

ARIS

Release Notes



ARIS

Version 9.8 – Service Release 7

December 2016

This document applies to ARIS Version 9.8 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.

Copyright © 2010 - 2016 Software AG, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners. Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).



1 Version information

Name	Version	Release date
ARIS 9.8 SR7	98.7.0	16.12.2016
ARIS 9.8 SR6	98.6.0	18.10.2016
ARIS 9.8 SR5	98.5.0	16.06.2016
ARIS 9.8 SR4	98.4.0	15.04.2016
ARIS 9.8 SR3c	98.3.0 (Build 1069100)	26.02.2016
ARIS 9.8 SR3b	98.3.0 (Build 1066384)	11.02.2016
ARIS 9.8 SR3	98.3.0 (Build 1063801)	29.01.2016
ARIS 9.8 SR2	98.2.0	13.10.2015
ARIS 9.8 SR1c	98.1.2 (Build 1041621)	05.10.2015
ARIS 9.8 SR1b	98.1.0 (Build 1039684)	24.09.2015
ARIS 9.8 SR1	98.1.0 (Build 1021446)	25.06.2015
ARIS 9.8	98.0.4	14.04.2015



2 Changes in ARIS 9.8 SR7

ARIS Architect / Designer

- Privileges for creating objects are now identified correctly in ARIS Explorer. (Pivotal 5251632)
- The status of an attribute placement is now displayed correctly in a model comparison. (Pivotal 5244266)
- The output of model graphics to PDF files was improved in ARIS version 9.8 SR 7. Furthermore, it is now possible to search for text contained in graphics. (Pivotal 5252690)
- Renamed standard attribute type groups are now exported correctly during filter export if the exported filter uses attribute types contained therein. (Pivotal 5255354)
- ARIS 9.8 SR7 provides the function of copying a symbol of the "Channel" type from a "Customer journey map" model into a model of the "EPC (row display)" type. (Pivotal 5257543)
- In ARIS 9.8 SR7, you can assign a model of the "Structuring model" type to an object of the "Technical term" type. (Pivotal 5257863)

ARIS Connect

- Only one e-mail with group news is sent to all members of a group now instead of sending individual e-mails to every single group member. This reduces the system load due to a significantly lower number of e-mails in the e-mail queue. (Pivotal 5256360)
- A model shortcut now works correctly again if it is clicked from a separate Browser tab. (Pivotal 5257947)
- The "More" button is now displayed only if there is not enough space available to show all items, e.g., group items. (Pivotal 5258234)
- The "Apache Commons FileUpload" library was updated to minimize security vulnerability.

ARIS Simulation

- A CSV export of statistics can now be performed after a simulation run for EPCs for which multiple assignment levels exist. (Pivotal 5254136)

ARIS Process Governance

- A line break was added to the task assignment e-mail so that the hyperlink is now inserted correctly and opens ARIS Process Board when clicked. (Pivotal 5256890)



ARIS Report

- A correction was made to the report script API so that URIs are now generated correctly. This enables correct links to be created, and results in the creation of valid Excel documents. (Pivotal 1127878)
- Assigning and applying templates to models via report is accelerated by 50%. (Pivotal 5250240)
- If you combine filtering (excluding symbols) with the "Hide non-configured objects" ARIS option, this setting is now used correctly by scheduled reports. (Pivotal 5251790)
- A correction was made to report script API method "<>.dialog.getDialogElement("PICTURENAME")" so that it now returns a defined result. Furthermore, new methods were added to enable the placing of image parts on dialogs. (Pivotal 5252342)
- A correction was made to report script API method "SingleSelectElement.setSelection(int)" so that it is now always evaluated correctly. (Pivotal 5252352)
- It is now possible to assign a report category the same name in various languages. (Pivotal 5254146)
- A correction was made to the report script API so that report execution can now be canceled while a subfunction of the report is being run through. (Pivotal 5254342)
- A correction was made to the report script API so that the generation of Microsoft Excel® files now always works correctly. (Pivotal 5256016)
- The ARIS Connect portal now displays report names correctly in the language selected. (Pivotal 5257311)
- A correction was made to report script API method "insertDocument" so that the page orientation applied to documents is now always correct. (Pivotal 5257339)
- If an assigned model is opened in the ARIS Connect portal, all reports available are now provided for the open model. (Pivotal 5258313)
- A correction was made to event handling so that macros are no longer run twice under certain circumstances.

ARIS Analysis

- Cyrillic font is now handled correctly by query filters. (Pivotal 5254811)

ARIS for SAP

- Running a transaction is now possible for SAP systems whose SAP GUI names contain a vertical bar. (Pivotal 5236560)



ARIS Risk & Compliance Manager

- It is now possible to modify Boolean attributes.
- Event-driven generation of control executions is possible now.
- A correction was made to a French error message to reflect the actual reason for the message: more disk space is required (not more RAM). (Pivotal 5251064)

ARIS Publisher

- Process manual generation using the "Create process manual" report was corrected so that it now also works under Linux. (Pivotal 5254170)

ARIS BPMN

- BPMN 2.0 export: It is now possible to change the "targetNamespace" attribute and calculate its value accordingly (`var targetNamespace = PREFIX + name;`). The calculation is performed by the "BPMN 2.0 export pre-processing script" ARIS report in the category "Open BPM". (Pivotal 5255799)
- BPMN model transformation was accelerated. (Pivotal 1128204)
- Derived BPMN model types are now displayed in the list of possible model types when a subprocess is collapsed. (Pivotal 5235260)

ARIS User Management

- During an LDAP import, it is now possible to cancel the import after the preview was activated so that no import is performed. (Pivotal 5258029)

ARIS Localization

- A correction was made to a French error message to reflect the actual reason for the message: more disk space is required (not more RAM). (Pivotal 5251064)
- The ARIS Client user interface is now available in Czech.



3 Changes in ARIS 9.8 SR6

ARIS Design Server / Connect Server

- Corrections were made to the 'abs_s' ACE runnable so that it now generates only the required number of threads, which results in a better performance. (Pivotal 1125274)
- A warning is now displayed when an attempt is made to edit permanently locked objects in a merge procedure. (Pivotal 5232941)
- The search now also returns a correct result when it is being extended by multiple attributes that are connected via an OR rule. (Pivotal 5239695)
- Merge: The 'Source overwrites target' option is now used correctly for font format conflicts when the 'Merge source and target attributes' option is enabled. (Pivotal 5240332)
- Tenant-specific configuration settings specified by the server administrator are now evaluated correctly, e.g., 'abs.downloadclient.useJARASDownloadClientLauncher' or 'abs.downloadclient.availableRunConfigurations'. (Pivotal 5240673)
- ARIS Server Administrator (command-line mode): The 'all' parameter of the 'reorg' command is now evaluated correctly. (Pivotal 5234635)
- XML export/import: It is now possible to correctly import exported lane models containing columns/rows that were frozen and deleted. (Pivotal 5234161)
- Database names containing spaces are now handled correctly by 'arisadm.sh'. (Pivotal 5241481)

ARIS Process Governance

- The Process Governance Web service Create - Static ARIS Business Publisher export' uses the 'com.idsscheer.age.serviceenabling.scriptrunner.defaultLanguage' property as the method language. The property value can be specified using the Administration Web interface. (Pivotal 5243193)
- Comments entered when delegating a task to another person are now displayed in ARIS Process Board. (Pivotal 5230297)
- Mandatory fields in Process Governance dialogs are now marked correctly by an asterisk (*) in ARIS Process Board. (Pivotal 1120552)
- The Process Governance operator 'Determine size of collection' now also supports the input of items that are used to select users. (Pivotal 5228624)



ARIS Architect / Designer

- Inserting objects from the ARIS Search into ARIS models by drag and drop no longer prevents models from being saved. (Pivotal 5244939)
- Model display in Microsoft® Internet Explorer® was improved so that the display of model contents is no longer fuzzy. (Pivotal 5244514)
- When copying attribute values from ARIS to Microsoft® Excel using Copy and Paste, line breaks in the attribute values are now ignored and the relevant text is no longer written to more than one cell in Excel. (Pivotal 5237815)
- Changing an OLE object in an ARIS model no longer prevents the ARIS model from being saved. (Pivotal 5235273)
- The option of creating and inserting objects is now available when using an ARIS Designer license. (Pivotal 5232904)
- A meaningful message is now displayed when an ARIS user tries to open an object assignment without having the required access privileges. The restriction may be caused by the method filter or license in use, or by the access privileges specified for a database. (Pivotal 5229568)
- When copying a user-defined symbol in ARIS Architect/Designer, the paste options 'Paste as variant' and 'Create master here' are now available. (Pivotal 5243639)
- The 'Connected objects' page of the model properties dialog now shows the connected ARIS objects. (Pivotal 5238607)
- Opening models - especially assigned BPMN models - is much faster now. (Pivotal 5203323)

ARIS Connect

- The text color of the active tab is now displayed correctly according to the 'Text color (active tab)' setting. (Pivotal 5244419)
- It is now possible to use hierarchies with multiple GUIDs (Globally Unique Identifiers) as a root element. (Pivotal 5235675)
- The names of related objects are now correctly displayed as links in the portal. (Pivotal 5231797)
- Wallpapers specified for a database are now also displayed in the Model Viewer of the portal. (Pivotal 1127108)

ARIS Simulation

- Process folders processed for a function with an associated risk and control type can now be successfully forwarded to the succeeding function. (Pivotal 5231667)



ARIS Report

- It is now possible to specify the font format for a cell in XSLX tables using the report script API. Thus, text is displayed correctly with the selected font even though the Microsoft® Excel menu shows the default font when the cell is selected. (Pivotal 5245639)
- If an ARIS report uses a language that does not exist in the report string table, the system attempts to use a language of the same language family. If none is available, English is used. (Pivotal 1126209)
- The 'Import data in Excel format' report now correctly imports integer attribute values. (Pivotal 5238248)
- Corrections were made to the 'filter.getAPIName()' method of the report script API so that now a result is returned when the attribute type groups 'Type' and 'Number' are used. (Pivotal 5237999)
- If multiple output files are created by an ARIS report, all of them are now saved correctly. (Pivotal 5234963)
- The handling of BLOB (Binary Large Object) attributes was improved so that they are now handled correctly in various contexts. (Pivotal 5235573)
- Corrections were made to the report script API so that objects extending beyond lane boundaries in lane models are now associated with the lane containing the largest part of the object. (Pivotal 5221907)
- Extensions were added to a variety of ARIS reports so that they can now be run for Enterprise BPMN models. (Pivotal 5226591)
- The 'ENVIRONMENT_BP' and 'ENVIRONMENT_STD' constants were added to the ARIS Script help as return values of the 'Context.getEnvironment()' function. (Pivotal 5226849)
- The 'Compare models' report can now be used to compare models across databases and thus identify the differences between a model selected in the working database and a corresponding model version stored in an archived version of the database. (Pivotal 1123683)
- The layout of ARIS models was adjusted so that it is always identical regardless of whether it is assigned via the report script API or the relevant functionality in ARIS Architect/Designer. (Pivotal 5241703)
- Page numbering was corrected in the 'Create process manual' report. (Pivotal 5241821)
- It is now possible again to configure macros in ARIS Architect. (Pivotal 5239341)
- Corrections were made to the 'setHorizontalLayout(boolean)' report script API method so that changing the layout direction now works as required. (Pivotal 5239355)

ARIS Analysis

- The performance of spreadsheets, queries, and analyses was improved. (Pivotal 5225040)



ARIS Risk & Compliance Manager

- It is now possible to directly set the current date and close the dialog by clicking 'Today'. (Pivotal 5232815)
- The 'ARCM attribute maintenance' macro was modified so that the dialog contents can now be accessed by the scroll bar. Thus, using the macro now also works well when the screen resolution is low. (Pivotal 5230296)

ARIS webMethods Integration

- 'The 'Share with IT' workflow now runs as required when different cases are used for the names of user roles. (Pivotal 1125877; 5219913; 5242308)

ARIS Publisher

- Attribute names listed in the ARIS Publisher search results are now displayed correctly in the database language or alternative language. (Pivotal 5240255)
- Attributes returned by the report script API for items selected in ARIS Publisher are now also correctly initialized when they have no value. (Pivotal 5231604)
- Security: Anonymous login to ARIS Publisher does not send any login data upon a GET request. This is possible only by using the POST method. (Pivotal 1123273)
- ARIS Publisher: The search now works as required when using quotes ("). (Pivotal 5240173)

ARIS BPMN

- The 'State' ARIS attribute was added to the 'BPMN 2.0 attributes' attribute type group for objects of the 'Cluster/Data model' and 'Information carrier' type. The BPMN export/import supports the exchange of this attribute. (Pivotal 5237334)

ARIS Document Storage

- When a new document version is uploaded, now a check is made as to whether the document type matches the document type of the original document. If it does not, a corresponding message is displayed. This message indicates to the user that proceeding with the upload will create a new document instead of a new document version. (Pivotal 5230265)



ARIS User Management

- The user selection dialogs now also show LDAP users in addition to local users for attributes of users such as 'Person responsible'. (Pivotal 5243978)
- LDAP import now includes members of nested groups if the recursion depth was set correctly. (Pivotal 5240674)
- Privileges that have been revoked are no longer reassigned after system restart. (Pivotal 5241806)
- The Japanese translation of the user management command line tools was improved. (Pivotal 1115149)
- If no password is entered for the technical LDAP user, testing the connection will now fail as expected. (Pivotal 5243579)

ARIS UML Designer

- Setting date values in properties dialogs now works as required. (Pivotal 5240059)
- User-defined Boolean attributes are now set correctly when attribute changes are made in ARIS UML Designer. (Pivotal 5238606)

ARIS Documentation

- The manual „Modeling BPMN 2.0 in ARIS“ has been incorporated into the ARIS Method manual.



4 Changes in ARIS 9.8 SR5

ARIS Design Server / Connect Server

- ARIS Server Administrator: An incorrect error message indicating a missing server connection was removed. (Pivotal 5233636)
- The 'hds' (Heavy Duty Server) runnable is now able to run in headless mode.
- With service release 4, 'BPMN2Serialization_Transformation' was renamed to 'BPMN 2.0 Export'. From service release 5, the 'Updatesystemdb' command will include renamed transformations.

ARIS Architect / Designer

- It is now possible to change the password in the download client login dialog anytime. (Pivotal 5225770)
- The merge procedure now handles renamed groups correctly when a database merge is performed a second time (update). (Pivotal 5232207)
- The Save operation no longer fails for models containing OLE objects to which changes were made in ARIS. (Pivotal 5235273)
- The 'Hierarchy number' attribute (AT_HIER_NUM) can now be set properly in ARIS Connect.
- Performance has been significantly improved for the creation of groups by users that do not have DBADMIN privileges (system users).

ARIS Process Governance

- The execution policy 'Only one required' was corrected. Thus, setting the 'Executor selection' attribute of the 'carries out' connection to 'Only one required' now works correctly. (Pivotal 5224127)
- The Web service 'Compare model versions New' now returns a correct description of the model differences. When an object is added, the action is no longer named 'Deleted', but 'Added' (and vice versa). (Pivotal 5235791)
- The default language to be used in ARIS Process Board is specified in the file '<ARIS installation folder>\server\bin\work\work_apg_<s,m,l>\base\webapps\processboard\WEB-INF\tl-configuration.xml'. The first locale from the list will be used as the default language when connecting to ARIS Process Board.



ARIS Connect

- If a user is logged out due to a session timeout, the next user action will open the ARIS Connect login page. (Pivotal 1122862)
- When opening an assigned model, the 'Select diagram' dialog is shown only when at least two models are assigned to the corresponding object. (Pivotal 5233894)
- ARIS Architect and ARIS Connect now use the same URLs (Uniform Resource Locators) for derived model types. This means that the URL for a derived model in ARIS Connect is always the same, regardless of whether the model is opened directly in ARIS Connect or by selecting 'Go to > ARIS Connect' in ARIS Architect. (Pivotal 5234565)
- The search now also finds objects whose names are abbreviated in models due to size restrictions. (Pivotal 5234576)
- It is now possible to use hierarchies for which multiple GUIDs (Globally Unique Identifiers) exist as a root element. (Pivotal 5235675)
- User-defined Model Viewer settings are now used as specified. (Pivotal 5235899)
- When templates that add a shadow to object symbols of the 'Exclusive gateway' type are applied to existing BPMN diagrams, these symbols are now displayed correctly. (Pivotal 5236813)
- Download icons are now available for linked documents in the 'Steps' view in ARIS Cloud.

ARIS Simulation

- When simulating EPCs containing distributed risks, now the correct number of process folders processed is passed on from a function to the successor of this function. (Pivotal 5231667)
- In EPCs containing one or more assigned processes, the process statistics (detailed evaluation) now show for each process instance the corresponding start event of the assigned model.

ARIS Analysis

- All existing private queries are now displayed. (Pivotal 1120366)
- If fields are merged for a query that is run to obtain subtotals, the context used is now correct for all items. (Pivotal 5226675)
- The 'Correct error(s)' dialog now always displays the current language.



ARIS Risk & Compliance Manager

- The display of the heat map for qualitative risk assessment was improved, so that the x-axis, the y-axis, and the heatmap's legend are now shown entirely and correctly. (Pivotal 5230430)
- The form tab is now no longer shown twice after duplication of a deficiency. (Pivotal 5236801)
- The dashboard link for the list of 'Issue-relevant objects' is now generated correctly when the 'Risk' object type is selected.
- Data migration now also works when documents from ARIS document storage that are listed in the ARCM database are not available in ARIS document storage.

ARIS Method

- The sequence of connections offered when creating a connection between a role and a function is now also correct when user-defined method filters are used. The sequence corresponds to the one known from the 'Entire method' filter, except for the connections that are excluded by the user-defined filter. (Pivotal 5227686)
- Placed user-defined attributes of the 'Boolean' type are now displayed correctly. (Pivotal 5230474)

ARIS Publisher

- The export procedure was improved to enable the processing of a very high number of text definitions and other objects. (Pivotal 5226072)
- Some errors were fixed and robustness was increased for methods of the Publisher report API. (Pivotal 5226781)
- ARIS Publisher now supports localized names of Process Governance processes. (Pivotal 5229907)
- Apache® POI libraries were updated to version 3.13. (Pivotal 5233858)

ARIS BPMN

- In BPMN 2.0 diagrams, tasks are now transformed directly into call activities without being shown as user tasks first. Thus, it is now possible to select the 'Business rule task' symbol for these objects, for example. (Pivotal 5230080)
- The names of lanes and pools are now transferred as required when BPMN files are imported into ARIS Connect.



ARIS User Management

- The translation of user management commands into Japanese was improved. (Pivotal 1115149)
- If the property 'com.aris.umc ldap.sync.user.importGroups' is enabled, the corresponding user group is now included in the user synchronization. (Pivotal 5233975)
- LDAP user synchronization no longer ignores the user-specific language for notifications. (Pivotal 5234183)
- Alfabet logout requests are now processed as required.

ARIS Report

- The report selection that is opened using the pop-up menu of a filter now provides filter-related reports only.
- The ARIS report script API now supports Lotus Notes links. (Pivotal 5224537)
- Script runner console output was improved, thus enabling users to identify more easily whether the execution was successful or has failed. (Pivotal 5229910)
- Table cells are now output correctly to PDF files and Microsoft® Word documents if the sum of the cell widths is less than 100%.
- Rhino libraries 1.7.7 and POI 3.13 are now used correctly.

ARIS UML Designer

- The report 'Output models and objects of the groups' now runs successfully if the report result contains UML 1.4 diagrams. (Pivotal 5229554)
- It is now possible to output the diagram type (AT_TYPE_6) to the header or footer of a diagram printout. (Pivotal 5230933)
- When using the 'Convert to UML 2' functionality for UML migration, the values of the 'Created by' and 'Created on' system attributes are now transferred correctly from UML 1.4 elements and diagrams to the corresponding UML 2 elements and diagrams. (Pivotal 5235289)
- If you have created object links in ARIS UML Designer, you can use Copy/Paste to add UML 2 elements to ARIS Architect/Designer models.



5 Changes in ARIS 9.8 SR4

ARIS Design Server / Connect Server

- The report script API method "ComObjOcc.setCopyOf" was corrected and now works reliably with pictures of the "PNG" format. (Pivotal 1111042)
- The ARIS Server administration command "maintain" now always works as required. (Pivotal 1119647)
- Special characters, such as "&", are now correctly exported during an XML export. This prevents errors from occurring when an XML import is performed. (Pivotal 5200229)
- If multiple report servers are in use, reports will now also run successfully if specific fonts are not available on all of the servers. (Pivotal 5217046)
- Evaluating font formats using a report now works correctly with fonts using underline formatting. (Pivotal 5223321)
- Reorganizing a database no longer results in connections being deleted from matrix models. (Pivotal 5224222)
- The options of the "reorg" command are now described in detail in the ARIS Server Installation and Administration Guide. (Pivotal 5226845)
- For security reasons, detailed error messages (including JAVA stack traces) are no longer issued if login failed.

ARIS User Management

- If users have logged in using single sign-on, they can open documents in ARIS document storage by clicking the link without having to log in again. (Pivotal 1120004)
- On the "Documents" page, documents are now displayed only once even if their name has been specified in various languages. (Pivotal 5197981)
- If the value for "com.aris.umc.users.guest.create" is set to "true" in the user management configuration, restarting the user management runnable will automatically create a user "guest" in case the previous guest user has been deleted. (Pivotal 5199187)
- Access privileges can now directly be granted to users that are associated with a user group to which ARIS Architect licenses are assigned. (Pivotal 5207700)
- The password policy requirements are now also shown in case users violate this policy when changing their password. (Pivotal 5208183)
- User management now shows the correct number for the users selected via check box. (Pivotal 5215997)
- LDAP user synchronization no longer imports assigned LDAP user groups. (Pivotal 5216032)
- The "Forgot password?" functionality was changed so that attackers can no longer identify users of the system. (Pivotal 5223618)



ARIS Connect

- Now the same version of a document opens, regardless of whether a link to a document in ARIS document storage is clicked in ARIS Architect or ARIS Connect. (Pivotal 5204160)
- When a user is logged out of ARIS Connect, the Login page is now displayed for the user to log in again. (Pivotal 5212629)
- The display of font formats in the ARIS Connect portal was corrected. Font formats are now displayed properly in all browsers. (Pivotal 5213281)
- Model Editor is now capable of displaying more than 20 templates for selection. (Pivotal 5214082)
- ARIS Architect and ARIS Connect now always show identical values for user-defined attributes. (Pivotal 5215053)
- Role filter sorting was corrected. (Pivotal 5223948)
- License usage was optimized so that no more than one license is used when users access ARIS Connect. (Pivotal 5206801;5209152)
- In the portal, models of the "Business Model Canvas" type are now also visible to users with the "ARIS Connect Viewer" license. (Pivotal 5208198; 5215835)
- The "Up" button now works correctly so that users can follow back the breadcrumb navigation path.
- Set a template as the default in ARIS Connect:
The model template assigned to a model created in ARIS Connect can be modified by changing the server settings. This should be done using the ""ARIS Server Administrator"" tool. Example:
"set abs.connect.template.newPalette.default 67311520-f5af-11e5-4fc6-0a0027000000".

The following describes a sample configuration and explains how to configure the default template:

```
# Specify the template to be used for a new model created in ARIS Connect
# (please note that ARIS Architect/Designer use a different mechanism).
# You can define default templates for databases using the classic or new symbol palette.
# In addition, you can overwrite the default templates when used for specific model types.
# Specify the default template for the classic symbol palette. Please note that models of
# the ""BPMN collaboration diagram"" type should be assigned another template:
#abs.connect.template.classicPalette.default=c4bbdb20-f1d2-11e5-45d9-5cf9dd733053
#abs.connect.template.classicPalette.MT_BPMN_COLLABORATION_DIAGRAM=7035bcc0
-f5af-11e5-4fc6-0a0027000000
# Specify the default template for the new symbol palette. Please note that a specific
# user-defined model type should be assigned another template:
#abs.connect.template.newPalette.default=67311520-f5af-11e5-4fc6-0a0027000000
```



#abs.connect.template.newPalette.a91b03b0-f5af-11e5-4fc6-0a0027000000=77097aa0-f5af-11e5-4fc6-0a0027000000

ARIS Process Governance

- Single sign-on (SSO) has been improved for ARIS Process Board so that additional login is no longer required. (Pivotal 1111850)
- Variables in ARIS Process Governance reminder e-mails are now resolved as required. (Pivotal 1113224)
- Process Governance administrator e-mails notifying a user of process failures now also provide the process context, e.g., the corresponding model name. (Pivotal 1115125)
- ARIS Process Governance Web services that process multi-value attributes, such as the model status, use the language that is preset in Administration for the key "com.idsscheer.age.serviceenabling.scriptrunner.defaultLanguage". The default is "en_US". (Pivotal 5189191)
- In ARIS Process Board, tasks retrieved by a report are now correctly output in a dialog. (Pivotal 5203012)
- If the description of a user group was changed in ARIS Architect, using the functionality "Update organizational chart" will update the description in the user management of ARIS Administration accordingly. (Pivotal 5210024)
- The ARIS Connect workflow "Propose document" now validates documents before enabling the "OK" button used to upload documents to ARIS document storage. (Pivotal 5214251)
- The option "Only one required" now works properly when user groups are specified as the input. This means that a human task that was assigned to multiples users and user groups is now also marked as completed if it was performed by a user group. (Pivotal 5224127)
- Notifications telling users that they will have to be the substitute for another user are now sent in the language specified in the user administration. (Pivotal 5224666)
- The service "Compare - Model versions" now returns results correctly in the language that was specified. (Pivotal 5218987; 5218988)

ARIS for SAP Solutions

- When derived function allocation diagrams (FAD) are used for SAP Solution Manager Synchronization and a screen is placed in such a diagram, the "Create transition" wizard now opens. (Pivotal 5225085)



ARIS Architect / Designer

- In Model Editor, texts in objects are now displayed correctly. Abbreviations or dots (...) are no longer displayed. (Pivotal 1113374)
- The "Select objects" dialog of the Variant Wizard now saves specified settings along with the status that was set for the listed objects. (Pivotal 1115301)
- Closing matrix models by running the macro API method "MatrixDesigner.closeMatrix(...)" now works correctly. (Pivotal 5203687)
- After migration from ARIS 7.2 to ARIS 9.8, the "Sequence flow condition" connection between the "Task" and "Rule" object types is now displayed as expected. (Pivotal 5204792)
- The sorting of versions was corrected. Thus, the columns for versions are now displayed properly in the various dialogs. (Pivotal 5207424)
- When more than one monitor is used, tooltips are now displayed only in the current one. (Pivotal 5208190)
- The behavior of tabs in ARIS Architect/Designer was corrected. Tabs now always show a name, and the button "Add new tab" is now always available. (Pivotal 5209879)
- When occurrence copies are created in Model Editor, items are now displayed much faster in the list of suggestions. (Pivotal 5212222)
- When a user logs in to an ARIS database for the first time, the alternative language is preselected. If the user then selects another database language, this will be the preselected language at the next user login to the database. (Pivotal 5212381)
- Grouped objects are now always saved correctly. (Pivotal 5212756)
- The "Options" dialog now also opens after a configuration administrator has deleted templates that are used as default templates by a user. (Pivotal 5215003)
- If the symbol palette was changed in the properties of a database, a dialog now indicates that the palette will be available for use only after the user logs out of the database and logs in again. (Pivotal 5215252)
- The modeling of BPMN models was changed in ARIS Connect. If a user places a symbol and then selects a symbol type, the mini toolbar now offers only symbols to which a connection is allowed. (Pivotal 5215968)
- The layout for model generation was improved so that symbols no longer overlap. (Pivotal 5217062)
- ARIS Connect Server and ARIS Design Server performance under Windows 2012 R2 was improved so that models now open much faster when the language in use is Hebrew. (Pivotal 5218346)
- Matrix models can now be edited and displayed as required. Modeling and displaying these models now works as in ARIS version 7.2. (Pivotal 5219733)
- Templates that were applied to a model can now also be applied to new or changed objects in the model. (Pivotal 5226106)



- Macros accessing imported JS files now run properly. (Pivotal 5226366)

ARIS Simulation

- When simulation experiments are performed for BPMN models containing pools, the response columns are now filled with data. (Pivotal 5202101)
- Interruption times in cumulative process statistics are now displayed using the format "dddd:hh:mm:ss" again.
- The detailed process statistics now shows the start event of the corresponding process model for each instance.
- A simulation run now includes organizational elements that are assigned to control elements via a connection of the "carries out" type, e.g., roles or organizational units.

ARIS Analysis

- The behavior of the "contains" option for attribute filters of the ad hoc analysis was changed. Examples:
Filtering a name by "o" will return all items that start with the letter "o", e.g., "Organizational element" or "Edit object".
Accordingly, filtering by "4.1" would return "Event 4.1.5" or "4.1Position", for example.
Filtering a name by "*o" will return all items that contain the letter "o", e.g., "Model 1" or "Position".
Accordingly, filtering by "*4.1" would return "E4.1", for example. (Pivotal 5215384)

ARIS Risk & Compliance Manager

- Assigned documents that are stored in ARIS document storage now also open under the "Linux" operating system. (Pivotal 5201717)

ARIS Method

- You can now add all BPMN2 object symbols to the "Matrix model" model type. (Pivotal 1111234)
- Corrections were made to the ARIS Method help, in which the list of ARIS symbols offered for the "BPMN allocation diagram (BPMN 2.0)" now includes only the ones that are actually available ("Partner entity", "Partner role", and "Pool"). (Pivotal 1116826)
- The tree view of the "Attributes" window now displays only groups that contain attribute types. Groups having subgroups in which attribute types do not exist are no longer displayed. (Pivotal 5207398)



ARIS Publisher

- The report script API method "ObjDef.getDefaultSymbolNum" now returns the correct result. (Pivotal 5207105)
- The pop-up menu for a model no longer displays an assignment relationship of a model to the model itself. (Pivotal 5209187)
- In ARIS Publisher, the client (browser) time zone is now displayed for dates in publisher exports. (Pivotal 5209984)
- It is now possible to generate a process manual for BPMN2.0 models. (Pivotal 5210852)
- If the name of a script has not been specified in the language currently in use, the alternative language is used. If no alternative language has been defined, English is used for showing the script name. Should English not be available, "(Untitled)" is shown instead of the name. (Pivotal 5212109)
- The missing Serbian flag was added to the language selection in ARIS Publisher. (Pivotal 5215080)
- The scaling is now correct for model graphics generated in ARIS Publisher via report. (Pivotal 5219456)

ARIS Report

- The Script Wizard now opens without a delay. (Pivotal 1109618)
- A system user is now able to delete scheduled reports of another user. (Pivotal 1111906)
- The semantic check rule "Start events and end events in a process" of the "Validate BPMN diagram" semantic check was corrected. Missing start or end events are now also identified within lanes. (Pivotal 5199387)
- For Script Editor, JavaScript Rhino was updated to version "Rhino 1.7.7". This enables the interpreter to check from a specific position in the code whether variables are declared ("strictMode(true);"). (Pivotal 5201927)
- The Java API for Microsoft® documents was updated to "Apache® POI 3.12". (Pivotal 5203754)
- The "Adapt model layout to new symbol sizes" macro now writes all changes to a log file. Furthermore, a Boolean attribute can be used to mark updated models. To do this, a Boolean attribute must be created and assigned to the corresponding model type. In the macro, the "LAYOUT_FLAG" variable must then be assigned the attribute GUID and the "bUseLayoutFlag" variable must be set to "true". Models that have already been updated will be skipped during the next macro execution. (Pivotal 5206110)
- Headers are now displayed again in DOT templates. (Pivotal 5206342)
- "The new constant MODEL_CXN_DISTANCE is now available in the script API for ARIS reports. It can be used with the ""Model.Flags"" method.



- The default value is taken from the ARIS Architect setting ""Spacing between connections and objects"" (""ARIS > Options, the ""Options"" dialog opens, ""Model > For new models > Connections"", check box ""Spacing between connections and objects""). (Pivotal 5207223)"
- The report script API method ".Cycles()" now correctly identifies parallel objects in a cycle. (Pivotal 5209851)
- The transition from daylight savings time to standard time no longer affects scheduled reports. They always start at the required time. (Pivotal 5211244)
- Due to an update to ASPOSE API 15.8.0 some errors relating to graphics were fixed. For example, graphics of the "EMF" type are now displayed correctly. (Pivotal 5211388)
- If a column is added to a data table of a WYSIWYG (What You See Is What You Get) report, only one column is actually added instead of two. (Pivotal 5211794)
- The report script API method "group.GetOrCreateObjDef" was corrected so that the results returned are now correct. (Pivotal 5211818)
- Macros that import macros now start as required again. (Pivotal 5212553)
- The report behavior in ARIS was corrected so that links generated in Word documents now work correctly again. (Pivotal 5215000)
- The output of model graphics that are generated in documents via report is now correct. (Pivotal 5215754)
- Strikethrough text is now displayed correctly when output to files of the "PDF", "DOC", and "DOCX" format by the ARIS report script API. (Pivotal 5217039)
- "The order of sending events for macros was adapted to match the behavior in ARIS 7.2.
- When a model is created, the ""Model created"" event is sent first, followed by the event ""Model is to be opened (vetoable)"". (Pivotal 5218652)"
- The report behavior in ARIS was corrected so that a Word document index now works correctly again. (Pivotal 5218849)
- The formattable attribute "Documentation" (AT_DOCUMENTATION) used for files of the "doc" and "docx" formats is now also available in WYSIWYG (What You See Is What You Get) reports; fully supported in documents and document tables, and partly supported in Microsoft® Excel (text editing functions only). (Pivotal 5221905)
- The macro event "Model is to be copied" now works as required when the "Paste" functionality is used. (Pivotal 5222146)
- Using the "Evaluate IT landscape" functionality for process support maps no longer issues an inappropriate error. (Pivotal 5225968)
- The report help now includes the "ENVIRONMENT_BP" and "ENVIRONMENT_STD" constants as return values for the "Context.getEnvironment()" function. (Pivotal 5226849)
- Users with the "ARIS Connect Viewer" license are now able to run reports. (Pivotal 5215685; 5213377)



ARIS UML Designer

- XMI exports now generate the correct UTF-8 format. (Pivotal 5208621)

ARIS BPMN

- BPMN import: The ""Name"" attribute for objects is reduced to the maximum attribute length of 250 characters. The full text is stored in the "Remark/Example" attribute. (Pivotal 5202548)
- Misleading error messages or warnings issued during transformation were rephrased or removed. (Pivotal 5202548)
- BPMN import: The assignment relationship between a call activity and the related model is now preserved. (Pivotal 5205438)
- Users are now allowed to specify user-defined namespaces in BPMN 2.0 files. These elements are ignored during import. (Pivotal 5218176)
- The BPMN export transformation "BPMN2Serialisation_Transformation" was renamed to "BPMN 2.0 Export". (Pivotal 5219214)
- Long attribute values can now be handled by the BPMN transformation. ARIS transfers the first 250 characters during the import of names, for example. (Pivotal 5202548)
- Corrections were made to error messages issued during BPMN transformation. (Pivotal 5202548)

ARIS Documentation

- Due to a customer request, the Portuguese semantic check message "A verificação semântica foi executada: no modelo estão indicados os possíveis erros." was changed to "A verificação semântica foi executada: no modelo serão indicados os erros, caso existam.". (Semantic check is complete. Errors that may have occurred are marked in the model.) (Pivotal 1114844)
- The description of the Search dialog was corrected in the online help. (Pivotal 5220406)
- Some pages were supplemented with metadata (content type) to prevent cross-site scripting. (Pivotal 5189248, 5189267)
- Corrections were made to the ARIS Connect help page "Define custom metadata for documents". (Pivotal 5203374, 5203367)



6 Changes in ARIS 9.8 SR3c

ARIS Design Server / Connect Server

- Exceptions that occurred during the import of ARIS 7.2 databases were fixed.
- If a manually installed ARIS site is updated from ARIS 9.8 SR2 to ARIS 9.8 SR3c, the first user login no longer triggers an unnecessary database reindex.

ARIS Architect / Designer

- Archimate filter import error "API name 'AT_UML_MAINTAIN_DONE' is unknown" was fixed. (Pivotal 5224164)
- Placed symbol attributes are now shown correctly in specific use cases. (Pivotal 1117793)
- The Web download client was fixed and now works with an Internet proxy as required.

API Portal

- A French language package is now available. (Pivotal 5219202)
- When a new LDAP user registers, the user is automatically added to the API Consumers group. (Pivotal 5223633)

ARIS Process Governance

- Bugs related to mini workflows were fixed. (Pivotal 5225791,5223805)
- It is now possible to assign tasks to users whose last names consist of two or more parts (separated by space character). (Pivotal 5223570)

ARIS Connect

- ARIS Connect navigation symbols are now displayed correctly in Firefox 31.4.0. (Pivotal 5218440)



ARIS Risk & Compliance Manager

- The PDF report column header was improved.

ARIS UML Designer

- Problems that occurred when migrating from UML1.4 to UML2 were fixed.
- The UML search function now works as required.

ARIS Setup

- The technical user is now created correctly in Collaboration during installation of a standard database management system so that changing the password "manager" of the user "system" no longer causes any problems.



7 Changes in ARIS 9.8 SR3b

ARIS Connect

- It is now possible again to create item types and item properties in the configuration.
- The profile picture of users is now transferred correctly from user management to the ARIS Connect profile. Thus, when synchronizing user data, the current user profile picture is used as required.
(Pivotal 5217938)
- Now the predefined language is still used when reopening ARIS Connect using Microsoft® Internet Explorer®.
- New models or new model versions (read-only) are now correctly displayed once they are approved or published.
(Pivotal 5218609)
- You can now open documents using the "Document Link" attribute even if their name contains special characters (umlauts).
(Pivotal 5219539)
- Both the robustness and performance of ARIS Connect were increased..

ARIS Report

- The report "Output model information" now correctly outputs a table of contents.
- The method "GetOrCreateObjDefsName" of the report script API now also create new objects in case of existing objects in database with similar names (not equal names).
(Pivotal 5211818)

ARIS Process Governance

- The performance of ARIS Process Governance has been significantly improved.
(Pivotal 5219109)

ARIS Risk & Compliance Manager

- When updating from ARIS Risk & Compliance Manager version 9.8.2.0 to version 9.8.3.0, Derby databases are now handled correctly.

ARIS User Management

- An error was fixed due to which ARIS client could not be started when using a proxy server with user and password authentication.



ARIS Analysis

- Japanese names of objects are now displayed correctly in the graphical view of the ad hoc analysis. This also works when stored ad hoc analysis are imported.
(Pivotal 5220776)

ARIS Document Storage

- All versions of a document from Microsoft® SharePoint can now be linked and downloaded in ARIS Architect/Designer.
(Pivotal 5224024)
- Documents from ARIS document storage are now sorted when displayed in ARIS Architect/Designer.
(Pivotal 5220685)



8 Changes in ARIS 9.8 SR3

General

- Due to a variety of improvement measures, both the robustness and performance of the entire system were optimized, especially with regard to ARIS Process Governance and ARIS UML Designer.

ARIS Design Server / Connect Server

- The method "ComObjOcc.setCopyOf" of the report script API now also works with graphics of the "PNG" format type. (Pivotal 1111042)
- Under certain conditions the merge log file issued an invalid message: "???". This type of message no longer occurs. (Pivotal 5216122)
- The robustness of the merge procedure for lane models was increased. (Pivotal 5215377)
- Changelist descriptions containing Hebrew characters are now displayed correctly in MSSQL based installations. (Pivotal 5219433)
- The memory specified by the XMX value is the maximum memory that Java runnables may consume in a scenario, i.e., it is the memory requirement relevant for a worst-case scenario.

The values of the "generated.apptypes.cfg" file are adapted to prevent runnables from running out of memory. However, it is not very likely that the memory usage of runnables reaches this peak. It is always possible to free memory by performing garbage collection on a regular basis. In case of need the system will begin to swap memory, which will decrease performance, but not stop ARIS from running.

The Platform Matrix provides the required information in the "Minimum" and "Recommended" columns.
(Pivotal 5209881)

ARIS Connect

- Users with the "ARIS Connect Viewer" license privilege are now able to run reports. (Pivotal 5215685; 5213377)
- ARIS Connect Model Editor now displays fonts correctly when ARIS Connect is run in Microsoft® Internet Explorer®.
(Pivotal 5213281)



ARIS Process Governance

- Report results of APG Web services are written to ARIS document storage by default. You can avoid this by setting the mapping value in the "Output format" field to 1 in the data flow of the corresponding Web service. (Pivotal 5212794)
- In the "Context" area of Process administration, model names are now displayed in their entirety. (Pivotal 1113229)
- The borders of ARIS Process Governance dialogs are now displayed according to how they were defined. (Pivotal 5211112)
- The number of rows displayed in ARIS Process Governance dialogs now corresponds to the number defined for them. (Pivotal 5213149)
- ARIS Process Governance dialogs now look the same in ARIS Connect and ARIS Designer. (Pivotal 5212202)
- The performance of human task monitoring in Process Administration was increased to enable better handling of a large number of human tasks.

ARIS Architect / Designer

- When a configuration administrator deletes a template that a user is using as a default template, the "Options" dialog now opens correctly for the user to select another template. (Pivotal 5215003)
- An error was fixed due to which the Save operation had failed under certain conditions. (Pivotal 5212756)
- Running the "Designer.closeModel()" method no longer prevents models of the "Matrix" type from being closed when they are open in the client in which the macro is run. (Pivotal 5203687)
- The "Add new tab" functionality as well as the label of the "Administration" tab are now always provided and retained when models are opened or closed. (Pivotal 5209879)
- Opening large models of the "Matrix" type using Arabic under Microsoft® Windows 8.1 now takes significantly less time than previously. (Pivotal 5215793)
- Users with read and write privileges for source and target groups are again able to move objects between these groups. (Pivotal 5211798)

ARIS Collaboration

- Model names that use special characters are now displayed correctly in comments. (Pivotal 5217144)



ARIS Risk & Compliance Manager

- The information in the "Performed by" field is no longer deleted if a test reviewer rejects a test case. (Pivotal 5206949)
- Deficiencies associated with a test case are now output only once per released level. (Pivotal 5206951)
- Due to a modification that prevents Microsoft® Internet Explorer® from switching to the compatibility mode, ARIS Risk & Compliance Manager content is now displayed correctly.
- The download button on the "Application status" page is now always available as required.
- When a deficiency or questionnaire template is duplicated, the form is now displayed only once.
- The "Trend identification (rates)" diagram is now adapted correctly so that lines no longer go beyond the diagram borders.
- Date values are now imported correctly during a client or database import.
- The "Administration" module is now available only to users that are associated with at least one user group.
- The display of the Japanese date format is now correct.

ARIS Method

- In models of the "Process selection diagram" type, implicit relationships are now created again between main processes and user-defined external processes. (Pivotal 5215005)
- The "transmits data to" connection type is now available again in model types to which it was added. (Pivotal 5187691)
- The "Entire method" filter now provides the "Transformation pattern" object and symbol even if Process Governance is inactive. Thus, saving user-defined models including this object no longer fails. (Pivotal 5213138)

ARIS Business Optimizer

- The Business Optimizer function "Objects from models" was improved so that the list of available database languages is now displayed correctly after selection of the ARIS database. (Pivotal 5209343)



ARIS Document Storage

- ARIS document storage now provides the option "-toplevelfolder" for the import of large document volumes. If this option is set, the top-level folder specified in parameter '-path' is ignored during import. This means that the structure of the folders subordinate to the top-level folder is displayed directly below the root directory in ARIS document storage. The top-level folder itself is not displayed.
(Pivotal 5213192)

ARIS Publisher

- An error pertaining to the layout was fixed. Clickable areas are now placed correctly and no longer overlap the vertical scroll bar. (Pivotal 5210852)
- Localized reports now always include the correct strings from string tables defined in an .arx file. (Pivotal 5215491)
- The export procedure now takes significantly less time than previously. This is especially true for databases including a large number of user-defined attributes.
(Pivotal 5209185)

ARIS Report

- The ARIS standard reports "Export attribute values for translation" and "Import translated attributes" were optimized as a part of general performance improvement.
(Pivotal 5214061)
- Display errors were fixed. EMF graphics are now displayed correctly so that you are again able to print models in PDF format or output them using reports.
(Pivotal 5211388)
- Corrections were made to the "Export all differences" functionality so that it is now possible to compare two selected models as required and correctly output the result to an Excel table. (Pivotal 5211699)
- A semantic check error was fixed. Running existence rules now works properly: data is loaded when required, and evaluations deliver correct results. (Pivotal 5211094)
- A macro execution error was fixed. ARIS macros that are used to start other macros now run as required. (Pivotal 5212553)
- The functionality provided to system users was extended. System users are now able to delete scheduled reports created by other users.
(Pivotal 1111906)



ARIS Installation

- The missing ARISAdm RPM package was added to the Red Hat Linux installation. (Pivotal 5210477)



ARIS User Management

- LDAP user synchronization no longer imports assigned LDAP user groups. (Pivotal 5216032)
- The new report API methods "user.isLDAP()" and "usergroup.isLDAP()" are available for you to check whether users or user groups originate from the LDAP system. (Pivotal 5212030)
- The report "Assigned and unused ARIS licenses" now also includes licenses of the "Access" type. (Pivotal 5203926)



9 Changes in ARIS 9.8 SR2

ARIS Design Server / Connect Server

- Groups without an assigned Globally Unique Identifier (GUID) can now be imported into ARIS using the XML import. (Pivotal 5193954)
- ARIS Merge now also merges databases that contain groups with identical group name and group path. (Pivotal 5191905)
- ARIS 9.8 now runs under a Turkish Windows 7 version. (Pivotal 5185980)
- Consolidation has been corrected so that all object occurrences of consolidated objects are retained. (Pivotal 5185719)
- The "Display statistics" pop-up menu is now available only to users having the "Server administrator" function privilege. (Pivotal 5190866)

ARIS Process Governance

- APG processes are now properly processed if they were started by ARIS Publisher for models whose names contain special characters, such as "&". (Pivotal 1110402)
- Combo boxes in Process Governance start screens started by ARIS Publisher are now filled correctly. (Pivotal 5200189)
- Process Governance process administration no longer displays an error message if a process instance without assigned human tasks is opened. (Pivotal 5197664)
- To run the ARIS Connect workflows "Share content" and "Share document" a user must be selected. (Pivotal 5199579)
- If objects related to Process Governance dialogs are locked, they are listed in the database under "Locked items". (Pivotal 5197492)
- The names of user-defined model types are now properly displayed in ARIS Connect. (Pivotal 5194467)
- It is now possible to change the column width of ARIS Process Board tables. (Pivotal 5186347)
- Corrections were made to Polish user interface text in ARIS Process Board. (Pivotal 5182426)



ARIS Architect / Designer

- The display of function privileges for users has been corrected. It now differentiates between function privileges assigned directly to the user and assigned to the user via a user group. (Pivotal 5193719)
- It is possible again to rename database prefixes. (Pivotal 5196848)
- Visio mapping has been corrected so that a timeout of ARIS Architect no longer occurs in certain situations. (Pivotal 5191387)
- If no valid SSL certificate was imported for an ARIS Server or if the certificate cannot be checked, a clear error message is output when registering the ARIS client at the server. (Pivotal 1107135)
- After starting ARIS Architect and ARIS Designer, the "Objects" check box of the Explorer tree is now enabled by default. (Pivotal 5191513)
- Locked models and objects are now displayed properly. (Pivotal 5193019)
- Inserting model shortcuts using the pop-up menu entry "Paste as > Shortcut" for models now works properly in Explorer. (Pivotal 5190447)
- If user-defined models are deleted from the configuration, existing models of this type can be reset to their original type when reorganizing the database with the option "Automatically replace missing item types". This way, they can still be found with ARIS search. (Pivotal 5192042)
- When generating a filter from an ARIS database or by merging two filters, no additional attributes are activated, e.g., "Automation category". (Pivotal 5197946)
- The activation areas of the check boxes in the "Search" dialog have been corrected. They are now enabled or disabled only by clicking their name or the relevant check box. (Pivotal 5189086)
- Saving models is now much faster than before. This is especially noticeable when saving models in groups containing a large number of objects and models. (Pivotal 5185898)
- The "Share with IT" workflow now processes user groups correctly even if their names do not match regarding case sensitivity. (Pivotal 5192588)
- The "Search" tab now provides a correct search result even if the value to be found is preceded by a blank when entered in the search field. In addition, the search now also finds attribute values whose names were specified using a blank in front. (Pivotal 5186470)
- When using templates with long names, these names are now entirely displayed in the tooltips. (Pivotal 1108430)
- The Template Wizard has been corrected, so that all values entered are now displayed correctly. (Pivotal 5188960)
- Graphics are no longer inverted in models, but displayed correctly. (Pivotal 5198212)
- Model comparison no longer flags assignments as "changed" if models were merged from one database into another. (Pivotal 5193635)



ARIS Risk & Compliance Manager

- Saving forms no longer has to be confirmed in a dialog. A status message is shown instead.
- In case an ARIS Risk & Compliance Manager license key has expired, a message with the corresponding information is shown during login.
- Saving a filter multiple times no longer results in an error message.
- Loss managers are now also informed when a loss reviewer sets the status of a loss to 'Accepted'.
- If the event enabling configuration is incomplete or incorrect, more detailed error messages are now displayed.
- Changing the user password is now possible by clicking the link "Change password". The link "Forgot password" now points to ARIS Administration.
- Generating a PDF report for the risk management evaluation "Risk assessment per impact type" is now performed correctly.
- For new risks, the value "No notification" is now activated by default in the field "Notification to" on the "Risk management" tab. This does not apply to migrated risks.
- Linked lists of deficiency management evaluations have been corrected so that the correct number of values is output now.
- The report for deficiency management evaluations now outputs diagrams as required if the corresponding option has been enabled.
- Subscriptions that are opened in the mapping list of a tenant using the "Open in new window" option are no longer editable.
- The "Name" attribute is now specified for users exported from ARIS Risk & Compliance Manager by SAML (Security Assertion Markup Language) and imported into ARIS Architect. The name consists of the "First name" and "Last name" attributes.

ARIS BPMN

- It is now possible to use function allocation diagram objects of the "Cluster" type in diagrams of the "BPMN collaboration diagram" type. (Pivotal 5201566)
- After having enlarged or moved lanes and pools, resizing is still possible at any time. Furthermore, the entire space is now used in the best possible way. (Pivotal 1102958)
- When using user-defined templates, it is now possible to create multiple objects with identical names. (Pivotal 5181583)



ARIS Connect

- The background color specified in ARIS Architect for models is now also displayed in the Model Viewer. (Pivotal 5202219)
- The save operation has been improved. Data entered is now also saved when editing views implies editing different areas, for example. (Pivotal 5199069)
- Objects of the "Technical term" type that are part of a process are displayed in every fact sheet under "General documents" in the overview. (Pivotal 5196642)
- A semantic check has been implemented that checks the configuration and prevents the parallel use of object IDs (OIDs) and Globally Unique Identifiers (GUIDs) for items. (Pivotal 5196924)
- Model Editor: If object symbols are changed, the model template is applied as required. (Pivotal 5198385)
- The display of models in the Enterprise Mode of Microsoft Internet Explorer has been improved so that diagrams are now displayed correctly. (Pivotal 5195586)
- Clicking OLE object symbols in Model Viewer opens the linked objects, even if they are placed on a model object. Prerequisites are that your browser's security guidelines allow this and that the saved object is stored on a local drive. (Pivotal 5194905)
- The "Recent changes" tab has been improved in order to correctly display user-defined time intervals. (Pivotal 5197066)
- The Model Viewer display in ARIS Connect has been improved. BPMN diagrams are now shown without errors. (Pivotal 5191372)
- The server license check has been reworked so that ARIS Connect Server now provides only functionality that is enabled by the license in use. (Pivotal 5177723)
- When starting ARIS Connect, now the current browser language is used. (Pivotal 5186489)
- Line breaks in object names are ignored in fact sheets and on the "Attributes" tab so that names are displayed as single-line text if they are not too long. If models from ARIS Architect are displayed whose objects include optional hyphens, their names are displayed in a single line without the use of hyphens. (Pivotal 5182146)
- ARIS Connect now differentiates between unauthorized access (HTTP 401) and forbidden access (HTTP 403). Customer configurations currently referencing the forbidden access (HTTP 403) from now on must reference the unauthorized access (HTTP 401).

ARIS Method

- If a model type is renamed in another language, this new name is now displayed in only this language and no longer also in other languages. (Pivotal 5198534)
- Migration from ARIS 7.2 to ARIS 9.8 SR2 includes all connection types as required. (Pivotal 5193281)



ARIS Analysis

- The query attributes "Processing time" (AT_WORK_TIME.TRM) and "Amount of damages" (AT_AMOUNT_OF_DAMAGES.TRM) are now editable in the query table. (Pivotal 5195530)
- The Attribute Wizard is now available after selection of query items or for tables in the "Start" tab bar: "Attributes > Attribute Wizard". (Pivotal 5193062)
- When using mixed text types in one table, such as Hebrew/Latin, the text is now sorted properly:
 1. Hebrew is sorted right to left.
 2. If Latin text is input or copied after Hebrew text, it is inserted on the left with left-to-right orientation.
 3. If Hebrew is then input or copied again, it is inserted left of the Latin with left-to-right orientation.

This sorting is retained when editing or saving. If the text is identified as Hebrew, the preset right-to-left orientation is retained, e.g. when starting text with a Hebrew character. (Pivotal 5190199)

ARIS Document Storage

- In ARIS document storage, searching for documents has been improved. It is now possible to search for longer document names. (Pivotal 5197686)
- ARIS document storage now supports document libraries embedded in Site Collections (Microsoft SharePoint®). (Pivotal 1109178)
- ARIS Process Governance dialogs now handle ARIS document storage privileges as required. (Pivotal 5190501)

ARIS Publisher

- The "ARIS Server Installation and Administration Guide" now provides a more detailed description of the ARIS Publisher binding. (Pivotal 1100725)
- Identification and export of filters now work correctly. (Pivotal 5197987)
- It is now possible again to incorporate ARIS Publisher into a dedicated HTML iFrame. (Pivotal 5196608)
- Rocket Search now uses the selected method filter correctly as a filter criterion. (Pivotal 5190946)
- It is now possible to start evaluations for matrix models from the navigation tree's pop-up menu. To do so, open a matrix model, right-click the relevant entry in the navigation tree, and then select "Evaluate". The "Run" dialog opens and you can select the required evaluation and output format. (Pivotal 5191562)
- Corrections were made to Chinese user interface text. (Pivotal 5183522)



- The display of user group names in Publisher Administration has been modified. Now names are shown in their entirety or as a tooltip even if they have more than 40 characters. (Pivotal 5190677)
- The display of abbreviations for connections in matrix models, as well as the display of wildcards and of the order of abbreviations for connection types is now identical in ARIS Publisher and ARIS Architect. (Pivotal 5186106)

ARIS Report

- The Model comparison report has been corrected. Report results now correspond to those generated by the ARIS 7.2 report. (Pivotal 5200513)
- The "Create process manual" report no longer ignores text formatting of attributes, but includes it in the output file. (Pivotal 5197333)
- Invoking the method "Model.BoundingRect()" of the report script API no longer results in an exception. (Pivotal 5196921)
- The report script API has been corrected so that combining objects of the "SearchItem" type with ".or" now returns correct results. (Pivotal 5193448)
- The report "Replace object types" has been corrected. It now deletes all objects that require deletion. (Pivotal 5197525)
- The report "Consolidate font formats" has been corrected. It no longer resets the font in open models to the default font. (Pivotal 5193427)
- The report script API has been corrected. Tables now return correct return values for rows after sorting. (Pivotal 5191874)
- The report script API method "Item.Attribute(int attrTypeNum, int localeID, boolean p_bUseLanguageFallback)" has been corrected. Elements are now passed on as required. (Pivotal 5190590)
- Reports created in ARIS Architect can now be imported into ARIS Cloud. (Pivotal 1105306)
- The report script API has been corrected so that the object definition list now returns the proper number of superordinate objects. (Pivotal 1104405)
- The report script API has been corrected so that the method "CreateSearchItem" now handles Boolean attributes as required. (Pivotal 5192617)

ARIS Installation

- The privileges for accessing admin shell script files have been adapted so that non-root users are now able to run scripts. (Pivotal 5196563)
- The blank has been removed from the "Select Port Number" input field of the ARIS Server Wizard. (Pivotal 1100734)



- A success message has been added to confirm that an uninstall operation has been successfully performed. (Pivotal 1100735)

ARIS User Management

- LDAP synchronization has been improved so that synchronizing a large number of users now works as required. (Pivotal 5200083)
- The locking behavior of the LDAP user management has been changed so that user access is locked only after the third failed login attempt. (Pivotal 5196459)



10 Changes in ARIS 9.8 SR1c

ARIS Setup

- It was not possible to update an ARIS 9.8 SR1 installation with ARIS 9.8 SR1b. This error is fixed with SR1c.



11 Changes in ARIS 9.8 SR1b

ARIS Design Server / Connect Server

- Restoring arissystemdb now works again (after updating ARIS 9.8 to ARIS 9.8 SR1). (Pivotal 5198534, 5198408)

ARIS Architect / Designer

- If a standard element was renamed in another language than the one currently used, the name of this element was shown in this language instead of the language currently in use. This error has been resolved. (Pivotal 5198534)
- Due to an error in ARIS Method the "Automation category" attribute type group was automatically active in a filter. This error has been resolved. (Pivotal 5197946)
- Versioning of models now works correctly if an ARIS database has more than 1000 groups and all models are to be versioned. (Pivotal 5178077)

ARIS Connect

- In ARIS Connect Viewer, sometimes assigned models were not shown in the navigation tree. This error has been resolved. (Pivotal 5198582, 5191905)
- Internet Explorer 11 with "Enterprise Mode" is now supported. (Pivotal 5195586)
- You can now turn on/off the highlighting for a model, and this option will still be valid if you navigate to an assigned model. (Pivotal 5190823)
- SSO of Portal Server ignores unsupported SPENGO challenges (NTLM) (Pivotal 5193918)
- OLE objects placed inside an ARIS object in Connect Viewer can now be started with a mouse click. (Pivotal 5194905)
- When adding an additional language via language selection in the Administration module, all language values for user-defined properties of items in a view were deleted. This error has been resolved. (Pivotal 5199069)

ARIS Analysis

- A performance drop down was fixed that had occurred when spreadsheet models were open in the same client session. (Pivotal 5197238)



ARIS Process Governance

- Process Board:
 - Added context column to the CSV export for the instance monitoring table.
 - Fixed sorting of the context column in the instance monitoring table.
 - Fixed width of combo boxes in APG dialogs.
 - Fixed height of check box list control, now depending on the amount of items.
 - Fixed overlay effect for action buttons in the details view in small windows.
- Now only users with the 'Process Governance administrator' function privilege are allowed to view, edit, delegate, or pass on tasks of another user. (Pivotal 5206599)
- Now the latest version of a deployed process is displayed if the governance process was started in ARIS Architect. (Pivotal 5206419)
- Fixed issue concerning file upload to ARIS document storage within APG process dialogs using Internet Explorer. (Pivotal 5202363)
- Robustness of APG process recovery during restart of runnable has been increased.
- APG process 'Compare model' now uses the language from the start context as an input for the methodology language. E.g., language-related method content like attribute values will be displayed in the same language as the one the user used for logging in and for starting the process. (Pivotal 5199153)
- Improved visualization of table controls within APG process dialogs. (Pivotal 5194465)
- Portuguese translation has been improved in general. (Pivotal 5196129)

ARIS Report

- An error in the ARIS Semantic Check environment had the effect that sometimes not all semantic check return values were available after an update to 9.8 SR1. This error has been resolved. (Pivotal 5204661)

ARIS User Management

- SAML authentication has been improved.
- LDAP synchronization no longer stops prematurely under certain conditions. (Pivotal 5200083)
- ARIS User Management now supports a configurable timeout for user data reports to avoid long execution times relating to data volume and infrastructure performance. (Pivotal 5200417)
 - reconfigure umcadmin_m +JAVA-Dcom.aris.umc.report.timeout="<value in msec>"



ARIS Collaboration

- When trying to restore ARIS 9.8 version data in an ARIS 9.8 version, the Restore operation failed for Collaboration. This issue occurred mainly after restoring ARIS 9.7 version data in an ARIS 9.8 version instance.
This issue has been resolved. Restoring ARIS 9.7 data in an ARIS 9.8 version, as well as restoring ARIS 9.8 data in an ARIS 9.8 version, is now possible.



12 Changes in ARIS 9.8 SR1

ARIS Design Server / Connect Server

- The names of databases imported from ARIS 7.2 into ARIS 9.0 are now displayed correctly in documents that are created using a report. (Pivotal 1106144)
- In User management, a search function for finding users associated with user groups was added to the "Associated users" area. (Pivotal 1104640)
- The command-line tool of User management was fixed for Unix. (Pivotal 5183921)
- The visualization of User management was improved so that all buttons are now displayed correctly. (Pivotal 5179658)
- The size of the "Reset password" dialog was increased. (Pivotal 1103352)

ARIS Architect / Designer

- The pop-up menu of an object now provides the "Apply template" menu item. (Pivotal 1104152)
- The correct type is now displayed for user-defined attribute type groups used in ARIS version 9.8. (See also ARIS help page "Create attribute type group") (Pivotal 1104135)
- User-defined attribute types are now included correctly when filters are generated automatically based on databases. (See also ARIS help page "Create filters automatically (database-based)") (Pivotal 5181714)
- Using wildcards with the Search function in ARIS Architect/Designer now works as required. (See also ARIS help page "Search for database content") (Pivotal 5187535)
- Filter import and migration was improved. Import-related inconsistencies are now automatically corrected when performing an import into ARIS version 9.8. (See also ARIS help page "Import filters") (Pivotal 1104595)

ARIS Process Governance

- Users with administration privileges are now able to appoint substitutes for other users. (Pivotal 5191050)
- The visualization and usability of controls in ARIS Process Board was improved. (Pivotal 5188820; 5186924)
- Uploading documents to ARIS Process Governance was improved for use with Microsoft® Internet Explorer. (Pivotal 5188571)
- Starting ARIS Process Governance processes via a macro is now possible without an ARIS Process Governance license. (Pivotal 5183918)



ARIS Publisher

- An error was solved in the Report API method "UserDefinedAttributeValueTypeNum()". User-defined attributes are now handled correctly. (See also "ARIS Script" help page "UserDefinedAttributeTypeNum(String) : int") (Pivotal 5188632)
- When the "Use print scale" option is selected in Publisher export profiles, the clickable area of assignment icons is now positioned correctly in Publisher exports. (Pivotal 5184383)
- Single sign-on is now restricted to users with a viewer license. (Pivotal 1104358)

ARIS Connect

- Attribute texts that have no formatting are HTML escaped so that they cannot be interpreted. Thus, the Attributes component is Cross-Site Scripting (XSS) safe.
- The report "Output object information" now outputs user-defined attributes correctly in ARIS Connect. (See also ARIS help page "Output object information") (Pivotal 5176620)
- Chinese characters are no longer displayed in the user interface of a Polish ARIS Connect version. (Pivotal 5167909)
- German words are no longer displayed in a dialog of the Japanese ARIS Connect version. (Pivotal 1097391)

ARIS Report

- Reports from ARIS version 7.2 using a long description text can now be imported into ARIS 9.x without any problems. (See also ARIS help page "Import scripts") (Pivotal 5190229)
- "The "ARIS Script" help of ARIS versions 9.7 and 9.8 now provides all required contents. (See also "ARIS > Help > ARIS Script") (Pivotal 5189948; 5190184)
- An error was removed from the report script API of function "ConnectableDef.AssignedModels()". (See also "ARIS Script" help page "AssignedModels() : Model[]") (Pivotal 1104860)
- A semantic check rule type was corrected so that running semantic checks for models of type "EPC" now works as required. (See also ARIS help page "What are rule types and profiles in the Semantic Check Wizard?") (Pivotal 5186578)
- The report "System fact sheet" was corrected. All items are assigned a name now. (See also ARIS help page "Report - System fact sheet") (Pivotal 5186240)
- A problem relating to model generation was solved. Furthermore, the current version of ASPOSE is being used from now (15.3.0). (Pivotal 5186481)
- The report "Import data in Excel format" was corrected. Names are no longer imported as single-line text only, but also as multi-line text, if required. (See also ARIS help page "Report - Import data in Excel format") (Pivotal 5183495)



- The semantic check "Validation of a BPMN diagram (BPMN 2.0)" was corrected. It no longer issues an error when a gateway has both incoming and outgoing sequence flow connections. (See also ARIS help page "Run BPMN semantic check") (Pivotal 5154792)

ARIS Collaboration

- In Collaboration you can add colleagues to a collaboration group. The number of colleagues displayed in the search when entering the first letter of a name in the "Add colleagues" field was increased to 10. (See also ARIS help page "Invite other users to Collaboration") (Pivotal 1103716)

ARIS Risk & Compliance Manager

- The remaining session time is now displayed correctly, and the session ends once the session time has expired.
- The e-mail addresses of the system users "Job user" and "Internal system user" can now be edited on their user pages.
- The migration of ARIS Risk & Compliance databases from version 4.1x to version 9.x now also works correctly for ARIS document storage links.
- It is no longer possible to open ARIS Risk & Compliance Manager in more than one browser tab.
- Updating policies and confirmations no longer results in an error message.
- Opening the risk assessments "Damage (qualitative)" and "Frequency (qualitative)" no longer results in an error message.
- Extended test case reports are now created correctly.
- Errors relating to linked lists of test, survey, and audit management evaluations were corrected. (Pivotal 5187561)

ARIS UML Designer

- If the value of a tagged value of type "String" is deleted, the tagged value is no longer shown in the diagram.
- Sorting arguments (up/down) in the properties dialog of a UML2 message now works as required. (Pivotal 5180175)



13 Changes in ARIS 9.8 GA

ARIS Design Server / Connect Server

- In user management, a tooltip has been added for the names of user groups so that the entire name is shown. The table row can display only a specific number of characters. (Pivotal 1100724)
- If preview is selected for a merge, a corresponding log file is transferred to the client and can be displayed. (Pivotal 5167253)
- User management has been improved for use with supported Internet Explorer versions. (Pivotal 5167103, 5170661)
- In ARIS 9.7 SR2, the error that had led to a tenant backup to work only for the default tenant in ARIS Cloud Controller has been eliminated. Backup of all tenants now works properly.
- The performance of the assignment of access privileges to groups has been improved.
- Filters from ARIS version 7.2 can now be imported properly into ARIS 9.8.
- In ARIS Cloud Controller, Collaboration data is now properly saved when backing up a tenant.
- The ARIS Publisher configuration remains available after backing up and restoring the system database. (Pivotal 5166762)
- Corrections were made to the command-line tool 'y-ldapsync' so that users are no longer unintentionally deleted from user management. (Pivotal 5174664)

ARIS Architect / Designer

- In ARIS Design Server, the number of search results is now shown properly. (Pivotal 1101623)
- In ARIS, it is now possible to edit user-defined attributes with the Attribute Wizard, even if a model is locked by another user. (Pivotal 5152947)
- In the ARIS 'Properties' dialog, attribute fields are now displayed in the size required for showing the entire content of the attribute values. (Pivotal 5154380)
- The function 'Automatic alignment' in ARIS has been optimized. Hierarchy structures are now displayed properly. (Pivotal 5157209)
- In user management, the 'Export user statistics' dialog is now displayed completely for the resolutions supported. (Pivotal 5159071)
- The function 'Automatic alignment' in ARIS has been optimized. Horizontal alignment has been improved. (Pivotal 5160123)
- In ARIS, the 'underline' effect is retained for a font format even if the font format is edited again. (Pivotal 5160555)



- The 'Hierarchy' fragment in value-added chains in ARIS now shows the object name in the language selected. (Pivotal 5160603)
- The function that displayed connections as transparent instead of in color is no longer supported. (Pivotal 5164488)
- In ARIS Designer, variant relationships are now displayed in an object's properties. Creating and deleting variants is impossible in ARIS Design Server. (Pivotal 5164728)
- In ARIS, the representation options for connections in the 'Connection appearance' dialog are now properly displayed when user-defined filters are applied. (Pivotal 5165980)
- In ARIS, models can be saved again after another language has been added. (Pivotal 5170263)
- In ARIS, the arrangement of attribute type groups has been adjusted for filtering. (Pivotal 5172014)
- In ARIS, the variant relationship is displayed in the variant properties when merging object variants without master object into another database. (Pivotal 5173041)
- In ARIS, object selection has been optimized for models of the 'Network topology' type in the 'Classic' symbol palette. (Pivotal 5176056)
- In ARIS, the path when calling the API function 'getParentGroup' is now shown properly. (Pivotal 5177892)
- In ARIS, connections between objects are now unambiguous (identifier). (Pivotal 5177915)
- In ARIS, all allowed objects now have a correct occurrence in the new model when being copied from BPMN 1.x to BPMN 2.0. (Pivotal 5178183)
- In ARIS, links in link attributes can now be opened by using the 'F7' key. (Pivotal 5179012)
- In ARIS, an error in the 'Compare models' report has been eliminated. Objects that were added in the work version are now displayed during the comparison as added instead of deleted. (Pivotal 5179409)
- In ARIS, users must have the 'Script administrator' function privilege to be able to import and export reports. (Pivotal 5180805)
- In ARIS, it is now possible to change the size of objects within an object via the properties. (Pivotal 5181410)
- In ARIS, the 'Attributes' dialog can now be opened for multiple versions in the 'Properties' dialog of versioned models. (Pivotal 5181983)
- In ARIS, the proper locale is now shown when renaming a database. (Pivotal 5182142)
- The "CentraSite synchronization" attribute can now be filtered. (Pivotal 5159538)
- Connections are now properly transferred when importing filters from ARIS version 9.6 to ARIS version 9.7. (Pivotal 5163433)
- If you apply a template to a model, the template is now also displayed when you select an object. (See also "ARIS > Help > Working with ARIS", subject area "Edit models > Basics", page "Assign a template to a model".) (Pivotal 5175053)



ARIS Process Governance

- The Japanese ARIS Process Board user interface has been improved. (Pivotal 1096246)
- The combo boxes in ARIS Process Governance dialogs have been extended. (Pivotal 5167925)
- If a versioning process started by ARIS Process Governance fails, an error message is now sent to the system administrator. (Pivotal 1094992)
- In ARIS Process Board, the input boxes in dialogs are now represented in a way that enables users to differentiate between editable and write-protected fields. (Pivotal 1101996)
- In ARIS Administration > Process administration > History, ascending and descending sorting of the table by column title is enabled again. (Pivotal 1101998)
- In Process Governance, the button name in dialogs and the button label are now identical. (Pivotal 5164454)
- For ARIS Process Board, the representation in the Polish interface language has been improved. (Pivotal 5167907)
- In Process Governance, the Web service 'Compare - Model versions' now works for non-versioned models. (Pivotal 5170004)
- In Process Governance, a defined contexts for processes is now saved properly. (Pivotal 5173253)
- In ARIS Process Board, the headers of check boxes in tables are now properly displayed in the tasks. (Pivotal 5177411)
- Charts in ARIS Connect > ARIS Administration are now displayed in the interface language selected for the application. (Pivotal 5177944)
- In ARIS Process Board, it is now possible to change table columns. (Pivotal 5178856)
- In the Process Governance mini workflow 'Submit new document', information on the model that the document is associated with is now supplied. (Pivotal 5179615)
- In Process Governance, moving services in the Explorer tree and the Governance resources is now possible. (Pivotal 5179812)
- In the Process Governance server component, an invalid XML restriction has been eliminated (CWE-611). (Pivotal 5179994)
- In ARIS Process Board, delegating tasks now works properly.
- In automated processes, the default database language must no longer be English for an ARIS Publisher export.
- In Process Governance, the behavior of terminator events after system restarts has been corrected.



ARIS Publisher

- In ARIS Publisher, users with the 'Database administrator' function privilege can now export databases. (Pivotal 1095670)
- In ARIS Publisher, the attribute type 'Change history' (type number 1472) is now included. (Pivotal 1100365)
- Wallpapers are now included in the export and displayed in ARIS Publisher. (Pivotal 5174228)
- In ARIS Cloud Controller, the ARIS Publisher login module is now displayed. (Pivotal 5177190)
- The borders for models in ARIS Publisher have been removed because they could not be displayed in ARIS. (Pivotal 5179065)
- A Publisher license key is no longer required to create HTML exports with contents from an ARIS Connect server. (Pivotal 5172363)

ARIS Connect

- Display and search results have been improved in ARIS Connect. (Pivotal 1095415)
- Errors have been resolved in the ARIS Connect search. (Pivotal 1095712)
- Functions are now found by the ARIS Connect search. (Pivotal 1100993)
- Items without a name are displayed as 'Untitled' instead of an empty field. (Pivotal 5149972)
- The message sent for expiring passwords now contains the information that a new password must be created. (Pivotal 5151339)
- Models with long names are now properly displayed in the ARIS Connect portal under 'Recent changes'. (Pivotal 5157892)
- In Collaboration, links are now represented with the proper symbol in Internet Explorer version 8. (Pivotal 5158819)
- In Collaboration, long group names are now shown completely in Internet Explorer version 9. (Pivotal 5160523)
- Objects in ARIS Connect can now be opened from the list of search results in the model in which they have an occurrence. (Pivotal 5160537)
- ARIS Connect users are now locked when they reach the number of failed login attempts that is specified in the configuration. (Pivotal 5164209)
- In the ARIS Connect portal, the entire right side of the page is used for displaying information. (Pivotal 5165019)
- The 'Highlighting' area in ARIS Connect is now displayed in the language selected for the application. (Pivotal 5165965)



- When starting ARIS from ARIS Connect, the proper start page is displayed depending on license and installation type. (Pivotal 5167262)
- ARIS document storage now uses English as an alternative language. (Pivotal 5168196)
- In ARIS Connect, the algorithm for displaying tables and RACI matrices has been optimized. (Pivotal 5168246)
- Models in ARIS Connect charts are now displayed in the language selected for the application. (Pivotal 5170052)
- Depending on whether the user does not have the required privileges or the model is unavailable, the proper error message is displayed when models are called and cannot be displayed in ARIS Connect. (Pivotal 5179627)
- In ARIS Connect, it is now possible to access documents in the portal without additional login. (Pivotal 5167504, 5173519)
- In the "Steps" view, the "Condition expression" attribute is shown with "Default" only for default connections, and for all other connections with "Event". (Pivotal 5160640)

ARIS Report

- Export RASCI chart:
This report has been replaced by the "RA(S)CI - Output organizational participations in processes" report that evaluates process models created under special modeling conventions.
If you want to continue using this report, make sure that model, object, and connection types differing from the modeling conventions mentioned above were used in processes.
- User-defined symbols are now displayed properly in report PDFs. (Pivotal 5165366)
- An error in ARIS Script has been eliminated. The method 'xlsRow.getCells()' now returns the proper result. (Pivotal 5166227)
- It is now possible to select filter options for derived model types in Script Editor. (Pivotal 5169087)
- If the interface language has not been specified, the language selected for the database is used as the alternative language for reports. (Pivotal 5169262)
- The ARIS standard report 'Output group information' now includes users with access to groups if they have the 'Database administrator' function privilege. (Pivotal 5170322)
- The 'Replace text attributes' report can now be used for UML content, as well. (Pivotal 5170824)
- The export of semantic check profiles has been improved. Special characters in file names that are allowed in ARIS but not in the file system are replaced by an underscore (_). (Pivotal 5174002)
- The generation of reports now works properly with evaluation filters. (Pivotal 5176648)
- The macro function 'Designer.setVisible' now works properly. (Pivotal 5176761)



- It is now possible to use custom fonts in reports. (Pivotal 5177078)
- The method 'ArisData.openDatabase' has been corrected. It now has the following return values in case of an error:
Null if the database does not exist.
Exception if login fails. (Pivotal 5178148)
- An error occurred during the import of XML files with special characters into shared report and macro files. This error has been eliminated. (Pivotal 5178381)
- In ARIS 9.8, script runner uses GUIDs instead of OIDs as in ARIS 7.x. The description in the template has been corrected. (Pivotal 5179366)
- The names of user-defined attributes are now properly output in reports. (Pivotal 5180662)
- Graphic resolution and text legibility in reports have been improved.
- Running a scheduled report in an environment with multiple ARIS Server runnables in order to automatically create objects no longer results in multiple creation of the same object. (See also "ARIS > Help > Working with ARIS", subject area "Evaluate data > Run reports > Valuable information", page "What are scheduled reports?") (Pivotal 5154230)
- The report API method "OutputLinkF()" now considers the "Underline" format. (Pivotal 5163013)

ARIS Analysis

- In ARIS Designer, the functions 'Excel export', 'Save as a table', and 'Save attributes' are now available for public queries, and 'Generate dashboard link' is available for private queries. (Pivotal 1098139)
- In ARIS simulations, BPMN models are now properly displayed in simulation experiments. (Pivotal 5165419)
- In models of the 'Table' type, references for additional table sheets are now retained after saving and closing. (Pivotal 5172490)

ARIS Risk & Compliance Manager

- In ARIS Risk & Compliance Manager, customizing has been improved. Adding documents is no longer limited to forms. (Pivotal 5173411)
- In ARIS Risk & Compliance Manager, customizing has been improved. Relationship privileges can now be assigned to base roles or be removed from base roles.
- In ARIS Risk & Compliance Manager customizing has been improved. The title of an attribute group is hidden if the group does not contain any visible attributes.
- In ARIS Risk & Compliance Manager, pie charts in the PDF report 'Incidents per hierarchy type' are now displayed completely and properly.



- In ARIS Risk & Compliance Manager, the log now displays the version changes on the correct version page.
- In ARIS Risk & Compliance Manager, the error has been eliminated that had led to an internal error when generating the PDF report of the 'Incidents per risk' evaluation.
- In ARIS Risk & Compliance Manager, the database migration now includes 'Subscriptions' of clients.
- In ARIS Risk & Compliance Manager, the error has been eliminated that had led to a task receiving a wrong state, if an offline document of a risk assessment was uploaded without having been changed.
- In ARIS Risk & Compliance Manager, the error has been eliminated that had led to data inconsistencies when answering and saving a questionnaire in different states.
- In ARIS Risk & Compliance Manager, the error has been eliminated that had led to a task receiving a wrong state, if an offline document of a risk assessment was uploaded without having been changed.
- In ARIS Risk & Compliance Manager, sign-off owners can now only view the sign-off hierarchy from the level they are assigned to a sign-off element.
- In ARIS Risk & Compliance Manager sign-off management, the error has been eliminated that had prevented a test case follow-up from being generated, even though the test case was not affected by a sign-off.
- ARIS Risk & Compliance Manager now supports single sign-on (SSO).

ARIS UML Designer

- In ARIS UML Designer, it is now possible to increase the height of UML2 Sequence diagrams. (Pivotal 5174839)

ARIS Business Optimizer

- In ARIS Optimizer, analysis groups are now shown only once. (Pivotal 5171769)

ARIS Document Storage

- The document link to the result of the "Compare - Model versions" Web Service now works properly. (Pivotal 5157260)
- In ARIS document storage, versioning when uploading new document versions now works properly. (Pivotal 5180126)
- Incorrect interface entries in the Japanese version have been eliminated. (Pivotal 1097391)



ARIS Documentation

- The help now explains the information that the history of users and user groups provides. (Pivotal 1098035)
- You can view procedure videos in the help. If your browser cannot open the procedure videos in the help, please use a different browser. The videos are also available in ARIS Community (<http://www.ariscommunity.com/help/quick-videos>). (Pivotal 5177913)
- The online help can now be called from anywhere in ARIS Connect.
- The link to Central User Management is displayed as a URL in ARIS Administration. (Pivotal 1098070)



14 Disclaimer

ARIS products are intended and developed 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. For example, processing capacities are exceeded if models and diagrams transcend the size of the modelling 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 modelling artefacts. It supports a modelling 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.