



ARIS

RELEASE NOTES

Version 10.0 Service Release 4b

May 2018

This document applies to ARIS Version 10.0 and to all subsequent releases. Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 Version information

Name	Version	Release date
ARIS 10.0 SR4b	10.0.4.1	14.05.2018
ARIS 10.0 SR4	10.0.4	17.04.2018
ARIS 10.0 SR3	10.0.3	21.12.2017
ARIS 10.0 SR2c	10.0.2.3	29.11.2017
ARIS 10.0 SR2b	10.0.2.2	07.11.2017
ARIS 10.0 SR2	10.0.2.1	17.10.2017
ARIS 10.0 SR1	10.0.1	14.07.2017
ARIS 10.0	10.0.0.2	19.04.2017

2 General information

Supported platforms

For detailed information about supported platforms see
Documents\English\2 System requirements\ARIS System Requirements.pdf

New features

For detailed information about new features in ARIS 10.0 see
Documents\English\1 Overview\ARIS Feature Overview.pdf

3 Fixes in ARIS 10.0 SR4b

General

- When distributed ARIS environments that include elasticSearch clusters are updated from ARIS 10.0 SR3 to ARIS 10.0 SR4, existing data are now correctly copied to the new structure. Thus, all required data are now always available in the new environment. (Pivotal 5325873)

ARIS Connect

- Corrections were made to the search functionality so that the correct number of pages is now displayed for the list of search results regardless of where you have started the search operation or how many results are returned. (See also "Help", topic area "Use ARIS Connect > "Search content".) (Pivotal 1329163)
- In ARIS Connect, the display of model assignments was changed in such way that an assigned model is displayed only if it is allowed by the method filter in use. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Output information", page "Display the current method filter", and topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Open assignment".) (Pivotal 5321644)
- An error due to which the ARIS portal sometimes became unresponsive was fixed in the navigation component. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal".) (Pivotal 5324495)
- Corrections were made to the sorting of tables so that the sorting now works properly when a user to which the "Contribution" license is assigned is working with a table as a viewer. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Contribute as a viewer".) (Pivotal 5316986, 5325152)

ARIS Server

- The "Fonts" folder containing the fonts used in reports is now no longer deleted when you perform an update of the ABS/HDS runnable. (Pivotal 5324980)

ARIS Document Storage

- When you back up an ADS tenant, now the operation correctly backs up the tenant you have selected and no longer tries to access other tenants. (Pivotal 5324880)

ARIS Dashboards

- For ARIS Aware content to be displayed faster, the communication log file is now being compressed.
(See also "Help", topic area "Use ARIS Connect > Use the repository", page "Use dashboards".) (Pivotal 5320076)
- An error was fixed in ARIS Aware so that when you import dashboards, the Oracle backend schema is now correctly created for tenants other than the default tenant.

ARIS Process Governance

- In ARIS Process Governance, both caching and the backup mechanism were improved so that completing a human task no longer results in process instances being blocked.
(See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Use case", page "Start governance process", and topic area "Special topics and functions > Process Governance > Model > Valuable information > What objects and symbols are relevant to Process Governance?", page "Human task".)
(Pivotal 5320844)
- When German is selected as the interface language, ARIS Process Governance dialogs that were created using ARIS 10.0 SR4 sometimes show incorrect names of controls in data flows. This problem does not occur in dialogs that were created with older versions of ARIS or when using an ARIS 10.0 SR4b installation.
If a dialog shows this behavior, open the affected dialog, save it, and update the data flow.
(See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs".)

ARIS Risk & Compliance Manager

- Deactivated/deleted processing activities are now correctly displayed in lists at organization hierarchy elements.
- Integration of GDPR enhancements into Connect configuration.
- ARIS Synchronization now also considers empty attributes of objects and clears them in ARCM.

ARIS Publisher

- Models that include a high number of user-defined method items now open quickly.
(Pivotal 5318998)

4 Fixes in ARIS 10.0 SR4

General

X-Forwarded-For headers will now be ignored by default

The X-Forwarded-For (XFF) HTTP header is a common method for identifying the originating IP address of a client connecting to a web application (like ARIS) through an HTTP proxy or load balancer.

Without this header, the application would see the IP address of the HTTP proxy or the load balancer as the apparent client IP address instead of the IP address of the actual client.

ARIS protection mechanism against brute force login attacks

ARIS has a security mechanism in place to prevent attackers from performing arbitrarily many login attempts to “try out” or “guess” a user’s password (a form of brute-force attack): if too many failed login attempts for a certain user account coming from a certain IP address are observed, that combination of user account and IP address is locked for any further login attempts.

Up to ARIS version 10.0.1, ARIS would accept XFF headers in a request. As a consequence, an attacker could set this header to make ARIS believe that his requests are coming from a different than his actual IP address. That way, the protection mechanism against brute force login attacks could be circumvented, allowing the attacker to try out arbitrary many passwords using different “fake” IP addresses in the XFF header.

To prevent this problem in the future, starting with ARIS 10.0.2, ARIS (the ARIS loadbalancer, in particular) will by default discard any XFF headers received from clients. However, there are scenarios where the use of the XFF header is legitimate, for example when ARIS is operated behind a reverse proxy (e.g., a highly-available loadbalancer in front of the ARIS loadbalancer(s)). Here, the reverse proxy will usually use the XFF header to allow ARIS to know the IP address of the actual client that does the request. With XFF headers now being discarded by default, ARIS will now no longer see the actual client addresses, but instead, from the perspective of ARIS, all requests will be coming from a single IP address (that of the reverse proxy).

While the negative effects of this change are limited, in such settings it is highly recommended to configure the ARIS loadbalancer to accept XFF headers from the IP address of the reverse proxy.

To do this, you should the loadbalancer configure parameter `HTTPD.X-Forwarded-For.trusted.proxy.regex`, with which you can provide a regular expression (regex, see <https://httpd.apache.org/docs/2.4/glossary.html#regex>) that will make the ARIS loadbalancer accept XFF headers from any IP address that matches this regex. Note that any backslash characters that are to appear in your regex need to be escaped by replacing them with four(!) backslash characters.

For example, to accept XFF headers from the IP address 10.0.0.1, you would set the `HTTPD.X-Forwarded-For.trusted.proxy.regex` to `"10\\\\\\\\.0\\\\\\\\.0\\\\\\\\.1"`. Observe the use of the quadruple backslashes to escape the dot (“.”) character that has a special meaning in regular expressions.

To get back the original behavior, you can set the `HTTPD.X-Forwarded-For.trusted.proxy.regex` parameter to `".*"` (a regular expression matching every IP address).

Security

- The loadbalancer configuration for enforcing HTTPS connections (SSL) now works as expected. (Pivotal 1296177)

ARIS Server

- It is no longer possible for users to start the consolidation of objects in a versioned database. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items > Create and manage objects", page "Consolidate objects".)
(Pivotal 5305664)
- A merge procedure no longer overwrites the name of the main group in the target database, even if you selected the "Source overwrites target" conflict resolution option for objects. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases > Merge databases".)
(Pivotal 5310146)
- The wording was improved for the error message that is displayed when a user who has permanently locked a model is trying to create an occurrence copy of a model object that is locked by another user.
(Pivotal 5310961)
- When logging in to a database, you can now select any existing change list instead of only the latest 999. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Open database", Link "Versionable databases".)
(Pivotal 5312692)
- A correction was made to the "Edit report parameters" functionality so that it now works correctly outside of a database context. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage scripts", page "Specify report parameters".) (Pivotal 5316621)

ARIS Dashboards

- You can now import, correctly display, and work with ARIS Aware content that you have backed up from ARIS 10.0 GA. (See also "Help", topic area "Manage ARIS Connect > Administrate dashboards (ARIS Aware) > Configure dashboards", page "Import dashboards".) (Pivotal 1322963)
- The dashboard editor in ARIS Aware now uses the language you have selected in ARIS Connect. Furthermore, some of the user interface items were given more descriptive names. (See also "Help", topic area "Use ARIS Connect > Use the repository > Use dashboards", page "Create a dashboard in the Repository".) (Pivotal 5306476)

ARIS Architect / Designer

- Default symbols used for object definitions can now be changed only by users having write privileges for objects. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Assign a default symbol to existing objects".) (Pivotal 5292670)
- Changes were made to the Visio import into ARIS so that relevant Visio drawing types are now correctly identified and the corresponding VSDX files correctly imported into ARIS. (See also "ARIS > Help > Working with ARIS", topic area "Export/Import > Visio import".) (Pivotal 5303304)
- The layout functionality was improved so that automatic creation of a model layout now provides better results. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Generate model layouts automatically".) (Pivotal 5308846)
- Sorting the "Variants" properties page of a model now works correctly for groups. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use variants".) (Pivotal 5310697)
- Now the search shows a correct result when special characters such as + ^ § () [] { } are being used in combination with an asterisk (*). (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5310837)
- The RACI view now works correctly when objects of the "Function" type (object type number 22) are defined to be either a "Task" or a "Subprocess" based on the attribute specified for them in BPMN models. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "What is the RACI fact sheet for?".) (Pivotal 5314379)

ARIS User Management

- The "updateLicense" ACC command for updating licenses now supports multiple product codes. (Pivotal 5288975)
- Corrections were made to the user synchronization functionality so that only group memberships with a direct assignment are removed now when users are being synchronized. (Pivotal 5300477)
- The names of user groups are no longer truncated on the "Associated users" page. (Pivotal 5303244)
- The delimiters | (pipe) and ~ (Tilde) are now handled correctly in multi-LDAP configurations and are allowed to be used as an input to the user interface. (Pivotal 5308410)
- User logins to the system are now logged correctly. (Pivotal 5311719)

- The standalone version of User Management now provides the English version of the ARIS help if no help is available in the interface language you have selected. (Pivotal 5311851)
- The "Add LDAP server" dialog is now displayed in the center of a screen and provides a horizontal scroll bar for you to easily access all relevant input fields by moving them into the visible area. (Pivotal 5311852)
- Kerberos SSO now works correctly with dashboard links so that users can directly access ARIS Aware dashboards by clicking the corresponding links. (Pivotal 5319866)

ARIS Connect

- It is now possible to simultaneously open more than seven ARIS Connect models in Microsoft® Internet Explorer® 11. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Basic modeling", page "Open model for editing".) (Pivotal 5300455)
- When you print a model graphic as a PDF file in the portal, the "Select output options" dialog is now displayed in the alternative language "English" if an unsupported language was selected as the interface language in ARIS Connect (for example, Greek). (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Output information", page "Print the graphic of the current model".) (Pivotal 5305845)
- Filtered objects of the "Control" type are no longer displayed on the process overview page and the sidebar of the "Steps" fact sheet. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Classic view > Groups > Fact sheets of ARIS models > 'Overview' and 'Steps'".) (Pivotal 5311553)
- Connections and connection ends are now always displayed correctly in ARIS Connect regardless of the browser being used. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer" and topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Basic modeling", page "Open model for editing".) (Pivotal 5318055)
- If you are using a modification set that is based on the classic view, the corresponding areas now open correctly when you click "Manage documents" or "Dashboards & Data feeds" on the "Home" page. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal > Manage configuration and modification sets", page "Create modification set" and topic area "Use ARIS Connect > Work in the portal > Views > Classic view > Quick start".) (Pivotal 5318061)

ARIS Report

- Corrections were made to the Script Wizard to enable the highlighting of output formats. As a result, highlighting is now correctly applied or removed when output formats are selected or deselected using the CTRL key and the mouse. (Pivotal 5300279)
- In ARIS Connect, you can now successfully run reports for models for which no name was specified in the language currently selected. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Output information", page "Generate report" and topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing", page "Generate report".) (Pivotal 5300672)
- Changes were made to drop-down lists in ARIS Connect. As a result, the width of drop-down list boxes in dialogs of ARIS Connect reports now corresponds to the width of the relevant selection box even if the list entries are shorter. If the texts in the list are longer, the last part is replaced with three dots. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Output information", page "Generate report" and topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing", page "Generate report".) (Pivotal 5300674)
- The report script API help was revised. Some errors were removed and missing information was added. (See also "ARIS > Help > ARIS Script".) (Pivotal 5303090)
- Corrections were made to the sorting of tables in report dialogs so that sorting a column no longer results in incorrect data being displayed. (Pivotal 5307810)
- Corrections were made to the ARIS object model. When running an ARIS report script, it is now no longer possible to create an object occurrence for a versioned object definition that is no longer available in the workspace version of a database. (Pivotal 5308192)
- Corrections were made to Script Editor so that existing (saved) breakpoints no longer move during the process of editing a script. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Use Script editor".) (Pivotal 5310701)
- "A user running a script in debug mode without being logged in to a database can now use the "Debug script" dialog to log in to a database. Double-clicking the name of the required database now correctly enables the "Next" button. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Use Script editor".) (Pivotal 5310706)
- Report script API method "getAccessRights (int nAccessRight)" of the "UserGroup" report class now returns a result. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Objects > UserGroup", page "getAccessRights(int) : Group[]".) (Pivotal 5313094)
- Report script API method "enableCancellation (boolean bEnableCancel)" now works correctly. When this method is set to "false", it is not possible to cancel a running report in ARIS Connect. (Pivotal 5311862)

- Corrections were made to the Visio import:
Connections of the "activates" or "creates" type used in BPMN diagrams are no longer modeled as message flows.
If a collapsed subprocess modeled in Visio contains objects, this subprocess is now converted into an expanded subprocess.
Please note:
Symbols that are incorrectly specified in the mapping with regard to Visio but are allowed by ARIS Method cannot be prevented from being placed. This may lead to subsequent errors due to which symbols of modeled objects do not comply with their descriptions/properties.
(See also "ARIS > Help > Working with ARIS", topic area "Export/Import > Visio import".)
(Pivotal 5311445)
- Report script API method "ScriptInfo.getImports()" now always returns a correct result by returning the file name when a file is imported and a GUID (Globally Unique Identifier) when a report is imported. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Global objects > Report component interfaces > Script admin > ScriptInfo", page "getImports() : String[]".) (Pivotal 5313718)
- The table of contents is now correctly numbered in the output of the "Create process manual" report. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Create process manual".) (Pivotal 5313833)
- The report "Import data in Excel format" now also imports files containing data from ARIS Simulation attributes, such as the "Processing time" (AT_WORK_TIME) attribute. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Import data in Excel format".) (Pivotal 5314149)
- Spaces are now correctly displayed when Arabic characters are used in EMF graphics that were generated by reports. As a result, Arabic words are now coherent and comprehensible. (Pivotal 5314462)
- Report script API method "getAccessRights (int nAccessRight)" of the "UserGroup" report class now returns a result. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Objects > UserGroup", page "getAccessRights(int) : Group[]".) (Pivotal 5318471)

ARIS Process Governance

- It is now possible to configure how hyperlinks are to be displayed in input tables used for ARIS Process Governance dialogs. When adding an input table to a screen diagram, you can use the "Display links as icons" check box to specify whether a link is to be displayed as an icon (check box enabled) or as an entire link (check box not enabled). (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information > Element pane", page "Input table".)
(Pivotal 5315987)

ARIS BPMN

- The "Symbol order" area in step 15 ("Select symbol order") of the Filter Wizard now correctly provides the object symbols for the "BPMN collaboration diagram (BPMN 2.0)" model type. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Define your own filter".)
(Pivotal 5300553)
- The "can trigger" connection is now displayed in the "Create connections" dialog for you to decide whether you want it to be shown or hidden when the associated object overlaps another object. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Create implicit connections for overlapping objects".)
(Pivotal 5306463)
- The use of BPMN functionality in ARIS was extended in such way that it is now possible to use lane objects in models of the "BPMN process diagram (BPMN 2.0)" type that were created as a "Subprocess (collapsed)" in a model of the "BPMN collaboration diagram (BPMN 2.0)" type.
(Pivotal 5312848)
- In BPMN diagrams, it is no longer possible to create a connection between a group and other BPMN objects. (Pivotal 5316232)
- BPMN import was improved in such way that it is now possible to import BPMN files that have invalid references to objects. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Create/Import a model", page "Import BPMN file".)
(Pivotal 5316504)
- Tasks whose "Activity type" attribute is set to "Call activity" are now correctly exported as a call activity as was the case in previous ARIS versions. (See also ARIS Connect: "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing > Export", page "Export BPMN diagram". ARIS Architect: "ARIS > Help > Working with ARIS", topic area "Export/Import > BPMN Import/Export", page "Export BPMN diagram as a BPMN file".) (Pivotal 5317471)

ARIS Business Publisher

- The folder icon is now correctly displayed in HTML exports. (See also "ARIS > Help > Working with ARIS", topic area "Publish > HTML export", page "Publish models as HTML export".)
(Pivotal 5312654)
- Report script API method "MatrixContentCell.getCxns()" no longer returns only NULL objects, but now returns the required information. (See also "ARIS > Help > ARIS Script, topic area "Methods for reports and semantic checks > Objects > Matrix", page "getContentCells() : MatrixContentCell[]".)
(Pivotal 5313084)

ARIS Risk & Compliance Manager

- Policies that have already been assigned to an incident are now no longer displayed for selection.
- The option that enables you to mark an object as "issue-relevant" is now available on all lists including assignment lists.
- Specifying input for the "Processing time (target)" field on audit step templates is now mandatory.
- An appropriate error message is now displayed when you are trying to create a questionnaire based on a survey task whose end date is in the past.
- When a customizing is enhanced using ARIS Cloud Controller, existing customizing are now deleted first.
- The "system administrator" role is automatically assigned to users in ARIS Risk & Compliance Manager (by synchronization) only if these users are assigned the 'ARCM administrator' function privilege in ARIS Administration/User Management.
- You can now switch to another section of a questionnaire via the tree view even if you have not answered all of a section's mandatory questions yet.
- An issue owner can no longer delete an issue whose issue owner state is "On hold".
- You can now create an incident only if the discovery date you specify is the current day or a date in the past.

ARIS Document Storage

- Displaying content from ARIS document storage in Arabic now works correctly. (Pivotal 5300129)
- The checking of document types was improved so that uploading documents now works without incorrect restrictions. (See also "Help", topic area "Use ARIS Connect > Work in the portal > My tasks > Documents", page "Upload document".) (Pivotal 5305508)
- If documents from ARIS document storage are renamed, comments associated with these documents are no longer removed. (See also "Help", topic area "Use ARIS Connect > Use the repository > Handle documents", page "Rename document".) (Pivotal 5307747)
- ARIS document storage links now correctly refer to the latest document version available. (See also "Help", topic area "Use ARIS Connect > Use the repository > Handle documents > Handle document versions", page "Show version history".) (Pivotal 5312227)

ARIS UML Designer

- Line breaks in a "Body" property are now correctly retained for an opaque action if you click the area in between two buttons in a value cell. (Pivotal 1205990)
- In multi-node environments (with at least 2 ABS runnables), temporary folders and files automatically created in the "Download" directory of the ABS runnables during a tenant backup are now automatically deleted. As a result, more free disk space is available. (Pivotal 1324820)

Localization

- Issues with garbled Japanese are fixed. Japanese texts are not garbled in Merge log and Merge wizard shows correct Japanese names. Also problems with garbled Japanese in attribute wizard and versioning are fixed. (Pivotal 1206134, 1206330, 1206471, 5320665, 5322062)

5 Fixes in ARIS 10.0 SR3

ARIS Server

- An attribute search performed in a database that was just restored now finds all relevant attributes regardless of the length of the attribute text. (See also "ARIS > Help" > Working with ARIS", topic area "General", page "Find".)
(Pivotal 5305021)
- Robustness was improved for the import of filters and XML files on Unix-based systems with regard to the MIME types in use.
(Pivotal 5301205)

ARIS Architect / Designer

- A user to whom only the "Read" privilege is assigned can no longer change the default symbol used for an object. (See also "ARIS > Help" > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Replace object symbol".)
(Pivotal 5292670)
- The Visio import now correctly identifies all template aliases so that VSDX files are successfully imported into ARIS. (See also "ARIS > Help" > Working with ARIS", topic area "Export/Import > Visio import", page "Import models from Microsoft® Visio".)
(Pivotal 5303304)
- The object consolidation functionality is no longer provided in a versioned database. It is generally not possible to consolidate objects in versioned databases. (See also "ARIS > Help" > Working with ARIS", topic area "Navigate and edit items > Create and manage objects", page "Consolidate objects".)
(Pivotal 5305664)
- The "Search" tab no longer displays technical attributes that are not relevant to users and thus are to be invisible. (See also "ARIS > Help" > Working with ARIS", topic area "General > New tab", page "Start search using new tab".)

ARIS User Management

- In the "Associated user groups" area of a user, user group names are now displayed in their entirety, which means that names are no longer restricted to the first 26 characters. (See also "Help", topic area "Manage ARIS Connect > Manage users", page "Edit user".)
(Pivotal 5303244)
- The accessibility of the User Management profile page was improved.

ARIS Connect

- User-defined symbols from derived model types are now correctly displayed in the "Symbols" bar in ARIS Connect Designer. (Pivotal 5300363)
- If no roles are selected for filtering, the filter output no longer displays any processes. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Valuable information > ", page "What is the structure of the My content area?".)
(Pivotal 5303680)
- Logging in to ARIS Connect using the Kerberos single sign-on now works correctly for users that log out and try to log in again. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Set up user management > Customize ARIS for LDAP server operations", page "Configure single sign-on".)
(Pivotal 5304415)
- If the configuration includes a language for which no translations are available, the "Select output options" dialog is now displayed in the alternative language "English".
(Pivotal 5305845)
- If a user changes the layout of the "Home" area in a modification set, these changes are now always saved correctly. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal > Manage configuration and modification sets", page "Create modification set".)
(Pivotal 5306080)
- The performance of ARIS Connect was improved for the browsers "Google Chrome", "Microsoft Internet Explorer 11", and "Microsoft Edge".
- Editing diagram names sometimes resulted in an error being displayed. This problem no longer exists.
- Color highlighting is now enabled again for table headers used in the ARIS Connect configuration so that table headers can now be clearly distinguished from table text. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal > Manage configuration and modification sets", page "Create modification set".)
- Model names containing country-specific characters are now correctly displayed in comments posted in Collaboration even when Microsoft SQL database systems are used. (See also "Help", topic area "Use ARIS Connect > Collaborate with users".)
(Pivotal 5305260)
- The display of a diagram is now refreshed in the "Home" area when a user switches to another database.
- Page changes now work correctly in the "My content" area. The required pages are shown as expected. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Classic view", page "Home".)

ARIS Report

- The "Output user groups with users and privileges" report is now generated correctly when curly brackets are used in an e-mail address. (See also "ARIS > Help" > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > User management", page "Report: Output user groups with users and privileges".)
(Pivotal 5297838)
- The "Export relationship matrix" report is now generated correctly, which means that all relevant relationships are now displayed in the Microsoft Excel export file. (See also "ARIS > Help" > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Administration", page "Report: Export relationship matrix".)
(Pivotal 5301512)
- Corrections were made to the "Mandatory semantic checks" ARIS macro so that it can now be run for open matrix models. (See also "ARIS > Help" > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Using script editor > Valuable information", page "What is a macro?".)
(Pivotal 5302177)
- Documents generated by reports, macros, or semantic checks now contain mixed-language content only if the file "atsall<language abbreviation>.js" is not available for the selected language (for example, if the file "atsallru.js", with "ru" meaning "Russian", is missing, a generated document may still contain some English terms, such as "page" or "database"). (See also "ARIS > Help" > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Using script editor > Valuable information", pages "What is an ARIS report?", "What is a macro?", and "What is a semantic check?".)
(Pivotal 5302728)
- Corrections were made to the report script API method "setFocusedElement" so that applying this method to multi-line text boxes no longer results in an error. (Pivotal 5303068)
- The "ARIS Script" help now provides a complete description of the "createFilteredDefCopy" method. (See also "ARIS > Help" > ARIS Script".)
(Pivotal 5303090)
- German special characters (umlauts) are now correctly displayed in the dashboard report properties. (Pivotal 5301517)

ARIS Dashboards

- German diacritics are now correctly displayed and processed in ARIS Aware dashboards and in the ARIS Connect configuration. (Pivotal 5300341)
- If a user uses a dashboard URL in a browser without being logged in to ARIS Connect, this user is now automatically redirected to the ARIS Connect start page of the tenant specified in the dashboard URL.

ARIS BPMN

- Clicking the "Back" button in the "Filter Wizard" now displays the previously selected model types, object types, and connection types. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Define your own filter".) (Pivotal 5300553)

ARIS Process Governance

- The behavior of dependent controls in ARIS Process Governance was adapted for use in ARIS Connect. This means that dialog elements of user-defined dialogs are now no longer displayed in ARIS Connect if the "Set as invisible" option was enabled for them. (Pivotal 5306672)
- The diagram view in the process administration now displays the corresponding diagram after a mini workflow was run in ARIS. (See also "Help", topic area "Manage ARIS Connect > Administrate automated processes", page "Open process administration".)

ARIS Risk & Compliance Manager

- The "Check issues" job now shows the issues to be checked only once. (Pivotal 5306195)
- The "Update survey" functionality is now described in the form help. Furthermore, a description of the button is now displayed as a tooltip.
- Corrections were made to the display of tooltips so that tooltips no longer prevent users from clicking specific areas of a chart.
- Control executions performed by deleted users are no longer excluded from control execution lists.

ARIS Document Storage

- Due to changes made to the persistence of ARIS document storage, it is not possible to migrate folders whose names use special characters. Prior to backing up folders for migration purposes, folder names must be changed to match the ARIS 10.0 naming conventions. This information is now available in the "ARIS Data Migration Guide.pdf" manual. (See also "Help", topic area "Manage ARIS Connect > Manage documents".) (Pivotal 5301299)

ARIS Analysis

- Corrections were made to character encoding so that data feeds can now be run correctly and MashZone and ARIS Aware are able to process the corresponding data. (Pivotal 5301824)
- Corrections were made to the sorting of query results in the table view so that entries are now always sorted correctly. (See also "ARIS > Help" > Working with ARIS", topic area "Evaluate data > Use queries", page "Output table view".)

6 Fixes in ARIS 10.0 SR2c

ARIS Server

The use of the 'optimizedb' command for a database in ARIS 10.x (including ARIS 10.0, ARIS 10.0 SR1, ARIS 10.0 SR2, ARIS 10.0 SR2b) can result in data consistency defects.

An ARIS database may become inconsistent (see 'II. Impact') if the following ARIS Administration commands are executed in ARIS 10.x:

- Run database optimization with the ARIS Server Administrator command 'optimizedb'.
- Restore a database with '-c checkrebuildall' and set the options "checkConsistency", "checkReplicaConsistency", and "rebuildForeignKeyIndexes" to 'true'.

The 'history <dbname>' ARIS Server Administrator command can be used to identify whether one of these two commands was executed for a specific database.

Sample entry for 'optimizedb':

```
[DB_OPTIMIZATION] | Start: 2017-11-14 12:16:23.937 | End: 2017-11-14 12:18:13.171  
| Duration: 109,234s (00:01:49.234) | Area: [-1] | Actions: [ACCESS_RIGHT, FONT, COM,  
CXN, TEXT, USER, OBJ, EXT_CXN, MODEL] | Options: [] | Consistency: Indices, foreign  
keys | ARIS: 10.0.0.1168090 / 10.0.1.1168090 | ASN: #20 | Tenant: default
```

Sample entry for restore using '-c checkrebuildall':

```
[IMPORT_V_10] | Start: 2017-11-27 13:22:22.774 | End: 2017-11-27 13:22:24.249 |  
Duration: 1,475s | Backup: 10.0.0.1185787 / 10.0.2.1.1185787 | DB schema: 5 | Clan:  
[blobHandling: OptimizeForSize, checkConsistency: true, checkReplicaConsistency:  
true, rebuildForeignKeyIndexes: true] | ARIS: 10.0.0.1195057 / 10.0.0.3.1195057 |  
No archive | Tenant: default
```

The database can be repaired in any case (Section 'III. Fix ' explains how to address the above-named database inconsistency issue).

Impact

Performing database optimization using the 'optimizedb' command or restoring a database by means of '-c checkrebuildall' may have the following effects in ARIS 10.x:

- Corruption of internal meta information. This information will be ignored by the backup operation so that using this backup to restore the database will result in data loss.
- The save operation for models can fail.

Fix

To prevent database inconsistencies from occurring or fix the inconsistency issue once it has occurred, it is necessary to run individual patches for ARIS 10.0, ARIS 10.0 SR1, ARIS 10.0 SR2, or ARIS 10.0 SR2b, or to perform an update to version ARIS 10.0 SR2c (10.0.2.3).

Once the relevant patch was run or the update to ARIS 10.0 SR2c was performed, executing the 'optimizedb' command will no longer cause any inconsistency issues.

Identifying inconsistencies in existing databases is possible only by running the corresponding patches for ARIS 10 versions older than SR2c or performing an update to ARIS 10.0 SR2c.

A new ARIS Server Administrator command called 'checkreferences' is available, making it possible to identify whether there are critical inconsistencies in a database. This command checks all databases on a tenant. There is no need to lock databases prior to executing this command.

If critical inconsistencies are found in a database as a result of executing this new command, the 'optimizedb <dbname>' command must be executed for the given database.

If 'checkreferences' does not identify any database inconsistencies, no actions are required.

Nevertheless, with the patched or updated version, we recommend a database optimization if any of the above described actions like optimization or special restore have been executed by the customer.

7 Fixes in ARIS 10.0 SR2b

General

- ARIS 10.0 SR2b supports now also Amazon AWS Linux.

ARIS Server

- Under certain circumstances ARIS databases can have structural issues concerning internal index entries. In such cases an automatically triggered maintenance mechanism has been deleting data instead of recovering it. This issue has now been solved. (Pivotal 5302336)
- The behavior of the consolidation.log file has been adapted to other log files in ARIS Business Server and therefore is now configurable. (Pivotal 5302094)

ARIS Report

- Resolving an issue with ARIS Report "User groups with assigned users and privileges" in User Management, that failed if the email address of a user contained the character { or }. (Pivotal 5297838)
- Resolving an issue with ARIS Report "Export Relationship Matrix, where the exported Microsoft Excel file did not contain any relationships at all. (Pivotal 5301512)

ARIS for SAP

- ARIS for Process Driven SAP: It is now possible to use SAP shadow symbols also in Enterprise BPMN process diagrams and Enterprise BPMN collaboration diagrams. The tasks with SAP shadow symbols by default and are not included in the SAP synchronization.

ARIS User Management

- User group name in User group association view will not be cut anymore. (Pivotal 5303244)

ARIS Analysis

- Fixed problem with encoding (queries & data feeds). (Pivotal 5301824)

8 Fixes in ARIS 10.0 SR2

ARIS Architect / Designer

- The "Filter Wizard" now displays previously selected model, object, and connection types when the user clicks the "Back" button. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Define your own filter".)
(Pivotal 5293670)
- In the "Attributes" dialog, now the correct values are copied when the columns are switched. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Extended editing > Edit attributes".)
(Pivotal 5293007)
- A time zone issue was fixed due to which different times were displayed for the "Last change" attribute in ARIS Connect Model Viewer and ARIS Architect when the server time (e.g., London (UTC +00:00)) was different from the client time (e.g., Berlin (UTC +01:00)).
(Pivotal 5290177)
- Models that contain object occurrences whose height is 0 are now loaded and opened without delay. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Basic", page "Open models".)
(Pivotal 5280868)
- The size of the "Assigned models" dialog can now be changed using the mouse. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Show assignment".)
(Pivotal 5279035)
- In the ARIS Method help, the "Process step" symbol is marked correctly as "Structurally relevant" for the derived "Process block" model type. (See also "ARIS > Help" > ARIS Method help".)
(Pivotal 5294966)
- User names are now output identically using lower case letters in ARIS Clients as well as in User Management of ARIS Administration.
(Pivotal 5290299)

ARIS Connect

- Text that is entirely displayed in ARIS Architect/Designer is now also entirely displayed in Model Editor instead of being abbreviated by three dots.
(Pivotal 5297752)
- The attributes "Last user" and "Last change" are no longer updated if no model changes were made.
(Pivotal 5294234)

- Model Editor now creates assignments correctly when a model is assigned whose name contains a line break. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Extended editing", page "Assign a model to an object".)
(Pivotal 5289214)
- The configuration of start elements used by the "Steps" fact sheet was corrected.
(Pivotal 5289554)
- Columns that were added to a matrix can now be deleted by moving the mouse pointer to the column header and clicking the "Delete" icon behind the column name. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Table", page "Remove a column of a matrix".)
(Pivotal 5284731)
- In Model Viewer, double-clicking an object symbol now opens the corresponding assignment. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Open assignment".)
(Pivotal 5283974)
- The text wrap functionality now works correctly for all attributes of all objects.
(Pivotal 5278786)
- The error message that is displayed when logging in to a Japanese version of ARIS Connect fails is now correctly displayed in Japanese.
(Pivotal 1296327)

ARIS Server

- The performance was improved for the portal and the quick search so that content and results are now displayed much faster. (See also "Help", topic area "Use ARIS Connect > Search content".)
(Pivotal 5290748)
- Reports using the report script API now provide version information much faster.
(Pivotal 5292841)
- Assignments are now always displayed correctly in the archive area.
(Pivotal 5274215)
- Problems that occurred when using Oracle JDBC drivers newer than version 12.1.0.1 for the ABS runnable were solved.
(Pivotal 5293255)

ARIS Report

- The "Replace symbol types" report now replaces symbols correctly when the "[All symbols]" option is selected for the current object symbols.
(Pivotal 5293222)

- A rounding error that occurred when applying the "OutputObject.SetLeftMargin()" and "GetLeftMargin()" report script API methods was corrected so that these methods no longer return wrong values (for example, 12 is no longer returned for a value that is actually 13). (Pivotal 5294181)
- The "Database.find(..)" report script API method now handles wildcards correctly. (Pivotal 5293159)
- The "SingleSelectElement.getSelectedIndex()" report script API method now returns the correct index when the index was preset. (Pivotal 5290796)
- If two carriage returns are inserted between two tables in the design view, only two instead of four spaces are now returned. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Create report > With design view", page "Create report scripts in design view".) (Pivotal 5289324)
- When the "Import data in Excel format" report is run, now an automatic layout is subsequently performed to prevent objects from overlapping. (Pivotal 5285382)
- Corrections were made to the "XlsSheet.setPicture(...)" report script API method so that results are now also output correctly when the XLSX format is used. (Pivotal 5278180, 5294460)
- The 'Export graphic as PDF' report is now available in multiple languages. (Pivotal 5297345)
- The ARIS Script help page for the "XlsCell.getCellValue" report script API method now correctly states that the return value of the cell is a string. (Pivotal 5289950)

ARIS BPMN

- Pressing F2 now starts direct editing from a condition expression attribute placed for a connection. (Pivotal 5294322)
- When a task is transformed into a call activity, the system now checks whether a valid symbol is used for the task. If not, the action is canceled. Thus, the semantic check that is subsequently run to validate the BPMN diagram no longer returns a symbol-related error. (Pivotal 5278385)
- It used to be possible to insert more than one lane into a pool when using drag and drop. Now, only the first lane is allowed to be inserted via drag and drop. To add an additional lane to a pool, you have to proceed as follows:
 1. Place a lane in the model window.
 2. Select both the newly placed lane and the pool to which you want to add the lane.
 3. Activate the BPMN tab.

4. Click "Insert lane" (ARIS Connect) or "Pool and lane > Insert lane (ARIS Architect/Designer)".

(Pivotal 5279298)

- Transforming BPMN object types sometimes resulted in connections no longer being allowed, for example, after having transformed a function into a manual task. It is now possible to add required connections via a corresponding filter.

(Pivotal 5276811)

ARIS Setup

- The ARIS Server setup now allows white spaces in the server installation path.

(Pivotal 5288382)

ARIS User Management

- ARIS Cloud Controller (ACC) commands now work correctly when the user password contains an @ character.

(Pivotal 5298229)

- The expiry date is now exported correctly when usage statistics are exported to a CSV file. The field names of the JSON export now match the column names of the CSV export.

(Pivotal 5293022)

- During LDAP user synchronization, users that were deleted from the configured LDAP system are now also removed from User Management.

(Pivotal 5287731, 5285602)

ARIS Dashboards

- If the language is changed in the "Repository" view for dashboards, the view is automatically refreshed and shown in the language selected (ARIS Connect > Repository > Dashboards & Data feeds).

(Pivotal 5296180)

- Dashboards are now filtered even if no dashboard description is available.

(Pivotal 5294453)

ARIS Process Governance

- When you jump from an error list of a failed governance process deployment to an incorrect object, now the relevant model opens and the incorrect object is selected (i.e., the selection is no longer removed).

(Pivotal 5292682)

ARIS Analysis & Queries

- Corrections were made to the configuration file so that queries and analyses now run efficiently on a local server.
(Pivotal 5291444)

ARIS Publisher

- If the "Release" attribute is set, it is now also displayed in Greek.
(Pivotal 5291727)
- All layouts - including additional layouts stored in the Publisher layout directory - are now available in the Export dialog and can be selected to create new Publisher exports.
(Pivotal 5291368)
- Transparent flags are now processed as required so that the graphic output of ARIS diagrams is generated correctly.
(Pivotal 5285501)

ARIS Risk & Compliance Manager

- If a questionnaire is generated, the interviewee in charge receives a corresponding notification.
- The monitor job now closes migrated task items properly.
- Once the import of an ARCM backup including configured dashboards is complete, the "My dashboards" button is now immediately available in the "Home" area.
- Object-specific control managers now can view the data available in assignment lists ("Control -> Control executions" and "Control execution tasks-> Control execution").
- If you want to assign an existing question to a section, you can now filter the questions in the assignment list.
- The test manager, tester, and test reviewer now can also view the data available in the assignment list (Test case -> Surveys and test case -> Questionnaires).
- Performing a backup or restore on a tenant other than the tenant configured for ARCM now completes without errors.
- It is no longer possible to enter negative values for integer parameters in the system configuration in the "Administration" area.
- The "News" panel in the "Home" area is visible only if news is actually available. Otherwise, this panel is hidden.
- Now, the correct module is highlighted in the module navigation when the module is changed starting from a form, for example, when a hierarchy is opened from a risk form.

9 Fixes in ARIS 10.0 SR1

ARIS Architect / Designer

- When an incorrect system password is entered, a more descriptive message is displayed now. (Pivotal 5271818)
- Access privileges assigned to user groups are now always displayed correctly. (Pivotal 5286786)
- It is now possible to search for language-independent attributes. (Pivotal 5280968)

ARIS Server

- Special characters are now used correctly in the backup archive file when a tenant backup of the "ABS" runnable is created.
- The file pg_initdb.log is now stored in the correct folder:
<instDir>\server\bin\work\work_postgres_{s,m,l}\log

ARIS Report

- The XLS output format of scheduled reports now allows more than 6553 rows. (Pivotal 5287402)
- Evaluating functions is no longer possible in the debug mode. This is due to the fact that functions to be evaluated must be carried out when report or macro scripts are being debugged, which may result in subsequent errors. Such errors can now no longer occur. (Pivotal 5277648)
- The "Type" column of the "Output object information (table)" report is now displayed only once instead of twice. (Pivotal 5277683)
- If ARIS Script Runner is started using an interface language that is not available, now "English" is automatically used as the interface language. (Pivotal 1279502)
- Objects in the "Create structure chart" report are now sorted so that they no longer cause a cancelation of the report. (Pivotal 5274243)

ARIS BPMN

- Transforming BPMN object types sometimes resulted in connections no longer being allowed, e.g., after having transformed a function into a manual task. It is now possible to add required connections via a corresponding filter. (Pivotal 5276811)

ARIS Setup

- Installation is now possible with all patch levels of SUSE Linux 12. (Pivotal 5287177)

ARIS Risk and Compliance Manager

- The database backup function was improved so that special characters now no longer prevent a backup from being created.
- The "create_user.bat" batch file for importing modeled ARCM users into ARIS Administration now includes an additional parameter for setting the loadbalancer port.
- The validation of users was removed entirely from ARIS Risk & Compliance Manager and is now performed only in User Management.
- If ARIS Help is not available in a specific language, the English version is displayed.
- The layout of the "Risk assessments - Qualitative (risk manager)" Risk Management evaluation PDF report was corrected.
- It is now possible to correctly open uploaded documents in ARIS Risk & Compliance Manager after a migration.
- Using the "Environments" filter in the "Issue-relevant objects" list no longer results in an empty dialog being displayed.
- In-memory Sign-off Management locks are now migrated to the database.
- The "Test cases" and "Deficiency statistics" Sign-off Management evaluations for generated sign-off processes now use the "Calculation" filter as required.
- If you are accessing one and the same object more than once via different browsers or tabs and should find that the object is locked for editing, now a message is displayed providing a link that you can use to request write privileges for the object in the current browser or tab.
- Risk assessments that were downloaded for offline processing are now displayed to object-specific risk managers in the list under "Home > My offline objects".
- The list of test cases for the "Test reviewer" role was renamed from "'Not effective' test cases (test reviewer)" to "Test cases (test reviewer)".
- If ARIS Risk & Compliance Manager is used in a multi-node scenario, the "CDF" runnable is required.
- The PDF and Excel report of the audit evaluation "Evaluations > Audit Management > Audit status (Audit steps)" no longer displays numbers, but the green check marks that are also used in ARIS Risk & Compliance Manager.
- An audit step template can now be saved only if all mandatory fields were filled in, even if the status of the audit is not yet set to "Released".
- The XML import now excludes assigned functions for which symbol types are used that ARIS Risk & Compliance Manager does not support.

ARIS Mobile API

- ARIS Mobile API now correctly returns the actual values for combo boxes instead of returning numbers. (Pivotal 5274702)

10 Fixes in ARIS 10.0 (reported by customers for ARIS 9.8)

ARIS Architect / Designer

- To increase ARIS security, the **TLS 1.0** protocol was deactivated in the course of development.
As a consequence, editing the **Documentation** attribute is no longer possible because this attribute is based on the **WebDAV** protocol. If a user now attempts to edit this attribute, a message is displayed indicating that TLS 1.0 needs to be activated.
(Pivotal 5268771, 5269774)
- The Explorer tree no longer collapses when the **Object properties** dialog is closed by clicking **OK**. (Pivotal 5269300)

ARIS Connect

- The user **guest** is no longer able to perform operations for which the user role **guest** has no privileges. (Pivotal 1132963)
- When a user opens a model after Collaboration was deactivated by the Administrator, and then switches between the document and task section, the message indicating that Collaboration is inactive is no longer displayed repeatedly in the Collaboration widget.
(Pivotal 5259015)
- It is now possible to identify a markup property that was added via SSC. (Pivotal 5266479)
- SCC now provides the buttons **Up** and **Down** for changing the order of properties displayed in fact sheets. (Pivotal 5266482)
- If no configuration is available for sorting, a new fallback configuration is automatically generated. It provides default sorting for all item types based on the **Name** attribute, and flow sorting for functions and events in process item types used for the **Steps** view.
(Pivotal 5261862)
- Role selection on the server now works as required. (Pivotal 5263161)
- A published database that was deleted is now no longer displayed in **ARIS Connect**.
(Pivotal 5260581)
- When using the **roleBasedItem** component, ensure that the configuration includes all references required to identify the user role. Details are available as comments in the file **instances/roleBasedItem/roleBasedItem_default.xml** in the classic and default configuration sets. (Pivotal 5258309)
- A correction was made due to which events are now sorted alphabetically. Based on this, the **Steps** view is now displayed correctly. (Pivotal 5271558)

ARIS Server

- It was possible to create a database using a name that already existed if there was a difference in the use of upper and lower case letters. This issue was fixed. (Pivotal 5273034)

ARIS Report

- The **setSelectedFile** method of the report script API had no effect when the report was run in ARIS Connect. This error was fixed. (Pivotal 5267068)
- Changing a connection assignment in Visio mapping no longer changes the Visio shape name to the ARIS symbol name. (Pivotal 1133534)
- If a server is constantly polled in an open report panel, this now leads to a session timeout. (Pivotal 5262683)
- Applying the drawing function to a model graphic, e.g., FrameRect of the **Picture** object, no longer turns the background of the model graphic into black. (Pivotal 5263046)
- The report **RA(S)CI - Output organizational participations in processes** is now available in XLS format in ARIS Connect. (Pivotal 5261594)
- A correction was made to the report script API method **Dialog.setDlgPicture (String sDlgItem, byte[] imagedata, int Type)** so that a number is no longer displayed next to an image. (Pivotal 5254294)
- Based on a correction that was made regarding the report script API, using a new Rhino Engine no longer prevents the cancelation of reports whose execution takes place in a subfunction of the report. (Pivotal 5254342)
- Pressing **ESC** to close a help topic no longer opens the report script help. (Pivotal 5254791)
- When the language in ARIS Connect is changed from English to another language, the names of available reports are now displayed. (Pivotal 5254808)
- A correction was made to the report/macro script API so that it is now possible to navigate back to the code editor when debugging the macro while using the **openMatrix** method with **visible** set to **false**. (Pivotal 5252643)
- A correction was made to the report script API method **<>.dialog.getDialogElement("PICTURENAME")** so that this method no longer returns an undefined result. Furthermore, methods were added that can be used to place images in dialogs. (Pivotal 5252342)
- The performance regarding the procedure of assigning and applying templates to models via reports was improved by more than 50%. (Pivotal 5250240)
- When using the report script API to generate URIs and output Excel documents, it is now possible to access an Excel document via the corresponding link. (Pivotal 1127878)
- Based on the switch to a newer external library version, links created in a document via ARIS Report now work correctly when **PDF** is used as the format. (Pivotal 5239084)

ARIS BPMN

- A correction was made regarding BPMN 2.0 models so that users with read-only privileges for an object are no longer able to modify the appearance of an object. (Pivotal 5265416)
- In BPMN 2.0 models, the **Symbols** bar no longer shows symbols that are not allowed so that it is no longer possible for a user to create connections or objects that are actually not allowed by the filter in use. (Pivotal 5262503)
- If a filter uses only BPMN symbols that were derived, ARIS Designer no longer shows the name of the symbol from which a user-defined symbol was derived, but the name of the symbol derived. (Pivotal 5271549)
- It is now possible to run a BPMN export for models containing grouped ARIS objects. (Pivotal 1132067)

ARIS Document Storage

- Links that are displayed in the portal on the **Documents** tab for models and that refer to documents in ARIS document storage, are now displayed in both the language selected for the portal and the alternative language. (Pivotal 5257886)

ARIS Process Governance

- The description of the ARIS Process Governance data flow design was updated in the file 'Data Flow Design.pdf'. (Pivotal 5266864)
- The order of documents in the table control of ARIS Process Governance dialogs is now alphabetical. (Pivotal 5267165)
- The performance regarding variable editing was increased in such way that editing a high number of variables is much faster now. (Pivotal 5248510)
- In ARIS Process Governance, the contrast was increased for scroll bars displayed in dialogs, especially for the use of Microsoft Internet Explorer. (Pivotal 5248988)

ARIS Risk and Compliance Manager

- A correction was made to a macro so that the values returned by the **ADateTextField** control are now correct. (Pivotal 5249123)

ARIS UML Designer

- In the **Properties** dialog, using the **CTRL + Up** and **CTRL + Down** arrow keys to move the properties of a UML2 class up or down now works as required. (Pivotal 5269243)

ARIS User Management

- The User Management report API method **getExpirationDate()** does no longer throw a Java NullPointerException if a license does not have an expiration date. (Pivotal 5268420)

ARIS for SAP© Solutions

- It is now possible to store the synchronization log file in ARIS Architect Administration if the file extension txt is available in ARIS Connect under ARIS Administration > ARIS document storage > Quota and restrictions > Valid file extensions. (Pivotal 1133477)
- In SAP© Solution Manager, links to models in ARIS Connect are now deleted correctly during data transfer from ARIS to SAP© Solution Manager. (Pivotal 5262556)

11 Disclaimer

ARIS products are intended and released for use by persons. Automated processes, such as the generation of content and the import of objects/artefacts via interfaces, can lead to an outsized amount of data, and their execution may exceed processing capacities and physical limits. Processing capacities are exceeded, for example, if models and diagrams are larger than the size of the modeling area, or when an extremely high number of processing operations is started. Physical limits may be exceeded if the memory available is not sufficient for the execution of operations and 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 in order to avoid the risk of overbooking.

This product was tested using scenarios that included 100,000 groups (folders), 100,000 users, and 1,000,000 modeling artefacts. It supports a modeling area of 25 square meters.

ARIS Document Storage was tested with 40.000 documents. We recommend monitoring the number and overall size of stored documents and if needed some documents should be archived.

If projects or repositories exceed the limits, a powerful functionality is available to break them down into smaller, more manageable parts.