (enable the check box) and hide objects (disable the check box) based on the **Positions** object type.

If no object of this type exists in the model, the option button is disabled.

Documents

You can show (enable the check box) and hide objects (disable the check box) based on the **Information carrier** object type, such as **Document**, **Test documentation**, and **Folder**.

If no object of this type exists in the model, the option button is disabled.

IT systems

You can show (enable the check box) and hide objects (disable the check box) based on the **Application system type** type, such as **Application system type**, **IT system**, and **IT software**.

If no object of this type exists in the model, the option button is disabled.

Capabilities

You can show (enable the check box) and hide objects (disable the check box) based on the **Capability** object type.

If no object of this type exists in the model, the option button is disabled.

Risks

You can show (enable the check box) and hide (disable the check box) objects based on the **Risk** object type.

If no object of this type exists in the model, the option button is disabled.

KPI instances

You can show (enable the check box) and hide objects (disable the check box) based on the **KPI instances** object type.

If no object of this type exists in the model, the option button is disabled.

GROUP BY**Roles**

Opens the list of connections by which roles can be linked to functions. Enable an option button to group the model elements by roles according to the connection you have selected. The previously selected grouping is deactivated. The model elements are grouped in a swimlane model (page 1173).

If no connection of a possible type is used in the model, the corresponding option button is disabled.

The **Group by** switch is turned on. To turn off the grouping, click **Off**.

**Positions**

Opens the list of connections by which positions can be linked to functions. Enable an option button to group the model elements by positions according to the connection you have selected. The previously selected grouping is deactivated. The model elements are grouped in a swimlane model (page 1173).

If no connection of a possible type is used in the model, the corresponding option button is disabled.

The **Group by** switch is turned on. To turn off the grouping, click **Off**.



Others

Provides the **IT system** option button that allows you to group the model elements according to objects based on the **Application system type** type (enable the **IT systems** option button). If no **Application system type**, **IT system**, or **IT software** object exists in the model, the option button is disabled.

The model is restructured in a swimlane model (page 1173). The previously selected grouping is deactivated. The model elements are grouped in a swimlane model (page 1173).

The **Group by** switch is turned on. To turn off the grouping, click **Off**.



LAYOUT

Horizontal

Arranges the model items from left to right.

The **Layout** switch is turned on. To turn off the selected layout, click **Off**.



Vertical

Arranges the model items top down.

The **Layout** switch is turned on. To turn off the selected layout, click **Off**.



7.1.2.5.11.3 How can comprehensive processes be modeled?

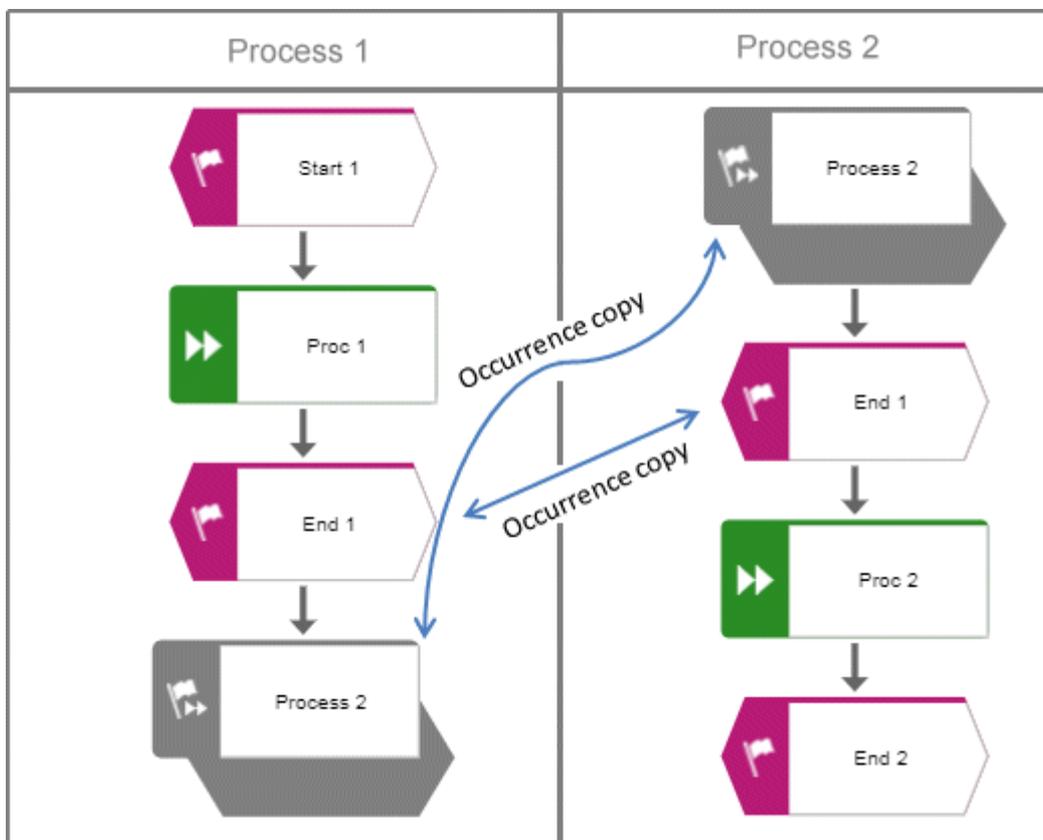
You can use the **Change view** functionality (page 659) in the **Diagram** fact sheet to show different views (page 660) on diagrams. This also allows you to choose the model-spanning Extended process view, which displays models that are connected by process interfaces.

To use the benefit of the Extended process view, the models of **EPC** type must be connected according to the following schemes.

PROCESS INTERFACE OCCURRENCE COPY

- Use an occurrence copy of the end event of the first model as start event of the second model.
- In the first model, place a process interface below the end event.
- Copy the process interface of the first model and place its occurrence copy in the second model above the start event.

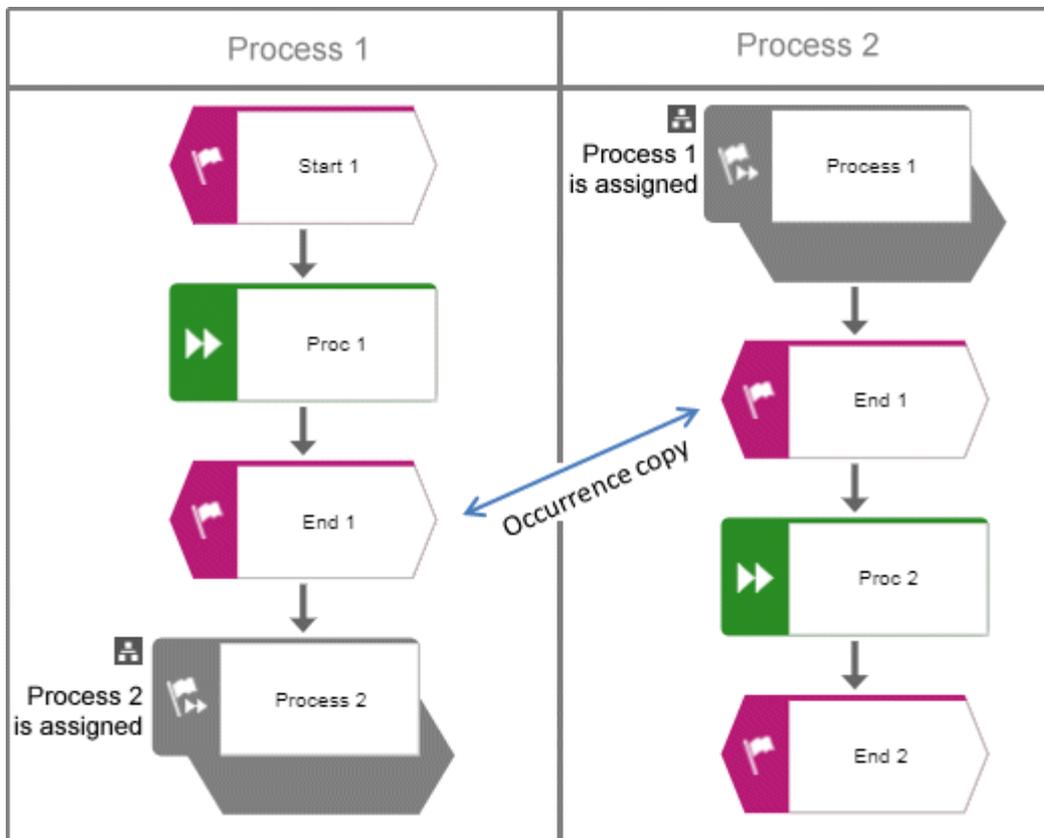
The following graphic shows the connection scheme of the models.



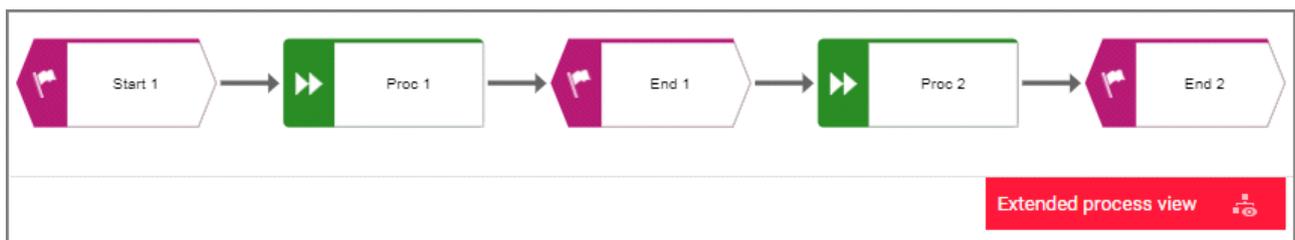
PROCESS INTERFACES WITH ASSIGNED MODELS

- Use an occurrence copy of the end event of the first model as start event of the second model.
- In the first model, place a process interface below the end event and assign the second model to the process interface.
- In the second model, place a process interface above the start event and assign the first model to the process interface.

The following graphic shows the connection scheme of the models.



If the Extended process view is activated for one of the two models, the following cross-model process is displayed.



7.1.2.6 Highlight model elements

You can highlight model elements to focus on aspects to be monitored.

7.1.2.6.1 Switch highlighting on

You can highlight model elements to focus on aspects to be monitored. This example illustrates highlighting of a process model in the default view (page 618).

Prerequisites

The highlighting is configured for the model you have selected.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Highlighting**. The **Highlighting** bar is opened. There are various criteria with criterion indicators sorted in different categories.
6. Click **On** in the **Highlighting** bar.
7. Open the relevant category and activate the check boxes of the criteria you want to be highlighted. To highlight all criteria of a category, activate the category check box.

The model elements that meet the selected highlighting criteria are colored and marked by the criterion indicator. The highlighting of process models remains active until you change the view or switch the highlighting off (page 667).

7.1.2.6.2 Switch highlighting off

If you have switched highlighting on (page 656), it remains active for as long as you stay in the view or until you switch highlighting off.

Prerequisites

The highlighting is configured for the model you have selected.

Procedure

1. Click **Groups** (page 615) in the Classic **view** (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Highlighting**. The **Highlighting** bar is opened.
6. Click **Off** in the **Highlighting** bar.

The coloring and marks of the model items are removed.

7.1.2.6.3 Highlight the happy and/or exception path

You can highlight the happy path and/or the exception path.

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.

Prerequisites

The highlighting for the happy path (page 670) and/or exception path (page 670) is defined for the model you have selected.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Highlighting**. The **Highlighting** bar is opened. There are various criteria with criterion indicators sorted in different categories.
6. Click **On** in the **Highlighting** bar.
7. Open the **Process paths** category and enable the **HP** check box to highlight the happy path (page 674).
8. Open the **Process paths** category and enable the **EX1** check box to highlight the exception path (page 675).
9. Enable the check box of the **Process paths** category to highlight both the happy path and the exception path (page 676).

You have highlighted the happy path and/or the exception path.

7.1.2.6.4 Highlight IT systems, general documents, roles

You can highlight items of the categories **IT systems**, **General documents**, and **roles**.

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.

Prerequisite

The relevant objects are inserted (page 672) in the selected model.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Click  **Highlighting**. The **Highlighting** bar is opened. There are various criteria with criterion indicators sorted in different categories.
6. Click **On** in the **Highlighting** bar.
7. Activate the check box of the **IT systems** category to highlight Application system objects (page 677) contained in the model.
8. Activate the check box of the **General documents** category to highlight Information carrier objects (page 677) such as **Document**, **Bar code**, and **Folder** contained in the model.
9. Activate the check box of the **Roles** category to highlight Role objects together with connected functions (page 677) contained in the model.

You have highlighted items of the categories **IT systems**, **General documents**, and **roles**.

7.1.2.6.5 Define the happy path

You can define in a model which path is the best way to perform a process. This path will be highlighted (page 674) if you highlight the happy path **HP** of the category **Process paths**.

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Open the relevant model (page 889) for editing.
2. For each connection that connects the objects of the respective model path, enter the value **HAPPY_PATH** in uppercase for the **Remark/Example** attribute.
3. Save your model (page 909).

The happy path for highlighting is defined.

7.1.2.6.6 Define the exception path

You can define in a model which path is the exceptional case to perform a process. This path will be highlighted (page 675) if you highlight the exception path **Ex1** of the category **Process paths**.

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Open the relevant model (page 889) for editing.
2. For each connection that connects the objects of the respective model path, enter the value **EXCEPTION_1** in uppercase for the **Remark/Example** attribute.
3. Save your model (page 909).

The exception path for highlighting is defined.

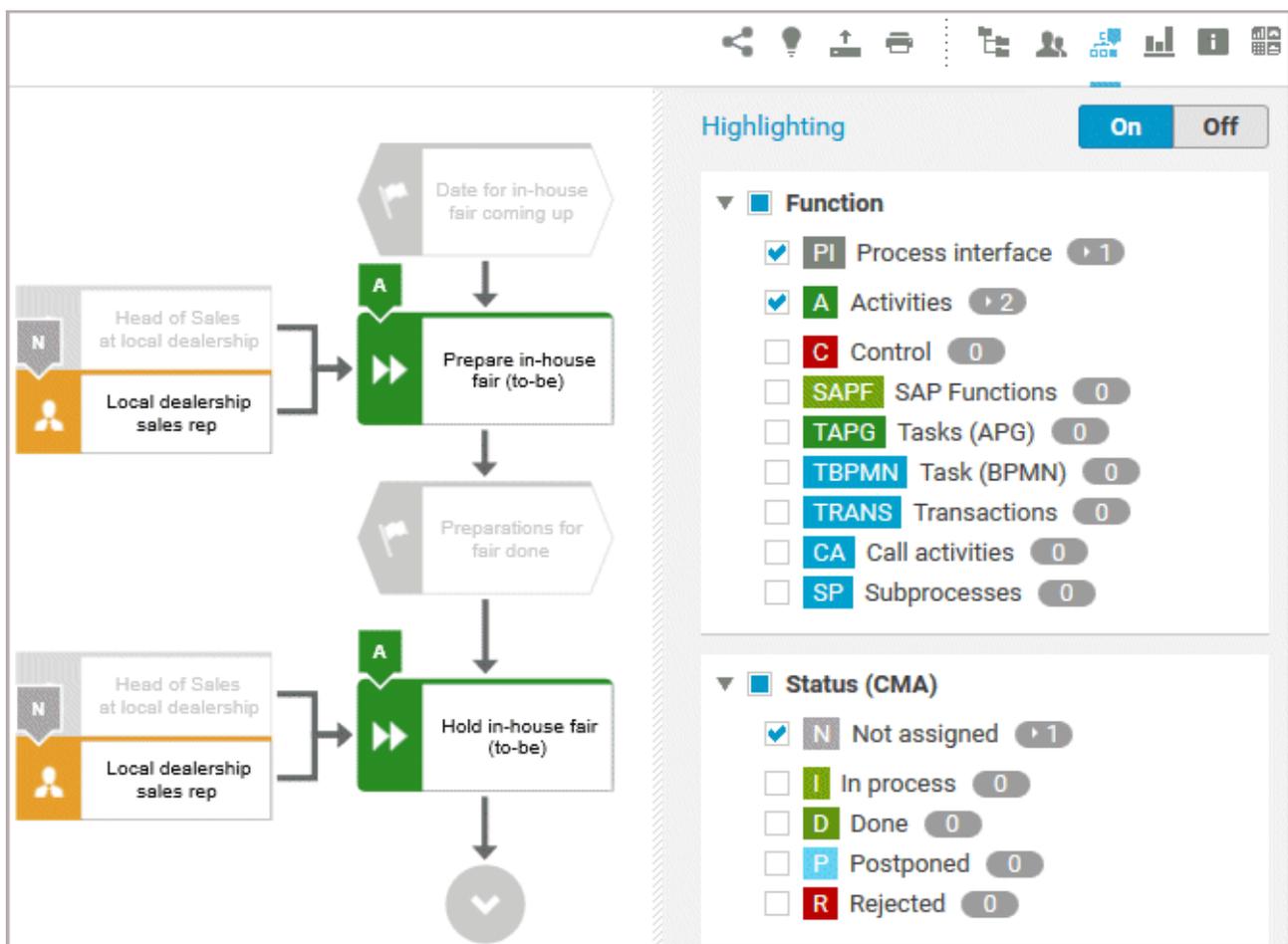
7.1.2.6.7 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.2.6.7.1 What is highlighting?

Highlighting is the visual emphasis of model content. If you have switched highlighting on (page 656), model items are colored and marked by criterion indicators based on the criteria you selected.

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.



If you switched highlighting on, all highlighting categories such as **Function** and **Status (CMA)** are listed. You can expand the categories to show its criteria. Furthermore, you can activate the check box of every single criterion. To activate all criteria of a category, activate the check box of the category.

Every criterion has a criterion indicator that is shown in the model if the criterion is activated. Activities, for example, have the criterion indicator **A**. In the **Highlighting** bar, the number of occurrences is displayed behind the criteria. In the image above, activities occur twice (criterion

indicator **A**), objects with the Change Management status **Not assigned** (criterion indicator **N**) only once. Note that in the example above, two object symbols have the **N** criterion indicator, although **1** is shown for the **Not assigned** criterion. The reason for this is that these object symbols are occurrence copies of one and the same object.

If you have switched highlighting on, for example, for processes, the highlighting remains active until you switch it off or you leave the view.

7.1.2.6.7.2 Which models, items, and values are relevant for highlighting?

This description is based on the standard configuration. Please note that your system may be configured differently, so that different attributes and values are relevant.

HAPPY PATH AND EXCEPTION PATH

You can use the following model types to define and highlight the happy path and the exception path (page 668):

- EPC
- EPC (column display)
- EPC (horizontal table display)
- EPC (instance)
- EPC (material flow)
- EPC (row display)
- EPC (table display)
- BPMN collaboration diagram (BPMN 2.0)
- BPMN process diagram (BPMN 2.0)
- Enterprise BPMN collaboration diagram
- Enterprise BPMN process diagram

The value for the happy path is `HAPPY_PATH`, the values for the exception paths are `EXCEPTION_1` to `EXCEPTION_4`. Values are case-sensitive, so that only correctly written values are considered for the highlighting.

IT SYSTEMS AND INFORMATION CARRIERS

You can highlight items of the It systems and General documents categories (page 677) in the following models.

All objects of type **Application system** are grouped under the **IT systems** category.

All objects of type **Information carrier**, such as **Document**, **Bar code**, **Folder**, and **Letter**, are grouped under the **General document** category.

- EPC
- EPC (column display)
- EPC (horizontal table display)
- EPC (instance)
- EPC (material flow)
- EPC (row display)
- EPC (table display)

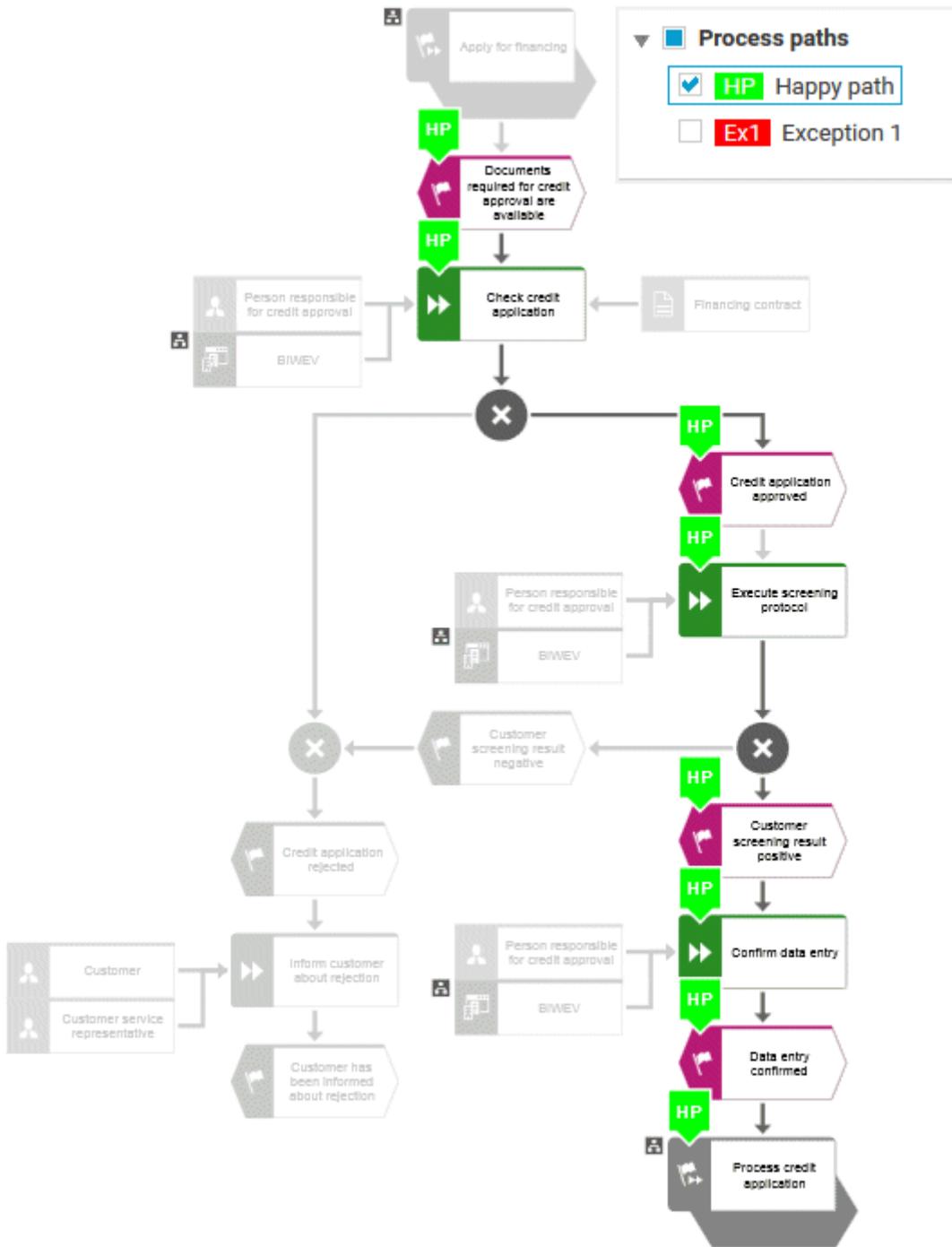
ROLES AND FUNCTIONS

You can highlight roles (page 677) in the following models. When you highlight a role, the executed function and the connection between the two objects are highlighted in addition to the role. If the role is assigned in an assigned Function allocation diagram (FAD) and is not visible in the current model, only the connected function is highlighted.

- EPC
- EPC (column display)
- EPC (horizontal table display)
- EPC (instance)
- EPC (material flow)
- EPC (row display)
- EPC (table display)
- BPMN collaboration diagram (BPMN 2.0)
- BPMN process diagram (BPMN 2.0)
- Enterprise BPMN collaboration diagram
- Enterprise BPMN process diagram

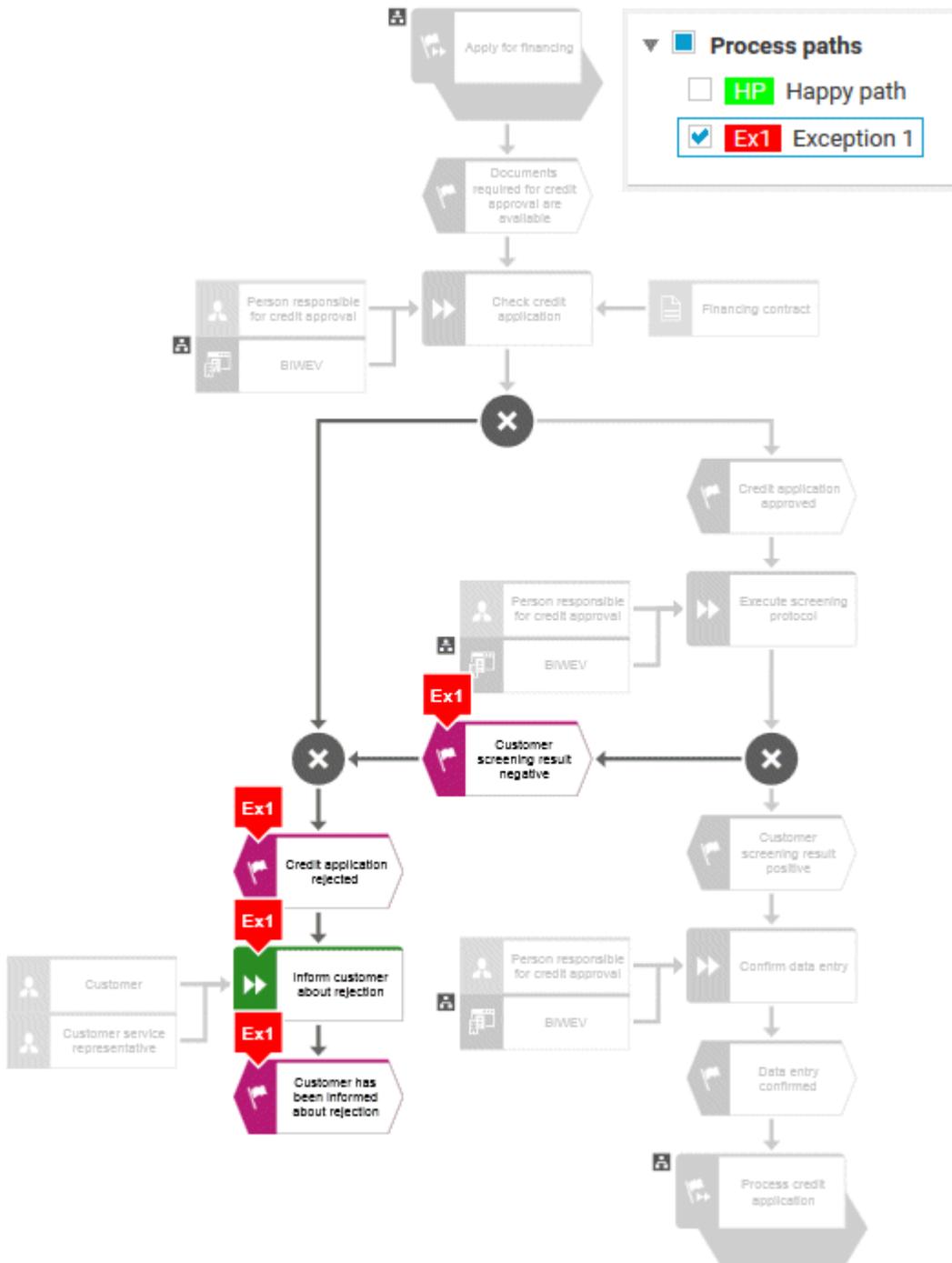
7.1.2.6.7.3 How is the happy path highlighted?

The happy path is highlighted.



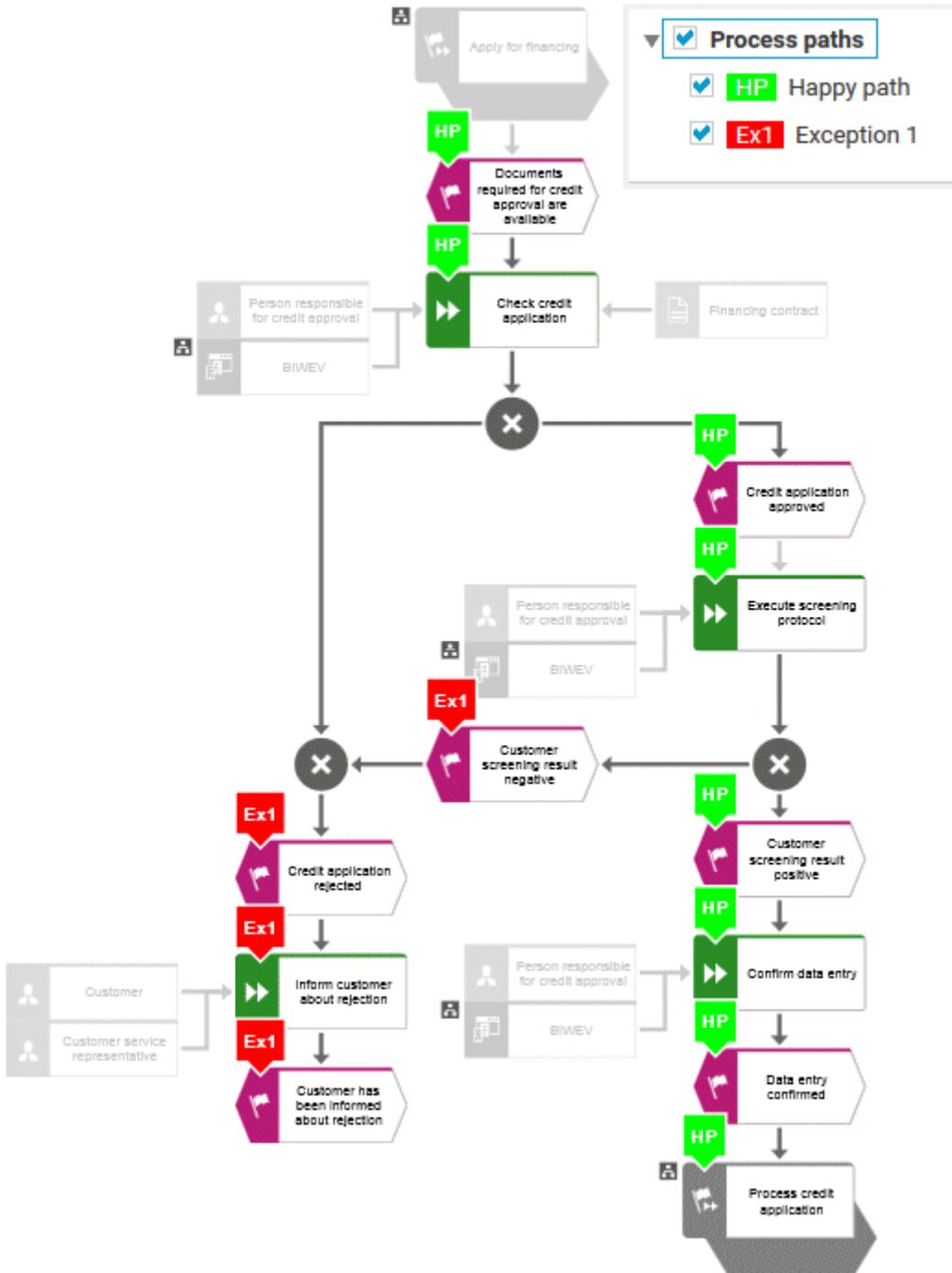
7.1.2.6.7.4 How is the exception path highlighted?

The exception path is highlighted.



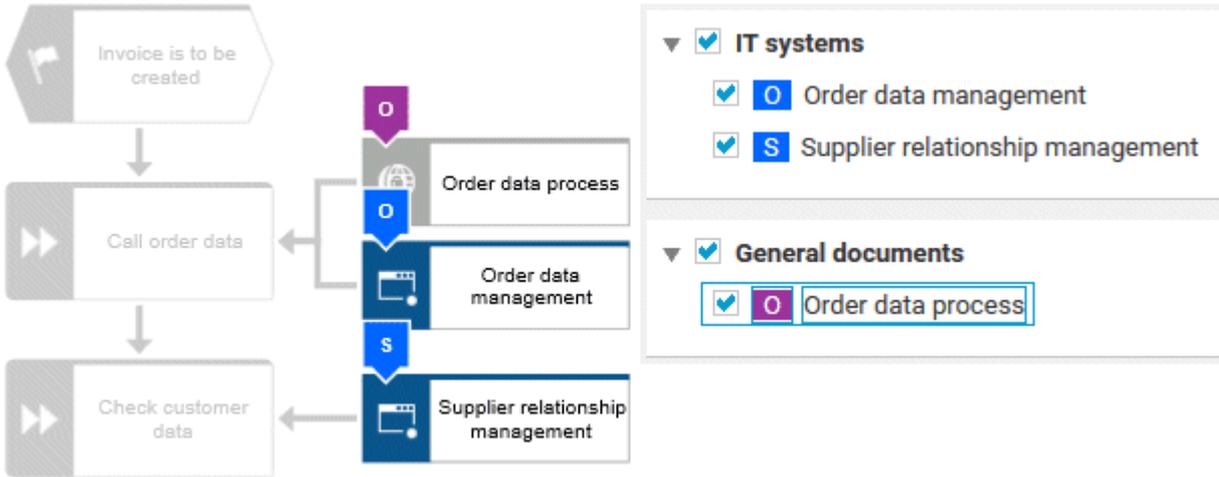
7.1.2.6.7.5 How are the happy path and exception path highlighted?

The happy path and the exception path are highlighted.



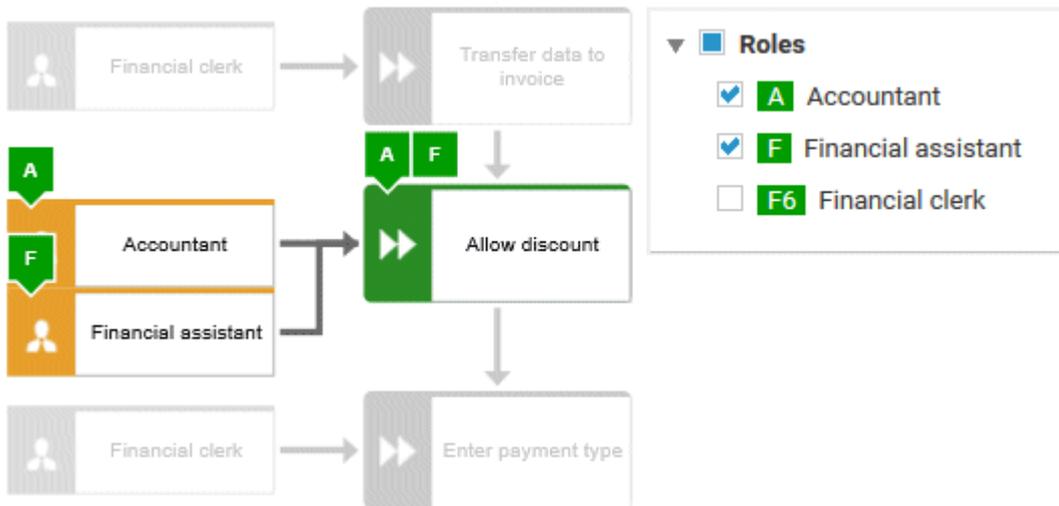
7.1.2.6.7.6 How are IT systems and general documents highlighted?

IT systems and general documents are highlighted.



7.1.2.6.7.7 How are roles and functions highlighted?

Roles and functions are highlighted.



7.1.2.7 Navigate

The following describes the navigation features.

7.1.2.7.1 Select database

You can select one of the databases offered in the  **Portal** to access its content.

Prerequisite

Several databases have been published. If only one database has been published, the ▼ down arrow symbol to select another database is not displayed.

Procedure

1. Click the name of the current database that follows the  database symbol. In the standard ARIS Connect views, database selection is located top right of the screen. The list of available databases opens.



2. Click the name of the database you want to use.

The name of the selected database is displayed. The **Recent changes** area is updated according to the selected database. If you start a search (page 824), it is performed based on the current database.

Shows all links to models that were changed recently. In addition, for each model the time elapsed since the last change and the path are shown.

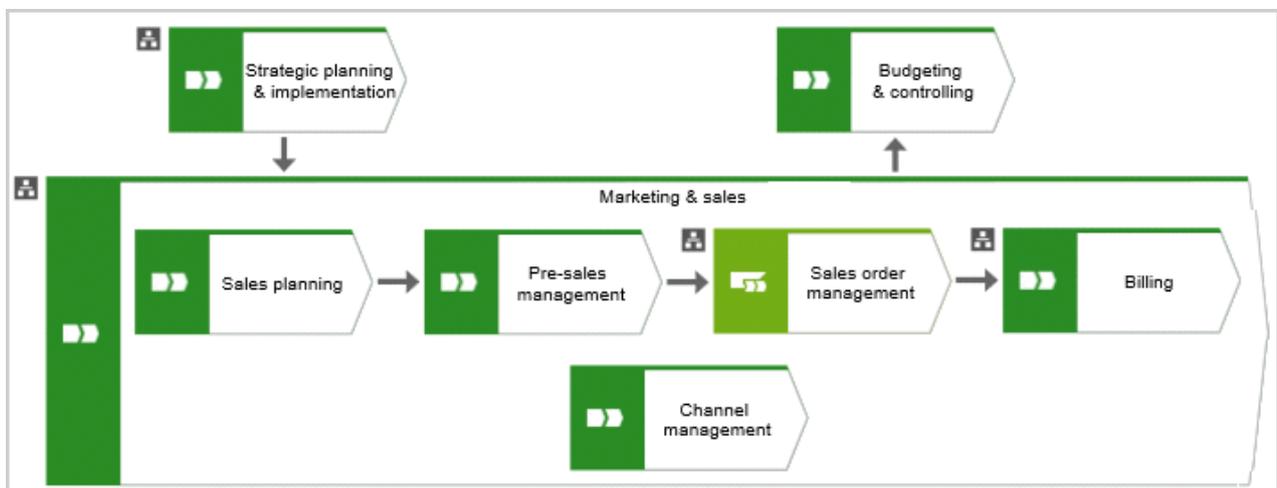
7.1.2.7.2 Navigate in the portal

With the help of hierarchies, administrators control how portal users can quickly navigate to relevant information. These hierarchies map the relationships between superior and subordinate items.

In the example for the **default** view, the **Processes**, **Organization**, and **IT systems** hierarchies are defined. In the following example, the **Processes** hierarchy is activated where users have access to all processes of the current database. The fact sheets provide various information about selected processes. When you select a process, the **Overview** fact sheet is activated by default.

The screenshot displays the portal's navigation menu and a selected process fact sheet. The top navigation bar includes 'Home', 'Processes' (highlighted), 'Organization', and 'IT systems'. The left sidebar shows a tree structure of processes, with 'Marketing & sales' expanded to show 'Billing' and 'Vehicle billing processing' selected. The main content area shows the 'Vehicle billing processing' fact sheet, with tabs for 'Overview' (selected), 'Steps', 'Diagram', and 'More'. The 'Description' section states: 'This process describes how to process the vehicle billing from calling & check invoice and printing the confirm receipt'. A 'Variants' section is also visible at the bottom.

If the **Diagram** fact sheet is selected, you can navigate to assigned diagrams (page 656) by clicking an object's  assignment icon, or by double-clicking an object with the  assignment icon.



7.1.2.7.3 Navigate step by step

You can easily follow the process flow in process models of the **EPC** type. Predecessor and successor as well as the attributes of the selected object are displayed.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Select a process model. You are offered the fact sheets of the process model.
3. Click the **Steps** (page 632) fact sheet. The first event of the process is shown at the top. It has no predecessor, therefore no object is placed in this field. Below, the event's successor is output. To the right, the attributes are shown.
4. Click the successor. The event as a predecessor is moved to the field above, the succeeding object is placed in the middle, and its successors are visible in the lower field. The attributes of this object are now visible.

If event and function precede or succeed each other, they are displayed together.

You navigate through a process step by step.

7.1.2.7.4 Navigate using a Process interface

You can easily follow the process flow from one process model to another using process interfaces in models of the **EPC** type.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Select a process model that contains an object of **Process interface** type to which the other process model is assigned (page 982).
3. Click the **Steps** (page 632) fact sheet.
4. Navigate to the process interface and click it.

The **Steps** fact sheet of the process assigned to the process interface is shown. If you want to navigate back to the **Steps** fact sheet of the previous model, click  **Back** at the top left side of the fact sheet.

7.1.2.7.5 Navigate using fact sheet buttons

You can scroll between the fact sheets and hierarchy levels visited.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Select the groups and models whose content you want to edit. The fact sheets of the selected item are displayed.
3. Click through the relevant fact sheets and complete your tasks.
Click on the relevant fact sheets one after the other and complete your tasks.
4. Click  **Back** to browse previously displayed fact sheets and hierarchy levels in backward direction.
5. Click  **Forward** to browse previously displayed fact sheets and hierarchy levels in forward direction.
6. Click  **Go up in hierarchy** to navigate to a parent folder or process.

You navigate through fact sheets and through the hierarchy using the fact sheet navigation buttons.

7.1.2.7.6 Use the Favorites tab in the portal

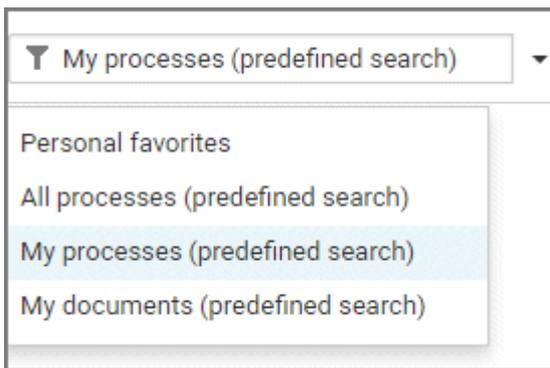
In the portal, you have direct access to all saved filter settings (page 744). The filters output the content of the selected database, while the personal favorites (page 743) of all published databases are listed and can be accessed.

Procedure

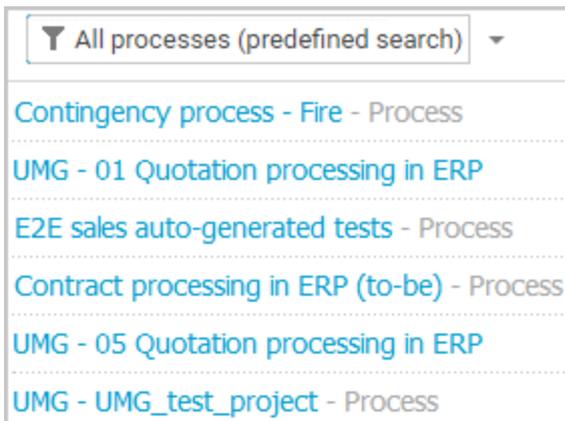
1. If you have access to more than one database, select the database you want to work with.
2. Click  **My favorites** in **Home** (page 614)

Provides direct access to saved filter criteria (page 682) of the **Favorites** area of the search as well as to models and groups a user selected as personal favorites (page 743).

3. Click the ▼ **down arrow** of the **Filter selection** field.



4. Click the context caption to select the relevant filter settings, for example, **My processes (predefined search)**. The content of the selected database is filtered.



If the filter result does not fit on one page, page numbers are displayed behind the **Filter selection** field.

5. Click the page numbers to display the content of the corresponding pages.
6. Click the name of the item. The item opens.

You have filtered database content based on your filter setting and opened one of your favorites using the **Favorites** tab.

7.1.2.7.7 Switch from Steps to Diagram

For models of type **EPC**, you can switch from the **Steps** fact sheet to the **Diagram** fact sheet where the current object symbol is selected.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Steps (page 632)** fact sheet and navigate to the relevant step.
5. Click  **Show in diagram** next to the step.

The **Diagram** fact sheet is opened and the object symbol of the current step is selected. To return to the **Steps** fact sheet, click **Steps**. If you have selected another object in the **Diagram** fact sheet, this object is marked in the **Steps** fact sheet.

7.1.2.7.8 Switch from Diagram to Steps

For models of type **EPC**, you can switch from the **Diagram** fact sheet to the **Steps** (page 632) fact sheet where the current object symbol is selected.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
5. Select the object symbol of the structurally relevant object that you want to select in the **Steps** fact sheet.
6. Activate the **Steps** fact sheet.

The object you have selected in the **Diagram** fact sheet is marked in the **Steps** fact sheet.

7.1.2.7.9 Return to the top of the Steps fact sheet

For models of type **EPC**, you can return quickly to the top of the **Steps** fact sheet.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Steps (page 632)** fact sheet and navigate to the relevant step. In the **Steps** fact sheet, at the top right the link  **Back to top** is shown.
5. Click  **Back to top**.

The top of the **Steps** fact sheet is shown.

7.1.2.7.10 How is a process interface represented in the Steps fact sheet?

You can use process interfaces to navigate (page 680) from one process model of the **EPC** type to another. To do so, you must assign the corresponding process to the process interface (page 982).

In the **Steps** fact sheet, a process interface that is placed as the first object in a model is labeled **Previous process**, a process interface that is placed as the last object in a model is labeled **Next process**.



7.1.2.8 Output information

The following describes different ways to get information.

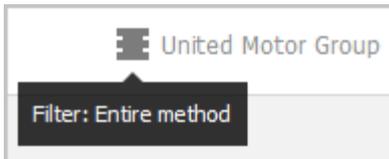
7.1.2.8.1 Display the current method filter

You can display the method filter (page 883) that you use for the current database.

Procedure

1. Drag the mouse pointer to the database name with the database symbol at the top right of the screen.
2. Leave the mouse cursor above the  database symbol for a short time.

The filter name is displayed:



7.1.2.8.2 Print the graphic of the current model

In the  **Portal**, you can print the graphic of the current model as PDF.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Click  **Print graphic as PDF**. The **Select output options** dialog opens.
5. Specify your settings.
6. Click **OK**. After the report is generated, the **Print graphic as PDF** dialog opens.
7. Click **Download result**. Using the following dialog, open the file in a PDF viewer or save it.

In the  **Portal**, you have printed the graphic of the current model as a PDF.

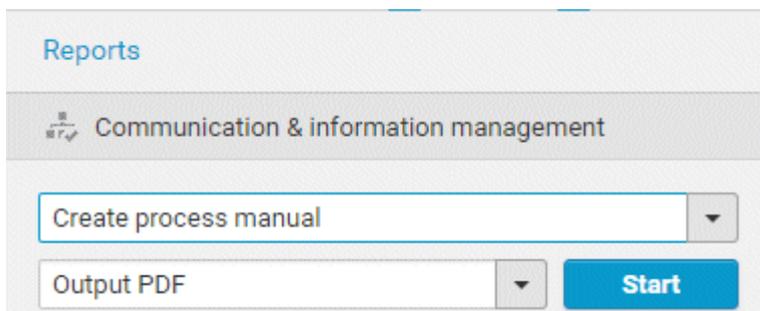
To the left of the user name, a  notification is inserted. Click the notification icon and  **Export graphic as PDF** to download the result again. The result is also listed on the **Reports** bar. If you select the **Diagram** fact sheet, you can open the **Reports** bar and download the printed model graphic as a PDF.

7.1.2.8.3 Generate report

The package includes various reports that you can start in the  **Portal**. Depending on the selected elements, reports are offered that provide a plausible evaluation for this context.

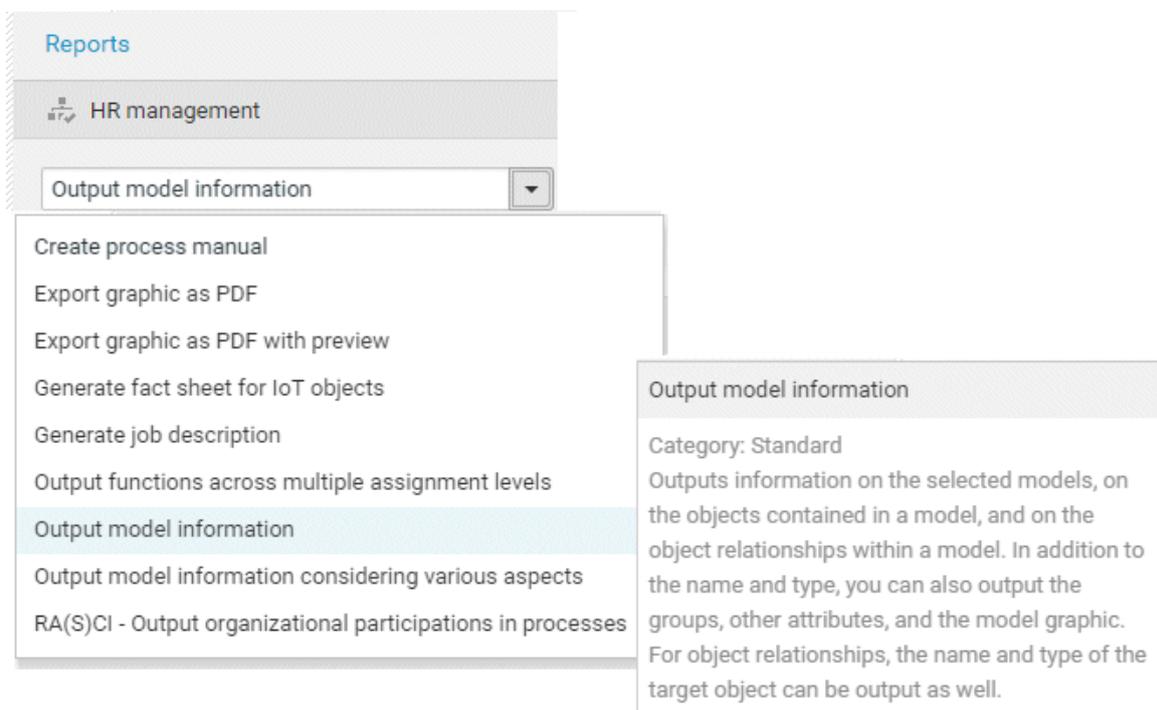
Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
3. Click  **Navigation** if the navigation bar is not shown.
4. In the relevant group, select the model for which you want to create a report.
5. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
6. Click  **Reports**. The **Reports** bar opens showing the name of the item for which the report is to be generated.

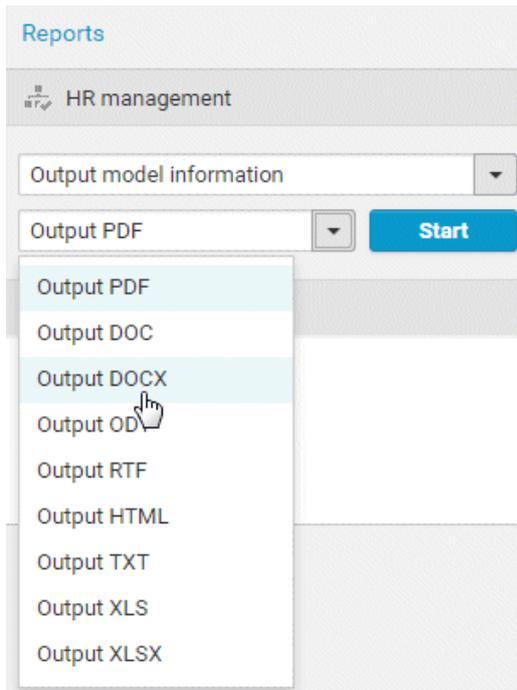


All reports you can start for this diagram are displayed.

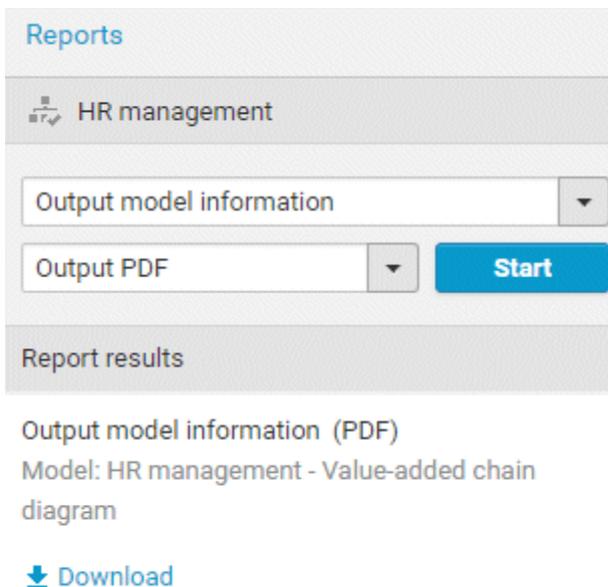
7. Click the ▼ down arrow next to the report name.
8. Select the relevant report. A report description is displayed.



9. Select the output format (page 734), for example, **Output DOCX**.



10. Click **Start**.
11. Depending on the report chosen, a dialog with options is displayed. Specify your settings and click **OK**. The report is started and a progress bar is displayed.
12. After the report is complete, the report is shown in the **Report results** link list for downloading, and a dialog opens.
13. Click **Download result** if you want to download the report immediately.
14. If you want to download the report result later, click the **Download report** link in the **Report results** link list.



You have created a report. Only information you are authorized to view is included.

7.1.2.8.4 Create infographics

You can create infographics for selected personas (objects of the **Persona** type). You can select an object in a fact sheet of the  **Portal**, in the  **Repository**, or in the open model. Objects of the **Persona** type can be used in models of **Customer segmentation map** and **Matrix model** type.

The following describes how to proceed in the  **Portal**.

Prerequisite

The corresponding attributes of the persona objects must be specified (page 716).

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Select the model that contains the persona.
6. If you have selected a model of the **Customer segmentation map** type, select the **Diagram** fact sheet. If you have selected a model of the **Matrix model** type, select the **Matrix** fact sheet.
7. Select the relevant **Persona** object in the fact sheet.
8. Click  **Evaluation**. The **Evaluation** bar opens showing the name of the item for which the report is generated.
9. Click the ▼ down arrow next to the currently displayed report name.
10. Select the **Create infographic for persona (page 716)** report.
11. Select the output format (page 734), for example, **Output DOCX**.
12. Click **Start**. After the report is complete, the report is shown in the **Report results** link list for downloading.
13. In the **Report results** link list, click **Download**.

You have created an infographic for a persona. Depending on the attributes entered for the persona, the information graphic provides information about the personality, the goals, the frustrations, etc.

7.1.2.8.5 Show where object occurrences are used

You can display where occurrences of an object are used and select the required occurrence using the navigation controls.

Procedure

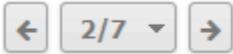
1. Click  **Quick start (page 627) in Home** (page 614).
2. Click  **View models & documents**. Depending on the active configuration set, the navigation area opens, for example, **Groups** or **Processes**.
3. Click the name of the model. The fact sheets of the model open.
4. Click **Diagram**. The **Diagram** fact sheet opens.
5. Select the required object in the **Diagram** fact sheet.
6. Click  **Properties**. The Properties bar opens.
7. Click **More**.
8. Click the **Related models** tab. The occurrences of the selected object are listed. If more than one occurrence exists in the current model, the number of the selected occurrence and the total number of occurrences are displayed next to the object name.
9. Click the left or right arrow to navigate to the next occurrence in the model. The next occurrence is selected and its number updated.
10. To directly select an occurrence, expand the drop-down list and click the occurrence number.
11. To open a model that contains an occurrence of the selected object, click the name of the model in the **In other diagrams** area. The model opens and the first occurrence of the object is selected. If there is no **Diagram** fact sheet for the occurrence, the first fact sheet is shown, for example, **Overview**

In the **In other models** area, all models are displayed to which you have at least read access. You have switched between the occurrences of an object using the navigation controls.

7.1.2.8.6 In which order are object occurrences displayed?

You can display where occurrences of an object are used and select the required occurrence using the navigation controls.

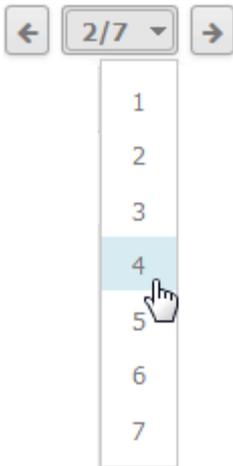
The navigation controls include arrows and a drop-down list:



If you click an arrow, the next occurrence is selected. The order of the occurrences depends on the vertical position of the objects in the model. The occurrence at the top most position is occurrence number 1.

The first number in the drop-down list refers to the occurrence currently selected, the second number represents the total amount of occurrences in a model.

Using the drop-down list, you can directly select a specific object occurrence:



7.1.2.8.7 Show dashboards

You can show dashboards for various items. The following example is based on predefined standard dashboards that are contained in the supplied **United Motor Group** database and the Classic view (page 613).

Prerequisite

Dashboards are configured for the items selected.

Procedure

1. In the  **Portal**, select (page 678) the **United Motor Group** database.
2. Click **Groups**. The Group tree opens.
3. Click **2. Processes > 2.1 Process architecture >  Enterprise process map**. The **Overview** fact sheet of the **Enterprise process map** model opens and shows the CoE - Local Maturity (page **Error! Bookmark not defined.**) dashboard.
4. Click **2.1.1 Core processes > 2.1.1.1 Customer services > 2.1.1.1.1 Customer services process >  Customer services process**. The **Overview** fact sheet of the **Enterprise process map** model opens and shows the CoE - Local Maturity (page **Error! Bookmark not defined.**) dashboard.
5. Click the **Dashboards** fact sheet. The model's dashboards are shown. You can switch between the Process Change Management (page **Error! Bookmark not defined.**) and the Local Maturity (page **Error! Bookmark not defined.**) dashboards.

You have shown different standard dashboards.

7.1.2.8.8 Show dashboard in a sidebar

You can show the **EA dashboard for objectives** dashboard in a sidebar. The following example is based on predefined standard dashboards that are contained in the supplied **United Motor Group** database and the Classic view (page 613).

Prerequisite

Dashboards are configured for the items selected.

Procedure

1. In the  **Portal**, select (page 678) the **United Motor Group** database.
2. Click **Groups**. The Group tree opens.
3. Click **1 Strategy > 1.1 Business strategy > 1.1.1 Strategies & Tactics >  01 Business strategies (all UMG segments)**. The **Diagram** fact sheet of the model opens.
4. Click  **Dashboards**.

The Dashboard sidebar opens and shows the EA dashboard for objectives (page **Error! Bookmark not defined.**) dashboards.

7.1.2.8.9 Generate report for multiple elements

You can generate a report for multiple elements. Depending on the selected elements, reports are offered that provide a plausible evaluation for this context.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the group where the content you want to select is stored.
5. In the detailed view, activate the check boxes of the relevant elements.
6. Click  **Reports**. The **Reports** bar opens. The number of item for which the report is generated is shown.
7. Click the drop-down list box to display the list of available reports.
8. Leave the mouse pointer on the name of a report if you want to display its description.
9. Click the name of the relevant report.
10. Click the **Start** button if you want to output the report in the displayed format (page 734). To select a different output format, click the **Output format** field and select the format you want to use, for example, **Output PDF**.
11. Click the **Start** button. The report is created.
12. When the report is created, the result is listed in the **Reports** bar, and a dialog to download the result opens.
13. Click  **Download result**. Depending on your browser settings, you can specify the download folder or the result is downloaded in the default download folder.
14. To download the result later, click  **Download report** in the **Reports** bar.

You have created a report for multiple elements.

7.1.2.9 Table

The following describes the use of tables.

7.1.2.9.1 Open a table

You can open a table for a process model to list the functions and their roles.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Activate the **Table** fact sheet (page 693).

You opened a table. You can sort the functions (page 695) or open the matrix (page 694).

7.1.2.9.2 Add a column to a table

You can add columns to a table. As long as you navigate in the fact sheets view, added columns are displayed. All added columns will be removed automatically when you leave the fact sheet view, for example, when you select another model in the group structure.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Click  **Add column**. The available columns are shown.
3. Click the column name of the column you want to add.

You added a column.

7.1.2.9.3 Remove a column from a table

You can delete columns from a table that you have added before. As long as you navigate in the fact sheets view, added columns are displayed. All added columns will be removed automatically when you leave the fact sheet view, for example, when you select another model in the group structure.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Move the mouse cursor over the column header of the column you want to remove.
3. Click **×** **Remove** after the column title.

The column is removed without confirmation prompt.

7.1.2.9.4 Open the matrix of a table

You can open a matrix based on the **Table (page 634)** fact sheet to clearly display the interrelations between the individual roles and functions.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Click  **Matrix**. The interrelations between the individual roles and functions are transparently displayed.
3. Click  **Add column** to extend the table. You can delete added columns at any time.

You have opened a matrix based on the **Table** fact sheet.

7.1.2.9.5 Add a column to a matrix

You can add columns to a matrix. As long as you navigate in the fact sheets view, added columns are displayed. All added columns will be removed automatically when you leave the fact sheet view, for example, when you select another model in the group structure.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Click  **Matrix**.
3. Click  **Add column**. The available columns are shown.
4. Click the column name of the column you want to add.

You added a column.

7.1.2.9.6 Remove a column from a matrix

You can delete columns from a matrix that you have added before. As long as you navigate in the fact sheets view, added columns are displayed. All added columns will be removed automatically when you leave the fact sheet view, for example, when you select another model in the group structure.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Click  **Matrix**.
3. Move the mouse cursor over the column header of the column you want to remove.
4. Click **×** **Remove** after the column title.

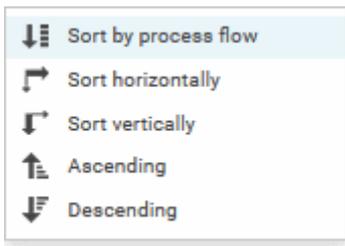
The column is removed without confirmation prompt.

7.1.2.9.7 Sort functions of fact sheets

You can sort the functions of fact sheets, for example, of the Table (page 634) or RACI (page 635) fact sheet.

Procedure

1. Activate the **Table** fact sheet (page 693).
2. Click the column title  **Functions**. The sort options are displayed.



3. Click the relevant sort option. The functions are resorted.

You have re-sorted the functions.

7.1.2.10 Manage SAP Solutions

Process-Driven Management for SAP® Solutions is available, if your ARIS administrator has configured the system in ARIS Connect as well as in ARIS Architect (see **ARIS - Process-driven Management for SAP.pdf**).

You can refine and evaluate your business processes in ARIS. This enables you to optimize your business processes.

ARIS video tutorial

Process-Driven SAP Management Explainer, 4 minutes

(<https://resources.softwareag.com/youtube-product-videos-for-uberflip/manage-your-digital-future-support-best-in-class-sap-solutions-with-aris>)

7.1.2.10.1 Run SAP® transaction/executable

Run transactions or executables in the connected SAP system.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- You are using Process-driven Management for SAP.
- Your administrator has configured the portal for the use of SAP content.
- Your administrator has register a SAP® Server for ARIS Connect

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Navigate to the relevant model of the **EPC** type, where transactions are available.
6. Click **Transactions**. You can start the  transaction automatically via the default server in each row displaying a transaction code. Click the  arrow head to display all registered SAP Servers. The default server selected is indicated by a check mark.
7. Run the transaction. The **SAP logon** dialog opens.
8. Enter the number of the SAP client and the user name, and click **OK**. Depending on your browser settings, the **Run SAP transaction** dialog opens.
9. Enter the password and click **Log on**.

The transaction is run in the current language. The logon remains active until you log out of the portal, enter different logon data, or close the SAP system. To delete the current SAP logon data, click the  arrow head and then **Reset logon data**. For the next transaction start you need to log on to the SAP system again.

If you start an executable of the **Fiori Application** Transaction type for the first time or log out from SAP Fiori launchpad before you start the executable, the **Start** page is displayed instead of the Fiori app. In this case, start the same executable again.

7.1.2.10.2 Download SAP® documents

You can download SAP documents that are associated with SAP transactions.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- You are using Process-driven Management for SAP.
- Documents are available.
- This function has been configured in the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Open (page 889) the relevant model.
6. Click **Transactions**.
7. Click the relevant transaction code. The fact sheet opens.
8. Next to the relevant document, click  **Download document**.

The document is downloaded.

7.1.2.10.3 Start ARIS Online Guide

If your administrator has provided ARIS Online Guide via ARIS Connect, you can open the relevant portal pages from SAP screens using the F1 key. All transactions are shown there in relation to the process. Details are summarized in corresponding fact sheets.

Prerequisites

- This function has been configured in the portal.
- You have configured the help call.

Procedure

Press the F1 key in the open screen. The corresponding portal page opens (link syntax: `http://<server name:port>/?tcode=<transaction code>#<tenant>/onlineguide`)

All information pertaining to this transaction is available on the open page.

7.1.2.10.4 Reset SAP® logon data

Change the logon information for running transactions.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- You are using Process-driven Management for SAP.
- This function has been configured in the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Open the relevant model.
6. Click **Transactions**.
7. In the last column of a transaction code, click the ▼ arrow head and then **Reset logon data**.

For the next transaction start (page 696) you need to log on to the SAP system again.

7.1.3 Use filters

You can define content filters (page 699) to restrict the content in the portal, so that only the content is displayed you want to focus on.

Content filters are available only if roles are assigned (page 701) to your user in models and the portal has been configured for the use of role filters.

7.1.3.1 Open My content to manage filters

You can manage your filters in the **My content** (page 641) area.

Procedure

1. Start ARIS Connect.
2. Click **Home** >  **My content**.

The **My content** area opens and you can manage your filters.

7.1.3.2 Add filters

You can add individual filters to the **Selected filters** section, thus making them active.

Procedure

1. In the **Add filters** section, move the mouse pointer over the name of the relevant filter. A plus sign is shown after the name.
2. Click the **+** plus sign.

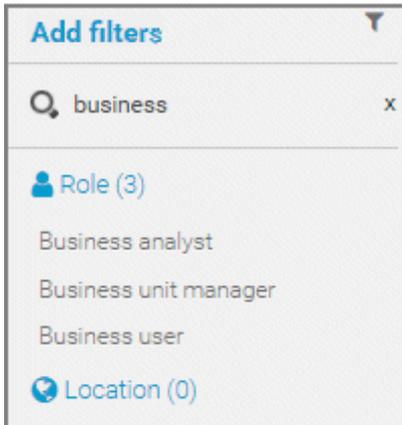
The filter is moved from the category of the **Add filters** section to the appropriate category of the **Selected filters** section and the content of the result pane is adjusted.

7.1.3.3 Add a number of filters

You can add a number of filters to the **Selected filters** section using the find functionality.

Procedure

1. In the **Add filters** section, click the **Find filter** field.
2. Enter a part of the name of the filters you want to add, e. g. **Business**. The found filters are shown under the appropriate category. The number of filters found is displayed after the category name.



3. Behind **Add filters**, click **▼ Add all** to move all filters found from the **Add filters** section to the appropriate category of the **Selected filters** section.

The filters are moved and the content of the result pane is adjusted.

7.1.3.4 Assign roles for the use of content filters

You can define content filters (page 705) using role assignment. In this case, these filters are added to the role filters under **Selected filters** of the **My content** (page 641) area.

Prerequisites

- You have the **User administrator** function privilege.
- You have the **ARIS Connect Designer** license privilege.

Procedure

1. Click  **Portal**.
2. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
3. In the navigation, select a diagram containing an occurrence of the relevant role, for example, **Regional sales department specialist**. The fact sheets are shown.
4. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on a separate tab for editing.
5. Select the relevant **Role** type object in the model.
6. Click  **Properties**. The Properties bar opens.
7. Click the **Attributes** tab if it is not activated yet.
8. Add (page 940) the **User/User group association** attribute if it is not displayed.
9. Move the mouse pointer to the **User/User group association** attribute.
10. Click  **Select user**. The **Select user(s)/user group(s)** dialog opens.
11. Enter the user name in the  **Filter** box.
12. Enable the check box for the user, and click **OK**.
13. Save the changes and close the diagram.

The role has been assigned to the user.

If this user activates (page 702) the content filters, information is restricted (page 705) according to the role.

7.1.3.5 Activate content filters using the My content area

You can determine that the role filter is used to filter your access to the portal's content.

Procedure

1. Click **Home >**  **My content.**
2. Check if the current filter setting is appropriate. If not, add an individual filter (page 699), add a number of filters (page 700), remove filters (page 703), or reset filter (page 703).
3. Turn the content filter switch on.



The filter is applied to the portal content. A symbol in front of your user name indicates the activated content filter.



7.1.3.6 Activate content filters using the button

You can turn on the content filters using the **Content filters** symbol.

Procedure

1. In front of your user name, click  **Content filters.** The **Content filters** pop-up opens.
2. Click **On.**



The content filters are applied and the portal content restricted. A  red symbol in front of your user name indicates the activated content filter.

7.1.3.7 Deactivate content filters

You can turn off the content filters using the **Content filters** symbol.

Procedure

1. In front of your user name, click  **Content filters.** The **Content filters** pop-up opens.
2. Click **Off.**



The content filters are removed and the portal content is not restricted anymore. A  blue symbol in front of your user name indicates the deactivated content filters.

7.1.3.8 Reset filter

You can reset the filters. The added filters are removed and only the content filters assigned by role stay active. The  **Reset filters** button is only displayed if you are logged in as user to whom a content filter is assigned via roles (page 701).

Procedure

After **Selected filters**, click  **Reset filters**.

All filters except the filters assigned by role assignment are removed and the content of the result pane is adjusted.

7.1.3.9 Remove selected filters

You can remove selected filters to remove their restrictions.

Procedure

1. In the **Selected filters** section, move the mouse pointer over the name of the relevant filter. A cross sign is shown after the name.
2. Click the  cross sign.

The filter is moved from the category of the **Selected filters** section to the appropriate category of the **Add filters** section. The content of the result pane is updated.

7.1.3.10 Remove all filters

You can remove all filters from the **Selected filters** section, the added filters as well as the filters assigned by role assignment (page 701).

Procedure

Behind **Selected filters**, click  **Remove all**.

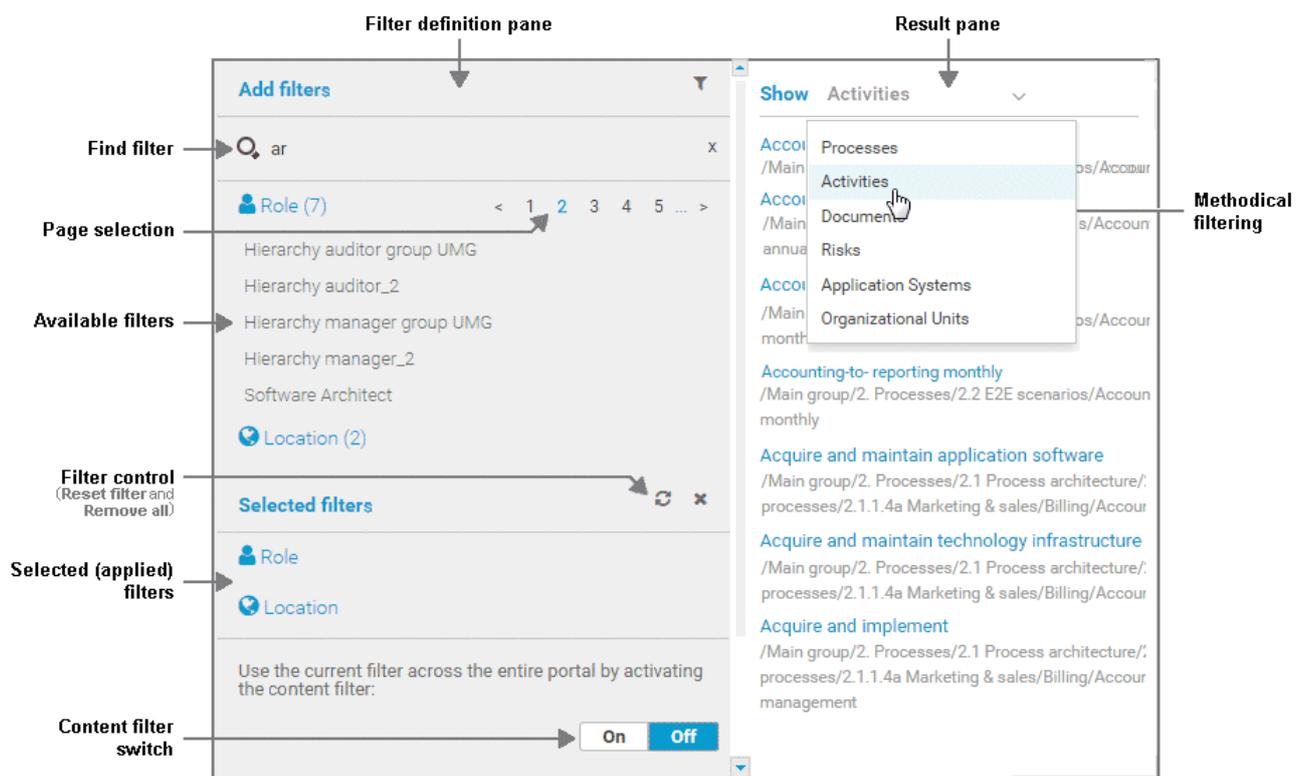
All filters including the filters assigned by role assignment are removed and the content of the result pane is adjusted.

7.1.3.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.3.11.1 What is the structure of the My content area?

If the administrator provides at least one database you have access to, the **My content** area is available. It provides a filter definition pane and a result pane. In the definition pane, you can define filters, refresh the filter result, delete filter definitions, turn on and turn off the defined filters. In the result pane, you can focus on specific aspects. Therefore you can, for example, switch between activities and processes.



In the **Add filters** section, all available filters for the current user are available. The filters assigned to the roles that are modeled for the current user are listed in the **Selected filters** section. You can add individual (page 699) or a number of filters (page 700) to the **Selected filters** section.

If the number of the selected filters is too large to be displayed, the filter category is collapsed and indicated by the number of filters contained. The category can be expanded. If the number of filters takes up more than one page, filters are offered on multiple pages. In that case, a page selection is displayed after the category name to navigate to the relevant pages.

You can remove selected filters (page 703) and selected filters can be reset (page 703), so that only those filters stay active that are assigned to you by role assignment. The **Reset filters**

button is only displayed if you are logged in as user to whom a content filter is assigned via roles (page 701).

Selected filters can be used as content filter. That means that in the  **Portal** only the content is shown that is allowed by the selected filters.

Finally you can remove the selected filters as well as the filters that are assigned to you (page 703) by role assignment.

7.1.3.11.2 What are content filters?

Content filters restrict the information in specific areas of the portal to content that is relevant to you. This is controlled in user management by administrators.

You can add filters (page 699) and activate them as content filters (page 702) to further restrict this content. Content filters are available only if roles are assigned (page 701) to your user in models and the portal has been configured for the use of role filters.

WHAT INFORMATION IS NOT FILTERED BY A CONTENT FILTER?

When you open a diagram, all information is displayed unfiltered. You can also navigate using assignments.

Regardless of content filters, assignments are filtered by hierarchy in the views. In the **Classic** view, all assignments are shown, because all assigned models are stored in the group structure.

In the default view, only assignments are shown that belong to the current hierarchy, for example, assignments from an object of Value-added chain diagrams (VAC) to process models like EPCs, but no assignments to organizational charts.

WHAT INFORMATION IS FILTERED BY A CONTENT FILTER?

Filtered according to the selected role:

- All steps of the **Steps** fact sheet are displayed if you view processes step by step (page 680), but the detailed information about the satellites is filtered.
- Tables (page 634)
- Fact sheets
- RACI matrices
- Search
- Navigation

7.1.4 Use models

7.1.4.1 Ask for model approval

Ask the person in charge to approve the models you changed so that the changed models can be made available to all users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the name of the model you want to edit.
6. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
7. Make the required changes.
8. Click  **Save**.
9. Click  **Collaboration** if it is not activated yet.
10. Click  **Request approval**. The **Confirmation** dialog opens for you to confirm that the model changes are to be saved and the model is to be reopened read-only.
11. Click **OK**. The model reopens read-only and the **Request approval** dialog is displayed.
12. If required, select a person in charge to approve the model if the **Person responsible** attribute has not been specified at the model.
13. Enter a comment to explain the approval request.
14. Click **Send**. A completion message is displayed.
15. Click **OK**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in My tasks. If the person responsible approves the changes, the model is automatically published and the current version is provided.

Until then, only you and other modelers can view your changes.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex

workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.4.2 Inform owner of change

You can inform the model owner of model changes you have made in the portal (page 748). The process owner is automatically determined by the attribute **Person responsible**.

Prerequisite

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Navigate to the items and change the relevant attributes (page 748). Depending on the attributes, various editing options (page 760) are available.
6. Click  **Inform owner of change**. The **Inform of change** dialog opens.
7. Insert a change description
8. Click **Submit**. The **Information** dialog opens.
9. Enable the **Do not show this message again** check box if you do not want to be informed again by the dialog when executing the mini workflow more than once during the current session.
10. Click **OK**.

The process owner receives an e-mail containing the information you entered. If he submits the human task, you will be informed via e-mail.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.4.3 Print graphic as PDF

In the  **Portal**, you can print the graphic of the current model as PDF.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Navigate to the group where the relevant model is stored.
3. Select the model. The fact sheets are shown.
4. Click  **Print graphic as PDF**. The **Select output options** dialog opens.
5. Specify your settings.
6. Click **OK**. After the report is generated, the **Print graphic as PDF** dialog opens.
7. Click **Download result**. Using the following dialog, open the file in a PDF viewer or save it.

In the  **Portal**, you have printed the graphic of the current model as a PDF.

To the left of the user name, a  notification is inserted. Click the notification icon and  **Export graphic as PDF** to download the result again. The result is also listed on the **Reports** bar. If you select the **Diagram** fact sheet, you can open the **Reports** bar and download the printed model graphic as a PDF.

7.1.4.4 Share model

You can share models with other users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model you want to send to another user.
6. Click  **Share** >  **Share model**. The corresponding dialog opens.
7. Select the user you want to share the model with.
8. Enable **Send copy to me** to receive a copy of the message, if required.
9. You can also enter a subject and a comment.
10. Click **Send**.

The selected user receives an e-mail containing the information you entered and a link to the corresponding model.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.4.5 Copy view code

You can copy the code of the views **Overview**, **Steps**, and **Diagram** to embed them, for example, in a wiki or in Microsoft® SharePoint.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model you want to send to another user.
6. Activate the **Overview**, **Steps**, or **Diagram** view.
7. Click  **Share**.
8. Under `</>` **Copy current view code**, click  **Copy to clipboard**.

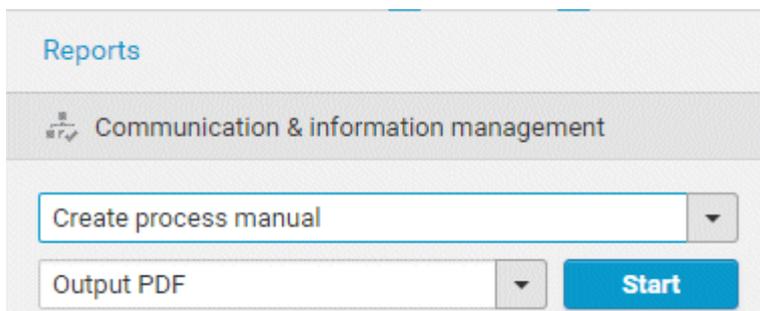
The view code is copied to the clipboard. If you insert the view code as html in a wiki page, the connection to ARIS Connect is established and the view is loaded.

7.1.4.6 Generate report

The package includes various reports that you can start in the  **Portal**. Depending on the selected elements, reports are offered that provide a plausible evaluation for this context.

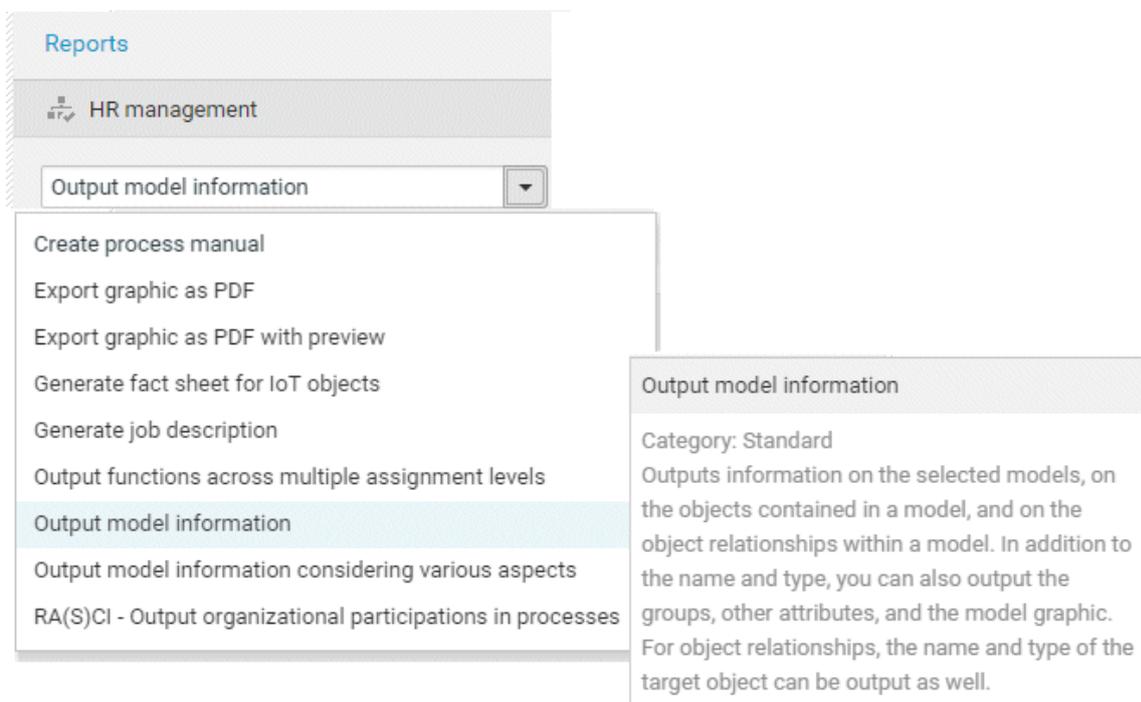
Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
3. Click  **Navigation** if the navigation bar is not shown.
4. In the relevant group, select the model for which you want to create a report.
5. Activate the **Diagram** fact sheet. The diagram is displayed in the Model Viewer.
6. Click  **Reports**. The **Reports** bar opens showing the name of the item for which the report is to be generated.

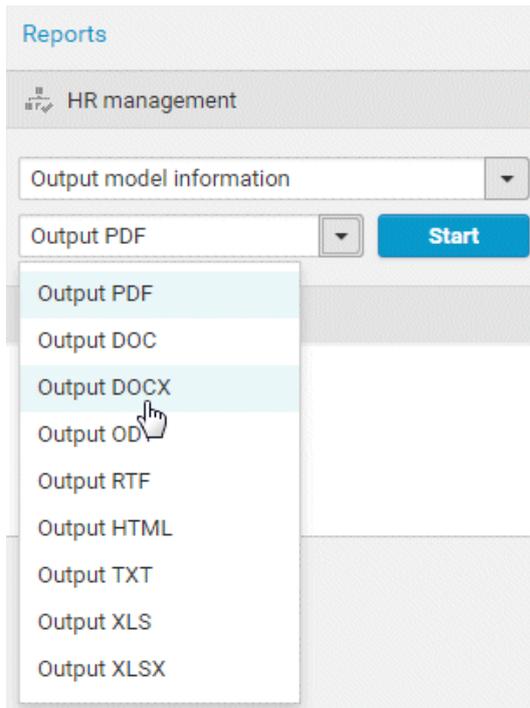


All reports you can start for this diagram are displayed.

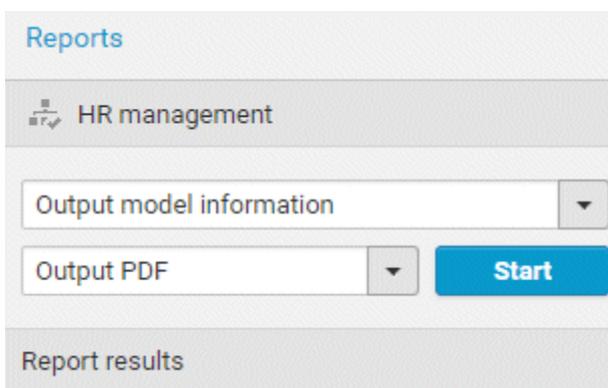
7. Click the ▼ down arrow next to the report name.
8. Select the relevant report. A report description is displayed.



9. Select the output format (page 734), for example, **Output DOCX**.



10. Click **Start**.
11. Depending on the report chosen, a dialog with options is displayed. Specify your settings and click **OK**. The report is started and a progress bar is displayed.
12. After the report is complete, the report is shown in the **Report results** link list for downloading, and a dialog opens.
13. Click **Download result** if you want to download the report immediately.
14. If you want to download the report result later, click the **Download report** link in the **Report results** link list.



You have created a report. Only information you are authorized to view is included.

7.1.4.6.1 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.4.6.1.1 What reports are available?

The Evaluation bar provides various standard reports. Depending on the model type you have opened or the object type you have selected, the reports offered may vary because only the reports related to the corresponding model or object type are displayed.

Script administrators can make additional reports available in ARIS Architect.

7.1.4.6.1.1.1 Analyze classification

USE

This analysis classifies all objects of a type according to the selected attribute. You can use this to test the consistency of your processes and analyze process-relevant factors in a flexible manner.

If you start the analysis for models, for example, to compare an actual process with a target process, the analysis is automatically limited to functions. To examine other objects, select the relevant objects and run the analysis for the selection. Make sure that you only select objects of one type.

In this way, you can classify all process contents according to your own criteria. For example, you can find out quickly and easily whether your process steps include mainly value adding or non-value adding activities. You can also determine the degree to which your processes are automated. The parameters derived from this can be used as a basis for comparison.

For example, you can identify

- whether your target process has improved relative to the actual process based on your target parameters, or
- which process variants come closer to achieving your objective (for example, achieving the objective of the Collections department process in the Private customer business segment compared with the Business customer business segment).

This analysis evaluates all possible aspects, for example, including

- IT systems
 - How many piloted systems are used?
 - How many systems are scheduled to be shut down soon?
- Risks
 - How many risks with a high probability of occurrence exist, as opposed to risks with a low probability of occurrence?

If you run this analysis in a Publisher export, the **Assessment of value added** attribute is automatically evaluated.

CONTEXT

- Models
- Objects of one type

OUTPUT

The analysis is summarized in an Excel workbook. The number of worksheets varies depending on whether you are analyzing models or objects.

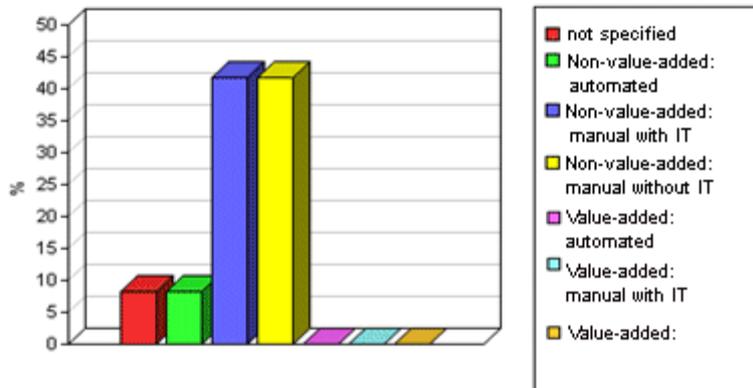
The following example is based on an analysis of the **Purchase order processing (actual)** and **Purchase order processing (target)** models. The **Assessment of value added** attribute is evaluated separately for each model. In this case, one worksheet is output with a table and one with charts.

TABLE

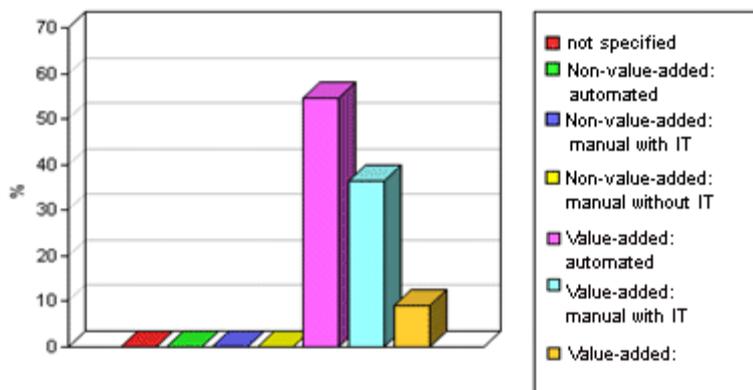
Analysis: Evaluate assessment of value added				
Created 5/25/09 11:21 AM				
Server horus.me.corp.ids-scheer.com				
Database: DemoDB-United Motors Group				
User: system				
File: Report0.xls				
Analyze classification				
Models:				
1.) United Motors Group\2. Processes\Process Architecture\Core Processes\Marketing & Sales (As Is Processes)\Sales order management (As Is)\Sales order processing\Sales order processing (As Is) (EPC)				
1.) United Motors Group\2. Processes\Process Architecture\Core Processes\Marketing & Sales (As Is Processes)\Sales order management (To Be)\Sales order processing\Sales order processing (To Be) (EPC)				
Attribute: Assessment of value added	1. Model		2. Model	
	Number	Percent	Number	Percent
Analyzed functions	12	100	11	100
not specified	1	8,33	0	0
Non-value-added: automated	1	8,33	0	0
Non-value-added: manual with IT	5	41,67	0	0
Non-value-added: manual without IT	5	41,67	0	0

CHARTS

1) United Motors Group\2. Processes\Process architecture\Core processes\Marketing&Sales (as-is processes)\Sales order management\Sales order processing\Sales order processing (as-is) (EPC)



1) United Motors Group\2. Processes\Process architecture\Core processes\Marketing&Sales (to-be processes)\Sales order management\Sales order processing\Sales order processing (to-be) (EPC)



CONTEXT

- Models
- Objects of one type

OUTPUT FORMAT

- XLS
- XLSX

7.1.4.6.1.1.2 Create infographic for persona

USE

This report outputs an infographic that visualizes all persona-related data you have specified. The following information is evaluated and displayed:

Lukas Andrews



Age	32
Job title	Software Engineer
Family status	married
Location	Saarbruecken
Customer segment	Family

"The Best Things in Life Are Free"

About

Lukas has been interested in technology for many years. As a software engineer he makes a living with programming innovative mobile apps. But his highest priority is the well-being of his family. For him, a car needs to be both functionally well designed and has enough space that the entire family can drive into holidays.

Personally, he owns many electronic gadgets. Generally, he is sensitive to cost but can get carried away if he sees an innovative solution.

Personality

- conscientious
- detail oriented
- humorous
- playful

Goals

- save money for buying a house
- get promoted in his company
- exercise his favorite sport more often: Climbing

Frustrations

- reading manuals
- services that are overly time consuming
- sharing his personal data to unknown entities





In order for the report to be run and for it to deliver meaningful results, make sure that the following attributes are specified for **Persona** objects:

Attribute	Example
Name	Lukas Andrews
Description/Definition	<p>This text is shown beneath the About topic.</p> <p>Lukas has been interested in technology for many years. As a software engineer he makes a living with programming innovative mobile apps. But his highest priority is the well-being of his family. For him, a car needs to be both functionally well designed and have enough space to accommodate the entire family for holiday trips.</p> <p>Personally, he owns many electronic gadgets. Generally, he is sensitive to cost but can get carried away if he sees an innovative solution.</p>

The following attributes must be specified for the **Customer Experience Management** attributes:

Attribute	Example
Age	32
Family status	married
Location	Saarbruecken
Job title	Software Engineer
Personality	<ul style="list-style-type: none"> ▪ conscientious ▪ detail oriented ▪ humorous ▪ playful
Frustration	<ul style="list-style-type: none"> ▪ reading manuals ▪ services that are overly time consuming ▪ sharing his personal data to unknown entities
Goals	<ul style="list-style-type: none"> ▪ save money for buying a house ▪ get promoted in his company ▪ exercise his favorite sport more often: Climbing
Quote	The Best Things in Life Are Free

You can link images either in the **Customer Experience Management** attribute type group or in the **ARIS document storage attribute** type group.

Customer Experience Management attribute	ARIS document storage attribute	Image/position
Portrait image link	ARIS document storage Link 1	Portrait; at the top
Descriptive image Link 1	ARIS document storage Link 2	Electronic gadgets; image on the left.
Descriptive image Link 2	ARIS document storage Link 3	Climbing; image in the center.
Descriptive image Link 3	ARIS document storage Link 4	Family; image on the right.

Some content is only shown in the infographic if the **Persona** object is related to a **Customer segment** object. The **belongs to** relationship is evaluated.

In this example, the **Family** Customer segment is shown, because the **Lukas Andrews** Persona occurs in a Customer segmentation map and this **Persona** object is related to the **Family** Customer segment object.



CONTEXT

Object of **Persona** type

OUTPUT FORMAT

- DOC
- DOCX
- RTF
- ODT
- PDF

7.1.4.6.1.1.3 Create process manual

USE

This report outputs all data from the selected processes up to the selected assignment level.

CONTEXT

Models of type:

- BPMN process diagram (BPMN 2.0)
- BPMN process diagram (BPMN 1.x)
- E-Business scenario diagram
- EPC
- EPC (material flow)
- EPC (column display)
- EPC (horizontal table display)
- EPC (table display)
- EPC (row display)
- Industrial process
- Office process
- Process schedule
- UML Activity diagram
- PCD
- PCD (material flow)
- Value-added chain diagram

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF

7.1.4.6.1.1.4 Export graphic as PDF

USE

This report exports a model graphic as a PDF file.

CONTEXT

Models

OUTPUT FORMAT

PDF

7.1.4.6.1.1.5 Generate job description

USE

Generates a job description for each selected organizational element and considers all processes and functions involved.

The following information can be output for each function:

- Organizational elements of the functions
- Data
- IT
- Improvement potential

If you start the report for models, only the modeled items are included. If you start the report for objects, all relevant object definitions are evaluated.

By default, the **carries out** connection is evaluated for the **Executing** relationship. The following connections are included for the **Participating** relationship:

- has consulting role in
- is IT responsible for
- is technically responsible for
- must be informed about
- must be informed on cancelation
- must inform about result of

Script administrators can change the content of the output.

If you output functional weak points, all information is output as for the job description. However, the selected organizational unit is listed along with all organizational units.

CONTEXT

MODELS OF TYPE

- EPC
- FAD
- Office process
- VACD

OBJECTS OF TYPE

- Group
- Organizational unit
- Organizational unit type
- Person
- Role
- Location
- Position
- System organizational unit
- System organizational unit type

OUTPUT FORMAT

- DOC
- XLS
- PDF
- DOCX
- ODT

7.1.4.6.1.1.6 Output functions across multiple assignment levels

USE

Outputs the following information for the selected models:

- Functions across multiple assignment levels
- Functions across multiple assignment levels according to ISO certification

The model attributes, the group, and the model graphic are output for the models, while the standard items are output additionally in the case of an evaluation according to ISO certification.

THE FOLLOWING INFORMATION IS OUTPUT FOR EACH MODEL EVALUATED

- Chapter number
- Model name
- Model type
- Function to which the model is assigned.
- Name of the group in which the model is saved.
- Specified model attributes
- Functions of the model are described in the order in which they are created within a partial path in the model. For each function, the chapter number and the name of the function are output.
- Model graphic (optional)
- Model type of the assigned models to be evaluated (optional)

Functions that occur in multiple models are only described once. Each subsequent occurrence in the report output contains a reference to this description.

ASSIGNED MODELS ARE HANDLED AS FOLLOWS

- All functions with assignments are determined.
- If an assigned model is a function allocation diagram, the evaluation is performed in the same way as for associations within the selected model.
- From the set of remaining assignments, select one to be examined in more detail. You can choose your own prioritization, for example, based on the model type. In turn, all functions are analyzed for the assigned model.

You have the option of restricting the report output by specifying the assignment level to be analyzed in detail. For each assignment outside this range, the report output shows only the model name and type.

OUTPUT

The output is created as text incorporating tables for the model and object information and is divided into chapters. The **REPORT1** to **REPORT4** styles are used for chapter headings. This enables you to create tables of contents in the output documents.

At the first level, the output is structured based on the models you have selected. The structural level is increased by one if the assigned model is a model with control flow. For all other assigned models, the structural level remains unchanged.

The descriptions of the functions in a model can be sorted numerically, alphabetically, by symbol type, or topologically. If you select numerical sorting, the functions in a model should be numbered. The numbering of a function uses the number specified in the **Type 1** attribute type in the **Function type** attribute type group.

The attributes, relationships, and assigned models for which the types can be determined are evaluated. Like selected models, the assigned models are evaluated up to a configurable structural level.

If you selected the topological sort criterion, the report output may contain additional information depending on the model class of the model in question.

The following table provides an overview of the model classes in question and the resulting special features of the output with topological sorting:

Model class	Special feature
Directed graph with associations	Beginning and end of process, as well as start and end of path.
Hierarchy	Chapter numbers of functions reflect the position of the object in the model hierarchy.
Central object type	If the model described is a function allocation diagram, the structural level in the report output is not increased. The allocations are described at the level of the object to which the model is assigned.
Process selection matrix	The scenarios in a process selection matrix and the processes assigned to them are evaluated in the same way as function trees, with the scenario taking on the function of the root. Main processes are not included.

CONTEXT

Model

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF
- HTML

7.1.4.6.1.1.7 Output functions with connected objects

USE

Outputs the model attributes, the model graphic, and the functions including the objects connected to them for the selected process models.

Optionally, you can select the following connected objects:

- Organizational elements
- Executing organizational elements
- Data elements (input/output data)
- Supporting application systems

You can specify the evaluation direction between the functions and the connected objects. In addition, you can also evaluate assigned function allocation diagrams.

CONTEXT

Models of type:

- EPC (event-driven process chain)
- EPC (column display)
- EPC (horizontal table display)
- EPC (table display)
- EPC (material flow)
- EPC (row display)
- Industrial process
- Office process
- PCD (process chain diagram)
- PCD (material flow)
- UML Activity diagram
- VACD (value-added chain diagram)

OUTPUT FORMAT

- RTF
- PDF
- HTML
- TXT
- DOC

7.1.4.6.1.1.8 Output model information

USE

Outputs information about the selected models, the objects contained in the model, and the relationships of the objects in the model. Apart from name and type, the groups, additional attributes, and model graphic can also be output.

For object relationships, you can also output the name and type of the target object.

CONTEXT

Models

OUTPUT FORMAT

- RTF
- PDF
- HTML
- TXT
- DOC
- XLS

7.1.4.6.1.1.9 Output model information considering various aspects

USE

Outputs model information including group structure as an Excel table.

A worksheet is created for each aspect. The worksheet lists all models in which the relevant aspect occurs.

The following aspects can be output:

- Data
- IT
- Organizational elements
- Targets/KPIs
- Products/Services
- Risks
- Others

For each aspect, the related functions can be listed, as well. Individual or integrated evaluations can be carried out for function allocation diagrams (FAD). For integrated evaluations, the functions from the FAD are integrated in the model.

CONTEXT

Models and groups

OUTPUT FORMAT

- XLS
- XLSX

7.1.4.6.1.1.10 Output object information

USE

Outputs the relationships and target objects at definition level for the selected objects. Optionally, you can output the groups and the attributes for both the source and target objects. The output is in table format.

CONTEXT

Object

OUTPUT FORMAT

- RTF
- PDF
- HTML
- DOC
- XLS
- XLSX
- DOCX
- ODT

7.1.4.6.1.1.11 Output occurrences of objects

USE

The occurrences in models are listed for the selected object definitions.

CONTEXT

Object

OUTPUT FORMAT

- RTF
- PDF
- HTML
- TXT
- DOC
- DOCX
- ODT
- XLS
- XLSX
- XML

7.1.4.6.1.1.12 Process manual (example)

USE

This report script is a sample created in ARIS Architect in the design view. It shows how to create report scripts in ARIS Architect without having programming knowledge.

CONTEXT

Objects

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF

7.1.4.6.1.1.13 RA(S)CI - Output organizational participations in processes

USE

This report supplies information on which organizational elements participate in the activities (functions) of a process and in what manner. Organizational responsibilities and participations are output in a matrix.

The report returns plausible results if your processes and the organizational responsibilities for the individual activities conform to the modeling conventions required.

RA(S)CI stands for **R**esponsible, **A**ccountable, (**S**upportive), **C**onsulted, **I**nformed.

By default, this report does not return any **Supportive** information. To output this information, your script administrator must set the **g_bRASCI** variable to **true**.

The matrix shows which organizational unit participates in activities of a process and in what manner:

- **Responsible** indicates who assumes execution responsibility. It shows who is responsible for performing an activity and who actually performs it, but also who assumes the disciplinary responsibility.
- **Accountable** identifies the person ultimately answerable for the correct and thorough completion of a task. Thus, 'Accountable' may be the one in charge of managing the costs, that is, the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **Consulted** shows who has a consulting role. This organizational unit - typically a group of subject matter experts - is asked for advice prior to a final decision being made or a final action being taken.
- **Informed** specifies who must be informed. It indicates who is kept up to date on the progress or completion of a task.

In the RACI matrix, RACI data is displayed under the following conditions:

- The connections are used in the selected process model.
- The connections are used in a function allocation diagram that is assigned to a function of the selected process model.

The result of the report is an Excel workbook containing several tables. Each process model included creates a table. The first table consists of a full list of the functions and organizational units of the process models included.

Process steps	Function	Financial assistant	Financial clerk	Accountant
Vehicle billing (as-is)	Allow for discounts	R		I
Vehicle billing (as-is)	Call order data	R, A		
Vehicle billing (as-is)	Change customer	R		
Vehicle billing (as-is)	Change order data		R	
Vehicle billing (as-is)	Check customer data	R		
Vehicle billing (as-is)	Check order data	R	R	
Vehicle billing (as-is)	Enter payment type		R	
Vehicle billing (as-is)	Have customer	R		
Vehicle billing (as-is)	Print invoice		R	
Vehicle billing (as-is)	Send invoice		R	I
Vehicle billing (as-is)	Transfer data to		R	

CONTEXT

- Individual process
- List of processes
- Process hierarchy

OUTPUT FORMAT

- XLS

7.1.4.6.1.2 What output formats exist?

You can change the output format on the **Reports** or **Semantic checks** tab of the **Evaluation** bar by clicking the down arrow. The selection of output formats may be restricted based on the report or semantic check. Possible output formats are:

PDF

DOC

DOCX

ODT

RTF

HTML

TXT

XLS

XLSX

XML

7.1.4.7 Create model

You can quickly and easily create new models.

Prerequisites

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click  **Create new model** on the **Quick start (page 627)** area. The corresponding dialog opens.
4. Enter a name for the new model in the **Model name** box.
5. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
6. Select the required model type. The **Target** area displays the database and group names. This is where the new model will be stored.
7. Click **Change** if you want to store the model in a different database and/or group. The **Select target group** dialog opens.
8. Select the required database in the **Database** box.
9. Select the required group.
10. Click **OK**. The **Select target group** dialog closes.
11. Check your input.
12. Click **OK**. The **Create model** dialog closes.

The model is created based on the preset template (page 883) and opens in a new tab (page 889).

7.1.4.8 Edit models

You can edit models in ARIS Connect.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the name of the model you want to edit.
6. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
7. Make the required changes.
8. Click  **Save**.

Your changes are saved in the model.

7.1.4.9 Use matrix models

You can display a matrix model in ARIS Connect.

In a model of the **Matrix model** type, you can represent object connections. You can use existing objects or create new objects. You can conveniently select objects from the entire database. You can view all existing connections.

AREAS OF USE

- Assessment of the degree to which markets are opened up, displayed in a table (business segment matrix)
- Representation of technical and disciplinary structures and their dependencies
- Representation of hierarchies
- Quick and clear management of connections between objects
- Specify connections easily and efficiently, and create models later using model generation

7.1.4.9.1 Open a matrix model in ARIS Connect

You can display a matrix model in ARIS Connect.

Prerequisite

- You have a valid license for either Designer or ARIS Architect.
- You have at least the **ARIS Connect Viewer** license privilege.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups**.
4. Navigate to the group containing the relevant model.
5. Click the matrix model.
6. Click **Matrix** to display the matrix model.

The matrix model is displayed.

7.1.4.9.2 Display use of connections for a matrix model in ARIS Connect

You can obtain information about the connections used in a matrix model.

Procedure

1. Open a matrix model in ARIS Connect. (page 737)
2. Place the mouse cursor over a connection cell.

The list of connections used in the matrix model is displayed as a tooltip.

7.1.4.9.3 Show/Hide hierarchies in a matrix model in ARIS Connect

You can show or hide hierarchies in a matrix model.

Procedure

1. Open a matrix model in ARIS Connect. (page 737)
2. Click the little arrow to expand or collapse the hierarchy. The hierarchy is shown or hidden accordingly.

The hierarchy is shown/hidden.

Location Organization		Europe	Frankfurt	Bratislava	St. Petersburg	America	Asia
							
	UMG America						
	UMG Asia						
	UMG Europe						

7.1.4.9.4 How are connections displayed?

In general, check marks indicate existing connections between objects in the matrix model. An asterisk indicates that there is more than one connection between two objects. The following display options are also available:

INDICATION OF THE DIRECTION OF THE CONNECTION

In the matrix model, a small arrow indicates the direction of a connection.

	Indicates the direction from an icon placed in the column header to an icon placed in the row header.
	Indicates the direction from an icon placed in the row header to an icon placed in the column header.

INDICATION OF ABBREVIATIONS

If an abbreviation is defined, this abbreviation is displayed instead of the check mark.

7.1.5 Use documents

ARIS document storage enables you to propose documents or to submit a change request for a document.

7.1.5.1 Propose a document to a model

You can submit new documents on ARIS Connect content that is evaluated by the person responsible for the content and that may be linked to the contents. We strongly recommend that you check documents for malicious software before uploading.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- The **Person responsible** document attribute must be specified for the relevant document with a user name that exists in user management.
- The person responsible must have the **ARIS Connect Viewer** or **ARIS Connect Designer** license.

Procedure

1. Click a model.
2. Click **+ Add**.
3. Click **Upload new document**. The **Upload new document** dialog opens.
4. Select the documents you want to submit.
5. Click **Upload**.
6. Enable the document and click **OK**.

The person responsible for the contents receives the approval request by e-mail. They can approve the proposal to link the document. It is then linked to the model or object. If they do not approve it, no link is created. The applicant receives a corresponding e-mail.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.5.2 Propose a document to an object

You can submit new documents on ARIS Connect content that is evaluated by the person responsible for the content and that may be linked to the contents.

Prerequisite

- You have at least the **ARIS Connect Viewer** license.
- The **Person responsible** document attribute must be specified for the relevant document with a user name that exists in user management.
- The person responsible must have the **ARIS Connect Viewer** or **ARIS Connect Designer** license.

Procedure

1. Click a model.
2. Click  **Propose document**. The **Submit new document** dialog opens.
3. Select the documents you want to submit.
4. Click **Send**.

The person responsible for the contents receives the approval request by e-mail. They can approve the document. It is then linked to the model or object. If they do not approve it, no link is created. The applicant receives a corresponding e-mail.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.5.3 Submit a change request for a document

You can send change requests for documents to the document manager for documents in ARIS Connect.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Open (page 651) the model that contains the document you want to submit a change request for.
4. Click **Diagram** if not enabled yet.
5. Click  **Edit** >  **Edit model**.
6. Click  **Properties**.
7. Activate the **Documents** tab.
8. Select the document for which you want to submit a change request.
9. Click  **Submit change request**. The corresponding dialog opens.
10. Enter a title and a description for your request.
11. Select the priority with which the request is to be handled.
12. Click **Send**.

You will automatically receive a confirmation notification.

The document manager receives the change request by e-mail with a link to the relevant document and a link to edit the associated task in My tasks.

Once the document manager has processed the request, the applicant receives a message by e-mail.

If the change request is accepted, the person who is to implement the changes receives an e-mail including a link to the associated task in My tasks and the information added. After processing and approval - or rejection -, the applicant receives an e-mail including the information that the change requests have been implemented - or rejected.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.6 Use favorites

Favorites enable you to quickly access database items you often need to work with.

In the **Search** area, you can save filter settings (page 744) and single database items as favorites (page 743). While you can define (page 744) and access the filter settings (page 744) in the Search area (page 826), you can access personal favorites and favorites based on filter settings in the Favorites area (page 745) of the portal.

7.1.6.1 Save a model or group as a personal favorite

You can save a model as a favorite to access it quickly from the **Favorites** tab of the portal.

Procedure

1. Navigate to the model or group you want to save as a personal favorite.
2. Behind the model or group name, click ☆ **Save as a favorite**.

The star is colored (★) and the model or group is added to the **Personal favorites** list. The stars of models or groups that you saved as favorites remain colored until you remove them from the **Personal favorites** list (page 743).

7.1.6.2 Remove a personal favorite

You can remove a personal favorite when it is no longer required.

Procedure

1. In the **Home** area, click ☆ **My favorites**.
2. Click the ▼ **down arrow** of the **Filter selection** field.
3. Click **Personal favorites**.
4. Move the mouse pointer over the relevant model or group name.
5. At the end of the line for the model, click ★ **Remove favorite**.

The model or group is removed from the favorites list. Alternatively, you can click the colored star when you have navigated to the relevant item.

7.1.6.3 Save search settings as a favorite

In the **Search** area (page 834), you can save your search settings. Thus, you can search the content based on specific settings at any time.

Procedure

1. Select the filter criteria (page 827) to define your search.
2. Click ☆ **Save search query as a favorite**. The corresponding dialog opens.
3. Enter a name.
4. Click **OK**.

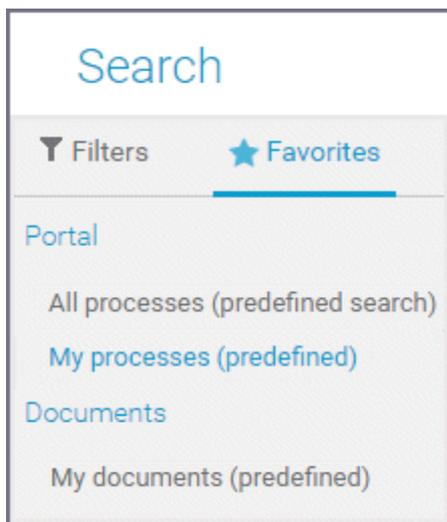
The search settings are saved in the ☆ **Favorites** area. You can filter the content based on these settings (page 744) at any time from various devices.

7.1.6.4 Use a favorite in the Search area

In the Search area (page 834), you can open a favorite setting to filter the content based on predefined filter criteria.

Procedure

1. Click ☆ **Favorites** in the **Filters** bar.



2. Click the favorite setting you want to use as the filter.

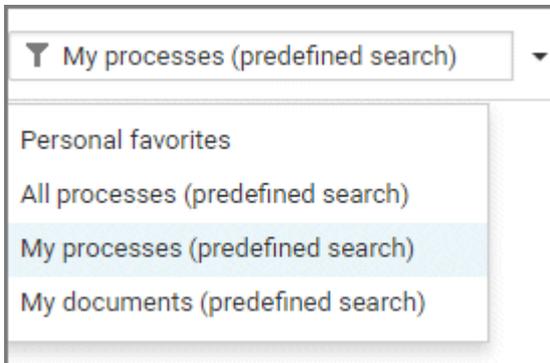
The filter criteria of the selected favorite setting are immediately applied and the list of filter results is updated.

7.1.6.5 Use a favorite setting in the My Favorites area

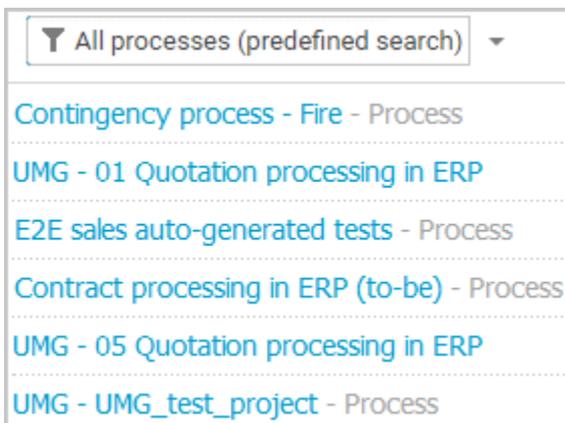
In the **My Favorites** area, you can open a favorite setting to filter the content based on predefined filter criteria.

Procedure

1. In the **Home** area, click  **My favorites**.
2. Click the  **down arrow** of the **Filter selection** field.



3. Click the context caption to select the relevant filter settings, for example, **My processes (predefined search)**. The content of the selected database is filtered.



If the filter result does not fit on one page, page numbers are displayed behind the **Filter selection** field.

4. Click the page numbers to display the content of the corresponding pages.
5. Click the name of the item. The item opens.

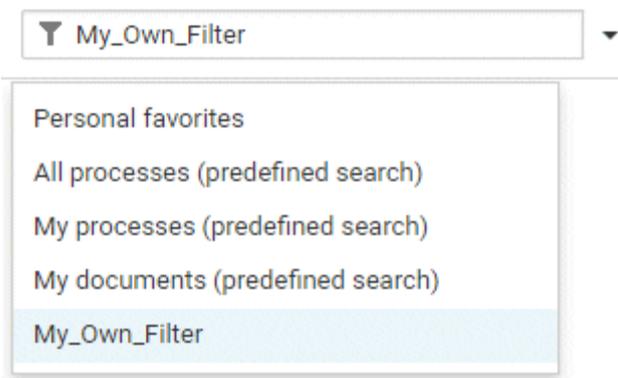
You have filtered database content based on your filter setting and opened one of your favorites using the **Favorites** tab.

7.1.6.6 Use an own favorite setting in the My Favorites area

In the **Search** area you can define a filter setting that is used in the **Search** area and in the **My Favorites** area to filter the content based on your own filter criteria.

Procedure

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Top right, click <user name>. The menu opens.
3. Click **Search**.
4. Select the filter criteria (page 827) to define your search.
5. Click ☆ **Save search query as a favorite**. The corresponding dialog opens.
6. Enter a name.
7. Click **OK**. The search settings are saved in the ☆ **Favorites** area. In the **Search** area, you can filter the content based on these settings at any time from various devices.
8. Click 🏠 **Portal**.
9. Click ☆ **My favorites**.
10. Click the ▼ **down arrow** of the **Filter selection** field.



11. Click your own filter setting.

Based on your filter setting, the portal content is shown.

7.1.6.7 Delete a favorite setting

You can delete a Favorite setting when you no longer need it. The Favorite setting disappears from the **Favorites** area of the search and from the **My favorites** area.

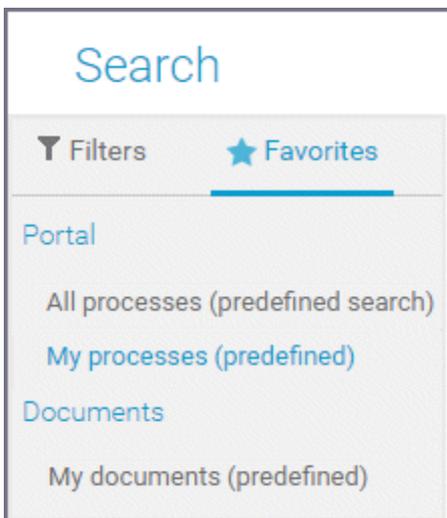
Procedure

1. Open the **Search** area (page 824).
2. Click **★ Favorites**.
3. Move the mouse pointer over the filter to be deleted. On the right of the filter name, The **Delete** button appears to the right of the filter name.
4. Click **Delete**.

The filter setting is deleted.

7.1.6.8 How are favorites in the search structured?

The **Filter** area reflects the saved search context. The search contexts are structured by captions, for example, **Portal** or **Documents**. The saved favorites are grouped under the captions. Thus, you are able to immediately recognize the search contexts of the favorites.



7.1.7 Contribute as a viewer

If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you can change values of specific items (page 757), create new or reuse existing items (page 749), as well as delete items (page 751) in the  **Portal**.

Please note that the description is based on the sample configuration supplied with the **Classic** view of ARIS Connect. In your installation other items may have been configured to be editable and the editing options for items may be different.

7.1.7.1 Change values of items

You can change values of items (page 757) in the  **Portal**.

Prerequisites

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- The **Workspace** database content was published for versionable databases.
- You have at least the **Write** access privilege for the items you want to edit.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click  **Edit** >  **Contribute**. Edit mode (page 756) is enabled.
6. Navigate to the group containing the relevant item.
7. Select the item you want to edit.
8. Activate the **Overview** fact sheet if it is not activated yet.
9. Change the relevant attribute. Depending on the attribute, various editing options (page 760) are available.
10. Confirm your changes.

Your changes are saved.

Text formatting is ignored and cannot be assigned. If you are expected to enter numbers, the field is colored red (page 760) if you do not enter a numerical value.

7.1.7.2 Create or reuse items in a table

In the portal, you can create new or reuse existing items.

The following description refers to items in a table (page 760). It uses the example of an object of the **Risk** type.

Prerequisites

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- The **Workspace** database content was published for versionable databases.
- You have at least the **Write** access privilege for the items you want to edit.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click  **Edit** >  **Contribute**. Edit mode (page 756) is enabled.
6. Navigate to the required diagram and select it.
7. Click the object to which you want to assign additional roles. To add objects of the **Role** type to the **Groups** table, you can select a risk from the sample configuration supplied.
8. In the **Activities** area, click the  **plus sign**. The input box opens.
9. Enter the name of the role.
If a role with the same name already exists, it is offered to you for selection. In addition, this name is listed with **(new item)** added to it.
10. To create a new role and assign the risk to it, click the entry with **(new item)** added to it. To reuse an existing role and assign the risk to it, click the other entry.
11. Click  **Change**. A completion message is displayed.

The new role was created (page 765) and added to the list, or the existing role will be reused. If you selected a role to which the risk was already assigned, no new entry is added to the table.

7.1.7.3 Create or reuse items in a list

In the  **Portal**, you can create new or reuse existing items.

The following description refers to items in a list (page 760). It uses the example of an application system type diagram.

Please note that new items you may have created are added to the diagram. At the same time, a new layout is automatically generated for the diagram. As a consequence, the arrangement of items in the diagram may differ from the original arrangement. If required, a user with the **ARIS Connect Designer** license privilege can adapt the layout of the diagram in ARIS Connect Designer (page 857).

Prerequisites

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- The **Workspace** database content was published for versionable databases.
- You have at least the **Write** access privilege for the items you want to edit.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click  **Edit** >  **Contribute**. Edit mode (page 756) is enabled.
6. Navigate to the required diagram and select it.
To add objects of the **Application system type** type to the **Subordinate IT systems** area, you can select an application system type diagram from the sample configuration supplied, for example.
7. Activate the **Overview** fact sheet if it is not activated yet.
8. Click the **Subordinate IT systems** edit box. Existing objects are displayed one next to the other and the option **Insert item** is shown.
9. Enter the name of the required application system type.
If an application system type with the same name already exists, it is offered to you for selection. In addition, this name is listed with **(new item)** added to it.
10. To create a new application system, click the entry with **(new item)** added to it.
To reuse an existing application system type, click the other entry.
11. Enter other names for additional application system types.
12. Click  **Change**. A confirmation prompt is shown listing all new application system types for confirmation.
13. Click **OK**.

New application system types (page 765) are added to the list, or existing application system types will be reused. Occurrences of new application system types are placed in the diagram window.

7.1.7.4 Delete items from tables

In the portal, you can delete items from tables.

The following description refers to items in a table (page 760). It uses the example of an object of the **Risk** type.

Prerequisites

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- The **Workspace** database content was published for versionable databases.
- You have at least the **Delete** access privilege for the items you want to delete.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click  **Edit** >  **Contribute**. Edit mode (page 756) is enabled.
6. Navigate to the required diagram and select it.
7. Click the object whose associated item you want to delete. To delete objects of the **Role** type from the **Groups** table, you can select a risk from the sample configuration supplied.
8. In the **Groups** area, click  **Delete** for the role from which you want to remove the risk assignment. A confirmation prompt is shown.
9. Click **OK** to confirm the prompt if you really want to delete the assignment to the role.

The assignment to the role is then deleted. If the assignment was represented as a connection in diagrams, this connection will be deleted from these diagrams. Definitions are retained in the database.

7.1.7.5 Delete items from lists

In the  **Portal**, you can delete items from lists and thus from diagrams.

The following description refers to items in a list (page 760). It uses the example of an application system type diagram.

Prerequisites

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- The **Workspace** database content was published for versionable databases.
- You have at least the **Delete** access privilege for the items you want to delete.

Warning

Please note that the deletion of items affects the layout of diagrams. Due to the delete operation, a new layout is automatically generated for the current diagram. As a consequence, the arrangement of items in the diagram may differ from the original arrangement. If required, a user with the **ARIS Connect Designer** license privilege can adapt the layout of the diagram in ARIS Connect Designer (page 857).

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click  **Edit** >  **Contribute**. Edit mode (page 756) is enabled.
6. Navigate to the required diagram and select it. To delete objects of the **Application system type** type from the **Subordinate IT systems** area, you can select an application system type diagram from the sample configuration supplied, for example.
7. Activate the **Overview** fact sheet if it is not activated yet.
8. Click the edit box in the **Subordinate IT systems** area. Existing objects are displayed one next to the other with a delete sign (x) added to them.
9. Click the delete sign for the application system types you want to delete from the diagram.
10. Click  **Change**. A confirmation prompt is displayed listing all application system types to be deleted.
11. Click **OK**.

The application system types are deleted from the list, and also from the application system type diagram together with their connections. Definitions are retained in the database.

7.1.7.6 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.7.6.1 What is ARIS Viewer Contribution?

If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you are able to change items and values for the following predefined items in the  **Portal**. 'Predefined' means that these items and their values were configured to be editable in the program by default.

This means that not all items of the following model and object types can be changed. Only those can be changed that were designed to be editable by the underlying concept and were set up accordingly by the configuration.

Please note that this is a sample configuration, which means that other items may have been configured to be editable in your installation.

MODEL TYPES

- Application system type diagram
- BPMN collaboration diagram (BPMN 2.0)
- BPMN process diagram (BPMN 2.0)
- Business controls diagram
- Enterprise BPMN collaboration diagram
- Enterprise BPMN process diagram
- EPC
- EPC (material flow)
- EPC (column display)
- EPC (table display)
- EPC (horizontal table display)
- EPC (row display)
- Function allocation diagram
- Organizational chart
- Process schedule
- Risk diagram
- KPI allocation diagram

OBJECT TYPES

- Application system
- Application system class
- Application system type
- Cluster/Data model
- Entity type
- Event
- Technical term
- Function
- Information carrier
- KPI instance
- Class
- Lane
- List
- Message
- Organizational unit
- Participant
- Person
- Risk
- Risk category
- Role
- Location
- Position
- System organizational unit
- System organizational unit type
- Test definition

ATTRIBUTES

ARIS Viewer Contribution enables you to edit attributes (page 760) that are based on the following base types:

- Boolean
- Value
- Floating point number domain
- Integer domain
- Floating point number
- Integer
- Date
- One-liner
- Multi-line text
- Link/File

Text formatting is ignored and cannot be assigned. If you are expected to enter numbers, the field is colored red (page 760) if you do not enter a numerical value.

Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

7.1.7.6.2 Requirements for Contribution

For a user to be able to work with ARIS Viewer Contribution the following requirements must be met:

- The user has the **ARIS Connect Viewer** and **Contribution** license privileges.
- The **Workspace** database content was published for versionable databases.
- The user has at least the **Write** access privilege for the group content of the database to be edited. Deleting items requires the **Delete** access privilege.
- The administrator has activated the Classic view (page 625), Default view (page 626), or a view derived from these views.

7.1.7.6.3 How to identify whether the edit mode is active

The edit mode is displayed in the header. If it is not active, only the symbol and **Edit** are displayed:



Clicking **Edit** >  **Contribute** enables the edit mode.

If the edit mode is active, this is shown in the header:



Clicking  **Exit edit mode** disables the edit mode.

The availability of various edit boxes (page 760) is another clear indication that the edit mode is active.

7.1.7.6.4 Which items are you allowed to change using the Contribution privilege?

If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you are able to change items and values for the following predefined items in the  **Portal**. 'Predefined' means that these items and their values were configured to be editable in the program by default.

This means that not all items of the following model and object types can be changed. Only those can be changed that were designed to be editable by the underlying concept and were set up accordingly by the configuration.

Please note that this is a sample configuration, which means that other items may have been configured to be editable in your installation.

MODEL TYPES

- Application system type diagram
- BPMN collaboration diagram (BPMN 2.0)
- BPMN process diagram (BPMN 2.0)
- Business controls diagram
- Enterprise BPMN collaboration diagram
- Enterprise BPMN process diagram
- EPC
- EPC (material flow)
- EPC (column display)
- EPC (table display)
- EPC (horizontal table display)
- EPC (row display)
- Function allocation diagram
- Organizational chart
- Process schedule
- Risk diagram
- KPI allocation diagram

OBJECT TYPES

- Application system
- Application system class
- Application system type
- Cluster/Data model
- Entity type
- Event
- Technical term
- Function
- Information carrier
- KPI instance
- Class
- Lane
- List
- Message
- Organizational unit
- Participant
- Person
- Risk
- Risk category
- Role
- Location
- Position
- System organizational unit
- System organizational unit type
- Test definition

7.1.7.6.5 Which attributes are you able to edit?

ARIS Viewer Contribution enables you to edit attributes (page 760) that are based on the following base types:

- Boolean
- Value
- Floating point number domain
- Integer domain
- Floating point number
- Integer
- Date
- One-liner
- Multi-line text
- Link/File

Text formatting is ignored and cannot be assigned. If you are expected to enter numbers, the field is colored red (page 760) if you do not enter a numerical value.

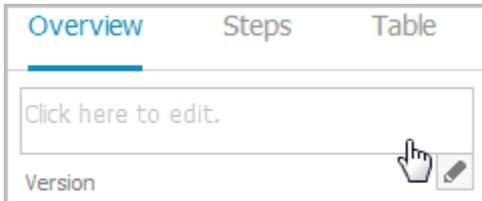
Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

7.1.7.6.6 Which editing options are available?

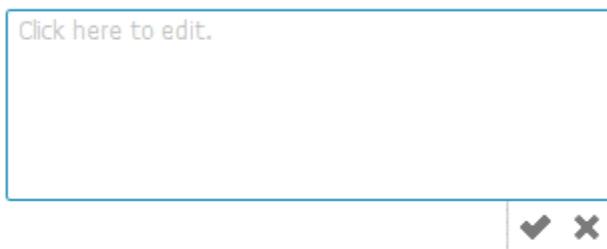
Depending on the attribute (page 759), various editing options are available.

Edit box

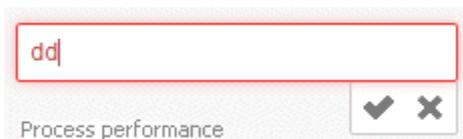
If the edit mode is active (page 756), moving the mouse pointer over an editable property will open the edit box. If no value has been specified yet (page 748), the hint **Click here to edit.** is displayed:



Clicking in the field will open it for editing:



The field indicates whether or not the input corresponds to the type expected. If an entry differs from the type expected, the field is displayed with a red border:

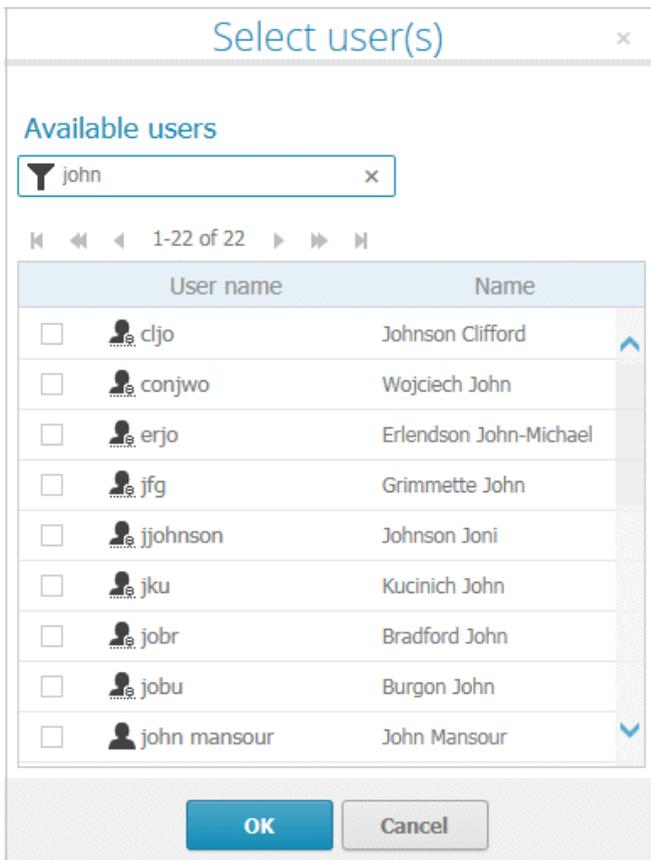


If the entry is correct, the field is displayed without a special characteristic:



Select user(s)

If you want to select a user, you will be offered a list of the users logged in to the system for you to select in a dialog, for example, for the **Responsible** attribute:



Available users

john

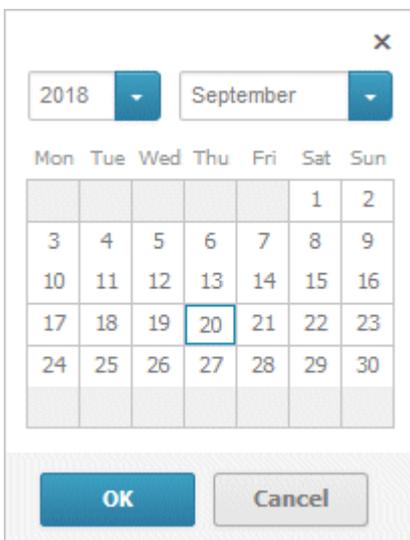
1-22 of 22

	User name	Name
<input type="checkbox"/>	cljo	Johnson Clifford
<input type="checkbox"/>	conjwo	Wojciech John
<input type="checkbox"/>	erjo	Erlendson John-Michael
<input type="checkbox"/>	jfg	Grimmette John
<input type="checkbox"/>	jjohnson	Johnson Joni
<input type="checkbox"/>	jku	Kucinich John
<input type="checkbox"/>	jobr	Bradford John
<input type="checkbox"/>	jobu	Burgon John
<input type="checkbox"/>	john mansour	John Mansour

OK Cancel

Date input

You can enter dates using the calendar. It opens when you click in the edit box:



2018 September

Mon Tue Wed Thu Fri Sat Sun

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OK Cancel

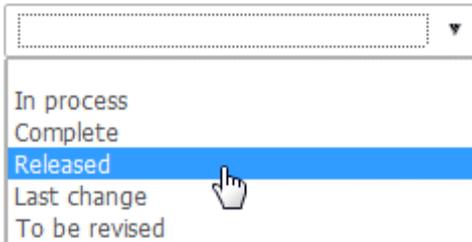
Drop-down list box

For attributes that require the entry of specific values or of Boolean attributes, you can select the appropriate entry, for example, for the **Model status** attribute:



A screenshot of a drop-down list box. The text 'Model status' is displayed to the left of the box. The box itself is empty with a small downward arrow on the right side. Below the box are two icons: a checkmark and an 'X'.

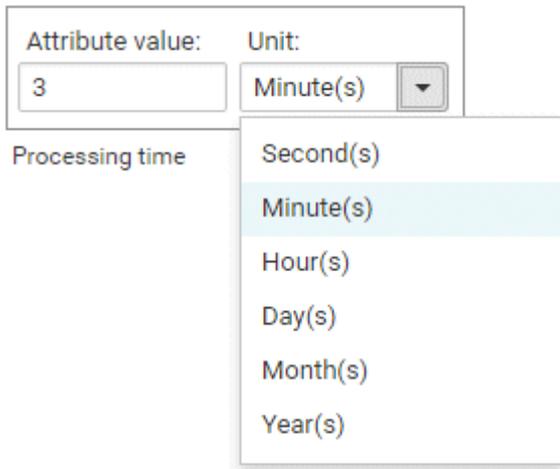
Clicking in the field will offer possible values for selection:



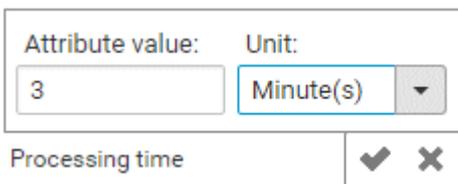
A screenshot of a drop-down list box with a list of options. The options are: 'In process', 'Complete', 'Released', 'Last change', and 'To be revised'. The 'Released' option is highlighted in blue, and a mouse cursor is pointing at it.

Combo box

You can use a combo box to edit composite attributes. This makes it possible, for example, to assign values to a unit.



A screenshot of a form with two fields: 'Attribute value:' and 'Unit:'. The 'Attribute value:' field contains the number '3'. The 'Unit:' field is a dropdown menu with 'Minute(s)' selected. A list of units is shown below the dropdown: 'Second(s)', 'Minute(s)', 'Hour(s)', 'Day(s)', 'Month(s)', and 'Year(s)'. The 'Minute(s)' option is highlighted in light blue. Below the form is the text 'Processing time'.



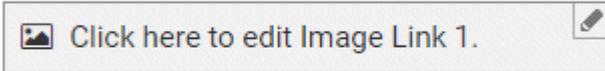
A screenshot of the same form as above, but with the dropdown menu closed. The 'Unit:' field now shows 'Minute(s)' and a small downward arrow. Below the form are two icons: a checkmark and an 'X'.

Link attribute boxes

You can use link attribute boxes to link images, videos, documents, and external pages to the current item.

Click here to edit Image Title 1.

Click here to edit Image Description 1.



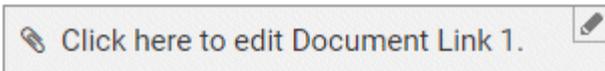
Click here to edit Video Title 1.

Click here to edit Video Description 1.



Click here to edit Document Title 1.

Click here to edit Document Description 1.



Click here to edit External page Title 1.

Click here to edit External page Description 1.



If you click in the title, description, or link row of a link attribute, the appropriate edit field opens and you can enter the relevant details.

CREATE AND REUSE OBJECTS

Table

Existing objects are listed in a table. Additional information is displayed in the individual rows:

Name	Role
Risk manager group Finance	Risk manager_3
Risk owner group Finance	Risk owner_3
Risk reviewer group Finance	Risk reviewer_3

You can add individual objects to the table (page 749) or remove objects from the table (page 751).

List

Existing objects are displayed in a list:

Collaboration system	Loan processing system
Reporting system	Revision data information system

You can create new or reuse existing objects. It is possible to add multiple items at once. Click in the field and enter the names for the required items. Once your input is complete, click

✔ Change:

Subordinate IT systems

Revision data information system x Loan

- Loan (new item) ✔
- Loan processing system ✘

DELETE OBJECTS

You can delete objects from tables (page 751) and lists (page 752):

Table

▲ Name	Role	
Risk manager group Finance	Risk.manager_3	✕ 

List



7.1.7.6.7 Where to save new items

When a new item is created by a user with the **Contribution** license privilege, its definition is saved to the **Contribution** subgroup of the main group.

Contribution is further divided into other groups. For example, functions are saved to **Contribution/Activities**, while organizational units will be stored under **Contribution/Departments**.

Any group that does not yet exist in the database is automatically created.

7.1.8 Use RACI matrix

Using the RACI matrix you can represent and analyze responsibilities that exist within a process (page 768). RACI is short for **R**esponsible, **A**ccountable, **C**onsulted, and **I**nformed.

The matrix shows which organizational unit participates in activities of a process and in what manner:

- **Responsible** indicates who assumes execution responsibility. It shows who is responsible for performing an activity and who actually performs it, but also who assumes the disciplinary responsibility.
- **Accountable** identifies the person ultimately answerable for the correct and thorough completion of a task. Thus, 'Accountable' may be the one in charge of managing the costs, that is, the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **Consulted** shows who has a consulting role. This organizational unit - typically a group of subject matter experts - is asked for advice prior to a final decision being made or a final action being taken.

Informed specifies who must be informed. It indicates who is kept up to date on the progress or completion of a task.

7.1.8.1 Create process model for RACI matrix

You can model processes that can be evaluated as a RACI matrix.

Prerequisite

You have the **ARIS Connect Designer** license privilege.

Procedure

1. Create a process model (page 768).
2. Use objects (page 768) and connections that can be evaluated by the RACI matrix.
3. Save the process.

You have modeled a process for which the relevant responsibilities can be represented using a RACI matrix (page 767).

7.1.8.2 Display RACI matrix

A RACI matrix can display the activities of a process and the associated organizational responsibilities.

Procedure

1. Click  **Portal** if it is not activated yet.
2. If your administrator has published multiple databases, select the required database by clicking the current database name next to the  database symbol and then clicking the name of the relevant database.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Show the  **Navigation** bar if it is not visible yet.
5. In the  **Navigation**, open the group in which the required process (page 768) is stored.
6. Click the name of the process for which you want to display the RACI matrix. The entry **RACI** is shown.
7. Click **RACI**.

The RACI matrix is displayed for the process model you have selected. The functions of the process are arranged in rows, the organizational elements are arranged in columns. In the portal, process participations are displayed by default as a RACI matrix in Classic view (page 615) and Default view (page 620). You can configure the representation as RASCI matrix. Please contact your local Software AG sales organization (<http://www.softwareag.com>).

You can use the RA(S)CI - Output organizational participations in processes (page 732) report to output the RACI matrix in Microsoft® Excel format from an open process model (page 889). By default, this report does not return any **Supportive** information. To output this information, your script administrator must set the **g_bRASCI** variable to **true**.

7.1.8.3 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.8.3.1 Which diagrams can be used for a RACI matrix?

A RACI matrix can be based on the following diagrams:

- EPC (API name **MT_EEPC**)
- EPC (column display) (API name **MT_EEPC_COLUMN**)
- EPC (material flow) (API name **MT_EEPC_MAT**)
- EPC (row display) (API name **MT_EEPC_ROW**)
- EPC (table display) (API name **MT_EEPC_TAB**)
- EPC (horizontal table display) (API name **MT_EEPC_TAB_HORIZONTAL**)
- BPMN collaboration diagram (BPMN 2.0) - (API name **MT_BPMN_COLLABORATION_DIAGRAM**)
- BPMN process diagram (BPMN 2.0) (API name **MT_BPMN_PROCESS_DIAGRAM**)
- Enterprise BPMN collaboration diagram (API name **MT_ENTERPRISE_BPMN_COLLABORATION**)
- Enterprise BPMN process diagram (API name **MT_ENTERPRISE_BPMN_PROCESS**)
- Function allocation diagram (API name **MT_FUNC_ALLOC_DGM**). This model must be assigned to a function.
- Value-added chain diagram (API name **MT_VAL_ADD_CHN_DGM**)

7.1.8.3.2 Which objects can be used for a RACI matrix?

The following objects are evaluated by a RACI matrix:

- Function (API name OT_FUNC)
- Group (API name OT_GRP)
- Organizational unit (API name OT_ORG_UNIT)
- Organizational unit type (API name OT_ORG_UNIT_TYPE)
- Person (API name OT_PERS)
- Role (API name OT_PERS_TYPE)
- Position (API name OT_POS)

7.1.8.3.3 Which connections can be used for a RACI matrix?

The following connections between organizational elements and functions are evaluated by the RACI matrix:

RESPONSIBLE (R)

- carries out (API name: CT_EXEC_1)
- carries out (API name: CT_EXEC_2)

ACCOUNTABLE (A)

- decides on (API name: CT_DECD_ON)
- decides on (API name: CT_DECID_ON)
- accepts (API name: CT_AGREES)

CONSULTED (C)

- is technically responsible for (API name CT_IS_TECH_RESP_1)
- is technically responsible for (API name CT_IS_TECH_RESP_3)
- has consulting role in (API name CT_HAS_CONSLT_ROLE_IN_1)
- has consulting role in (API name CT_HAS_CONSLT_ROLE_IN_2)

INFORMED (I)

- must be informed about (API name: CT_MUST_BE_INFO_ABT_1)
- must be informed about (API name: CT_MUST_BE_INFO_ABT_2)
- must be informed on cancellation (API name: CT_MUST_BE_INFO_ON_CNC_1)
- must be informed on cancellation (API name: CT_MUST_BE_INFO_ON_CNC_2)

If RA(S)CI was set, the following connections are additionally available:

SUPPORTIVE (S)

- contributes to (API name CT_CONTR_TO_1)
- contributes to (API name CT_CONTR_TO_2)

7.1.9 Use Mini workflows

Mini workflows are some work steps that have to be processed from different people. The flow of the work steps is based on the information provided by the content.

If, for example, a change request for a model is submitted, the request is sent via e-mail to the person who is extracted from the **Person responsible** attribute of the relevant model. In My tasks, the request is entered as task. There, the Person responsible can assess if the change should be made.

7.1.9.1 Edit models

You can edit models in ARIS Connect.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the name of the model you want to edit.
6. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
7. Make the required changes.
8. Click  **Save**.

Your changes are saved in the model.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.9.2 Share model

You can share models with other users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model you want to send to another user.
6. Click  **Share** >  **Share model**. The corresponding dialog opens.
7. Select the user you want to share the model with.
8. Enable **Send copy to me** to receive a copy of the message, if required.
9. You can also enter a subject and a comment.
10. Click **Send**.

The selected user receives an e-mail containing the information you entered and a link to the corresponding model.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.9.3 Submit change request

You can send change requests for models to the person responsible.

Prerequisites

- You have at least the **ARIS Connect Viewer** license privilege.
- The **Person responsible** model attribute must be specified for the relevant model with a user name that exists in the user management.
- The models are saved in a versionable database.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model for which you want to submit a change request.
6. Click  **Submit change request**. The corresponding dialog opens.
7. Enter a title and a description for your request.
8. Select the priority with which the request is to be handled.
9. Add any relevant documents, graphics, etc. that could be used as a basis for editing.
10. Click **Send**. A completion message is displayed.
11. Click **OK**.

The person responsible receives the change request by e-mail with a link to the relevant model and a link to edit the associated task in My tasks.

Once the person responsible has processed the request, the applicant receives a message by e-mail.

As soon as the first change request is made, the **ARIS Connect Governance Inbox** database is automatically created in ARIS. It contains a Requirements inbox for each person responsible with a model of the **Requirements tree** type. An object of the **Requirement** type is created for each change request. As the process continues, the realization status of the object is automatically changed depending on which status the person responsible has selected (**Approve, Reject**). This enables all change requests to be monitored in the **ARIS Connect Governance Inbox** database.

All users can select the language to be used for the notification in their profile in ARIS Connect. This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.9.4 Ask for model approval

Ask the person in charge to approve the models you changed so that the changed models can be made available to all users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the name of the model you want to edit.
6. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
7. Make the required changes.
8. Click  **Save**.
9. Click  **Collaboration** if it is not activated yet.
10. Click  **Request approval**. The **Confirmation** dialog opens for you to confirm that the model changes are to be saved and the model is to be reopened read-only.
11. Click **OK**. The model reopens read-only and the **Request approval** dialog is displayed.
12. If required, select a person in charge to approve the model if the **Person responsible** attribute has not been specified at the model.
13. Enter a comment to explain the approval request.
14. Click **Send**. A completion message is displayed.
15. Click **OK**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in My tasks. If the person responsible approves the changes, the model is automatically published and the current version is provided.

Until then, only you and other modelers can view your changes.

All users can select the language to be used for the notification in their profile in ARIS Connect.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.9.5 Request feedback on processes

You can request feedback on processes from other users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Click the model for which you want feedback.
6. Click  **Comment** in the bar panel if the bar is not activated yet.
7. Enter your comment in the box provided.
8. Click  **Tag**.
9. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
10. Click  **Link**.
11. Insert a link to a Web site that contains more detailed information.
12. Click **Add link**. The link is checked and added.
13. Click  **File**. The **Select document** dialog is displayed.
14. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
15. Select the file you want to upload and enter the relevant additional information.
16. Click **Upload**.
17. Enable the check box of the document you want to add to your post.
18. Click **OK**.

The comment is displayed and can be commented on by other users.

All users can select the language to be used for the notification in their profile in ARIS Connect. This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.9.6 Inform owner of change

You can inform the model owner of model changes you have made in the portal (page 748). The process owner is automatically determined by the attribute **Person responsible**.

Prerequisite

- You have the **ARIS Connect Viewer** and **Contribution** license privileges, or the **ARIS Connect Designer** license privilege.
- When using Microsoft® Internet Explorer version 8, the compatibility mode must be disabled.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Navigate to the items and change the relevant attributes (page 748). Depending on the attributes, various editing options (page 760) are available.
6. Click  **Inform owner of change**. The **Inform of change** dialog opens.
7. Insert a change description
8. Click **Submit**. The **Information** dialog opens.
9. Enable the **Do not show this message again** check box if you do not want to be informed again by the dialog when executing the mini workflow more than once during the current session.
10. Click **OK**.

The process owner receives an e-mail containing the information you entered. If he submits the human task, you will be informed via e-mail.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.1.10 My tasks

My tasks is used for editing tasks that are provided by Process Governance during process execution. In addition, My tasks provides an overview of a user's active tasks.

-  **My tasks**

Displays the list of tasks that you are responsible for in terms of processing. Use the filter (page 783) to limit the list. Initially, the tasks to be edited are displayed (status **New** and **Overdue**). If you want to display all tasks, change the filter.

-  **Tracking**

Displays the active tasks that you triggered by starting the process. As soon as a task is completed and the next task in the process is active, the completed task is removed the list.

You have one of the following license privileges: **ARIS Architect with Process Governance**, **ARIS Viewer**, **ARIS Connect Viewer**, or **ARIS Connect Designer**.

Statistics data in the form of charts for human tasks are available in ARIS Connect under **ARIS Administration > Charts > Governance > Human tasks**.

Note: You can watch videos for some procedures in the help. If your browser is unable to open the quick videos within the help, please use a different browser. The videos are also available in ARIS Community (<http://www.ariscommunity.com/help/quick-videos>).

ARIS video tutorial

Manage tasks

(<http://www.ariscommunity.com/videos/learn-how-manage-tasks-process-board>) (approx. 6 minutes)

This tutorial is based on ARIS 7.2. The functionality shown is also available to you in the current version.

7.1.10.1 Open My tasks

You can start My tasks to edit the tasks assigned to you, or to query information about the tasks that you triggered by starting a process. Initially, the tasks to be edited are displayed (status **New** and **Overdue**). If you want to display all tasks, change the filter.

Prerequisite

You have one of the following license privileges: **ARIS Architect with Process Governance**, **ARIS Viewer**, **ARIS Connect Viewer**, or **ARIS Connect Designer**.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** >  **My tasks**.

My tasks opens.

Tip

Alternatively, you can use  **Edit tasks** to open My tasks in ARIS Connect. Furthermore, you can use My tasks without ARIS Connect. The address required to access the latter is normally sent to you automatically by e-mail. Otherwise, you can request the address from your system administrator.

ARIS video tutorial

Manage tasks using My tasks (without ARIS Connect

(<http://www.ariscommunity.com/videos/learn-how-manage-tasks-process-board>) (approx. 6 minutes)

This tutorial is based on ARIS 7.2. The functionality shown is also available to you in the current version.

7.1.10.2 Tasks

7.1.10.2.1 Edit tasks

Edit the tasks assigned to you. You can complete a task the first time you edit it or continue editing it at a later time, for example, if information you require is not currently available. Initially, the tasks to be edited are displayed (status **New** and **Overdue**). If you want to display all tasks, change the filter. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list ( **Select columns**).

Procedure

1. Click the relevant task in the task list. The buttons of the available functions are displayed.
2. Click  **Edit**. The dialog for editing the task opens.
3. Enter the required information and select the relevant options.
4. Click **OK** in the dialog to complete the task. After this, further editing is no longer possible (the status is **Completed**). The button for completing the task may also have a different name because this button can be customized by the modeler. Tasks in status **Completed** can be accessed only in read-only mode.

Click **Save** in the dialog to save the current input and to continue editing the task at a later time (status is **In process**) or delegate it to another user (status is **Delegated**).

Click **Cancel** to discard your changes.

5. Enter your password, if you are requested to do so when finishing the task. Double authentication can be specified in the ARIS Administration configuration (**ARIS Administration > Configuration > Process Governance > Workflow policies > E-signature (double authentication)**), so that you have to reenter the password when you complete tasks.

The task was edited and has a status (page 141) that corresponds to how it was completed.

Tip

Alternatively, you can double-click a task to open it for editing.

7.1.10.2.2 Interrupt editing

You can interrupt editing of a task and resume editing of the same task at a later time.

Procedure

1. Click the relevant task in the task list. The buttons of the available functions are displayed.
2. Click  **Edit**. The dialog for editing the task opens.
3. Edit the task.
4. Click **Save**.

Your current input and selected options are saved. The status of the task is set to **In process**. You can finish editing the task at a later time.

7.1.10.2.3 Refresh lists of tasks

You can refresh your list of tasks in order to check whether additional tasks have been assigned to you since you logged in.

Procedure

Above the list of tasks ( **My tasks** or  **Tracking**), click  **Refresh**.

The list is updated with any newly assigned tasks.

7.1.10.2.4 Reset a task

You can reset the status of a task from **In process** to **New**. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list ( **Select columns**).

Warning

This causes all current input and selected options to be deleted.

Procedure

1. Click the task you want to reset in the task list.
2. Click  **More** >  **Reset**.

The current details are deleted and the status of the task is set to **New**.

7.1.10.2.5 Display tasks in read-only mode

You can open tasks in read-only mode. This is particularly useful for tasks that cannot be edited, such as tasks with status **Completed**.

You can activate report support on the **Data** tab. If you do so, the data will be read from ARIS by report right before the dialog is displayed and will then be displayed in the dialog when the task is opened for editing. If the task is displayed read-only, the report is not executed.

Procedure

1. Click the relevant task in the task list. The buttons of the available functions are displayed.
2. Click  **View**.

The task opens in read-only mode.

7.1.10.2.6 Display task details

You can display additional details of a task, such as its creation date, priority, description, delegation history, etc.

Procedure

1. Click the task for which you want to display additional details.
2. Above the list of tasks, click  **Details**.
3. Click **Delegation history** to see which people the task has been passed on to in the past. Initially, the latest entry is displayed at the top. **Delegation history** is displayed as soon as a task has been delegated once.

Detailed information about the selected task is displayed below the list.

7.1.10.2.7 Pass on tasks (substitute)

You can pass on your new tasks to a substitute for a specific period of time. This means that you can, for example, have another person complete the tasks assigned to you while you are on vacation. A task can only be passed on to the selected substitute if the status (page 141) of the task is **New**. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list ( **Select columns**).

Prerequisite

The user to whom the task is passed on is assigned one of the following license privileges: **ARIS Architect** with **Process Governance** or **wM Integration**, **ARIS Designer**, **ARIS Publisher**, **ARIS Viewer**.

Procedure

1. Click  **Specify substitution**. The corresponding dialog opens.
2. Enable the **Active** check box to activate the substitute immediately or start from a selected start date.
3. Select a **Start date** and **End date** to define the period of time for which you want to be represented by the substitute. After this period has elapsed, the task is automatically re-assigned to the original assignee.

You can specify only one substitution period for all substitutions.

4. Double-click the table row of the user group for which you want to specify a substitute. The **Select user** dialog opens.
5. Enter the first characters of the group, user ID, first name, or last name, and click **Find**. If hits exist for the current search, the results are displayed.
6. To select a group or user, select the relevant element. If you select a group, you also need to select a user. Click **OK**. The **Select user** dialog closes.
7. The selected user is entered in the **Executor** column of the **Specify substitution** dialog.
8. To delete a substitution, click the relevant executor in the table, and select **Delete**.
9. Click **OK**.

The options selected for the substitute are applied. Your new tasks are passed on in accordance with these options and their status (page 141) is displayed as **Passed on** in your task list. The substitute receives an automatic notification by e-mail about the duration of the substitution or when the substitution is canceled, if this option is enabled in the ARIS Administration configuration.

7.1.10.2.8 Delegate tasks

You can delegate a task, that is, pass it on permanently to another executor. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list ( **Select columns**).

Prerequisites

- A task must have been selected in the list.
- The task must have been assigned to a user group.
- The status of this task is **New** or **In process**.
- The user to whom the task has been transferred belongs to the allowed group (data flow: **Group of allowed delegates**).
- The user to whom the task is passed on is assigned one of the following license privileges: **ARIS Architect** with **Process Governance** or **wM Integration**, **ARIS Designer**, **ARIS Publisher**, **ARIS Viewer**.

Procedure

1. Click the relevant task in the task list. The buttons of the available functions are displayed.
2. Click  **More** >  **Delegate**. The **Delegate task** dialog opens.
3. Enter the first characters of the group, user ID, first name, or last name, and click **Find**. If hits exist for the current search, the results are displayed.
4. To select a group or user, select the relevant element. If you select a group, you also need to select a user.
5. You can also enter a comment, such as a reason or notes for the new executor.
6. Click **Delegate**.

The task is passed on to the selected executor. In the list belonging to the user who has delegated the task, it is displayed with the status (page 141) **Delegated**.

Click a task in the task list to display detailed information. Click **Delegation history** to see which people the task has been passed on to in the past. Initially, the latest entry is displayed at the top. **Delegation history** is displayed as soon as a task has been delegated once.

7.1.10.2.9 Organize and sort lists of tasks

You can specify the columns to be displayed in the lists (**My tasks** and **Tracking**). In addition, you can sort the lists in ascending or descending order according to the titles. Thus, you obtain a better overview of your tasks.

Procedure

1. Click **My tasks** or **Tracking**.
2. Click  **Select columns** to specify the columns to be displayed in the list. The corresponding dialog opens.
3. Click the required columns in the **Hidden columns** box while holding down the Ctrl or Shift key, and select **Add**. The columns are transferred to the **Shown columns** box.
To remove columns from the **Shown columns** box, click the relevant columns in that box while holding down the Ctrl or Shift key, and click **Remove**.
4. Click **OK**.
5. To sort the list in ascending or descending order according to a specific criterion, click in the table header of the column according to which you wish to sort. Depending on the sorting last selected, the icon for ascending sorting (▲) or descending sorting (▼) is shown next to the column name. Click the relevant sorting.

The list is organized according to your settings.

7.1.10.2.10 Use filter for list of tasks

A filter is provided for restricting the list of tasks to certain items in order to obtain a clearer overview. Initially, the tasks to be edited are displayed (status **New** and **Overdue**). If you want to display all tasks, change the filter.

Procedure

1. Above the list of tasks, click  **Filter**. The **Filter** area is shown.
2. Select the relevant filter criteria, for example, the status **New tasks** and the priority **High**.
3. Click **Filter**.

The list is refreshed automatically. Tasks are only displayed if they match the selected filter criteria.

Tip

Alternatively, enter the relevant search term in the **Filter** box above the task list.

7.1.10.2.11 Delegate, pass on, or edit tasks of another user

You can display and edit the tasks of another user. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list (🔧 **Select columns**).

Prerequisite

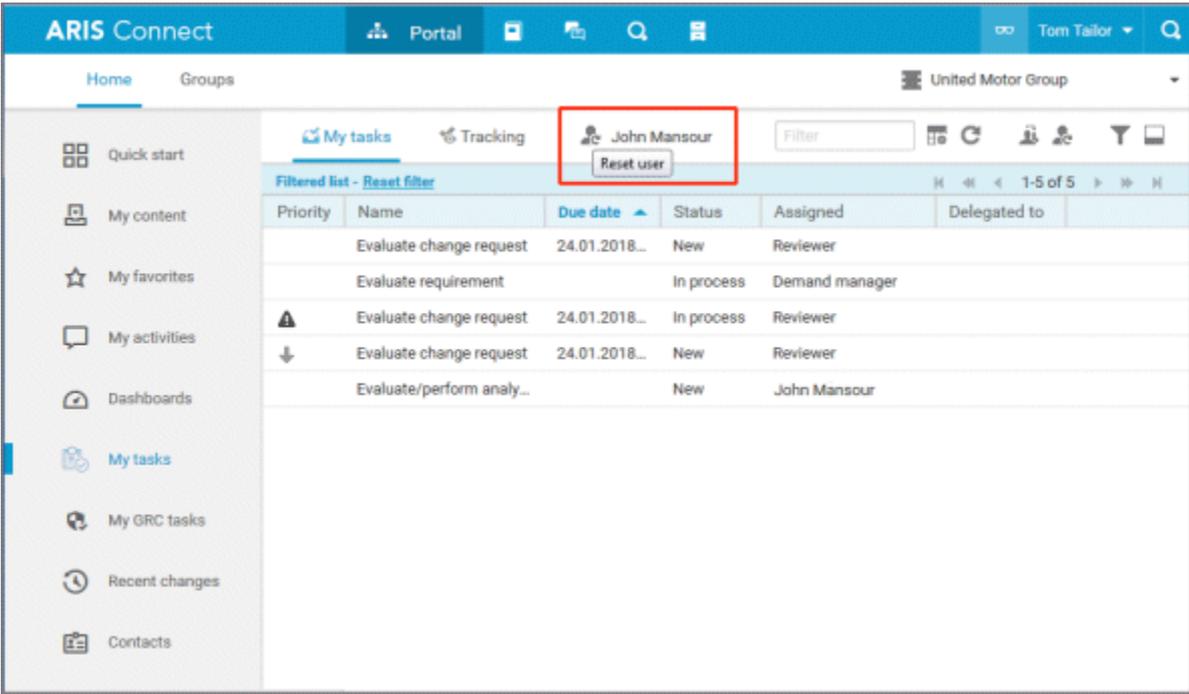
You have the Process Governance administrator function privilege.

Procedure

1. Click  **Change user**. The corresponding dialog opens.
2. Enter the first characters of the group, user ID, first name, or last name, and click **Find**. If hits exist for the current search, the results are displayed.
3. To select a group or user, select the relevant element. If you select a group, you also need to select a user.
4. Click **OK**.

The tasks of the selected user are displayed. Instead of this user, you can now edit (page 778), delegate (page 782) (**Delegate to me** button), or pass on tasks. To return to your user, click **Reset user**. Statistics data in the form of charts for human tasks are available in ARIS Connect under **ARIS Administration > Charts > Governance > Human tasks**.

Click  **Reset user** to return to your own task list.



The screenshot shows the ARIS Connect interface. The top navigation bar includes 'ARIS Connect', 'Portal', and a user profile 'Tom Taylor'. The main content area is titled 'United Motor Group' and shows a 'My tasks' section. A table of tasks is displayed, with columns for Priority, Name, Due date, Status, Assigned, and Delegated to. The tasks listed are:

Priority	Name	Due date	Status	Assigned	Delegated to
	Evaluate change request	24.01.2018...	New	Reviewer	
	Evaluate requirement		In process	Demand manager	
⚠	Evaluate change request	24.01.2018...	In process	Reviewer	
↓	Evaluate change request	24.01.2018...	New	Reviewer	
	Evaluate/perform analy...		New	John Mansour	

A red box highlights the 'John Mansour' header and the 'Reset user' button above the table.

7.1.10.2.12 Display the tasks you started

You can display the active tasks that you triggered by starting the process.

Procedure

1. Click  **Tracking**.
2. Click the task for which you want to display additional details.
3. Above the list of tasks, click  **Details**.

Detailed information about the selected task is displayed below the list.

7.1.10.2.13 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.10.2.13.1 What status filters are available for the list of tasks?

A filter is provided for restricting the list of tasks to certain items in order to obtain a clearer overview. (**Filter**) Initially, the tasks to be edited are displayed (status **New** and **Overdue**). If you want to display all tasks, change the filter. The list is refreshed automatically after you select the filter option. Tasks are then only displayed if they match the selected filter criteria.

The following status filters are available:

- **Tasks to be edited**
If you select this filter, only tasks with the status **New**, **In process**, and **Overdue** are displayed.
- **New tasks**
If you select this filter, only tasks with the status **New** are displayed.
- **Tasks in process**
If you select this filter, only tasks with the status **In process** are displayed.
- **Suspended tasks**
If you select this filter, only tasks with the status **Suspended** are displayed.
- **Overdue tasks**
If you select this filter, only tasks with the status **Overdue** are displayed.
- **Completed tasks**
If you select this filter, only tasks with the status **Completed** are displayed.
- **Tasks delegated/passed on**
If you select this filter, tasks are only displayed if their status is **Delegated** or **Passed on**.
- **All tasks**
If you select this filter, all tasks are displayed, regardless of their status.

A corresponding status filter is not provided for every task status (page 141). The status filter is always applied to all tasks.

Alternatively, enter the relevant search term in the **Filter** box above the task list.

7.1.10.2.13.2 What statuses can tasks have?

Tasks can have the following statuses in **My tasks**:

- **New**

The task has not been edited since it was assigned or it was reset (page 779).
- **In process**

The task was partially edited and the editor then finished editing by selecting **Save** to save the current input and resume editing at a later time.
- **Active**

Tasks to be edited, that is, tasks in the **New** or **In process** state.
- **Overdue**

The specified processing time of the task has expired. If the list contains overdue tasks, the number is displayed in the top bar .
- **Suspended**

The process instance that triggers this human task has been suspended in the process administration.
- **Being edited by another user**

This status is set automatically as long as a task that was assigned to several possible executors is currently being edited by one of them. Tasks with this status are displayed with a gray background in the list.
- **Failed**

The task could not be performed because a problem occurred.
- **Completed**

Editing of the task was completed with **OK**. Further editing is no longer possible. However, you can open the task with a double-click to view details. Tasks with this status are displayed with a gray background and with strikethrough formatting in the list.
- **Passed on**

Editing of the task was passed on from the executor to another user for a specific period of time (page 778).
- **Delegated**

Editing of the task was passed on permanently (page 782) from the original assignee to another user. The task remains in the list of the original assignee with this status.
- **Task assignment failed**

The task was not completed by any executor before its due date. The group of executors contained either no executors or no active executors.

7.1.10.2.13.3 What statuses can tasks have in Tracking?

The following statuses are possible for tasks:

- **Active**
Tasks to be edited.
- **Suspended**
The process instance that triggers this human task has been suspended in the process administration.
- **Issue_resolution**
A problem occurred during process execution, which the Process Governance administrator must solve in the process administration.
- **Failed**
The task could not be performed because a problem occurred.
- **Completed**
Editing of the task was completed.

7.1.10.2.13.4 What options are available for exiting the editing of a task?

Several options are available for exiting the editing of a task:

- Click **OK** in the dialog to complete the task. After this, further editing is no longer possible (the status is **Completed**). The button for completing the task may also have a different name because this button can be customized by the modeler. Tasks in status **Completed** can be accessed only in read-only mode.
- Click **Save** in the dialog to save the current input and to continue editing the task at a later time (status is **In process**) or delegate it to another user (status is **Delegated**).
- Click **Cancel** to discard your changes.

Depending on the task, additional buttons for exiting editing may be used in addition to the standard buttons (**Save**, **Cancel**). You can generate these buttons individually when creating dialogs.

Final processing of a task can be linked to entry of the user password to ensure that only authenticated users process tasks. This can also be defined when creating dialogs.

7.1.10.2.13.5 How to pass on editing of a task to another user

There are two ways to pass on editing of tasks to other users. To find out if another user is already editing a task, display (page 783) the **Current editor** column in your list (🔧 **Select columns**).

SPECIFY A SUBSTITUTE FOR A SPECIFIC PERIOD OF TIME

You can pass on editing of your new tasks to another user for a certain period of time, for example, you can set up a substitute for you while you are on vacation. With this option, tasks are only passed on to the selected user if their status (page 141) is **New**. These tasks are then displayed in your task list with the status **Passed on**.

DELEGATE TASKS

You can pass on certain tasks to another person on a permanent basis, that is, you can delegate (page 782) these tasks. Tasks can only be delegated if their status (page 141) is **New** or **In process**. These tasks are then displayed in your task list with the status **Delegated**.

7.1.10.2.13.6 How can user accounts be deleted and anonymized?

Users can only be deleted in ARIS Administration. To anonymize Process Governance users according to GDPR (page 1172), use **ARIS Process Governance Command-Line Tool**. For detailed information, refer to the **ARIS Process Governance Command-Line Tool** manual. After anonymization, users and their activities are shown with **Anonymized user** instead of with the user name.

AUTOMATION DATA FLOWS

The Process Governance services can write user specific data to attributes. These attribute values can be anonymized with the help of customized reports in order to meet the requirements of the General Data Protection Regulation (GDPR (page 1172)). Please contact your local Software AG sales organization (<http://www.softwareag.com>).

7.1.10.3 Documents

7.1.10.3.1 Download and edit a document

When editing a task, you can open attached documents for editing.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document you want to edit.
4. Click  **Actions**.
5. Click  **Open document**.
6. Save the document on your hard drive.
7. Navigate to the location where you saved it, open the document, and edit it.
8. Save the document.

You can now upload (page 790) the modified document and move it to ARIS document storage.

7.1.10.3.2 Upload document

You can upload documents. We strongly recommend that you check documents for malicious software before uploading.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Click  **Upload**. The Upload document dialog opens.
4. Click **Upload**.
5. Navigate to the document you want to upload and select the document.
6. If the dialog stipulates that an uploaded document is to be saved permanently in ARIS document storage, select the appropriate location. If this is not the case, this option is not offered and the location cannot be changed.
7. Click **OK**.

The document is uploaded.

7.1.10.3.3 Check out document

You can download (page 795) documents.

Prerequisite

The document is saved in ARIS document storage.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Click  **Actions**.
4. Click  **Check out document**.
5. Select the document you want to download.
6. Specify a local directory on your hard drive.

The document is downloaded and saved locally. The document is also locked in ARIS document storage.

7.1.10.3.4 Remove document

You can remove added documents when editing a task.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document you want to remove.
4. Click  **Remove**.

The document is removed from the list. ARIS document storage is not affected by this action.

7.1.10.3.5 Lock document

You can lock a document in ARIS document storage and thus prevent it from being edited by another user.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document you want to lock.
4. Click  **Actions**.
5. Click  **Lock** in the list.

The selected document is locked for editing by other users.

7.1.10.3.6 Unlock document

If you locked a document to prevent it from being edited by other users you can unlock it again so that other users can work with the document again. A Process Governance administrator can unlock any locked document in ARIS Architect.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document you want to lock.
4. Click  **Actions**.
5. Select  **Unlock** from the list.

Other users can edit the document.

7.1.10.3.7 Display document details

You can view the properties (metadata) of a document.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document whose details you want to display.
4. Click  **Actions**.
5. Click  **Properties** in the list. The **Properties** dialog opens.

The properties (metadata) of the document are displayed, for example, change date, title, and description.

7.1.10.3.8 Edit document properties

You can edit the properties of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Edit the document properties, for example, change the description.
6. Click **OK**.

You have edited the properties of the document.

7.1.10.3.9 Select document owner or responsible

You can edit the properties of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Open properties**.
6. Next to the **Owner** box, click  **Edit**.

The **Select owner** dialog opens. Start typing a user name. User names which contain the string you type are displayed. Select a user and click **OK**.

You can select the person responsible for the document.

7.1.10.3.10 Move document to ARIS document storage

You can move a temporary document to ARIS document storage and thus save it permanently.

Prerequisite

The document is already uploaded as a temporary document.

Procedure

1. Select the task you want to edit in the list.
2. Click **Edit**. The dialog for editing the task opens.
3. Select the document that you want to move to ARIS document storage.
4. Click  **Actions**.
5. Click  **Move to ARIS document storage**.

The document is saved permanently in ARIS document storage until it is deleted.

7.1.10.3.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.1.10.3.11.1 Tags

Option for supplementing data with additional information in data processing and IT.

The word tag is used in the sense of a label, marker or identifier. Tags can be used in search queries, for example.

7.1.10.3.11.2 What are temporary documents?

Temporary documents are documents that were not explicitly uploaded to ARIS document storage, but added to the process during process instance runtime, for example, by adding an attachment to an e-mail. They are saved in the system in a particular safe location and are deleted when the process instance is completed.

Temporary documents can be uploaded (page 790) to ARIS document storage to become permanent documents.

7.1.10.3.11.3 What is checking in and checking out?

Checking out means copying a document from the ARIS document storage to a local drive and edit it. The document is locked for other users until it is checked in again.

Checking in means saving the new version in ARIS document storage after editing. The user enters a description of the change list that describes the changes. After checking in the document, another user can check it out again for editing.

7.1.10.3.11.4 Which documents can be found using the full text search?

The full text search can search all kinds of documents, including graphics. The following formats can be searched:

- XML files and documents with an XML-like structure
- Microsoft® Office documents
- Documents in OpenOffice format **OpenDocument** (file extension **.odf**)
- PDF documents
- Documents in electronic publication format (**epub**)
- RTF documents
- Text files
- Compressed formats (such as **zip**); the archive is unpacked and the documents contained are searched.
- Audio formats (such as **mp3**), Metadata will be extracted.
- Graphic formats (such as **jpeg**), Metadata will be extracted.
- Video formats (such as **flv**), Metadata will be extracted.
- Documents in **mbox** format. E-mails are extracted and searched.

7.1.10.4 Select executor dialog

Specifies the user for whom you want to perform the action.

Find

For finding a specific item. Enter the first characters of the group, user ID, first name, or last name, and click **Find**.

Search result

Indicates the number and names of the items found by the current search. To select a group or user, double-click the relevant element. If you select a group, you also need to select a user.

7.1.10.5 Change user dialog

Changes the user so that actions can be performed for that user.

Find

For finding a specific item. Enter the first characters of the group, user ID, first name, or last name, and click **Find**.

Search result

Indicates the number and names of the items found by the current search. To select a group or user, double-click the relevant element. If you select a group, you also need to select a user.

7.1.10.6 Delegate dialog

Defines the user to whom the task is to be delegated.

Find

For finding a specific item. Enter the first characters of the group, user ID, first name, or last name, and click **Find**.

Search result

Indicates the number and names of the items found by the current search. To select a group or user, double-click the relevant element. If you select a group, you also need to select a user.

Comment

Adds a comment to the delegated task, such as a reason or notes for the new executor.

7.1.10.7 Add document dialog - Find

You can search for a document.

Search filter

Used for entering a search term.

Find

Starts the search. You can also start searching by pressing **Enter**.

Documents found

Displays the documents that match the search criteria.

Selected documents

Displays the list of documents already included in the selection.

7.1.10.8 'Upload document' dialog

Enables the upload of the required document.

File

Enter the name of the file. To search your file system, click  **Browse**.

Location

Enables you to select the location where files are to be saved in ARIS document storage. Click the small right arrow in order to navigate to further subfolders. To browse, click  **Browse** next to the box.

Comment

Enables you to enter a comment that will be displayed in the **Document versions** dialog.

Title

Used to enter the title of the document to be uploaded.

Description

Used to enter the description of the document to be uploaded.

Tags

Displays tags, if they exist. You can add new tags and edit or delete existing ones.

Enter suggestions here

Used to enter new tags. Press Enter to transfer the new tag.

Delete individual tag

Click  **Delete** to delete an individual tag or selected tags for this document. Multiple selections are allowed.

Delete all tags

Click  **Delete all tags** to delete all tags for this document.

Find

Click  **Find** to search for corresponding tags for this document in your ARIS document storage.

7.1.10.9 Select document dialog - Explorer

Enables selection of the documents you want to add. Multiple selection is possible. Double-click to add a single document to the selection.

Properties ()

Opens the **Document properties** dialog. This dialog displays document properties, such as file name, version, and file type.

Versions ()

Displays the current version of the document. During a new upload of the document the last number is increased. When the document status is changed, the number in the middle is increased. The states **Approved**, **Rejected**, **In process**, and **To be approved** exist.

Add to selection ()

Adds the selected document to the document selection.

Open ()

The document opens if the software required for opening the document is available on your local system.

Upload document ()

Opens the **Upload document** dialog.

Add folder ()

Adds a new folder below the selected one.

Clear selection ()

Clears the selection. All documents are removed from the selection.

Remove document ()

Removes the selected document from the selection. Multiple selection is possible. Select adjacent documents by holding down the Shift key and clicking the first and last document. Select individual objects by holding down the Shift key and clicking the relevant documents.

Selected documents

Displays the list of documents already included in the selection.

EXPLORER TAB

Click the small right arrow in order to navigate to further subfolders.

Selected documents

Displays the list of documents already included in the selection.

FIND TAB

Find what

Enables you to enter a term that occurs in the title, file name, description, or tags (page 795) of the document.

Area

Enables you to restrict the search. For example, you can search only the metadata of the documents or just their contents.

Search result

Displays the documents that match the search criteria.

7.1.10.10 Document versions dialog

Displays the list of document versions.

Properties

Opens the **Document properties** dialog. This dialog displays document properties, such as file name, version, and file type.

Add to selection

Adds the selected document to the document selection.

Open

The document opens if the software required for opening the document is available on your local system.

Remove revision

Removes a specific revision of a document.

Version

Displays the current version of the document. During a new upload of the document the last number is increased. When the document status is changed, the number in the middle is increased. The states **Approved**, **Rejected**, **In process**, and **To be approved** exist.

Revision number

Shows the number of the revision for the selected document. Each time a document is checked out and changed, a new revision number is assigned.

Size

Displays the size of the file.

Changed on

Displays the change date of the respective document version.

Changed by

Displays who edited this version of the document.

Change description

Used for changing the descriptive text of the selected document version.

Selected documents

Displays all documents already selected.

7.1.10.11 Select person responsible dialog

Displays all ARIS Server users.

Enter term

Serves to enter the initial letters of a user name. Only those users whose user name starts with the letters you entered are displayed in the list.

User name

Displays the user names.

Full name

Displays the full name of the user.

7.1.10.12 Upload location dialog

Specify the folder in ARIS document storage in which you want to save the document.

Properties

Displays the folder's properties, for example, access privileges.

New folder

Creates a new folder.

Rename folder

Enables you to rename a folder. To rename a folder, you can also select a folder and press the F2 key.

7.1.10.13 'Select folder' dialog

Enables you to enter search criteria for the document. You can only search for or navigate in the permanent documents for which you have read privileges. Click the small right arrow in order to navigate to further subfolders.

New folder

Creates a new folder.

Rename folder

Enables you to rename a folder. To rename a folder, you can also select a folder and press the F2 key.

7.1.10.14 Browse tags dialog

From the available tags, select those you want to use for marking the document.

Browse tags

Used for entering a search term to restrict the number of the tags (page 795) displayed existing in the system. When you enter the first letters the display is restricted to the tags that fit your input.

Tags found

The tags that the search criteria apply to are displayed. Double-click a tag to add it to the selection.

Selected tags

Displays the tags the document is marked with. Double-click to add more tags to the selection.

7.1.10.15 Specify substitution dialog

Specifies the options for selecting a substitute for the current user.

Active

Activates the substitute with the options defined.

Start date

Defines the date from which the substitution is active.

End date

Defines the date on which the substitution will cease to be active.

User group

Displays the user group of the user selected as substitute.

Executor

Specifies the executor who is to assume the duties of substitution.

Delete

Deletes the substitute in the selected row from the table.

7.2 Use the Catalog



The  **Catalog** shows descriptions of business processes, roles, documents, and IT systems in tables. Depending on the selected context, you can list persons responsible, departments, business processes, and occurrences in business processes.

Business processes		Roles	Documents	Systems
Name	Description	Responsible		
Acquire and implement	Acquire and implement consists of: <ul style="list-style-type: none"> ▶ Identify automated solutions ▶ Acquire and maintain application software ▶ Acquire and maintain technology infrastructure 	ethan.owner		
Apply for financing	This model describes how to process an application for financing	ethan.owner		
Billing	Billing consists of: <ul style="list-style-type: none"> ▶ Vehicle billing ▶ Accounts receivable management ▶ Pay cash 	ethan.owner		
Billing (to-be)	Billing (to-be) consists of: <ul style="list-style-type: none"> ▶ Vehicle billing (to-be) ▶ Account receivable management ▶ Pay cash 	ethan.owner		

1 2 3 4 5 6 7 8 9 10

Click an entry to navigate. The corresponding fact sheet opens.

7.2.1 Choose items starting with the same letter

You can reduce the number of items shown in the catalog table.

Prerequisite

Catalog letters can be displayed for the chosen language. If you, e. g., select Japanese it is not possible to display the large amount of letters available.

Procedure

1. Click  **Catalog**.
2. Click  **Catalog letters** in the **Name** cell of the table header. The **Catalog letters** bar opens.

▲ Name  ▼	Description
All A B C D E F G H I J K L M N	
E2E sales auto-generated tests	
E2E sales tests	
Execute billings	This process describes how to execute billings

3. Click the relevant letter.

Only items starting with the letter chosen are shown.

7.2.2 Filter catalog items based on name, description, and responsibility

You can reduce the number of items shown in the catalog table.

Procedure

1. Click  **Catalog**.
2. Click  **Filter** in the table header. The text boxes to filter the list are opened.

▲ Name  ▼	Description  ▼	Responsible  ▼
<input type="text" value="Car"/>	<input type="text"/>	<input type="text"/>

3. Enter the relevant terms in one or more fields.

All items are listed whose attribute content contains a word beginning with the term entered. You can narrow down the search by entering terms in more than one text box.

7.2.3 Remove catalog filter

You can easily remove the catalog filter.

Prerequisite

You have filtered the catalog content (page 804).

Procedure

Click  **Filter** in the table header. The text boxes to filter the list are closed and all glossary items are shown.

You have removed the catalog filter.

7.2.4 Choose a catalog page

If not all catalog entries fit on one page, you can switch to the page that contains the relevant catalog entry.

Procedure

1. Click  **Catalog**.
2. Click the relevant page number at the bottom of the page.

Car loan application	This process describes the functions necessary to create a car loan application. There are different organizational units involved, such as "Local dealership sales rep", "Credit check employee" and "Credit processing employee". The process is supported by three business services for automatic execution.	ethan.owner
1 2 3 4 5 6 >		

All items of the selected page are listed.

7.3 Collaborate with users



Collaboration is the platform for cooperation across teams. With Collaboration, information can be exchanged faster, knowledge can be shared, and cooperation across borders is improved.

7.3.1 Getting started

These five steps are an optimal start to Collaboration.

Prerequisites

- Collaboration is activated in ARIS Administration configuration.
- You have at least the **ARIS Connect Viewer** license privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Edit (page 807) your user profile.
2. Search (page 808) for groups and people who provide interesting content.
3. Create filters and check (page 813) for new information.
4. Comment on (page 811), share, flag posts, etc.
5. Invite (page 816) others to Collaboration.

You started using Collaboration to exchange information, share knowledge, etc.

7.3.2 Open Collaboration

Open Collaboration to exchange information, share knowledge, etc.

Prerequisites

- Collaboration is activated in ARIS Administration configuration.
- You have at least the **ARIS Connect Viewer** license privilege.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Collaboration**.

Collaboration opens.

7.3.3 Edit your Collaboration user account

Specify your user profile to provide other users with information about your areas of activity and your interests.

Prerequisite

You have at least the **ARIS Connect Viewer** license privilege.

Procedure

1. Click **<user name>** on the left, then click **Edit profile** on the right. Your profile page for Collaboration is displayed.
2. Upload a picture in JPG, PNG, or GIF format, with the specified maximum size.
If your user profile in ARIS Administration already includes a picture, it is also displayed in Collaboration. If a different picture is uploaded in ARIS Connect or in Collaboration, it is automatically transferred to the other application.
3. Click **Edit** to specify the trimming and size of the picture for Collaboration.
4. Select the preferred picture trimming by dragging the picture with the mouse.
5. Enlarge (+) or reduce (-) the picture.
6. Click **OK**.
7. Enter the title of your position in the company.
8. Describe your activities.
9. Specify keywords that will enable colleagues looking for particular information or expertise to find you. Use a comma as the separator.
10. Enter your telephone number.
11. Specify whether colleagues should be able to post information (**Allow others to post to my feed**) and submit comments (**Allow others to comment on activities in my feed**) in your feeds. To do this, enable the check box for the relevant option.
12. Click **OK**.

Your profile is changed. The information is now available to other users.

7.3.4 Find users and groups and follow their feeds

Look for colleagues or groups to find interesting contacts and information.

Procedure

1. Enter the name of the user or group in the global  **Search** box at the top right. The search results are displayed during input.
2. Continue entering characters until the relevant user or group is displayed.
3. Click the name you are looking for. The profile of the user or the group is displayed with all posts.
4. For users and public groups, click **Follow**. For private groups, click **Send request**. (Private groups are identified as follows: )

When you follow users, you have access to the posts that they publish in their feeds. In private groups, a coordinator must confirm your request before you are allowed access to this group's posts, comments, etc. In public groups you have immediate access to the group. The feeds you follow are displayed under  **My feed** and the groups you follow under **Groups**. To stop following a user or group, click **Unfollow** in the user or group profile. Users who are following your feeds are displayed under **Followers** in your profile. Users and groups you are following are displayed under **Following** in your profile. Activities of deleted and anonymized users are shown with **Anonymized user**.

Tip

- To find groups, you can also use the group search function (**Groups** >  **Find groups** > **All groups**).
- Alternatively, you can find out which groups and feeds another user follows from the user's profile ( **Search** > **User XY** > **Following**).
- You can also use the global search to search for keywords, in order to find interesting feeds, users, and groups.

7.3.5 Follow and comment on content in the portal as a user

Follow interesting content in the portal to be informed about updates, etc., in Collaboration.

Prerequisite

You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Open the process you want to follow.
2. Click  **Collaboration** in the bar panel if the bar is not activated yet.
3. Click **Follow**.
4. To comment, write or copy your text into the input box. Up to 2000 characters are available.
5. Click  **Tag**.
6. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
7. Click  **Link**.
8. Insert a link to a Web site that contains more detailed information.
9. Click **Add link**. The link is checked and added.
10. Click  **File**. The **Select document** dialog is displayed.
11. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
12. Select the file you want to upload and enter the relevant additional information.
13. Click **Upload**.
14. Enable the check box of the document you want to add to your post.
15. Click **OK**.
16. Click **Post**.

Your comment is posted, and the processes you follow are displayed under  **My portal feeds** in Collaboration. To stop following content, click **Unfollow** in the row of the relevant content.

7.3.6 Publish posts

Post information that could be of interest to your colleagues, or start a discussion on a particular topic.

Prerequisite

You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Click  **My feed**, the profile of the relevant user, the relevant group, or  **All company feed**, depending on whether the information is to be displayed only to those users who follow your feeds, only to the members of a certain group, or to all users. If you post information to All company feed, it is possible that your information will not be seen by the relevant users, as some users do not use **All company feed** due to the large number of posts and the associated complexity.
2. Enter or copy your text into the text box. Up to 2000 characters are available.
3. To create a link to another user in the text, enter an '@' at the relevant point in the text, immediately followed by the name of the user. The search results are displayed during input.
4. Continue entering characters until the relevant user or group is displayed.
5. Click the name you are looking for.
6. Click  **Tag**.
7. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
8. Click  **Link**.
9. Insert a link to a Web site that contains more detailed information.
10. Click **Add link**. The link is checked and added.
11. Click  **File**. The **Select document** dialog is displayed.
12. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
13. Select the file you want to upload and enter the relevant additional information.
14. Click **Upload**.
15. Enable the check box of the document you want to add to your post.
16. Click **OK**.
17. Select the target group (page 821) by entering the first letters of the relevant group, then select one of the options displayed. By default, a new post is public.
18. Click **Post**.

Your post is published. If you published something in your feed, the text is also displayed in the company feeds. If you posted something to another user's feed, this post is also displayed in the company feed and if you are following the other user's feed, this post is displayed in your feed as

well. If you published a post in a private group you are a member of, the post is shown only to group members.

To remove the post from your feeds, click **Delete**. Administrators can delete posts made by all users.

7.3.7 Comment on, share, flag posts, etc.

Depending on whether a post is your own or from another user, you can perform different actions.

Prerequisites

- The Like button, commenting on and sharing content, creating bookmarks, and flagging posts are enabled in ARIS Administration configuration.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Open the page containing the relevant post.
2. Click  **Like** to show other users what interests you. The user who wrote the post receives a notification, if they have the relevant notification setting. The post is also flagged accordingly and added to your filter. To cancel your Like, click  **Unlike**.
3. Click  **Comment** to enter a comment or further information for a post. You can also add a link to a Web site.
4. Click  **Share** to comment on a post by another user and publish it in your own feed. To remove the post from your feeds, click **Delete**. Administrators can delete posts made by all users.
5. Click  **More > Bookmark** to add a post to your filters, so that you can easily find it again (**Filters >  My bookmarks**).
6. Click  **Edit** or  **More > Edit** to change or correct a post or comment you already published. Editing is possible as long as no other user has liked or commented on your post or comment yet.
7. Click  **More > Flag** if you want the Collaboration administrator to review a post you think is inappropriate.

Depending on the selected action, the affected users receive a message by e-mail.

7.3.8 Add documents to posts

You can use documents from ARIS document storage in your posts. Use documents that have already been uploaded to ARIS document storage or upload new documents yourself.

Prerequisite

Using documents from ARIS document storage is enabled in ARIS Administration configuration.

Procedure

1. Add your post (page 810) or comment to the relevant feed (👤 **My feed**, 👤 **All company feed**, or your group feeds).
2. Click  **File**. The **Select document** dialog is displayed.
3. Click  **Upload new document** to upload one of your own documents. The corresponding dialog opens.
4. Select the file you want to upload and enter the relevant additional information.
5. Click **Upload**.
6. Enable the check box of the document you want to add to your post.

You have added a document to your post.

7.3.9 View notifications and specify settings

Read your internal notifications and specify the situations in which you want to receive a notification about activities in Collaboration as well as the notification frequency.

Procedure

1. Click  **1 View notifications**. Your notifications are displayed. Various filters provide you with a better overview, for example, **All**, **Unread**, **Read**.
2. Click **Change your notification settings**. Your notification settings are displayed.
3. Specify the situations in which you want to be informed about activities by other users, groups, or portal feeds. In each case, decide whether you want to receive the notification as an internal notification in Collaboration (**In-app**), or as an **E-mail**.
4. Specify the e-mail notification frequency, for example, **Daily digest**. If you do not want to receive e-mail notifications, select **Never** for the relevant situation.
5. Click **OK**.

Your settings are saved. From now on, you will be notified according to your specifications. The time for daily digest e-mail and the day for weekly digest e-mail are defined by the Collaboration administrator.

7.3.10 Define filters

Define custom filters to find interesting posts quickly and easily using keywords or to gain a better overview.

Prerequisite

Creating filters is enabled in ARIS Administration configuration.

Procedure

1. Click  **Create filter**. The form for creating a filter opens.
2. Select the relevant filter criteria, for example, whether you want all feeds or only feeds you follow to be included in the filter.
3. Enter a name for the filter.
4. Specify the keywords that can be used to find relevant posts. Use a space to separate the keywords.
5. Click **OK**.

The filter is saved and is displayed under **Filters**. Click the filter name to display the posts that contain the specified keywords.

To change a saved filter, click  **Filter XY** >  **Edit filter**. To delete filters that you no longer require, click  **Delete filter**.

7.3.11 Use tags

Use tags to categorize posts using keywords. This enables other users to find posts on interesting topics more easily.

Prerequisite

Creating tags and filtering using tags are activated in the ARIS Administration configuration.

Procedure

1. Add your post (page 810) to the relevant feed ( **My feed**,  **All company feed**, or a group feed).
2. Click  **Tag**.
3. Enter the words to be used as keywords (page 822) in the tag input box, for example, BPM. Alternatively, select an existing tag from the list of tags. It is displayed as soon as you enter a letter that is part of an existing tag. Press **Enter** after each keyword.
4. Click **Post**.

Your post is published. The keywords entered as tags are shown below the post. You can add or delete tags at any time.

7.3.12 Filter feeds by means of tags

Use tags (page 822) to filter feeds using keywords.

Prerequisite

- Creating tags and filtering using tags are activated in the ARIS Administration configuration.
- There are tags for the feed.

Procedure

1. Open the relevant feed overview (👤 **My feed**, 👤 **All company feed**). The tags are displayed above the feeds.
2. Click the tags for which you want to see posts. You can combine multiple tags. Activated tags are indicated in color.

You are shown the posts containing the tags selected.

To cancel the filter, click the selected keywords again.

7.3.13 Use hashtags

Use hashtags (page 822) to categorize posts using keywords or topics. This enables other users to find posts on interesting topics more easily.

Procedure

1. Add your post (page 810) or comment to the relevant feed (👤 **My feed**, 👤 **All company feed**, or your group feeds).
2. Enter the word to be used as a keyword, preceded by a # symbol, for example, #BPM, or enter a sentence. Alternatively, select an existing hashtag from the list.
3. Publish (page 810) the post.

Your post is published and the keyword entered as a hashtag is highlighted in color as a link. Tags are automatically created for hashtags so that they can be used to filter feeds.

If a user clicks the hashtag, all post and comments subsequently entered are displayed on a separate page. A hashtag can be saved as a filter (page 813). You can then use the same hashtag in the filter definition, for example, #BPM.

7.3.14 Find help

In addition to this online help, there are various ways you can find support in Collaboration.

Procedure

Publish a post containing your question and use the hashtag (page 822) **#Help**.

This keyword enables other users to find and reply to your question. Alternatively, contact your system administrator.

7.3.15 Work with groups

7.3.15.1 Create a group

Create your own group if you cannot find any interesting groups or you need a group for your team. Groups enable users to collaborate in a team and to participate in a special interest group or a particular topic.

Prerequisite

Creating groups is enabled in ARIS Administration configuration.

Procedure

1. Click **+ Create group**.
2. Enter the name of the group and the short name.
3. Describe the group's interests, so that your group can be found by other users. The best way to do this is to use keywords.
4. If necessary, specify an additional coordinator who will manage the group profile and privileges (**+ Add coordinator**).
5. Enable the relevant privacy option (**Public/Private**). After saving the group, you cannot change this option.
6. For private groups, you can follow portal feeds (page 817).
7. Click **OK**. The group is displayed in your groups list.
8. To remove the group from your groups list, click **✦ Unpin** next to the group's name. This is useful to provide a better overview if you are following a lot of groups.

The group is created. Depending on your decision, the group is displayed or not under **Groups**. Using tags, other users can find the group and follow its posts. In private groups, only members are able to read the posts. The group's name and description will, however, be visible in search results for non-members, as well.

7.3.15.2 Edit or delete a group

Change the details of a group, if the information is outdated. Delete an unused group, for example, to provide a better overview.

Prerequisite

You are the coordinator of the group.

Procedure

1. Under **Groups**, click the group that is to be edited.
If the group is not displayed in your groups list because it is unpinned (page 816), click **Find groups** and then the relevant group.
The **Edit group** form is displayed.

2. Change the relevant information, such as name, description, keywords, etc.
3. If necessary, specify an additional coordinator who will manage the group profile and privileges (**+** **Add coordinator**).
4. For private groups, you can follow portal feeds (page 817).
5. Click **OK**.

Your changes are saved.

7.3.15.3 Unpin and pin your groups

Decide if groups you are following should be displayed or not in your groups list. This is useful to provide a better overview if you are following a lot of groups.

Procedure

1. To remove a group from your list, move the mouse pointer over the group name you want to unpin from the list.
2. Click **✖ Unpin**. The group is removed from the list.
3. To display a group in your groups list, click **Find groups** and then the relevant group. The **group** is displayed.
4. Click **★ Pin** next to the group's name. The group is displayed in your groups list.

Depending on your decision, the group is displayed or not under **Groups**.

7.3.15.4 Invite other users to join a group

Invite other users to become a member in a specific group.

Procedure

1. Activate the group you want to issue an invitation for.
2. In the **Add colleagues** box, enter the name of the person you want to invite.
3. Click **Add**.

The user receives a notification that they have been invited to join a private group. This user can then request membership of the group (**🔍 Find groups > Send request**). If the group coordinator approves (page 818) the request, the user can read the posts, comments, etc., by this group, and can himself post content in the group.

Group coordinators can add more users to a group directly (**Add colleagues**). That user immediately becomes a member of the group and receives the posts, comments, etc., by the group (**👤 My feed**).

7.3.15.5 Follow portal contents as a group

Follow interesting content for private groups in ARIS Connect to be informed about updates, etc., in Collaboration. This enables a private group, for example, a project team, to jointly discuss and edit relevant processes.

Prerequisites

- The group is a private group.
- You are the coordinator of the group.
- The item from ARIS Connect must be followed as a portal feed in Collaboration.
- You have the required access privilege (page 598) in ARIS Architect.

Procedure

1. Under **Groups**, click the group that is to follow portal feeds.
If the group is not displayed in your groups list because it is unpinned (page 816), click **Find groups** and then the relevant group.
2. Click **Edit group**.
3. Click **Follow portal feeds**. The **Find portal feed** dialog opens.
4. Enter a search term for finding the portal feed. Please ensure that the spelling is correct.
5. Click **Find** or press **Enter**.
6. Click the required portal feed in the search result.
7. Click **OK** in both the dialog and the group.

Using the **Following** button, the group can view the portal feed. Comments, etc., are shown directly in the group. To unsubscribe a group from a portal feed, the group coordinator removes the portal feed from the list of feeds followed by the group (**Group XY > Edit group > Followed portal feeds > Delete**).

Users of the group are notified when the portal feed has changed or comments have been added to it.

7.3.15.6 Edit requests to join private groups as a coordinator

Edit requests for group memberships.

Prerequisite

The group is a private group you are the coordinator of.

Procedure

1. Open the group.
2. Click **Requests**. The user requests are displayed.
3. For each request, click **Approve** or **Deny**.

If the user was accepted as a group member, the user will be notified accordingly and displayed in the list of followers. If the user was denied membership the user and all other group coordinators receive a corresponding notification.

7.3.15.7 Grant/revoke group users coordinator privileges

Grant additional group members coordinator privileges or revoke them from them.

Procedure

1. Open the private group.
2. Click **Followers**. The members of this group are displayed.
3. In the row for the group member you want to grant/revoke coordinator privileges to/from, click **Grant** or **Revoke**. The button always shows the command that can be executed next, that is, **Revoke** if the user has administrator privileges, and vice versa.

The user is granted coordinator privileges (page 823) or they are withdrawn. The user receives a notification. If a user is granted coordinator privileges all other coordinators of the group receive a notification, as well.

A coordinator can cancel group membership only if another coordinator withdraws the coordinator privileges from the user first.

Tip

The **Remove** button removes the user from the group. The **Revoke** button revokes the user's coordinator privileges.

7.3.16 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.3.16.1 Keyboard shortcuts for Collaboration

The following shortcuts are available in Collaboration (page 806).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus in the program.

Shortcut	Action
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
End	Moves to the lower entries if they cannot be displayed completely due to the window size or the screen resolution.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Home	Moves to the upper entries if they cannot be displayed completely due to the window size or the screen resolution.
Tab	<ul style="list-style-type: none"> Focuses the next control in the navigation or enters the next input field. Jumps from the Comment box to the  Tag,  Link, and  File symbols that you can use to attach tags, links, or files to your comment. It also jumps to the other input fields and to the Post button.
Shift + Tab	Focuses the previous control in the navigation or enters the next previous input field.
Right arrow/ Left arrow	Moves the cursor in input fields through the text.
Up arrow/ Down arrow	Moves the selection of items in lists.
Enter	<p>Opens the attachment fields and places the cursor in the input field if the Tag or Link symbol is selected. Opens the Select document dialog when the File symbol is selected.</p> <ul style="list-style-type: none"> Posts the comment when the Post button is selected. Executes the focused button. Opens the dialog/the selection list of the focused item.
Ctrl + Enter	Posts a comment when the Post button is active.

7.3.16.2 What is a feed?

Feeds contain the posts (page 810) in Collaboration, which for example, can be commented (page 811) on. The posts are categorized as follows:

-  **My feed**
Shows the posts and comments by the users from Collaboration whose feeds you follow.
-  **All company feed**
Shows all posts and comments by users and public groups from Collaboration.
-  **My portal feeds**
Displays a linked list of the portal feeds you follow. Portal feeds are only available if Collaboration is used within ARIS Connect.

7.3.16.3 How can users automatically follow content?

These options enable users to automatically become followers.

POSTING OR COMMENTING ON FEEDS

If **Automatically follow users/Automatically follow groups/Automatically follow models** is enabled in the configuration (**ARIS Administration > Collaboration > General settings**), you automatically become a follower of users, groups, or models, by posting or commenting on their feeds. To stop following this content, click **Unfollow**.

PERSON RESPONSIBLE

If a user name is set for the **Person responsible** model attribute of a model in an ARIS database, this user automatically becomes a follower of this model. Once automatic following is activated in Collaboration (**ARIS Administration > Collaboration > Configure database**), this user sees all model activities in **My feed**, and receives notifications about them. However, this only applies if this user has at least the **Read (r---**) access privilege in the corresponding ARIS database.

If a different user name is set for the **Person responsible** model attribute at a later point in time, the automatic following remains activated for the previous user until this user manually stops following this model (**Unfollow**).

7.3.16.4 What does following posts mean?

When you follow users, you have access to the posts that they publish in their feeds. In private groups, a coordinator must confirm your request before you are allowed access to this group's posts, comments, etc. In public groups you have immediate access to the group.

The feeds you follow are displayed under  **My feed** and the groups you follow under **Groups**. To stop following a user or group, click **Unfollow** in the user or group profile. Users who are following your feeds are displayed under **Followers** in your profile. Users and groups you are following are displayed under **Following** in your profile.

7.3.16.5 Which target groups can be assigned to posts?

The following target groups can be selected for posts (page 810):

-  **Private**
Only the creator can see this group. You can use it to keep your own notes.
-  **Public**
All users can see this group.
-  **Public Collaboration group**
Only members of the selected public group(s) can see this group. Multiple selection is possible.
-  **Private Collaboration group**
Only members of the selected public group(s) can see this group. Multiple selection is possible, but you can assign only groups you are a member of.
-  **ARIS user group (ARIS Administration)**
Only members of the selected ARIS user group(s) can see this group. Multiple selection is possible, but you can assign only groups you are a member of.

By default, a new post is public. Any combination of ARIS user groups, public Collaboration groups, and private Collaboration group is possible. It is not possible to assign users.

In a post, you can move the mouse pointer over the group symbol () to view the names of assigned groups.

The Collaboration administrator can view all posts, even the private ones.

7.3.16.6 What does Like mean?

By clicking on  **Like** under a post, you are telling other people that you are giving this post a positive rating, but without leaving a comment. Just like a comment, this is shown along with your user name below the post. To cancel your Like, click  **Unlike**.

7.3.16.7 What is a timestamp?

A timestamp (page 811) indicates when a post was last updated in Collaboration. Example: Last update was 2 hours ago. Timestamp = **2 h**.

7.3.16.8 What is a tag?

Tags are used to categorize posts using keywords, making them easier to find (page 814). The keywords entered as tags are shown below the post. Tags are automatically created for hashtags so that they can be used to filter feeds.

7.3.16.9 What is a hashtag?

Hashtags are used to categorize posts and comments using keywords or topics, making them easier to find. The keyword entered as a hashtag is displayed as a link, highlighted in color. If a user clicks the hashtag, all post and comments subsequently entered are displayed on a separate page. A hashtag can be saved as a filter (page 813). You can then use the same hashtag in the filter definition, for example, #BPM.

A hashtag consists of the **#** character followed by a keyword or phrase. There is no space after the **#** and the phrase does not contain any punctuation marks.

Examples

#BPM

#Optimize your processes using social collaboration

7.3.16.10 What does flagging a post mean?

You can send (page 811) posts you deem inappropriate to the Collaboration administrator for review. The administrator decides whether the post will be deleted or not.

7.3.16.11 Which group types exist?

Groups can be created (page 815) for teams, departments, interest groups, topics, projects, etc. There are public and private groups. Public groups are open to all users. For private groups, a coordinator decides who is to be granted access (page 818) to the group.

7.3.16.12 Which database access privileges of ARIS Architect are relevant to Collaboration?

For some interactions in Collaboration, users need special access privileges, for example, to post on portal feeds. These access privileges are assigned in ARIS Architect. You can synchronize the privileges in Collaboration manually, after you edited them in ARIS Architect. The following database access rights are relevant to Collaboration:

- **No access (----)**
No portal content is displayed.
- **Read (r---)**
Portal content is displayed. Users can read posts added to models, and they can like, share, bookmark, tag, and flag them. However, they cannot comment on models.
- **Read + Comment (rc--), Read + Write (rw--)** (and all other types of rw access)
Portal content is displayed. Users can use all functions of Collaboration.

For detailed information about access rights, refer to the help in ARIS Architect (ARIS Configuration and Administration).

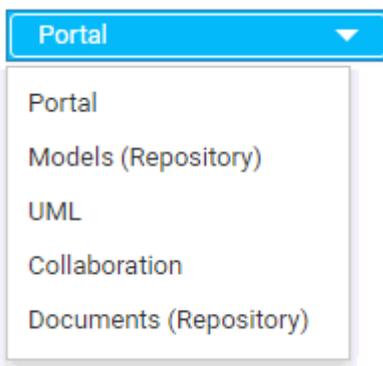
7.4 Search content



Searching in ARIS Connect enables you to conveniently find items such as models, objects, documents, groups in Collaboration, etc., throughout the system.

You can use the quick search (page 825) on the start page to access items directly. Or you can use the Search area (page 826) to define the search context beforehand and filter the search results.

The area to be searched and the search results depend on your license. If you use an **ARIS Connect Designer** license, you can access the following search context:



Models found in the **Models (Repository)** search context can be opened for editing. Models found in the  **Portal** search context can be opened read-only. Since users with an **ARIS Connect Viewer** license have only read access to models the **Models (Repository)** search context is not available to them.

7.4.1 Open Search area directly

You can open the Search area directly.

Procedure

Open Search area

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Click  **Search**.

Open Search area using the menu

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Top right, click <user name>. The menu opens.
3. Click **Search**.

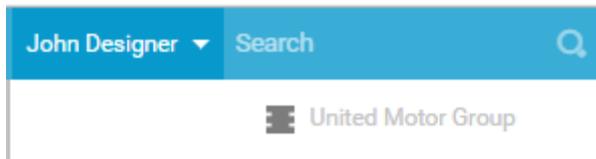
The Search area opens and you can browse ARIS Connect for the relevant terms.

7.4.2 Open Search area with term to be searched for

You can open the **Search** area using the term you want to find.

Procedure

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Click in the **Search** box.



3. Enter the term you want to find. The search list is shown.
4. Click **Show all** at the end of the list.

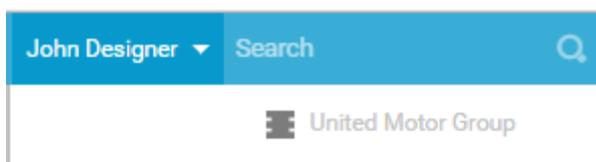
The Search area opens with the results for the term you entered.

7.4.3 Start quick search

You can begin the search for items directly on the start page of ARIS Connect.

Procedure

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Click in the **Search** box.



3. Enter the relevant term.
A list with the first results (page 833) will be shown as you enter the term. As you complete the term, the list will be updated.
4. In the list, click the entry to which you want to navigate.

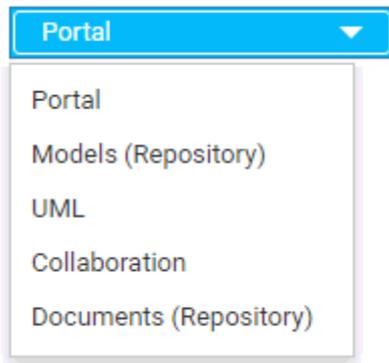
The item opens. For example, if you click the name of a model, the model opens in ARIS Connect Designer. If you click a collaboration entry, it is output in Collaboration.

7.4.4 Find using the Search area

You can use the **Search** area to find items. The Search area offers a wide range of filter options.

Procedure

1. If more than one database is provided, select the database (page 678) your search is to be based on.
2. Click  **Search**.
3. Enter the term you want to find. The items found will be presented in a list.
4. Click the down arrow that follows the term you entered and select the search context, for example, **Portal** or **Documents (Repository)**.



The search results are updated according to the search context. If filters are available for the selected context, they are listed in the **Filters** area.

5. In the **Filters** area, click the relevant filters and adjust the filter properties as necessary (page 827).

The result of the search will be updated to reflect the search context and filter criteria you specified.

7.4.5 Jump to an item found

You can use jump to items that are listed in the **Search** area.

Procedure

1. Perform a search (page 826) and filter the search result (page 827) if necessary.
2. Click the name of the relevant item, for example, the name of a model. If you performed the search in the **Model (Repository)** context (page 827), the model is opened on a new tab for editing (page 889). If you performed the search in the **Portal** context (page 827), the fact sheets of the model are opened.
3. When you reopen the Search area, the search result is still available and you can jump to another item.

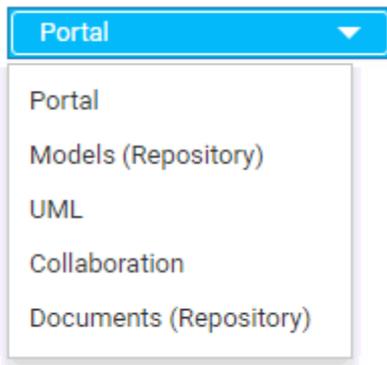
You navigated from the search result to a found item.

7.4.6 Use search context and filters

You can restrict the result in the Search area (page 826) to the items you want to find by using the search context and filters.

Procedure

1. In the Search area, click the down arrow that follows the term you entered, and select, for example, **Portal**, **Models (Repository)**, **Collaboration**, or **Documents (Repository)**.



The search result will be restricted to the range you selected. If the search result can be filtered, filter criteria will be listed in the **Filters** area.

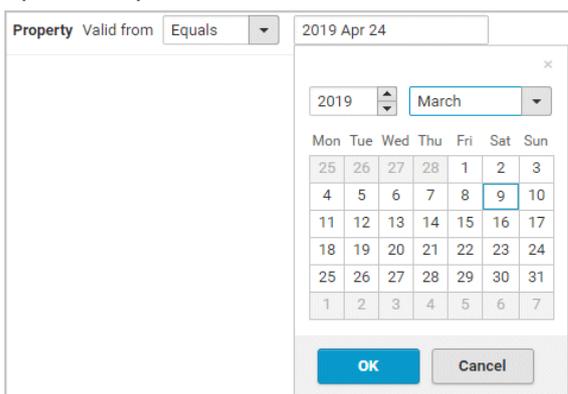
2. Click one or more filter criteria. The selected filter criteria will be listed and the search result updated. If you have selected a filter criterion that you can define more precisely, another area with subordinate filter criteria will be added to the **Filters** area.
3. Click additional criteria. The selected criteria will be displayed in the Search area and restrict the search result.
 - a. Selected filter criteria are listed:



- b. You can enter properties as the search criterion for certain filter criteria, for example, the file name:



You will be offered different input options depending on the property type. A calendar opens so you can select a date:



4. If necessary, specify the property of the search criterion.
5. To clear a selected filter criterion, click **✕ Clear**. The filter criterion will be cleared and the search result updated.
6. To see more search criteria, click **Show more** in the **⌵ Filters** area. The list will be extended.
7. To clear all filter criteria for an area, click **Clear subordinate filters**.
8. To clear all filters and base your search on other search criteria, click **Show all** in the **Filters** area. All previously selected search criteria will be cleared.

The list of results will be updated according to the search context and the selected criteria.

7.4.7 Save search settings as a favorite

In the **Search** area (page 834), you can save your search settings. Thus, you can search the content based on specific settings at any time.

Procedure

1. Select the filter criteria (page 827) to define your search.
2. Click **☆ Save search query as a favorite**. The corresponding dialog opens.
3. Enter a name.
4. Click **OK**.

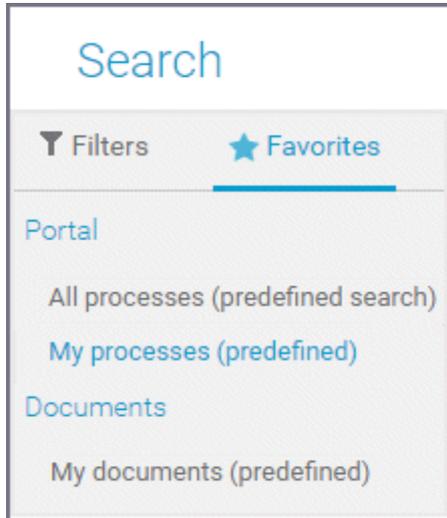
The search settings are saved in the **★ Favorites** area. You can filter the content based on these settings (page 744) at any time from various devices.

7.4.8 Use a favorite in the Search area

In the Search area (page 834), you can open a favorite setting to filter the content based on predefined filter criteria.

Procedure

1. Click **★ Favorites** in the **Filters** bar.



2. Click the favorite setting you want to use as the filter.

The filter criteria of the selected favorite setting are immediately applied and the list of filter results is updated.

7.4.9 Clear filters

You can clear filter criteria in more than one way.

Procedure

Clear a selected filter criterion

You can clear a single filter criterion.

Procedure

In the **Filters** bar, click a selected filter criterion again or click **Clear** for a filter criterion.

A screenshot of a filter criterion. It shows a dark rounded rectangle containing the text "EPC (column display)" in white, followed by a small white "x" icon in a dark circle, indicating a close or clear button.

The filter criterion is cleared and the list of filter results updated.

Clear criteria from the main filter area

You can clear all filter criteria from the main filter area. The main filter area is the upper part of the filter bar located to the left of the list of results.

Procedure

Click **Show all** in the **Filter** bar.

All filter criteria are cleared and the list of filter results is updated.

Clear filter criteria from the subordinate filter area

You can clear the filter criteria from the subordinate filter area. If you have selected the **Models** context for filtering, the subordinate filter criteria for models are located in the **Filter** access bar below the main filter area.

Procedure

Click **Clear subordinate filters** in the **Filter** bar under **Properties**.

The filter criteria of the subordinate filter area are removed and the list of filter results is updated.

Clear all filter criteria

You can clear all filter criteria.

Procedure

Click **Clear all filters** at the top right.

All filter criteria are cleared and the list of filter results is updated.

You have cleared filter criteria.

7.4.10 Open search result on separate tab

You can open the items found on a separate tab. In this way, the search result remains available, and you can process the items found one after the other.

Procedure

1. Search for an item using the Search area (page 826).
2. Hold down the **Ctrl** key, and click the name of the relevant item.

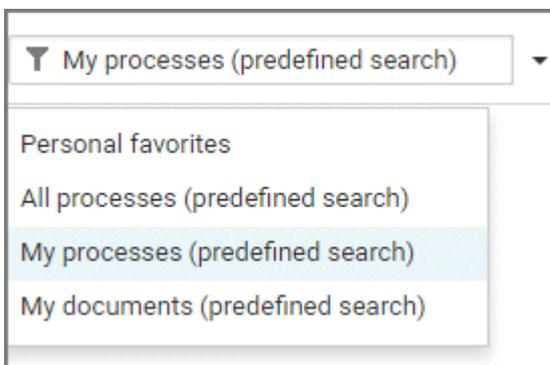
The item will open on a separate tab.

7.4.11 Use a favorite setting in the My Favorites area

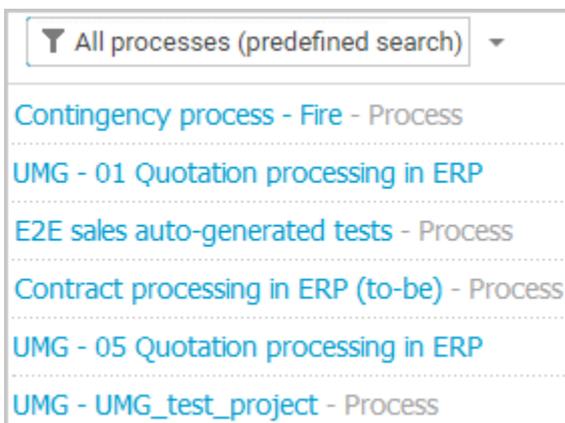
In the **My Favorites** area, you can open a favorite setting to filter the content based on predefined filter criteria.

Procedure

1. In the **Home** area, click  **My favorites**.
2. Click the  **down arrow** of the **Filter selection** field.



3. Click the context caption to select the relevant filter settings, for example, **My processes (predefined search)**. The content of the selected database is filtered.



If the filter result does not fit on one page, page numbers are displayed behind the **Filter selection** field.

4. Click the page numbers to display the content of the corresponding pages.
5. Click the name of the item. The item opens.

You have filtered database content based on your filter setting and opened one of your favorites using the **Favorites** tab.

7.4.12 Delete a favorite setting

You can delete a Favorite setting when you no longer need it. The Favorite setting disappears from the **Favorites** area of the search and from the **My favorites** area.

Procedure

1. Open the **Search** area (page 824).
2. Click  **Favorites**.
3. Move the mouse pointer over the filter to be deleted. On the right of the filter name, The  **Delete** button appears to the right of the filter name.
4. Click  **Delete**.

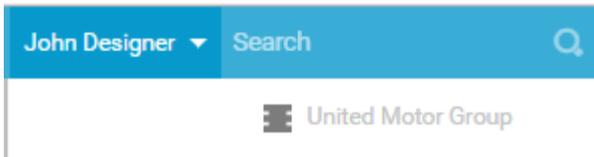
The filter setting is deleted.

7.4.13 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.4.13.1 How is the quick search structured?

Quick search consists of a single input box:



A search list is compiled and displayed as soon as you have entered a search term. The first matches are output by category:

John Designer mod	
Portal	Apply for financing Process Receipt of goods (with risks and contr... Process Receipt of goods Process Start model Default Hardware platform for firewall Default
Models (Repository)	Start model Structuring model Demo_bow_tie_model Bow tie diagram Demo_bow_tie_model_3 Bow tie diagram Demo_bow_tie_model_2 Bow tie diagram Hardware platform for firewall IT architecture matrix
UML	No results found
Collaboration	No results found
Documents	AGE_UC_Configure_tool.doc ARIS Document Storage_SharePoint.p... ARIS Server Installation and Administr...
80 matches in all categories Show all	

The total number of matches is output at the end of the search list.

To access all matches, click **Show all**. The Search area opens (page 834).

7.4.13.2 How is the Search area structured?

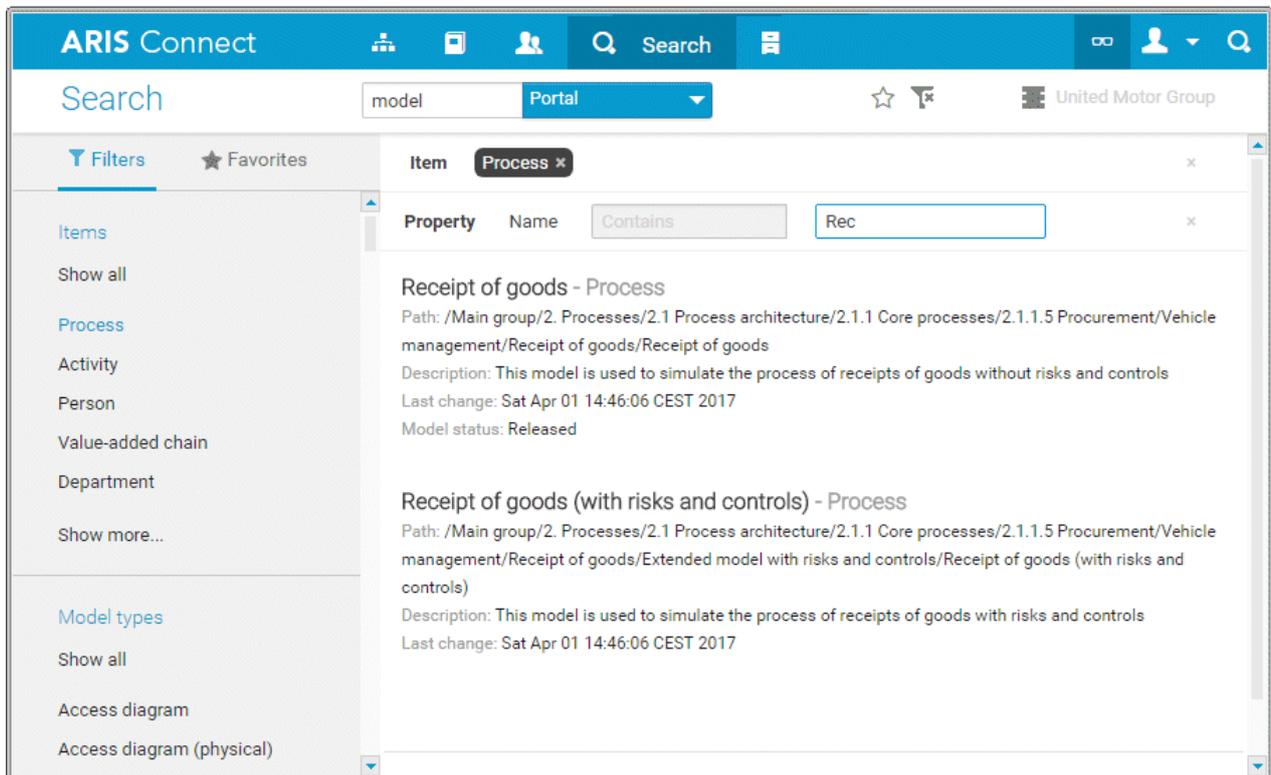
The Search area (page 824) includes a list of all matches.

To the right of the search term you entered, you can select the search context, for example, **Portal** or **Documents**.

To the left of the list, the filter criteria are offered under **Filters**. If you click the filter criteria, they are listed above the matches and restrict the list of results. Clicking a selected filter criterion again or clicking **✕ Remove** will clear the criterion. For certain filter criteria, such as the file name, you can enter properties as the search criterion, for example, a term that should be present in the name.

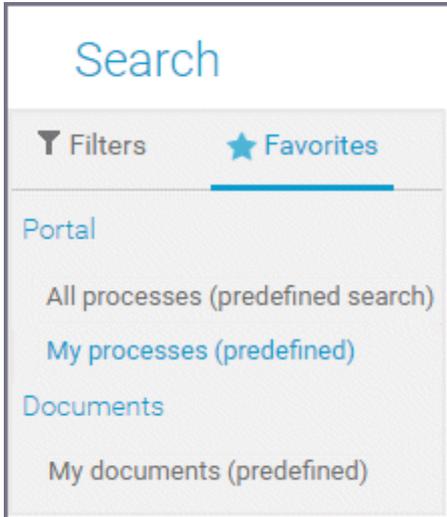
You can clear filter criteria (page 830) in several ways. You can save filter settings (page 744) and access saved filter settings (page 744) via the **Favorites** access bar.

If there are too many matches to display all at once, page numbers appear at the end of the list of results. If you click one of these numbers, the matches on that page will be output.



7.4.13.3 How are favorites in the search structured?

The **Filter** area reflects the saved search context. The search contexts are structured by captions, for example, **Portal** or **Documents**. The saved favorites are grouped under the captions. Thus, you are able to immediately recognize the search contexts of the favorites.



7.4.13.4 How can search results be influenced?

If you use quick search (page 825) or the Search area (page 826) to find items, the list of results will be influenced by the selected database (page 678) and the license you are using.

For example, if you are using an **ARIS Connect Viewer** license, the **Models** area, from which you can open models for editing in ARIS Connect Designer, will not be displayed. This area is displayed to users with the **ARIS Connect Designer** license. These users are allowed to open models for editing.

7.4.13.5 What does the search find?

The search in ARIS Connect works according to the following rules.

- In general, the search can find words and numbers. Special characters, for example, **! (\$ § % &) "** are not considered.
For example, the result of the search term **ser** is **Hardware server** and **Customer service process**.
- Special characters, for example, **! (\$ § % &) "** are not considered. Items named with special characters are found using the characters of the search terms.
For example, the result of the search term **percent** is **%Percentage**.
- The search for more than one word links the words with AND. That means that every word must be present for an item to be listed.
For example, the result of the search term **customer data** is **Customer data model, Input customer data, Create customer master data, and Data - customer model**.
- An exact search for several words is not possible.
- The wildcard ***** is ignored.
- The wildcard **question mark (?)** searches for any character except for special characters.
For example, the result of the search term **a?a** is **a1a, a2a, and aba**. The result of the search term **?per** does not list any item whose name contains **%Percentage**.
- Untitled items cannot be found. If items are untitled in the current language, but are named in the alternative language, they are found and listed in the alternative language.

7.5 Use the repository



The repository contains databases and documents etc. of the selected server.

7.5.1 Work in the repository



In databases, you can navigate to database groups and edit its content, for example, rename models and objects.

These procedures and other procedures that you can execute directly in the repository are summarized here.

Repository tree (page 852)

Group menu (page 853)

Detail view (page 852)

Item menu in the detailed view (page 854)

Item editing buttons (page 855)

Item editing buttons (multi selection) (page 855)

Repository buttons (page 856)

7.5.1.1 Create model

You can create a new model in the selected database group.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new model. When you select the group, its contents are displayed in the right pane.
5. In the upper right, click  **Create model**. The corresponding dialog opens.
6. In the **Model name** box specify the name that the new model is to be created with in the selected group.
7. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
8. Select the required model type.
9. Click **OK**.

The new model is created and saved in the selected group. A new tab with the model opens and you can model the content.

7.5.1.2 Create group

You can create a new group in which you can store models and objects.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new group. When you select the group, its contents are displayed in the right pane.
5. In the upper right, click  **Create group**. The corresponding dialog opens.
6. Enter the required name in the **Name** box.
7. Click **OK**.

The group is created as a subgroup of the selected one and you can store models and objects in it.

7.5.1.3 Refresh content of a database group

You can update the contents of the selected database to display the current contents. This is useful if several people are working in the database at the same time. For example, if someone else changes the names of groups, you can see the changes after refreshing.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select a database group.
5. In the upper right, click  **Refresh**.

The current database data is read and displayed.

7.5.1.4 Generate report for multiple elements

You can generate a report for multiple elements. Depending on the selected elements, reports are offered that provide a plausible evaluation for this context.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the group where the content you want to select is stored.
5. In the detailed view, activate the check boxes of the relevant elements.
6. Click  **Reports**. The **Reports** bar opens. The number of item for which the report is generated is shown.
7. Click the drop-down list box to display the list of available reports.
8. Leave the mouse pointer on the name of a report if you want to display its description.
9. Click the name of the relevant report.
10. Click the **Start** button if you want to output the report in the displayed format (page 734). To select a different output format, click the **Output format** field and select the format you want to use, e. g. **Output PDF**.
11. Click the **Start** button. The report is created.
12. When the report is created, the result is listed in the **Reports** bar, and a dialog to download the result opens.
13. Click  **Download result**. Depending on your browser settings, you can specify the download folder or the result is downloaded in the default download folder.
14. To download the result later, click  **Download report** in the **Reports** bar.

You have created a report for multiple elements.

7.5.1.5 Run a semantic check for models and objects

You can check one or multiple models and objects for semantic correctness.

When you run a semantic check, the previous semantic check results are deleted from the results list.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group containing the models and/or objects you want to check.
5. In the detailed view, enable the check boxes of the relevant models and/or objects.
6. Click  **Semantic checks** to open the **Semantic checks** bar. The **Semantic checks** bar displays the name of the selected item. If you have selected more than one item, the **Semantic checks** bar displays the number of selected items.
7. Click in the semantic check list box. The relevant semantic checks are listed.
8. Select the required semantic check.
9. Click **Start**. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed. The result is listed in the **Result** area and can be downloaded (page 1059) in the selected format (page 1051).

7.5.1.6 Run a semantic check for the content of a group

You can check the content of a group for semantic correctness.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group containing the models and/or objects you want to check. The **Semantic checks** bar displays the name of the selected database group.
5. Click in the semantic check list box. The relevant semantic checks are listed.
6. Select the required semantic check.
7. Click **Start**. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed. The result is listed in the **Result** area and can be downloaded (page 1059) in the selected format (page 1051).

7.5.1.7 Delete a model or an object

You can delete a model or an object from the database.

Warning

You cannot undo the deletion of models and objects.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. Move the mouse cursor over the row of the item you want to delete. The edit buttons are displayed at the end of the row.
6. Click  **Delete**. A confirmation prompt is displayed.
7. Click **OK**.

The item is deleted.

Tip

You can delete multiple items at the same time. To do this, activate two or more items and click  **Delete** that is displayed in the upper right corner.

7.5.1.8 Rename a model or an object

You can rename a model or an object.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. Move the mouse cursor over the row of the item you want to delete. The edit buttons are displayed at the end of the row.
6. Click  **Rename**. The corresponding dialog opens.
7. Overwrite the current item name.
8. Click **OK**.

The item is renamed.

7.5.1.9 Copy a model or an object into another group

You can copy models and objects and paste them into a database group.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. Move the mouse cursor over the row of the item you want to copy. The edit buttons are displayed at the end of the row.
6. Click  **Copy**.
7. Select the group in which you want to paste the model or the object.
8. Click the ▼ down arrow of the group and click  **Paste**.

If you insert a model, it is newly created, while occurrence copies (page 1175) of the existing objects are used for the objects it contains. If an object is inserted, a definition copy (page 1170) is created.

Tip

You can copy and paste either multiple models or multiple objects at the same time. To do this, activate two or more check boxes of models or objects and click  **Copy** displayed in the upper right corner. Now you can paste them into a group.

7.5.1.10 Copy one or more objects from the repository in a model

You can copy objects in the repository and paste them into a model of the same database as occurrence copies (page 1175) or as definition copies (page 1170).

Prerequisite

You have the **ARIS Connect Designer** license privilege.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. If you want to copy an object, move the mouse cursor over the row of the object. The edit buttons are displayed at the end of the row.
If you want to copy more than one object, enable the check boxes of two or more objects.
6. Click  **Copy** at the end of the row to copy an object or click  **Copy** in the upper right corner to copy multiple objects.
7. Select the model tab in which you want to paste the objects.
8. If you want to insert the objects as occurrence copies, click  **Paste** in the **Start** tab bar.
If you want to insert the objects as definition copies, click the ▼ **Paste as** down arrow to the right of the  **Paste** button in the **Start** tab bar and then click **Definition copy**.

The objects are inserted as occurrence copies or as definition copies (page 1170) and can be dragged to the corresponding positions.

7.5.1.11 Move a model or an object

You can move a model or an object to another database group of the same database.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. Move the mouse cursor over the row of the item you want to move. The edit buttons are displayed at the end of the row.
6. Click  **Cut**.
7. Select the group in which you want to move the model or the object.
8. Click the ▼ down arrow of the group and click  **Paste**.

The selected item is moved.

Tip

You can move multiple models and objects at the same time. To do this, activate two or more check boxes of models and objects and click  **Cut** displayed in the upper right corner. Now you can paste them into another group.

7.5.1.12 Show technical information for models and objects

You can show the GUID (page 1172), the type number, and the API name (page 1165) for selected models or objects. You can copy the data.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
5. At the end of the row for the relevant item, click  **More >**  **Technical information**. The corresponding dialog opens.

The GUID, the type number, and the API name for the selected model or the selected object are shown. You can copy the data. In this way, you can insert the GUID elsewhere, for example.

7.5.1.13 Go to the fact sheets of a model

You can navigate from the  **Repository** to the fact sheets (page 1171) of a model in the  **Portal**.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new model. When you select the group, its contents are displayed in the right pane.
5. At the end of the row for the relevant item, click  **More >**  **Go to ARIS Connect fact sheet**.

A new tab with the fact sheets of the model opens. The **Overview** fact sheet is activated.

7.5.1.14 Use database groups

You can use the database group functionality to manage database contents.

7.5.1.14.1 Create group

You can create a new group in the database.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new group. When you select the group, its contents are displayed in the right pane.
5. Navigate to the database group in which the relevant item is saved. When you select the group, its contents are displayed in the right pane.
6. Click the ▼ down arrow of the group and click  **Create group**. The corresponding dialog opens.
7. Enter the required name in the **Name** box.
8. Click **OK**.

The group is created as a subgroup of the selected one and you can store models and objects in it.

7.5.1.14.2 Move a group

1. You can move a database group and its contents to another group of the same database.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group you want to move. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ down arrow of the group and click  **Cut**.
6. Select the group into which you want to move the cut group.
7. Click the ▼ down arrow of the group and click  **Paste**.

The group and its contents is moved.

7.5.1.14.3 Rename a group

You can rename a group.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group you want to rename.
5. Click the ▼ down arrow of the group and click  **Rename**. The corresponding dialog opens.
6. Overwrite the current group name.
7. Click **OK**.

The group is renamed.

7.5.1.14.4 Create model

You can create a new model in the selected database group.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new model. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ down arrow of the group and click  **Create model**. The corresponding dialog opens.
6. In the **Model name** box specify the name that the new model is to be created with in the selected group.
7. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
8. Select the required model type.
9. Click **OK**.

The model is created and saved in the selected group. A new tab with the model opens and you can model the content.

7.5.1.14.5 Copy group with models

You can copy a group. The models contained in the group are also copied by this operation. Objects contained in the group are not copied. You can copy objects using the specific functionality (page 842).

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group that you want to copy. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ down arrow of the group and click  **Copy**.

The group and the contained models are copied and can be pasted (page 848) into another group.

7.5.1.14.6 Paste content in a group

You can insert models (page 842), objects (page 842), and groups with models (page 848) into a group.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group into which you want to paste content. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ down arrow of the group and click  **Paste**.

The models, objects, or groups with models are inserted into the group.

7.5.1.14.7 Import ARIS Express model

You can import a model from ARIS Express and use it in ARIS Connect. ARIS Express saves models in files of the **ARIS Document Format** format (adf).

Prerequisite

- The model is of a model type allowed by ARIS Connect and by the method filter (page 883) you are using.
- You have a **Designer** license.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to import the ARIS Express model. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ down arrow of the group and click  **Import ARIS Express model**. The corresponding dialog opens.
6. Click **Select file** and use the **File Upload** dialog to navigate to the group in which the model is stored in **ADF** format.
7. Select the relevant ADF file and click **Open**.
 - a. The selected model is imported if an ARIS Express filter or an ARIS Express template is available.
 - b. If no ARIS Express filter or ARIS Express template is available, you are asked whether you still want to import the model. Click **OK** if you want to import the model. Only after you have imported the ARIS Express filter and ARIS Express template does the model look as in ARIS Express. Click **OK** to confirm the message that some object types are represented by default symbols.
8. Use ARIS Architect to import the ARIS Express filter and the ARIS Express template if you want the imported model to appear exactly as it does in ARIS Express.

The imported model is stored in the selected group and you can open it for editing.

7.5.1.14.8 Import BPMN file

You can import (page 1022) data from a BPMN file and use the BPMN diagram that was generated by the import in ARIS Connect.

Prerequisites

- The method filter (page 883) you are using allows BPMN diagrams.
- You have a **Designer** license.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group into which you want to import the BPMN diagram. When you select the group, its contents are displayed in the right pane.
5. Click the ▼ **down arrow** and select  **Import BPMN diagram**. The corresponding dialog opens.
6. Click **Select file** and navigate to the relevant BPMN file.
7. Select the BPMN file and click **Open**. The file is parsed. If it is a valid BPMN file it is imported. The BPMN diagram is stored in the selected group, and you can open it for editing on a tab.

7.5.1.14.9 Refresh repository content

You can update the contents of the selected database to display the current contents. This is useful if several people are working in the database at the same time. For example, if someone else changes the names of groups, you can see the changes after refreshing.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Edit the relevant content.
5. Click  **Refresh** when you want to know whether other editors have edited content, added new content, renamed items, or deleted items.

The current database data is read and displayed.

7.5.1.14.10 Delete a group

You can delete a group and its contents.

Warning

You cannot undo the deletion of the group and its contents.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group you want to delete.
5. Click the ▼ down arrow of the group and click  **Delete**. A confirmation prompt is displayed.
6. Click **Delete**. If the group does not contain any items, it is deleted immediately.
7. If the group contains items, you are asked in a confirmation prompt whether you also want to delete these items.
8. Click **Yes**.

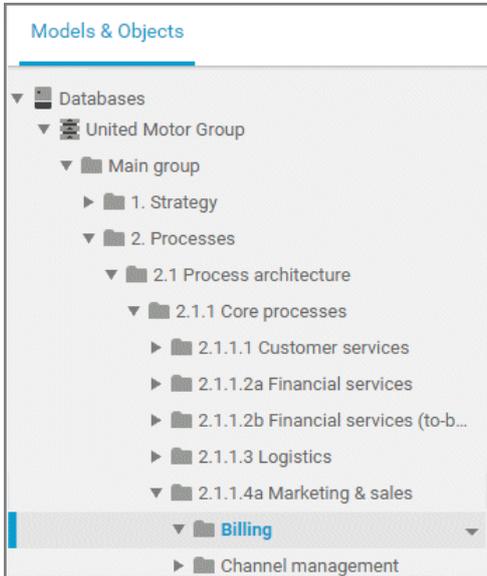
The group and its contents are deleted.

7.5.1.15 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.1.15.1 Repository tree

The repository tree contains the database content.



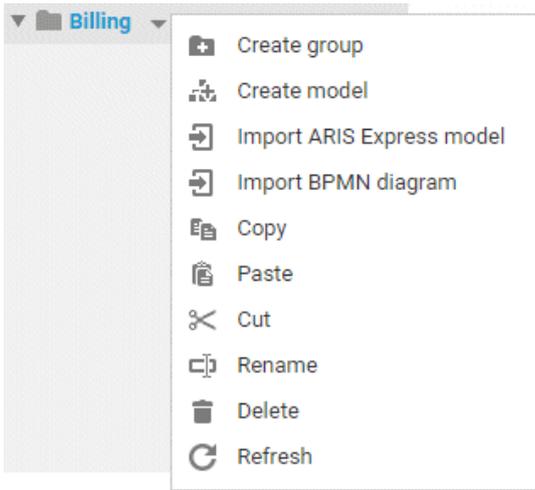
7.5.1.15.2 Detail view

The detail view displays the contents of a group.

<input type="checkbox"/>	Name	Type	
<input type="checkbox"/>	Billing Last change on 01.04.2017 14:46:06 by system	Value-added chain diagram	
<input type="checkbox"/>	Vehicle billing processing Last change on 31.08.2017 15:55:21 by system	EPC	
<input type="checkbox"/>	Accounts receivable management Last change on 14.09.2009 15:26:38 by system	Function	
<input type="checkbox"/>	Allow discount Last change on 26.03.2018 21:05:16 by system	Function	
<input type="checkbox"/>	AND rule Last change on 14.09.2009 15:26:38 by system	Rule	
<input type="checkbox"/>	Billing Last change on 03.01.2014 16:15:39 by system	Function	

7.5.1.15.3 Group menu

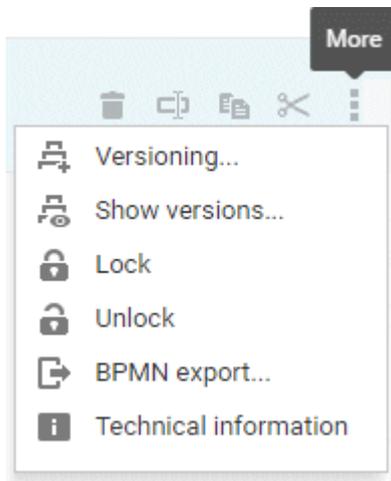
The following menu items are available for groups.



-  Create group (page 846)
-  Create model (page 847)
-  Import ARIS Express model (page 849)
-  Import BPMN diagram (page 850)
-  Copy (page 848)
-  Paste (page 848)
-  Cut (page 846)
-  Rename (page 847)
-  Delete (page 851)
-  Refresh (page 850)

7.5.1.15.4 Item menu in the detail view

Items of the detail view have the following menu items. Depending on the selected item, the menu items are enabled or disabled.



 Versioning (page 1066)

 Show versions (page 1067)

 Lock (Models (page 1063)/Objects (page 1064))

 Unlock (Models (page 1064)/Objects (page 1065))

 BPMN export (page 970)

 Technical information (page 845)

7.5.1.15.5 Item editing buttons

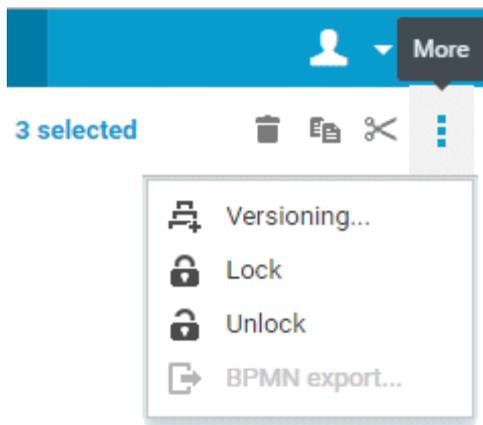
The following editing buttons are available for editing items. Depending on the selected item, the editing buttons are enabled or disabled.



-  **Delete** (page 841)
-  **Rename** (page 841)
-  **Copy** (page 842)
-  **Cut** (page 844)
-  **More**

7.5.1.15.6 Item editing buttons

The following editing buttons are available for editing several selected elements. Depending on the selected elements, the editing buttons are activated or deactivated.



Placed above the detail view.

-  Versioning (page 1066)
-  Lock (selected models (page 1063)/objects (page 1064))
-  Unlock (selected models (page 1064)/objects (page 1065))
-  BPMN export (page 970)

7.5.1.15.7 Repository buttons

The following repository buttons are available. They affect the repository view, such as refreshing the content, or start specific functionality, such as reports or semantic checks.



Placed above the detail view.

 [Create model \(page 838\)](#)

 [Create group \(page 838\)](#)

 [Refresh \(page 839\)](#)

 [Reports \(page 692\)](#)

 [Semantic checks \(page 840\)](#)

7.5.2 Create and edit models

ARIS Connect Designer allows you to edit existing and new models (page 876) in ARIS Connect. Using the **ARIS Connect Designer** license privilege you can create new models (page 876) directly in the portal, as well as edit (page 889) or create models (page 876) in the repository. You can access the entire modeling functionality of ARIS Connect Designer using buttons and bars (page 865) that you can use to efficiently edit your models.

If you have created or opened a model, you can set up the perspective (page 857) and adjust it to your own needs. Modeling (page 889) your organization, processes, data, etc., is just as simple as extended model editing (page 931). In addition to the graphic information, you can add further information to your models using attributes (page 899) that can be placed in the model as a symbol (page 947) or a text (page 943), if necessary.

In combination with ARIS Architect, automated processing steps can be inserted via macros (page 926). In addition, semantic checks can be used to execute exactly specified model and object checks.

Of course, you can also add comments to models (page 975) and discuss models with other users.

To use ARIS Connect Designer, you must have the **ARIS Connect Designer** license.

7.5.2.1 Customize ARIS Connect Designer

If you create a new model in ARIS Connect or open an existing model for editing, the model is displayed on a separate tab and ARIS Connect Designer is activated. You can set up the ARIS Connect Designer user interface according to your requirements. In addition, you can apply templates to specify the appearance of model items. ARIS Connect Designer provides you with the following functionality:

- edit models.
- create new models.
- assign models.
- generate reports.
- run semantic checks.
- comment on models and model items.

7.5.2.1.1 Show and hide bars

You can use the bar buttons to show or hide bars as required.

What is said in the following for the **Symbols** bar applies to all bars.

Procedure

Click  **Symbols**. If the **Symbols** bar is shown, it will be hidden. If it is hidden, it will be shown. Depending on your selection you either have more room to edit the model items or direct access to the relevant functionality.

7.5.2.1.2 Show/Hide header

You can hide or show the header. This means you either have more space for modeling, or are able to view the information displayed in the header.

Procedure

1. Click  **Show/Hide header**. The header is hidden so that more space is available for modeling.
2. Click  **Show/Hide header**. The header is shown and the header information is available to you.

You have adapted the display area according to your requirements.

7.5.2.1.3 Customize Symbols bar

You can change the content of the **Symbols** bar so that you are offered only the symbols you need for modeling.

Procedure

Remove individual symbols from the Symbols bar

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Move the mouse pointer over the symbol you want to remove. Behind the symbol the icon  **Remove** is displayed.
3. Click  **Remove**.

The symbol is removed from the **Symbols** bar.

Add a specific symbol

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. In the **Symbols** bar, click  **Symbols**. The dialog opens. Objects displayed in the **Symbols** bar are followed by a  check mark.
3. Click the **Enter symbol name** box and enter the name of the required symbol partly or entirely. All object symbols are displayed whose names contain the term you entered.
4. Click the symbol not yet displayed in the **Symbols** bar that you want to include. A  check mark is added to the symbol.
5. Click **Close**.

The selected symbol is added to the **Symbols** bar.

Overall setup of the Symbols bar

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. In the **Symbols** bar, click  **Symbols**. The dialog opens. Objects displayed in the **Symbols** bar are followed by a  check mark.
3. Click the symbols that are displayed in the **Symbols** bar, but that you no longer want to display. Their  check marks are removed.
4. Click the symbols not yet displayed in the **Symbols** bar that you want to include. A  check mark is added to these symbols.
5. Click **Close**.

The **Symbols** bar now provides you with the object symbols required for modeling your model. If you placed an object symbol using the **Symbols** bar, you can then use the mini toolbar (page 918) to create further objects.

Restore defaults

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. In the **Symbols** bar, click  **Symbols**. The dialog opens. Objects displayed in the **Symbols** bar are followed by a  check mark.
3. Click **Restore defaults**. A  check mark is added to the object symbols that the system provides in the **Symbols** bar by default.
4. Click **Close**.

All symbols that are part of the system default are visible in the **Symbols** bar.

The **Symbols** bar provides the object symbols that you want to use.

7.5.2.1.4 Customize Attributes tab

You can show additional attributes or specify whether and when attributes are to be shown.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. Click  **Edit language** if you want to show (page 941) an additional language column for language-specific attributes. You can select an additional database language and view and edit it next to the language currently used.
4. Click  **Add** on the **Attributes** tab. The **Select attribute** dialog opens.
5. If you want to add only specified attributes, enable the **Show specified attributes only** check box. You can restrict the result of displayed attributes using a search term.
6. Enter a search term for the attributes you want to display. The attribute type groups that contain attributes whose names contain the term you entered are expanded and the attributes are displayed.
7. Enable the check boxes of the relevant attributes.
8. Click **OK**. The selected attributes are added to the **Attributes** tab.
9. Click  **More** next to the attribute whose visibility you want to specify.
10. Click  **Hide always** if you want to hide the attribute from the **Attributes** tab even if a value has been specified. For the attribute to be displayed at a later time you need to select it explicitly by clicking **Add**.
11. Click  **Hide, if not specified** if you want the attribute to be displayed on the **Attributes** tab only if a value has been specified.
12. Click  **Place attribute** and the relevant position in the model window if you want the attribute value to be displayed in the model.
13. Click  **Delete attribute** if you want to delete the attribute value. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

The attributes on the **Attributes** tab are displayed according to your settings.

7.5.2.1.5 Show and hide mini toolbar

You can show and hide the mini toolbar for an object.

Procedure

1. Select an object in the model. The mini toolbar (page 918) is shown as transparent. When you move the mouse pointer over the mini toolbar it becomes opaque. Now you can configure the mini toolbar (page 862), or click the  **Connection** symbol or object symbols.
2. If you want the mini toolbar to be hidden only temporarily while the mouse pointer is not over the object, move the mouse pointer away from the object until the mini toolbar is hidden. As soon as you move the mouse pointer back towards the object, the mini toolbar is shown again.
3. If you do not want the mini toolbar to be shown for a selected object anymore, move the mouse pointer several centimeters away from this object. The mini toolbar is hidden and is then no longer shown when you position the mouse pointer over the object.
It will be visible for the object again only if you cancel the selection and select the object again.

Depending on your action, the mini toolbar is either shown or hidden for an object.

7.5.2.1.6 Configure mini toolbar

You can define which object symbols the mini toolbar (page 918) should offer for the relevant object type. You are offered only the object symbols for which the creation of a connection to the selected object type is allowed by the method.

Procedure

1. Select the object symbol whose object type you want to configure the mini toolbar for. The mini toolbar is shown.
2. Move the mouse pointer to the mini toolbar and click  **Add/Remove symbols**. The dialog opens.
3. Click the symbols that are displayed in the mini toolbar, but that you no longer want to display. Their  check marks are removed.
4. Click the symbols that are not displayed in the mini toolbar, but that you do want to include. A  check mark is added to these symbols.
5. Click **Close**.

Now, when you open the mini toolbar (page 862) the selected object symbols are available.

7.5.2.1.7 Change grid width

You can show a grid in the model window (page 865). Model items are aligned to the grid and inserted or moved according to the grid width. In the grid, you can specify how far apart the grid points will be.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Grid and guides > Change grid width**. The dialog is displayed.
3. Enter the required grid width or click the up or down arrow to change the grid width.
4. Click **OK**.

The grid is displayed with the new grid width, and model items are aligned and moved within this grid.

7.5.2.1.8 Show formatting toolbar

The formatting toolbar is enabled for selected texts, for example, for the text of placed attributes (page 900). The formatting bar is not available for attributes that the system changes, for example, for the attribute **Creator**.

Procedure

1. Select the placed attribute in the model window.
2. Click the attribute again.

The text of the attribute is selected for you to overwrite it, and the formatting toolbar is shown. If you deselect the placed attribute, the formatting toolbar is hidden.

7.5.2.1.9 Apply model template

You can apply a template (page 1174) to a model and thus, change its appearance as well as its attribute placements in the model window (page 865) at once automatically.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Template**. The list of available templates is shown.
3. Click the required template.

The content of the model window is adjusted immediately in line with the model template settings.

7.5.2.1.10 Reset model template

You can reset the appearance of a model for which a template (page 1174) was used to the ARIS default appearance. Color and size changes and attribute placements assigned by templates are removed.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Template**. The list of available templates is shown.
3. Click **Reset**.

The content of the model window (page 865) is adjusted immediately.

7.5.2.1.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.1.11.1 How is ARIS Connect Designer structured?

ARIS Connect Designer from ARIS Connect has the following areas.

Header

The header outputs the name and type of the opened model. It also displays the current language.

If you change the language (page 890), the text attributes are output in the selected language as long as the text attributes are specified in the target language. If this is not the case, the text attributes are displayed in the alternative language and identified by the language code added to the alternative language.

Logistics - Value-Added Chain Diagram (US ▾)

Bar buttons

You can use the bar buttons to show or hide the **Search** and the **Collaboration, Reports, Properties, Modeling table** (page 1001), **Semantic checks**, and **Symbols** bars. You can also hide or show the header by clicking **Hide/Show header**, depending on whether you need more space for the model window or want to be able to see the information provided in the header.



Tab bars

Tab bars enable you to access the relevant buttons within a specific context.

All tab bars contain frequently used buttons (page 871). This means that you do not need to switch between tab bars to access these buttons.

START TAB BAR

The **Start** tab bar groups the functions related to the representation and placement of model items (page 912).

MODEL TAB BAR

The **Model** tab bar groups the functions related to the layout and the graphic of models (page 914).

FORMAT TAB BAR

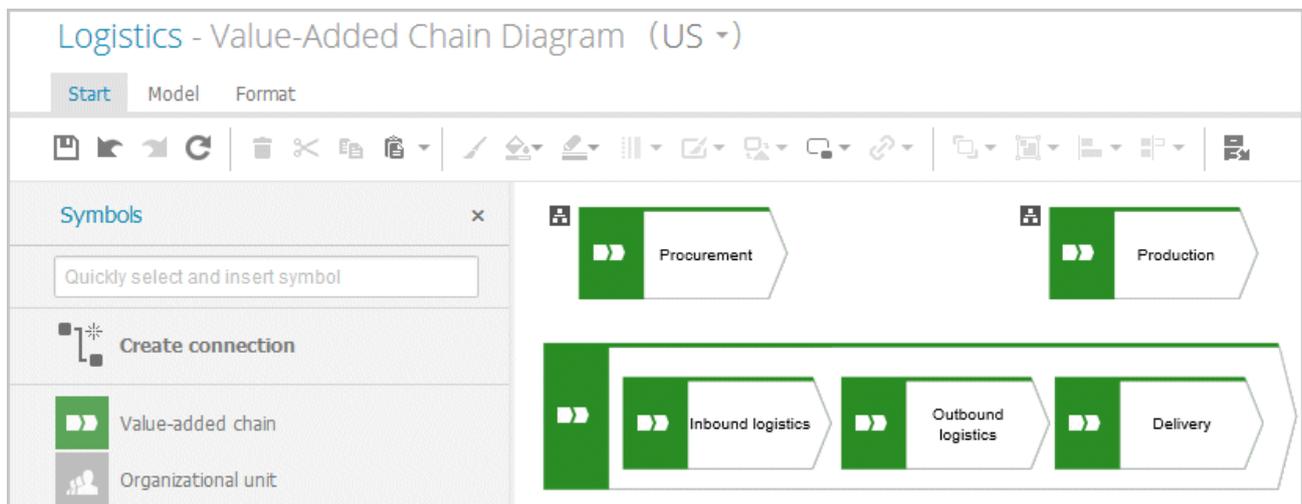
The **Format** tab bar groups the functions related to the presentation of written data in models (page 915).

BPMN TAB BAR

The BPMN tab bar is displayed if you have opened a BPMN diagram. It groups the functions that are used for the convenient editing of BPMN diagrams (page 917).

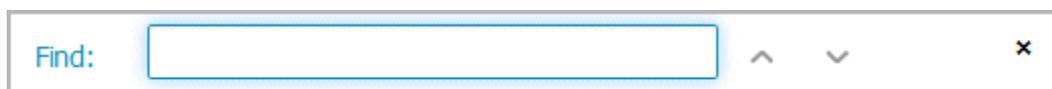
Model window

The model items are arranged in the model window. You can see the changes made with the different bars immediately. Thus, color changes made to objects or changes in the size of appearance are displayed at once. In addition, you can quickly bring relevant objects into the visible model area, even in large models, using the **Find** button in the bar buttons.



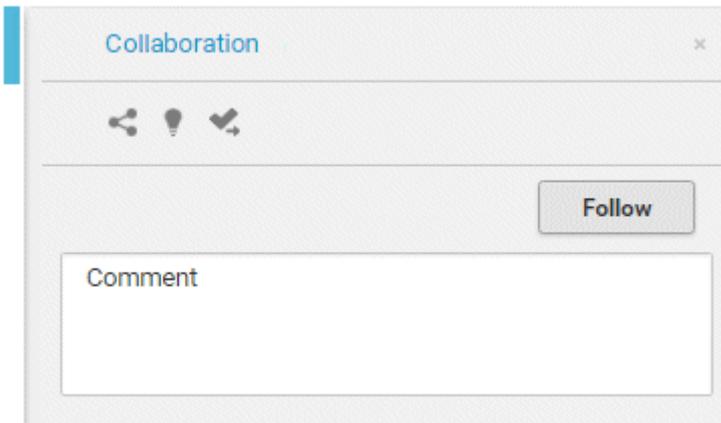
Search bar

Click  **Search** in the bar buttons to show the **Search** bar that you can use to have objects selected in the model (page 932).



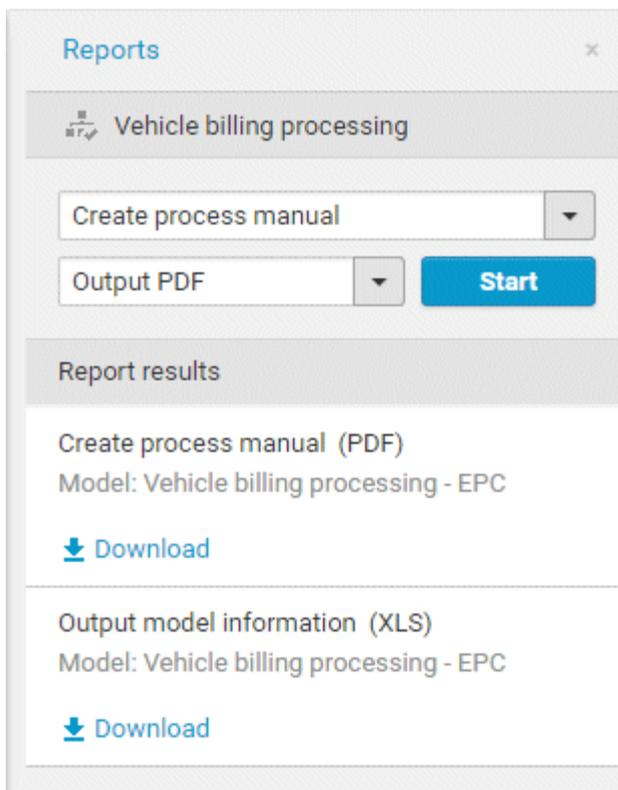
Collaboration bar

Click  **Collaboration** in the bar buttons to show the **Collaboration** bar that you can use to enter notes, improvement proposals, questions, etc., pertaining to the model (page 975).



Reports bar

Click  **Reports** in the bar buttons to show the **Reports** tabs and generate reports (page 976).



Properties bar

Click **i Properties** in the bar buttons to show the **Properties** bar where you can edit attributes (page 899), or view occurrences (page 906) and relationships of objects (page 907), for example.

The screenshot shows a 'Properties' window with a close button (x) in the top right. It has four tabs: 'Attributes', 'Documents', 'Occurrences', and 'Relationships'. The 'Attributes' tab is active, displaying a table with two columns: 'Name' and 'Value'. The table contains the following data:

Name	Value
Name	Allow discount
Type	Function [Function]
Time of generation	5/7/2019, 6:41:39 PM
Creator	w.becker
Last change	9/14/2019, 3:26:38 PM
Last user	system

At the bottom of the window, there are two buttons: 'Add...' with a plus icon and 'Edit language' with a globe icon.

Semantic checks bar

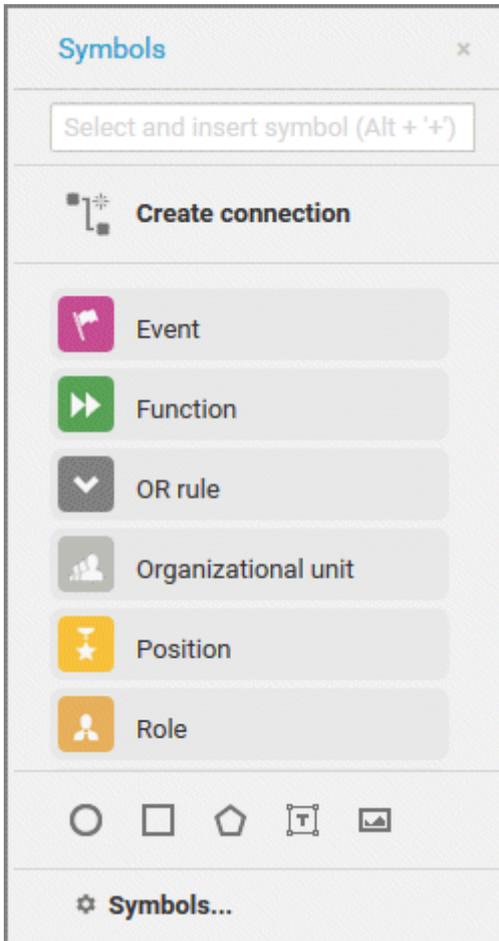
Click **✓ Semantic checks** in the bar buttons to show the **Semantic checks** bar where you can run semantic checks for a model (page 1048) or for one or more objects (page 1049). Among other things, the toolbar allows you to restrict the view to errors, warnings, or notes (page 1050).

The screenshot shows a 'Semantic checks' window titled 'Rules for organizational elements'. It has a toolbar with navigation and filtering icons. On the right, there are three status indicators: '0 errors' (red), '10 warnings' (orange), and '0 notes' (yellow). The main area contains a table with the following data:

#	Item	Finding types	Description
4	Accountant	Allocation rules	Incorrect relationship: less than 1
5	Financial assistant	Allocation rules	Incorrect relationship: less than 1
6	Financial assistant	Object attribute rules	Missing/Incorrect attribute types: Full name, Identifier, Company affiliation, Company code
7	Financial assistant	Allocation rules	Incorrect relationship: less than 1
8	Financial assistant	Object attribute rules	Missing/Incorrect attribute types: Full name, Identifier, Company affiliation, Company code
9	Financial clerk	Object attribute rules	Missing/Incorrect attribute types: Full name, Identifier, Company affiliation, Company code

Symbols bar

The **Symbols** bar provides object symbols (page 893), graphic objects (page 935), and text (page 903) for insertion into the model window. It also allows you to filter the available object symbols by entering names and create connections between (page 901) objects.



Display bar

The Display bar is located at the bottom of the model window. You can use this bar to quickly define which model areas are to be displayed in the visible window pane (page 904).

If for example, you want to display the entire model in the visible window pane, click  **Fit to window** (without any model item being selected).



7.5.2.1.11.2 What are tab bars for?

Tab bars enable you to access the relevant buttons within a specific context.

All tab bars contain frequently used buttons (page 871). This means that you do not need to switch between tab bars to access these buttons.

START TAB BAR

The **Start** tab bar groups the functions related to the representation and placement of model items (page 912).

MODEL TAB BAR

The **Model** tab bar groups the functions related to the layout and the graphic of models (page 914).

FORMAT TAB BAR

The **Format** tab bar groups the functions related to the presentation of written data in models (page 915).

BPMN TAB BAR

The BPMN tab bar is displayed if you have opened a BPMN diagram. It groups the functions that are used for the convenient editing of BPMN diagrams (page 917).

7.5.2.1.11.3 What general buttons are available?

The following general buttons are available for each tab bar.



Save: Saves your changes in the database.



Undo: Undoes editing steps.



Redo: Redoes editing steps that were undone.



Refresh: Refreshes the display. Reloads the data from the database and thereby also shows any changes made by a different editor in the meantime.



Delete: Deletes selected model items.



Cut: Cuts selected items and saves them to the clipboard.



Copy: Copies selected items to the clipboard.



Paste: Pastes the content of the clipboard into the model. If an object is on the clipboard, an occurrence copy (page 978) is inserted. Click the arrow next to the **Paste** icon if you want to paste a definition copy.

7.5.2.1.11.4 Keyboard shortcuts for ARIS Connect Designer

The following shortcuts are available in ARIS Connect Designer (page 857).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Alt	Temporarily switches off Guided Modeling and grid (page 895) when you drag items.
Alt + down arrow	Moves selected objects down four grid lines.
Alt + F4	Closes the web browser. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Alt + left arrow	Moves selected objects four grid lines to the left.
Alt + - (minus)	Inserts an optional hyphen (page 897) at the cursor position in a text.
Alt + right arrow	Moves selected objects four grid lines to the right.
Alt + up arrow	Moves selected objects up four grid lines.
Ctrl + A	Selects all items.
Ctrl + C	Copies selected items to the clipboard. This enables you to paste copied items from the clipboard into models/diagrams and into other Windows programs.
Ctrl + down arrow	Moves selected items downwards by increments of one pixel.
Ctrl + End	Displays the bottom right pane of the model window.
Ctrl + Enter	Inserts a line break for text attributes, such as free-form texts, object names, etc.
Ctrl + F	Opens the Find bar.
Ctrl + F4	Closes the model tab. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Ctrl + Home	Displays the upper left pane of the model window.
Ctrl + left arrow	Moves selected items to the left by increments of one pixel.
Ctrl + Page down	Switches to the next web browser tab from left to right if your web browser supports changing tabs using the keyboard.
Ctrl + Page up	Switches to the next web browser tab from right to left if your web browser supports changing tabs using the keyboard.

Shortcut	Action
Ctrl + right arrow	Moves selected items to the right by increments of one pixel.
Ctrl + S	Saves your changes.
Ctrl + Shift + V	Inserts a definition copy of an object if an object is in the clipboard.
Ctrl + up arrow	Moves selected items upwards by increments of one pixel.
Ctrl + V	Pastes the content of the clipboard, if this is content that can be placed in the model window. If an object is in the clipboard, an occurrence copy of the object is inserted.
Ctrl + X	Cuts selected items and copies them to the clipboard.
Ctrl + Y	Redoes editing steps that were undone.
Ctrl + Z	Undoes preceding editing steps.
Del	Removes selected object symbols or deletes selected items, such as free-form text and graphic objects.
Down arrow	Moves the model window contents up (the contents of the model window that are further down will be displayed).
Enter	Ends the input.
ESC	Removes selections and closes dialogs. Closing dialogs with the ESC key is the same as clicking Cancel .
F2	Selects the selected text attribute of an element or the object name of a selected object for editing.
F3	Opens the Find bar. When the find bar is open, pressing the F3 key jumps to the next occurrence of the searched term.
F5	Updates the current view based on the database changes.
F11	Turns full screen mode on or off if your web browser supports full screen.
Left arrow	Moves the model window contents to the right (the contents of the model window that are further left will be displayed).
- (minus)	Reduces the display of the model content by 10%.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
+ (plus)	Enlarges the display of the model content by 10%.
Right arrow	Moves the model window contents to the left (the contents of the model window that are further right will be displayed).

Shortcut	Action
Shift	Keeps the shapes of a circle and a square (page 938) when you place and scale the graphic objects Circle/Elipse and Square/Rectangle .
Shift + Page down	Moves the contents of the model window page by page to the right (the contents of the model window that are further left will be displayed).
Shift + Page up	Moves the contents of the model window page by page to the left (the contents of the model window that are further right will be displayed).
Up arrow	Moves the model window contents down (the contents of the model window that are further up will be displayed).

7.5.2.1.11.5 Keyboard shortcuts for the Select attribute dialog

The following shortcuts are available in the **Select attribute** dialog with which you can add attributes on the Attributes tab (page 940).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Moves the focus down to the next attribute.
End	Moves to the lower attributes.
Enter	Closes the dialog and adds the selected attributes when the focus is on the OK button, or closes the dialog and adds no attributes when the focus is on the Cancel button.
ESC	Closes the dialog without changes. Pressing this key corresponds to clicking Cancel .
F5	Updates the current view based on the database changes. The dialog is closed without changes.
F11	Turns full screen mode on or off if your web browser supports full screen. The dialog remains open.
Home	Moves to the upper attributes.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Space	Enables or disables the check box of the attribute on which the focus is located.
Tab	Jumps from the Search field to the Show specified attributes only check box, the attribute list field, the OK button, and the Cancel button.
Up arrow	Moves the focus up to the next attribute.

7.5.2.2 Create/Import a model

You can use ARIS Connect Designer to create new models and to import models from ARIS Express (<http://www.ariscommunity.com/aris-express>).

7.5.2.2.1 Create new models

You can create new models in order to for example, model procedures as a control flow or model the data generation and usage.

Prerequisite

You have the **ARIS Connect Designer** license privilege.

Procedure

In the portal (quick video)

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click  **Create new model** on the **Quick start (page 627)** area. The corresponding dialog opens.
4. Enter a name for the new model in the **Model name** box.
5. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
6. Select the required model type. The **Target** area displays the database and group names. This is where the new model will be stored.
7. Click **Change** if you want to store the model in a different database and/or group. The **Select target group** dialog opens.
8. Select the required database in the **Database** box.
9. Select the required group.
10. Click **OK**. The **Select target group** dialog closes.
11. Check your input.
12. Click **OK**. The **Create model** dialog closes.

In the repository

13. Click  **Repository**.
14. Click  **Databases** on the left to display the available databases.
15. Select the relevant database.
16. Navigate to the database group in which you want to create a new model. When you select the group, its contents are displayed in the right pane.
17. In the upper right, click  **Create model**. The corresponding dialog opens.
18. In the **Model name** box specify the name that the new model is to be created with in the selected group.

19. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
20. Select the required model type.
21. Click **OK**.

The new model is created and opened in a new tab. You can set up ARIS Connect Designer (page 857) and model the model.

7.5.2.2.2 Create group

You can create a new group in which you can store models and objects.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Navigate to the database group in which you want to create a new group. When you select the group, its contents are displayed in the right pane.
5. In the upper right, click  **Create group**. The corresponding dialog opens.
6. Enter the required name in the **Name** box.
7. Click **OK**.

The group is created as a subgroup of the selected one and you can store models and objects in it.

7.5.2.2.3 Create matrix model

You can create a model of the **Matrix model** type. A matrix model is used to represent connections between objects.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click  **Create new model** on the **Quick start (page 627)** area. The corresponding dialog opens.
4. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
5. Select **Matrix model**. The **Target** area displays the database and group names. This is where the new model will be stored.
6. Click **Change** if you want to store the model in a different database and/or group. The **Select target group** dialog opens.
7. Select the required database in the **Database** box.
8. Select the required group.
9. Click **OK**. The **Select target group** dialog closes.
10. Check your input.
11. Click **OK**. The **Create model** dialog closes.

The matrix model is newly created in the selected group and opened for editing on a tab.

7.5.2.2.4 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.2.4.1 What model types are available in ARIS Connect?

The following model types are available.

The number of model types may differ from the model types listed here. Additional model types can be enabled by the license key used. On the other hand, the number of model types can be limited by the filter used (page 883).

Access diagram
Access diagram (physical)
Application collaboration diagram
Application collaboration diagram (physical)
Application system diagram
Application system type diagram
ArchiMate model (2.1)
ArchiMate model (3.0)
Attribute allocation diagram (Solution Design)
Bow tie diagram
BPMN allocation diagram (BPMN 2.0)
BPMN collaboration diagram (BPMN 2.0)
BPMN conversation diagram (BPMN 2.0)
BPMN process diagram (BPMN 2.0)
BSC Cause-and-effect diagram
Business controls diagram
Business footprint diagram
Business Model Canvas
Business rule allocation diagram
Business rule architecture diagram
Business segment matrix
Class diagram

CtX-tree
Customer journey landscape
Customer journey map
Customer segmentation map
Customer touchpoint allocation diagram
Customer touchpoint map
Data type diagram (Solution Design)
Data Warehouse model
DMN boxed function
DMN context diagram
DMN decision requirements diagram
DMN decision table model
DMN invocation diagram
Document structure (Solution Design)
DW structure
E-Business scenario diagram
eERM
eERM attribute allocation diagram
Enterprise BPMN collaboration diagram
Enterprise BPMN process diagram
EPC
EPC (column display)
EPC (horizontal table display)
EPC (instance)
EPC (material flow)
EPC (row display)
EPC (table display)
Event diagram
Fishbone diagram
Function allocation diagram
Function mapping

Function tree
Functions mapping (SAP Solution Manager)
IE Data model
Information carrier diagram
IoT object context
IoT object definition
IT architecture mapping
IT architecture matrix
Knowledge map
Knowledge structure diagram
KPI allocation diagram
KPI tree
Network diagram
Network topology
Objective diagram
Organizational chart
Process selection diagram
Process selection matrix
Product allocation diagram
Product selection matrix
Product/Service exchange diagram
Product/Service tree
Product tree
Program flow chart (PF)
Questionnaire template allocations
Quick model
RAD
Requirement allocation diagram
Requirements tree
Risk diagram
Role diagram

SAP functions mapping (SAP Solution Manager)
SAP NetWeaver Business Warehouse data flow model
SAP NetWeaver Business Warehouse mapping multi provider
SAP NetWeaver Business Warehouse structure
SAP NetWeaver Business Warehouse transformation
SAP Solutions allocation diagram
SAP Solutions organizational elements mapping
Screen design
Screen design (Solution Design)
Screen diagram
Screen navigation
Service allocation diagram
Service architecture diagram
Service collaboration diagram
SIPOC
Strategy allocation diagram
Strategy diagram
Structuring model
Survey management
SWOT diagram
System environment
Table diagram
Task allocation diagram
Technical resources
Technical terms model
TOGAF diagram
Value-added chain diagram
Value stream map
Work breakdown structure
XML model

7.5.2.2.4.2 Which template is used for new models?

When you create, import, or generate a new model, it is created on the basis of a template. In ARIS Architect, users with the **Configuration administrator** function privileges create templates and assign them to model types.

If a template is assigned to the model type you use, this template is used. If there is no assignment to a template, your model is created on the basis of the **Default** template.

7.5.2.2.4.3 Which method filter is used?

When you open and edit models, your work is based on one of the method filters (page 1174) assigned to you ARIS Architect. Database administrators specify which method filter a user may use in ARIS Connect. To do this, a database administrator assigns the relevant method filter to the database and user in ARIS Architect.

The method filter applied depends on the method filter(s) assigned to you.

- If you were assigned only one filter, that filter is applied.
- If you were assigned multiple filters:
 - The method filter assigned to the database is used (default filter of the database).
 - If the default filter of the database does not exist, the filter named **Demo** is used.
 - If the **Demo** filter does not exist either, the **Entire method** filter is applied.
 - If the **Entire method** filter also does not exist, the first method filter of the alphabetically sorted list is used.

7.5.2.2.4.4 Keyboard shortcuts for ARIS Connect Designer

The following shortcuts are available in ARIS Connect Designer (page 857).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Alt	Temporarily switches off Guided Modeling and grid (page 895) when you drag items.
Alt + down arrow	Moves selected objects down four grid lines.
Alt + F4	Closes the web browser. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Alt + left arrow	Moves selected objects four grid lines to the left.
Alt + - (minus)	Inserts an optional hyphen (page 897) at the cursor position in a text.
Alt + right arrow	Moves selected objects four grid lines to the right.
Alt + up arrow	Moves selected objects up four grid lines.
Ctrl + A	Selects all items.
Ctrl + C	Copies selected items to the clipboard. This enables you to paste copied items from the clipboard into models/diagrams and into other Windows programs.
Ctrl + down arrow	Moves selected items downwards by increments of one pixel.
Ctrl + End	Displays the bottom right pane of the model window.
Ctrl + Enter	Inserts a line break for text attributes, such as free-form texts, object names, etc.
Ctrl + F	Opens the Find bar.
Ctrl + F4	Closes the model tab. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Ctrl + Home	Displays the upper left pane of the model window.
Ctrl + left arrow	Moves selected items to the left by increments of one pixel.
Ctrl + Page down	Switches to the next web browser tab from left to right if your web browser supports changing tabs using the keyboard.
Ctrl + Page up	Switches to the next web browser tab from right to left if your web browser supports changing tabs using the keyboard.

Shortcut	Action
Ctrl + right arrow	Moves selected items to the right by increments of one pixel.
Ctrl + S	Saves your changes.
Ctrl + Shift + V	Inserts a definition copy of an object if an object is in the clipboard.
Ctrl + up arrow	Moves selected items upwards by increments of one pixel.
Ctrl + V	Pastes the content of the clipboard, if this is content that can be placed in the model window. If an object is in the clipboard, an occurrence copy of the object is inserted.
Ctrl + X	Cuts selected items and copies them to the clipboard.
Ctrl + Y	Redoes editing steps that were undone.
Ctrl + Z	Undoes preceding editing steps.
Del	Removes selected object symbols or deletes selected items, such as free-form text and graphic objects.
Down arrow	Moves the model window contents up (the contents of the model window that are further down will be displayed).
Enter	Ends the input.
ESC	Removes selections and closes dialogs. Closing dialogs with the ESC key is the same as clicking Cancel .
F2	Selects the selected text attribute of an element or the object name of a selected object for editing.
F3	Opens the Find bar. When the find bar is open, pressing the F3 key jumps to the next occurrence of the searched term.
F5	Updates the current view based on the database changes.
F11	Turns full screen mode on or off if your web browser supports full screen.
Left arrow	Moves the model window contents to the right (the contents of the model window that are further left will be displayed).
- (minus)	Reduces the display of the model content by 10%.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
+ (plus)	Enlarges the display of the model content by 10%.
Right arrow	Moves the model window contents to the left (the contents of the model window that are further right will be displayed).

Shortcut	Action
Shift	Keeps the shapes of a circle and a square (page 938) when you place and scale the graphic objects Circle/Ellipse and Square/Rectangle .
Shift + Page down	Moves the contents of the model window page by page to the right (the contents of the model window that are further left will be displayed).
Shift + Page up	Moves the contents of the model window page by page to the left (the contents of the model window that are further right will be displayed).
Up arrow	Moves the model window contents down (the contents of the model window that are further up will be displayed).

7.5.2.2.4.5 Keyboard shortcuts for the Select attribute dialog

The following shortcuts are available in the **Select attribute** dialog with which you can add attributes on the Attributes tab (page 940).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Moves the focus down to the next attribute.
End	Moves to the lower attributes.
Enter	Closes the dialog and adds the selected attributes when the focus is on the OK button, or closes the dialog and adds no attributes when the focus is on the Cancel button.
ESC	Closes the dialog without changes. Pressing this key corresponds to clicking Cancel .
F5	Updates the current view based on the database changes. The dialog is closed without changes.
F11	Turns full screen mode on or off if your web browser supports full screen. The dialog remains open.
Home	Moves to the upper attributes.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Space	Enables or disables the check box of the attribute on which the focus is located.
Tab	Jumps from the Search field to the Show specified attributes only check box, the attribute list field, the OK button, and the Cancel button.
Up arrow	Moves the focus up to the next attribute.

7.5.2.2.4.6 How to proceed if the model type is missing for models

Model types and method filters are configured in ARIS Architect. Therefore, the description of the **Solutions** section explains how the system administrator proceeds in ARIS Architect.

CAUSE

There is a model in the database that is based on a user-defined model type that no longer exists in the ARIS method configuration. In this case, the user-defined model type can no longer be used to find the model. There are two possible reasons why the model type is no longer available:

- The method filter used does not contain the user-defined model type.
- The model type has been intentionally deleted from the ARIS method configuration.

SOLUTIONS

- If a method filter exists on the server or tenant that contains the user-defined model type, the user can log in to the database again with this method filter. The model is based on the user-defined model type again.
- If there is no method filter on the server or tenant that contains the user-defined model type, the system administrator can use ARIS Architect to import the method filter into the server/tenant and the user can log in to the database again with this method filter. The model is based on the user-defined model type again.
- If the user-defined method filter has been intentionally deleted, the system administrator can reorganize the database on the **Administration** tab of ARIS Architect with the **Automatically replace missing item types** option. This resets the model type to the standard ARIS model type. After re-logging in to the database, the model is found again by the search if the search is performed using the standard ARIS model type.

7.5.2.3 Model

ARIS Connect Designer assists you in editing models, for example, by providing Guided Modeling (page 892), a grid (page 891), a mini toolbar (page 899), graphic objects (page 935), or in-place formatting options (page 900).

7.5.2.3.1 Basic modeling

This section describes the basic procedures for editing models.

7.5.2.3.1.1 Open model for editing

You can open models in different ways.

Prerequisite

- You have a **Designer** license.
- The model type of the model is allowed (page 888) by the method filter (page 883) in use.

Procedure

From Groups or the Processes area

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
3. Select the group or process area containing the required model. The content of the selected group or process area is listed.
4. Click the name of the relevant model.
5. Click **Diagram** if you want to display the model graphically.
6. Click  **Edit** >  **Edit model**.

From the repository

1. Click  **Repository**.
2. In the database, select the group containing the relevant model. The content of the selected group is listed.
3. Click the name of the model you want to open.

Using the search

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. At the top right, click the **Search** box and enter a term that is included in the model name. All models and objects containing this term are listed immediately.
3. In the **Models (Repository)** category, click the name of the model you want to open.

From the 'Recent changes' area

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. Click  **Recent changes** in the **Home** area. All models are listed that have recently been changed or created.
3. Click the name of the model you want to open. Depending on active configuration set, the **Groups** or **Process** area opens and the model is activated.
4. Click **Diagram** if you want to display the model graphically.
5. Click  **Edit** >  **Edit model**.

The model opens in a separate tab.

7.5.2.3.1.2 Change database language of a model

You can select a database language other than the one currently in use for a model. This enables you to specify all language-dependent attributes for the model in a language of your choice.

If you change the language (page 890), the text attributes are output in the selected language as long as the text attributes are specified in the target language. If this is not the case, the text attributes are displayed in the alternative language and identified by the language code added to the alternative language.

Prerequisite

The header is shown (page 858).

Procedure

1. In the header, click the language code next to the model name. A list of available languages is displayed.
2. Click the language you want to use for entering the language-dependent contents.

The model window and the bars will directly display the language-dependent contents in the selected language, for example, on the **Attributes** tab of the **Properties** bar. You can change language-dependent contents specified in this language or enter new contents.

7.5.2.3.1.3 Show and hide grid

If a grid is hidden, you can show it in the model window (page 865). When you place or move model items, they are inserted or moved according to the grid width (page 863). This facilitates the orderly placement of model items.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Grid and guides** > **Show grid**.

A dot grid is displayed in the model window and the check box is enabled (). Model items are placed and moved according to the grid width.

To hide the grid, click  **Grid and guides** > **Show grid**. The dot grid is hidden and model items are placed or moved pixel by pixel.

7.5.2.3.1.4 Set grid width

You can set the grid width. Based on the grid width, model elements are inserted or moved in the model window (page 865).

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Grid** > **Change grid width**. The corresponding dialog opens.
3. Enter the required grid width in the spin box or click the up or down arrow to increase or reduce the grid width.
4. Click **OK**.

Grid settings have been changed.

7.5.2.3.1.5 Enable and disable Guided Modeling

You can enable or disable Guided Modeling (page 919), which helps you to place objects or connections in the model window.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Grid and guides** > **Show guides**.

The guides for placing objects are active in the model window and the check box is enabled (.

To deactivate the guides, click  **Grid and guides** > **Show guides**.

Set up default distance for Guided Modeling

7.5.2.3.1.6 Set up default distance for Guided Modeling

You can set up the default distance for Guided Modeling (page 919). The default distance is indicated by a special cursor.

Warning

Setting the object spacing will changes the layout of the model.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Layout**. The layout options are provided.
3. Enter values for **Vertical item spacing** and **Horizontal item spacing** (page 1056).
4. Enable the **Use as default** check box.
5. Click **OK**.

The layout for the model is created and the entered item spacing is set as the default distance.

7.5.2.3.1.7 Place object symbols

You can place object symbols in the model window (page 865) in various ways.

Procedure

Using the Symbols bar (quick video)

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
 2. Click the object symbol you want to place in the model window.
 3. Move the mouse pointer to the model window. The frame of the object is displayed. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
 4. Click the position in the model window where you want to insert the object symbol. The name of the object symbol is selected for overwriting by default.
 5. If necessary, overwrite the previous name with the name of your choice and press Enter.
- The object symbol has been inserted in the model window.

Using the selection box in the Symbols bar

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
 2. In the **Select and insert symbol** box enter a few characters of the object symbol name. All object symbols whose names contain these characters are listed, regardless of whether they are hidden or shown in the **Symbols** bar. The list is continuously updated while you are entering your input.
 3. In the list, click the object symbol you want to place.
 4. Move the mouse pointer to the model window. The frame of the object is displayed. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
 5. Click the position in the model window where you want to insert the object symbol. The name of the object symbol is selected for overwriting by default.
 6. If necessary, overwrite the previous name with the name of your choice and press Enter.
- The object symbol has been inserted in the model window.

Using the mini toolbar

Prerequisite

An object symbol has already been placed in the model window.

Procedure

1. Click the placed object symbol. The mini toolbar (page 918) is shown.
2. In the mini toolbar, click the symbol you want to place in the model window.
3. The **Select connection** box and the outline of the object is displayed. The currently used connection is marked with a preceding bar.
4. Click on another connection or close the **Select connection** box with **× Close**.
5. Move the mouse pointer to the position to where you want to insert the object. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
6. Click the position in the model window where you want to insert the object symbol. The name of the object symbol is selected for overwriting by default.
7. If necessary, overwrite the previous name with the name of your choice and press Enter.

The object symbol is placed in the model window and linked to the previously selected object symbol using the selected connection.

As an occurrence copy

Create a new occurrence for an existing object. This enables you, for example, to insert the same organizational unit at all positions in a process where it actually participates in the process.

Prerequisite

An object symbol has already been placed in the model window.

Procedure

1. Click the placed object symbol and then  **Copy**.
2. Click  **Paste**. Alternatively, press **Ctrl + V**. A frame for the occurrence copy is displayed in the model window.
3. Drag the frame to the required position. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
4. Click the position in the model window where you want to insert the object symbol.

The object symbol is placed in the model window. It represents the object whose object symbol you copied as an occurrence copy (page 1175). This means, for example, that the name of both object symbols is changed, that is, the name of the copied object symbol and the name of the object symbol copy, if you change it for ONE of the two.

As a definition copy

Use an existing object as the basis for a new object. Thus, you only need to change the attributes by which the new object differs from the source object.

Prerequisite

An object symbol has already been placed in the model window.

Procedure

1. Click the placed object symbol and then  **Copy**.
2. Click **▼ down arrow > Definition copy** next to  **Paste**. Alternatively, press **Ctrl + Shift + V**. A frame for the definition copy is displayed in the model window.
3. Drag the frame to the required position. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
4. Click the position in the model window where you want to insert the object symbol.

The object symbol is placed in the model window. As a definition copy (page 1170) it represents a new object using the attributes of the object whose object symbol you have copied. The new object is autonomous even though it has the same attributes as the source object. This means, for example, that the name of the copied object does not change if you change the name of the source object.

7.5.2.3.1.8 Temporary switch off of Guided Modeling and grid

You can temporarily switch off of Guided Modeling and the grid when you drag items.

Prerequisite

Guided Modeling (page 892) and/or the grid (page 891) are enabled.

Procedure

1. Select the item you want to drag.
2. Press the **Alt** key.
3. Drag the item.

The item is not "caught" by Guided Modeling and/or the grid and can be moved pixel by pixel.

7.5.2.3.1.9 Place occurrence copy

You can place occurrence copies in the model window (page 865) in different ways.

Procedure

By placing an object symbol

Procedure

1. Click the relevant object symbol in the toolbar or the mini toolbar.
2. Move the mouse pointer to the model window. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
3. Click the position in the model window where you want to insert the object symbol. The name of the object symbol is selected for overwriting by default.
4. Enter at least two letters. A list of existing objects is displayed that have the same type as the placed object and whose names begin with the letters entered.
5. Click the name of the object you want to create as an occurrence copy. The name is entered in the object.

The occurrence copy is placed in the model window.

By copying and pasting

Procedure

1. In the model window, click the object of which you want to create an occurrence copy.
2. Click  **Copy** in the toolbar.
3. Click  **Paste** in the toolbar. A frame for the occurrence copy is displayed in the model window.
4. Drag the frame to the required position. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
5. Press the mouse button.

You have placed the occurrence copy.

You have placed an occurrence copy.

7.5.2.3.1.10 Use optional hyphens

You can insert optional hyphens in texts. These hyphens are displayed only when necessary when texts must be broken up due to, for example, resizing an object. Optional hyphens can be used for attribute texts and free-form texts. The following procedure describes an example use of optional hyphens for the name attribute of an object.

Procedure

1. Click a selected object in the model. The name of the object is selected for editing.
2. Place the cursor at the position at which you want to insert an optional hyphen.
3. Press **Alt + -**. An optional hyphen is inserted and the placeholder for the optional hyphen is displayed (↵).
4. Insert optional hyphens wherever you want to separate the attribute value when you change the size of an object.
5. Click in the modeling background.

The text input box is closed and the optional hyphen placeholders are no longer displayed.

If you now change the size of the object so that the text requires a line break, the text is wrapped at the position of the optional hyphen and a hyphen is automatically inserted at that position.

7.5.2.3.1.11 Paste copied object as an occurrence copy

You can paste a copied object into a model as an occurrence copy. Thus, a new occurrence is created, that is, a new graphical representation of the object. This means, for example, that changing the name of this occurrence will change the name in all occurrences of the copied object.

Prerequisite

The object is allowed to exist in the target model according to the method.

Procedure

1. Select the relevant object.
2. Click  **Copy**. Now you can insert the copy into the current or another model.
3. Click  **Paste > Occurrence copy**. Alternatively, press **Ctrl + V**. The frame of the object is displayed.
4. Move the mouse pointer to the relevant position. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
5. Click the position in the model window where you want to insert the object symbol.

Copying and pasting the occurrence of an object is now complete.

Occurrence copies enable you to quickly reuse the same object at different positions in the same model, or to reuse it in various other models.

7.5.2.3.1.12 Paste copied object as a definition copy

You can paste a copied object into a model as a definition copy. Thus, a new object is created whose attributes are identical with those of the copied object. Changing the attributes of the pasted object will not affect the copied object.

Prerequisite

The object is allowed to exist in the target model according to the method.

Procedure

1. Select the relevant object.
2. Click  **Copy**. Now you can insert the copy into the current or another model.
3. Click  **Paste > Definition copy**. The frame of the object is displayed.
4. Move the mouse pointer to the relevant position. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
5. Click the position in the model window where you want to insert the object symbol.

Copying an object and pasting it as a definition copy is now complete.

Using definition copies reduces the effort of creating multiple objects that differ only in a few attributes.

7.5.2.3.1.13 Change object symbol

You can change the symbol for selected objects if various symbols are available for them.

Prerequisite

The method filter in use (page 883) includes different symbols of the objects you selected.

Procedure

1. Click an object, or hold the **Ctrl** key pressed to select multiple objects of the same type.
2. Activate the Start (page 912) tab bar.
3. Click  **Change symbol**. The list of object symbols available for the selected object(s) is shown.
4. Click the symbol you want to use from now on for the selected object/s in this model.

The symbol for the selected object is or the symbols of the selected objects are changed.

7.5.2.3.1.14 Modeling using the mini toolbar

You can model very effectively using the mini toolbar (page 918). By configuring (page 862) it you are quickly offered the object symbols (page 862) required for your model.

Procedure

1. Click a placed object symbol (page 893). The mini toolbar is shown.
2. In the mini toolbar, click the object symbol you want to place. A frame is displayed for the new object.
3. Move the mouse pointer to the model window. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
4. Click the position in the model window where you want to insert the object symbol. The object symbol is placed together with a connection to the source object and the name field for overwriting.
5. Enter the relevant name.
6. Press **Enter**.

The new object symbol is placed and the connection to the source object is created automatically.

7.5.2.3.1.15 Edit attributes

You can edit model attributes and the attributes of objects or connections.

Prerequisite

The attribute you selected can be edited. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

Procedure

1. Click **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. If you want to edit model attributes, ensure that no model item is selected.
If you want to edit object or connection attributes, select the corresponding object or connection.
4. Display the relevant attribute (page 940) if it is not listed.
5. Click the cell that comes after the name of the attribute. A dialog is displayed. If you can enter any text for an attribute, a dialog including the formatting toolbar is displayed. If required, you can enlarge (page 943) this dialog.
6. Make your changes. Different input options are available depending on the type of attribute. While you can enter text for text attributes such as names, you can, for example, select a number and a unit for times.
7. Click **OK**.

You have changed the attribute value.

7.5.2.3.1.16 Directly format placed attributes

You can format model, object, and connection attributes when editing in the model window.

Prerequisite

The attribute you selected can be edited. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

Procedure

1. Double-click the placed attribute of a model, object, or connection so that the text is selected. The formatting toolbar is shown.
2. In the formatting toolbar, click the button for the formatting you want to assign to the selected attribute, for example,  **Increase indent**. The formatting information is directly applied to the selected attribute.
3. Click an empty area in the model window. The attribute selection is undone.

You have formatted the placed attribute.

7.5.2.3.1.17 Create connections

You can link objects using connections in different ways in the model window (page 865).

Procedure

When placing objects using the mini toolbar

Prerequisite

An object symbol has already been placed in the model window.

Procedure

1. Click the placed object symbol. The mini toolbar (page 918) is shown.
2. In the mini toolbar, click the symbol you want to place in the model window.
3. The **Select connection** box and the outline of the object is displayed. The currently used connection is marked with a preceding bar.
4. Click on another connection or close the **Select connection** box with **× Close**.
5. Move the mouse pointer to the position to where you want to insert the object. Lines indicate the alignment of the moving object to the placed objects and arrows indicate the distances.
6. Click the position in the model window where you want to insert the object symbol. The name of the object symbol is selected for overwriting by default.
7. If necessary, overwrite the previous name with the name of your choice and press Enter.

The object symbol is placed in the model window and linked to the previously selected object symbol using the selected connection.

Subsequently using the Symbols bar

1. In the **Symbols** bar click  **Create connection**.
2. Click the object in the model window you want to connect with another object.
3. Click a target object that can be connected to the source object. If the method does not allow objects to be connected to one another, a prohibitory sign is displayed on the target object; the connection cannot be attached to this object.

Both objects are linked by a connection.

Subsequently using the mini toolbar

1. Click the object in the model window you want to connect with another object. The mini toolbar is shown.
2. In the mini toolbar, click  **Create connection**.
3. Click a target object that can be connected to the source object. If the method does not allow objects to be connected to one another, a prohibitory sign is displayed on the target object; the connection cannot be attached to this object.

Both objects are linked by a connection.

You have linked objects in the model window.

7.5.2.3.1.18 Determine the appearance of connections

You can determine the color, the line style and weight, the bridge height, and rounding intensity of connections.

Procedure

Determine the connection color

1. Select the connections you want to adjust.
2. Activate the Start (page 912) tab bar.
3. Click  **Line color**. The color palette opens.
4. Click the color you want to apply.

The connection color is adjusted.

Tip

Using the color palette, you can define another color or reset the color to the default color.

Determine the line style and weight

1. Select the connections you want to adjust.
2. Activate the Start (page 912) tab bar.
3. Click  **Line style**.
4. Click the solid, dashed, or dotted line to adjust the selected connections.
5. Click  **Line weight**.
6. Click the weight in points in which the connections are to be displayed.

The line style and the line weight of the selected connections are adjusted.

Determine the bridge height and rounding intensity

1. Open the model you want to adjust.
2. Activate the Model (page 914) tab bar.
3. Click  **Connection properties**. The **Edit connections** dialog opens.
4. Click the **Bridge height** field and specify the height of the bridge. The higher the value, the higher the bridge. A preview of the specified bridge height is displayed.
5. Click the **Rounding intensity** field and specify the degree of edge rounding for connections with directional changes. The higher the value, the stronger the rounding. A preview of the specified edge rounding is displayed.
6. Click **OK**.

The bridge height and rounding intensity of the current model's connections are adjusted.

You have adjusted the connections.

7.5.2.3.1.19 Place text

You can place text in the model window (page 865) irrespective of other model items. This way you can add additional information to your model.

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click  **Text**.
3. Click the position in the model window where you want to place the text. A text box is inserted.
4. Enter your text in the text box and press the **Ctrl + Enter** keys for line breaks.
5. Press **Enter**.

The text is inserted into the model window. You can format (page 900) the text in just the same way as placed text attributes.

7.5.2.3.1.20 Insert graphic

You can place images and graphics in the model window (page 865) in order to add further information to the model or to optimize the design. For example, you can optimize a model for representation purposes.

Procedure

1. Open (page 889) the relevant model.
2. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
3. Click  **Graphic**. The **Select graphic** dialog opens.
4. Click **Select file** and use the **Open** dialog to navigate to the directory in which the required graphic or image is stored.
5. Select the graphic or image and click **Open**.

The image or graphic is placed in the model window. You can change its size, drag it to another position, and place it behind model items (page 966), for example.

7.5.2.3.1.21 Adjust size of appearance

You can change the size that models and model items are displayed in.

Procedure

1. Click  **Fit to window** in the Display bar.
If you have not selected a model item, the entire model content is placed in the visible area.
If you have selected one or more model items, their size of appearance is adjusted so that the selected model items are optimally placed in the visible area.
2. In the Display bar, click  **Original size**. The model content is output in the size 100 %.
3. In the Display bar, click  **Zoom in**. The model content is enlarged by 10 %.
4. In the Display bar, click  **Zoom out**. The model content is reduced in size by 10 %.

You have resized the model according to your requirements.

7.5.2.3.1.22 Select connected object

You can select the object that is linked to the selected object by a connection.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Select the occurrence of the relevant object in the model window.
3. Click the **Relationships** tab if it is not activated yet. The relationships of the selected object are listed.
4. Next to the name of the occurrence of a relationship  (connection (page 1167)), click  **More > Go to object**.

The connected object is selected in the model window.

7.5.2.3.1.23 Display and select connection

You can view and select the connection between a source and target object.

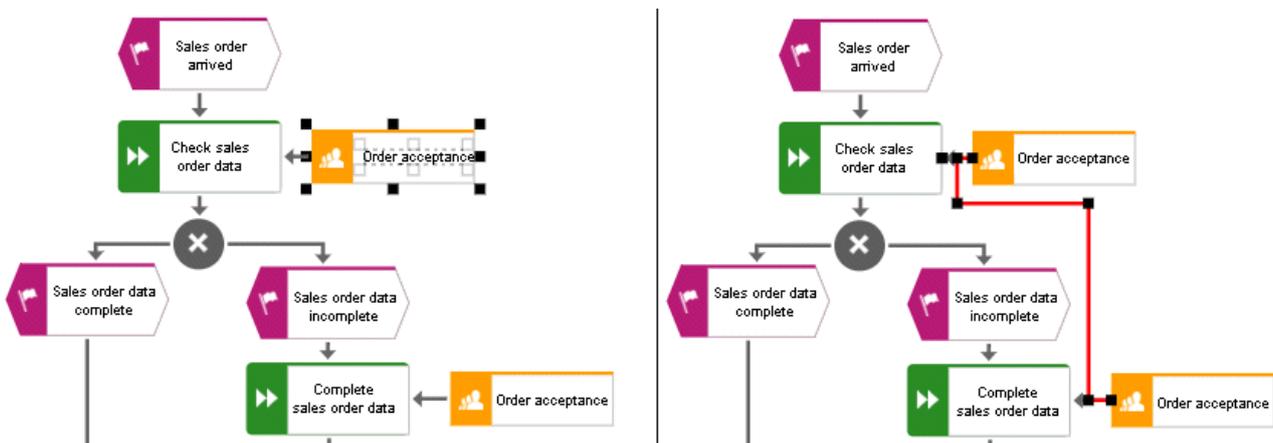
Procedure

1. Click **Properties**. The Properties bar opens.
2. Select the occurrence of the relevant object in the model window.
3. Click the **Relationships** tab if it is not activated yet. The relationships of the selected object are listed.
4. Next to the name of the occurrence of a relationship  (connection (page 1167)), click **More > Display connection**.

The connection between source and target object is selected. If multiple occurrences of a source object are used in a model, any connections that do not yet exist between the occurrences and the target object are created and selected.

Example

The following graphic shows two occurrences of the **Order acceptance** object. If you select one of the two occurrences and enable the **Display connection** function for the **carries out** connection linking the selected occurrence to the **Check sales order data** object, a **carries out** connection is also created to the target object from the other object occurrence that had a connection only to the **Complete sales order data** object before.



7.5.2.3.1.24 Delete connection

You can delete connections that do not have any occurrences in models for specific objects.

Procedure

1. Click **Properties**. The Properties bar opens.
2. Select the occurrence of the relevant object in the model window.
3. Click the **Relationships** tab if it is not activated yet. The relationships of the selected object are listed.
4. Next to the name of a relationship that has no occurrences in a model  (connection (page 1167)), click **More > Delete**.

If the connection no longer has any occurrences in any model, it is deleted. If it still has an occurrence in a model, a message is displayed and the connection is not deleted.

7.5.2.3.1.25 Display occurrences in an open model

You can display the usage of the selected object and connection occurrences in the open model.

Procedure

1. Click **Properties**. The Properties bar opens.
2. Select the relevant occurrence in the model window.
3. Click the **Occurrences** tab if it is not activated yet. The usage of the selected occurrence is displayed in the areas **In this model** and **In other models**.
4. Navigate to the individual occurrences in the model, if multiple occurrences exist. To do this, use the navigation buttons in the **In this model** area.
 - a. From top to bottom or left to right: Click the  right arrow.
 - b. From bottom to top or right to left: Click the  left arrow.
 - c. Select occurrence directly: Click  direct selection and then the number of the relevant occurrence.

The occurrence selected is highlighted. If it is placed outside the visible area, the model display is moved automatically so that the selected occurrence is placed in the visible area.

7.5.2.3.1.26 Display occurrences in other models

You can display the usage of the selected object and connection occurrences in other models than the open model.

Procedure

1. Click **i Properties**. The Properties bar opens.
2. Select the relevant occurrence in the model window.
3. Click the **Occurrences** tab if it is not activated yet. The usage of the selected occurrence is displayed in the areas **In this model** and **In other models**.
4. In the **In other models** area, click the name of the model in which the occurrence is to be selected.

The selected model opens in a new tab and the occurrence is highlighted. If multiple occurrences of the object exist in this model, the top one is highlighted.

7.5.2.3.1.27 Display relationships of selected objects

You can display the relationships of selected objects (page 921).

Procedure

1. Click **i Properties**. The Properties bar opens.
2. Select the occurrence of the relevant object in the model window.
3. Click the **Relationships** tab if it is not activated yet.

The relationships of the selected object are listed. If a relationship has an occurrence as a connection (page 1167), you can select the object (page 904) that is linked to the selected object by the connection. You can also delete connections that do not have any occurrences in models.

7.5.2.3.1.28 Delete model items

You can delete model items from the model window (page 865).

Procedure

Using the tab bar

1. Select the model items you want to delete.
2. Click  **Delete** in the tab bar.

The selected elements are deleted without prompting. As long as you have not saved the model you can undo the deletion by clicking  **Undo**.

Using the Delete key

1. Select the model items you want to delete.
2. Press the **Del** key.

The selected elements are deleted without prompting. As long as you have not saved the model you can undo the deletion by clicking  **Undo**.

You have deleted model items from the model window.

7.5.2.3.1.29 Refresh model appearance

You can refresh the model appearance in order to display current content from the database. This is useful if several people work with the model items. For example, names of objects that have an occurrence in the model you have opened may have been changed.

Procedure

1. Make the relevant changes in your model.
2. Click  **Refresh** if you want to compare the most current state of your model with the changes from other users.

The current data is read from the database and the appearance of your model is refreshed. If for example, the names of the objects used in the model were changed the new names are displayed.

7.5.2.3.1.30 Save model

Save your model.

Procedure

1. Make the required changes.
2. Click  **Save** in the tab bar.

Your changes are saved. You or others can access this model status at a later time.

7.5.2.3.1.31 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.3.1.31.1 Bars and buttons

7.5.2.3.1.31.1.1 What are tab bars for?

Tab bars enable you to access the relevant buttons within a specific context.

All tab bars contain frequently used buttons (page 871). This means that you do not need to switch between tab bars to access these buttons.

START TAB BAR

The **Start** tab bar groups the functions related to the representation and placement of model items (page 912).

MODEL TAB BAR

The **Model** tab bar groups the functions related to the layout and the graphic of models (page 914).

FORMAT TAB BAR

The **Format** tab bar groups the functions related to the presentation of written data in models (page 915).

BPMN TAB BAR

The BPMN tab bar is displayed if you have opened a BPMN diagram. It groups the functions that are used for the convenient editing of BPMN diagrams (page 917).

7.5.2.3.1.31.1.2 What general buttons are available?

The following general buttons are available for each tab bar.



Save: Saves your changes in the database.



Undo: Undoes editing steps.



Redo: Redoes editing steps that were undone.



Refresh: Refreshes the display. Reloads the data from the database and thereby also shows any changes made by a different editor in the meantime.



Delete: Deletes selected model items.



Cut: Cuts selected items and saves them to the clipboard.



Copy: Copies selected items to the clipboard.



Paste: Pastes the content of the clipboard into the model. If an object is on the clipboard, an occurrence copy (page 978) is inserted. Click the arrow next to the **Paste** icon if you want to paste a definition copy.

7.5.2.3.1.31.1.3 What buttons does the Start tab bar have?

Beside the general buttons (page 871), the **Start** tab bar provides the following buttons.



Format painter: Transfers the format (page 958) from one item to another.



Fill color: Colors the item in the selected color (page 958).



Equation 1: Edit

Line color: Colors the line of the item in the selected color (page 960).



Line style: Assigns selected items a different style (page 961) (**Dotted**, **Dashed**, or **Solid**).



Line weight: Assigns selected items a different line weight (page 961) in points.



Appearance: Assigns other properties to or removes properties from selected items (page 962), such as **Shaded**, **3-D effect**, and in addition, **Active** for objects.



Change symbol: Changes the symbol (page 898) of a selected object or the symbols of all selected objects of a type.



Attribute placement: Places attributes at the preset positions.



Assignments: Assigns a new model to the selected object (page 964). The type and name of the new model can be selected.



Arrange: Positions selected items (page 966) behind or in front of other items.



Group/Ungroup: Groups selected items (page 966), so that they can be treated like a single item or ungroups them (page 967).



Align: Aligns selected items in the model area with regard to each other (page 967).



Match size of items: Matches the size of selected model items with each other (page 967).



Go to: Opens the **Go to** menu.



Go to occurrence in Repository: Opens a new tab showing the repository for the selected object or model and enables the relevant check box.



Go to ARIS Connect fact sheet: Opens the fact sheets (page 1171) of the current model on a new tab. The **Overview** fact sheet is activated.



Alfabet: Provides functionality for establishing connections (page 973) with Alfabet.

7.5.2.3.1.31.1.4 What buttons does the Model tab bar have?

Beside the general buttons (page 871), the **Model** tab bar provides the following buttons.



Check diagram: Starts the selected semantic check (page 1049) for the current model or the selected objects.



Layout: Automatically creates a new layout for the model (page 971).



Horizontal space: Inserts space in your model (page 971) from left to right.



Vertical space: Inserts space in your model (page 971) from top to bottom.



Export graphic: Exports the graphic of the model (page 969) to your download area.



Connection properties: Determines the bridge height and rounding intensity of connections (page 902).



Grid and guides: Shows and hides (page 891) the grid in the model windows, enables or disables Guided Modeling (page 892), and sets the grid width (page 891).



Background color: Changes the background (page 962) color of an open model.



Apply template: Provides the available model templates for selection (page 864).

7.5.2.3.1.31.1.5 What buttons does the Format tab bar have?

Beside the general buttons (page 871), the **Format** tab bar provides the following buttons.



Format painter: Transfers the format (page 958) from one item to another.



Font format: Provides the available font formats for selection.



Bold: Applies bold formatting to a text.



Italic: Applies italic formatting to a text.



Underline: Applies underline formatting to a text.



Strikethrough: Applies strikethrough formatting to a text.



Font color: Opens the color palette for you to change the color of the selected text.



Font: Provides all fonts available for the selected text.



Font size: Enables you to change the font size for the selected text.



Reset character formatting: Undoes all formatting changes.



Increase indent: Increases the text indent from the left margin.



Decrease indent: Decreases the text indent from the left margin.



Bullets: Applies a bullet to each paragraph of the selected text.



Numbering: Turns the paragraphs of the selected text into a numbered list, starting at 1.



Align left: Aligns selected text to the left.



Centered: Aligns selected text to the center.



Align right: Aligns selected text to the right.

7.5.2.3.1.31.1.6 What buttons does the BPMN tab bar have?

Beside the general buttons (page 871), the **BPMN** tab bar provides the following buttons.



Change symbol: Changes the symbol (page 898) of a selected object or the symbols of all selected objects of a type.



Add lane: Adds a new lane (page 1018) to a pool or lane.



Insert lane: Inserts a selected lane in the selected pool or lane (page 1018).



Delete pool or lane: Deletes the selected pool or lane (page 1019).



Move lane: Moves the selected lane (page 1019) in the required direction.



Transform into call conversation: Transforms communication elements into call conversations (page 1019).



Change type of sequence flow: Specifies the type of a sequence flow (page 1020).



Collapse subprocess: Collapses a subprocess object (page 1020).



Expand subprocess: Expands a subprocess object (page 1021).



Figure 1: Edit

Edit: Opens the assigned model contained in the subprocess (page 1021) on a separate tab for editing.



Select global reference: Opens the dialog **Select global process or task** to assign it to a Call activity (page 1021).

7.5.2.3.1.31.1.7 What is the mini toolbar for?

The mini toolbar provides you with exactly the object symbols that can be linked to the selected object using a connection.



When you place an object symbol from the mini toolbar in the model window a connection between the selected object and the new object symbol is created at the same time. In addition, you can use the mini toolbar to create connections to existing objects.

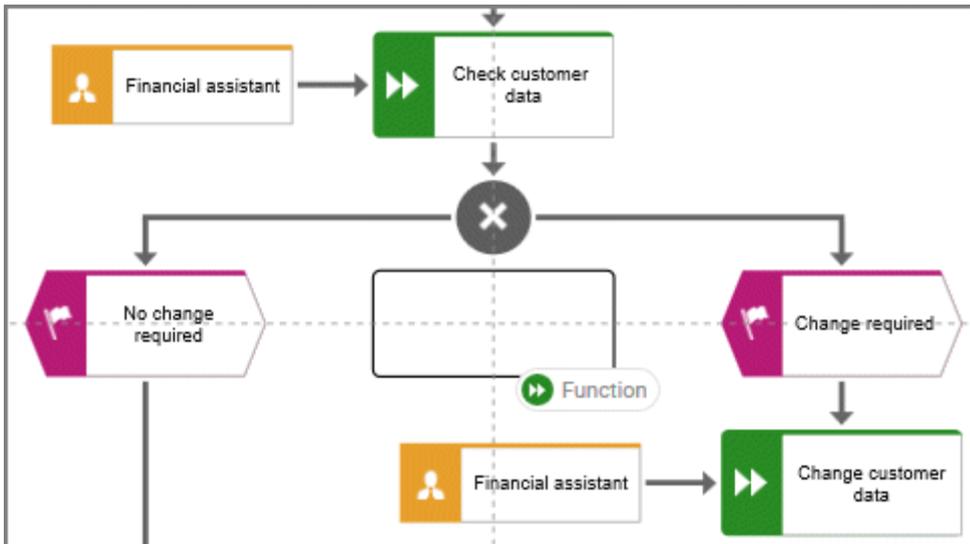
The mini toolbar is configured for each object type. When you click an object, the mini toolbar provides the object symbols you selected for the underlying object type.

7.5.2.3.1.31.2 Model display

7.5.2.3.1.31.2.1 What is Guided Modeling for?

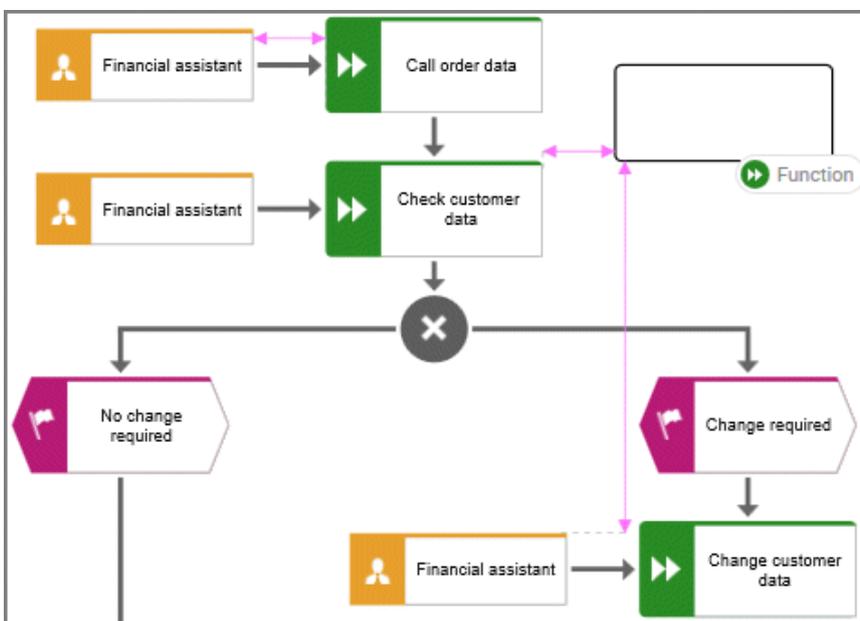
Guided Modeling supports you in placing or moving items. When you place or move objects or connections in a model, lines and arrows appear informing you of the orientation and distance of the items from adjacent items. The items snap into place where Guided Modeling "suggests" to position them. If Guided Modeling (page 892) and the grid (page 891) are switched on, Guided Modeling has priority when you position items.

Lines show the horizontal and vertical alignment to the adjacent items.



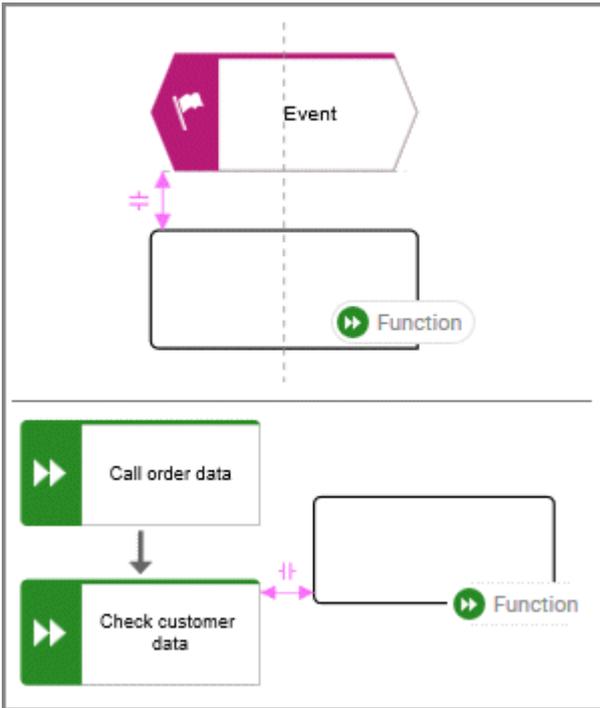
Guided Modeling always takes into account the nearest relevant items for the alignment lines.

Arrows indicate the distance between the moving object and the adjacent items.



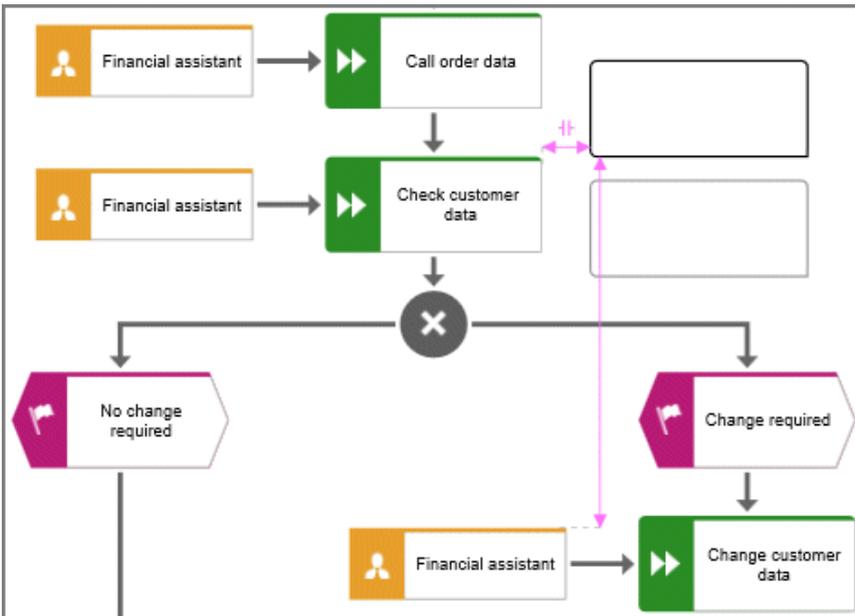
Distances are only displayed for items that are in the visible area of the model window.

The default distance is indicated by a special cursor.



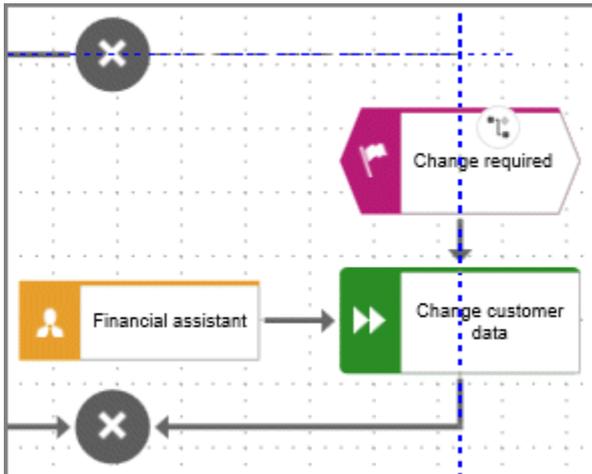
The default distance is the distance set for the horizontal and vertical item spacing of an optimized layout (page 971). To set the default distance, you must perform an optimized layout with an item spacing setting (page 892).

Guided Modeling is also provided for multi selections and connections.



The item of several selected items that you click to drag is used as the reference item. It is highlighted in bold when dragged and the orientation and distance guides are displayed for this item.

Guided Modeling for connections allows you to connect connections centrally at the border of the object regardless of the grid. (The blue highlighting of the guides in the screenshot serves only for clarification.)



7.5.2.3.1.31.2.2 How are object relationships displayed by symbols?

The relationships are identified by the following symbols:



Symbol for relationships for which an occurrence or an implicit connection exists in the current model.



Symbol for assignment relationships (implicit relationships).



Symbol for relationships for which no occurrences exist in the current model and that are not implicit either.

For example, if a connection was created between objects **A** and **B** and object **B** has been deleted, the relationship is displayed when object **A** is selected.

7.5.2.3.1.31.2.3 What are optional hyphens for?

The purpose of optional hyphens is to specify separation points for longer words. Where required, automatic separation occurs at these points and optional hyphens are inserted.

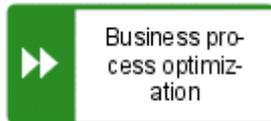
When entering an attribute text, for example, optional hyphens can be specified. They are indicated by a placeholder (☐) during input. If, for example, optional hyphens are inserted for an object name, the name is automatically adjusted if the size of the object is changed.

Example

You insert optional hyphens when entering the text:



When you exit the entry by clicking in the model background, the name is separated.



When you enlarge the object, the name is separated at a different place and provided with a hyphen. The previously displayed hyphens are removed.



7.5.2.3.1.31.2.4 What to consider when placing objects in/on objects

You can place objects on other objects (page 934) or in other objects (page 933). The difference between these two procedures is as follows: When placing an object **on** another object you specify that no implicit connection will be created between the objects. In contrast, when placing an object **in** another object you specify that an implicit connection is to be created between the objects.

You can place multiple objects of one type in an object at once. If you want to embed two objects at once and object 1 already has a connection to the enclosing object while object 2 has none, proceed as follows when creating connections:

- Select the connection that exists between object 1 and the enclosing object: This connection now links both objects to the enclosing object.
- Select a connection other than the one that exists between object 1 and the enclosing object: Object 1 is now linked to the enclosing object via two connections - the existing connection and the one you have selected. Object 2 uses the new connection.

Objects that were placed in other objects are also moved when the enclosing object is moved. If an enclosing object is selected, the embedded object is selected as well. This indicates clearly that an object is embedded in another object. In contrast, a non-embedded object is neither selected nor moved when the object on which it was placed is selected or moved.

You can drag an embedded object from an enclosing object to the model background. The connections linking the objects are then displayed.

7.5.2.3.1.31.2.5 Which items can be copied from one model to another?

You can copy graphic objects, such as circles, free-form texts, graphics, and objects, from one model to another.

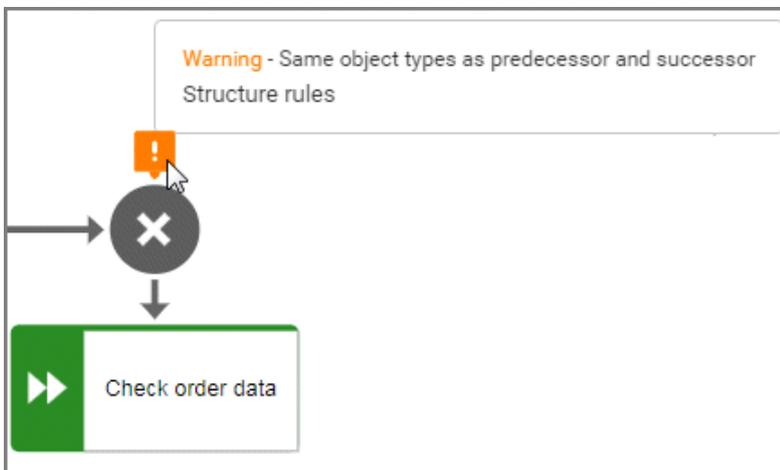
However, for an object to be pasted in the target model it has to be allowed there by the method. For example, if you copy functions and organizational units in the source model, only the organizational units will be pasted into a model of the **Organizational chart** type because functions are not allowed in this model type. The corresponding information is provided by the preview frames of the copied functions, showing as crossed out with an X when they are pasted into the organizational chart.

7.5.2.3.1.31.2.6 How are errors, warnings, and notes marked in the model?

If a semantic check detects errors, warnings, or notes, the corresponding object is marked in the model.

Information type	Marker
Error	
Warning	
Note	

If, for example, a warning is found, the warning marker is placed above the corresponding object. When you position the mouse pointer over the warning marker, additional information on the warning is displayed.



You can show detailed information in the **Semantic checks** bar by expanding an entry.

#	Item	Finding	Description
1	> ● AND rule	 Structure rules	Same object types as predecessor and successor
2	▼ ● XOR rule	 Structure rules Warning	Rule: Order at the rule must be observed At occurrence level, this rule checks whether or not at objects of type "Rule" redundancies exist for the set of preceding object types and the set of subsequent object types. When all incoming connections come from events, then all outgoing connections may only lead to functions, and vice versa.

7.5.2.3.1.31.3 ARIS and Alfabet

7.5.2.3.1.31.3.1 What is Alfabet?

Alfabet is an IT planning and portfolio management system. Based on answering the questions, when, where, how and why to make changes in the IT portfolio, it is used to increase IT investment returns and reduce transformation risks.

7.5.2.3.1.31.3.2 How do ARIS and Alfabet interact?

You can use the **ARIS - Alfabet Interoperability Interface** to reuse objects from ARIS and Alfabet databases in the respective other system. This is done interactively and for one object at a time or as a batch job and for multiple objects. By default, data from applications can be transferred from Alfabet to the ARIS database, while processes and functions can be transferred from ARIS to the Alfabet database.

It is easy to navigate between the systems. For example, from a business process in Alfabet, you can jump to the corresponding function or to a model in ARIS Connect that contains the function.

7.5.2.3.1.31.3.3 When is the Alfabet button shown?

When Alfabet is configured with ARIS Architect, the Alfabet button is available in the Start (page 912) tab bar. You can find the complete configuration description in the ARIS Architect online help.

7.5.2.3.1.31.4 Macros

You can apply macros to your models in ARIS Connect. The macros are executed on the server, which means that the models are locked when the macros are applied.

7.5.2.3.1.31.4.1 What are macros?

Macros are command sequences with which recurring actions can be automated.

Macros can be started manually in ARIS Architect or automatically in ARIS Architect and ARIS Connect. To start macros automatically, you can define that a macro is started when a certain event occurs (page 926).

For example, you can specify that the **Output model information** report is generated whenever a model of a specific type is saved (event **Model saved**). Or you can specify that whenever a new object occurrence of a specific object type is placed in a model of a specific model type the object symbol is always colored blue (event **Object occurrence created**).

7.5.2.3.1.31.4.2 Where to choose macro events for ARIS Connect Designer?

On the **Administration** tab in ARIS Architect, you can choose the macro events to start macros (page 926) in ARIS Connect Designer.

Click **ARIS > Administration** to open the tab.

Click **Evaluations > Macros** to open the macro categories.

In the appropriate category, right-click the relevant macro and click **Properties**.

In the **Property** dialog, click **Context** and enable the option button **Event**.

Click **Select event**. In the dialog, the **Available in ARIS Connect** column in the dialog box indicates the events that can be used in ARIS Connect to start a macro.

7.5.2.3.1.31.4.3 What does the addition vetoable in macro names mean?

Some macro names have the addition **vetoable**. This indicates the ability of a macro developer to suppress standard functionality.

You can define a macro that starts, for example, a semantic check automatically when a user saves a model. The semantic check is triggered by the **Model is to be saved (vetoable)** event. To suppress the save operation for non-compliant models, you must include the line **Context.setProperty("event.veto", "1")** into the corresponding statement block. The model is saved only if the semantic check rules are met.

7.5.2.3.1.31.5 Keyboard shortcuts for ARIS Connect Designer

The following shortcuts are available in ARIS Connect Designer (page 857).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Alt	Temporarily switches off Guided Modeling and grid (page 895) when you drag items.
Alt + down arrow	Moves selected objects down four grid lines.
Alt + F4	Closes the web browser. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Alt + left arrow	Moves selected objects four grid lines to the left.
Alt + - (minus)	Inserts an optional hyphen (page 897) at the cursor position in a text.
Alt + right arrow	Moves selected objects four grid lines to the right.
Alt + up arrow	Moves selected objects up four grid lines.
Ctrl + A	Selects all items.
Ctrl + C	Copies selected items to the clipboard. This enables you to paste copied items from the clipboard into models/diagrams and into other Windows programs.
Ctrl + down arrow	Moves selected items downwards by increments of one pixel.
Ctrl + End	Displays the bottom right pane of the model window.
Ctrl + Enter	Inserts a line break for text attributes, such as free-form texts, object names, etc.
Ctrl + F	Opens the Find bar.
Ctrl + F4	Closes the model tab. If changed models have not yet been saved, the system displays a message to notify you. You can cancel the dialog and save the model or leave the model page without saving.
Ctrl + Home	Displays the upper left pane of the model window.
Ctrl + left arrow	Moves selected items to the left by increments of one pixel.
Ctrl + Page down	Switches to the next web browser tab from left to right if your web browser supports changing tabs using the keyboard.
Ctrl + Page up	Switches to the next web browser tab from right to left if your web browser supports changing tabs using the keyboard.

Shortcut	Action
Ctrl + right arrow	Moves selected items to the right by increments of one pixel.
Ctrl + S	Saves your changes.
Ctrl + Shift + V	Inserts a definition copy of an object if an object is in the clipboard.
Ctrl + up arrow	Moves selected items upwards by increments of one pixel.
Ctrl + V	Pastes the content of the clipboard, if this is content that can be placed in the model window. If an object is in the clipboard, an occurrence copy of the object is inserted.
Ctrl + X	Cuts selected items and copies them to the clipboard.
Ctrl + Y	Redoes editing steps that were undone.
Ctrl + Z	Undoes preceding editing steps.
Del	Removes selected object symbols or deletes selected items, such as free-form text and graphic objects.
Down arrow	Moves the model window contents up (the contents of the model window that are further down will be displayed).
Enter	Ends the input.
ESC	Removes selections and closes dialogs. Closing dialogs with the ESC key is the same as clicking Cancel .
F2	Selects the selected text attribute of an element or the object name of a selected object for editing.
F3	Opens the Find bar. When the find bar is open, pressing the F3 key jumps to the next occurrence of the searched term.
F5	Updates the current view based on the database changes.
F11	Turns full screen mode on or off if your web browser supports full screen.
Left arrow	Moves the model window contents to the right (the contents of the model window that are further left will be displayed).
- (minus)	Reduces the display of the model content by 10%.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
+ (plus)	Enlarges the display of the model content by 10%.
Right arrow	Moves the model window contents to the left (the contents of the model window that are further right will be displayed).

Shortcut	Action
Shift	Keeps the shapes of a circle and a square (page 938) when you place and scale the graphic objects Circle/Elipse and Square/Rectangle .
Shift + Page down	Moves the contents of the model window page by page to the right (the contents of the model window that are further left will be displayed).
Shift + Page up	Moves the contents of the model window page by page to the left (the contents of the model window that are further right will be displayed).
Up arrow	Moves the model window contents down (the contents of the model window that are further up will be displayed).

7.5.2.3.1.31.6 Keyboard shortcuts for the Select attribute dialog

The following shortcuts are available in the **Select attribute** dialog with which you can add attributes on the Attributes tab (page 940).

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

Shortcut	Action
Down arrow	Moves the focus down to the next attribute.
End	Moves to the lower attributes.
Enter	Closes the dialog and adds the selected attributes when the focus is on the OK button, or closes the dialog and adds no attributes when the focus is on the Cancel button.
ESC	Closes the dialog without changes. Pressing this key corresponds to clicking Cancel .
F5	Updates the current view based on the database changes. The dialog is closed without changes.
F11	Turns full screen mode on or off if your web browser supports full screen. The dialog remains open.
Home	Moves to the upper attributes.
Page down	Scrolls the screen down. The scroll distance may vary depending on the application.
Page up	Scrolls the screen up. The scroll distance may vary depending on the application.
Space	Enables or disables the check box of the attribute on which the focus is located.
Tab	Jumps from the Search field to the Show specified attributes only check box, the attribute list field, the OK button, and the Cancel button.
Up arrow	Moves the focus up to the next attribute.

7.5.2.3.2 Extended editing

Besides the basic editing options, Model Editor provides you with additional functionality, such as copying formatting (page 958), creating groupings (page 966), applying various colors (page 959), inserting user-defined descriptions (page 956), or automatic resizing of objects (page 967).

7.5.2.3.2.1 Create a new model using an assignment

You can assign models to objects. The assignment enables you to describe objects in independent models in more detail, for example. Assigned models are displayed by way of an  assignment icon at the object and can be opened by double-clicking the assignment icon.

Procedure

1. In the open model, click the object to which you want to assign a new model.
2. Activate the Start (page 912) tab bar.
3. Click  **Assignment** >  **Create assignment**. The dialog opens.
4. Select the required model type. The model types that are allowed for the selected object by the method and by the method filter (page 883) in use are available for selection.
5. Enter the relevant model name. The name of the selected object is suggested as a model name.
6. Click **OK**.

The new model is assigned to the selected object and opens on a separate tab. You can model the required content.

7.5.2.3.2.2 Use objects

7.5.2.3.2.2.1 Find objects in an open model

You can have objects selected in the model window. If the object is not located in the visible area of the model window the visible area is moved and the object is displayed as selected in the visible area.

Procedure

1. Click the  **Find** bar button or press **Ctrl + F**. The Find bar opens.
2. Enter a part of the name or the entire name for the object to be found.
3. Click either  **Search down** or  **Search up**, depending on the direction in which you want to search for objects. The next object whose name contains the term entered is selected. If it is located outside of the visible area it is placed in the visible area.
4. Click  **Search down** or  **Search up** again. The next object with the term in its name is selected.

Each time you click the up and down buttons the next occurrence is selected. If a corresponding object cannot be found in the one direction the first occurrence is selected again.

7.5.2.3.2.2.2 Show where object occurrences are used

You can display where occurrences of an object are used and select the required occurrence using the navigation controls.

Procedure

1. Select an object in the model.
2. Click  **Properties**. The Properties bar opens.
3. Click the **Occurrences** tab. The occurrences of the selected object are listed. If more than one occurrence exists in the current model, the number of the selected occurrence and the total number of occurrences are displayed next to the object name.
4. Click the left or right arrow to navigate to the next occurrence in the model. The next occurrence is selected and its number updated.
5. To directly select an occurrence, expand the drop-down list and click the occurrence number.
6. To open a model that contains an occurrence of the selected object, click the name of the model in the **In other models** area. The model opens and the first occurrence of the object is selected. If there is no **Diagram** fact sheet for the occurrence, the first fact sheet (page 1171) is shown, for example, **Overview**

In the **In other models** area, all models are displayed to which you have at least read access. You switched between the occurrences of an object using the navigation controls.

7.5.2.3.2.2.3 Place objects directly below each other

You can easily place objects directly below each other.

Procedure

1. Enable Guided Modeling. (page 892)
2. Drag the object to the border of the object under which you want to position it directly. It snaps into place here.
3. Release the mouse button.

The object is now placed directly below the other object.

7.5.2.3.2.2.4 Place an object in an object

You can place an object in another object. The object then overlaps the object in which it is placed and has an implicit connection to this object. Implicit connections are connections that are not being displayed while an object is placed in another object.

Procedure

1. Click the object you want to place in another object, and hold down the mouse button.
2. Drag the object on top of the other object, position it inside the other object's borders, and release the mouse button. If multiple connections are available between the two objects, the connection selection is displayed. A right arrow is added to the outgoing connections of the embedded object, while a left arrow is added to the incoming connections.
3. Click the connection you want to draw between these two objects. The connection created is an implicit connection, which means that it is not displayed while the object is embedded in the other object.

The object is now placed in the other object. Due to the existing implicit connection, the embedded object is also selected or moved when the object in which it was placed is selected or moved.

Tip

You can place multiple objects of one type in an object at once.

7.5.2.3.2.2.5 Place an object on an object

You can place an object on another object. The object then overlaps the object on which it is placed, but has no implicit connection to this object. Implicit connections are connections that are not being displayed while an object is placed in another object.

Procedure

1. Click the object you want to place on another object, and hold down the mouse button.
2. Drag the object on top of the other object, position it inside the other object's borders, and release the mouse button. The connection selection is displayed.
3. Click **× No connection**. Thus, no connection is created between the two objects.

The object is now placed on the other object. Due to the lack of an implicit connection, the embedded object is neither selected nor moved when the object on which it was placed is selected or moved.

7.5.2.3.2.3 Use graphic objects

Graphic objects (page 1172) are shapes that can structure model content for the user. With regard to models, graphic objects do not have any semantics. That is why they cannot be evaluated by reports or included in analyses, for example.

7.5.2.3.2.3.1 Place graphic objects

You can place graphic objects in the model window (page 865) in order to, for example, structure model content.

Procedure

Place circle

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Circle/Ellipse**.
3. Click the position in the model window where you want to insert the graphic objects.

The circle is inserted in the model window. Now you can color the line (page 960) and inside (page 958), and, for example, place the graphic object behind a model area (page 966) to highlight this area.

Place square

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Square/Rectangle**.
3. Click the position in the model window where you want to insert the graphic objects.

The square is inserted in the model window. Now you can color the line (page 960) and inside (page 958), and, for example, place the graphic object behind a model area (page 966) to highlight this area.

Place rectangle

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Square/Rectangle**.
3. Click the position in the model window where you would like to place the graphic symbol, and hold down the mouse button.
4. Drag the mouse pointer in the desired direction so that the placed item receives the required form of a rectangle.
5. Release the mouse button.

The rectangle is inserted in the model window. Now you can color the line (page 960) and inside (page 958), and, for example, place the graphic object behind a model area (page 966) to highlight this area.

Place ellipse

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Circle/Ellipse**.
3. Click the position in the model window where you would like to place the graphic symbol, and hold down the mouse button.
4. Drag the mouse pointer in the desired direction so that the placed item receives the required form of an ellipse.
5. Release the mouse button.

The ellipse is inserted in the model window. Now you can color the line (page 960) and inside (page 958), and, for example, place the graphic object behind a model area (page 966) to highlight this area.

Place polygon

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Polygon/Line**.
3. In the model window, click the position where you want the polygon to begin.
4. Click the positions where the lines of the polygon are to change direction.
5. Double-click the position where you would like the polygon to end.

The polygon is inserted in the model window. Now you can color the line (page 960) and inside (page 958), and, for example, place the graphic object behind a model area (page 966) to highlight this area.

Place line

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Polygon/Line**.
3. In the model window, click the position where you want the line to begin.
4. Double-click the position where you would like the line to end.

The line is inserted in the model window. Now you can color the line (page 960).

Specify size when placing objects

You can directly resize circles/ellipses and squares/rectangles when placing them.

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Circle/Ellipse** or  **Square/Rectangle**.
3. In the model window, click the position where you want the graphic object to begin, and hold down the mouse button.
4. Drag the mouse pointer in the required direction until the graphic object has reached the required size.
5. Release the mouse button.

The graphic object is placed with the required size.

7.5.2.3.2.3.2 Paste copied graphic objects

You can paste copied graphic objects, such as circles or squares, regardless of whether you have copied them from the same or another model.

Procedure

1. Select the required graphic objects.
2. Click  **Copy**.
3. Open the target model, if required.
4. Click  **Paste**. Preview frames are displayed for the items you are pasting.
5. Click the position in the model window where you want to insert the graphic objects.

Copying and pasting graphic objects is now complete.

7.5.2.3.2.3.3 Resize ellipses and rectangles

You can directly resize circles/ellipses and squares/rectangles when placing them.

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. Click the graphic object  **Circle/Ellipse** or  **Square/Rectangle**.
3. In the model window, click the position where you want the graphic object to begin, and hold down the mouse button.
4. Drag the mouse pointer in the required direction until the graphic object has reached the required size.
5. Release the mouse button.

The graphic object is placed with the required size.

Place and scale circle or square

7.5.2.3.2.3.4 Place and scale circle or square

You can place and scale graphic objects in one operation. Placement and scaling of circles and squares differs from the placement of other graphic objects.

Procedure

1. Open the **Symbols** bar if it is not already open by clicking  **Symbols**.
2. To place a circle: Click the graphic object  **Circle/Ellipse**.
To place a square: Click the graphic object  **Square/Rectangle**.
3. Press the **Shift** key.
4. Click the position in the model window where you would like to place the graphic symbol, and hold down the mouse button.
5. Move the mouse pointer to scale the graphic object. The circular or square shape is retained during the operation.
6. Release the mouse button and the **Shift** key when the correct size of the graphic object is reached.

The circle or square is placed and scaled.

7.5.2.3.2.4 Use attributes

You can use attributes to describe and distinguish between models, objects and connections. You can place attributes directly in the model window (page 944), and specify for specific attributes that they are to be displayed as a symbol (page 947).

7.5.2.3.2.4.1 Customize Attributes tab

You can show additional attributes or specify whether and when attributes are to be shown.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. Click  **Edit language** if you want to show (page 941) an additional language column for language-specific attributes. You can select an additional database language and view and edit it next to the language currently used.
4. Click  **Add** on the **Attributes** tab. The **Select attribute** dialog opens.
5. If you want to add only specified attributes, enable the **Show specified attributes only** check box. You can restrict the result of displayed attributes using a search term.
6. Enter a search term for the attributes you want to display. The attribute type groups that contain attributes whose names contain the term you entered are expanded and the attributes are displayed.
7. Enable the check boxes of the relevant attributes.
8. Click **OK**. The selected attributes are added to the **Attributes** tab.
9. Click  **More** next to the attribute whose visibility you want to specify.
10. Click  **Hide always** if you want to hide the attribute from the **Attributes** tab even if a value has been specified. For the attribute to be displayed at a later time you need to select it explicitly by clicking **Add**.
11. Click  **Hide, if not specified** if you want the attribute to be displayed on the **Attributes** tab only if a value has been specified.
12. Click  **Place attribute** and the relevant position in the model window if you want the attribute value to be displayed in the model.
13. Click  **Delete attribute** if you want to delete the attribute value. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

The attributes on the **Attributes** tab are displayed according to your settings.

7.5.2.3.2.4.2 Add attributes in the Attributes tab

You can edit model attributes and the attributes of objects or connections.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. If you want to edit model attributes, ensure that no model item is selected.
If you want to edit object or connection attributes, select the corresponding object or connection.
4. Click  **Add** in the **Attributes** tab. The **Select attribute** dialog opens.
5. If you want to see only attributes with assigned values, enable the **Show specified attributes only** check box. You can restrict the result of displayed attributes using a search term.
6. Enter a search term for the attributes you want to display. The attribute type groups that contain attributes whose names contain the term you entered are expanded and the attributes are displayed.
7. Enable the check boxes of the relevant attributes.
8. Click **OK**.

The selected attributes are added to the **Attributes** tab.

7.5.2.3.2.4.3 Hide attributes of the Attributes tab

You can hide attributes of the **Attributes** tab to keep the attribute list clear.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. If you want to hide model attributes, ensure that no model item is selected.
If you want to hide object or connection attributes, select the corresponding object or connection.
4. Move the mouse pointer over the row of the attribute you want to remove.
5. Click the  three dots at the end of the row. The attribute menu opens.
6. Click  **Hide always** if you want to hide the attribute, even if it has a value.
Click  **Hide, if not specified** if you want to hide the attribute if it is not specified, but should be displayed if a value has been entered.

The attributes you "hide always" are hidden.

The attributes you "hide, if not specified" are hidden if no value is entered or hidden as soon as their values are deleted. If a value is entered for them, for example, in the model window, they are displayed again on the **Attributes** tab.

7.5.2.3.2.4.4 Edit attributes

You can edit model attributes and the attributes of objects or connections.

Prerequisite

The attribute you selected can be edited. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. If you want to edit model attributes, ensure that no model item is selected.
If you want to edit object or connection attributes, select the corresponding object or connection.
4. Display the relevant attribute (page 940) if it is not listed.
5. Click the cell that comes after the name of the attribute. A dialog is displayed. If you can enter any text for an attribute, a dialog including the formatting toolbar is displayed. If required, you can enlarge (page 943) this dialog.
6. Make your changes. Different input options are available depending on the type of attribute. While you can enter text for text attributes such as names, you can, for example, select a number and a unit for times.
7. Click **OK**.

You have changed the attribute value.

7.5.2.3.2.4.5 Show language column

You can show a column for another language next to the original column. This enables you to compare and edit (page 942) the contents of language-dependent items in different languages. For example, you can use this option to translate language-dependent contents from one language into another.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. Click  **Edit language**. A second column is shown for language-dependent attributes.
4. Click the  **down arrow** in the header cell and select the required language.

The content of the language column is displayed in the language you have selected. If you change or enter attribute values, this is done in the selected language.

7.5.2.3.2.4.6 Hide language column

You can hide the shown language column (page 941) when you no longer need it.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. Click  **Hide language**.

The additional column for language-dependent attributes is removed, and only the column of the original language remains visible.

7.5.2.3.2.4.7 Edit attributes of various languages

You can edit model, object, and connection attributes in various languages as long as they are not system attributes.

Procedure

1. Click  **Properties**. The Properties bar opens.
2. Click the **Attributes** tab if it is not activated yet.
3. Show the relevant attribute if it is not listed.
4. Show the required language column (page 941).
5. Click in the cell behind the attribute name. The **Edit** dialog and the selected language column are shown. If required, you can enlarge (page 943) the dialog.
6. Make your changes. Different input options are available depending on the type of attribute. While you can enter text for text attributes such as names, you can, for example, select a number and a unit for times. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.
7. If you have specified your input for the language displayed and want to specify input for other languages, click the name of the selected language in the dialog. The list of available languages opens.
8. Select another language and make your entries.
9. Click **OK**.

Your changes are saved in the various languages.

7.5.2.3.2.4.8 Increase size of attribute editing dialog

You can increase the size of the attribute editing dialog so that you can conveniently edit comprehensive content.

Procedure

1. Open the dialog (page 899) for the attribute you want to edit.
2. Click  **Zoom in**. The size of the dialog increases and offers more space for editing the attribute.
3. Click  **Zoom out** to display the dialog in the original size again.

You have resized the attribute editing dialog according to your requirements.

7.5.2.3.2.4.9 Place attributes at fixed positions

You can place any attribute of objects and connections, not just the name, visibly in the model window. For quick placement several fixed positions in and around the object are offered.

Procedure

Place new attributes at fixed positions

1. Select the object you want to place a new attribute for.
2. Activate the Start (page 912) tab bar.
3. Click  **Attribute placement**.
4. Click **Create attribute placement**. The **Select attribute** dialog opens.
5. Enable the **Show specified attributes only** checkbox. Then only the attributes with a value are made available for selection.
6. Enter the first letters of the required attribute name. All attributes are displayed whose names contain the term you entered.
7. Click the name of the attribute you want to place.
8. Click **OK**. The dialog closes and a frame for the attribute is displayed in the model window.
9. Click anywhere in the model window.
10. Click the newly placed attribute so that the handles are colored.
11. Click  **Attribute placement**.
12. Click the position of the object where the attribute is to be placed, for example,  **Top right**.

The attribute is placed in the selected position at the object. You can specify that the attribute name is to be displayed for the placed attribute. You can also specify for certain attributes that they are to be displayed as a symbol.

Place freely placed attributes at fixed positions

1. Select the freely placed attributes you want to place at a fixed position. Their handles will be colored.
2. Activate the Start (page 912) tab bar.
3. Click  **Attribute placement**.
4. Click the position of the object where the attribute is to be placed, for example,  **Top right**.

The attributes are placed at the objects at the position selected. You can specify that the attribute name is to be displayed for placed attributes. You can also specify for certain attributes that they are to be displayed as a symbol.

You have placed attributes at fixed positions.

7.5.2.3.2.4.10 Place attributes at any position

You can place any attribute of objects and connections, not just the name, visibly in the model window. These cannot only be placed at fixed positions (page 943), but also freely.

Procedure**Place new attribute freely**

Select the object you want to place a new attribute for.

1. Activate the Start (page 912) tab bar.
2. Click  **Attribute placement**.
3. Click **Create attribute placement**. The **Select attribute** dialog opens.
4. Enable the **Show specified attributes only** checkbox. Then only the attributes with a value are made available for selection.
5. Enter the first letters of the attribute name. All attributes are displayed whose names contain the term you entered.
6. Click the name of the attribute you want to place.
7. Click **OK**. The dialog closes and a frame for the attribute is displayed in the model window.
8. In the model window, click the position where you want to place the attribute.

The attribute is placed in the selected position in the model window.

Reposition a placed attribute

1. Click the placed attribute you want to reposition. The handles will be colored.
2. Hold down the mouse button.
3. Drag the attribute to the position in the model window where you want to place it and release the mouse button.

The attribute is placed in the selected position in the model window.

You have placed attributes at any positions.

7.5.2.3.2.4.11 Place attributes from Attributes tab

Use the **Attributes** tab to quickly place an attribute.

Procedure

1. Select the object you want to place a new attribute for.
2. Click  **Properties**. The Properties bar opens.
3. Click the **Attributes** tab if it is not activated yet.
4. Behind the attribute you want to place, click  **More**.
5. Click  **Place attribute**.
6. Move the mouse pointer to the model window. A frame is displayed.
7. Drag the frame in the model window to the position where you want to place the attribute.
8. Click the relevant position.

The attribute is placed.

7.5.2.3.2.4.12 Display names of placed attributes

You can specify that the attribute name of placed attributes is to be displayed in the model window.

Procedure

1. Select the placed attribute whose attribute name you want to display in the model window.
2. Activate the Start (page 912) tab bar.
3. Click  **Attribute placement**.
4. Enable the **With name** check box.

The attribute value is placed in front of the attribute name.

7.5.2.3.2.4.13 Select placed attributes

You can select placed attributes in order to place them at another position or to remove the placement (page 947).

Procedure

1. Click a placed attribute in the model window. The attribute is marked by a colored handle.
2. Press the **Ctrl** key, and click additional placed attributes you want to reposition or remove.

You can now delete or reposition (page 943) the selected attributes.

7.5.2.3.2.4.14 Edit placed attributes

You can edit placed text attributes of models, objects, and connections in the model window. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

Procedure

1. Click the placed attribute. It now has handles.
2. Click on the text attribute again. The attribute is selected for editing.
3. Change the text attribute as necessary.
4. Press **Enter** or click in the model background.

The text attribute is changed.

7.5.2.3.2.4.15 Directly format placed attributes

You can format model, object, and connection attributes when editing in the model window.

Prerequisite

The attribute you selected can be edited. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

Procedure

1. Double-click the placed attribute of a model, object, or connection so that the text is selected. The formatting toolbar is shown.
2. In the formatting toolbar, click the button for the formatting you want to assign to the selected attribute, for example,  **Increase indent**. The formatting information is directly applied to the selected attribute.
3. Click an empty area in the model window. The attribute selection is undone.

You have formatted the placed attribute.

7.5.2.3.2.4.16 Move placed attribute

You can move placed attributes of objects and connections.

Procedure

1. Click the placed attribute and hold down the mouse button. The attribute now has handles.
2. Drag the attribute to the required position and release the mouse button.

The attribute is placed at the new position.

7.5.2.3.2.4.17 Display placed attributes as a symbol

You can display certain attributes as a symbol (page 950) if they are placed.

Prerequisite

The attribute can be represented by a symbol. This is the case if you select the attribute and the **As a symbol** check box becomes available.

Procedure

1. Select the placed attribute you want to represent with a symbol.
2. Activate the Start (page 912) tab bar.
3. Click  **Attribute placement**.
4. Enable the **As a symbol** check box.

The placed attribute is represented as a symbol.

7.5.2.3.2.4.18 Remove placed attribute

You can remove placed attributes from the model window. Of course, only the attribute placement is deleted and not the value that was placed. To change the attribute value, edit the attribute (page 899) on the **Attributes** tab of the  Properties bar.

Procedure

1. Select the placed attribute (page 946) whose placement you want to remove.
2. Press the **Del** key.

The placement of the selected attribute is removed without prompting for confirmation.

7.5.2.3.2.4.19 Remove multiple placed attributes

You can remove multiple placed model, object, or connection attributes from the model window in only one step. Of course, only the attribute placement is deleted and not the value that was placed.

Procedure

Remove directly

1. Use the Ctrl key to select the placed attributes you want to delete in the model window directly.
2. Press the **Del** key.

The placements of the selected attributes are removed without prompting for confirmation.

Use a dialog

1. Select the object or connection whose attribute placements you want to remove.
2. Activate the Start (page 912) tab bar.
3. Click  **Attribute placement > Delete attribute placement**. The dialog is displayed.
4. Enable the check boxes for the placed attributes whose attribute placement you want to delete. You can enable all check boxes at once by enabling the superior check box **Attribute name**.
5. Click **OK**.

The placements of the selected attributes are removed without prompting for confirmation.

You have removed multiple placed attributes.

7.5.2.3.2.4.20 Delete attributes

Use the Attributes bar to delete attributes.

Procedure

1. Select the object or connection whose attribute you want to delete. If you want to delete model attributes, you must ensure that no object or connection is selected so that the model attributes will be displayed on the **Attributes** tab of the **Properties** bar.
2. Click  **Properties**. The Properties bar opens.
3. Click the **Attributes** tab if it is not activated yet.
4. Behind the attribute you want to delete, click  **More**.
5. Click  **Delete attribute**.

The value of the attribute will be deleted. You cannot change or delete attribute values of attributes that the system defines. These are placed in gray cells, for example, **Last change**.

7.5.2.3.2.4.21 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.3.2.4.21.1 What placed attribute does an object have?

If you place an object in the model window, the name of the object is output as an attribute. The name attribute is usually placed within the object. You can place additional attributes of objects in the model window in order to have the relevant information available directly in the model window.

If you want to place more attributes, it is useful to place them near the object to which they belong. It can however occur that in the layout objects are positioned very close to one another making it difficult to say which object a placed attribute belongs to. In addition, it is also possible to place attributes freely. If an attribute was placed farther away from its object it may be difficult to assign the placed attribute after the layout is changed.

By clicking on an object it is given colored handles as a marker and its attributes are given handles that are not colored. This enables you to identify which placed attributes an object has. This also applies to placed attributes that do not have an attribute value. They are invisible in the model window until you assign a value to them. If the associated object is selected the "invisible" placed attribute also receives attribute handles.

7.5.2.3.2.4.21.2 What to consider when placing objects in/on objects

You can place objects on other objects (page 934) or in other objects (page 933). The difference between these two procedures is as follows: When placing an object **on** another object you specify that no implicit connection will be created between the objects. In contrast, when placing an object **in** another object you specify that an implicit connection is to be created between the objects.

You can place multiple objects of one type in an object at once. If you want to embed two objects at once and object 1 already has a connection to the enclosing object while object 2 has none, proceed as follows when creating connections:

- Select the connection that exists between object 1 and the enclosing object: This connection now links both objects to the enclosing object.
- Select a connection other than the one that exists between object 1 and the enclosing object: Object 1 is now linked to the enclosing object via two connections - the existing connection and the one you have selected. Object 2 uses the new connection.

Objects that were placed in other objects are also moved when the enclosing object is moved. If an enclosing object is selected, the embedded object is selected as well. This indicates clearly that

an object is embedded in another object. In contrast, a non-embedded object is neither selected nor moved when the object on which it was placed is selected or moved.

You can drag an embedded object from an enclosing object to the model background. The connections linking the objects are then displayed.

7.5.2.3.2.4.21.3 What does place attribute as a symbol mean?

Attributes of objects can be placed in the model window which allows them to emphasize additional, important aspects in the model.

A symbol can be placed instead of a value for some attributes, which allows the attribute value to be identified immediately.

If such an attribute was specified and placed, for example, the **Existence** attribute, the **As a symbol** check box becomes available. If you enable the check box, a plus sign is placed in the model instead of **Yes** for the **Existence** attribute, and a minus sign instead of **No**.

7.5.2.3.2.4.21.4 Which attributes can be placed as a symbol?

There are attributes for which a default symbol is defined.

If such an attribute was specified and placed, for example, the **Existence** attribute, the **As a symbol** check box becomes available. If you enable the check box, a plus sign is placed in the model instead of **Yes** for the **Existence** attribute, and a minus sign instead of **No**.

Other attributes can be assigned attribute symbols for placement by a user with the **Configuration administrator** function privilege. This is done on the **Administration** tab in ARIS Architect.

7.5.2.3.2.4.21.5 What happens to placed attributes that have no attribute value?

If you place an object in the model window, the name of the object is output as an attribute. The name attribute is usually placed within the object. You can place additional attributes of objects in the model window in order to have the relevant information available directly in the model window. The usual procedure is to place attributes with an attribute value that can be seen directly in the model.

However, it may be useful to place attributes that are assigned a value at a later point in time. If, for example, it was defined that, as a rule, the maximum processing time is to be placed to the upper left of the **Function** object type this may happen even if the attribute value of this attribute has not been entered for all functions. If the value is entered later it is automatically displayed in the model window.

If a placeholder is to be used to make the placement of attributes without a value visible in the model window, you can define that they are to be placed with an attribute name. In our example, **Max. processing time:** would then be output for the relevant functions, and a value entered would appear behind the colon.

7.5.2.3.2.4.21.6 How is the format copied to placed attributes?

You can copy the formats of a selected item to another item or to several other items.

The following applies to placed attributes and free-form texts:

- If object or connection occurrences are the target, all of the placed attributes of the target are modified. The position is not changed.
- If placed attributes or free-form texts are the target, the target text is modified. The position is not changed.

7.5.2.3.2.5 Use documents

ARIS document storage enables you to propose documents or to submit a change request for a document.

7.5.2.3.2.5.1 Upload documents

You can upload documents to ARIS document storage and assign them to models and objects (page 953) in order to supplement these with detailed descriptions and graphics, for example. We strongly recommend that you check documents for malicious software before uploading.

Prerequisite

The filter in use (page 883) allows the **ARIS document storage Link** attribute.

Procedure

1. Open (page 889) the relevant model.
2. Click  **Properties**. The Properties bar opens.
3. Click the **Attributes** tab if it is not activated yet.
4. Show the **ARIS document storage Link** attribute.
5. In the editing cell of the **ARIS document storage Link** attribute, click  **Edit**. The **Select document** dialog opens.
6. Select **ARIS document storage** if it is not yet selected.
7. Select the folder in which you want to save the document.
8. Click  **Upload new document**. The dialog opens.
9. Click **Browse**. The dialog opens.
10. Navigate to the relevant document, select it, and click **Open**.
11. The dialog closes and you may enter the document's title, a description, as well as tags (keywords) enabling the document to be identified in ARIS document storage.
12. Click **Upload**.

Once the upload of the document is complete, you can assign it to models and objects (page 953).

7.5.2.3.2.5.2 Assign documents

You can supplement individual models and objects with, for example, detailed information and graphics by assigning documents available in ARIS document storage to them.

Prerequisite

The filter in use allows the **ARIS document storage Link** attribute.

Procedure

1. Open (page 889) the relevant model.
2. Select the object to which you want to assign a document, or ensure that no object is selected if you want to assign the document to the model.
3. Click  **Properties**. The Properties bar opens.
4. Click the **Attributes** tab if it is not activated yet.
5. Show (page 861) the **ARIS document storage Link** attribute.
6. In the editing cell of the **ARIS document storage Link** attribute, click  **Edit**. The **Select document** dialog opens.
7. Select ARIS document storage if it is not yet selected.
8. Select the folder containing the relevant document.
9. Enable the option button of the document you want to assign.
10. Click **OK**.

The document is assigned to the item.

On the **Documents** tab, a document with the **ARIS document storage Link** attribute is marked with  for objects and  for models. If a document title was specified, it is shown, otherwise the complete link to the document in ARIS document storage. You can place the attribute (page 943). To ensure that the name you specify is placed in the model instead of the link, you can show the **ARIS document storage Title** attribute from the **Attributes** tab (**Properties** bar). If you specify a name for the attribute, this name is displayed in the model instead of the contents of the placed **ARIS document storage Link** attribute.

7.5.2.3.2.5.3 Open assigned document

You can easily open an assigned document.

Procedure

Placed attribute

Double-click the placed **ARIS document storage Link** attribute.

From the Attributes bar

1. Activate (page 861) the **Attributes** bar.
2. Show the **ARIS document storage Link** attribute.
3. Click the entry in the editing cell.

You can either open or save the assigned document.

7.5.2.3.2.5.4 Link documents

You can link documents available in ARIS document storage directly with individual models and objects and thus supplement them with detailed descriptions and graphics, for example.

Procedure

1. Open (page 889) the relevant model.
2. Select the object for which you want to create a link to a document, or ensure that no object is selected if you want to link the document with the model.
3. Click **i Properties**.
4. Activate the **Documents** bar.
5. Click **+ Add**.
6. In ARIS document storage, click the folder containing the relevant document.
7. Enable the check box for the required document, and click **OK**.

The document is linked with the item.

On the **Documents** tab, a mark is shown:  for objects and  for models. If a document title was specified, it is shown, otherwise the complete link in ARIS document storage.

7.5.2.3.2.5.5 Open linked document

You can easily open an assigned document.

Procedure

1. Activate (page 861) the **Documents** bar.
2. Click a document.

You can either open or save the linked document.

7.5.2.3.2.5.6 Use the Documentation attribute

You can describe database and model items (models, objects, groups, etc.) using formatted documents or other files and save these documents in the **Documentation** attribute. If you are using the Microsoft® Word file formats **DOC** and **DOCX**, a preview is available and the  **Edit** button is available. You can also create the documents directly from the **Documentation** attribute.

Procedure

Insert an external description

Prerequisite

You are using Microsoft® Word.

Procedure

1. Start ARIS Connect and open ARIS Connect Designer.
2. Select the item to which you want to assign the description and which does not yet have an external description.
3. Activate the **Attributes** tab of the **Properties** bar and show the **Documentation** attribute (page 861).
4. Click  **Edit** in the attribute row. Microsoft® Word opens with a blank document.
5. Enter your description and click Save.

The description is assigned to the item. When you click  **Edit** again, the document opens and you can edit it.

Import external description

1. Create an external description and save it, for example, in Microsoft Word.
2. Start ARIS Connect and open ARIS Connect Designer.
3. Select the item you want to assign the description to.
4. Activate the **Attributes** tab of the **Properties** bar and show the **Documentation** attribute (page 861).
5. Click  **Import** in the attribute row. The **Select document** dialog opens.
6. Click **Select file** and select the newly created external description in the dialog.
7. Click **Open**.

The document is inserted in the **Documentation** attribute.

Edit an external description

If you are using the Microsoft® Word file formats **DOC** and **DOCX**, a preview is available and the  **Edit** button is available.

Warning

Due to technical restrictions external descriptions cannot be locked if they are open in the editor. Therefore, it is possible that a user deletes an external description in ARIS Connect while it is being edited by another user in the text editor. In this case, all changes of the description are deleted without the editing user being notified.

Procedure

1. If the attribute is not displayed: Activate the **Attributes** tab of the **Properties** bar and show the **Documentation** attribute (page 861).
2. Click  **Edit** in the attribute row. The word processor is launched and the document opens.
3. Edit and save the document.
4. Close Microsoft® Word and activate ARIS Connect.
5. If necessary, click  **Update**.

The document is added to the **Documentation** attribute and a preview is displayed.

Display external descriptions read-only

1. Select the item the description of which you want to display.
2. Activate the **Attributes** tab of the **Properties** bar and show the **Documentation** attribute (page 861).
3. Click  **Display**. Depending on your browser, you may be asked whether you want to save or open the file.
4. Select **Open**. The corresponding program launches and the file opens in read-only mode.

You can now find out about the content of the document.

If you decide to save the document, you must save it with a name that differs from its previous name. Thus, a copy is created. It is, however, not inserted into the **Documentation** attribute.

Refresh the preview of the external description

1. Select the item the description of which you want to display.
2. Activate the **Attributes** tab of the **Properties** bar and show the **Documentation** attribute (page 861).
3. Click  **Refresh**.

The display of the **Documentation** attribute is updated so that the changes you have made will be displayed.

You have described a database or model item with a formatted document.

7.5.2.3.2.6 Format model and model items

7.5.2.3.2.6.1 Format painter

You can copy the formats of a selected item to another item or to several other items. This way, you can transfer the format of one object to all other objects and need not to transfer it to each object individually.

Procedure

1. Select the model item whose format you want to copy.
2. Activate the Start (page 912) tab bar.
3. Click  **Format painter**.
4. If you want to copy the format to one item: click the relevant item.
If you want to copy the format to more than one item: use the mouse to draw a border around the relevant items. You can also press the **Ctrl** key and click the required items one after the other.

The format of the selected items is adjusted accordingly.

7.5.2.3.2.6.2 Color model items

You can assign a different color to object symbols and graphic objects.

Procedure

1. Select the model items you want to color.
2. Activate the Start (page 912) tab bar.
3. Click  **Fill color**. The color palette opens.
4. Click the color you want to color the selected model item with. The selected model items are colored with the selected color. The color palette closes.

You have colored the selected model items.

7.5.2.3.2.6.3 Color model items with a user-defined color

You can assign your own color to object symbols and graphic objects.

Procedure

1. Select the model items you want to color.
2. Activate the Start (page 912) tab bar.
3. Click  **Fill color**. The color palette opens.
4. Click **Choose your own color**. The **Define color** dialog opens.
5. Select your own color in one of the ways described below. Your changes will be displayed in the preview window on the right:
 - a. Click the color bar and move the line to the relevant color range to select the basic color. Then click on the relevant position in the color box to select the brightness of the basic color.
 - b. Enter the respective share of each color from 0 to 255 in the **Red**, **Green** and **Blue** boxes. 0 means that the corresponding color is absent. If you enter **0** in all three boxes you have selected the color **black**.
 - c. Enter a hexadecimal color definition in the **Color code: #** box. The hexadecimal system uses the letters A to F in addition to the numerals of the decimal system, which means that it is based on the base 16. If you enter FFFF00, this sets the color to **Yellow**.
6. Click **OK**.

You have colored the selected model items with a self-defined color.

7.5.2.3.2.6.4 Color model items with a gradient

You can color object symbols and graphic objects with a gradient.

Procedure

1. Select the model items you want to color.
2. Activate the Start (page 912) tab bar.
3. Click  **Fill color**. The color palette opens.
4. Click **Choose your own color**. The **Define color** dialog opens.
5. Enable the **Gradient** check box. Two color boxes and a list box for the direction of the gradient are displayed.
6. Click the first color box and select the start color (page 959) for the gradient.
7. Click the second color box and select the second color (page 959) for the gradient.
8. Click the list box and select the direction of the gradient.
9. Click **OK**.

You have colored the selected model items with a gradient.

7.5.2.3.2.6.5 Display model items without color

You can display object symbols and graphic objects without a color fill.

Procedure

1. Select the model items you want to display without color.
2. Activate the Start (page 912) tab bar.
3. Click  **Fill color**. The color palette opens.
4. Click **No fill color**.

The selected model items are displayed without color.

7.5.2.3.2.6.6 Reset object symbol color

You can reset the color of an object symbol back to the default color if you have changed the color.

Procedure

1. Select the object symbol you colored.
2. Activate the Start (page 912) tab bar.
3. Click  **Fill color**. The color palette opens.
4. Click  **Reset**.

You have reset the color of the selected object symbols to their original color.

7.5.2.3.2.6.7 Color borders and lines

You can assign a different color to the borders of object symbols and graphic objects, as well as connections.

Procedure

1. Select the model items whose borders you want to color.
2. Activate the Start (page 912) tab bar.
3. Click  **Line color**. The color palette opens.
4. Click the color you want to color the borders and lines of the selected model items with.

You have colored the borders and lines of the selected model items.

7.5.2.3.2.6.8 Reset border and line color

You can reset the colors of the borders and lines of model items if you changed their color.

Procedure

1. Select the model items whose borders or lines you colored.
2. Activate the Start (page 912) tab bar.
3. Click  **Line color**. The color palette opens.
4. Click  **Reset**.

You have reset the colors of the borders and lines of selected model items.

7.5.2.3.2.6.9 Change line style

You can assign a different style to the borders of object symbols, graphic objects, and connections.

Procedure

1. Select the model items whose border and line style you want to change.
2. Activate the Start (page 912) tab bar.
3. Click  **Line style**. The style selection opens.
4. Click **Solid**, **Dashed**, or **Dotted**, depending on which style you want to assign to the selected elements.

The style of the borders and lines of the selected model items is adjusted accordingly.

7.5.2.3.2.6.10 Change line weight

You can change the weight of the borders of object symbols, graphic objects, and connections.

Procedure

1. Select the model items whose line weight for borders and lines you want to change.
2. Activate the Start (page 912) tab bar.
3. Click  **Line weight**. The weight selection opens.
4. Click **0 pt**, **2 pt**, **4 pt**, or **8 pt**, depending on which weight you want to assign to the borders and lines of the selected model items.

The weight of the borders and lines of the selected model items is adjusted accordingly.

7.5.2.3.2.6.11 Change item appearance

You can change the appearance of model items in the model window.

Procedure

1. Select the model items whose appearance you want to define.
2. Activate the Start (page 912) tab bar.
3. Click  **Appearance**. The appearance selection opens.
4. Click **Shaded** if the selected items are to have a shadow. The check box is enabled. Connections cannot have a shadow.
5. Click **3-D effect** if the selected items are to be displayed in 3-D style. The check box is enabled. Connections cannot be displayed in a 3-D style.
6. Click **Active** if the selected items are to be displayed as inactive. The check box is disabled. Objects are displayed without color and with a gray border, connections are displayed in gray. Graphic objects cannot be displayed as inactive.

You have defined the appearance of model items. To change a setting again, click the relevant option again.

7.5.2.3.2.6.12 Change model background

You can change the background color of an open model.

Procedure

1. Open the relevant model.
2. Activate the Model (page 914) tab bar.
3. Click  **Background color**. The **Color palette** opens.
4. Click a color of the color palette.

The model background is colored with the selected color.

7.5.2.3.2.6.13 Use your own color for the background

You can change the background color of an open model with a custom color.

Procedure

1. Open the relevant model.
2. Activate the Model (page 914) tab bar.
3. Click  **Background color**. The **Color palette** opens.
4. Click  **Choose your own color**. The **Define color** dialog opens.
5. Use the colored areas to directly select a color, or insert the values in the **Red**, **Green** and **Blue** boxes to define an RGB color, or enter a hexadecimal HTML color code.
6. Click **OK**.

The model background is colored with the defined color.

7.5.2.3.2.6.14 Reset background color

You can reset the background color of an open model. The assigned background color is removed and the background color of the template on which the model is based is displayed.

Procedure

1. Open the relevant model.
2. Activate the Model (page 914) tab bar.
3. Click  **Background color**. The **Color palette** opens.
4. Click  **Reset**.

The color palette remains open and you can select another color (page 962).

7.5.2.3.2.7 Assign models

7.5.2.3.2.7.1 Assign a model to an object

You can assign models to objects. The assignment enables you to describe objects in independent models in more detail, for example. Assigned models are displayed by way of an  assignment icon at the object and can be opened by double-clicking the assignment icon.

Procedure

1. In the open model, click the object to which you want to assign a new model.
2. Activate the Start (page 912) tab bar.
3. Click  **Assignment** >  **Create assignment**. The dialog opens.
4. Select the required model type. The model types that are allowed for the selected object by the method and by the method filter (page 883) in use are available for selection.
5. Enter the relevant model name. The name of the selected object is suggested as a model name.
6. Click **OK**.

The new model is assigned to the selected object and opens on a separate tab. You can model the required content.

7.5.2.3.2.7.2 Open assigned model

You can open models that you assigned (page 1165) to objects.

Procedure

1. Navigate to the object for which you want to open an assigned model.
2. Double-click the  assignment icon (page 1166).
If multiple models are assigned to the object, the **Select model** dialog is shown, where you can select the model you want to open.
If only one model is assigned to the object, it will open without prompting.

The assigned model opens and you can use it.

7.5.2.3.2.7.3 Delete model assignments

You can delete the relationship between objects and assigned models.

Procedure

1. Click the object with the assignment that you want to delete.
2. Activate the Start (page 912) tab bar.
3. Click  **Assignment** >  **Delete assignment**. The **Delete model assignment** dialog opens.
4. Enable the check box(es) of the model(s) for which you want to delete the assignment relationships (page 1166).
5. Click **OK**.

The selected assignment relationships are deleted without prompting for confirmation.

7.5.2.3.2.8 Use model items

7.5.2.3.2.8.1 Place model items one behind the other

You can specify in which order overlapping model items are placed one behind the other in the model window.

In the example below, it is assumed that you have created the three objects **1**, **2**, and **3** in sequence. As the most recently placed objects are created at the highest level, object **3** is at the highest level and object **1** is at the lowest level. You want to reverse this sequence.

Procedure

1. Activate the Start (page 912) tab bar.
2. Select the object **3** and click  **Arrange** >  **Send backward**.
3. Select the object **1** and click  **Arrange** >  **Bring forward**.

Now, when you place the objects one behind the other they are placed in the order 1, 2, and 3.

In the same manner, you can place graphic objects such as squares or circles behind parts of objects to highlight these areas separately.

7.5.2.3.2.8.2 Group model items

You can group model items and then handle them as if they were a single object.

Procedure

1. Select the model items you want to group.
2. Activate the Start (page 912) tab bar.
3. Click  **Group/Ungroup** > **Group**. The selected model items are combined in a group (page 1172). The handles are placed around the grouping.

To select all items in a group, click one of the previously independent items. You can now move them all together, for example.

7.5.2.3.2.8.3 Ungroup

You can undo the grouping of model items and move and edit the items of the group separately once again.

Procedure

1. Select the grouping you want to undo.
2. Activate the Start (page 912) tab bar.
3. Click  **Group/Ungroup > Ungroup**. The grouping is ungrouped. Each item has its own handles.

When you click one of the previously grouped items, it is now selected separately once again and can be moved separately.

7.5.2.3.2.8.4 Align model items

You can quickly align selected model items relative to each other.

Procedure

1. Select the model items you want to align.
2. Activate the Start (page 912) tab bar.
3. Click  **Align** and then the relevant alignment, for example, **Align left** or **Distribute vertically**.

The selected model items are aligned accordingly.

7.5.2.3.2.8.5 Match size of items

You can resize selected items so that they match.

Procedure

1. Select the different-sized model items you want to match.
2. Activate the Start (page 912) tab bar.
3. Click  **Match size of items** and then the relevant size change, for example,  **Same height (maximum)**.

The height of the selected model items is matched to that of the tallest item.

7.5.2.3.2.9 Lanes

7.5.2.3.2.9.1 Add a column/row to lane models

You can add new columns/rows to lane models (page 1173). In the example, a row is added. The procedure for columns is the same.

Procedure

1. Click the relevant row header. The **+** **Add column/row** button is displayed.
2. Click **+** **Add column/row**. The **Insert lane** dialog opens.
3. Select the lane type you want to add.
4. Click **OK**.

The selected row is inserted under the marked row.

7.5.2.3.2.9.2 Delete a column/row from lane models

You can delete columns/rows from lane models (page 1173). In the example, a row is deleted. The procedure for columns is the same.

Procedure

1. Click the relevant row header. The **🗑** **Delete column/row** button is displayed.
2. Click **🗑** **Delete column/row**.
 - If the row is not mandatory and contains no objects, it is deleted without prompting.
 - If the row is mandatory and must always exist in the model, you are informed of this and the row is not deleted.
 - If the row contains objects, you will be asked whether you want to delete the objects because the row can only be deleted after doing this.
3. Click **OK** if you are sure that the objects can be deleted together with the row.

The objects and the selected rows are deleted.

7.5.2.3.2.10 Export

7.5.2.3.2.10.1 Export model as a graphic

You can export the model as a graphic and use it in other programs.

Procedure

1. Open (page 889) the relevant model.
2. Ensure that no model item is selected.
3. Activate the Model (page 914) tab bar.
4. Click  **Export as a graphic** in the tab bar. The model graphic is created.
5. Decide whether to open or save the graphic. To save the graphic, confirm the Save options in the dialog.

The model graphic either opens in your graphics program or is available as a PNG file in your download area.

7.5.2.3.2.10.2 Export model items as a graphic

You can export parts of models as a graphic and use the graphic in other programs.

Procedure

1. Open (page 889) the relevant model.
2. Select the model item you want to export as a graphic.
3. Activate the Model (page 914) tab bar.
4. Click  **Export as a graphic** in the tab bar. The model item graphic is created.
5. Decide whether to open or save the graphic. To save the graphic, confirm the Save options in the dialog.

The model graphic either opens in your graphics program or is available as a PNG file in your download area.

7.5.2.3.2.10.3 Export BPMN diagram

You can export (page 1022) a BPMN diagram (page 1017).

Procedure

1. In the  **Repository**, select the group of the database containing the BPMN diagram. The group content is displayed.
2. In the row of the relevant BPMN diagram, click  **More**.
3. Click  **BPMN export**. The BPMN 2.0 diagram is validated. If modeling errors occur, these are highlighted in the diagram and must be corrected. A tip for solving an error is displayed when you move the mouse pointer over the highlighting. You can open or save the BPMN file.
4. Save the file at the required location.

You can use exported BPMN diagrams in other applications.

7.5.2.3.2.11 Layout

7.5.2.3.2.11.1 Optimize layout

You can automatically generate the alignment of objects of a model with each other.

Procedure

1. Open the model whose layout you want to generate automatically.
2. Activate the Model (page 914) tab bar.
3. Click  **Layout**. The layout options are provided.
4. Specify your settings (page 1056) and click **OK**.

The objects of the model are realigned.

7.5.2.3.2.11.2 Insert space

You can insert space between model items, either from top to bottom or from left to right. You can then insert additional model items between the items you moved.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Horizontal space** to insert space from left to right.
Click  **Vertical space** to insert space from top to bottom.
A horizontal or vertical line is shown in the model window.
3. Click the position from where you want to insert space.
4. Move the mouse pointer to the right to insert horizontal space, or down to insert vertical space. The covered model area is highlighted in green and a plus sign is added. This allows you to immediately identify which area is being freed up for new model items.
5. Click the position up to where you want to insert space. Objects, graphic objects, and free-form text are moved from the highlighted area.

You have added space between existing model items, which you can use to place other model items.

7.5.2.3.2.11.3 Remove space

You can remove space between model items, either from right to left or from bottom to top.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Horizontal space** to remove space from right to left.
Click  **Vertical space** to remove space from bottom to top.
A horizontal or vertical line is shown in the model window.
3. Click the position from where you want to remove space.
4. Move the mouse pointer to the left to remove horizontal space, or to the top to remove vertical space. The model area you select is highlighted in red and a minus sign is added. This enables you to immediately identify how much space will be reduced between the model items.
Once you can no longer delete any space between model items, the area covered is no longer increased when moving the mouse pointer.
5. Click the position up to where you want to remove space. The model items are moved accordingly.

You have successfully removed space between model items.

7.5.2.3.2.12 ARIS and Alfabet

7.5.2.3.2.12.1 Map Alfabet objects to ARIS objects

You can map an Alfabet object to an ARIS object. Multiple mapping is not possible. By default, objects of the **Application system type** type can be mapped. In the description, this object type is used as an example.

Prerequisite

The database is connected with Alfabet.

Procedure

1. Open a model that contains objects of the **Application system type** type.
2. Select the relevant application system type.
3. In the Start (page 912) tab bar, click  **Alfabet** >  **Map Alfabet object**. The **Select Alfabet object** dialog opens.
4. Select the Alfabet table, for example, **Application**. You will see only those Alfabet objects you have the privileges to use. If you start typing the object name into the **Filter** field, the number of entries will decrease.
5. Click the Alfabet object you want to map to the ARIS object. The option button is activated.
6. Click **OK**.

The mapping between the Alfabet object and the ARIS object has been created. The name of the Alfabet object is now used for the ARIS object. Additional attributes have been entered for this object in the **Alfabet** attribute type group in ARIS.

7.5.2.3.2.12.2 Create Alfabet object

You can create a missing Alfabet object to be mapped to an ARIS object.

Prerequisite

The database is connected with Alfabet.

Procedure

1. Open a model that contains objects of the **Application system type** type.
2. Select the relevant application system type.
3. In the Start (page 912) tab bar, click  **Alfabet** >  **Map Alfabet object**. The **Select Alfabet object** dialog opens.
4. Select the Alfabet table, for example, **Application**.
5. Click **Create Alfabet object** button. The Alfabet login dialog opens.
6. Create the object in Alfabet.
7. In the **Select Alfabet object** dialog of ARIS Connect Designer, click  **Refresh**.

The new object is listed in the table.

7.5.2.3.2.12.3 Unmap Alfabet object

You can delete the mapping between an ARIS object and an Alfabet object. By default, objects of the **Application system type** type can be mapped. In the description, this object type is used as an example.

Prerequisite

The database is connected with Alfabet.

Procedure

1. Open a model that contains objects that are mapped to Alfabet objects (page 973).
2. Select the relevant **Application system type** object.
3. In the Start (page 912) tab bar, click  **Alfabet** >  **Unmap Alfabet object**.

The mapping between the selected ARIS object and the Alfabet object is removed without prompting. All attributes in the **Alfabet** attribute type group are deleted. The name of the Alfabet object continues to be used for the ARIS object.

7.5.2.3.2.13 Enter comments

You can write comments about models, which can be read and answered by other users. This way you can participate in improving your own models and those of others.

Procedure

1. Click  **Collaboration**. The Collaboration bar opens.
2. Enter a comment or answer an existing comment.
3. Enter an http link to a Web site that provides additional information, e. g., **http://www.ariscommunity.com**. The entry must start with **http://**.
4. Click **Post**.

Your comment or reply is added and can be read by the other users. Accordingly, users can react to your input and you can improve the model together with them as required.

7.5.2.3.2.14 Select object or model in the Repository

You can navigate from a model to the occurrence of a selected object or of the model in Explorer.

Prerequisite

Selected objects are saved.

Procedure

1. Select the object to whose occurrence you want to navigate to in Explorer. If you want to navigate to the occurrence of the model, make sure that no object is selected.
2. Activate the Start (page 912) tab bar.
3. Click  **Go to** >  **Go to occurrence in Repository**.

A new tab showing the repository opens. The group structure of the database expands and the check box in front of the selected object or model is enabled in the detail view.

7.5.2.3.2.15 Go to the fact sheets of a model

You can navigate from a model to the fact sheets (page 1171) of the model in the  **Portal**.

Prerequisite

No object is selected.

Procedure

1. Activate the Start (page 912) tab bar.
2. Click  **Go to** >  **Go to fact sheet in Connect**.

A new tab with the fact sheets of the model opens. The **Overview** fact sheet is activated.

7.5.2.3.2.16 Generate report

You can generate and download a report for the open model or selected objects.

Procedure

1. Click  **Reports**. The **Reports** bar opens.
2. Select one or more objects or deselect all model elements to perform the action on the model.
3. Click the drop-down list box to display the list of available reports.
4. Leave the mouse pointer on the name of a report if you want to display its description.
5. Click the name of the relevant report.
6. Click the **Start** button if you want to output the report in the displayed format (page 734). To select a different output format, click the **Output format** field and select the format you want to use, e. g. **Output PDF**.
7. Click the **Start** button. The report is created.
8. If additional settings are required, dialogs are opened. Specify the settings.
9. When the report is created, the result is listed in the **Reports** bar, and a dialog to download the result opens.
10. Click  **Download result**. Depending on your browser settings, you can specify the download folder or the result is downloaded in the default download folder.
11. To download the result later, click  **Download report** in the **Reports** bar.

You generated the report for the open model or for the selected objects.

7.5.2.3.2.17 Create infographics

You can create infographics (page 1173) for selected personas (page 1176) (objects of the **Persona** type). You can select an object in a fact sheet (page 1171) of the  **Portal**, in the  **Repository**, or in the open model. Objects of the **Persona** type can be used in models of **Customer segmentation map** and **Matrix model** type.

The following describes how to proceed in the  **Portal**.

Prerequisite

The corresponding attributes of the persona objects must be specified (page 716).

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
4. Click  **Navigation** if the navigation bar is not shown.
5. Select the model that contains the persona.
6. If you have selected a model of the **Customer segmentation map** type, select the **Diagram** fact sheet. If you have selected a model of the **Matrix model** type, select the **Matrix** fact sheet.
7. Select the relevant **Persona** object in the fact sheet.
8. Click  **Evaluation**. The **Evaluation** bar opens showing the name of the item for which the report is generated.
9. Click the ▼ down arrow next to the currently displayed report name.
10. Select the **Create infographic for persona (page 716)** report.
11. Select the output format (page 734), for example, **Output DOCX**.
12. Click **Start**. After the report is complete, the report is shown in the **Report results** link list for downloading.
13. In the **Report results** link list, click **Download**.

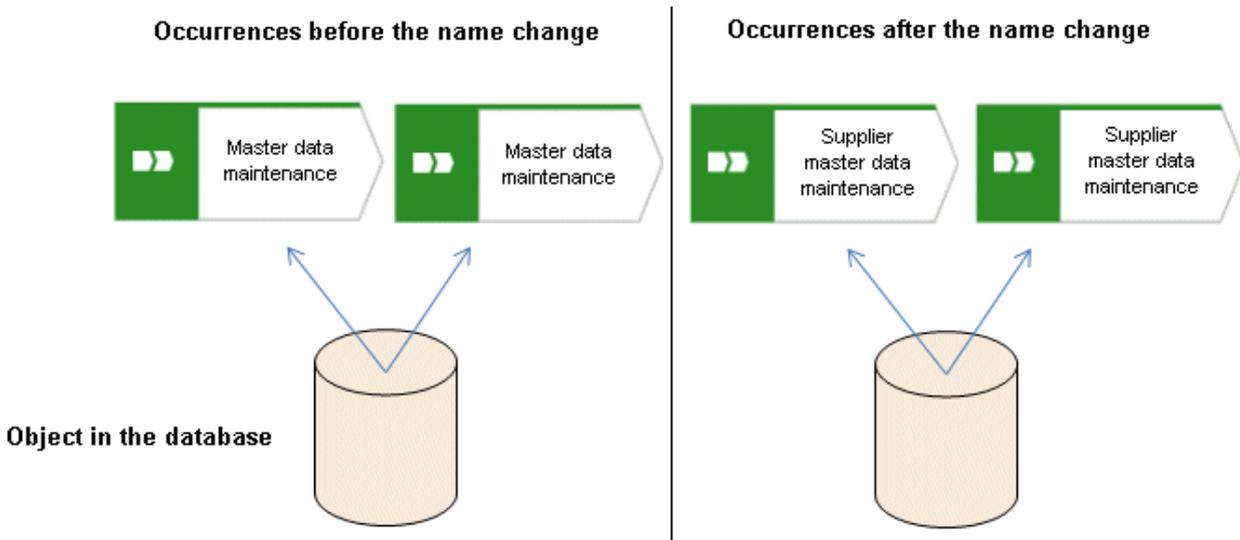
You have created an infographic for a persona. Depending on the attributes entered for the persona, the information graphic provides information about the personality, the goals, the frustrations, etc.

7.5.2.3.2.18 Valuable information

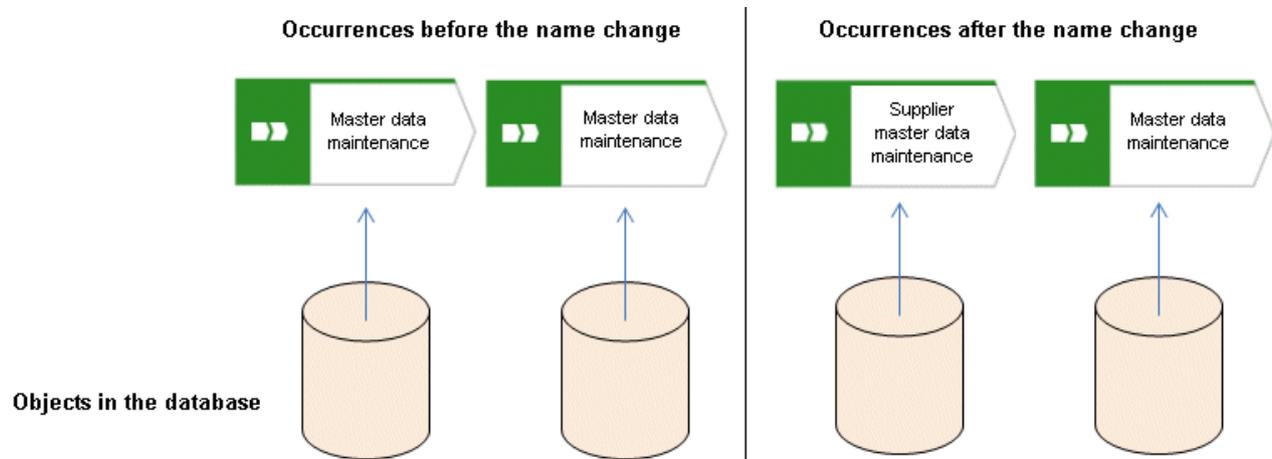
This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.3.2.18.1 What is the difference between occurrence copy and definition copy?

An occurrence copy is only the copy of a graphical representation of an object. Thus, when you create an occurrence copy, a graphic is created that references the copied object:



When you create a definition copy, an entirely new object is created whose attributes are identical with those of the copied object:



If attributes of an object are changed, this change also applies to the corresponding attributes in all occurrences of the object. This becomes clear when changing the **Name** attribute:

	Source object	Occurrence copy	Definition copy
Before the name change			
After the name change			

7.5.2.3.2.18.2 Which items can be copied from one model to another?

You can copy graphic objects, such as circles, free-form texts, graphics, and objects, from one model to another.

However, for an object to be pasted in the target model it has to be allowed there by the method. For example, if you copy functions and organizational units in the source model, only the organizational units will be pasted into a model of the **Organizational chart** type because functions are not allowed in this model type. The corresponding information is provided by the preview frames of the copied functions, showing as crossed out with an X when they are pasted into the organizational chart.

7.5.2.3.2.18.3 Which formats are copied to which items?

You can copy the formats of a selected item to another item or to several other items. This depends on whether the format has been copied to one or more items and also the items between which the format is copied.

THE FOLLOWING FORMATS ARE COPIED:

- Fill color, including transparency and gradient
- Line style, weight, and color
- Shadow
- Active information of objects and connections
- Connection direction arrow (if the source and target connections are of the same connection type)

THE FORMAT CAN BE COPIED BETWEEN THE FOLLOWING ITEMS:

- Object occurrences
- Connection occurrences
- Attribute occurrences
- Graphic objects, for example, circle, square, etc.
- Free-form texts and placed model attributes
- Groupings (as the target, with the formats being copied to all items in the grouping as if the items were selected individually)

FORMAT COPYING AFFECTS THE FOLLOWING ATTRIBUTE PLACEMENT CHARACTERISTICS:

- Placement and sorting
- Font formats and individual characters as well as paragraph formatting for attribute definitions if the formatting includes the entire text.
- Alignment
- **With attribute name** and **As a symbol** settings

WHEN A FORMAT IS COPIED, IT AFFECTS THE FOLLOWING CHARACTERISTICS OF FREE-FORM TEXTS/PLACED MODEL ATTRIBUTES/ATTRIBUTE OCCURRENCES:

- Font formats
- Alignment
- **As a comment** setting
- **Character formatting** setting
- General character formatting.

7.5.2.3.2.18.4 Which formats are not copied?

You can copy the formats of a selected item to another item or to several other items. This depends on whether the format has been copied to one or more items and also the items between which the format is copied.

However, some formats are not copied:

- Model properties, for example, background color, grid, and print settings, and the **New connections only right-angled** setting are not copied for models.
- In terms of attribute placements, the text area size is not copied.
- The size is not copied for objects, free-form text/placed model attributes/attribute occurrences in order not to destroy the layout of models.

7.5.2.3.2.18.5 How are formats copied to identical and different items?

You can copy the formats of a selected item to another item or to several other items. This depends on whether the format has been copied to one or more items and also the items between which the format is copied.

It is possible to copy formats from one item to another identical item, but also from one item to a different item, for example, from an object occurrence to a connection occurrence. The items can be placed in different models.

Of course, the formats copied between different items are based on the formats that are available to all these items. Below, we will use the example of object occurrences to explain how formats are copied.

The object symbol size is not copied in order not to destroy the layout of models.

SOURCE AND TARGET OCCURRENCES ARE IDENTICAL

Object occurrences are identical if they are based on the same object type and have the same object symbol. All formats are copied.

PLACED SOURCE AND TARGET ATTRIBUTES ARE IDENTICAL

The copy format function causes the attribute placements of the source object occurrence to be transferred to the target object occurrence. This means that the target object occurrence receives the attribute placements of the source object occurrence.

SOURCE AND TARGET OBJECT OCCURRENCES DIFFER

- The source object occurrence is based on another object type than are the target object occurrences/All target object occurrences are identical: All formatting except for the fill color is copied.
For example, the formatting of an activity can be copied to a group of organizational units or graphic objects.
- The source object occurrence is based on another object type than are the target object occurrences/Target object occurrences differ: The formats are copied only to object occurrences that are identical to the source object occurrence. None of the other objects change at all.
This enables you to use the mouse to select model areas and copy the format without having to consider whether object occurrences will be changed unintentionally.

PLACED SOURCE AND TARGET ATTRIBUTES DIFFER

The copy format function copies the formats only from placed attributes that exist in both the source and target object occurrences. The position is not copied. If the source and target attributes have different placements, the attribute placements are not deleted or created.

7.5.2.3.2.18.6 How is the format copied to placed attributes?

You can copy the formats of a selected item to another item or to several other items.

The following applies to placed attributes and free-form texts:

- If object or connection occurrences are the target, all of the placed attributes of the target are modified. The position is not changed.
- If placed attributes or free-form texts are the target, the target text is modified. The position is not changed.

7.5.2.3.2.18.7 How do you enable navigation via process interface?

To navigate from one process model of the **EPC** type to another, place an object of **Process interface** type in a model and assign the relevant process model (page 964) to the process interface.

If you open the **Steps** fact sheet of the model containing the process interface, you can easily jump to the assigned model by clicking the process interface (page 680).

7.5.2.3.2.18.8 How can documents be linked?

Documents can be linked to models or objects in two ways:

Using the attributes of a model or object (page 953)

Directly using the Documents tab (page 954)

7.5.2.3.2.18.9 What reports are available?

The Evaluation bar provides various standard reports. Depending on the model type you have opened or the object type you have selected, the reports offered may vary because only the reports related to the corresponding model or object type are displayed.

Script administrators can make additional reports available in ARIS Architect.

7.5.2.3.2.18.9.1 Analyze classification

USE

This analysis classifies all objects of a type according to the selected attribute. You can use this to test the consistency of your processes and analyze process-relevant factors in a flexible manner. If you start the analysis for models, for example, to compare an actual process with a target process, the analysis is automatically limited to functions. To examine other objects, select the relevant objects and run the analysis for the selection. Make sure that you only select objects of one type.

In this way, you can classify all process contents according to your own criteria. For example, you can find out quickly and easily whether your process steps include mainly value adding or non-value adding activities. You can also determine the degree to which your processes are automated. The parameters derived from this can be used as a basis for comparison.

For example, you can identify

- whether your target process has improved relative to the actual process based on your target parameters, or
- which process variants come closer to achieving your objective (for example, achieving the objective of the Collections department process in the Private customer business segment compared with the Business customer business segment).

This analysis evaluates all possible aspects, for example, including

- IT systems
 - How many piloted systems are used?
 - How many systems are scheduled to be shut down soon?

- Risks

How many risks with a high probability of occurrence exist, as opposed to risks with a low probability of occurrence?

If you run this analysis in a Publisher export, the **Assessment of value added** attribute is automatically evaluated.

CONTEXT

- Models
- Objects of one type

OUTPUT

The analysis is summarized in an Excel workbook. The number of worksheets varies depending on whether you are analyzing models or objects.

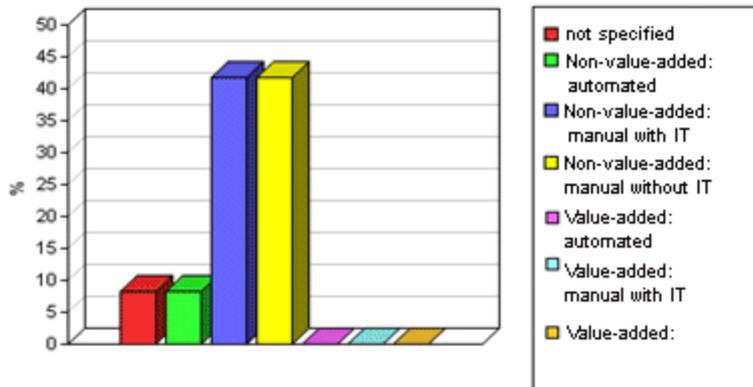
The following example is based on an analysis of the **Purchase order processing (actual)** and **Purchase order processing (target)** models. The **Assessment of value added** attribute is evaluated separately for each model. In this case, one worksheet is output with a table and one with charts.

TABLE

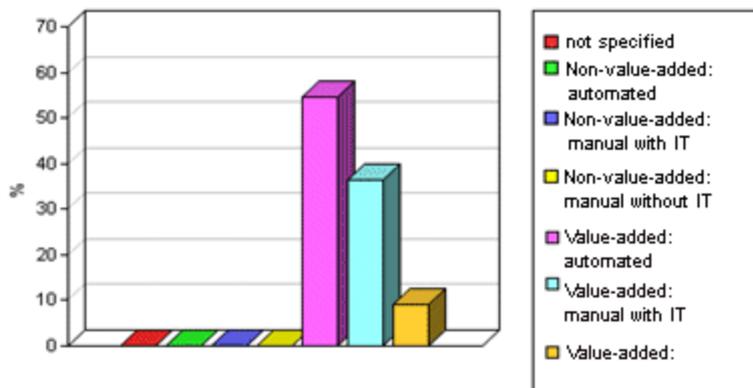
Analysis: Evaluate assessment of value added				
Created 5/25/09 11:21 AM				
Server: horus.me.corp.ids-scheer.com				
Database: DemoDB-United Motors Group				
User: system				
File: Report0.xls				
Analyze classification				
Models:				
1.) United Motors Group\2. Processes\Process Architecture\Core Processes\Marketing & Sales (As Is Processes)\Sales order management (As Is)\Sales order processing\Sales order processing (As Is) (EPC)				
1.) United Motors Group\2. Processes\Process Architecture\Core Processes\Marketing & Sales (As Is Processes)\Sales order management (To Be)\Sales order processing\Sales order processing (To Be) (EPC)				
Attribute: Assessment of value added	1. Model		2. Model	
	Number	Percent	Number	Percent
Analyzed functions	12	100	11	100
not specified	1	8,33	0	0
Non-value-added: automated	1	8,33	0	0
Non-value-added: manual with IT	5	41,67	0	0
Non-value-added: manual without IT	5	41,67	0	0

CHARTS

1) United Motors Group\2. Processes\Process architecture\Core processes\Marketing&Sales (as-is processes)\Sales order management\Sales order processing\Sales order processing (as-is) (EPC)



1) United Motors Group\2. Processes\Process architecture\Core processes\Marketing&Sales (to-be processes)\Sales order management\Sales order processing\Sales order processing (to-be) (EPC)



CONTEXT

- Models
- Objects of one type

OUTPUT FORMAT

- XLS
- XLSX

7.5.2.3.2.18.9.2 Create infographic for persona

USE

This report outputs an infographic that visualizes all persona-related data you have specified. The following information is evaluated and displayed:

Lukas Andrews



Age	32
Job title	Software Engineer
Family status	married
Location	Saarbruecken
Customer segment	Family

"The Best Things in Life Are Free"

About

Lukas has been interested in technology for many years. As a software engineer he makes a living with programming innovative mobile apps. But his highest priority is the well-being of his family. For him, a car needs to be both functionally well designed and has enough space that the entire family can drive into holidays.

Personally, he owns many electronic gadgets. Generally, he is sensitive to cost but can get carried away if he sees an innovative solution.

Personality	Goals	Frustrations
<ul style="list-style-type: none">conscientiousdetail orientedhumorousplayful	<ul style="list-style-type: none">save money for buying a houseget promoted in his companyexercise his favorite sport more often: Climbing	<ul style="list-style-type: none">reading manualsservices that are overly time consumingsharing his personal data to unknown entities



In order for the report to be run and for it to deliver meaningful results, make sure that the following attributes are specified for **Persona** objects:

Attribute	Example
Name	Lukas Andrews
Description/Definition	<p>This text is shown beneath the About topic.</p> <p>Lukas has been interested in technology for many years. As a software engineer he makes a living with programming innovative mobile apps. But his highest priority is the well-being of his family. For him, a car needs to be both functionally well designed and have enough space to accommodate the entire family for holiday trips.</p> <p>Personally, he owns many electronic gadgets. Generally, he is sensitive to cost but can get carried away if he sees an innovative solution.</p>

The following attributes must be specified for the **Customer Experience Management** attributes:

Attribute	Example
Age	32
Family status	married
Location	Saarbruecken
Job title	Software Engineer
Personality	<ul style="list-style-type: none"> ▪ conscientious ▪ detail oriented ▪ humorous ▪ playful
Frustration	<ul style="list-style-type: none"> ▪ reading manuals ▪ services that are overly time consuming ▪ sharing his personal data to unknown entities
Goals	<ul style="list-style-type: none"> ▪ save money for buying a house ▪ get promoted in his company ▪ exercise his favorite sport more often: Climbing
Quote	The Best Things in Life Are Free

You can link images either in the **Customer Experience Management** attribute type group or in the **ARIS document storage attribute** type group.

Customer Experience Management attribute	ARIS document storage attribute	Image/position
Portrait image link	ARIS document storage Link 1	Portrait; at the top
Descriptive image Link 1	ARIS document storage Link 2	Electronic gadgets; image on the left.
Descriptive image Link 2	ARIS document storage Link 3	Climbing; image in the center.
Descriptive image Link 3	ARIS document storage Link 4	Family; image on the right.

Some content is only shown in the infographic if the **Persona** object is related to a **Customer segment** object. The **belongs to** relationship is evaluated.

In this example, the **Family** Customer segment is shown, because the **Lukas Andrews** Persona occurs in a Customer segmentation map and this **Persona** object is related to the **Family** Customer segment object.



CONTEXT

Object of **Persona** type

OUTPUT FORMAT

- DOC
- DOCX
- RTF
- ODT
- PDF

7.5.2.3.2.18.9.3 Create process manual

USE

This report outputs all data from the selected processes up to the selected assignment level.

CONTEXT

Models of type:

- BPMN process diagram (BPMN 2.0)
- BPMN process diagram (BPMN 1.x)
- E-Business scenario diagram
- EPC
- EPC (material flow)
- EPC (column display)
- EPC (horizontal table display)
- EPC (table display)
- EPC (row display)
- Industrial process
- Office process
- Process schedule
- UML Activity diagram
- PCD
- PCD (material flow)
- Value-added chain diagram

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF

7.5.2.3.2.18.9.4 Export graphic as PDF

USE

This report exports a model graphic as a PDF file.

CONTEXT

Models

OUTPUT FORMAT

PDF

7.5.2.3.2.18.9.5 Generate job description

USE

Generates a job description for each selected organizational element and considers all processes and functions involved.

The following information can be output for each function:

- Organizational elements of the functions
- Data
- IT
- Improvement potential

If you start the report for models, only the modeled items are included. If you start the report for objects, all relevant object definitions are evaluated.

By default, the **carries out** connection is evaluated for the **Executing** relationship. The following connections are included for the **Participating** relationship:

- has consulting role in
- is IT responsible for
- is technically responsible for
- must be informed about
- must be informed on cancelation
- must inform about result of

Script administrators can change the content of the output.

If you output functional weak points, all information is output as for the job description. However, the selected organizational unit is listed along with all organizational units.

CONTEXT

MODELS OF TYPE

- EPC
- FAD
- Office process
- VACD

OBJECTS OF TYPE

- Group
- Organizational unit
- Organizational unit type
- Person
- Role
- Location
- Position
- System organizational unit
- System organizational unit type

OUTPUT FORMAT

- DOC
- XLS
- PDF
- DOCX
- ODT

7.5.2.3.2.18.9.6 Output functions across multiple assignment levels

USE

Outputs the following information for the selected models:

- Functions across multiple assignment levels
- Functions across multiple assignment levels according to ISO certification

The model attributes, the group, and the model graphic are output for the models, while the standard items are output additionally in the case of an evaluation according to ISO certification.

THE FOLLOWING INFORMATION IS OUTPUT FOR EACH MODEL EVALUATED

- Chapter number
- Model name
- Model type
- Function to which the model is assigned.
- Name of the group in which the model is saved.
- Specified model attributes
- Functions of the model are described in the order in which they are created within a partial path in the model. For each function, the chapter number and the name of the function are output.
- Model graphic (optional)
- Model type of the assigned models to be evaluated (optional)

Functions that occur in multiple models are only described once. Each subsequent occurrence in the report output contains a reference to this description.

ASSIGNED MODELS ARE HANDLED AS FOLLOWS

- All functions with assignments are determined.
- If an assigned model is a function allocation diagram, the evaluation is performed in the same way as for associations within the selected model.
- From the set of remaining assignments, select one to be examined in more detail. You can choose your own prioritization, for example, based on the model type. In turn, all functions are analyzed for the assigned model.

You have the option of restricting the report output by specifying the assignment level to be analyzed in detail. For each assignment outside this range, the report output shows only the model name and type.

OUTPUT

The output is created as text incorporating tables for the model and object information and is divided into chapters. The **REPORT1** to **REPORT4** styles are used for chapter headings. This enables you to create tables of contents in the output documents.

At the first level, the output is structured based on the models you have selected. The structural level is increased by one if the assigned model is a model with control flow. For all other assigned models, the structural level remains unchanged.

The descriptions of the functions in a model can be sorted numerically, alphabetically, by symbol type, or topologically. If you select numerical sorting, the functions in a model should be numbered. The numbering of a function uses the number specified in the **Type 1** attribute type in the **Function type** attribute type group.

The attributes, relationships, and assigned models for which the types can be determined are evaluated. Like selected models, the assigned models are evaluated up to a configurable structural level.

If you selected the topological sort criterion, the report output may contain additional information depending on the model class of the model in question.

The following table provides an overview of the model classes in question and the resulting special features of the output with topological sorting:

Model class	Special feature
Directed graph with associations	Beginning and end of process, as well as start and end of path.
Hierarchy	Chapter numbers of functions reflect the position of the object in the model hierarchy.
Central object type	If the model described is a function allocation diagram, the structural level in the report output is not increased. The allocations are described at the level of the object to which the model is assigned.
Process selection matrix	The scenarios in a process selection matrix and the processes assigned to them are evaluated in the same way as function trees, with the scenario taking on the function of the root. Main processes are not included.

CONTEXT

Model

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF
- HTML

7.5.2.3.2.18.9.7 Output model information

USE

Outputs information about the selected models, the objects contained in the model, and the relationships of the objects in the model. Apart from name and type, the groups, additional attributes, and model graphic can also be output.

For object relationships, you can also output the name and type of the target object.

CONTEXT

Models

OUTPUT FORMAT

- RTF
- PDF
- HTML
- TXT
- DOC
- XLS

7.5.2.3.2.18.9.8 Output model information considering various aspects

USE

Outputs model information including group structure as an Excel table.

A worksheet is created for each aspect. The worksheet lists all models in which the relevant aspect occurs.

The following aspects can be output:

- Data
- IT
- Organizational elements
- Targets/KPIs
- Products/Services
- Risks
- Others

For each aspect, the related functions can be listed, as well. Individual or integrated evaluations can be carried out for function allocation diagrams (FAD). For integrated evaluations, the functions from the FAD are integrated in the model.

CONTEXT

Models and groups

OUTPUT FORMAT

- XLS
- XLSX

7.5.2.3.2.18.9.9 Output object information

USE

Outputs the relationships and target objects at definition level for the selected objects. Optionally, you can output the groups and the attributes for both the source and target objects. The output is in table format.

CONTEXT

Object

OUTPUT FORMAT

- RTF
- PDF
- HTML
- DOC
- XLS
- XLSX
- DOCX
- ODT

7.5.2.3.2.18.9.10 Output occurrences of objects

USE

The occurrences in models are listed for the selected object definitions.

CONTEXT

Object

OUTPUT FORMAT

- RTF
- PDF
- HTML
- TXT
- DOC
- DOCX
- ODT
- XLS
- XLSX
- XML

7.5.2.3.2.18.9.11 Process manual (example)

USE

This report script is a sample created in ARIS Architect in the design view. It shows how to create report scripts in ARIS Architect without having programming knowledge.

CONTEXT

Objects

OUTPUT FORMAT

- PDF
- DOC
- DOCX
- ODT
- RTF

7.5.2.3.2.18.9.12 RA(S)CI - Output organizational participations in processes

USE

This report supplies information on which organizational elements participate in the activities (functions) of a process and in what manner. Organizational responsibilities and participations are output in a matrix.

The report returns plausible results if your processes and the organizational responsibilities for the individual activities conform to the modeling conventions required.

RA(S)CI stands for **R**esponsible, **A**ccountable, (**S**upportive), **C**onsulted, **I**nformed.

By default, this report does not return any **Supportive** information. To output this information, your script administrator must set the **g_bRASCI** variable to **true**.

The matrix shows which organizational unit participates in activities of a process and in what manner:

- **Responsible** indicates who assumes execution responsibility. It shows who is responsible for performing an activity and who actually performs it, but also who assumes the disciplinary responsibility.
- **Accountable** identifies the person ultimately answerable for the correct and thorough completion of a task. Thus, 'Accountable' may be the one in charge of managing the costs, that is, the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **Consulted** shows who has a consulting role. This organizational unit - typically a group of subject matter experts - is asked for advice prior to a final decision being made or a final action being taken.
- **Informed** specifies who must be informed. It indicates who is kept up to date on the progress or completion of a task.

In the RACI matrix, RACI data is displayed under the following conditions:

- The connections are used in the selected process model.
- The connections are used in a function allocation diagram that is assigned to a function of the selected process model.

The result of the report is an Excel workbook containing several tables. Each process model included creates a table. The first table consists of a full list of the functions and organizational units of the process models included.

Process steps	Function	Financial assistant	Financial clerk	Accountant
Vehicle billing (as-is)	Allow for discounts	R		I
Vehicle billing (as-is)	Call order data	R, A		
Vehicle billing (as-is)	Change customer	R		
Vehicle billing (as-is)	Change order data		R	
Vehicle billing (as-is)	Check customer data	R		
Vehicle billing (as-is)	Check order data	R	R	
Vehicle billing (as-is)	Enter payment type		R	
Vehicle billing (as-is)	Have customer	R		
Vehicle billing (as-is)	Print invoice		R	
Vehicle billing (as-is)	Send invoice		R	I
Vehicle billing (as-is)	Transfer data to		R	

CONTEXT

- Individual process
- List of processes
- Process hierarchy

OUTPUT FORMAT

- XLS

7.5.2.3.2.18.10 What output formats exist?

You can change the output format on the **Reports** or **Semantic checks** tab of the **Evaluation** bar by clicking the down arrow. The selection of output formats may be restricted based on the report or semantic check. Possible output formats are:

PDF
DOC
DOCX
ODT
RTF
HTML
TXT
XLS
XLSX
XML

7.5.2.3.3 Model table-based

Table-based modeling enables rapid and comfortable modeling of EPCs and BPMN diagrams (page 1010). The modeling table is shown by default.

Objects are modeled in a table and simultaneously placed in the model displayed above. Layout takes place automatically. The distance between objects is defined by the spacings specified in the layout options.

Table-based modeling provides a quick and easy way to model processes and process frameworks at an early stage, for example, in meetings during the project planning phase.

Moreover, additional information (page 1004) can be added for models and objects.

It can also be used to navigate in the model. If an object is selected in the table, it is selected in the model and the selected object is moved into the visible area. If an object is selected in the model, it is also selected in the table and the row is displayed in the visible area.

7.5.2.3.3.1 Hide/Show modeling table

You can hide or show the modeling table.

Procedure

1. Open (page 889) a model to edit or create (page 876) a new model.
2. Click  **Modeling table**.

If the modeling table is shown, it will be hidden. If it is hidden, it will be shown.

When a model is opened for the first time, the modeling table is shown. The setting made will be applied.

7.5.2.3.3.2 Switch full-screen mode on/off

You can hide or show the model above the table. By default, it is shown.

Procedure

1. Open (page 889) a model to edit or create (page 876) a new model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Click  **Collapse/Expand table**. The model is hidden.
4. Click  **Collapse/Expand table**. The model is shown.

You have hidden or shown the model.

7.5.2.3.3.3 Show/Hide BPMN container

For BPMN diagrams, you can specify whether or not the **Belongs to container** column is displayed. This column exists only in BPMN diagrams and is displayed by default.

Procedure

1. Open (page 889) a BPMN diagram.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Click  **Add or remove columns**.
4. Enable the **Show BPMN container column** check box to show the **Belongs to container** column. Disable the check box to hide the **Belongs to container** column.

You have specified whether or not the **Belongs to container** column is to be displayed.

7.5.2.3.3.4 Create object

You can add objects to a model. In the modeling table, a new object is always inserted below the selected object. You can use the table (page 1003) to insert lanes into the model.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. In the modeling table, click the cell where you want to create an object.
4. Press **Ins**. Alternatively, click  **Add new object**.
Five default symbols that are allowed here are shown. To choose a different symbol, enter at least three characters of the symbols name. Symbols and objects that match with the entered text are displayed.
5. Select a symbol from the list and enter a name.
6. Start typing the name of the object to be created.
7. Press **Enter**.

The first object you add to a BPMN diagram is automatically placed within a pool.

Click **Undo** or press **CTRL + Z** if you do not want the object to be added to a pool. The object is then placed directly in the diagram.

The object is inserted and the model items are rearranged in the model. The color of the object type is displayed before of the name.

7.5.2.3.3.5 Create object with special object symbol

You can use an object symbol that is not directly displayed. The example description is based on the **Function (target)** object symbol, which you can add to an EPC. It must be included in the filter you are using.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. In the modeling table, click the cell where you want to create an object.
4. Start typing the name of the object to be created. Alternatively, click **+ Add new object**.
5. Enter the term **target**, which is part of the name for the relevant object symbol. All object symbols and existing objects whose name contains the term are displayed.
6. Click **Function (target)** in the **Symbols** area. The symbol is inserted and the name is selected for overwriting.
7. Enter a name.
8. Press **Enter**.

You have created a new object using the **Function (target)** object symbol. The color of the object type is displayed before of the name.

7.5.2.3.3.6 Use existing object

You can reuse existing objects in the model.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. In the modeling table, click the cell where you want to create an object.
4. Start typing the name of the object to be created. Alternatively, click **+ Add new object**.
5. Enter a term that appears in the name of the existing object you want to insert. All objects whose name contains the term are displayed.
6. Select the required object in the **Existing objects** area.
7. Press **Enter**.

The selected object is reused. The color of the object type is displayed before of the name.

7.5.2.3.3.7 Rename structurally relevant object

In the modeling table, you can edit structurally relevant objects (page 1178) that have already been modeled.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Select the object you want to edit.
4. Press **F2**. Alternatively, click  **Edit table cell**.
5. Rename the object.
6. Press **Enter**.

You have renamed an object.

7.5.2.3.3.8 Edit the Description/Definition column

You can specify descriptions and definitions for objects.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. If the **Description/Definition** column is not shown, add (page 1007) it.
4. Select the **Description/Definition** column for the relevant object and press **F2**.
Alternatively, double-click the **Description/Definition** column, or click the **Description/Definition** column and select **Edit table cell**. The **Edit Description/Definition** dialog opens.
5. Enter the description or definition. The text can be formatted.
6. Click **OK**.

The new or changed description is saved.

7.5.2.3.3.9 Create split paths

You can use operators such as **AND**, **XOR**, or **OR** to model split paths in a model.

You can also add split paths without using any operators, if this is permitted by the method, for example, in BPMN diagrams.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Select the object row below which the operator is to be modeled.
4. Press **Ins**. Alternatively, click  **Add new object**.

Five default symbols that are allowed here are shown. To choose a different symbol, enter at least three characters of the symbols name. Symbols and objects that match with the entered text are displayed.

5. Select an operator.

By default, the list displays an **OR** operator for EPCs and a **gateway** for BPMN diagrams.

If you want to use a different operator, enter part of the operator name. Corresponding operators are displayed. Select the relevant operator.

6. Press **Ins**. Alternatively, click  **Add new object**. Select the first object that will follow the operator and enter a name.
7. Press **Enter**. The object is placed below the operator in EPCs, and beside the operator in BPMN diagrams.
8. Select an operator.
9. Press **Ctrl + Shift + Ins**. Alternatively, click  **Add new object as a split path**. Select another object and enter a name. The object is placed next to the operator.
10. Press **Enter**.
11. Model (page 1002) additional objects for the relevant split path.

You have modeled a split path.

The objects in a split path are outlined in the table by a thicker grid line.

7.5.2.3.3.10 Remove object from model

You can remove an object from the model. It is retained in the database and you can reuse it.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. In the modeling table, click the object you want to remove.
4. Press the **Del** key.

The object is removed from the model without prompting for confirmation.

Connections from and to the deleted object are also deleted. The preceding object is linked to the following object using a connection.

7.5.2.3.3.11 Model satellites

You can insert not structurally relevant objects (page 1178) (satellites (page 1178)) in a model or in a diagram.

Model new satellites

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Double-click the cell for the satellite you want to model for an object, for example, an **Organizational unit** object.
4. Select an object symbol.
5. Enter the name and press **Enter**.
6. Enter more names if you want to create additional satellites of the same type. If you want to create additional satellites of a different type in the same column, first select the object type.
7. Exit the cell (page 1010) when you have created the required satellites.

You have modeled one or more satellites.

Model existing satellites

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Double-click the cell for the satellite you want to model for an object, for example, an **Organizational unit** object.
4. Enter a term that appears in the name of the existing object you want to insert. All objects whose name contains the term are displayed.

5. Select the required object in the **Existing objects** area.
 6. Exit the cell (page 1010) when you have created the required satellites.
- You have modeled one or more existing satellites.

Tip

You can also open the dialog for the relevant column by pressing **F2**. Select an object type and press **Enter**. You can enter a name. Press an arrow key to exit the cell.

7.5.2.3.3.12 Add object column

You can add columns for satellite objects to the modeling table and also show these objects in the model area. Columns are always inserted to the right of the column that is selected. If no column is selected, the new column is inserted to the right of the **Name** column.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Click  **Add or remove columns**.
4. Click **Add object column**. A dialog opens.
5. Select an object and a connection from the list and click **OK**.

You have added an object.

7.5.2.3.3.13 Add attribute column

You can add an attribute column to specify model item attributes that are not initially displayed. Columns are always inserted to the right of the column that is selected. If no column is selected, the new column is inserted to the right of the **Name** column.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. In the table, click the object for which you want to specify attributes.
4. Click  **Add or remove columns**.
5. Click  **Add attribute column**. The **Add attribute** dialog opens.
6. Select an attribute.
7. Click **OK**.

The attribute column is added to the right of the selected column and you can enter an attribute value.

7.5.2.3.3.14 Edit attribute

You can specify attributes in the modeling table. Attributes specified by the system cannot be edited, for example, Creation date. System attribute columns have a gray background.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Select the cell for the relevant attribute.
4. Press **F2**.
5. Edit (page 1014) the attribute value.
6. Exit the cell (page 1010) once you have finished editing the attribute value.

You have edited an attribute.

7.5.2.3.3.15 Arrange columns

You can re-arrange columns as required by removing and recreating them. This example shows how to move the default **creates output to Information carrier** column next to the default **Name** column.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Click  **Add or remove columns**.
4. Click the  **Remove symbol** for the **creates output to Information carrier** column.
5. Click the name of an object in the **Name** column.
6. Click  **Add or remove columns**.
7. Click  **Add object column**. The **Add new object column** dialog opens.
8. Select an object and a connection. In this case, select the **Information carrier** object and the **creates output to** connection. This will create the **creates output to Information carrier** column header.
9. Click **OK**.

The **creates output to Information carrier** column is placed next to the **Name** column.

All columns can be re-arranged as described.

7.5.2.3.3.16 Remove column

You can remove columns for attributes or objects from the modeling table.

Procedure

1. Open (page 889) a model.
2. Click  **Modeling table** if the modeling table is not displayed.
3. Click  **Add or remove columns**.
4. Click the  **Remove** symbol in front of the name of an attribute or object column.

The attribute or object column is removed from the modeling table without prompting for confirmation, while the attribute value or the object is retained.

If required, you can add both the attribute value and the object to the modeling table.

7.5.2.3.3.17 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.3.3.17.1 What models can be edited using a table?

The following model types and the model types derived can be edited using a table:

- EPC
- BPMN collaboration diagram (BPMN 2.0)
- Enterprise BPMN collaboration diagram
- BPMN process diagram (BPMN 2.0)
- Enterprise BPMN process diagram

If you open a model of this type, you can  show and hide the modeling table (page 1001).

7.5.2.3.3.17.2 How to control the table using the keyboard

Keyboard shortcuts can be performed on selected items. Selected items can be identified by the focus (page 1171) in the program.

You can control the modeling table using the keyboard:

How to model an EPC using the keyboard (video 4 min. 23 sec.)

How to model a BPMN diagram using the keyboard (video 2 min. 31 sec.)

Shortcut	Selection	Action
Arrow keys	Table	Moves to next column/row in direction of arrow.
Ctrl + End	Table	Activates the last cell in the modeling table.
Ctrl + Home	Table	Activates the first cell in the modeling table.
Ctrl + Shift + Ins	Operator	Creates split paths.
Del	Object name	Deletes the object from the model.
End	Table	Activates the last column in the current row.
Enter	Name column activated	Jumps to the next cell or ends editing.

Shortcut	Selection	Action
F2	▪ Name cell	▪ Activates the name editing mode.
	▪ Description/Definition cell	▪ Opens the Description/Definition dialog. The description/definition can be edited.
	▪ Object cell	▪ Opens the object symbol list if symbols can be inserted.
	▪ Attribute cell	▪ Opens the Edit attribute dialog.
Home	Table	Activates the first column in the current row.
Ins	Table	Adds an object row.
PageDown	Table	Scrolls one page down.
PageUp	Table	Scrolls one page up.
Shift + F2	BPMN container cell	Enables renaming of the container.
Shift + Tab	Table cell	Activates the next cell to the left.
Tab	Table cell	Activates the next cell to the right.

7.5.2.3.3.17.3 What do different colors mean in table-based modeling?

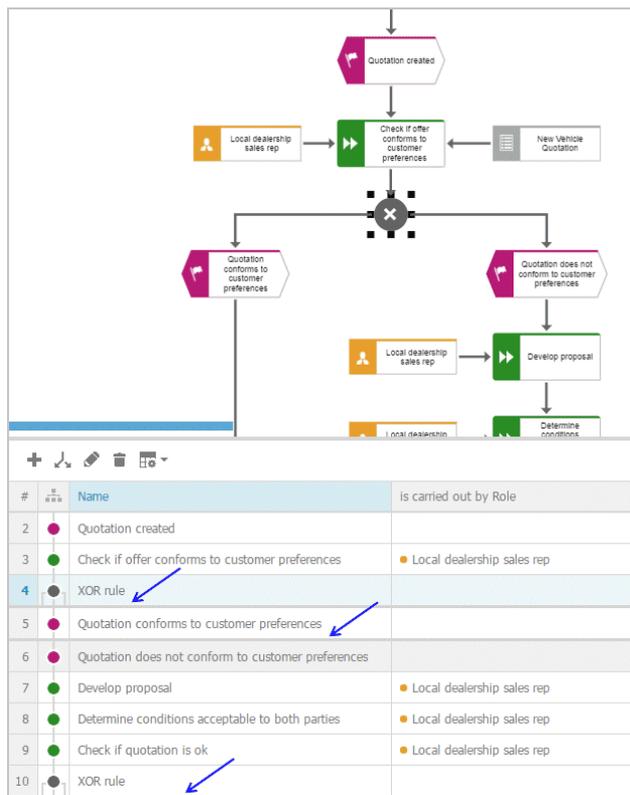
- The colors help you to distinguish between the object types. They correspond to the object colors.

Examples

A table for a model of the **EPC** type contains, for example, green highlighting for functions because functions are displayed in green in the model. In a table for a BPMN diagram, a task appears in blue, as in the diagram.



- A flashing cursor in an empty row indicates that entries can be made.
- A gray background indicates that no entries can be specified.
- Split paths are outlined by a thicker line.



- In BPMN models, lanes are outlined by a thicker line.

7.5.2.3.3.17.4 What default columns are available?

There are columns that are displayed by default when the modeling table is opened for the first time. However, you can hide all of them except for the numbering, color, and name column. Your setting is saved, which means that when you create or open a model, the table is displayed with the columns you specify.

IN AN EPC

- **Numbering**
Shows the line number.
- **Color column**
Displays the color of the object symbol.
- **Name**
The object name is entered here.
- **Description/Definition**
A description or definition of the object is entered here.
- **is carried out by Role**
The performing role or job description for the object is entered here. If the role or job description are not suitable for this object, a message is displayed.
- **is support by Application system type**
An application system type is inserted here. If such an object is not permitted for an object, for example, for an event, a message is displayed.
- **receives input from Information carrier**
An information carrier is inserted here. If such an object is not permitted for an object, for example, for an event, a message is displayed.
- **creates output to Information carrier**
An information carrier is inserted here. If such an object is not permitted for an object, for example, for an event, a message is displayed.

IN A BPMN DIAGRAM

- **Numbering**
Shows the line number.
- **Color column**
Displays the color of the object symbol.
- **Name**
The object name is entered here.
- **Description/Definition**
A description or definition of the object is entered here.
- **Belongs to container**
Shows the pool or lane to which an object belongs. This column cannot be edited.

7.5.2.3.3.17.5 What are the special features of BPMN diagrams?

For BPMN diagrams, you can specify whether or not the **Belongs to container** column is displayed. This column exists only in BPMN diagrams and is displayed by default. Lanes are automatically enlarged in table-based modeling if a new object does not fit completely into the lane.

7.5.2.3.3.17.6 What attribute values and processing types are available?

You can specify attributes in the modeling table. Attributes specified by the system cannot be edited, for example, Creation date. System attribute columns have a gray background.

The processing of an attribute value may change depending on the attribute type. For example, if you want to process an attribute of the **Time date** type, you can do this using the calendar displayed.

The following attribute types are available:

Date attributes

The calendar is displayed when you click in the cell containing the attribute value. For an attribute of the **Time date** type, you can select a time in addition to the date.

The screenshot shows a date and time selection dialog box. At the top, there are dropdown menus for the year (2016) and the month (March). Below these is a calendar grid with days of the week (Mon to Sun) as headers. The date 14 is highlighted in blue. Below the calendar is a text input field labeled 'Time:' containing the value '12:41:10'. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Boolean

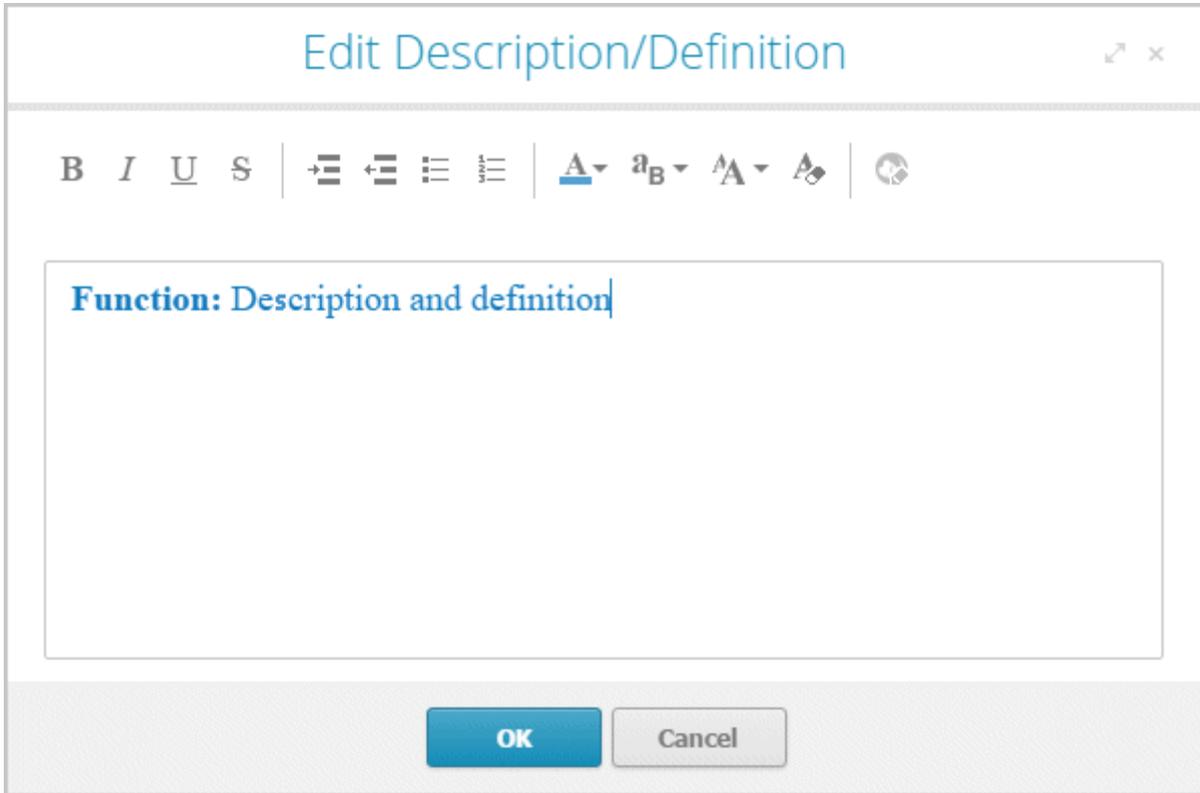
You can change the attribute value by enabling (true:) or disabling (false:) the check box. The check box for an attribute value that is not specified is shaded in color ().

Text attributes

You can change the attribute value directly in the cell.

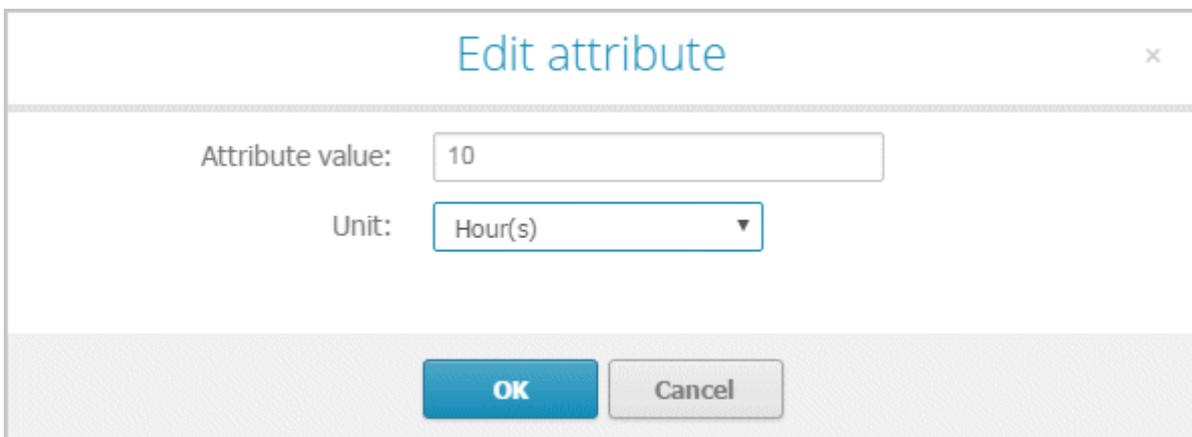
Formatable text attributes

A dialog opens. You can edit the text and formatting.



Attribute values with unit

A dialog opens. When saving the attribute value for numerical attributes, a check is made as to whether the value entered is a number. If not, you are notified.

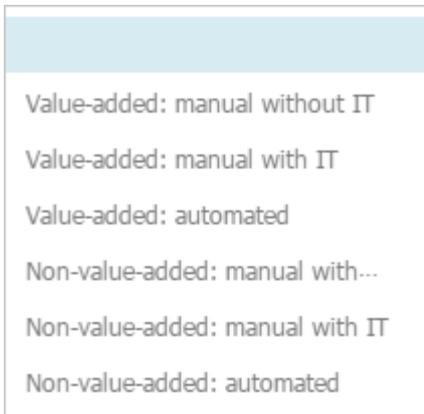


Numerical attributes

You can change the attribute value directly in the cell. When saving the attribute value, a check is made as to whether the value entered is a number. If not, you are notified.

List attributes

You can select from a list of attribute values specified by the method by clicking the relevant value.



7.5.2.3.4 Use BPMN modeling support

ARIS Connect Designer can assist you in modeling BPMN (page 1166) diagrams. When placing objects, you automatically receive alternative object symbols for placement. Furthermore, when you work with BPMN diagrams, a specific tab bar is shown enabling you to quickly access BPMN functionality you frequently require.

7.5.2.3.4.1 BPMN videos

Some procedure pages contain short videos illustrating the procedure described. Procedure videos are always provided where they help you understand the initial situation, processing, and/or the result of a procedure better.

7.5.2.3.4.2 Enable and disable Guided Modeling

You can enable or disable Guided Modeling (page 919), which helps you to place objects or connections in the model window.

Procedure

1. Activate the Model (page 914) tab bar.
2. Click  **Grid and guides** > **Show guides**.

The guides for placing objects are active in the model window and the check box is enabled (.

To deactivate the guides, click  **Grid and guides** > **Show guides**.

Set up default distance for Guided Modeling

7.5.2.3.4.3 Change BPMN object symbol

You can change the symbol for selected objects if various symbols are available for them.

Prerequisite

The method filter in use (page 883) includes different symbols of the objects you selected.

Procedure

1. Click an object, or hold the **Ctrl** key pressed to select multiple objects of the same type.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Change symbol**. The list of object symbols available for the selected object(s) is shown.
4. Click the symbol you want to use from now on for the selected object/s in this model.

The symbol for the selected object is or the symbols of the selected objects are changed.

7.5.2.3.4.4 Change loop type

You can use the **Loop type** attribute to specify the loop behavior for objects of the **Task** type.

Procedure

1. Select the task whose behavior you want to change.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Change symbol**.
4. Click  **Marker**.
5. Click one of the loop behaviors  **None**,  **Standard**,  **Multi-instance parallel** or  **Multi-instance sequential**.

The loop behavior of the **Task** object has been changed.

7.5.2.3.4.5 Add lane

You add additional lanes to placed pools and lanes.

Procedure

1. Select the lane for which you want to add an additional lane.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Add lane**. The options for adding lanes are displayed.
4. Click the corresponding option.

A lane is added to the selected lane according to your selection.

7.5.2.3.4.6 Insert lane into a pool or lane

You can easily insert a lane that is placed directly in the model into a pool or lane.

Prerequisite

The lane or pool into which a lane is to be inserted contains no flow objects.

Procedure

1. Activate the BPMN (page 917) tab bar.
2. Select the lane you want to insert.
3. Press the **Ctrl** key and select the pool or lane into which you want to insert the lane.
4. Click  **Insert lane**. If you have selected a pool into which to insert the lane, the lane is inserted immediately. If you have selected a lane into which to insert the lane, the **Specify which lane to insert** dialog opens.
5. Enable the options button of the lane you want to insert.
6. Click **OK**. The lane for which you have activated the options button is inserted into the other lane.

You have inserted a lane into a pool or lane.

7.5.2.3.4.7 Move lane

You can subsequently reposition lanes that you have placed within pools or lanes.

Procedure

1. Click the lane you want to place at another position. The lane and all embedded objects are highlighted. Depending on where the lane is located with regard to the other lanes the corresponding options for moving are provided.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Move lane** and select the required direction, such as  **Lane up**,  **Lane down**,  **Lane to the left**, or  **Lane to the right**.

The lane you selected is placed at the new position.

7.5.2.3.4.8 Delete pool or lane

You can easily delete a lane or pool.

Prerequisite

Flow objects and lanes must not be located side by side in the same pool, otherwise the lane cannot be deleted.

Procedure

1. Activate the BPMN (page 917) tab bar.
2. Select the pool or lane you want to delete.
3. Click  **Delete pool or lane**.

The pool or lane is deleted.

If the lane to be deleted contains objects, these are placed in the superordinate container. If the top container is deleted, the objects are retained.

7.5.2.3.4.9 Transform communication into call conversation

You can easily transform a communication into a call conversation.

Procedure

1. Open or create a BPMN conversation diagram containing a communication object.
2. Activate the BPMN (page 917) tab bar.
3. Select the communication symbol of the communication object you want to transform.
4. Click  **Transform into call conversation**.

The communication object is transformed into a call conversation and the conversation symbol is marked in bold.

7.5.2.3.4.10 Change type of sequence flow

You can change the sequence flow type in models of the **BPMN process diagram (BPMN 2.0)**, **BPMN collaboration diagram (BPMN 2.0)**, **Enterprise BPMN collaboration diagram**, and **Enterprise BPMN process diagram** type.

Procedure

1. Click the flow connection you want to change.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Change type of sequence flow**.
4. Click one of the available types:  **Regular sequence flow**,  **Default sequence flow** or  **Conditional sequence flow**.

You changed the sequence flow type.

7.5.2.3.4.11 Collapse subprocess

You can collapse a symbol for the **Subprocess** type. This way the process modeled in the subprocess is assigned to the subprocess and the subprocess is collapsed.

Procedure

1. Select the subprocess you want to collapse.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Collapse subprocess**. The process contained in the subprocess is assigned to the object and, at the same time, is displayed as embedded in the object, which is indicated by a  **plus sign**. If a process is not yet assigned to the subprocess, the **Create assignment** dialog opens in which you can assign a new BPMN process.
4. Click the subprocess again.

The process contained is assigned to the subprocess (page 964) and can be opened by double-clicking the assignment icon.

7.5.2.3.4.12 Expand subprocess

You can expand a collapsed symbol of the **Subprocess** type. This way the process modeled and assigned in this subprocess is displayed as embedded in the subprocess.

Procedure

1. Select the subprocess you want to expand.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Expand subprocess**.

The process contained is displayed as embedded in the subprocess. (page 964) The process remains assigned to the subprocess (page 964).

7.5.2.3.4.13 Edit subprocess

You can edit a subprocess.

Procedure

1. Activate the BPMN (page 917) tab bar.
2. Select the relevant subprocess symbol with an assigned model.
3. Click  **Edit subprocess**.

The assigned model is opened for editing.

7.5.2.3.4.14 Assign global reference to call activity

You can assign a global process or a task to an object of the **Call activity** type. If you place a call activity, the **Select global process or task** dialog opens and you can assign the relevant global process or task. You can change the assignment later.

Procedure

1. Select the relevant call activity.
2. Activate the BPMN (page 917) tab bar.
3. Click  **Select global reference**. The **Select global process or task** dialog opens.
4. Navigate to the database group in which the relevant global process or task is stored.
5. Select the global process or task.
6. Click **OK**.

The selected global process or task is assigned to the call activity.

7.5.2.3.4.15 How to import a BPMN file

The following applies when importing (page 850) a BPMN 2.0 diagram:

- You can import BPMN diagrams of the **BPMN collaboration diagram (BPMN 2.0)** and **BPMN process diagram (BPMN 2.0)** type.
- **<bpmn:import>** elements are not supported (see chapter 15.3.1 **Document Structure** of the BPMN specification (<http://www.bpmn.org/>)).
- Existing ARIS objects are not reused. Importing the same file multiple times results in new models and definition copies (page 1170). Occurrence copies (page 1175) of objects are not generated.
- XSD ID references are supported. QNames that can contain namespaces are not supported (see chapter 15.3.2 **References within the BPMN XSD** of the BPMN specification (<http://www.bpmn.org/>)).
- There are character limits for attributes in ARIS. For example, the Name (AT_NAME) attribute can have a maximum of 250 characters. If the BPMN import exceeds this number of characters, the first 250 characters are used and the remaining characters are cut off.

7.5.2.3.5 Matrix model

In a model of the **Matrix model** type, you can represent object connections. You can use existing objects or create new objects. You can conveniently select objects from the entire database.

7.5.2.3.5.1 Create matrix model

You can create a model of the **Matrix model** type. A matrix model is used to represent connections between objects.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Click  **Create new model** on the **Quick start (page 627)** area. The corresponding dialog opens.
4. Click the **Model type** box and enter part of the model type name. All model types (page 879) are displayed whose names contain the term you entered.
5. Select **Matrix model**. The **Target** area displays the database and group names. This is where the new model will be stored.
6. Click **Change** if you want to store the model in a different database and/or group. The **Select target group** dialog opens.
7. Select the required database in the **Database** box.
8. Select the required group.
9. Click **OK**. The **Select target group** dialog closes.
10. Check your input.
11. Click **OK**. The **Create model** dialog closes.

The matrix model is newly created in the selected group and opened for editing on a tab.

7.5.2.3.5.2 Create matrix model from new objects

Using models of type **Matrix model** you can show existing connections between objects in a table.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open a matrix model. (page 1025)
2. Double-click in the row or the column header. If no symbols are specified (page 1027) yet, the **Add/Remove symbols** dialog opens (page 1027).
3. Select the object types and click **Close**.
4. Click **Apply**.
5. Select an object and enter a name.

You have added a new object to the matrix model.

Tip

If symbol types are already specified (page 1027), click a row or column header, press **F2**, select the object type using the arrow keys, press **Return** and enter a name for the object and press **Return**. Leave the row or column header using the arrow keys and press **F2** to add the next object to the matrix.

7.5.2.3.5.3 Create matrix model from existing objects

Using models of type **Matrix model** you can show existing connections between objects in a table.

Prerequisite

- You have the **ARIS Connect Designer** license privilege.
- The classic configuration set or modification set based on it is selected for the portal.

Procedure

1. Open a matrix model. (page 1025)
2. Click in the rows or the column header.
3. Click  **Insert existing object**. The corresponding dialog opens.
4. Select the object you want to insert.

You have created a matrix model from existing objects. The symbol types are added to your matrix.

7.5.2.3.5.4 Open matrix model for editing

You can open models in different ways.

Prerequisite

- You have a **Designer** license.
- The model type of the model is allowed (page 888) by the method filter (page 883) in use.

Procedure

From Groups or the Processes area

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
3. Select the group or process area containing the required model. The content of the selected group or process area is listed.
4. Click the name of the relevant model.
5. Click **Matrix** if this display is not enabled yet. The matrix is displayed.
6. Click  **Edit** >  **Edit model**.

From Home tab

1. Click **Home**.
2. Click **Manage models & objects**.
3. In the database, select the group containing the relevant model. The content of the selected group is listed.
4. Click the name of the model you want to open.

From the repository

1. Click  **Repository**.
2. In the database, select the group containing the relevant model. The content of the selected group is listed.
3. Click the name of the model you want to open.

Using the search

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. At the top right, click the **Search** box and enter a term that is included in the model name. All models and objects containing this term are listed immediately.
3. In the **Models (Repository)** category, click the name of the model you want to open.

From the 'Recent changes' area

1. If you are authorized to use multiple databases, activate the database containing the contents you want to access. You can select the relevant database in the  **Portal** at the top right below the search.
2. Click  **Recent changes** in the **Home** area. All models are listed that have recently been changed or created.
3. Click the name of the model you want to open. Depending on active configuration set, the **Groups** or **Process** area opens and the model is activated.
4. Click **Matrix** if this display is not enabled yet. The matrix is displayed.
5. Click  **Edit** >  **Edit model**.

The matrix model opens in a separate tab.

7.5.2.3.5.5 Specify symbols and connections

Before creating new objects and connections in a matrix model, you have to define the symbols and connections to be used.

7.5.2.3.5.5.1 Specify symbols for a matrix

Before you add new objects in a matrix model, you must select the symbols to be displayed.

Procedure

1. Create a matrix model. (page 878)
2. If you want to display symbols in the row header, click the row header. If you want to display symbols in the column header, click the column header.
3. Click  **Display symbols and connections** >  **Display symbols**. The corresponding dialog opens.
4. Click  **Add**. The corresponding dialog opens.
5. Enter the first characters in the **Enter symbol name** field to reduce the number of object symbols displayed.
6. Click the symbols you want to select.
7. Click **Apply** twice.

You have selected the symbols to be displayed in a matrix model.

Symbol types that are not enabled and do not have occurrences in the matrix are deleted from the menu. If you want to delete a symbol type, delete all occurrences in the model first.

7.5.2.3.5.5.2 Specify connection types for a matrix

Before you add connections to a matrix model, you must select the connection types to be used.

Prerequisite

You have modeled at least one object in the column and in the row header.

Procedure

1. Create a matrix model. (page 878)
2. Double-click in an empty cell between two objects or click  **Display symbols and connections** >  **Display connections**. The corresponding dialog opens.
3. Enter the first characters in the **Enter text to filter** field to reduce the amount of connection types displayed.
4. Move the mouse cursor over the connection type you want to add and click  **Show connection in menu**.
5. Click **Apply**.

You have selected the connection types to be used in a matrix model.

7.5.2.3.5.5.3 Specify default connection

You can specify a default connection for the matrix model.

Prerequisite

You have modeled at least one object in the column and in the row header.

Procedure

1. Create a matrix model. (page 878)
2. Click  **Display symbols and connections** >  **Display connections**. The corresponding dialog opens.
3. Enter the first characters in the **Enter text to filter** field to reduce the amount of connection types displayed.
4. Move the mouse cursor over the connection type you want to specify as default connection and click  **Use as default connection**.
5. Click **Apply**.

You have selected the default connection type to be used in a matrix model.

7.5.2.3.5.5.4 Specify an abbreviation for a connection

You can specify abbreviations for connections in a matrix model.

Prerequisite

You have modeled at least one object in the column and in the row header.

Procedure

1. Create a matrix model. (page 878)
2. Click  **Display symbols and connections** >  **Display connections**. The corresponding dialog opens.
3. Enter the first characters in the **Enter text to filter** field to reduce the amount of connection types displayed.
4. Move the mouse cursor in the  **Abbreviation for connection** column over the connection you want to specify an abbreviation for and click  **Rename**.
5. Enter a letter, a number, or a special character as a code.

This connection type will no longer be represented by a check mark in the matrix model, but by the character. If multiple connections are defined between objects, this is indicated by an asterisk in the cell in the matrix model. In a matrix model, connections are created (page 1047) at definition level only.

6. Click **Apply**.

You have specified abbreviations for connections in a matrix model.

7.5.2.3.5.5.5 Remove connection types from the matrix

You can remove connections types from the list of connection types to be used in a matrix model.

Prerequisite

You have modeled at least one object in the column and in the row header.

Procedure

1. Create a matrix model. (page 878)
2. Click  **Display symbols and connections** >  **Display connections**. The corresponding dialog opens.
3. Enter the first characters in the **Enter text to filter** field to reduce the amount of connection types displayed.
4. Move the mouse cursor over the connection types where the  **Show connection in menu** icon is displayed.
5. Click  **Show connection in menu** to remove the connection type from the list.
6. Click **Apply**.

You have removed connection types from the list of connection types to be used in the matrix model.

All modeled connections of this type still exist but are not displayed in the matrix.

7.5.2.3.5.6 Create connections

7.5.2.3.5.6.1 Create new connections between objects in matrix model

Besides being able to view existing connections, you can also create new connections between objects.

Procedure

1. Open a matrix model. (page 1025)
2. Select a matrix cell between two objects.
3. Click  **Create connections**. If several connections are possible, the **Create connection** dialog opens.
4. Click the connection you want to create, and click **OK**.
5. To add a connection that is not displayed, click **Add connection types**. The corresponding dialog opens.

If multiple connections are defined between objects, this is indicated by an asterisk in the cell in the matrix model. In a matrix model, connections are created (page 1047) at definition level only.

You have created a connection between objects in a matrix model.

Tip

Double-click a matrix cell to open the **Create Connection** dialog.

7.5.2.3.5.6.2 Draw connections using keyboard

You can draw connections between objects with the keyboard if you have defined abbreviations (page 1028) for these connections.

Procedure

1. Open a matrix model. (page 1025)
2. Click in a cell in your matrix model.
3. In the cells where you want to create connections, enter the abbreviation for the required connection.

If there are several possible connections with the same abbreviation, the **Create connections** dialog opens. Enable the relevant connections and click **OK**.

The connections that correspond to the abbreviation are created in your matrix model. In a matrix model, connections are created (page 1047) at definition level only.

Tip

If abbreviations are specified for the connections, you can move in the matrix model using the arrow keys and create connections using only the keyboard.

7.5.2.3.5.6.3 Temporarily hide connections in a matrix model

For a better overview, you can hide connections.

Prerequisite

You have modeled at least one object in the column and in the row header.

Procedure

1. Open a matrix model. (page 1025)
2. Click  **Display symbols and connections** >  **Display connections**. The corresponding dialog opens.
3. Enter the first characters in the **Enter text to filter** field to reduce the amount of connection types displayed.
4. Move the mouse cursor over the connection types where the  **Show connection in menu** icon is displayed.
5. Click  **Show connection in menu** to remove the connection type from the list.
6. Click **Apply**.

The connections are no longer displayed in the matrix model. These settings are saved when you close the matrix model. When it is opened again, these settings are active. You can show (page 1027) these connections again.

7.5.2.3.5.6.4 Delete connections in matrix model

You can delete connections in the matrix model.

Prerequisite

The connection you want to delete must not have any occurrences in models.

Procedure

1. Open a matrix model. (page 1025)
2. Click the relevant cell in the matrix model and click  **Delete**. All connections except those that are used in other models are deleted.

The connections are deleted.

7.5.2.3.5.6.5 Delete connections using the inspector

You can delete connections in the matrix model.

Prerequisite

The connection you want to delete must not have any occurrences in models.

Procedure

1. Open a matrix model. (page 1025)
2. Click  if the inspector panel is not enabled yet.
3. Click the relevant cell in the matrix model.
4. In the inspector panel, select the connection to be deleted and click  **Delete**. The specific connection is deleted.

You can use the filter to reduce the number of connections displayed. If you have entered a filter and change the selection, the filter is reset.

The connection is deleted.

You can delete all connections except those that are used in other models.

7.5.2.3.5.7 Insert objects from other groups in matrix model

You can insert objects from the entire database into a matrix model.

Procedure

1. Open a matrix model. (page 1025)
2. Click in the rows or the column header.
3. Click  **Insert existing object**. The corresponding dialog opens.
4. Select the object you want to display in the matrix model and click **OK**.

The selected object is displayed in the matrix model.

7.5.2.3.5.8 Edit objects

7.5.2.3.5.8.1 Temporarily hide connections in the matrix model

In a matrix model, you can represent connections between objects and create new objects or connections. You can hide objects.

Procedure

1. Open a matrix model. (page 1025)
2. If you want to hide symbols for the row header, click the row header. If you want to hide symbols for the column header, click the column header.
3. Click  **Display symbols and connections** >  **Display symbols**. The corresponding dialog opens.
4. Disable the symbol types you want to hide temporarily.
5. Click **Apply**.

The symbol type is no longer displayed in the matrix model. These settings are saved when you close the matrix model. When it is opened again, these settings are active. The symbol type is also removed from the list if there are no occurrences in the matrix.

SHOW OBJECT AGAIN

Click  **Display symbols and connections** >  **Display symbols**. Enable the check box of the relevant symbol type.

NO LONGER DISPLAY OBJECT IN MATRIX MODEL

If the object is no longer needed, you can delete (page 1038) it from the matrix model.

7.5.2.3.5.8.2 Sort objects in matrix model

New objects are always inserted in the selected row or column in the matrix model. You can change the arrangement of objects in the matrix model subsequently.

Procedure

1. Open a matrix model. (page 1025)
2. Select the objects you want to sort.
3. Click  **Sort**.
4. Click  **Sort ascending (A-Z)**,  **Sort descending (Z-A)**, or  **Sort by type**.

The matrix model is sorted based on your settings.

Tip

Select adjacent objects by holding down the Shift key and clicking the first and last object. You can select objects that are not adjacent by holding down the Ctrl key and clicking the relevant objects. You can extend or reduce your selection using the arrow keys.

7.5.2.3.5.8.3 Move objects in a matrix model

You can move objects within a matrix model.

Procedure

1. Open a matrix model. (page 1025)
2. Select the object in the matrix model.
3. Hold down the mouse button and drag the selected object to the relevant position.

The object is now displayed in the matrix model in the way you arranged it. A hierarchically grouped object is moved in its entirety.

Tip

You can move hierarchies by moving the top level.

Select adjacent objects by holding down the Shift key and clicking the first and last object. You can select objects that are not adjacent by holding down the Ctrl key and clicking the relevant objects.

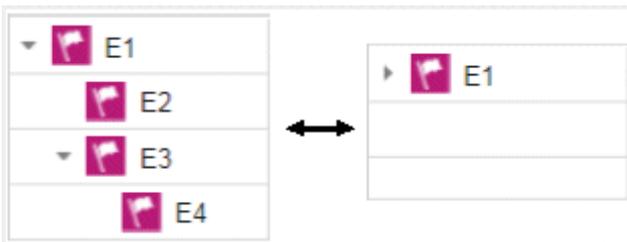
7.5.2.3.5.8.4 Group objects hierarchically

You can hierarchically group any objects both in rows and in columns.

Procedure

1. Open a matrix model. (page 1025)
2. Select the object that you want to position below another object in a hierarchy. The objects must be arranged directly below or beside each other.
3. Click  **Down one level.**

For a row, the object is grouped hierarchically below the object that is placed directly above it. For a column, the object is grouped below the object that is placed directly to the left of it. The row or column can be reduced to the top level of the hierarchy by clicking it, that is, the subordinate rows or columns are hidden.



Tip

Select adjacent objects by holding down the Shift key and clicking the first and last object. You can extend or reduce your selection using the arrow keys.

7.5.2.3.5.8.5 Cancel hierarchical grouping of objects

You can hierarchically group any objects both in rows and in columns. All actions performed on the top object are also performed on the subordinate objects.

Procedure

1. Open a matrix model. (page 1025)
2. Click the arrow sign for an object to display the objects grouped below it if applicable.
3. Click the object for which you want to undo the hierarchical structure.
4. Click  **Up one level.**

The object is placed one level higher in the hierarchy.

Tip

Select adjacent objects by holding down the Shift key and clicking the first and last object. You can select objects that are not adjacent by holding down the Ctrl key and clicking the relevant objects. You can extend or reduce your selection using the arrow keys.

7.5.2.3.5.8.6 Remove symbol types from the matrix

You can remove symbols from the list of symbols to be used in a matrix model.

Procedure

1. Create a matrix model. (page 878)
2. If you want to remove symbols from the row header, click the row header. If you want to remove symbols from the column header, click the column header.
3. Click  **Display symbols and connections** >  **Display symbols**. The corresponding dialog opens.
4. Deselect the symbols you want to remove from the list of symbols to be used in a matrix.
5. Click **Apply**.

You have removed symbols from the list of symbols to be used in a matrix model. You can only remove a symbol type from the list if there are no objects of that symbol type used in the matrix.

7.5.2.3.5.8.7 Change object symbol

You can change the symbol for selected objects if various symbols are available for them.

Prerequisite

The method filter in use (page 883) includes different symbols of the objects you selected.

Procedure

1. Click an object, or hold the **Ctrl** key pressed to select multiple objects of the same type.
2. Activate the Start (page 912) tab bar.
3. Click  **Change symbol**. The list of object symbols available for the selected object(s) is shown.
4. Click the symbol you want to use from now on for the selected object/s in this model.

The symbol for the selected object is or the symbols of the selected objects are changed.

7.5.2.3.5.8.8 Copy objects and paste them into matrix model

You can copy objects in a matrix model and paste them into the same or another matrix model.

COPY AND PASTE OBJECTS

Procedure

1. Open (page 1025) a matrix model.
2. Select one or more objects in the matrix model.
3. Click  **Copy** or use the keyboard shortcut **Ctrl + C**.
4. Click the relevant position in the matrix model.
5. Click  **Paste** or use the keyboard shortcut **Ctrl + V**.

The objects are pasted into the matrix model as occurrence copies (page 1175).

COPY AND PASTE HIERARCHICALLY GROUPED OBJECTS

Procedure

1. Open (page 1025) a matrix model.
2. Select one or more objects in the matrix model. If you select the top object in the hierarchy, the entire structure is copied.
3. Click  **Copy** or use the keyboard shortcut **Ctrl + C**.
4. Click the relevant position in the matrix model.
5. Click  **Paste** or use the keyboard shortcut **Ctrl + V**.

The hierarchically grouped objects are pasted into the matrix model as occurrence copies (page 1175).

Tip

Select adjacent objects by holding down the Shift key and clicking the first and last object. You can select objects that are not adjacent by holding down the Ctrl key and clicking the relevant objects. You can extend or reduce your selection using the arrow keys.

7.5.2.3.5.8.9 Copy objects from graphical models and paste them into a matrix

You can copy objects in a matrix model and paste them into the same or another matrix model.

COPY AND PASTE OBJECTS

Procedure

1. Open (page 1025) a matrix model.
2. Open (page 889) a graphical model.
3. Select one or more objects in the graphical model.
4. Click  **Copy** or use the keyboard shortcut **Ctrl + C**.
5. Click the relevant position in the matrix model.
6. Click  **Paste** or use the keyboard shortcut **Ctrl + V**.

The objects are pasted into the matrix model as occurrence copies (page 1175).

7.5.2.3.5.8.10 Delete objects in a matrix model

You can delete objects from a matrix model.

Procedure

1. Open a matrix model. (page 1025)
2. Click the relevant cell in the matrix model and click  **Delete**.

The object is deleted from the matrix model.

7.5.2.3.5.9 Label column or row header title

You can enter a label for the column or row header title.

Procedure

1. Open a matrix model. (page 1025)
2. Double-click the column or row header title of the matrix model. The corresponding dialog opens.
3. Enter the title.

You have defined the label of the column or row header title.

7.5.2.3.5.10 Apply color to row or column

You can apply a color background to entire rows or columns.

Procedure

1. Open a matrix model. (page 1025)
2. Activate the Start (page 912) tab bar.
3. Click in a row or column header.
Select multiple rows or columns by holding down the Shift key and clicking the first and last row or column. You can select rows or columns that are not adjacent by holding down the Ctrl key.
4. Click  **Fill color**. The color palette opens.
5. Click the relevant color. The color palette closes.

A color background is applied to the row or column containing objects. Only those cells in which connections are not allowed have no color background.

7.5.2.3.5.11 Color columns or rows with a user-defined color

You can assign your own color to row or column headers that contain objects.

Procedure

1. Open a matrix model. (page 1025)
2. Activate the Start (page 912) tab bar.
3. Click in a row or column header.
Select multiple rows or columns by holding down the Shift key and clicking the first and last row or column. You can select rows or columns that are not adjacent by holding down the Ctrl key.
4. Click  **Fill color**. The color palette opens.
5. Click **Choose your own color**. The **Define color** dialog opens.
6. Select your own color in one of the ways described below. Your changes will be displayed in the preview window on the right:
 - a. Click the color bar and move the line to the relevant color range to select the basic color. Then click on the relevant position in the color box to select the brightness of the basic color.
 - b. Enter the respective share of each color from 0 to 255 in the **Red**, **Green** and **Blue** boxes. 0 means that the corresponding color is absent. If you enter **0** in all three boxes you have selected the color **black**.

- c. Enter a hexadecimal color definition in the **Color code: #** box. The hexadecimal system uses the letters A to F in addition to the numerals of the decimal system, which means that it is based on the base 16. If you enter FFFF00, this sets the color to **Yellow**.

7. Click **OK**.

A color background is applied to the row or column containing objects. Only those cells in which connections are not allowed have no color background.

7.5.2.3.5.12 Reset color

You can reset the color of a row or a column if you have changed the color.

Procedure

1. Open a matrix model. (page 1025)
2. Activate the Start (page 912) tab bar.
3. Click in a row or column header.

Select multiple rows or columns by holding down the Shift key and clicking the first and last row or column. You can select rows or columns that are not adjacent by holding down the Ctrl key.

4. Click  **Fill color**. The color palette opens.
5. Click  **Reset**.

You have reset the color of the selected rows or columns to their original color.

7.5.2.3.5.13 Change size of row or column

You can change the size of a row or a column.

Procedure

1. Open a matrix model. (page 1025)
2. Click in a row or column header.

Select multiple rows or columns by holding down the Shift key and clicking the first and last row or column. You can select rows or columns that are not adjacent by holding down the Ctrl key.

3. Click  **Change row and column size**. The corresponding dialog opens.
4. Enter the size in pixels.

The size of the selected rows or columns is changed.

Tip

You can change the size of a single row or column by dragging its border with the mouse.

7.5.2.3.5.14 Change text orientation of row or column header

You can change the text orientation of a row or a column header.

Procedure

1. Open a matrix model. (page 1025)
2. Click in a row or column header.
3. Click the **Format** tab.
4. If you want a horizontal text orientation, click the row or column header and click **T** → **Text orientation** > **T** → **Horizontal**.

If you want a vertical text orientation, click the row or column header and click **T** → **Text orientation** > **T** → **Vertical**.

The text is oriented accordingly.

Example

Column header title	Function 1	Column header title	Function 1
Row header title		Row header title	Function 1
Event 1		Event 1	

7.5.2.3.5.15 Align text of row or column horizontally

You can align the text of a row or a column horizontally.

Procedure

1. Open a matrix model. (page 1025)
2. Click in a row or column header.
3. Click the **Format** tab.
4. If you want to align the text left, click the row or column header and click  **Align horizontally** >  **Align left**.

If you want to align the text left, click the row or column header and click  **Align horizontally** >  **Align center**.

If you want to align the text right, click the row or column header and click  **Align horizontally** >  **Align right**.

The text is aligned accordingly.

Example

Column header title Row header title	Function 1 	Column header title Row header title	Function 1 	Column header title Row header title	Function 1 
 Event 1		 Event 1		 Event 1	

7.5.2.3.5.16 Align text of row or column vertically

You can align the text of a row or a column vertically.

Procedure

1. Open a matrix model. (page 1025)
2. Click in a row or column header.
3. Click the **Format** tab.
4. If you want to align the text top, click the row or column header and click  **Align vertically** >  **Align top**.

If you want to align the text center, click the row or column header and click  **Align vertically** >  **Align center**.

If you want to align the text bottom, click the row or column header and click  **Align vertically** >  **Align bottom**.

The text is aligned accordingly.

Example

Column header title Row header title	Function 1 	Column header title Row header title	Function 1 	Column header title Row header title	Function 1 
 Event 1		 Event 1		 Event 1	

7.5.2.3.5.17 Export matrix model to Microsoft Excel

You can use a report to export the completed matrix model to Microsoft® Excel so that it can be prepared for use in a presentation, for example.

Procedure

1. Open a matrix model. (page 1025)
2. Click  **Reports**. The **Reports** bar opens.
3. Click the drop-down list box to display the list of available reports.
4. Click the **Export relationship matrix** report.
5. Click the **Start** button.
6. When the report is created, the result is listed in the **Reports** bar, and a dialog to download the result opens.
7. Click  **Download result**. Depending on your browser settings, you can specify the download folder or the result is downloaded in the default download folder.
8. To download the result later, click  **Download report** in the **Reports** bar.

You have exported a matrix model as a XLS file.

You can open the file in Microsoft® Excel.

7.5.2.3.5.18 Generate a PDF file of a matrix model

You can generate a PDF file of a matrix model and use this to print the matrix, for example.

Procedure

1. Open a matrix model. (page 1025)
2. Click  **Reports**. The **Reports** bar opens.
3. Click the drop-down list box to display the list of available reports.
4. Select the **Export graphic as PDF** report.
5. Click the **Start** button. The corresponding dialog opens.
6. Select your settings and click **OK**.
7. When the report is created, the result is listed in the **Reports** bar, and a dialog to download the result opens.
8. Click  **Download result**. Depending on your browser settings, you can specify the download folder or the result is downloaded in the default download folder.
9. To download the result later, click  **Download report** in the **Reports** bar.

You have generated a PDF of a matrix model.

7.5.2.3.5.19 Delete matrix model

You can delete a matrix model.

Prerequisite

You require the **Delete** access privilege for the groups in which the items are saved.

In order to restore the status of a database after unintentionally deleting something, please use versioned databases or back up your databases before you delete items.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Repository**.
3. Move the mouse cursor over the matrix model to be deleted and click  **Delete**.

After a confirmation prompt, the matrix model is deleted.

7.5.2.3.5.20 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.3.5.20.1 What is a matrix model?

In a model of the **Matrix model** type, you can represent object connections. You can use existing objects or create new objects. You can conveniently select objects from the entire database.

You can view all existing connections, display only one connection in the matrix model, or add new connections.

In the matrix model, you can place or move objects as required, sort them alphabetically or according to methods, or arrange them hierarchically.

AREAS OF USE

- Assessment of the degree to which markets are opened up, displayed in a table (business segment matrix)
- Representation of technical and disciplinary structures and their dependencies
- Representation of hierarchies
- Quick and clear management of connections between objects

Specify connections easily and efficiently, and create models later using model generation

7.5.2.3.5.20.2 How are connections displayed?

In general, check marks indicate existing connections between objects in the matrix model. An asterisk indicates that there is more than one connection between two objects. The following display options are also available:

INDICATION OF THE DIRECTION OF THE CONNECTION

In the matrix model, a small arrow indicates the direction of a connection.

	Indicates the direction from an icon placed in the column header to an icon placed in the row header.
	Indicates the direction from an icon placed in the row header to an icon placed in the column header.

INDICATION OF ABBREVIATIONS

If an abbreviation is defined, this abbreviation is displayed instead of the check mark.

7.5.2.3.5.20.3 What are connections at definition level?

In matrix models, only the definition level is visualized for connections. This means that matrix models do not contain occurrences of connections, only of objects.

7.5.2.3.5.20.4 How to control the matrix using the keyboard

You can control the matrix using the keyboard:

Shortcut	Selection	Action
Arrow keys	▪ In the list of symbols	Moves to the next/previous symbol in arrow direction.
	▪ In the matrix	Moves to next column/row in arrow direction.
Enter	Cell	Opens the Display connection type dialog
Esc key	Dialog opened	Cancel the dialog.
F2	Cell of the row or column header	Opens the list of symbols available.
+ key	Matrix	Zooms in the matrix.
- key	Matrix	Zooms out the matrix.

7.5.2.4 Check models and objects

You can use the provided or your own semantic checks to check whether models and objects meet predefined conditions. If rules are not adhered to, detailed error descriptions, warnings, and/or notes are displayed. Based on semantic check results, you can customize the models and ensures that they are properly modeled. As a result, expensive modification efforts and rework can be avoided if models are created by several people or even across department boundaries.

You can use ARIS Connect Designer to check an open model and its objects (page 1048). Errors are marked in the model itself and listed in the **Semantic checks** bar that is displayed under the model. The **Semantic checks** bar also lists warnings and notes.

The semantic check results (page 1052) of the checks used in ARIS Connect Designer can be downloaded in the format selected.

You can also run semantic checks in the repository (page 1057).

7.5.2.4.1 Run a semantic check for a model

You can check whether the model complies with the modeling conventions.

When you run a semantic check, the previous semantic check results are deleted from the results list.

Procedure

1. Open a model (page 889).
2. Click  **Semantic checks** to open the **Semantic checks** (page 865) bar.
3. Click in the semantic check list box. The relevant semantic checks are listed.
4. Select the required semantic check. You can select a semantic check to check the model or to check specific objects.
5. Click  **Run the selected semantic check**. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed and the result is displayed. Errors, warnings, and notes are listed in the **Semantic checks** bar and the corresponding objects are marked by error, warning, and note markers (page 1054) in the model. The result can be downloaded (page 1052) in the selected format (page 1051).

7.5.2.4.2 Rerun a semantic check

You can rerun the last executed semantic check to ensure that your adjustments have fixed previous errors.

Procedure

1. Run a semantic check (page 1048).
2. Fix the errors displayed by the semantic check.
3. Click  **Rerun the last semantic check**. Based on the previous profile and data, the last semantic check is performed independently of the current selection.
4. Check whether all errors have been corrected. If not, proceed with troubleshooting.

You have corrected modeling errors using the semantic check.

7.5.2.4.3 Run a semantic check using the Model tab bar

You can check whether the model or selected objects complies with the modeling conventions. When you run a semantic check, the previous semantic check results are deleted from the results list.

Procedure

1. Open a model (page 889).
2. If you want to run a semantic check for the model, ensure that no model element is selected or select objects if you want to run a semantic check for objects.
3. Click the **Model** tab bar.
4. Click  **Check diagram**. The semantic checks available for the model or for the selected objects are displayed.
5. Select the required semantic check. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed and the result is displayed. Errors, warnings, and notes are listed in the **Semantic checks** bar and the corresponding objects are marked by error, warning, and note markers (page 1054) in the model. The result can be downloaded (page 1052) in the selected format (page 1051).

7.5.2.4.4 Review semantic check results

You can review semantic check results for errors, warnings, and notes.

Prerequisites

You have run a semantic check for the open model.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** (page 865) bar. The result of the last executed semantic check is listed.
2. Click  **Go to next error, warning, or note**. The next entry is highlighted. If the corresponding object is not in the visible model area, it is moved to the visible model area.
3. Click  **Go to previous error, warning, or note**. The previous entry is highlighted. If the corresponding object is not in the visible model area, it is moved to the visible model area.

You have reviewed the listed semantic check results.

7.5.2.4.5 Restrict the result view to errors, warnings or notes

You can restrict the result to errors, warnings, or notes to focus on items you want to edit.

Prerequisite

You have run a semantic check for the open model. The semantics check found errors, warnings, and notes.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** (page 865) bar. The number of errors, warnings and notes is displayed.

26 errors

10 warnings

10 notes

2. Click **errors**, **warnings**, or **notes**.

Depending on your choice, only the errors, warnings, or notes are listed. You can display all semantic check entries again by clicking **Show all**.

26 errors

Show all

7.5.2.4.6 Show additional information for errors, warnings, and notes

You can show additional semantic check results in the model and in the **Semantic checks** bar. A marker is displayed above the corresponding object in the model, depending on the type of result. Each finding is displayed in a row in the **Semantic checks** bar.

Prerequisites

You have run a semantic check for the open model.

Procedure

1. Click the entry in the **Semantic checks** bar you want to show in the model. A marker is placed above the corresponding object in the model.
2. In the model, position the mouse pointer over the marker. Additional information is displayed in a pop-up.
3. In the **Semantic checks** bar, click  **Expand** of an error, warning, or note. Detailed information is displayed, such as the rule on which the entry is based.

You have shown additional information (page 924) in the model and in the **Semantic checks** bar.

7.5.2.4.7 Set up the output options of the semantic check

You can specify in which format the result of the semantic check is to be generated for downloading.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** bar.
2. Click  **Select output format**. The corresponding dialog opens.
3. Click the  down arrow and select the output option you want to use, for example, **Output PDF**.
4. Click **OK**.

You have set up the output options for semantic check results. If you now run a semantic check and click  **Download result as a document**, the result is downloaded in the selected format.

7.5.2.4.8 Download the result of a semantic check

You can download the result of a semantic check that is listed in the **Semantic checks** bar.

Prerequisites

You have run a semantic check for the open model.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** (page 865) bar. The result of the last executed semantic check is listed.
2. Click  **Download result as a document.**

The **Save As** dialog opens and you can navigate to the folder in which you want to save the semantic checks result in the chosen format (page 1051).

7.5.2.4.9 Clear the result of the last semantic check

You can clear the result of the last semantic check. As a consequence, you will no longer be able to download the corresponding semantic check results.

Prerequisites

You have run a semantic check for the open model.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** (page 865) bar. The result of the last executed semantic check is listed.
2. Click  **Clear semantic check result.**

The entries of the semantic check result for the current model are deleted.

7.5.2.4.10 Close the Semantic checks bar

You can close the **Semantic checks** bar when you no longer need it.

Procedure

Click  **Semantic checks** or click  **Close** in the **Semantic checks** bar.

The **Semantic checks** bar is closed.

7.5.2.4.11 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.2.4.11.1 What should you know about semantic checks?

You can use semantic checks to ensure correct modeling in ARIS. Your models are checked using the defined rules. These rules ensure that your business process models are logically structured in ARIS and are meaningful. Only models such as these can produce meaningful and correct analysis results in further work and be used to help make decisions.

ARIS provides standard semantic checks. You can use ARIS Architect to define your own checks and make them available to ARIS users.

Using ARIS Connect, semantic checks can be run for selected content (page 840) or the content of a group (page 840) in the repository or for an opened model (page 1048) and its objects (page 1049) in ARIS Connect Designer.

Certain semantic checks can be applied to different items, while others can only be applied to one item or item type, for example, only to models of one model type. This depends on which rules a semantic check verifies.

7.5.2.4.11.2 What icons symbolize the semantic check results?

Results of semantic checks are also displayed graphically.



If a semantic check is executed in the  **Repository** without finding a rule violation, this is indicated by a green symbol.

26 10 10

If a semantic check is executed in the  **Repository** and it finds rule violations, the number and type of rule violations are displayed. The number with a dark red background indicates the errors, the number with a light red background displays the warnings, and the number with a yellow background displays the notes.

Has no findings.

If a semantic check is executed using ARIS Connect Designer without finding a rule violation, this is indicated by a green symbol.

26 errors

10 warnings

10 notes

If a semantic check is executed in ARIS Connect Designer and it finds rule violations, the number and type of rule violations are displayed. You can restrict the result view to errors, warnings, or notes.

26 errors

Show all

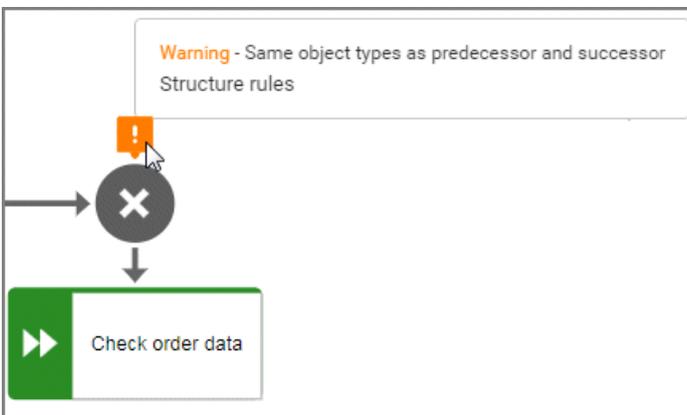
If you have restricted the result view in ARIS Connect Designer to errors, warnings, or notes, you can show all result entries again by clicking on **Show all**.

7.5.2.4.11.3 How are errors, warnings, and notes marked in the model?

If a semantic check detects errors, warnings, or notes, the corresponding object is marked in the model.

Information type	Marker
Error	
Warning	
Note	

If, for example, a warning is found, the warning marker is placed above the corresponding object. When you position the mouse pointer over the warning marker, additional information on the warning is displayed.



You can show detailed information in the **Semantic checks** bar by expanding an entry.

Rules for data elements
▶
↺
↻
✖
⚙
⬇
0 errors
2 warnings
0 notes
✕

#	Item	Finding	Description
1	> ● AND rule	 Structure rules	Same object types as predecessor and successor
2	▼ ● XOR rule	 Structure rules Warning	Rule: Order at the rule must be observed At occurrence level, this rule checks whether or not at objects of type "Rule" redundancies exist for the set of preceding object types and the set of subsequent object types. When all incoming connections come from events, then all outgoing connections may only lead to functions, and vice versa.

7.5.2.4.12 Layout options dialog

Specifies the values based on which models are layouted.

Top margin

Specifies the distance to the top margin of the model window in millimeters.

Left margin

Specifies the distance to the left margin of the model window in millimeters.

Horizontal item spacing

Specifies the horizontal distance in millimeters that the items in the model should have next to each other after the layout process, and sets the default horizontal distance for Guided Modeling (page 919).

Vertical item spacing

Specifies the vertical distance in millimeters that the items in the model should lie below each other after the layout process, and sets the default vertical distance for Guided Modeling (page 919).

Layout orientation

Specifies the model orientation, either vertical or horizontal.

Arrange satellites

Specifies the arrangement of satellites, that is, of the objects that are assigned to structurally relevant objects (page 1178). When arranging satellites, different connection types are also included. Satellites that are connected to an object via the same connection type will be grouped together in one space.

Horizontally

The satellites are arranged from left to right. Satellites that are linked with the structurally relevant object by the same connection type are placed directly next to one another.

Quadratic

Satellites are arranged inside a square if possible. Satellites that are linked with the structurally relevant object by the same connection type are grouped together within a common space.

Vertically

The satellites are arranged from top to bottom. Satellites that are linked with the structurally relevant object by the same connection type are placed directly beneath one another.

Minimize connection anchor points

Reduces the number of anchor points in the layout. If you use the grid at the same time, you can obtain the effect of superimposing several outgoing or incoming connections.

Use as default

Transfers your layout settings.

When you start laying out models of this type, the settings you specify here will be reused and you will not have to reenter them.

7.5.3 Check models and objects

If rules are not adhered to, detailed error descriptions, warnings, and/or notes are displayed. Based on semantic check results, you can customize the models and ensures that they are properly modeled. As a result, expensive modification efforts and rework can be avoided if models are created by several people or even across department boundaries.

You can use the repository to check the content of a group (page 840), multiple models, and multiple objects (page 840). Errors, warnings, and notes are indicated in the **Semantic checks** bar.

The semantic check results (page 1059) of the checks used in the repository can be downloaded in the format selected.

You can also run semantic checks for open models (page 1048).

7.5.3.1 Set up the output options of the semantic check

You can specify in which format the result of the semantic check is to be generated for downloading.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** bar.
2. Click  **Select output format**. The corresponding dialog opens.
3. Click the  down arrow and select the output option you want to use, for example, **Output PDF**.
4. Click **OK**.

You have set up the output options for semantic check results. If you now run a semantic check and click  **Download result as a document**, the result is downloaded in the selected format.

7.5.3.2 Run a semantic check for models and objects

You can check one or multiple models and objects for semantic correctness.

When you run a semantic check, the previous semantic check results are deleted from the results list.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group containing the models and/or objects you want to check.
5. In the detailed view, enable the check boxes of the relevant models and/or objects.
6. Click  **Semantic checks** to open the **Semantic checks** bar. The **Semantic checks** bar displays the name of the selected item. If you have selected more than one item, the **Semantic checks** bar displays the number of selected items.
7. Click in the semantic check list box. The relevant semantic checks are listed.
8. Select the required semantic check.
9. Click **Start**. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed. The result is listed in the **Result** area and can be downloaded (page 1059) in the selected format (page 1051).

7.5.3.3 Run a semantic check for the content of a group

You can check the content of a group for semantic correctness.

Procedure

1. Click  **Repository**.
2. Click  **Databases** on the left to display the available databases.
3. Select the relevant database.
4. Select the database group containing the models and/or objects you want to check. The **Semantic checks** bar displays the name of the selected database group.
5. Click in the semantic check list box. The relevant semantic checks are listed.
6. Select the required semantic check.
7. Click **Start**. Depending on the rules to be checked, the semantic check is executed without further input or dialogs are opened and you have to make settings.

The **Semantic check** is executed. The result is listed in the **Result** area and can be downloaded (page 1059) in the selected format (page 1051).

7.5.3.4 Jump from objects in the Semantic checks bar to the repository

You can jump from objects listed in the **Result** area of the **Semantic checks** bar to where they are stored in the repository.

Prerequisites

You have already run a semantic check.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** bar.
2. Click the name of a listed object in the **Result** area.

The object is moved to the visible area of the detail view of the repository. The object is highlighted and its check box enabled.

7.5.3.5 Download the result of a semantic check

You can download the results of semantic checks that are listed in the **Semantic checks** bar.

Prerequisites

You have already run a semantic check.

Procedure

1. Click  **Repository**.
2. Click  **Semantic checks** to open the **Semantic checks** bar. The result of the last executed semantic check is listed.
3. Click  **Download result as a document**.

The **Save As** dialog opens and you can navigate to the folder in which you want to save the semantic checks result in the chosen format (page 1051).

7.5.3.6 Open a checked model in ARIS Connect Designer

You can open a model in ARIS Connect Designer for which you ran a semantic check in the repository. This provides you with the extended functionality of the **Semantic checks** bar of ARIS Connect Designer.

Prerequisites

You have already run a semantic check for a model.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** bar.
2. Click the name of a model in the **Result** area.

The model is opened and the **Semantic checks** bar contains the semantic check results. Objects with errors, warnings, and/or notes are marked in the model. You can restrict the result to errors, warnings or notes (page 1050).

7.5.3.7 Clear the result of the last semantic check

You can clear the result of the last semantic check. As a consequence, you will no longer be able to download the corresponding semantic check results.

Prerequisites

You have already run a semantic check.

Procedure

1. Click  **Semantic checks** to open the **Semantic checks** bar. The result of the last executed semantic check is listed.
2. Click  **Clear semantic check result**.

The entries of the semantic check results for all items are deleted.

7.5.3.8 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.3.8.1 What should you know about semantic checks?

You can use semantic checks to ensure correct modeling in ARIS. Your models are checked using the defined rules. These rules ensure that your business process models are logically structured in ARIS and are meaningful. Only models such as these can produce meaningful and correct analysis results in further work and be used to help make decisions.

ARIS provides standard semantic checks. You can use ARIS Architect to define your own checks and make them available to ARIS users.

Using ARIS Connect, semantic checks can be run for selected content (page 840) or the content of a group (page 840) in the repository or for an opened model (page 1048) and its objects (page 1049) in ARIS Connect Designer.

Certain semantic checks can be applied to different items, while others can only be applied to one item or item type, for example, only to models of one model type. This depends on which rules a semantic check verifies.

7.5.3.8.2 What icons symbolize the semantic check results?

Results of semantic checks are also displayed graphically.



If a semantic check is executed in the  **Repository** without finding a rule violation, this is indicated by a green symbol.

26 10 10

If a semantic check is executed in the  **Repository** and it finds rule violations, the number and type of rule violations are displayed. The number with a dark red background indicates the errors, the number with a light red background displays the warnings, and the number with a yellow background displays the notes.

Has no findings.

If a semantic check is executed using ARIS Connect Designer without finding a rule violation, this is indicated by a green symbol.

26 errors 10 warnings 10 notes

If a semantic check is executed in ARIS Connect Designer and it finds rule violations, the number and type of rule violations are displayed. You can restrict the result view to errors, warnings, or notes.

26 errors Show all

If you have restricted the result view in ARIS Connect Designer to errors, warnings, or notes, you can show all result entries again by clicking on **Show all**.

7.5.4 Lock models and objects

You can permanently lock models and objects to prevent editing by other users, and unlock locked items again.

Locking models and objects is useful during Release Cycle Management (RCM), for example, to perform an assessment of the required items.

The versioning and permanent locking functions support key aspects of Release Cycle Management.

You can lock:

- objects
- models
- content of groups

7.5.4.1 Lock models

You can lock models so that they cannot be edited, for example, to perform a review. As long as the lock is enabled, only the user who applied it can edit the locked items.

Prerequisite

- The models must be closed.
- You have the **Lock permanently** function privilege or are a system user.

Procedure

1. In the  **Repository**, navigate to the database group containing the content you want to lock. When you select the group, its content is displayed.
2. If you want to lock a model, move the mouse pointer to the row with the model and click  **More**.
If you want to lock multiple models, enable the check boxes for the relevant models and click  **More** above the item list. The menu is displayed.
3. Click  **Lock**. The lock is applied and you will be informed of the result. If it was impossible to lock one or multiple objects of a model, you will be informed of the items that were locked and those that could not be locked.

Locked models and objects can only be edited by you. The locked items remain locked until you or a system user unlocks them again.

7.5.4.2 Lock objects

You can lock objects so that they cannot be edited, for example, to perform a review. As long as the lock is enabled, only the user who applied it can edit the locked items.

Prerequisite

You have the **Lock permanently** function privilege or are a system user.

Procedure

1. In the  **Repository**, navigate to the database group containing the content you want to lock. When you select the group, its content is displayed.
2. If you want to lock an object, move the mouse pointer to the row with the object and click  **More**.
If you want to lock multiple objects, enable the check boxes for the relevant objects and click  **More** above the item list. The menu is displayed.
3. Click  **Lock**. The lock is applied and you will be informed of the result. If it was impossible to lock one or multiple objects, you will be informed of the objects that were locked and those that could not be locked.

Locked objects can only be edited by you. The locked objects remain locked until you or a system user unlock them again.

7.5.4.3 Unlock models

You can unlock locked models in order to release them for editing for all users with the corresponding privilege.

Prerequisite

- The models must be closed.
- You have the **Lock permanently** function privilege or are a system user.

Procedure

1. In the  **Repository**, navigate to the database group containing the content you want to unlock. When you select the group, its content is displayed.
2. If you want to unlock a model, move the mouse pointer to the row with the model and click  **More**.
If you want to unlock multiple models, enable the check boxes of the relevant models and click  **More** above the item list. The menu is displayed.
3. Click  **Unlock**. The lock is removed and you will be informed of the result. If it was impossible to unlock one or multiple objects of a model, you will be informed of the items that were unlocked and those that could not be unlocked.

The dialog closes and the models (and objects, if applicable) are unlocked.

7.5.4.4 Unlock objects

You can unlock locked objects in order to release them for editing for all users with the corresponding privilege.

Prerequisite

- The models must be closed.
- You have the **Lock permanently** function privilege or are a system user.

Procedure

1. In the  **Repository**, navigate to the database group containing the content you want to unlock. When you select the group, its content is displayed.
2. If you want to unlock an object, move the mouse pointer to the row with the object and click  **More**.
If you want to unlock multiple objects, enable the check boxes of the relevant objects and click  **More** above the item list. The menu is displayed.
3. Click  **Unlock**. The lock is removed and you will be informed of the result. If it was impossible to unlock one or multiple objects of a model, you will be informed of the objects that were unlocked and those that could not be unlocked.

The dialog closes and the objects are unlocked.

7.5.5 Manage versions

In ARIS Connect you can version models and thus store different model states.

The different model versions can be opened for information, while the workspace model is the only one available for editing.

Within the scope of Release Cycle Management (RCM) you can identify and explain specific model versions. The change lists (page 1167) are used to continuously document the changes made to models. This means that the documentation can be used both internally and externally.

The permanent locking and versioning functions support key aspects of Release Cycle Management.

Versioning is not performed automatically when saving; it is performed when the content is suitable for versioning. "Suitable for versioning" means that a model has reached a state that is to be archived.

7.5.5.1 Version models

You can version models, for example, to use them in Release Cycle Management (RCM).

Prerequisite

- You have opened a versionable database.
- You have the **Version** access privilege.

Procedure

1. In the  **Repository**, navigate to the database group containing the models you want to version. When you select the group, its content is displayed.
2. If you want to version a model, move the mouse pointer to the row with the model and click  **More**.
If you want to version multiple models, enable the check boxes for the relevant models and click  **More** above the item list. The menu is displayed.
3. Click  **Versioning**. The **Enter description** dialog opens.
4. Enter a change description. This description informs users of the changes made since the last version and why they were made.
5. Click **OK**.

The model/s is/are saved as a version and a change list including the description is created.

7.5.5.2 Show versions

You can display a list of versions of a model.

Procedure

1. In the  **Repository**, navigate to the database group containing the model whose versions you want to view. When you select the group, its content is displayed.
2. Move the mouse pointer to the row with the relevant model and click  **More**. The menu is displayed.
3. Click  **Show versions**. The **Version overview** dialog opens.

All versions of the model are displayed. The date it was saved, its change list numbers, and the version descriptions are shown.

7.5.5.3 Open version

You can open versions of a model for information purposes.

Procedure

1. In the  **Repository**, navigate to the database group containing the model whose versions you want to view. When you select the group, its content is displayed.
2. Move the mouse pointer to the row with the relevant model and click  **More**. The menu is displayed.
3. Click  **Show versions**. The **Version overview** dialog opens.
4. Click the name of the version you want to open write-protected in ARIS Connect Designer.

The write-protected version of the model opens on a new tab and you can obtain information on the model's contents. Furthermore, you can view reports on the model or selected objects (page 976).

Tip

You can click on two or more versions. They are opened on separate tabs. Switching between the tabs shows you the differences between the versions in a simple way.

7.5.6 Use dashboards

If you have an ARIS Aware (page **Error! Bookmark not defined.**) license, you can use predefined dashboards that are supplied with the software, or create your own dashboards.

7.5.6.1 Open a dashboard

You can open an existing dashboard from the  Repository of ARIS Connect. The dashboard is displayed in view mode provided by the dashboard editor.

Prerequisite

- You have the **View** permission for the dashboard. See Manage dashboard permissions for details.
- You have the **View** permission for the assigned data feeds. See Manage data feed permissions for details.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To open a dashboard, click the relevant dashboard name.

The selected dashboard opens in view mode of the dashboard editor.

In edit mode, you can edit the dashboard currently opened, provided you have the **Dashboard administrator** function privilege. Click  **Edit dashboard** in the main menu.

7.5.6.2 Create a dashboard

ARIS Connect allows you to create your own dashboards.

By default, dashboards and the relevant data feeds are provided in the  Repository of ARIS Connect.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. Click  **New**.
The dashboard editor is opened in edit mode.
6. Configure and save your dashboard using the dashboard editor.
7. Click  **Refresh**.

Your dashboard is created and available in the **Dashboards** list in the  Repository of ARIS Connect.

7.5.6.3 Delete a dashboard

You can delete an existing dashboard from the  Repository of ARIS Connect.

Warning

Deleted dashboards cannot be restored.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To delete a dashboard, move the mouse pointer over a dashboard in the dashboard list and click the  **Delete** icon in the corresponding row.
6. To delete one or more dashboards, select the dashboards you want to delete and click the  **Delete** icon on the toolbar.
7. Click **Yes** to confirm the deletion.

The selected dashboards are deleted.

7.5.6.4 Specify dashboard privileges in the Repository

You can specify dashboard view privileges in the  Repository of ARIS Connect. You can assign view privileges to individual users or to user groups. If you assign privileges to a user group, the privileges are automatically assigned to all members of that group.

All users and user groups with the **View** privilege for the dashboard are listed in the **Associated users/user groups** box. Initially, only the creator of the dashboard has the **View** privilege for the dashboard. All not yet assigned users and user groups are listed in the **Available users/users groups** box.

All users and user groups with the **View** privilege for the dashboard has automatically the **View** privilege for all associated assets of the dashboard, such as data feeds and aliases.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Dashboards**.
5. To specify dashboard privileges, move the mouse pointer over a dashboard in the dashboard list and click the  **Specify privileges** icon in the corresponding row.
6. Enter a term in the  filter box to filter the list of available users and user groups.
7. In the **Available users/users groups** box, select the users and user user groups you want to assign to the dashboard and click **Add**.
8. Click **Add all** to assign all available users and user groups to the dashboard.
9. In the **Associated users/user groups** box, select the users and user user groups from whom you want to revoke the **View** privilege and click **Remove**.
10. Click **Remove all** to revoke the **View** privilege of all users and user groups.
11. Click **OK**.

The selected users and user groups have now the **View** privileges for the dashboard and the associated assets.

7.5.6.5 Open a data feed

You can open an available data feed in the  Repository of ARIS Connect. The data feed is opened in the data feed editor.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To open a data feed, click the relevant data feed name.

The selected data feed opens in the data feed editor.

You can edit the data feed currently open using the data feed editor, provided you have the **Dashboard administrator** function privilege.

7.5.6.6 Create a data feed

ARIS Connect allows you to create your own data feeds.

By default, the available dashboards and the relevant data feeds are provided in the  Repository of ARIS Connect.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. Click  **New**.
The data feed editor is opened.
6. Configure and save your data feeds using the data feed editor.
7. Click  **Refresh**.

Your data feed is created and available in the **Data feeds** list in the  Repository of ARIS Connect.

7.5.6.7 Delete a data feed

You can delete an available data feed in the  Repository of ARIS Connect.

Warning

Deleted data feeds cannot be restored.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To delete a data feed, move the mouse pointer over a data feed in the data feed list and click the  **Delete** icon in the corresponding row.
6. To delete one or more data feeds, select the data feeds you want to delete and click the  **Delete** icon on the toolbar.
7. Click **Yes** to confirm the deletion.

The selected data feeds are deleted.

7.5.6.8 Specify data feed privileges

You can specify data feed view privileges in the  Repository of ARIS Connect. You can assign view privileges to individual users or to user groups. If you assign privileges to a user group, the privileges are automatically assigned to all members of that group.

All users and user groups with the **View** privilege for the data feed are listed in the **Associated users/user groups** box. Initially, only the creator of the data feed has the **View** privilege for the dashboard. All not yet assigned users and user groups are listed in the **Available users/users groups** box.

All users and user groups with the **View** privilege for the data feed has automatically the **View** privilege for all associated assets of the data feed, such as other data feeds and aliases.

Prerequisite

You have the **Dashboard administrator** function privilege.

Procedure

1. Start ARIS Connect.
2. Click  **Repository**.
3. Activate the **Dashboards & Data feeds** tab.
4. Click  **Data feeds**.
5. To specify data feed privileges, move the mouse pointer over a data feed in the data feed list and click the  **Specify privileges** icon in the corresponding row.
6. Enter a term in the  filter box to filter the list of available users and user groups.
7. In the **Available users/users groups** box, select the users and user user groups you want to assign to the data feed and click **Add**.
8. Click **Add all** to assign all available users and user groups to the data feed.
9. In the **Associated users/user groups** box, select the users and user user groups from whom you want to revoke the **View** privilege and click **Remove**.
10. Click **Remove all** to revoke the **View** privilege of all users and user groups.
11. Click **OK**.

The selected users and user groups have now the **View** privileges for the data feed and the associated assets.

7.5.6.9 Valuable information

This section provides background information to assist you in carrying out the relevant procedures.

7.5.6.9.1 What is ARIS Aware (dashboards)?

You can use the product ARIS Aware as visualizing component of ARIS Connect. Using ARIS Aware enables you to combine information from many sources and visualize data as KPIs by means of dashboards. ARIS Aware supports users in various departments across the enterprise by providing dashboards for evaluating a wide variety of data. It improves the transparency of the business and enables you to make the best decisions based on reliable data analyses. ARIS Aware is equipped with ready-to-go templates for common scenarios in the context of business process management, including Center of Excellence (CoE) (page **Error! Bookmark not defined.**), Business Usage Monitoring (page **Error! Bookmark not defined.**), Enterprise Architecture Management (page **Error! Bookmark not defined.**), Customer Experience Management (CXM) (page **Error! Bookmark not defined.**), Process Performance Management, and Governance Risk and Compliance Management. These templates can be extended and customized according to the individual requirements of a company.

7.5.6.9.2 What are the areas relevant to ARIS Aware?

You can use ARIS Aware to create dashboards and data feeds, store data, read data, configure dashboards, and show dashboards.

The following describes the data collection using reports. There are also other ways of collecting data, for example, using data files that are manually uploaded to ARIS document storage (page 1157).

CREATE DASHBOARDS AND DATA FEEDS

You can create and connect dashboards (page 377) and data feeds (page 380). Dashboards and data feeds are stored on the server you defined.

STORE DATA

Database information to be compiled for dashboard display is gathered by different reports. For some reports parameters can be specified. These parameterized reports are to be started frequently using report schedules. This keeps the dashboards up to date. The scheduled reports themselves trigger related reports. Each report collects specific pieces of information. The results are stored in ARIS document storage as XML report output files. These pieces of information are formed into dashboards. That is why dashboards correlate very closely to the set of executed reports.

READ DATA

Data to be displayed in a dashboard is loaded from the ARIS document storage database and combined with ARIS attributes extracted from the XML files that are stored in the ARIS document storage database as well.

CONFIGURE DASHBOARDS

Dashboards can be configured for different items to be shown in different views in the ARIS Connect portal and in Collaboration.

SHOW DASHBOARDS

Dashboards can be shown in different views in the  **Portal** and collaboration. You can use the supplied database United Motor Group to show various dashboards (page 691).

7.5.6.9.3 What standard dashboards are available?

ARIS Aware offers many standard demo dashboards. The predefined dashboards consist of charts or tables that show the results of various visual analyses of the **United Motor Group** database content.

7.5.6.9.3.1 Dashboards using Center of Excellence (CoE) data

Here you can find information about Center of Excellence dashboards (page 1170) delivered by default. Consequently, the dashboards provide information about leadership and best practice for the focus area business concept via Business Process Modeling.

7.5.6.9.3.1.1 CoE - Aggregated maturity level (overview)

This dashboard is shown on the **Overview** fact sheet of process models. It shows an aggregated view of all process models based on hierarchy of models in the ARIS Connect configuration. That is, starting with the top-level model, for example, a value-added chain diagram, and ending with the process model of the lowest level, for example, an EPC of level 4. The progress of models that are at a lower level of the hierarchy is weighted with(?) 70 % by default.

CHARTS

AGGREGATED MODELING PROGRESS

Overview of the percentage of maintained mandatory data (attributes).

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

Yes

Data collection

Context - process model:

Collection of all processes in the hierarchy starting from the top level model, for example, Value-added chain, down to the last level process model, for example, Level 4 EPC, and aggregated evaluation of all mandatory properties.

Data feed

CoE - Aggregated maturity level

Calculation

Aggregated progress of the mandatory attributes calculated for all process models in the hierarchy. The calculation is based on the mandatory attributes to be maintained, for example,

person responsible, validity date etc. Hereby, the progress of the subordinate result (children in the hierarchy) is weighted with 70% by default.

AGGREGATED MODEL COUNT FOR CURRENT PROCESS

Shows how many processes are modeled in the corresponding hierarchy level.

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

No

Data collection

Context - process model:

Collection and count of all processes in the hierarchy.

Data feed

CoE - Number of process models

Calculation

Aggregated number of processes in the hierarchy level.

MODEL RELEASE STATUS

Shows the aggregated release progress considering the aggregated value of the property **Model status**.

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

Yes

Data collection

Context - process model:

Collection of all processes in the hierarchy considering the aggregated value of the property **Model status**.

Data feed

CoE - Model status

Calculation

Aggregation of the property **Model status** in the hierarchy level.

EXAMPLE



7.5.6.9.3.1.2 CoE - Aggregated maturity - Diagram

This dashboard is shown on the **Diagram** fact sheet of process models. It shows an aggregated view of all process models based on hierarchy of models in the ARIS Connect configuration. That is, starting with the top-level model, for example, a value-added chain diagram, and ending with the process model of the lowest level, for example, an EPC of level 4. The progress of models that are at a lower level of the hierarchy is weighted with(?) 70 % by default.

CHARTS

AGGREGATED MODELING PROGRESS

Overview of the percentage of maintained mandatory data (attributes).

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

Yes

Data collection

Context - process model:

Collection of all processes in the hierarchy starting from the top level model, for example, Value-added chain, down to the last level process model, for example, Level 4 EPC, and aggregated evaluation of all mandatory properties.

Data feed

CoE - Aggregated maturity level

Calculation

Aggregated progress of the mandatory attributes calculated for all process models in the hierarchy. The calculation is based on the mandatory attributes to be maintained, for example, person responsible, validity date etc. Hereby, the progress of the subordinate result (children in the hierarchy) is weighted with 70% by default.

MANDATORY PROPERTIES SUMMARY

Shows all mandatory properties and lists the number of properties that have not been specified.

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

Yes

Data collection

Context - process model:

Collection of all mandatory properties in the hierarchy.

Data feed

CoE - Mandatory attributes

Calculation

Aggregation of the mandatory properties in the hierarchy level.

MODEL AGE (PERCENT DISTRIBUTION)

Shows the aggregated age distribution of process models (how long process models have been unchanged) based on the **Last change** property.

Data source

ARIS Architect:

Report: CoE - Aggregated maturity level

Report configurable?

Yes

Data collection

Context - process model

Collection of the **Last change** property for all process models in the hierarchy.

Data feed

CoE - Model age

Calculation

Aggregation of the **Last change** property in the hierarchy level.

EXAMPLE



7.5.6.9.3.1.3 CoE - Local maturity level

This dashboard is shown for selected process models and organizational charts.

CHARTS

TOTAL NUMBER OF CHANGE REQUESTS

Shows the number of change requests submitted for a specific model via the  **Submit change request** mini workflow.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - model:

Collection of the number of all change requests started on the context of this model.

Data feed

CoE - Process Instances (Change Request)

Calculation

Calculation of the number of change requests for which this model was the selected context (by default using the  **Submit change request** mini workflow).

MANDATORY SEMANTIC CHECKS

Shows the result of the **Mandatory semantic checks** semantic check as a symbol.

Data source

ARIS Architect:

Report: CoE - Local and global maturity level

Report configurable?

Yes

Data collection

Context - model:

Collection of the result of the configured semantic check.

Data feed

CoE - Local maturity - Conventions

Calculation

Collection of the result of the configured semantic check - by default the **Mandatory semantic check** semantic check with the result **SUCCESSFUL** or **FAILED**.

MANDATORY ATTRIBUTES

Identifies the number of mandatory properties specified and compares it with the total number of mandatory properties. The default mandatory attributes include Model status, Person responsible, Version, Validity, and Activities.

Data source

ARIS Architect:

Report: CoE - Local and global maturity level

Report configurable?

Yes

Data collection

Context - model:

Collection of the statuses of the mandatory attributes - whether they are maintained or not.

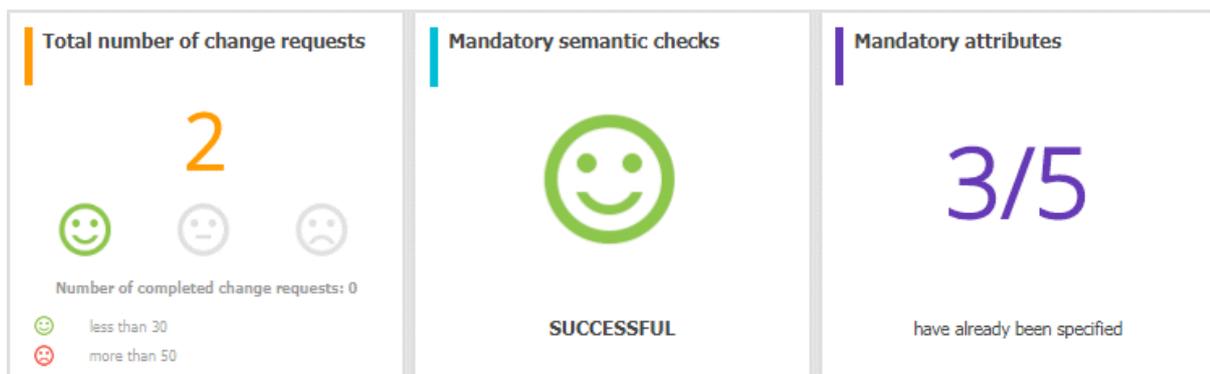
Data feed

CoE - Local maturity - Conventions

Calculation

Collection of the statuses of the mandatory attributes - whether they are maintained or not.

EXAMPLE



7.5.6.9.3.1.4 CoE - Global maturity level

This dashboard provides different types of information on all process models and organizational charts within a database.

CHARTS

VALIDITY DATE STATUS

Overview of the validity date of the models in the database. Shows when models will expire based on the value that was specified for the **Validity** attribute value.

Data source

ARIS Architect:

Report: CoE - Local and global maturity level

Report configurable?

Yes

Data collection

Context - database:

Collection of all models of the database, and evaluation and grouping of their validity dates into the following categories:

- **undefined**: no validity date is maintained
- **next 5 days**: validity date is next week
- **next 14 days**: validity date is within the next two weeks
- **next 30 days**: validity date is within the next 30 days
- **later**
- **expired**: validity date is in the past

Data feed

CoE - Validity date

Calculation

Collection of all models of the database, and evaluation and grouping of their validity dates into the following categories:

- **undefined**: no validity date is maintained
- **next 5 days**: validity date is next week
- **next 14 days**: validity date is within the next two weeks
- **next 30 days**: validity date is within the next 30 days
- **later**
- **expired**: validity date is in the past

VALIDITY DATE OVERVIEW

Lists the process models and organizational charts in a table and shows the expiration status for each model based on the value of the **Validity** attribute.

Data source

ARIS Architect:

Report: CoE - Local and global maturity level

Report configurable?

Yes

Data collection

Context - database:

Collection of all models of the database and evaluation and grouping their validity dates.

Data feed

CoE - Validity date

Calculation

Collects the values of the **Validity** attribute for every model in a table.

MOST SHARED MODELS

Shows the models which have been shared most frequently using the **Share model** mini workflow.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of the number of all instances of the **Share model** mini workflow.

Data feed

CoE - Process Instances (Share)

Calculation

Collection of the number of all instances of the **Share model** mini workflow and display of the seven top models which are the most frequently selected context of the mini workflow.

OWNERS WITH THE MOST MODEL RESPONSIBILITY

Shows the seven responsible people with the most process models in their responsibility (maintained as **Person responsible** attribute value for these models).

Data source

ARIS Architect:

Report: CoE - Local and global maturity level

Report configurable?

Yes

Data collection

Context - database:

Collection of all models in the database and evaluation of their process owners.

Data feed

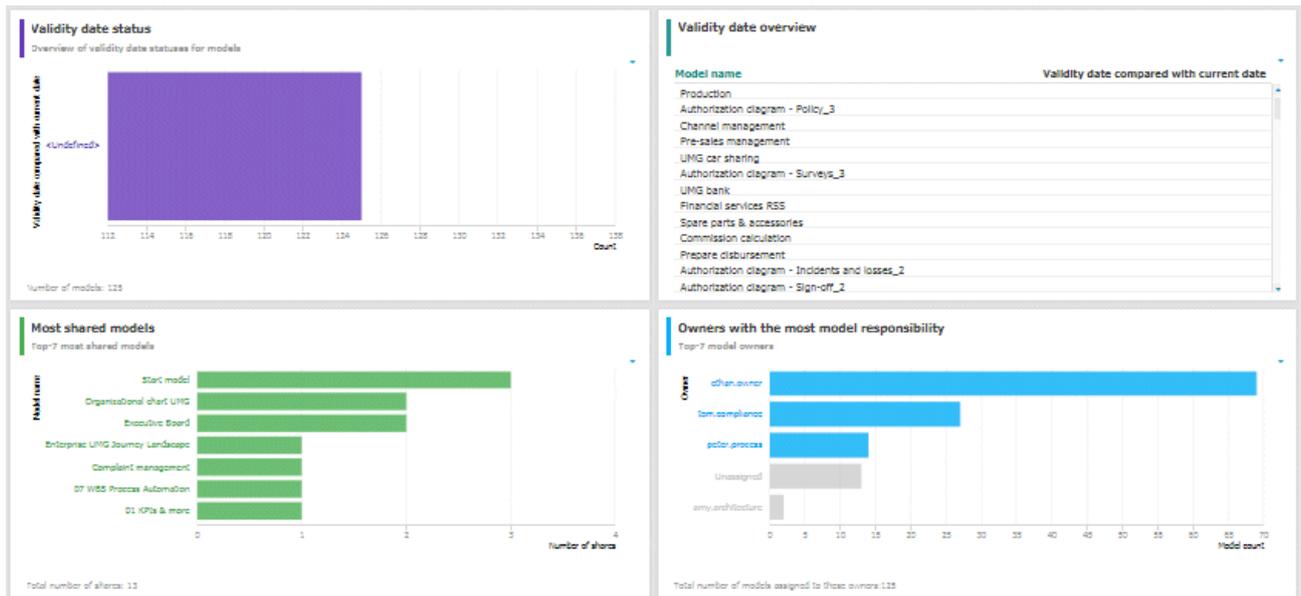
CoE - Process Owners

Calculation

Collection of all models in the database and evaluation and count of the most frequent process owners maintained as **Person responsible** attribute value.

By default the top 7 owners with the most models are shown. This can be configured.

EXAMPLE



7.5.6.9.3.1.5 CoE - Process Change Management

The dashboard shows governance information based on Process Governance.

CHARTS

STATUS OF CHANGE REQUESTS FOR MODELS

Shows the processes with change requests in the RUNNING and COMPLETED status. This is based on the  **Submit change request** mini workflow.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of all process instances of  **Submit change request** mini workflow and grouping them into the following categories:

- RUNNING (pending change requests)
- COMPLETED (realized change requests)

Data feed

CoE - Process Instances (Change Request)

Calculation

Collection of the number of all instances of  **Submit change request** mini workflow (by default) and grouping them by status RUNNING or COMPLETED. The ID of the workflow to be considered can be configured.

CHANGE REQUESTS COUNT IS

Shows the increase or decrease in the number of change requests within three months based on the submission date of change requests submitted for models the  **Submit change request** mini workflow.

Shows the number of overall change requests in the system based on the  **Submit change request** mini workflow for models.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of the number of all instances of the  **Submit change request** mini workflow for models.

Data feed

CoE - Process Instances (Change Request)

Calculation

Collection of the number of all instances of the  **Submit change request** mini workflow for models (by default). The ID of the workflow to be considered can be configured.

MODEL CHANGE REQUESTS OVER TIME

Shows the top seven models with the highest number of pending change requests.

Timeline of the change requests over time based on the assignment date of the  **Submit change request** mini workflow for models.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of the assignment date of all instances of the  **Submit change request** mini workflow for models.

Data feed

CoE - Process Instances (Change Request)

Calculation

Collection of the assignment date of all instances of the  **Submit change request** mini workflow for models (by default) and count per date. The ID of the workflow to be considered can be configured.

MODELS WITH ASSIGNED CHANGE REQUESTS

Shows models with the most assigned pending change requests.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of all instances of the  **Submit change request** mini workflow for models.

Data feed

CoE - Process Instances and Human Tasks (Change Request)

Calculation

Collection of all instances of the  **Submit change request** mini workflow for models (by default) which are in the RUNNING status and evaluation of their context (the models for which the change requests have been started). Display of the top 7 of these models.

MODEL OWNERS WITH ASSIGNED CHANGE REQUESTS

Model owners with the most assigned pending change requests.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of all instances of the  **Submit change request** mini workflow for models.

Data feed

CoE - Process Instances and Human Tasks (Change Request)

Calculation

Collection of all instances of the  **Submit change request** mini workflow for models (by default) which are in the RUNNING status and evaluation of the number of requests per owner (the responsible person for the model for which the change request has been submitted). Display of the top 7 process owners. The ID of the workflow to be considered can be configured.

STATUS OF CHANGE REQUESTS AND CHANGE REQUEST DETAILS

Shows both the Status of change requests as well as Change request details. Both charts depend on each other.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

Yes

Data collection

Context - APG:

Collection of all instances of the  **Submit change request** mini workflow for models.

Data feed

CoE - Process Instances and Human Tasks (Change Request)

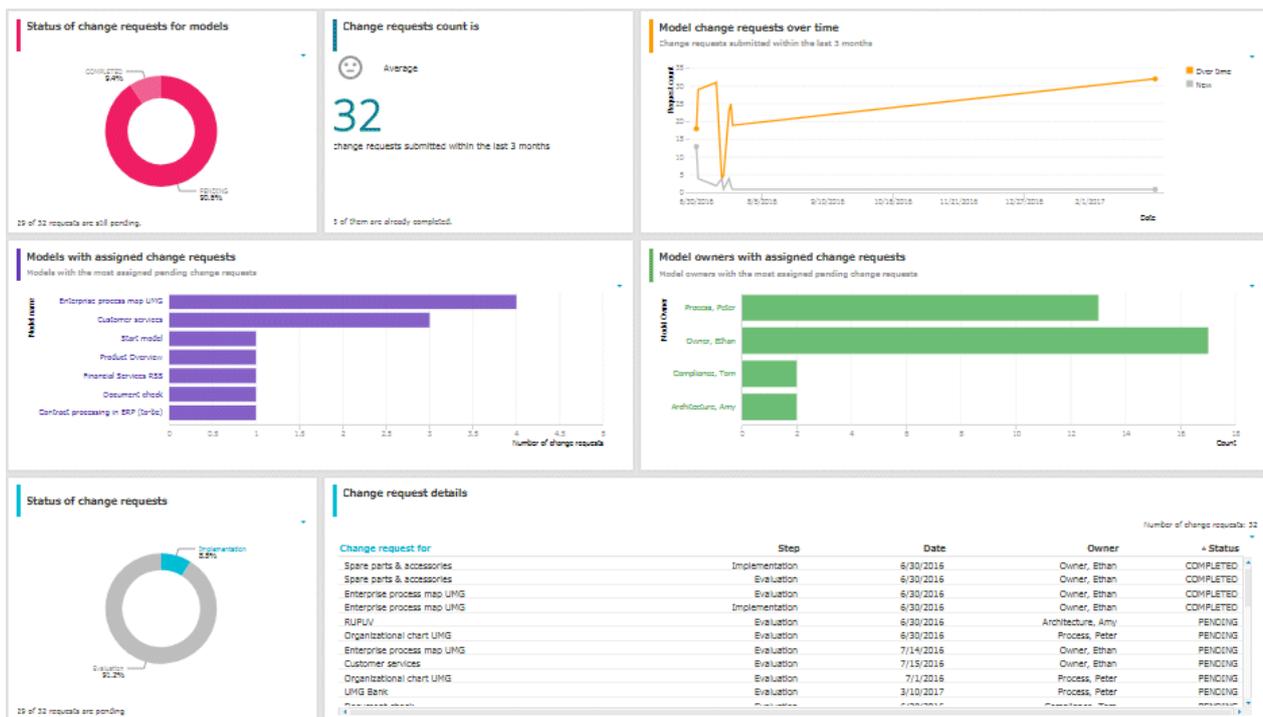
Calculation

Collection of all instances of the  **Submit change request** mini workflow for models (by default) and display of the details:

- The name of the model for which the change request has been submitted.
- The current active step in the mini workflow (evaluation step: change request not yet evaluated or realization step: change request has been evaluated and is now being realized).
- The assignment date of the change request (start date of the process instance).
- The owner of the human task - the person to whom this task has been assigned.
- The change request status (RUNNING or COMPLETED).

The ID of the workflow to be considered can be configured.

EXAMPLE



7.5.6.9.3.1.6 CoE - Human tasks

This dashboard shows overall governance information about the human tasks submitted via Process Governance

CHARTS

TOTAL NUMBER OF HUMAN TASKS

Shows the total number of human tasks regardless of the Process Governance process they belong to. For example, it includes the human tasks belonging to the  **Submit change request** and  **Inform owner of change** mini workflow, but also the ones from custom APG workflows.

The **CoE - Human tasks** dashboard can be filtered based either on database and model context, or on task-related information such as status and priority.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

No

Data collection

Context - APG:

Collection of the number of all human tasks in APG.

Data feed

CoE - Process Instances and Human Tasks

Calculation

Collection of the number of all human tasks in APG.

HUMAN TASKS OVER TIME

Shows the timeline of the human tasks based on their creation date.

The **CoE - Human tasks** dashboard can be filtered based either on database and model context, or on task-related information such as status and priority.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

No

Data collection

Context - Process Governance:

Collection of the creation date of all human tasks in Process Governance.

Data feed

CoE - Process Instances and Human Tasks

Calculation

Collection of the creation date of all human tasks in Process Governance.

HUMAN TASK DETAILS

Lists all human tasks including specific details such as priority, creation date, status, and participant.

The **CoE - Human tasks** dashboard can be filtered based either on database and model context, or on task-related information such as status and priority.

Data source

ARIS Architect:

Report: CoE - Governance

Report configurable?

No

Data collection

Context - APG:

Collection of all human tasks in APG and their details.

Data feed

CoE - Process Instances and Human Tasks

Calculation

Collect all human tasks in APG and display the details:

- **Human task name** (as it appears in Process Board)
- **Human task priority** (HIGH, LOW, NORMAL)
- Creation date of the human task
- Human task status (ACTIVE or COMPLETED)
- Human task participant (the user to whom the human task is assigned)
- Item (the selection context for this human task, for example, the model for which the change request has been submitted or for which approval has been initiated)
- Description (the human task description as it appears in Process Board)
- Database (in which the workflow has been started to which the human task belongs)

EXAMPLE

Date

From

To

Task

Task name

Task status

Priority

Context

Item Name

Database

Total number of human tasks

34

Number of completed human tasks: 5

😊 less than 30
😞 more than 50

Human tasks over time

Month	Count
July	15
August	3
September	2
October	2
November	2
December	2
2017	2
January	2
February	2
March	1

Human task details

Human task	Prior...	Creation date	Status	Participant	Item	Description	Database
Realize change request for model [Spare parts & ac...	NOR...	2016-06-30	COMPLET...	Owner, Eth...	Spare parts & acces...	please adapt	United Motor ...
Change request for model [Spare parts & accessori...	NOR...	2016-06-30	COMPLET...	Owner, Eth...	Spare parts & acces...	please adapt	United Motor ...
Change request for model [Enterprise process map ...	NOR...	2016-06-30	COMPLET...	Owner, Eth...	Enterprise process ...	Please adapt to the cur...	United Motor ...
Realize change request for model [Enterprise proce...	NOR...	2016-06-30	COMPLET...	Owner, Eth...	Enterprise process ...	Please adapt to the cur...	United Motor ...
Change request for model [Product Overview] Fina...	NOR...	2016-06-30	COMPLET...	Owner, Eth...	Product Overview	please change	United Motor ...

7.5.6.9.3.2 Dashboards using Customer Experience Management (CXM) data

Available dashboards (page 1170) using content that is retrieved from Customer Experience Management (CXM)-related models.

Since Customer Experience is based on expectations, experiences and attitudes, ABC offers the possibility to model personas (page 1176) and create their infographics (page 688). In this way, target groups can be clearly distinguished from each other and their needs can be addressed.

7.5.6.9.3.2.1 Customer experience

Dashboard providing an overview of how customers experience their interaction with the company during a so-called customer journey. This dashboard includes various charts that illustrate the customer experience from different angles.

CHARTS

NUMBER OF AFFECTED INTERNAL PROCESSES

Number of internal processes that include customer touchpoints of the **Pain point**, **Moment of truth**, or **Best practice** type.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Retrieves customer touchpoint data from all customer journeys contained in customer journey maps that are assigned to a selected model of the Customer journey landscape type. Identifies the customer touchpoints of each customer journey map. In addition, the following data is collected:

- checks whether the customer touchpoints have a connection to an internal process.
- counts all customer touchpoints that have a connection to an internal process.
- checks whether the **Pain point** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Pain point** attribute type is set to **true**.
- checks whether the **Moment of truth** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Moment of truth** attribute type is set to **true**.

- checks whether the **Best practice** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Best practice** attribute type is set to **true**.

Data feed

CXM - Analyze customer experience

Calculation

Number of internal processes that include customer touchpoints of the **Pain point**, **Moment of truth**, or **Best practice** type.

PERCENTAGE OF CRITICAL CUSTOMER TOUCHPOINTS

Overview of the percentage of critical customer touchpoints.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

-.-

Data feed

CXM - Analyze customer experience

Calculation

Number of customer touchpoints for which the **Moment of truth** attribute type is specified over the aggregated number of customer touchpoints multiplied by 100.

OVERALL CUSTOMER EXPERIENCE

Percent distribution of customer feelings calculated for an entire customer journey landscape.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Data is retrieved from all customer journeys related to a selected model of the **Customer journey landscape** type.

All customer touchpoints contained in the customer journey maps assigned to the selected customer journey landscape are retrieved. The following data is counted:

- All customer touchpoints for which the **Customer feeling** attribute is specified as **Positive**.
- All customer touchpoints for which the **Customer feeling** attribute is specified as **Neutral**.
- All customer touchpoints for which the **Customer feeling** attribute is specified as **Negative**.

Data feed

CXM - Overall customer experience

Calculation

Aggregated number of values (Positive, Neutral, Negative) retrieved from the **Customer feeling** attribute.

CUSTOMER JOURNEYS LEADING TO A GOOD EXPERIENCE

Top seven customer journeys creating a good customer experience.

Data source

ARIS Architect:

Report: CXM – Analyze customer journeys

This report answers the following questions:

- Which customer journey is the most critical?
- Which customer lifecycle
- Which stage is the most critical?

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CXM_ANALYZE_CUSTOMER_JOURNEYS.XML** document stored in ARIS document storage. The **Analyze customer journeys (TOP 7)** document is stored in this subfolder: ARIS document storage/Dashboarding/<database name; default=United Motor Group>/EA.

The report result is used as input for the **CXM - Analyze customer journeys** data feed. This data feed is related to the **Customer experience** CXM dashboard (page **Error! Bookmark not defined.**).

CONTEXT

Database

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Data is retrieved from all customer journeys related to a selected model of the **Customer journey landscape** type.

All customer touchpoint contained in customer journey maps are retrieved, and all customer touchpoints for which the value of the **Customer feeling** attribute type is set to **Positive** are counted.

Data feed

CXM - Analyze customer journeys

Calculation

Number of customer touchpoints for which the **Customer feeling** attribute type is set to **Positive** over the number of customer touchpoints per customer journey.

CUSTOMER JOURNEYS LEADING TO A BAD EXPERIENCE

Top seven customer journeys creating a bad customer experience.

Data source

ARIS Architect:

Report: CXM – Analyze customer journeys

This report answers the following questions:

- Which customer journey is the most critical?
- Which customer lifecycle
- Which stage is the most critical?

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CXM_ANALYZE_CUSTOMER_JOURNEYS.XML** document stored in ARIS document storage. The **Analyze customer journeys (TOP 7)** document is stored in this subfolder: ARIS document storage/Dashboarding/<database name; default=United Motor Group>/EA.

The report result is used as input for the **CXM - Analyze customer journeys** data feed. This data feed is related to the **Customer experience** CXM dashboard (page **Error! Bookmark not defined.**).

CONTEXT

Database

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Data is retrieved from all customer journeys related to a selected model of the **Customer journey landscape** type.

All customer touchpoints contained in customer journey maps are retrieved, and the customer touchpoints for which the value of the **Pain point** attribute type is set to **true** are counted.

Data feed

CXM - Analyze customer journeys

Calculation

Number of customer touchpoints for which the **Pain point** attribute type is specified over the number of customer touchpoints per customer journey.

EXAMPLE



7.5.6.9.3.2.2 Responsibilities

Customer experience dashboard evaluating business units and channels.

CHARTS

BUSINESS UNITS ASSOCIATED WITH GOOD EXPERIENCE

Top seven business units associated with a good customer experience.

Data source

ARIS Architect:

Report: CXM - Responsibility (Ownership)

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the selected customer journey landscape, all owners specified in the **Ownership** row and their associated customer touchpoints are retrieved from all assigned customer journey maps. Checks whether the **Customer feeling** attribute is specified for any of the customer touchpoints and counts the touchpoints for which the value of the **Customer feeling** attribute type is set to **Positive**.

Data feed

CXM - Responsible owner

Calculation

Good experience ratio: Number of customer touchpoints for which the value of the **Customer feeling** attribute type is set to **Positive** divided by the total number of customer touchpoints.

BUSINESS UNITS ASSOCIATED WITH BAD EXPERIENCE

Top seven business units associated with a bad customer experience.

Data source

ARIS Architect:

Report: CXM - Responsibility (Ownership)

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the selected customer journey landscape, all owners specified in the **Ownership** row and their associated customer touchpoints are retrieved from all assigned customer journey maps. Checks whether the **Pain point** attribute is specified for any of the customer touchpoints and counts the touchpoints for which the value of the **Pain point** attribute type is set to **true**.

Data feed

CXM - Responsible owner

Calculation

Number of customer touchpoints for which the value of the **Pain point** attribute type is set to **true** divided by the total number of customer touchpoints (bad experience ratio).

CHANNELS ASSOCIATED WITH GOOD EXPERIENCE

Top seven channels associated with a good customer experience.

Data source

ARIS Architect:

Report: CXM - Responsibility (Channel)

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the selected customer journey landscape, all channels specified in the **Channel** row and their associated customer touchpoints are retrieved for all assigned customer journey maps. Checks whether the **Customer feeling** attribute is specified for any of the customer touchpoints and counts the touchpoints for which the value of the **Customer feeling** attribute type is set to **Positive**.

Data feed

CXM - Responsibility channel

Calculation

Good experience ratio: Number of customer touchpoints for which the value of the **Customer feeling** attribute type is set to **Positive** divided by the total number of customer touchpoints.

CHANNELS ASSOCIATED WITH BAD EXPERIENCE

Top seven channels associated with a bad customer experience.

Data source

ARIS Architect:

Report: CXM - Responsibility (Channel)

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the selected customer journey landscape, all channels specified in the **Channel** row and their associated customer touchpoints are retrieved for all assigned customer journey maps. Checks whether the **Pain point** attribute is specified for any of the customer touchpoints and counts the touchpoints for which the value of the **Pain point** attribute type is set to **true**.

Data feed

CXM - Responsibility channel

Calculation

Number of customer touchpoints for which the value of the **Pain point** attribute type is set to **true** divided by the total number of customer touchpoints (bad experience ratio).

EXAMPLE



7.5.6.9.3.2.3 Customer journey map

Customer journey map dashboard that evaluates customer touchpoints and retrieves the customer touchpoints with high market potential.

CHARTS

NUMBER OF AFFECTED INTERNAL PROCESSES

Number of internal processes that include customer touchpoints of the **Pain point**, **Moment of truth**, or **Best practice** type.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

Context: **Customer journey landscape** model type.

Retrieves customer touchpoint data from all customer journeys contained in customer journey maps that are assigned to a selected model of the Customer journey landscape type. Identifies the customer touchpoints of each customer journey map. In addition, the following data is collected:

- checks whether the customer touchpoints have a connection to an internal process.
- counts all customer touchpoints that have a connection to an internal process.
- checks whether the **Pain point** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Pain point** attribute type is set to **true**.
- checks whether the **Moment of truth** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Moment of truth** attribute type is set to **true**.
- checks whether the **Best practice** attribute is specified for any of the touchpoints.
- counts the customer touchpoints for which the value of the **Best practice** attribute type is set to **true**.

Data feed

CXM - Analyze customer experience

Calculation

Number of internal processes that include customer touchpoints of the **Pain point**, **Moment of truth**, or **Best practice** type.

PERCENTAGE OF NEGATIVE CUSTOMER TOUCHPOINTS

Overview of the percentage of negative customer touchpoints.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

.-

Data feed

CXM - Analyze customer experience

Calculation

Number of pain points divided by the number of customer touchpoints multiplied by 100.

PERCENTAGE OF CRITICAL CUSTOMER TOUCHPOINTS

Overview of the percentage of critical customer touchpoints.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

.-

Data feed

CXM - Analyze customer experience

Calculation

Number of customer touchpoints for which the **Moment of truth** attribute type is specified over the aggregated number of customer touchpoints multiplied by 100.

PERCENTAGE OF POSITIVE CUSTOMER TOUCHPOINTS

Overview of the percentage of positive customer touchpoints.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

-.-

Data feed

CXM - Analyze customer experience

Calculation

Number of customer touchpoints with the value **Positive** set for the **Customer feeling** attribute divided by the number of customer touchpoints multiplied by 100.

IMPORTANCE AND FEELINGS CUSTOMERS ASSOCIATE WITH TOUCHPOINTS

Importance and feelings that customers associate with customer touchpoints.

Data source

ARIS Architect:

Report: CXM – Analyze customer journeys

This report answers the following questions:

- Which customer journey is the most critical?
- Which customer lifecycle
- Which stage is the most critical?

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CXM_ANALYZE_CUSTOMER_JOURNEYS.XML** document stored in ARIS document storage. The **Analyze customer journeys (TOP 7)** document is stored in this subfolder: ARIS document storage/Dashboarding/<database name; default=United Motor Group>/EA.

The report result is used as input for the **CXM - Analyze customer journeys** data feed. This data feed is related to the **Customer experience** CXM dashboard (page **Error! Bookmark not defined.**).

CONTEXT

Database

Report configurable?

No

Data collection

-.-

Data feed

CXM - Importance vs. feelings

Calculation

Values from the **Customer feeling** and **Importance to customer** attributes specified for customer touchpoints.

CUSTOMER TOUCHPOINTS WITH HIGH MARKET POTENTIAL

Customer touchpoints with high market potential and the corresponding transformation costs retrieved from customer journey maps.

Data source

ARIS Architect:

Report: CXM - Analyze customer experience

Report configurable?

No

Data collection

-.-

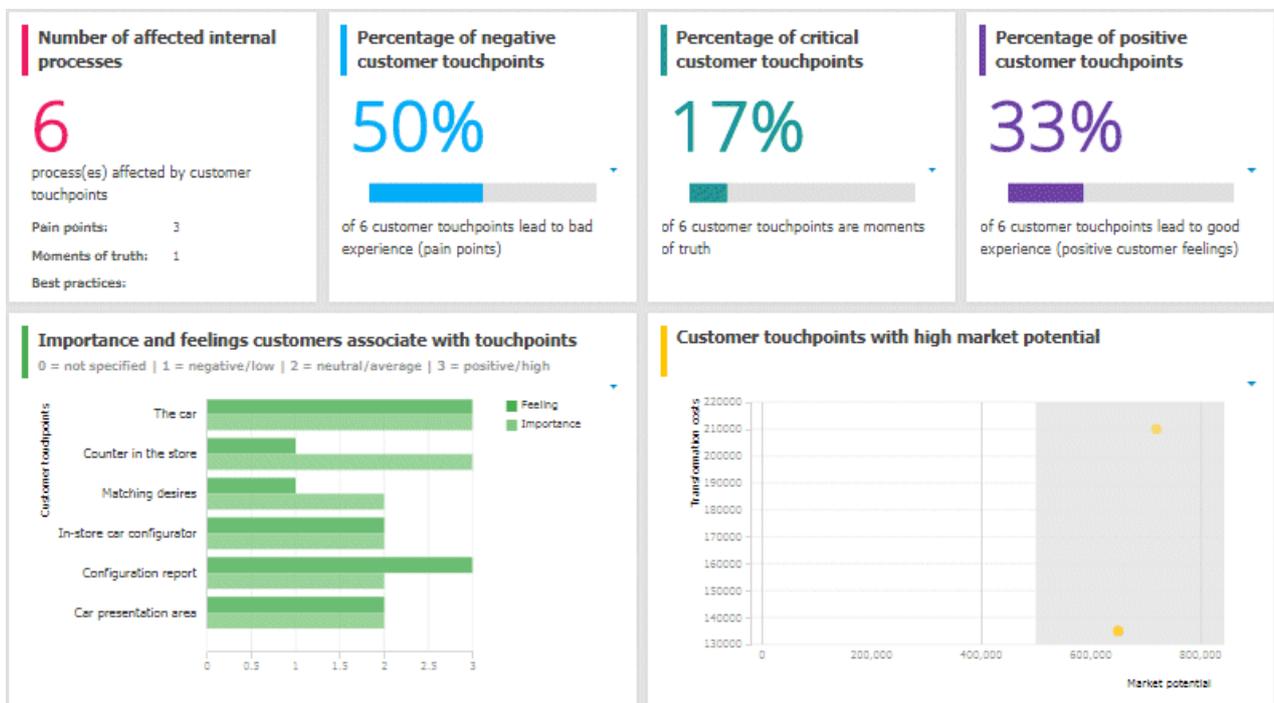
Data feed

CXM - Analyze customer experience

Calculation

Values from the **Market potential** and **Transformation costs** attributes specified for customer touchpoints.

EXAMPLE



7.5.6.9.3.3 Dashboards using content that is retrieved by ARIS reports that access Piwik data

Available dashboards (page 1170) using content that is retrieved by ARIS reports that access Piwik data. Piwik is an open-source analytics platform.

7.5.6.9.3.3.1 Piwik - Publications

Dashboard that includes an overview of the ARIS portal usage. It provides charts that consider various aspects for which you can select different evaluation periods, such as last week, last month, and last year.

CHARTS

NUMBER OF VISITS OVER TIME

Shows the number of visits (visits/unique visitors) over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Global portal usage running the Piwik **VisitsSummary** report.

This report creates global portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific **Piwik** reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **VisitsSummary** report
- **BrowserVersions** report
- **BrowserEngines** report
- **Language** report
- **OsVersions** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

The parameters must be specified according to the required Piwik settings. If the settings are specified several output files are generated.

OUTPUT

Generates several **XML** documents stored in this subfolder: ARIS document storage/Dashboarding/**Piwik**.

The report result is used as input for the Piwik - Technical KPIs (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Since a context is mandatory for ARIS reports, an ARIS database must be specified as context for this report. However, the database will not be evaluated by the report and it therefore does not matter which database is selected.

Data feed

Piwik - Summary of visits over time

MOST VIEWED ITEM TYPES (E.G., 'PROCESS', 'ROLE')

Top seven item types most viewed over the selected time period, for example, processes.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **CustomDimension** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Data feed

Piwik - Most viewed item types

MOST VIEWED ITEMS

Top seven items most viewed over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **PageTitles** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Data feed

Piwik - Most viewed items

MOST SEARCHED KEYWORDS

Top seven of the keywords most searched over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **SiteSearchKeywords** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Data feed

Piwik - Most searched keywords

MOST VIEWED ITEM TYPES LIST

Top-fifty list of item types most viewed over the selected time period, for example, processes.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **CustomDimension** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Data feed

Piwik - Most viewed items types

MOST VIEWED ITEMS LIST

List of top fifty items most viewed over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **PageTitles** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Data feed

Piwik - Most viewed items

MOST SEARCHED KEYWORDS LIST

Top-fifty list of the keywords most searched over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Database-specific portal usage running the Piwik **SiteSearchKeywords** report.

This report creates ARIS database-specific portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific Piwik reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **PageTitles** report
- **CustomDimension** report
- **SiteSearchKeywords** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

OUTPUT

Generates several **XML** documents stored in the ARIS document storage/Dashboarding/<database name; default=United Motor Group>/**Piwik** subgroup.

The report result is used as input for the Piwik - Publications (page **Error! Bookmark not defined.**) dashboard.

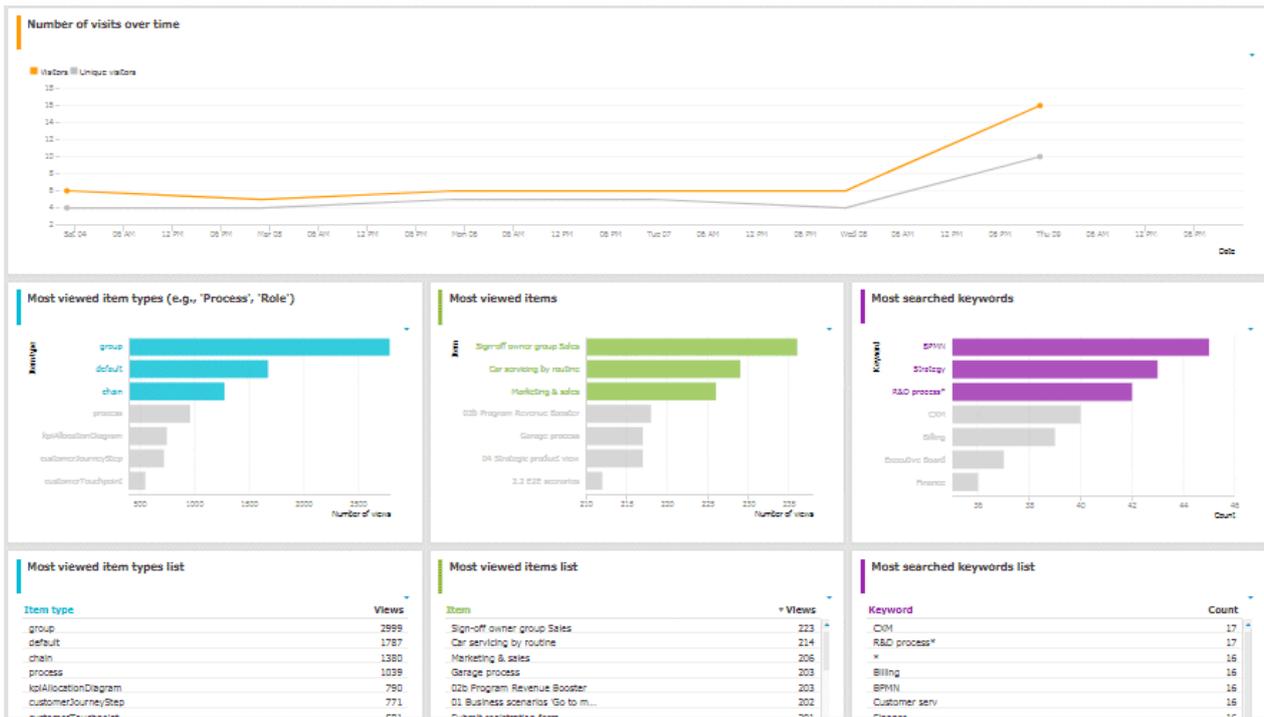
CONTEXT

Database

Data feed

Piwik - Most searched keywords

EXAMPLE



7.5.6.9.3.3.2 Piwik - Technical KPIs

Dashboard that shows technical KPIs regarding the ARIS usage. It provides charts that consider various technical aspects for which you can select different evaluation periods, such as last week, last month, and last year.

CHARTS

PERCENT DISTRIBUTION OF BROWSER ENGINES

Percent distribution of the browser engines used over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Global portal usage running the Piwik **BrowserEngines** report.

This report creates global portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific **Piwik** reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **VisitsSummary** report
- **BrowserVersions** report
- **BrowserEngines** report
- **Language** report
- **OsVersions** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

The parameters must be specified according to the required Piwik settings. If the settings are specified several output files are generated.

OUTPUT

Generates several **XML** documents stored in this subfolder: ARIS document storage/Dashboarding/**Piwik**.

The report result is used as input for the Piwik - Technical KPIs (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Since a context is mandatory for ARIS reports, an ARIS database must be specified as context for this report. However, the database will not be evaluated by the report and it therefore does not matter which database is selected.

Data feed

Piwik - Browser engines

MOST USED OPERATING SYSTEMS

Operating systems most used over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Global portal usage running the Piwik **OsVersions** report.

This report creates global portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific **Piwik** reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **VisitsSummary** report
- **BrowserVersions** report
- **BrowserEngines** report
- **Language** report
- **OsVersions** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

The parameters must be specified according to the required Piwik settings. If the settings are specified several output files are generated.

OUTPUT

Generates several **XML** documents stored in this subfolder: ARIS document storage/Dashboarding/**Piwik**.

The report result is used as input for the Piwik - Technical KPIs (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Since a context is mandatory for ARIS reports, an ARIS database must be specified as context for this report. However, the database will not be evaluated by the report and it therefore does not matter which database is selected.

Data feed

Piwik - Operating system version

MOST USED BROWSER VERSIONS (LIST)

Browser versions most used over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Global portal usage running the Piwik **BrowserVersions** report.

This report creates global portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific **Piwik** reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **VisitsSummary** report
- **BrowserVersions** report
- **BrowserEngines** report
- **Language** report
- **OsVersions** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

The parameters must be specified according to the required Piwik settings. If the settings are specified several output files are generated.

OUTPUT

Generates several **XML** documents stored in this subfolder: ARIS document storage/Dashboarding/**Piwik**.

The report result is used as input for the Piwik - Technical KPIs (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Since a context is mandatory for ARIS reports, an ARIS database must be specified as context for this report. However, the database will not be evaluated by the report and it therefore does not matter which database is selected.

Data feed

Piwik - Browser version

MOST USED PORTAL LANGUAGES (LIST)

Portal languages most used over the selected time period.

Data source

ARIS Architect:

Report: Piwik - Global portal usage running the Piwik **Language** report.

This report creates global portal usage statistics. Therefore, it accesses an external Piwik instance that contains a collection of ARIS portal events, retrieves specific **Piwik** reports, and adds ARIS data to them, if required.

The following **Piwik** reports are retrieved:

- **VisitsSummary** report
- **BrowserVersions** report
- **BrowserEngines** report
- **Language** report
- **OsVersions** report

In order to use the Piwik - Global portal usage and Piwik - Database-specific portal usage reports, make sure to have Piwik installed and configured and the report parameters specified accordingly.

The parameters must be specified according to the required Piwik settings. If the settings are specified several output files are generated.

OUTPUT

Generates several **XML** documents stored in this subfolder: ARIS document storage/Dashboarding/**Piwik**.

The report result is used as input for the Piwik - Technical KPIs (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

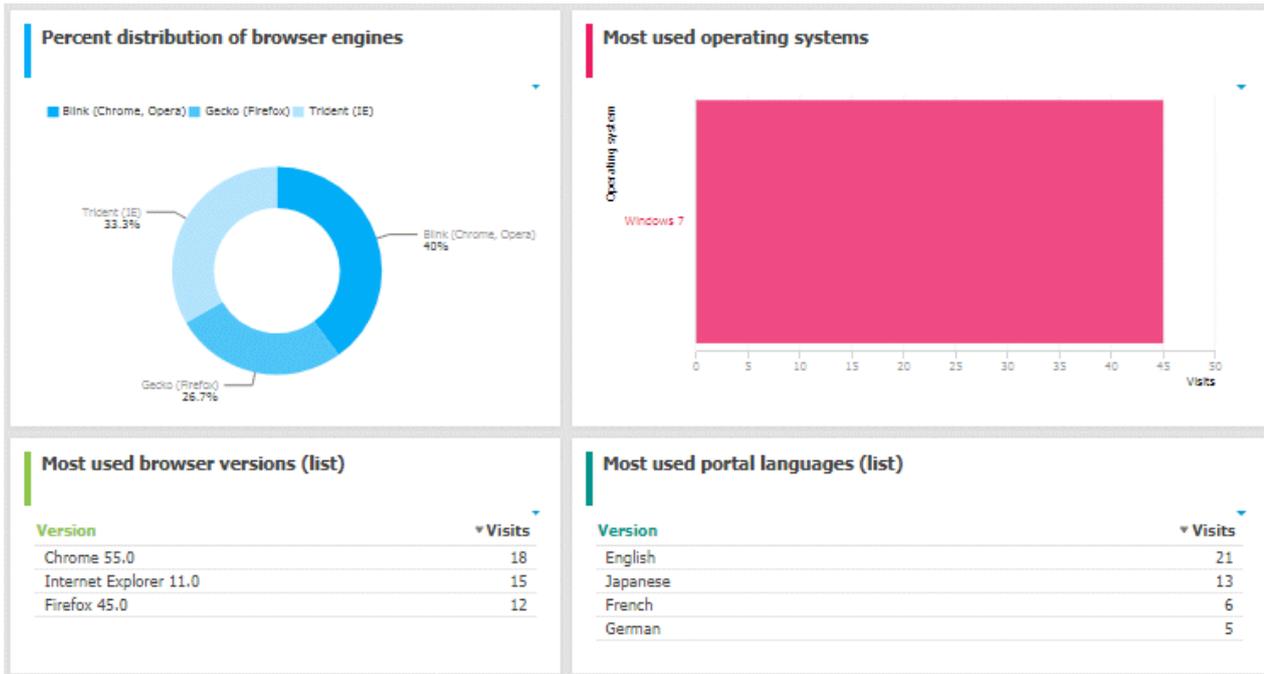
Database

Since a context is mandatory for ARIS reports, an ARIS database must be specified as context for this report. However, the database will not be evaluated by the report and it therefore does not matter which database is selected.

Data feed

Piwik - Portal language

EXAMPLE



7.5.6.9.3.4 Dashboards using Enterprise Architecture (EA) data

Available dashboards (page 1170) based on Enterprise Architecture (EA) information.

7.5.6.9.3.4.1 EA dashboard for organizational units

Shows a separate tab for organizational units, that is, for object of type **Organizational unit** and **Organizational unit type**.

CHARTS

SYSTEMS HAVING EXPIRED

Number of systems that are no longer standard.

Data source

ARIS Architect or ARIS Architect and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Report configurable?

No

Data feed

- EA - Organizational unit - Systems expired
Uses the **EA - Organizational unit (Systems with lifecycle data)** data feed as a sub-feed.
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks for the **End** attribute to see whether a system has expired.

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

SYSTEMS PHASING IN

Number of systems that will become standard within 12 months.

Data source

ARIS Architect or ARIS Architect and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Report configurable?

No

Data feed

- EA - Organizational unit (systems phasing in)
Uses the **EA - Organizational unit (Systems with lifecycle data)** data feed as a sub-feed.
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks via the **Phase-in phase (start)** attribute if a system is phasing in

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

SYSTEMS PHASING OUT

Number of systems used by the selected organizational unit which will be retired within the next twelve months.

Data source

ARIS Architect or ARIS Architect and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Report configurable?

No

Data feed

- EA - Organizational unit (systems phasing out)
Uses the **EA - Organizational unit (Systems with lifecycle data)** data feed as a sub-feed.
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks via the **Phase-out phase (start)** attribute if a system is phasing out

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

SYSTEMS EXPIRING

Number of systems used by the selected organizational unit which will become non-standard within the next twelve months.

Data source

ARIS Architect or ARIS Architect and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Report configurable?

No

Data feed

- EA - Organizational unit (standard systems expiring)
Uses the **EA - Organizational unit (Systems with lifecycle data)** data feed as a sub-feed.
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks via the **Start** attribute if a system is expiring

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.
-

USAGE OF NON-STANDARD SYSTEMS

Distribution of standard and non-standard systems used by the selected organizational unit.

Data source

ARIS Architect or ARIS Architect and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Report configurable?

No

Data feed

EA - Organizational unit (standard versus non-standard systems)

Uses the **EA - Organizational unit (Systems with lifecycle data)** data feed as a sub-feed.

Calculation

Checks via the **Standardization status** attribute if a system used is non-standard

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

SYSTEMS COMPARED BY COST AND CRITICALITY

Portfolio of systems used by the selected organizational unit categorized by cost, criticality, and interface count.

Data source

ARIS Architect:

- Report: EA - Relations between organizational units and systems
- Report: EA - Systems with data

This report creates a table listing all IT systems of the database. For each system, various types of information are provided, such as the **Data center costs** and **Criticality** attributes, or the number of interfaces.

The **Enterprise Architecture Management** extension pack is required for ARIS Architect or ARIS Designer.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_SYSTEMS_WITH_DATA.XML** file. The **Systems with data** document is stored within this subfolder: ARIS document storage/Dashboarding/<database name>; default=United Motor Group>/EA.

The report result is used as input for the **EA - Organizational unit - Systems with data** data feed. This data feed is related to the EA dashboard for organizational units (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Report configurable?

Yes

Data feed

EA - Organizational unit - Systems with data

Calculation

Compares systems via the **Costs per unit** and **Critically** attributes

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

SYSTEM REPLACEMENT CANDIDATES BY CAPABILITY REDUNDANCY

Seven pairs of systems used by the selected organizational unit with the greatest overlap of capabilities.

Data source

ARIS Architect:

- Report: EA - Relations between organizational units and systems
- Report: EA - Systems redundancies

This report creates a table listing all IT system pairs that have common capabilities. In each pair, **System A** is considered to be the potential replacement for **System B**. For each pair, the capability overlap is shown as a percentage.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_SYSTEM_REDUNDANCIES.XML** file. **The System redundancies in the use of capabilities** document is stored in this subfolder: ARIS document storage/Dashboarding/<database name; default=United Motor Group>/EA.

The report result is used as input for the **EA - System - System redundancies** data feed. This data feed is related, for example, to the EA dashboard for organizational units (page **Error! Bookmark not defined.**) dashboard.

CONTEXT

Database

Report configurable?

Yes

Data feed

EA - System - System redundancies

Calculation

Compares systems regarding their common capabilities.

- System that supports an organizational unit via function or optionally via position or role or
- System that lies under the responsibility of an organizational role.

System A is considered as potential replacement of system B.

OPERATING AND CAPITAL EXPENSES FOR SYSTEMS OVER TIME

Operating and capital expenses for the systems used by the selected organizational unit over time.

Data source

ARIS Architect:

Report: EA/Alfabet - CAPEX/OPEX for organizational units

Report configurable?

Yes

Data feed

EA - OrgUnit - CAPEX/OPEX

Calculation

Lists the capital expenses (CAPEX) and operational expenses (OPEX) over time for all organizational units of the database that also exist in a connected Alfabet system.

EXAMPLE



7.5.6.9.3.4.2 EA dashboard for IT systems

Shows a separate tab for IT systems, that is, for object of type **Application system type**.

CHARTS

MOST SUPPORTED ORGANIZATIONAL UNITS

Based on process support maps, seven organizational units with most processes actively supported by the selected system.

Data source

ARIS Architect:

Report: EA - System support

Report configurable?

No

Data feed

EA - System - Supported organizational units

Calculation

Lists all supported objects of **Application system type** object type. These objects are identified using the Process support unit, the Organizational unit, and Function objects connected to the IT system.

SUPPORT DISTRIBUTION BY ORGANIZATIONAL UNIT

Based on process support maps, all organizational units supported by the selected system and their distribution.

Data source

ARIS Architect:

Report: EA - System support

Report configurable?

No

Data feed

EA - System - Supported organizational units

Calculation

Shows the distribution of supported objects of **Application system type** object type. These objects are identified using the Process support unit, the Organizational unit, and Function objects connected to the IT system.

PROCESSES WITH MOST SYSTEM SUPPORTS

Seven processes with most functions actively supported by the selected system - not based on process support maps.

Data source

ARIS Architect:

Report: EA - System support for VACDs

Report configurable?

No

Data feed

EA - System Supported processes

Calculation

Counts and ranks the systems supported per processes.

Traversing the hierarchy of value-added chain diagrams (VACDs), searches for all functions supporting IT systems. Functions support IT systems if they are connected using the connection type **supports** in event-driven process chains (EPCs) that are assigned to VACDs.

SUPPORT DISTRIBUTION BY PROCESSES

All processes supported by the selected system and their distribution - not based on process support maps.

Data source

ARIS Architect:

Report: EA - System support for VACDs

Report configurable?

No

Data feed

EA - System Supported processes

Calculation

Lists the systems supported per processes together with the percentage distribution, based on the rank.

Traversing the hierarchy of value-added chain diagrams (VACDs), searches for all functions supporting IT systems. Functions support IT systems if they are connected using the connection type **supports** in event-driven process chains (EPCs) that are assigned to VACDs.

SYSTEM REPLACEMENT CANDIDATES BY CAPABILITY OVERLAP

Seven replacement possibilities involving the selected system as source or target with the most capability overlap.

Data source

ARIS Architect:

Report: EA - System redundancies

Report configurable?

No

Data feed

EA - System - System redundancies

Calculation

Compares systems regarding their common capabilities.

OPERATING COSTS BY COST TYPE

Operating costs for the selected IT system by different cost types over time.

Data source

ARIS Architect:

Report: EA/Alfabet - System costs

Report configurable?

No

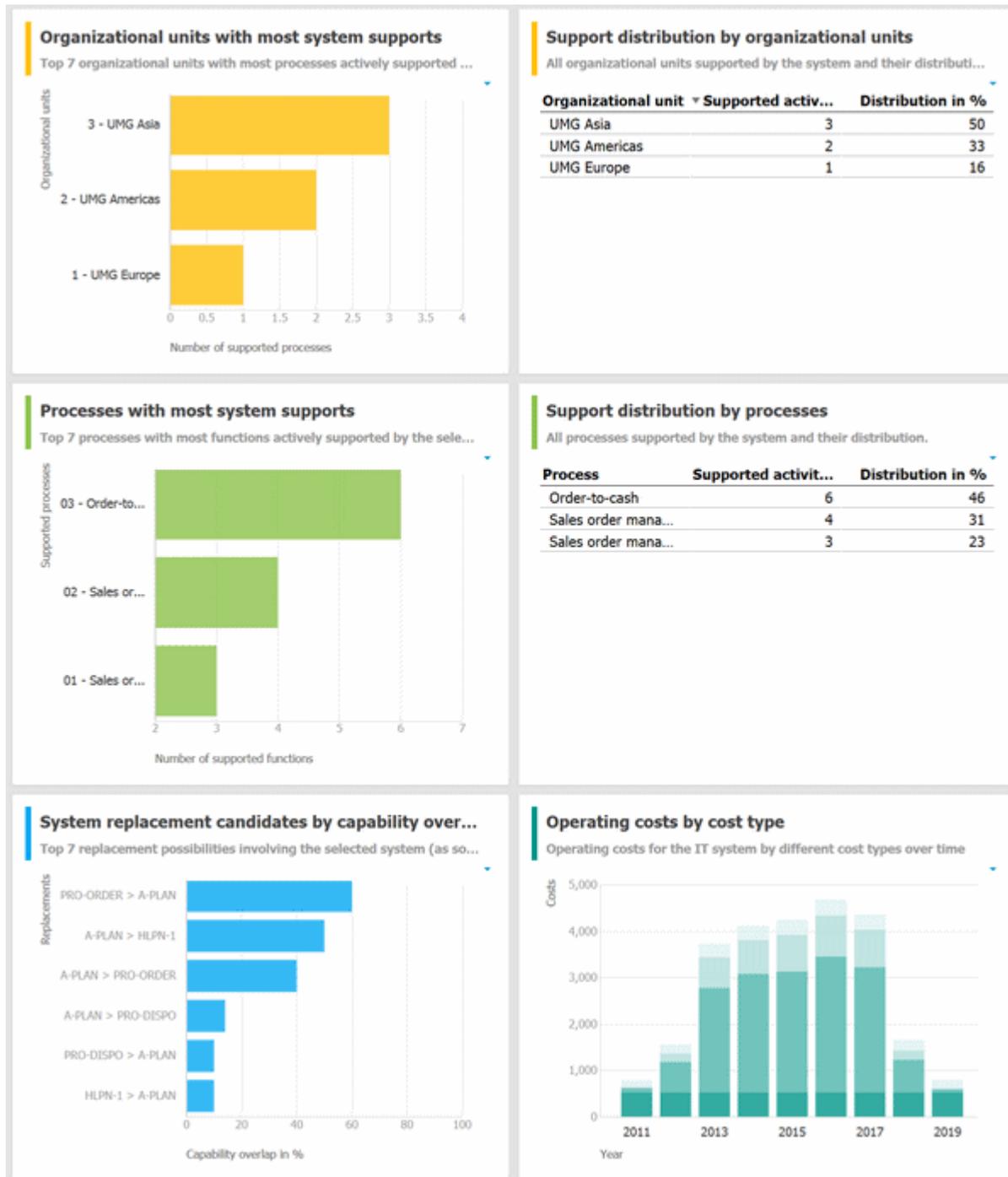
Data feed

EA - System (costs over time)

Calculation

Lists all IT systems of the database that also exist in Alfabet. All cost values are listed per system and year for the various cost types specified.

EXAMPLE



7.5.6.9.3.4.3 EA dashboard for objectives

Shown as side bar for the **Diagram** fact sheet of the model types **Strategy diagram** and **Objective diagram**.

CHARTS

OBJECTIVES

Shows all objectives in the model and their goal accomplishments over all KPIs.

Data source

ARIS Architect:

- Report: EA - Models and objectives
- Report: EA - Objectives with data

Report configurable?

No

Data feed

EA - Goal accomplishment (objectives)

Calculation

Lists all **Strategy diagram** and **Objective diagram** model types and the objectives contained with their goal accomplishments.

KPIS PER OBJECTIVE

Shows the KPIs of the objective selected in the diagram and their respective values.

Data source

ARIS Architect:

- Report: EA - Objectives and KPIs
- Report: EA - KPIs with data

Report configurable?

No

Data feed

EA - Goal accomplishment (KPIs per objective)

Calculation

Lists all objectives including their KPIs whose achievement is calculated based on the Balanced Scorecard methodology.

EXAMPLE

Objectives

Goal accomplishment over all KPIs

▲ Objective GA

Achieve annualized sales of 30 bn. €	●
Acquisition of profitable niche play...	●
Align 100% delivery processes ac...	●
Be the future no. 1 premium car s...	●
Design game changing 21st centur...	●
Improve buying experience	●
Improve decision making experience	●
Improve operating margin to 6%	●

KPIs of the objective

Goal accomplishment for each KPI

▲ KPI GA

Cycle time improvement rate	●
Over all error ratio	●
Over all process effectiveness (OPE)	●

7.5.6.9.3.5 Dashboards using Process Performance Manager data

Available dashboards (page 1170) based on Process Performance Manager data.

7.5.6.9.3.5.1 Process and Finance KPIs dashboard

Shows an overview of a sample assembly process (manufacturing).

CHARTS

FINISHED PROCESS INSTANCES

Number of process instances measured by ARIS Process Performance Manager.

Data source

Process Performance Manager favorite persisted for the use case demo.

Data feed

PPM instances per day (persisted)

Calculation

Counts the number of recorded process instances over the entire period.

PROCESS INSTANCES INCLUDING PRODUCTION FAULTS

Shows the percentage of process instances for which the quality checks (mentioned in the process) failed.

Data source

Process Performance Manager favorite persisted for the use case demo.

Data feed

PPM instances (persisted)

Calculation

Calculates the percentage of process instances for which the quality checks (mentioned in the process) failed.

NUMBER OF TRACTORS PRODUCED WITHOUT FAULTS

Shows the number of finished process instances over time (on an hourly scale).

Data source

Process Performance Manager favorite persisted for the use case demo.

Data feed

PPM instances per hour (persisted)

Calculation

Number of finished process instances over time (on an hourly scale).

TRACTORS SOLD

Shows the overall number of sold tractors without production faults.

Data source

Process Performance Manager favorite persisted for the use case demo.

Data feed

PPM instances (persisted)

Calculation

Counts the overall number of sold tractors without production faults.

MATERIAL COST PER TRACTOR VARIANT

Shows the average material cost per tractor variant.

Data source

Process Performance Manager favorite persisted for the use case demo.

Data feed

PPM - Cost per tractor variant (persisted)

Calculation

Average sum of the values of all cost attributes in all trace entries of all process instances per variant.

AVERAGE MATERIAL COSTS

Shows the overall average material costs.

Data source

Process Performance Manager favorite persisted for the use case demo.

Data collection

In the side-by-side view: Reacts to the function selection and shows the average cost of the assembled part.

Data feed

PPM - Function details (persisted)

Calculation

Average sum of the values of all cost attributes in all trace entries of all process instances.

REVENUE

Shows the overall revenue over all sold tractors.

Data source

Process Performance Manager favorite persisted for the use case demo.

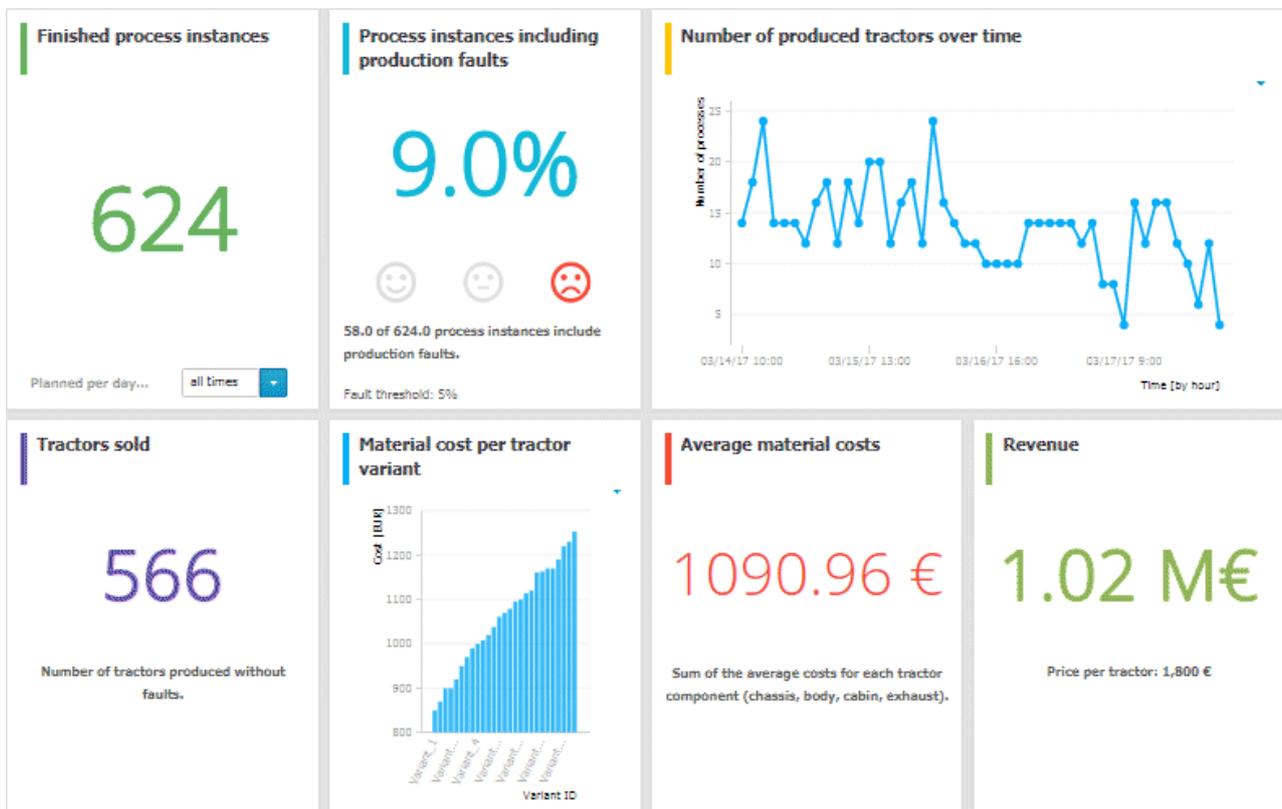
Data feed

PPM instances (persisted)

Calculation

Number of sold tractors multiplied by the price per tractor.

EXAMPLE



7.5.6.9.3.5.2 Comparison of production process variants (persistent)

Shows modeled process variants side-by-side.

CHARTS

PROCESS VARIANT WITH THE SHORTEST CYCLE TIME (MINUTES)

Shows the function flow describing the process variant with the shortest process cycle time of all recorded instances.

Data source

PPM instances (persisted)

Data feed

PPM - Workflow with shortest cycle time (persisted)

PROCESS VARIANT WITH THE LONGEST CYCLE TIME (MINUTES)

Shows the function flow describing the process variant with the longest process cycle time of all recorded instances.

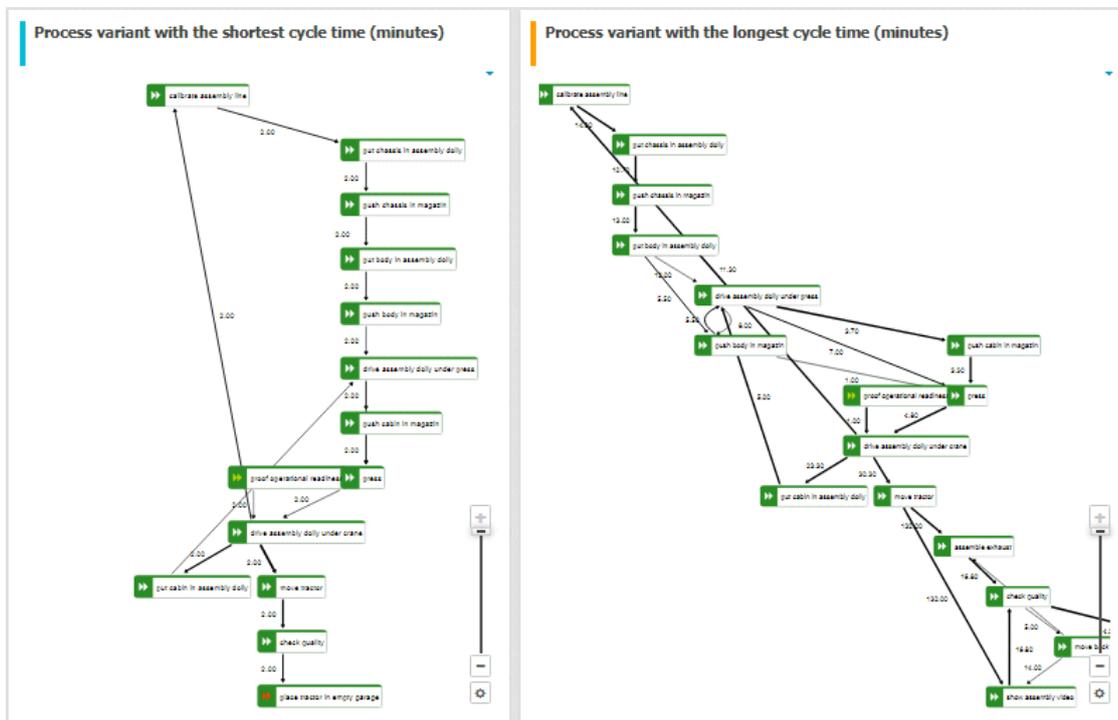
Data source

PPM instances (persisted)

Data feed

PPM - Workflow with shortest cycle time (persisted)

EXAMPLE



7.5.6.9.3.6 Dashboards using Collaboration

Here you can find information about Collaboration dashboards delivered by default.

7.5.6.9.3.6.1 Collaboration overview

Shows the amount of content and the number of active users, as well as the types of content and user groups in Collaboration.

AVAILABILITY

- **ARIS Connect** >  **Portal** >  **Dashboards**
- **ARIS Connect** >  **Collaboration** > **Administration** >  **Dashboards** (only for users with the **Collaboration administrator** function privilege)

CHARTS

CONTENT ADDED OVER TIME

Amount and type of Collaboration content created in the last three months.

Data source

Posts, comments, tags, etc. of Collaboration.

Data feed

Collaboration - Content overview

NUMBER OF ACTIVE USERS OVER TIME

Number of active Collaboration users in the last five days.

Data source

Users of Collaboration who posted and commented on content.

Data feed

Collaboration - Usage overview

NUMERICAL CONTENT TYPE DISTRIBUTION

Percentage distribution of Collaboration content created in the last three months.

Data source

Posts, comments, tags, etc. of Collaboration.

Data feed

Collaboration - Content overview

NUMERICAL GROUP TYPE DISTRIBUTION

Numerical distribution of private and public groups created in Collaboration.

Data source

Private and public groups in Collaboration

Data feed

Collaboration - Largest groups

EXAMPLE



7.5.6.9.3.6.2 Content overview (Collaboration)

Shows the most frequently used Collaboration and ARIS content by users.

AVAILABILITY

- **ARIS Connect** >  **Portal** >  **Dashboards**
- **ARIS Connect** >  **Collaboration** > **Administration** >  **Dashboards** (only for users with the **Collaboration administrator** function privilege)

CHARTS

MOST FOLLOWED MODELS

The top seven most followed models in Collaboration.

Data source

ARIS models in Collaboration

Data feed

Collaboration – Most followed ARIS content

MOST COMMENTED MODELS

The top seven most commented models in Collaboration.

Data source

ARIS models in Collaboration

Data feed

Collaboration – Most commented ARIS content

MOST BOOKMARKED POSTS

The top seven most bookmarked posts in Collaboration.

Data source

Posts in Collaboration

Data feed

Collaboration – Most bookmarked posts

MOST LIKED POSTS

The top seven most liked posts in Collaboration.

Data source

Posts in Collaboration

Data feed

Collaboration – Most liked posts

MOST COMMENTED POSTS

The top seven most commented posts in Collaboration.

Data source

Posts in Collaboration

Data feed

Collaboration – Most commented posts

MOST SHARED POSTS

The top seven most shared posts in Collaboration.

Data source

Posts in Collaboration

Data feed

Collaboration – Most shared posts

EXAMPLE



7.5.6.9.3.6.3 Group monitoring (Collaboration)

Shows the most frequently used groups and details of Collaboration groups.

AVAILABILITY

- **ARIS Connect** >  **Portal** >  **Dashboards**
- **ARIS Connect** >  **Collaboration** > **Administration** >  **Dashboards** (only for users with the **Collaboration administrator** function privilege)

CHARTS

MOST FOLLOWED GROUPS

The top seven most followed groups in Collaboration.

Data source

Groups in Collaboration

Data feed

Collaboration – Largest groups

GROUPS WITH THE MOST POSTS ADDED

The top seven groups with the most posts in Collaboration.

Data source

Groups and posts in Collaboration

Data feed

Collaboration – Most active groups

MOST COMMENTED GROUPS

The top seven most commented groups in Collaboration.

Data source

Groups and comments in Collaboration

Data feed

Collaboration – Most active groups

PERCENT DISTRIBUTION OF GROUP TYPES

Percentage distribution of private and public groups created in Collaboration.

Data source

Private and public groups in Collaboration

Data feed

Collaboration – Largest groups

GROUP DETAILS

Details of the largest Collaboration groups: group type, number of followers, amount of ARIS content, number of posts, and number of comments. If a group type is selected in the **Percent distribution of group types** chart, the details are filtered according to the selected group type.

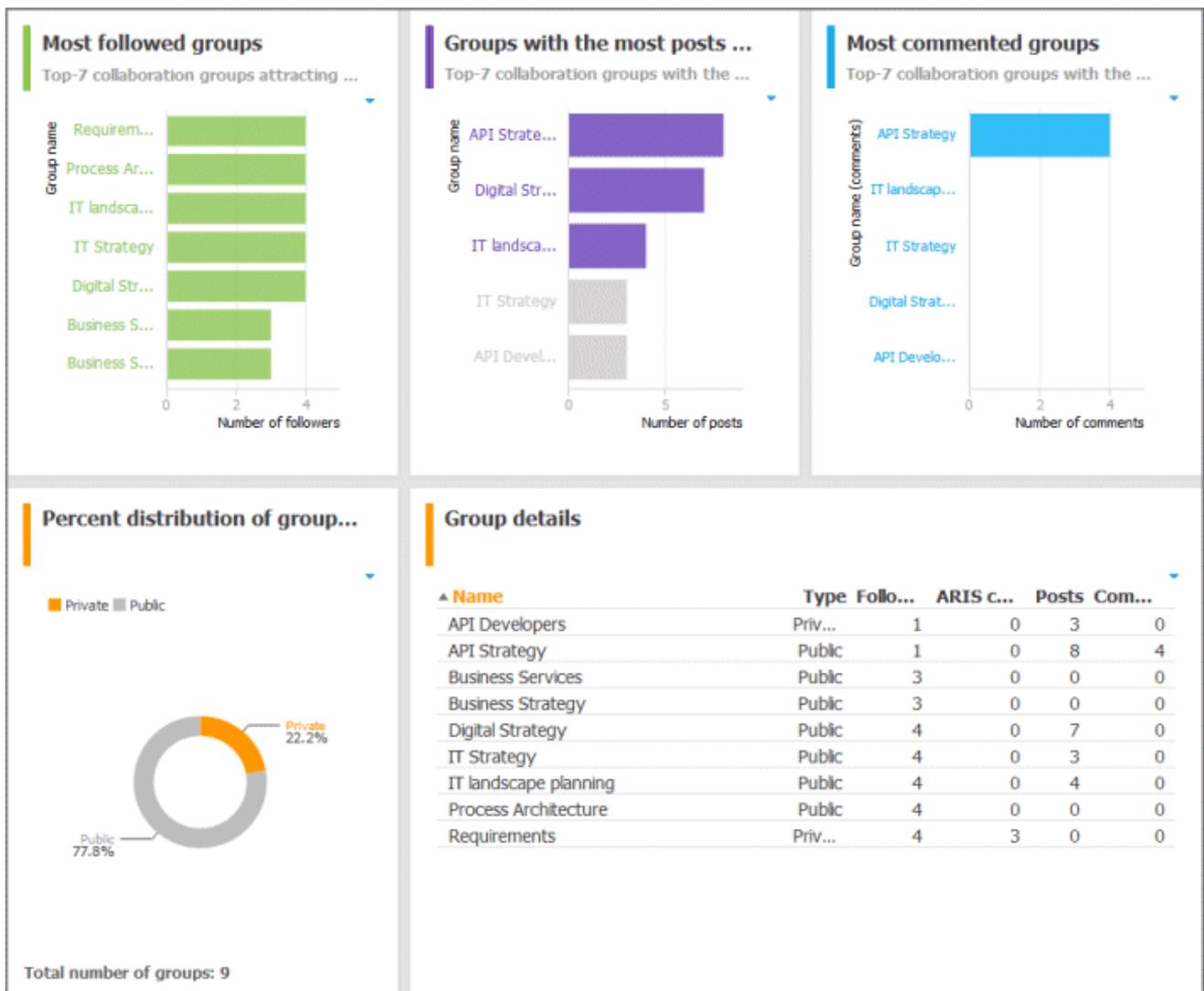
Data source

Private and public groups in Collaboration

Data feed

Collaboration – Largest groups

EXAMPLE



7.5.6.9.3.6.4 Users

Shows details of Collaboration users.

AVAILABILITY

ARIS Connect >  **Collaboration** > **Administration** >  **Dashboards** (only for users with the **Collaboration administrator** function privilege)

CHARTS

USERS GENERATING THE MOST CONVERSATIONS

The top seven users most involved in conversations in Collaboration.

Data source

Users in Collaboration

Data feed

Collaboration – Most active users

MOST FOLLOWED USERS

The top seven most followed Collaboration users.

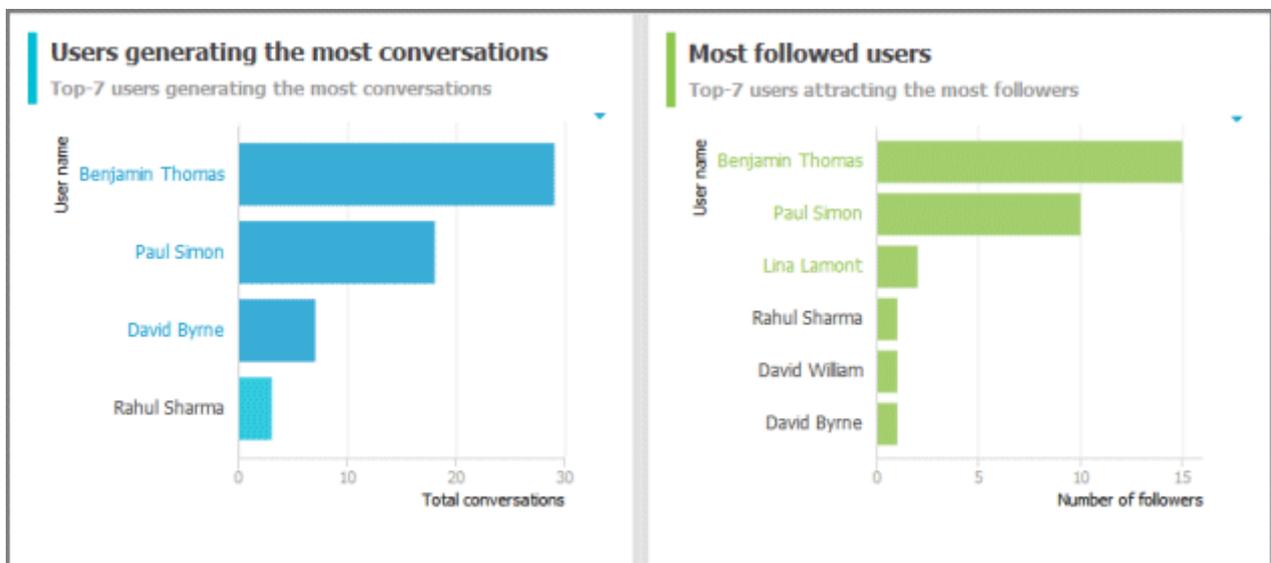
Data source

Users in Collaboration

Data feed

Collaboration – Most followed users

EXAMPLE



7.5.6.9.3.7 Governance, Risk and Compliance (GRC) dashboards

Here you can find information about Governance, Risk and Compliance (GRC) dashboards delivered by default.

7.5.6.9.3.7.1 Governance, Risk, and Compliance (GRC) management

Shows an overview for GRC-related objects and workflows.

AVAILABILITY

The dashboard is available for the activity, department, and process factsheet.

CHARTS

NUMBER OF RISKS

Number of risks related to the selected context.

Data source

ARIS

Calculation

- search current object
- search all risks connected to the current object
- eliminate duplicates
- count risks

RISK ASSESSMENT WORKFLOW STATUS

Distribution of Risk Owner workflow status of the risk assessments
(related to the above risks)

Data source

ARIS Risk & Compliance Manager

Calculation

For each of the above risks:

- search for youngest risk assessments in ARCM (RA_START date, if there are more with the same RA_START we are taking the one with highest ID)
- count risk assessments along risk owner status

Number of controls

Number of controls related to the above risks.

Data source

ARIS

Calculation

- search current object
- search all risks connected to the current object
- search all controls connected to the risks found
- eliminate duplicates
- count controls

CONTROL TEST WORKFLOW STATUS

Distribution of Tester workflow status of the control tests.

(related to the above controls)

Data source

<_arcm

Calculation

For each of the above controls:

- search for youngest control tests in ARCM
- Define workflow status:
 - Workflow status = new
 - if Test status = new
 - Workflow status = in progress
 - if Test status = in progress
 - Workflow status = completed
 - if Test status = Control effective or Control not effective or Not possible
 - Workflow status = closed
 - if test status = closed (or similar, when test has been closed by the system because testperiod is over)
- count control tests along tester status

TOP TEN SCORED RISK ASSESSMENTS

List of risk assessments impact types related to the above risks.

(with impact types having a risk score, sorted by score highest at top of the list)

Reduced score counts. If no reduced score is available take original score

Control type: list/grid, showing:

Risk name (link to risk in ARCM)

Impact type (link to assessment in ARCM)

Risk score

Data source

ARIS Risk & Compliance Manager

Calculation

For each of the above risks:

- search for youngest risk assessments in ARCM (see above)
- search for all impact types with risk score assigned to any risk assessment
- sort risk by risk score
- (We take reduced qualitative score if available. If not, qualitative score.)

See example below

CONTROL TEST RESULT

Distribution of control tests (Control test workflow status) by test status.

Data source

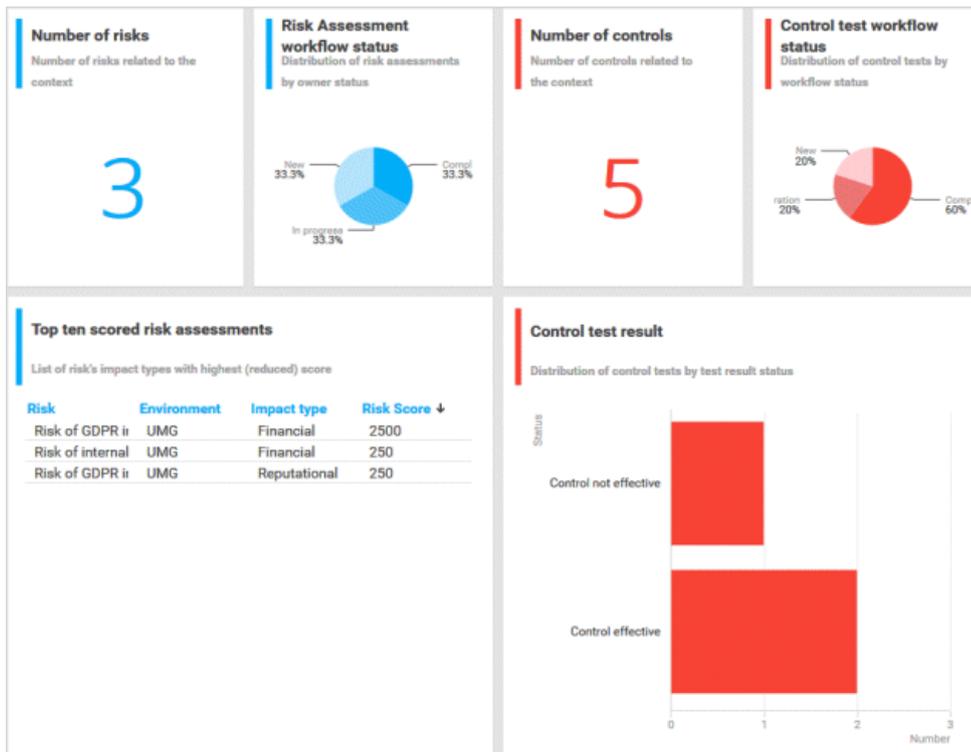
ARIS Risk & Compliance Manager

Calculation

For each of the above control tests with workflow status completed:

Count control tests along Test status result (**Control effective**, **Control not effective**, or **Not possible**).

EXAMPLE



7.5.6.9.3.8 GDPR Dashboards

You can find information about GDPR dashboards that are contained in ARIS Accelerators for GDPR in the **ARIS Accelerators for GDPR Installation Guide** and the **ARIS Accelerators for GDPR Use Case** manual.

7.5.7 Handle documents

ARIS document storage enables you to manage and temporarily or permanently save documents. Access restriction on folder level is possible in ARIS document storage.

7.5.7.1 Link new documents to a model or object

You can link new documents with a model or object. We strongly recommend that you check documents for malicious software before uploading.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Click **Groups** (page 615) in the Classic view (page 625) or **Processes** (page 620) in the Default view (page 626).
2. Click the name of the model you want to edit.
3. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
4. Click  **Properties**. The **Properties** bar opens.
5. Activate the **Documents** tab.
6. Click in the model background to add a document to the model or the relevant object to add a document to the object.
7. Click  **Add document**. The corresponding dialog opens.
8. Navigate to the target folder.
9. Click  **Upload new document**. The **Select new document** dialog opens.
10. Click **Select file** and select a document.
11. Enter a title and, if required, specify further document properties.
12. Click **Upload**.
13. Select the relevant documents and click **OK**.

The documents are linked with the model or object.

7.5.7.2 Add existing documents to a model or object

You can link documents from ARIS document storage or a document management system with a model or object.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Click  **Portal** if it is not activated yet.
2. Navigate to a group and click a model.
3. Click **Diagram** if not enabled yet.
4. Click  **Edit** >  **Edit model**. The model opens in ARIS Connect Designer on an individual tab.
5. Click  **Properties**.
6. Activate the **Documents** tab.
7. Click in the model background or an object.
8. Click  **Add document**.
9. Click the folder containing the relevant documents.
10. Select the relevant documents and click **OK**.

The documents are linked with the model or object.

7.5.7.3 Have document, assigned to a model, approved

Ask the person in charge to approve the documents you changed so that the changed document can be made available to all users.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click  **Portal** if it is not activated yet.
3. Open (page 651) the model that contains the document that you want to have approved.
4. Click  **Properties**.
5. Activate the **Documents** tab.
6. Select the relevant document.
7. Click  **Request approval**. The corresponding dialog opens.
8. Click **Send**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in My tasks. If the person responsible approves the changes, the current version of the document is made available in ARIS Connect (status APPROVED). The document is visible in the portal on the **Documents** tab. If rejected, the document receives the status REJECTED.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.5.7.4 Share document assigned to a model

You can share documents with other users.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Click  **Portal** if it is not activated yet.
2. Open (page 651) the model that contains the document you want to submit a change request for.
3. Click **Diagram** if not enabled yet.
4. Click  **Edit** >  **Edit model**.
5. Click  **Properties**.
6. Activate the **Documents** tab.
7. Select the document you want to share with another user.
8. Click  **Share document**. The corresponding dialog opens.
9. Select the user you want to share the document with.
10. Enable **Send copy to me** to receive a copy of the message, if required.
11. You can also enter a subject and a comment.
12. Click **Send**.

The selected user receives an e-mail containing the information you entered and a link to the corresponding document.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.5.7.5 Remove document from a model or object

You can remove a document from a model or object.

Prerequisite

You have the **ARIS Connect Designer** license.

Procedure

1. Click  **Portal** if it is not activated yet.
2. Open (page 651) the model you want to remove the document from.
3. Click **Diagram** if not enabled yet.
4. Click  **Edit** >  **Edit model**.
5. Click  **Properties**.
6. Activate the **Documents** tab.
7. Click  **Remove selected document**.

The document is removed from the model or object and no longer has any relationship to the model or object.

7.5.7.6 Have document approved in ARIS document storage

Ask the person in charge to approve the documents you changed so that the changed document can be made available to all users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- The **Person responsible** document attribute must be specified for the relevant document with a user name that exists in user management.
- The person responsible must have the **ARIS Connect Viewer** or **ARIS Connect Designer** license.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the document you want to have approved.
4. Click  **Request approval**. The corresponding dialog opens.
5. Enter a comment describing what you changed.
6. Click **Send**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in My tasks. If the person responsible approves the changes, the current version of the document is made available in ARIS Connect (status APPROVED). The document is visible in the portal on the **Documents** tab. If rejected, the document receives the status REJECTED.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.5.7.7 Share document

You can share documents with other users.

Prerequisite

- You have at least the **ARIS Connect Viewer** license privilege.
- The **Person responsible** document attribute must be specified for the relevant document with a user name that exists in user management.
- The person responsible must have the **ARIS Connect Viewer** or **ARIS Connect Designer** license.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the document you want to share.
4. Click  **Share document**. The corresponding dialog opens.
5. Select the user you want to share the document with.
6. Enable **Send copy to me** to receive a copy of the message, if required.
7. You can also enter a subject and a comment.
8. Click **Send**.

The selected user receives an e-mail containing the information you entered and a link to the corresponding document.

This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

7.5.7.8 Rename document

You can rename a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Edit**.
6. Enter the new name in the **File name** box.
7. Click **Save**.

The name is changed.

7.5.7.9 Show links of a document

You can display the links of a document, for example, the ARIS models in which the document is used.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Open properties**.
6. Click **Relations**.

The relations of the document are displayed.

7.5.7.10 Show history of a document

You can show the version history of a document. If a document is changed and uploaded again, a version history is created automatically.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant document. The **Document details** page opens.
4. Click **History**.

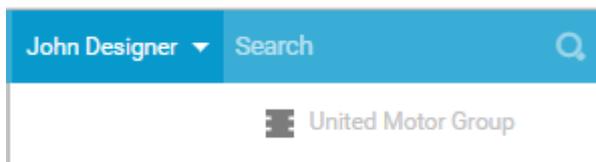
The history of the document is displayed. All changes to the document such as changes to metadata, locking, unlocking, and the uploading of a new version are displayed.

7.5.7.11 Find a document

You can begin the search for items directly on the start page of ARIS Connect.

Procedure

1. Click in the **Search** box.



2. Enter the relevant term.
A list with the first results (page 833) will be shown as you enter the term. As you complete the term, the list will be updated.
3. In the list, click the entry to which you want to navigate.
4. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

7.5.7.12 Handle document versions

7.5.7.12.1 Upload version of a document

If you have edited a document after downloading it and want to update this version in ARIS document storage, you can upload the new version in your ARIS document storage. We strongly recommend that you check documents for malicious software before uploading.

Prerequisite

- You have the **Document management** function privilege.
- The document has the same name and document type as the first uploaded version of this document.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click  **Upload new version of this document** in the document row.



	1.gif Last change 2012.12.20, 08:37:19 by system Document	
	1.txt Last change 2012.12.20, 08:37:02 by system Document	   

The dialog for uploading a document opens.

5. Enter the relevant optional additional information, and click **OK**.

You have updated an existing document in ARIS document storage. This works for Microsoft® SharePoint 2013 as well.

7.5.7.12.2 Sort versions of a document

You can sort versions of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click a document.
5. Click **Versions**.
6. Click a column title.

The document versions are sorted.

You can reverse the sort order by clicking the column title again.

7.5.7.12.3 Show version history

You can show the version history of a document. If a document is changed and uploaded again, a version history is created automatically.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click **Versions**.

The different versions of the document are displayed. The change description is in the **Comment** column.

7.5.7.12.4 Show version of a document

You can show the version history of a document. If a document is changed and uploaded again, a version history is created automatically.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click the relevant document. The **Document details** page opens.
4. Click **Versions**.
5. In the row of the relevant version, click  **Open version**.
6. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

7.5.7.12.5 Delete version of a document

If a document is changed and uploaded again, a version history is created automatically. You can delete all versions of a document except for the last.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click **Versions**.
6. In the row of the relevant version, click  **Delete**.
7. Click **Delete version**.
8. A confirmation prompt is displayed. Click **OK**.

You have deleted this version of the document from ARIS document storage.

7.5.7.13 Handle document with Document administrator privilege

7.5.7.13.1 Add document to ARIS document storage

You can manage documents in your ARIS document storage. You can add documents to your ARIS document storage. We strongly recommend that you check documents for malicious software before uploading.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click  **Upload**. The **Upload document** dialog opens.
5. Enter the relevant optional additional information, and click **OK**.

You have added a document to ARIS document storage.

Administrators can import all documents in a directory to ARIS document storage.

7.5.7.13.2 Open/Download document

You can download and open documents from ARIS document storage. If a document is highlighted as locked, only the person who locked the document can open it and upload a new version. We strongly recommend that you check documents for malicious software before you open them.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.

Click  **Download** in the document row.

	1.gif Last change 2012.12.20, 08:37:19 by system Document	
	1.txt Last change 2012.12.20, 08:37:02 by system Document	   

4. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

7.5.7.13.3 Download multiple documents

You can download multiple documents. We strongly recommend that you check documents for malicious software before you open them.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Enable the check boxes in front of the relevant documents.
5. Click  **Download selected documents**.

The selected documents are packed in a ZIP archive and then downloaded.

Tip

Enable the check box in front of the **Name** column to select all documents in a directory at once.

7.5.7.13.4 Select document owner or responsible

You can edit the properties of a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Open properties**.
6. Next to the **Owner** box, click  **Edit**.

The **Select owner** dialog opens. Start typing a user name. User names which contain the string you type are displayed. Select a user and click **OK**.

You can select the person responsible for the document.

7.5.7.13.5 Move document

You can move a document to another folder.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click  **Move to another folder** in the **Actions** bar of the relevant document. The **Move document** dialog opens.
5. Select the relevant folder, and click **OK**.

You have moved the document to another folder.

7.5.7.13.6 Move multiple documents

You can move documents to another folder.

Prerequisite

- You have the **Document management** function privilege.
- You have access to ARIS document storage and/or the relevant third-party document management system.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Enable the check boxes in front of the relevant documents.
5. Click  **Move to another folder**. The **Move document** dialog opens.
6. Select the relevant folder, and click **OK**.

You have moved the documents to another folder.

Tip

Enable the check box in front of the **Name** column to select all documents in a directory at once.

7.5.7.13.7 Browse ARIS document storage

You can search for a document.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Depending on your installation, you can also click  **Attributes** to refine your search so that you restrict the search to metadata, to contents, or to metadata and contents. You can also specify that the term is to be searched only in the current version.
4. Enter the search term.

Possible hits are displayed as soon as you enter the first few letters.

7.5.7.13.8 Lock document

You can lock documents that are in your ARIS document storage to prevent them from being edited by other users.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Lock document**.

The document is locked to prevent it from being edited by other users. Only you or administrators can unlock the document.

7.5.7.13.9 Unlock document

You can unlock documents that are locked and thus make them available to other users for editing.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the relevant document. The **Document details** page opens.
5. Click  **Unlock document**.

The document can be edited by other users.

7.5.7.13.10 Delete document from ARIS document storage

You can remove documents from ARIS document storage.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Click the arrow to navigate in the structure, and select the folder containing the relevant document.
5. Click  **Delete** in the **Actions** bar of the relevant document. A confirmation prompt is displayed.
6. Click **OK**.

The document is no longer displayed within ARIS document storage.

Tip

Enable the check box in front of the **Name** column to select all documents in a directory at once.

7.5.7.13.11 Delete multiple documents from ARIS document storage

You can remove multiple documents from ARIS document storage in one operation.

Prerequisite

You have the **Document management** function privilege.

Procedure

1. Click  **Repository**.
2. Click **Documents**.
3. Click a folder in the navigation.
4. Select the check boxes of the documents you want to delete.
5. In the top right screen, click  **Delete selected documents**. A confirmation prompt is displayed.
6. Click **OK**.

The selected documents are no longer displayed within ARIS document storage.

Tip

Enable the check box in front of the **Name** column to select all documents in a directory at once.

8 Glossary

A

ACCESS PRIVILEGE

With the access privileges you can control which content is accessible to specific users or user groups. Depending on their privilege, users can see, create/edit, delete or version models and objects. You assign access privileges to users, user groups, or database groups on the properties pages. Administrators manage users, user groups, cross-database and cross-product privileges and licenses for all ARIS products in ARIS Administration.

No access (----)

Users see the group structure of the database. Group contents are not displayed.

Read (r---)

The group content is displayed. Users can open models but neither change models and objects, nor add or delete new items.

Read + Comment (rc--)

The group content is displayed. Users can use all functions of Collaboration in ARIS Connect.

Read + Write (rw--)

The group content is displayed. Users can change models and objects, add new items, delete object occurrences from models, but not object definitions.

Read + Write + Delete (rwd-)

The group content is displayed. Users can modify models and objects and add and delete items.

Read + Version (r--v)

The group content is displayed. Users can open and version models but neither change models and objects, nor add or delete new items.

Read + Comment + Version (rc-v)

The group content is displayed. Users can use all functions of Collaboration in ARIS Connect and open and version models, but they can neither change models and objects, nor add or delete new items.

Read + Write + Version (rw-v)

The group content is displayed. Users can change models and objects, add new items, delete object occurrences from models, and version models. Object definitions cannot be deleted.

Read + Write + Delete + Version (rwdv)

The group content is displayed. Users can modify models and objects, add and delete items, and version models.

ALTERNATIVE LANGUAGE

Database language in which database content is displayed if attribute values are not specified in the database language used. When you create a database, **English (United States)** is selected automatically. On the **Administration** tab, you can change the alternative language.

API NAME

The API name is a unique identifier for database items. You can use the API name to address database items with the ARIS API programming interface.

ARIS API

ARIS API is a programming interface with which you can access ARIS and its data from external applications.

ARIS ADMINISTRATION

Manages users, user groups, privileges, licenses, documents, configurations, and processes for a tenant (page 1179).

ARIS CONNECT GOVERNANCE INBOX

As soon as the first change request is made, the **ARIS Connect Governance Inbox** database is automatically created in ARIS. It contains a Requirements inbox for each person responsible with a model of the **Requirements tree** type. An object of the **Requirement** type is created for each change request. As the process continues, the realization status of the object is automatically changed depending on which status the person responsible has selected (**Approve, Reject**). This enables all change requests to be monitored in the **ARIS Connect Governance Inbox** database.

ASSIGNMENT

A model assigned to an object by an assignment relationship.

If a model is assigned to an object, this can be indicated by an assignment icon. An assignment enables you, for example, to use a model to describe objects in detail and thus get from a rough plan to a detailed plan.

ASSIGNMENT ICON

Icon that shows that one or more models are assigned to an object by an assignment relationship. You can open assigned models by double-clicking the assignment icon. The assignment icon is displayed if you have disabled the **Hide assignment icons** option.

The assignment icon may look different and may be placed at different points in the object depending on the model template you are using.



You can also assign an assignment icon of your own to a database. It is displayed to the right of the icons.



ASSIGNMENT RELATIONSHIP

Relationship of an object to a model assigned to it.

You can create an assignment relationship using drag and drop or using the object properties dialog. The assignment relationship is displayed at the object by an assignment icon.

B

BPMN

Business **P**rocess **M**odel and **N**otation (**BPMN**) is a graphical notation used to describe business processes.

C

CHANGE LIST (VERSIONING)

Includes selected content of a database. This may comprise individual models, multiple models without interdependencies, related models, group content, or the entire database contents. They will be versioned together and saved under one change list number. Change lists are sorted in ascending order.

A description of the change list characterizes the versioned contents. The change list description records who versioned which database content, when, and why. Opening a change list displays the database content you selected for versioning. This can be a model, or the entire database content.

CHANGE LIST NUMBER (VERSIONING)

Number and description of a version of the database content. Change list numbers can be used to select particular versions for viewing. You have only read access for the content.

Change lists are sorted in ascending order. (Versioning state)

CONFIGURATION SET

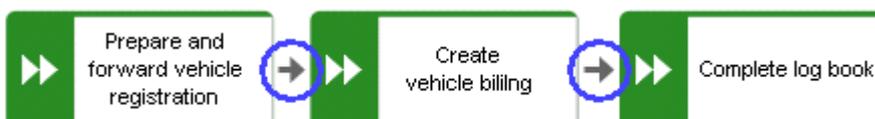
A configuration set specifies the graphical user interface of ARIS Connect. Configuration sets are based on XML files and cannot be changed within ARIS Connect, but only in the relevant XML file. By default, ARIS Connect provides the classic configuration set (page 625) and the default configuration set (page 626).

You can specify a modification set based on a configuration set.

CONNECTION

Visible relationship between objects, which is created during modeling. It is thus a graphical representation of a relationship.

A connection is usually represented by lines in the model window. If a direction is relevant, the line is added an arrow. One example is the connection of the **is predecessor of** type between functions in models of the **EPC** (event-driven process chain) type.



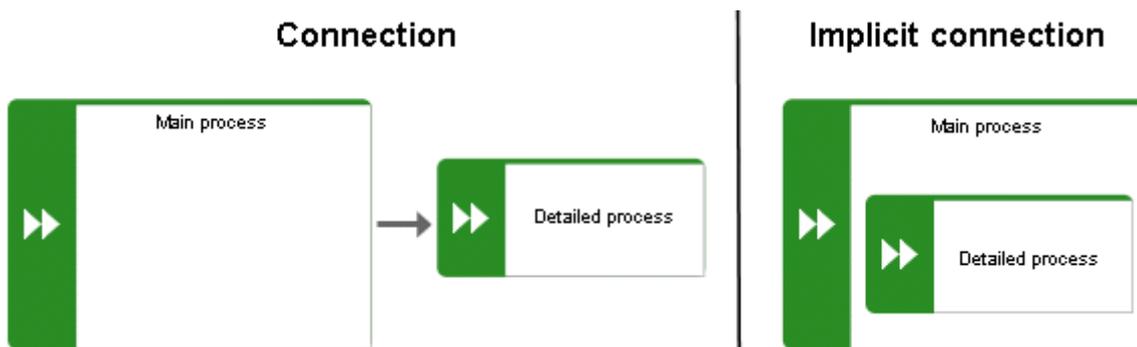
CONNECTION, IMPLICIT

Invisible connection.

Implicit connections are created if the **Create implicit connections for overlapping objects** option is enabled and objects are placed within objects. In the displayed dialog, you can decide whether to hide any connections and, if so, which connections to hide for these objects. The difference between implicit connections and implicit relationships is that an implicit connection can be represented by a line in the model window. This line is displayed again, for example, if you drag an object from another object down into the free area of the model window.

Example of implicit connections:

Place a function on another function in a model of the **EPC** type.



In a model of the **PCD** type, place a function in the **Function** column and an organizational unit in the **Organizational unit** column. An implicit connection of the 'carries out' type is automatically created from the organizational unit to the function.

Function	Organizational unit
<p>Create vehicle billing</p>	<p>Accounting</p>

This needs to be differentiated from implicit relationships (page 1176).

CRON EXPRESSION

String consisting of six to seven fields that is separated by a space and represents a time.

Normally, a CRON expression is used to define routine jobs that are executed automatically at certain times by the system.

Fields

- Seconds, mandatory field, valid value: **0-59**, valid characters: *****, **/**, **,**, **-**.
- Minutes, mandatory field, valid value: **0-59**, valid characters: *****, **/**, **,**, **-**.
- Hours, mandatory field, valid value: **0-59**, valid characters: *****, **/**, **,**, **-**.
- Day in month, mandatory field, valid value: **0-59**, valid characters: *****, **/**, **,**, **-**.
- Month, mandatory field, valid value: **0-12** or **JAN-DEC**, valid characters: *****, **/**, **,**, **-**.
- Day of the week, mandatory field, valid value: **0-7** or **SUN-SAT**, valid characters: *****, **/**, **,**, **-**, **?**, **L**, **C**, **#**.
- Year, not a mandatory field, valid value: **1970-2010**, valid characters: *****, **/**, **,**, **-**.

CURRENT VERSION (VERSIONING)

Corresponds to the last versioned database content. This version includes the entire versioned content of a database. You have only read access for the content.

In principle, this is the last change list created for a database (versioning state).

D

DASHBOARDS

Dashboards (page 637) visualize database internal and database external information. Information can be runtime information, performance data, and analysis data, for example.

DEFINITION COPY

Copy of the object definition, that is of the entire object, rather than just the occurrence as is the case with the occurrence copy.

The definition copy creates a new object. The occurrence, which is created when creating the definition copy, refers to the new object.

You can create copies of objects. When copying an object, you can decide whether you wish to create a new object (a definition copy) or a new object symbol for an existing object (an occurrence copy).

It makes sense to create a definition copy for an existing object if a new object is to have properties similar to those of the source object.

For example, you have modeled the object **Plant 1** and specified its properties. You now wish to create the object **Plant 2**, which has properties similar to Plant 1. In this case, it is advisable to create a definition copy of Plant 1. Object **Plant 2** is thus given all the properties of object Plant 1, but exists independently of it. You now simply need to change the properties that differ from those of object Plant 1, for example, by changing the name to **Plant 2**.

This involves significantly less work for you than creating the object from scratch and having to enter all the properties again.

Some attributes are not copied when the definition copy is created. For example, it does not make sense to copy the identifier of an object because the identifier represents a unique ID of an object.

E

ESCALATION MANAGER

The escalation manager is the user who is notified when a human task is not completed by any executor by the due date.

F

FACT SHEETS

Fact sheets show facts about an item in various views. Facts can be displayed in text form or graphically. Facts in text form are, for example, item descriptions or lists of elements that are structured in tables. In ARIS Connect, you can assign fact sheets to various items, such as processes, functions, events, and documents.

In the **Classic** view delivered with ARIS Connect as standard the following fact sheets are assigned to a process:

Overview (page 630)

Steps (page 632)

Table (page 634)

RACI (page 635)

Diagram (page 636)

Dashboards (page 637)

Tasks (page 638)

Documents (page 640)

FOCUS

Selection marker that marks the item that is selected. There are certain occurrences of selection markers, such as text cursors.

The focus is usually surrounded by colored frames, which can be dashed or solid.

You can often start actions for the selected items using the **Enter** key or the space bar.

FULLY-QUALIFIED HOST NAME (FQHN)

The fully-qualified host name (FQHN) is the host name that is specified as the IP address of a computer or as a fully-qualified domain name (FQDN) in the following form:

my.department.example.com.

FUNCTION PRIVILEGE

Controls tasks that users can perform.

You can use function privileges to provide users with specific functionality and thus control their authorizations across a database in ARIS Architect. Function privileges are assigned on the properties pages of users or user groups. In ARIS Administration, administrators manage users, user groups, cross-database and cross-product privileges and licenses for all ARIS products.

G

GDPR

The **General Data Protection Regulation** (GDPR) protects the rights of individuals' personal data within the European Union. It also regulates the export of personal data outside the EU. GDPR is a regulation by the European Parliament, the Council of the European Union, and the European Commission.

GRAPHIC OBJECTS

Graphic elements without implicit semantic meaning. They can be used, for example, to indicate model areas, to specially highlight objects that are thematically linked, or to prepare models so that they are suitable for presentation.

Graphic objects include circles, ellipses, squares, rectangles, lines, and polygons.

GRID

Placement markings in the model window in the form of dots that you can show for modeling support (page 891).

These mark the minimum spacing between one model item and another. If you move an item, it is moved by increments of one gridline accordingly.

GROUPING

Grouped model items (page 966).

They can be moved, enlarged or reduced, and deleted as if they were one item.

GUID

Globally **U**nique **I**dentifier (GUID).

The GUID is a string that renders items unique anywhere in the world.

I

IMPERSONATION

Impersonation enables a user to perform actions on behalf of a different user account, for example, backup and restore tenants. This requires the creation of a user in the user management for the infrastructure tenant, for example, **master**. This user must be assigned all licenses and privileges that are needed for the action.

INFOGRAPHICS

Infographics (also **information graphics**) are visual representations of content. By combining images and text, it is easy for users to understand the information contained.

Infographics can simplify complicated topics. The data is displayed quickly and clearly.

INFRASTRUCTURE TENANT

Specifies the tenant with special privileges for managing other tenants, components, and the configuration in ARIS Administration.

By default, the **master** tenant is the infrastructure tenant. The system users **system** and **superuser** have administrative privileges, that is, they can access ARIS Administration and Tenant Management.

Users with the relevant privileges can specify other infrastructure tenants in ARIS Administration.

J

JAAS

Java Authentication and Authorization Service (JAAS).

A Java interface that enables you to provide services for authentication and access privileges in Java programs. JAAS supports user-based authentication.

L

LANE MODEL

Synonym for **Swimlane model**.

Model represented using columns/rows or a table.

Lanes are columns and/or rows. They include only specific object types and they structure the modeled information. An implicit relationship is often created between objects in a row.

A model of the **EPC (table display)** type is a lane model.

LDAP

Lightweight **D**irectory **A**ccess **P**rotocol (**LDAP**).

Application protocol from network technology. LDAP enables information from a distributed, location-independent and hierarchical database in a network to be queried and modified.

M

METHOD FILTER

Filter restricting the total number of ARIS Method items and thus offering only those items for modeling that are actually required.

By applying a specific method filter, only the model types included in this method filter will be offered for selection when creating new models. When modeling, all object, connection, and attribute types are available for the model type that are contained in the method filter. Thus, the content offered is exactly the content you need for performing your tasks. Method filters are an effective means of supporting uniform modeling and make it possible to provide users with only the information and methods relevant to them.

MINI TOOLBAR

Toolbar of objects (page 899) that are used for placing and drawing connections.

It is shown if you select an object in the model.

MODEL TEMPLATE

Basic settings that change the appearance and attribute placements of models all at once when being assigned. This enables you to apply settings defined once to all relevant models. Templates can be assigned additively. This means that all changes from templates assigned one after the other are valid. If, for example, you assign a template that removes the fill color of objects, and then assign a template that places the name attribute above the objects, both changes take effect.

MODIFICATION SET

A modification set is based on a configuration set and specifies the graphical user interface of ARIS Connect.

Administrators create and enable custom modification sets for you based on the classic configuration set (page 625) or default configuration set (page 626) to change the appearance of the portal.

MY TASKS

My tasks is used for editing tasks that are provided by Process Governance during process execution. In addition, My tasks provides an overview of a user's active tasks.

O

OCCURRENCE

Graphical representation of objects, connections, and free-form texts.

It is used to represent items in a model.

With an occurrence copy several occurrences of an object can be created. These can differ within a model and/or in different models, that is, object symbol, size, color, and attribute placements can be set individually and thus be different.

If the placed text attributes of an occurrence are changed, the changes are applied to all occurrences at which the text attribute has also been placed. For example , if the name an object is changed, the change is displayed for all occurrences.

OCCURRENCE COPY

Copy of the occurrence, that is, only the graphical representation of an object, rather than the entire object as with the definition copy.

All of the occurrence copies of an object represent the underlying object definition.

You can create copies of objects. When copying an object, you can decide whether you wish to create a new object (a definition copy) or a new object symbol for an existing object (an occurrence copy).

It is helpful to create a copy of the object symbol for an existing object - that is, only a copy of the occurrence of an object - if exactly the same object is used at various positions in the model or in different models.

For example, if, in the model you are creating, Plant 1 supplies goods at various points of the model, it is advisable to use occurrence copies at these points. These refer to the same object, and any changes to this object apply to all occurrence copies.

If you want to rename Plant 1 to **Plant A**, for example, you only need to do this for ONE of the occurrences: All other occurrences are changed to **Plant A** at the same time.

OLE OBJECT

OLE objects are objects from various external applications, which can be used in ARIS. When you start the objects from within ARIS, they are opened in the external application.

For them to open, specific requirements must be met. For example, the security policy of the Web browser must allow opening, and saved objects must be stored in a local drive.

OTP

One-Time Pad (OTP).

This one-time pad is a symmetric encryption method for transferring secret messages. This encryption method is characterized by the fact that it uses a key of the same length as the message itself.

The OTP is information-theoretically secure and has proven to be impossible to crack – provided that it is used properly.

P

PERSONAS

Personas are fictional characters that characterize the features of people of a target group. Personas are used to illustrate the differences between user types.

In the customer experience (page **Error! Bookmark not defined.**) environment, a persona represents a customer segment and its main characteristics. Each persona provides a specific set of information describing that person representing a user type in more detail.

R

RELATIONSHIP

Connection that can exist between model elements and among models.

Relationships include connections, implicit connections, implicit relationships, assignment, and variant relationships. Therefore, the term **relationship** is a superordinate term for all links that can exist between objects and models.

RELATIONSHIP, IMPLICIT

Assignment relationship, that is, a relationship between objects for which no visible connection is drawn.

You create this relationship by assigning a model to an object.

This needs to be differentiated from implicit connections.

ROOT ELEMENT

Model or object that is used as the top element in a hierarchy in the portal. This element is displayed when you open the hierarchy in the portal.

S

SAML

Security Assertion Markup Language (SAML).

XML framework for exchanging authentication and authorization information. SAML provides functions to describe and transfer security-related information.

SATELLITE

A satellite is an object that can be inserted in a model or diagram but is not a structurally relevant object (page 1178) in the model or diagram.

For example, an object of the **Organizational unit** type is a satellite in an event-driven process chain (EPC). In a model of the **Organizational chart** type, on the other hand, an object of the **Organizational unit** type is a structurally relevant object.

SINGLE LOG-OUT (SLO)

The advantage of using SLO is that users need log out only once from the network.

SINGLE SIGN-ON (SSO)

With **SSO** or **single sign-on** the user only needs to authenticate himself once with his user name and password to access all services, programs and computers without logging in again.

If services, programs, and computers request a new authentication when accessed by the user the authentication is carried out by the underlying SSO mechanism.

SSL

Secure Socket Layer (SSL).

Security software for encrypting data that is exchanged between programs.

STRUCTURALLY RELEVANT OBJECTS

Basic model objects.

These are objects that indicate the distinctive feature of a model. For a model of the **Organizational chart** type, the objects **Organizational unit**, **Role**, and **Person** are structurally relevant objects, for example. Using these items, you can build the typical hierarchy of an organizational chart.

The **Event** and **Function** objects are typical for the **EPC** model type and are thus structurally relevant to a business process. You can use these to establish the typical control flow. The **Organizational unit**, **Role**, and **Person** objects can also be inserted into an **EPC**. However, these objects do not constitute the distinctive feature of a business process. As structurally irrelevant objects, they act as satellites, and add more detailed information to the process model. For example, you can insert **organizational units** and link them to functions to illustrate who carries out those functions.

An object that can be inserted in a model or diagram but is not a structurally relevant object is known as a satellite (page 1177).

SUPERUSER

The user **superuser** is created automatically. By default, this user is assigned the **User management**, **License management**, and **Configuration administrator** function privileges. This user can also enable this function privilege for other users. Users of the **superuser** type do not use up a license. They manage the system administration, but cannot use ARIS products due to license restrictions. The default password is **superuser**. You should change the default password to prevent unauthorized access. The password of the superuser is very important, as it is the only user who cannot be deleted. You can change all user data except for the user name.

SYSTEM USERS

System users are users who have all function and access privileges in a database and who have the required privileges in ARIS Administration. System users can be created by the system administrator (user **system**) or by another system user.

The system user **system** is created automatically. This user has full access to all databases of a tenant. The name **system** cannot be changed. A system user should immediately change the password **manager** in ARIS Administration to prevent unauthorized access. The function and access privileges of system users cannot be changed at database level. To withdraw privileges from a system user, another system user must disable the **System user** check box on the user's **Function privileges** properties page in ARIS Architect. As a result, the user's privileges can be changed. After this, the user has no access privileges.

The system user **system** assumes the administrator role of the system administrator and has all function and access privileges in all databases of a tenant. Authorized persons can use this emergency user to log in to any database, even if you are using an external system, such as LDAP, for authentication.

The name **system** cannot be changed. The **System user** check box for this user (**Function privileges** properties page in ARIS Architect) cannot be disabled either. You should immediately change the password **manager** to prevent unauthorized access.

To avoid problems, you should create additional system users. Having more than one system user can avoid problems, for example, if one system user has forgotten his password. If you forgot the passwords of all your system users, the full range of functions is no longer available and full data access is no longer possible.

What is the user 'arisservice'?

SYSTEM DATABASE

This database manages the content of the **Configuration** and **Evaluations** folders, which is displayed on the **Administration** tab. This includes filters, templates, and font formats, but also ARIS Method and all common files, report scripts, scheduled reports, semantic checks and macros.

The system database is created automatically while the first user is logging in to ARIS. The content is available to all databases of this tenant. The ARIS Service Administrator commands **backupsystemdb**, **restoresystemdb**, and **updatesystemdb** can be used to save and restore this data centrally.

T

TENANT

A tenant is a container providing its own ARIS Administration and ARIS data set, such as configuration, ARIS method, databases, scripts, etc.

Each tenant provides users with a particular set of functionalities and specific data depending on their licenses and privileges.

TLS

Transport Layer Security (**TLS**).

TLS is known under the name of its predecessor **Secure Sockets Layer (SSL)** and is an encryption protocol for the secure transfer of data on the Internet.

U

UML (UNIFIED MODELING LANGUAGE)

UML is a graphical modeling language for specifying, constructing, and documenting software, parts of software, and other systems. This "unified" modeling language specifies the notations of the modeling terms and their relationships. It also defines the graphical notation, the static structures, and the dynamic processes.

URI

String that is used to uniquely identify an abstract or physical resource.

URIs are used to describe resources (such as Web sites, other files, calls for Web services) on the Internet.

URIs can be incorporated as a string (encoded with a character set) into digital documents, particularly those in HTML format, or written by hand. A link from one Web site to another is called a hyperlink.

URL

Uniform Resource Locator, a particular type of URI (**Uniform Resource Identifier**).

URLs identify a resource via the network protocol used (for example, http or ftp) and the **location** of the resource (for example, of a service) in a network.

The term URL is often used synonymously with URI because URLs were the first and are still the most frequently used type of URI.

USER NAME

Name of a user (for example, **system**) for access to a database. The user name does not necessarily have to correspond to a person's real name.

Access to a database is possible if a user logs in to it with the combination of user name and password that has previously been stored for the database. This is the case when the system administrator or a user with the **User management** function privilege creates the new user.

USER 'SYSTEM'

The system user **system** assumes the administrator role of the system administrator and has all function and access privileges in all databases of a tenant. Authorized persons can use this emergency user to log in to any database, even if you are using an external system, such as LDAP, for authentication.

The name **system** cannot be changed. The **System user** check box for this user (**Function privileges** properties page in ARIS Architect) cannot be disabled either. You should immediately change the password **manager** to prevent unauthorized access.

To avoid problems, you should create additional system users. Having more than one system user can avoid problems, for example, if one system user has forgotten his password. If you forgot the passwords of all your system users, the full range of functions is no longer available and full data access is no longer possible.

V

VARIANT RELATIONSHIP

Reference in a variant to the GUID of its master.

When you create variants of objects or models, they receive a reference to the GUID of their master. The model or object created as a variant can be changed as required, irrespective of the master item. However, the master model/object and the model/object variant "know" each other. With variant relationships, scripts can be used, e. g. to evaluate differences between items.

VERSION

A model that remains fixed and can no longer be changed in a change list.

The versioning state of the last version created is the current version.

VERSION NUMBER

Number assigned to a model during versioning.

The number relates to the model whose versions are numbered in ascending order.

VERSIONING STATE

Image of database content recorded at a certain point in time.

A versioning state can include models of different versions with different or identical version numbers that represent a specific state. While Workspace represents a state that is editable but has not yet been versioned, the versions are included in the Current version state and in the revisions associated with the Change list numbers.

W

WORKSPACE (VERSIONING)

Indicates the database content that has not yet been versioned. It can be edited. (Versioning state)

9 Legal information

9.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product. Please read the Release Notes and take the information into account when installing, setting up, and using the product.

If you want to install technical and/or business system functions without Software AG's consulting services, you require extensive knowledge of the system to be installed, its intended purpose, the target systems, and their various dependencies. Due to the number of platforms and interdependent hardware and software configurations, we can only describe specific installations. It is not possible to document all settings and dependencies.

When you combine various technologies, please observe the manufacturers' instructions, particularly announcements concerning releases on their Internet pages. We cannot guarantee proper functioning and installation of approved third-party systems and do not support them. Always follow the instructions provided in the installation manuals of the relevant manufacturers. If you experience difficulties, please contact the relevant manufacturer.

If you need help installing third-party systems, contact your local Software AG sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard Software AG software maintenance agreement and can be performed only on special request and agreement.

If a description refers to a specific ARIS product, the product is named. If this is not the case, names for ARIS products are used as follows:

Name	Includes
ARIS products	Refers to all products to which the license regulations of Software AG standard software apply.
ARIS Clients	Refers to all programs that access shared databases via ARIS Server, such as ARIS Architect or ARIS Designer.
ARIS Download clients	Refers to ARIS clients that can be accessed using a browser.

9.2 Data protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR).

Where applicable, appropriate steps are documented in the respective administration documentation.

9.3 Disclaimer

ARIS products are intended and developed for use by persons. Automated processes, such as the generation of content and the import of objects/artifacts via interfaces, can lead to an outsized amount of data, and their execution may exceed processing capacities and physical limits. For example, processing capacities are exceeded if models and diagrams transcend the size of the modeling area or an extremely high number of processing operations is started simultaneously. Physical limits may be exceeded if the memory available is not sufficient for the execution of operations or the storage of data.

Proper operation of ARIS products requires the availability of a reliable and fast network connection. Networks with insufficient response time will reduce system performance and may cause timeouts.

If ARIS products are used in a virtual environment, sufficient resources must be available there in order to avoid the risk of overbooking.

The system was tested using scenarios that included 100,000 groups (folders), 100,000 users, and 1,000,000 modeling artifacts. It supports a modeling area of 25 square meters.

If projects or repositories are larger than the maximum size allowed, a powerful functionality is available to break them down into smaller, more manageable parts.

Some restrictions may apply when working with process administration, ARIS Administration, ARIS document storage, and My tasks, and when generating executable processes. Process Governance has been tested and approved for 1000 parallel process instances. However, the number may vary depending on process complexity, for example, if custom reports are integrated.

ARIS document storage was tested with 40.000 document items. We recommend monitoring the number and overall size of stored document items and archiving some document items if needed.

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