ARIS Connect

ADMINISTRATOR USER MANUAL

Version 10.0

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Contents

1 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 receive 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 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_Features_Overview.pdf)

Note: You can view 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 Basics

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

2.1 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 (e.g., 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.

2.2 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, 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, 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.

2.3 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 your user name. The menu opens.
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.

2.4 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 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.

2.5 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 > Contribute**.
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.

2.6 Switch your profile

You can switch between profiles (page 9) 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.

2.7 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. Click your user name. The menu opens.
2. Click **Search**.

The Search area (page 550) opens.

2.8 Show tasks in ARIS Process Board

In ARIS Connect you can show new tasks in ARIS Process Board 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**.

ARIS Process Board opens.

2.9 Open ARIS Download Client page

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

Prerequisite

Your administrator has enabled the use of download clients.

Procedure

1. Click your user name. The menu opens.
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.

2.10 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 your user name. The menu opens.
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.

2.11 Forward a page of the online help

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

Prerequisite

The person you are sending the link to can access the server on which the online help is located.

Procedure

1. Open the page of the online help that you want to refer to.
2. Click **E-mail this page**.

An e-mail opens, in which the link to the current page is already inserted.

If this does not happen, check whether the following setting has been made on your computer. The example shows the setting for the Windows 7 operating system. If you are using a different operating system, the terminology may differ from that in this example.

Procedure

1. Click **Start > Default Programs**.
2. Click **Associate a file type or protocol with a program** in the dialog.
3. Navigate to the **mailto** entry.
4. Double-click **mailto**. The **Open with** dialog opens.
5. Select the e-mail program you want to use to forward the online help page.
6. Click **OK**. The dialog closes.
7. Close the remaining Windows panes.

If you now click **E-mail this page**, an e-mail containing the link to the current page opens.

2.12 Open Administration

You can open Administration, e.g., 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 your user name. The menu opens.
2. Click **Administration**.

The administration areas such as Configuration and User management will be open for editing.

2.13 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 empty pages are displayed after opening a video page, please press F5 to refresh the page.

2.14 Open information window

You can view information about ARIS Connect.

Procedure

1. Click your user name. The menu opens.
2. Click **About**.

Information about ARIS Connect will be displayed.

2.15 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 the Model Editor 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.

2.16 Log out of ARIS Connect

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

Procedure

1. Click your user name. The menu opens.
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.

2.17 What profiles include which content?

Profiles provide users a profile based view of the portal. Depending on the profile, users have access to different content and functionalities. Profiles are applied in addition to the function and license privileges. If more than one profile is assigned, the user can switch between these profiles via **<User name> > Profiles > <profilexy>**. Only one profile can be active at a time. You can assign 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 selecting a model in the **Portal**.
Contributor	The **Steps** fact sheet is displayed when selecting a model in the **Portal**. If the **Steps** area is not available, the **Overview** area is displayed.
Designer	The **Diagram** fact sheet is displayed when selecting a model in the **Portal**.
Manager/Owner	The **Dashboards** fact sheet is displayed when selecting a model in the **Portal**.
Viewer	▪ The **Steps** fact sheet is displayed when selecting a model in the **Portal**. If the **Steps** area is not available, the **Overview** area is displayed. ▪ The **Tasks** area is not available. ▪ The **Contribute** function is not available.
Viewer (accessible)	▪ The **Steps** fact sheet is displayed when selecting a model in the **Portal**. If the **Steps** area is not available, the **Overview** area is displayed. ▪ The **Tasks** area is not available. ▪ The **Contribute** function is not available. ▪ ARIS document storage and Process Governance are not available.

3 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.

3.1 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 or that you have saved as a bookmark in your browser. The **Log in** 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)

3.2 What is ARIS Administration for?

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.

3.3 Manage licenses

Centrally manage licenses for all ARIS products to give users the required privileges for the programs.

3.3.1 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 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**.

3.3.2 Delete licenses/Delete license file

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 42) 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.

3.3.3 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.

3.3.4 Valuable information

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

3.3.4.1 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 26) 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.

3.3.4.2 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 42) them when new license are available. In the configuration, you can specify that administrators are notified before a license expires.

3.3.4.3 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

3.3.4.4 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.

3.4 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.

3.4.1 Use case - Manage users

This use case provides a comprehensive description of all procedures that administrators must carry out for a tenant 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' and 'system'. They are responsible for the user management of an activated tenant. The server was started, the password for the system user **superuser** has not been changed yet.

USER MANAGEMENT IN ARIS ADMINISTRATION

1. Open ARIS Administration and log in as 'superuser'.
   a. Click the link that was provided to you or that you have saved as a bookmark in your browser. The **Log in** dialog opens.
   b. Enter your user name and your password.
   c. Click **Log in**.
   d. Click **<User name> > Administration**.
   ARIS Administration opens.
2. Change the passwords for the users 'superuser' and 'system'.
   a. Change the passwords of the users **superuser** and **system** 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 >** **Contribute**.
   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.

3. Import the license purchased.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.
    d. Click **Licenses**.
    e. Click **Import license file**. The dialog opens.
    f. Select the relevant license file.
    g. 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.
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 (e.g., the Database administrator 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.
    a. Click **ARIS >** **Administration** or **ARIS >** **Explorer**.
    b. Click **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
    c. In the Explorer tree, right-click your connection to the ARIS Server and select **New >** **Database**.
    d. Enter a name. Do not use any special characters.
    e. Enable the **Versionable** check box if you want the content of the new database to be versioned.
    f. 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.
    g. Change the password of the system user **system**.
    h. Assign access privileges.
    i. Assign function privileges to users and user groups.
    j. Assign filters to users and user groups.

    The database is available to authorized users.

4. Assign access privileges for database groups. These actions can be carried out by all users with the **User administrator** function privilege.
   a. Click **ARIS >** **Explorer**.
   b. Log in to the database.
   c. Click **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
   d. Right-click the group for which you want to edit the access privileges, and select **Properties**.
   e. Click **Access privileges (users)** or **Accesss privileges (user groups)** on the **Selection** tab.
   f. Select the users/user groups for which you want to assign privileges.
   g. 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.
   h. 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.
   i. Click **OK**.

   After the user logs in to the database again the changed access privileges will be in effect.
5. Assign database-specific function privileges to users and user groups.
   a. Click **ARIS >** **Administration**.
   b. Click **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
   c. Log in to the database.
   d. In the **Navigation** bar, click **Users** or **User groups**.
   e. In the table, right-click the user or user group, and select **Properties**.
   f. Click **Function privileges** on the **Selection** tab.
   g. In the **Assign** column, click the relevant function privileges. You can assign only function privileges that are assigned to you, too.
   h. You cannot change function privileges for system users.
   i. 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.
   j. 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.

6. Assign filters to users and user groups.
   a. Click **ARIS >** **Administration**.
   b. Click **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
   c. Log in to the database.
   d. In the **Navigation** bar, click **Users** or **User groups**.
   e. In the table, right-click the user or user group, and select **Properties**.
   f. Click **Method filter** on the **Selection** tab.
   g. In the **Assign** column, click the relevant filters.
   h. 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)

3.4.2 Create user

Create a user for authorized employees. The default users system (page 45), superuser (page 46), arisservice (page 46), and guest (page 46) are created automatically. You can create additional system users (page 22).

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, activate 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 assigned items. To remove items from the **Assigned items** box, enable the check boxes of the relevant items in this box, and click **Remove**.
9. Click **Save**.
10. Enable (page 35) the required function and license privileges for the user under **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 assign all available items, click **Add all**, and click **Remove all** to remove all assignments.
- 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.

3.4.3 Create system user for a single database

You can create a system (page 45) user for a single database using ARIS Architect.

Prerequisite

- You have the **User administrator** function privilege.
- The user is already created (page 20) 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 create as system user 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**.

As as result, the user receives all function and access privileges to the database.

3.4.4 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 >** **Contribute**.
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 25), 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.

3.4.5 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: .

3.4.6 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 42) a user statistics.

3.4.7 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 26) the user.
4. Click the relevant user/user group.
5. Click History (page 52) 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.

3.4.8 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 assign all available items, click **Add all**, and click **Remove all** to remove all assignments.

3.4.9 Log out user

You can end the sessions of users. This may be necessary, for example, if all licenses of the **Concurrent user** license type (page 13) 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 has been 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 42) a user statistics.

3.4.10 Delete user

Delete users when they are no longer relevant. The system user cannot be deleted.

Prerequisite

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

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 is deleted.

Tip

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

3.4.11 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.

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 **Delete all**. The **Confirmation** dialog opens.
4. Click **OK**.

All users and user groups are deleted except for the default users system (page 45), superuser (page 46), arisservice (page 46), and guest (page 46).

3.4.12 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.

3.4.13 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, i.e., 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.

3.4.13.1 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.
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.

3.4.13.2 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 33) 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.

3.4.13.3 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 >** **Contribute**.
4. Change the description, if necessary.
5. Click **Save**.
6. Change the user association (page 31), if necessary.
7. Change the function privileges for the user group, if necessary.

The user group data is changed.

3.4.13.4 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: .

3.4.13.5 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 26) the user.
4. Click the relevant user/user group.
5. Click History (page 52) 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.

3.4.13.6 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**. Use the filter to limit the list of users based on specific search criteria.
4. Click **Edit association**. The **Associate users** dialog opens.

   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 assigned items. To remove items from the **Assigned items** box, enable the check boxes of the relevant items in this box, and click **Remove**.
5. Click **OK**.

The users associated to the user group have been changed.

Tip

To assign all available items, click **Add all**, and click **Remove all** to remove all assignments.

3.4.13.7 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**.

3.4.13.8 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.

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 **Delete all**. The **Confirmation** dialog opens.
4. Click **OK**.

All users and user groups are deleted except for the default users system (page 45), superuser (page 46), arisservice (page 46), and guest (page 46).

3.4.14 Assign privileges and profiles

3.4.14.1 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 assigned 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 assign all available items, click **Add all**, and click **Remove all** to remove all assignments.

3.4.14.2 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 distribution is activated in ARIS Administration.

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 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.

3.4.14.3 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.
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 >** **Contribute**. 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 >** **Contribute**. 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.

3.4.14.4 Assign a profile to a user group

Assign the relevant profile (page 9) in order to enable a profile based view of the portal. Depending on the profile, users have access to different content and functionalities. Profiles are applied in addition to the function (page 47) and license (page 49) privileges.

Prerequisite

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 > <profilexy>**. 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 > <profilexy>**. Only one profile can be active at a time.

3.4.15 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.

3.4.15.1 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 >** **Contribute**.
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.

3.4.15.2 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 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.

3.4.16 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.

3.4.16.1 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 are transferred from the LDAP system according to the selected options.

3.4.16.2 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.

3.4.17 Manage user data

You can backup and restore management data, export user statistics and generate reports (page 54) about users, user groups, privileges, licenses, assignments, etc.

3.4.17.1 Back up user management data

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

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.

3.4.17.2 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 dialog opens.
4. Select the backup file.
5. Enter the password to open the file.
6. Click Start.

The user management data is restored.

3.4.17.3 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 414).

Procedure

1. Click **User management**. The list of users is displayed.
2. Click **Additional functions**.
3. Click **Export user statistics**. The 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.

3.4.17.4 Generate report

Generate reports (page 54) 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 dialog opens.
4. Select the relevant report.
5. Select the output format.
6. Click Start.
7. Click **OK**.

The relevant report is output as an Excel file.

3.4.18 Valuable information

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

3.4.18.1 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)

3.4.18.2 What is the 'system' user?

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

You can create (page 22) additional system users. Alternatively, an existing **system** user can be copied. Having more than one system user can avoid problems if, e. g., one system user has forgotten his password.

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. By default, the **system** user has the following function privileges:

- ARCM administrator
- ARIS Connect administrator
- Analysis administrator
- Collaboration administrator
- Configuration administrator
- Dashboard administrator
- Database administrator
- Document administrator
- License administrator
- Portal administrator
- Process Governance administrator
- PPM user
- Publisher administrator
- Publishing administrator
- Script administrator
- Server administrator
- Technical configuration administrator
- UML Viewer
- User administrator

3.4.18.3 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 activate this function privilege for other users. The **superuser** user does not use up a license. The **superuser** user manages 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. You can change all user data except for the user name.

3.4.18.4 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.

3.4.18.5 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 (http://softwareag.com/licenses)).

3.4.18.6 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, i.e., 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.

3.4.18.7 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 35) 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 a tenant's analysis database. 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, and be the moderator for posts users flagged as inappropriate.

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, e.g., ARIS filters, templates, and XML structures.

Dashboard administrator

Create and manage visual content in ARIS Connect, e.g., dashboards.

Database administrator

Manage tenant databases. System user (page 45) 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 (e.g., 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)

3.4.18.8 What license privileges can be assigned?

License privileges provide users with specific products and components. You can assign (page 35) 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.

- **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 Connect Viewer

View ARIS Connect content.

- **Contribution**

  View and add ARIS Connect content.

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 ARIS Process Board, and edit content in IT Inventory.

ARIS Cloud Advanced Administration

Manage databases.

ARIS Cloud Basic Viewer

View ARIS Cloud content.

ARIS Cloud Basic Designer

Create models.

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.

3.4.18.9 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

3.4.18.10 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 38) manually in the user management (**Change password**).

GENERATE PASSWORD

Alternatively, a password can be generated (page 38) 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.

3.4.18.11 Which reports exist?

You can generate the following reports as Excel files.

ACTIVE USER SESSIONS

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

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.

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.

3.5 Manage documents

3.5.1 Log in to ARIS document storage

Before you can use ARIS document storage, you must log in to ARIS Connect.

Prerequisite

You have an ARIS Server license.

Procedure

1. If you use ARIS Connect, enter the URL for ARIS Connect in the following form:

   `<Your ARIS Connect server>`
2. Log in.
3. Click **Documents**.

You can now work with ARIS document storage.

3.5.2 Display charts for documents

You can display various charts for documents.

Prerequisite

You have the **Technical configuration** 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.

3.5.3 Configure jobs for ARIS document storage

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

Procedure

1. Click **Configuration**.
2. Click **Document storage**.
3. Find the string **com.idsscheer.aris.ads.batch.fire** and enter the time at which a lock should be automatically removed - e.g., **0 0 2 * * ?**, if a job is supposed to run every night at 2:00 a.m.

   The time in the strings must be a CRON expression.

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

3.5.4 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. Close the registration 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. Restart Microsoft® Windows.

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

3.5.5 Log out of ARIS document storage

You can log out of ARIS document storage.

Procedure

Click **Log out**.

The entire ARIS Administration closes.

3.5.6 Use metadata

Metadata can be used to classify documents and is displayed in the properties (page 58) of a document.

3.5.6.1 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 58) of a document.

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. Click **ARIS document storage**.
3. Click the arrow to open the menu.
4. Click **Open properties**. The properties (page 73) 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.

3.5.6.2 Delete custom metadata

You can delete custom metadata.

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. Click **ARIS document storage**.
3. Click the arrow to open the menu.
4. Click ARIS document storage, and click the arrow to open the menu.
5. Click **Open properties**. The properties (page 73) of the folder are displayed.
6. Click **Attribute types**.
7. Select the custom attribute type to be deleted and click **Delete**.

You have deleted custom metadata.

3.5.6.3 Display document properties

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

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Open properties**.

The properties of the document are displayed.

3.5.6.4 Edit document properties

You can edit the properties of a document.

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Open properties**.
6. Click **Edit >** **Contribute**.

You have edited the properties of the document.

3.5.6.5 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. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Open properties**.
6. Click **Edit >** **Contribute**.
7. Enter a new tag and click **Add**.

You have edited the tags of the document.

3.5.6.6 Delete tags of a document

You can delete the tags of a document.

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Open properties**.
6. Click **Edit >** **Contribute**.
7. Enter a new tag and click **Delete**.

You have deleted a tag.

3.5.7 Use folders

The folder structure of ARIS document storage provides a better overview, and the possibility to specify access privileges (page 61).

3.5.7.1 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. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the arrow to open the menu.
5. Click **Add folder**.
6. Enter a name for the folder, and click **OK**.

You have created a new folder.

3.5.7.2 Display folder properties

You can view 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. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder, and click the arrow to open the menu.
4. Click **Properties**.

The properties (page 73) of the folder are displayed.

3.5.7.3 Edit folder properties

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. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder, and click the arrow to open the menu.
4. Click **Properties**. The properties (page 73) of the folder are displayed.
5. Click **Edit >** **Contribute**.

You can edit the properties (page 73) of the folder.

3.5.7.4 Restrict access to 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.

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

Prerequisite

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

Procedure

1. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder, and click the arrow to open the menu.
4. Click **Properties**.
5. Click **Access privileges** (page 73).
6. Click **Change user group association**. The **Associate user groups** (page 73) dialog opens.
7. 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 assigned items. To remove items from the **Assigned items** box, enable the check boxes of the relevant items in this box, and click **Remove**.
8. Click **Save**.

You have restricted the access to ARIS document storage folders.

3.5.7.5 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. Open ARIS document storage (page 55).
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the arrow to open the menu.
5. Click **Delete**. The **Confirmation** dialog opens.
6. Click **OK**.

You have deleted the folder.

3.5.8 Valuable information

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

3.5.8.1 What are permanent documents?

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

You can set up (page 61) 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 63).

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.

3.5.8.2 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 534) 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.

3.5.8.3 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 Model Editor. 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 the ARIS Connect Model Editor. This is marked by the or link symbols.

3.5.8.4 Which external document management systems can you use?

Only one external document management system may be used. This is where permanent documents (page 63) are managed. The storage for temporary documents (page 63) is not affected by this.

- Available is Microsoft® SharePoint 2013

3.5.8.5 What is the folder Dashboarding?

Data collected by scheduled reports (page 64) which are the basis for data feeds 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 to restrict the access (page 61) to the **Dashboarding** folder and all its subfolders to the user which is configured in the the URL alias (page 100).

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

You find at least the following folders under 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 624)

Under United Motor Group

- CoE - containing the dashboard data for Center of Excellence (page 604)
- CXM - containing the dashboard data for Customer Experience (page 614)
- EA - containing the dashboard data for Enterprise Architecture (page 628)
- Exported Tables - containing the dashboard data for meta data, e.g., the person responsible for a process.
- Piwik - containing the dashboard data of the **United Motor Group** database collected by Piwik (page 624)

3.5.8.6 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.

3.5.8.7 What charts are available for documents?

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

This chart just 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.

3.5.8.7.2 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.

3.5.8.7.3 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.

3.5.8.7.4 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.

3.5.8.7.5 What does the 'Largest documents' chart show?

This chart is a bar chart.

It shows the 20 largest documents including their file size.

3.5.8.7.6 What does the 'Latest documents' chart show?

This chart is a simple list.

This chart shows the 15 latest documents.

3.5.8.7.7 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**.

3.5.8.7.8 What does the 'Outdated documents' chart show?

This chart is a simple list.

This chart shows the 15 oldest documents.

3.5.9 What pages are there in ARIS document storage?

3.5.9.1 'Add attribute type' page

Enables the definition of custom metadata for documents saved in ARIS document storage.

Type
Specifies the type of the attribute.

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

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

Add
Adds a value to the list of allowed values for an attribute of type **Value**.

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

3.5.9.2 'Associate user groups' page

Restricts folder access privileges to the user groups associated.

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.

AVAILABLE USER GROUPS

User group name
Displays the name of the user group.

Add
Adds the selected user group to the list of selected user groups.

Add all
Adds all user groups displayed to the list of selected user groups.

Remove
Removes the selected user group from the list of selected user groups.

Remove all
Removes all user groups from the list of selected user groups.

SELECTED USER GROUPS

User group name
Displays the name of the user group.

Save
Saves the settings specified.

Cancel
Discards the settings and closes the dialog.

3.5.9.3 'Select person responsible' page

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.

3.5.9.4 '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.

3.5.9.5 '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 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.

3.5.9.6 'Associate user groups' page

Displays the access privileges for a folder in ARIS document storage.

Associated user groups
Shows the user groups with access to the selected folder in ARIS document storage.

3.5.9.7 'Document details' page

Displays document properties.

DOCUMENT DETAILS

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.

Person responsible
Shows the name of the owner of this document.

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.

Link
Displays the link to the physical location.

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

Add tags
Input field for new tags. These are transferred when you click the plus sign.

3.5.9.8 'Document versions' page

Displays the list of document versions.

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
Displays the change date of the respective document version.

Changed by
Displays who edited this version of the document.

Comment
Comment that was entered during the upload of a new version of the document.

3.5.9.9 'Select folder' page

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.

3.5.9.10 'Folder details' page

Displays the properties of a folder.

DETAILS

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.

Access privileges
Shows who has access privileges for a specific folder.

3.5.9.11 'Select tags' page

From the available tags, 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 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.

3.5.9.12 'Access privileges' page

Displays the properties of a folder in ARIS document storage.

Pass on access privileges to all subfolders
Activates the function based on which the privileges defined for a folder also apply to its subordinate folder.

Add
Allows the users of the selected user groups to access this folder from ARIS document storage.

Add all
Allows access to the selected folder for the users of all user groups.

Remove
Removes the access privilege for the users of the selected user group for this folder in ARIS document storage.

Remove all
Removes the access privileges for all user groups.

Save
Saves the access privileges for the user groups.

Cancel
Discards all changes to settings.

3.5.9.13 'Versions' page

Displays the versions of a document.

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.

3.5.9.14 'Relationships' page

Displays the relationships of a document.

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.

3.5.9.15 'History' page

Displays the history of a document.

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, e.g., an update of the document relationship or a change to a document's metadata.

Details

Shows the event in detail.

3.6 Administrate automated processes

Process administration (page 91) in ARIS Connect provides information and functions pertaining to automated processes.

ARIS video tutorial

3.6.1 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 90) function privilege.

Procedure

1. Open (page 91) **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.

3.6.2 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 91) **Process administration** in ARIS Connect.
2. Click **Human tasks**, **Instances**, or **Console**, or got to **Processes** and click the process instance and then **History**.
3. Click **Export as a CSV file** in the navigation bar. The dialog opens.
4. Select the output options.
5. Click **Export**.

The content is exported as a CSV file.

3.6.3 Send reminder about executing human tasks

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

Procedure

1. Open (page 91) **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 98) is notified. Statistics data in the form of charts (page 99) for human tasks are available under **Charts > Governance > Human tasks**.

ARIS video tutorial

Process administration overview (http://www.ariscommunity.com/videos/process-administration-aris-connect-overview) (approx. 3 minutes)

3.6.4 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 91) **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 78) 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 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, the data is backed up and archived. The suspended process instance will not continue to run until **Resume** is selected.

3.6.5 Resume execution of a process instance

You can resume the execution of a process instance that was previously suspended (page 77).

Procedure

1. Open (page 91) **Process administration** in ARIS Connect.
2. Click the relevant process instance under **Processes**.
3. Click **Resume**.

The execution of the process instance is resumed.

3.6.6 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 91) **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.

3.6.7 Suspend recurrence for the executable process

You can suspend the recurrence of an executable process.

Procedure

1. Open (page 91) **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 79) 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 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, the data is backed up and archived. The suspended process instance will not continue to run until **Resume** is selected.

3.6.8 Resume recurrence for the executable process

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

Procedure

1. Open (page 91) **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.

3.6.9 Delete executable process

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

Warning

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 91) **Process administration** in ARIS Connect.
2. Under **Processes**, click the process, process version, or process instance.
3. Click **Delete**.

The selected item is deactivated.

3.6.10 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 90) function privilege.

Procedure

1. Open (page 91) **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.

3.6.11 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 90) in ARIS Connect for this purpose. If problems occur during process execution, e.g., 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

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

You can display a list of process instances in their various statuses (page 96). You can check if process instances failed so that you can correct (page 84) and restart them, if required.

Procedure

1. Open (page 91) **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**. 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 select **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)

3.6.11.2 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 91) **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 83).

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)

3.6.11.3 Restart activities with status FAILED

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

Procedure

1. Open (page 91) **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 83) 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)

3.6.11.4 Skip activities with status 'Failed'

If a restart (page 82) is impossible, you can skip failed activities. You are notified by e-mail if an activity failed.

Procedure

1. Open (page 91) **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)

3.6.11.5 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 91) **Process administration** in ARIS Connect.
2. Click **Instances**.
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)

3.6.12 Display information

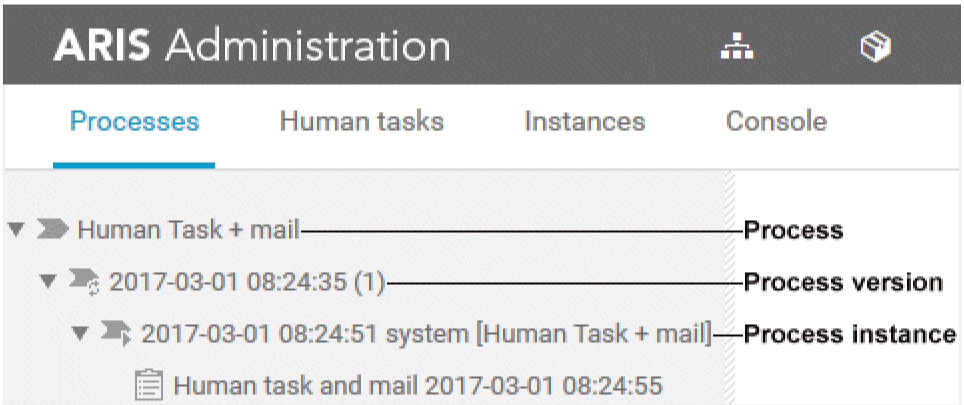
Process administration in ARIS Connect (**ARIS Administration > Process administration**) provides functions (page 90) for process automation and information about executable processes.

3.6.12.1 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 93), Context (page 93), History (page 94), Activities (page 95), Console (page 93), Assignments (page 93)).

Procedure

1. Open (page 91) **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 99) for Governance processes are available under **Charts > Governance > Processes**.

ARIS video tutorial

Process administration overview (http://www.ariscommunity.com/videos/process-administration-aris-connect-overview) (approx. 3 minutes)

3.6.12.2 Display information about activities

You can display details of an activity.

Procedure

1. Open (page 91) **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 data** or **Output data** to check the data. Additionally, you can click **Show details** to display the XML data.

The relevant details are displayed.

3.6.12.3 Display human tasks of a process instance

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

Procedure

1. Open (page 91) **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)

3.6.12.4 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 91) **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 97) is displayed as **Delegated**.

Statistics data in the form of charts (page 99) for human tasks are available under **Charts > Governance > Human tasks**.

ARIS video tutorial

Process administration overview (http://www.ariscommunity.com/videos/process-administration-aris-connect-overview) (approx. 3 minutes)

3.6.13 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.

3.6.13.1 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 91) **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 93) to display information about the status and progress of the simulated process instances.
5. To display simulation data for simulated activities, click History (page 94), 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 92). The simulated activities are selected in the **Simulated** column.
7. To display messages regarding the process instance, activate the Console (page 93) bar. The various process passes of the instance are displayed under the process instance, e.g., when an XOR operator is used in the process.

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

3.6.13.2 Share simulated process

You can release process versions that were created and checked by Process Governance Simulation, i.e., 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 91) **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.

3.6.13.3 Delete simulation runs

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

Prerequisite

You have the Process Governance administrator (page 90) function privilege.

Procedure

1. Open (page 91) **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.

3.6.14 Valuable information

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

3.6.14.1 What tasks does the Process Governance administrator perform?

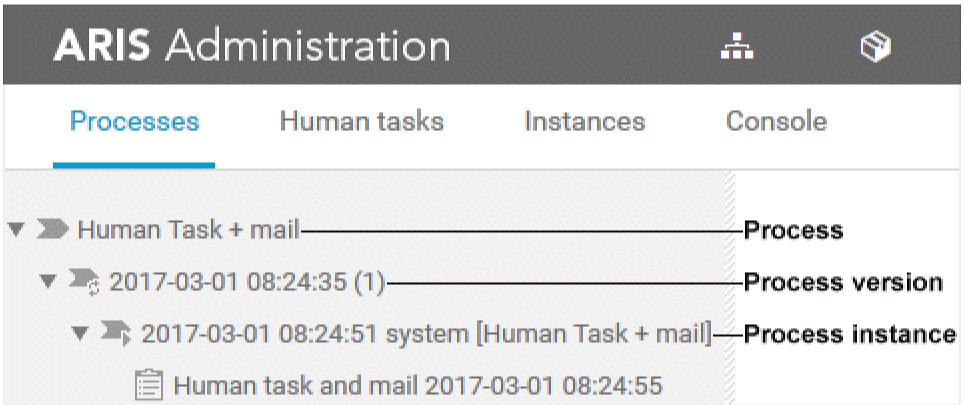
The Process Governance administrator manages (page 91) the processes. Process administration in ARIS Connect provides process automation functions and supplies information on processes. Depending on whether a process, process version, or process instance is selected, various functions and tabs are available:

- Start (page 76) governance processes in process administration, e.g., older versions of the process.
- Deactivate (page 79) executable processes.
- Restart (page 82) activities in the status **FAILED**.
- Suspend (page 77) the execution of process instances.
- Resume (page 78) the execution of process instances that were previously suspended.
- Terminate (page 78) the execution of process instances if, for example, the executable process is no longer relevant.
- Configure recurrences for an executable process.
- Suspend (page 78) the recurrence of an executable process
- Resume (page 79) 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 93) bar also at the process level.
- View all tasks of other users in ARIS Process Board.

Statistics data in the form of charts (page 99) for Governance processes are available under **Charts > Governance > Processes**.

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

Process administration in ARIS Connect (**ARIS Administration > Process administration**) provides functions (page 90) for process automation and information about executable processes. Executable processes, process versions, process instances, and human tasks are displayed under **Processes**.



EXECUTABLE PROCESS

You can delete (page 79) the executable process including all versions and instances.

PROCESS VERSION

You can start (page 76) the governance process or delete (page 79) the process version. If a recurrence is configured, you can suspend (page 78) the recurrence of the process. You can transform (release (page 88)) simulated processes into a normal process.

PROCESS INSTANCE

You can display (page 86) associated tasks, and suspend (page 77), resume (page 78), terminate (page 78), or delete (page 79) 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 93) view.

HUMAN TASK

You can send (page 77) a reminder to the executors of the tasks.

NAVIGATION BARS

Use the navigation bars to display human tasks (page 92), instances (page 92), the console (page 93), details (page 93), context (page 93), history (page 94), and activities (page 95).

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)

3.6.14.3 What functions/information does the overview of humans tasks provide?

The human tasks of all executable processes are displayed. Use **filters** to restrict the number of process instances displayed according to various criteria. You can sort the table by different columns, e.g., by status. You can export the data as a CSV file ().

You can display/delegate (page 87) the assigned executor or send (page 77) 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 select **Display process instance** or **Display process version**.

Statistics data in the form of charts (page 99) for human tasks are available under **Charts > Governance > Human tasks**.

3.6.14.4 What functions/information does instance monitoring provide?

It provides an overview of the process instances and their various statuses (page 96). Use **filters** to restrict the number of process instances displayed according to various criteria. You can sort the table by different columns, e.g., by status. You can export the data as a CSV file ().

You can check if process instances failed so that you can correct (page 84) and restart them, if required.

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

Statistics data in the form of charts (page 99) for Governance processes are available under **Charts > Governance > Processes**.

3.6.14.5 What functions/information does the 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 ().

3.6.14.6 What functions/information do the details provide?

Details (page 85) 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**).

3.6.14.7 What functions/information does the context provide?

The context 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 (e.g., 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 91) for process administration and in instance monitoring (page 92).

3.6.14.8 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.

3.6.14.9 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.

3.6.14.10 You have activated 'History'.

History is displayed if you have selected a process instance of an executable process. The tab lists activities run by process instances. If an entry contains a process instance with the **Failed** status, the activity can be restarted (page 82) 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 data** or **Output data** to check the data. Additionally, you can click **Show details** to display the XML data.

3.6.14.11 What functions/information does the overview of 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 83) an activity, move the mouse pointer over the relevant row, and click **Skip activity**.

3.6.14.12 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.

3.6.14.13 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).

3.6.14.14 What is the context for executable processes?

The execution context determines from which items (database, group, model/object type, document), in which applications (e.g., 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.

3.6.14.15 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.

3.6.14.16 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.

3.6.14.17 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 77) 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 78) 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 84) 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.

3.6.14.18 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 has been reset.

- **In process**

  The task has been 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, i.e., 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 ARIS Process Board 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 has been 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.

- **Delegated**

  Editing of the task was passed on permanently 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.

3.6.14.19 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.

3.7 Use charts

Charts represent accumulated statistics data graphically.

3.7.1 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 414). Only the **Users > License usage** chart is displayed regardless of this activation.

Procedure

6. Click **Charts**.
7. 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 42) 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.

3.7.2 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.

3.8 Administrate dashboards (ARIS Aware)

Using ARIS Aware in ARIS Connect you combine information from many sources and visualize data as KPIs in charts on dashboards. ARIS Aware supports users in different departments across the enterprise with dashboards for evaluating a wide variety of data. It improves the transparency of the business and allows you to make the best decisions based on reliable data analytics. 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 604), Business Usage Monitoring (page 624), Enterprise Architecture Management (page 628), Customer Experience Management (CXM) (page 614), Process Performance Management and Governance, Risk and Compliance Management. These templates can be extended and customized according to the individual needs of a company.

3.8.1 Configure dashboards

Specify a URL alias of the server where data for dashboards and data feeds are stored. You can specify a URL alias of the Process Performance Manager server as well.

3.8.1.1 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.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **Dashboards**.
5. Select **URL_ALIAS** from the list.
6. Click Add. The **Add property** dialog opens.
7. Enter a fully-qualified host name (FQHN). 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 the fully-qualified host name and the port of the server to be used.
10. Enter user name and password of the user who is supposed to have access to the data.
11. Click **Save**.

The alias URL is defined.

If you define your own data feeds, this alias URL can be used.

3.8.1.2 Edit an alias of the ARIS Server

Edit an alias of the ARIS Server where data for dashboards and feeds are stored.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **Dashboards**.
5. Move the mouse pointer to the item you want to change.
6. Click **Edit**.
7. The **Edit property** dialog opens.
8. Enter your changes.
9. Click **Save**.

You have edited the alias of the ARIS Server where data for feeds are stored.

3.8.1.3 Delete an alias of the ARIS Server

You can delete an alias of the ARIS Server where data for dashboards and feeds are stored.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **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 for data of dashboards and feeds is deleted without prompting for confirmation.

3.8.1.4 Add an alias for a PPM server

You can specify an alias of a Process Performance Manager server.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **Dashboards**.
5. Select **PPM_CONNECTIONS** from the list.
6. Click Add. The **Add property** dialog opens.
7. Enter a fully-qualified host name (FQHN).
8. Enter the protocol (http or https) to be used for the communication.
9. Enter the fully-qualified host name and the port of the server to be used.
10. 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.
11. Click **Save**.

You have specified an alias of your Process Performance Manager server.

3.8.1.5 Edit alias of a PPM server

You can edit the alias of your Process Performance Manager server.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **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. The **Edit property** dialog opens.

7. Enter your changes.
8. Click **Save**.

You have edited the alias of your Process Performance Manager server.

3.8.1.6 Delete an alias of a PPM server

You can delete an alias of the Process Performance Manager server.

Prerequisite

- You have the **Dashboard administrator** function privilege.
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **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.

The selected alias of the Process Performance Manager server is deleted without prompting for confirmation.

3.8.1.7 Make default dashboards available

This procedure explains how to restore default ARIS Aware content in ARIS Connect.

Prerequisites

- Your ARIS Server is enabled for ARIS Aware (see **ARIS Server Installation Guide** or **ARIS Cloud Controller (ACC) Command-Line Tool** on DVD, ARIS Download Center (aris.softwareag.com) or Empower (https://empower.softwareag.com/)).
- A valid server license of the **YCSAW** type is available in ARIS Administration.
- You have access to the ARIS installation DVD.

Procedure

1. Extract the **Documents** archive (ARIS installation DVD\Content\ARISAware) to a target directory, e.g.: **C:/ARIS 10/Dashboarding**. This archive contains all required documents used by the default data feeds. You can either generate the documents in ARIS Architect or import the default ARIS document storage documents via bulk import:
2. Open a DOS prompt for the ..ARIS installation path\server\bin\work\work_adsadmin_s\tools**bin** folder, e. g.:

   C:\Windows\System32\cmd.exe /K "cd C:\SoftwareAG\ARIS10.0\server\bin\work\work_adsadmin_s\tools\bin"

3. Enter, e.g.:

   y-admintool.bat bulkimport -u system -p manager -path "c:\ARIS 10\Dashboarding"

   exit

4. Check the message for 148 imported files in 10 folders.
5. Copy the **Dashboards_Feeds.acb** file from the ARIS installation DVD to a target directory, e.g.: **C:/ARIS 10/Dashboarding/backup**. This is a tenant backup archive of the **default** tenant.
6. Restore the default tenant from this target directory using ARIS Cloud Controller (ACC).

   Warning

   This will delete all current data of the **default** tenant. To prevent the loss of data, first backup the current tenant or single databases before proceeding to the next step.

7. Start ACC.

   To start ACC under a Windows operating system click **Start > All Programs > ARIS > Administration > Start ARIS Cloud Controller**. If you have changed agent user credentials you must enter the password.

   To start ACC under a Linux operating system, execute the **acc.sh** shell script instead. ACC is available if you have copied and installed the **aris-acc-<number>** rpm file depending on the Linux operating system.- Restore tenant backup via ARIS 10.0 Cloud Controller.

8. Enter, e.g.,:

   restore tenant default from "C:/ARIS 10/Dashboarding/backup/Dashboards_Feeds.acb"

9. In ARIS Connect publish the **United Motor Group** database (page 282) using the **default** configuration set.
10. Add an alias URL for dashboards (page 100). You must add the alias **Feed URL**. The exact spelling is mandatory. Otherwise default dashboards cannot be displayed.

All default dashboards, data feeds and documents (page 55) are available in ARIS Connect.

It is a good idea to check the content (page 105) within the ARIS Connect repository.

3.8.1.8 Check default data feeds for issues

You can open a data feed available in ARIS Connect. The data feed is opened in the data feed editor.

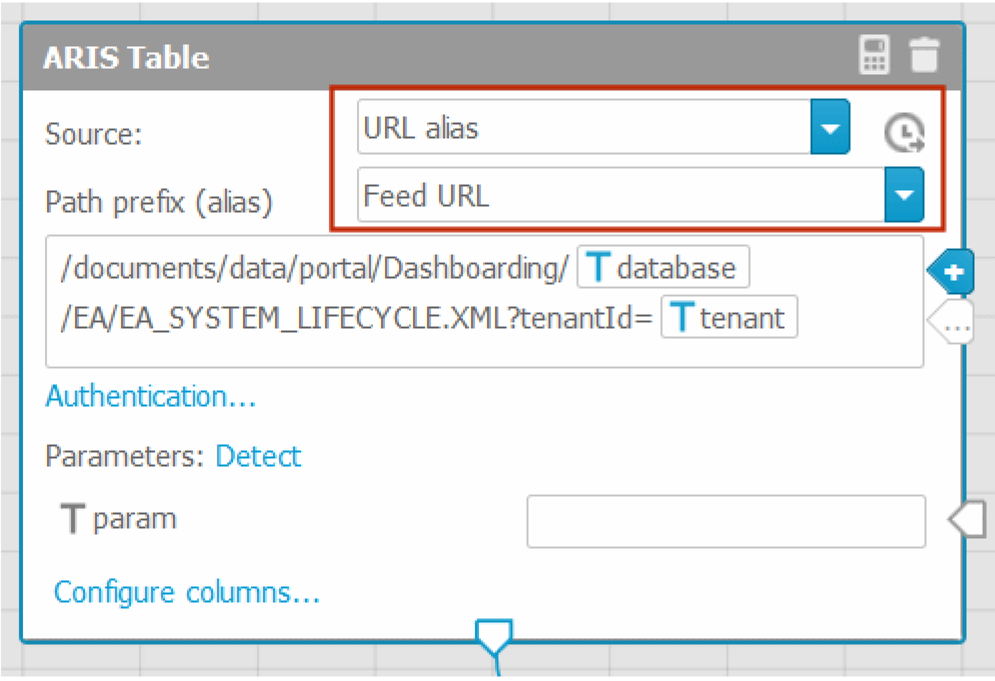
The dashboards available and the relevant data feeds are provided in the ARIS Connect **Repository** ().

Prerequisite

- You have the **Dashboard administrator** function privilege.
- The **Feed URL** alias URL is defined (page 100).
- The default ARIS Aware dashboards are available (page 103).

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Data feeds**. The default data feeds are displayed.
5. Click a data feed name. The data feed is opened in the data feed editor.



   The data feed selected is opened in the data feed editor. The data feed will work properly if the **Feed URL** is in use. If the Path prefix (alias) field shows a red frame, the alias URL has not been created as required (page 100).

6. Click **Calculate preview**. If data is shown in the **Calculation result of operator ARIS Table** section, the default data feeds work properly.

If the data feeds work, all default dashboards can be displayed in ARIS Connect (page 577). In case of errors check whether the prerequisites specified are met.

3.8.2 Manage dashboards and data feeds

3.8.2.1 Open a dashboard in ARIS Connect

You can open a dashboard available in ARIS Connect. The dashboard is displayed in view mode of the dashboard editor.

The dashboards and the relevant data feeds are provided in the ARIS Connect **Repository** ().

Prerequisite

- You have the **View** permission for the dashboard. See Manage dashboard permissions (page 118) for details.
- You have the **View** permission for the assigned data feeds. See Manage data feed permissions (page 164) for detail.

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Dashboards**.
5. To open a dashboard click the relevant dashboard name.

The dashboard selected is opened in view mode of the dashboard editor.

In edit mode you can edit the dashboard (page 112) currently opened, provided you have the **Dashboard administrator** function privilege. Click the **Edit dashboard** icon in the main menu.

3.8.2.2 Create a dashboard in ARIS Connect

ARIS Connect enables you to create your own dashboards (page 250).

By default, dashboards and the relevant data feeds are provided in the ARIS Connect Repository ().

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Dashboards**.
5. Click New.

   The dashboard editor is opened in edit mode.
6. Configure and save your dashboard by using the dashboard editor (page 112).
7. Click **Refresh**.

Your dashboard is created and available in the **Dashboards** list in the ARIS Connect Repository ().

3.8.2.3 Open a data feed in ARIS Connect

You can open a data feed available in ARIS Connect. The data feed is opened in the data feed editor.

The dashboards available and the relevant data feeds are provided in the ARIS Connect **Repository** ().

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Data feeds**.
5. To open a data feed click the relevant data feed name.

The data feed selected is opened in the data feed editor.

By using the data feed editor (page 159) you can edit the data feed currently opened, provided you have the **Dashboard administrator** function privilege.

3.8.2.4 Create a data feed in ARIS Connect

ARIS Connect enables you to create your own data feeds (page 250).

By default, dashboards available and the relevant data feeds are provided in the ARIS Connect Repository ( ).

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Data feeds**.
5. Click New.

   The data feed editor is opened.
6. Configure and save your data feeds by using the data feed editor (page 159).
7. Click **Refresh**.

Your data feed is created and available in the **Data feeds** list in the ARIS Connect Repository ( ).

3.8.2.5 Using dashboard editor

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, edit and manage your dashboards. The view mode enables 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 118) for details.

3.8.2.5.1 Use dashboards in view mode

The view mode of the dashboard editor enables you to display and to use your dashboards interactively.

To use a dashboard in view mode you need the **View** permission for the dashboard. See Manage dashboard permissions (page 118) for details.

3.8.2.5.1.1 Display a dashboard in view mode

You can switch from the edit mode to the view mode of the dashboard editor. Your currently opened dashboards will be displayed with actual data in the view mode.

Procedure

1. Create (page 111) or open (page 111) a dashboard in the edit mode of the dashboard editor.
2. Click the **View dashboard** icon in the dashboard editor main menu.

The dashboard is displayed with actual data in the view mode of the dashboard editor.

To switch from view mode to the edit mode click the **Edit dashboard** icon in the main menu.

3.8.2.5.1.2 Use interactive filters in dashboards

You can use interactive filters for charts and tables, if the relevant filter conditions have been defined for these dashboard components. You can set a filter by clicking a data element of a component, e.g., a data point in a line chart. The selected data element of this component takes effect as a filter for all associated components.

Procedure

1. Display a dashboard in the dashboard view mode. (Seite 109)
2. Click a data element of a dashboard component, e.g., a coordinate of a line chart or a cell in a table.

   The selected data element is applied as a filter to all associated components.
3. Click the **Menu** icon > **Delete selection** to remove the filter set.

The dashboard components are displayed with the filters selected.

You can define filters for specific dashboard components. See Define filters for dashboard components (Seite 147).

3.8.2.5.1.3 Refresh data of dashboard components

You can manually refresh the data currently displayed in a dashboard component.

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 30 sec. You can set the **Refresh rate** in the Assign data (Seite 121) dialog.

The usage of the manual **Refresh** option is independent of the **Auto Refresh** function.

Procedure

1. Display a dashboard in the dashboard view mode. (Seite 109)
2. Click a dashboard component.
3. Click the **Menu** icon > **Refresh**.

The dashboard components are displayed with the refreshed data.

Most of the dashboard components provide the **Auto refresh** option. Use this option to activate the automatic data retrieval for a component. 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 component properties. To display the properties dialog in dashboard edit mode () click an inserted component.

3.8.2.5.1.4 Change column width and sort order

In the dashboard view mode you can change the initial table column width and sort order of a **Grid** component.

Procedure

1. Display a dashboard in dashboard view mode. (Seite 109)
2. Click a table column header of an inserted **Grid** component.

   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 on the required column headings. In this case the rows are sorted by the first column.
3. To adapt the column width drag the column borders with the mouse.

The table is displayed according to your configuration.

3.8.2.5.2 Manage dashboards

You can manage your dashboards in edit mode of the dashboard editor.

3.8.2.5.2.1 Open a dashboard in dashboard editor

You can open a dashboard available in edit mode of the dashboard editor.

Procedure

1. Click **Manage** > **Open** in edit mode of the dashboard editor main menu.
2. Select an **Available dashboard**.

   In the dialog opened you can also search a dashboard using your keyboard.
3. Click **OK**.

The dashboard selected is opened in the dashboard editor.

3.8.2.5.2.2 Create a dashboard in dashboard editor

By using the edit mode of the dashboard editor you can create and configure your dashboards.

Procedure

1. In the dashboard edit mode click **Manage** > **Create dashboard** in the dashboard main menu.

   A new dashboard is opened.
2. Configure your dashboard.
3. Click **Manage** > **Save** in the dashboard main menu. The dashboard **Properties** dialog is displayed.
4. Enter a dashboard name in the **Name** box.
5. Enter an optional dashboard description in the **Description** box.
6. Enter optional comma-separated search tags in the **Tags** box. The search tags are used to find your dashboard using the search function.
7. Click **OK**.

Your changes are applied.

You can also Edit dashboard properties (Seite 117) later.

To display the dashboard in the view mode click the **View dashboard** icon in the main menu.

3.8.2.5.2.3 Using the smart dashboard edit mode

The edit mode of the dashboard editor gives you an easy graphic way to create, manage and edit your dashboards.

The edit mode provides two different dashboard work spaces, a smart dashboard and a fixed grid dashboard.

In contrast to a fixed grid dashboard the size of a smart dashboard is automatically adapted to the screen resolutions in the dashboard view mode. Depending on the available space, components are stretched or shrinked. In case there is not enough space available components are also re-positioned automatically. See Use dashboards in view mode (page 109) for details.

The smart dashboard work space is displayed by default when you create a new dashboard (page 111) or when you open a smart dashboard available.

The work space is divided in three rows and 12 columns where you can place your dashboard components (page 120).

3.8.2.5.2.3.1 Insert new row

You can insert a new row into the dashboard.

Procedure

1. Click a row on the smart dashboard work space.
2. Click **Insert row** in the properties dialog of the row.

A new line is inserted below the row selected.

3.8.2.5.2.3.2 Delete a row

You can delete a row in the dashboard.

Procedure

1. Click a row on the smart dashboard work space.
2. Click the **Delete** icon in the properties dialog of the row.

The row is deleted.

3.8.2.5.2.3.3 Resize a row

You can change the height of a row.

Procedure

1. Move the cursor to the lower border of a row.

   The cursor will change to a resize symbol.
2. Click and drag the row border with your mouse.

   The height of all components inserted in the row are resized automatically.

The row height is resized.

3.8.2.5.2.3.4 Lock row height

You can lock the row height set in the dashboard work space.

By default, the row height is adapted dynamically to the screen resolution in the dashboard view mode and therefore the size of the components inserted is adapted as well. If you lock the row height the component size is also fixed.

Procedure

1. Click a row on the work space.
2. Activate the **Lock height** option in the properties dialog of the row.

The row height is fixed.

3.8.2.5.2.3.5 Change a row order

You can change the row order on the smart dashboard.

Procedure

1. Click a row on the work space.
2. Move the row selected up or down via drag and drop

The row order is changed.

3.8.2.5.2.3.6 Place a dashboard component

You can place a component in any free field on the dashboard work space.

Procedure

1. Click a component inserted on the dashboard work space.
2. Move the component selected via drag and drop and place it in a free field on the dashboard.

   You can not place more than one component in one field.

The component is placed in a free field.

3.8.2.5.2.3.7 Resize dashboard components

You can scale up or down the size of dashboard components.

Procedure

1. Click a component inserted in the dashboard. The component is displayed with a frame.
2. Resize the component width by dragging the anchor point of the frame with your mouse pointer.

   A component width can be resized across multiple free fields.
3. Resize the component height by resizing the height of the row where the component is inserted. To resize the row height drag the upper or lower row border by your mouse pointer.

   The height of all components inserted in the same row are resized automatically.

The selected components are resized.

3.8.2.5.2.3.8 Avoid line break in dashboard view mode

You can avoid the automatic line break of the dashboard components if there is not enough space available in the dashboard view mode.

Procedure

1. Click a row on the work space.
2. Activate the **Do not break** option in the properties dialog of the row.

In view mode the components will be shrunk and kept in the same row.

3.8.2.5.2.3.9 Group components

By using the **Layout group** you are able to group components in the dashboard.

The **Layout group** () consists of two rows and 12 columns. Grouped components can be handled as one single component. You can insert, move, resize, or copy a layout group analogous to any dashboard component. The **Layout group** is available in the dashboard component bar.

Procedure

1. Insert the **Layout group** into the dashboard via drag and drop. See Insert components in a dashboard (freeform_insertComponent.html#task_ykn_xbj_gr).
2. Resize the layout group. See Resize dashboard components (freeform_resizeComp.html#task_nnt_prp_3r).
3. Insert dashboard components in the layout group.

The layout group is placed on the dashboard.

Use the selection mode if a layout group is overlapping its host cells completely and the underlying row and cells cannot be selected. Click **Options** > **Selection mode ON** in the dashboard main menu.

3.8.2.5.2.3.10 Set row style

You can change the style applied to a single row. The style selected sets, e.g., the background color of the row.

Procedure

1. Click a row on the work space.

   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.

The row style is set.

3.8.2.5.2.3.11 Set layout group style

You can change the style applied to a layout group. The style selected sets, e.g., 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.

3.8.2.5.2.3.12 Set dashboard tab style

You can change the style applied to a dashboard tab. The style selected sets, e.g., the background color of the tab.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) 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.

3.8.2.5.2.3.13 Switch to fixed grid work space

You can switch from the smart dashboard work space to the fixed grid work space.

You can only switch if you have not already inserted a dashboard component in the smart dashboard. And you can not switch from a fixed grid dashboard to a smart dashboard work space. A dashboard is automatically opened in the fixed grid work space if the dashboard has also been created by use of the fixed grid work space.

Procedure

4. Create a dashboard (page 111).
5. Click **Manage** > **Switch to fixed grid** in the dashboard main menu.

The fixed grid work space is displayed.

3.8.2.5.2.4 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 the smart dashboard mode or the fixed grid mode, see Using the smart dashboard edit mode (page 112) for details.

Procedure

1. In the dashboard edit mode click **Manage** > **Open** in the dashboard main menu.
2. Select an **Available dashboard** and click **OK**. The selected dashboard is opened in the edit mode of the dashboard editor.

   A warning message is displayed if local changes exist for the dashboard selected. To open the dashboard with the local changes you can 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.

3.8.2.5.2.5 Delete a dashboard

You can delete dashboards in the dashboard editor.

Warning

Deleted dashboards cannot be restored.

Procedure

1. Open a dashboard to be deleted. (page 116)
2. Click **Manage** > **Delete** in the dashboard main menu.
3. Click **Yes**.

The selected dashboard is deleted.

3.8.2.5.2.6 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 111) or open a dashboard (page 116) 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.

3.8.2.5.2.7 Manage dashboard permissions

You can manage dashboard permissions in the dashboard editor. You are able to 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.

You can assign the following access permissions for saved dashboards only.

- **Edit**

  Users are able to display and edit dashboards in the dashboard editor.

- **View**

  Users are able to view dashboards in the dashboard editor view mode.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) 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 group in the **Search results** box.
5. Drag a user or user group from the **Search result** field and drop it into the **Principals with permissions** box.

   By default, the creator of the dashboard already exists in the **Principals with permissions** list.
6. Activate or deactivate the **View** or **Edit** permissions of an user or user group.
7. Click **Save**.

Your changes are applied.

If you want to remove a user or user group from the Principals with permissions list click the Delete icon.

3.8.2.5.2.8 Change dashboard style template

You can assign a different style template to an available dashboard. By means of style templates you can customize the look and feel of your dashboards, e.g., colors schemes, fonts or background color.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) 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.

3.8.2.5.3 Configure dashboard components

You can configure the visualization and the behavior for all dashboard components. Additionally, you can assign data sources and set filters for most components.

Depending on the dashboard component type, e.g., line chart, grid, or image, different options are available.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted in the dashboard. The relevant component properties dialog is displayed.
3. Click the **Assign data** icon to edit the data source assignment. See Assign data sources to dashboard components (Seite 121) for details.
4. Click the **Configure filter** icon to specify filter conditions. See Define filters for dashboard components (Seite 147) for details.
5. Click the **Config** tab and set the component display options. See the list of Dashboard components (page 165) for details.
6. Specify **Actions** for the component, if required. See Specify actions for dashboard components (page 148) for details.
7. Specify **URL selections** for the component, if required. See Use dynamic URL selection (page 156) for details.

Your settings are applied.

3.8.2.5.3.1 Insert components into a dashboard

Using dashboard components you can create your individual dashboards and visualize interactively your source data. The dashboard editor provides you with various dashboard components, e.g., line, bar chart, speedometer chart, grid, or input field.

For a list with all dashboard components available and all parameters configurable, see Dashboard components (page 165) in the appendix.

Available dashboard components:

- Line Chart
- Column Chart
- Bar Chart
- Pie Chart
- Grid
- Circular gauge Chart
- Traffic Light
- Drop-down box
- Input field
- Image
- Label

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component icon in the dashboard component bar. The component selected is inserted as blank box in the dashboard and placed in the next free field. The relevant component properties dialog is displayed.

   Alternatively, place the component via drag and drop in any free field on the dashboard. The relevant component properties dialog is displayed.
3. Click the component inserted and place it in a free field on the dashboard per drag and drop.

The component selected is inserted and placed on the dashboard.

3.8.2.5.3.2 Assign data sources to dashboard components

To display content in a dashboard component you need to assign a data source to the component at first.

For several data sources, e.g., XML, JSON, or ARIS Table, you can define dynamical and reusable input parameters, see Create input parameters (page 143). For the **Input field** and **Image** components data sources are not required.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted in the dashboard. The relevant properties dialog is displayed.
3. Click the **Assign data** icon 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 component selected. The **Data flow** box shows an overview of the data source configuration.
4. Optionally, you can create input parameters for the selected component.

   Input parameters are dynamic and reusable parameters to be used in several data source operators and data transformation operators. See Create input parameters (page 143).
5. Select a data source operator in the **Add a data source** bar and specify your settings. See Data source operators (page 182) 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. Select a data transformation operator, e.g., **Change data type**, in the **Add data operations** bar and specify your settings.

   See Data transformation operators (page 199) for a list of available data transformation operators.
7. Click the **Calculate peview** icon of an operator to display a preview of the transformed source data of the operator. This enables 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 **Edit data source**.

The data source and transformation operators are assigned to the component selected.

To display data in a dashboard component (e.g., line chart) you have to assign the relevant data source columns to the component elements required. In the **Assign data (2/2)** dialog you are enabled to assign data source columns to the individual component elements. For example, you can assign separate columns to the chart axes as dimension (X-Axis) or KPI (Y-Axis).

3.8.2.5.3.2.1 Assign data columns to line, column or bar chart

To display data in a dashboard component (e.g., line chart) you have to assign the relevant data source columns to the component elements (e.g., x-axis) required.

In a line, column, and bar chart 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 dashboard component.
(freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a **Data column** as dimension to the **X-Axis** via drag and drop.
4. Assign one or more **Data columns** as KPIs to the **Y-Axis** via drag and drop.

   If you have assigned one column to the **X-Axis** and one column to the **Partition** then you can not assign more than one column to the **Y-Axis**.
5. Optionally, assign a **Data column** as second dimension to the **Partition** via drag and drop.

   If you have assigned more than one column to the **Y-Axis** the **Partition** is not longer available.
6. Optionally, assign one or more columns to the **More columns (invisible)** element via drag and drop. The columns are not displayed in the component. They are used for filtering components only. See Define filters for dashboard components (Seite 147) for details.

The data source columns are assigned to the component elements.

3.8.2.5.3.2.1.1 Set properties of component elements

For each component element, such as axis, dimensions or measures, you can edit the settings, e. g., axis title, display name or format.

Depending on the data type of the assigned data source column there are different settings available. See the Option list below for details.

Procedure

1. Click the assigned source column of the **X-Axis** and specify the axis and column settings.
2. Click **Y-Axis** to specify the axis settings.
   i. Click the **Text** tab to specify the **Axis title** and **Axis format**.
   j. Click the **Data range** tab to limit the KPI value range.
3. Click an assigned source column of the **Y-Axis** and specify the settings.
4. Click the assigned source column of the **Partition** and specify the settings.
5. Click an assigned source column of the **More columns (invisible)** box and specify the settings.
6. Click **Coloring** and click the **Thresholds** tab to specify the KPI thresholds. See Configure thresholds (freeform_assignDataToLineCharts.html#configure_thresholds).
7. Click **Coloring** and click the **Rating** tab to specify the KPI rating. See Configure thresholds (freeform_assignDataToLineCharts.html#configure_thresholds).
8. Click **OK** to save your settings and to leave the dialog.

The chart is displayed in the dashboard with real data of the data source assigned.

Option list

Option	Description
Axis title	Title of the x- or y-axis. Activate 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. If desired, you can add a prefix or postfix to the format, e. g. $ 1,234 or 1,234 mm.
Display name (data point)	New column name displayed in the component, e. g. used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Sorting	Sorts the labels of the x-axis data points ascending or descending. Or it sorts the x-axis labels by another 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.

Option	Description
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. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).
Text tab	Enables you to specify the **Axis title** and **Axis format**.
Data range tab	Enables you to specify minimum value (**From**) and maximum value (**To**) of the KPI value range. If the values are not set the values are calculated automatically. You can enter fixed values manually or assign data source columns for a dynamic value assignment via 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 need to 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 need to assign exactly one KPI to the y-axis.

3.8.2.5.3.2.1.2 Configure KPI thresholds

You can define thresholds for numeric and text KPIs to display their status. A colored background and graphic shows 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 graphic coloring.

   The **Graphic** tab is only available if exactly one 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, e. g. < (less than).
6. Enter a value for each threshold.

   You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only numeric data columns are allowed. Assign the required numeric data column from the data source to a threshold field via drag and drop.
7. Click on ⊕ **Plus** button to add a threshold or click on ⊖ **Minus** button to remove a threshold.
8. Select a threshold view style in the **Style** drop-down menu.

   Available for Background only.
9. Activate the **Colorize axis labels** to display the axis labels colored according to the graphic colors.

The thresholds are configured for the component selected.

3.8.2.5.3.2.1.3 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 10 best or worst KPI values, absolute or in percent.

Prerequisites

You have assigned exactly one KPI to the y-axis.

Procedure

1. Click **Coloring**.
2. Click **Rating** to specify the KPI rating.

   The tab is only available if exactly one column is assigned to the Y-Axis.
3. Activate the **Absolute** or **Percentage** option to set a absolute or percentage rating, e.g., to color the top 3 or 30% KPI values.

   The highest value is considered as 100%
4. Click a **Color** box to select a graphic color for each rating range.
5. Select **Top** or **Button** in the drop-down menu to assign the color selected to the best respectively the worst KPI values.
6. Enter a value for the rating range, e.g., 5 for the five best KPI values.
7. Click on ⊕ **Plus** button to add a rating range or click on ⊖ **Minus** button to remove a rating range.
8. To color the remaining, non assigned, KPI values, activate the **Others** option and select a color.
9. Activate the **Colorize axis labels** to display the axis labels colored according to the graphic colors.

The rating is configured for the component selected.

3.8.2.5.3.2.2 Assign data columns to pie chart

To display data in a pie chart component (e.g., line chart) you have to assign the relevant data source columns to the component elements required (e.g., x-axis).

A pie chart can display one numeric KPI iterated via a dimension (text or date dimension).

Prerequisite

You have assigned a data source to the dashboard component.
(freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a numeric **Data columns** to the **KPI** via drag and drop.
4. Assign a text or date **Data column** as dimension to the **Partition** via drag and drop.
5. Optionally, assign one or more columns to the **More columns (invisible)** element via drag and drop. The columns are not displayed in the component. They are used for filtering components only. See Define filters for dashboard components (Seite 147) for details.

The data source columns are assigned to the component elements.

3.8.2.5.3.2.2.1 Set properties of component elements

For each component element, such as measure or dimension, you can edit the settings, e.g., display name or format.

Depending on the data type of the assigned data source column there are different settings available. See the Option list below for details.

1. Click the assigned source column of the **KPI** and specify the settings.
2. Click the assigned source column of the **Partition** and specify the settings.
3. Click an assigned source column of the **More columns (invisible)** box and specify the settings.
4. Click **OK** to save your settings and to leave the dialog.

The chart will be displayed with real data of the assigned data source.

Option list

Option	Description
Display name (data point)	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).

3.8.2.5.3.2.3 Assign data columns to bubble chart

To display data in a dashboard component (e.g., line chart) you have to assign the relevant data source columns to the component elements required (e.g., x-axis).

In the bubble chart you can display 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 size of the bubble areas.

Prerequisite

You have assigned a data source to the dashboard component.
(freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a **Data column** as KPI to the **X-Axis** via drag and drop.
4. Assign a **Data column** as KPI to the **Y-Axis** via drag and drop.
5. Optionally, assign a **Data column** as KPI to the **Size by** element via drag and drop.
6. Assign a **Data column** as dimension to the **Partition** via drag and drop.
7. Optionally, assign one or more columns to the **More columns (invisible)** element via drag and drop. The columns are not displayed in the component. They are used for filtering components only. See Define filters for dashboard components (Seite 147) for details.

The data source columns are assigned to the component elements.

3.8.2.5.3.2.3.1 Set properties of component elements

For each component element, such as axis, dimensions or measures, you can edit the settings, e.g., axis title, display name or format.

Depending on the data type of the assigned data source column there are different settings available. See the Option 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 assigned source column of the **X-Axis** and specify the axis and column settings.
3. Click the assigned source column of the **Y-Axis** and specify the settings.
4. Click the assigned source column of the **Size by** element and specify the settings.
5. Click the assigned source column of the **Partition** and specify the settings.
6. Click an assigned source column of the **More columns (invisible)** box and specify the settings.
7. Click **Coloring** to specify the KPI thresholds. See Configure KPI thresholds (page 131) for details.
8. Click **OK** to save your settings and to leave the dialog.

The chart will be displayed with real data of the assigned data source.

Option list

Option	**Description**
Axis title	Title of the x- or y-axis. Activate 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. If desired, you can add a prefix or postfix to the format, e.g., $ 1,234 or 1,234 mm.
Display name (data point)	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default, the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).
Text tab	Enables you to specify the **Axis title** and **Axis format**.

Option	Description
Data range tab	Enables you to specify minimum value (**From**) and maximum value (**To**) of the KPI value range. If the values are not set the values are calculated automatically. You can enter fixed values manually or assign data source columns for a dynamic value assignment via drag and drop.
Coloring > Thresholds	Enables you to specify the thresholds values range and to set the background color accordingly. You need to assign at least one KPI to the y-axis.

3.8.2.5.3.2.3.2 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 you want to define thresholds for.
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, e. g. < (less than).
5. Enter a value for each threshold.

   You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only numeric data columns are allowed. Assign the required numeric data column from the data source to a threshold field via drag and drop.
6. Click on ⊕ **Plus** button to add a threshold or click on ⊖ **Minus** button to remove a threshold.
7. Select a threshold view style in the **Style** drop-down menu.

   Available for Background only.

The thresholds are configured for the component selected.

3.8.2.5.3.2.4 Assign data columns to grid

To display data in the grid component you have to assign the relevant data source columns to the component elements required.

You can assign any number of data source columns as **Grid colums**.

Prerequisite

You have assigned a data source to the dashboard component.
(freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 columns** to the **Y-Axis** via drag and drop.
4. Optionally, assign one or more columns to the **More columns (invisible)** element via drag and drop. The columns are not displayed in the component. They are used for filtering components only. See Define filters for dashboard components (Seite 147) for details.

The data source columns are assigned to the component elements.

3.8.2.5.3.2.4.1 Set properties of component elements

For each component element you can edit the settings, e. g. column name or format.

Depending on the data type of the assigned data source column there are different settings available. See the Option 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 134) for details.
2. Click an assigned source column of the **More columns (invisible)** box and specify the settings.
3. Click **OK** to save your settings and to leave the dialog.

The grid will be displayed with real data of the assigned data source.

Option list

Option	Description
Axis title	Title of the x- or y-axis. Activate 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. If desired, you can add a prefix or postfix to the format, e.g., $ 1,234 or 1,234 mm.
New column name	Replaces the data source column name, used for tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the grid. Available for numeric columns. By default activated.
Show cell value	Displays the values of the column. By default activated.
Make clickable (for actions)	Makes the column clickable for triggering actions. See Specify actions for dashboard components (freeform_specify_action.html#task_specify_action) for details.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).
Text tab	Enables you to specify the **New column name** , the **Format** and **Aggregation**.

Option	Description
Thresholds tab	Enables you to specify the thresholds values range.

3.8.2.5.3.2.4.2 Configure thresholds

You can define thresholds for numeric and text grid columns to display the status of a KPI. A coloured marker shows the threshold range in which a KPI value is located.

Procedure

1. Click one of the assigned **Grid columns** to specify the settings.
2. Click on the **Thresholds** tab.
3. Click on **Background** or **Foreground** to set the KPI values and the grid background or foreground colors.

   Here you can define a KPI value range for the thresholds and the corresponding colors of the grid cells background or foreground.

   a. Click on a **Color** box to select a color for each threshold.

   b. Select an operator for each threshold to define the KPI value range, e.g., < (less than).

      The available operators are different for numeric (e .g., **< (less than)** or **= (equals to)**) and text (e.g., **starts with** or **is equal to**).

   c. Enter a value for each threshold.

      You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only text data columns are allowed. Assign the required text data column from the data source to a threshold field via drag and drop.

   d. Click on **Plus** button to add a threshold or click on **Minus** button to remove a threshold.

   e. Activate the **Colorize row** option to use the background/foreground coloring for all others cells in the row.
4. Click on **Traffic Lights** to set KPI values and to define traffic lights.

   Here you can define a KPI value range for the thresholds and corresponding traffic lights. The traffic lights will be displayed in each cell of the rows. By default there are three traffic light phases plus the inactive phase. In addition of the color you can also select a different shape for each traffic light phase.

   a. Click on a **Color** box to select a color and a shape for each traffic light phase.

      You can use custom images instead of the colored shapes for each traffic light phase. For this activate the **Image based Traffic Light** option, click on the drop-down menu and enter an **Image URL**.

   b. Activate 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, e.g., is equal to.

d. Enter a value for each threshold.

   You can either enter fix 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 via drag and drop.

e. Click on ⊕ **Plus** button to add a traffic light phase or click on ⊖ **Minus** button to remove a phase.

f. Activate the **Switch position** option to place the traffic light symbol right hand of the values.

g. Activate the **Make clickable (for actions)** option to make the traffic lights clickable for triggering actions. See Specify actions for dashboard components (freeform_specify_action.html#task_specify_action) for details.

h. Activate the **Show tooltip** option to show tool tips for each traffic light symbol.

i. By default the traffic light phase is also visible if it is inactive (A KPI value is not available.). Deactivate the **Inactive state** option if the traffic light phase should not be visible. You can also change the color of the inactive traffic light phase. In case of a selected image you can only deactivate the **Show inactive state** option.

5. Click **OK**.

The thresholds are configured for the selected component.

3.8.2.5.3.2.5 Assign data columns to circular gauge chart

To display data in the gauge chart component you have to assign the relevant data source columns to the component elements required.

A circular gauge chart 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 dashboard component. (freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a numeric **Data column** to the aggregated **KPI** via drag and drop.

A data source column is assigned to the **KPI** element.

3.8.2.5.3.2.5.1 Set properties of component 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 different colors.

See the Option list below for details.

1. Click the assigned source column of the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 137) for details.
3. Click **OK** to save your settings and to leave the dialog.

The chart will be displayed with real data of the assigned data source.

Option list

Option	Description
Display name	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).

Option	Description
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.

3.8.2.5.3.2.5.2 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 on a **Color** box to select a color for each threshold.
3. Select an operator for each threshold to define the KPI value range, e.g., < (less than).
4. Enter a value for each threshold.

   You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only numeric data columns are allowed. Assign the required numeric data column from the data source to a threshold field via drag and drop.
5. Click on **Plus** button to add a threshold or click on **Minus** button to remove a threshold.

The thresholds are configured for the selected component.

3.8.2.5.3.2.6 Assign data columns to horizontal and vertical gauge chart

To display data in the gauge chart component you have to assign the relevant data source columns to the component elements required.

A gauge chart 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 dashboard component. (freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a numeric **Data column** to the aggregated **KPI** via drag and drop.

A data source column is assigned to the **KPI** element.

3.8.2.5.3.2.6.1 Set properties of component 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 different colors.

See the Option list below for details.

1. Click the assigned source column of the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 139) for details.
3. Click **OK** to save your settings and to leave the dialog.

The chart will be displayed with real data of the assigned data source.

Option list

Option	Description
Display name	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).
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	Enables you to specify the thresholds values range.

3.8.2.5.3.2.6.2 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 on a **Color** box to select a color for each threshold.
3. Select an operator for each threshold to define the KPI value range, e.g., < (less than).
4. Enter a value for each threshold.

   You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only numeric data columns are allowed. Assign the required numeric data column from the data source to a threshold field via drag and drop.
5. Click on **Plus** button to add a threshold or click on **Minus** button to remove a threshold.

The thresholds are configured for the selected component.

3.8.2.5.3.2.7 Assign data columns to traffic light

To display data in the traffic light component you have to assign the relevant data source columns to the component elements required.

A traffic light 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 dashboard component. (freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a numeric or text **Data column** to the **KPI** element via drag and drop.

A data source column is assigned to the **KPI** element.

3.8.2.5.3.2.7.1 Set properties of component 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 different colors.

See the Option list below for details.

Procedure

1. Click the assigned source column of the **KPI** and specify the settings.
2. Click **Thresholds** to specify the KPI thresholds. See Configure thresholds (page 140) for details.
3. Click **OK** to save your settings and to leave the dialog.

The traffic light will be displayed using the real data of the assigned data source.

Option list

Option	Description
Display name	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).

3.8.2.5.3.2.7.2 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 phases plus the inactive phase.

Procedure

1. Click on **Thresholds**.

   The option is only available if a column has already been assigned to the KPI.
2. Select **Color and shape** in the drop-down menu to display the traffic light phases with different colored shapes.
3. Click on a color box to select a color and shape for each threshold phase.
4. Select **Image** in the drop-down menu to use custom images instead of the colored shapes for each traffic light phase
5. Select an operator for each threshold to define the KPI value range, e.g., < (less than).

The available operators differ for numeric (e .g., **< (less than)** or **= (equals to)**) and text columns (e.g., **starts with** or **is equal to**).

6. Enter a value for each threshold.

   You can either enter fix threshold values or you can choose columns from your data source representing dynamic threshold values. For dynamic threshold values only numeric data columns are allowed. Assign the required numeric data column from the data source to a threshold field via drag and drop.

7. Click on **Plus** button to add a threshold or click on **Minus** button to remove a threshold.

8. By default the traffic light phase is also visible if it is inactive (A KPI value is not available.). Deactivate the **Inactive state** option if the traffic light phase should not be visible. You can also change the color of the inactive traffic light phase. In case of a selected image you can only deactivate the **Show inactive state** option.

The thresholds are configured for the selected component.

3.8.2.5.3.2.8 Assign data columns to drop-down box

To display data in the drop-down box component you have to assign the relevant data source columns to the component elements required.

Prerequisite

You have assigned a data source to the dashboard component. (freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a **Data column** to the **Visible column** element via drag and drop.
4. Optionally, assign one or more columns to the **More columns (invisible)** element via drag and drop. The columns are not displayed in the component. They are used for filtering components only. See Define filters for dashboard components (Seite 147) for details.

The data source columns are assigned to the component elements.

3.8.2.5.3.2.8.1 Set properties of component elements

For each component element you can edit the settings, e. g. display name or format.

See the Option list below for details.

1. Click the assigned source column of the **Visible column** element and specify the settings.
2. Click an assigned source column of the **More columns (invisible)** box and specify the settings.
3. Click **OK** to save your settings and to leave the dialog.

The drop-down menu will be displayed with real data of the assigned data source.

Option list

Option	Description
Display name	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Aggregation	Specifies how the KPI value is calculated. Available for numeric columns. Default is average value (**Avg**).
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.

3.8.2.5.3.2.9 Assign data columns to label

To display data in the label component you have to assign the relevant data source columns to the component elements required.

Prerequisite

You have assigned a data source to the dashboard component. (freeform_assignDataSource.html#task_h55_zlx_gr)

Procedure

1. Click a component inserted 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 a source **Data column** to the **Data column** element via drag and drop.

A data source column is assigned to the component element.

If you have assigned a text or date column to the component the values are taken from the first data row. Therefore in most cases the label needs to be filtered by other components.

3.8.2.5.3.2.9.1 Set properties of component elements

For each component element you can edit the settings, e.g., display name or format.

See the Option list below for details.

Procedure

1. Click the assigned source column of the **Visible column** element and specify the settings.
2. Click an assigned source column of 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.

Option list

Option	Description
Display name	New column name displayed in the component, e.g., used for KPI, data point or tool tip. By default the data source column name is used.
Format	Output format of the column values, e. g. used for data points or tool tip. Available for columns of **date** and **numeric** typ.
Round numerically	Displays rounded KPI values in the chart. Available for numeric columns. By default activated.
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.

3.8.2.5.3.2.10 Create input parameters

You can create input parameters to enter dynamic values that are passed into the data transformation step (e.g., for filtering) or passed to the data source itself.

By using parameters sets you are enabled to create dynamic URLs for your XML source and RAQL queries. The parameters are used to dynamically pass context from dashboards to applications via URLs. You can create dynamic URLs and query parameters providing required context to open URLs, invoke web services, etc.

The functionality is available in the **Assign data (1/2)** dialog.

Procedure

1. Click a component inserted in 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.

   There are input parameters of **Text**, **Number** and **Date** type available. The selection enables 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 will be used if the input parameter is not filled by the dashboard context. For example, if the input parameter is filled by the selection of an other component and there is nothing selected.

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 dashboard components (Seite 121).

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 current selected component.

You can use the input parameters for the XML, CSV, MS Excel data source, and ARIS Table of the current data source assignment. Available input parameters will be provided via an additional button by the data source operator.

If you use the input parameter in an XML data source URL, then you can specify, that the value of the parameter should be URL encoded. For an input parameter of **Date** or **Number** type you can additionally specify the format pattern.

In the data source operator it's possible to specify the format pattern for an input parameter of **Number** and **Date** type.

To specify the parameter properties click on the inserted input parameter and select the option required.

Input parameters are also available for several data transformation operators, e.g., Insert column, to enter dynamic values into 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 dashboard component. See Define filters for dashboard components (Seite 147) for details.

3.8.2.5.3.2.11 Data source operators

To display content (e.g., charts, apps or tables) in a dashboard component you need to assign a data source to the component at first. The following data source operators are available.

ARIS Table (page 183)

PPM (page 184)

MS Excel (page 190)

CSV (page 187)

JSON (page 193)

XML (page 196)

Data feed (page 198)

3.8.2.5.3.2.12 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 (Seite 206)

Delete column (Seite 228)

Rename column (Seite 199)

Duplicate column (Seite 228)

Insert column (Seite 236)

Concatenate texts (Seite 222)

Filter rows (Seite 231)

Conditional replace (Seite 223)

Arithmetic (Seite 203)

Aggregate (Seite 200)

Round up/down date (Seite 243)

Average (Seite 205)

Goal accomplishment (Seite 234)

Move date (Seite 238)

Round up/down (Seite 242)

Filter by date (Seite 230)

Find text index (Seite 233)

Replace text (Seite 241)

Extract text (Seite 229)

The feed editor provides a wider variety of data transformation operators for creating more complex transformation rules in data feed definitions. See the data transformation operators (E:\NoBackup_DITA_Import\data_feeds\datafeeds_trans_operators.html#freeform_operators) listed in appendix.

3.8.2.5.3.3 Set up dashboard components

For all dashboard components you can configure the visualization and the behavior in the dashboard view mode. Additionally, you can assign data sources and set filters for most components.

Depending on the dashboard component typ, e.g., line chart, grid or image, different options are available.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted in the dashboard. The relevant component properties dialog is displayed.
3. Click the **Assign data** icon to edit the data source assignment. See Assign data sources to dashboard components (Seite 121) for details.
4. Click the **Configure filter** icon to specify filter conditions. See Define filters for dashboard components (Seite 147) for details.
5. Click the **Config** tab and set the dashboard component display options. See the list of dashboard component (page 165) for details.
6. Specify **Actions** for the component, if required. See Specify actions for dashboard components (page 148) for details.
7. Specify **URL selections** for the component, if required. See Use dynamic URL selection (page 156) for details.

Your settings are applied.

3.8.2.5.3.4 Remove components from dashboard

You can remove components from a dashboard.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Select one or more components inserted in the dashboard. A corresponding pop-up menu is displayed.
3. Click the **Delete** icon in the pop-up menu.
4. Click **Delete**.

The components selected are deleted from the dashboard.

3.8.2.5.3.5 Define filters for dashboard components

In the dashboard edit mode you can define relations between components by specifying filter conditions for selected components. The defined filters can be used in the dashboard view mode (See Use interactive filters in your dashboards (Seite 109)).

Most dashboard components support data filters. Particularly, the **Drop-down box** and **Input field** provide you with a selection of values in a drop-down menu or a manual data input for filtering other dashboard components. (See Insert components into a dashboard (page 120)).

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Select the tab containing the component for that you want to set a filter. It is not possible to change the tab within the filter dialog. This is relevant if you have placed a component on several tabs. See Display components on several dashboard views (page 152) for details.
3. Click a component inserted in the dashboard. The relevant properties dialog is displayed.
4. Click the **Filter** icon to edit the filter configuration. The filter dialog of the selected component displays the **Source columns** assigned to the component and the **Select filter component** bar. See Assign data sources to dashboard components (Seite 121) for details.

   If applicable, input parameters will be displayed as additional filter components. If input parameters have been defined, they are listed below the **Source columns** of a component. See Create input parameters (page 143) for details.

   If invisible columns have been defined, they are listed as **Source columns** but not highlighted. Invisible columns are not displayed in the component but they can be used as filter criterion. See Assign data sources to dashboard components (Seite 121) for details.
5. Drag a column that you want to filter in the **Source columns** box and drop the selected column in the **Drop her to define a new filter** field. The **Define filter condition** dialog is displayed. All components that can be used as filter are highlighted. The columns in the **Available coordinates** box of each component 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 in the drop-down menu, e.g., **is equal to**.
   b. Drag a coordinate in the **Available coordinates** box of a the component that you want to use as filer component. And drop the selected coordinate in the empty filter condition field.
   c. Alternatively, you can enter a constant value as filter condition.
   d. To consider the case sensitivity click the Aa **Match case** / **Ignore case** icon. It is only available for coordinates or values of type **Text**.
   e. If you want the filter conditions to be considered as 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. Activate the **block values** option to block the rows which meets the condition.

7. Click **Define new filter** to add filters on other source columns.
8. Click **Save filter**.

Your filter conditions are saved.

Now you can use interactive filters in your dashboards (Seite 109).

3.8.2.5.3.6 Specify actions for dashboard components

You can assign actions to specific dashboard components (e.g., charts, traffic light, label, image). The actions set a data selection in other components, call other views of the dashboard or jump to a specific URL.

For an action, you can specify a data selection of a specific component on a dashboard view, e.g., column in a table. The component will then be displayed applying the data selected. If the data selected also represents filter values for another component, this component is filtered accordingly.

The actions are triggered by clicking a component, by a mouse over event or by selection change, depending on the component selected. **On mouse over** events are performed if you move your mouse pointer over a data point of a component, e.g., a coordinate of a Line chart. Whereas **On selection change** events are performed if you click on a data point in a chart or if you delete a data selection in a component. Depending on the component you can delete a selection by clicking in the background or selecting the **Delete selection** option in the **Menu** of the component.

For the Grid component additional trigger options can be available, depending on your Grid component settings. That are **On "item" click** and **On "item" traffic light click**. Whereby "item" is a placeholder for a column name. In the Grid component settings you can make column cells clickable for triggering actions.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click an inserted chart component 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 selection of actions is dependent on the selected component.
5. Activate the **Change tab** action to call another dashboard view by action triggering and select the target tab in the drop-down menu.

   The action is only available if you have added one or more views in the dashboard. See Add dashboard views (page 154) for details.

   If you deactivate the option then the action will not be deleted but deactivated in the view mode.

6. Activate the **Set selection** option to set a data selection by triggering an action. This action set a specific selection in one or several of the components on the same dashboard view.

   If you deactivate the option then the action will not be deleted but deactivated in the view mode.

7. Configure the **Set selection** action.

   a. Click **Configure** to set the action configuration.

      Initially all **Available coordinates** of the target components are displayed.

   b. Set the coordinates of the component you want to select by your action. For this drag the relevant coordinate and drop it in the field of the **Select selection component** 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 component. Drag the relevant component coordinate and drop it in the **Selection** field of the previously set coordinate.

      Only the coordinates with the fitting values are provided.

   d. Click **Add an additional selection** to define a further selection.

   e. Click **Save action**.

8. Activate the **Call URL** option to jump to a specific URL by triggering an action.

   If you deactivate the option then the action will not be deleted but deactivated in the view mode.

   a. Click **Configure** to set the action configuration.

   b. Enter the target URL in **URL** input field of the **Enter target URL** area.

      You have the option to create a dynamic URL by adding **Available coordinates** to the URL. For this you can insert the coordinates from several components via drag and drop. A selected coordinate will placed on the current cursor position in the **URL** input field.

      In case of a coordinate of typ number or date, click the inserted coordinate and select a **Format pattern**.

      To ensure that a coordinate is URL encoded, click the inserted coordinate and activate the **Use URL encoding** option.

   c. In the **Target window** field you can enter a name of the window where the URL should be opened, or you can select a target attribute in the drop-down menu. Available attributes are **_blank** (new window), **_self** (self window), **_parent** (parent window) and **_top** (entire window).

   d. Click **Save action**.

Your action is specified for the selected component.

You can use the defined action in the dashboard view mode. See Use dashboards in view mode (page 109).

3.8.2.5.3.7 Hide or display component header and border

You can hide the header and the outline of the component container.

The header and the outline are hidden for some components by default, e. a. Input field and Combobox. You can display them if necessary.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click on an inserted component in the dashboard. A corresponding pop-up menu is displayed.
3. Show the **Config** tab to set the display options.
4. Click **More options**.
5. Set the **Container** header and border.
   - Click the **Hide header** icon. Hides the header incl. the title of the component and the content will be resized. Click the icon again to display the header.
   - Click the **Hide border** icon. Hides the outline of the component container. Click the icon again to display the outline.

The header and outline of the component will be hidden or displayed.

3.8.2.5.3.8 Resize dashboard components

You can scale up or down the size of dashboard components.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted in the dashboard. The component is displayed with a frame.
3. In smart dashboards
   a. Resize the component width by dragging the anchor point of the frame with your mouse pointer.

      A component width can be resized across multiple free fields.

   b. Resize the component height by resizing the height of the row where the component is inserted. To resize the row height drag the upper or lower row border by your mouse pointer.

      The height of all components inserted in the same row are resized automatically.
4. In fixed grid dashboards drag the anchor point of the frame with your mouse pointer.

The selected components are resized.

3.8.2.5.3.9 Move components to front or back

You can move a component forward or backward in a dashboard relatively to other components. For example, you can display a chart in the background of the dashboard and place several components on top of it, i.e., in the foreground.

The option is only available in the fixed grid dashboard mode. See Switch to fixed grid work space (page 116) for details.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Select one or more inserted components in the dashboard. A corresponding pop-up menu is displayed.
3. Set **Layering**
   - Click the **Bring to front** icon. Displays the component in front of one or more other components.
   - Click the **Bring forward** icon. Brings the component one level forward.
   - Click the **Bring backward**. Brings the component one level backward.
   - Click the **Send back**. Displays the component behind one or more other components.

The selected components are moved forward or backward in the dashboard.

3.8.2.5.3.10 Copy and past components in dashboards

You can copy or cut components and past them in the same or in any other tab of the dashboard.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted in the dashboard. A corresponding pop-up menu is displayed.
3. Click the **Copy** icon in the pop-up menu to copy the components selected to the clipboard.
4. Click the **Past** icon in the pop-up menu to insert the components copied in the same tab of the dashboard.

   Duplicates of the components copied have been created.
5. Click the **Cut** icon in the pop-up menu to cut the component selected and copy it to the clipboard.
6. Open any tab of the dashboard and press the **Strg**+**V**.

   Filter relations between copied components are retained.

The component selected is copied to the clipboard and pasted in dashboard tab selected.

3.8.2.5.3.11 Display components on several dashboard views

You can display a component on several views of a dashboard.

A component placed on several tabs can be used for filtering other components and triggering selection events across multiple tabs. And vice versa a global placed component can be filtered and triggered by other components. If a global component is selected, e.g., you click on a data point of a line chart, the selection is shown in the same line charts on all tabs where it is placed. Also dependant filter and actions are triggered for the entire dashboard.

On each tab the component has the same position, size, configuration and filter conditions etc., except the component layering, see Move components to front or back (page 151).

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click a component inserted. The relevant properties dialog is displayed.
3. Click **Select tabs** and select the tabs on which the component should be placed.

   To display a component on several views you have to add one or more tabs beforehand. See Add dashboard views (page 154) for details.

   The icon indicates that the component is displayed on several tabs.
4. To remove a component from a tab unselect the relevant tab in the **Select tabs** menu.

   You can not remove a component from the currently activated tab. Switch to another tab before.
5. To delete a component click the **Delete** icon in the pop-up menu.

   If you delete a component on a tab the same component will be deleted on all tabs.

The component is placed on several tabs and will be displayed on the corresponding dashboard views.

You can use a action defined in the dashboard view mode. See Use dashboards in view mode (page 109).

3.8.2.5.3.12 Change component style template

You can assign a different style template to a component inserted in your dashboard. By means of style templates you are able to customize the look and feel of your dashboard components, e.g., colors schemes, fonts or background color.

The style templates provided for the component selected are part of the dashboard style template assigned (freeform_change_style_template.html#task_change_style_template) to the current dashboard.

Procedure

1. Create a dashboard (freeform_create_dashboard.html#task_p4t_41h_gr/title_hdh_41h_gr) or open a dashboard (freeform_edit_dashboard.html#task_bpt_j4h_gr) in the dashboard editor.
2. Click a component inserted in the dashboard. The relevant properties dialog is displayed.
3. Click **More options**.
4. Select a style template in the **Widget style** drop-down menu.

The selected style template is applied to the current dashboard component.

To create your own dashboard component style templates, see Create component style template (freeform_create_widget_style_template.html#create_widget_style_template) for details.

3.8.2.5.4 Configure dashboard views

You can configure the individual dashboard views in the dashboard editor.

3.8.2.5.4.1 Add dashboard views

You can add additional views of a dashboard. A dashboard can include several views. The individual views are displayed on separate tabs.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click the **New tab** icon beside the tab name.

A new tab is added. The tab will be displayed as a separate dashboard view in view mode.

3.8.2.5.4.2 Delete dashboard views

You can delete any view from a dashboard. A dashboard view is displayed as a separate tab in the dashboard editor.

Warning

Deleted dashboard views cannot be restored.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click the **Show menu** icon beside the relevant tab name.
3. Click the **Delete** icon in the pop-up menu.
4. Click **Delete**.

The selected dashboard view is deleted.

3.8.2.5.4.3 Set dashboard view properties

You can set the properties of a dashboard view. Specify a name for the dashboard view, select a style and set the view selected as default.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click the ▼ **Show menu** icon beside the tab title of the relevant tab.
3. Enter a text in the **Name** box in the pop-up menu.
4. To set the dashboard view style click the **Style** selection box and select a style.

   This option is only available for smart dashboards.
5. To set the dashboard view background click the color selection box and select a background color.

   This option is only available for fixed grid dashboards.
6. Click **Make default** to set the current selected tab as the default view.

   The default view will be displayed initially when you open the dashboard in the view mode.

The dashboard view properties are set.

3.8.2.5.4.4 Set dashboard view style

You can change the style applied to the dashboard view. The style selected sets, e.g., the background color of the view.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) 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 view style is set.

3.8.2.5.4.5 Set dashboard view as default

You can set the current selected tab as the default view. The default view is displayed initially when you open the dashboard in the view mode.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click the ▼ **Show menu** icon beside the tab title of the relevant tab.
3. Click **Make default**.

The dashboard view is set as default view.

3.8.2.5.5 Other

3.8.2.5.5.1 Use dynamic URL selection

By specifying URL parameters you can dynamically select specific elements of dashboard components, e.g., a grid row, a combobox entry, a pie slice, etc. When you call a dashboard via URL in the view mode, the elements are automatically preselected and, if applicable, the preselected elements are used as a filter or action trigger.

You can select the URL parameters required for dynamic URL selection in a dashboard component's properties menu and copy them to the clipboard. You can set a preselection based on data columns for each dashboard component that supports data preselection, e.g., Grid, Input field, or several charts.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click an component inserted that supports data preselection. The relevant properties dialog is displayed.
3. Before you set a preselection you need to assign the relevant data columns to the component. See Assign data sources to dashboard components (Seite 121).
4. Click the **URL selection** tab.
5. You can enter a component ID in the **URL-ID** input field. If you change the preset ID you need to choose a unique ID within your dashboard and you have to save the dashboard to persist the new **URL-ID**.
6. The **URL example** field contains a URL selection of the components including all assigned data columns and corresponding dummy values.
7. You can edit the URL selection according to your requirements in the **URL example** field.

   Expected formats:

   Number: no thousands separator and a dot for decimal separator

   Date / time: yyyy-MM-ddThh:mm:ss

   Text: no restrictions (just URL-encoded)
8. 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).
9. Add the parameters to an URL that you want to use for calling a dashboard and enter the URL in your web browser.
10. To open a specific dashboard view add the corresponding tab parameter to the dashboard URL.

    a. Click the **Show menu** icon 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 need to choose a unique ID within your dashboard and you have to save the dashboard to persist the new **URL-ID**.

d. Copy the URL selection to the clipboard. If your browser supports this function a **Copy to clipboard** button is available.

e. Add the URL selection copied to clipboard to your dashboard URL.

The dashboard is displayed with the preselection in the view mode.

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 need to reload the dashboard page. However, you can also apply a selection in an open dashboard without reloading the entire page. In order to realize that, the selection string must begin with #... instead of &...

...**#**cn16.Time=2015-12-23&cn16.Location=New%20York

3.8.2.5.5.2 Hide tab bar in view mode

You can hide the tap bar in the dashboard view mode. By default, the individual dashboard views are displayed on separate tabs.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click **Manage** in the dashboard main menu.
3. Click **Properties**.
4. Activate the **Hide tab bar in view mode** option.
5. Click **OK**.

Your settings are applied.

The tab bar will be hidden when you open the dashboard in view mode (freeform_display_dashboard.html#task_yzv_sdj_gr). Only the active tab will be displayed.

3.8.2.5.5.3 Set display size

You can set the display size for the current displayed dashboard. Set the zoom factor to improve the clarity of a dashboard.

The option is only available in the fixed grid dashboards. See Switch to fixed grid work space (page 116) for details.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) 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.

3.8.2.5.5.4 Set grid lines

You can set the grid lines in the desktop background in . The grid lines help you to arrange the individual components more easily. The dashboard components are automatically aligned to the grid lines.

The options are only available in the fixed grid dashboards. See Switch to fixed grid work space (page 116) for details.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click **Options** in the dashboard main menu.
    - Click **Increase Grid Space**.
    - Click **Reset Grid** to restore the default grid space.
    - Click **Decrease Grid Space**.

The grid lines of the current dashboard are adjusted accordingly.

3.8.2.6 Using data feed editor

The data feed editor as a graphical user interface gives you an easy, graphic way 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 in dashboards and other in data feeds, and to see the data in a dashboard, the **View** permission is required. See Manage data feed permissions (page 164) for detail.

3.8.2.6.1 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 feed table is calculated using a feed definition, which combines data from various data sources.

To create a date feed definition you need to perform the following steps.

- Open a new data feed (page 159)
- Select data sources (page 160)
- Calculate the feed data (page 160)
- Add further operators (page 161)
- Connect the operators (page 161)
- Save the data feed (page 162)

3.8.2.6.1.1 Open a new data feed

To create a data feed you have to open a new data feed first.

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 <uicontrol>Output</uicontrol> element that completes the feed definition, is already set. The element is mandatory and cannot be deleted.

3.8.2.6.1.2 Select data sources

You can set one or more data sources for the data feed definition, e.g., 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. Different options are available for setting the data source depending on the data source type.

See Data source operators (page 182) for a list of data sources and the relevant settings supported by the data feed editor.

The source files, which can be selected by specifying the path, must be stored in the ARIS Connect Repository ( ).

Procedure

1. Click the symbol in the **Add data operations** bar, if not already selected.
2. Click a data source, e.g., XML.

   The selected operator is displayed on the data feed editor workspace.
3. Select the data source or connection type of the data source file required, e.g., an URL or a local path to a XML file.
4. Enter an URL or a path to the data source file, e.g., for a XML file. Or select a data source or a connection in a selection box, e.g., a PPM connection.
5. Specify your additional settings.

The selected data source operator is inserted and source data can be extracted.

3.8.2.6.1.3 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 and the result is displayed in as preview in a table at the lower edge of the workspace.

3.8.2.6.1.4 Add further operators

Insert optional operators into 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 199) 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 via drag and drop.

   The operator is displayed on the feed editor workspace.
3. Specify your settings.

The selected operator is inserted and configured.

3.8.2.6.1.5 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. For a selected outgoing anchor point, the permitted incoming anchor points are each marked in blue.

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 an transformation operator.
2. To disconnect two operators click an incoming or outgoing anchor point and drop it on the workspace.
3. Define the data flow among the inserted operators in a similar manner.
4. Finally, 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.

3.8.2.6.1.6 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.

   With the **Save as** option you can create a copy of the current opened data feed.

2. Specify your settings.

The data feed is saved on the server.

You can change your settings by editing the data feed (page 162).

3.8.2.6.2 Edit a data feed

You can edit a data feed 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. Make your settings.
4. Click **Manage** > **Save** in the data feed editor main menu.

Your settings are applied.

3.8.2.6.3 Delete data feeds

You can delete data feeds in the feed editor.

Warning

Deleted data feeds couldn't be restored.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click **Manage** > **Delete** in the data feed editor main menu.
3. Click **Delete**.

The selected data feed is deleted.

3.8.2.6.4 Edit data feed properties

You can edit the properties (name, description and tags) of existing data feeds.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click **Manage** > **Properties** in the feed editor main menu. The **Dashboard properties** dialog will be displayed.
3. Enter the mandatory **Name** of the data feed.
4. Enter an optional **Description**.
5. You can optionally enter comma separated search tags in the **Tags** field.
6. Click **OK**.

Your changes are applied.

3.8.2.6.5 Manage data feed permissions

You can manage the permissions of data feeds in the data feed editor. You are able to 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.

You can assign the following access rights only for saved data feeds.

- **Edit**

  This user can use data feeds to create dashboards or include them in other data feeds and he can edit data feeds in the data feed editor.

- **View**

  This user can use data feeds to create dashboards or include them in other data feeds. This user can view the data of the data feed in the view mode of the related dashboard.

Procedure

1. Create a dashboard (page 111) or open a dashboard (page 116) in the dashboard editor.
2. Click **Manage** > **Permissions** in the data feed editor main menu. The **Manage dashboard permissions** dialog is displayed.
3. Enter a therm in the search field and click **Search**. Clicking on **Search** without any input values fetches all users and groups.
4. Click **Show MashZone NextGen default groups** to show only default users or user group in the **Search results** field.
5. Drag an user or user group from the **Search result** field and drop it into the **Principals with permissions** field.

   By default, the creator of the data feed is already present in the **Principals with permissions** list.
6. Activate or deactivate the **View** or **Edit** privileges of an user or user group.
7. Click **Save**.

Your changes are applied.

If you want to remove a user or user group from the Principals with permissions list click the Delete icon.

3.8.2.6.6 Data feed operators

The feed editor provides a wide range of data source and data transformation operators for creating data feed definitions (Seite 159).

- Data source operators (page 182)
- Data transformation operators (page 199)

3.8.2.7 Appendix

3.8.2.7.1 Dashboard components

The dashboard editor provides a various number of dashboard components.

Available dashboard components:

- Line chart (page 165)
- Column chart (page 167)
- Bar chart (page 168)
- Pie chart (page 169)
- Bubble chart (page 170)
- Grid (page 171)
- Circular gauge chart (page 172)
- Horizontal and vertical gauge chart (page 173)
- Traffic light (page 174)
- Drop-down box (page 175)
- Input field (page 176)
- Image (page 178)
- Label (page 179)
- Function flow diagram (page 180)

See also Insert components into a dashboard (page 120).

3.8.2.7.1.1 Line chart

A line chart can display values for two iterations. Two dimensions and one KPI can be used, or one dimension and multiple KPIs. The second iteration is displayed with several stacked lines. Multiple KPIs are then displayed using lines of different colors.

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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.

General Options	Description
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
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific line chart options	Description
Chart title	Optional chart title for the displayed chart of the component
Line type	Selects the line type of the line chart. Available are **Linear**, **Curved** or **Step** line types. Default is **Linear**.
Data points	Selects the size of displayed data points. Available are **Large**, **Small** or **None** line types. Default is **Large**.
Interpolate	Activated option: Missing values are ignored (leads to a continuous line). Deactivated option: Missing values lead to gaps within the line.
Rotate x-axis labels	Rotates the labels of the x-axis 90 degrees
Legend position	Displays a legend in the chart component and sets the position. Default is **None**, i.e., no legend is displayed.

3.8.2.7.1.2 Column chart

A column chart can display values for two iterations. Two dimensions and one KPI can be used, or one dimension and multiple KPIs. The second iteration is displayed with several stacked columns. Multiple KPIs are then displayed using columns of different colors.

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific column chart options	Description
Chart title	Optional chart title for the displayed chart of the component
Column type	Selects the column type of the column chart. This option is only available if a data source has been assigned. Available are **Stacked** or **Grouped** columns.
Legend position	Displays a legend in the chart component and sets the position. Default is **None**, i.e., no legend is displayed.

3.8.2.7.1.3 Bar chart

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific bar chart options	Description
Chart title	Optional chart title for the displayed chart of the component
Column type	Selects the bar type of the bar chart. This option is only available if a data source has been assigned. Available are **Stacked** or **Grouped** bars.
Legend position	Displays a legend in the chart component and sets the position. Default is **None**, i.e., no legend is displayed.

3.8.2.7.1.4 Pie chart

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific pie chart options	Description
Chart title	Optional chart title for the displayed chart of the component
Inner radius	Selects a inner radius in % to display a inner circle with the selected radius.
Values	Selects in the values drop-down menu the kind of display for the displayed KPIs.
Values position	Select in the values position drop-down menu the position where the KPI values are displayed. Available positions are **Inside** and **Outside** of the pie chart.
Legend position	Displays a legend in the chart component and sets the position. Default is **None**, i.e., no legend is displayed.

3.8.2.7.1.5 Bubble chart

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific bubble chart options	Description
Chart title	Optional chart title for the displayed chart of the component
Data points	Selects the data point shape. Default is **Circle**. The option is only available when **Partition** is assigned, see Assign data columns to bubble chart. (page 129)
Data point size	Selects the data point size. Default is **Medium**.
Legend position	Displays a legend in the chart component and sets the position. Default is **None**, i.e., no legend is displayed.

3.8.2.7.1.6 Grid

You can use the **Grid** component to insert a table in your dashboard.

The following component options are available.

General Options	Description
Name	Optional component name
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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.
Auto Refresh	Set the automatic data retrieval for the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs.

Specific grid options	Description
Configuration	Enables you to edit the Grid component interactively. Click the **Configuration** icon. In the edit mode the Grid component is displayed with 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 on the column header. To adapt the column width you can drag the column borders with the mouse. If required, you can change the defined column width and column sort order in the dashboard view mode (Seite 110).
Auto column width	Adapts the column width to the column content automatically. The horizontal scroll bar is no longer displayed in the component.

3.8.2.7.1.7 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 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 incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

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.

3.8.2.7.1.8 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 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 incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific 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. Default is **Medium**.

3.8.2.7.1.9 Traffic lights

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific traffic light options	Description
Type	Traffic light type. Available are **Vertical**, **Horizontal** and **Single**.

3.8.2.7.1.10 Drop-down box

The drop-down box provides you with a selection of values in a drop-down menu for filtering other dashboard components.

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific drop-down box options	Description
No selection	Adds the **No selection** value to the value list as first entry. Initially 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 components.
No selection label	Alternative text for the default text **No selection**. The text will be displayed in the drop-down box.

3.8.2.7.1.11 Input field

The input field enables you to enter values manually for filtering other dashboard components.

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific input field options	Description
Data type	Data type of the user input. The user can only insert values of the selected data type. **Text** **Number** **Date** If the input field data type is set to **DATE** a calendar icon will be shown in the input field to open a date picker.
Date format	**Format** of the user input. The user can only insert values with the selected format. The option is only available for **Date** data type.
Prompt text	Displays a prompt text in the input field.
Initial value	Initial value will displayed in the input field and used as default preset value. Optional

Specific input field options	Description
current date/time	Uses the current date as default preset value. The component always uses the current date and time of the dashboard at runtime. The option is only available for **Date** data type. The value displayed depends on the format selected.
Submit button text	Alternative text for the **Submit button text**. The text will be displayed in the input field instead of the default text **Ok**.
Show submit button	Displays the submit button in the input field.
Submit value with each keystroke	Submits immediately the entered values with each keystroke. For **Date** and **Number** the input field will only submit valid date or number values.

3.8.2.7.1.12 Image

The **Image** component supports the file format PNG, GIF and JPEG. The image file can be picked up from a web source or a local folder.

General Options	Description
Name	Optional component name
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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.
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific image options	Description
Source URL	URL of the image source. The URL can refer to an internet source (http) or a locally hosted resource uploaded to the ARIS Connect repository.
Image sizing	**Original**: displays the image in the original size. **Scaled**: displays the image fitted to the component frame size. **Aspect ratio**: keeps the aspect ratio of the image.
Horizontal alignment	Aligns the image within the component frame.
Vertical alignment	Aligns the image within the component frame.

3.8.2.7.1.13 Label

A label displays a fixed text you have entered, or a text that is supplied dynamically by a datasource.

The following component options are available.

General Options	Description
Name	Optional component name
More options	Displays additional options
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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 dashboard. By default, the **Default** widget style is preselected.
Auto refresh	Sets the automatic data retrieval of the component
Visibility	Selects the tabs, where the component is displayed. The icon indicates that the component is displayed on several tabs. See Display components on several dashboard views (page 152) for details.

Specific label options	Description
Style	Style for your displayed text in the drop-down menu.
Alignment	Alignment of the inserted text. Default is left aligned.

3.8.2.7.1.14 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 are able to clearly display and evaluate the process structure and the relationship 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 self loops). The end function has only incoming connections (except self loops) and is indicated by a red symbol. All other functions have 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
Container	**Hide header**: Hides the header incl. the title of the component and the content will be resized. 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.
Auto refresh	Set the automatic data retrieval for the component

Specific function flow diagram options	Description
Edit widget	Activates the interactive mode. The interactive mode () enables you: - to resize the diagram via mouse wheel. The diagram can be zoomed in or out related to the mouse pointer position. - to move the entire diagram or the individual function symbols via drag and drop. To move the complete graph, please click on an empty space within the widget and hold down the mouse button. Now the graph can be moved until you release the mouse button. - to select an connection value. You can select a value in the widget settings menu if you have set at least one **Additional connection values** in the **Assign data (2/2)** dialog. See Assign data sources (page 129). - to enable the magnifier. Click the **Settings** icon and select **Enable magnifier**. The magnifier is enabled by default. - to modify the relevance slider view and the relevance slider value. The slider value is not saved in dashboard configuration.
Layout	**Reset initial**: Restores the initial diagram layout
Zoom	**Reset**: Restores the initial diagram size
Relevance slider	Enables the relevance slider in the dashboard view and edit mode.
Connection labels	Displays the connection values in the diagram. The connection values defined in the data assignment (page 129) can be displayed or hidden beside the connections. By default, the **Relevance values** are displayed on the connections. If an **Additional connection value** is defined then this one is displayed as connection value instead. If more than one additional connection value is defined then a drop-down menu in the settings menu is provided where you can select the values that should be displayed on 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.

3.8.2.7.2 Operators

The dashboard and data feed editor provide a wide range of data source and data transformation operators for creating dashboards and data feed definitions.

Data source operators (page 182)

Data transformation operators (page 199)

3.8.2.7.2.1 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.

3.8.2.7.2.1.1 ARIS Table

Extracts data from an ARIS Table.

In ARIS Architect, you can export a model of the **Table** type and generate a link to the export file in the form of an URL. Detailed information on how to create an ARIS Table is available in 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 ARIS document storage. These documents are used as data sources for the corresponding default data feeds provided in ARIS Connect. In these data feeds, **ARIS Table** is set as data source operator. See also How to make default dashboards visible (page 265) for further details.

The following parameters are available.

Parameters	Description
Source	ARIS export file in XML format Size limit: Unlimited (100,000 rows); URL: HTTP address for the source file If another operator dynamically supplies the URL, the URL cannot be edited here.
Insert parameter ( )	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ( )	Enables you to set input parameter options
Refresh rate ()	Specifies the time until the source file is read in again. Default value is 30 sec.
Authentication	Specifies a HTTP basic access authentication or an existing authentication defined in the administration. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL
Parameters: Detect	Reads out potential parameters of the data source automatically. A requested parameters list will be displayed, based on the specified ARIS Table source. You can enter the required parameter values to read in the data source.
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

3.8.2.7.2.1.2 PPM

Uses the Process Performance Manager (PPM) query interface to retrieve data from favorites defined in PPM.

For every PPM system which should be used in ARIS Connect, a PPM connection has to be created beforehand.

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. The following parameters are available.

Parameters	Description
PPM Connection	Alias of the PPM Connection, which contains the PPM client connection data defined in ARIS Connect. See Configure PPM server (page 102) for details.
Refresh rate ()	Specifies the time until the source file is read in again. Default value is 30 sec.
Favorite	Path of a PPM favorite. The favorite path represents the favorites tree including favorites folder and name, e.g., \Favorites\Process cycle time
Extract from URL	Automatically determines the connection data of the PPM data source, e.g., 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 at the PPM client server. **Single Sign-On**: Enables you to log in to PPM client server via single sign-on (SSO), by using your current credentials. **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. In particular, the PPM user needs to 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, e.g., 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 columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a new name for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.
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 185) for details.

3.8.2.7.2.1.2.1 Add filter

You can add one or more filter criteria to filter the values of the PPM query.

Procedure

8. Click **Add filter**.
9. Select a **Dimension** or **Measure** provided by PPM, e.g., date or process throughput time, and click **Add**. The selected criterion is added to the PPM operator.
10. Select an operator for the condition of the filter criterion in the drop-down menu, e.g., is equal to.
11. Enter a constant filter value in the input field or insert an input parameter by clicking the **Insert input parameter** icon. The button is only clickable if there is at least one input parameter with the same data type.
12. Click the **Set filter properties icon** and specify the criterion parameters.

    When specifying parameters, such as filter criterion and filter values, please observe the predefined syntax of the PPM query interface (query API). See example below. For detailed information on the PPM query interface, please refer to the PPM documentation **PPM Query interface**.

    Filter using an expression uses criterion expressions for filtering. Available for criterions of text data type.

    Key uses the criterion key as filter value.

    Description uses the criterion description as filter value.

    Set filter level allows the selection of the level you want to filter. Available for two level and multi level dimensions.

    Example: The two level dimension **Dealer** with the levels **Region** and **City** allows to filter the data according to Region or City.

    Scaling. Available for criterions of date data type and for some number criterions (KPI value for example % or numeric).

13. Click the **Add condition** icon to add further filter conditions.
14. Click **Next** to leave the dialog.

Your settings are applied.

Example

The character combination of space + **(** in the filter value (e.g., 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.

3.8.2.7.2.1.3 CSV

Reads the CSV file and writes the individual values (character strings) to 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	Text file, with values consistently separated using the same separators. ▪ **URL**: HTTP address of the source file If another operator dynamically supplies the URL, 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**: loads 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. **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, e.g., Feed URL. ▪ **Feed URL** is the alias for the resource directory of the default data feeds provided in ARIS Connect. Enter a path into the input box 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 To configure a **Path prefix (alias)** see Configure Dashboard server (page 100) for details. To store data source files in a resource directory see Upload file based data sources (page 249) for details. To copy the source file URL see Upload file based data sources (page 249) for details.
Insert parameter ( )	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ( )	Enables you to set input parameter options
Refresh rate ()	Specifies the time until the source file is read in again. Default value is

Parameters	Description
	30 sec.
Authentication	Specifies a HTTP basic access authentication or an existing authentication defined in the administration. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL
Separator	Separates the column values in the CSV file. Available are comma (,), semicolon (;), space, tab and pipe ((|)), default is comma.
Get column names from row	Specifies a particular row that contains the column names. Activate the **Get column names from row** option and enter the number of the relevant row.
Data from row	Specifies a particular row from that the data source values extraction starts.
Advanced parsing options	**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. **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, e.g., "1,23". Masking characters can be set as required (available masking characters: single-quote ('), double-quote ("), none). **Remove quote characters in column value**: Removes the characters used for masking from the result data. If this option is deactivated, then the masking characters will remain as part of the result data. **Sanitize names**: Transforms column names such that they can be used as XML names, in the same way as EMML treats them. This affects names containing spaces or other special characters. If this option is deactivated, then the names are kept as is. **Trim whitespace**: Removes all leading and trailing whitespace from column values. If this option is deactivated, then any whitespace will be part of the result data. **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 particular value is understood as a date or numeric value, because different sets of date patterns and locales are used. If this option is deactivated, then dates without an explicit time zone are assigned to the server's default time zone, while when this option is deactivated, they are assigned GMT.

Parameters	Description
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

If you use an absolute URL, e.g., **http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication has to be set. All requests to the uploaded file will be made with the specified user/password combination.

If you use a relative URL, e.g., **/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication is not required. All requests to the uploaded file will be made with the current logged in user.

3.8.2.7.2.1.4 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.

As a list table, a corresponding column is created in the data feed for every non-empty column in the source table.

Three columns are created in the data feed as a cross table. 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.

Cells that have the Number data type in MS Excel are extracted accurately, regardless of their formatting. Therefore, the values in can be more accurate than displayed in MS Excel. By contrast, cells that have the Date data type in Excel are extracted based on the format information to maintain the accuracy of the time stamp.

A cell may only have up to 2000 characters.

The following parameters are available.

Parameters	Description
Source	MS Excel file (xls, xlsx) ▪ **URL**: HTTP address of the source file If another operator dynamically supplies the URL, 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**: loads 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. **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, e.g., Feed URL. ▪ **Feed URL** is the alias for the resource directory of the default data feeds provided in ARIS Connect. Enter a path into the input box 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 To configure a **Path prefix (alias)** see Configure Dashboard server (page 100) for details. To store data source files in a resource directory see Upload file based

Parameters	Description
	data sources (page 249) for details. To copy the source file URL see Upload file based data sources (page 249) for details.
Insert parameter ()	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options
Refresh rate ()	Specifies the time until the source file is read in again. Default value is 30 sec.
Sheet	Sheet in the source table to be extracted. Default value: First sheet Specification: Mandatory
List table / Cross table	Specifies the table type. Default value: List table Specification: Mandatory For cross tables, only one vertical iteration on the left side of the table is currently supported.
Separator	Separates the column values in the CSV file. Available are comma (,), semicolon (;), space, tab and pipe ((|)), default is comma.
Column name from row	Determines the names of the individual columns from a particular row, whose row number must be specified. Blank cells in the row with the column name are named **Unnamed column** + the consecutive number of the unnamed columns, if the affected columns contain further data. This option is not available for cross tables.
Horizontal iteration from row	Determines the column names of the individual iteration steps from a particular 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 from a particular row. 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, e.g., A3 to H128 Specification: Optional Only a single continuous data range is possible, but it may contain empty rows or columns.

Parameters	Description
	If no upper limit (to) is specified for the data range, all cells above the lower limit (from) are extracted.
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

If you use an absolute URL, e.g., **http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication has to be set. All requests to the uploaded file will be made with the specified user/password combination.

If you use a relative URL, e.g., **/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication is not required. All requests to the uploaded file will be made with the current logged in user.

3.8.2.7.2.1.5 JSON

Extracts data from a JSON file.

The following parameters are available.

Parameters	Description
Source	JSON file ▪ **URL**: HTTP address of the source file If another operator dynamically supplies the URL, 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**: loads 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. **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, e.g., Feed URL. ▪ **Feed URL** is the alias for the resource directory of the default data feeds provided in ARIS Connect. Enter a path into the input box 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 To configure a **Path prefix (alias)** see Configure Dashboard server (page 100) for details. To store data source files in a resource directory see Upload file based data sources (page 249) for details. To copy the source file URL see Upload file based data sources (page 249) for details.
Insert parameter ( )	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options
Refresh rate ()	Specifies the time until the source file is read in again. Default value is 30 sec.
Authentication	Specifies a HTTP basic access authentication or an existing authentication

Parameters	Description
	defined in the administration. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL
Repeating object: Detect	Reads out the repeating object locator automatically. A repeating object locator already set by a user will not be considered. Depending on the repeating object locator, the detected columns will be displayed in the **Columns** box. JSON object that is repeated for each row; You can edit the repeating object locator manually. Specify a valid XQuery 3.1 lookup expression, e.g., ?catalog?journal?articles?* ?data?rows?* ?catalog?books?* Conceptually, 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: - 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 '?5' would select the fifth element of an array. More details of the lookup syntax can be found at https://www.w3.org/TR/xquery-31/#id-lookup
Advanced parsing options	**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 assumed. **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 particular value is understood as a date or numeric value, because different sets of date patterns and locales are used. If this option is deactivated, then dates without an explicit time zone are assigned to the server's default time zone, while when this option is deactivated, they are assigned GMT.
Columns: Detect	Reads out the columns of the data source automatically. The requested columns list will be displayed, based on the specified repeating object.
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used

Parameters	Description
	instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

If you use an absolute URL, e.g., **http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication has to be set. All requests to the uploaded file will be made with the specified user/password combination.

If you use a relative URL, e.g., **/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication is not required. All requests to the uploaded file will be made with the current logged in user.

3.8.2.7.2.1.6 XML

Extracts data from an XML file. The data records are identified using a recurring element. The individual values are written to table columns in the data feed based on the specified parameters.

The following parameters are available.

Parameters	Description
Source	XML file or EMML-Mashups ▪ **URL**: HTTP address of the source file If another operator dynamically supplies the URL, 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**: loads 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. **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, e.g., Feed URL. ▪ **Feed URL** is the alias for the resource directory of the default data feeds provided in ARIS Connect. Enter a path into the input box 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 To configure a **Path prefix (alias)** see Configure Dashboard server (page 100) for details. To store data source files in a resource directory see Upload file based data sources (page 249) for details. To copy the source file URL see Upload file based data sources (page 249) for details.
Insert parameter ()	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ()	Enables you to set input parameter options
Refresh rate ()	Specifies the time until the source file is read in again. Default value is 30 sec.

Parameters	Description
Authentication	Specifies a HTTP basic access authentication or an existing authentication defined in the administration. User name and password are required for accessing the source file.
HTTP headers	Adds HTTP headers to the URL
Repeating element: Detect	Reads out the repeating element automatically. A repeating element already set by a user will not be considered. The repeating element will be displayed corresponding to the hierarchy of the xml elements, e.g., <element>/<repeating element>. Depending on the repeating element, the requested columns will be displayed in the **Columns** box. XML element that is repeated for each row (XPath to repeat element); You can edit the repeating element manually. Specify a valid XPath expression, e.g., /catalog/journal/article /data/row /catalog/book
Advanced parsing options	**EMML parsing**: EMML compatibility mode. If selected, the XML Data source determines data types analogous to EMML, and parse data the way EMML does. Default is unselected.
Columns: Detect	Reads out the columns of the data source automatically. The requested columns list will be displayed, based on the specified repeating element.
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

If you use an absolute URL, e.g., **http://myhost.company:1080/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication has to be set. All requests to the uploaded file will be made with the specified user/password combination.

If you use a relative URL, e.g., **/documents/rest/links/03388871-367d-4abe-a2c9-37bc9fa44580**, an authentication is not required. All requests to the uploaded file will be made with the current logged in user.

3.8.2.7.2.1.7 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 164) 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.
Insert parameter ( )	Inserts user defined input parameters at cursor position. The button is only clickable if at least one user input parameter, e.g., **Text user input**, has already been inserted in the feed definition.
Parameter options ( )	Enables you to set input parameter options
Configure columns	Configures the columns list. Unselect a column for excluding it from the result data. Entering a **New name** for a column will cause that to be used instead of the original column name in the result. Clicking **Reset columns** will reload the column list from the data source and undo all changes in the list.

3.8.2.7.2.2 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 feed editor.

3.8.2.7.2.2.1 Rename column

3.8.2.7.2.2.1.1 Behavior

Changes the names of the specified columns from the data feed. The data type of the column is retained.

3.8.2.7.2.2.1.2 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

3.8.2.7.2.2.2 Aggregate

3.8.2.7.2.2.2.1 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 no, one or several dimension columns. In all rows that have the same values in all dimension columns, the values in the columns to be aggregated are combined into one row based on an aggregation rule, i.e., 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 to a single value for each column. No rows are created for combinations that do not occur in the original table.

3.8.2.7.2.2.2.2 Parameters

The following parameters are available.

Action	Result
Dimension column	Name of dimension column. Source: Source table Data type: Date, Number, or Text Default value: {None} Specification: Optional
Aggregation column	Name of the column to be aggregated. Source: Aggregation column is transferred from the source table. Data type: Number Default value: {None} Specification: Optional
Aggregation type	Aggregation type for the column to be aggregated: Average value, Sum, Minimum, Maximum, Count, First row and Last row. Default value: Average value, if aggregation column selected. Specification: Mandatory, if aggregation column selected.
Weighting	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. Specification: Optional

3.8.2.7.2.2.2.3 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 particular 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 particular 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 particular 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 particular 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 particular 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 particular 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 particular 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.

3.8.2.7.2.2.2.4 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 Weighting (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)

3.8.2.7.2.2.3 Arithmetic

3.8.2.7.2.2.3.1 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.

3.8.2.7.2.2.3.2 Parameters

The following parameters are available.

Action	**Result**
Operands	One numerical operand per operation for the "Square" and "Square root" calculation types, otherwise two numerical operands. Source: Source table, constants, user input or incoming values from other operators. Data type: Number Specification: Mandatory
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 (%)	Multiplies row by row 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
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

Action	Result
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 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.

3.8.2.7.2.2.3.3 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

3.8.2.7.2.2.4 Average

3.8.2.7.2.2.4.1 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.

3.8.2.7.2.2.4.2 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

3.8.2.7.2.2.5 Change data type

3.8.2.7.2.2.5.1 Behavior

Changes the data types of the specified columns to the **Number**, **Text**, or **Date** data types

Action	Result
Conversion of **Text** to **Number**	Numerical value of the text taking into account the decimal separator. If the decimal separator is set correctly, any thousands separator is detected automatically.
Conversion of **Number** to **Text**	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. If nothing is specified here, the results are formatted in the numerical format.
Conversion of **Text** to **Date**	Date value of the text in the internal format, based on the specified format and, where applicable, the language. 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, e.g., 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. 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.
Conversion of **Date** to **Text**	Text representation of the date in the internal format, or based on the language and the specified format Non-editable text must be enclosed in quotation marks. 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.
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:

15. 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, e.g., Quarter 04/2009.
16. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, e.g., quarter Q/y or Q Y.

Procedure:

17. The (first) two sequences of digits are determined from the source value.
18. 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.
19. 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.

3.8.2.7.2.2.5.2 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 (e.g., GMT) RFC time zone: Z (e.g., -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
	Day of the year: D Hour (0-23): H Hour (1-24): k Hour AM/PM (0-11): K Hour AM/PM (1-12): h Minute: m Second: s AM/PM: a Time zone: z RFC time zone: Z Era: G Default value: yyyy-MM-dd'T'HH:mm:ss; Permitted separators in both cases: Dash/minus (-), underscore (_), slash (/), period (.), colon (:), comma (,), tab character, and space. Specification: Mandatory
Language	Language if the target format is of the **Date** type. Available languages: de and en. Specification: Mandatory when using names of months and names of days of the week
Decimal separator	Separator for the decimal places, if the target format is of the **Number** type. Default value: Comma (,) Specification: Mandatory
Format (**Number** source format)	Number format for the conversion of the **Number** type to the **Text** type. 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, e.g., 1,234.321. After this, you can add text (such as the unit "hours" or km/h). Default value: 1234 Permitted separators: Thousands separator in German: period (.) Thousands separator in English: comma (,) Decimal separator in German: comma (,) Decimal separator in English: period (.)

Parameter	Description
Leading zeros	Number of leading zeros. The maximum number of leading zeros is the number of digits before the decimal separator. Example: Format: 1,234.12 and leading zeros: 5 Number -> Text 10,245 -> 00010,25 12000,4 -> 12000,4 89,7 -> 00089,70
Specify type	Automatically specifies the data type of the source values. 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.
Encoding (**Text** source format)	Specifies the encoding of special characters, for the conversion of the **Text** type to the **Text** type, e.g., "/", "&", "?". Apply UTF-8 encoding: encodes the entire text, using UTF-8 codes Decode UTF-8: decodes the entire text, using UTF-8 codes Apply URL encoding: keeps the URL specific characters 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.

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, i.e., 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 week of the year (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 or YYYY-QQ. These strings may only consist of the year, separator, and quarter.

All other strings must be enclosed in single quotation marks ('). Spaces can be inside or outside, e.g., '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, e.g., "2 .3 .09" -> "d .M .y" but not "2. 3. 09" -> "d .M .y".

3.8.2.7.2.2.5.3 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"

3.8.2.7.2.2.6 Change data type - single value

3.8.2.7.2.2.6.1 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**	Numerical value of the text taking into account the decimal separator. If the decimal separator is set correctly, any thousands separator is detected automatically.
Conversion of **Number** to **Text**	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. If nothing is specified here, the results are formatted in the numerical format.
Conversion of **Text** to **Date**	Date value of the text in the internal format, based on the specified format and, where applicable, the language. 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, e.g., 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. 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.
Conversion of **Date** to **Text**	Text representation of the date in the internal format, or based on the language and the specified format Non-editable text must be enclosed in quotation marks. 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.
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:

20. 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, e.g., Quarter 04/2009.
21. The pattern uses **Y** or **y** as the symbol for the year and **Q** or **q** for the quarter, e.g., quarter Q/y or Q Y.

Procedure:

22. The (first) two sequences of digits are determined from the source value.
23. 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.
24. 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.

3.8.2.7.2.2.6.2 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)	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 (e.g., GMT) RFC time zone: Z (e.g., -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
	Day of the year: D Hour (0-23): H Hour (1-24): k Hour AM/PM (0-11): K Hour AM/PM (1-12): h Minute: m Second: s AM/PM: a Time zone: z RFC time zone: Z Era: G Default value: yyyy-MM-dd'T'HH:mm:ss; Permitted separators in both cases: Dash/minus (-), underscore (_), slash (/), period (.), colon (:), comma (,), tab character, and space. Specification: Mandatory
Language	Language if the target format is of the **Date** type. Available languages: de and en. Specification: Mandatory when using names of months and names of days of the week
Decimal separator	Separator for the decimal places, if the target format is of the **Number** type. Default value: Comma (,) Specification: Mandatory
Format (**Number** source format)	Number format for the conversion of the Number type to the Text type. 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, e.g., 1,234.321. After this, you can add text (such as the unit "hours" or km/h). Default value: 1234 Permitted separators: Thousands separator in German: period (.) Thousands separator in English: comma (,) Decimal separator in German: comma (,) Decimal separator in English: period (.)

Parameter	Description
Leading zeros	Number of leading zeros. The maximum number of leading zeros is the number of digits before the decimal separator. Example: Format: 1,234.12 and leading zeros: 5 Number -> Text 10,245 -> 00010,25 12000,4 -> 12000,4 89,7 -> 00089,70
Specify type	Automatically specifies the data type of the source values. 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.
Encoding (**Text** source format)	Specifies the encoding of special characters, for the conversion of the **Text** type to the **Text** type, e.g., "/", "&", "?". Apply UTF-8 encoding: encodes the entire text, using UTF-8 codes Decode UTF-8: decodes the entire text, using UTF-8 codes Apply URL encoding: keeps the URL specific characters 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.

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, i.e., 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 week of the year (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 or YYYY-QQ. These strings may only consist of the year, separator, and quarter.

All other strings must be enclosed in single quotation marks ('). Spaces can be inside or outside, e.g., '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, e.g., "2 .3 .09" -> "d .M .y" but not "2. 3. 09" -> "d .M .y".

3.8.2.7.2.2.6.3 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"

3.8.2.7.2.2.7 Column to value

3.8.2.7.2.2.7.1 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.

3.8.2.7.2.2.7.2 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

3.8.2.7.2.2.8 Combine data feeds

3.8.2.7.2.2.8.1 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.

3.8.2.7.2.2.8.2 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.
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

Parameter	Description
	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.

3.8.2.7.2.2.9 Concatenate data feeds

3.8.2.7.2.2.9.1 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.

3.8.2.7.2.2.9.2 Parameters

The following parameters are available.

Parameter	Description
Left/right data feeds	Two data feeds to be combined. Specification: Mandatory

3.8.2.7.2.2.10 Concatenate texts

3.8.2.7.2.2.10.1 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.

3.8.2.7.2.2.10.2 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

3.8.2.7.2.2.11 Conditional replace

3.8.2.7.2.2.11.1 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, i.e., 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".

3.8.2.7.2.2.11.2 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
Comparison operator	Operator that compares the values from the source column with the comparison values. Available comparison operators depend on the data type of the source column. Default value: is equal to Specification: Mandatory
Comparison values	Values that are compared with the values from the source column. Source: Column with values, single value from a feed (single-value operator), user input, or a constant. Data type: Must be identical to that of the source column. Comparison value missing

Action	Result
	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. Specification: Mandatory

3.8.2.7.2.2.11.3 Comparison operators

The following comparison operators are available.

Data type	Comparison operators
Figure	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
Text	Is equal to Is not equal to Starts with Ends with Contains Does not contain Is empty Is not empty
Date	Before After In Before or on On or after Is empty Is not empty

3.8.2.7.2.2.12 Convert text

3.8.2.7.2.2.12.1 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.

3.8.2.7.2.2.12.2 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
Target column	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). Data type: Text Default value: Result_1 Specification: Optional If the target column is identical to the source column, the values in the source column are overwritten.

3.8.2.7.2.2.13 Copy data feeds

3.8.2.7.2.2.13.1 Behavior

Creates up to four independent copies of a data feed.

3.8.2.7.2.2.13.2 Parameters

The following parameters are available.

Parameter	Description
Data feed	Data feed to be copied. Specification: Mandatory

3.8.2.7.2.2.14 Copy single value

3.8.2.7.2.2.14.1 Behavior

Creates an independent copy of a single value, without changing the input value.

3.8.2.7.2.2.14.2 Parameters

The following parameters are available.

Parameter	Description
Single value	Single value to be copied. Specification: Mandatory

3.8.2.7.2.2.15 Date user input

3.8.2.7.2.2.15.1 Behavior

Enables 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.

3.8.2.7.2.2.15.2 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

3.8.2.7.2.2.16 Delete column

3.8.2.7.2.2.16.1 Behavior

Deletes the specified columns from the data feed.

3.8.2.7.2.2.16.2 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

3.8.2.7.2.2.17 Duplicate column

3.8.2.7.2.2.17.1 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. All columns can be duplicated, regardless of type.

3.8.2.7.2.2.17.2 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

3.8.2.7.2.2.18 Extract text

3.8.2.7.2.2.18.1 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 and 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.

3.8.2.7.2.2.18.2 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
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

3.8.2.7.2.2.19 Filter by date

3.8.2.7.2.2.19.1 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 particular 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.

3.8.2.7.2.2.19.2 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.

3.8.2.7.2.2.20 Filter rows

3.8.2.7.2.2.20.1 Behavior

Filters the data feed one row at a time using particular 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.

Action	Result
Action	Executed if particular conditions are met. Possible actions: Let values pass (from source table) Block values (from source table) if all conditions are met one condition is met Default value: Let values pass if all conditions are met. Specification: Mandatory
Column	Name of the column whose values are filtered. Source: Source table Data type: Number, Text, Date; Specification: Mandatory
Comparison operator	Operator that compares the values from the source column with the comparison values. Available comparison operators depend on the data type of the source column. Default value: is equal to Specification: Mandatory
Comparison values	Values that are compared with the values from the source column. Source: Source table, single-value operator, user input, or a constant Data type: Must be identical to that of the source column. Comparison value missing 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. Specification: Mandatory

3.8.2.7.2.2.20.2 Parameters

The following parameters are available.

Parameter	Description
Figure	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
Text	Is equal to Is not equal to Starts with Ends with Contains Does not contain Is empty Is not empty
Date	Before After In Before or on On or after Is empty Is not empty

3.8.2.7.2.2.21 Find text index

3.8.2.7.2.2.21.1 Behavior

Finds the specified search text in a search column and writes the position of the found text to a numerical target column.

If the search text is not found, the position is -1.

3.8.2.7.2.2.21.2 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.

3.8.2.7.2.2.22 Goal accomplishment

3.8.2.7.2.2.22.1 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%.

3.8.2.7.2.2.22.2 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, e.g., sales revenue Negative: Higher values are assessed as negative, e.g., 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 >= target values Negative rating: Source values <= target values
0% 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: Target values <= source values Negative rating: Target values >= source values

Parameter	Description
Target column	Name of the column to which the result is written. Source: Source table or constant. Default value: Result_1 Data type: Number Specification: Optional

3.8.2.7.2.2.23 Insert column

3.8.2.7.2.2.23.1 Behavior

Inserts new columns of Text, Number, or Date data type into the data feed. Each of the columns can be populated with an initial value.

3.8.2.7.2.2.23.2 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 or constant and source table Data type: Depends on the data type of the source column. Specification: Optional

3.8.2.7.2.2.24 Merge single texts

3.8.2.7.2.2.24.1 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.

3.8.2.7.2.2.24.2 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 will be automatically shortened to 2,000 characters.

3.8.2.7.2.2.25 Move date

3.8.2.7.2.2.25.1 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 whose unit 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.

3.8.2.7.2.2.25.2 Parameter

The following parameters are available.

Action	Result
Source column	Name of the source column whose date values are moved. Source: Source table Data type: Date Specification: Mandatory
Direction	Direction in which the date is moved. Valid values: Forward or Back Data type: Text Default value: Forward Specification: Mandatory
Value	Value by which the date is moved by the selected unit. Source: Manual entry or single value and source table Data type: Number Default value: 1 Specification: Optional
Unit	Unit of time by which the date is moved. Data type: Text Default value: Second

Action	Result
	Specification: As source 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.
Target column	Name of the target column to which the result is written. Data type: Date Default value: Result_1 Specification: Optional The target column can be identical to the source column. The values in the target column are overwritten.

3.8.2.7.2.2.25.3 Example

Source value	Value	Unit	Direction	Result
2009-12-24T16:23	10	YEAR	NEXT	2019-12-24T16:23
2009-12-24	10	DAY	NEXT	2010-01-03
2009-12-30	10	MONTH	BACK	2009-02-28
2009-11	1	QUARTER	NEXT	2010-02
2009-11	1	DAY	NEXT	2009-11
2009-01-01	3	As source	NEXT	2011-01-04
2011-Q1	3	As source	NEXT	2011-Q4

3.8.2.7.2.2.26 Number user input

3.8.2.7.2.2.26.1 Behavior

Enables 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 (e.g., 1234.56).

3.8.2.7.2.2.26.2 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: Number Specification: Optional
Preview value	The value is used if the user does not provide any input. Source: Constant Data type: Number Specification: Optional

3.8.2.7.2.2.27 Replace text

3.8.2.7.2.2.27.1 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.

3.8.2.7.2.2.27.2 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
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, i.e., NOT "First row", "Last row" and "All rows".

3.8.2.7.2.2.28 Round up/down

3.8.2.7.2.2.28.1 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, i.e., 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.

3.8.2.7.2.2.28.2 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
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

3.8.2.7.2.2.29 Round up/down date

3.8.2.7.2.2.29.1 Behavior

Converts date values from a date column to a rougher time unit and writes the results to a target column.

3.8.2.7.2.2.29.2 Parameter

The following parameters are available.

Action	Result
Source column	Name of the source column whose values are rounded. Source: Source table Data type: Date Specification: Mandatory
Precision	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, e.g., 5 minutes or 1 year Data types: Numeric, Text Default values: 1, Minute If the accuracy of the source column is less accurate or the same as the target column format, the original value is retained. The date values are rounded according to the selected interval. Only the unit to be rounded is taken into account, e.g., when rounding to minutes, the seconds are ignored. Rounding type: Specifies how the selected time interval is to be rounded. Round up for half an interval: Automatically rounds up above an interval value higher than or equal to half of the interval value Round down for half an interval: Automatically rounds down below an interval value lower than or equal to half of the interval value Always round up: Always rounds up, regardless of the interval value Always round down: Always rounds down, regardless of the interval value
Target column	Name of the target column to which the converted date is written Data type: Date Default value: Result_1 Specification: Optional The target column can be identical to the source column. The values in the target column are overwritten. If the target column is not of the Date type, it is replaced by a new date column.

3.8.2.7.2.2.29.3 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	2010-08-06T0**4:00:00**

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-**03-01**T00

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**

3.8.2.7.2.2.30 Runtime info

3.8.2.7.2.2.30.1 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.

3.8.2.7.2.2.30.2 Parameters

The following parameters are available.

Parameter	Description
Information type	The single-value operator can return the following types of information: User data Today's date Random number Default value: User data Specification: Mandatory
Property	Properties of the logged-in user; displayed if User data is selected as the information type. The following values can be selected: Login, First name, Last name, E-mail and Language Default value: User name Specification: Mandatory
Precision	Specifies the accuracy of the date, displayed if Today's date is selected as the information type. The following values can be selected: Minute, Hour, Day, Month, Year Default value: Day Specification: Mandatory
Number range	Number range of the random number; displayed if Random number is selected as the information type. The following values can be selected: Integers, Floating point numbers Default value: Integers Specification: Mandatory
Upper/lower limit	Upper or lower limit of the value range for the random number; displayed if Random number is selected as the information type. Default value: 0 and 10 Specification: Mandatory

3.8.2.7.2.2.31 Text user input

3.8.2.7.2.2.31.1 Behavior

Enables 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.

3.8.2.7.2.2.31.2 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

3.8.2.7.2.2.32 Value to column

3.8.2.7.2.2.32.1 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.

3.8.2.7.2.2.32.2 Parameters

The following parameters are available.

Parameter	Description
Target column	Name of the column to which the conversion result is written. The name of the column is initially **Result_1**. You can change the name manually if required. Data type: Text, Date or Number Default value: Result_1 Specification: Optional

3.8.2.7.3 Upload file based data sources

To use data sources in the dashboard and data feed editor that are file-based, such as Excel spreadsheets, CSV files or XML files, you have to store the files in a resource directory in the ARIS document storage, accessible in the ARIS Connect Repository.

Prerequisite

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

Procedure

25. Start ARIS Connect.
26. Activate the **Repository**.
27. Activate the **Documents** tab.
28. In ARIS document storage navigation tree select the folder where you want to store your source file.
29. Click **Upload**. The **Upload new document** dialog is displayed.
30. Click **Select** and select the relevant resource file.
31. Enter a title in the **Title** input box.
32. Enter a description in the **Description** input box.
33. Enter a number of terms comma separated in the **Tags** input box. Tags are used for the search function.
34. 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 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 clipboard.

3.8.3 Valuable information

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

3.8.3.1 What are dashboards?

Dashboards are interactive applications that collect data from different data sources, combine it, and visualize it, e.g., ARIS table or CSV files. Dashboards are composed of individual components (e.g., 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 109) for instructions.

See Create a dashboard (page 111) for instructions.

3.8.3.2 What are data feeds?

A data feed is a table containing prepared data. It consists of several columns that contain numerical values (e.g., 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 (e.g., data from MS Excel, CSV, or XML files) using feed definitions. The source data is not held redundantly in 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.

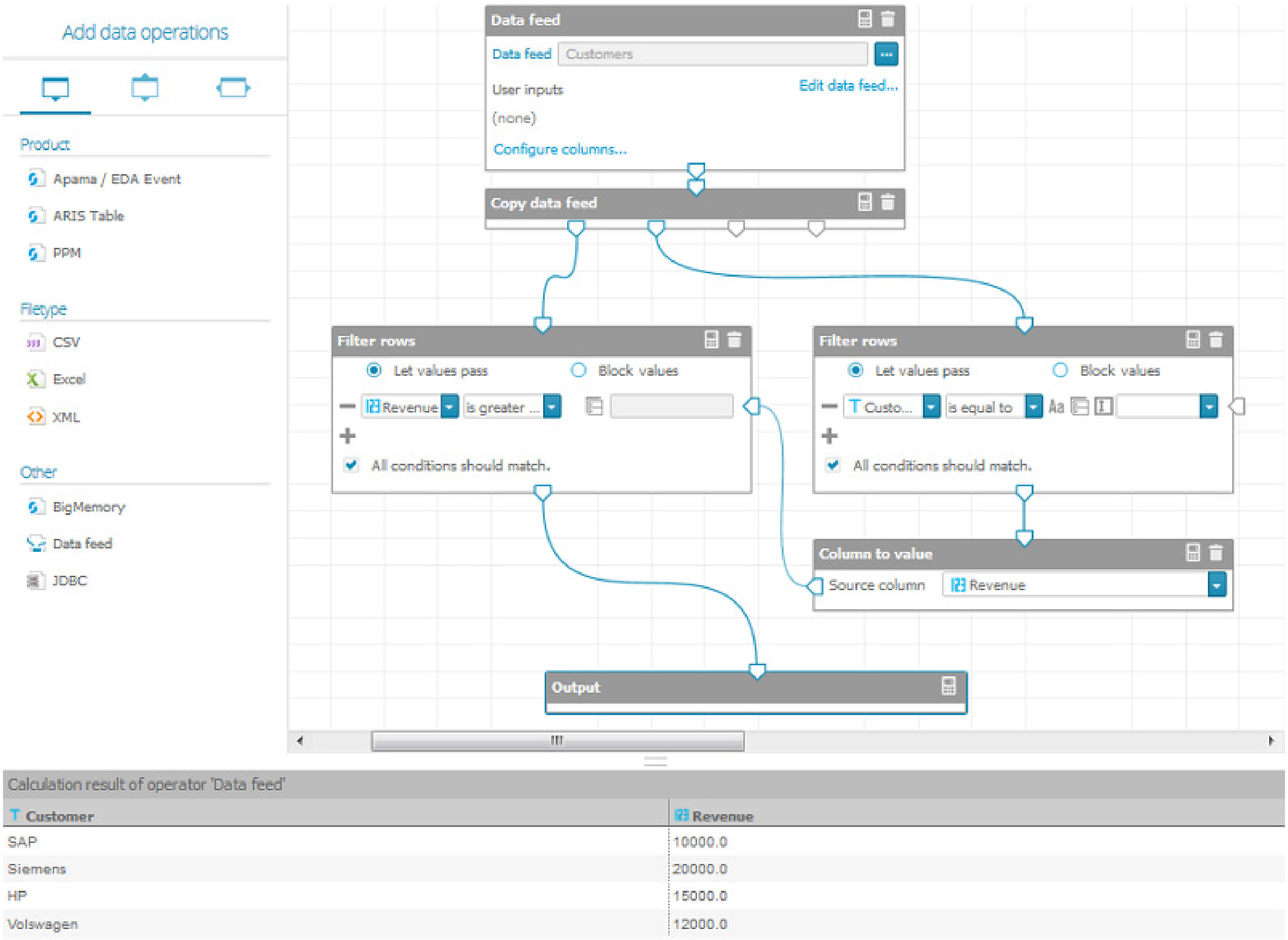
Only one data feed can be assigned to each dashboard component, with the same data feed being able to supply the data for several dashboard components. See Assign data sources to dashboard components (Seite 121) for details.

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, which are linked together using 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 gives you an easy, graphic way to create, manage and view your data feeds, without any programming knowledge. The feed editor provides you with all supported data source operators and all relevant data transformation and user input operators. Rule definitions are done using drag and drop.

See Create data feeds (Seite 159) for instructions.

Data feed definition and feed table



3.8.3.3 What is the data source for dashboards by default?

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 and in the Report Wizard.

In this category you find reports needed to generate data feed input for default ARIS Aware Dashboards. The code of these reports cannot be modified. If you like to modify the code, in order to define your own dashboards (page 578), 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. 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.

3.8.3.3.1 Report: CoE - Aggregated maturity

USE

This report evaluates the following **Center of Excellence** use cases:

- Maturity level
- Mandatory properties
- Number of processes
- Model status
- Model age

The results are aggregated along the process hierarchy so that each level of the process hierarchy will provide an aggregated result for its complete child hierarchy. The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.2 Report: CoE - Conventions

USE

This **Center of Excellence** report provides the evaluation algorithms for the **Conventions** use case.

It is invoked by the main report **CoE - Local and global maturity** and is not intended to be started by users.

3.8.3.3.3 Report: CoE - Local and global maturity

USE

This report evaluates the following **Center of Excellence** use cases:

- Conventions
- Owner distribution
- Validity date

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.4 Report: CoE - Maturity level/Mandatory properties

USE

This report provides the evaluation algorithms for the following **Center of Excellence** use cases:

- Maturity level
- Mandatory properties

It is invoked by the **CoE - Aggregated maturity** report and is not intended to be started by users.

3.8.3.3.5 Report: CoE - Model age

USE

This **Center of Excellence** report provides the evaluation algorithms for the **Model age** use case.

It is invoked by the **CoE - Aggregated maturity** report and is not intended to be started by users.

3.8.3.3.6 Report: CoE - Number of processes/Model status

USE

This report provides the evaluation algorithms for the following **Center of Excellence** use cases:

- Number of processes
- Model status

It is invoked by the **CoE - Aggregated maturity report** and is not intended to be started by users.

3.8.3.3.7 Report: CoE - Owner distribution

USE

This internal **Center of Excellence** report provides the evaluation algorithms for the **Owner distribution** use case. It is invoked by the **CoE - Local and global maturity** and is not intended to be started by users.

3.8.3.3.8 Report: CoE - Representative Objects

USE

This report collects representative objects for the items in the evaluated hierarchy.

It is invoked by the **CoE - Aggregated maturity** report and is not intended to be started by users.

3.8.3.3.9 Report: CoE - Validity date

USE

This internal **Center of Excellence** report provides the evaluation algorithms for the **Validity date** use case. It is invoked by the **CoE - Local and global maturity** and is not intended to be started by users.

3.8.3.3.10 Report: CXM - Analyze customer experience

USE

This report provides the answers to the following questions and provides a general overview:

- Which business drivers influenced the journey?
- How happy is the customer?
- Which customer touchpoints are critical?
- Overview of risks and initiatives.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CMX_ANALYZE_CUSTOMER_EXPERIENCE.XML** file. The **Get a general overview** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**CXM** subfolder (page 60).

The report result is used as input for the **CXM - Analyze customer experience** data feed. This data feed is related to the **Customer experience** CXM dashboard (page 614) and the **Customer journey map CXM** dashboard (page 621).

CONTEXT

Database

3.8.3.3.11 Report: CXM – Analyze customer journeys (TOP 7)

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 the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **CXM - Analyze customer journeys** data feed. This data feed is related to the the **Customer experience** CXM dashboard (page 614).

CONTEXT

Database

3.8.3.3.12 Report: CXM - Critical journeys

USE

This report answers the following questions:

- Which customer journey is the most critical?
- Which customer lifecycle stage is the most critical?

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.13 Report: CXM - Responsibility (Channel)

USE

This report provides the answers to the question: **Who is responsible for the customer touchpoints (Channel)?**

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CMX_RESPONSIBLE_CHANNEL.XML** file. The **Who is responsible for the customer touchpoints (Channel)?** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**CXM** subfolder (page 60).

The report result is used as input for the **CXM - Responsible channel** data feed. This data feed is related to the the **Responsibilities** CXM dashboard (page 618).

CONTEXT

Database

3.8.3.3.14 Report: CXM - Responsibility (Ownership)

USE

This report provides the answer: **Who is responsible for the customer touchpoints (Ownership)?**

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **CMX_RESPONSIBLE_OWNER.XML** file. The **Who is responsible for the customer touchpoints (Ownership)?** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**CXM** subfolder (page 60).

The report result is used as input for the **CXM - Responsible owner** data feed. This data feed is related to the the **Responsibilities** CXM dashboard (page 618).

CONTEXT

Database

3.8.3.3.15 Report: EA - KPIs with data

This report creates a table with all KPIs in the database. Each KPI's quantitative and qualitative goal accomplishments are included.

The goal accomplishments are calculated according to Balanced Scorecard methodology.

For the calculation of the goal accomplishment values, at least the actual and the plan values of the KPI have to be maintained. In case of an inverse KPI, the maximum value is required, as well, but only for the quantitative goal accomplishment.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.16 Report: EA - Models and objectives

This report creates a table with models of the **Strategy diagram** model type and the **Objective diagram** model type, both of which contain objectives. In addition, all objectives that the models contain are listed.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.17 Report: EA - Objectives and KPIs

This report creates a table with all objectives and their KPIs.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.18 Report: EA - Objectives with data

This report creates a table that includes all objectives of the database. The goal accomplishment is also provided for each objective.

The goal accomplishment is calculated as a weighted sum of the quantitative goal accomplishment values of the connected KPIs. This is done only if a weighting value was specified for all connections to KPIs, and if goal accomplishment values can be calculated for all KPIs. For the latter to be possible, the actual value and the plan value must have been specified for each KPI. For an inverse KPI, the maximum value must be available as well.

The calculation is carried out in line with the **Balanced Scorecard** methodology and in the same way as in the **Create BSC management view** report.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.19 Report: EA - Relations between organizational units and systems

This report creates a table with pairs of organizational units and IT systems. Such a pair is included in the table if a system supports an organizational unit, via a function and optionally a position or role, or an organizational unit is responsible for a system. The report also takes hierarchies of functions and organizational units into account.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_UNIT_SYSTEM.XML** file. The **Relations between units and systems** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - Organizational unit - Systems with lifecycle data** and the **EA - Organizational unit - Systems expired** data feeds. These data feeds are related to the EA dashboard for organizational units (page 628) dashboard.

CONTEXT

Database

3.8.3.3.20 Report: EA - System 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 the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - System - System redundancies** data feed. This data feed is related, e. g., to the EA dashboard for organizational units (page 628) dashboard.

CONTEXT

Database

3.8.3.3.21 Report: EA - System support

This report creates a table listing all IT systems of the database, as well as the organizational units and functions they support. Each row in the table consists of an **Application system type** object, the supported object, the object type, the support count, and a rank. The supported objects are identified by looking at the **Process support unit** objects that the IT system is connected to, and the **Organizational unit** and **Function** objects connected to the IT system.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_SYSTEM_SUPPORTS.XML** document stored in ARIS document storage. The **System supports document** is stored in the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - System - Supported organizational units** data feed. This data feed is related to the the EA dashboard for IT systems (page 632).

CONTEXT

Database

3.8.3.3.22 Report: EA - System support for VACDs

This report traverses the hierarchy of value-added chain diagrams (VACDs) and counts how many functions in EPCs assigned to VACDs are supported by an IT system. An IT system supports a function if the IT system is linked to the function via a connection of the **supports** type. The report creates a table listing the support count and a rank for each combination of an IT system with a VACD.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_SYSTEMS_VACD_SUPPORTS.XML** file. The document is stored in the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - System Supported processes** data feed. The data feed is related to the **EA dashboard for IT systems** (page 632) dashboard.

CONTEXT

Database

3.8.3.3.23 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 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 the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

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 628) dashboard.

CONTEXT

Database

3.8.3.3.24 Report: EA/Alfabet - CAPEX/OPEX for organizational units

This report creates a table that includes 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. Each row contains the name, the ARIS GUID and Alfabet GUID of the organizational unit, the year to which the cost values refer, as well as the CAPEX and OPEX cost values themselves.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_CAPEX_OPEX.XML** file. The **Capex/Opex** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - OrgUnit - CAPEX/OPEX** data feed. This data feed is related to the EA dashboard for organizational units (page 628) dashboard.

CONTEXT

Database

3.8.3.3.25 Report: EA - KPIs with data

This report creates a table listing all IT systems of the database that also exist in Alfabet. For each system and year, the table contains a row providing the cost values for the various cost types as specified in Alfabet.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.26 Report: EA/Alfabet - Systems with lifecycle data

This report creates a table listing all **Application system type** objects of the database. It also provides the lifecycle data for each object. These data originate from an Alfabet system - if one is connected to the database - or from the relevant ARIS attributes.

The report provides various parameters allowing customizing without changing the report code.

OUTPUT

Generates the **EA_SYSTEM_LIFECYCLE.XML** document stored in ARIS document storage. The **System with lifecycle data** document is stored in the ARIS document storage/Dashboarding/United Motor Group/**EA** subfolder (page 60).

The report result is used as input for the **EA - Organizational unit - Systems with lifecycle data** and the **EA - Organizational unit - Systems expired** data feeds. These data feeds are related to the EA dashboard for organizational units (page 628) dashboard.

CONTEXT

Database

3.8.3.3.27 Report: Export item data to tables

This report is working with parameters only. These parameters are related to the current ARIS Connect configuration.

You must specify the items and the properties for these items. While running, the report collects these user specified properties and writes the output to ARIS document storage.

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.28 Report: Piwik - Database-specific portal usage reports

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

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.29 Report: Piwik - Global portal usage reports

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

The report provides various parameters allowing customizing without changing the report code.

CONTEXT

Database

3.8.3.3.30 Report: Piwik - Global portal usage reports

This report is used by MashZone to retrieve a data feed from ARIS Server. A data feed can be created in ARIS Architect. An XSL table is generated frequently by using a scheduled report.

CONTEXT

Database

3.8.3.4 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 103) created for demonstration purposes, or create your own dashboards (page 578).

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 not active, your server administrator must activate the runnable using ARIS Cloud Controller (ACC)(see **ARIS Server Installation Guide** or **ARIS Cloud Controller (ACC) Command-Line Tool** on DVD, ARIS Download Center (aris.softwareag.com) or Empower (https://empower.softwareag.com/)).
- In the User Management a valid license of the **YCSAW** type is assigned to the users, also to the **system** user (see ARIS Connect online help, Assign privileges and profiles chapter (page 33)).
- In ARIS Connect, the **Feed URL** alias URL must be defined (see ARIS Connect online help; Add an alias URL for dashboards (page 100)).
- The required content has been made available from the ARIS installation DVD (page 103).
- In ARIS Connect, check default data feeds for issues (page 105).

3.9 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.

3.9.1 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 650) in ARIS Architect.

Procedure

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

Collaboration opens.

3.9.2 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**.

3.9.3 Check activities flagged as inappropriate

Check content flagged as inappropriate and decide whether it needs to be deleted.

Prerequisite

- Flagging activities is activated 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 has been 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.

3.9.4 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 650) 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 in no longer displayed in **My portal feeds** for the selected users.

3.9.5 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 <aba>. 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 650) 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.

3.9.6 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, i.e., 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 650) in ARIS Architect.

Procedure

1. Under **Administration** click **Manage announcements**.
2. Enter the announcement title.
3. Enter or copy your text into the input field. Up to 2000 characters are available.
4. Click **OK**.

Your announcement is published in **All company feed** and **My feed** of all colleagues.

If an announcement is outdated, click **Delete.**

3.9.7 Configure ARIS document storage user

Specify a user responsible for the generation of dashboards. The data of dashboards is stored in ARIS document storage. Only one ARIS document storage user (page 61) can be specified at a time. For detailed information about access to ARIS document storage (page 61) 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.

3.9.8 Display dashboards

You can view statistics data via dashboards: Overview, Collaboration content, users and groups. 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 414).
- Your ARIS Server is enabled for ARIS Aware.

Procedure

1. Under **Administration**, click **Dashboards**.
2. Click the relevant area (**Overview**, **Collaboration**, **Users**, **Groups**).

The dashboards for the selected area are displayed.

More information on dashboards is available in Show dashboards (page 577), Dashboards available by default (page 604), and Set up dashboards.

3.9.9 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.

3.9.10 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

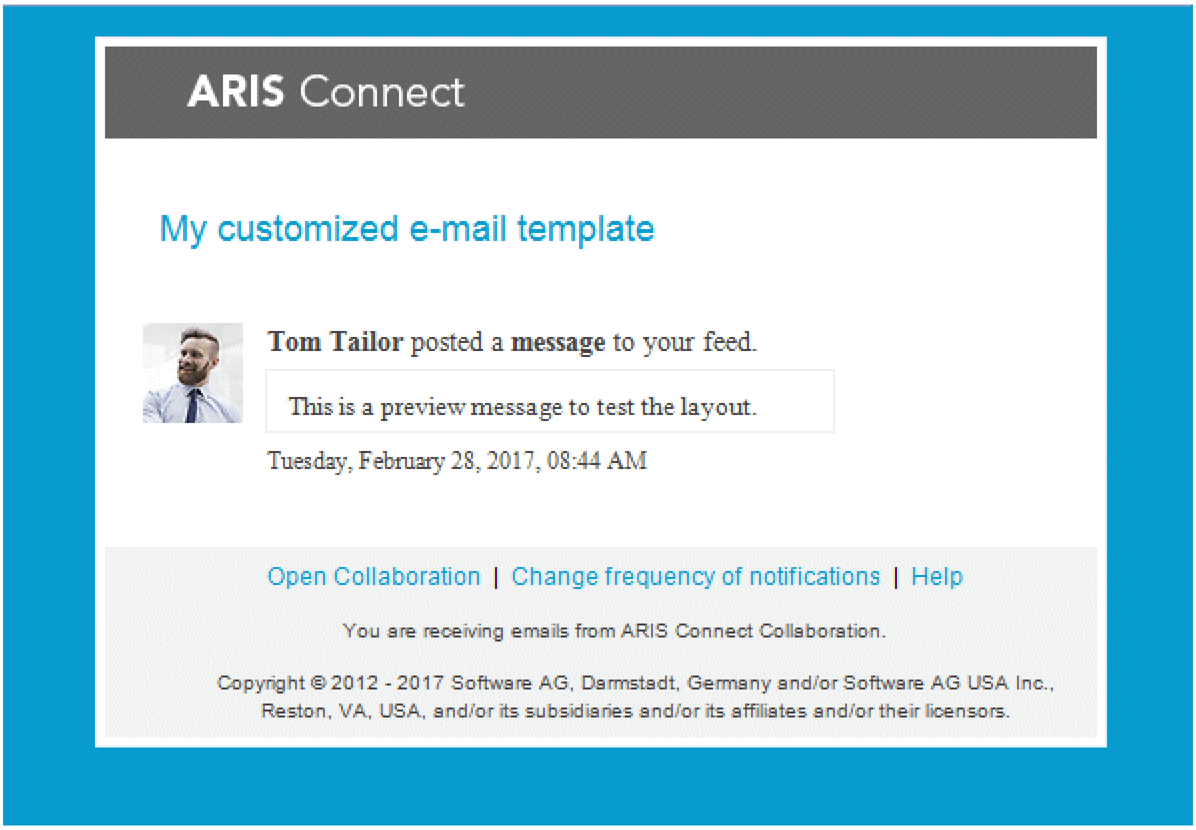
Change the background color of the e-mail and the heading.

- 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:



3.9.11 What are the privileges of coordinators and Collaboration administrators?

COORDINATORS

- Are responsible for managing (page 647) 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 647) coordinator privileges to other group members, as well.

COLLABORATION ADMINISTRATORS

- Have the same privileges as coordinators.
- Manage the posts that users have flagged as inappropriate (page 267).
- Can synchronize (page 268) access privileges
- Can manage (page 268) announcements
- Can configure (page 269) ARIS document storage user
- Can display (page 269) dashboards
- Can clean up and export (page 266) activities
- Can view all posts and delete them.
- Can configure (page 270) and customize (page 270) e-mail notifications.

Collaboration administrator is a function privilege assigned in ARIS Administration.

3.9.12 What dashboards are there?

There are dashboards from the overview, Collaboration content, users and groups areas.

3.9.13 Which access rights 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 <aba>. You can synchronize (page 268) 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).

3.10 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 278), you have to configure the infrastructure tenant (page 274). This assigns users in the infrastructure tenant privileges for impersonation (page 279), along with additional function privileges.

Once all operational tenants are configured (page 275), 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 276).

3.10.1 Configure infrastructure tenant

In order for users to be able to log into Tenant Management, they must have been assigned **impersonation** privileges (page 279) 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, e.g., **http://myServer:1080/umc**. The User Management login dialog opens.
2. Enter the name of the infrastructure tenant in the **Tenant** field, e.g., **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. Click **Privileges**. The list of function privileges is displayed.
7. 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 275).

3.10.2 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, e.g., 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. Activate the **Configuration** tab.
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
    - Collaboration administrator
    - Database administrator
    - Document administrator

- License 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 280). All substitutes can log in using their user name and manage tenants on behalf of the system user **superuser**.

3.10.3 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.

Prerequisite

You are a system user or have the **User administrator** and **Technical configuration administrator** function privileges.

Procedure

1. Open ARIS Administration for an operational tenant, e.g., 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. Activate the **Configuration** tab.
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. Select the **Security** entry in the drop-down list.
13. Click **Advanced settings**.
14. Click **Edit**.
15. Enable the **Generate user statistics** check box.
16. Click **Save**. The **Utilization** and **Licenses** columns can be displayed on the **Tenants** page.
17. Click **User management**.
18. Select the user **superuser**. The details will be displayed.
19. Click **Privileges**. The list of function privileges is displayed.
20. Activate the function privileges required for backing up and restoring:
    - Analysis administrator
    - Collaboration administrator
    - Database administrator
    - Document administrator
    - License 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.
21. Log out of ARIS Administration.

    The user **superuser** has the privileges to manage data for this tenant.
22. Configure all other tenants that were not created in Tenant Management in the same way.

The user **superuser** has the privileges to manage all data for the tenants (page 280). All substitutes can log in using their user name and manage tenants on behalf of the system user **superuser**.

3.10.4 Open Tenant Management

System users and users (page 274) 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 274).

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.

   If you reset the password for the user **system** or **superuser**, other users can no longer log in with these user names. Automated processes, e.g., automatic backups, can no longer be performed.
4. Click **Log in**.

You can manage all tenants in the system.

3.10.5 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 279).

3.10.6 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, e.g., master (page 338). 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, e.g., **default**, the user **superuser** must be defined as the target for impersonation (page 274). 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:

- ARCM administrator
- Analysis administrator
- Collaboration administrator
- Document administrator
- Database administrator
- License administrator
- Process Governance administrator
- Server administrator
- Technical configuration administrator

3.10.7 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. Extensions, e.g., 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.

Backup/restore	Required function privileges	Component (runnable)
Data from ARIS Administration, e.g., users, privileges,	User administrator Technical configuration administrator	ARIS Administration/User Management (umcadmin_<s, m, or l>)
Licenses	License administrator	
System database 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 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>)

Backup/restore	Required function privileges	Component (runnable)
Dashboards	Dashboard administrator	ARIS Aware (dashboarding_<s, m, or l>)

You require the same function privileges to restore the data.

3.11 Configure ARIS Connect

ARIS Connect can be configured and customized to meet specific requirements that can differ between various customers.

3.11.1 Configure Portal

By default, ARIS Connect provides the classic configuration set (page 582) and the default configuration set (page 582) as examples. Using these as basis, you can define modification sets customizing how data are displayed.

3.11.1.1 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 your 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 288). As long as the databases are available in the portal they cannot be deleted in ARIS.

3.11.1.2 Manage configuration and modification sets

Portal administrators select the configuration set to show portal data. The way you are able to navigate through the data is determined by the hierarchies.

By default, ARIS Connect provides the classic configuration set (page 582) and the default configuration set (page 582) as examples. With these, you publish sample portals on the basis of the demo database, for example. Of course, you can also publish your databases with these sample configuration sets. If you want to change the appearance of the portal, administrators simply create (page 287) custom modification sets for you based on the classic configuration set or default configuration set. 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://softwareag.com).

3.11.1.2.1 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 the arrow next to your 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>_bak.zip** backup file is downloaded.

3.11.1.2.2 Duplicate configuration set

You can generate a new modification set by duplicating a configuration set.

Prerequisite

- You have the **Portal administrator** function privilege.
- You have access to the backup file.

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your 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 **Duplicate**. A new modification set is generated.

The modification set is created. It contains all elements from the selected template.

Change (page 289) the new modification set by adding the required items, properties, and fact sheets, or by adapting existing ones.

3.11.1.2.3 Define a portal configuration set providing SAP® content

In order to make SAP transactions, the ARIS Online Guide, and SAP documents available to portal users, you need to create an additional portal configuration set.

If you require further modification sets, please contact your local Software AG sales organization (http://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 may 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** (**http://www.softwareag.com/education/**). 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 l>**\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 **l>**\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:

    work_abs_<s, **m**
    or **l>**\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. Load the current changes using the external link:

    http://<server name><:port number, if different from default port>/#<tenant>/**reloadConfig**,

    e.g. http://connectserver.eu.comp:1080/#default/reloadConfig
15. Log in as a system user.
16. Click **Reload and validate configuration files**. The changed configuration is validated. Results will be displayed on completion.
17. 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.
18. Activate the **Groupview_SAP** configuration set via external link:

    http://<server name><:port number, if different from default port>/#<tenant>/**adminSettings**

    e.g:

    http://connectserver.eu.comp:1080/#default/adminSettings

    You can also activate (page 288) the **Groupview_SAP** configuration set within ARIS Connect.

In this configuration set, the functions Run SAP transaction (page 564), Download SAP documents (page 565), and ARIS Online Guide (page 567) are now available for published databases (page 282).

Ensure you are connected to SAP Solution Manager 7.2.

3.11.1.2.4 Restore configuration set

If you require further modification sets, please contact your local Software AG sales organization (http://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 the arrow next to your 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**. 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, it is overwritten. The **classic** and **default** configuration sets cannot be overwritten or deleted.

3.11.1.2.5 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 the arrow next to your 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.

3.11.1.2.6 Create modification set

You can create (page 287) your own modification sets based on the classic configuration set (page 582), on the default configuration set (page 582) 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://softwareag.com).

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your 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 289) the new modification set by adding the required items, properties, and fact sheets, or by adapting existing ones.

3.11.1.2.7 Save ARIS Connect modification set

Save user-defined modification sets (page 287) 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 the arrow next to your 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>_bak.zip** backup file is downloaded.

Based on this backup, you can restore this version of the modification set (page 288).

3.11.1.2.8 Restore ARIS Connect modification set

Restore saved modification sets (page 287).

Prerequisite

- You have the **Portal administrator** function privilege.
- You have access to the backup file.

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your 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**. The file selection dialog opens.
6. Double-click the ZIP file (syntax: **<name of the modification set>_bak.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 for restored one (page 289).

3.11.1.2.9 Select modification set

Select the modification set to showi the portal data. By default, the program provides the classic configuration set (page 582) and the default configuration set (page 582). If required, user-defined modification sets (page 287) and restored modification sets (page 288) are also displayed here.

You can create (page 287) your own modification sets based on the classic configuration set (page 582), on the default configuration set (page 582) or based on a user-defined configuration set. If you require further modification sets, please contact your local Software AG sales organization (http://softwareag.com).

Prerequisite

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

Procedure

1. Start ARIS Connect.

2. Click the arrow next to your 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.

3.11.1.2.10 Rename modification set

Change the names of modification sets.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click the arrow next to your 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.

3.11.1.2.11 Edit modification set

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 the arrow next to your user name.
3. Click **Administration**.

4. Click **Manage configuration sets**.
5. Move the mouse pointer over a user-defined modification set. All available configuration and modification sets are displayed. The current configuration or modification set is marked as **(active)**. You can edit custom (page 287) modification sets only.
6. Click **Edit**.

The **Define modification set** page opens and you can edit the modification set.

3.11.1.2.11.1 Edit items

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

3.11.1.2.11.1.1 Add items

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
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, e.g., **Risk**.
5. For each language enter the name of the element that it is to be displayed with in the portal.
6. In the **Source** box, select the type of ARIS item, e.g., **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. Click **Create**. The item is displayed in the list.
11. Click **Back**.
12. To test the changed modification set, select (page 288) it for publishing.

As soon as a fact sheet has been configured (page 297), the changes are available to all users of the portal.

3.11.1.2.11.1.2 Edit items

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
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, e.g., **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, e.g., **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 **Remove** to delete entries.
12. Click **Back**.
13. To test the changed modification set, select (page 288) it for publishing.

The changes are available to users in the portal.

3.11.1.2.11.1.3 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 289)
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, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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**. A dialog of the same name 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, e.g., **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.

3.11.1.2.11.1.4 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 289)
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, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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, e.g., Process.
7. Click **Edit >** **Contribute**.
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, e.g., **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.

3.11.1.2.11.1.5 Allow Connect Viewer users to edit

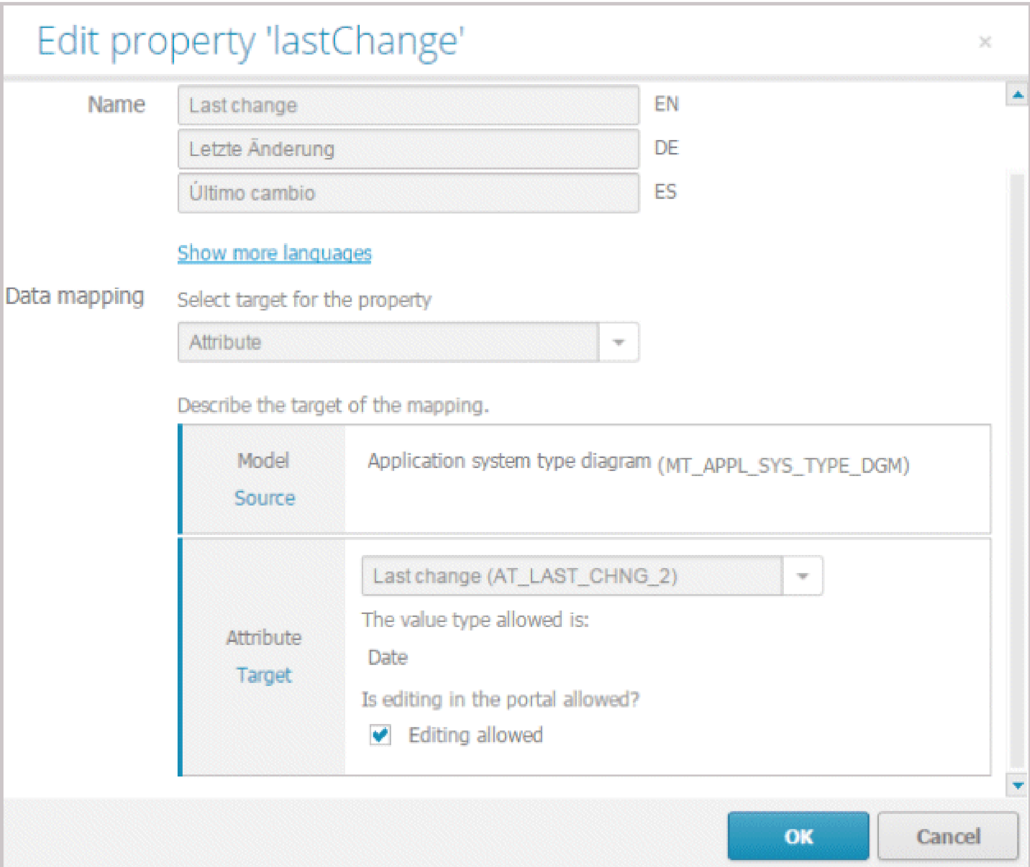
You can allow users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges along with the corresponding access privileges to edit item properties that represent attribute values in the portal.

Prerequisite

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

Procedure

1. Open a user-defined modification set for editing. (page 289)
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, e.g., **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**.



9. Click **OK**.
10. Click **Back**.

11. To test the changed modification set, select (page 288) it for publishing.

Users who have both the **ARIS Connect Viewer** and the **Contribution** license privileges can edit the item.

3.11.1.2.11.2 Edit Fact sheets

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

3.11.1.2.11.2.1 Customize text colors

You can customize the text color.

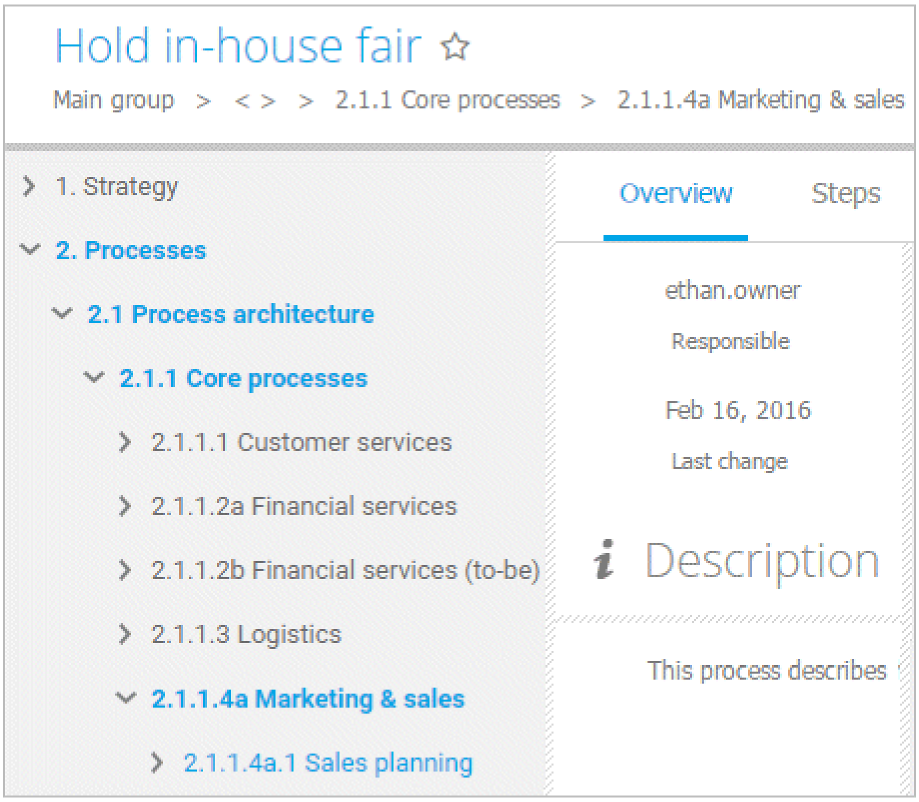
Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Fact sheets** section, customize the text color.
5. Click **Save**.

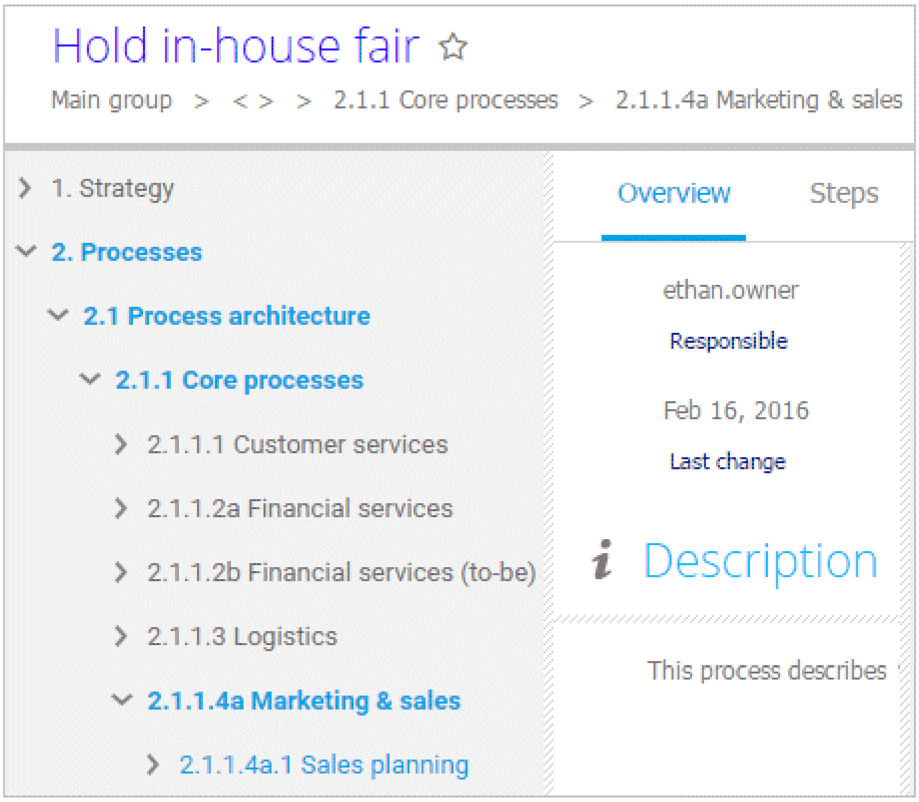
You have changed the text color.

Example

Default text colors on **Fact sheets** page:



Customized icons and text on **Fact sheets** page:



3.11.1.2.11.2.2 Define layout

For new items (page 290) 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 289)
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, e.g., **Process**.
4. Click **Edit**. The **Edit fact sheet** page opens. All subordinate sheets are listed.
5. Ensure that an overview page is added. 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 in 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 activated.

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 299).
10. Click **Remove** to delete entries.

The new modification set is created and adjusted.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.3 Add fact sheet

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
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 identifier 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 288) it for publishing.

3.11.1.2.11.2.4 Edit fact sheet

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **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 602) are offered.
6. Select an entry and click **Add**.
7. Specify the contents to be displayed in the fact sheet.
8. Click **Fact sheets** on the **Define modification set** page. All items available for fact sheets are displayed.
9. Move the mouse pointer over the item you want to change the overview page for, e.g., **Process**.
10. Click **Edit**. The **Edit fact sheet** page opens. All subordinate sheets are listed.
11. Ensure that an overview page is added. If this is not the case, click **Add** and select **Overview**.
12. Move the mouse pointer over the **Overview** entry.
13. Click **Edit**. The **Edit subordinate sheet** page opens. The items in 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 activated.
14. Select the layout of the page. This enables you to specify how the content of the areas is to be arranged.
15. 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 299).
16. Click **Remove** to delete entries.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.1 Edit the Overview tab

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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. Select a layout. **ItemList** type items can be edited.
7. Click **Edit** for the relevant item of the **ItemList** type.
8. Select a 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**.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.2 Add a dashboard to the Overview item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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 of section**.
7. Click **Add**.
8. The **Add Dashboard** dialog is displayed.
9. Select a dashboard.
10. Enter a name in the relevant languages.
11. Click **Add**. The dashboard is added to the **Overview** item.
12. Click **Back**.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.3 Remove a dashboard from the Overview item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.

4. Click **Edit >** **Contribute**. 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 of section**.
7. Select a dashboard.
8. Click **Delete**. The dashboard is removed from the **Overview** item.
9. Click **Back**.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.4 Add a dashboard to the Diagram item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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. Click **Back**.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.5 Remove a dashboard from the Diagram item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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 in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.6 Add a dashboard to the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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**.
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 **Dashboards** item.
11. Click **Back**.

For the portal to be displayed in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.2.4.7 Remove a dashboard from the Dashboard item

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

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 289)
2. Click **Fact sheets** on the **Define modification set** page.
3. Move the mouse pointer to the item you want to change, e.g., **Process**.
4. Click **Edit >** **Contribute**. 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 in this modification set, you need to select (page 288) the new modification set for display.

3.11.1.2.11.3 Edit hierarchies

Edit your own modification sets created based on the classic configuration set (page 582) or the default configuration set (page 582).

3.11.1.2.11.3.1 Create navigation hierarchy

Define your own navigation options for the portal. You can use hierarchies (page 331) to control how portal users can quickly navigate to relevant information. These hierarchies map the relationships between superior and subordinate items.

You can define your own hierarchies for each user-defined modification set.

Prerequisite

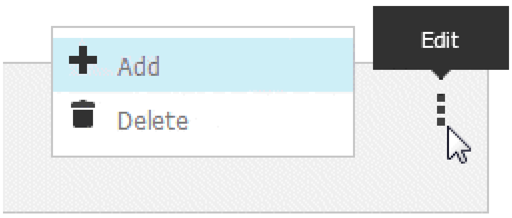
- You have the **Portal administrator** function privilege.
- If you want to use a root element (page 334), the GUID of the root element must be available on the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 289)
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, e.g., **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 Hierarchy Wizard 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 **Edit**.



9. Click + Add.

10. 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.
11. Add further items in the same manner. The hierarchy is symbolized by indents.
12. Click **Finish** if you do not want to insert a root element (page 334). Otherwise click **Next** to insert a root element.
    a. Click **Add**. The **Add root element** dialog opens.
    b. Paste the GUID from the clipboard.
    c. Click **OK**. The GUID of the item is displayed in the list.
    d. Click **Finish**.
13. Click **Back**.
14. Activate (page 306) the hierarchy.

The navigation is available to users in the portal. To test the changed modification set, select (page 288) it for publishing.

3.11.1.2.11.3.2 Activate navigation hierarchy

Use hierarchies to define the navigation (page 497) 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 289)
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, e.g., **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 ✔ **Activate**.

   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.
4. Click ↩ **Back**.

The changed navigation is available to users in the portal. To test the changed modification set, select (page 288) it for publishing.

3.11.1.2.11.4 Edit components

You can configure global settings for certain components, e.g., diagrams or steps.

3.11.1.2.11.4.1 Customize diagrams

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 289)
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 configured the diagram on the **Component** tab.

3.11.1.2.11.4.2 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 289)
2. Click **Component** on the **Define modification set** page.
3. Click **Edit** in the **Steps** row. The **Edit component** dialog opens. Add or delete properties for processes, functions, and events and define their hierarchy.
4. Click **Back**.

You have configured the diagram on the **Component** tab.

3.11.1.2.11.4.3 Customize colors for steps

You can customize the text color.

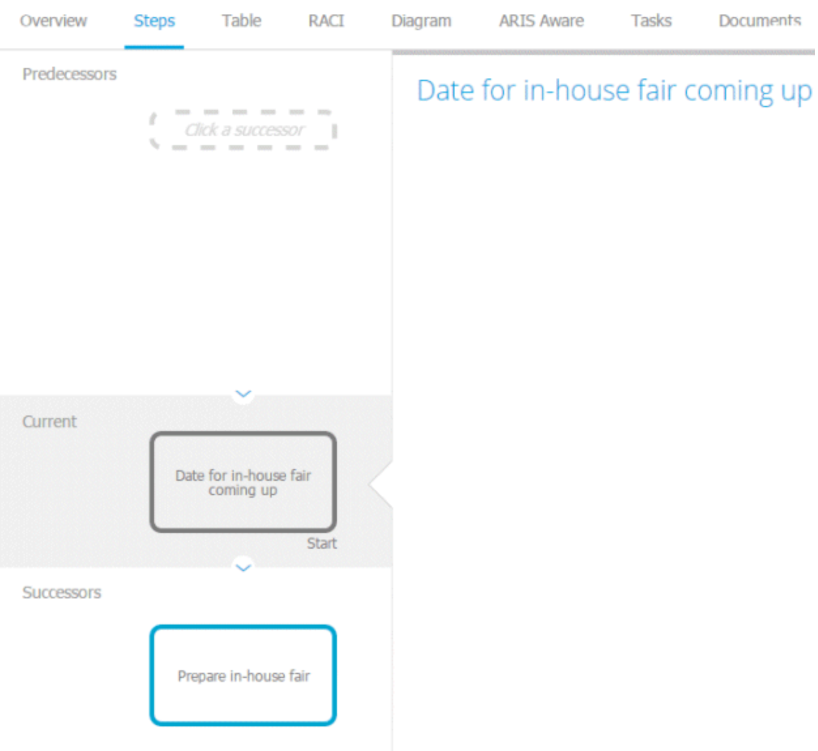
Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Steps** section, customize the colors.
5. Click **Save**.

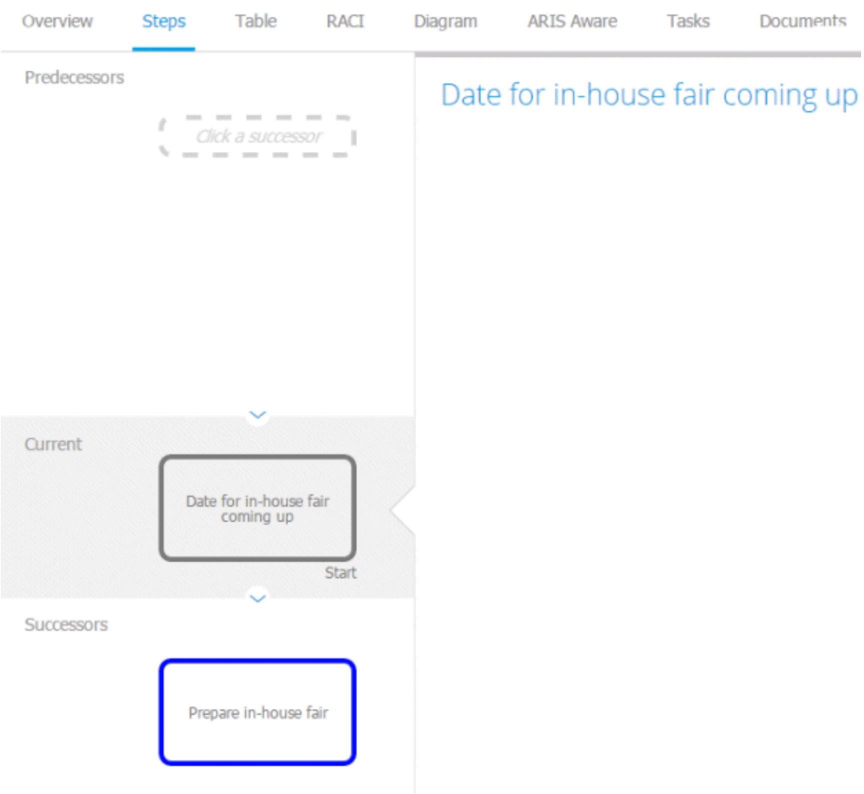
You have changed the text color.

Example

Default colors on **Steps** page:



Customized colors on **Steps** page:



3.11.1.2.11.5 Edit Home

Customize the start page (**Home**) of the portal.

3.11.1.2.11.5.1 Customize icons and text

You can customize the icon color and size as well as the text color.

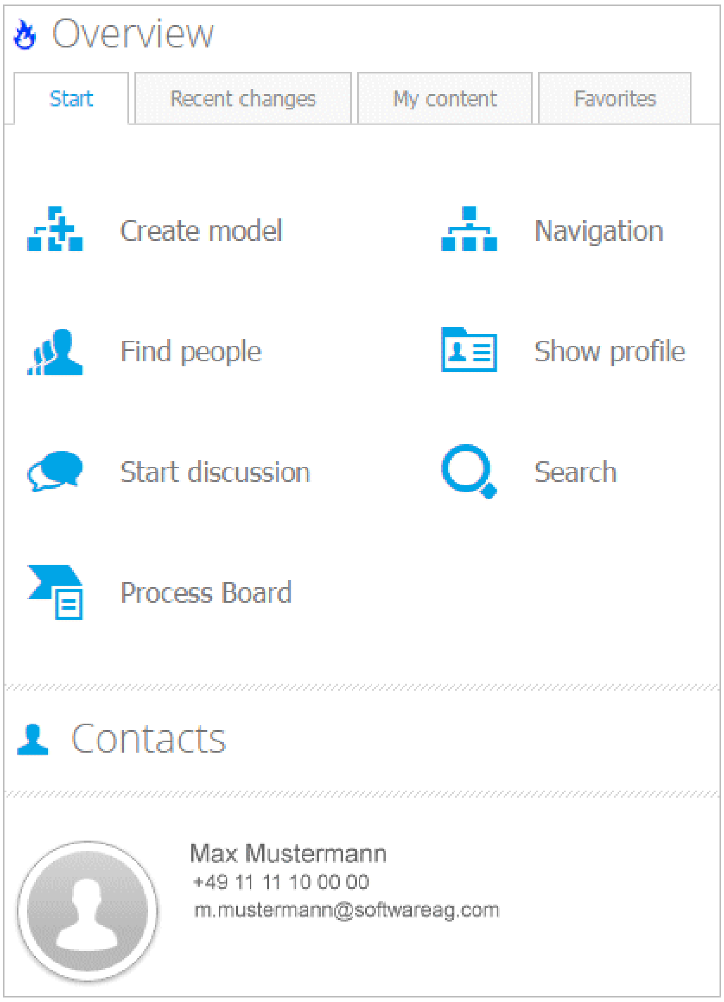
Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Home** section, customize the icon color and size as well as the text color.
5. Click **Save**.

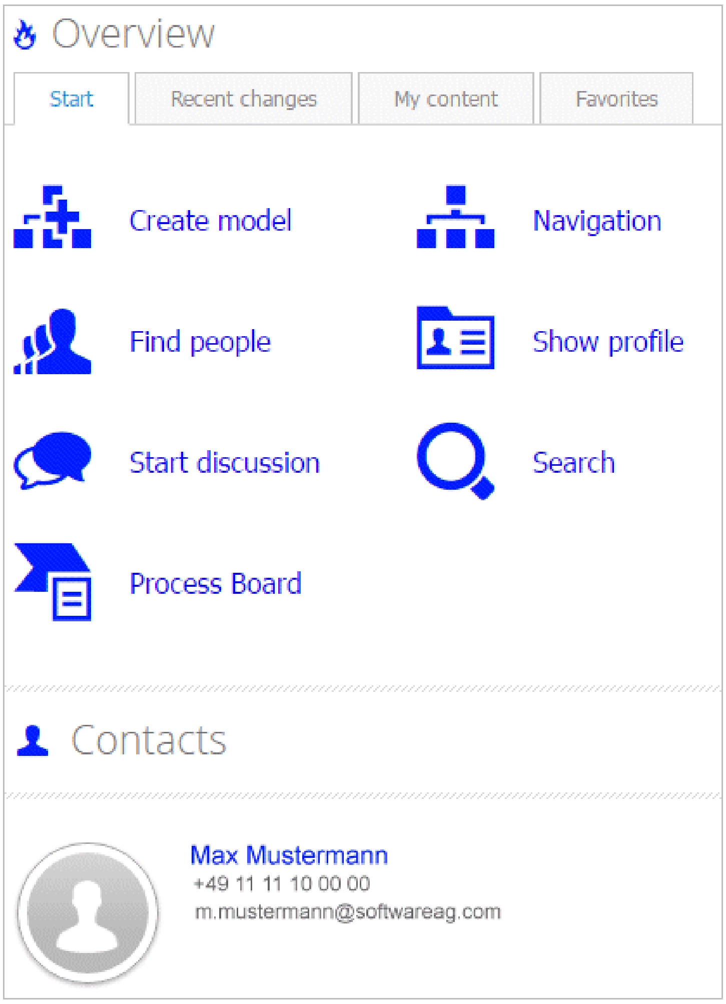
You have changed the icon color and size as well as the text color.

Example

Default icons and text on **Home** page:



Customized icons and text on **Home** page:



3.11.1.2.11.5.2 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 289)
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, select (page 288) it for publishing.

3.11.1.2.11.5.3 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 289)
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, select (page 288) it for publishing.

3.11.1.2.11.5.4 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 314) to the clipboard.

Procedure

1. Open a user-defined modification set for editing. (page 289)
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, e.g., **c.group.UnitedMotorGroup.SnE94F0CEeMP2v2B6YbX4g**.
9. Double-click **OK**.

The configured diagrams are now displayed on the **Home** page of the database. To test the changed modification set, select (page 288) it for publishing.

3.11.1.2.11.5.5 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 313) 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

3.11.1.2.11.5.6 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 289)
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, select (page 288) it for publishing.

3.11.1.2.11.5.7 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 289)
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, select (page 288) it for publishing.

3.11.1.2.11.5.8 Add and configure 'App gallery' 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 289)
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 **App gallery**.
5. Click **Add**.
6. Click **Edit** in the **App gallery** row. The **Edit app gallery** dialog opens.
7. Enter a name for the gallery in the various languages.
8. Click **Add** to add an existing app. The button is available if apps exist that you can add. The **Add app** dialog opens. The **Create model**, **Navigation**, **Find people**, **Create profile**, **Start discussion**, and **Search** apps are preconfigured.
9. Click **Delete** in the row for the app you do not want to be displayed on the **Home** page. You can make a deleted app accessible in the app gallery again.
10. Change the order of the apps by clicking the up or down arrow.
11. Click **OK**.

The configured apps are now displayed on the **Home** page. To test the changed modification set, select (page 288) it for publishing.

3.11.1.2.11.5.9 Add new app to gallery

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 289)
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 **App gallery**.
5. Click **Add**.
6. Click **Edit** in the **App gallery** row. The **Edit app gallery** 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, select (page 288) it for publishing.

3.11.1.2.11.5.10 Add external web page

Define your own layout for the **Home** page of the portal. You can add an external web page, e.g., your company's home page.

Prerequisite

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

Procedure

1. Open a user-defined modification set for editing. (page 289)
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, select (page 288) it for publishing.

3.11.1.2.11.5.11 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 289)
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, select (page 288) it for publishing.

3.11.1.2.11.6 Edit user interface

As a portal administrator, you customize the user interface.

3.11.1.2.11.6.1 Customize font and colors

Customize the settings according to the corporate design of your company.

Prerequisite

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

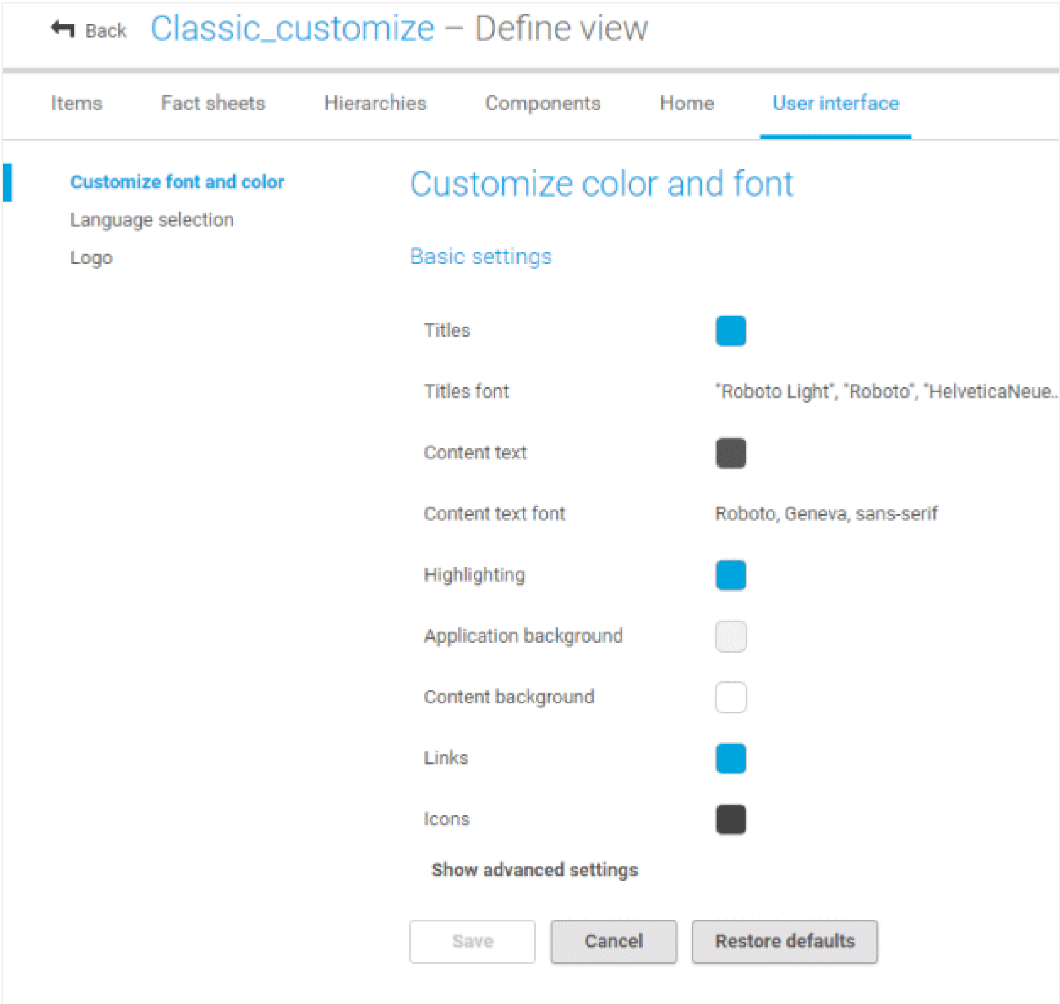
Procedure

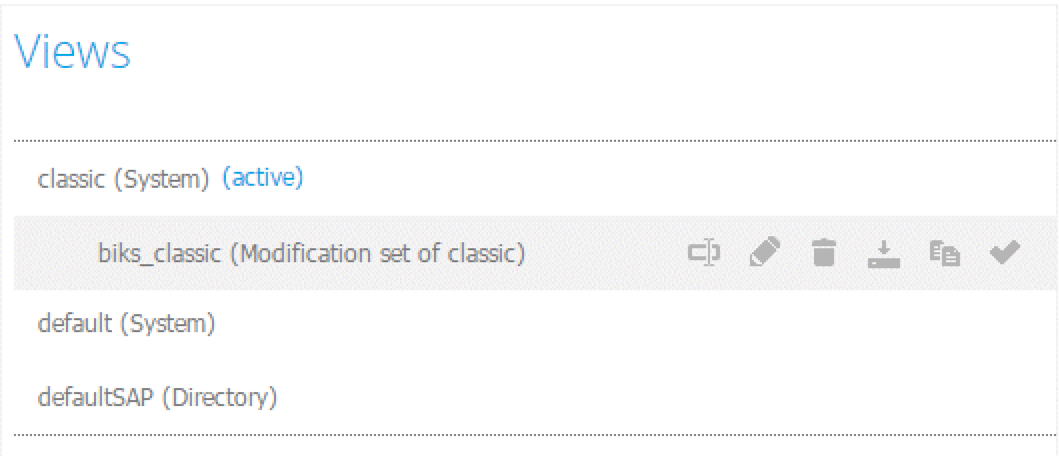
1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Customize font and color**.
4. Specify the required settings.
5. Click **Save**.

The changes are applied. The page is refreshed if the modification set was specified as **active**.

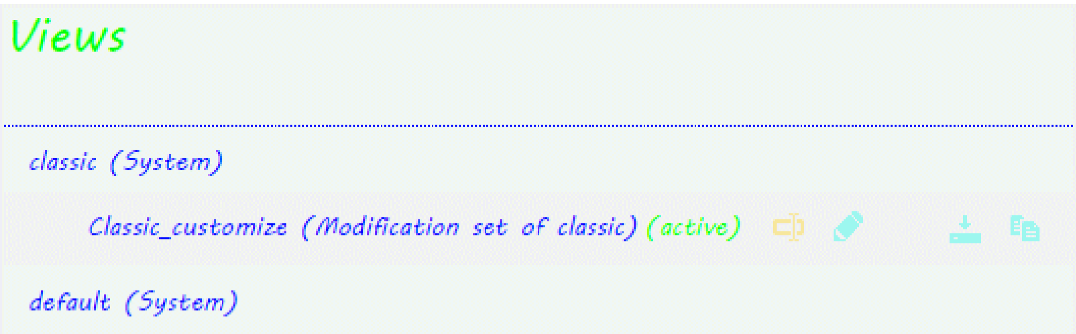
Example

Default font and colors:





Customized font and color:



3.11.1.2.11.6.2 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 289)
2. Click **User interface**.
3. Click **Customize font and color**.
4. Click **Restore defaults**.
5. Click **Save**.

The default settings are loaded. The page is refreshed if the modification set was specified as **active**.

3.11.1.2.11.6.3 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 329).

Procedure

1. Open a user-defined modification set for editing. (page 289)
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**.

The activated languages are available for selection by ARIS Connect users.

3.11.1.2.11.6.4 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 289)
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.

3.11.1.2.11.6.5 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 289)
2. Click **User interface**.
3. Click **Insert logo**.
4. Click **Restore**.

The default logo is loaded and the page is refreshed.

3.11.1.2.11.6.6 Advanced customization

3.11.1.2.11.6.6.1 Customize the header

You can customize the header background color, as well as text and highlighting color.

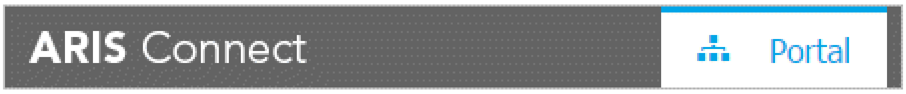
Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Header** section, customize the header background color, and text and highlighting color.
5. Click **Save**.

You have changed the header.

Example

Default header:



Header with green background, light yellow highlighting and yellow ochre text:

3.11.1.2.11.6.6.2 Customize ARIS Process Board

You can customize the logo, as well as the logo height and width of ARIS Process Board.

Procedure

1. Copy the new logo to **<installation directory>\server\bin\work\work_apg_s\base\webapps\processboard\tasklist** ,e.g., **C:\SoftwareAG\ARIS10\server\bin\work\work_apg_s\base\webapps\processboard\tasklist**.
2. Open a user-defined modification set for editing. (page 289)
3. Click **User interface**.
4. Click **Show advanced settings**.
5. Scroll down to **Process Governance**.
6. Enter the 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 ARIS Process Board.

3.11.1.2.11.6.6.3 Customize the sidebars

You can customize the background color of the sidebars.

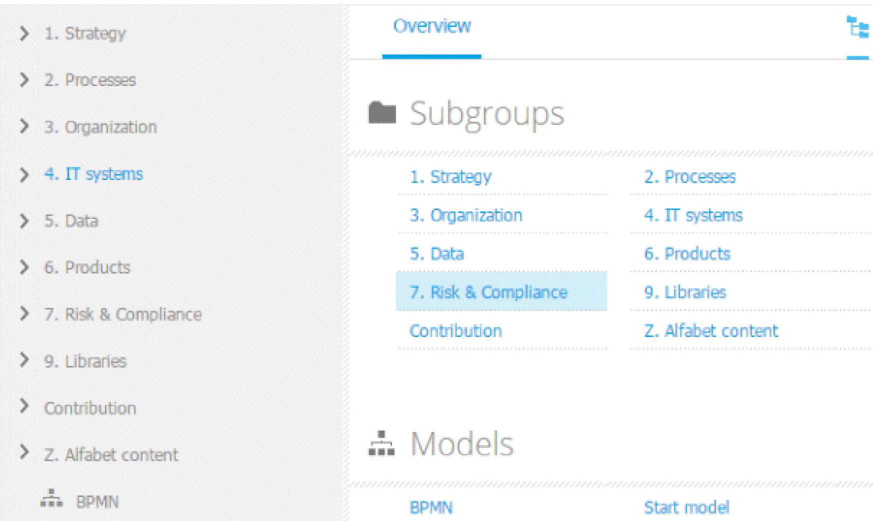
Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **sidebars** section, customize the sidebar background color.
5. Click **Save**.

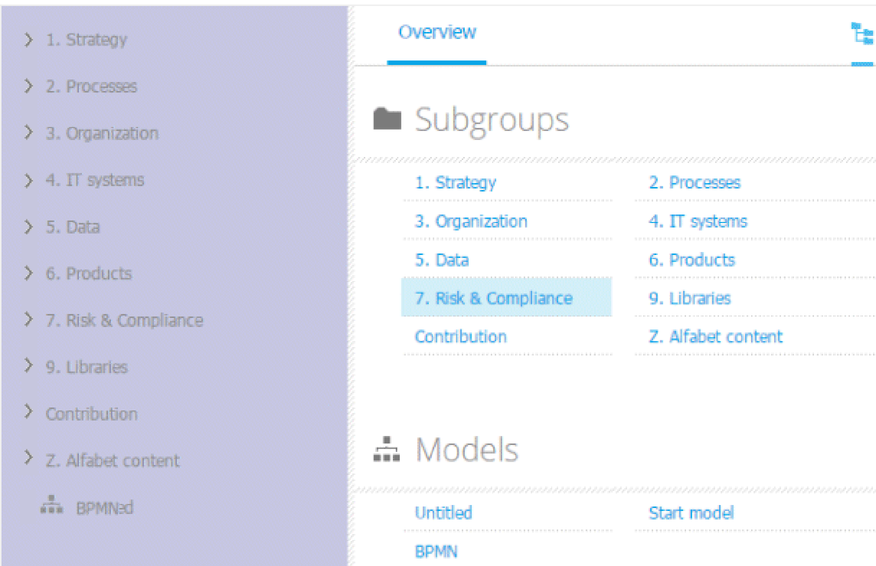
You have changed the left and right sidebar.

Example

Default sidebar:



Sidebar with light blue background:



3.11.1.2.11.6.6.4 Customize buttons

You can customize the buttons.

Procedure

1. Open a user-defined modification set for editing. (page 289)
2. Click **User interface**.
3. Click **Show advanced settings**.
4. In the **Buttons** section, customize the button colors and shapes.
5. Click **Save**.

You have changed the button colors and shapes.

Example

Default buttons:

Customized buttons:

3.11.1.2.11.6.7 Delete modification set

Delete modification sets that are no longer needed.

Warning

The configurations of deleted modification sets will be lost.

Prerequisite

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

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.

3.11.1.2.11.7 Valuable information

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

3.11.1.2.11.7.1 What are the special features in terms of languages?

You can select all languages (page 322) 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, e.g., 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 for the database is used.

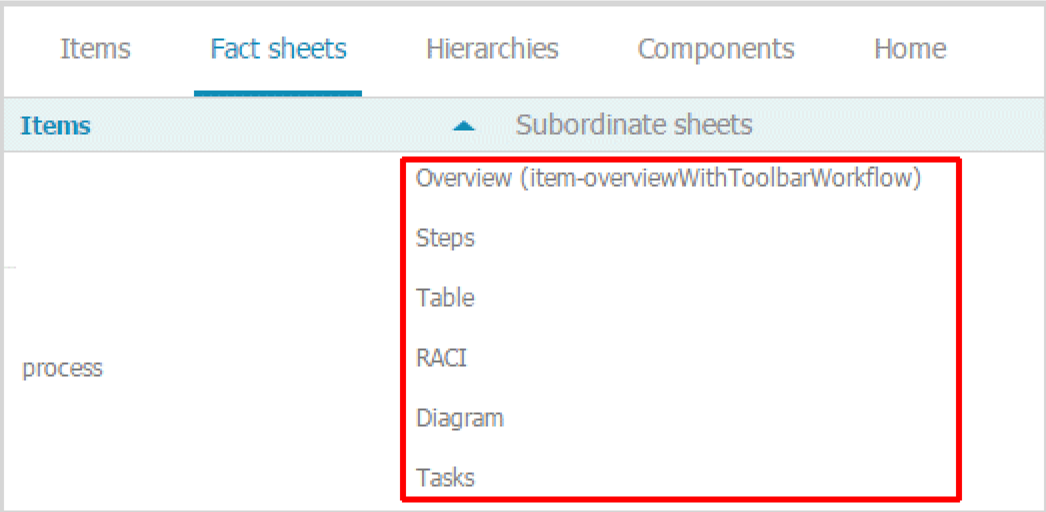
For example, if you have selected the language **Quechua (Bolivia)** and this language is not available, all entries you specify for attributes are added in the English database language if you have selected English as the alternative language. In Model Editor, for example, the current database language is displayed after the model name using a language code.

3.11.1.2.11.7.2 What can be configured in fact sheets?

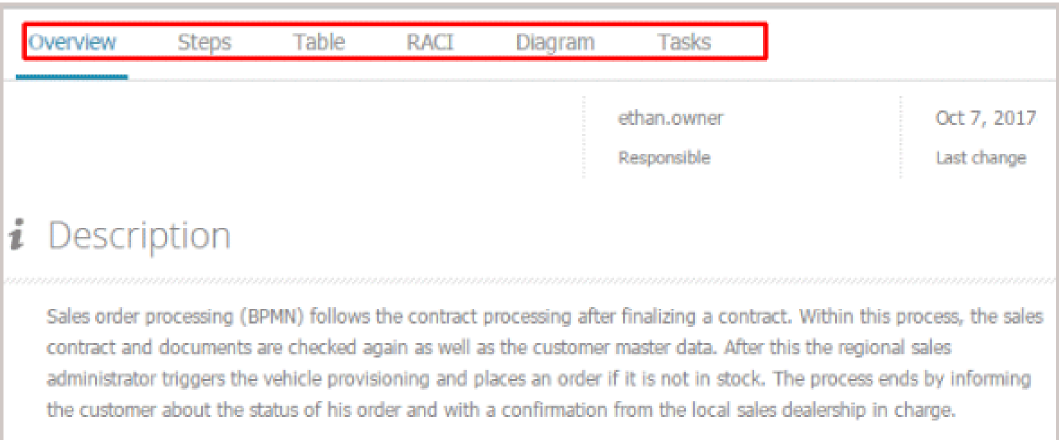
Using fact sheets, you configure how the pages are displayed that open when you click a process in the navigation. The fact sheet for a process includes the subordinate pages you defined in the fact sheet configuration (page 297).

Example

The subordinate pages shown are configured for a process:



The result of configuring the fact sheet for a process looks like this:



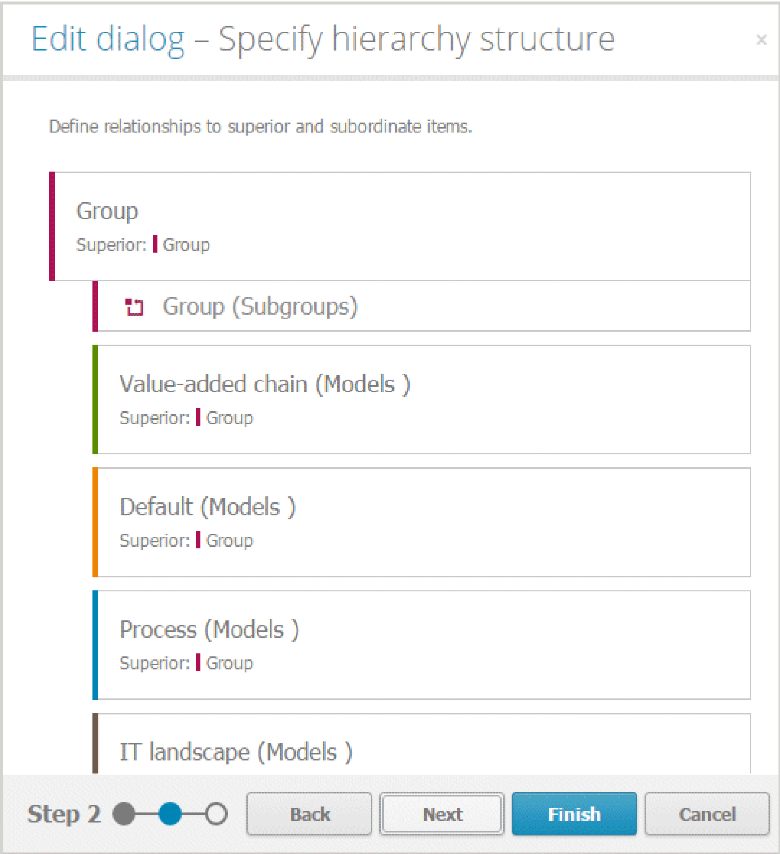
3.11.1.2.11.7.3 What does the navigation hierarchy define?

Using the navigation hierarchy, you define the navigation options for the portal. The example shows the configuration of the hierarchy for a group.

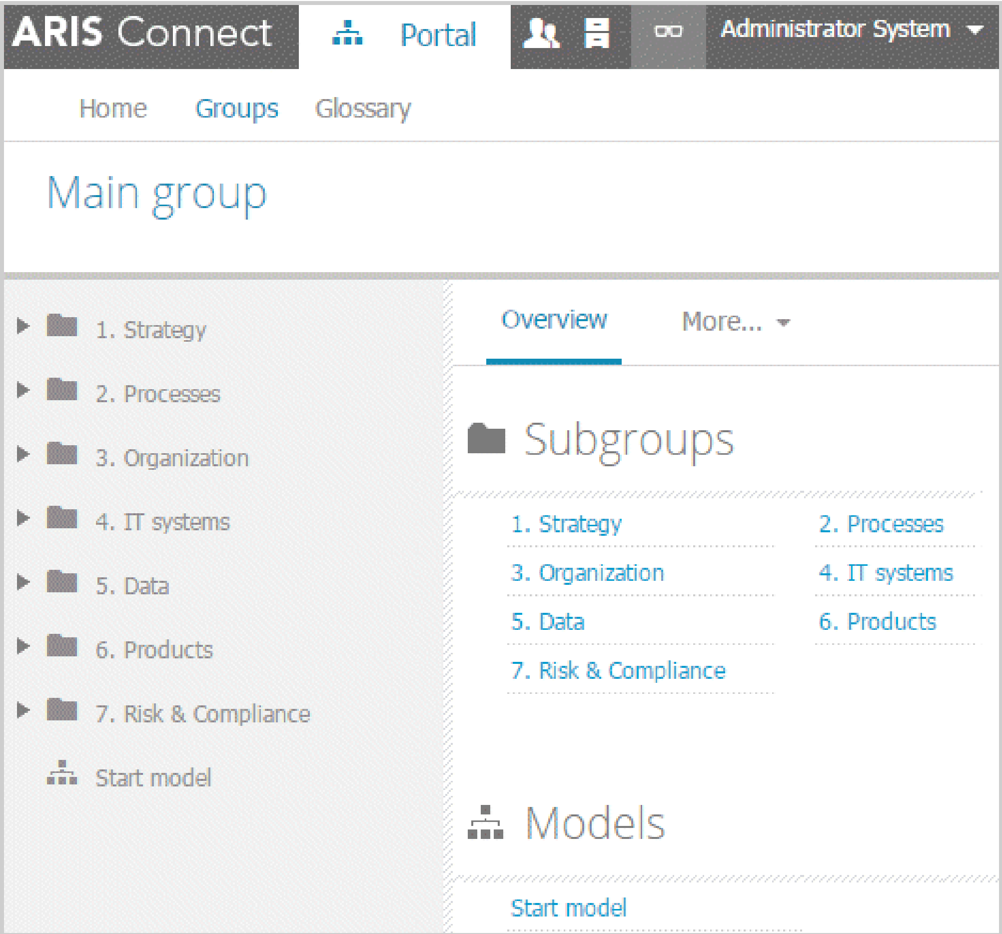
The second item must be of the same type as the first item. If it is not, a hierarchy cannot be created. Items of the same type are arranged without space.

Example

Subgroups and processes are configured for the group:

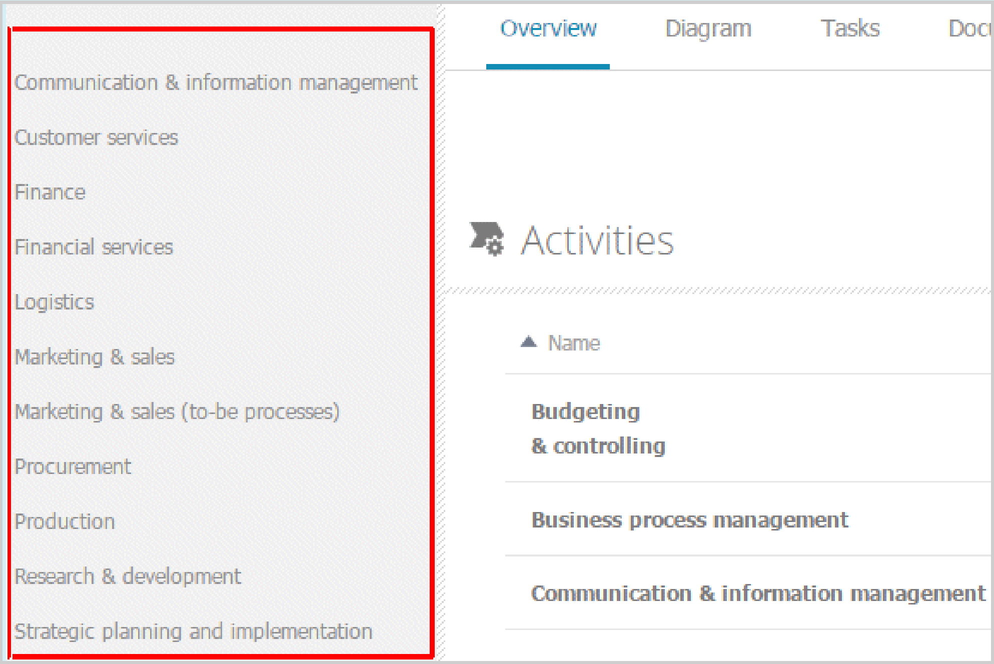


The result looks like this in the portal:

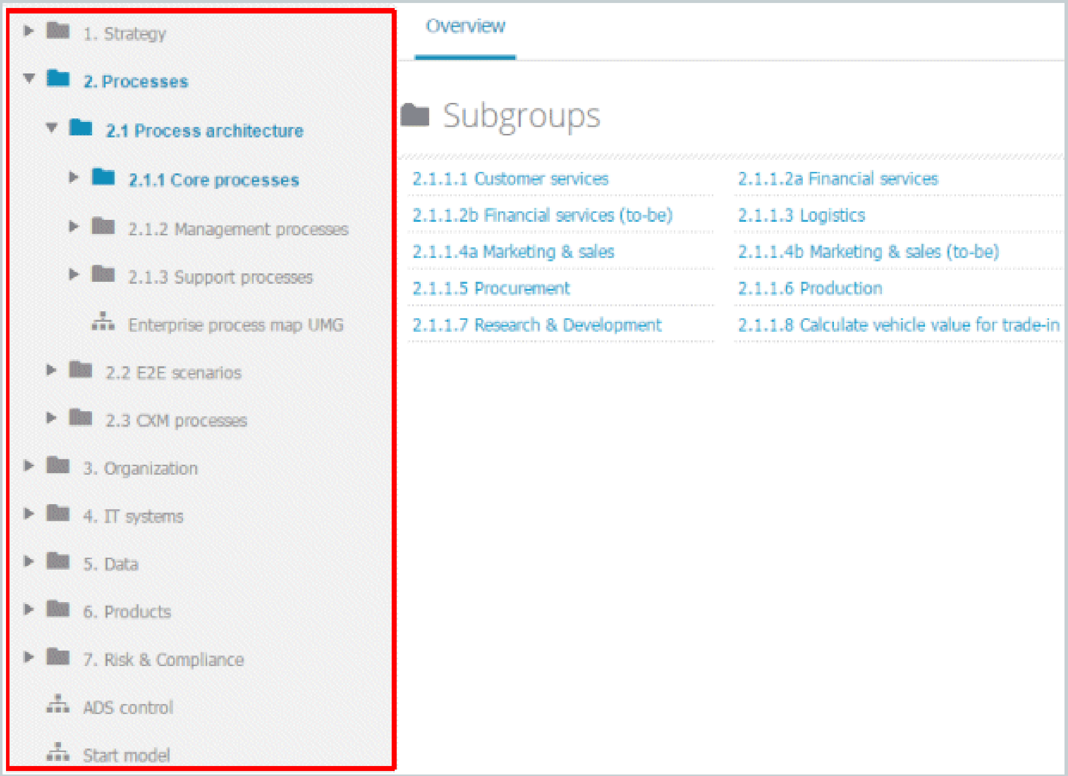


3.11.1.2.11.7.4 What to remember regarding hierarchies

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.

3.11.1.2.11.7.5 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 304) 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, e.g., 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.

3.11.1.2.11.7.6 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 560) 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 560) if you do not enter a numerical value.

Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

3.11.2 Set up user management

You can customize general settings of your system's user management.

3.11.2.1 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
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.

3.11.2.2 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
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.

3.11.2.3 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, e.g., **http://myServer:1080/#myTenant/adminUsers**. The **Log in** dialog opens.
2. Enter the name of the infrastructure tenant in the **Tenant** field, e.g., **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 10) to ARIS Connect.
10. Click the arrow next to your user name, and select **Administration**.
11. Activate the **Configuration** tab.
12. Click **User management**.
13. Select **Users** from the selection list.
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.

    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.

3.11.2.4 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Infrastructure** in the list box.
6. Click a configuration category. The following categories are available:

GENERAL

You can configure the following properties of your system:

Build number

Build number of ARIS Administration. This corresponds to the following property: com.aris.umc.version Cross-tenant property that cannot be changed.

Load balancer URL

Specifies the URL of the load balancer. This corresponds to the following property: com.aris.umc.loadbalancer.url Cross-tenant property that cannot be changed.

E-mails with HTTP URLs only

Specifies whether or not the HTTP protocol is used instead of the HTTPS protocol in e-mails. This corresponds to the following property: com.aris.umc.notification.useHttpLinks

HTTP CLIENT

These are all cross-tenant settings and cannot be changed.

Connection timeout

Specifies the duration after which a client's connection attempt is canceled. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.client.connect.timeout

Idle timeout

Specifies the wait time timeout of the ARIS Administration REST client. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.client.idle.timeout

Read timeout

Specifies the wait time timeout of the REST client for read access. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.client.read.timeout

Maximum connections (total)

Specifies the maximum number of connections that may be established simultaneously. If additional connections are to be established, they are refused. This corresponds to the following property: com.aris.umc.client.connections.max

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. This corresponds to the following property: com.aris.umc.client.connections.perhost

Number of retries

Specifies the maximum number of retries. This corresponds to the following property: com.aris.umc.client.retry.max

Host name verification

Specifies whether the verification of the SSL host name is activated. Verification is enabled by default. This corresponds to the following property: com.aris.umc.ssl.host.verification.active

ADVANCED SETTINGS

You can configure the following properties of your system:

Allowed remote clients

Comma-separated list of client IPs that uses the remote interface of ARIS Administration. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.remote.clients

Configuration cache lifetime

Specifies the lifetime of the configuration cache in seconds. The configuration is reloaded after the time set here. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.config.cache.ttl

Encrypted properties

Specifies a comma-separated list of encrypted property keys. This corresponds to the following property: com.aris.umc.config.encrypted

JAAS login context

Specifies the login name for the JAAS context. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.jaas.login.context

Default tenant

Specifies that the default tenant is used for authentication. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.basicauth.tenant

Infrastructure tenant

Specifies the 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, i.e., they can access ARIS Administration and Tenant Management.

Users with the relevant privileges can specify other infrastructure tenants in ARIS Administration. Cross-tenant property that cannot be changed.

This corresponds to the following property: com.aris.infrastructure.tenant

7. Click **Edit >** **Contribute**.

   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.

3.11.2.5 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Kerberos** in the list box.
6. Click a configuration category. The following categories are available:

   GENERAL

   You can configure the following properties of your system:

   Use Kerberos

   Specifies whether a Kerberos-based login is allowed. This corresponds to the following property: com.aris.umc.kerberos.active

   KDC

   Specifies the fully qualified name of the central **K**ey **D**istribution **C**enter (**KDC**). This is usually the fully qualified host name of the LDAP server. This corresponds to the following property: com.aris.umc.kerberos.kdc

Realm

Specifies the realm of Kerberos tickets. Fully qualified domain name in uppercase letters. This corresponds to the following property: com.aris.umc.kerberos.realm

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. This corresponds to the following property: com.aris.umc.kerberos.servicePrincipalName

Key table

Specifies the location of the keytab file that is used for Kerberos tickets. This corresponds to the following property: com.aris.umc.kerberos.keyTab

Configuration file

Storage location of the configuration file for Kerberos. The file can be uploaded directly.

This corresponds to the following property: com.aris.umc.kerberos.config

ADVANCED SETTINGS

You can configure the following properties of your system:

Debug output

Specifies whether debug output is allowed for Kerberos operations. This corresponds to the following property: com.aris.umc.kerberos.debug

Allow local users

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. This corresponds to the following property: com.aris.umc.kerberos.allowlocalusers

Default tenant

Specifies the default tenant for a Kerberos-based login. This corresponds to the following property: com.aris.umc.kerberos.tenant

Cross-tenant property that cannot be changed.

7. Click **Edit >** **Contribute**.

   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.

3.11.2.6 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Kerberos** in the list box. 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. Click **Upload**.
8. Select whether you want to upload the configuration file or the key table. The dialog for uploading a file opens.
9. Select the relevant file.

You have uploaded a configuration file.

3.11.2.7 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **LDAP** in the list box.
6. Click a configuration category. The following categories are available:

CONNECTION

You can configure the following properties of your system:

Activate LDAP

Specifies whether the LDAP integration is activated. This corresponds to the following property: com.aris.umc.ldap.active

Server URL

Specifies the URL of the LDAP server. This corresponds to the following property: com.aris.umc.ldap.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. This corresponds to the following property: com.aris.umc.ldap.backup.url

User name

Specifies the user name of the LDAP user. This corresponds to the following property: com.aris.umc.ldap.service.user

Password

Specifies the password of the LDAP user. This corresponds to the following property: com.aris.umc.ldap.service.pwd

Use SSL

Specifies if SSL is to be used. This corresponds to the following property: com.aris.umc.ldap.ssl

SSL mode

Specifies the SSL mode (page 352). This corresponds to the following property: com.aris.umc.ldap.ssl.mode

Test connection

Click **Test connection** to test the connection to the LDAP server.

Verify host names

Specifies if an SSL host is to be verified. This corresponds to the following property: com.aris.umc.ldap.ssl.host.verification.active

Verify certificates

Specifies whether an SSL certificate is to be verified. This corresponds to the following property: com.aris.umc.ldap.ssl.certificate.verification.active

Simultaneous connections

Specifies the maximum number of simultaneous connections to the same LDAP server. If additional connections are to be established, they are refused. Cross-tenant property that cannot be changed.

This corresponds to the following property: com.aris.umc.ldap.connection.concurrent

Connection timeout

Specifies the duration after which the attempt to connect to the LDAP server is canceled. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.ldap.timeout

Read timeout

Specifies the maximum amount of time that read access may take. This corresponds to the following property: com.aris.umc.ldap.read.timeout

ATTRIBUTE MAPPINGS

You can configure the following properties of your system:

objectClass

Specifies the attribute that contains the object class. This corresponds to the following property: com.aris.umc.ldap.attribute.objectclass

DN

Specifies the fully qualified name (distinguished name). This corresponds to the following property: com.aris.umc.ldap.attribute.distinguishedname

GUID

Specifies the LDAP GUID. This corresponds to the following property: com.aris.umc.ldap.attribute.guid

GROUP ATTRIBUTE MAPPINGS

You can configure the following properties of your system:

Name

Specifies the group name. This corresponds to the following property: com.aris.umc.ldap.attribute.group.name

hasMember

Specifies the attribute that references the members of a group. This corresponds to the following property: com.aris.umc.ldap.attribute.hasmember

User-defined

Specifies a comma-separated list of LDAP attributes that are to be imported as user-defined attributes of a group. This corresponds to the following property: com.aris.umc.ldap.group.attributes.userdefined

USER ATTRIBUTE MAPPINGS

You can configure the following properties of your system:

Name

Specifies the user name of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.name

First name

Specifies the first name of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.firstname

Last name

Specifies the last name of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.lastname

E-mail address

Specifies the e-mail address of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.email

Telephone number

Specifies the telephone number of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.phone

Picture

Specifies the picture of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.user.picture

memberOf

Specifies the attribute that references the groups of a user. This corresponds to the following property: com.aris.umc.ldap.attribute.memberof

User-defined

Specifies a comma-separated list of LDAP attributes that are to be imported as user-defined attributes of a user. This corresponds to the following property: com.aris.umc.ldap.user.attributes.userdefined

BEHAVIOR

Group object class

Object class of the LDAP groups. This corresponds to the following property: com.aris.umc.ldap.group.objectclass

User object class

Specifies the object class of the LDAP user. This corresponds to the following property: com.aris.umc.ldap.user.objectclass

Search paths

Specifies a semicolon-separated list of all LDAP search paths. This corresponds to the following property: com.aris.umc.ldap.searchpath

Group search paths

Specifies a semicolon-separated list of all LDAP search paths for user groups. Overwrites the list of general search paths. This corresponds to the following property: com.aris.umc.ldap.group.searchpath

User search paths

Specifies a semicolon-separated list of LDAP search paths for users. Overwrites the list of general search paths. This corresponds to the following property: com.aris.umc.ldap.user.searchpath

Group search filter

Specifies the query filter for LDAP groups. This corresponds to the following property: com.aris.umc.ldap.filter.group

User search filter

Specifies the query filter for LDAP users. This corresponds to the following property: com.aris.umc.ldap.filter.user

Recursion depth

Specifies the recursion depth that is to be used for nested groups and users. This corresponds to the following property: com.aris.umc.ldap.recursion.depth

Page size

Specifies the maximum number of entries that are loaded in a single LDAP query. This corresponds to the following property: com.aris.umc.ldap.pagesize

Referrals

Defines how referrals to other LDAP systems are processed. This corresponds to the following property: com.aris.umc.ldap.referral

TRUSTSTORE

Truststore

Specifies where to look for the truststore. This corresponds to the following property: com.aris.umc.ldap.ssl.truststore.location

Password

Specifies the truststore password. This corresponds to the following property: com.aris.umc.ldap.ssl.truststore.password

Type

Specifies the truststore type to be used. This corresponds to the following property: com.aris.umc.ldap.ssl.truststore.type

ADVANCED SETTINGS

Debug output

Specifies whether or not debug information for LDAP operations are output. This corresponds to the following property: com.aris.umc.ldap.debug

Import superior group

Specifies whether the superior group is to be imported automatically when the group is imported. This corresponds to the following property: com.aris.umc.ldap.group.import.parent.enabled

Import user at login

Specifies whether an LDAP user is to be imported automatically during the login attempt. This corresponds to the following property: com.aris.umc.ldap.user.importOnLogin

Import user groups when synchronizing

Specifies whether additional user groups are to be imported during user synchronization. This corresponds to the following property: com.aris.umc.ldap.sync.user.importgroups

Update group associations at login

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. This corresponds to the following property: com.aris.umc.ldap.attribute.memberof.resolveOnFirstLogin

Use attribute value paging

Specifies whether a page break is to be inserted if the server-side limit for valid values is exceeded for attributes, e.g., if more than 1,500 attribute values exist. This corresponds to the following property: com.aris.umc.ldap.user.attributes.paging.enabled

Prevent login of manually created users

Specifies that only LDAP users may log in. This does not apply to the **arisservice**, **guest**, **superuser**, and **system** users. This corresponds to the following property: com.aris.umc.ldap.auth.only

Cache size

Specifies the maximum number of LDAP entities that are cached during an import. This corresponds to the following property: com.aris.umc.ldap.entity.cache.size

Pool wait time

Specifies the maximum amount of time that a connection request may take if the maximum number of connections to the LDAP server was exceeded. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.ldap.connection.concurrent.timeout

Pool size

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. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.ldap.connection.pool.size

Pool time

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. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.ldap.connection.pool.timeout

Skip errors

Specifies whether the LDAP import ignores users or user groups for which errors occurred without showing an error message. This corresponds to the following property: com.aris.umc.ldap.sync.skipOnFault

Use bottom-up method

Specifies whether the bottom-up method (**memberOf** attribute) or the top-down method (**hasMember** attribute) is applied when associating users to user groups. This corresponds to the following property: com.aris.umc.ldap.sync.members.searchBottomUp

Use DN as GUID

Specifies that the fully qualified name (distinguished name) is used as GUID. This corresponds to the following property: com.aris.umc.ldap.sync.useDnAsGuid

7. Click **Edit >** **Contribute**.

   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.

3.11.2.8 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **LDAP** in the list box.
6. Click **Truststore**.
7. Click **Upload > Truststore**. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a truststore file.

3.11.2.9 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **LDAP** in the list box.
6. Click **Connection**.
7. Click **Edit**.
8. Enable **Activate LDAP**.

   If you want to upload a configuration, ensure that you have disabled pop-up blockers in the browser, and click the field next to the relevant key.

   The dialog for selecting the file opens.
9. Configure the URL for the LDAP system. To do so, enter the URL as in the **Server URL** field, for example:

   `ldap://hqgc.mycompany.com:3168.`
10. Configure the path to the backup system, if this backup system is used for your LDAP system and automatically applies the function of the original system, if required in the **Server URL (fallback)** field.

    Click **Behavior**.
11. Enter the Path to the user group in the **Group search paths** field.
12. Enter the Path to the users in the **User search paths** field.

    If you want to enable the function of following referrals of users to other directories, enter **follow** in the **Referral** field.

    If you want to avoid the above behavior, enter **ignore** in the **Referral** field.

    If you leave this entry blank, referrals are not followed.

    Optional: If you want to ensure that the import of LDAP users is carried out despite any errors that might occur, e.g., if names are redundant, click **Advanced settings** and enable **Skip errors**.

    Please note that system performance is significantly deteriorated if you enable this option.

3.11.2.9.1 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **LDAP** in the list box.
6. Click **Connection**.
7. Click **Edit**.
8. Configure the URL for the LDAP system. To do so, enter the URL as in the **Server URL** field, for example:

   `ldap://hqgc.mycompany.com:3168.`
9. Configure the path to the backup system, if this backup system is used for your LDAP system and automatically applies the function of the original system, if required in the **Server URL (fallback)** field.
10. Enable **Use SSL**.
11. Select **STARTTLS** from the **SSL mod**e list.
12. 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.

13. 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 your user name and select **Administration**.
    3. Activate the **Configuration** tab.
    4. Activate **User Management**.
    5. Select **LDAP** in the list box.
    6. Click **Truststore**.
    7. Click **Upload > Truststore**. The dialog for uploading a file opens.
    8. Select the relevant file.

    You have uploaded a truststore file.

SSL

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **LDAP** in the list box.
6. Click **Connection**.
7. Click **Edit**.
8. Configure the URL for the LDAP system. To do so, enter the URL as in the **Server URL** field, for example:

   `ldap://hqgc.mycompany.com:3168.`
9. Configure the path to the backup system, if this backup system is used for your LDAP system and automatically applies the function of the original system, if required in the **Server URL (fallback)** field.
10. Enable **Use SSL**.
11. Select **SSL** from the **SSL mod**e list.
12. 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.

13. 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 your user name and select **Administration**.
    3. Activate the **Configuration** tab.
    4. Activate **User Management**.
    5. Select **LDAP** in the list box.
    6. Click **Truststore**.
    7. Click **Upload > Truststore**. The dialog for uploading a file opens.
    8. Select the relevant file.

    You have uploaded a truststore file.

3.11.2.9.2 Allow login only for LDAP users

To allow only LDAP users to log in to ARIS Architect and ARIS Process Board, you need to configure the system accordingly.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **All** from the list.
6. Find the string **com.aris.umc.ldap.auth.only** and define it as **true**.

Only LDAP users and the following users can log in to ARIS Architect and ARIS Process Board: **system**, **superuser**, **arisservice**, and **guest**.

3.11.2.9.3 Configure single sign-on

If you are using MS Active Directory Domain Services, you can configure SSO (single sign-on). 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.

Single sign-on in ARIS is based on Kerberos. 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 MS Windows networks. In addition, it is widely used with Linux operating systems and is designed for use with all major platforms.

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 a Kerberos-based authentication (default) and the Service Principal Name of the ARIS Server has the following format: **HTTP/<host name>**, e.g., **HTTP/mypc01.my.domain.com**.

Client

- Client and server computers are connected to the same MS Active Directory Domain Services.
- The browser used supports Kerberos-based authentication.
- The browser used has been configured accordingly.

CONFIGURATION IN ARIS ADMINISTRATION USING KERBEROS

SSO must be configured for the servers.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **Kerberos** in the list box.

   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
```

6. Click **Import configuration file**.
7. Click **Edit**.
8. Enable **Use Kerberos**.
9. 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.
10. In the **Realm** field, configure the realm for the Kerberos service. Enter the fully qualified domain name in uppercase letters.

    Example: **MYDOMAIN.COM**.
11. In the **KDC** field, configure the fully qualified name of the KDC to be used.
12. **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**.

CONFIGURATION IN ARIS ADMINISTRATION USING SAML

SSO must be configured for the servers.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **User management**.
5. Select **SAML** in the list box.
6. Click **Edit**.
7. Enable **Use SAML**.

8. Enter the ID of the identity provider in the **Identity provider ID** field.
9. Enter the ID of the service provider in the **Service provider ID** field.
10. Enter the end point of the identity provider that is used for single sign-on in the **Single sign-on URL** field.
11. Enter the end point of the identity provider that is used for single log-out in in the **Single logout URL** field.

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.

3.11.2.10 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **User-defined notifications** in the list box.
6. Click a configuration category.
7. Click **Upload**.
8. Select the relevant template. The dialog for uploading a file opens.
9. Select the relevant file.

You have uploaded a template for notifications.

3.11.2.11 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 407) 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **User-defined notifications** in the list box.
6. Click a configuration category. The following categories are available:

USERS

Notify about creation

Specifies whether users are to be notified after they have been created. This corresponds to the following property: com.aris.umc.notification.userCreated.enabled

User created - Subject

Subject of the notification that is sent when a user has been created. This corresponds to the following property: com.aris.umc.notification.userCreated.subject

User created - Message

Specifies the text of the notification that is sent when a user has been created. This corresponds to the following property: com.aris.umc.notification.userCreated.message

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. This corresponds to the following property: com.aris.umc.notification.userCreated.template

Notify about deactivation

Specifies whether users are to be notified after they have been deactivated. This corresponds to the following property: com.aris.umc.notification.userDisabled.enabled

User deactivated - Subject

Specifies the subject of the notification that is sent when a user has been deactivated. This corresponds to the following property: com.aris.umc.notification.userDisabled.subject

User deactivated - Message

Specifies the text of the notification that is sent when a user has been deactivated. This corresponds to the following property: com.aris.umc.notification.userDisabled.message

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. This corresponds to the following property: com.aris.umc.notification.userDisabled.template

Notify about activation

Specifies whether users are to be notified after they have been activated. This corresponds to the following property: com.aris.umc.notification.userEnabled.enabled

User activated - Subject

Specifies the subject of the notification that is sent when a user has been activated. This corresponds to the following property: com.aris.umc.notification.userEnabled.subject

User activated - Message

Specifies the text of the notification that is sent when a user has been activated. This corresponds to the following property: com.aris.umc.notification.userEnabled.message

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. This corresponds to the following property: com.aris.umc.notification.userEnabled.template

PASSWORDS

Notify about password change

Specifies whether users are to be notified after their password has been changed. This corresponds to the following property: com.aris.umc.notification.passwordChanged.enabled

Password change - Subject

Specifies the subject of the notification that is sent when a password has been changed. This corresponds to the following property: com.aris.umc.notification.passwordChanged.subject

Password change - Message

Specifies the text of the notification that is sent when a password has been changed. This corresponds to the following property: com.aris.umc.notification.passwordChanged.message

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. This corresponds to the following property: com.aris.umc.notification.passwordChanged.template

Notify about password reset

Specifies whether users are to be notified after their password has been reset. This corresponds to the following property: com.aris.umc.notification.passwordReset.enabled

Password reset - Subject

Specifies the subject of the notification that is sent when a password has been reset. This corresponds to the following property: com.aris.umc.notification.passwordReset.subject

Password reset - Message

Specifies the text of the notification that is sent when a password has been reset. This corresponds to the following property: com.aris.umc.notification.passwordReset.message

Password reset - HTML template

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. This corresponds to the following property: com.aris.umc.notification.passwordReset.template

Notify about password reset request

Specifies that users are to be notified if they have requested a password reset. This corresponds to the following property: com.aris.umc.notification.passwordResetRequested.enabled

Password reset request - Subject

Specifies the subject of the notification that is sent when a user has requested a password reset. This corresponds to the following property: com.aris.umc.notification.passwordResetRequested.subject

Password reset request - Message

Specifies the text of the notification that is sent when a user has requested a password reset. This corresponds to the following property: com.aris.umc.notification.passwordResetRequested.message

Password reset request - HTML template

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. This corresponds to the following property: com.aris.umc.notification.passwordResetRequested.template

LICENSES

Notify about license expiration

Specifies whether administrators with the **License management** privilege are to be notified when a license has expired. This corresponds to the following property: com.aris.umc.notification.licenseExpired.enabled

License has expired - Subject

Specifies the subject of the notification that is sent when a license has expired. This corresponds to the following property: com.aris.umc.notification.licenseExpired.subject

License has expired - Message

Specifies the text of the notification that is sent when a license has expired. This corresponds to the following property: com.aris.umc.notification.licenseExpired.message

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. This corresponds to the following property: com.aris.umc.notification.licenseExpired.templates

Notify before license expiration

Specifies whether administrators with the **License management** privilege are to be notified when a license is about to expire. This corresponds to the following property: com.aris.umc.notification.licenseExpiring.enabled

Days before expiration

Specifies how many days before license expiration a notification is sent. This corresponds to the following property: com.aris.umc.notification.licenseExpiring.threshold

License will expire soon - Subject

Specifies the subject of the notification that is sent when a license is about to expire. This corresponds to the following property: com.aris.umc.notification.licenseExpiring.subject

License will expire soon - Message

Specifies the text of the notification that is sent when a license is about to expire. This corresponds to the following property: com.aris.umc.notification.licensselicenseExpiring.message

License will expire soon - 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. This corresponds to the following property: com.aris.umc.notification.licenseExpiring.template

Notify about license exhaustion

Specifies whether administrators with the **License management** privilege are to be notified when the total number of logins allowed for the license is reached. This corresponds to the following property: com.aris.umc.notification.licenseSeatsConsumed.enabled

License exhaustion - Subject

Specifies the subject of the notification that is sent when the total number of logins allowed for the license is reached. This corresponds to the following property: com.aris.umc.notification.licenseSeatsConsumed.subject

License exhaustion - Message

Specifies the text of the notification that is sent when the total number of logins allowed for the license is reached. This corresponds to the following property: com.aris.umc.notification.licenseSeatsConsumed.message

License exhaustion - HTML template

Specifies the HTML template used for the notification that is sent when an administrator is to be notified that the total number of logins allowed with a license is reached. The template must have been uploaded previously. This corresponds to the following property: com.aris.umc.notification.licenseSeatsConsumed.template

TENANTS

Notify about deletion

Specifies whether a notification is sent if a tenant was deleted. This corresponds to the following property: com.aris.umc.notification.tenantDeleted.enabled

Notify all users about deletion

Specifies whether a notification is to be sent to all users. This corresponds to the following property: com.aris.umc.notification.tenantDeleted.sendToAll.enabled

Tenant deleted - Subject

Specifies the subject of the notification that is sent if a tenant was deleted. This corresponds to the following property: com.aris.umc.notification.tenantDeleted.subject

Tenant deleted - Message

Specifies the text of the notification that is sent if a tenant was deleted. This corresponds to the following property: com.aris.umc.notification.tenantDeleted.message

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. This corresponds to the following property: com.aris.umc.notification.tenantDeleted.template

Notify about deactivation

Specifies whether a notification is sent if a tenant was deactivated. This corresponds to the following property: com.aris.umc.notification.tenantDisabled.enabled

Notify all users about deactivation

Specifies whether a notification is sent to all users if a tenant was deactivated. This corresponds to the following property: com.aris.umc.notification.tenantDisabled.sendToAll.enabled

Tenant deactivated - Subject

Specifies the subject of the notification that is sent if a tenant was deactivated. This corresponds to the following property: com.aris.umc.notification.tenantDisabled.subject

Tenant deactivated - Message

Specifies the text of the notification that is sent if a tenant was deactivated. This corresponds to the following property: com.aris.umc.notification.tenantDisabled.message

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. This corresponds to the following property: com.aris.umc.notification.tenantDisabled.template

Notify about activation

Specifies whether a notification is sent if a tenant was activated. This corresponds to the following property: com.aris.umc.notification.tenantEnabled.enabled

Notify all users about activation

Specifies whether a notification is sent to all users if a tenant was activated. This corresponds to the following property: com.aris.umc.notification.tenantEnabled.sendToAll.enabled

Tenant activated - Subject

Specifies the subject of the notification that is sent if a tenant was activated. This corresponds to the following property: com.aris.umc.notification.tenantEnabled.subject

Tenant activated - Message

Specifies the text of the notification that is sent if a tenant was activated. This corresponds to the following property: com.aris.umc.notification.tenantEnabled.message

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. This corresponds to the following property: com.aris.umc.notification.tenantEnabled.template

MULTI-FACTOR AUTHENTICATION

Notify about one-time password request

Specifies whether users are to be notified if they have requested a one-time password. This corresponds to the following property: com.aris.umc.notification.otpRequested.enabled

One-time password request - Subject

Subject of the notification that is sent when a user has requested a one-time password. This corresponds to the following property: com.aris.umc.notification.otpRequested.subject

One-time password request - Message

Text of the notification that is sent when a user has requested a one-time password. This corresponds to the following property: com.aris.umc.notification.otpRequested.message

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. This corresponds to the following property: com.aris.umc.notification.otpRequested.message

Notify about token secret change

Specifies whether users are to be notified if their token secret has been changed. This corresponds to the following property: com.aris.umc.notification.otpSecretChanged.enabled

Token secret change - Subject

Subject of the notification that is sent when the token secret has been changed by a user. This corresponds to the following property: com.aris.umc.notification.otpSecretChanged.subject

Token secret change - Message

Text of the notification that is sent when the token secret has been changed by a user. This corresponds to the following property: com.aris.umc.notification.otpSecretChanged.message

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. This corresponds to the following property: com.aris.umc.notification.otpSecretChanged.template

OAUTH

Notify about signup

Specifies whether administrators are to be notified if a new user has signed up. This corresponds to the following property: com.aris.umc.notification.signupCompleted.enabled

Signup complete - Subject

Subject of the notification that is sent when a new user has signed up. This corresponds to the following property: com.aris.umc.notification.signupCompleted.subject

Signup complete - Message

Text of the notification that is sent when a new user has signed up. This corresponds to the following property: com.aris.umc.notification.signupCompleted.message

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. This corresponds to the following property: com.aris.umc.notification.signupCompleted.template

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

You have customized your system configuration.

3.11.2.12 Customize OAuth settings

OAuth is only relevant for API Portal.

OAuth is an open standard for authorization. This mechanism is used, for example, by Google, Facebook, Twitter, etc. to permit users to share information about their accounts with third party applications or websites without revealing them their passwords.

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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **OAuth** in the list box.
6. Click a configuration category. The following categories are available:

GENERAL

Use OAuth

Specifies whether OAuth is allowed. The default value is **false**. This corresponds to the following property: com.aris.umc.oauth.active

OAuth providers

Specifies in a comma-separated list the social network providers for which login is allowed.

Activate the relevant providers. This corresponds to the following property: com.aris.umc.oauth.providers

API keys

Specifies a comma-separated list of API keys. This corresponds to the following property: com.aris.umc.oauth.api.keys

API secrets

Specifies a comma-separated list of API secrets. This corresponds to the following property: com.aris.umc.oauth.api.secrets

ADVANCED SETTINGS

Debug output

Specifies whether debug output is enabled for OAuth operations. The default value is **false**. This corresponds to the following property: com.aris.umc.oauth.debug

Default tenant

Specifies the default tenant that is used for OAuth-based authentication. The default value is **default**. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.oauth.tenant

7. Click **Edit >** **Contribute**.

   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.

3.11.2.13 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Password policy** in the list box.
6. Click a configuration category. The following categories are available:

   GENERAL

   Minimum length

   Specifies the minimum length of a password. This corresponds to the following property: com.aris.umc.password.length.min

   Maximum length

   Specifies the maximum length of a password. This corresponds to the following property: com.aris.umc.password.length.max

   Minimum number of lowercase letters

   Specifies the minimum number of lowercase letters in a password. This corresponds to the following property: com.aris.umc.password.characters.lowercase.min

   Allow uppercase letters

Specifies whether uppercase letters are allowed in a password. This corresponds to the following property: com.aris.umc.password.characters.uppercase.allowed

Minimum number of uppercase letters

Specifies the minimum number of uppercase letters in a password. This corresponds to the following property: com.aris.umc.password.characters.uppercase.min

Allow numbers

Specifies whether numbers are allowed in a password. This corresponds to the following property: com.aris.umc.password.characters.numeric.allowed

Minimum number of numbers

Specifies the minimum number of numbers that must be contained in a password. This corresponds to the following property: com.aris.umc.password.characters.numeric.min

Allow special characters

Specifies whether special characters are allowed in a password. This corresponds to the following property: com.aris.umc.password.characters.special.allowed

Minimum number of special characters

Specifies the minimum number of special characters in a password. This corresponds to the following property: com.aris.umc.password.characters.special.min

Special characters

Specifies which characters are special characters. This corresponds to the following property: com.aris.umc.password.characters.special.set

EXPIRING PASSWORDS

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. This corresponds to the following property: com.aris.umc.password.expiry.active

Password lifetime

Specifies the period of time after which a password expires. This is defined for a single tenant. This corresponds to the following property: com.aris.umc.password.expiry.days

ADVANCED SETTINGS

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. This corresponds to the following property: com.aris.umc.password.change.forceAfterReset

Force different password

Specifies whether the new password must differ from the old one. This is defined for a single tenant. This corresponds to the following property: com.aris.umc.password.change.forceDifference

Force change before first login

Specifies whether a user must change the password upon first login. This is defined for a single tenant. This corresponds to the following property: com.aris.umc.password.change.forceOnFirstLogin

Activate reset confirmation

Specifies whether a user must confirm a password reset. This corresponds to the following property: com.aris.umc.password.reset.confirmation.active

Link lifetime

Specifies the time in seconds during which a user can click the link sent by e-mail in order to confirm the password. This corresponds to the following property: com.aris.umc.password.reset.confirmation.ttl

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

You have customized your system configuration.

3.11.2.14 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **SAML** in the list box.
6. Click a configuration category. The following categories are available:

GENERAL

Use SAML

Specifies whether an SAML-based login is allowed. This corresponds to the following property: com.aris.umc.saml.active

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**. This corresponds to the following property: com.aris.umc.saml.binding

Identity provider ID

Specifies the ID of the identity provider. This corresponds to the following property: com.aris.umc.saml.identity.provider.id

Service provider ID

Specifies the ID of the service provider. This corresponds to the following property: com.aris.umc.saml.service.provider.id

Single sign-on URL

Specifies the end point of the identity provider that is used for single sign-on. This corresponds to the following property: com.aris.umc.saml.identity.provider.sso.url

Single logout URL

Specifies the end point of the identity provider that is used for single log-out (page 763). This corresponds to the following property: com.aris.umc.saml.identity.provider.logout.url

SIGNATURE

Sign assertions

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. This corresponds to the following property: com.aris.umc.saml.signature.assertion.active

Sign requests

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. This corresponds to the following property: com.aris.umc.saml.signature.request.active

Sign responses

Specifies whether the SAML authentication response must be signed or not. This corresponds to the following property: com.aris.umc.saml.signature.resonse.active

Sign metadata

Enforces that the SAML metadata must be signed. If set, the service provider metadata file provided by the application is signed. This corresponds to the following property: com.aris.umc.saml.signature.metadata.active

Signature algorithm

Specifies the algorithm for the signature. The algorithm can be selected from the list. This corresponds to the following property: com.aris.umc.saml.signature.algorithm

KEYSTORE

Keystore

Specifies the location of the keystore file used for validating SAML assertions. The keystore must have been uploaded previously. This corresponds to the following property: com.aris.umc.saml.keystore.location

Alias

Specifies the alias name that is used to access the keystore. This corresponds to the following property: com.aris.umc.saml.keystore.alias

Password

Specifies the password that is used to access the keystore. This corresponds to the following property: com.aris.umc.saml.keystore.password

Type

Specifies the type of the keystore to be used. The keystore type can be selected from a list. This corresponds to the following property: com.aris.umc.saml.keystore.typ

TRUSTSTORE

Truststore

Specifies the location of the truststore file used for validating SAML assertions. The keystore must have been uploaded previously. This corresponds to the following property: com.aris.umc.saml.truststore.location

Alias

Specifies the alias to be used for accessing the truststore. This corresponds to the following property: com.aris.umc.saml.truststore.alias

Password

Specifies the password to be used for accessing the truststore. This corresponds to the following property: com.aris.umc.saml.truststore.password

Type

Specifies the type of the truststore. This corresponds to the following property: com.aris.umc.saml.truststore.type

ADVANCED SETTINGS

Login using DN

Specifies whether login is to be tried using the fully qualified name instead of the user name. This corresponds to the following property: com.aris.umc.saml.login.mode.dn.active

Decompose DN

Specifies whether the fully qualified name is to be decomposed. This corresponds to the following property: com.aris.umc.saml.login.mode.keyword.active

Keyword

Specifies which part of the fully qualified name is to be used for login. This corresponds to the following property: com.aris.umc.saml.login.mode.keyword.name

Authentication context classes

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**. This corresponds to the following property: com.aris.umc.saml.auth.context.class.refs

Authentication context comparison

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**. This corresponds to the following property: com.aris.umc.saml.auth.context.comparison

NameID format

Specifies in which format the user ID is transferred to ARIS Administration. This corresponds to the following property: com.aris.umc.saml.auth.nameid.format

Clock skew

Specifies the time offset between identity provider and service provider in seconds. Assertions are accepted if they are received within the permitted time frame. This corresponds to the following property: com.aris.umc.saml.assertion.timeoffset

Assertion lifetime

Specifies the maximum lifetime of an SAML assertion in seconds. This corresponds to the following property: com.aris.umc.saml.assertion.ttl

Default tenant

Specifies the default tenant that is to be used for the SAML-based login. This corresponds to the following property: com.aris.umc.saml.tenant

7. Click **Edit >** **Contribute**.

   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.

3.11.2.14.1 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **SAML** in the list box.
6. Click **Keystore**.
7. Click **Upload > Keystore**. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a keystore file.

3.11.2.14.2 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **SAML** in the list box.
6. Click **Truststore**.
7. Click **Upload > Truststore**. The dialog for uploading a file opens.
8. Select the relevant file.

You have uploaded a truststore file.

3.11.2.15 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Security** in the list box.
6. Click a configuration category. The following categories are available:

   ACCOUNT LOCKOUT

   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**. This corresponds to the following property: com.aris.umc.authentication.lock.enabled

   Attempt limit

   Specifies the number of failed login attempts that are allowed before user login is locked. This corresponds to the following property: com.aris.umc.authentication.lock.counter.limit

   Lockout duration

   Specifies how long a user login is temporarily locked when a user causes too many failed logins. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.authentication.lock.ttl

   Lock counter duration

   Time that must elapse before the number of failed login attempts is reset. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.authentication.lock.counter.ttl

   USER SESSIONS

   Session cache size

   Specifies how many session IDs are saved in the session renewal cache. When the cache is full, the least recently used sessions are removed. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.session.renewal.cache.size

Session cache lifetime

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 cannot be changed. This corresponds to the following property: com.aris.umc.session.renewal.cache.ttl

Session ID generator

Specifies the random number generator used for generating session IDs. This corresponds to the following property: com.aris.umc.session.identifier.generator

Minimum length of session ID

Specifies the minimum length of a session ID in bytes. For security reasons this value should not be less than 32. This corresponds to the following property: com.aris.umc.session.identifier.length.min

Maximum length of session ID

Specifies the maximum length of a session ID in bytes. This corresponds to the following property: com.aris.umc.session.identifier.length.max

Maximum concurrent sessions

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. This corresponds to the following property: com.aris.umc.session.concurrent.max

MULTI-FACTOR AUTHENTICATION

Use multi-factor authentication

Specifies whether multi-factor authentication is required. The default value is **false**. This corresponds to the following property: com.aris.umc.authentication.multiFactor.active

Clock skew intervals

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. This corresponds to the following property: com.aris.umc.authentication.multiFactor.clockSkew

ADVANCED SETTINGS

Generate user statistics

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:

- 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.

This corresponds to the following property: com.aris.umc.audit.enabled

Log authentication

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 42):

- Login failed
- Login successful
- Logged out
- Logged out by administrator

This corresponds to the following property: com.aris.umc.audit.log.auth.enabled

Log changes to configuration

Enables logging of changes to the configuration. 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 42):

- 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

This corresponds to the following property: com.aris.umc.audit.log.conf.enabled

Log changes to licenses/privileges

Enables logging of changes to licenses or privileges. 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 42):

- License deleted
- License imported
- License consumed

- License released
- Violation of user group license limit
- Violation of user license limit
- Replace license file for tenant

  This corresponds to the following property: com.aris.umc.audit.log.license.privilege.enabled

  Log changes to users/user groups

  Enables logging of changes to users or user groups. 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 42):

- 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

  This corresponds to the following property: com.aris.umc.audit.log.user.group.enabled

  Force SSO

  Specifies that only an SSO login is allowed. The default value is **false**. This corresponds to the following property: com.aris.umc.authentication.sso.only

  Minimum authentication delay

  Specifies the minimum delay that is added at each login. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.authentication.delay.min

  Maximum authentication delay

  Specifies the maximum delay that is added at each login. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.authentication.delay.max

  Use OTPs

  Specifies whether or not the generation of one-time passwords (OTPs) is allowed. This corresponds to the following property: com.aris.umc.otp.active

  Lifetime

  Specifies the lifetime of a one-time password (OTP) in seconds. Passwords become invalid after this time period at the latest. This corresponds to the following property: com.aris.umc.otp.ttl

  License pools at user group-level

  Specifies that license pools are assigned at the user group level (page 34). If this option is enabled, licenses must not be assigned to users directly, but are to be assigned via user groups only. This corresponds to the following property: com.aris.umc.license.distribution.handling

7. Click **Edit >** **Contribute**.

   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.

3.11.2.16 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **SMTP** in the list box.
6. Click a configuration category. The following categories are available:

CONNECTION

Host name

Specifies the host name or IP address of the SMTP server. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.host

Port

Specifies the port for the SMTP server. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.port

Sender address

Specifies the sender address for notifications. This must be a valid e-mail address. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.sender

E-mail format

Specifies the default type used for sending notifications. This corresponds to the following property: com.aris.umc.notification.type

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. This corresponds to the following property: com.aris.umc.notification.language

Use authentication

Specifies whether authentication to the SMTP server is to be used. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.authentication

User name

Specifies the user name that is used for authentication. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.userName

Password

Specifies the password that is used for authentication to the SMTP server. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.password

Use SSL

Specifies whether TLS is to be used for the connection to the SMTP server. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.ssl

SSL mode

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. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.ssl.mode

Connection timeout

Specifies the duration after which the attempt to connect to the SMTP server is canceled. This is defined in milliseconds. This corresponds to the following property: com.aris.umc.notification.smtp.timeout

ADVANCED SETTINGS

Debug output

Activates debugging output. This corresponds to the following property: com.aris.umc.notification.debug

Number of retries

Specifies the number of retries for sending notifications. This corresponds to the following property: com.aris.umc.notification.smtp.retry.count

Minimum wait time

Specifies the minimum wait time between the retries. This corresponds to the following property: com.aris.umc.notification.smtp.retry.sleep.min

Maximum wait time

Specifies the maximum wait time between the retries. This corresponds to the following property: com.aris.umc.notification.smtp.retry.sleep.max

Send rate

Specifies the maximum number of messages sent per second. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.smtp.sendrate

Reply-to addresses

Specifies a comma-separated list of reply-to addresses. This corresponds to the following property: com.aris.umc.notification.smtp.replyto

Number of threads

Specifies the maximum number of threads that are used for sending notifications. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.umc.notification.threads

Maximum queue length

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 cannot be changed. This corresponds to the following property: com.aris.umc.notification.queue

7. Click **Edit >** **Contribute**.

   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.

3.11.2.17 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Activate **User Management**.
5. Select **Users** in the list box.
6. Click a configuration category. The following categories are available:

   GENERAL

   E-mail address required

   Specifies whether the **E-mail address** box must be specified for a user. This corresponds to the following property: com.aris.umc.users.email.required

   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. This corresponds to the following property: com.aris.umc.users.email.validation.active

Maximum login name length

Specifies the maximum length of the login names. This corresponds to the following property: com.aris.umc.users.name.length.max

Maximum picture size

Specifies the maximum size of a profile picture in bytes. The default setting is 1048576 bytes. This corresponds to the following property: com.aris.umc.collaboration.picture.size.max

Session duration (initial)

Specifies the initial life span of a standard user session in minutes. This corresponds to the following property: com.aris.umc.session.ttl

Session duration (max)

Specifies the maximum life span of a standard user session in minutes. This corresponds to the following property: com.aris.umc.session.ttl.max

Impersonation target users

Specifies the users for which you want to allow impersonation (page 279). This corresponds to the following property: com.aris.umc.impoersonation.targets

Display technical users

Specifies whether or not user statistics and charts are also displayed for technical users such as **system**, **arisservice**, and **guest**. This corresponds to the following property: com.aris.umc.chart.display.defaultUsers.enabled

ARISSERVICE

Generate, if not available

Specifies whether the user **arisservice** is generated at startup, if not yet available. This corresponds to the following property: com.aris.umc.users.service.create

User name

Specifies the login name of the user **arisservice**. This corresponds to the following property: com.aris.umc.users.service.name

E-mail address

Specifies the e-mail address of the user **arisservice**. This corresponds to the following property: com.aris.umc.users.service.email

Initial password

Specifies the initial password of the user **arisservice**. This corresponds to the following property: com.aris.umc.users.service.password

GUEST

Generate, if not available

Specifies whether the user **guest** is generated at startup, if not yet available. This corresponds to the following property: com.aris.umc.users.guest.create

User name

Specifies the login name of the user **guest**. This corresponds to the following property: com.aris.umc.users.guest.name

E-mail address

Specifies the e-mail address of the user **guest**. This corresponds to the following property: com.aris.umc.users.guest.email

Initial password

Specifies the initial password of the user **guest**. This corresponds to the following property: com.aris.umc.users.guest.password

Automatically log in visitors

Specifies that visitors are automatically logged in as a guest when accessing the ARIS Connect portal. This corresponds to the following property: com.aris.umc.users.guest.allow.auto.login

SUPERUSER

User name

Specifies the login name of the administrator in ARIS Administration. This corresponds to the following property: com.aris.umc.users.admin.name

E-mail address

Specifies the e-mail address of the administrator. This corresponds to the following property: com.aris.umc.users.admin.email

Initial password

Specifies the initial password of the administrator in ARIS Administration. This corresponds to the following property: com.aris.umc.users.admin.password

SYSTEM

Generate, if not available

Specifies whether the user **system** is generated at startup, if not yet available. This corresponds to the following property: com.aris.umc.users.system.create

User name

Specifies the login name of the user **system**. This corresponds to the following property: com.aris.umc.users.system.name

E-mail address

Specifies the e-mail address of the user **system**. This corresponds to the following property: com.aris.umc.users.system.email

Initial password

Specifies the initial password of the user **system**. This corresponds to the following property: com.aris.umc.users.system.password

Session duration (initial)

Specifies the initial duration of a system user session in minutes. This corresponds to the following property: com.aris.umc.session.system.ttl

Session duration (max)

Specifies the maximum duration of a system user session in minutes. This corresponds to the following property: com.aris.umc.session.system.ttl.max

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

You have customized your system configuration.

3.11.2.18 Valuable information

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

3.11.2.18.1 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, e.g., master (page 338). 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, e.g., **default**, the user **superuser** must be defined as the target for impersonation (page 274). 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:

- ARCM administrator
- Analysis administrator
- Collaboration administrator
- Document administrator
- Database administrator
- License administrator
- Process Governance administrator
- Server administrator
- Technical configuration administrator

3.11.2.18.2 What infrastructure properties are available?

You can customize your system infrastructure (page 339) as required.

Key	**Description**	**Valid input**	**Example**
com.aris.umc.notification.useHttpLinks	E-mails with HTTP URLs only Specifies whether or not the HTTP protocol is used instead of the HTTPS protocol in e-mails.	true, false.	
com.aris.umc.basicauth.tenant	Default tenant Specifies that the default tenant is used for authentication. Cross-tenant property that cannot be changed.	String	
com.aris.infrastructure.tenant	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, i.e., they can access ARIS Administration and Tenant Management. Users with the relevant privileges can specify other infrastructure tenants in ARIS Administration. Cross-tenant property that cannot be changed.		
com.aris.umc.client.connect.timeout	Connection timeout Specifies the duration after which a client's connection attempt is canceled. This is defined in milliseconds. Cross-tenant property that cannot be changed.	Integer > 0	

Key	Description	Valid input	Example
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.idle.timeout	Idle timeout Specifies the wait time timeout of the ARIS Administration REST client. This is defined in milliseconds.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.client.read.timeout	Read timeout Specifies the wait time timeout of the REST client for read access. This is defined in milliseconds.	Integer > 0	
com.aris.umc.client.retry.max	Number of retries Specifies the maximum number of retries.	Integer > 0	
com.aris.umc.config.cache.ttl	Configuration cache lifetime Specifies the lifetime of the configuration cache in seconds. The configuration is reloaded after the time set here. Cross-tenant property that cannot be changed.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.config.encrypted	Encrypted properties Specifies a comma-separated list of encrypted property keys.	List of strings	com.softwareag.aris.umc.ldap.service.pwd
com.aris.umc.jaas.login.context	JAAS login context Specifies the login name for the JAAS context. Cross-tenant property that cannot be changed.	String	UMC-DB
com.aris.umc.remote.clients	Allowed remote clients Comma-separated list of client IPs that uses the remote interface of ARIS Administration.	String	
com.aris.umc.ssl.host.verification.active	Host name verification Specifies whether the verification of the SSL host name is activated. Verification is enabled by default.	true, false	
com.aris.umc.version	Build number Build number of ARIS Administration. Cross-tenant property that cannot be changed.	String	9.8.0-SNAPSHOT
com.aris.umc.loadbalancer.url	Load balancer URL Specifies the URL of the load balancer. Cross-tenant property that cannot be changed.		

3.11.2.18.3 What Kerberos properties are available?

You can configure Kerberos (page 341) as required.

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.config	Configuration file Storage location of the configuration file for Kerberos. The file can be uploaded directly.	String	./config/Kerberos/krb5.conf
com.aris.umc.kerberos.debug	Debug output Specifies whether debug output is allowed for Kerberos operations.	true, false	
com.aris.umc.kerberos.kdc	KDC Specifies the fully qualified name of the central **K**ey **D**istribution **C**enter (**KDC**). This is usually the fully qualified host name of the LDAP server.	String	049bfs01.me.corp.softwareag.com
com.aris.umc.kerberos.keyTab	Key table Specifies the location of the keytab file that is used for Kerberos tickets. The file can be uploaded directly.	String	C:/safePlace/krb-umc.keytab
com.aris.umc.kerberos.realm	Realm Specifies the realm of Kerberos tickets. Fully qualified domain name in uppercase letters.	String	MY.CORP.SOFTWAREAG.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
com.aris.umc.kerberos.tenant	Default tenant Specifies the default tenant for a Kerberos-based login. Cross-tenant property that cannot be changed.	String	

Key	Description	Valid input	Example
com.aris.umc.kerberos.allowlocalusers	Allow local users 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.	true, false	

3.11.2.18.4 What LDAP properties are available?

You can customize LDAP (page 344) as required.

Key	Description	Valid input	Example
com.aris.umc.ldap.active	Activate LDAP Specifies whether the LDAP integration is activated.	true, false	
com.aris.umc.ldap.attribute.memberof.resolveOnFirstLogin	Update group associations at login 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.	true, false	
com.aris.umc.ldap.user.attributes.paging.enabled	Use attribute value paging Specifies whether a page break is to be inserted if the server-side limit for valid values is exceeded for attributes, e.g., if more than 1,500 attribute values exist.	true, false	
com.aris.umc.ldap.auth.only	Prevent login of manually created users Specifies that only LDAP users may log in. This does not apply to the **arisservice**, **guest**, **superuser**, and **system** users.	true, false	

Key	Description	Valid input	Example
com.aris.umc.ldap.url	Server URL Specifies the URL of the LDAP server.		
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	ldap://0815bfs01.my.corp.com:389
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 Specifies the duration after which the attempt to connect to the LDAP server is canceled. This is defined in milliseconds.		
com.aris.umc.ldap.connection.concurrent.timeout	Pool wait time Specifies the maximum amount of time that a connection request may take if the maximum number of connections to the LDAP server was exceeded.	Integer > 0	
com.aris.umc.ldap.connection.pool.size	Pool size 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.	Integer > 0	
com.aris.umc.ldap.connection.pool.timeout	Pool time 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.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.ldap.entity.cache.size	Cache size Specifies the maximum number of LDAP entities that are cached during an import.	Integer > 0	3500
com.aris.umc.ldap.filter.group	Group search filter Specifies the query filter for LDAP groups.	String	(&(objectClass=role)(name=y*))
com.aris.umc.ldap.filter.user	User search filter Specifies the query filter for LDAP users.	String	(&(sAMAccountName=*))
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.group.searchpath	Group search paths Specifies a semicolon-separated list of all LDAP search paths for user groups. Overwrites the list of general search paths.	String	OU\=distribution lists\,DC\=my,DC\=corp\,DC\=company\,DC\=com
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
com.aris.umc.ldap.pagesize	Page size Specifies the maximum number of entries that are loaded in a single LDAP query.	Integer > 0	
com.aris.umc.ldap.read.timeout	Read timeout Specifies the maximum amount of time that read access may take.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.ldap.recursion.depth	Recursion depth Specifies the recursion depth that is to be used for nested groups and users.	**1** means one level, **0** means all	1
com.aris.umc.ldap.referral	Referrals Defines how referrals to other LDAP systems are processed.	▪ **follow** means that the referral is automatically followed. ▪ **ignore** means that referrals are ignored. ▪ **throw** means that referrals are checked.	ignore
com.aris.umc.ldap.service.pwd	Password Specifies the password of the LDAP user.	String	
com.aris.umc.ldap.service.user	User name Specifies the user name of the LDAP user.	String	arisldapservice
com.aris.umc.ldap.ssl	Use SSL Specifies if SSL is to be used.	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.ssl.host.verification.active	Verify host names Specifies if an SSL host is to be verified.	true, false	
com.aris.umc.ldap.ssl.mode	SSL mode Specifies the SSL mode (page 352).	String	STARTTTLS
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	

Key	Description	Valid input	Example
com.aris.umc.ldap.ssl.truststore.type	Type Specifies the truststore type to be used.	String	
com.aris.umc.ldap.sync.skipOnFault	Skip errors Specifies whether the LDAP import ignores users or user groups for which errors occurred without showing an error message.	true (without message), false (with error message)	
com.aris.umc.ldap.sync.useDnAsGuid	Use DN as GUID Specifies that the fully qualified name (distinguished name) is used as GUID.	true, 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.user.searchpath	User search paths Specifies a semicolon-separated list of LDAP search paths for users. Overwrites the list of general search paths.	String	OU\=employees\,DC\=my\,DC\=corp\, DC\=company\,DC\=com
com.aris.umc.ldap.sync.members.searchBottomUp	Use bottom-up method Specifies whether the bottom-up method (**memberOf** attribute) or the top-down method (**hasMember** attribute) is applied when associating users to user groups.		
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.sync.user.importgroups	Import user groups when synchronizing Specifies whether additional user groups are to be imported during user synchronization.	true, false	false

3.11.2.18.5 What LDAP attribute mapping properties are available?

You can customize the LDAP attribute mappings (page 344) as required.

Key	Description	Valid input	Example
com.aris.umc.ldap.attribute.distinguishedname	DN Specifies the fully qualified name (distinguished name).	String	distinguishedName
com.aris.umc.ldap.attribute.group.name	Name Specifies the group name.	String	Group name
com.aris.umc.ldap.attribute.guid	GUID Specifies the LDAP GUID.	String	Object GUID
com.aris.umc.ldap.attribute.hasmember	hasMember Specifies the attribute that references the members of a group.	String	hasMember
com.aris.umc.ldap.attribute.memberof	memberOf Specifies the attribute that references the groups of a user.	String	memberOf
com.aris.umc.ldap.attribute.objectclass	objectClass Specifies the attribute that contains the object class.	String	objectClass
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.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.name	Name Specifies the user name of a user.	String	Fragment
com.aris.umc.ldap.attribute.user.phone	Telephone number Specifies the telephone number of a user.	String	+491234567
com.aris.umc.ldap.attribute.user.picture	Picture Specifies the picture of a user.	Location of an image	

Key	Description	Valid input	Example
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 group.j	String	Description, operating system
com.aris.umc.ldap.group.objectclass	Group object class Object class of the LDAP groups.	String	Group
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
com.aris.umc.ldap.user.objectclass	User object class Specifies the object class of the LDAP user.	String	Organizational unit

3.11.2.18.6 Which properties are available for user-defined notifications?

You can customize the user-defined notifications (page 359) as required.

Variables (page 407) may be used to personalize the content of a notification of ARIS Administration. Variables can be used in both notification subject and body.

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.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.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.templates	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.licensselicenseExpiring.message	License will expire soon - Message Specifies the text of the notification that is sent when a license is about to expire.	String	
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.template	License will expire soon - 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.		
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.licenseSeatsConsumed.enabled	Notify about license exhaustion Specifies whether administrators with the **License management** privilege are to be notified when the total number of logins allowed for the license is reached.	true, false	true
com.aris.umc.notification.licenseSeatsConsumed.message	License exhaustion - Message Specifies the text of the notification that is sent when the total number of logins allowed for the license is reached.	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 the total number of logins allowed with a license is reached. The template must have been uploaded previously.		
com.aris.umc.notification.licenseSeatsConsumed.subject	License exhaustion - Subject Specifies the subject of the notification that is sent when the total number of logins allowed for the license is reached.	String	

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.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.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.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.message	Password reset - Message Specifies the text of the notification that is sent when a password has been reset.	String	
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.template	Password reset - HTML template 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.		

Key	Description	Valid input	Example
com.aris.umc.notification.passwordResetRequested.enabled	Notify about password reset request Specifies that users are to be notified if they have requested a password reset.		
com.aris.umc.notification.passwordResetRequested.message	Password reset request - Message Specifies the text of the notification that is sent when a user has requested a password reset.		
com.aris.umc.notification.passwordResetRequested.subject	Password reset request - Subject Specifies the subject of the notification that is sent when a user has requested a password reset.		
com.aris.umc.notification.passwordResetRequested.template	Password reset request - HTML template 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.		
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.message	Tenant deleted - Message Specifies the text of the notification that is sent if a tenant was deleted.	String	
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	false
com.aris.umc.notification.tenantDeleted.subject	Tenant deleted - Subject Specifies the subject 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
	Tenant deactivated - Message Specifies the text of the notification that is sent if a tenant was deactivated.	String	
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	false
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.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
com.aris.umc.notification.tenantEnabled.message	Tenant activated - Message Specifies the text of the notification that is sent if a tenant was activated.	String	

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	false
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.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. jThe template must have been uploaded previously.		
com.aris.umc.notification.userCreated.enabled	Notify about creation Specifies whether users are to be notified after they have been created.	true, false	
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.subject	User created - Subject Subject 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	

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.subject	User deactivated - Subject Specifies the subject 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.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.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.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.		
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	

Key	Description	Valid input	Example
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	
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.		
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.message	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.		

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.		

3.11.2.18.7 What variables can be used for user-defined notifications?

Variables (page 407) 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 receivings 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 receivings 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

3.11.2.18.8 What OAuth properties are available?

OAuth is only relevant for API Portal.

You can configure OAuth (page 366) as required.

Key	Description	Valid input	Example
com.aris.umc.oauth.active	Use OAuth Specifies whether OAuth is allowed. The default value is **false**.	true, false	
com.aris.umc.oauth.api.keys	API keys Specifies a comma-separated list of API keys.	String	
com.aris.umc.oauth.api.secrets	API secrets Specifies a comma-separated list of API secrets.	String	
com.aris.umc.oauth.debug	Debug output Specifies whether debug output is enabled for OAuth operations. The default value is **false**.	true, false	
com.aris.umc.oauth.providers	OAuth providers Specifies in a comma-separated list the social network providers for which login is allowed.	Comma-separated list	Google, Facebook
com.aris.umc.oauth.tenant	Default tenant Specifies the default tenant that is used for OAuth-based authentication. The default value is **default**.	String	default

3.11.2.18.9 What properties are available for password policies?

You can customize your password policies (page 367) as required.

Key	Description	Valid input	Example
com.aris.umc.password.characters.lowercase.min	Minimum number of lowercase letters Specifies the minimum number of lowercase letters in a password.	Integer > 0	
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	*$-+?&=!%{}/_
com.aris.umc.password.characters.uppercase.allowed	Allow uppercase letters Specifies whether uppercase letters are allowed in a password.	true, false	
com.aris.umc.password.characters.uppercase.min	Minimum number of uppercase letters Specifies the minimum number of uppercase letters in a password.	Integer > 0	
com.aris.umc.password.length.max	Maximum length Specifies the maximum length of a password.	0 < Integer > 47	
com.aris.umc.password.length.min	Minimum length Specifies the minimum length of a password.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.password.expiry.active	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 after which a password expires. This is defined for a single tenant.	Integer > 0	
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.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.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 seconds during which a user can click the link sent by e-mail in order to confirm the password.	Integer > 0	30

3.11.2.18.10 What SAML properties are available?

You can configure SAML (page 369) as required.

Key	Description	Valid input
com.aris.umc.saml.active	Use SAML Specifies whether an SAML-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.	
com.aris.umc.saml.identity.provider.logout.url	Single logout URL Specifies the end point of the identity provider that is used for single log-out (page 763).	
com.aris.umc.saml.signature.assertion.active	Sign assertions 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.	true, false
com.aris.umc.saml.signature.request.active	Sign requests 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.	true, false
com.aris.umc.saml.signature.response.active	Sign responses 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.	true, false
com.aris.umc.saml.signature.metadata.active	Sign metadata Enforces that the SAML metadata must be signed. If set, the service provider metadata file provided by the application is signed.	true, false

Key	Description	Valid input
com.aris.umc.saml.signature.algorithm	Signature algorithm Specifies the algorithm for the signature. The algorithm can be selected from the list.	String
com.aris.umc.saml.keystore.location	Keystore Specifies the location of the keystore file used for validating SAML assertions. The keystore must have been uploaded previously.	
com.aris.umc.saml.keystore.alias	Alias Specifies the alias name that is used to access the keystore.	String
com.aris.umc.saml.keystore.password	Password Specifies the password that is used to access the keystore.	String
com.aris.umc.saml.keystore.typ	Type Specifies the type of the keystore to be used. The keystore type can be selected from a list.	String
com.aris.umc.saml.truststore.location	Truststore Specifies the location of the truststore file used for validating SAML assertions. The keystore 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
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

Key	Description	Valid input
com.aris.umc.saml.login.mode.keyword.name	Keyword Specifies which part of the fully qualified name is to be used for login.	String
com.aris.umc.saml.auth.context.class.refs	Authentication context classes 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**.	String
com.aris.umc.saml.auth.context.comparison	Authentication context comparison 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**.	String
com.aris.umc.saml.auth.nameid.format	NameID format Specifies in which format the user ID is transferred to ARIS Administration.	String
com.aris.umc.saml.assertion.timeoffset	Clock skew Specifies the time offset between identity provider and service provider in seconds. Assertions are accepted if they are received within the permitted time frame.	
com.aris.umc.saml.assertion.ttl	Assertion lifetime Specifies the maximum lifetime of an SAML assertion in seconds.	
com.aris.umc.saml.tenant	Default tenant Specifies the default tenant that is to be used for the SAML-based login.	String

3.11.2.18.11 What security properties are available?

You can customize the security settings (page 374) as required.

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.delay.max	Maximum authentication delay Specifies the maximum delay that is added at each login. This is defined in milliseconds.	Integer > 0	
com.aris.umc.authentication.delay.min	Minimum authentication delay Specifies the minimum delay that is added at each login. This is defined in milliseconds.	Integer > 0	
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.counter.ttl	Lock counter duration Time that must elapse before the number of failed login attempts is reset. This is defined in milliseconds.	Integer > 0	
com.aris.umc.authentication.lock.ttl	Lockout duration Specifies how long a user login is temporarily locked when a user causes too many failed logins. This is defined in milliseconds.	Integer > 0	
com.aris.umc.authentication.multiFactor.active	Use multi-factor authentication Specifies whether multi-factor authentication is required. The default value is **false**.	true, false	
com.aris.umc.authentication.multiFactor.clockSkew	Clock skew intervals 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. jThis is defined in milliseconds.		

Key	Description	Valid input	Example
com.aris.umc.authentication.sso.only	Force SSO Specifies that only an SSO login is allowed. The default value is **false**.	true, false	
com.aris.umc.session.concurrent.max	Maximum concurrent sessions 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.	Integer > 0	
com.aris.umc.session.identifier.generator	Session ID generator Specifies the random number generator used for generating session IDs.	String	
com.aris.umc.session.identifier.length.max	Maximum length of session ID Specifies the maximum length of a session ID in bytes.	Integer > 0	
com.aris.umc.session.identifier.length.min	Minimum length of session ID Specifies the minimum length of a session ID in bytes. For security reasons this value should not be less than 32.	Integer > 0	
com.aris.umc.session.renewal.cache.size	Session cache size Specifies how many session IDs are saved in the session renewal cache. When the cache is full, the least recently used sessions are removed. Cross-tenant property that cannot be changed.	Integer > 0	
com.aris.umc.session.renewal.cache.ttl	Session cache lifetime 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 cannot be changed.	Integer > 0	
com.aris.umc.otp.active	Use OTPs Specifies whether or not the generation of one-time passwords (OTPs) is allowed.		

Key	Description	Valid input	Example
com.aris.umc.otp.ttl	Lifetime Specifies the lifetime of a one-time password (OTP) in seconds. Passwords become invalid after this time period at the latest.		
com.aris.umc.audit.enabled	Generate user statistics 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: ▪ 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	Log authentication 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 42): ▪ 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	Log changes to configuration 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 42): ▪ 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
com.aris.umc.audit.log.license.privilege.enabled	Log changes to licenses/privileges 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 42): ▪ 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	Log changes to users/user groups 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 42): ▪ 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.license.distribution.handling	License pools at user group-level Specifies that license pools are assigned at the user group level (page 34). 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

3.11.2.18.12 What SMTP properties are available?

You can configure SMTP (page 379) as required.

Key	Description	Valid input	Example
com.aris.umc.notification.debug	Debug output Activates debugging output.	true, false	
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.queue	Maximum queue length 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 cannot be changed.	Integer > 0	
com.aris.umc.notification.sender	Sender address Specifies the sender address for notifications. This must be a valid e-mail address.	String	
com.aris.umc.notification.type	E-mail format Specifies the default type used for sending notifications.	String	
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.host	Host name Specifies the host name or IP address of the SMTP server. Cross-tenant property that cannot be changed.	String	localsmtp.my.corp.softwareag.com
com.aris.umc.notification.smtp.password	Password Specifies the password that is used for authentication to the SMTP server.	String	smtppassword

Key	Description	Valid input	Example
com.aris.umc.notification.smtp.port	Port Specifies the port for the SMTP server.	Integer greater than or equal to 0, but less than or equal to 65535	
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
com.aris.umc.notification.smtp.ssl.mode	SSL mode 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.	STARTTTLS, SSL	STARTTTLS
com.aris.umc.notification.smtp.timeout	Connection timeout Specifies the duration after which the attempt to connect to the SMTP server is canceled. This is defined in milliseconds.	Integer > 0	
com.aris.umc.notification.smtp.userName	User name Specifies the user name that is used for authentication.	String	
com.aris.umc.notification.smtp.retry.count	Number of retries Specifies the number of retries for sending notifications.	Integer > 0	
com.aris.umc.notification.smtp.retry.sleep.min	Minimum wait time Specifies the minimum wait time between the retries. This is defined in milliseconds.	Integer > 0	
com.aris.umc.notification.smtp.retry.sleep.max	Maximum wait time Specifies the maximum wait time between the retries. This is defined in milliseconds.	Integer > 0	

Key	Description	Valid input	Example
com.aris.umc.notification.smtp.sendrate	Send rate Specifies the maximum number of messages sent per second. Cross-tenant property that cannot be changed.	Integer > 0	
com.aris.umc.notification.smtp.replyto	Reply-to addresses Specifies a comma-separated list of reply-to addresses.		
com.aris.umc.notification.threads	Number of threads Specifies the maximum number of threads that are used for sending notifications. Cross-tenant property that cannot be changed.	Integer > 0	

3.11.2.18.13 What user settings properties are available?

You can customize the configuration for users (page 381) as required.

Key	Description	Valid input	Example
com.aris.umc.collaboration.picture.size.max	Maximum picture size Specifies the maximum size of a profile picture in bytes. The default setting is 1048576 bytes.	Integer > 0	1048576
com.aris.umc.users.admin.email	E-mail address Specifies the e-mail address of the administrator.	String	
com.aris.umc.users.admin.name	User name Specifies the login name of the administrator in ARIS Administration.	String	superuser
com.aris.umc.users.admin.password	Initial password Specifies the initial password of the administrator in ARIS Administration.	String	
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	

Key	Description	Valid input	Example
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.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.email	E-mail address Specifies the e-mail address of the user **arisservice**.	String	
com.aris.umc.users.service.name	User name Specifies the login name of the user **arisservice**.	String	
com.aris.umc.users.service.password	Initial password Specifies the initial password of the user **arisservice**.	String	
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.email	E-mail address Specifies the e-mail address of the user **guest**.	String	
com.aris.umc.users.guest.name	User name Specifies the login name 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.	true, false	

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.email	E-mail address Specifies the e-mail address of the user **system**.	String	
com.aris.umc.users.system.name	User name Specifies the login name of the user **system**.	String	
com.aris.umc.users.system.password	Initial password Specifies the initial password of the user **system**.	String	
com.aris.umc.session.system.ttl.max	Session duration (max) Specifies the maximum duration of a system user session in minutes.	Integer > 0	
com.aris.umc.session.system.ttl	Session duration (initial) Specifies the initial duration of a system user session in minutes.	Integer > 0	
com.aris.umc.session.ttl	Session duration (initial) Specifies the initial life span of a standard user session in minutes.	Integer > 0	
com.aris.umc.session.ttl.max	Session duration (max) Specifies the maximum life span of a standard user session in minutes.	Integer > 0	
com.aris.umc.impoersonation.targets	Impersonation target users Specifies the users for which you want to allow impersonation (page 279).		
com.aris.umc.chart.display.defaultUsers.enabled	Display technical users Specifies whether or not user statistics and charts are also displayed for technical users such as **system**, **arisservice**, and **guest**.	true, false	

3.11.3 Set up Document storage

You can customize general settings of ARIS document storage.

3.11.3.1 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
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.

3.11.3.2 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Click **Import configuration as a 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.

3.11.3.3 Configure full-text search

You can display the settings for the full-text search in your document storage.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Select **Full-text search** in the list box.
6. Click a configuration category. The following categories are available:

   GENERAL

   Maximum document size

   Specifies the maximum document size in Elasticsearch. Cross-tenant property that cannot be changed. This corresponds to the following property:
   com.idsscheer.aris.ads.search.elastic.document.maxsize.kb

   Storage limit

   Specifies the storage limit for the Elasticsearch parser. Cross-tenant property that cannot be changed. This corresponds to the following property:
   com.idsscheer.aris.ads.search.elastic.parser.memory.threshold.kb

   Maximum number of parallel threads

   Specifies the maximum number of threads for parallel processing when indexing documents. Cross-tenant property that cannot be changed. This corresponds to the following property:
   com.idsscheer.aris.ads.search.elastic.parser.thread.count

   Maximum queue size

   Specifies the maximum size of the queue for indexing documents. Cross-tenant property that cannot be changed. This corresponds to the following property:
   com.idsscheer.aris.ads.search.elastic.parser.queue.size

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

The **Cross-tenant** symbol indicates that the settings made apply to all tenants on this server and cannot be changed.

3.11.3.4 Customize infrastructure settings

You can customize the infrastructure for your document storage, e.g., the path for mobile uploads.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Select **Infrastructure** in the list box.
6. Click a configuration category. The following categories are available:

GENERAL

Activate network share usage

Specifies whether a network share or a local directory is used for storing document content. If enabled, only meta data are stored in the ARIS document storage database. Cross-tenant property that cannot be changed. The default is **allowed** (default value **true**). This corresponds to the following property: com.aris.ads.filesystem.active

Path to the network share

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: **\\<servername>\<directory>**, e.g., **\\myServer\data**. If you leave the preconfigured path, all data are 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, e.g., **C:\docdata**. This corresponds to the following property: com.aris.ads.filesystem.path

Thumbnails size

If a picture is smaller than the thumbnail size specified, no thumbnail is displayed for this picture. This corresponds to the following property: com.aris.ads.filesystem.path

Path for mobile uploads

Specifies the path where to store files uploaded from mobile devices. This corresponds to the following property: com.aris.ads.mobile.upload.path

Build version

This ARIS document storage version is currently installed. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.ads.version

ADVANCED SETTINGS

Configuration cache lifetime

Specifies the TTL for internal caches. Cross-tenant property that cannot be changed. This corresponds to the following property: com.aris.ads.config.cache.ttl

Encrypted properties

Specifies a comma-separated list of encrypted property keys. This corresponds to the following property: com.aris.ads.config.encrypted

7. Click **Edit >** **Contribute**.

   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 document storage configuration.

3.11.3.5 Configure document management system

You can configure a third-party document management system. Only one external document management system can be used.

The system available is Microsoft® SharePoint 2013

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Select **Document management system** in the list box.
6. Click a configuration category. The following categories are available:

CONNECTION

Use third-party document management system

Specifies whether or not a third-party document management system can be used. This corresponds to the following property: com.idsscheer.aris.ads.dms.active

Type

Specifies which third-party document management system is to be used, e.g. Microsoft® SharePoint 2013. This corresponds to the following property: com.idsscheer.aris.ads.dms.type

Server URL

Specifies the URL of the server on which the third-party document management system is installed. This corresponds to the following property: com.idsscheer.aris.ads.dms.url

User name

Specifies the user that is granted access to the third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.user

Password

Specifies the password for accessing a third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.password

Root folder

Specifies the name under which access to a third-party document management system is granted. This corresponds to the following property: com.idsscheer.aris.ads.dms.root

Web site collection

Specifies the subsites or a collection of Web sites that are included in the third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.site.collection

DOCUMENT ATTRIBUTE MAPPINGS

Description

Specifies the description field for a document in the third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.document.description

Person responsible

Specifies a document owner in the third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.document.owner

Tags

Specifies a third-party document management system property containing the tags of the document (metadata). This corresponds to the following property: com.idsscheer.aris.ads.dms.tags.holder

Search fields

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. This corresponds to the following property: com.idsscheer.aris.ads.dms.search.fields

ADVANCED SETTINGS

Folder data type

Specifies the ID of the internal data type directory of the third-party document management system. Changing this ID is possible only in case of errors and requires consultation with the administrator of the third-party document management system. This corresponds to the following property: com.idsscheer.aris.ads.dms.foldertypeid

7. Click **Edit >** **Contribute**.

   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 document storage configuration.

3.11.3.6 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 your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Select **Quota and restrictions** in the list box.
6. Click General.

GENERAL

Maximum file size

Specifies the maximum allowed size (in kilobytes) for file uploads. This corresponds to the following property: com.aris.ads.config.max.filesize

Quota limit

Specifies the maximum total size (in kilobytes) of the document storage available to a tenant. This corresponds to the following property: com.aris.ads.config.storage.quota.limit

Quota usage

Amount of storage already used (in kilobytes) by uploaded documents. This corresponds to the following property: com.aris.ads.config.storage.quota.usage

Restrict file types

Specifies whether or not the file type filter (file extensions) is activated. The default is **not enabled** (default value **false**). This corresponds to the following property: com.aris.ads.config.supported.filetypes.filter.active

Valid file extensions

Specifies the list of allowed file extensions. This corresponds to the following property: com.aris.ads.config.supported.filetypes.filter

Restrict file types

Specifies whether or not the file type filter (MIME types) is activated. The default is **not enabled** (default value **false**). This corresponds to the following property: com.aris.ads.config.supported.mimetypes.filter.active

Allowed file types

Specifies the list of allowed file types (MIME types). This corresponds to the following property: com.aris.ads.config.supported.mimetypes.filter

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

You have configured the quota and restrictions for your document storage.

3.11.3.7 Configure WebDAV

You can display the WebDAV settings in your document storage.

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Click your user name and select **Administration**.
3. Activate the **Configuration** tab.
4. Click **Document storage**.
5. Select **WebDAV** in the list box.
6. Click a configuration category. The following categories are available:

   GENERAL

   Tenant

   Specifies the tenant for which a WebDAV mapping exists. Cross-tenant property that cannot be changed. This corresponds to the following property: com.softwareag.ads.webdav.tenant

   Repository

   Specifies the name of the repository for which WebDAV is to be available. There can only ever be one repository per tenant. Cross-tenant property that cannot be changed. This corresponds to the following property: com.softwareag.ads.webdav.repository

7. Click **Edit >** **Contribute**.
8. Adjust your settings.
9. Click **Save**.

The **Cross-tenant** symbol indicates that the settings made apply to all tenants on this server and cannot be changed.

3.11.3.8 Valuable information

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

3.11.3.8.1 What properties for the full-text search are available?

You can display (page 425) the settings for the full-text search in your document storage.

Key	Description	Valid input	Example
com.idsscheer.aris.ads.search.elastic.document.maxsize.kb	Maximum document size Specifies the maximum document size in Elasticsearch. Cross-tenant property that cannot be changed.	Integer > 0	2000
com.idsscheer.aris.ads.search.elastic.parser.memory.threshold.kb	Storage limit Specifies the storage limit for the Elasticsearch parser. Cross-tenant property that cannot be changed.	Integer > 0	500
com.idsscheer.aris.ads.search.elastic.parser.queue.size	Maximum queue size Specifies the maximum size of the queue for indexing documents. Cross-tenant property that cannot be changed.	Integer > 0, default value is 10.	40
com.idsscheer.aris.ads.search.elastic.parser.thread.count	Maximum number of parallel threads Specifies the maximum number of threads for parallel processing when indexing documents. Cross-tenant property that cannot be changed.	Integer > 0	10

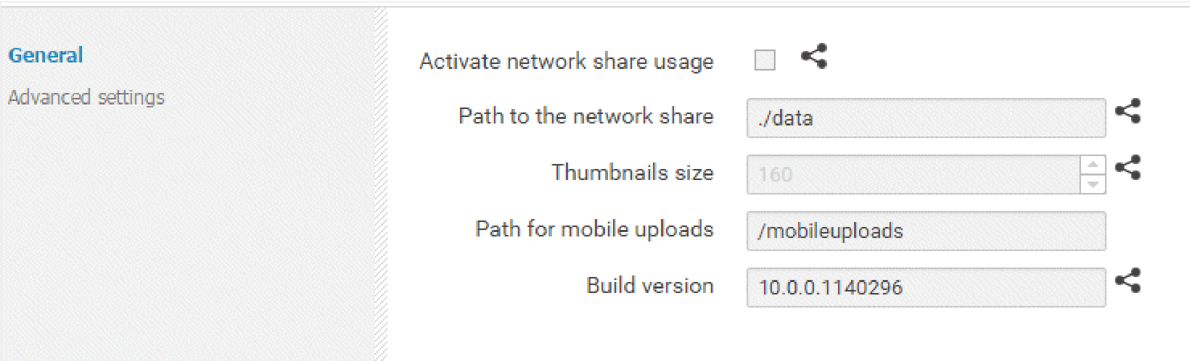
3.11.3.8.2 What infrastructure properties are available?

You can configure the infrastructure (page 426) for your document storage.

GENERAL

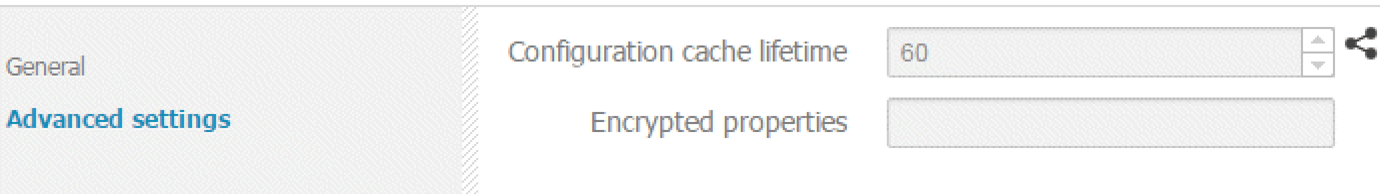
Key	Description	Valid input	Example
com.aris.ads.filesystem.active	Activate network share usage Specifies whether a network share or a local directory is used for storing document content. If enabled, only meta data are stored in the ARIS document storage database. Cross-tenant property that cannot be changed.	false, true	
com.aris.ads.filesystem.path	Path to the network share 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: **\\<servername>\<directory>**, e.g., **\\myServer\data**. If you leave the preconfigured path, all data are 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, e.g., **C:\docdata**. The default is **allowed** (default value **true**). Cross-tenant property that cannot be changed.		
com.aris.ads.filesystem.path	Thumbnails size If a picture is smaller than the thumbnail size specified, no thumbnail is displayed for this picture. Cross-tenant property that cannot be changed.	Integer > 0	160
com.aris.ads.mobile.upload.path	Path for mobile uploads Specifies the path where to store files uploaded from mobile devices.	Path	/root/mobileuploads

Key	Description	Valid input	Example
com.aris.ads.version	Build version This ARIS document storage version is currently installed. Cross-tenant property that cannot be changed.	Number	11.0.1.123456



ADVANCED SETTINGS

Key	Description	Valid input	Example
com.aris.ads.config.cache.ttl	Configuration cache lifetime Specifies the TTL for internal caches. Cross-tenant property that cannot be changed.	Integer > 0	
com.aris.ads.config.encrypted	Encrypted properties Specifies a comma-separated list of encrypted property keys.	List	

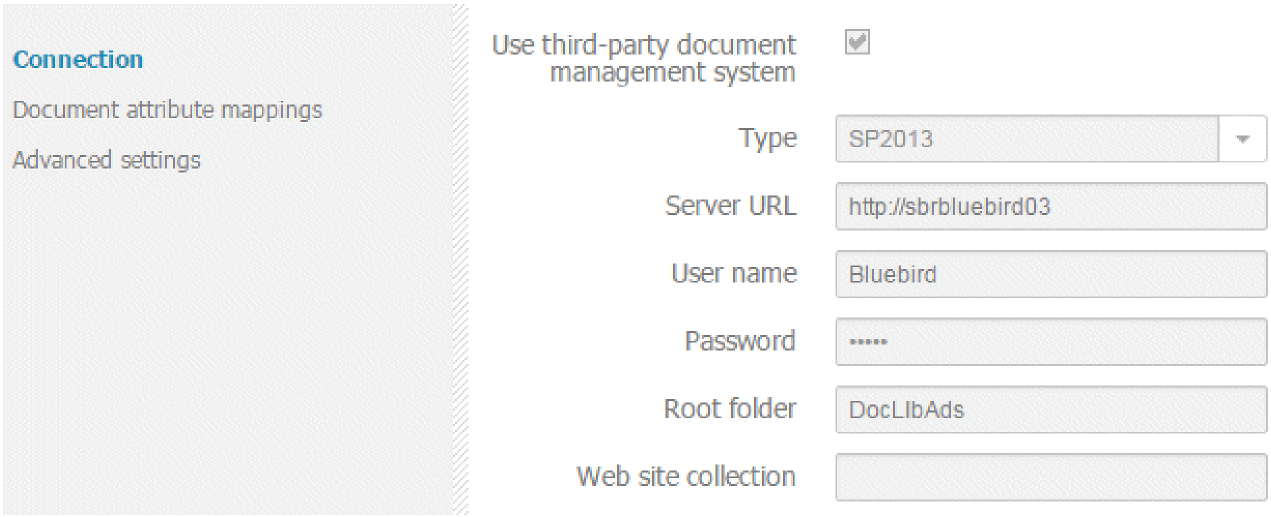


3.11.3.8.3 What document management system properties are available?

You can configure a third-party document management system (page 428). Only one external document management system may be used.

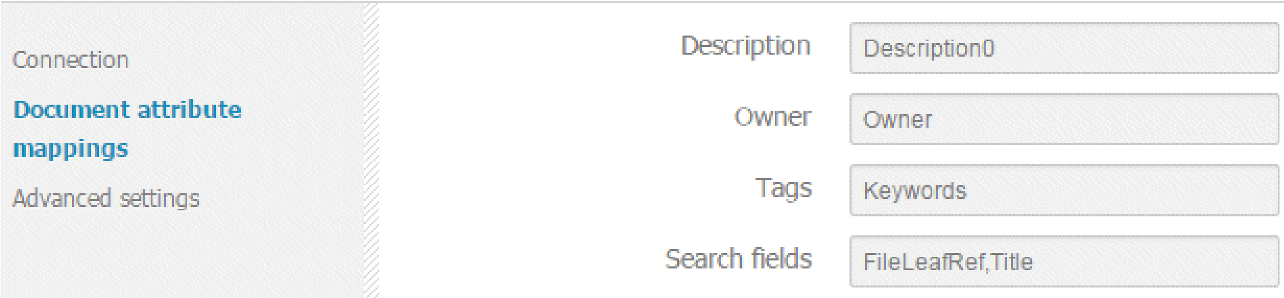
CONNECTION

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.active	Use third-party document management system Specifies whether or not a third-party document management system can be used.	true, false	
com.idsscheer.aris.ads.dms.type	Type Specifies which third-party document management system is to be used, e.g. Microsoft® SharePoint 2013.	SP2010, SP2013	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	
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.site.collection	Web site collection Specifies the subsites or a collection of Web sites that are included in the third-party document management system.	Comma-separated list	



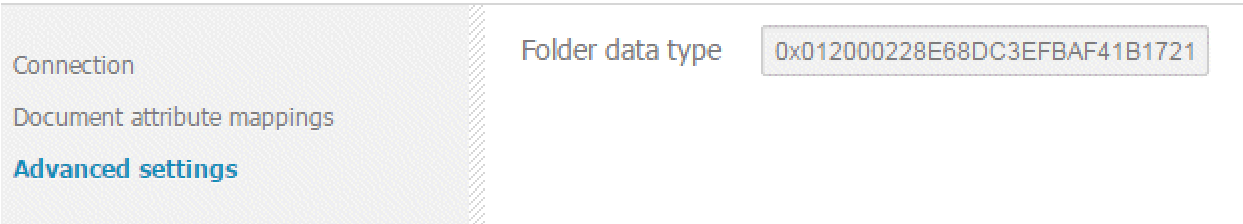
DOCUMENT ATTRIBUTE MAPPINGS

Key	Description	Valid input	Example
com.idsscheer.aris.ads.dms.document.description	Description Specifies the description field for a document in the third-party document management system.	String	
com.idsscheer.aris.ads.dms.document.owner	Person responsible Specifies a document owner in the third-party document management system.	String	
com.idsscheer.aris.ads.dms.tags.holder	Tags Specifies a third-party document management system property containing the tags of the document (metadata).	Comma-separated list	
com.idsscheer.aris.ads.dms.search.fields	Search fields 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.	Comma-separated list	FileLeafRef, Title



ADVANCED SETTINGS

Key	Description	Valid input	Example
com.idsscheer.aris.ads .dms.foldertypeid	Folder data type Specifies the ID of the internal data type directory of the third-party document management system. Changing this ID is possible only in case of errors and requires consultation with the administrator of the third-party document management system.	String	239847348760298



3.11.3.8.4 What properties are available for quota and restrictions?

You can configure the quota and restrictions (page 430) 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 types 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,text/pdf
com.aris.ads.config.supported.mimetypes.filter.active	Restrict file types Specifies whether or not the file type filter (MIME types) is activated. The default is **not enabled** (default value **false**).	true, false	false

3.11.3.8.5 What WebDAV properties are available?

You can display the WebDAV settings (page 431) in your document storage.

Key	Description	Valid input	Example
com.softwareag.ads.webdav.repository	Repository Specifies the name of the repository for which WebDAV is to be available. There can only ever be one repository per tenant.	String	apg
com.softwareag.ads.webdav.tenant	Tenant Specifies the tenant for which a WebDAV mapping exists.	String	default

3.11.4 Set up Process Governance

You can customize general settings of Process Governance.

3.11.4.1 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
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.

3.11.4.2 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Click **Import configuration as a 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.

3.11.4.3 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Select **Infrastructure** in the list box.
5. Click **Edit >** **Contribute**.

   The **Cross-tenant** symbol indicates that the settings made apply to all tenants on this server and cannot be changed.
6. Adjust your settings.

   Encrypted properties

   Specifies the configuration properties with encrypted values in a comma-separated list. This corresponds to the following property: com.idsscheer.age.config.encrypted

   Web service read timeout

   Specifies the timeout for read access to a Web service in milliseconds. This corresponds to the following property: com.idsscheer.age.activity.ws.call.timeout

   Log level

   Specifies the log level relevant for logging messages in a log file. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.log.dblogger.severity

   Log file output path

   Specifies the output path for the system monitoring log files. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.log.monitoring.output.path

   Maximum query result size

   Specifies the maximum number of items that are to be returned by a single query. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.query.maxResults

   Maximum execution time

   Specifies the maximum execution time in milliseconds for activities that support a timeout. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.xe.maxExecDuration

Archive folder

Specifies the location of the folder used for archiving automatically generated processes. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.autodeploy.archive

Input folder

Specifies the location of the folder used for storing automatically generated processes. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.autodeploy.model

Stop process instance if notification fails

Specifies that running a process instance should fail if a notification cannot be successfully sent. This corresponds to the following property: com.aris.age.email.fail.instance.on.error

Simulate notifications

Specifies that notifications are not to be sent to their recipients. This corresponds to the following property: com.aris.age.email.simulate.only

Build number

Process Governance build number. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.version

7. Click **Save**.

You have customized your system configuration.

3.11.4.4 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Select **Publishing** in the list box.
5. Click **Edit >** **Contribute**.

   The **Cross-tenant** symbol indicates that the settings made apply to all tenants on this server and cannot be changed.
6. Adjust your settings.

   Export to server hard drive

   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. This corresponds to the following property: com.idsscheer.age.serviceenabling.staticExport.exportToDisk

   Static export directory

   Specifies the directory for the static export. This corresponds to the following property: com.idsscheer.age.serviceenabling.staticExport.exportDir

   Static export link template

   Specifies the template for the link to a static export that is generated via Web service. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.serviceenabling.staticExport.wsServer
7. Click **Save**.

You have customized your system configuration.

3.11.4.5 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Select **Reporting** in the list box.
5. Click **Edit >** **Contribute**.
6. Adjust your settings.

Default method language

Specifies the default method language for the ARIS services. This corresponds to the following property: com.idsscheer.age.serviceenabling.scriptrunner.defaultLanguage

7. Click **Save**.

You have customized your system configuration.

3.11.4.6 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Select **Workflow policies** in the list box.
5. Click **Edit >** **Contribute**.
6. Adjust your settings.

   Exclude weekend

   Specifies whether only work days are to be considered in an escalation. This corresponds to the following property: com.idsscheer.age.days.workingdays.enabled

   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). This corresponds to the following property: com.idsscheer.age.days.off

   Public holidays

   Defines the public holidays. This corresponds to the following property: com.idsscheer.age.days.publicholidays

   E-signature (double authentication)

   Specifies whether or not reentering the password is necessary when completing tasks. This corresponds to the following property: com.idsscheer.age.e.signature.enabled

   Reminder notification threshold

   Specifies whether 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. This corresponds to the following property: com.idsscheer.age.reminder.notification.time

   Notify when a substitute is activated

   Specifies whether or not a notification is sent when a substitute is configured for ARIS Process Board. This corresponds to the following property: com.idsscheer.age.substitution.notification.enabled

   Allow task delegation

   Specifies whether or not delegation of tasks to other users (Delegate/Substitution) is allowed. This corresponds to the following property: com.idsscheer.age.taskList.delegation.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 ARIS Process Board for the first time. This corresponds to the following property: com.idsscheer.age.taskList.startTaskConfirmation.enabled

7. Click **Save**.

You have customized your system configuration.

3.11.4.7 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 your user name and select **Administration**.
2. Activate the **Configuration** tab.
3. Click **Process Governance**.
4. Select **Pools** in the list box.
5. Click **Edit > Contribute**.

   The **Cross-tenant** symbol indicates that the settings made apply to all tenants on this server and cannot be changed.
6. Adjust your settings.

   Job service thread pool size

   Specifies the number of threads to be used by the job service. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.job.service.threadsNumber

   Simulation pool size

   Specifies the size of the pool containing simulated process instances. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.simulation.instanceExecutorsPool.size

   Dispatch worker thread pool size

   Specifies the pool size for dispatch worker threads. Cross-tenant property that cannot be changed. This corresponds to the following property: com.idsscheer.age.xe.dispatch.workersPool.size
7. Click **Save**.

You have customized your system configuration.

3.11.4.8 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 20) 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, e.g., 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.

3.11.4.9 Valuable information

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

3.11.4.9.1 What infrastructure properties are available?

You can configure your Process Governance the infrastructure (page 441). 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 cannot be changed.		Number > 0
com.idsscheer.age.log.monitoring.output.path	Log file output path Specifies the output path for the system monitoring log files. Cross-tenant property that cannot be changed.	Path on a server	
com.idsscheer.age.query.maxResults	Maximum query result size Specifies the maximum number of items that are to be returned by a single query. Cross-tenant property that cannot be changed.		
com.idsscheer.age.xe.maxExecDuration	Maximum execution time Specifies the maximum execution time in milliseconds for activities that support a timeout. Cross-tenant property that cannot be changed.	43200000	Number > 0

Key	Description	Valid input	Example
com.idsscheer.age.autodeploy.archive	Archive folder Specifies the location of the folder used for archiving automatically generated processes. Cross-tenant property that cannot be changed.		
com.idsscheer.age.autodeploy.model	Input folder Specifies the location of the folder used for storing automatically generated processes. Cross-tenant property that cannot be changed.		
com.aris.age.email.fail.instance.on.error	Stop process instance if notification fails Specifies that running a process instance should fail if a notification cannot be successfully sent. The default is **allowed** (default value **true**).	true, false	true
com.aris.age.email.simulate.only	Specifies that notifications are not to be sent to their recipients. The default value is **false**.	true, false	false
com.idsscheer.age.version	Build number Process Governance build number. Cross-tenant property that cannot be changed.		

3.11.4.9.2 What Publishing properties are available?

You can configure Process Governance Publishing (page 443). This is where you find an overview of keys and value pairs:

Key	Description	Valid input	Example
com.idsscheer.age.serviceenabling.staticExport.exportToDisk	Export to server hard drive 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.	true, false; the default value is true.	true
com.idsscheer.age.serviceenabling.staticExport.exportDir	Static export directory Specifies the directory for the static export.	<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	Static export link template Specifies the template for the link to a static export that is generated via Web service. Cross-tenant property that cannot be changed.	http://Process Governance_server/aris/apgstatic/<GUID>	http://Process Governance_server/aris/apgstatic/234ekmfhkdsau4w58

3.11.4.9.3 What Reporting properties are available?

You can configure Process Governance Reporting (page 444). 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

3.11.4.9.4 What properties are available for workflow policies?

You can configure the workflow policies (page 445) 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.publicholidays	Public holidays Defines the public holidays.	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 whether 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.	Number > 0	75

Key	Description	Valid input	Example
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 ARIS Process Board.	true, false	false
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 ARIS Process Board for the first time.	true, false	true

3.11.4.9.5 What properties are available for pools?

You can configure thread pools (page 446) for Process Governance. 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 cannot be changed.	Integer > 0	8
com.idsscheer.age.simulation.instanceExecutorsPool.size	Simulation pool size Specifies the size of the pool containing simulated process instances. Cross-tenant property that cannot be changed.	Integer > 0	5
com.idsscheer.age.xe.dispatch.workersPool.size	Dispatch worker thread pool size Specifies the pool size for dispatch worker threads. Cross-tenant property that cannot be changed.	Integer > 0	16

3.11.5 Set up Collaboration

You can customize general settings of Collaboration.

3.11.5.1 Customize Collaboration

You can customize Collaboration. Depending on your license, you have read-access from ARIS to documents managed in third-party document management systems.

Prerequisite

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

Procedure

1. Click **Configuration**.
2. Click **Collaboration**.
3. Click **Edit** in the row of the property you want to configure.

   If Collaboration is deactivated, the properties are also deactivated and cannot be edited.
4. Click a configuration category. The following categories are available:

   GENERAL SETTINGS

   Activate Collaboration

   Activates Collaboration. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.enableECP

   Create groups

   Specifies whether or not creating groups in Collaboration is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowCreationOfGroups

   Create filter

   Specifies whether or not creating filters in Collaboration is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowCreationOfFilters

   Enable Like button

   Specifies whether or not the **Like** button is displayed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.enableLikeButton

   Create comments

   Specifies whether or not comments on content are allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowCommenting

   Share content

   Specifies whether or not sharing of content is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowSharing

Create bookmarks

Specifies whether or not creating bookmarks is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowBookmarks

Create tags

Specifies whether or not creating tags is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowTags

Flag activities

Specifies whether or not flagging content is allowed. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowFlags

Allow tag filtering (My feed)

Specifies whether or not filtering using tags is allowed on the Collaboration start page. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.allowTagFilterInMainStream

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**). This corresponds to the following property: collaboration.optionsPage.allowTagFilterInFullStream

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**). This corresponds to the following property: collaboration.optionsPage.allowTagFilterInCommentStream

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**). This corresponds to the following property: collaboration.optionsPage.filterPrivateFeeds

Use search operator 'OR' instead of 'AND'

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**). This corresponds to the following property: collaboration.optionsPage.tagsCloudSearchOperator

Enable attachments

Specifies whether or not documents from ARIS document storage can be accessed as new attachments for activities. The default is **allowed** (default value **true**). This corresponds to the following property: collaboration.optionsPage.enableAttachment

Export activities as ZIP file instantly

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. The default value is **false**.

This corresponds to the following property:
collaboration.optionsPage.exportActivitiesAsZipFileInstantly

CONFIGURE USER GROUP

Enable all user groups

Enables the function based on which all ARIS user groups are displayed when users are posting in Collaboration. This corresponds to the following property: enableAllUserGroups

Configure visibility of user groups in the collaboration

Enables the function based on which a single ARIS user group is displayed when users are posting in Collaboration. This corresponds to the following property:
userGroupsToHaveOwnFeedInCollaboration

You have configured your Collaboration.

3.11.5.2 What properties are available for Collaboration?

The following can be customized in Collaboration.

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
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

Key	Description	Valid input
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
collaboration.optionsPage.tagsCloudSearchOperator	Use search operator 'OR' instead of 'AND' 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**).	true, false
collaboration.optionsPage.enableAttachment	Enable attachments Specifies whether or not documents from ARIS document storage can be accessed as new attachments for activities.	true, false
collaboration.optionsPage.exportActivitiesAsZipFileInstantly	Export activities as ZIP file instantly 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.	true, false
enableAllUserGroups	Enable all user groups Enables the function based on which all ARIS user groups are displayed when users are posting in Collaboration.	true, false
userGroupsToHaveOwnFeedInCollaboration	Configure visibility of user groups in the collaboration Enables the function based on which a single ARIS user group is displayed when users are posting in Collaboration.	true, false

4 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 Cloud users. When you open ARIS Connect in your Web browser you receive role-based access to the process descriptions that are relevant to you.

4.1 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 Cloud users. When you open ARIS Connect in your Web browser you receive 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 582) and the default view (page 582) are described.

4.1.1 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 459) and the default view. These views are defined in configuration sets, which cannot be changed. However, administrators can define multiple modified modification sets, based on these templates.

4.1.1.1 Classic view

If the administrator provides at least one database, this view shows all content relevant to you in a clear structure:

- Home (page 461)
- Groups (page 462)
- Glossary (page 474)

If your administrator has published multiple databases, these are available for selection United Motor Group. You can switch between the published databases as required.

You only see information in the portal that is relevant to you. This is controlled in user management by administrators.

You can activate role filters (page 510) to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

Overview

The Overview gives you access to some tabs that allow you to start working with ARIS Connect rapidly.

Start

Find people

Activates Collaboration where you find people (page 638) you want to discuss with, for example.

Start discussion

Activates Collaboration where you can start a new discussion (page 638).

Process Board

Opens ARIS Process Board, where you can edit tasks that are assigned to you.

Navigation

Enables you to browse the ARIS Connect content for models and objects.

Show profile

Opens your profile page. You can edit your data or add an image.

Search

Opens the Search (page 550) area where you can search for ARIS Connect content. You can use filters, for example, to display just the model and objects, UML content, or Collaboration entries.

Recent changes

Shows all links to models that were changed recently.

My content

Shows the current activities you are following in Collaboration (page 639) or in the portal (page 507).

Favorites

Provides direct access to saved filter criteria (Seite 504) of the **Favorites** area of the search and to models a user selected as a favorite element.

Contacts

Lists your contacts.

My activities

Shows the current activities you are following in Collaboration or in the portal (page 639).

4.1.1.1.1 Home

The **Overview** and **My activities** areas provide a well-structured entry point for accessing the portal.

START

The following links are available on the tab:

Create model ()

Opens the **Create model** dialog that you use for easily creating models (page 517).

Find people ()

Activates Collaboration where you find people (page 638) you want to discuss with, for example.

Start discussion ()

Activates Collaboration where you can start a new discussion (page 638).

Process Board ()

Opens ARIS Process Board, where you can edit tasks that are assigned to you.

Navigation ()

Enables you to browse the ARIS Connect content for models and objects.

Show profile ()

Opens your profile page. You can edit your data or add an image.

Search ()

Opens the Search (page 550) area where you can search for ARIS Connect content. You can use filters, for example, to display just the model and objects, UML content, or Collaboration entries.

RECENT CHANGES

Shows all links to models that were changed recently.

MY CONTENT

Shows the current activities you are following in Collaboration (page 639) or in the portal (page 507).

FAVORITES

Provides direct access to saved filter criteria (Seite 504) of the **Favorites** area of the search and to models a user selected as a favorite element.

CONTACTS

Lists your contacts.

MY ACTIVITIES

Shows the current activities you are following in Collaboration or in the portal (page 639).

4.1.1.1.2 Groups

Use the Explorer tree to navigate to the entire contents of the portal you selected.

Depending on the contents selected and the model type, different functions are available.

Using the bar panel buttons **Comment** and **Navigation**, you can show or hide the Collaboration functions **Follow** (page 507) and **Comment** (page 506), as well as the Explorer tree. Thus, more space is available, for example, to show diagrams. The buttons of visible bars are indicated in color.

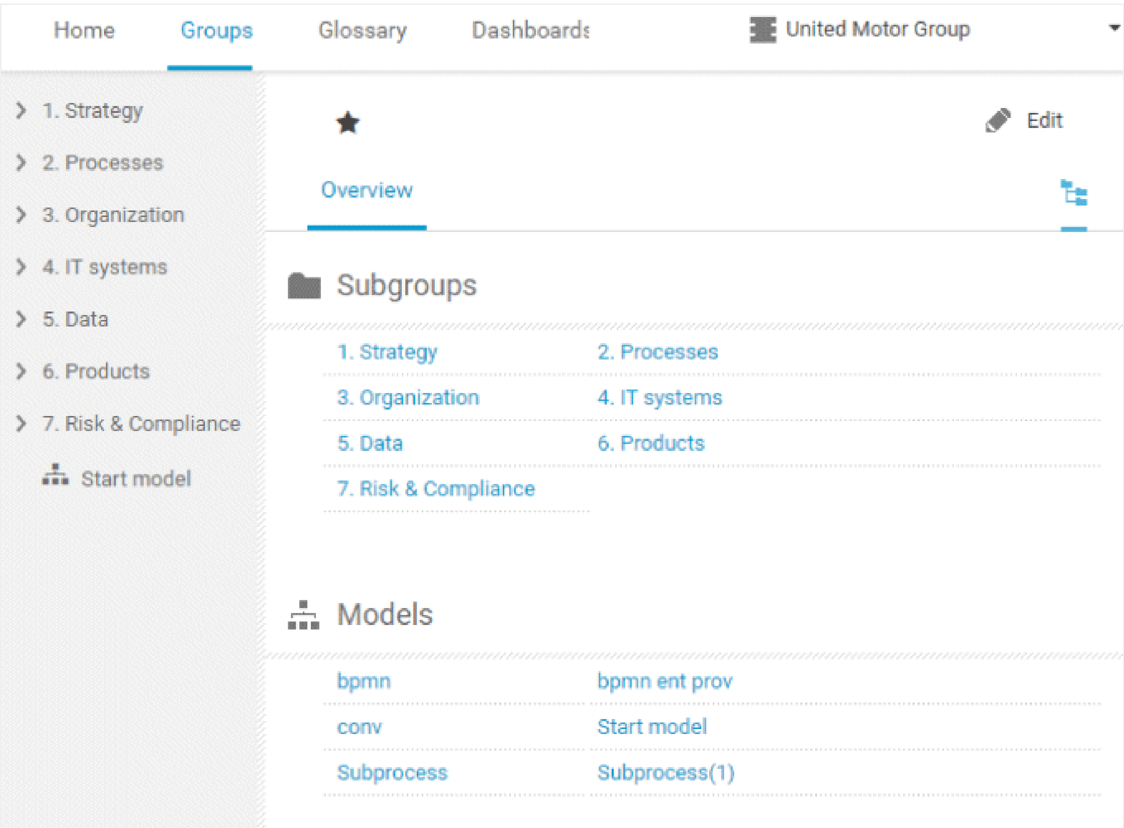
Click **Share model** to share models with other users (page 514). Click **Submit change request** to send change requests to the process manager (page 505). The function **Start governance process** (page 507) is provided only if an executable process is available. Users with the **ARIS Connect Designer** function privilege can change processes (page 518) using the **Edit** button.

If you have both the **ARIS Connect Viewer** and **Contribution** license privileges, you can use the **Edit** button to change values of specific items (page 558), create new or reuse existing items (page 553), as well as delete items (page 555).

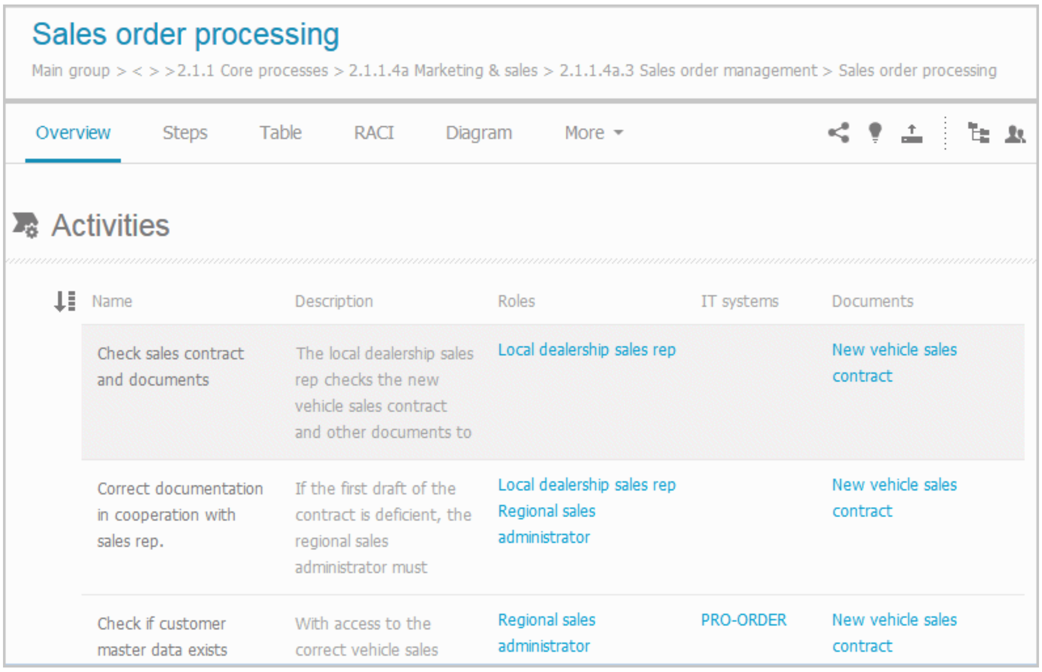
GROUP ITEMS OF ARIS MODELS

Overview

Displays the group content. Content that can be used to navigate to other content is displayed as links.

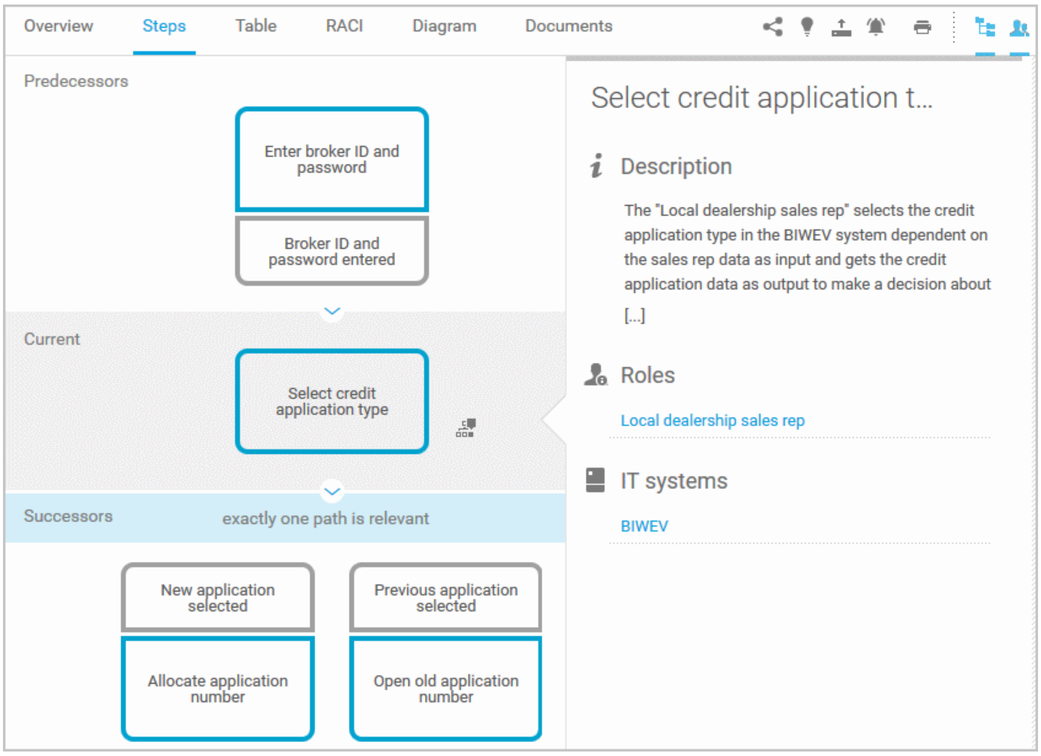


The relevant content is displayed based on the item selected. For example, if you have selected a model, additional headings are shown depending on the context. Breadcrumb navigation simplifies navigation to superior elements.



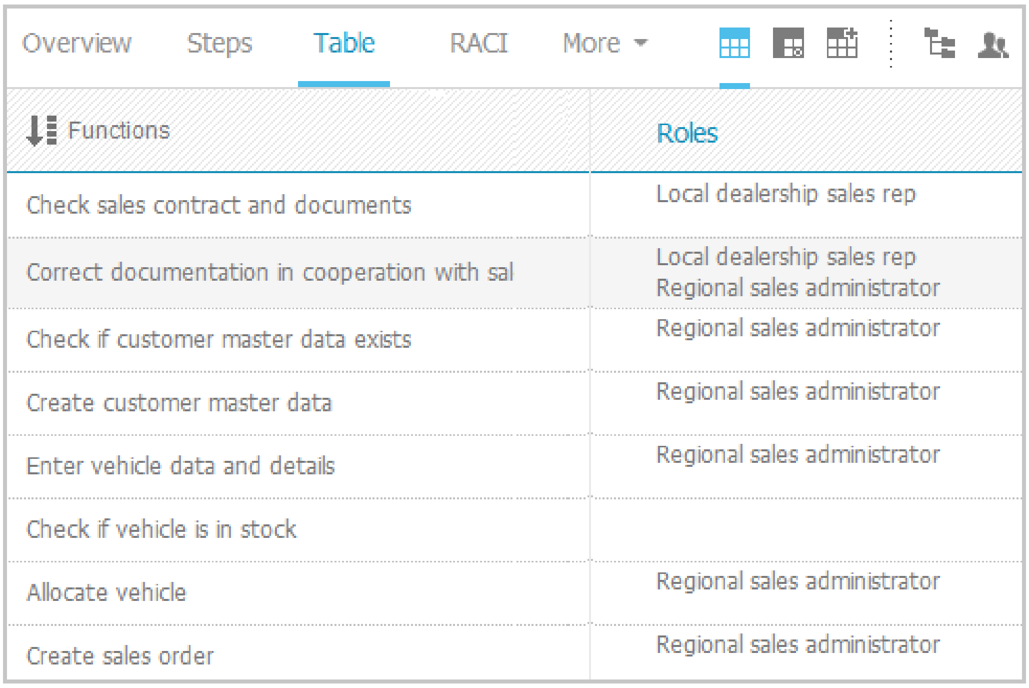
Steps

Transparently displays all steps of a process (EPC) (page 498). 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.



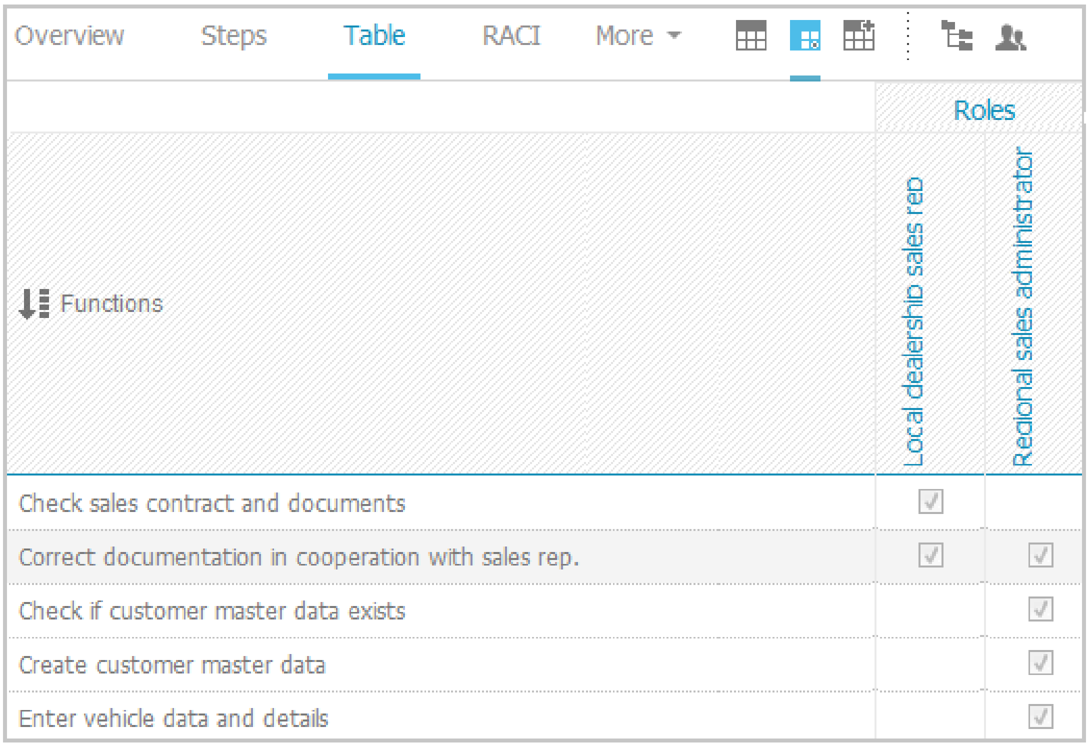
Table

Shows the functions that the process (EPC) contains, as well as the roles assigned to them.



You can sort the functions alphabetically by clicking the column title.

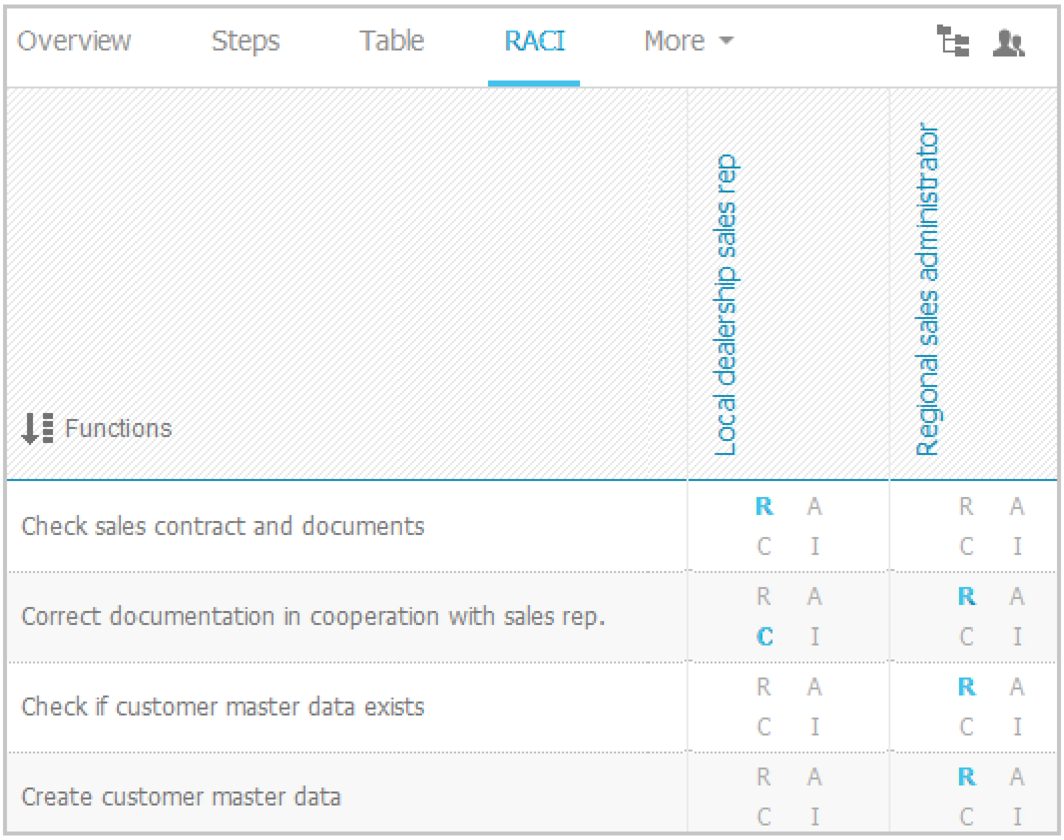
Clicking **Matrix** transparently displays the interrelations between the individual roles and functions.



Clicking **Add column** will extend the table. You can delete added columns at any time.

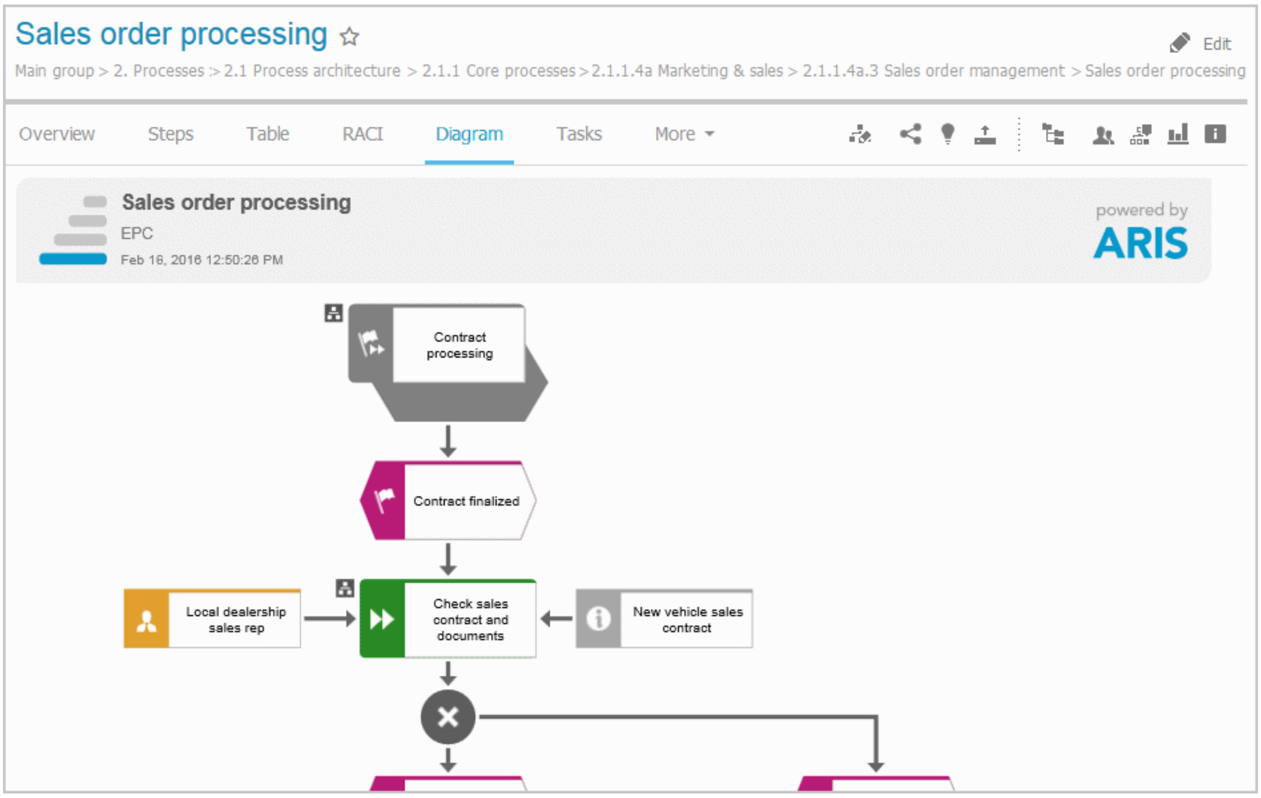
RACI

RACI matrices are displayed only if RACI information is available for this process (page 568). Using the button you can sort the matrices by process flow.



Diagram

Graphically displays the diagram in Model Viewer. Depending on the diagram type, different functions are available.



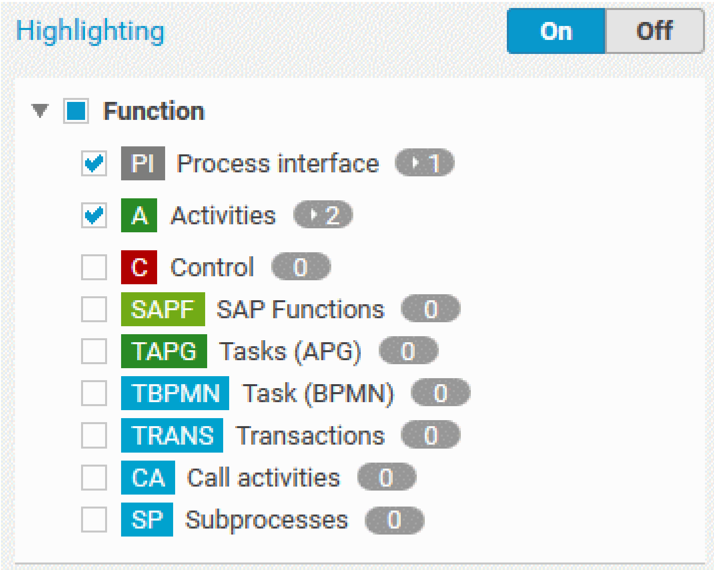
Using the functions of the view bar you can change the size of appearance. Navigate in the model using the small frame of the thumbnail view above the slider. Clicking the ▼ arrow head will hide the bar.

Click **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.

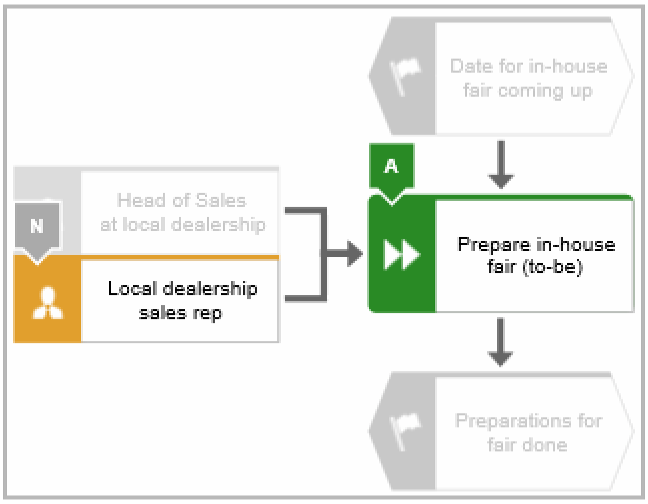
Attributes   More ▼

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

To highlight objects in the diagram that meet a defined condition, click **Highlight** and **On**, and enable the criteria to be met.



The objects are then highlighted in the diagram. In this example the activity is highlighted because its check box is activated in the categories. All other objects are displayed in grayscale.

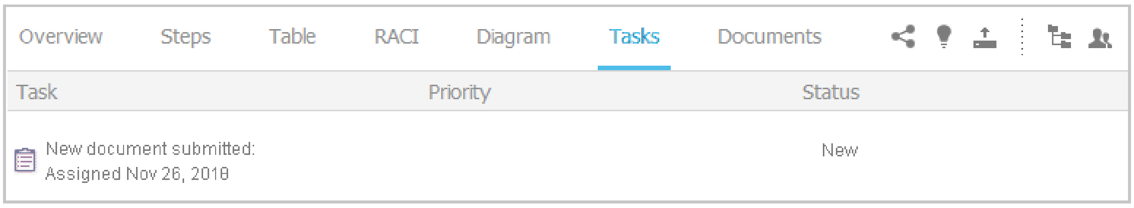


ASSIGNMENTS

If you click the assignment icon of an object in the diagram, or double-click an object with the assignment icon, all diagrams assigned are offered in a dialog for selection. If only one diagram is assigned, that diagram opens directly. Assigned diagrams contain detailed information on the object that the diagrams are assigned to, for example.

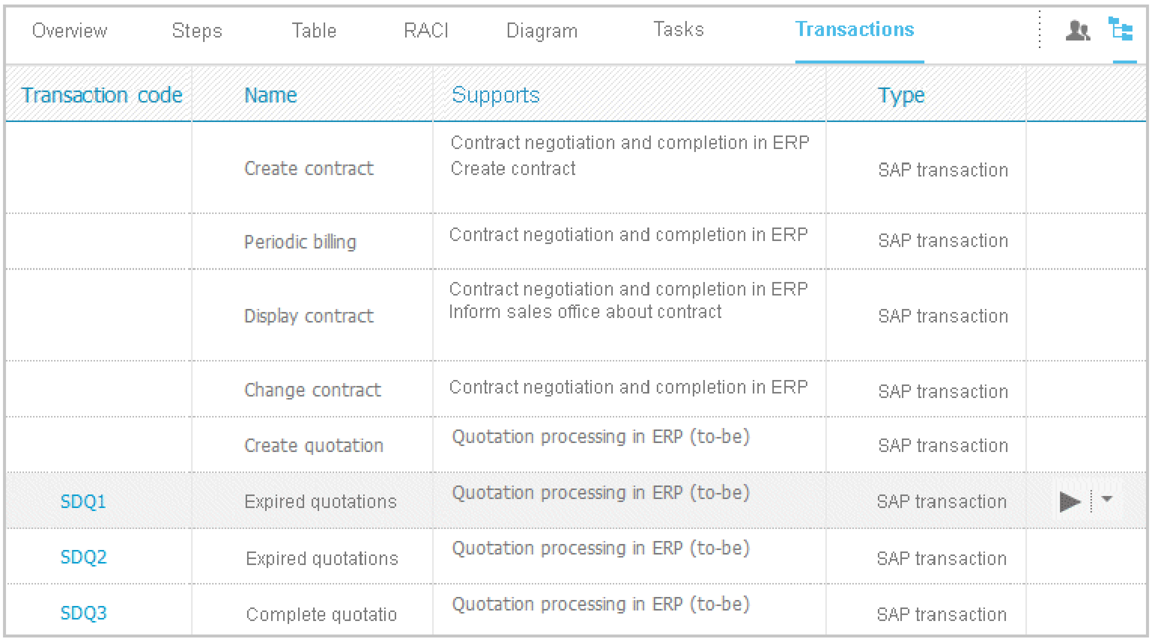
Tasks

Shows your tasks, e.g., mini workflows or APG processes and opens them for editing in ARIS Process Board (page 5).



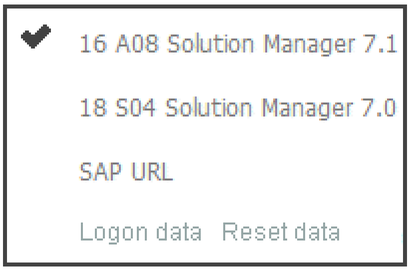
Transactions

Transactions are displayed if you are using Process-driven Management for SAP and if this function has been configured in the portal.

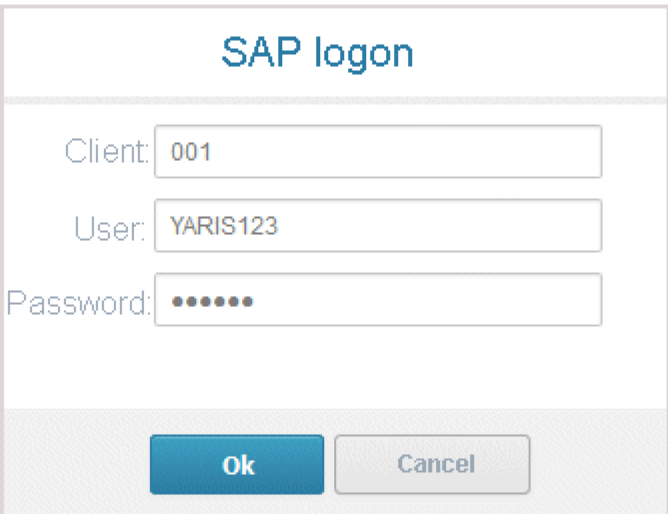


Transaction code	Name	Supports	Type
	Create contract	Contract negotiation and completion in ERP Create contract	SAP transaction
	Periodic billing	Contract negotiation and completion in ERP	SAP transaction
	Display contract	Contract negotiation and completion in ERP Inform sales office about contract	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 564) 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.

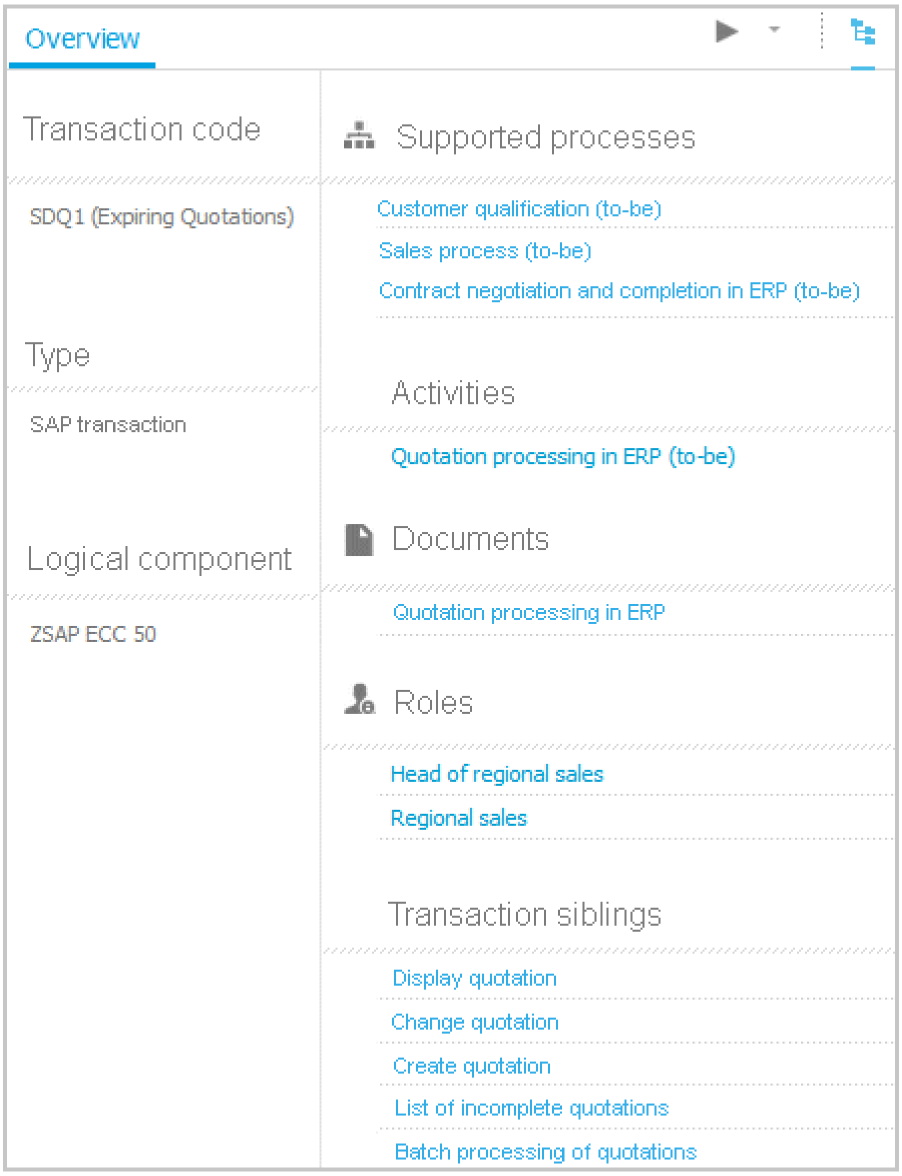


To start the transaction, click an SAP Server or a URL. The Login dialog opens.



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 565). 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 565) them.



Documents

Lists documents assigned to models or objects, for example, by the **Link 1** - **Link 4** attributes.

ARIS document storage enables you to manage and temporarily or permanently save documents.

Access restriction on folder level is possible in ARIS document storage. The documents saved there can be used during runtime of an executable process, e. g., attached to an e-mail.

All file formats are allowed for documents.

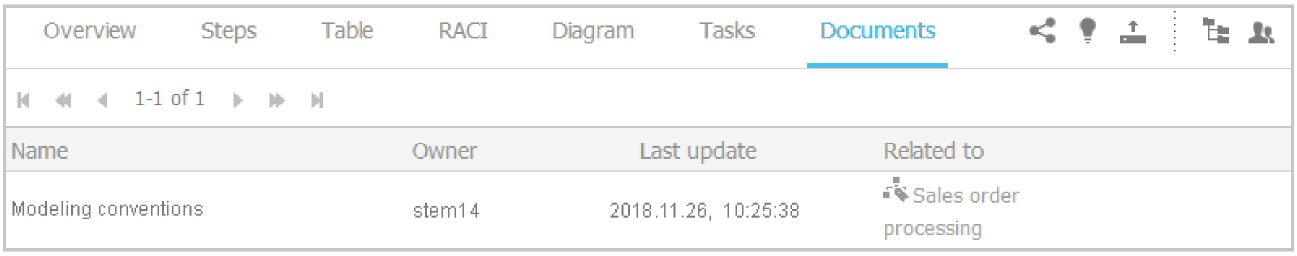
Temporary documents are deleted automatically after the executable process is terminated. Permanent documents are kept until they are deleted explicitly.

Depending on your license, you have read-access from ARIS to documents managed in third-party document management systems.

Note: You can view 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).

If you want to use the full range of functions of a document management system, including archiving and audit compliance, or you want to use very large numbers of documents, you can link Microsoft® Sharepoint 2013 to ARIS.

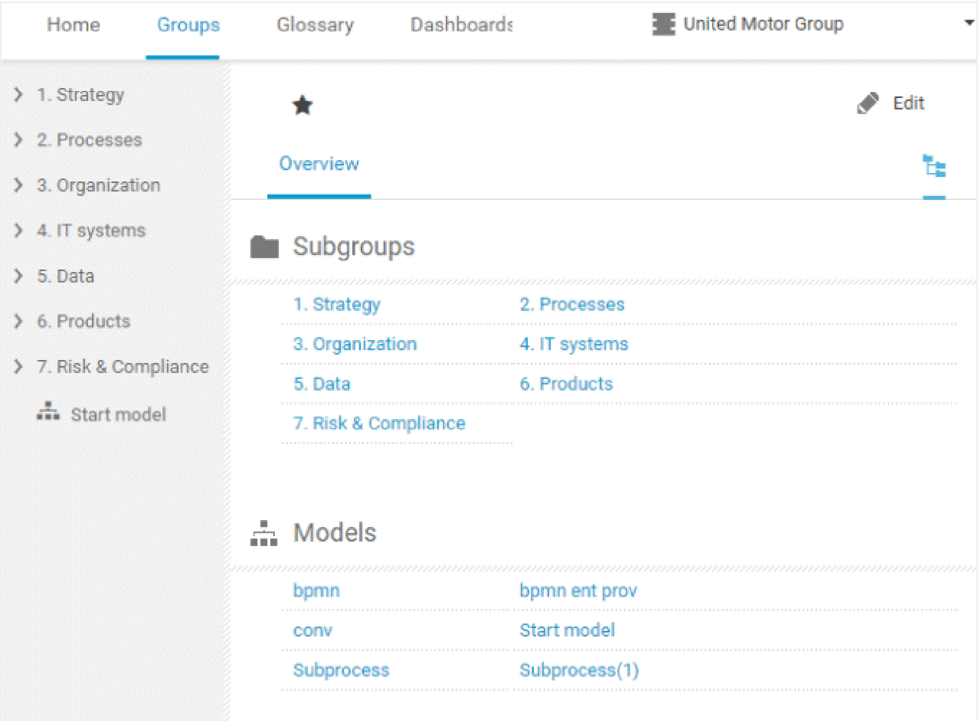
ARIS document storage as standalone component should be used for administrative purposes only. End users should access documents in the repository in ARIS Connect.



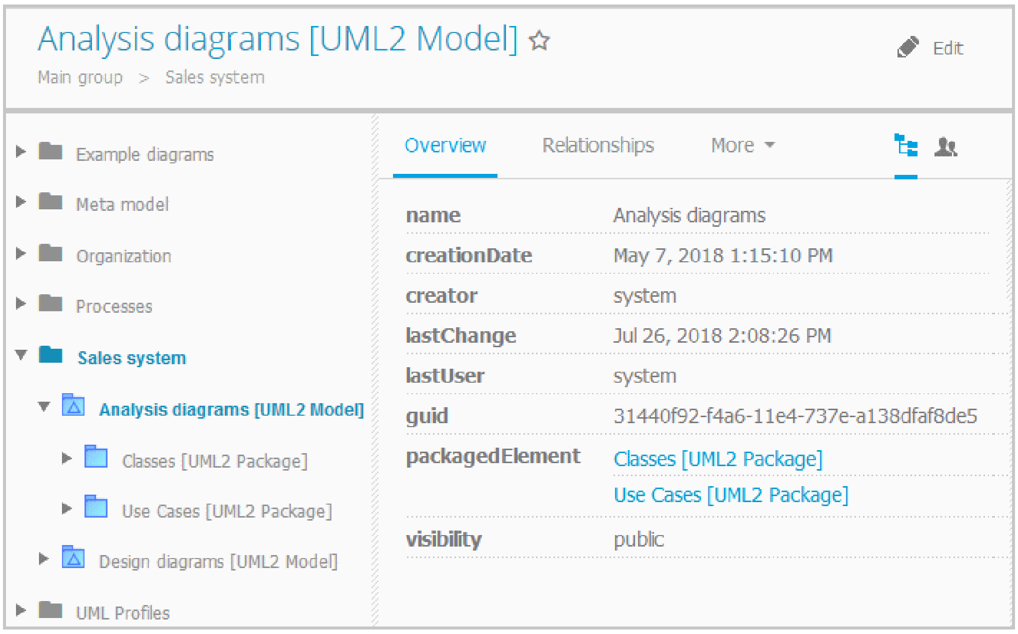
GROUP ITEMS OF UML ELEMENTS

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. Breadcrumb navigation simplifies navigation to superior elements.



Relationships

Displays the relationships of the selected UML element as a link. If you click the link, the related element is displayed, highlighted in the tree, and the breadcrumb navigation adjusted.

Reused objects

Lists the objects that the selected element reuses as a link. If you click the link, the related element is displayed, highlighted in the tree, and the breadcrumb navigation adjusted.

Linked diagrams

Lists the diagrams with which the selected element is linked as a link. If you click the link, the related element is displayed, highlighted in the tree, and the breadcrumb navigation adjusted.

Presentations

Lists the diagrams in which the selected element occurs as a link. If you click the link, the related element is displayed, highlighted in the tree, and the breadcrumb navigation adjusted.

Stereotypes

Lists the stereotypes that were applied to the selected element as a link. If you click the link, the related element is displayed, highlighted in the tree, and the breadcrumb navigation adjusted.

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, highlighted in the tree, and the breadcrumb navigation adjusted.

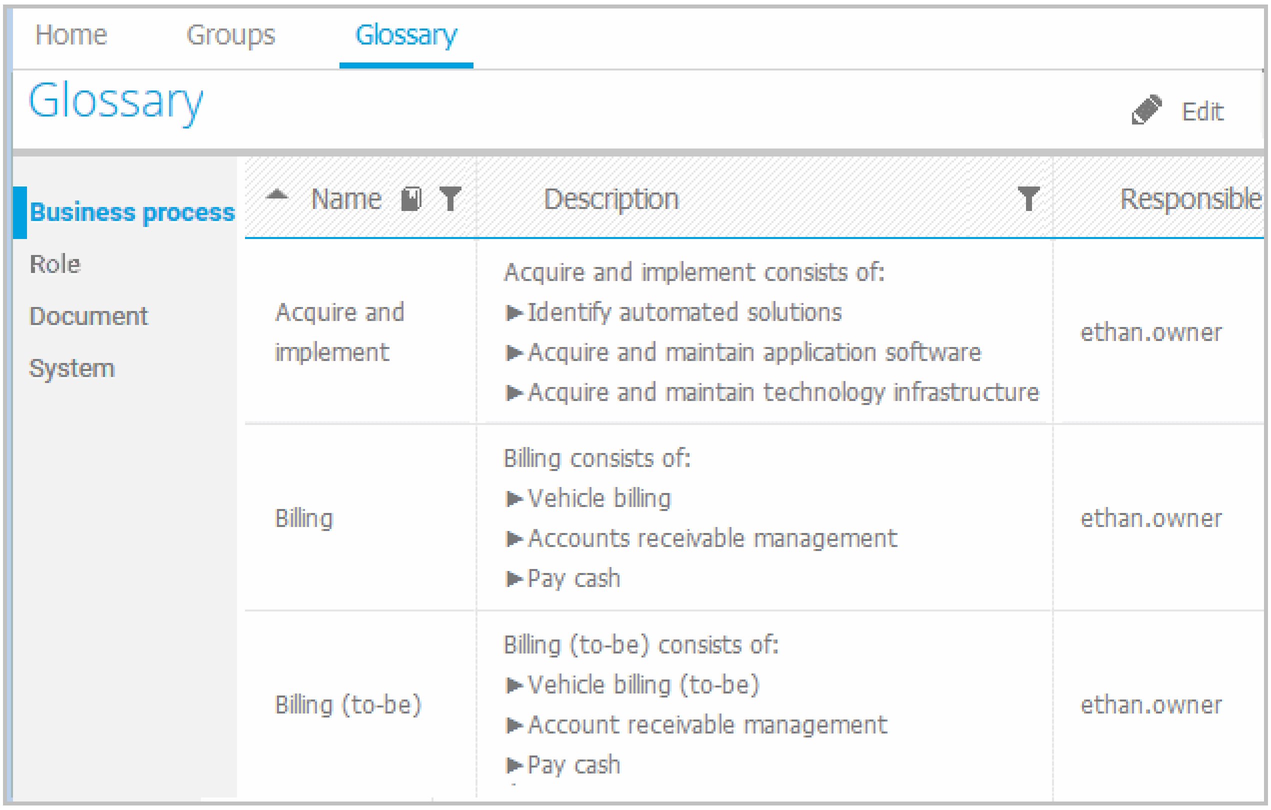
Diagram

This entry is displayed if you have selected a UML diagram and displays the UML diagram in Model Viewer graphically.

4.1.1.1.3 Glossary

The **Glossary** page 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.

If you have both the **ARIS Connect Viewer** and **Contribution** license privileges, you can use the **Edit** button to change values of specific items (page 558), create new or reuse existing items (page 553), as well as delete items (page 555).



Click an entry to navigate. The corresponding fact sheet opens.

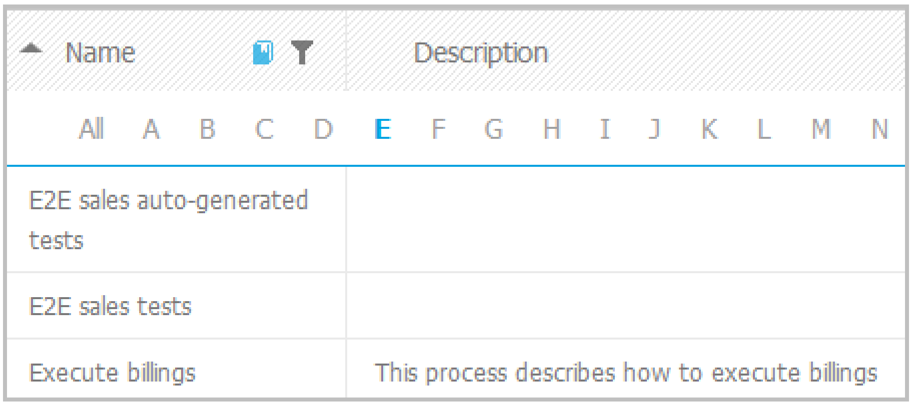
You can reduce the number of items shown in the list or change the glossary page:

Choose items starting with the same letter

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Glossary letters** in the **Name** cell of the table header. The **Glossary letters** bar opens.



3. Click on the relevant letter.

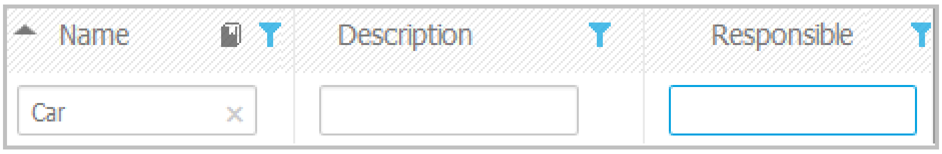
Only items starting with the same letter are shown.

Filter items based on name, description, and responsibility

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Filter** in the table header. The text boxes to filter the list are opened.



3. Enter the relevant terms in one or more fields.

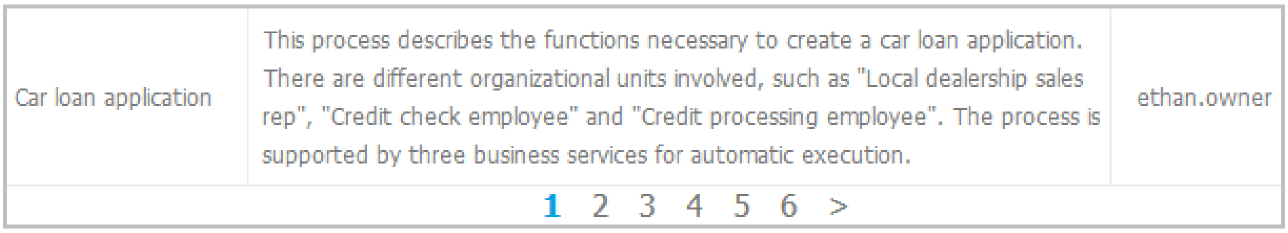
All items are listed whose attribute content contains a word beginning with the term entered. You can narrow down the search by entering terms in more than one text box.

Change the glossary page

If not all glossary entries fit on one page, you can switch to the page that contains the relevant glossary entry.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click the relevant page number at the bottom of the page.



All items of the selected page are listed.

4.1.1.2 Default view

If you click **Portal**, you can view all information relevant to you.

If the administrator provides at least one database, this view shows all content relevant to you in a clear structure:

- Processes (page 478)
- Organization (page 489)
- IT systems (page 490)
- Glossary (page 493)

If your administrator has published multiple databases, these are available for selection United Motor Group. You can switch between the published databases as required.

You only see information in the portal that is relevant to you. This is controlled in user management by administrators.

You can activate role filters (page 510) to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

Important for me

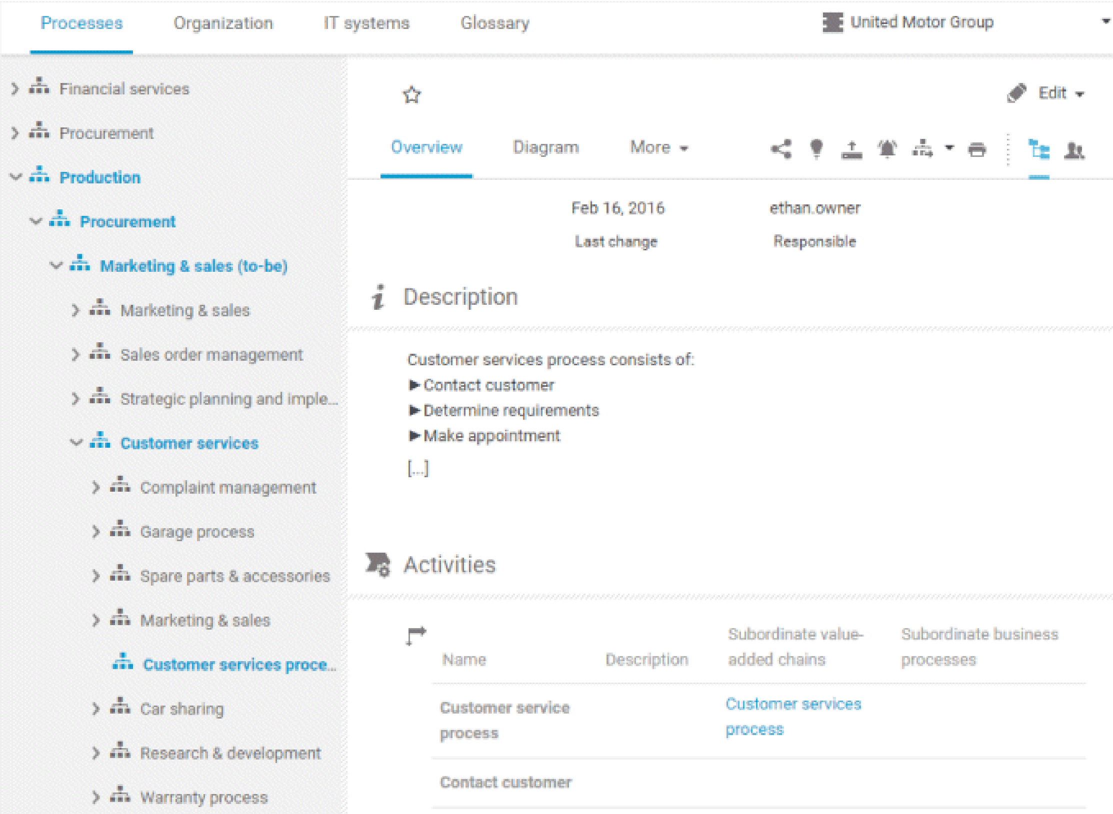
Displays processes in which the user logged in or their group is modeled, as well as application systems for which the user or user group is responsible. Processes are models of the **EPC** type (event-driven process chain).

My activities

Shows the current activities you are following in Collaboration or in the portal (page 639).

4.1.1.2.1 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.



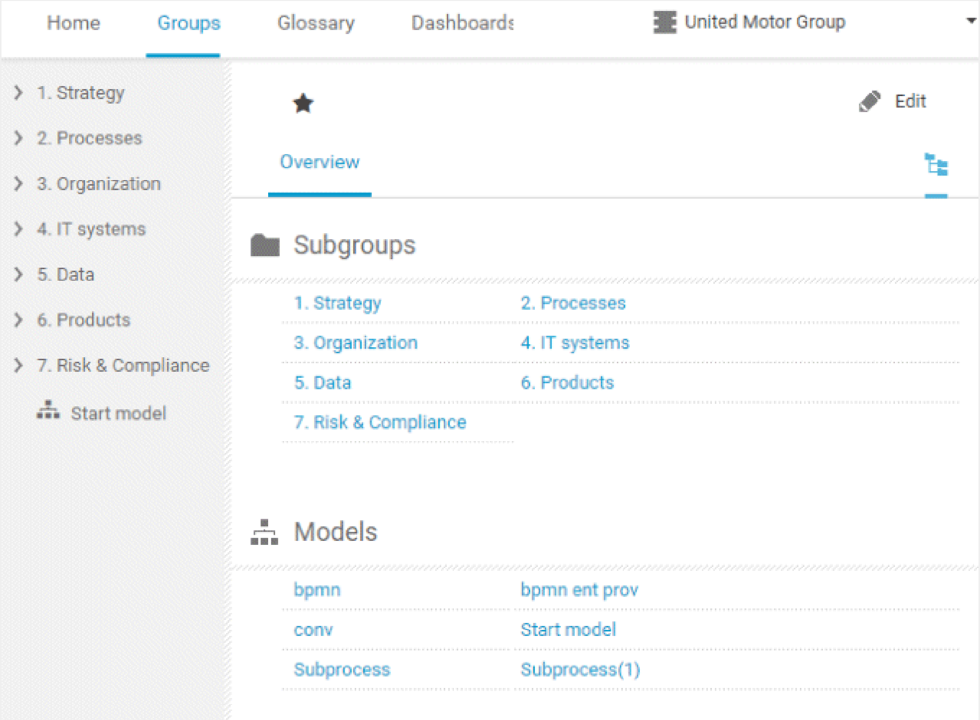
Depending on the contents selected and the type of a diagram, different functions are available.

Using the bar panel buttons **Comment** and **Navigation**, you can show or hide the Collaboration functions **Follow** (page 507) and **Comment** (page 506), as well as the Explorer tree. Thus, more space is available, for example, to show diagrams. The buttons of visible bars are indicated in color.

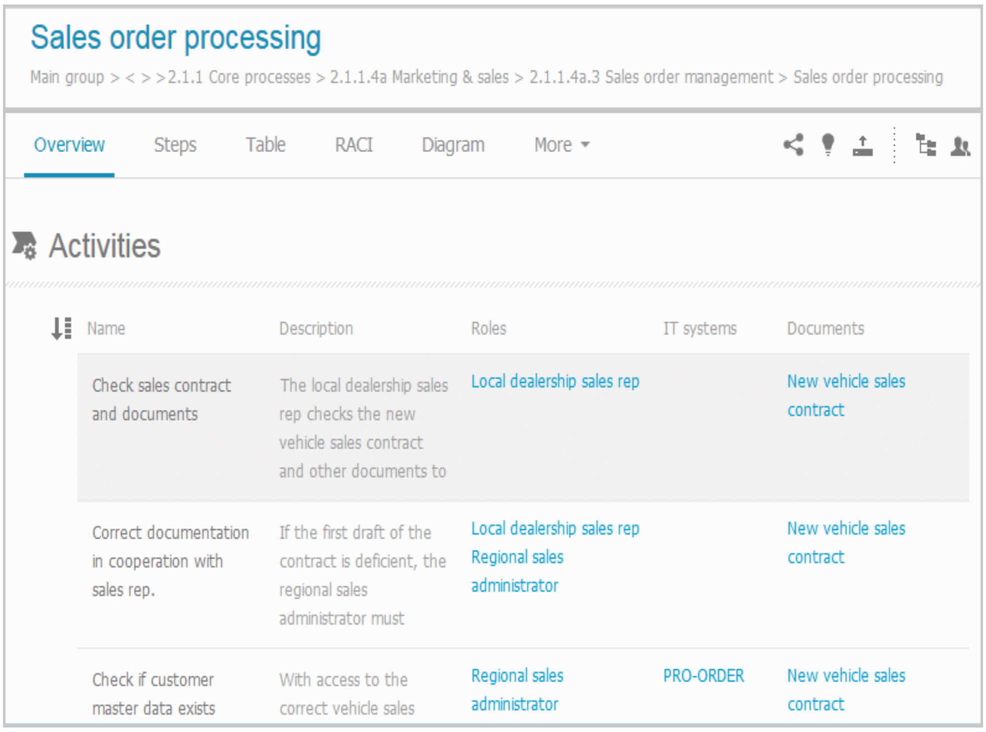
Click **Share model** to share models with other users (page 514). Click **Submit change request** to send change requests to the process manager (page 505). The function **Start governance process** (page 507) is provided only if an executable process is available. Users with the function privilege **ARIS Connect Designer** can change processes using the **Edit** button (page 518).

Overview

Displays the group content. Content that can be used to navigate to other content is displayed as links.

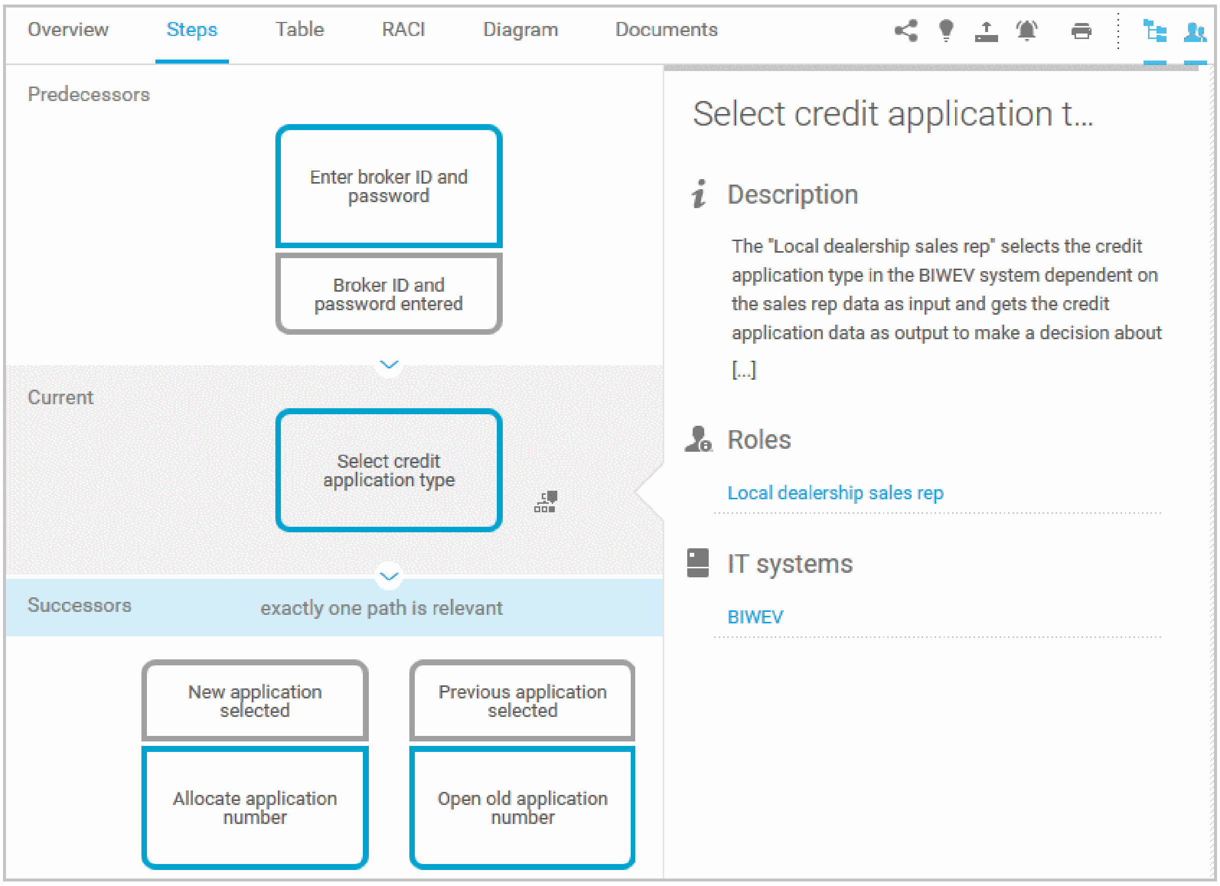


The relevant content is displayed based on the item selected. For example, if you have selected a model, additional headings are shown depending on the context. Breadcrumb navigation simplifies navigation to superior elements.



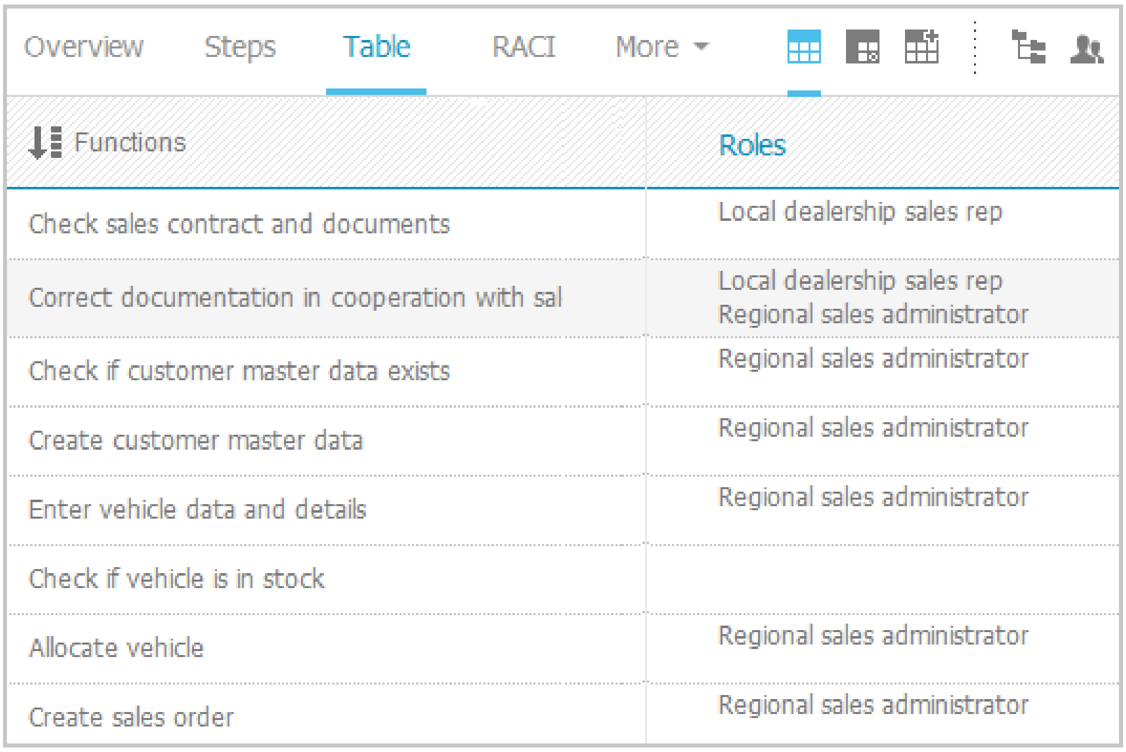
Steps

Transparently displays all steps of a process (EPC) (page 498). 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.



Table

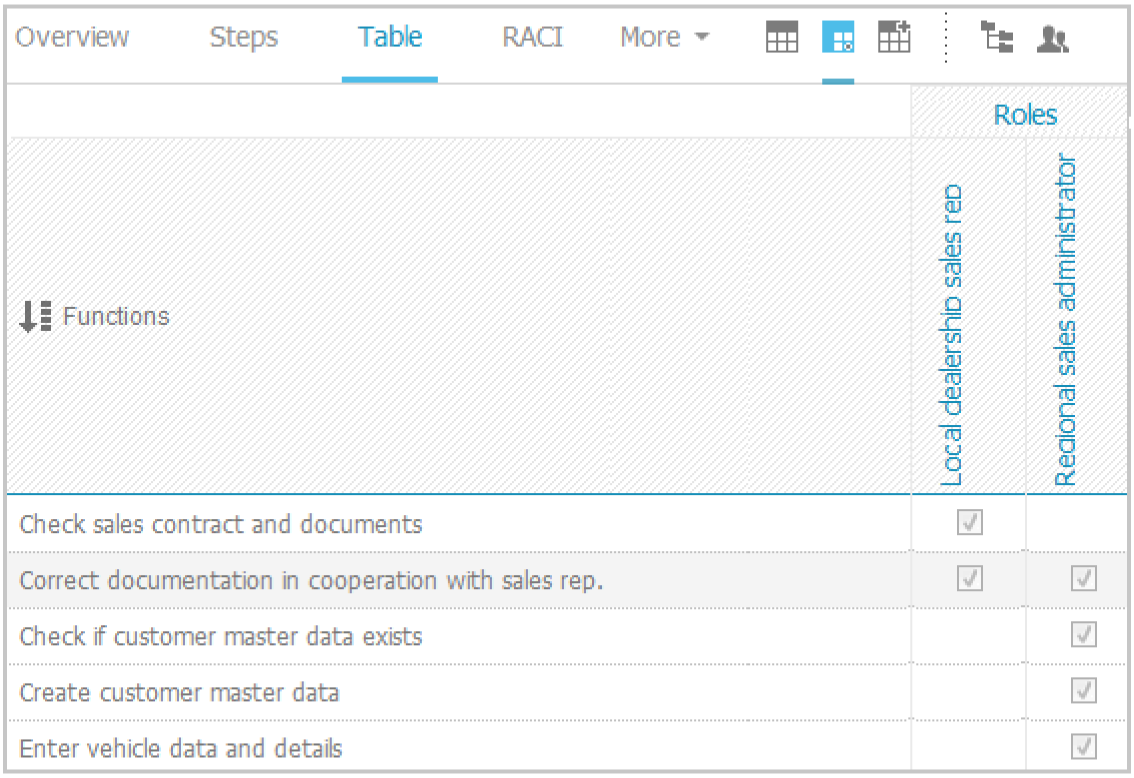
Shows the functions that the process (EPC) contains, as well as the roles assigned to them.



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 alphabetically by clicking the column title.

Clicking **Matrix** transparently displays the interrelations between the individual roles and functions.

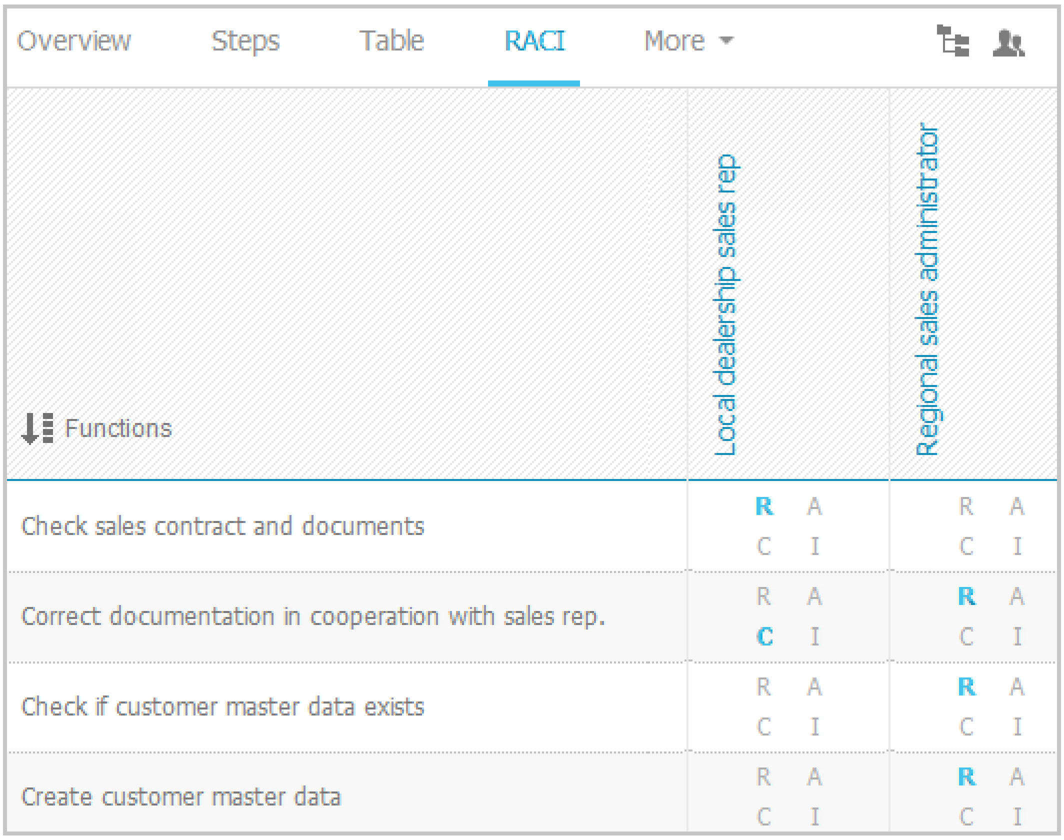


Functions	Local dealership sales rep	Regional sales administrator
Check sales contract and documents	✓	
Correct documentation in cooperation with sales rep.	✓	✓
Check if customer master data exists		✓
Create customer master data		✓
Enter vehicle data and details		✓

Clicking **Add column** will extend the table. You can delete added columns at any time.

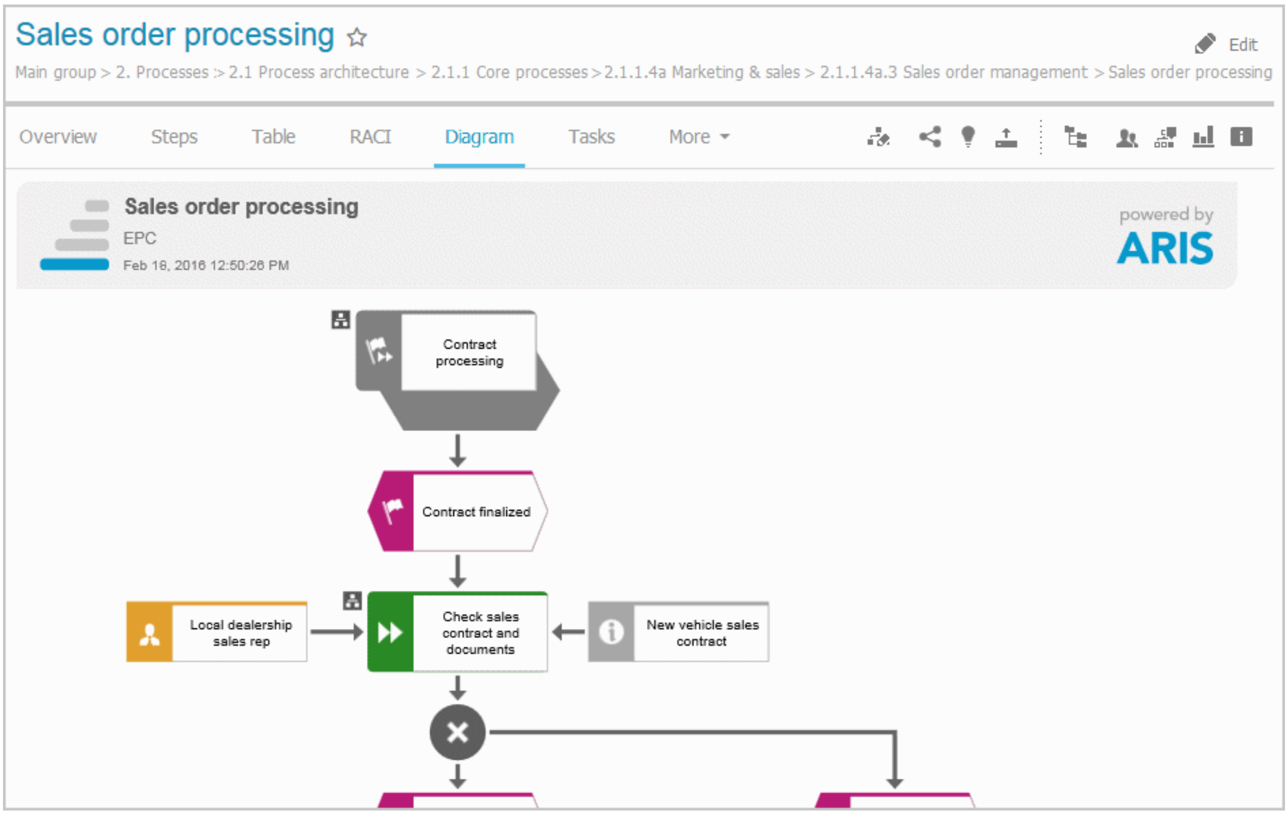
RACI

RACI matrices are displayed only if RACI information is available for this process (page 568). Using the button you can sort the matrices by process flow.



Diagram

Graphically displays the diagram in Model Viewer. Depending on the diagram type, different functions are available.



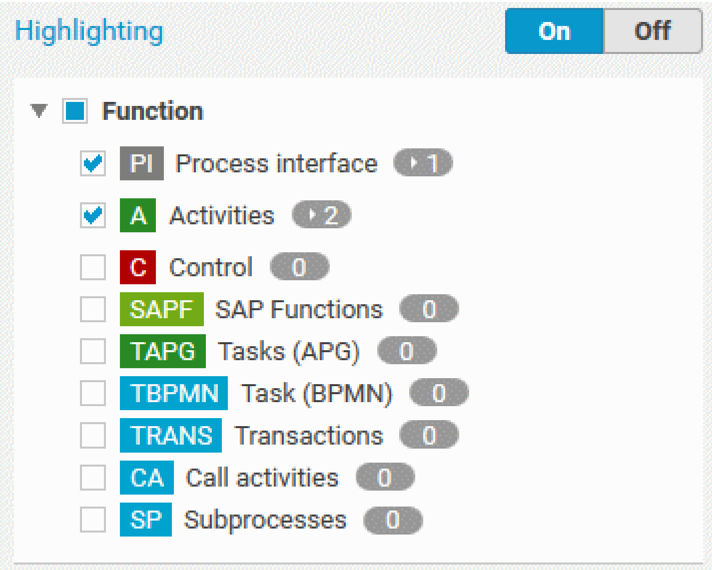
Using the functions of the view bar you can change the size of appearance. Navigate in the model using the small frame of the thumbnail view above the slider. Clicking the ▼ arrow head will hide the bar.

Click **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.

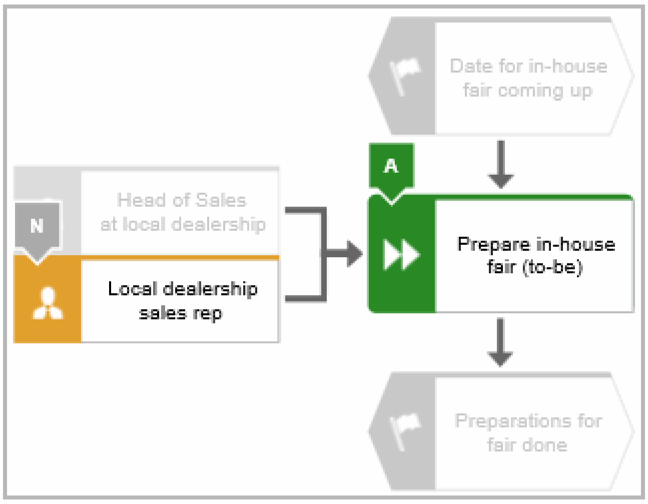
Attributes   More

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

To highlight objects in the diagram that meet a defined condition, click **Highlight** and **On**, and enable the criteria to be met.



The objects are then highlighted in the diagram. In this example the activity is highlighted because its check box is activated in the categories. All other objects are displayed in grayscale.

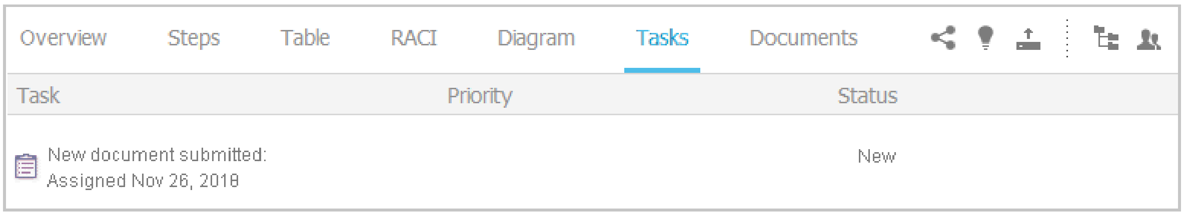


ASSIGNMENTS

If you click the assignment icon of an object in the diagram, or double-click an object with the assignment icon, all diagrams assigned are offered in a dialog for selection. If only one diagram is assigned, that diagram opens directly. Assigned diagrams contain detailed information on the object that the diagrams are assigned to, for example.

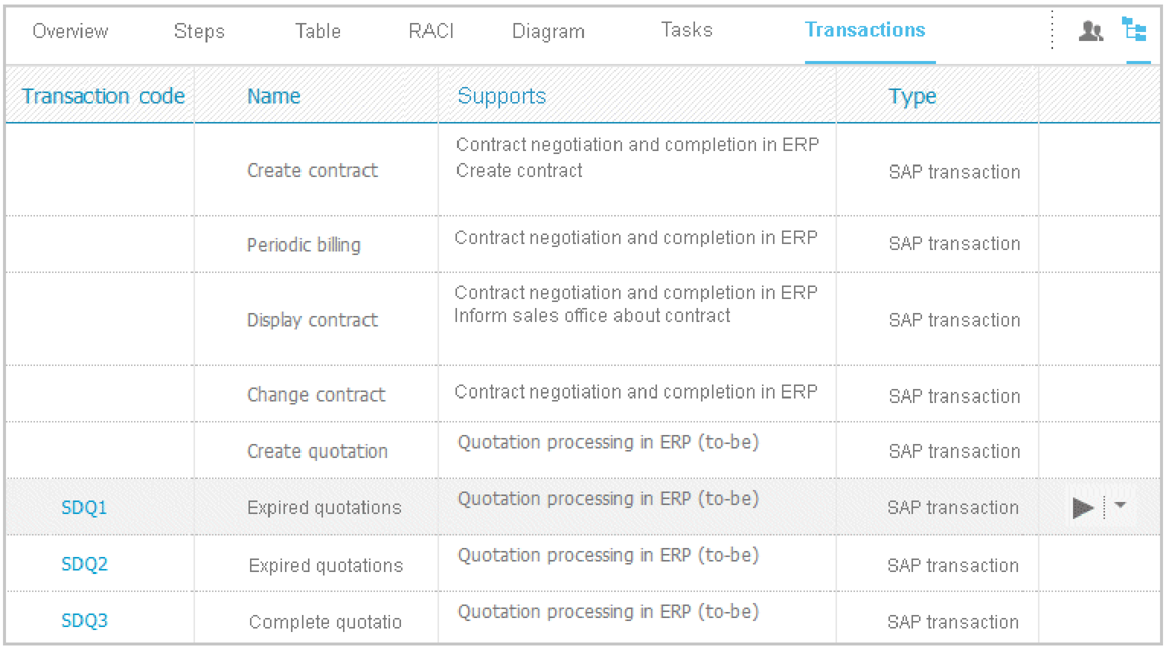
Tasks

Shows your tasks, e.g., mini workflows or APG processes and opens them for editing in ARIS Process Board (page 5).



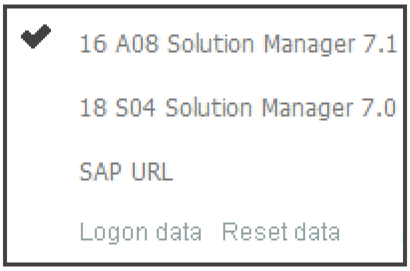
Transactions

Transactions are displayed if you are using Process-driven Management for SAP and if this function has been configured in the portal.

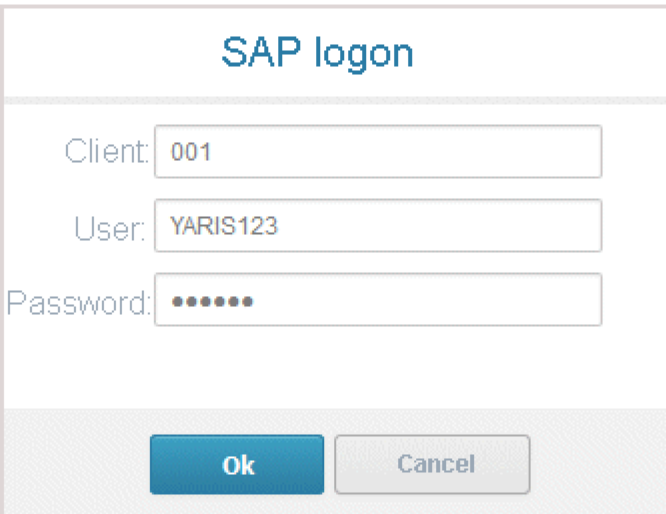


Transaction code	Name	Supports	Type
	Create contract	Contract negotiation and completion in ERP Create contract	SAP transaction
	Periodic billing	Contract negotiation and completion in ERP	SAP transaction
	Display contract	Contract negotiation and completion in ERP Inform sales office about contract	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 564) 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.

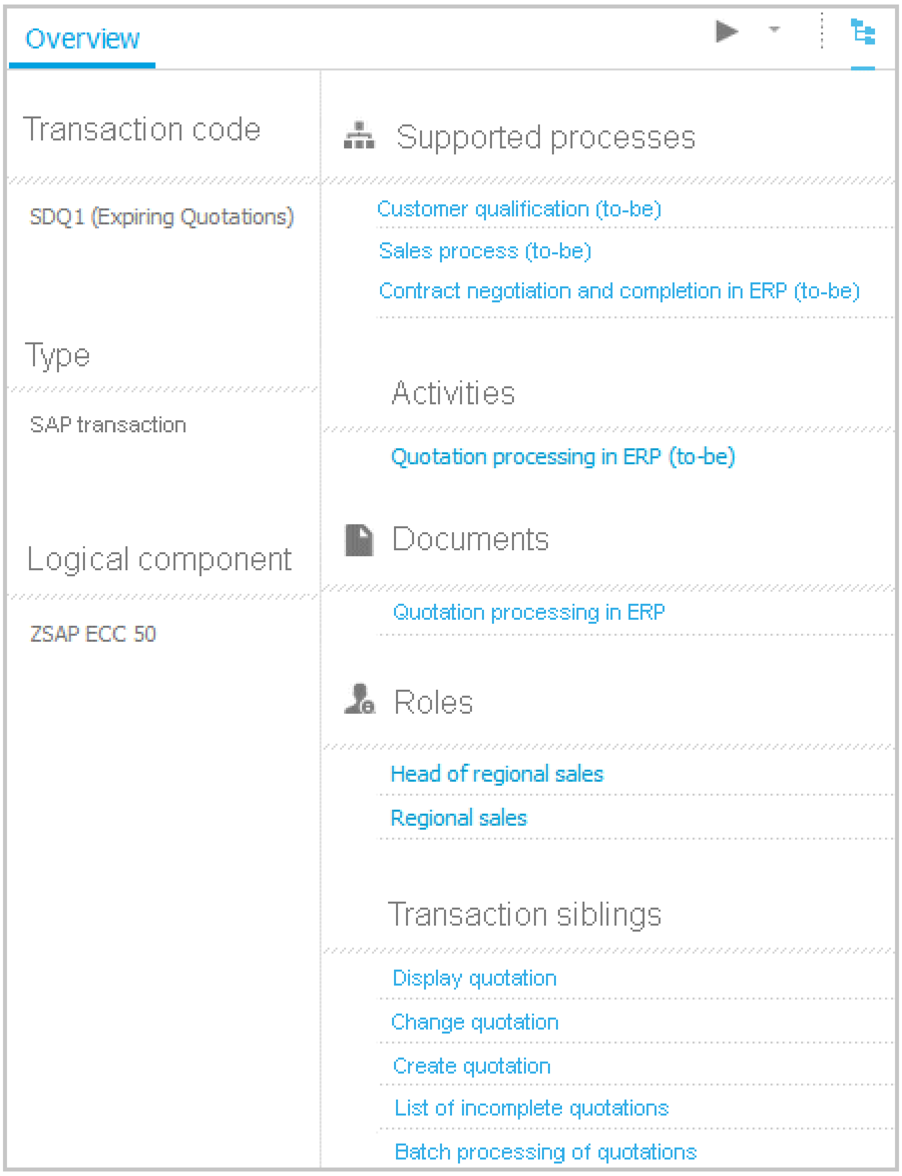


To start the transaction, click an SAP Server or a URL. The Login dialog opens.



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 565). 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 565) them.



Documents

Lists documents assigned to models or objects, for example, by the **Link 1** - **Link 4** attributes.

ARIS document storage enables you to manage and temporarily or permanently save documents.

Access restriction on folder level is possible in ARIS document storage. The documents saved there can be used during runtime of an executable process, e. g., attached to an e-mail.

All file formats are allowed for documents.

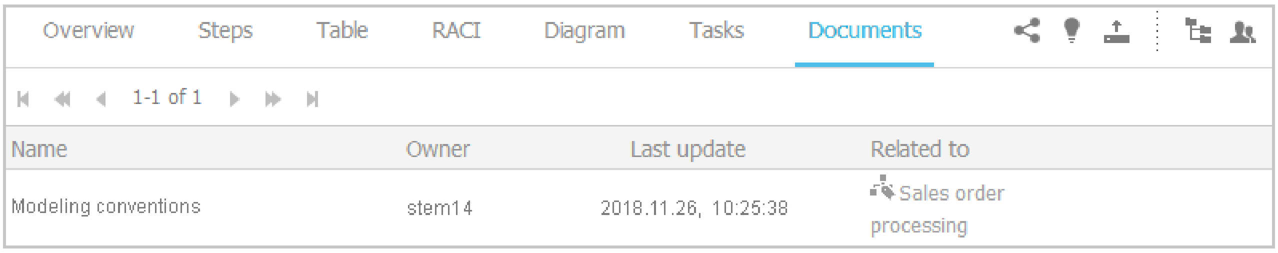
Temporary documents are deleted automatically after the executable process is terminated. Permanent documents are kept until they are deleted explicitly.

Depending on your license, you have read-access from ARIS to documents managed in third-party document management systems.

Note: You can view 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).

If you want to use the full range of functions of a document management system, including archiving and audit compliance, or you want to use very large numbers of documents, you can link Microsoft® Sharepoint 2013 to ARIS.

ARIS document storage as standalone component should be used for administrative purposes only. End users should access documents in the repository in ARIS Connect.



ARIS video tutorial

ARIS Connect - Process improvement (http://www.ariscommunity.com/videos/aris-connect-process-improvement-everyone)

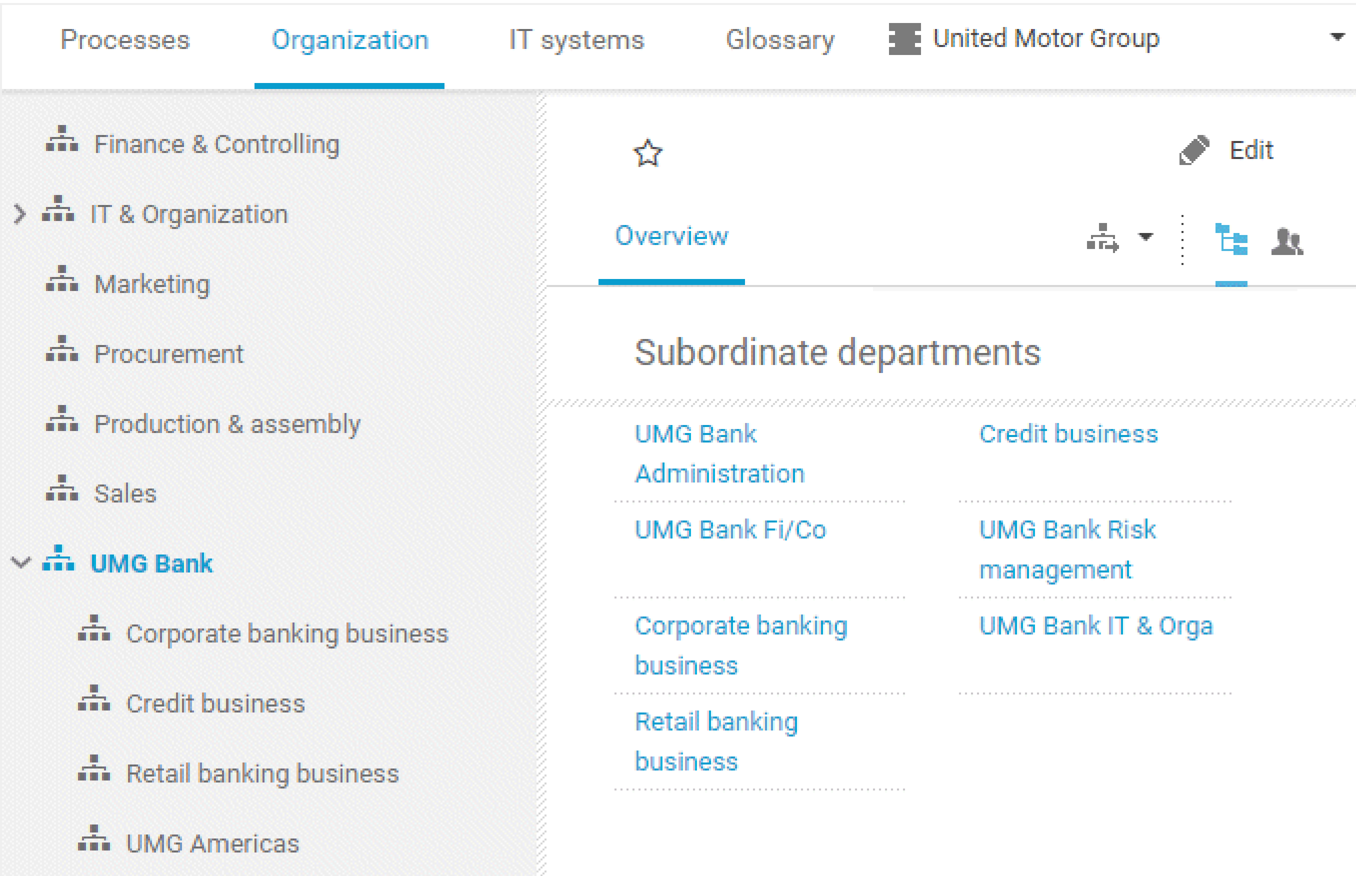
4.1.1.2.2 Organization

Quickly gain an overview of the organizational structure. Navigate to all organizational elements of the portal selected. Breadcrumbs simplify navigation to superior elements.

The Overview gives you access to the relevant information. For example, if you click a supported process, the process information (page 478) is displayed. IT information (page 490) is available when clicking a system in use.

Using the bar panel buttons **Comment** and **Navigation**, you can show or hide the Collaboration functions **Follow** (page 507) and **Comment** (page 506), as well as the Explorer tree. Thus, more space is available, for example, to show diagrams. The buttons of visible bars are indicated in color.

The function **Start governance process** (page 507) is provided only if an executable process is available.



4.1.1.2.3 IT systems

Quickly obtain an overview of the IT landscape. Use the Explorer tree to navigate to all IT systems of the portal. Breadcrumbs simplify navigation to selected elements.

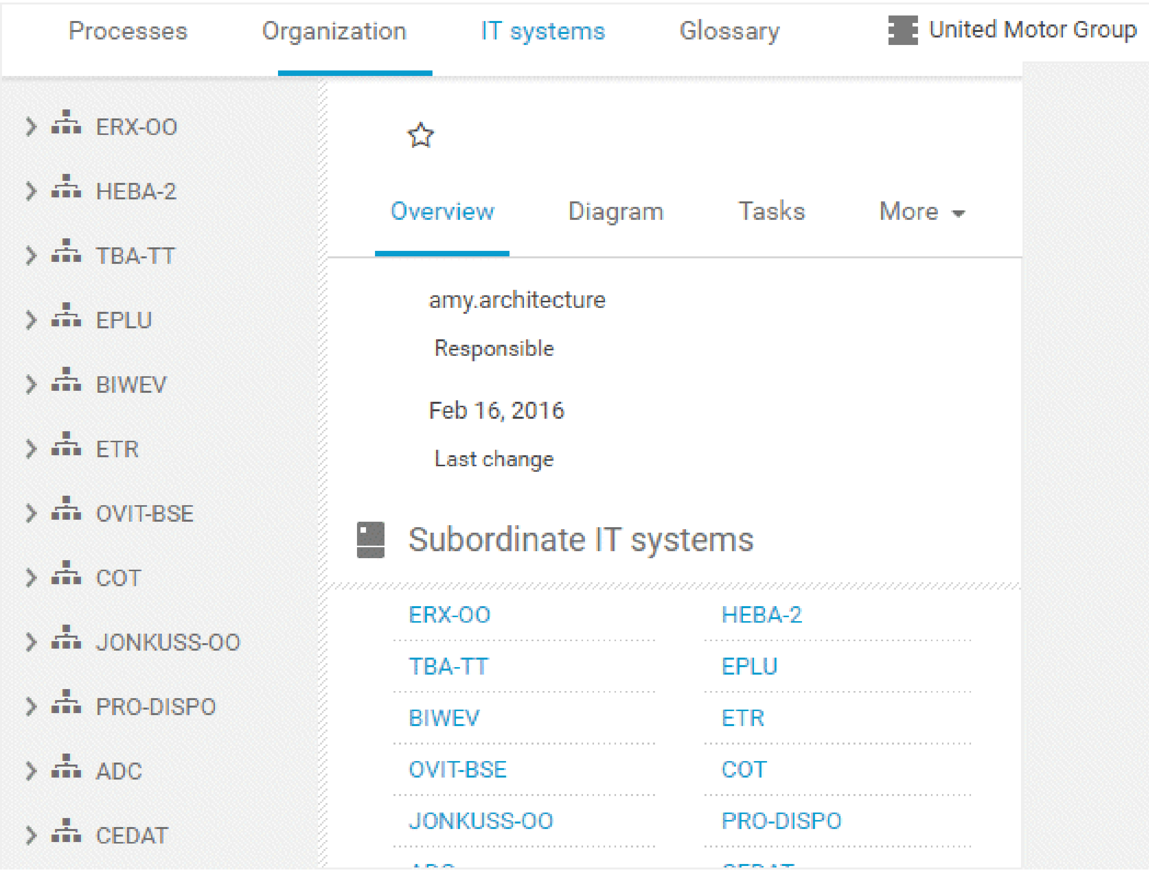
Depending on the contents selected, different functions are available.

Using the bar panel buttons **Comment** and **Navigation**, you can show or hide the Collaboration functions **Follow** (page 507) and **Comment** (page 506), as well as the Explorer tree. Thus, more space is available, for example, to show diagrams. The buttons of visible bars are indicated in color.

Click **Share model** to share models with other users (page 514). Click **Submit change request** to send change requests to the process manager (page 505). The function **Start governance process** (page 507) is provided only if an executable process is available. Users with the **ARIS Connect Designer** function privilege can change processes (page 518) using the **Edit** button. If you have both the **ARIS Connect Viewer** and **Contribution** license privileges, you can use the **Edit** button to change values of specific items (page 558), create new or reuse existing items (page 553), as well as delete items (page 555).

Overview

The Overview gives you access to the relevant information. If you do not select any items in Explorer, all IT systems are listed in alphabetical order.



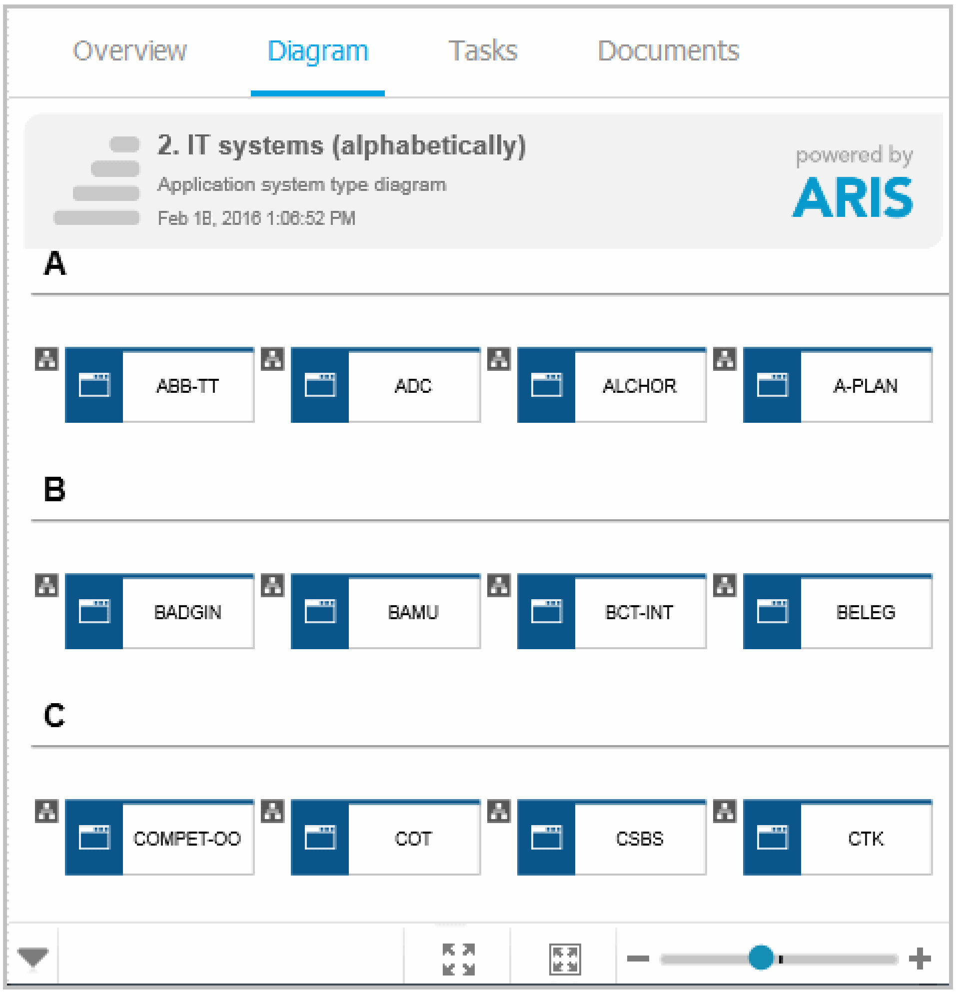
Diagram

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.

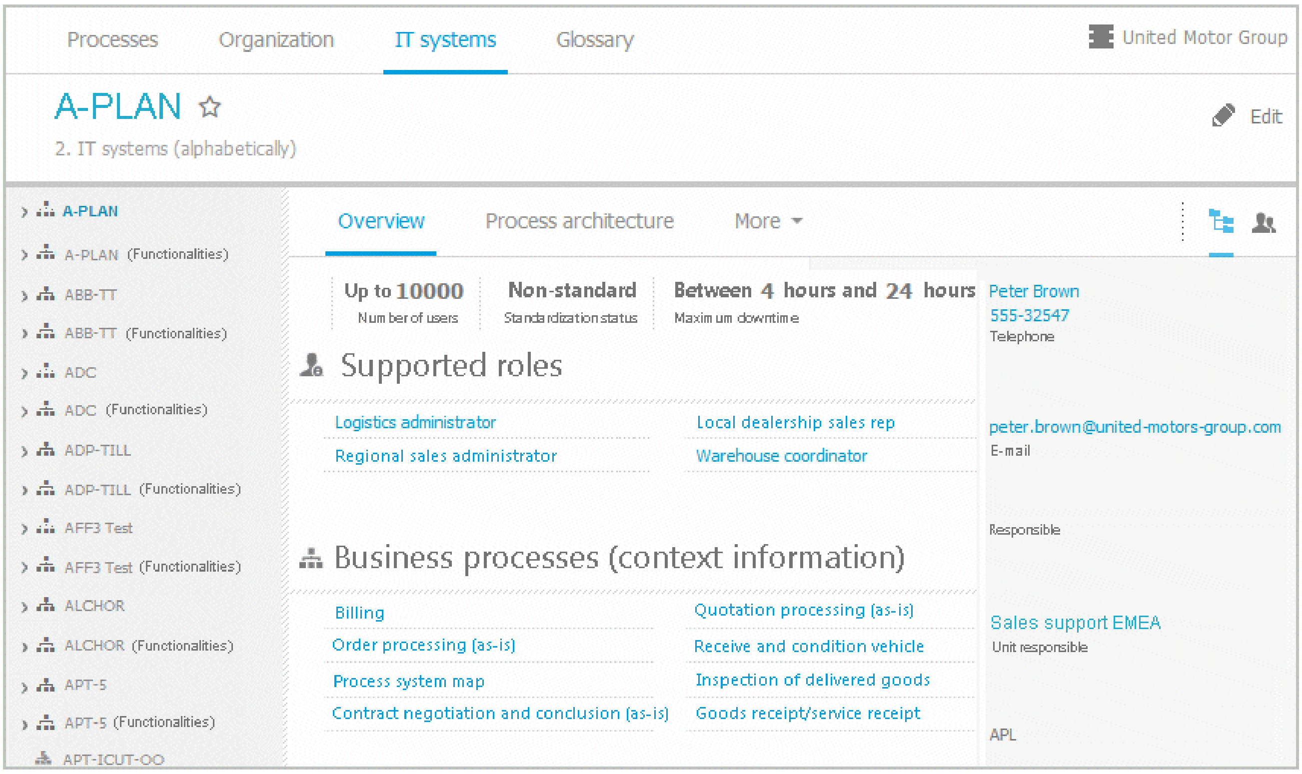
Click **Properties** to view all attributes specified. If you have selected an object, the attributes for that object are displayed. Click **More** to view related objects or occurrences. The model properties are shown if no object is selected.

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.



IT system fact sheet

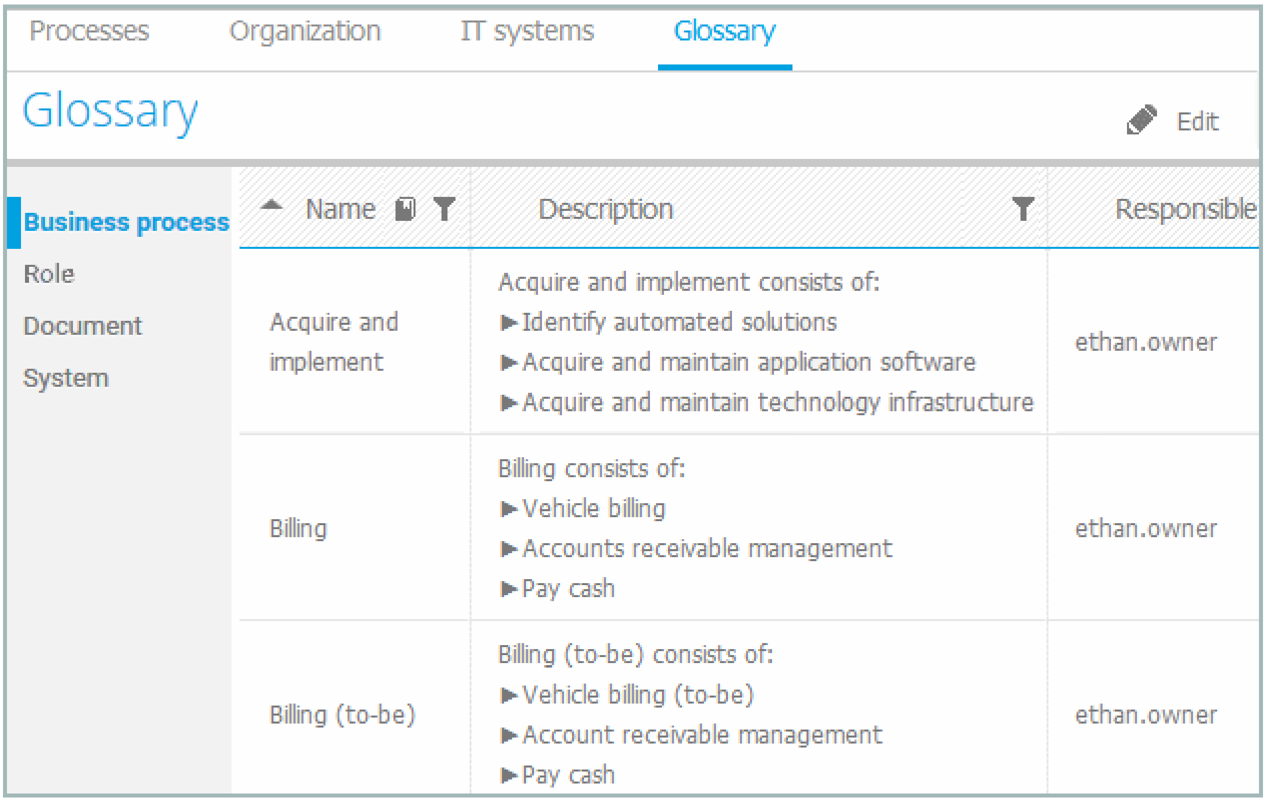
If you click an IT system in the Explorer tree or Overview, the IT system fact sheet provides you with important information at a glance.



4.1.1.2.4 Glossary

The **Glossary** page 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.

If you have both the **ARIS Connect Viewer** and **Contribution** license privileges, you can use the **Edit** button to change values of specific items (page 558), create new or reuse existing items (page 553), as well as delete items (page 555).



Click an entry to navigate. The corresponding fact sheet opens.

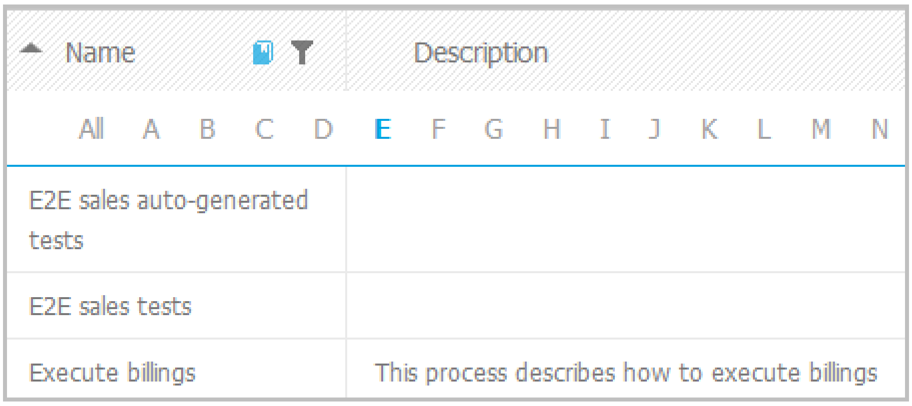
You can reduce the number of items shown in the list or change the glossary page:

Choose items starting with the same letter

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Glossary letters** in the **Name** cell of the table header. The **Glossary letters** bar opens.



3. Click on the relevant letter.

Only items starting with the same letter are shown.

Filter items based on name, description, and responsibility

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Filter** in the table header. The text boxes to filter the list are opened.

3. Enter the relevant terms in one or more fields.

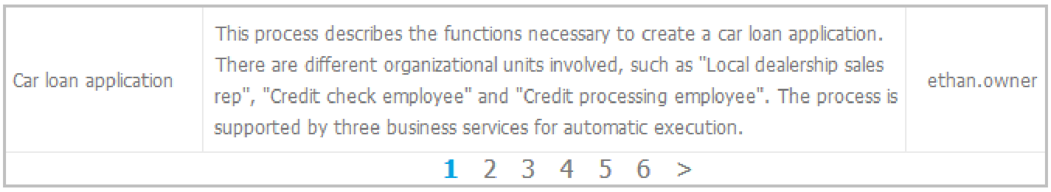
All items are listed whose attribute content contains a word beginning with the term entered. You can narrow down the search by entering terms in more than one text box.

Change the glossary page

If not all glossary entries fit on one page, you can switch to the page that contains the relevant glossary entry.

Procedure

4. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
5. Click the relevant page number at the bottom of the page.



All items of the selected page are listed.

4.1.2 Use 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 Cloud users. When you open ARIS Connect in your Web browser you receive 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 582) and the default view (page 582) are described.

4.1.2.1 Select database

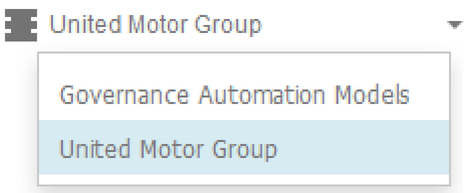
You can select one of the databases offered in the portal to access its content.

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:

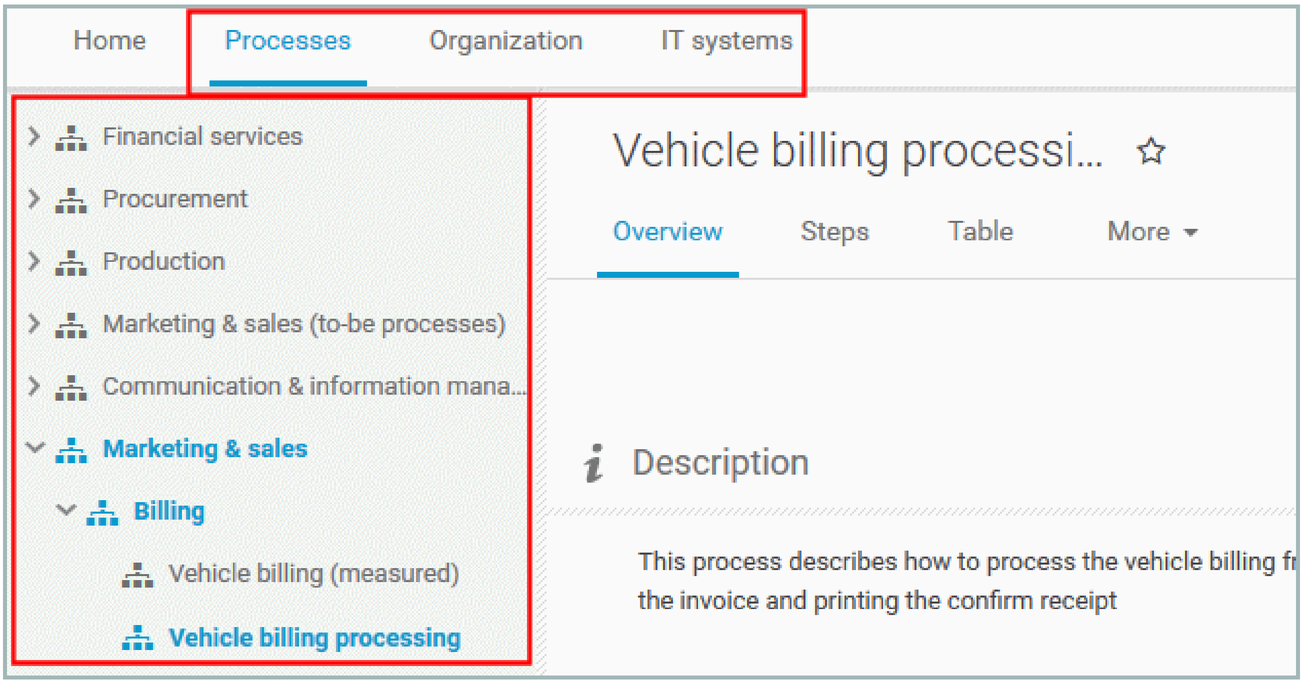
   In the standard ARIS Connect configuration sets, database selection is located top right of the screen.
   The list of available databases opens.
2. Click the name of the database you want to use.

The name of the selected database is displayed. The **Recent changes** area is updated according to the selected database. A search is performed based on the current database.

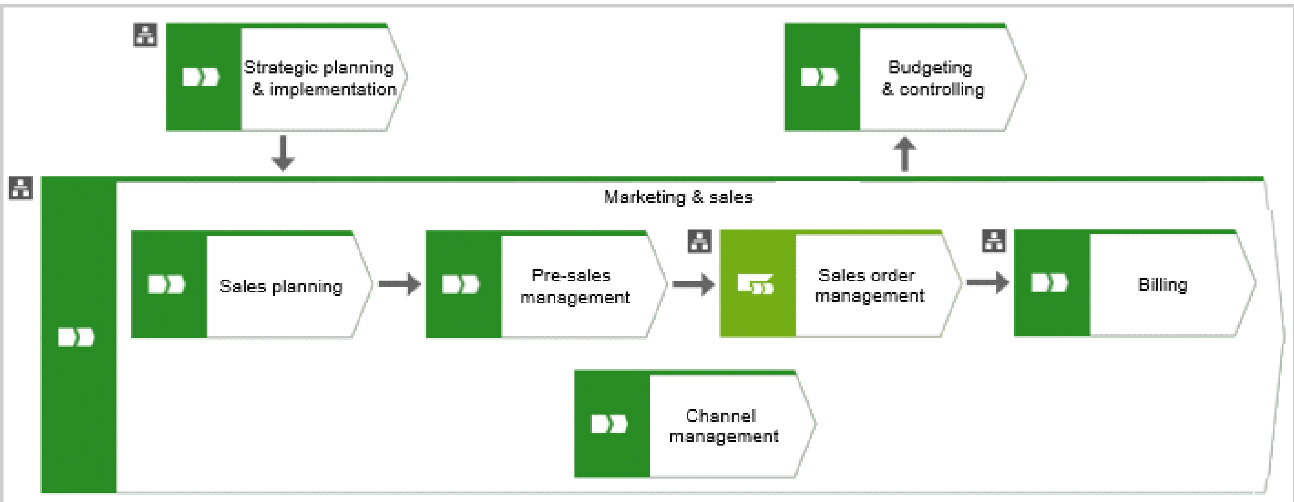
4.1.2.2 Navigate

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. All processes subordinate to the current process are displayed in the colored area.



In the diagrams, navigate to assigned diagrams by clicking an object's assignment icon, or by double-clicking an object with the assignment icon. All assigned diagrams are offered for selection in a dialog. If only one diagram is assigned, that diagram opens directly. Assigned diagrams contain detailed information on the object that the diagrams are assigned to, for example.



4.1.2.3 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. In the Groups area (page 462), select a model of the **EPC** type. You are offered the steps of the EPC.
2. Click the steps. The first event of the process is shown at the top. It does not have a predecessor, therefore, no object is placed in this field. Below, the event's successor is output. To the right, the attributes are shown.
3. 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.

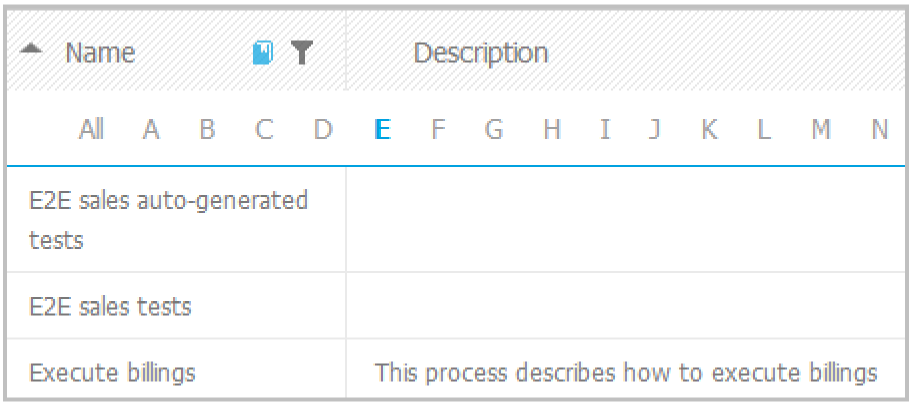
You navigate through a process step by step.

4.1.2.4 Choose glossary items starting with the same letter

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Glossary letters** in the **Name** cell of the table header. The **Glossary letters** bar opens.



3. Click on the relevant letter.

Only items starting with the same letter are shown.

4.1.2.5 Filter glossary items based on name, description, and responsibility

You can reduce the number of items shown in the glossary list.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click **Filter** in the table header. The text boxes to filter the list are opened.

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.

4.1.2.6 Remove glossary filter

You can easily remove the glossary filter.

Prerequisite

You have filtered the glossary content (page 499).

Procedure

Click **Filter** in the table header. The text boxes to filter the list are closed and all glossary items are shown.

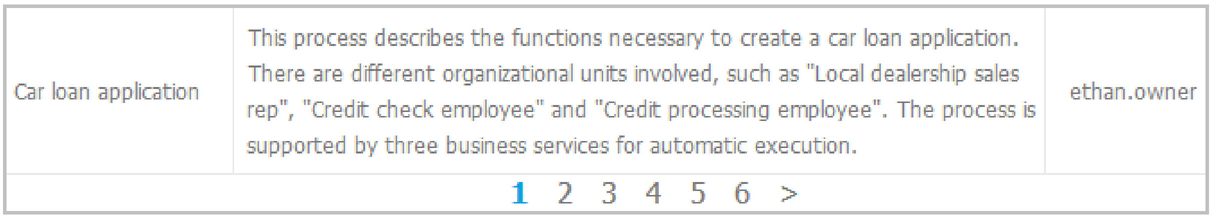
You have removed the glossary filter.

4.1.2.7 Change the glossary page

If not all glossary entries fit on one page, you can switch to the page that contains the relevant glossary entry.

Procedure

1. In the Classic configuration set (page 474) or the Default configuration set (page 493) of the portal, click **Glossary**.
2. Click the relevant page number at the bottom of the page.



All items of the selected page are listed.

4.1.2.8 Switch from Steps to Diagram

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 462) in the classic view (page 582) or Processes (page 478) in the default view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Activate the **Steps** fact sheet and navigate to the relevant step.
4. Click **Show in model** next to the step.

The **Diagram** fact sheet is opened and the object symbol of the current step is selected. To return to the step fact sheet, click **Steps**. If you have selected another object in the **Diagram** fact sheet, this object is marked in the **Steps** fact sheet.

4.1.2.9 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 462) in the classic view (page 582) or Processes (page 478) in the default view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Click **Print graphic as PDF**. The **Select output options** dialog opens.
4. Specify your settings.
5. Click **OK**. After report generation, the **Print graphic as PDF** dialog opens.
6. 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 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 PDF.

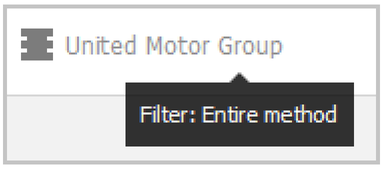
4.1.2.10 Display the current method filter

You can display the method filter that you use for the current database.

Procedure

1. Drag the mouse cursor over the database name located at the top right of the screen.
2. Leave the mouse cursor above the database name for a short time.

The filter name is displayed:

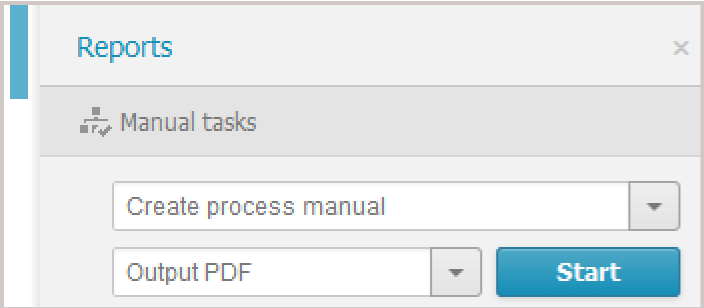


4.1.2.11 Generate report

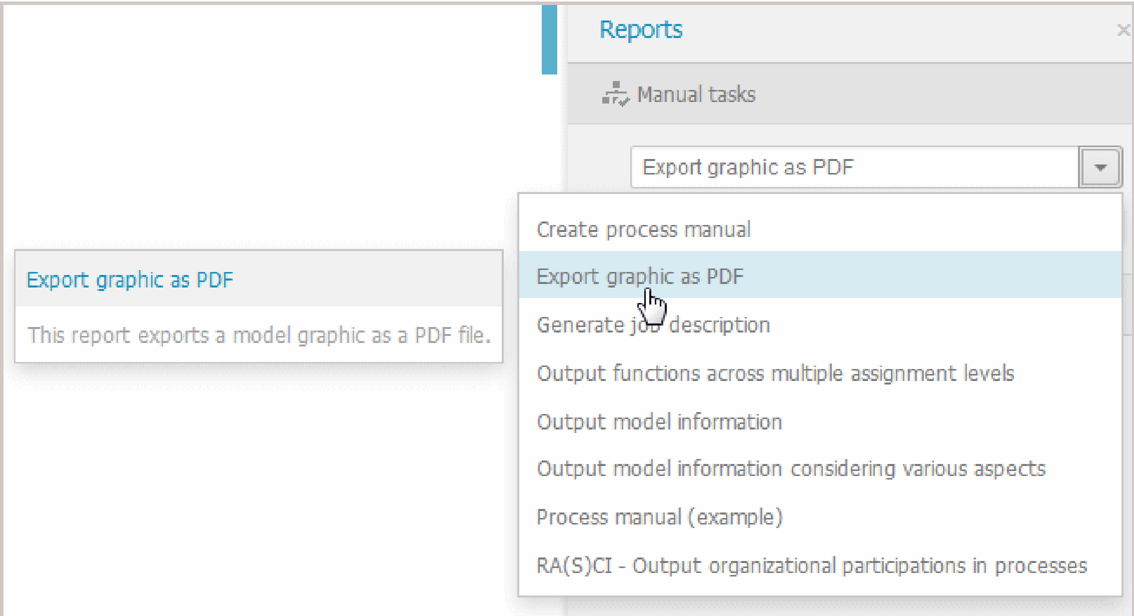
The package includes various reports that you can start in the portal. Depending on the diagram open, reports are offered that provide a plausible evaluation for this context.

Procedure

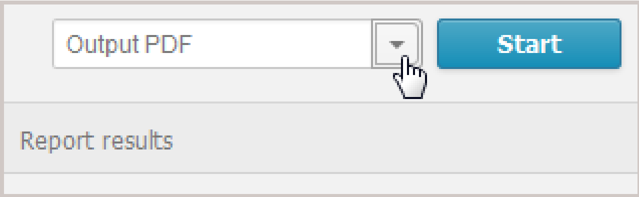
1. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click the model for which you want to create a report.
6. Click **Diagram** if not enabled yet.
7. Click **Reports**. The **Reports** bar opens showing the name of the item for which the report is generated.

   All reports you can start for this diagram are displayed.
8. Click the down arrow next to the report name.
9. Select the relevant report.

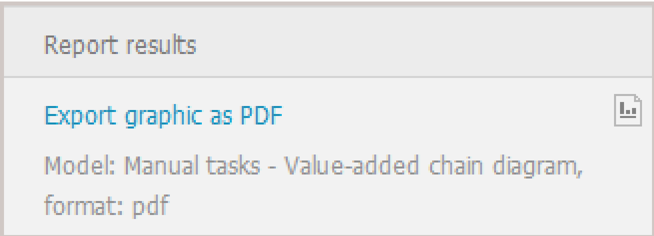
10. Select the output format.



11. Click the output format, e.g., **Output PDF**.
12. Click **Start**. The report is started and a progress bar is displayed. After the report is complete, the **Output object information** dialog is opened.
13. Click **Download result** if you want to download the report immediately. You can choose whether to open or to save the report.

You have created a report. Only information you are authorized to view is included.

The report is shown in the **Report results** link list for downloading.



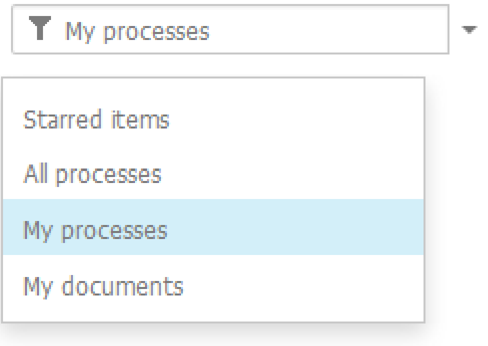
If you click the link, the report output opens.

4.1.2.12 Use the Favorites tab in the portal

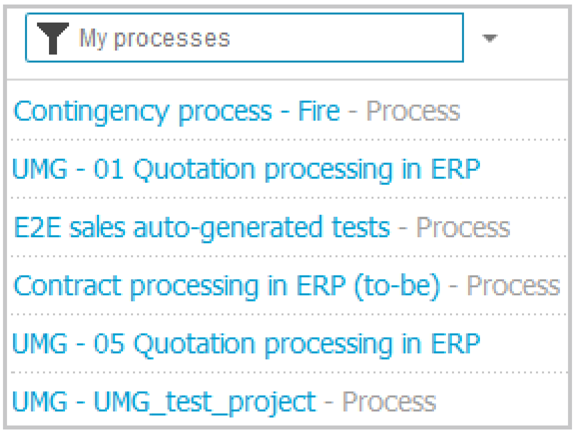
In the portal, you have direct access to all saved filter settings (page 545) to filter the content of the selected database.

Procedure

1. If you have access to more than one database, select the database you want to work with.
2. Activate the **Favorites** tab.
3. Click the ▼ **down arrow** of the **Filter selection** field.



4. Click the favorite setting of the context caption, e. g., **My processes**. 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.

4.1.2.13 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 **Navigation**. The **Groups** area opens.
2. Open the group where the required model is stored.
3. Click the name of the model. The factsheet of the model opens.
4. Click **Diagram**. The **Diagram** view opens.
5. Select the required object in the **Diagram** view.
6. Click **Properties**. The Properties bar opens.
7. 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.
8. Click the left or right arrow to navigate to the next occurrence in the model. The next occurrence is selected and its number updated.
9. To directly select an occurrence, expand the drop-down list and click the occurrence number.
10. 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 view for the occurrence, the first fact sheet tab is shown, e.g., **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.

4.1.2.14 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.
- 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. Depending on the view in use, click **Groups** or **Processes**.
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 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 ARIS Process Board.

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**.

4.1.2.15 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 650) 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 649) in the tag input box, e.g., 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 the Enter key 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 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.

4.1.2.16 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 (page 585).

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.

4.1.2.17 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**.

4.1.2.18 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click the model for which you want feedback.
6. Click **Comment** if the **Comment** bar is not open yet.
7. Enter your comment in the box provided.
8. Click **Tag**.
9. Enter the words to be used as keywords (page 649) in the tag input box, e.g., 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 the Enter key 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 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 below the process 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**.

4.1.3 Use roles

You use role filters to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

4.1.3.1 Assign roles

In order to enable users to use role filters (page 586) in the portal, you must assign the corresponding roles to the users.

Prerequisites

- You have the **User administrator** function privilege.
- You have the **ARIS Connect Designer** license privilege.

Procedure

1. Click **Portal**.
2. Open a diagram containing an occurrence of the relevant role, e.g., **Regional sales department specialist**.
3. Click **Edit**. The diagram opens on a separate tab for editing.
4. Select the **Role** type object and click **Properties**. The attributes are displayed.
5. Move the mouse pointer to the **User/User group association** attribute.
6. Click **Select user**. The **Select user(s)/user group(s)** dialog opens.
7. Enter the user name in the **Filter** box.
8. Enable the check box for the user, and click **OK**.
9. Save the changes and close the diagram.

The role has been assigned to the user.

If this user activates (page 510) the role filter, only information from models in which the selected role occurs will be displayed.

4.1.3.2 Activate role filter

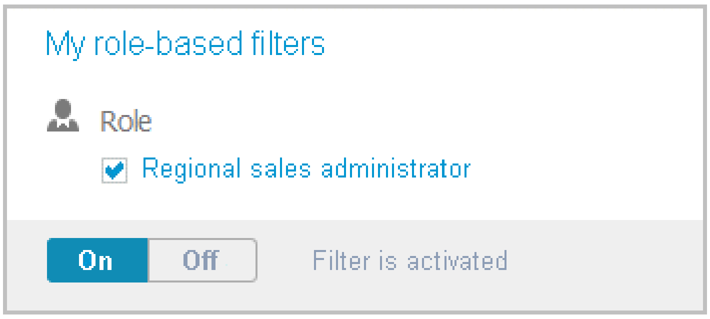
Using role filters, you restrict the content in such a way that you only see information from processes in which certain roles are involved.

Prerequisite

A role has been assigned (page 509) to your user.

Procedure

1. Click **Select role filter** to the left of your user name.
2. Click **On** and activate the relevant role.



In the portal, you now see information only for the models in which the selected role occurs. Models of the **Value-added chain diagram** type are always shown with an active role filter regardless of whether or not the model contains the role. When you open a diagram, all information is displayed unfiltered. You can also navigate using assignments. If you view processes step by step (page 498), all steps are displayed. The detailed information about the satellites is filtered according to the selected role. Tables, fact sheets, and RACI matrices contain only role-specific information. You only access filtered information via the search and the navigation.

If you click **Off**, the role filter is deactivated and you see your entire content again.

4.1.4 Use models

4.1.4.1 Open assignment

In Model Viewer, you can quickly open models assigned to objects.

Procedure

1. Click Groups (page 462) in the classic view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Click **Diagram** if you have not already selected this fact sheet before. The diagram as well as all objects with assigned models are displayed in the Model Viewer.
4. Click the relevant assignment icon, or double-click the object at which the relevant assignment icon is shown.

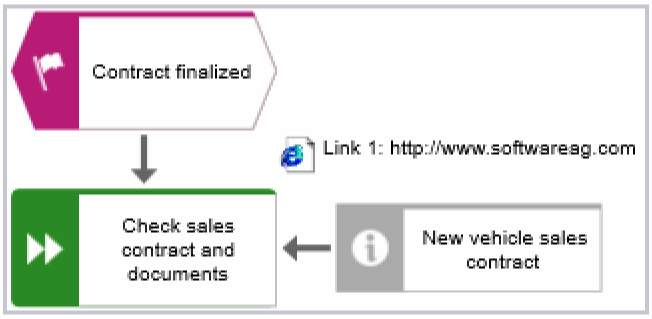
All assigned diagrams are offered for selection in a dialog. If only one diagram is assigned, that diagram opens directly. Assigned diagrams contain detailed information on the object that the diagrams are assigned to, for example.

4.1.4.2 Open placed link attributes

In Model Viewer, you can open placed link attributes.

Procedure

1. Click Groups (page 462) in the classic view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Click **Diagram** if you have not already selected this fact sheet before. The diagram as well as all placed link attributes are displayed in the Model Viewer.



4. 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.

4.1.4.3 Switch from Steps to Diagram

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 462) in the classic view (page 582) or Processes (page 478) in the default view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Activate the **Steps** fact sheet and navigate to the relevant step.
4. Click **Show in model** next to the step.

The **Diagram** fact sheet is opened and the object symbol of the current step is selected. To return to the step fact sheet, click **Steps**. If you have selected another object in the **Diagram** fact sheet, this object is marked in the **Steps** fact sheet.

4.1.4.4 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 462) in the classic view (page 582) or Processes (page 478) in the default view (page 582).
2. Select the required model in the navigation. The fact sheets are shown.
3. Click **Print graphic as PDF**. The **Select output options** dialog opens.
4. Specify your settings.
5. Click **OK**. After report generation, the **Print graphic as PDF** dialog opens.
6. 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 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 PDF.

4.1.4.5 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. Depending on the view in use, click **Groups** or **Processes**.
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 the Model Editor on an individual tab.
7. Make the required changes.
8. Click **Collaboration** if it is not activated yet.
9. 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.
10. Click **OK**. The model reopens read-only and the **Request approval** dialog is displayed.
11. If required, select a person in charge to approve the model if the **Person responsible** attribute has not been specified at the model.
12. Enter a comment to explain the approval request.
13. Click **Send**. A completion message is displayed.
14. Click **OK**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in ARIS Process Board. 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**.

4.1.4.6 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click the model you want to send to another user.
6. Click **Share model**. The 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**.

4.1.4.7 Inform owner of change

You can inform the model owner of model changes you have made in the portal (page 552). 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Navigate to the items and change the relevant attributes (page 552). Depending on the attributes, various editing options (page 560) 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**.

4.1.4.8 Generate report

You can generate and download a report for the open model.

Procedure

1. Show the Reports bar ().
2. Click the drop-down list box to display the list of available reports.
3. Leave the mouse pointer on the name of a report if you want to display its description.
4. Click the name of the relevant report.
5. Click the report output format, e.g., **Output PDF** if you want to output the report in the first available format (page 602).
   To select a different report format, click the **Down arrow** next to **Output PDF** and select the format you want to use. The **Output PDF** button is given the name of the selected report format.
6. Click the button. The report is created and listed in the Reports bar (page 712).
7. Click the name of the listed report to download and open the report.

You generated the report for the open model.

4.1.4.9 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.
- The relevant model type must be included in the database filter. If this is not the case, the portal page is displayed again after the **Create model** dialog closes.

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 model** on the **Home** tab. The 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 717) 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 and opens in a new tab (page 660).

4.1.4.10 Edit models

You can edit models in ARIS Connect.

Prerequisite

- You have the **ARIS Connect Designer** 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. Depending on the view in use, click **Groups** or **Processes**.
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 the Model Editor 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**.

4.1.4.11 Use matrix models

You can display a matrix model in ARIS Connect.

4.1.4.11.1 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.

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.

4.1.4.11.2 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 519)
2. Place the mouse cursor over a connection cell.

The list of connections used in the matrix model is displayed as a tooltip.

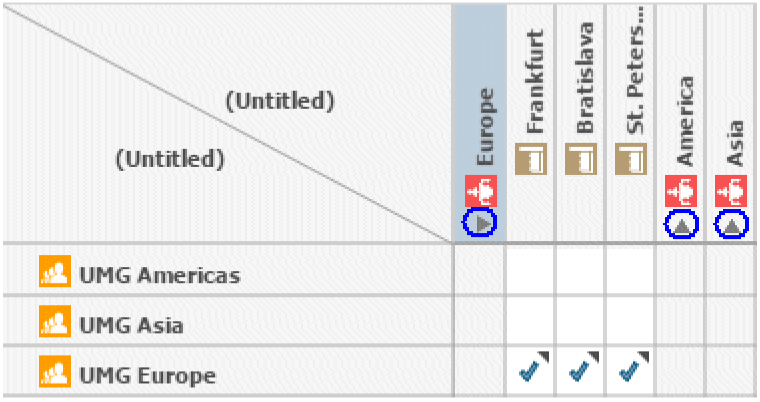
4.1.4.11.3 Show/Hide hierarchies in a matrix model in ARIS Connect

You can show or hide hierachies in a matrix model.

Procedure

1. Open a matrix model in ARIS Connect. (page 519)
2. Click the little arrow to expand or collapse the hierarchy. The hierarchy is shown or hidden accordingly.

The hierarchy is shown/hidden.

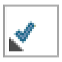
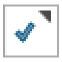


4.1.4.11.4 How are connections displayed?

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 in Designer or ARIS Architect, this abbreviation is displayed instead of the check mark.

4.1.5 Handle documents

ARIS document storage enables you to manage and temporarily or permanently save documents.

4.1.5.1 Propose document

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.

Prerequisites

- 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. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click a model or object.
6. Click **Propose document**. The **Submit new document** dialog opens.
7. Select the documents you want to submit.
8. 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**.

4.1.5.2 Link new documents to a model or object

You can link new documents with a model or object.

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. Depending on the view in use, click **Groups** or **Processes**.
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 the Model Editor on an individual tab.
7. Click **Properties**. The **Properties** bar opens.
8. Activate the **Documents** tab.
9. Click in the model background to add a document to the model or the relevant object to add a document to the object.
10. Click **Add document**. The dialog opens.
11. Navigate to the target folder.
12. Click **Upload new document**. The **Select new document** dialog opens.
13. Click **Select file** and select a document.
14. Enter a title and, if required, specify further document properties.
15. Click **Upload**.
16. Select the relevant documents and click **OK**.

The documents are linked with the model or object.

4.1.5.3 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. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Navigate to a group and click a model.
4. Click **Diagram** if not enabled yet.
5. Click **Edit**. The model opens in the Model Editor on an individual tab.
6. Click **Properties**.
7. Activate the **Documents** tab.
8. Click in the model background or an object.
9. Click **Add document**.
10. Click the folder containing the relevant documents.
11. Select the relevant documents and click **OK**.

The documents are linked with the model or object.

4.1.5.4 Submit a change request for a document

You can send change requests for documents to the document manager for documents in ARIS Connect.

'DOCUMENTS' TAB

Prerequisites

- 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. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click a model or object.
6. Activate the **Documents** tab.
7. Select the document for which you want to submit a change request.
8. Click **Submit change request**. The dialog opens.
9. Enter a title and a description for your request.
10. Select the priority with which the request is to be handled.

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 ARIS Process Board.

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 ARIS Process Board 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**.

IN A MODEL

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 518) the model that contains the document you want to submit a change request for.
4. Click **Diagram** if not enabled yet.
5. Click **Edit >** **Contribute**.
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 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 ARIS Process Board.

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 ARIS Process Board 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**.

4.1.5.5 Have document approved

Ask the person in charge to approve the documents you changed so that the changed document can be made available to all users.

'DOCUMENTS' TAB

Prerequisites

- 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. Open ARIS Connect and log in with your user name and password.
2. Click **Repository** if it is not activated yet.
3. Activate the **Documents** tab.
4. Click the document you want to have approved.
5. Click **Request approval**. The dialog opens.
6. Enter a comment describing what you changed.
7. Click **Send**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in ARIS Process Board. 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**.

IN A MODEL

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 518) 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 dialog opens.
8. Click **Send**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in ARIS Process Board. 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**.

4.1.5.6 Share document

You can share documents with other users.

'DOCUMENTS' TAB

Prerequisites

- 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. Open ARIS Connect and log in with your user name and password.
2. Open ARIS Connect and log in with your user name and password.
3. Click **Portal** if it is not activated yet.
4. Depending on the view in use, click **Groups** or **Processes**.
5. Click **Navigation** if the navigation bar is not shown.
6. Click a document.
7. Activate the **Documents** tab.
8. Click the model you want to share.
9. Click **Share document**. The dialog opens.
10. Select the user you want to share the document with.
11. Enable **Send copy to me** to receive a copy of the message, if required.
12. You can also enter a subject and a comment.
13. 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**.

IN A MODEL

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 518) the model that contains the document you want to submit a change request for.
4. Click **Diagram** if not enabled yet.
5. Click **Edit >** **Contribute**.
6. Click **Properties**.
7. Activate the **Documents** tab.
8. Select the document you want to share with another user.
9. Click **Share document**. The dialog opens.
10. Select the user you want to share the document with.
11. Enable **Send copy to me** to receive a copy of the message, if required.
12. You can also enter a subject and a comment.
13. Click **Send**.

The selected user receives an e-mail containing the information you entered and a link to the corresponding document.

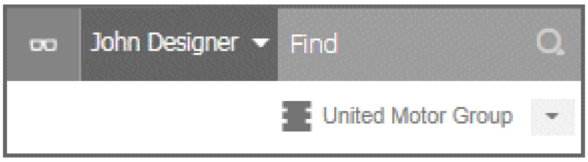
This workflow is a part of ARIS Connect. It can be customized, if required. For example, you can change e-mail texts, add notifications, make changes to dialogs, etc. The integration of complex workflows (standard RCM, change management, etc.) requires the **ARIS Design Server** license or **ARIS Connect** Server extension pack: **Process Governance**.

4.1.5.7 Find a document

You can begin the search for items directly on the start page of ARIS Connect.

Procedure

1. If necessary, select the database (page 496) your search is to be based on.
2. Click in the **Find** box.



3. Enter the relevant term.
   A list with the first results (page 549) 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 document will open.

4.1.5.8 Rename document

You can rename a document.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Enter the new name in the **File name** box.
6. Click **Save**.

The name has been changed.

4.1.5.9 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. Open ARIS document storage.
2. Click a folder in the navigation.
3. Click the relevant document.
4. Click **Open properties**.
5. Click **Relationships**.

The properties of the document are displayed.

4.1.5.10 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. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Open (page 518) the model you want to remove the document from.
4. Click **Diagram** if not enabled yet.
5. Click **Edit >** **Contribute**.
6. Click **Properties**.
7. Activate the **Documents** tab.
8. Click **Remove selected document**.

The document is removed from the model or object and no longer has any relationship to the model or object.

4.1.5.11 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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Versions**.
6. In the row of the relevant version, click **Open version**.
7. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

4.1.5.12 Handle document versions

4.1.5.12.1 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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Versions**.
6. In the row of the relevant version, click **Open version**.
7. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

4.1.5.12.2 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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Versions**.

The different versions of the document are displayed. The change description is in the **Comment** column.

4.1.5.12.3 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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
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.

4.1.5.13 Handle document with Document administrator privilege

4.1.5.13.1 Add documents to ARIS document storage

You can manage documents in your ARIS document storage. You can add more documents to your ARIS document storage.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
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.

4.1.5.13.2 Open/Download document

You can open and edit documents in the ARIS document storage as long as they are not locked.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.

   Click **Download** in the document row.

4. Select **Open with** in your browser.

The document opens if the software required for opening the document is available on your local system.

4.1.5.13.3 Select document manager

You can edit the properties of a document.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Open properties**.
6. Click **Edit >** **Contribute**.
7. Next to the **Person responsible** box, click **Edit**.

   The **Select person responsible** dialog opens.

You can select the person responsible for the document.

4.1.5.13.4 Upload multiple documents

You can upload multiple documents.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click **Upload new version of this document** in the document row.

   The dialog for uploading a document opens.
5. Enter the relevant optional additional information, and click **OK**.

You have uploaded documents.

Administrators can import all documents in a directory to ARIS document storage.

4.1.5.13.5 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.

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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click **Upload new version of this document** in the document row.

   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.

4.1.5.13.6 Sort versions of a document

You can sort versions of a document.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
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.

4.1.5.13.7 Download multiple documents

You can download multiple documents.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
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.

4.1.5.13.8 Move document

You can move a document to another folder.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
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.

4.1.5.13.9 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. Open ARIS document storage.

2. In the navigation, click the arrow next to **ARIS document storage**.
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 document to another folder.

Tip

Enable the check box in front of the **Name** column to select all documents in a directory at once.

4.1.5.13.10 Browse ARIS document storage

You can search for a document.

Prerequisite

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

Procedure

1. Log in to ARIS document storage.
2. 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.
3. Enter the search term.

Possible hits are displayed as soon as you enter the first few letters.

4.1.5.13.11 Lock document

You can lock documents that are in your ARIS document storage to prevent them from being edited by other users.

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Lock document**.

The document is locked for editing by other users. Only you or a Process Governance administrator can unlock the document.

4.1.5.13.12 Unlock document

You can unlock documents that are locked and thus make them availabe to other users for editing.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click the relevant document.
5. Click **Unlock document**.

The document can be edited by other users.

4.1.5.13.13 Delete document from ARIS document storage

You can remove documents from ARIS document storage.

Prerequisite

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

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
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.

4.1.5.13.14 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. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click in 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.

4.1.5.13.15 Delete documents from the repository

You can delete documents permanently from ARIS document storage. You should do this regularly to clean up the repository.

Procedure

1. Open ARIS document storage.
2. In the navigation, click the arrow next to **ARIS document storage**.
3. Click a folder in the navigation.
4. Click **Administrative actions**.
5. Click **Permanently delete deleted documents from document storage**. A confirmation prompt is displayed.
6. Click **OK**.

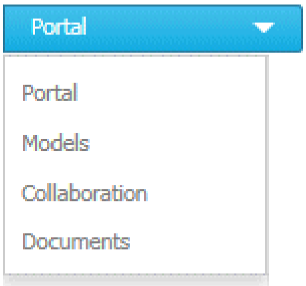
All documents already deleted in this folder are deleted permanently.

4.1.6 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 541) on the start page to access items directly. Or you can use the Search area (page 543) 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:



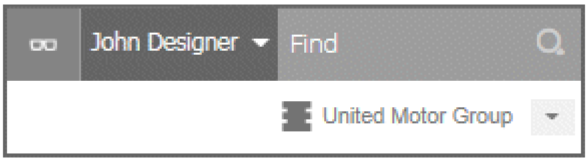
If you use an **ARIS Connect Viewer** license, the **Models** search context is not available. Models found can be opened for editing, but users with **ARIS Connect Viewer** licenses have read-only access to models.

4.1.6.1 Start quick search

You can begin the search for items directly on the start page of ARIS Connect.

Procedure

1. If necessary, select the database (page 496) your search is to be based on.
2. Click in the **Find** box.



3. Enter the relevant term.
   A list with the first results (page 549) 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.

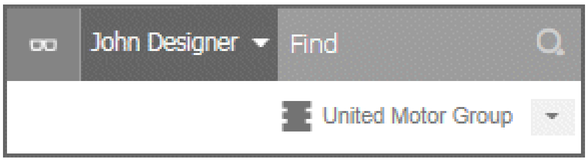
The item opens. For example, if you click the name of an object, it is displayed in the portal. If you click a comment, it is output in Collaboration. If you click the name of a model, the model opens in Model Editor.

4.1.6.2 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 necessary, select the database (page 496) your search is to be based on.
2. Click in the **Find** 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.

4.1.6.3 Open Search area directly

You can open the Search area directly.

Procedure

Open Search area using the menu

1. If necessary, select the database (page 496) your search is to be based on.
2. Click the ▼ **down arrow** beside your user name. The menu opens.
3. Click **Search**.

Open Search area in the portal

1. If necessary, select the database (page 496) your search is to be based on.
2. If you are not in the portal, click **Portal**.
3. Click **Search**.

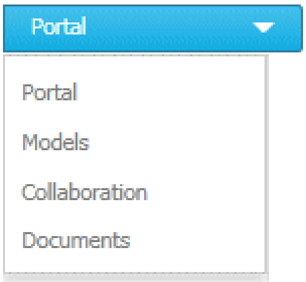
The Search area opens and you can browse ARIS Connect for the relevant terms.

4.1.6.4 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 necessary, select the database (page 496) your search is to be based on.
2. If you are not in the portal, click **Portal**.
3. Click **Search**.
4. Enter the term you want to find. The items found will be presented in a list.
5. Click the down arrow that follows the term you entered and select the search context, e.g., **Portal** or **Documents**.

   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.
6. In the **Filters** area, click the relevant filters and adjust the filter properties as necessary (page 544).

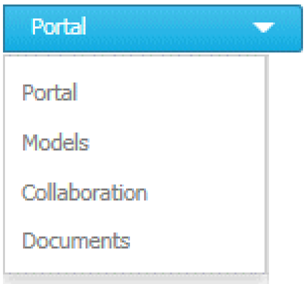
The result of the search will be updated to reflect the search context and filter criteria you specified.

4.1.6.5 Use search context and filters

You can restrict the result in the Search area (page 543) 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, e.g., **Portal**, **Models**, **Collaboration**, or **Documents**.

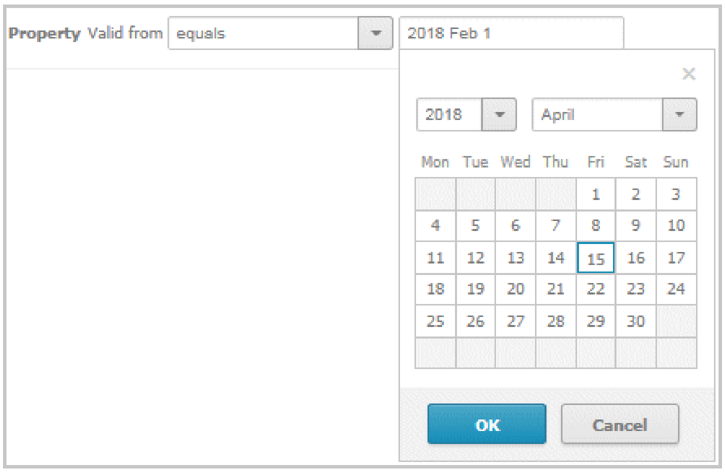


The search result will be restricted to the range you selected. If the search result can be filtered, filter criteria will be listed in the **Filters** area.

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.
   c. Selected filter criteria are listed:

   d. You can enter properties as the search criterion for certain filter criteria, e.g., 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 **Clear all filters** 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.

4.1.6.6 Save filter settings as a favorite

In the Search area (page 550), you can save your filter settings. Thus, you can filter the content based on specific filters at any time.

Procedure

1. Select the filter criteria (page 544) to define your filter.
2. Click ☆ **Save filters as favorites**. The dialog opens.
3. Enter a name.
4. Click **OK**.

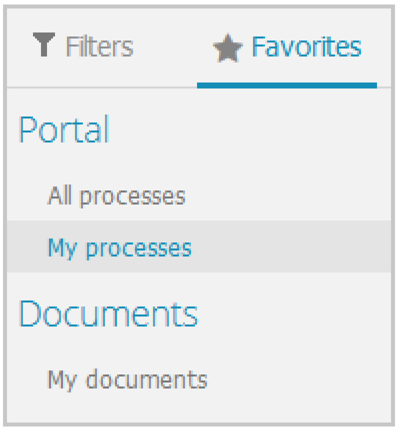
The filter settings are saved in the **Favorites** area. You can filter the content based on these settings (Seite 545) at any time from various devices.

4.1.6.7 Use a favorite in the Search area

In the Search area (page 550), 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.

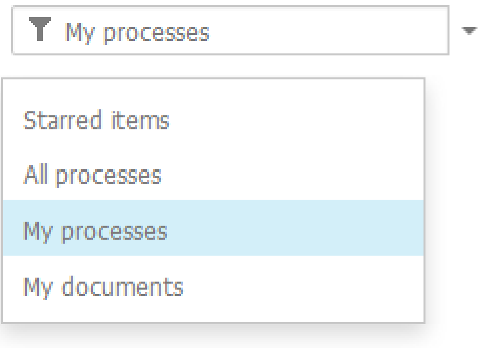
The filter criteria of the selected favorite setting are immediately applied and the list of filter results is updated.

4.1.6.8 Use a favorite in the Favorites area

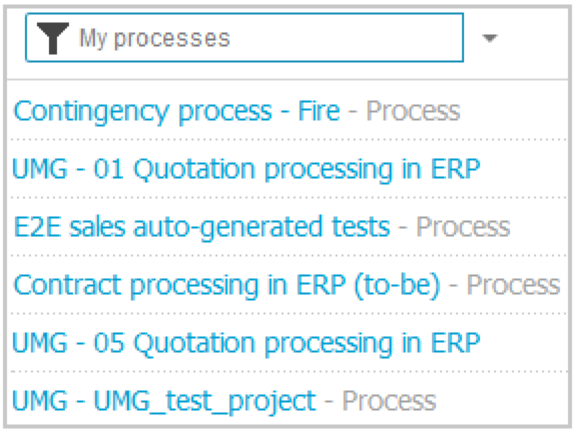
In the Favorites area (page 551), you can open a favorite setting to filter the content based on predefined filter criteria.

Procedure

1. In the Portal, activate the **Favorites** tab.
2. Click the ▼ **down arrow** of the **Filter selection** field.



3. Click the favorite setting of the context caption, e. g., **My processes**. 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.

4.1.6.9 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

To the left of the result list, click a selected filter criterion again or click × **Clear** for a filter criterion.

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.

The filter criteria of the subordinate filter area are removed and the 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.

4.1.6.10 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 543).
2. Hold down the **Ctrl** key, and click the name of the relevant item.

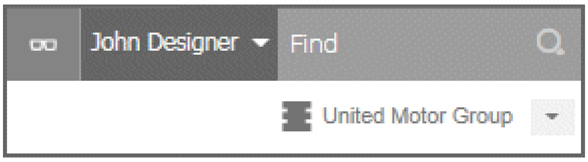
The item will open on a separate tab.

4.1.6.11 Valuable information

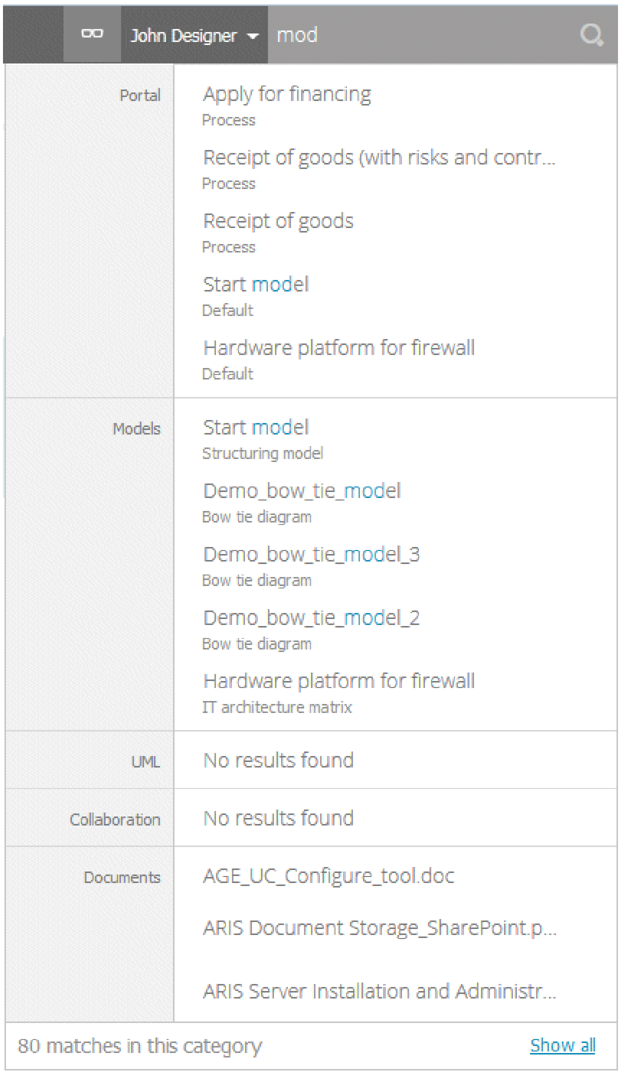
This section provides background information to assist you in carrying out the relevant procedures.

4.1.6.11.1 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:



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 550).

4.1.6.11.2 How is the Search area structured?

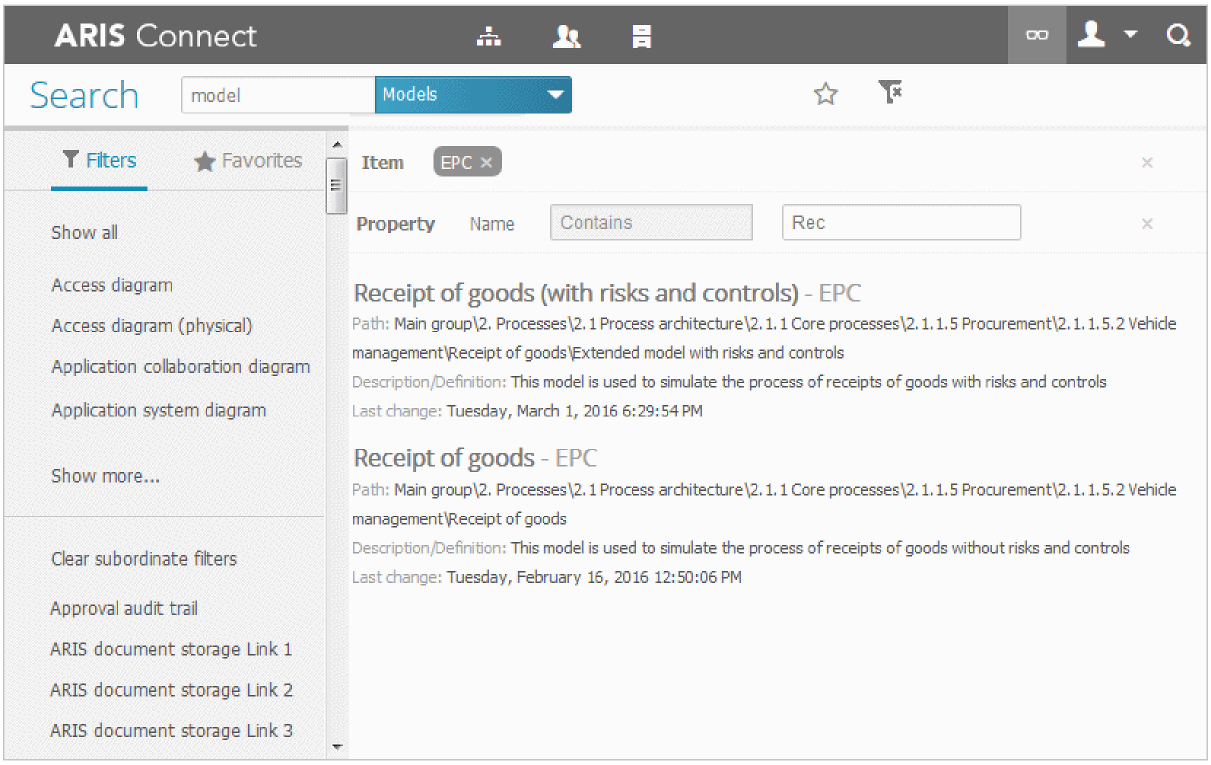
The Search area (page 542) includes a list of all matches.

To the right of the search term you entered, you can select the search context, e.g., **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.

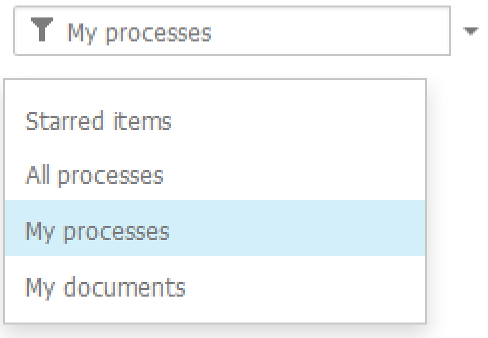
For certain filter criteria, such as the file name, you can enter properties as the search criterion, e.g., a term that should be present in the name.

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.



4.1.6.11.3 How is the Favorites area structured?

The **Filter** area reflects the saved search context. The search contexts are structured by captions, e.g., **Portal** or **Documents**. The saved favorites are grouped under the captions. Thus, you are able to immediately recognize the search contexts of the favorites.



4.1.6.11.4 How can search results be influenced?

If you use quick search (page 541) or the Search area (page 543) to find items, the list of results will be influenced by the selected database (page 496) 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 the Model Editor, 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.

4.1.7 Contribute as a viewer

If you have both the **ARIS Connect Viewer** and **Contribution** license privilege, you can change values of specific items (page 558), create new or reuse existing items (page 553), as well as delete items (page 555) 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.

4.1.7.1 Change values of items

You can change values of items (page 558) 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click **Edit >** **Contribute**. The edit mode (page 557) is enabled.
6. Navigate to the group containing the relevant item.
7. Select the item you want to edit.
8. Activate the **Overview** area if it is not activated yet.
9. Change the relevant attribute. Depending on the attribute, various editing options (page 560) 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 560) if you do not enter a numerical value.

4.1.7.2 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 560). 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click **Edit >** **Contribute**. The edit mode (page 557) 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 563) 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.

4.1.7.3 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 560). 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 Model Editor.

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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click **Edit >** **Contribute**. The edit mode (page 557) 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** area 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 563) 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.

4.1.7.4 Delete items from tables

In the portal, you can delete items from tables.

The following description refers to items in a table (page 560). 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click **Edit >** **Contribute**. The edit mode (page 557) 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.

4.1.7.5 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 560). 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 Model Editor.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click **Edit >** **Contribute**. The edit mode (page 557) 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** area 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.

4.1.7.6 Valuable information

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

4.1.7.6.1 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, default view, or a view derived from these views.

4.1.7.6.2 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:

Edit

Clicking **Edit > Contribute** enables the edit mode.

If the edit mode is active, this is shown in the header:

Edit mode Exit edit mode

Clicking **Exit edit mode** disables the edit mode.

The availability of various edit boxes (page 560) is another clear indication that the edit mode is active.

4.1.7.6.3 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

4.1.7.6.4 Which attributes are you able to edit?

ARIS Viewer Contribution enables you to edit attributes (page 560) 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 560) if you do not enter a numerical value.

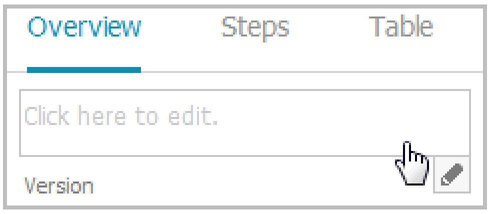
Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

4.1.7.6.5 Which editing options are available?

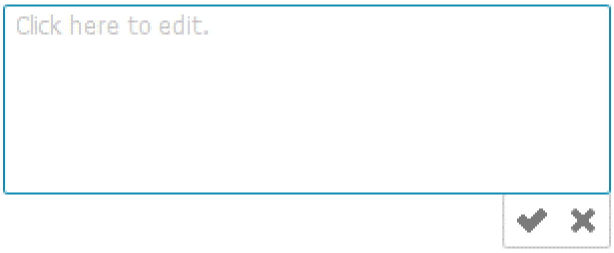
Depending on the attribute (page 559), various editing options are available.

Edit box

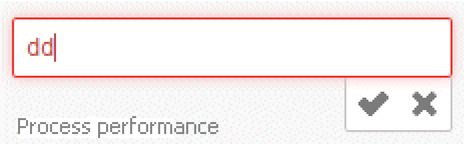
If the edit mode is active (page 557), moving the mouse pointer over an editable property will open the edit box. If no value has been specified yet (page 552), the hint **Click here to edit.** is displayed:



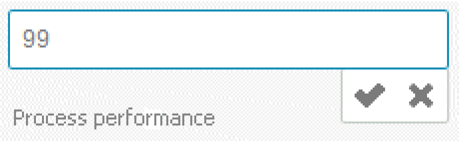
Clicking in the field will open it for editing:



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:

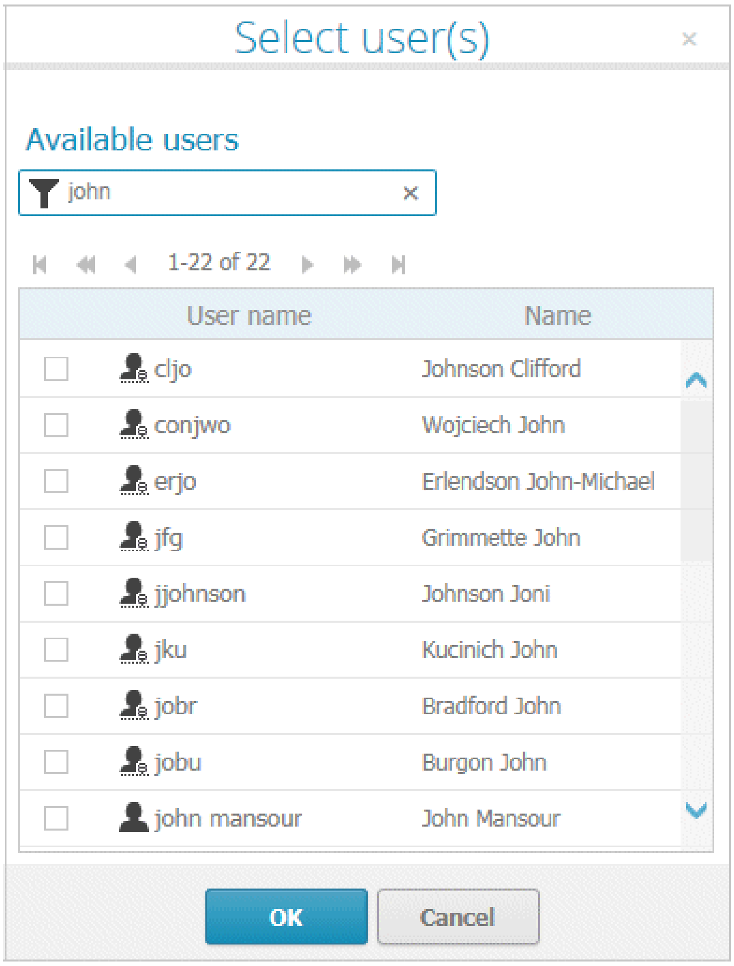


If the entry is correct, the field is displayed without a special characteristic:



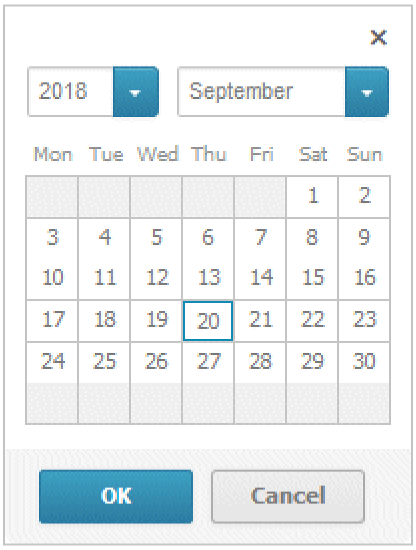
Select user(s)

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, e.g., for the **Responsible** attribute:



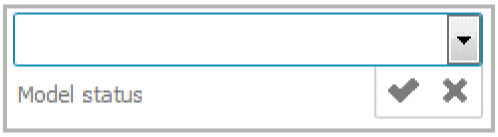
Date input

You can enter dates using the calendar. It opens when you click in the edit box:

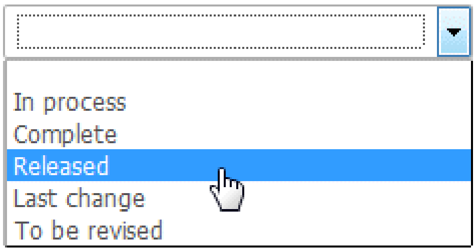


Drop-down list box

For attributes that require the entry of specific values or of Boolean attributes, you can select the appropriate entry, e.g., for the **Model status** attribute:



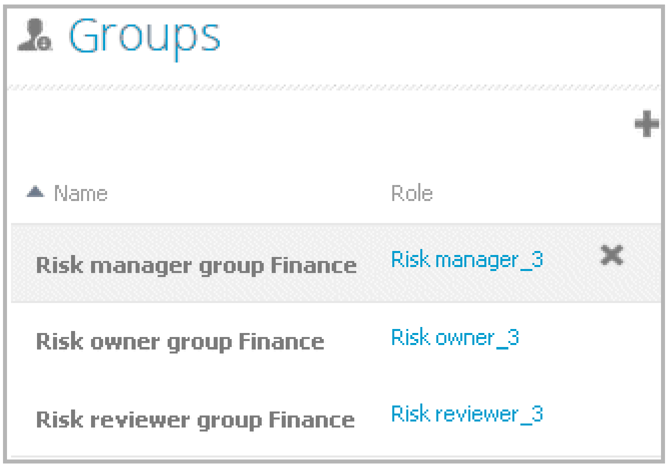
Clicking in the field will offer possible values for selection:



CREATE AND REUSE OBJECTS

Table

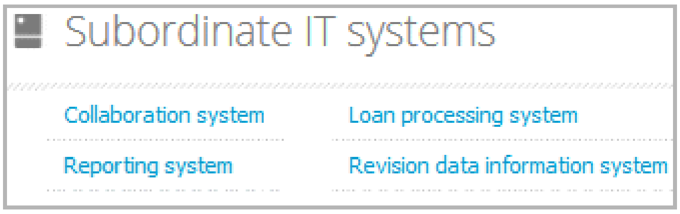
Existing objects are listed in a table. Additional information is displayed in the individual rows:



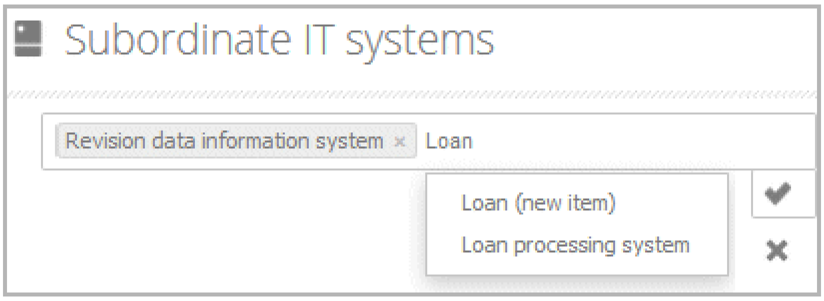
You can add individual objects to the table (page 553) or remove objects from the table (page 555).

List

Existing objects are displayed in a list:



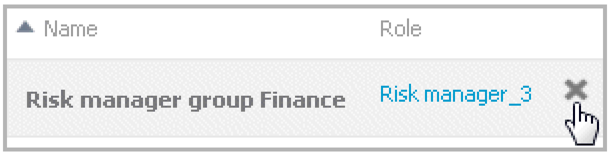
You can create new or reuse existing objects. It is possible to add multiple items at once. Click in the field and enter the names for the required items. Once your input is complete, click ✔ **Change**:



DELETE OBJECTS

You can delete objects from tables (page 555) and lists (page 556):

Table



List

4.1.7.6.6 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.

4.1.8 Manage SAP Solutions

Process-Driven Management for SAP® Solutions is available, if you have selected this topic in the Perspective Wizard.

You can refine and evaluate your business processes in ARIS. This enables you to optimize your business processes.

Depending on the SAP Solution Manager® version in use, you need to configure the system differently (see Using SAP Solution Manager 7.2 and Using SAP Solution Manager 7.1. All other procedures are version-independent.

ARIS video tutorial

Process-Driven SAP Management Two-Minute Explainer (http://www.softwareag.com/corporate/rc/rc_perma.asp?id=tcm:16-97174)

Connectivity for SAP Solutions in ARIS, 4 minutes (http://www.softwareag.com/corporate/rc/rc_perma.asp?id=tcm:16-116500)

4.1.8.1 Run SAP® transaction

Run transactions 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.

Procedure

1. Open ARIS Connect and log in with your user name and password.
2. Click **Portal** if it is not activated yet.
3. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Navigate to the relevant model ot 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.

4.1.8.2 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. Depending on the view in use, click **Groups** or **Processes**.
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 564) you need to log on to the SAP system again.

4.1.8.3 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Open 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.

4.1.8.4 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**.

4.1.8.5 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 (page 566).

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.

4.1.9 Use RACI matrix

Using the RACI matrix you can represent and analyze responsibilities that exist within a process (page 570). RACI is short for **R**esponsible, **A**ccountable, **S**upportive, **C**onsulted, and **I**nformed.

The matrix shows which organizational unit participates in activities of a process and in what manner:

- **R**esponsible 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. Execution responsibility must be assigned to at least one role, although others (see **Supportive**) can be delegated to assist in the work required.
- **A**ccountable 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, i.e., the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **S**upportive relates to the person supporting the person responsible (see 'Responsible') in performing the activity.
- **C**onsulted 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.

4.1.9.1 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** privilege.

Procedure

1. Create a process model (page 570).
2. Use objects (page 570) 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 569).

4.1.9.2 Display RACI matrix

A RACI matrix can display the activities of a process and the associated organizational responsibilities.

Procedure

1. Activate the 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**.
4. Show the **Navigation** bar if it is not visible yet.
5. In the **Navigation**, open the group in which the required process (page 570) 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 462) and default view. You can configure the representation as RASCI matrix. Please contact your local Software AG sales organization (http://softwareag.com).

You can use the RA(S)CI - Output organizational participations in processes (page 600) report to output the RACI matrix in Microsoft® Excel format from an open process model (page 660). 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**.

4.1.9.3 Valuable information

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

4.1.9.3.1 Which diagrams can be used for a RACI matrix?

A RACI matrix can be based on the following diagramms:

- 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**)

4.1.9.3.2 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)

4.1.9.3.3 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)

4.1.10 Use Mini workflows

4.1.10.1 Edit models

You can edit models in ARIS Connect.

Prerequisite

- You have the **ARIS Connect Designer** 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. Depending on the view in use, click **Groups** or **Processes**.
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 the Model Editor 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**.

4.1.10.2 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click the model you want to send to another user.

6. Click **Share model**. The 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**.

4.1.10.3 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.
- 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. Depending on the view in use, click **Groups** or **Processes**.
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 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 ARIS Process Board.

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**.

4.1.10.4 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. Depending on the view in use, click **Groups** or **Processes**.
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 the Model Editor on an individual tab.
7. Make the required changes.
8. Click **Collaboration** if it is not activated yet.
9. 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.
10. Click **OK**. The model reopens read-only and the **Request approval** dialog is displayed.
11. If required, select a person in charge to approve the model if the **Person responsible** attribute has not been specified at the model.
12. Enter a comment to explain the approval request.
13. Click **Send**. A completion message is displayed.
14. Click **OK**.

The person responsible receives an e-mail with the relevant information and a link to the associated task in ARIS Process Board. 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**.

4.1.10.5 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Click the model for which you want feedback.
6. Click **Comment** if the **Comment** bar is not open yet.
7. Enter your comment in the box provided.
8. Click **Tag**.
9. Enter the words to be used as keywords (page 649) in the tag input box, e.g., 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 the Enter key 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 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 below the process 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**.

4.1.10.6 Inform owner of change

You can inform the model owner of model changes you have made in the portal (page 552). 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. Depending on the view in use, click **Groups** or **Processes**.
4. Click **Navigation** if the navigation bar is not shown.
5. Navigate to the items and change the relevant attributes (page 552). Depending on the attributes, various editing options (page 560) 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**.

4.1.11 Use dashboards

Based on a ARIS Aware (page 602) license, you can create and display predefined dashboards that are delivered by default or self-provided dashboards.

4.1.11.1 Open a dashboard in ARIS Connect

You can open a dashboard available in ARIS Connect. The dashboard is displayed in view mode of the dashboard editor.

The dashboards and the relevant data feeds are provided in the ARIS Connect **Repository** ().

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 detail.

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Dashboards**.
5. To open a dashboard click the relevant dashboard name.

The dashboard selected is opened 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 the **Edit dashboard** icon in the main menu.

4.1.11.2 Create a dashboard in ARIS Connect

ARIS Connect enables you to create your own dashboards.

By default, dashboards and the relevant data feeds are provided in the ARIS Connect Repository ( ).

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Dashboards**.
5. Click New.

   The dashboard editor is opened in edit mode.
6. Configure and save your dashboard by using the dashboard editor.
7. Click **Refresh**.

Your dashboard is created and available in the **Dashboards** list in the ARIS Connect Repository ( ).

4.1.11.3 Open a data feed in ARIS Connect

You can open a data feed available in ARIS Connect. The data feed is opened in the data feed editor.

The dashboards available and the relevant data feeds are provided in the ARIS Connect **Repository** ( ).

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Data feeds**.
5. To open a data feed click the relevant data feed name.

The data feed selected is opened in the data feed editor.

By using the data feed editor you can edit the data feed currently opened, provided you have the **Dashboard administrator** function privilege.

4.1.11.4 Create a data feed in ARIS Connect

ARIS Connect enables you to create your own data feeds.

By default, dashboards available and the relevant data feeds are provided in the ARIS Connect Repository ().

Prerequisite

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

Procedure

1. Start ARIS Connect.
2. Activate the **Repository**.
3. Activate the **Dashboard & Data feeds** tab.
4. Click **Data feeds**.
5. Click New.

   The data feed editor is opened.
6. Configure and save your data feeds by using the data feed editor.
7. Click **Refresh**.

Your data feed is created and available in the **Data feeds** list in the ARIS Connect Repository ().

4.1.11.5 Show dashboards

You can show dashboards for various items. The following example is based on predefined dashboards by default that are contained in the supplied **United Motor Group** database and the Classic view (page 459).

Prerequisite

Dashboards are configured for the items selected.

Procedure

1. In the Portal, select (page 496) the **United Motor Group** database.
2. Click **Groups**. The Group tree opens.
3. Click **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 607) 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 607) dashboard.
5. Click the **Dashboards** fact sheet. The model's dashboards are shown. You can switch between the Process Change Management (page 610) and the CoE - Local Maturity (page 607) dashboards.

You have shown different dashboards by default.

4.1.12 Valuable information

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

4.1.12.1 In which order are object occurrences displayed?

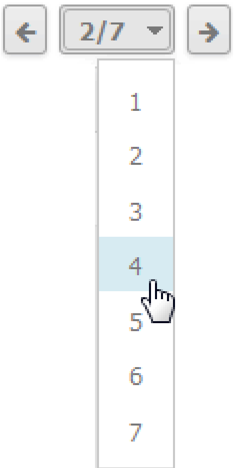
You can display where occurrences of an object are used and select the required occurrence using the navigation controls.

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:



4.1.12.2 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 459) and the default view. These views are defined in configuration sets, which cannot be changed. However, administrators can define multiple modified modification sets, based on these templates.

4.1.12.3 What is the structure of the classic view?

If the administrator provides at least one database, this view shows all content relevant to you in a clear structure:

- Home (page 461)
- Groups (page 462)
- Glossary (page 474)

If your administrator has published multiple databases, these are available for selection United Motor Group . You can switch between the published databases as required.

You only see information in the portal that is relevant to you. This is controlled in user management by administrators.

You can activate role filters (page 510) to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

Overview

The Overview gives you access to some tabs that allow you to start working with ARIS Connect rapidly.

Start

Find people

Activates Collaboration where you find people (page 638) you want to discuss with, for example.

Start discussion

Activates Collaboration where you can start a new discussion (page 638).

Process Board

Opens ARIS Process Board, where you can edit tasks that are assigned to you.

Navigation

Enables you to browse the ARIS Connect content for models and objects.

Show profile

Opens your profile page. You can edit your data or add an image.

Search

Opens the Search (page 550) area where you can search for ARIS Connect content. You can use filters, for example, to display just the model and objects, UML content, or Collaboration entries.

Recent changes

Shows all links to models that were changed recently.

My content

Shows the current activities you are following in Collaboration (page 639) or in the portal (page 507).

Favorites

Provides direct access to saved filter criteria (Seite 504) of the **Favorites** area of the search and to models a user selected as a favorite element.

Contacts

Lists your contacts.

My activities

Shows the current activities you are following in Collaboration or in the portal (page 639).

4.1.12.4 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, this view shows all content relevant to you in a clear structure:

- Processes (page 478)
- Organization (page 489)
- IT systems (page 490)
- Glossary (page 493)

If your administrator has published multiple databases, these are available for selection United Motor Group. You can switch between the published databases as required.

You only see information in the portal that is relevant to you. This is controlled in user management by administrators.

You can activate role filters (page 510) to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

Important for me

Displays processes in which the user logged in or their group is modeled, as well as application systems for which the user or user group is responsible. Processes are models of the **EPC** type (event-driven process chain).

My activities

Shows the current activities you are following in Collaboration or in the portal (page 639).

4.1.12.5 When can UML content be displayed?

You can display UML content in ARIS Connect under the following conditions:

- You use the classic configuration set.
- The database with UML content you are using has been assigned a filter 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.

4.1.12.6 Where is UML content displayed?

UML content is displayed in the same way as other ARIS content. You can use the groups (page 462) 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.

4.1.12.7 What is the context for executable processes?

The execution context determines from which items (database, group, model/object type, document), in which applications (e.g., 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.

4.1.12.8 What are role filters?

You only see information in the portal that is relevant to you. This is controlled in user management by administrators.

You can activate role filters (page 510) to further restrict this content. Role filters are available only if roles are assigned (page 509) to your user in models and the portal has been configured for the use of role filters.

WHAT INFORMATION IS FILTERED BY A ROLE FILTER?

When you open a diagram, all information is displayed unfiltered. You can also navigate using assignments. If you view processes step by step (page 498), all steps are displayed. The detailed information about the satellites is filtered according to the selected role.

Tables, fact sheets, and RACI matrices contain only role-specific information. You only access filtered information via the search and the navigation.

If you click **Off**, the role filter is deactivated and you see your entire content again.

4.1.12.9 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 560) that are based on the following base types:

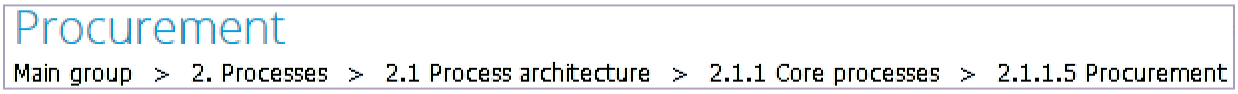
- Boolean
- Value
- Floating point number domain
- Integer domain
- Floating point number
- Integer
- Date
- One-liner
- Multi-line text
- Link/File

Text formatting is ignored and cannot be assigned. If you are expected to enter numbers, the field is colored red (page 560) if you do not enter a numerical value.

Please note that combined attributes and Binary Large Object (BLOB) attributes are not supported.

4.1.12.10 What is the breadcrumb navigation?

Text line that displays the path to the selected object within the database structure. The individual path elements are available as a link. By clicking a path element, you jump directly to the relevant place in the structure.



4.1.12.11 What reports are available?

The Reports bar provides various reports. Depending on the model type you have opened, the reports offered may vary because only the reports related to the corresponding model type are displayed.

Create process manual (page 590)

Export graphic as PDF (page 591)

Generate job description (page 592)

Output functions across multiple assignment levels (page 594)

Output functions with connected objects (page 596)

Output model information (page 597)

Output model information considering various aspects (page 598)

Output object information (page 599)

Process manual (example) (page 599)

RA(S)CI - Output organizational participations in processes (page 600)

4.1.12.11.1 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

4.1.12.11.2 Export graphic as PDF

USE

This report exports a model graphic as a PDF file.

CONTEXT

Models

OUTPUT FORMAT

PDF

4.1.12.11.3 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

4.1.12.11.4 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, e.g., 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

4.1.12.11.5 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
- XLS

4.1.12.11.6 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

4.1.12.11.7 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

4.1.12.11.8 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
- DOCX
- ODT

4.1.12.11.9 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

4.1.12.11.10 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 with 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:

- **R**esponsible 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. Execution responsibility must be assigned to at least one role, although others (see **Supportive**) can be delegated to assist in the work required.
- **A**ccountable 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, i.e., the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **S**upportive relates to the person supporting the person responsible (see 'Responsible') in performing the activity.
- **C**onsulted 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.
- **I**nformed 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

4.1.12.12 What report output formats exist?

When you click the output button in the Reports bar, for example, **Output PDF**, the report is output in the selected format. You can change the output format by clicking the down arrow. The selection of output formats may be restricted based on the report. Possible output formats are:

PDF

DOC

DOCX

ODT

RTF

HTML

TXT

XLS

XLSX

XML

4.1.12.13 What is ARIS Aware (Dashboards)?

You can use the product ARIS Aware as visualizing component of ARIS Connect. Using ARIS Aware you combine information from many sources and visualize data as KPIs in charts on dashboards. ARIS Aware supports users in different departments across the enterprise with dashboards for evaluating a wide variety of data. It improves the transparency of the business and allows you to make the best decisions based on reliable data analytics. 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 604), Business Usage Monitoring (page 624), Enterprise Architecture Management (page 628), Customer Experience Management (CXM) (page 614), Process Performance Management and Governance, Risk and Compliance Management. These templates can be extended and customized according to the individual needs of a company.

4.1.12.14 What are the ARIS Aware fields?

ARIS Aware can be divided into the fields **Create dashboards and data feeds, store data**, **read data**, **configure dashboards**, and **show dashboards**.

In the following the data collection via reports is described. Naturally, other kinds of data collection are possible, e. g., via data files that are manually uploaded to ARIS document storage (page 534).

CREATE DASHBOARDS AND DATA FEEDS

There, dashboards (page 578) and data feeds (page 579) are created and connected. Dashboards and data feeds are stored on the defined server.

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

If the data are requested to show dashboards, they are loaded from the ARIS document storage database and combined with extracted ARIS attributes of 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 portal and 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 580).

4.1.12.15 What is an alias of a URL?

An alias is always recommended to shorten the link used in dashboards and data feeds. You have to enter the path where the data are stored only, and not the complete URL.

This also enables the import of such data to a different server. In this case, you have to adapt the alias only .

4.1.12.16 What dashboards are available by default?

ARIS Aware offers many demo dashboards by default. Dashboards consist of charts that offer different visual analyses of the **United Motor Group** database content.

4.1.12.16.1 Based on Center of Excellence (CoE)

Here you can find information about Center of Excellence dashboards delivered by default. Consequently, the dashboards provide information about leadership and best practice for the focus area business concept via Business Process Modeling.

4.1.12.16.1.1 CoE - Aggregated Maturity Overview

The dashboard is shown on the **Overview** fact sheet of process models. It shows an aggregated view of all process models, considering the connect hierarchy as defined in the configuration, starting from the top level model, e.g., a Value-added chain diagram, down to the last level process model, e.g., level 4 EPC. The progress of the models in the hierarchy (subordinated models), is weighted by 70 % by default.

CHARTS

Aggregated maintaining progress

Shows the percentage of maintaining progress.

Data source
Model/Database content

Calculation
Calculates the aggregated percentage of the mandatory properties to be maintained, such as person responsible, validity date, etc.

Aggregated model count

Shows the count of involved process models.

Data source
Model/Database content

Calculation
Counts the processes modeled in the corresponding hierarchy level.

Aggregated release progress

Shows the percentage of processes that are not completed (not set), completed, and released.

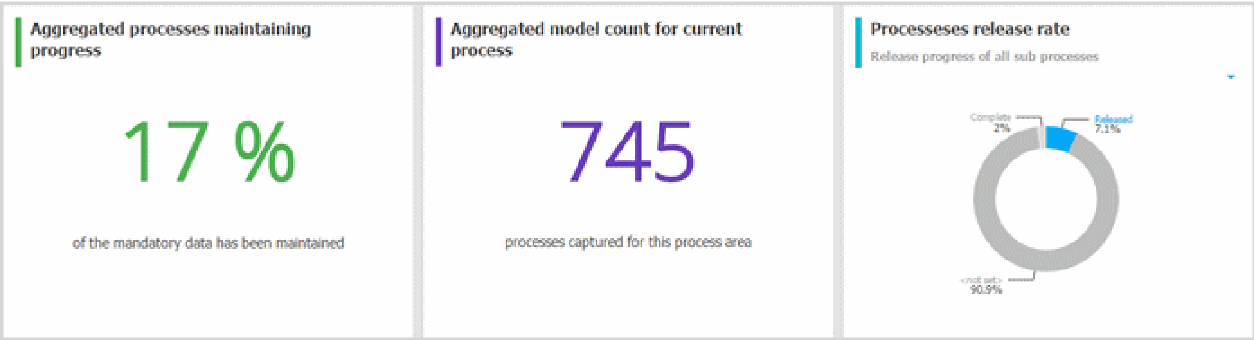
Data source

Model/Database content

Calculation

Determines the percentage of processes that are not completed (not set), completed, and released.

EXAMPLE



4.1.12.16.1.2 CoE - Aggregated Maturity Diagram

The dashboard is shown on the **Diagram** fact sheet of process models. It shows an aggregated view of all process models, considering the connect hierarchy as defined in the configuration, starting from the top level model, e.g., a Value-added chain diagram, down to the last level process model, e.g., level 4 EPC. The progress of the models in the hierarchy (subordinated models), is weighted by 70 % by default.

CHARTS

Aggregated maintaining progress

Shows the count of maintaining progress concerning models.

Data source

Model/Database content

Calculation

Aggregates the count of the mandatory properties to be maintained, such as person responsible, validity date, etc.

Aggregated summary of mandatory properties

Shows the mandatory properties and lists the number of not yet maintained properties.

Data source

Model/Database content

Calculation

Counts the properties that are not yet maintained.

Aggregated model age distribution

Shows in percentage terms how long processes have not been changed.

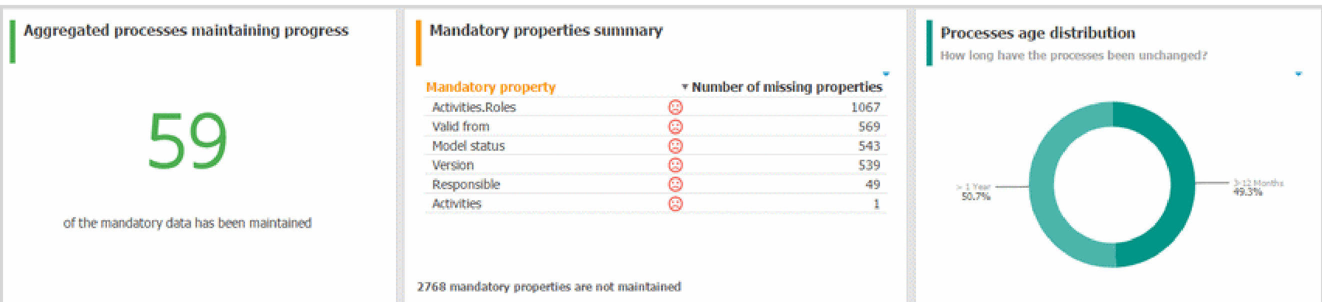
Data source

Model/Database content

Calculation

Evaluates the **Last change** attribute of the models as basis of the percentage that shows how long models are not changed. Unchanged models are categorized in time frames like **3-12 Months** or **> 1 Year**.

EXAMPLE



4.1.12.16.1.3 CoE - Local Maturity # Dashboard

The dashboard is shown for selected process models and organizational charts.

CHARTS

Number of change requests for the model

Shows the number of change requests that has been submitted for the model by using the **Submit change request** mini workflow.

Data source

Model/Database content

Calculation

Counts and evaluates the number of submitted change requests.

Result of the semantic check

Shows the result of the **Mandatory semantic check** semantic check as symbol.

Data source

Model/Database content

Calculation

Accesses the result of the **Mandatory semantic check** semantic check.

Status of mandatory properties

Shows the maintained and total number of mandatory properties.

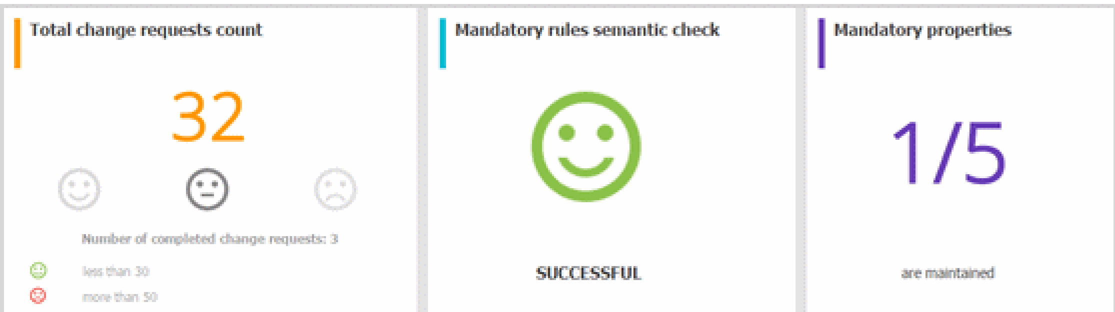
Data source

Model/Database content

Calculation

Evaluates how many mandatory properties are maintained compared to the total number of mandatory properties. The mandatory properties by default are **Model status**, **Person responsible**, **Version**, **Validity**, and **Activities**.

EXAMPLE



4.1.12.16.1.4 CoE - Global Maturity

The dashboard is shown for all process models and organizational charts within the database.

CHARTS

Validity date status

Shows, based on the property **Validity**, when the models will expire.

Data source

Model/Database content

Calculation

Evaluates the **Validity** attribute of all process models and organizational charts within the database.

Validity date overview

Lists the process models and organizational charts together with their **Validity** attributes in a table.

Data source

Model/Database content

Calculation

Evaluates the **Validity** attribute of all process models and organizational charts within the database.

Most shared processes

Shows the number of model sharing based on the **Share model** mini workflow.

Data source

Model/Database content

Calculation

Counts and evaluates the number of model sharings.

Owners with process responsibilities

Shows how often persons are assigned to process models as owner.

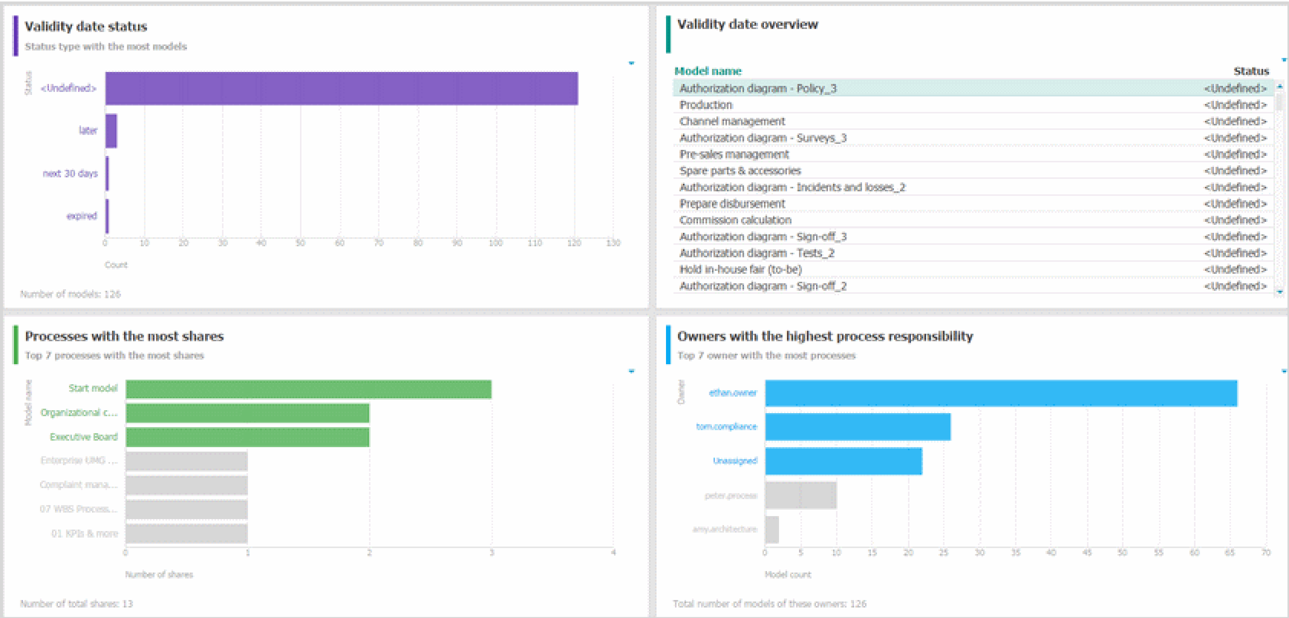
Data source

Model/Database content

Calculation

Evaluates the **Person responsible** attribute of all process models in the database.

EXAMPLE


Validity date status
Status type with the most models
Status
<Undefined>
later
next 30 days
expired
0 10 20 30 40 50 60 70 80 90 100 110 120 130
Count
Number of models: 126
Validity date overview
Model name
Status
Authorization diagram - Policy_3 <Undefined>
Production <Undefined>
Channel management <Undefined>
Authorization diagram - Surveys_3 <Undefined>
Pre-sales management <Undefined>
Spare parts & accessories <Undefined>
Authorization diagram - Incidents and losses_2 <Undefined>
Prepare disbursement <Undefined>
Commission calculation <Undefined>
Authorization diagram - Sign-off_3 <Undefined>
Authorization diagram - Tests_2 <Undefined>
Hold in-house fair (to-be) <Undefined>
Authorization diagram - Sign-off_2 <Undefined>
Processes with the most shares
Top 7 processes with the most shares
Model name
Start model
Organizational c...
Executive Board
Enterprise UMG ...
Complaint mana...
07 WBS Process...
01 KPIs & more
0 1 2 3 4
Number of shares
Number of total shares: 13
Owners with the highest process responsibility
Top 7 owner with the most processes
Owner
ethan.owner
tom.compliance
Unassigned
peter.process
amy.architecture
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70
Model count
Total number of models of these owners: 126

4.1.12.16.1.5 CoE - Process Change Management

The dashboard shows governance information based on Process Governance.

CHARTS

Processes with change request

Shows the number of open change requests and the percentage of running and completed change requests that have been submitted for the models by using the **Submit change request** mini workflow.

Data source

Model/Database content

Calculation

Counts and evaluates the number of submitted change requests.

Number of overall change requests

Shows the total number of change requests that have been submitted for the models within three months by using the **Submit change request** mini workflow and how many of them are completed.

Data source

Model/Database content

Calculation

Counts and evaluates the number of submitted change requests.

Change requests over time

Shows the development of change requests within three months for the models based on the submission date of the change requests of the **Submit change request** mini workflow.

Data source

Model/Database content

Calculation

Evaluates the submission date of the change requests.

Processes with pending change requests

Shows seven models with the most open change requests.

Data source

Model/Database content

Calculation

Evaluates the state of the change requests.

Process owners with most change requests

Shows seven process owners with the most open change requests.

Data source

Model/Database content

Calculation

Evaluates the states and assignments of the change requests.

Processes in realization step

Shows the percentage of realized and evaluated change requests and in addition the number of open and the number of total change requests.

Data source

Model/Database content

Calculation

Evaluates the states of the change requests.

Change request overview

Shows the single change requests in the current steps with dates, owner, and status in a table.

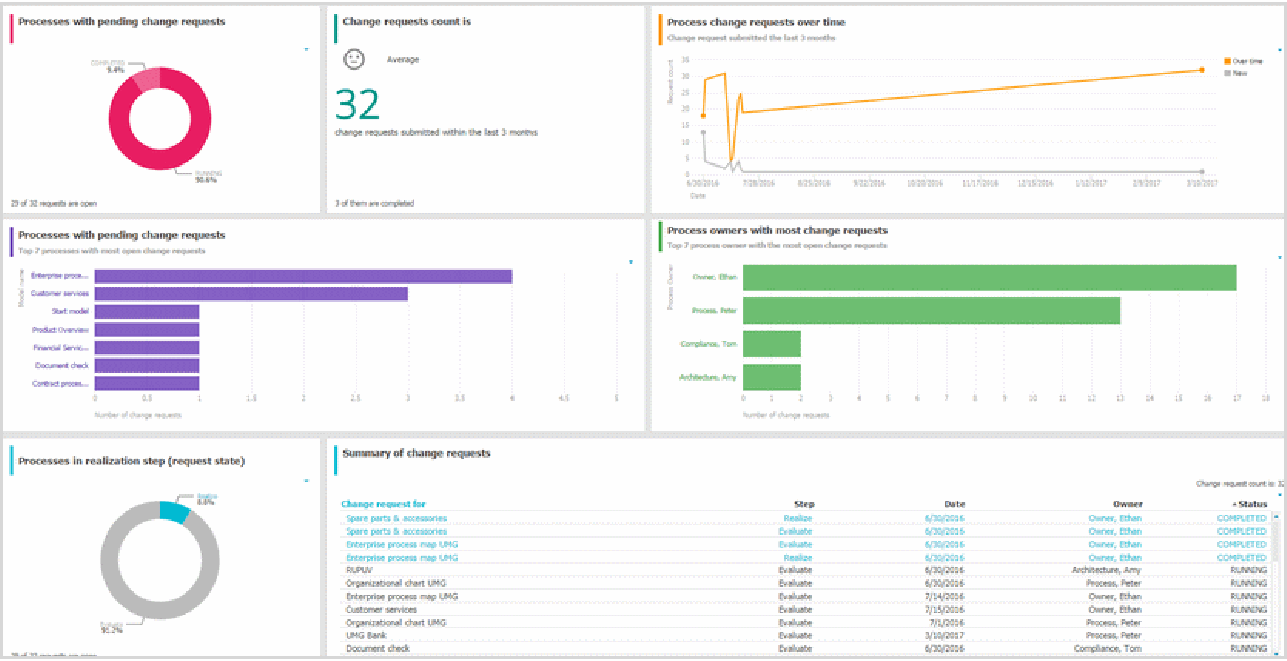
Data source

Model/Database content

Calculation

Lists all change requests with data.

EXAMPLE



4.1.12.16.1.6 CoE - Human Task

The dashboard shows overall governance information about the human tasks submitted by Process Governance.

CHARTS

Number of all human tasks

Shows the number of all human tasks independent from the Process Governance process. The human tasks include, e. g., change requests, approvals, and custom Process Governance workflows. The Dashboard **CoE - Human tasks** can be filtered by using database and model context as well as by task information such as status and priority.

Data source

Model/Database content

Calculation

Counts all human tasks.

Human tasks over time

Shows when the most human tasks are submitted and assigned over time. The Dashboard **CoE - Human tasks** can be filtered by using database and model context as well as by task information such as status and priority.

Data source

Model/Database content

Calculation

Counts the number of human tasks that are daily submitted and assigned within a period selected.

Human tasks details

Lists the human tasks with details such as **Priority**, **Creation date**, **Status**, and **Participant**. The Dashboard **CoE - Human tasks** can be filtered by using database and model context as well as by task information such as status and priority.

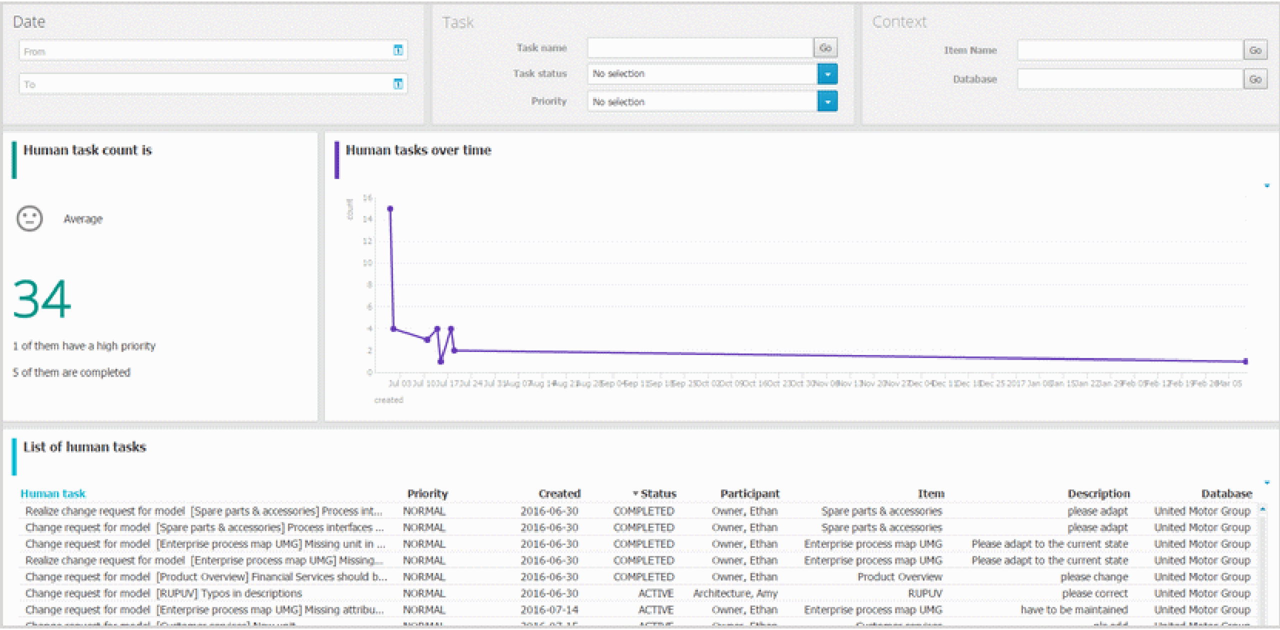
Data source

Model/Database content

Calculation

Lists all human task including details in a table.

EXAMPLE


Date
From
To
Task
Task name
Go
Task status
No selection
Priority
No selection
Context
Item Name
Go
Database
Go
Human task count is
Average
34
1 of them have a high priority
5 of them are completed
Human tasks over time
count
created
List of human tasks
Human task
Priority
Created
Status
Participant
Item
Description
Database
Realize change request for model [Spare parts & accessories] Process int... NORMAL 2016-06-30 COMPLETED Owner, Ethan Spare parts & accessories please adapt United Motor Group
Change request for model [Spare parts & accessories] Process interfaces ... NORMAL 2016-06-30 COMPLETED Owner, Ethan Spare parts & accessories please adapt United Motor Group
Change request for model [Enterprise process map UMG] Missing unit in ... NORMAL 2016-06-30 COMPLETED Owner, Ethan Enterprise process map UMG Please adapt to the current state United Motor Group
Realize change request for model [Enterprise process map UMG] Missing... NORMAL 2016-06-30 COMPLETED Owner, Ethan Enterprise process map UMG Please adapt to the current state United Motor Group
Change request for model [Product Overview] Financial Services should b... NORMAL 2016-06-30 COMPLETED Owner, Ethan Product Overview please change United Motor Group
Change request for model [RUPUV] Typos in descriptions NORMAL 2016-06-30 ACTIVE Architecture, Amy RUPUV please correct United Motor Group
Change request for model [Enterprise process map UMG] Missing attribu... NORMAL 2016-07-14 ACTIVE Owner, Ethan Enterprise process map UMG have to be maintained United Motor Group

4.1.12.16.2 Based on Customer Experience (CXM)

Dashboards based content that is collected from Customer Experience (CXM) models.

4.1.12.16.2.1 Customer experience

Dashboard with an overall overview about the Customer experience and charts that show Customer experience from different angles.

CHARTS

Number of affected internal processes

Number of internal processes affected by customer touchpoints with bad experience.

Data source

Report: CXM - Analyze customer experience

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Collects all Customer journeys reachable from the current Customer journey landscape by following the Customer journey maps assigned. For each Customer journey map:

- Checks for all Customer touchpoint if there is a connection to an internal process.
- Counts all Customer touchpoints that have a connection to an internal process.
- Checks for every Customer touchpoint if the **Pain point** attribute is specified.
- Counts the Customer touchpoints with an activated **Pain point** attribute type (value **true**).
- Checks for every Customer touchpoint if the **Moment of truth** attribute is specified.
- Counts the Customer touchpoints with an activated **Moment of truth** attribute type (value **true**).
- Checks for every Customer touchpoint if the **Best practice** attribute is specified.
- Counts the Customer touchpoints with an activated **Best practice** attribute type (value **true**).

Data feed

CXM - Analyze customer experience

Calculation

Aggregated number of internal processes affected by customer touchpoints with bad experience.

Percentage of critical customer touchpoints

Overview of the percentage of critical customer touchpoints.

Data source
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
-.-

Data feed
CXM - Analyze customer experience

Calculation
Aggregated number of Customer touchpoints for which the **Pain point** attribute type is specified over the aggregated number of Customer touchpoints multiplied by 100.

Overall customer experience

Distribution of customer feelings over the whole customer journey landscape.

Data source
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
Context: **Customer journey landscape** model type.

Data are collected from all reachable Customer journeys via the current **Customer journey landscape** model type.

All contained **Customer touchpoint** occurrences of each Customer journey map are collected. The following data is count:

- 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 **Customer feeling** values (positive, neutral, negative).

Customer journeys with good customer experience

Top seven customer journeys with good customer experience.

Data source

Report: CXM - Analyze customer experience (TOP7)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Data are collected from all reachable Customer journeys via the current **Customer journey landscape** model type.

All contained **Customer touchpoint** occurrences of each Customer journey map are collected and all Customer touchpoints are count for which the **Customer feeling** attribute type is set to **Positive**.

Data feed

CXM - Analyze customer journeys

Calculation

Number of customer touchpoints for which the **Customer feeling** attribute type is specified with the value **Positive** over number of customer touchpoints per customer journey.

Customer journeys with bad customer experience

Top seven customer journeys with bad customer experience.

Data source

Report: CXM - Analyze customer experience (TOP7)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Data are collected from all reachable Customer journeys via the current **Customer journey landscape** model type.

All contained **Customer touchpoint** occurrences of each Customer journey map are collected and all Customer touchpoints are count which have an activated **Pain point** attribute type (value **true**).

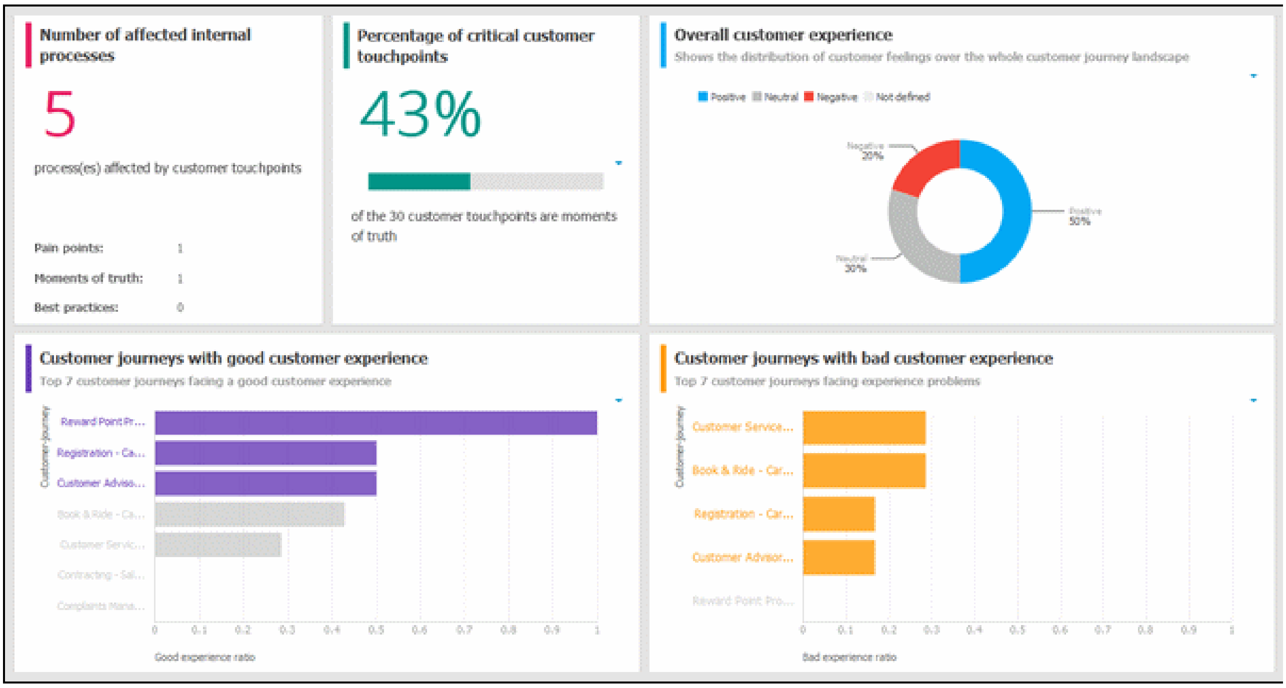
Data feed

CXM - Analyze customer journeys

Calculation

Number of Customer touchpoints for which the **Pain point** attribute type is activated over number of Customer touchpoints per Customer journey.

EXAMPLE


Number of affected internal processes
5
process(es) affected by customer touchpoints
Pain points: 1
Moments of truth: 1
Best practices: 0
Percentage of critical customer touchpoints
43%
of the 30 customer touchpoints are moments of truth
Overall customer experience
Shows the distribution of customer feelings over the whole customer journey landscape
Positive
Neutral
Negative
Not defined
Negative 20%
Positive 50%
Neutral 30%
Customer journeys with good customer experience
Top 7 customer journeys facing a good customer experience
Customer journey
Reward Point Pr...
Registration - Ca...
Customer Adviso...
Book & Ride - Ca...
Customer Servic...
Contracting - Sal...
Complaints Mana...
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Good experience ratio
Customer journeys with bad customer experience
Top 7 customer journeys facing experience problems
Customer journey
Customer Service...
Book & Ride - Car...
Registration - Car...
Customer Advisor...
Reward Point Pro...
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Bad experience ratio

4.1.12.16.2.2 Responsibilities

Customer experience dashboard with business units and channel evaluations.

CHARTS

Business units with good experience

Top seven business units with good customer experience.

Data source

Report: CXM - Responsibility (Ownership)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the current Customer journey landscape, all contained **Ownership** occurrences of the **Ownership** row and the associated Customer touchpoints of each Customer journey map are collected. Checks every Customer touchpoint and counts it, if the **Customer feeling** attribute is specified as **Positive**.

Data feed

CXM - Responsible owner

Calculation

Good experience ratio: **Number of positive feelings** divided by **Number of customer touchpoints**.

Business units with bad experience

Top seven business units with bad customer experience.

Data source

Report: CXM - Responsibility (Ownership)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the current Customer journey landscape, all contained **Ownership** occurrences of the **Ownership** row and the associated Customer touchpoints of each Customer journey map are collected. Checks every Customer touchpoint and counts, if the **Pain point** attribute is activated (value **true**).

Data feed

CXM - Responsible owner

Calculation

Bad experience ratio: **Number of pain points** divided by **Number of customer touchpoints**.

Channels with good experience

Top seven channels with good customer experience.

Data source

Report: CXM - Responsibility (Channel)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the current customer journey landscape, all contained occurrences of the **Channel** row and the associated touchpoints of each customer journey map are collected. Checks every Customer touchpoint and counts it, if the **Customer feeling** attribute is specified as **Positive**.

Data feed

CXM - Responsible channel

Calculation

Good experience ratio: **Number of positive feelings** divided by **Number of customer touchpoints**.

Channels with bad experience

Top seven channels with bad customer experience.

Data source

Report: CXM - Responsibility (Channel)

Report configurable

No

Data collection

Context: **Customer journey landscape** model type.

Starting from the current customer journey landscape, all contained occurrences of the **Channel** row and the associated touchpoints of each customer journey map are collected. Checks every Customer touchpoint and counts, if the **Pain point** attribute is activated (value **true**).

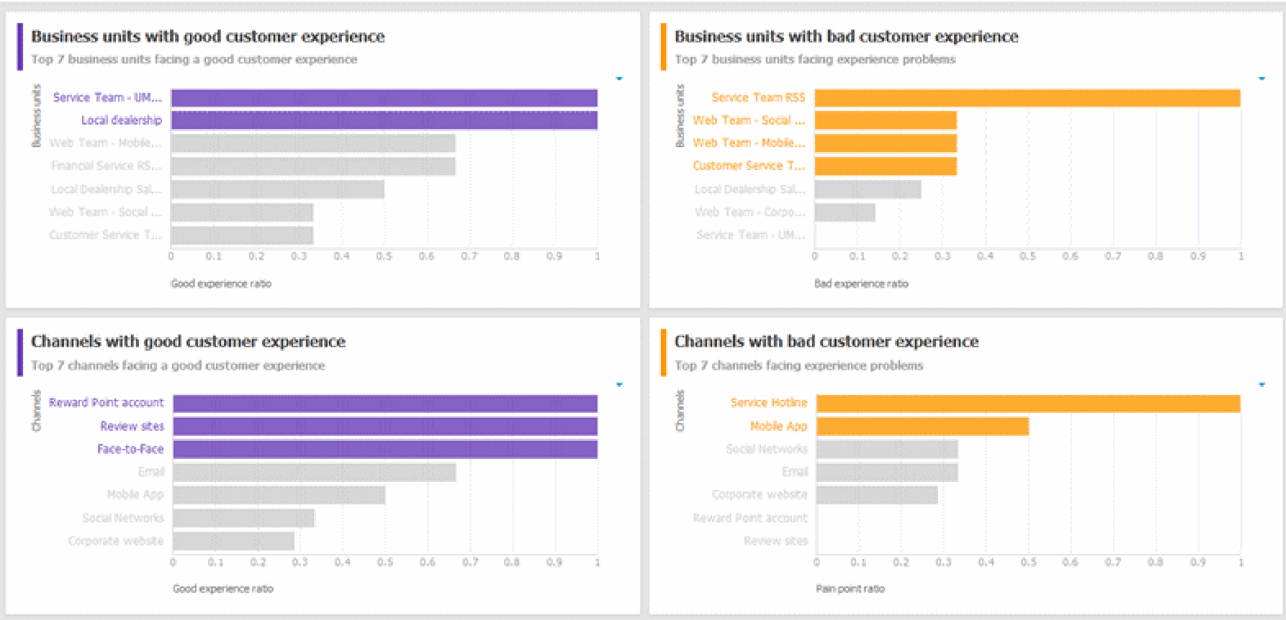
Data feed

CXM - Responsible channel

Calculation

Bad experience ratio: **Number of pain points** divided by **Number of customer touchpoints**.

EXAMPLE


Business units with good customer experience
Top 7 business units facing a good customer experience
Business units
Service Team - UM...
Local dealership
Web Team - Mobile...
Financial Service RS...
Local Dealership Sal...
Web Team - Social ...
Customer Service T...
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Good experience ratio
Business units with bad customer experience
Top 7 business units facing experience problems
Business units
Service Team RSS
Web Team - Social ...
Web Team - Mobile...
Customer Service T...
Local Dealership Sal...
Web Team - Corpo...
Service Team - UM...
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Bad experience ratio
Channels with good customer experience
Top 7 channels facing a good customer experience
Channels
Reward Point account
Review sites
Face-to-Face
Email
Mobile App
Social Networks
Corporate website
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Good experience ratio
Channels with bad customer experience
Top 7 channels facing experience problems
Channels
Service Hotline
Mobile App
Social Networks
Email
Corporate website
Reward Point account
Review sites
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Pain point ratio

4.1.12.16.2.3 Customer journey map

Customer journey map dashboard with customer touchpoint evaluation and market potential.

CHARTS

Number of affected internal processes

Number of internal processes affected by customer touchpoints with bad experience.

Data source
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
Context: **Customer journey landscape** model type.

Collects all Customer journeys reachable from the current Customer journey landscape by following the Customer journey maps assigned. For each Customer journey map:

- Checks for all Customer touchpoint if there is a connection to an internal process.
- Counts all Customer touchpoints that have a connection to an internal process.
- Checks for every Customer touchpoint if the **Pain point** attribute is specified.
- Counts the Customer touchpoints with an activated **Pain point** attribute type (value **true**).
- Checks for every Customer touchpoint if the **Moment of truth** attribute is specified.
- Counts the Customer touchpoints with an activated **Moment of truth** attribute type (value **true**).
- Checks for every Customer touchpoint if the **Best practice** attribute is specified.
- Counts the Customer touchpoints with an activated **Best practice** attribute type (value **true**).

Data feed
CXM - Analyze customer experience

Calculation
Aggregated number of internal processes affected by customer touchpoints with bad experience.

Percentage of bad customer feelings

Overview of the percentage of negative customer touchpoints.

Data source
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
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
-.-

Data feed
CXM - Analyze customer experience

Calculation
Aggregated number of Customer touchpoints for which the **Pain point** attribute type is specified over the aggregated number of Customer touchpoints multiplied by 100.

Percentage of good customer feelings

Overview of the percentage of positive customer touchpoints.

Data source
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
-.-

Data feed
CXM - Analyze customer experience

Calculation
Number of customer touchpoints with value **Positive** for the **Customer feeling** attribute divided by the Number of customer touchpoints multiplied by 100.

Customer touchpoints with high market potential

Customer touchpoints with high market potential related to the transformation costs.

Data source
Report: CXM - Analyze customer experience

Report configurable
No

Data collection
-.-

Data feed

CXM - Analyze customer experience

Calculation

Values from the **Market potential** attribute and **Transformation costs** attribute from customer touchpoints.

Importance and feelings of customer touchpoints

Importance and feelings that a customer associates with a customer touchpoint.

Data source

Report: CXM - Analyze customer experience (TOP7)

Report configurable

No

Data collection

-.-

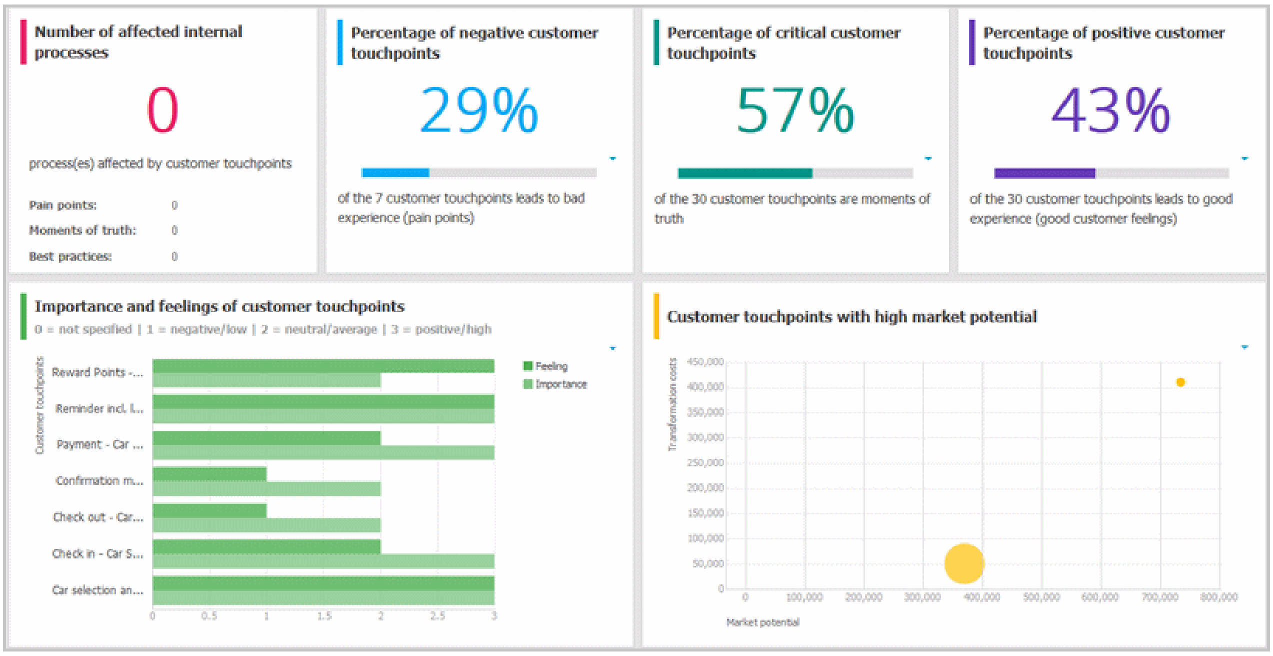
Data feed

CXM - Importance vs. feelings

Calculation

Values from the **Customer feeling** attribute and **Importance to customer** attribute from customer touchpoints.

EXAMPLE



4.1.12.16.3 Based on Piwik

Dashboards based on information that is collected by ARIS reports that access to Piwik data. Piwik is an open source analytics platform.

4.1.12.16.3.1 Piwik - Publications

Dashboard that includes an overall overview of the ARIS usage/consumption and six different charts for which you can select various evaluation periods such as last week, last month, and last year.

CHARTS

Number of visits over time

Top seven business units with good customer experience.

Data source
Piwik - Global reports: VisitsSummary report

Data feed
Piwik - Visit summary over time

Most viewed item types

Top seven item types most viewed over the selected time period, e.g. process.

Data source
Piwik - Database-specific reports: CustomDimension report

Data feed
Piwik - Most viewed item types

Most viewed items

Top seven items most viewed over the selected time period.

Data source
Piwik - Database-specific reports: PageTitles report

Data feed
Piwik - Most viewed item

Most searched keywords

Top seven searched keywords most viewed over the selected time period.

Data source
Piwik - Database-specific reports: SiteSearchKeywords report

Data feed
Piwik - Most searched keywords

Most viewed item types list

List of top fifty item types most viewed over the selected time period, e.g. process.

Data source

Piwik - Database-specific reports: CustomDimension report

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

Piwik - Database-specific reports: PageTitles report

Data feed

Piwik - Most viewed items

Most searched keywords list

List of top fifty searched keywords most viewed over the selected time period.

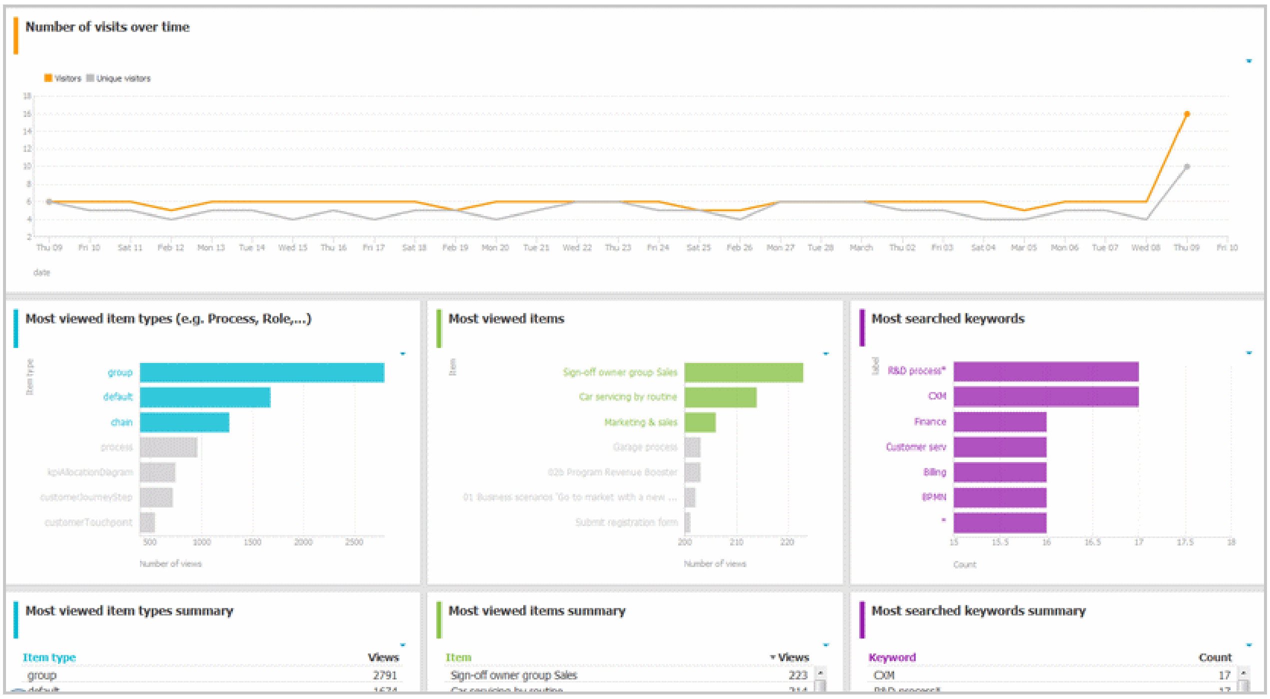
Data source

Piwik - Database-specific reports: SiteSearchKeywords report

Data feed

Piwik - Most searched keywords

EXAMPLE



4.1.12.16.3.2 Piwik - Technical KPIs

Dashboard that shows technical KPIs regarding the ARIS usage/consumption in four charts for which you can select various evaluation periods such as last week, last month, and last year.

CHARTS

Browse engine distribution

Number of visits over the selected time period: visitors, unique visitors.

Data source

Piwik - Global reports: BrowserEngines report

Data feed

Piwik - Browser engines

Most used operation systems

Operation systems most used over the selected time period.

Data source

Piwik - Global reports: OsVersions report

Data feed

Piwik - Operating system version

Browser version summary

Browser versions most used over the selected time period.

Data source

Piwik - Global reports: BrowserVersions report

Data feed

Piwik - Browser version

Portal language summary

Portal language most used over the selected time period.

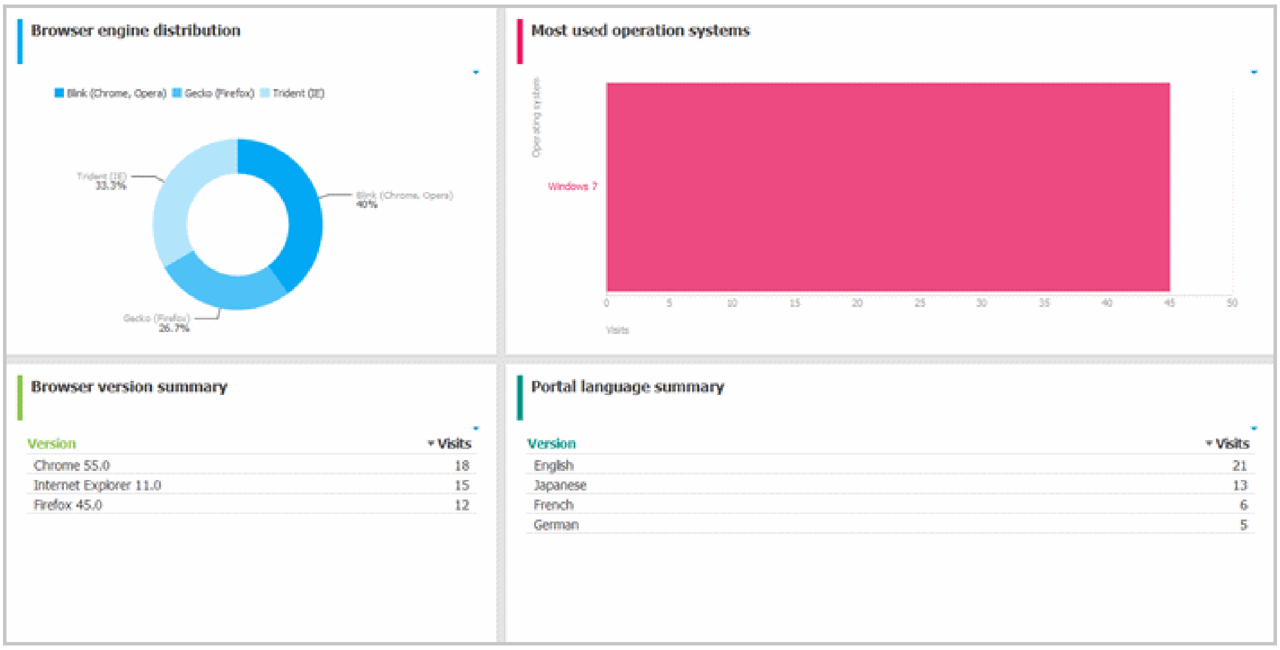
Data source

Piwik - Global reports: Language report

Data feed

Piwik - Portal language

EXAMPLE


Browser engine distribution
Blink (Chrome, Opera)
Gecko (Firefox)
Trident (IE)
Trident (IE) 33.3%
Blink (Chrome, Opera) 40%
Gecko (Firefox) 26.7%
Most used operation systems
Operating system
Windows 7
0 5 10 15 20 25 30 35 40 45 50
Visits
Browser version summary
Version
Visits
Chrome 55.0 18
Internet Explorer 11.0 15
Firefox 45.0 12
Portal language summary
Version
Visits
English 21
Japanese 13
French 6
German 5

4.1.12.16.4 Based on EA

Dashboards based on Enterprise Architecture (EA) information.

4.1.12.16.4.1 EA dashboard for organizational units

Shows a separate tab for organizational units, i. e. for object of type **Organizational unit** and **Organizational unit type**.

CHARTS

Systems having expired

Number of systems used by the selected organizational unit which are no longer standard.

Data source

ARIS or ARIS and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Data feed

- EA - Organizational unit - Systems expired
  uses **EA - Organizational unit (Systems with lifecycle data)** as a sub-feed
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks via the **End** attribute if a system has expired

- that supports an organizational unit via function or optionally via position or role or
- that lies under the responsibility of an organizational role.

Systems phasing in

Number of systems used by the selected organizational unit which will become standard within the next twelve months.

Data source

ARIS or ARIS and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Data feed

- EA - Organizational unit (systems phasing in)
  uses **EA - Organizational unit (Systems with lifecycle data)** 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

- that supports an organizational unit via function or optionally via position or role or
- 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 or ARIS and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Data feed

- EA - Organizational unit (systems phasing out)
  uses **EA - Organizational unit (Systems with lifecycle data)** 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

- that supports an organizational unit via function or optionally via position or role or
- 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 or ARIS and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Data feed

- EA - Organizational unit (standard systems expiring)
  uses **EA - Organizational unit (Systems with lifecycle data)** as a sub-feed
- EA - Organizational unit - Systems with lifecycle data

Calculation

Checks via the **Start** attribute if a system is expiring

- that supports an organizational unit via function or optionally via position or role or
- 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 or ARIS and Alfabet:

- Report: EA - Relations between organizational units and systems
- Report: EA/Alfabet - Systems with lifecycle data

Data feed

EA - Organizational unit (standard versus non-standard systems)
uses **EA - Organizational unit (Systems with lifecycle data)** as a sub-feed

Calculation

Checks via the **Standardization status** attribute if a system used is non-standard

- that supports an organizational unit via function or optionally via position or role or
- 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

Data feed

EA - Organizational unit - Systems with data

Calculation

Compares systems via the **Costs per unit** and **Critically** attributes

- that supports an organizational unit via function or optionally via position or role or
- 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:

- Report: EA - Relations between organizational units and systems
- Report: EA - Systems redundancies

Data feed

EA - System - System redundancies

Calculation

Compares systems regarding there common capabilities

- that supports an organizational unit via function or optionally via position or role or
- 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

Report: EA/Alfabet - CAPEX/OPEX for organizational units

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

4.1.12.16.4.2 EA dashboard for IT systems

Shows a separate tab for IT systems, i. e. for object of type **Application system type**.

CHARTS

Organizational units with most system supports

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

Data feed

EA - System - Supported organizational units

Calculation

Lists all supported objects, that are **Application system type** object types. These objects are identified via the **Process support unit**, the **Organizational unit**, and **Function** objects connected to the IT system.

Support distribution by organizational units

Based on process support maps, all organizational units supported by the selected system and their distribution.

Data source

ARIS Architect:

Report: EA - System support

Data feed

EA - System - Supported organizational units

Calculation

Shows the distribution of supported objects, that are **Application system type** object types. These objects are identified via 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

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 via the connection type **supports** in event process chain diagrams (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

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 via the connection type **supports** in event process chain diagrams (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

Data feed

EA - System - System redundancies

Calculation

Compares systems regarding there common capabilities.

Operating costs by cost type

Operating costs for the selected IT system by different cost types over time.

Data source

ARIS Architect:

EA/Alfabet - System costs

Data feed

EA - System (costs over time)

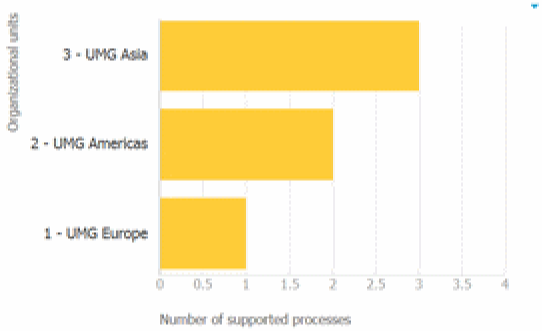
Calculation

Lists all IT systems of the database that also exist in Alfabet. Per system and year all cost values for the various cost types specified are listed.

EXAMPLE

Organizational units with most system supports

Top 7 organizational units with most processes actively supported ...



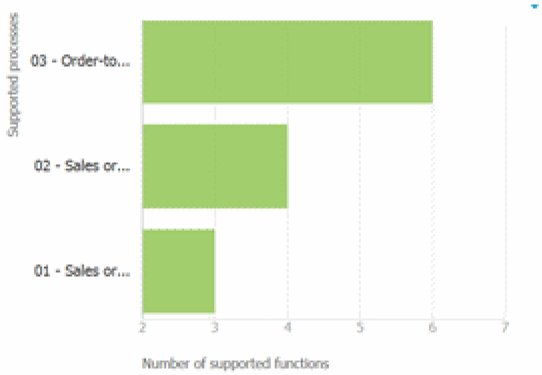
Support distribution by organizational units

All organizational units supported by the system and their distributi...

Organizational unit	Supported activ...	Distribution in %
UMG Asia	3	50
UMG Americas	2	33
UMG Europe	1	16

Processes with most system supports

Top 7 processes with most functions actively supported by the sele...



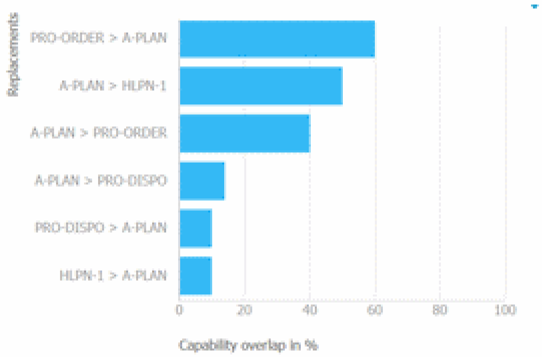
Support distribution by processes

All processes supported by the system and their distribution.

Process	Supported activit...	Distribution in %
Order-to-cash	6	46
Sales order mana...	4	31
Sales order mana...	3	23

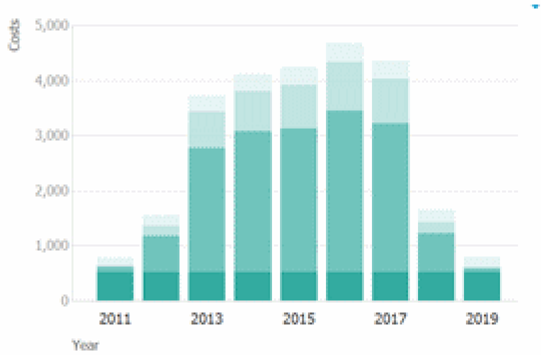
System replacement candidates by capability over...

Top 7 replacement possibilities involving the selected system (as so...



Operating costs by cost type

Operating costs for the IT system by different cost types over time



4.1.12.16.4.3 EA dashboard for objectives

Shown as side bar for the diagram view 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

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 of the 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

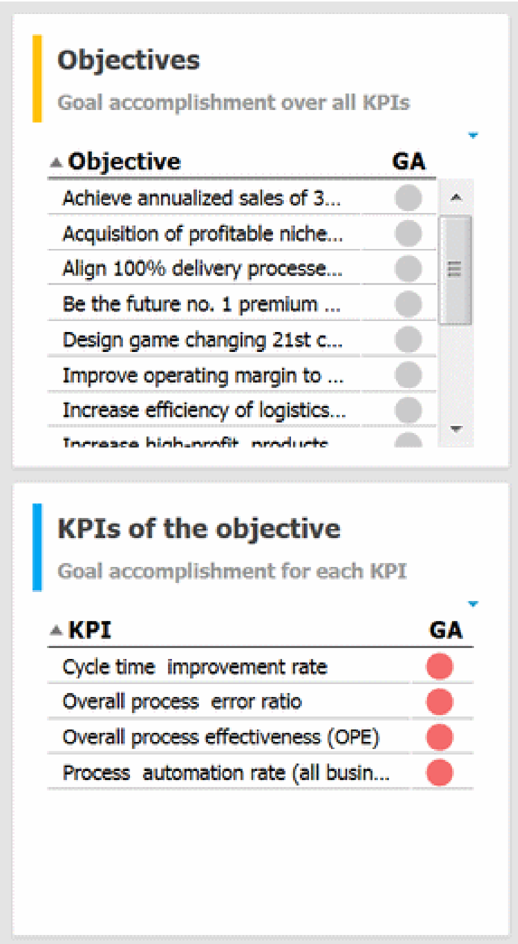
Data feed

EA - Goal accomplishment (KPIs per objective)

Calculation

Lists all all objectives and their KPIs whose accomplishments are calculated according to the Balanced Scorecard methodology.

EXAMPLE


Objectives
Goal accomplishment over all KPIs
Objective
GA
Achieve annualized sales of 3...
Acquisition of profitable niche...
Align 100% delivery processe...
Be the future no. 1 premium ...
Design game changing 21st c...
Improve operating margin to ...
Increase efficiency of logistics...
KPIs of the objective
Goal accomplishment for each KPI
KPI
GA
Cycle time improvement rate
Overall process error ratio
Overall process effectiveness (OPE)
Process automation rate (all busin...

4.2 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.

4.2.1 Getting started

These five steps are an optimal start to Collaboration:

1. Create (page 637) a user profile.
2. Search (page 638) for groups and people who provide interesting content.
3. Create filters and check (page 643) for new information.
4. Comment on (page 641), share, flag posts, etc.
5. Invite (page 646) others to Collaboration.

You started using Collaboration to exchange information, share knowledge, etc.

4.2.2 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 650) in ARIS Architect.

Procedure

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

Collaboration opens.

4.2.3 Create or edit a user profile

Specify your user profile to provide other users with information about your areas of activity and your interests.

Procedure

1. Click your 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.

4.2.4 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 **Find** 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 needs to 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.

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 (**Global Search > User XY > Following**).
- You can also use the global search to search for keywords, in order to find interesting feeds, users, and groups.

4.2.5 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 650) in ARIS Architect.

Procedure

1. Open the process you want to follow.
2. Click **Comment** 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 649) in the tag input box, e.g., 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 the Enter key 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 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.

4.2.6 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 650) 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 input field. 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 649) in the tag input box, e.g., 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 the Enter key 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 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 648) 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 have published something in your feed, the text is also displayed in the company feeds. If you have 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.

4.2.7 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 activated in ARIS Administration configuration.
- You have the required access privilege (page 650) 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 feeds. 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.

4.2.8 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 activated in the ARIS Administration configuration.

Procedure

1. Add your post (page 640) 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 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.

4.2.9 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, e.g., **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 notification frequency, e. g., **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.

4.2.10 Define filters

Define custom filters to find interesting posts quickly and easily using keywords or to gain a better overview.

Prerequisite

Creating filters is activated in ARIS Administration configuration.

Procedure

1. Click ✚ **Create filter**. The form for creating a filter opens.
2. Select the relevant filter criteria, e.g., 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**.

4.2.11 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 640) 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 649) in the tag input box, e.g., 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 the Enter key 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.

4.2.12 Filter feeds by means of tags

Use tags (page 649) 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.

4.2.13 Use hashtags

Use hashtags (page 649) 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 640) 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, e.g., #BPM, or enter a sentence. Alternatively, select an existing hashtag from the list.
3. Publish (page 640) 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 643). You can then use the same hashtag in the filter definition, e.g., #BPM.

4.2.14 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 649) **#Help**.

This keyword enables other users to find and reply to your question. Alternatively, contact your system administrator.

4.2.15 Work with groups

4.2.15.1 Create, edit or delete 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 activated 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**). As the creator of the group, you are automatically the coordinator.
5. Enable the relevant privacy option (**Public**/**Private**).
6. For private groups, you can follow portal feeds (page 646).
7. Click **OK**.

Your group is created. It is displayed 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.

To edit or delete a group, click the relevant group name under **Groups**. Then click **Edit group** on the right. The group's profile page is displayed. Make the required changes or click **Delete group**.

4.2.15.2 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 647) 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**).

4.2.15.3 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, e.g., 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 650) in ARIS Architect.

Procedure

1. Activate the group that is to follow portal feeds.
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 the Enter key.
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.

4.2.16 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.

4.2.17 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, i.e., **Revoke** if the user has administrator privileges, and vice versa.

The user is granted coordinator privileges (page 650) 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.

4.2.18 Valuable information

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

4.2.18.1 What is a feed?

Feeds contain the posts (page 640) in Collaboration, which for example, can be commented (page 641) 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.

4.2.18.2 Which target groups can be assigned to posts?

The following target groups can be selected for posts (page 640):

- **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 groups 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.

4.2.18.3 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 needs to 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.

4.2.18.4 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**.

4.2.18.5 What is a timestamp?

A timestamp (page 641) indicates when a post was last updated in Collaboration. Example: Last update was 2 hours ago. Timestamp = **2 h**.

4.2.18.6 What is a tag?

Tags are used to categorize posts using keywords, making them easier to find (page 644). 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.

4.2.18.7 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 643). You can then use the same hashtag in the filter definition, e.g., #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

4.2.18.8 What does flagging a post mean?

You can send (page 641) posts you deem inappropriate to the Collaboration administrator for review. The administrator decides whether the post will be deleted or not.

4.2.18.9 Which group types exist?

Groups can be created (page 645) 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 647) to the group.

4.2.18.10 Which access rights 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 <aba>. 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).

4.3 Use the repository

The repository contains, e.g., databases and documents of the selected server. In the database, you can navigate to a database group and edit its content, e.g., rename models and objects.

4.3.1 Create and edit models

The Model Editor allows you to edit existing and new models (page 651) in ARIS Connect. Using the **ARIS Connect Designer** license privilege you can create new models (page 651) directly in the portal, as well as edit (page 660) or create models (page 651) in the repository.

You can access the entire modeling functionality of Model Editor via buttons and bars (page 712) that you can use to efficiently edit your models.

If you have created or opened a model, you can set up the perspective (page 654) and adjust it to your own needs. Modeling (page 660) your organization, processes, data, etc., is just as simple as extended model editing (page 692). In addition to the graphic information, you can add further information to your models using attributes (page 669) that can be placed in the model as a symbol (page 707) or a text (page 703), if necessary.

Of course, you can also add comments to models and discuss models with other users.

To use Model Editor, you need to have the **ARIS Connect Designer** license.

4.3.1.1 Create/Import a model

Model Editor allows you to create new models or use models imported from ARIS Express (http://www.ariscommunity.com/aris-express).

4.3.1.1.1 Create new model

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

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 model** on the **Home** tab. The 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 717) 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

1. Click **Repository** if it is not activated yet.
2. Select the database group in which you want to create a new model. When you select the group, its content is displayed.
3. In the upper right, click **Create model**. The dialog opens.
4. In the **Model name** box specify the name that the new model is to be created with in the selected group.
5. Click the **Model type** box and enter part of the model type name. All model types (page 717) are displayed whose names contain the term you entered.
6. Select the required model type.
7. Click **OK**.

The new model is created and opened in a new tab. You can set up Model Editor (page 654) and model the model.

4.3.1.1.2 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 723) 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 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.

4.3.1.1.3 Create group

You can create a new group in which you can store models and objects.

Procedure

1. Click **Repository** if it is not activated yet.
2. Select the database group in which you want to create a new group. When you select the group, its content is displayed.
3. In the upper right, click **Create group**. The dialog opens.
4. Enter the required name in the **Name** box.
5. Click **OK**.

The new group is created as a subgroup of the selected one and you can store models and objects in it.

4.3.1.1.4 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 you are using.
- You have a **Designer** license.

Procedure

1. Click **Repository** if it is not activated yet.
2. Select the database group into which you want to import the ARIS Express model. When you select the group its content is displayed and a down arrow is shown next to the name.
3. Click the down arrow and select **Import ARIS Express model**. The dialog opens.
4. Click **Select file** and use the **File Upload** dialog to navigate to the group in which the model is stored in **ADF** format.
5. Select the relevant ADF file and click **Open**.
    e. The selected model is imported if an ARIS Express filter or an ARIS Express template is available.
    f. If no ARIS Express filter or ARIS Express template is available, you are asked whether you still want to import the model. If you do import the model, it will not look the same as in ARIS Express. Click **OK**.
6. Then import the ARIS Express filter and/or 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.

4.3.1.1.5 Import BPMN file

You can import (page 734) data from a BPMN file and use the BPMN diagram that was generated by the import in ARIS Connect.

Prerequisites

- The method filter you are using allows BPMN diagrams.
- You have a **Designer** license.

Procedure

1. Click **Repository** if it is not activated yet.
2. Select the database group into which you want to import the BPMN diagram. When you select the group its content is displayed and a **down arrow** is shown next to the name.
3. Click the **down arrow** and select **Import BPMN diagram**. The dialog opens.
4. Click **Select file** and navigate to the relevant BPMN file.
5. Select the BPMN file and click **Open**.

The BPMN diagram is stored in the selected group, and you can open it for editing on a tab.

4.3.1.2 Customize Model Editor

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 the Model Editor is activated. You can set up the Model Editor user interface according to your requirements. In addition, you can apply templates to specify the appearance of model items. The Model Editor provides you with the functionality to

- edit models.
- create new models.
- assign models.
- generate reports.
- comment on models and model items.

4.3.1.2.1 Show and hide bars

Using the bar buttons you can 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.

4.3.1.2.2 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.

4.3.1.2.3 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 **Add/Remove 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 **Add/Remove 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 727) 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 **Add/Remove 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.

4.3.1.2.4 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 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. Enter a search term for the attribute you want to display. A list of all attributes whose names contain the term you entered is displayed.
6. Click the relevant attribute.
7. Click **OK**. The selected attribute is added to the **Attributes** tab.
8. Click **More** next to the attribute whose visibility you want to specify.
9. 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**.
10. Click **Hide, if not specified** if you want the attribute to be displayed in the **Attributes** tab only if a value has been specified.
11. Click **Place attribute** and the relevant position in the model window if you want the attribute value to be displayed in the model.

12. 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 will be displayed in line with your settings.

4.3.1.2.5 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 727) 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 657), 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.

4.3.1.2.6 Configure mini toolbar

You can define which object symbols the mini toolbar (page 727) 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 657) the selected object symbols are available.

4.3.1.2.7 Change grid width

You can show a grid in the model window (page 712). 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 724) tab bar.
2. Click **Grid > 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.

4.3.1.2.8 Show formatting toolbar

The formatting toolbar is enabled for selected texts, for example, for the text of placed attributes (page 669). 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.

4.3.1.2.9 Assign model template

You can assign a template (page 761) to a model and thus, change its appearance as well as its attribute placements in the model window (page 712) at once automatically.

Procedure

1. Activate the Model (page 724) 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.

4.3.1.2.10 Reset model template

You can reset the appearance of a model that was assigned templates (page 761) to the ARIS default appearance. Color and size changes and attribute placements assigned by templates are removed.

Procedure

1. Activate the Model (page 724) tab bar.
2. Click **Template**. The list of available templates is shown.
3. Click **Reset**.

The content of the model window (page 712) is adjusted immediately.

4.3.1.3 Model

Model Editor assists you in editing models, e.g., by providing a grid (page 661), a mini toolbar (page 668), graphic objects (page 666), or in-place formatting options (page 669).

4.3.1.3.1 Open model for editing

You can open models in different ways.

Prerequisite

You have a **Designer** license.

Procedure

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 **Find** 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 and objects** category, click the name of the model you want to open.

From groups

1. Activate the **Groups** area in the portal.
2. 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. The groups of the selected database are displayed.
3. Select the group containing the required model. The contents of the selected group are listed.
4. Click the name of the relevant model.
5. Click **Diagram** if this display is not enabled yet. The model is displayed.
6. Click **Edit**.

From the 'Recent changes' tab

1. In the portal, activate the **Recent changes** tab of the overview. All models are listed that have recently been changed or created.
2. 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. The display of the **Recent changes** tab is adjusted.
3. Click the name of the model you want to open. The **Groups** area opens and the model is activated.
4. Click **Diagram** if this display is not enabled yet. The model is displayed.
5. Click **Edit**.

From the repository

1. Activate the **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.

The model opens in a separate tab.

4.3.1.3.2 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 661), 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 655).

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, e.g. on the **Attributes** tab of the **Properties** bar. You can change language-dependent contents specified in this language or enter new contents.

4.3.1.3.3 Show and hide grid

If a grid is hidden, you can show it in the model window (page 712). When you place or move model items, they are inserted or moved according to the grid width (page 658). This facilitates the orderly placement of model items.

Procedure

1. Activate the Model (page 724) tab bar.
2. Click **Grid >** **Toggle grid**.

A dot grid is displayed in the model window. Model items are placed and moved according to the grid width.

To hide the grid, click **Grid >** **Toggle grid** again. The dot grid is hidden and model items are placed or moved pixel by pixel.

4.3.1.3.4 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 712).

Procedure

1. Activate the Model (page 724) tab bar.
2. Click **Grid > Change grid width**. The 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.

4.3.1.3.5 Place object symbols

You can place object symbols in the model window (page 712) in different ways.

Procedure

Using the Symbols bar

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. 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. 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 **Quickly 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. 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 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 727) is shown.
2. In the mini toolbar, click the symbol you want to place in the model window. A frame is displayed for the new object.
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. 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 a connection.

As an occurrence copy

Create a new occurrence for an existing object. This enables you, e. g., 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 preview frame is displayed for the new item.
3. 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. This means, for example, that the name of both object symbols is changed, i.e., 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 preview frame is displayed for the new item.
3. 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 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, e.g., that the name of the copied object does not change if you change the name of the source object.

You have placed object symbols in the model window.

4.3.1.3.6 Place occurrence copy

You can place occurrence copies in the model window (page 712) in different ways.

Procedure

By placing an object symbol

Procedure

1. Click the relevant object symbol in the toolbar or the mini toolbar.
2. In the model window, click the position where you want to place the object symbol.
3. 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.
4. 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 and press the mouse button.

You have placed the occurrence copy.

You have placed an occurrence copy.

4.3.1.3.7 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, i.e., 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**. A preview frame is displayed for the new item.
4. 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 enables you to quickly reuse the same object at different positions in the same model, or to reuse it in various other models.

4.3.1.3.8 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**. A preview frame is displayed for the new item.
4. 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.

4.3.1.3.9 Change object symbol

You can change the symbol for selected objects if various symbols are available for them.

Prerequisite

The method filter in use 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 723) 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.

4.3.1.3.10 Place graphic objects

You can place graphic objects in the model window (page 712) 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 object.

The circle is inserted in the model window. Now you can color the line (page 701) and inside (page 699), and, for example, place the graphic object behind a model area (page 708) 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**.
3. Click the position in the model window where you want to insert the graphic object.

The square is inserted in the model window. Now you can color the line (page 701) and inside (page 699), and, for example, place the graphic object behind a model area (page 708) 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**.
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 701) and inside (page 699), and, for example, place the graphic object behind a model area (page 708) 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 701) and inside (page 699), and, for example, place the graphic object behind a model area (page 708) 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 701) and inside (page 699), and, for example, place the graphic object behind a model area (page 708) 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 701).

Specify size when placing objects

You can directly resize circles/ellipses and squares 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**.
3. In the model window, click the position where you would like 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 taken the shape that you want to place.
5. Release the mouse button.

The graphic object is placed with the required size.

You have placed graphic objects.

4.3.1.3.11 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.

4.3.1.3.12 Modeling using the mini toolbar

You can model very effectively using the mini toolbar (page 727). By configuring (page 657) it you are quickly offered the object symbols (page 657) required for your model.

Procedure

1. Click a placed object symbol (page 662). 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. In the model window, click the position where you want to place the object symbol. The object symbol is placed together with a connection to the source object and the name field for overwriting.
4. Enter the relevant name.
5. Press **Enter**.

The new object symbol is placed and the connection to the source object is created automatically.

4.3.1.3.13 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. 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.
2. Click **Properties**. The Properties bar opens.
3. Click the **Attributes** tab if it is not activated yet.
4. Display the relevant attribute using the **Add** button 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 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.

4.3.1.3.14 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, e.g., **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.

4.3.1.3.15 Create connections

You can link objects using connections in different ways in the model window (page 712).

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 727) is shown.
2. In the mini toolbar, click the symbol you want to place in the model window. A frame is displayed for the new object.
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. 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 a 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.

4.3.1.3.16 Place text

You can place text in the model window (page 712) 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 669) the text in just the same way as placed text attributes.

4.3.1.3.17 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.

4.3.1.3.18 Delete model items

You can delete model items from the model window (page 712).

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.

4.3.1.3.19 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.

4.3.1.3.20 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 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 726) 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.

4.3.1.3.21 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 726) 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.

4.3.1.3.22 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 726) 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.

4.3.1.3.23 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.

Prerequisites

The lane or pool in which a lane is to be inserted contains no flow objects.

Procedure

1. Activate the BPMN (page 726) tab bar.
2. Select the lane you want to insert.
3. Press **Ctrl** key and select the pool or lane you want to insert the lane.
4. Click **Insert lane**. If you have selected a pool to insert the lane the lane is inserted immediately. If you have selected a lane to insert the lane, the **Specify which lane to insert** dialog opens.
5. Activate the options button of the lane you want to insert.
6. Click **OK**. The lane with activated options button is inserted in the other lane.

You have inserted a lane into a pool or lane.

4.3.1.3.24 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 726) 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.

4.3.1.3.25 Delete pool or lane

You can easily delete a lane or pool.

Prerequisites

Due to the deletion of a lane, flow objects and lanes must not be located side by side in the same pool. If so, the lane cannot be deleted.

Procedure

1. Activate the BPMN (page 726) tab bar.
2. Select the pool or lane you want to delete.
3. Click **Delete pool or lane**.

The pool or lane is deleted.

4.3.1.3.26 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 726) 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.

4.3.1.3.27 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 726) 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.

4.3.1.3.28 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 726) 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 708) and can be opened by double-clicking the assignment icon.

4.3.1.3.29 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 726) tab bar.
3. Click **Expand subprocess**.

The process contained is displayed as embedded in the subprocess. (page 708) The process remains assigned to the subprocess (page 708).

4.3.1.3.30 Edit subprocess

You can edit a subprocess.

Procedure

1. Activate the BPMN (page 726) tab bar.
2. Select the relevant subprocess symbol with an assigned model.
3. Click **Edit subprocess**.

The assigned model is opened for editing.

4.3.1.3.31 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 726) 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.

4.3.1.3.32 Model table-based

Table-based modeling enables rapid and comfortable modeling of EPCs and BPMN diagrams (page 684). 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. 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 679) 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.

4.3.1.3.32.1 Hide/Show modeling table

You can hide or show the modeling table.

Procedure

1. Open (page 660) a model to edit or create (page 651) 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.

4.3.1.3.32.2 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 660) a model to edit or create (page 651) a new model.
2. Click **Collapse/Expand table**. The model is hidden.
3. Click **Collapse/Expand table**. The model is shown.

You have hidden or shown the model.

4.3.1.3.32.3 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 660) a BPMN diagram.
2. Click **Add or remove columns**.
3. 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.

4.3.1.3.32.4 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 678) to insert lanes into the model.

Procedure

1. Open (page 660) a model.
2. Start typing the name of the object to be created.
3. Press **Ins**. Alternatively, click **Add new object**.
4. Select a symbol from the list and enter a name.
5. 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.

4.3.1.3.32.5 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 660) a model.
2. Start typing the name of the object to be created. Alternatively, click ✚ **Add new object**.
3. 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.
4. Click **Function (target)** in the **Symbols** area. The symbol is inserted and the name is selected for overwriting.
5. Enter a name.
6. 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.

4.3.1.3.32.6 Use existing object

You can reuse existing objects in the model.

Procedure

1. Open (page 660) a model.
2. Start typing the name of the object to be created. Alternatively, click ✚ **Add new object**.
3. 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.
4. Select the required object in the **Existing objects** area.
5. Press **Enter**.

The selected object is reused. The color of the object type is displayed before of the name.

4.3.1.3.32.7 Rename structurally relevant object

In the modeling table, you can edit structurally relevant objects that have already been modeled.

Procedure

1. Open (page 660) a model.
2. Select the object you want to edit.
3. Press **F2**. Alternatively, click ✎ **Edit table cell**.
4. Rename the object.
5. Press **Enter**.

You have renamed an object.

4.3.1.3.32.8 Edit the Description/Definition column

You can specify descriptions and definitions for objects.

Procedure

1. Open (page 660) a model.
2. If the **Description/Definition** column is not shown, add (page 681) it.
3. 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.
4. Enter the description or definition. The text can be formatted.
5. Click **OK**.

The new or changed description is saved.

4.3.1.3.32.9 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, e.g., in BPMN diagrams.

Procedure

1. Open (page 660) a model.
2. Select the object row below which the operator is to be modeled.
3. Press **Ins**. Alternatively, click ✚ **Add new object**.
4. 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.
5. Press **Ins**. Alternatively, click ✚ **Add new object**. Select the first object that will follow the operator and enter a name.
6. Press **Enter**. The object is placed below the operator in EPCs, and beside the operator in BPMN diagrams.
7. Select an operator.
8. 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.
9. Press **Enter**.
10. Model (page 677) 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.

4.3.1.3.32.10 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 660) a model.
2. In the table, click the object you want to remove.
3. 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.

4.3.1.3.32.11 Model satellites

A satellite is an object that can be inserted in a model or diagram but is not a structurally relevant object (page 763) 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.

Model new satellites

Procedure

1. Open (page 660) a model.
2. Double-click the cell for the satellite you want to model for an object, e.g., an **Organizational unit** object.
3. Select an object symbol.
4. Enter the name and press the **Enter** key.
5. 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.
6. Exit the cell (page 684) when you have created the required satellites.

You have modeled one or more satellites.

Model existing satellites

Procedure

1. Open (page 660) a model.
2. Double-click the cell for the satellite you want to model for an object, e.g., an **Organizational unit** object.
3. 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.
4. Select the required object in the **Existing objects** area.
5. Exit the cell (page 684) 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 the **Enter** key. You can enter a name. Press an arrow key to exit the cell.

4.3.1.3.32.12 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 660) a model.
2. Click **Add or remove columns**.
3. Click **Add object column**. A dialog opens.
4. Select an object and a connection from the list and click **OK**.

You have added an object.

4.3.1.3.32.13 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 660) a model.
2. In the table, click the object for which you want to specify attributes.
3. Click **Add or remove columns**.
4. Click **Add attribute column**. The **Add attribute** dialog opens.
5. Select an attribute.
6. Click **OK**.

The attribute column is added to the right of the selected column and you can enter an attribute value.

4.3.1.3.32.14 Edit attribute

You can specify attributes in the modeling table. Attributes specified by the system cannot be edited, e.g., Creation date. System attribute columns have a gray background.

Procedure

1. Open (page 660) a model.
2. Select the cell for the relevant attribute.
3. Press **F2**.
4. Edit (page 689) the attribute value.
5. Exit the cell (page 684) once you have finished editing the attribute value.

You have edited an attribute.

4.3.1.3.32.15 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 660) a model.
2. Click **Add or remove columns**.
3. Click the **Remove symbol** for the **creates output to Information carrier** column.
4. Click the name of an object in the **Name** column.
5. Click **Add or remove columns**.
6. Click **Add object column**. The **Add new object column** dialog opens.
7. 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.
8. Click **OK**.

The **creates output to Information carrier** column is placed next to the **Name** column.

All columns can be re-arranged as described.

4.3.1.3.32.16 Remove column

You can remove columns for attributes or objects from the modeling table.

Procedure

1. Open (page 660) a model.
2. Click **Add or remove columns**.
3. 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.

4.3.1.3.32.17 Valuable information

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

4.3.1.3.32.17.1 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 676).

4.3.1.3.32.17.2 How to control the table using the keyboard

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.)

Key/Keyboard shortcut	Context	Action
Arrow keys	Table selected	Move to next column/row in direction of arrow.
Ctrl + End	Table selected	Activates the last cell in the modeling table.
Ctrl + Home	Table selected	Activates the first cell in the modeling table.
Ctrl + Shift + Ins	Operator selected	Create split paths.
Del	Object name selected	Delete object.
End	Table selected	Activates the last column in the current row.
Enter	**Name** column activated	To next row/End editing.
F2	▪ **Name** cell selected	▪ Activates the name editing mode.

Key/Keyboard shortcut	Context	Action
	▪ **Description/Definition** cell selected	▪ Opens the **Description/Definition** dialog. The description/definition can be edited.
	▪ **Object** cell selected	▪ Opens the object symbols list if symbols can be inserted.
	▪ **Attribute** cell selected	▪ Opens the **Edit attribute** dialog for you to insert the attribute value.
Home	Table selected	Activates the first column in the current row.
Ins	Table selected	Adds an object row.
PageDown	Table selected	Scrolls one page down.
PageUp	Table selected	Scrolls one page up.
Shift + F2	**BPMN container** cell	Enables renaming of the container.
Tab	Table cell selected	Activates the cell to the right of the cell currently selected.
Shift + Tab	Table cell selected	Activates the cell to the left of the cell currently selected.

4.3.1.3.32.17.3 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.

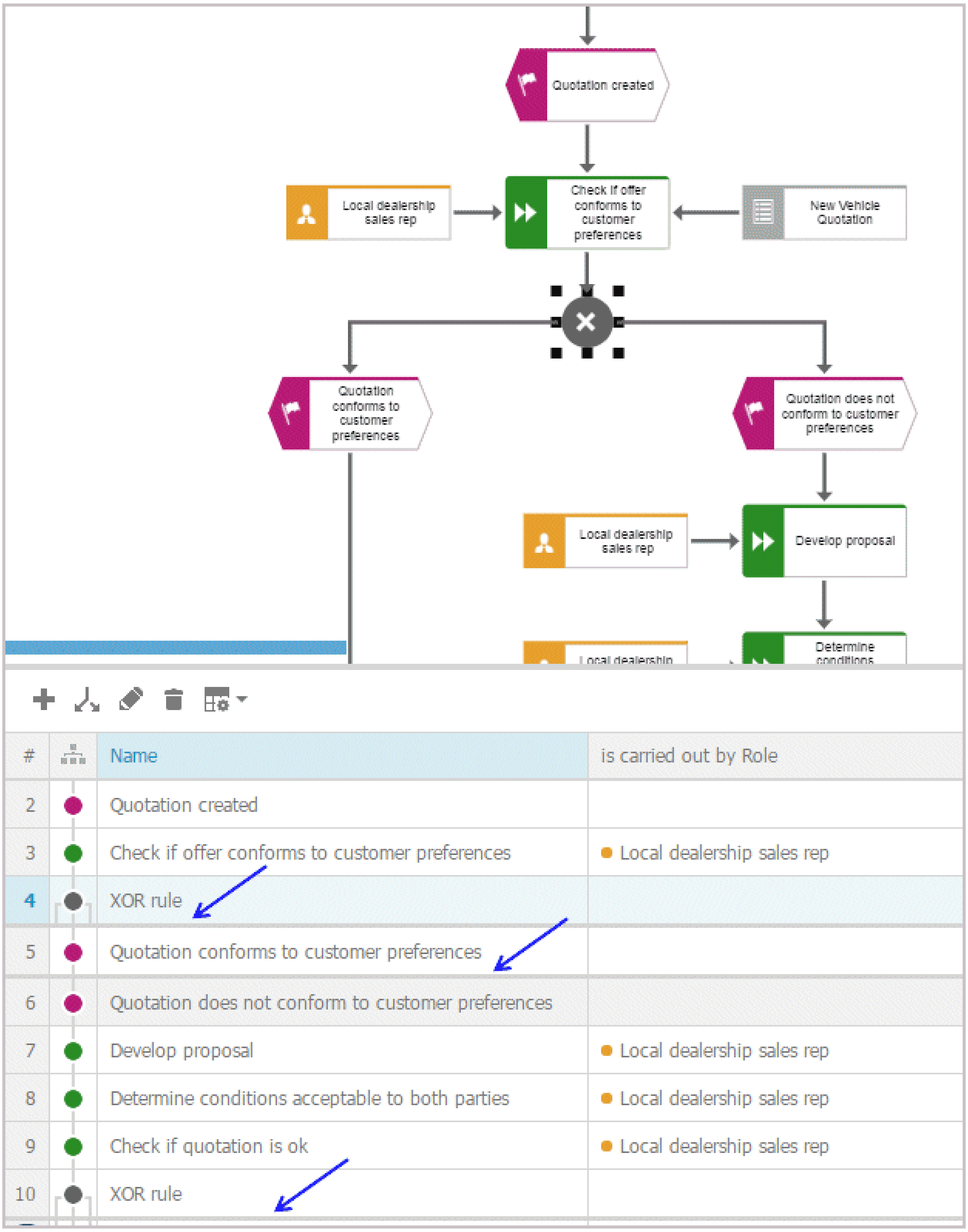
A flashing cursor in an empty row indicates that entries can be made.

A gray background indicates that no entries can be specified.

Examples

- A table for a model of the **EPC** type contains, e.g., 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.

- Split paths are outlined by a thicker line.



- In BPMN models, lanes are outlined by a thicker line.

4.3.1.3.32.17.4 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, e.g., 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, e.g., 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, e.g., 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.

4.3.1.3.32.17.5 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.

4.3.1.3.32.17.6 What attribute values and processing types are there?

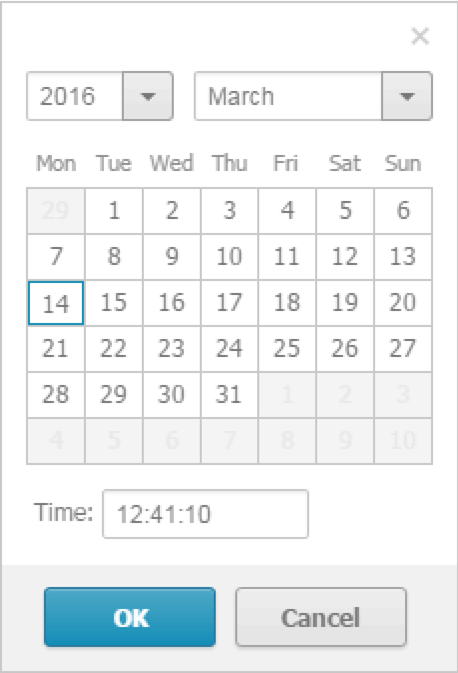
You can specify attributes in the modeling table. Attributes specified by the system cannot be edited, e.g., Creation date. System attribute columns have a gray background.

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.



Boolean

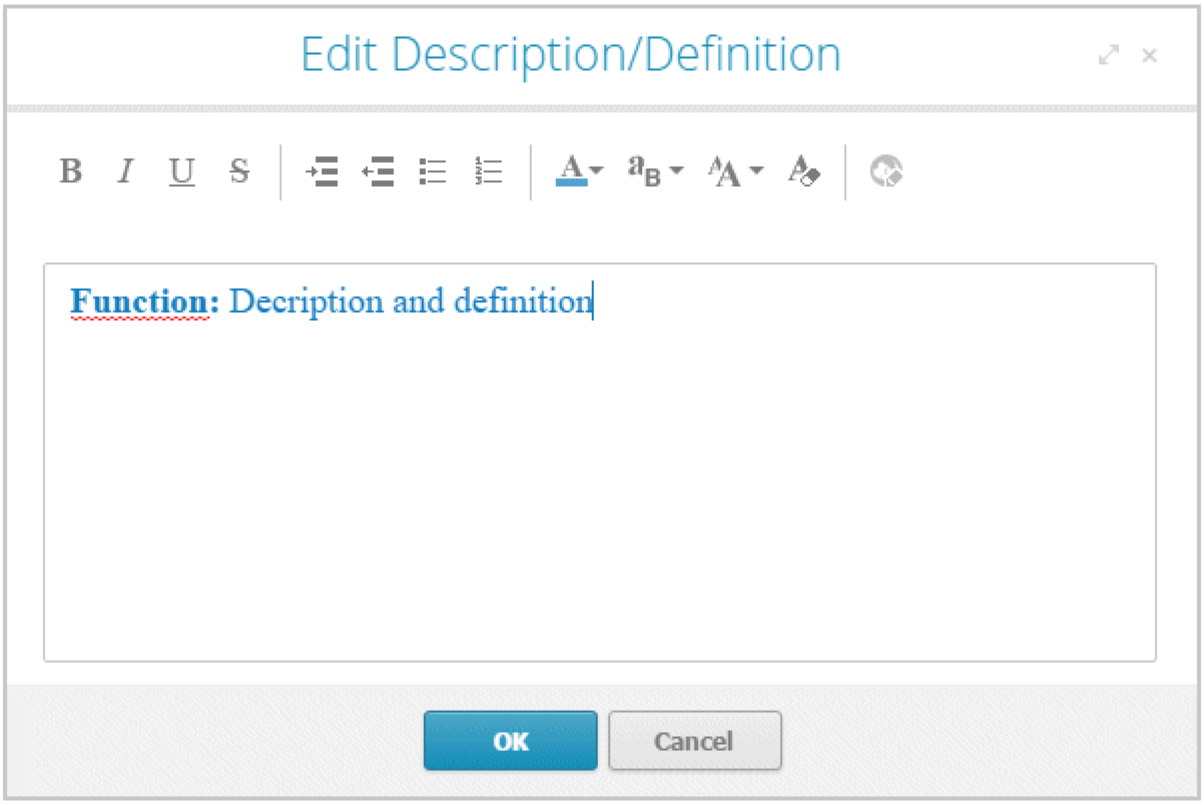
You can change the attribute value by enabling (true:) or disabling (false:) the check box. The check box for an attribute value that is not specified is shaded in color ().

Text attributes

You can change the attribute value directly in the cell.

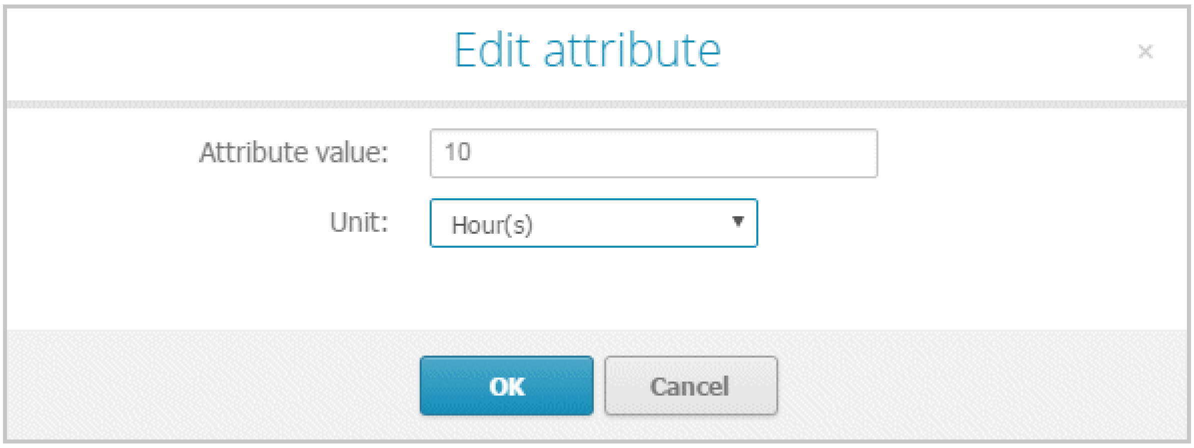
Formatable text attributes

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.

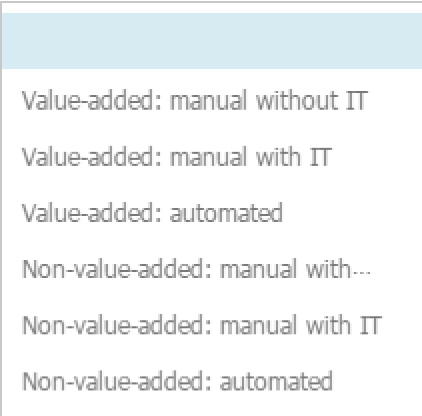


Numerical attributes

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.



4.3.1.4 Extended editing

Besides the basic editing options, Model Editor provides you with additional functionality, such as copying formatting (page 699), creating groupings (page 709), applying various colors (page 700), inserting user-defined descriptions (page 697), or automatic resizing of objects (page 710).

4.3.1.4.1 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. 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.

4.3.1.4.2 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 view for the occurrence, the first fact sheet tab is shown, e.g., **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.

4.3.1.4.3 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.

4.3.1.4.4 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.

4.3.1.4.5 Upload documents

You can upload documents to ARIS document storage and assign them to models and objects (page 695) in order to supplement these with detailed descriptions and graphics, for example.

Prerequisite

The filter in use allows the **ARIS document storage Link** attribute.

Procedure

1. Open (page 660) the relevant model.
2. Activate (page 656) the **Properties** bar.
3. Activate 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 695).

4.3.1.4.6 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 660) 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. Activate the **Properties** bar.
4. Activate the **Attributes** tab if it is not activated yet.
5. Show (page 656) 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 703). 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.

4.3.1.4.7 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 660) 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 **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.

4.3.1.4.8 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 Model Editor.
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 656).
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 Model Editor.
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 656).
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 656).
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 656).
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 656).
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.

4.3.1.4.9 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 723) 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.

4.3.1.4.10 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 723) 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.

4.3.1.4.11 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 723) 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.

4.3.1.4.12 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 723) 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 700) for the gradient.
7. Click the second color box and select the second color (page 700) 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.

4.3.1.4.13 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 723) tab bar.
3. Click **Fill color**. The color palette opens.
4. Click **No fill color**.

The selected model items are displayed without color.

4.3.1.4.14 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 723) 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.

4.3.1.4.15 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 723) 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.

4.3.1.4.16 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 723) 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.

4.3.1.4.17 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 723) tab bar.
3. Click **Line style and weight**. The style selection opens.
4. Click **Dotted**, **Dashed**, or **Solid**, 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.

4.3.1.4.18 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 723) tab bar.
3. Click **Line style and weight**. The weight selection opens.
4. Click **0 point**, **2 point**, **4 point**, or **8 point**, 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.

4.3.1.4.19 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 723) 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.

4.3.1.4.20 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 723) 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, e.g., **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 723) tab bar.
3. Click **Attribute placement**.
4. Click the position of the object where the attribute is to be placed, e.g., **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.

4.3.1.4.21 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 703), but also freely.

Procedure

Place new attribute freely

Select the object you want to place a new attribute for.

1. Activate the Start (page 723) 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.

4.3.1.4.22 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.

4.3.1.4.23 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 723) tab bar.
3. Click **Attribute placement**.
4. Enable the **With name** check box.

The attribute value is placed in front of the attribute name.

4.3.1.4.24 Select placed attributes

You can select placed attributes in order to place them at another position or to remove the placement (page 707).

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 703) the selected attributes.

4.3.1.4.25 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 the Enter key or click in the model background.

The text attribute is changed.

4.3.1.4.26 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, e.g., **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.

4.3.1.4.27 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.

4.3.1.4.28 Display placed attributes as a symbol

You can display certain attributes as a symbol (page 728) 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 723) tab bar.
3. Click **Attribute placement**.
4. Enable the **As a symbol** check box.

The placed attribute is represented as a symbol.

4.3.1.4.29 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 669) on the **Attributes** tab of the Properties bar.

Procedure

1. Select the placed attribute (page 705) whose placement you want to remove.
2. Press the **Del** key.

The placement of the selected attribute is removed without prompting for confirmation.

4.3.1.4.30 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 723) 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.

4.3.1.4.31 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 723) 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 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.

4.3.1.4.32 Place model items one behind the other

You can specify in which order overlappping 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 723) 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.

4.3.1.4.33 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 723) tab bar.
3. Click **Group/Ungroup > Group**. The selected model items are combined in a group (page 757). 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.

4.3.1.4.34 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 723) 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.

4.3.1.4.35 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 723) tab bar.
3. Click **Align** and then the relevant alignment, for example **Align left** or **Distribute vertically**.

The selected model items are aligned accordingly.

4.3.1.4.36 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 723) 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.

4.3.1.4.37 Select object or model in Explorer

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 723) tab bar.
3. Click **Go to occurrence in Explorer**.

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.

4.3.1.4.38 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 723) tab bar, click **Alfabet > Map Alfabet object**. The **Select Alfabet object** dialog opens.
4. Select the Alfabet table, e.g., **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.

4.3.2 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 723) tab bar, click **Alfabet > Map Alfabet object**. The **Select Alfabet object** dialog opens.
4. Select the Alfabet table, e.g., **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 the Model Editor, click **Refresh**.

The new object is listed in the table.

4.3.2.1.1 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 710).
2. Select the relevant **Application system type** object.
3. In the Start (page 723) 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.

4.3.2.2 Valuable information

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

4.3.2.2.1 How is the Model Editor structured?

The Model Editor 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, 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.

Bar buttons

Using the bar buttons you can show or hide the **Search** and the **Comment**, **Properties**, **Reports**, and **Symbols** bars. You can also hide or show the 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 722). 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 723).

MODEL **TAB BAR**

The **Model** tab bar groups the functions related to the layout and the graphic of models (page 724).

FORMAT **TAB BAR**

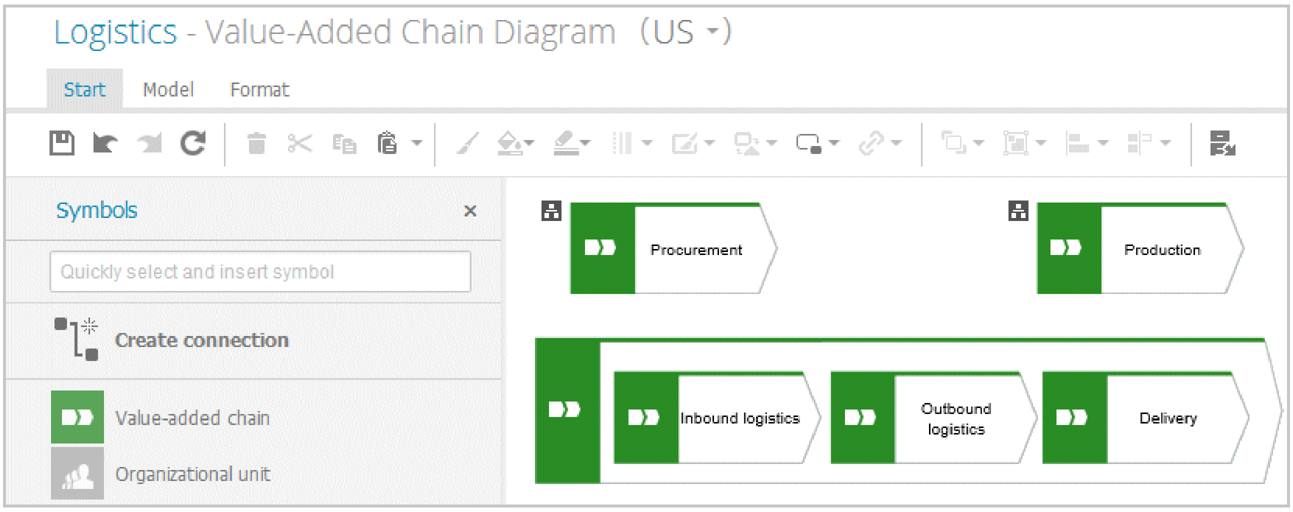
The **Format** tab bar groups the functions related to the presentation of written data in models (page 725).

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 726).

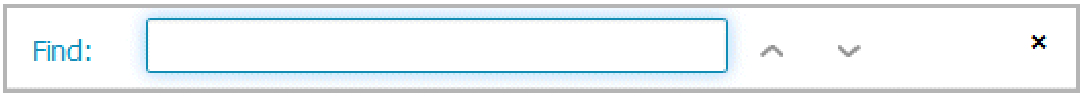
Model window

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.



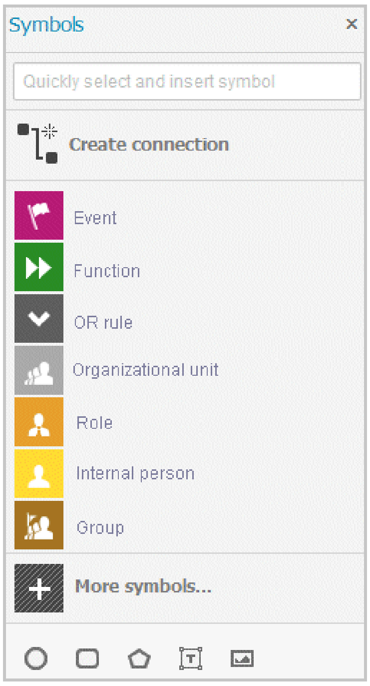
Find bar

Click **Find** in the bar buttons to show the **Find** bar that you can use to have objects selected in the model.



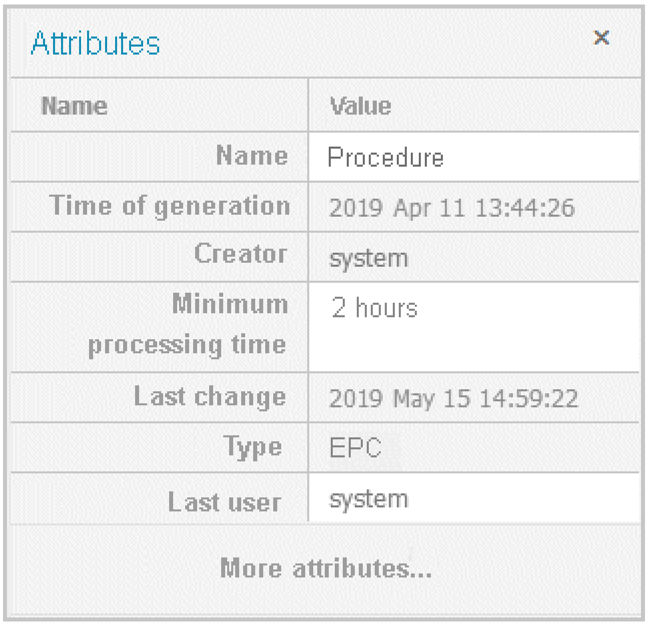
Symbols bar

The **Symbols** bar provides object symbols (page 662), graphic objects (page 666), and text (page 671) for insertion into the model window. It also allows you to filter the available object symbols by entering names and create connections between (page 670) objects.



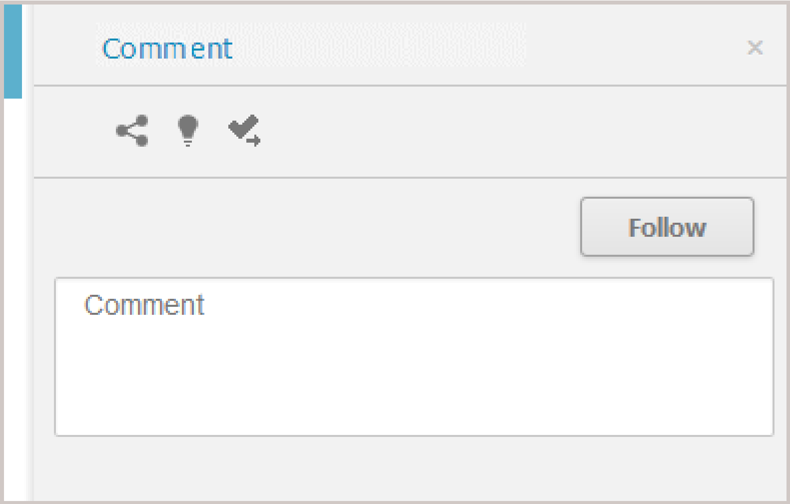
Properties bar

Click **Properties** in the bar buttons to show the Properties bar where you can edit attributes (page 669), or view occurrences and relationships of objects, for example.



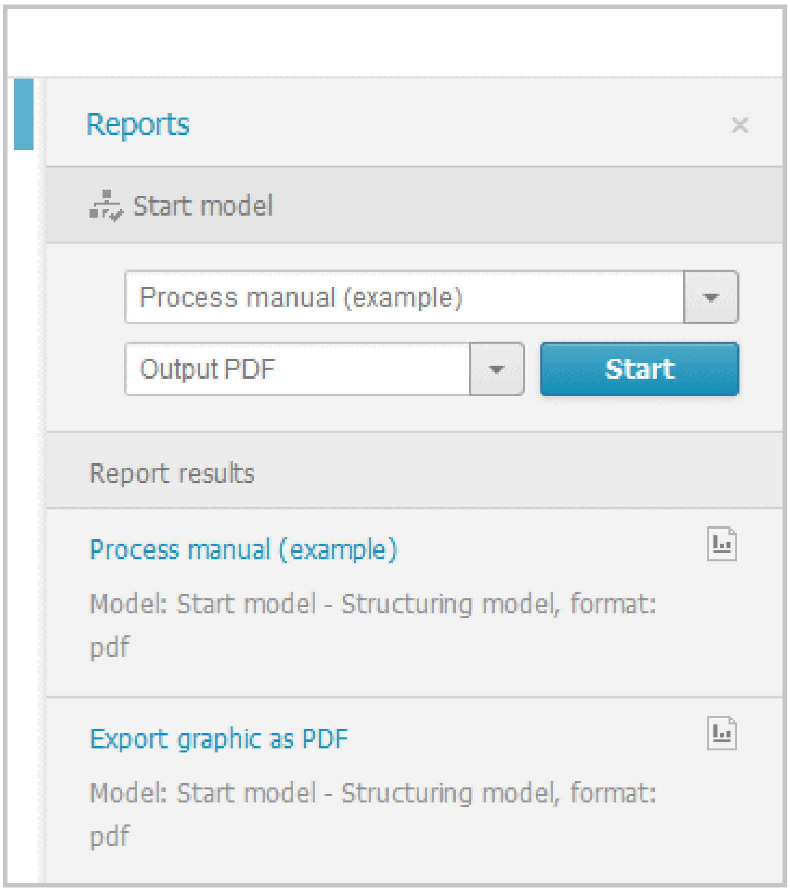
Comment bar

Click **Comment** in the bar buttons to show the **Comment** bar that you can use to enter notes, improvement proposals, questions, etc., pertaining to the model.



Reports bar

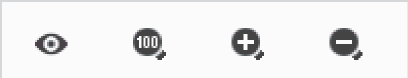
Click **Reports** in the bar buttons to show the **Reports** bar and generate reports.



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.

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).



4.3.2.2.2 What model types are available in ARIS Connect?

The following model types are available. Depending on the filter you are using not all model types are available.

Access diagram
Access diagram (physical)
Application collaboration diagram
Application collaboration diagram (physical)
Application system diagram
Application system type diagram
ArchiMate model
Attribute allocation diagram (Solution Design)
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
Bow tie diagram
Business controls diagram
Business footprint diagram
Business rule allocation diagram
Business rule architecture diagram
Business segment matrix
Class diagram
CtX-tree
Data type diagram (Solution Design)
Data Warehouse model
Document structure (Solution Design)
DW structure
eERM
eERM attribute allocation diagram

Enterprise BPMN collaboration diagram
Enterprise BPMN process diagram
EPC
EPC (column display)
EPC (horizontal table display)
EPC (material flow)
EPC (row display)
EPC (table display)
Fishbone diagram
Function allocation diagram
Function mapping
Functions mapping (SAP Solution Manager)
Function tree
IE Data model
Information carrier diagram
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
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 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

4.3.2.2.3 Which method filter is used?

When you open and edit models, your work is based on method filters (page 760).

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 **Entire method** is used.
  - If the **Entire method** filter also does not exist, the first method filter of the alphabetically sorted list is used.

Database administrators specify which method filter a user may use in ARIS Cloud. To do this, a database administrator assigns the relevant method filter to the database and user in ARIS Cloud Administration.

4.3.2.2.4 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 722). 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 723).

MODEL **TAB BAR**

The **Model** tab bar groups the functions related to the layout and the graphic of models (page 724).

FORMAT **TAB BAR**

The **Format** tab bar groups the functions related to the presentation of written data in models (page 725).

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 726).

4.3.2.2.5 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 730) is inserted. Click the arrow next to the **Paste** icon if you want to paste a definition copy.

4.3.2.2.6 What buttons does the Start tab bar have?

The **Start** tab bar provides the following buttons.

Format painter: Transfers the format (page 699) from one item to another.

Fill color: Colors the item in the selected color (page 699).

Line color: Colors the line of the item in the selected color (page 701).

Equation 1: Edit

Line style and weight: Assigns selected items a different style (page 702) (**Dotted**, **Dashed**, or **Solid**) and defines the weight (page 702).

Appearance: Assigns other properties to or removes properties from selected items (page 703), such as **Shaded**, **3-D effect**, and in addition, **Active** for objects.

Change symbol: Changes the symbol (page 666) of a selected object or the symbols of all selected objects of a type.

Place attribute: Places text attributes at the preset positions.

Assignments: Assigns a new model to the selected object (page 708). The type and name of the new model can be selected.

Arrange: Positions selected items (page 708) behind or in front of other items.

Group/Ungroup: Groups selected items (page 709), so that they can be treated like a single item or ungroups them (page 709).

Align: Aligns selected items on the modeling area with regard to each other (page 709).

Match size of items: Matches the size of selected model items with each other (page 710).

Go to occurrence in Explorer: Opens a new tab showing the repository for the selected object or model and enables the relevant check box.

Alfabet: Provides functionality for establishing connections (page 710) with Alfabet.

4.3.2.2.7 What buttons does the Model tab bar have?

The **Model** tab bar provides the following buttons.

Optimize layout: Automatically creates a new layout for the model.

Horizontal space: Inserts space in your model from left to right.

Vertical space: Inserts space in your model from top to bottom.

Export graphic: Exports the graphic of the model to your download area.

Grid: Shows and hides (page 661) the grid in the model windows and sets the grid width (page 662).

Template: Provides the available model templates for selection (page 658).

4.3.2.2.8 What buttons does the Format tab bar have?

The **Format** tab bar provides the following buttons.

Format painter: Transfers the format (page 699) 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.

4.3.2.2.9 What buttons does the BPMN tab bar have?

The **BPMN** tab bar provides the following buttons.

Change symbol: Changes the symbol (page 666) of a selected object or the symbols of all selected objects of a type.

Add lane: Adds a new lane (page 673) to a pool or lane.

Insert lane: Inserts a selected lane in the selected pool or lane (page 673).

Delete pool or lane: Deletes the selected pool or lane (page 674).

Move lane: Moves the selected lane (page 673) in the required direction.

Transform into call conversation: Transforms communication elements into call conversations (page 674).

Change type of sequence flow: Specifies the type of a sequence flow (page 674).

Collapse subprocess: Collapses a subprocess object (page 675).

Expand subprocess: Expands a subprocess object (page 675).

Figure 1: Edit

Edit: Opens the assigned model contained in the subprocess (page 675) 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 676).

4.3.2.2.10 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.

4.3.2.2.11 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.

4.3.2.2.12 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.

4.3.2.2.13 What to consider when placing objects in/on objects

You can place objects on other objects (page 694) or in other objects (page 693). 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 modeling area. The connections linking the objects are then displayed.

4.3.2.2.14 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, e. g., the **Existence** attribute, the **As a symbol** check box becomes available. If you enable the check box, a plus sign is placed in the modeling area instead of **Yes** for the **Existence** attribute, and a minus sign instead of **No**.

4.3.2.2.15 What does place attribute as a symbol mean?

There are attributes for which a default symbol is defined.

If such an attribute was specified and placed, e. g., the **Existence** attribute, the **As a symbol** check box becomes available. If you enable the check box, a plus sign is placed in the modeling area 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 Cloud Administration.

4.3.2.2.16 What happens to placed attributes that have no attribute value?

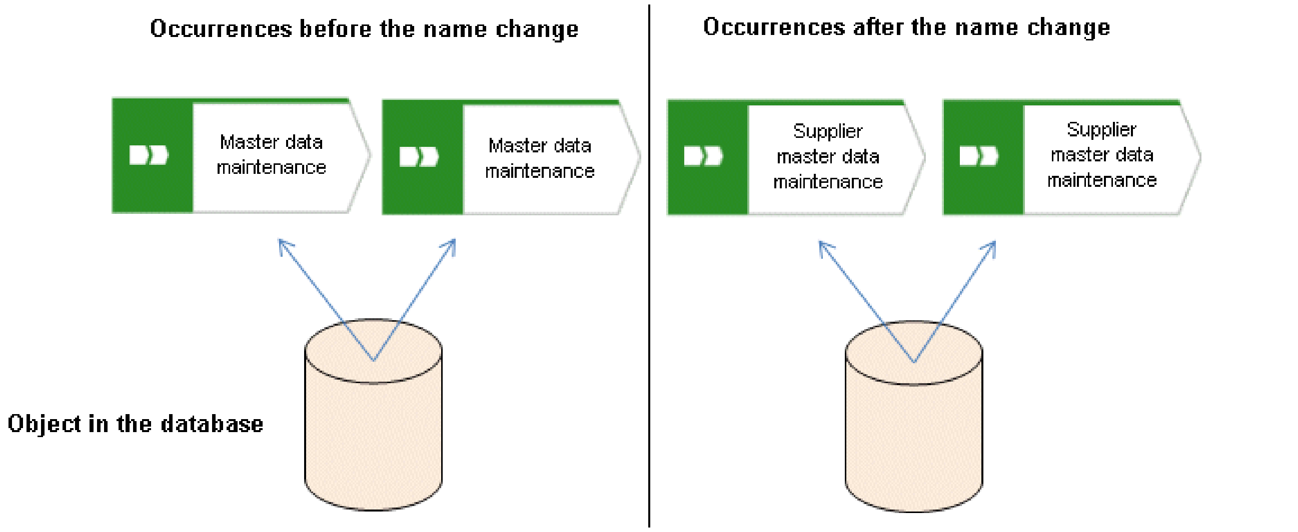
If you place an object in the model window, the name of the object is output as an attribute. The name attribute is usually placed within the object. You can place additional attributes of objects in the model window in order to have the relevant information available directly in the model window. The 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.

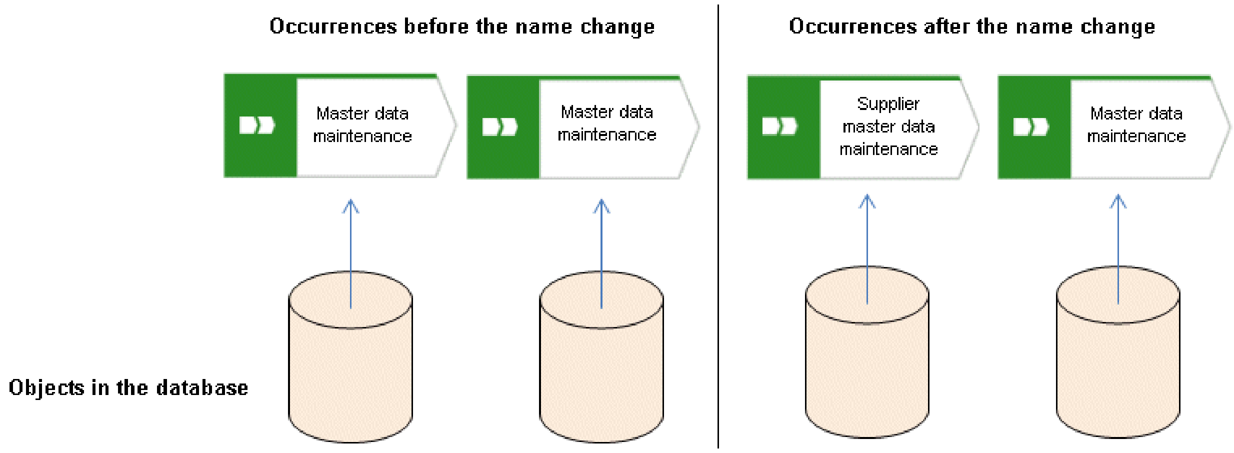
If a placeholder is to be used to make the placement of attributes without a value visible in the model window, you can define that they are to be placed with an attribute name. In our example, **Max. processing time:** would then be output for the relevant functions, and a value entered would appear behind the colon.

4.3.2.2.17 What is the difference between occurrence copy and definition copy?

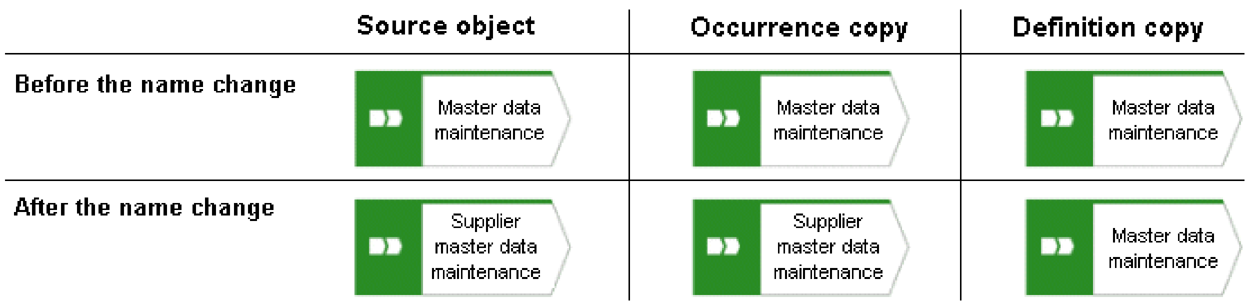
An occurrence copy is only the copy of a graphical representation of an object. Thus, when you create an occurrence copy, a graphic is created that references the copied object:



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:



4.3.2.2.18 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.

4.3.2.2.19 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, e.g., 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.

4.3.2.2.20 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, e.g., 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.

4.3.2.2.21 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, e.g., 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 for 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 modeling 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

4.3.2.2.22 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.

4.3.2.2.23 How to import a BPMN file

The following applies when importing (page 654) 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. Occurrence copies 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/)). The BPMN file is validated against the official XML schema of the BPMN 2.0 specification and imported if validation is successful. If errors are found, these are displayed in a dialog.
- 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.

4.3.2.2.24 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.

4.3.2.2.25 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. 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.

4.3.2.2.26 When is the Alfabet button shown?

When Alfabet is configured with ARIS Architect, the Alfabet button is available in the Start (page 723) tab bar. You can find the complete configuration description in the ARIS Architect online help.

4.3.2.2.27 What reports are available?

The Reports bar provides various reports. Depending on the model type you have opened, the reports offered may vary because only the reports related to the corresponding model type are displayed.

Create process manual (page 590)

Export graphic as PDF (page 591)

Generate job description (page 592)

Output functions across multiple assignment levels (page 594)

Output functions with connected objects (page 596)

Output model information (page 597)

Output model information considering various aspects (page 598)

Output object information (page 599)

Process manual (example) (page 599)

RA(S)CI - Output organizational participations in processes (page 600)

4.3.2.2.27.1 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

4.3.2.2.27.2 Export graphic as PDF

USE

This report exports a model graphic as a PDF file.

CONTEXT

Models

OUTPUT FORMAT

PDF

4.3.2.2.27.3 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

4.3.2.2.27.4 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, e.g., 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

4.3.2.2.27.5 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

4.3.2.2.27.6 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

4.3.2.2.27.7 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
- DOCX
- ODT

4.3.2.2.27.8 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

4.3.2.2.27.9 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 with 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:

- **R**esponsible 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. Execution responsibility must be assigned to at least one role, although others (see **Supportive**) can be delegated to assist in the work required.
- **A**ccountable 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, i.e., the one who assumes project budget responsibility. The **decides on** and **accepts** connections are evaluated in order to mark this responsibility.
- **S**upportive relates to the person supporting the person responsible (see 'Responsible') in performing the activity.
- **C**onsulted 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.
- **I**nformed 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

4.3.2.2.28 What report output formats exist?

When you click the output button in the Reports bar, for example, **Output PDF**, the report is output in the selected format. You can change the output format by clicking the down arrow. The selection of output formats may be restricted based on the report. Possible output formats are:

PDF

DOC

DOCX

ODT

RTF

HTML

TXT

XLS

XLSX

XML

4.3.3 Version models

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 are used to continuously document the changes to models, which 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.

4.3.3.1 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.

4.3.3.2 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.

4.3.3.3 Open version

You can open a version of a model for information purposes.

Procedure

1. In the repository, navigate to the database group containing the model whose version you want to open. 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.

The write-protected version of the model opens in Model Editor and you can obtain information on the model's contents. Furthermore, you can view reports on the model or selected objects (page 516).

4.3.4 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

4.3.4.1 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 not be opened by any user, not even by yourself.
- 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 unlock them again.

4.3.4.2 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.

4.3.4.3 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 not be opened by any user, not even by yourself.
- 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.

4.3.4.4 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 not be opened by any user, not even by yourself.
- 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.

5 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 + 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 + 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.

ARIS Administration

Manages users, user groups, privileges, licenses, documents, configurations, and processes for a tenant (page 765).

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, e.g., 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)

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

Definition copy

Copy of the object definition, i.e. 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

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-qualyfied 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

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 elements include circles, squares, and polygons.

Grid

Placement markings in the model window in the form of dots that you can show for modeling support (page 661).

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 709).

They can be moved, enlarged or reduced, and deleted as if they were one item.

GUID

Globally **U**nique **Id**entifier (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, e.g., backup and restore tenants. This requires the creation of a user in the user management for the infrastructure tenant, e.g., **master**. This user must be assigned all licenses and privileges that are needed for the action.

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, i.e., they can access ARIS Administration and Tenant Management.

Users with the relevant privileges can specify other infrastructure tenants in ARIS Administration.

J

JAAS

Java **A**uthentication and **A**uthorization **S**ervice (**JAAS**).

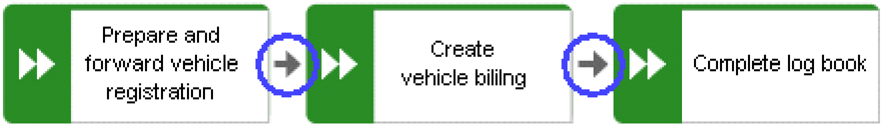
A Java interface that enables you to provide services for authentication and access privileges in Java programs. JAAS supports user-based authentication.

K

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.



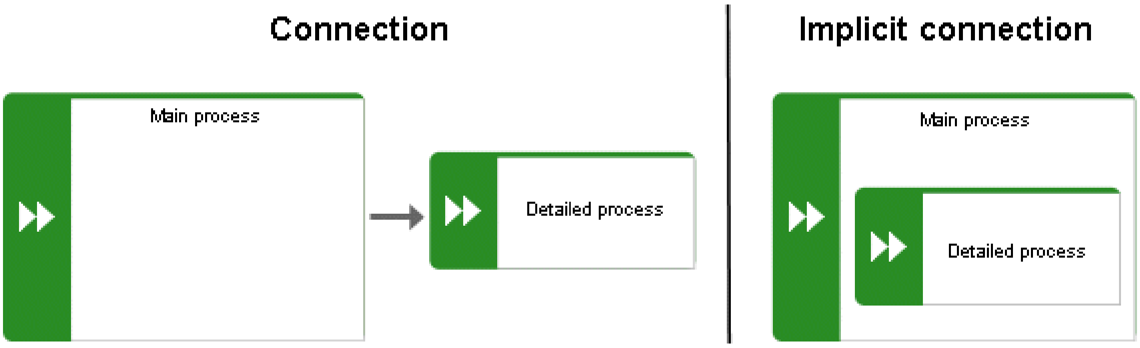
Connection, implicit

Invisible connection.

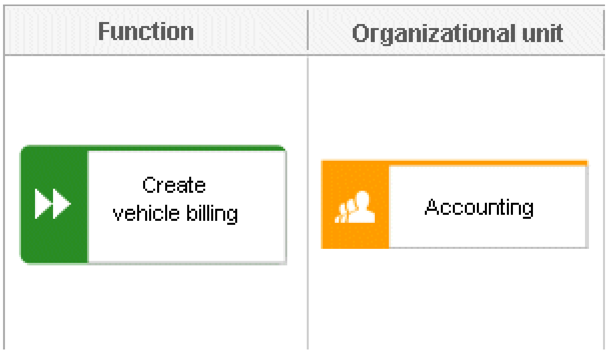
Implicit connections are created if the **Create implicit connections for overlapping objects** option is enabled and objects are placed within objects. In the displayed dialog, you can decide whether to hide any connections and, if so, which connections to hide for these objects. The difference between 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.



This needs to be differentiated from implicit relationships (page 762).

L

Lane 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.

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 668) 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.

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, i.e., 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, i.e., 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 - i.e., 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-**T**ime **P**ad (**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

ARIS Process Board

ARIS Process Board is used for editing tasks that are provided by Process Governance during process execution. In addition, ARIS Process Board provides an overview of a user's active tasks.

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, i.e., 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 **A**ssertion **M**arkup **L**anguage (**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 763) 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)

The advantage of using SSO is that users need to remember only one password when logging in to the network. After entering the password at their workspace, they have access to all computers, services and programs for which they have the required privileges, without having to enter the password again.

SSL

Secure **S**ocket **L**ayer (**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 763).

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 activate this function privilege for other users. The **superuser** user does not use up a license. The **superuser** user manages 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. You can change all user data except for the user name.

system

The system user **system** assumes the administrator role of the system administrator and has all function and access privileges in all databases. 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) cannot be disabled either. You should immediately change the password **manager** to prevent unauthorized access.

To avoid problems, you should create additional system users. If you forgot the passwords of all your system users, the full range of functions and access to the data in this database are no longer available to you.

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. 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. 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. 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) cannot be disabled either. You should immediately change the password **manager** to prevent unauthorized access.

To avoid problems, you should create additional system users. If you forgot the passwords of all your system users, the full range of functions and access to the data in this database are no longer available to you.

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 for all databases of this tenant. The ARIS Service Administrator commands **backupsystemdb**, **restoresystemdb**, and **updatesystemdb** can be used to save and restore this data centrally.

After performing an update setup, please update the system configuration of the tenant (filters, templates, and scripts) based on the supplied system database (ARIS_DVD/Content/SystemDB/*.adb). Any content you have created will be retained.

Syntax

`updatesystemdb <archive>`

Restores the central system database that contains data such as filters, model templates, and scripts from a system database backup file (ADB) <archive>. It is also possible for you to update the system database using the **updatesystemdb** command

After performing an update setup, please update the system configuration of the tenant (filters, templates, and scripts) based on the supplied system database (ARIS_DVD/Content/SystemDB/*.adb). Any content you have created will be retained.

Syntax

`updatesystemdb <archive>`

Syntax

`restoresystemdb <archive>`

Saves the central system database that contains data such as filters, model templates, and scripts in an ADB file in a directory **<archivedir>**.

Syntax

`backupsystemdb <archivedir> [<alternatename>]`

T

Tenant

Provides a user with a particular functionality and specific data depending on their license. One ARIS Administration exists for each tenant. All ARIS clients use tenants to access database servers and thus work with a common data basis. For each tenant, there is a configuration on the **Administration** tab that defines ARIS Method and the modeling conventions. These are used by all databases on that tenant.

All tenants are managed using the Infrastructure tenant.

TLS

Transport **L**ayer **S**ecurity (**TLS**).

TLS is known under the name of its predecessor **S**ecure **S**ockets **L**ayer (**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 **R**esource **L**ocator, a particular type of URI (**U**niform **R**esource **I**dentifier).

URLs identify a resource via the network protocol used (e.g., http or ftp) and the **location** of the resource (e.g., 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 (e.g., **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.

V

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)

6 Support information

6.1 Support

ONLINE

A valid support contract allows you to access the solution database.

Click **https://empower.softwareag.com/** (**https://empower.softwareag.com/**).

If you have any questions on specific installations that you cannot perform yourself, please contact your local Software AG sales organization.

BY TELEPHONE

If you have a valid support contract, you can contact Global Support ARIS at:

+800 ARISHELP

The plus sign stands for the prefix required in a given country to dial an international connection.

Example for dialing within Germany with a direct extension line: 00 800 2747 4357

6.2 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.

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V