ARIS 10

RELEASE NOTES (BUGFIXES)

APRIL 2025

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

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

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1 Version information

Name	Version	Release date
ARIS 10.0 SR28	10.0.28.0	30th April 2025
ARIS 10.0 SR27	10.0.27.0	31th October 2024
ARIS 10.0 SR26	10.0.26.0	18th June 2024
ARIS 10.0 SR25	10.0.25.0	27th February 2024
ARIS 10.0 SR24	10.0.24.0	21th November 2023
ARIS 10.0 SR23	10.0.23.0	23th June 2023
ARIS 10.0 SR22	10.0.22.0	18th April 2023
ARIS 10.0 SR21	10.0.21.0	16th December 2022
ARIS 10.0 SR20	10.0.20.0	18th October 2022
ARIS 10.0 SR19b	10.0.19.2	05th October 2022
ARIS 10.0 SR19	10.0.19.0	16th August 2022
ARIS 10.0 SR18	10.0.18.0	17th May 2022
ARIS 10.0 SR17b	10.0.17.3	05th April 2022
ARIS 10.0 SR17	10.0.17.0	14th January 2022
ARIS 10.0 SR16	10.0.16.0	15th October 2021
ARIS 10.0 SR15	10.0.15.0	07th July 2021
ARIS 10.0 SR14	10.0.14.0	15th March 2021
ARIS 10.0 SR13	10.0.13.10	17th July 2020
ARIS 10.0 SR12	10.0.12.0	15th April 2020
ARIS 10.0 SR11	10.0.11.0	16th December 2019
ARIS 10.0 SR10	10.0.10.0	15th October 2019
ARIS 10.0 SR9	10.0.9.0	28th June 2019
ARIS 10.0 SR8	10.0.8.0	16th April 2019
ARIS 10.0 SR7	10.0.7	20th December 2018
ARIS 10.0 SR6	10.0.6	16th October 2018
ARIS 10.0 SR5	10.0.5	13th July 2018
ARIS 10.0 SR4	10.0.4	17th April 2018
ARIS 10.0 SR3	10.0.3	21th December 2017
ARIS 10.0 SR2	10.0.2.1	17th October 2017
ARIS 10.0 SR1	10.0.1	14th July 2017
ARIS 10.0	10.0.0.2	19th April 2017

2 General information

Supported platforms

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

New features

For detailed information about new features in ARIS 10.0 see Documents\English\ReleaseNotes-Features.pdf

Update of ARIS Version

For detailed information about updates to new version of ARIS 10.0 see Documents\English\ARIS Update Cookbook.pdf

If you have an elasticsearch cluster, please follow instruction under chapter 12 "Adjust elasticsearch cluster".

If you update from ARIS 10.0 SR9 or older version, we recommend to re-index your data. See chapter 21 "Re-index modeling data for each tenant (optional)".

Announcement of the discontinuation of support for ARIS Cloud Usage Monitoring Service (YCSUM)

Please read carefully: Due to the modernization of our product portfolio, we announce the final retirement of the following ARIS product for July 2025:

- ARIS Cloud Usage Monitoring Service (product code: YCSUM)

The final version with general availability of the above-mentioned products was shipped with the ARIS 10.0 SR26 in June 2024.

According to our standard maintenance guidelines (see https://empower.softwareag.com), end of maintenance (EOM) is 1 year after general availability of ARIS 10.0 SR26, which will be June 2025.

No further releases will be shipped after this date, and no maintenance contracts will be continued for this product beyond June 2025. In case of questions, please contact your Software AG sales representative.

The product(s) listed above have been replaced by another product providing a similar capability set. Software AG has developed modern, state-of-the art alternatives that can be used to address the use-cases that were previously covered by the product(s) listed before. Your Software AG sales representative or one of our partner organizations is happy to discuss possible transition scenarios to new product versions.

Announcement of the discontinuation of support the ARIS cloud infrastructures YCSCS, YCSSS, YCSMM, YCSLL, YCSXL, YCSXM, YCSXN

Please read carefully: Due to the modernization of our product portfolio, we announce the final retirement of the following ARIS products for June 2025:

- ARIS Cloud Entpr. - Base Service Config.ARIS (product code: YCSCS)
- ARIS Cloud Entpr. - Base Service S-Size (product code: YCSSS)
- ARIS Cloud Entpr. - Base Service M-Size (product code: YCSMM)
- ARIS Cloud Entpr. - Base Service L-Size (product code: YCSLL)
- ARIS Cloud Entpr. - Base Service XL-Size (product code: YCSXL)
- ARIS Cloud Entpr. - Base Serv. XXL-Size (product code: YCSXM)
- ARIS Cloud Entpr. - Base Serv. XXXL-Size (product code: YCSXN)

The final version with general availability of the above-mentioned products was shipped with the ARIS 10.0 SR26 in June 2024.

According to our standard maintenance guidelines (see https://empower.softwareag.com), end of maintenance (EOM) is 1 year after general availability of ARIS 10.0 SR26, which will be June 2025.

No further releases will be shipped after this date, and no maintenance contracts will be continued for this product beyond June 2025. In case of questions, please contact your Software AG sales representative.

The product(s) listed above have been replaced by another product providing the same capability set. Software AG has developed modern, state-of-the art alternatives that can be used to address the use-cases that were previously covered by the product(s) listed before. Your Software AG sales representative or one of our partner organizations is happy to discuss possible transition scenarios to new product versions.

Announcement of the discontinuation of support for certain functionalities

Custom ARIS model transformations are no longer supported.
Custom model transformation files (rlib file) will no longer work and will be ignored during migration. If you still need to make significant changes to your transformations, please contact us. In most cases we can offer you a better integrated solution.

The Process Governance Mashzone API for providing specific data to certain legacy Mashzone dashboards is no longer be available with the version ARIS 10.0 SR26 (Q2 2024).

Announcement of the discontinuation of support for certain functionalities

Please read carefully: Retirement announcement for the ARIS Design Server (YDS) products.

Due to the modernization of our product portfolio, we announce the final retirement of the following ARIS products in April 2027:

- ARIS Design Server (product code: YDS)
- ARIS Design Server Alfabet Interoperab. (product code: YDSAL)
- ARIS Design Server EP API Access Infra. (product code: YDSAI)
- ARIS Design Server EP ArchiMate (product code: YDSAR)
- ARIS Design Server EP API Full Access (product code: YDSFA)
- ARIS Design Server EP Process Governance (product code: YDSPG)
- ARIS Design Server EP API System Access (product code: YDSSA)
- ARIS Design Server EP MS SharePoint (product code: YDSSH)
- ARIS Design Server EP TOGAF (product code: YDSTO)
- ARIS Design Server EP API Light Access (product code: YDSMA)
- ARIS Design Server EP IoT (product code: YDSOT)
- ARIS Design Server EP API Read Access (product code: YDSRA)

The final version with general availability of the above products was shipped with ARIS 10.0 SR26.

According to our standard maintenance policy (see https://empower.softwareag.com/), the end of maintenance (EOM) is 3 years after the general availability of ARIS 10.0 SR24, which will be in April 2027.

No further releases will be shipped after this date, and no maintenance contracts for this product will be continued beyond April 2027. If you have any questions, please contact your Software AG sales representative.

The product(s) listed above have been replaced by another product that provides the same functionality. Software AG has developed modern, state-of-the-art alternatives that can be used to address the use cases previously covered by the product(s) listed above. Please contact your Software AG sales representative or one of our partner organizations to discuss possible transition scenarios to new product versions.

Reminder of the discontinuation of support for certain functionalities as of release ARIS 10.0 SR24 in November 2023.

We announce that as of the release of ARIS 10 SR24, the following functionalities will no longer be supported:

1. The standalone APG Process Board will no longer be available. Instead, you can use the integrated APG Process Board available on the ARIS Connect Server (YCS).
2. You will no longer be able to start "Export as html" from ARIS Architect (YAA) as this export is dependent on Publisher functionality.
3. The Report API component BusinessPublisher used by ARIS Publisher and the "Export as HTML" report will no longer be available.
4. Windows Server 2016 is no longer supported. We recommend that you use Windows Server 2019, Windows Server 2022 or LINUX systems instead (see the "ARIS System Requirements" document).
5. Firefox browser is no longer supported. We recommend that you use Microsoft Edge or Google Chrome.
6. Mobile devices (iPad, Android tablet) are no longer supported.

Affected products: ARIS Connect Server (YCS), ARIS Design Server (YDS), ARIS Risk and Compliance Manager (YRC), PPM (YPI), Process Extractor (YMS), ARIS Designer (YAD), ARIS Architect (YAA), and UML Designer (YUD).

If you have any questions, please contact our support team.
Your Software AG sales representative or one of our partners will be happy to discuss possible transition scenarios to ARIS Cloud (www.ariscloud.com) or to ARIS on-premises.

ARIS REST API

The ARIS REST APIs (like ARIS Repository API) do no longer accept trailing slashes in the called URLs (this means a '/' character at the end of the URL). This change is conformant to the existing documentation – including the documentation of former releases - and to common best practices.

Disclaimer: Send email from report

In general, direct use of internal Java classes from the abs runnable during report execution is officially not supported, because the APIs of Java classes can change and are not under our control.

With ARIS 10 SR24 the ARIS server components were migrated to Java 17. This resulted in such an incompatible change.

Customers who used javax.mail to send emails from reports will find that this is no longer possible in Java 17. An alternative is to use Packages.jakarta.mail instead.

3 Fixes in ARIS 10.0 SR28

General

- In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

Security

- For security reasons, the following third-party libraries were updated:
  - elasticsearch to version 8.17.4
  - elasticsearch (old) to version 7.17.28
  - httpd (Apache Loadbalancer) to version 2.4.63
  - jcommander to version 1.82
  - jetty to version 12.0.19
  - json-smart to version 2.5.2
  - log4j to version 2.24.3
  - mina-core to version 2.2.4
  - netty to version 4.1.119.Final
  - poi to version 5.4.0
  - postgres jdbc to version 42.7.5
  - spring to version 6.1.16
  - spring-core to version 6.2.5
  - spring-boot to version 3.4.4
  - tomcat to version 10.1.40
  - zookeeper to version 3.9.3
- Further information on third-party libraries can be found in the folder Documents\English\Legal information
- In addition to the report script execution security enhancements introduced in previous releases, the following security enhancement has been made:
  Access to internal Java classes is now restricted by a whitelist that allows only a fixed set of Java classes to be used in report scripts. As an alternative, several new functionalities are now provided through the standard ARIS report script API. The corresponding changes are described here: https://docs.aris.com/10.0.28.0/yay-technical-help/en/#/home/510531/en/1

ARIS Server

- It is now possible to delete a database during a running tenant backup, e.g. to reduce runtime, as long as the database has not yet been backed up in the sequential backup. (SI-574564)

ARIS Architect / Designer:

- We fixed a bug in satellite modeling. If an existing object was selected for reuse as a satellite and the action to create it as a satellite was confirmed with the Enter key, the object was not reused, but a new object with the same name was created. (SI-576323)
- We fixed a bug that could cause symbols to be displayed at the wrong size in the modeling component. Now the correct symbol sizes are applied when using templates. (SI-574902, SI-575866)
- ARIS REST API: We fixed a bug in the query of data in Serbian. (SI-575791)
- We fixed a bug that caused special characters and symbols to be displayed incorrectly in the fact sheets when they were copied from other programs and pasted into the description attribute of an object. (SI-575520)
- We fixed a bug that occurred after deleting an object in the Explorer/in 'Models and objects' that was used as a parent in matrix models. This caused the child objects to become their own parents. (SI-575393)
- We fixed a bug in BPMN modeling. When using derived symbols in BPMN models, it was not possible to create e.g. a message flow connection between a start event and a pool. (SI-574125)
- We fixed a bug that caused macros that were executed during the modification of an object attribute not to work as expected. (SI-573365)
- We fixed a bug in BPMN modeling. Some specific BPMN actions were also enabled for function allocation diagrams. This meant that relationships between objects (group and another object) could not be created. (SI-570026)
- We fixed a bug in the properties panel / satellite modeling of the modeling component. The content types based on bool attributes were not evaluated correctly. (SI-573854)
- We fixed a bug in the Modeling component that caused black custom symbols to appear on a black background. (SI-574246)

ARIS

- We fixed a bug that made it impossible to edit object fields in 'Contribute' mode in 'Published content' if the attributes of these objects contained only breaks, such as <p> or <br>. (SI-575810)
- We fixed a bug in model comparison. After activation of the model comparison in Administration, the 'Model comparison' option is now set to 'On' by default in the 'Diagram' tab of the respective model in 'Published content'. (SI-574858)
- We fixed a bug in the alignment and formatting of descriptions of UML diagrams. (SI-576177)

ARIS Reports

- We fixed a bug in the ARIS report script API that caused an HTTP 400 error when a DELETE method was used against a third-party REST API. (SI-576305)
- We fixed a bug in the report script API method 'getLockOwner()'. If the model is opened by a user in a client, the client user name plus '@client' is returned. For security reasons, we no longer display host information. (SI-575563)
- We fixed a bug in the ARIS report script API. It is now possible to send an HTTP 'PATCH' request when calling third-party REST APIs. (SI-574766)
- We fixed a bug that caused imported semantic check roles and profiles to be displayed in different languages. (SI-572740)

ARIS Risk and Compliance

- With SR 28, we introduced an option to roll back a custom database schema to the standard ARCM schema. (SI-575451)

- With SR 28 the following fact sheets include an additional property in the 'GRC management' section:
  - Compliance assessment definition (identifier: complianceAssessmentDef)
  - Control execution task (identifier: controlExecutionTask)
  - Risk (identifier: risk)
  - Survey scheduler (identifier: surveyTask)
  - Control test definition (identifier: testDef)

  Property:
  'Time limit includes review' attribute mapping (identifier: timeLimitIncludesReview)
  XMl version of the mapping:

```
<mapping name="timeLimitIncludesReview" type="boolean">
    <attribute typeNum="4632" function="target,edit"/>
</mapping>
```

  If you use the 'classic' configuration set or a modification set of this configuration, and a customized version of the Default set (content type set) from SR 27 is enabled for publishing, it is recommended that you add the relevant mapping to the 'GRC management' property group of the relevant content type.

ARIS ArchiMate

- Users will now receive a warning if they attempt to assign an ArchiMate connection type to a function allocation diagram using 'Select connections from all available connection types', because this would create too many connections. Instead, the connections of these types should be assigned between specific source and target symbols using 'Select connections used between object symbols'. (SI-574135)

ARIS Documentation

- ARIS Documentation: With SR 28, only the PDF guides that deal with installing and updating your system are shipped with the on-premises products. The online help sets and other documents are no longer shipped with the products. Instead, when you click 'Help' in the ARIS user interface, you are redirected to the appropriate help set at https://docs.aris.com. This will provide you with the same documentation as before, but will reduce the size of the product packages that are deployed on your end. If you are not allowed to access the Internet for security reasons, you can download all documentation from the ARIS Download Center (https://ariscommunity.com/download-center/products). For detailed information on how to make the online help available on your system, refer to the "Make online help available" section of the following installation and update guides:
  - ARIS Server Installation - Windows.pdf
  - ARIS Server Installation - Linux.pdf
  - ARIS Server Update Installation Guide.pdf
  - ARIS Update Cookbook.pdf
- ARIS Documentation: The 'ARIS Risk and Compliance Customizing Guide' and 'ARIS Risk and Compliance Data Migration Guide for Customized Versions' are no longer available online in the Technical Documentation or as PDF files on the installation media. To obtain these guides in PDF format, please contact ARIS Support.
  The 'ARIS Risk and Compliance Installation Guide' and 'ARIS Risk and Compliance Upgrade Guide' are available online at https://docs.aris.com under Risk and Compliance > Technical Documentation > Installation and Upgrade or on your installation media.
- ARIS Documentation: The 'ARIS ArchiMate 3.x User Guide' is no longer available as a PDF file at https://docs.aris.com or on the installation media. Its contents can be found in the online help of ARIS Architect and ARIS (Configure and Administrate).

ARIS Localization

- With SR28, we added Ukrainian as a UI and method language in all clients.

ARIS Queries

- The performance of queries was improved. (SI-573194)

ARIS Variants

- To use the enhanced variant management, only the ARIS Connect Designer license is required instead of the ARIS Enterprise Admin license. (SI-575139)

ARIS User Management

- SAML RelayState no longer allows URL redirection attacks. (SI-574326)
- If the 'E-mail notification for user creation' option is disabled in the SCIM configuration, notifications are no longer sent to users that are provisoned using SCIM. (SI-571335)
- An error in the CLI command for deleting license usage data from UMC backup has been fixed. Now all data from a certain period is deleted and not only the data that was exactly on the start and end date of the period.

ARIS Dashboards

- The auto-refresh data feature, which enables automatic data retrieval for widgets, is no longer supported.

4 Fixes in ARIS 10.0 SR27

General

- In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

Security

- We have improved security for the report script execution. This change is affecting ARIS Enterprise customers in the private cloud and on-premises.

  What's changing:

  1. JAR File Import Restrictions:
  The import of JAR files into reports is now prohibited in all editions. This change enhances security by preventing the execution of potentially harmful code.

  2. Script Method Restrictions:
  - The getClass() method can no longer be called on objects within scripts.
  - The java.lang.Class class cannot be instantiated in scripts.
  - The Context.execute(command) method is no longer usable.

  3. New Context Methods:
  To support some common use cases, we will offer additional secure report methods instead:
  - String Context.getClassName(Object object): This new method returns the name of the class of the specified object.
  - boolean Context.classEquals(Object object1, Object object2): This new method checks whether the class names of two objects are equal.

  4. Only for On-Premises Customers:
  For the restrictions listed in points (1) and (2), a server switch is available. If you do not want these restrictions to be applied to your system, contact Global ARIS Support for assistance.

- For security reasons, the following third-party libraries were updated:
  - activemq to version 6.1.2
  - bcpkix-jdk18on to version 1.78.1 (CVE-2023-33202)
  - camel to version 4.7.0
  - curator to version 5.7.0
  - cxf to version4.0.5 (CVE-2024-32007, CVE-2024-29736, CVE-2024-41172)
  - Elasticsearch to version 8.14.5
  - Elasticsearch (old) to version 7.17.24
  - guava to version 32.2.1-jre
  - httpd (Apache Loadbalancer) to version 2.4.62 (CVE-2024-39573, CVE-2024-38477, CVE-2024-38476, CVE-2024-38475, CVE-2024-38474, CVE-2024-38473, CVE-2024-38472, CVE-2024-36387, CVE-2024-40898, CVE-2024-40725)
  - hsqldb to version 2.7.3
  - Jackson to version 2.14.3
  - jetty to version 12.0.14
  - log4j to version 2.24.1
  - netty to version 4.1.114.Final
  - poi to version 5.2.5
  - postgres jdbc to version 42.7.4
  - rhino to version 1.7.15
  - rhino-js-engine to version 1.7.14
  - spring to version 6.0.23 and 6.1.14
  - spring-boot to version 3.1.12, 3.2.10 and 3.3.5
  - tomcat to version 10.1.30
- JAVA patch level updated to 17.54.22
- Further information on third-party libraries can be found in the folder Documents\English\Legal information

ARIS Server

- We fixed a bug that prevented database backups created in ARIS 10 SR26 from being restored in earlier ARIS versions. Using the parameter as described (e.g. backup "United Motor Group" c:\temp -v 10.0.24) now works as expected. (SI-568258)
- With SR 27, the URLs of the ARIS document storage links are now automatically adapted to the new server and tenant after a migration. Alternatively, you can still adapt them using the 'Adapt ARIS document storage links' report.

ARIS Architect / Designer:

- We fixed a bug that caused text annotations to be placed incorrectly when smart modeling was used. (SI-565887)
- We fixed a bug that caused custom templates not to be applied correctly to BPMN objects that were copied and pasted into diagrams. (SI-565497)
- We fixed a bug that caused a drop-down menu to appear empty when the 'Generate model' function was used. (SI-567450)
- We fixed a bug that prevented models of type 'Spreadsheet' from being opened when they were assigned to objects. (SI-567601)
- We fixed a bug that caused the creation of message flows to an Event subprocess in an Enterprise BPMN collaboration diagram to fail. (SI-567683)
- We improved the zoom function in the 'Diagram' fact sheet in 'Published content'. (SI-567238)

ARIS

- We fixed a bug in the filtering method of CES (Enterprise Search). The search now returns the expected results when you search for groups. (SI-558118)
- We fixed a bug that caused the mini fact sheets of objects to disappear on hover or click. The mini fact sheets are now displayed correctly. (SI-564368)
- The validation of the content type configuration now follows less strict rules with regard to symbol filters. (SI-565517)
- Assigning database access privileges to a single user now allows a large number of databases. (SI-566505)
- It is now possible to load content type sets without an ARIS Connect Designer license in ARIS Administration under 'Content type configuration'. (SI-568648)
- We improved the 'Edit model' function under 'Published content'. All model types are now editable. (SI-561919)
- We fixed a bug in CES (Enterprise Search) that caused punctuation, including periods, to not appear in search results. Models with names containing punctuation and special characters are now displayed correctly in search results. (SI-569835)
- The following APG Web Services are no longer supported in ARIS 10.0 SR27
  - Dynamic export
  - Delete dynamic export
  - Static export
  - Delete temp files

  Instead of failing, they don't run and return a negative result.

- In the fact sheets, all elements of the properties are now displayed in the correct language after the language of the user interface has been changed. (SI-563692)
- We fixed a bug that caused duplicate tile names in the 'Quick links' component of the 'Home' page. Tile names can now be added or changed individually for each tile. (SI-565804)
- We fixed a bug that caused the customization of the header font color to fail. The correct font color is now displayed. (SI-566183)
- We fixed a bug that prevented the catalog from displaying updated information. Newly added or deleted data is now automatically updated and displayed correctly in the catalog. (SI-568823)
- We improved the assignment of database access privileges. You can now switch to another group by clicking the folder icon. (SI-565561)
- We fixed a bug that caused setting the symbols for attribute types to fail. The symbols can now be selected under 'Values and symbols' and saved as expected. (SI-570133)

ARIS Dashboards

- We fixed a bug that prevented setting the timeZone parameter correctly for dashboards.

ARIS Reports

- We fixed a bug that caused already running scheduled reports to restart after a server error. Reports are now deactivated after an unexpected server error and a deactivation message is displayed. (SI-563317)
- We fixed a bug that allowed users with a 'Database administrator' function privilege to view all reports, including those with restricted access. (SI-566532)
- For reports that run in the Web, we now support the escape character '\n' to create new lines in report dialogs. (SI-567057)
- We fixed a bug in the 'Consolidate objects' standard report that caused duplicated and redundant objects to be missed and not consolidated. (SI-565144)
- We fixed a bug that prevented opening ARCM reports from ARIS Architect after the update. (SI-568147)
- We fixed a bug that caused the cursor to jump to the wrong place when an item was selected in a dialog. (SI-568672)

ARIS Risk and Compliance

- Deactivated audit steps can now be reactivated. (SI-567455)
- We added the following fields to the 'Data (issue)' view: immediateMeasure, remediationMeasure, description, owner_status, owner_remark, remark. (SI-569783)

ARIS Method

- We improved the 'Vertical space' and 'Horizontal space' layout functions for newly created models. (SI-564754)
- We fixed a bug that caused item definitions to be sorted incorrectly. (SI-565432)

ARIS User Management

- We fixed a bug that prevented users from being redirected to the login page after an expired session. When a session expires, the user is now automatically logged out and redirected to the SSO login page. (SI-553510)
- We fixed a bug that caused users to lose connection multiple times, preventing them from saving content. The error handling of the central user management (UMC) is now more robust. (SI-565316)
- We fixed a bug that caused dump files to take up disk space. The temporary folder is now cleaned every three days, and the cleaning interval can be set as needed. (SI-567982)

ARIS BPMN

- The BPMN import/export now supports derived BPMN and eBPMN diagrams. (SI-559820)
- The filter defined in the 'Select database filter' dialog is used to open a model after the Visio import. (SI-563287)

ARIS Process Mining

- In the Diagram view in ARIS, the user menu is no longer overlaid by dashboards displayed on the side. (SI-567387)
- We improved the table data extraction configuration. Highlighting in the 'Filter statement' dialog now works as expected. (SI-568530)

ARIS Process Governance

- We improved the 'Process.archiveInstances' report method. No error messages occur when you archive or unarchive content using scripts. (SI-566521)

ARIS Localization

- We have corrected an error in the translation into Dutch. The symbol 'Control' has been translated as 'Besturing'. This has now been changed to 'Controle'. (SI-569698)

5 Fixes in ARIS 10.0 SR26

General

- In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

Security

- For security reasons, the following third-party libraries were updated:
  - activemq to version 5.18.4
  - bcprov-jdk18on to version 1.78 (CVE-2024-29857, CVE-2024-30171, CVE-2024-30172)
  - camel to version 4.5.0 (CVE-2024-22371)
  - commons-compress to version 1.26.1 (CVE-2024-25710, CVE-2024-26308)
  - commons-configuration to version 2.10.1 (CVE-2024-29131, CVE-2024-29133)
  - cxf to version 4.0.4 (CVE-2024-28752)
  - Elasticsearch to version 8.13.4
  - Elasticsearch (old) to version 7.17.21 (CVE-2024-23446)
  - guava to version 32.1.3-jre
  - httpd (Apache Loadbalancer) to version 2.4.59 (CVE-2023-38709, CVE-2024-24795, CVE-2024-27316)
  - hsqldb to version 2.7.2 (CVE-2022-41853)
  - io.netty to version 4.1.110.Final
  - jetty to version 12.0.9
  - joda-time to version 2.12.7 (CVE-2024-23080)
  - jose to version 0.9.6 (CVE-2023-51775)
  - json-path to version 2.9.0
  - log4j to version 2.23.1
  - poi to version 5.2.5
  - postgres jdbc to version 42.7.3 (CVE-2024-1597)
  - snakeyaml to version 2.2
  - spring to version 6.0.21 and 6.1.8 (CVE-2024-22262)
  - spring-boot to version 3.1.12 and 3.2.6
  - tomcat to version 10.1.24
  - zookeeper to version 3.9.2 (CVE-2024-23944)
- JAVA patch level updated to 17.50.20
- Further information on third-party libraries can be found in the folder Documents\English\Legal information

ARIS Server

- The .adb file format for ARIS 10.0 SR26 has been changed.
  An .adb file created with SR26 cannot be restored in SR25 (and older versions), also newer tenant backups cannot be restored in older versions.
  However, there is a new option in the arisadm backup command for backup in older format, e.g. backup "United Motor Group" c:\temp -v 10.0.24
- We improved the description of the 'reorg' option. (SI-548154)
- Search results with special characters in the name are now opened correctly. (SI-549096)
- Temporary database backup files are now deleted after the backup file has been successfully created. (SI-548985)
- We fixed a bug that caused an incorrect access mode to be used during the optimization of the archived data of a database. (SI-548988)
- The system now prevents the existence of multiple databases with the same name, even if they are not visible. (SI-558946)
- If an archived ARIS database is in an older format, it may happen that models in a group are no longer displayed in the Explorer if models from that group have been moved to another group. This is not a defect in the database. (SI-559547)

ARIS Designer:

- We fixed an error in the content type configuration that prevented users from configuring relations for derived model types. (SI-559630)
- We fixed a bug in the ARIS macro API that caused unsaved changes to be discarded when a macro was executed. (SI-547054)
- We fixed a bug in the web administration for ARIS semantic checks which meant that some profiles could only be maintained in a limited number of languages. (SI-551991)
- We fixed an error in the placement of attributes in user-defined symbols based on the traditional ARIS palette. (SI-556184)
- Changing the default symbol for gateways immediately after gateway creation now works correctly. (SI-554182)
- We improved the image quality of model graphics created using the REST API. (SI-549595)

ARIS UML Designer

- ARIS UML Designer: We fixed a bug in the graphical report of UML models that caused the content of UML models not to be displayed in the PDF generated by the 'Export graphic as PDF' report. (SI-555255)

ARIS

- Videos embedded in fact sheets now play correctly. (SI-521260)
- Links to 'Dashboards' now open the correct tab in 'Published content'. (SI-524950)
- The 'Edit fact sheet' page now opens in a new tab. The 'Back' button has therefore been removed. (SI-547814)
- The 'Search in model' option in 'Published content' now finds text that consists of more than one word and spans multiple lines. (SI-552125)
- We fixed a bug in the definition of the link template 'Clickable link with title'. (SI-558549)
- The entries in the 'Groups' fact sheet in 'Published content' are now sorted alphabetically. (SI-558523, SI-558741)
- We fixed a bug that caused the details panel to not update correctly when the selection in the list properties (text view, table view) was changed. (SI-560282)
- We fixed a bug that prevented users from accessing the main menu if the email address used for the account contained dollar signs or backslashes. (SI-561520)
- We fixed a bug that caused the scroll bars on the 'Home' page not to be displayed if the grid layout component was set to a different style. (SI-560683, SI-561687)
- We fixed an issue that allowed users to change the attributes of objects to which they didn't have write access. (SI-559554)
- Sorting in sub tables of fact sheets now works correctly. (SI-523133)
- The 'Organizational unit' object (OT_ORG_UNIT) is now available in the Customer journey map (MT_CUSTOMER_JOURNEY_MAP) and the Customer touchpoint allocation diagram (MT_CUSTOMER_TOUCHPOINT_ALLOCATION_DIAGRAM). (SI-556501)
- We fixed a bug that caused the XML import/export, merge and consolidation functions to be unavailable when a custom configuration set was used. (SI-551988)
- Deleting user-defined attribute types now works as expected. (SI-555800)
- Favorites now display the correct column content, even if individual attribute values are not maintained. (SI-558565)

ARIS Dashboards

- We fixed a bug that prevented saving data from a dashboard in CSV format. (SI-554266)
- We fixed a bug in the use of the Root Cause Miner widget. (SI-556257)
- We fixed a bug with the import of dashboards that were exported from older ARIS versions (e.g. ARIS 10.0 SR20). (SI-557313)

ARIS Reports

- We fixed a bug in the ARIS report script API. Variant relationships are now also created for objects in groups to which the executing user only has read access. (SI-546974)
- We fixed a bug that caused certain languages, such as Bosnian, to be displayed incorrectly in reports. (SI-546780)
- We fixed a bug that caused the report-based search for models to return incorrect results because the values for user-defined Boolean attributes (1=false, 2=true) and the default values for Boolean attributes (0=false, 1=true) did not match in the Englisch code. (SI-548076)
- We further improved the stability and robustness of the ARIS standard report 'Compare models'. (SI-557804)
- We fixed a bug that caused the number of 'Save' dialogs to be duplicated when users exported multiple report files simultaneously. (SI-561659)

ARIS Document Management

- Files with special characters such as ampersand (&) in the name can now be opened in the file selection of ADS in ARIS Architect. (SI-547606)
- We introduced the property 'com.aris.ads.temp.file.extension.validate'. If this property is set to true, the same file type checks are carried out for the temporary repository as for the permanent repository. (SI-553062)
- The 'Approve document' mini workflow is not supported in the public cloud editions of ARIS Advanced and ARIS Enterprise. The corresponding buttons have therefore been removed. (SI-552497)
- The SharePoint Online Adapter now supports a proxy configuration. (SI-550611)
- We updated the entries for 'createAttribute' and 'hasAttribute' in the ARIS script help (ARIS API for reports and macros). (SI-557404)
- We added an entry for 'IADSPermissions' to the ARIS script help (ARIS API for reports and macros). (SI-560710)

ARIS ArchiMate

- It is now possible to assign more than one ArchiMate (3.x) model to an 'Artifact' symbol of the 'Information Carrier' type. (SI-552744)
- The ArchiMate import now transfers the correct date attribute values. (SI-548607)
- During an ArchiMate import, the first 250 characters of a name will be imported if the name is longer than 250 characters. (SI-550901)

ARIS BPMN

- The correct language is now assigned during BPMN import/export. (SI-548253)
- The placement of the lanes is now handled correctly in the BPMN import. (SI-559501)

ARIS DMN

- Published content' now includes the 'Contribute' option for DMN decision tables. (SI-551718)

ARIS Analysis

- We fixed an issue with consolidated objects not being displayed correctly in spreadsheets. This fix causes occurrences to be recalculated in all previously created spreadsheets the first time they are opened in version SR26, which can take several minutes in large spreadsheets. Also, from version SR 26, occurrences are recalculated after each operation with objects in the spreadsheet (such as insert, delete, ...), which can take some time if applied to a large number of objects. To consolidate objects placed in spreadsheets created in older versions, open the spreadsheet, save it (even if no changes have been made, new occurrences should be saved), and close it. You can now perform the consolidation.
- Queries in ARIS: The new 'Bulk editing' feature allows you to edit multiple items at once.

ARIS Risk and Compliance

- Support for 'Software AG Digital Event Services' is deprecated and will be removed in the ARIS 10.0 SR27 release. Please contact Software AG Global Support for replacement information.
- We fixed a bug that prevented a regulation owner from accessing the change review assigned to him. (SI-558913).

ARIS Alfabet Integration

- Now only the license 'ALFABET_LICENSE_PERMISSIONS (YCSAL, YDSAL)' and the function right 'Configuration administrator' are required to connect ARIS and Alfabet. (SI-559483)

ARIS Tenant Management

- We introduced a tooltip for the 'Objects per database' chart in ARIS Administration, which explains the underlying data in more detail. (SI-548403)

ARIS Method

- The 'Documented knowledge' object type is now available in the Enterprise BPMN collaboration diagram. (SI-553948)

ARIS User Management

- We fixed a bug in the user/user group assignment dialog that caused endless loops when the user clicked the area next to the checkboxes. (SI-550834)

ARIS Variants

- The correct status is now reported during variant creation. (SI-523525)

ARIS Process Mining

- When process variants are transferred from Process Mining to ARIS, access rights are no longer required for the main group of the database, but only for the group to which the model is to be transferred. (SI-522557)
- The SQL function 'BIGINT' is now available in the auto-completion drop-down list in the Transformations editor. (SI-557440)
- Problems with transferring BPMN models containing 'intermediate events' from ARIS to Process Mining are now fixed. (SI-561764)

ARIS Process Governance

- Email notifications in APG are now sent without errors. (SI-562078)

6 Fixes in ARIS 10.0 SR25

General

- In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

Security

- For security reasons, the following third-party libraries were updated:
  - Lodash to version 4.17.21 (CVE-2019-10744)
  - Apache log4j to version 2.22.1
  - jetty to version 11.0.20
  - io.netty to version 4.1.106.Final
  - tomcat to version 10.1.18
  - Jakarta JSON to version 2.1.3
  - Elasticsearch to version 7.17.17
- JAVA patch level updated to 17.46.20, covering:
  - CVE-2023-22025
  - CVE-2023-22067
  - CVE-2023-22081
- Further information on third-party libraries can be found in the folder Documents\English\Legal information

ARIS Server

- Temporary backup files that are created during a database backup will now be automatically deleted after the backup has been successfully completed. (SI-548985)

ARIS Architect

- The object search in ARIS Architect now finds objects with line breaks in their names. (SI-524872)
- In ARIS Architect or UML Designer you can create object links if you have read access to the source and target objects and write access to at least one of these objects. If renaming is selected in the rules for object links, write permissions must also be available for the object that is to be renamed in order to be able to create the object link.

ARIS

- If you maintain an attribute in different languages in different versions of a model, the model comparison now indicates whether the attribute was added or removed and what the fallback value is. (SI-518492)
- The 'Dashboards' tab in 'Published Content' now displays as expected when you change the language. (SI-548875)
- We fixed a bug that caused German umlauts to be displayed incorrectly after the upgrade from SR 23 to SR 24. (SI-549430)
- We fixed a bug that caused mini fact sheets to be displayed incorrectly after an upgrade to SR 23. (SI-551025)
- We fixed a bug that caused Slovenian special characters to be displayed incorrectly after the upgrade from SR 23 to SR 24. (SI-525151)
- Sorting within tables now works correctly in the fact sheets. (SI-523133)
- When you perform a search in the glossary, the attributes will now be displayed in the correct language after you change the language of the user interface. (SI-522238)
- We fixed a bug that prevented the 'Product allocation diagram' model type from being displayed in the fact sheet, even though it had been added to a custom content type set. (SI-548827)

ARIS Process Governance

- The 'com.aris.age.autodeploy.enabled' property is available again. (SI-548070)

ARIS Variants

- ARIS report script API: We fixed a bug in the script-based creation of object variants that caused the variant relationship not to be established if the executing user did not have write access to the folder where the original object was located. (SI-546974)
- The user will now see the correct status message when creating variants, for example, if the process fails. (SI-523525)

ARIS Document Management

- In ARIS Architect, you can now open files from ARIS Document Storage that contain an ampersand (&) in the name. (SI-547606)

ARIS Archimate

- During the ArchiMate import, the values of the date attributes are now transferred correctly. (SI-548607)
- During the ArchiMate import, long object names are now transferred, but shortened to a maximum length of 250 characters. (SI-550901)

ARIS BPMN

- The BPMN export/import functionality now assigns the correct language to a diagram when it is imported into a new database. (SI-548253)

ARIS Dashboards

- We fixed a bug that caused the conversion of a text column to a numeric column to fail when data feeds were configured in the new editor. (SI-497419)
- We fixed a bug that caused German umlauts to be displayed incorrectly after the upgrade from SR 23 to SR 24. (SI-549430)
- In the German version, the date filter of the dashboards now displays the day and month in the correct order. (SI-550284)

ARIS Reports

- The ARIS report script API method Model.Neighbour(occ, occ) now runs correctly for read-only models. (SI-522088)
- We fixed a bug that caused the report-based search for models to return incorrect results due to a mismatch between the values for user-defined Boolean attributes (1=false, 2=true) and the default values for Boolean attributes (0=false, 1=true). (SI-548076)

ARIS DMN

- In 'Published content', the 'Contribute' functionality is now also available for DMN decision tables.

7 Fixes in ARIS 10.0 SR24

General

- In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

- All download clients of all ARIS product editions in SR24 require a local 64-bit Java runtime environment (JRE) to be installed and will no longer work with a local 32-bit JRE. The reason has been a technology change in Java that forced us to do this step.
  Please make sure that the user's machines have a 64-bit JRE installed.

- With ARIS 10 SR24 the download clients in the public cloud ARIS product editions (including ARIS Advanced) will by default provide single sign on. This means that the downloaded client will automatically work with the login from the portal and no login in the client itself is required any more. This has been necessary to ensure that the login to the download client also works, when SCIM/SSO is used.
  This improvement leads to the following change: If you want to start the download client (for example ARIS Advanced Architect or ARIS Administration client), you at first need to go to the Portal and press the download button to get a fresh download jar from the ARIS server. You can use this download jar only one time as it is only valid for a certain time period. Only this rather small download jar has to be downloaded every time. The respective ARIS client itself is not downloaded again.
  Further improvements that come with this change is an increased security for the download client usage:
  - No user credentials are stored on your local machine anymore.
  - It reduces the risk that an attacker could steal your client session.

ARIS Architect

- When you create (implicit) connections between two objects, the connections whose source is the parent object are now offered first in the pre-selection. (Si-498758)
- In ARIS Architect, the ARIS menu is now displayed correctly when the user uses two monitors with different zoom levels. (SI-508623)

Security

- For security reasons, the following third-party libraries were updated:
  - Apache HTTP Server to version 2.4.58
  - Apache log4j to version 2.21.1
  - guava to version 32.1.3
  - jetty to version 11.0.18
  - io.netty to version 4.1.101.Final
  - tomcat to version 10.1.15
  - activemq to version 5.18.3
- Further information on third-party libraries can be found in the folder Documents\English\Legal information

ARIS Process Governance

- We fixed a bug in the Process Governance Web service 'Add - Comment in Collaboration' that caused upper case letters in tag values to be replaced with lower case letters. (SI-502810)
- We fixed a bug in the Process Governance Web service 'Unlock - Model(s)/object(s)' that caused the "Approve content" workflow to fail. (SI-506804)
- The Process Governance Web service 'Create - News' now runs correctly when different languages (locales) are selected for logging into the system and running the 'Approve content' workflow. (SI-514369)
- You can now start governance processes from the result of private and public queries. (SI-515116)

ARIS

- We improved the sorting algorithm. (SI-467482)
- We made the following improvements to the 'Change view' function:
  - Connections from messages to pools now end at the border of the lane as expected.
  - Objects no longer overlap.
  - When the swimlane is triggered, only one request is sent to load the model. (SI-484088)
- You can now change the background color of the tiles on the Home page. (SI-486575)
- The catalog footer no longer hides the last row of the table. (SI-499713)
- You can now open the assignments of the start model on the iPad by double-clicking. (SI-510865)

- We fixed a bug that caused database changes not to be displayed under 'Last changes' in certain cases when hierarchies were defined in the content type configuration. (SI-511398)
- You are now correctly redirected to the Home page when you click on the ARIS logo. (SI-512206)
- We implemented a spinning wheel to indicate longer loading times for fact sheets. (SI-512375)
- The database selection field now works as expected in dashboards that access multiple databases. (SI-513442)
- A scroll bar is now also displayed in the overview pages that were not defined as the first tab of the fact sheets. (SI-513858)
- We improved zooming and auto-scaling of the Home page. (SI-514379)
- The ARIS version information is now correctly adjusted to the window size. (SI-515288)
- A message is now displayed in the Cloud Enterprise search if users do not have the required privileges. (SI-516336)
- You can now change the background color of the tiles on the Home page. (SI-517748)
- Custom item types are now correctly assigned the GUID instead of the type number (typNum). (SI-518144)
- We improved the style of the bulleted lists in attribute editing.
- You can now add more than one greeting message to the Home page.
- The extended search now works as expected if the user defined the order of the items in the content type configuration.
- We fixed a bug that caused not all databases to be displayed after the migration of configuration and modification sets.
- We corrected the link to the free ARIS digital trainings.

ARIS Server

- We fixed a vulnerability that occurred when a database session was opened for different users via a report script. (SI-498546)

ARIS Process Mining

- In the Conformance app, the colors for the conformance rate and the rule compliance rate now match in the tiles and diagrams. (SI-513616)

ARIS Risk and Compliance

- We fixed a bug caused by a missing time zone ID. (SI-503594)

ARIS Document Management

- In the 'Documents' tab of the charts, the correct number of saved documents, folders and versions is now displayed under 'Number of document-related elements'. (SI-514647)

ARIS User management

- We fixed a problem in the central user management (UMC) that caused an internal application exception without result. (SI-508358)

ARIS Simulation

- The simulation now only outputs charts for selected functions. (SI-512137)
- In the attribute editor, the value for the 'Processing time sum' attribute is now displayed correctly for all distributions. (SI-514092)

ARIS BPMN

- We fixed a bug that caused incorrect hierarchies to be created in the default attribute groups, resulting in endless loops when users opened or created models. (SI-511313)
- We extended the semantic check structure rules to make them applicable to BPMN models. To access these changes, you must import the rules from your installation media. (SI-519008)

ARIS Spreadsheet

- The export of functions such as =SUM() from a spreadsheet to Excel is now compatible with the new version of Excel. (SI-507630)

ARIS Reports

- We fixed the output of Arabic characters in graphic formats. (SI-509025)
- The "Import data in Excel format" now runs correctly for objects whose names contain more than 255 characters. (SI-512179)
- We corrected the formatting of ARIS reports regarding indenting. (SI-512275)

- We fixed a bug in the Report API method 'SetValue' that caused a timestamp attribute to be saved in the wrong time zone. (SI-514792)
- We fixed an issue that prevented events that trigger macros from starting if the user had made changes to model attributes in the properties panel. (SI-514821)

ARIS Method

- The 'Event' object symbol with the original API name ST_EVENT_PIC and original type number 356 is now available for customizing in ARIS Enterprise Administration. (SI-505953)
- The 'Product/Service' object symbol with the original API name ST_PROD_SERV and original type number 524 is now available for customizing in ARIS Enterprise Administration. (SI-506866)
- The 'has transition to' connection with the original API name CT_HAS_TRANS_TO is now available in the connection list in ARIS Enterprise Administration. (SI-514242)
- The ‘Version/Release’ attribute is now included in the ArchiMate 3.0 export. (SI-516302)

ARIS Documentation

- Please note that the online help for the new ARIS Enterprise Public Cloud edition is only available in English in this version.

8 Fixes in ARIS 10.0 SR23

General

In addition to the fixes listed here, we are continuously improving the robustness, performance, resilience, and safety of our products.

Security

- For security reasons, the following third-party libraries were updated:
  - Apache HTTP Server to version 2.4.57
  - JRE to version 8.70.0.24, 11.64.20, 17.42.22
  - guava to version 32.0.1
  - swagger-ui to version 3.25.5
  - jetty to version 11.0.15
  - io.netty to version 4.1.93.Final
  - tomcat to version 8.5.90, 9.0.75
  - spring-boot to version 2.7.12
  - springframework to version 5.2.24.RELEASE, 5.3.27
  - FasterXML Jackson Core to version 2.14.3

ARIS

- You can now customize the color of the 'Create Model' button in the 'Quick access' area of the Application launcher. (SI-499451)
- The model comparison view now also shows deleted objects. (SI-499709)
- In the catalog, entries containing a hyphen followed by a line break are now displayed correctly. (SI-500387)
- The diagram view now displays the correct information about selected connections in the 'Properties' overview under 'Related models'. This information corresponds to that displayed in the 'Details' overview of the model editor under 'Occurrences'. (SI-501384).
- The connection type attribute 'Multiplicity (Scr)' is now available in ARIS. (SI-501501)
- We fixed an error that caused a large number of log entries to be generated due to a missing timezone ID. (SI-503594)
- We fixed a error in the configuration of fact sheets that caused the model viewer to not display correctly after it was removed and added again.
- Changed mini fact sheets are now displayed correctly after migration from an older to a newer product version.

- When editing fact sheets you can now add list items.
- The ARIS modeling component now loads Archimate models faster. (SI-498906)
- With ARIS10 SR23, the saving of a model in ARIS Connect Designer works as expected where a definition copy of a user defined attribute was pasted and where the user defined attribute was deleted from the "entire method" before pasting. (SI-502519)

ARIS Server

- ARIS: The search now displays results in all database languages, including custom languages, e.g., Slovenian. (SI-503978)

ARIS Risk and Compliance

- In the data migration of ARIS Risk and Compliance with MS SQL Server as DBMS, an error was fixed that caused incorrect 'Select' statements (wrong sort order due to different collations). (SI-502624)
- ARIS Risk and Compliance: Deactivated control execution definitions and control executions are no longer displayed in data feeds of ARIS Risk and Compliance.
  (SI-502650)
- The dashboard data feeds of ARIS Risk and Compliance now contain all answer types of Survey management. (SI-502781)
- The report-based semantic checks for compliance with ARIS Risk and Compliance modeling conventions are no longer available. Run a simulation instead before you transfer risk and compliance data to verify that the data is correct and can be transferred without errors. To do so, use ‘Simulate transfer’ in the ‘Transfer risk and compliance data’ report. The information about semantic checks is still available in the SR23 help and manuals, but will be removed for SR24.

ARIS Tenant Management

- Tenant backup and restore from the object storage now supports .acb files

ARIS User management

- The 'Notify about creation' option now remains selected when you edit any of the fields under 'Users'. (SI-502519)

ARIS Analysis

- Inserting and editing formulas in models of type 'Spreadsheet' now works correctly.

ARIS Reports

- ARIS Report: An error in the ARIS Report API method Context.getClientTimeZone() caused by an update of the JRE to Java 17 was fixed. (SI-502770)
- ARIS Report: We added 2 new methods to the ARIS Report API:
  - getName(int nLocaleId, boolean bAllowFallback)
  - getDescription(int nLocaleId, boolean bAllowFallback)

  The additional parameter bAllowFallback allows you to specify whether you want to get an empty string or the value of the fallback language if no values were maintained.
  (SI-503666)

ARIS Documentation

- The content of the 'Modeling Conventions for Process Governance' manual is now provided in the online help of ARIS Architect, which is why the PDF document is no longer available. (SI-504977)

9 Fixes in ARIS 10.0 SR22

Security

- For security reasons, the following third-party libraries were updated:
  - apache tomcat to version 8.5.87
  - json to version 20230227
  - netty to version 4.1.89.Final
  - jetty-server to version 11.0.14
  - springdoc-openapi to version 1.6.14
  - swagger-annotations to version 2.2.7
  - jackson-core to version 2.14.2
  - xstream to version 1.4.4
  - gwt-servlet to version 2.10.0
  - log4j to version 2.20.0

ARIS

- The tooltips in the catalog header are now displayed correctly again. (See also "Help", topic area "View content", page "Use the Catalog".) (SI-488763)

ARIS Architect

- A model template created for all models can now be applied to new models, even if specific model templates already exist.
  Please note that in multi-node scenarios with more than two ARIS servers, it may take up to five minutes for the internal caches to be updated and the changes to become visible.
  (See also "ARIS > Help", topic area "Edit models > Basics > Good to know", page "What are templates for?".) (SI-496216)

ARIS Collaboration

- In Collaboration, comments can now be added to models even if multiple languages with different character sets are maintained in a database. (See also "Help", topic area "Collaborate with users", page "Comment on, share, flag posts, etc." and topic area "View content > Discuss content", page "Comment on published content".) (SI-492989)

ARIS Reports

- The ARIS report script API was corrected. During the creation of dialogs, buttons are now only activated if the corresponding condition is met. (See also "ARIS > Help > ARIS API for ARIS reports and macros".) (SI-494159)
- In the Arabic version, when a user runs a report that contains a model graphic, the object symbols are now also output. (SI-496508)
- The ARIS standard report "Import data in Excel format" now executes the import even if it is started by users who have been assigned database access rights only via a user group. (SI-492897)
- The semantic check "Validation of a service-oriented EPC" was corrected. You can download the corrected version from the installation media. (SI-492903)
- The "Session cleaner" was fixed so that reports are no longer aborted in certain cases. (SI-492229)

ARIS Variants

- The variant rollout process now supports attribute changes in additional languages besides the current database maintenance language the user is logged in with. (See also "Help", topic area "Create content > Use variants > Enhanced variant management (use case)", page "Resolve the differences".) (SI-495147)

ARIS Documentation

- The content of the following documents is now offered in a combined technical help so that the PDF files are no longer required. This allows users to easily search for technical information across topics.
  - ARIS Adapter for Microsoft® Sharepoint 2016 & 2019
  - ARIS Basic Troubleshooting Guide
  - ARIS Customization
  - ARIS Client Installation Guide
  - ARIS Data Migration Guide
  - ARIS Data Protection (GDPR)
  - ARIS Disclaimer and General Notices
  - ARIS E-Mail Template Configuration
  - ARIS for SAP Solutions
  - ARIS Interfaces to SAP Solution Manager
  - ARIS Logging

  - ARIS - Migrating SAP projects
  - ARIS Process Governance Customizing
  - ARIS Report Script Changes
  - ARIS Requirements for SAP Solutions
  - ARIS Server Update Installation Guide
  - ARIS SSO, LDAP, KERBEROS, SAML, SCIM
  - ARIS System Monitoring
  - ARIS Update Cookbook
  - ARIS Users and License Management
  - ARIS webMethods Integration
  - Migrating web services from ARIS 7.2
  - ARIS Cloud Controller (ACC) Command-line Tool
  - ARIS Document Storage Command-Line Tool
  - ARIS Process Governance Command-Line Tool
  - ARIS Server Administrator Command-line Tool
  - ARIS UML Designer Migration Guidelines
  - ARIS User Management Command-Line Tool

- The content of the following documents is now offered in the online help of the respective products so that the PDF files are no longer required. Since the online helps are linked to each other, users can now jump directly to information that relates to the topic of the former PDFs, such as information about the ARIS method.
  - ARIS Administrator User Manual
  - ARIS Download Client Configuration
  - ARIS Method Reference
  - ARIS Modeling Component Quick Start
  - ARIS UML Designer Introduction
  - ARIS Tenant Management
  - PPM Process Conformance Checking with ARIS
  - Quick Start Guide ARIS Architect
  - Quick Start Guide ARIS Designer

10 Fixes in ARIS 10.0 SR21

General

- ARIS Download Clients now use Zulu JRE 11.x by default. If the installed JRE does not contain this version, Zulu JRE 11.x is downloaded into the user profile and used for starting the ARIS client. (See also "Help", topic area "Getting started > Basic handling", page "Open ARIS Download Client page".) (SI-488780)

Security

- For security reasons, the following third-party libraries were updated:
  - commons-text to version 1.10.0 (CVE-2022-42889)
  - jackson-databind to version 2.13.4.2 (CVE-2022-42003)
  - gwt-servlet to version 2.10.0 (CVE-2022-3509)
  - spring-boot to version 2.7.6 (CVE-2022-42252)
  - protobuf-java to version 3.21.9 (CVE-2022-3509)
  - spark-streaming-kafka to version 3.2.3 (CVE-2021-38153)

ARIS

- The list of last changes is now displayed completely on the Home page. (See also "Help", topic area "View content", page "Show recently changed models".) (SI-485738)
- ARIS now runs as expected on Windows Server 2016 if the system was installed via setup.
- Even if an invalid hierarchy was imported, the ARIS user interface is still properly displayed. (See also "Help", topic area "Manage ARIS Configure content types > Edit a content type set", page "Hierarchies".)
- The robustness and efficiency of the ARIS design component has been further improved for working with large models with many objects and connections. (See also "Help", topic area "Create content > Create and edit models".) (SI-484913)
- The properties of large databases are now displayed faster in the "Models and objects" view of ARIS. (See also "Help", topic area "Use models and objects", page "Models and objects view".)
- The robustness of ARIS administration components has been improved so that configuration and usage of non-standard languages work properly now. (See also "Help", topic area "Manage ARIS", page "Manage configuration languages".) (SI-485619)
- Creating links with UTF-8 special characters for ARIS attributes using the report script API now works properly again. (SI-483676)

ARIS Server

- UML models can now be analyzed through DB optimization and errors can be fixed, if required. (SI-485908)
- The "scriptrunner.bat" batch file was adapted to the proper JRE path. (SI-486705)

ARIS Collaboration

- ARIS Collaboration: The health check for technical ECP users has become obsolete and was therefore removed.
- Users assigned to a user group whose name includes special characters ("umlauts") can now view activities and comments pertaining to a model and publish their own comments. (SI-482545)

ARIS Architect

- The stability of the "ARIS Architect/Designer" download client has been improved for Arabic. (See also "Help", topic area "Getting started > Basic handling", page "Open ARIS Download Client page".) (SI-480026)

ARIS Process Governance

- It is now possible again to remove documents from the editing dialog of the ARIS Process Board. (SI-483685)

ARIS Risk and Compliance Manager

- The ARIS Infrastructure health check now displays the health status of the ARCM runnable. (See also "Help", topic area "Manage ARIS Server and tenants> ARIS Cloud Controller (ACC) > Use cases", page "Health check".) (SI-484717)
- The ARCM database migration from version 10.0.18 to 10.0.20 now works properly with Oracle.

ARIS Documentation

- The contents of the “ARIS Publisher Specifics and IT inventory” and “ARIS Users and License Management” manuals are available in the online help, which is why the PDFS files are no longer provided.

ARIS Document Management

- It is now possible again to upload all Excel (XLS) files to ARIS document storage without an out-of-memory error.
- The "Owner" column is now filled with a value when documents are uploaded from the bulk-import tool via WebDav. (SI-481510)
- The time stamp for the download of a document changed in the metering log entry of ARIS document storage. (SI-487351)

ARIS User Management

- SAML authentication is now performed when the ARIS Process Board is accessed via a deep link. (See also "Help", topic area "Manage ARIS > Configure user management > LDAP > Customize ARIS for LDAP server operations > Configure single sign-on (LDAP)", page "Use SAML".) (SI-483465)
- The "krb5.conf" Kerberos configuration file provided on the DVD was adapted to the JRE17 encryption types.

ARIS Setup

- To reduce the product update scope, the patch setup updates only changed parts. The optional ARIS Cloud Controller Linux packages are now part of the patch setup scope of delivery, which customers can request for newer patch setups. (SI-487495)

11 Fixes in ARIS 10.0 SR20

General

- ARIS Download Clients now use Zulu JRE 11.x by default. If the installed JRE does not contain this version, Zulu JRE 11.x is downloaded into the user profile and used for starting the ARIS client. (See also "Help", topic area "Getting started > Basic handling", page "Open ARIS Download Client page".) (SI-488780)

- Semantic checks, XML files, and user-defined logos are no longer overwritten during an update. Current semantic checks and XML files can be imported from the installation package (../ ARIS_Installation_and_Documentation-<patch>**Content\Reports\Common_files and../Semantic Checks**).

Security

- For security reasons, the following third-party libraries were updated:
  - zlib to version 1.2.13 (CVE-2018-25032)
  - chart.js to version 2.9.4 (CVE-2020-7746)
  - snakeyaml to version 1.32 (CVE-2022-38750, CVE-2022-38752, CVE-2022-25857)
  - poi up to version 5.2.2 (CVE-2022-26336)
  - commons-konfiguration2 up to version 2.8 (CVE-2022-33980)
  - postgresql up to version 42.5.0 (CVE-2022-31197)
  - jsoup to version 1.15.3 (CVE-2022-36033)
  - tika-core up to version 2.4.1 (CVE-2022-25169)
  - spring-core up to version 5.3.22 (CVE-2022-22971)
  - kotlin-stdlib-common up to version 1.6.10 (CVE-2020-15824, CVE-2020-29582)
  - spring-security-crypto up to version 5.7.3 (CVE-2020-5408)
  - netty up to version 4.1.79 (CVE-2021-43797)

ARIS Server

- Scripts are now imported to the correct category even if the categories were renamed after the export. Source and target categories are now identified by their GUID. (SI-464445)
- Merge performance in multi-node scenarios has been improved. (SI-475331)

ARIS Report

- You can now access report categories even if they contain invalid scripts. (SI-477300)

- A function was added to the "API for reports", which enables the comparison of matrix models. (SI-479863)
- Scheduled reports run smoothly now. (SI-474917)

ARIS Architect

- You can now create a filter based on a database even if you are logged in with a filter other than "Entire method". (SI-477686)
- You can now run a macro based on the "Model attribute to be changed (vetoable)" event. (SI-449511)
- In case of temporary connection issues between ARIS Server and ARIS, a message is displayed and models can be edited. (SI-474448)
- ARIS download clients now communicate properly if a script is used for determining the proxy server, such as 'proxy.pac'. (SI-459511)
- Automatic layout generation was improved. (SI-470945)
- An improved message is displayed when users try to create an assignment to a model while the model is being edited and has not been saved yet. (SI-477261)

ARIS Connect

- All objects connected with a process interface and output via a configuration set are now properly listed. (Pivotal 5451105)
- User-defined text attributes are now output in a properly aligned fashion in the "Steps" view. (SI-463625)
- Icons in mini fact sheets are now properly displayed in front of the text. (SI-470397)
- The "Contribute" function is now available even if a user-defined model type is used and a content type set is activated. (SI-464090)
- Glossary filtering now works properly when users filter by letter and other criteria. (SI-472550)
- Define modification set/Define fact sheets: The "Reports" toolbar was renamed to "Toolbar for confirmations". (SI-475078)
- The message "No content available" is now displayed only once when users switch from the "Groups" view to the "Catalog" tab in a database without content. (SI-475240)
- Now all UI languages are offered to newly created users logging in for the first time. (SI-476424)
- The search now works properly in Mozilla Firefox and the items found can be opened as expected. (SI-475295)
- The Model viewer search now processes bookmarks properly. (SI-472546)

- User-defined object symbols with rotating parts are now properly displayed in ARIS. (SI-476170)
- You can now delete the "Ownership" row in the "Customer journey map" model. (SI-475054)

ARIS Risk and Compliance Manager

- Risk assessment data is now deleted when the risk owner entered values for the "Qualitative" assessment mode and then changed to "Quantitative" and vice-versa. (SI-467708)
- The arcm runnable can reconnect to the standard database system even if the IP address of the Postgres instance was changed after a disconnect. (SI-472567)
- "API for reports" now has an additional function that enables user-defined import of ARCM objects.

ARIS Archimate

- The ArchiMate export of models with user-defined symbols now works properly. (SI-478946)

ARIS Dashboards

- Translations were added or corrected for dashboards. (SI-465367)
- Dashboards: Errors that occurred during the placement of single stream values and using "Combine" and "Concatenate" operators were eliminated. (SI-480302)

ARIS Document Management

- "Last change" in ARIS Document storage: The date format of the "Last change" attribute was changed according to the locale. (SI-480482)

ARIS Process Governance

- The "Prioritize and deprioritize process instances" function is no longer available for governance processes in process management. If required, this function can be reactivated. To do so, please contact Software AG Support.

ARIS User Management

- The "Export user statistics" report no longer displays the "Node" column for login/logout events. (SI-470610)

- E-mail validation in the user management now works properly for different domain types. (SI-480636)

ARIS Simulation

- Setting values equal to or larger than 1000 is now possible for all probability distributions. (SI-473980)

ARIS BPMN

- Objects placed on connections in BPMN models are now properly inserted. (SI-471060)
- It is now possible in BPMN diagrams to change a sub-process into a call activity. (SI-471060)

ARIS Method

- Object symbols for UML2 diagrams are now included in the Method help. (SI-476878)
- Several new connections from UML 1.4 were added to the filter for the modeling component in ARIS. (SI-469641)

12 Fixes in ARIS 10.0 SR19b

ARIS Server

- „Delete previous versions" functionality can lead to data loss in archived data when used on versioned database with interval-based archive mode. This is fixed now.

  How to detect that a database is affected?

  - Is database not versionable one -> not affected
  - Is database versionable one, but not using interval-based archive mode -> not affected
  - Was "Delete previous versions" functionality not used -> not affected
  - Was "Delete previous versions" functionality only used once -> do not use it a second time, patched version will prevent executing this functionality again until repaired (get in contact with ARIS Product Support)
  - If you use the "Delete previous versions" functionality more than one time data loss in archived data will happen.

13 Fixes in ARIS 10.0 SR19

Security

- For security reasons, the following third-party libraries have been updated:
  - httpd to version 2.4.54
    (CVE-2022-26377, CVE-2022-28330, CVE-2022-28614, CVE-2022-28615, CVE-2022-28615, CVE-2022-30522, CVE-2022-30556, CVE-2022-31813)
  - netty to version 4.1.79.FINAL
    (CVE-2022-24823)
  - spring framework to version 5.3.22
    (CVE-2016-1000027, CVE-2022-22970, CVE-2022-22971)
  - spring-boot to version 2.6.10 including
    (CVE-2022-29885 embedded tomcat to version 9.0.65)
  - spring-tx to version 5.2.22
    (CVE-2022-22971, CVE-2022-22970)
  - tomcat to version 8.5.82
  - gson to version 2.8.9
    (CVE-2022-25647)
  - lucene-core to version 8.11.1
    (CVE-2022-23708)
  - xerxes to version 2.12.2
    (CVE-2022-23437, CVE-2017-10355)
  - jetty-io to version 11.0.11
    jetty-server to version 11.0.11
    (CVE-2022-2048, CVE-2022-2191, CVE-2022-2047)
  - jackson(-databind) to version 2.13.3
  - okhttp to version 4.9.2
    (CVE-2021-0341)

ARIS Server

- Search results are now displayed in the predefined language if the "Ctrl+F" search function is used to perform a search in a database. (SI-469369)
- An error was fixed so that backing up versioned data of a database is now possible.
- It is now possible to restore ARIS database backups for ADB files whose size exceeds 2 GB.

ARIS Architect / Designer

- When using the ARIS API, the call to delete user-defined attributes did not work correctly. This has been fixed. (SI-475316)

ARIS Connect

- If the selected language is changed, models are now correctly displayed by the model viewer. (SI-463800)
- The paging was corrected in the search in ARIS so that the search result lists are now identical in ARIS Architect and ARIS. (SI-467475)
- Now, the items of the second level of a hierarchy in a navigation tree are sorted correctly if the sorting is performed based on two properties. (SI-467482)
- It is now possible to filter glossaries even if a value is not specified in the current language but only in the default language. (SI-469271)
- The dialog used for editing quick links can now be reopened as expected after a new entry was added. (SI-469619)
- Newly added filters are now displayed correctly in ARIS. (SI-473089, SI-473067)
- Mini fact sheets are now displayed correctly (also for user-defined symbols) when the mouse pointer is positioned over the object symbol in the model.
  (SI-474495, SI-468580, SI-466913)

ARIS Process Governance

- A language-dependent problem relating to the use of transformation patterns was solved so that starting Process Governance processes now no longer fails. (SI-471614)
- The "Process Governance" runnable is now correctly registered during an upgrade so that loading ARIS is successful. (SI-472732)
- Line breaks used in e-mails that are generated by ARIS Process Governance are now inserted correctly due to the use of the "formatLine" operator. (SI-473034)
- In drop-down lists of Process Governance reports, it is now possible to use customized separators instead of the default separator. (SI-474205)

ARIS Method

- In the document "ARIS Method Reference.pdf", the possible number of relationships was set to "Multiple" for the following associations:
  > Source object type "Entity type (17)" --> Connection type "has relationship to (194)" --> Target object type "Entity type (17)"
  > Source object type "Entity type (17)" --> Connection type "has relationship to (194)" --> Target object type "Relationship type (11)".
  (SI-473305)

ARIS Report

- A problem was solved that had resulted in models being locked when macros and reports were combined for execution. (SI-470785)
- With the help of Java Graphic API it is now possible to use the preview of an image in a report dialog. (SI-471348)

ARIS Analysis

- The performance of queries used in dashboards was improved. (SI-460165)

ARIS Risk and Compliance Manager

- Issues that are not associated with any issue-relevant objects are now considered correctly by the monitoring server task so that the status of such issues is changed when the end date has been reached.
- The answers provided by an interviewee are now saved correctly when the interviewee modifies the answers after the survey reviewer has rejected the questionnaire.
  (SI-470210)
- Questionnaires are now processed correctly during download, offline processing and when they are saved. (SI-471884)
- ARIS Process Governance: An error that had occurred when a scheduled script was started was fixed in the script runner. The result of this error was an incorrect operation of the application. (SI-467837)

ARIS Variants

- You can configure the visibility of the following new variant attributes:
  - Roll-out state
  - Last roll-out state change
  - Roll-in state
  - Last roll-in state change

ARIS Document Management

- The ARIS document storage method "getHyperLink()" now returns the correct public link. (SI-471806)
- The overview of a document now shows the creator instead of the last user/editor. (SI-472513)

Documentation

- Documents whose title page shows a version number other than 10.0.19 have not been changed but are still valid for version 10.0.19.

14 Fixes in ARIS 10.0 SR18

ARIS Architect / Designer

- If you reapply a template to a model, attributes are now placed correctly at the predefined position. (See also "Help", topic area "Create content > Create and edit models > Model ", page "Assign model template".)
- Satellite modeling in ARIS and ARIS Architect/Designer now filters out all object symbols that are not allowed by the content type configuration. While the filter is not being applied to the search in ARIS Architect/Designer, a meaningful message is issued there when a user selects a prohibited symbol as a satellite. (See also ARIS "Help", topic area "Create content > Create and edit models > Model", page "Use satellite modeling" and ARIS Architect/Designer "Help", topic area "Create models > ARIS models", page "Satellite modeling".)
- The spell check in ARIS Architect/Designer now works correctly again. (See also "ARIS > Help ", topic area "General", page "Use the spell check".)
- The automatic layout algorithm was improved for complex cases. (See also "ARIS > Help", topic area "Create models > ARIS models > Use objects >Extended editing", page "Generate model layouts automatically".)
- You are now able to set the client language for all installation scenarios of an ARIS Designer/Architect installation.
- In the ARIS modeling clients, connections that go to derived object symbols are now displayed as connections that go to the object symbols from which they were derived. (See also "ARIS > Help", topic area "ARIS Configuration and Administration > Manage ARIS method", page "Derive object symbols".)
- The "Character formatting" setting is now set correctly during the import of a model template. (See also "Help", topic area "Manage ARIS > Manage model templates", page "Available templates".)

ARIS Server

- The merge preview now shows the same result as the log file. (See also "ARIS > Help", topic area "ARIS Configuration and Administration > Manage databases > Merge databases", page "Start Merge preview".)

ARIS Connect

- Models and objects that are created in the "Published content" view using "Contribution" are now saved in the configured database groups according to the content type configuration. (See also "Help", topic area "Work with content > Contribute as a viewer ".)
- If you attempt to open a mini fact sheet for an object that uses an object symbol not allowed by the method filter in use, an empty fact sheet is displayed now instead of an error page. (See also "Help", topic area "Getting started > User interface > Fact sheets > Diagram fact sheet", page "Show mini fact sheets" and topic area "Manage ARIS > Configure user interface > Edit modification set > Manage fact sheets > Edit fact sheet", page "Mini fact sheets".)
- When you highlight objects that belong to the default path, these objects are now indicated by means of a solid frame instead of a dashed or dotted one. (See also "Help", topic area "Work with content > Use models > Highlight model items", page "Highlight the happy and/or exception path".)
- It is now possible to use the special character "&" in attribute names. (See also "Help", topic area "Manage ARIS > Manage ARIS Method > Attribute types", pages "Rename attribute type in current language" and "Rename attribute type in all languages".)
- If you select a view for a process model in the diagram fact sheet, such as "Lean", all process models are shown in this view until you select another view. (See also "Help", topic area "Getting started > User interface > Fact sheets > Diagram fact sheet", page "Change view".)
- When you copy items from one matrix model to another, the formatting as well as the hierarchies are now also transferred. (See also "Help", topic area "Create content > Create and edit models > Model > Matrix model".)
- Macros that were created in order to replace the "New model" functionality (macro event "Model is to be created with type and name (vetoable)") now work correctly in ARIS. When you create new assignments, the assignment icon is displayed and the newly created models can be opened in ARIS automatically.

ARIS User Management

- When you copy a group, the relationships between the UML2 elements and the ARIS objects of this group are now copied as well and are displayed on the "Reused objects" tab.

ARIS Report

- The results of semantic checks are now correctly filtered in the ARIS modeling component. (See also "Help", topic area "Create content > Create and edit models > Check open models", page "Run semantic check for an open model".)

- When you are using the ARIS report script API, multi-line texts are now correctly read from Microsoft Excel and correctly written to ARIS attributes.
- The robustness of the standard report "Export attribute values for translation" was improved. If an attribute exceeds the maximum number of 32767 characters in Microsoft Excel, the corresponding value is added to the output file. This enables users to check the given attribute manually. (See also "Help", topic area "Output information > Generate report > Available reports", page "Report: Export attribute values for translation".)
- Improvements were made to the report "Generate job description". (See also "Help", topic area "Output information > Generate report > Available reports", page "Report: Generate job description".)
- The "Create process manual" report now runs correctly regardless of what type of formatted attributes is being used. (See also "Help", topic area "Output information > Generate report > Available reports", page "Report: Create process manual".)
- Zookeeper/Load balancer now return the server name. As a consequence, it is no longer required to request the server name from the client by using "Item.Database().ServerName()" (which is a step that, in the past, did not work for scheduled reports and ScriptRunner).
- The content of table cells is now correctly aligned in report output files.
- The ARIS report script method "Database.User(String sName, UserGroup oUserGroup)" now correctly returns a user when a user group is added. (See also "ARIS > Help > ARIS API > Command reference for ARIS reports and macros", topic area "API for reports > Objects > Database", page "User(String,UserGroup):User"".)

ARIS BPMN

- Customized or derived object symbols are now handled correctly in BPMN diagrams.
- When you create or edit relation properties in the content type configuration, only the relations that can really be displayed in the selected model are offered for editing.
- Updated templates are now correctly applied to BPMN diagrams so that modified lanes are considered appropriately when you add them to pools. (See also "Help", topic area "Create content > Create and edit models > Model", page "Assign model template".)
- In ARIS, the background color set under "Available templates" is now applied correctly to the model types.
- In the French language version, the BPMN objects "Pool" and "Lane" were renamed to "Piste" and "Corridor".

ARIS Risk and Compliance Manager

- The communication between ARIS Architect and ARIS Risk and Compliance is now resumed smoothly even if changes were made to the infrastructure.

ARIS Variant Management

- Improvements were made to the layout that is displayed after a rollout of EPC models. (See also "Help", topic area "Create content > Use variants", page "Enhanced variant management".)
- Within the rollout view, the symbol and connection names of a master are displayed in the language that the user defines in ARIS Administration. (See also "Help", topic area "Create content > Use variants", page "Enhanced variant management".)
- The attributes "Roll-out state" and "Last roll-out state change" are now contained in the method filters as default attributes. (See also "Help", topic area "Manage ARIS > Manage ARIS Server and tenants > Tenant Management tool > Manage tenants > Manage filters", page "What are filters?".)

ARIS Dashboards

- Dashboards that are based on "React" technology are now correctly displayed when the configuration of the Web socket protocol was changed.
- You can now use the percent sign (%) within the password for a feed alias.
- The sorting of dashboard columns now corresponds to the sorting of the columns in the exported CSV file.
- Setting the selection of associated widgets now works correctly even if a data column of a heat matrix is renamed. (See also "Help", topic area "Use dashboard and data feed editor > Use the new dashboard and data feed editor > Configure a dashboard", page "Add widgets to a dashboard ".)
- The dashboarding runnable now starts correctly even if the content of the database table in which the dashboard style is stored is changed.

15 Fixes in ARIS 10.0 SR17b

Security

- Third party lib updates due to security vulnerability:
  - Spring4Shell, CVE-2022-22965 and CVE-2022-22950
    → Update Spring Framework to versions 5.3.18 and 5.2.20

For detailed information: https://nvd.nist.gov/

- For ARIS Download Clients, the file "log4j1" was replaced by "log4j2" for security reasons.

ARIS Connect

- When changing the logo on the home page, the logo was displayed in the wrong size. This is now fixed.
- Even if it was configured that properties are not to be displayed initially, the Properties buttons now work.
- Loading UML content was improved. This means that loading ARIS groups with a large number of elements, such as subgroups and objects is now significantly faster, even if access to UML2 content is activated.
- Changed configurations are now properly loaded. I.e., customer-specific adjustments of change sets are properly loaded so that, e.g., a changed greeting is now properly displayed in the portal.
- In the portal, objects are now recognized that were not assigned the default object symbol.
- Adding the line "<property name="isOpened" value="true"/>" in the "item.xml" file properly displays the properties if an item is selected for viewing.
- Models added to the Landing Page (Home) are now scaled properly in size.
- The search in ARIS now works in Edit mode (contribution) for unpublished databases.
- More than 150 relationships can now be displayed for an object in the ARIS modeling component.

ARIS Architect

- Users can no longer edit the "AT_DOCUMENTATION" attribute if they have only the "Read" privilege.

- The model and object attributes "Last update date" and "Last update by" are now updated when other model/object attributes in the ARIS Repository are changed on the properties page.

ARIS Server

- When merging versioned content (from older versions), the current version / workspace was merged. This is now fixed.
- After the update to SR17, problems could occur when starting the server (ADS) if Oracle was used as the database system. This is now fixed.
- Importing databases by means of reports now works properly.
- Errors are now longer reported after a database repair with "optimizeDB".

ARIS Risk&Compliance Manager

- After an update or migration of a previous ARIS Risk & Compliance Manager version, the master data maintenance settings are properly considered.
- Information on ARIS Risk & Compliance Manager adjustments are now output via the "About" dialog.

ARIS Analysis

- Calculation tables now open in Edit mode if they were created by means of a report.

ARIS Document Storage

- Order of parameters in ARIS Document Storage document URLs aligned to usage within Professional Service report solution.

ARIS User Management

- In user management, the load time for licenses and function privileges was optimized when licenses and function privileges have to be distributed to a large number of user groups.

ARIS for process-driven SAP

- In SAP Solution Manager, you can rename a lane of a role-based diagram, which corresponds to a process variant in ARIS, and synchronize the renaming with ARIS. In ARIS, use the option "Transfer process variants" when synchronizing.

16 Fixes in ARIS 10.0 SR17

Security

- With ARIS 10.0 SR17, these third-party libraries were updated:
  - Apache Tomcat was updated to version 8.5.73.
  - Apache HTTPD was updated to version 2.4.52.
  - Log4j was updated to version 2.17.1.
  - Azul JRE was updated to version 11.52.14.

General

- Transport Layer Security (TLS) 1.0 and 1.1 are security protocols for establishing encryption channels over computer networks. As TLS 1.0 and 1.1 are out-of-date protocols that do not support modern cryptographic algorithms, and they contain security vulnerabilities that may be exploited by attackers these protocols has been stopped since ARIS 10.0 SR17.
  This is affecting SSL secured connection to SMTP servers which has been switch to TLS 1.2 with ARIS 10.0 SR17.

ARIS Architect / Designer

- If you use the connection mode for BPMN models in ARIS Architect/Designer, the connections are now created automatically.

ARIS Report

- Issues that had occurred when formatting reports in the design view were fixed. If you change the style of a section, this change is now considered correctly in the generated report.
- The formatting of documents generated by ARIS reports was improved.

ARIS Document Storage

- Swagger API links are now enabled again for the storage of ARIS documents.

ARIS Collaboration

- ARIS Collaboration now supports TLS 1.2.

ARIS Connect

- Dashboards are now displayed only once in the dashboards view.
- The size of the "Create objects" dialog was adjusted in such a way that the dialog is now displayed entirely even if the screen resolution is low.
- When satellites are added in the "Published content" view of ARIS Connect using Contribution, models and objects are now created in the correct groups according to the content type configuration in use.
- Now, the process steps view also displays user-defined process models.
- Improvements were made to the performance of the search function in ARIS Connect.
- It is now possible to configure the size of the contents displayed on the "Home" page (start page). To this end, the XML configuration provides the size specification "min80WithOptionalControls". Furthermore, you can specify the size by entering the values "Home section max-width" and "Home section width" under "User interface".

ARIS Server

- First Versioning with option "Include Border Items" runs in an Internal Merge Error. This is fixed now.

ARIS User Management

- Accessing the end points of the "User" and "Group" SCIM resource types is now possible again. Attribute-related information is returned in detail.
- The ARIS Process Governance operator used for retrieving users from the user management of ARIS Administration now supports not only the login name but also the first name and the last name as a valid input.
- ARIS now verifies correctly whether the user who is logging in has the "Variant manager" function privilege.

ARIS Risk & Compliance Manager

- Now, the statuses are displayed in the columns of a report generated in Excel format.
- The arrows of the confirmation dialog in the Arabic user interface now point into the correct direction and are placed to the left of the text.
- Improvements were made to the layout of the Arabic user interface. Message texts, check boxes, and buttons are now arranged correctly.
- Users that do not have issue management privileges are now able to create issues again.
- The "Cleaning server task schedule" scheduler now also deletes historic server tasks.

Accessibility

- The number of ARIS Process Governance tasks that is visible in the symbol is now also displayed in a tooltip as follows: "My tasks (23 pending)". This number of tasks is also read by the screen reader (JAWS).
- The form fields in the modal dialog "Change request" are now linked to the visible label of the dialog. Thus, the size of the active clickable area is increased.
- The search field is now selected by pressing the Tab key because this field was included in the tab order for accessibility. Once the search field is selected, the focus is on the inner edit field whose content is read by the screen reader.
- When a modal dialog is opened, the screen reader tells the user that a dialog is now displayed. The title of the dialog is read as well. When a modal dialog is closed, for example, "Propose new document(s)", the focus of the keyboard is set to the triggering button. Thus, users can continue working at the position where they opened the dialog.

17 Fixes in ARIS 10.0 SR16

ARIS Architect / Designer

- When you edit multi-line text attributes in ARIS Architect and ARIS Designer, a scroll bar is now displayed to enhance the editing of long text attributes. (Pivotal 5452036)
- When you create an object in ARIS Connect, all reusable objects are now displayed to you. (Pivotal 5452438)
- When you generate a process model from a matrix model in ARIS Architect or ARIS Designer, all connections that were drawn between the model objects are now displayed. (Pivotal 5455528)
- Exporting model graphics to a document now works correctly for all available image file formats. (Pivotal 5455719)

ARIS Server

- Databases that can no longer be used because an error occurred when deleting them, for example, are now deleted automatically. You can find databases of this kind by entering the ARIS Server Administrator command "list all". Databases that remain in the states "restoring", "deleting", or "migrating" are deleted after a specific time period has elapsed. (Pivotal 5433162)"
- Problems that occurred when merging UML2 content were solved. (Pivotal 5438512)
- ARIS Merge: Corrections were made to an error message that occurs during the merge of databases if a model that is assigned to an object is unavailable in the target database. (Pivotal 5443340)
- ARIS Server with Oracle DBMS: The use of bind variables in SQL statements was increased for the process of backing up databases. (Pivotal 5450418)
- The ARIS Server Administrator command "optimizedb" now reliably solves database problems that are related to database versions. (Pivotal 5450546)
- The fault tolerance was increased for the process of importing and merging lane models that do not comply with all conventions required by ARIS Method. (Pivotal 5451319)
- The time required for the versioning of models was considerably reduced. (Pivotal 5454040)

ARIS Report

- The ARIS report script method "XlsSheet.removeRow((XlsRow p_row, boolean bShiftRows)" now works correctly again. Rows are deleted from Excel tables as expected. (Pivotal 5440530)

- If you want to restrict the access to a report script, you can now enter a higher number of users or user groups. The maximum number of characters that can be entered in the corresponding field was increased from 4,000 to 12,000. (Pivotal 5440924)
- The ARIS report script method "getLockOwner()" now always returns correct results even if the model is locked for editing or explicitly locked. (Pivotal 5447762)
- Importing Microsoft Visio files into ARIS Architect now works correctly. (Pivotal 5447875)
- You can now run the ARIS report "Import data in Excel format" successfully even if the retrieval of attribute values fails. In such a case, the report is no longer canceled. Instead, errors are written to a log file. (Pivotal 5448263)
- The language support for reports that were created in the design view (WYSIWYG) in ARIS Architect was improved. (Pivotal 5448478)
- The ARIS report script method "Model.setTemplate" now works correctly when it is called by another report script. (Pivotal 5449378)
- The robustness of ARIS was increased in terms of model graphic generation. Errors that had occurred occasionally during the generation of model graphics were solved. (Pivotal 5451328)
- You can now successfully run ARIS reports even if the attributes that determine the sort order are not specified. (Pivotal 5451604)
- The robustness of the ARIS macro interface was increased so that possible errors are avoided. (Pivotal 5454611)

ARIS Connect

- You can now perform group transformations based on attributes. (Pivotal 5436458)

ARIS Document Storage

- Corrections were made to the error message that is displayed when you upload a new version of a document using another file extension than before.

ARIS User Management

- Calculating the local login time used for user management charts, LDAP synchronization, and active sessions now works correctly when the ARIS server time differs from the local client time. (Pivotal 1450258)

- Corrections were made to the example explaining how to perform an ARIS Cloud user import. (Pivotal 5449778)

Visio Import

- Importing Microsoft Visio files that were created using third-party programs (such as Lucidchart) now works correctly. (Pivotal 5442983)

ARIS Dashboarding

- In the data assignment dialog for dashboards, now unique names are used for data feeds to which the same name is assigned. For example, if you enter "database" into a data feed hierarchy twice, the data feeds can be distinguished now because the data assignment dialog shows the names "database_feed1" and "database_feed2". (Pivotal 5448945)

ARIS Alfabet Interface

- The old ARIS Alfabet interface based on reports and a SOAP web service in ARIS and operated by the tools A2AIntegrationGui.exe and A2AIntegrationBatch.exe from an Alfabet server is not supported in ARIS 10.0 SR16 anymore. Please make sure to switch to the newer, actively supported interface, which is based on ARIS' and Alfabet's REST APIs.

  For the ARIS side this interface is documented here: "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Enterprise Architecture Management > ARIS > Alfabet Interoperability Interface > Configuration > Modify configuration", page "Modify configuration of Alfabet REST API v2". For the Alfabet side, please look into the file ARISAlfabetInteroperability.pdf which is available in the Alfabet installation directory.

ARIS Process Governance

- In ARIS Process Governance dialogs, links are now represented correctly in both the "View" and the "Edit" mode. (Pivotal 5442292)
- Restoring a tenant that is managed on an ORACLE database management system and that contains ARIS Process Governance data no longer results in heavy utilization of the TEMP tablespace.

18 Fixes in ARIS 10.0 SR15

Security

- Third party lib updates due to security vulnerability:
  - CVE-2020-13936
  - CVE-2020-13959
  - CVE-2021-21409
  - CVE-2021-22696
  - CVE-2021-28163
  - CVE-2021-28164
  - CVE-2021-28165
  - CVE-2021-28657
  - CVE-2021-29425

For detailed information: https://nvd.nist.gov/

ARIS Architect / Designer

- The object type "Item definition" (API name "OT_DMN_ITEM_DEFINITION", type number 490)" and the connection type "has type" (API name "CT_HAS_TYPE", type number 908) are now available in the administration of ARIS Architect. (Pivotal 5441563)

ARIS Collaboration

- Comments that start with a hash sign (#) are now processed correctly. (See also "Help", topic area "Use ARIS Connect > Collaborate with users", page "Comment on, share, flag posts, etc.".) (Pivotal 5439272)

ARIS Report

- Exporting formulas to Microsoft Excel output files using ARIS report scripts now works correctly again. (Pivotal 5444289)
- The "Database.close()" ARIS report script method now works correctly again. (See also "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > Database", page "close ():void".) (Pivotal 5445246)

- The "ExtendedOutputObject.insertDocument" ARIS report script method now works correctly again. (See also "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > Output object > ExtendedOutputObject", page "InsertDocument(ExtendedOutputObject,boolean,boolean):boolean".)
(Pivotal 5446707)

ARIS Connect

- When you open a model, select an object, and open the side bar containing the dashboards, now the GUID of the selected object is displayed correctly. (Pivotal 5437511)
- When you restore a modification set to a different server than the current one, this modification set is now loaded correctly and also correctly references the dashboards that were previously imported using a report. (See also "Help", topic area "Use ARIS Connect > Use dashboards", page "Use own dashboards", page "Modification sets and dashboards".) (Pivotal 5439897)
- If you select a role as the filter criterion in the "My content" area and then select the "Activities" method filter, all available activities of the processes found are now displayed correctly. (See also "Help", topic area "Use ARIS Connect > View content > Navigate > Use filters", pages "Add several filters" and "Structure of My content area".) (Pivotal 5443710)
- If you switch from the current profile to a different profile, the selected profile is now loaded correctly and the views showing the database content are adapted accordingly. (See also "Help", topic area "Use ARIS Connect > Getting started > Basic handling", page "Switch your profile".) (Pivotal 5443754)
- It is now possible to specify in the ARIS Server Administrator command-line tool that a message is issued when a user attempts to use an existing identifier for an object. To do this, "designer.check.identifier.uniqueness" is set to "true". Command: "set designer.check.identifier.uniqueness true". (See also installation medium, "Documents > English > 4 Administration\4.1 Basic (Single node)", manual "ARIS Server Administrator command-line tool".) (Pivotal 5444405)
- Mini fact sheets now remain open even of a zoom level other than 100% is specified. (See also "Help", topic area "Use ARIS Connect > Work with content > Use models > Diagram fact sheet", page "Show mini fact sheets".) (Pivotal 5445027)
- Help text that was defined for fact sheets and the catalog in the file "glossaryBusinessProcess.xml" is now correctly displayed as a tooltip in both the fact sheet and the catalog. (See also "Help", topic area "Use ARIS Connect > View content > Use the Catalog".)
- Reports are now run based on the selected login language. (See also "Help", topic area "Use ARIS Connect > Output information", page "Generate report".)

ARIS Document Storage

- The documentation of the "ADSRepository" report class of the "setPermissions" method was improved and now describes what kind of input is valid for the parameters "authorizationType" and "elementType". (See also "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Global objects > Report component interface > ADS > ADSRepository", page "setPermissions (ADSFolder, String[] String, String):boolean".) (Pivotal 5435758)

ARIS Method

- The symbol type "Item definition" (API name "ST_DMN_ITEM_DEFINITION", type number 1937)" and the connection type "has type" (API name "CT_HAS_TYPE", type number 908) are now available in the administration of ARIS Architect. (Pivotal 5441567)

ARIS User Management

- In the user management, a problem concerning the SAML user attributes "First name", "Last name", and "E-Mail" was fixed. These attributes are now connected correctly and the values are rendered based on the attributes configured in the IDP. (Pivotal 5443910)

ARIS BPMN

- It is now possible to change the default symbol of a task to the symbol type "Subprocess (collapsed)". (See also ARIS Connect, "Help", topic area "Manage ARIS Connect > Configure ARIS Method > Object symbols", page "Change 'Default' setting for object symbol" and ARIS Architect, "ARIS > Help > topic area "ARIS Configuration and Administration > Manage ARIS Method", page "Edit object types" and topic area "Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Assign a default symbol to existing objects".) (Pivotal 5441691)

ARIS Risk & Compliance Manager

- The lists "Control executions" and "Control executions (control execution owner)" now provide the correct contents for users that have the two roles "Control auditor (object-specific)" and "Control execution owner". (Pivotal 5441848)
- The schedule of the "Synchronize with User Management" server task now works again in the way it was configured. (Pivotal 5442555)

ARIS Process Governance

- Configured public holidays are now correctly considered with regard to the execution time for human tasks. (Pivotal 5440685)

ARIS Analysis

- It is now possible to process the connection attribute "AT_NAME" using queries. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use queries".)
  (Pivotal 1446762)

19 Fixes in ARIS 10.0 SR14

ARIS Architect / Designer

- When you perform Oracle installations, the error "ORA-01795: maximum number of expressions in a list is 1000" no longer occurs during merge operations. (Pivotal 5402994)
- The new setting "abs.methodology.shouldSaveDataOnClientSide" is now available. You can use this setting to specify whether serialized method data is to be stored on the client. The default is "True" so that the method data are stored on the client. (Pivotal 5407952)
- Corrections were made to the logging in ARIS ScriptRunner. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports", page "Automatically start reports with Script Runner".) (Pivotal 5413717)
- When you use the ARIS report script option "setSynchronizeAssignments(true)", assignments are now correctly updated in the target database during a merge procedure. (See also ARIS Architect, "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Global objects > Report component interfaces > Merge > MergeBase Options", page "setSynchronizeAssignments(boolean):void".) (Pivotal 5422733)
- The HD server's report processing was made more robust so that erroneous reports no longer block the HD server. (Pivotal 5435529)
- The connection between two objects is now drawn correctly when a user-defined template was assigned to a model and an object symbol was changed in the model. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Basics", page "Assign a template to a model".) (Pivotal 1432452)
- Characters no longer appear twice when you press a key while directly editing attributes of an object or model. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Basics", page "Place object".) (Pivotal 5408819)
- When you search for values of user-defined attributes, now only the searched attributes are displayed in an additional column of the result table. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5410573)
- In BPMN diagrams, the size of lanes in pools is now correctly adapted when user-defined model templates are used. (See also "ARIS > Help > Working with ARIS", topic area "Create models > BPMN diagrams", page "Add multiple lanes to pool or lane".)
(Pivotal 5420714)

- The layout mechanism was changed so that connections are now placed correctly even if connection anchor points were moved. (See also "Help", topic area "Use ARIS Connect > Create models > ARIS Models > Use objects > Extended editing", page "Generate model layouts automatically" and topic area "ARIS Configuration and Administration > Configure the system > Good to know", page "Which ARIS administrator roles exist in ARIS Architect?".) (Pivotal 5421034)
- Within Change Management, it is now possible for users who are no system users to submit improvement proposals for models. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Improve models", page "Submit improvement proposal".) (Pivotal 5421634)
- Objects whose names contain line breaks are now found for re-use. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Basics", page "Insert line break".) (Pivotal 5424499)
- When you perform a search using an attribute value as the filter criterion, the value that was entered is now handled correctly and the result that is output is correct. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5425873)
- Texts in Hebrew are now displayed without flickering when the font type is changed to bold or italic, for example. (Pivotal 5426222)
- Changing BPMN object symbols using the "Edit symbol" button now also works for derived object symbols. (See also "ARIS > Help > Working with ARIS", topic area "Create models > BPMN diagrams", page "Place object" and topic area "ARIS Configuration and Administration > Manage ARIS Method", page "Derive object symbols".) (Pivotal 5435418)
- Improvements were made to the robustness and layout mechanism of Smart Modeling so that Smart Modeling now very well supports modeling in complex models. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model", page "Use Smart Modeling".) (Pivotal 5436769)
- Special characters within link attributes are now handled correctly in ARIS Connect. (See also "ARIS > Help", topic area > "Create content > Create and edit models > Model > Extended editing > Use attributes", page "Available editing options for attributes".) (Pivotal 5437033)
- The search now always opens when you use the keyboard shortcut "Ctrl + F" or the pop-up menu. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5409870, 5411262)

- When you show relationships in process models, the connection as well as an occurrence of the related target object is created even if the model already contains an occurrence. In contrast, when you show relationships in all other model types, the connection occurrence is created only if an occurrence of the target object is already available in the model. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Display and navigation", page "Show relationships".) (Pivotal 5412968, 5417493)
- When you add lanes to pools or paste lanes using Copy & Paste, templates that were already applied are now correctly applied to the new objects. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use objects > Extended editing", page "Apply a template to one or more objects".)

ARIS Connect

- The report "CoE - Local and global maturity level" now still works correctly when you change the default language of a database. (See also "Help", topic area "Manage ARIS Connect > Manage databases > Manage database properties > Languages", page "Select default language (Language page)".)
- Improvements were made to the storage mechanism of ARIS user management so that less memory is consumed by data that are allocated to users. (Pivotal 1406095)
- It is now possible to specify in the XML configuration that the "Model comparison" button is shown in the portal for selected models even if there are no differences between the two comparison models. (See also "Help", topic area "Use ARIS Connect > Work with content > Use models > Compare models", page "Compare model versions".) (Pivotal 1432419)
- Improvements were made to the logging procedure. Given that the locale is not relevant to the default symbol, the incorrect error message "Could not parse locale 'null' from symbol filter" is no longer output. (Pivotal 5402390)
- Corrections were made to ARIS Contribute so that entries of dialogs that are using multi select are sorted correctly. (See also "Help", topic area "Use ARIS Connect > Work with content > Contribute as a viewer".) (Pivotal 5403375)
- Improvements were made to the procedure of uploading configuration sets. Now, all configuration sets are correctly uploaded to the server even if multiple users start this procedure simultaneously. (Pivotal 5405603)
- The ARIS bar that enables users to access the portal, the catalog, etc., is now displayed to newly created users who were assigned a license but have no access privileges. (See also "Help", topic area "Manage ARIS Connect > Manage users", page "Create user".) (Pivotal 5408011)
- Now, the background of the current display in ARIS Connect is no longer grayed out and locked when

  - a user with the "ARIS Connect Viewer" license was assigned the "Read" access privilege in ARIS Architect for some groups of a database and
  - the user clicks a group in ARIS Connect for which the user has no access privilege.

  (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Configure the system", page "Assign access privileges (users/user groups)".) (Pivotal 5408348)
- When you search for an item that does not exist, the error message "The requested item cannot be found." no longer displays a bullet that provides no information. (See also "Help", topic area "Use ARIS Connect > View content > Search content".)
  (Pivotal 5408492)
- When you type text into an input field very quickly, the text is now entered entirely without being cut off. (See also "Help", topic area "Use ARIS Connect > Work with content > Contribute as a viewer", page "Change values of items".) (Pivotal 5410346)
- It is now possible to use hyphens in the names of JavaScript (js) and HTML templates when modification sets are imported. (Pivotal 5410923)
- When you specify in the XML configuration that the search in the portal is to be sorted by item types (orderByItemtype=true), saved favorites are now displayed correctly. (See also "Help", topic area "Use ARIS Connect > View content > Use favorites".) (Pivotal 5414278)
- If a user has an ARIS Connect Viewer license and an ARIS Connect Designer license along with an ARIS Aware license, the ARIS Connect Designer license is now used along with the ARIS Aware license. Thus, the maximum functionality is available to the user. (See also "Help", topic area "Manage ARIS Connect > Manage users", page "Available licenses in ARIS Connect".) (Pivotal 5416296)
- When you add a new component to a modification set and assign a name to it, the title of the component is now displayed entirely in the "Home" area. (See also "Help", topic area "Manage ARIS Connect > Configure the user interface > Edit modification set", page "Edit 'Home'".) (Pivotal 5416333)
- The scroll bar is now displayed correctly in the "My activities" area of all configuration and modification sets. (Pivotal 5416353)
- The date format of the repository was adapted to match the date format of the other ARIS Connect components. (Pivotal 5416407)
- You can now always directly navigate to the corresponding model from the search. You are no longer redirected to the page "Recently used models". (See also "Help", topic area "Use ARIS Connect > Use the repository > Work in the repository", page "Display and open a recently used model".) (Pivotal 5416694)

- It is now possible to enter multiple lines in the "Title" and "Description" attributes. Thus, lists of attributes such as "Image Title 1" and "Image Description 1" are displayed correctly. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Extended editing > Use attributes", page "Available editing options for attributes".) (Pivotal 5416746)
- Corrections were made to the display of mini fact sheets in Mozilla Firefox. Mini fact sheets are now automatically hidden when the model contents is moved. (See also "Help", topic area "Use ARIS Connect > Work with content > Use models > Diagram fact sheet", page "Show mini fact sheets".) (Pivotal 5418611)
- The model size is now displayed correctly in the model overview even if the size of appearance is set to less than 100% in the browser. (See also "Help", topic area "Use ARIS Connect > Work with content > Use models > Diagram fact sheet", page "Navigate using the Diagram fact sheet".) (Pivotal 5418765)
- When you change the connection alignment, the connection now always remains linked to the source and target objects instead of losing its connection to the target object and connecting with the source object. (Pivotal 5421245)
- Smart Modeling was extended so that it now supports the modeling of lane models in a better way. For example, it is now possible to drop structurally relevant objects on a connection in a lane model and thereby connect these objects with the successor and predecessor object. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model > Use Smart Modeling" and topic area "Glossary > S", page "Structurally relevant objects".) (Pivotal 5421924)
- The usability of ARIS Connect Designer was improved. When a bright font color is used, the background color of the input field now switches from white to grey. This increases the readability of the input. (Pivotal 5426287)
- When you export the catalog contents to Microsoft Excel, a check is now performed to find out whether exported links contain invalid characters. If this is the case, the links are converted into text. (See also "Help", topic area "Use ARIS Connect > View content > Use the catalog", page "Export catalog content to Excel".) (Pivotal 5428255)
- Corrections were made to the "My documents (predefined search)" filter of the "My favorites" area so that the filtered documents are now displayed correctly. (See also "Help", topic area "Use ARIS Connect > View content > Navigate > Use favorites", page "Filter using My Favorites".) (Pivotal 5428710)
- The documentation on how to access the transformation configuration using a report was improved. Further explanations on the various objects as well as some examples describing the most important use cases were added. (Pivotal 5432644)
- Corrections were made to the sorting of the catalog so that the alphabetic sorting now remains active even if filters are used. (See also "Help", topic area "Use ARIS Connect > View content > Use the catalog".) (Pivotal 5432682)

- It is now possible to open a model multiple times in a row from the catalog even if a filter was set. (See also "Help", topic area "Use ARIS Connect > View content > Use the catalog", page "Filter catalog items based on name, description, and responsibility".) (Pivotal 5432683)
- Corrections were made to the validation of configuration sets. Now, all user-defined objects are found in the configuration sets during a search procedure. (See also "Help", topic area "Manage ARIS Connect > Manage configuration sets".) (Pivotal 5433663)
- The result of an extended search is now correct even if user-defined attributes are used for filtering. (See also ARIS Connect, "Help", topic area "Use ARIS Connect > View content > Search content", page "Use search context and filters".) (Pivotal 5435200)
- The message "You are logged out." can be prevented so that the login page is shown directly after you logged out of ARIS Connect. To do this, you can specify on the global configuration page that after a logout, the ARIS Connect login page opens.
- Users can now open models that contain connections from groups for which the user has no access privileges. These connections appear grayed out. (See also "Help", topic area "Manage ARIS Connect > Manage databases > "Manage database properties", page "Access privileges".)
- Filtering the catalog now works as expected.
  - If the language is changed, the catalog is correctly filtered by the changed date format.
  - If you specify that all data is to be displayed according to a defined date ("greater than"), data for the defined date are no longer included in the result.
  - If you set "less than" for the filtering, all other entries of the filtering are now retained.

  (See also "Help", topic area "Use ARIS Connect > View content > Use the catalog", page "Filter catalog items based on name, description, and responsibility".)
- For a model that was changed, the timestamp of the "Last change" attribute is now correctly output in the portal and in the model. (Pivotal 1416522, 5435179)

ARIS Report

- You can now use the report "Output model information" also for matrix models. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Output model information".) (Pivotal 5402080)
- The report "Import data in Excel format" is now able to generate matrix models. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Import data in Excel format".) (Pivotal 5402493)
- When you use the DateChooser component in report dialogs, the date is now displayed in the correct format DD-MM-YYYY. (See also ARIS Architect, "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Global objects > Dialog objects", page " DateChooser".) (Pivotal 5410893)

- The page numbers are now created correctly in PDF documents that are generated using a report. (Pivotal 5412396)
- Corrections were made to the ARIS report script method "CxnDef.Delete(boolean)" so that this method no longer calls "doLayout()". Thus, it can no longer happen that a layout is to be performed for a connection occurrence of a connection definition that was deleted. (See also ARIS Architect, "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > CxnDef", page "Delete():boolean".)
  (Pivotal 5413603)
- The parameter "bInsertEmfAsPng" is now available for the ARIS report script method "xlsSheet.insertPicture(int column, int row, byte[]". This parameter must be set to "True" if the EMF graphic in use is a model graphic that was changed using commands of the "Picture" object. This parameter corrects an error of an external library. The default value of the parameter is "False".

  Parameters:
  - imageData
  - int imageFormat
  - int insertMethod
  - double widthMM
  - double heightMM
  - boolean bInsertEmfAsPng)

  As an alternative, we recommend that you create and insert the picture using the PNG format. This resolves the issue also in previous ARIS versions (10.0.12). (See also ARIS Architect "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > Output objects > Workbook > XlsSheet", page "insertPicture(int,int,byte[],int,int,double,double,boolean):void".) (Pivotal 5418049)
- Report generation is more robust now because it is no longer possible for a report to open more than 50 databases at the same time. If more than 50 databases are opened, an exception can occur, which usually indicates a script error. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model > Extended editing", page "Generate report".) (Pivotal 5415414)
- When you call the ARIS report script method "SingleSelectElement.setSelection(-1)" for a list box, subsequent controls are now correctly updated in ARIS Connect. (See also ARIS Architect "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Global objects > Dialog object > SingleSelectElement", page "setSelection():int:boolean".) (Pivotal 5418996)

- The ARIS report script method "MatrixHeaderCell.getColor()" now no longer outputs a null pointer exception when a cell has no fill color. (See also ARIS Architect "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > MatrixHeaderCell", page "getColor():int".) (Pivotal 5419473)
- ARIS report script: Additional line breaks are now no longer inserted after bullet points or enumerations. (Pivotal 5419753)
- ARIS report script: When you generate Microsoft Word documents with the content of the ARIS attribute "Documentation" (AT_DOCUMENTATION), now the locale is considered correctly. (See also ARIS Architect "ARIS > Help > Working with ARIS", topic area "Edit models > Edit attributes > Extended editing", page "Create an external description" and "ARIS > Help > ARIS Script", topic area "ARIS Script > Methods for reports and semantic checks > Objects > AttrBlobDef", page "createExternalDocument():ExternalDocument".) (Pivotal 5423359)
- For list items, now the text format of the first text that is output by the report is used. This meets the user expectation in a better way than using the text format of the last text. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions > Good to know", page "How do languages, fonts, scripts, and Diagram fact sheet interrelate?".) (Pivotal 5423360)
- The size of the model graphic that is generated using the "Export graphic as PDF" standard report is now identical regardless of whether the graphic is exported with or without the background color. (See also "Help", topic area "Use ARIS Connect > Create content > Model > Extended editing > Generate report > Available reports", page "Export graphic as PDF".) (Pivotal 5436021)
- Corrections were made to the semantic check rule types "Model attribute rules" and "Object attribute rules" so that these rules no longer indicate an error when there is none. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Run semantic checks > Good to know", page "What are rule types and profiles?".)
- Reports that open a drop-down list box in ARIS Connect now always offer all configured items for selection. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model > Extended editing > Generate report", page "Available reports".)
- Semantic checks for models that contain objects with object definitions for which the user has no access privileges are now performed correctly. Locked object definitions are not evaluated. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Run semantic checks > Good to know", page "What are rule types and profiles?".)
- The report "Compare models" now compares models correctly even if models of different versions of a database are compared.
- Generating models that use a background color no longer results in an error. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Export graphic as PDF".)

ARIS for SAP

- It is now possible to start documents that were downloaded from SAP Solution Manager to ARIS by pressing "F7". (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Special topics and functions > ARIS for SAP Solutions > Specific handling using SAP Solution Manager 7.2", page "Transfer and synchronize data (SAP Solution Manager 7.2)".) (Pivotal 5420564)
- ARIS Test Designer now creates test paths correctly even if a user has only the "Read" privilege for the Process Step Library and the Executable Library in ARIS. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Evaluate data > Test Designer".)
- You can use the following ARIS default object symbols for satellite modeling in the SAP context: "Screen", "Project documentation", "Test documentation", and "Class". (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model > Extended editing > Use satellites", page "Create a connection to a new satellite".)

ARIS Document Storage

- Using the report API, it is now possible to save documents that have the same name but different metadata to ARIS document storage in parallel. (See also "Help", topic area "Use ARIS Connect > Create content > Create and edit models > Model > Extended editing > Use documents", page "Upload documents".) (Pivotal 5435538)

ARIS Process Governance

- The ARIS Process Governance service "Write - 1 attribute to multiple elements" now fails for the various attribute types when a model is locked by a user. (Pivotal 5435568)

ARIS Server

- When you perform Oracle installations, the error "ORA-01795: maximum number of expressions in a list is 1000" no longer occurs during merge operations. (Pivotal 5402994)
- The new setting "abs.methodology.shouldSaveDataOnClientSide" is now available. You can use this setting to specify whether serialized method data is to be stored on the client. The default is "True" so that the method data are stored on the client. (Pivotal 5407952)
- Corrections were made to the logging in ARIS ScriptRunner. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports", page "Automatically start reports with Script Runner".) (Pivotal 5413717)

- When you use the ARIS report script option "setSynchronizeAssignments(true)", assignments are now correctly updated in the target database during a merge procedure. (See also ARIS Architect, "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Global objects > Report component interfaces > Merge > MergeBase Options", page "setSynchronizeAssignments(boolean):void".) (Pivotal 5422733)
- The HD server's report processing was made more robust so that erroneous reports no longer block the HD server. (Pivotal 5435529)

ARIS / Alfabet

- When you import the table "BUSINESSPROCESSMODEL" from Alfabet into ARIS, now all subordinate systems are also imported correctly. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Enterprise Architecture Management > ARIS - Alfabet Interoperability Interface".) (Pivotal 5427952)

ARIS ArchiMate

- The ArchiMate export setting "Connections" now works correctly so that depending on the setting, connections are included in or excluded from the export. (See also "ARIS > Help > Working with ARIS", topic area "Export/Import > ArchiMate® export/import", page "Export ArchiMate® file".) (Pivotal 1433554)

ARIS Method

- In an IE data model, it is now possible to create a "has relationship to" connection between a reinterpreted relationship type and an entity type. (Pivotal 5423994)

ARIS Simulation

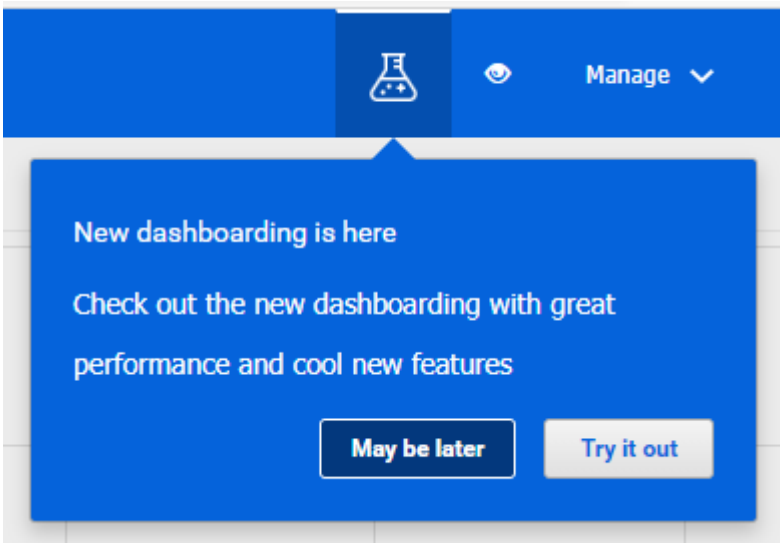
- It is now possible to run a simulation experiment on a server on which more than one simulation runnable is available. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Simulation > Experiments", page "Start new experiment" and topic area "ARIS Configuration and Administration > ARIS Server and Tenant Management > ARIS Cloud Controller (ACC)", page "What runnables are available?".) (Pivotal 5399915)

ARIS User Management

- When you change SMTP settings in ARIS Administration, the placeholder password now remains unchanged. (Pivotal 5409842)
- In the user management, API calls now also work in an environment that uses multi-LDAP configuration. (Pivotal 5419788)

ARIS Dashboarding

- Preview of the upcoming new dashboarding. The preview is accessible through the lab symbol in the current dashboarding- and feed editor applications. Functionally, the new dashboarding is targeted towards responsive design and include a new dashboard layout engine as well as new visualizations, new workflows and a completely rewritten UI. Most of the existing dashboard can be migrated. Also, all data feeds except for a few can be opened in the new web clients. Features which will be added for the final release include multi-language support as well as customizations and styling capabilities.



20 Fixes in ARIS 10.0 SR13

Security

- The SQL injection vulnerability that existed in connection with the "Find groups" function in Collaboration has been eliminated. (See also "Help", topic area "Use ARIS Connect > Collaborate with users > Work with groups", page "Follow portal contents as a group".)

ARIS Setup

- The Elasticsearch runnable starts properly now after an ARIS version was updated to ARIS 10.0 SR12. (Pivotal 5414298)

ARIS Architect / Designer

- The search in ARIS Architect can now be opened in general. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5409870, 5411262)

ARIS Document Management

- In document storage, the correct byte size of the files uploaded under Windows into a WebDAV folder of a WebDAV drive is displayed. (See also "Help", topic area "Manage ARIS Connect > Manage documents", page "Use ARIS document storage with WebDAV" and "Manage ARIS Connect >Configure ARIS Connect > Set up Document storage", page "Configure WebDAV".) (Pivotal 1401786)
- The document storage plug-in now returns "false" if a user does not have the required privileges. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use documents", page "What is ARIS document storage?".)

ARIS Process Governance

- With ARIS Release 10 SR12, the output format of the "Return timestamp" data flow operator changed. It has been reset to the former output format. (Pivotal 5415947)

ARIS Report

- Buttons are now properly shown or hidden on subordinate report pages. (Pivotal 5415456)

ARIS Collaboration

- Unauthorized users can no longer retrieve activities liked by other users. (See also "Help", topic area "Use ARIS Connect > Collaborate with users", page "Comment on, share, flag posts, etc.".) (Pivotal 5406104)
- The Collaboration function is now no longer available if Collaboration was deactivated in the administration (the "Collaboration activated" check box is disabled). If Collaboration is opened, the user is notified that this function needs to be enabled first. (See also "Help", topic area "Manage ARIS Connect > Configure Portal > Set up Collaboration", pages "Customize Collaboration" and "What properties are available for Collaboration?".) (Pivotal 5414381)
- The Technical user is now found if a health check on the ECP runnable is performed. (Pivotal 5415245)
- The vulnerability during the execution of the ExportActivitiesServlet in Collaboration (Path Traversal Vulnerability) has been eliminated.

ARIS User Management

- The get request of the system for cross-domain identity management (SCIM) now returns the correct start index, the SCIM group API is updated by the put request, and the group display name is output in the SCIM client. (Pivotal 5400346)
- SAML single sign-on was extended so that it works properly and the 'RelayState' can be queried for customer-specific identity providers (IDPs). (Pivotal 5406906)
- The filter analysis logic was adopted to the new SCIM standard. This results in user data being processed properly. (See also "Help", topic area "Manage ARIS Connect > Manage users > Use SCIM".) (Pivotal 5413456)
- If a model is shared, the "Select users" dialog box now finds users with names spelled in Korean. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use model", page "Share model".) (Pivotal 5416091)
- The LDAP configuration was corrected. User data is transferred to the proper tenant now so that the user is logged in properly. (Pivotal 5416260)

ARIS Analysis

- If a query is performed for a query element for which the "Merge results" item has been deactivated, the empty rows in the query result table are now removed. (Pivotal 5413689)

ARIS Risk & Compliance Manager

- Confirmations in ARIS Connect are now displayed properly via the GRC task list and the link in the e-mail notification. A confirmation was not displayed when confirmations existed for different objects/models in different databases and the respective other database was used before. (Pivotal 5404109)
- GRC dashboards in ARIS Risk & Compliance Manager are no longer displayed in minimized format. (Pivotal 5409991)
- It used to be impossible to assign documents to questions when using Internet Explorer 11. This error has been fixed. (Pivotal 5410739)
- The monitoring server task that checks issues for due dates now checks environment-specific and cross-environment issues. (Pivotal 5411269)
- ARIS Reporting errors have been fixed. The generation of reports now works smoothly for customized, complex queries of ARIS Risk & Compliance Manager data. (Pivotal 5412046)
- The error occurring in test cases without hierarchy assignment during the calculation of evaluations was eliminated. (Pivotal 5413668)
- ARIS accelerators for GDPR: Groups ('Role' object) that were deleted from the system fact sheet in the Contribute mode ('Edit > Contribute') are also deleted in the corresponding model.(See also "Help", topic area "Use ARIS Connect > Work in the portal > Contribute as a viewer".)
- All connections are now available in the GDPR method filter.
- Documents that are assigned to controls or test definitions in ARIS Architect will be synchronized to ARIS Risk & Compliance Manager.
- The "Environment" attribute is now displayed in the Issue form if the same object is assigned as issue-relevant via various environment.
- The error that occurred during the calculation of evaluations in test cases without hierarchy assignment has been fixed.
- Lists and evaluations of audits can now be opened.
- The error that prevented user-defined filters in ARIS Risk & Compliance Manager evaluations from being saved has been fixed.
- The Document and Simple links in the questionnaire are now shown as clickable.
- The error preventing substitute users from opening assigned documents has been fixed.
- Navigation from ARIS Risk & Compliance Manager to ARIS Connect now works even if the HTTP port is not the standard port 80.
- Characters such as ',' (comma) are now properly displayed in the 'Output change log' report.

ARIS Connect

- Catalog content is now properly grouped for export. (See also "Help", topic area "Use ARIS Connect > Use the Catalog", page "Export catalog content to Excel".) (Pivotal 5406541)
- Catalog content is exported properly now even if they contain links with spaces. (See also "Help", topic area "Use ARIS Connect > Use the Catalog", page "Export catalog content to Excel".) (Pivotal 5406542)
- Personal favorites that were created a long time ago can now be removed. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use favorites", page "Remove a personal favorite ".) (Pivotal 5408012)
- UML content maintained in a database language other than English (United States) is now visible if all other database languages were deleted. Example: If you maintained UML content in "English (United Kingdom)" rather than in "English (United States)" and delete all other languages in the database, the UML content is properly displayed. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "When can UML content be displayed?".) (Pivotal 5410936)"
- If database content is filtered in the "My content" view, the filtered content remains displayed even if the user logs off and logs in again with a different user name. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "What is the structure of the My content area?".) (Pivotal 5410968)
- The ARIS Connect Portal now displays the proper content even if the view is not refreshed with F5. (See also "Help", topic area "Use ARIS Connect > Basics > Valuable information", page "Keyboard shortcuts generally available".) (Pivotal 5411075)
- The "Diagram" fact sheet remains enabled after a change from it to another browser tab and back, so that it is no longer necessary to click twice to enable its functionality. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "What is the Diagram fact sheet for?".) (Pivotal 5411479)
- The extended search now properly returns the path of the model listed below. (See also "Help", topic area "Use ARIS Connect > ", page "Search content".) (Pivotal 5411569)"
- Mini fact sheets are now displayed for objects of an assigned model even if the assigned model was accessed by jumping there from a link in a mini fact sheet of the superordinate model. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Diagram fact sheet", page "Show Mini fact sheets".) (Pivotal 5411803)
- The "Highlight" function updates the model properly now after settings were changed. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Highlight model items".) (Pivotal 5413061)
- The "Recently used" area in the repository properly shows all recently used models now. (See also "Help", topic area "Use ARIS Connect > Use the repository > Work in the repository > Model > ", page "Display and open a recently used model".) (Pivotal 5413283)

- Mini fact sheets now display the text for the "Role" object symbol properly before the object symbol. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Diagram fact sheet", page "Show Mini fact sheets".) (Pivotal 5414076)
- Assignments are now properly opened in ARIS Connect Designer. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing > Assign models", page "Open assigned model".) (Pivotal 5414668)
- All customer-specific changes to Boolean configuration values that are configured differently from the default configuration, e.g., enableOverlay, are now adopted. (See also "Help", topic area "Manage ARIS Connect > Configure Portal > Manage configuration and modification sets", page "Edit modification set".) (Pivotal 5415810)"
- The "ARIS Aware" license privilege is now prioritized over the "ARIS Connect Viewer" license privilege. If both license privileges are available, only the "ARIS Aware" license privilege is used. (See also "Help", topic area "Manage ARIS Connect > Manage users", page "Use case - Manage users".) (Pivotal 5416296)
- The "Steps" view now properly displays process models such as the EPC (event-driven process chain) if they contain a start object connected to a process interface. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "What is the Steps fact sheet for?".) (Pivotal 5414595; 5414696)
- The ARIS Connect logo and user logos are now displayed in the proper size in all configuration and modification sets. (See also "Help", topic area "Manage ARIS Connect > Configure Portal > Manage configuration and modification sets".)

21 Fixes in ARIS 10.0 SR12

Security

- A Bootstrap security vulnerability was eliminated. Using the ".attr()" method now no longer enables cross-site scripting (XSS) (see https://github.com/twbs/bootstrap/issues/20184). (Pivotal 5395569)

ARIS Architect / Designer

- Searching for group names now returns correct results again. (Pivotal 5386344)
- In ARIS Architect, the search dialog is now displayed much faster for systems that provide a lot of user-defined method contents. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5389461)
- The connection selection dialog is now no longer displayed in BPMN diagrams when objects are placed on top of each other. (Pivotal 5389668)
- A correction was made to the date selection in ARIS Architect. If you click "Today", now the date of the current day is selected. (Pivotal 5392609)
- When you change the content of the attribute "Documentation" (AT_DOCUMENTATION), the attributes "Last change" and "Last editor" are now correctly updated. (Pivotal 5394029)
- When you copy text into the "Identifier" attribute, existing line breaks are automatically removed during the save operation because this attribute is a single-line attribute. (Pivotal 5394095)
- When you edit a filter in the Filter Wizard, all attribute type groups are provided now. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Edit filter".) (Pivotal 5394335)
- Loading the list of users in ARIS Architect was improved. If there is a large number of users, it now no longer takes several minutes to display the user list. Even if there are more than 90000 users, displaying the list takes only 10 seconds. (Pivotal 5397244)
- When you change the default symbol of an object definition, this change is now directly displayed in the Explorer tree. There is no need to restart the program. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items > Create and manage objects", page "Replace object symbol for definition".) (Pivotal 5397955)
- During the automatic layout operation, a large free space is no longer added at the top of the model. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Extended editing", page "Generate model layouts automatically".) (Pivotal 5398004)
- The copy function of the method administration in ARIS Architect now works correctly again. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and

Administration > Manage ARIS Method.) (Pivotal 5398489)

ARIS Server

- CPU usage by the "abs" runnable was optimized. (Pivotal 5393612)
- Object occurrences are no longer incorrectly created in assigned models. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Basic > Link models", page "Assign a new model".) (Pivotal 5395850)
- It now no longer happens that the list of completed tasks in ARIS Connect Administration is empty for a specific amount of time even though tasks were completed. (Pivotal 5398464)
- When you restore the system database, incorrect states are now automatically corrected so that method filters can be imported later at any time. (Pivotal 5399878)
- Versioning errors now no longer occur when UML2 content is deleted. (Pivotal 5400111)
- The display of swimlane models is now generated faster and more efficiently with regard to resources. (Pivotal 5400720)
- The renaming of a main group is now correctly transferred during a merge procedure. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage Databases", page "Merge databases".) (Pivotal 5401277)

ARIS Connect

- In modification sets, attributes containing Word documents, for example, are now no longer handled as attributes of the "STRING" base type but as attributes of the "BLOB" base type. Attributes of the "BLOB" base type are mapped to markup attributes so that their content is interpreted as documents that can be displayed in ARIS Connect fact sheets. (Pivotal 1401465)
- In the ARIS Connect configuration sets, the default setting for "SendSignal" is now set to "false". (Pivotal 5377079)
- There used to be a display issue in ARIS Connect. During the editing of models, margins of text boxes were not displayed in the same way as in the portal and in ARIS Clients. You can solve this issue by using the "defaultServerSettings.cfg" configuration file. Open the configuration file ("<ARIS10.0 installation directory>\server\bin\work\work_abs_m\base\webapps\abs\config") and set the value of "abs.graphics.fontFractionalMetrics.enabled" to "true". (Pivotal 5378256)
- In ARIS Connect, integer attributes are no longer displayed as decimal numbers in spin boxes. (Pivotal 5381647)
- In the portal, predecessors and successors in a process are now correctly displayed on the "Steps" fact sheet. Before the fix, all processes were evaluated that were assigned to a process interface and that were linked by connections to each event and each function. Now, when the

steps are displayed, also the connections to objects of the "Rule" type are considered and not all of the assigned process models are used. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information > ", page "What is the Steps fact sheet for?".) (Pivotal 5382369)

- When you log in to the portal, the portal now displays only role filters that are relevant to the corresponding user group. (Pivotal 5384831)
- In the language selection field in ARIS Connect, all languages are now displayed using an uppercase letter for the first letter of a language. (See also "Help", topic area "Use ARIS Connect > Basics > ", page "Select language".) (Pivotal 5386027)
- In ARIS Connect, report output files are now created with the correct file name. (Pivotal 5391360)
- In ARIS Connect, the border lines of empty columns, rows, and lanes in models with row and column display are now entirely displayed. (Pivotal 5394856)
- The licence problem that was encountered after the creation of modification sets no longer occurs. (Pivotal 5394908)
- The date format is now used in accordance with the language you have selected. (Pivotal 5395295)
- In a versioned model in ARIS Connect, model assignments now open in the selected model version. (Pivotal 5395490)
- In ARIS Connect, models are now displayed correctly when you use Microsoft IE 11. (Pivotal 5395532)
- In ARIS Connect, object names are now always displayed correctly even if you click the corresponding object symbol multiple times. (Pivotal 5395649)
- In ARIS Connect Designer, you can now create connection assignments for matrix models in the same way as in ARIS Architect. (Pivotal 5396940)
- The error message that was issued when the action "Reload and validate configuration files" was carried out is now no longer displayed. (Pivotal 5399060)

ARIS Process Governance

- An error was fixed due to which an unknown context was displayed when a model was no longer available in the version that was last published. (Pivotal 5387890)
- You can now delegate human tasks in ARIS Process Governance even if an assigned user was deleted from the user management. The process instances no longer fail if a reminder e-mail is sent to the deleted user. Instead, the process administrator is informed by e-mail that the user is missing. (Pivotal 5397720)
- An error was fixed due to which the user selection was not displayed in an ARIS Process Governance report. (Pivotal 5398486)

- Assignment and task reminder links to ARIS Process Board are now clickable in ARIS Process Governance e-mails.

ARIS Report

- Importing date attributes using the "Import data in Excel format" report now works correctly. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > ", page "Report: Import data in Excel format".) (Pivotal 5381277)
- When you export matrix models as a graphic using ARIS reports, object names in matrix models are no longer cut off if you use "SansSerif" as the font in matrix models. To ensure this, you can use the command "set designer.matrix.font "<your preferred font>"" in "ARIS Server Administrator". (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > ", page "Report: Export graphic as PDF".)
(Pivotal 5389459)
- For report output in PDF or HTML format, the representation and resolution of model graphics was improved for the use of zoom factors <100% (e.g., 50%). (Pivotal 5392321)
- The size of backup files of the system database was reduced. Report output files of scheduled reports are no longer saved to the system database. Old files that still exist are automatically deleted when a scheduled report is run or the corresponding schedule is edited. (Pivotal 5394801)
- In ARIS Script, an error was fixed that used to occur when the "CellStyle.getTopBorderColor()" method was used in combination with an XLSX file.
(Pivotal 5397531)
- In ARIS Script, running the "Attr - GetValue (boolean)" method for an empty attribute of the "AT_Documentation" type no longer results in an error. (Pivotal 5399939)

ARIS User Management

- Problems concerning the LDAP connection were resolved. (Pivotal 5368527)
- The command line tools of the user management were adapted so that it is now possible to edit users and user groups that use Cyrillic letters. (Pivotal 5399801)

ARIS Analysis

- The query result is now no longer empty if user-defined attributes are used for queries for conditions. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use queries", page "Add conditions".) (Pivotal 5396082)

ARIS Risk & Compliance Manager

- Checking the privileges of internal APIs for opening or forwarding forms was improved. (Pivotal 5394418)
- Names that contain an underscore ('_') no longer cause error messages when dashboard links are generated. (Pivotal 5395500)
- An error was fixed so that risks that are not assigned to a process hierarchy are now considered in the linked list of evaluations. (Pivotal 5400994)
- The workflow buttons are now deactivated in forms when a violation of the segregation of duties has occurred.
- An error concerning the risk manager privileges was fixed. Risk managers are now allowed to generate and review risk assessments when they are assigned environment-specific and object-specific roles at the same time.
- An error was fixed so that surveys can now be created on the basis of manually created working copies of questionnaire templates.
- Now the audit scope is displayed in the form directly after having been assigned. Before the fix, the audit scope was displayed only after the form was saved.
- In ARIS Risk & Compliance Manager, it is now possible to define a general sender alias for notifications.
- The Customizing Toolkit (CTK) for ARIS Risk & Compliance Manager now works correctly when custom DSL files are used.

22 Fixes in ARIS 10.0 SR11

ARIS Architect / Designer

- Links specified in link attributes are now correctly resolved so that the target is correctly displayed. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing > Use attributes > Valuable information", page "What editing options are available for attributes?".) (Pivotal 5386684)
- In column/row models, you can now add only columns and rows in which you can create connections that are allowed by the method filter in use. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "Glossary > L", page "Lane model" or ARIS Connect, "Help", topic area "Use ARIS Connect > Glossary > L", page "Lane model".)
  (Pivotal 5387414)
- Now, newly created system users are provided the "Administrator: Unlock" functionality for models and objects. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Use locks", page "Unlock models" and "Unlock objects".) (Pivotal 5389186)

ARIS Server

- Certain circumstances used to result in the problem that backing up the latest version or a specific change list of an ARIS database failed. Now, you can successfully back up any latest version of an ARIS database as well as all available change lists. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > ARIS Server and Tenant Management > Managing tenants > Tenant Management tool > Tenant Management > Manage tenants", page "Back up tenant".) (Pivotal 5385756)
- Corrections were made to ARIS Mobile API so that all REST API query operations now work correctly. (Pivotal 5391291)

ARIS for SAP

- ARIS for SAP Solutions - SAP Solution Manager 7.2 synchronization:
  Models of the "EPC (row display)" or "EPC (column display)" type that were transferred from ARIS to SAP Solution Manager 7.2 using the "Transfer models" option, are now displayed correctly in SAP Solution Manager even after row or column headers are deleted from the ARIS models. The default name of row or column headers in this kind of model type is "Organizational elements & Application system". (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > ARIS for SAP Solutions > Specific handling using SAP Solution Manager 7.2 > Transfer and synchronize data (SAP Solution Manager 7.2) > Transfer

models to SAP® Solution Manager".) (Pivotal 5381936)

ARIS Connect

- The content of the "Activities" table in the "Overview" fact sheet is now entirely displayed when you click "Show all". (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information", page "What is the Overview fact sheet for?".) (Pivotal 5386744)
- The view configuration and validation of configuration and modification sets was corrected in such a way that only relevant warnings are issued now when a view that was edited is being reloaded. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect" and topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal" page "Manage configuration and modification sets".) (Pivotal 5387569)"
- Mozilla Firefox now correctly reloads HTML templates when you close and reopen the browser using ARIS Connect. (Pivotal 5388203)
- If displaying mini factsheets is disabled, mini factsheets are now no longer displayed in customer configurations. Furthermore, models are now correctly resized in customer configurations when "Fit to window" is clicked. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Diagram fact sheet", pages "Switch on the mini fact sheet display" and "Use the view bar".) (Pivotal 5388529)
- The layout of the "My favorites" area is now displayed correctly when additional properties are added by the XML configuration to models saved to a list of favorites. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use favorites".) (Pivotal 5388704)
- Catalog pages are now being loaded much faster and now display the entire contents. (See also "Help", topic area "Use ARIS Connect > Use the Catalog", page "Choose items starting with the same letter".) (Pivotal 5388727)
- You can now download the catalog contents from an Excel export to a local computer with German set as the language in ARIS Connect. (See also "Help", topic area "Use ARIS Connect > Use the Catalog", page "Export catalog content to Excel".) (Pivotal 5390914)

ARIS Process Governance

- During a tenant backup, all temporary files of ARIS Process Governance are now correctly deleted. (See also program "Tenant Management", " Help > Tenant management", topic area "Manage tenants", page "Back up tenant".) (Pivotal 5385103)

ARIS Report

- Corrections were made to the time zone on the server side. Thus, ARIS Architect and the "Output model information" report now display the correct time in the "Last change" attribute. (Pivotal 5386607)

ARIS – Alfabet interface

- For reasons of security, Alfabet now uses Alfabet RESTful API v2. We strongly recommend that you no longer use Alfabet RESTful API v1 because this version will be phased out sometime in the future. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Enterprise Architecture Management > ARIS > Alfabet Interoperability Interface > Configuration > Modify configuration", page "Modify configuration of Alfabet REST API v2".)

ARIS Risk & Compliance Manager

- The description "Configure MashZone NextGen Business Analytics to display dashboards" was updated and enhanced with a description relevant to ARIS Aware: "Configure MashZone NextGen Business Analytics/ARIS Aware to display dashboards". Performing the steps now leads to the expected result.
- The "Confirmations" area now opens when you select an object from an inactive database and thus change the database to perform the confirmation.
- The "Document upload allowed" attribute is now available in the ARCM attribute maintenance macro in ARIS Architect.
- Information that is available for an event when event enabling is used can now be fully read instead of being cut off after the "&" character even if that information contains XML entities such as "&amp".
- Users can now perform role-based tasks, such as generating objects, for as long as the corresponding role is assigned to them for at least one environment.
- The English tooltip now describes the e-mail fallback mechanism in more detail: "Specifies the sender e-mail address for messages triggered by scheduled server tasks. If the Server task sender is not specified, the sender address from ARIS Administration is used instead, provided that it is specified (Configuration > User management > SMTP > Connection)." With the service release ARIS 10 SR 12 in April 2020, this tooltip will be up-to-date in all other available languages.
- You can now specify one and the same user as a substitute more than once.

ARIS Document Storage

- In User Management, you can now reset the privileges for all existing user groups. Furthermore, the Call Level Interface (CLI) was adapted in such a way that data that is no longer valid can be removed. (See also manual "ARIS Document Storage Command-Line Tool", chapter "Command line tools for ARIS document storage", Command "deleteAccessPrivileges".) (Pivotal 5386534)

ARIS Dashboarding

- Importing SAP default dashboards now works correctly. (See also "Help", topic area "Manage ARIS Connect > Administrate dashboards (ARIS Aware) > Configure dashboards > Make default dashboards available", page "Import default dashboard content".)

ARIS Analysis

- You can now export models of the "Spreadsheet" type using the "Read" privilege. (See also "ARIS > Help > Working with ARIS", topic area "Create models > Spreadsheeds > Advanced editing", page "Export spreadsheet to Microsoft Excel".) (Pivotal 5392039)

23 Fixes in ARIS 10.0 SR10

Security

- Multiple third-party libraries were updated due to known weak points that could have resulted in a denial of service or the execution of remote code:
  - CVE-2018-19362 in jackson-databind-2.9.5 allows deserialization of untrusted data. Refer to https://snyk.io/vuln/SNYK-JAVA-COMFASTERXMLJACKSONCORE-72882 for more information.
  - CVE-2018-11771 in commons-compress-1.16.1 allows denial of service (DoS) attacks. Refer to https://snyk.io/vuln/SNYK-JAVA-ORGAPACHECOMMONS-32473 for more information.
  - CVE-2015-7501 in commons-collections-3.2.2 allows deserialization of untrusted data. Refer to https://snyk.io/vuln/SNYK-JAVA-COMMONSCOLLECTIONS-30078 for more information.

  The current Service Release 10 now contains the following versions:
  jackson-databind-2.9.8
  commons-compress-1.18
  commons-collections-4.4
  (Pivotal 5379994)

ARIS Process Governance

- When you model a dialog, spaces used in option button group labels are now no longer replaced with underscores. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information" > Elements pane, page "Option button group".) (Pivotal 5362426)
- In the "My tasks" area, when tasks are delegated or deleted, now the correct number of pending tasks is displayed without the need to manually refresh the page. (See also "Help", topic area "Use ARIS Connect > Work in the portal > My tasks", page "Open My tasks".) (Pivotal 5370241)
- In the "My tasks" area, country-specific special characters used in texts such as model names are now correctly displayed with both uppercase and lowercase letters. (See also "Help", topic area "Use ARIS Connect > Work in the portal > My tasks", page "Open My tasks".) (Pivotal 5374079)
- The locks underlying the "Request approval" mini workflow were adjusted in such a way that locked models using the same objects no longer cause the workflow to terminate. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use Mini workflows", page "Ask for model approval".)

ARIS Architect / Designer

- Models whose names include line breaks are now found in a search for database content. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Search for database content".) (Pivotal 5381493)
- When you copy lanes into a pool, the placement of pool labels now remains unchanged. (See also "ARIS > Help > Work with ARIS", topic area "Create models > BPMN diagrams", page "Move a lane".) (Pivotal 5364763)
- In models of the "Value-added chain diagram" type, connections are now correctly aligned to the grid when the insertion symbol of Smart Modeling is used. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models > Use Smart Modeling", page "Connect objects".) (Pivotal 5371953)
- When you open a model, the given grid width is now at least 2. This ensures that you are always able to draw connections between objects. (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models", page "Set grid".) (Pivotal 5372424)
- The "Select Alfabet object" dialog now provides pagination when there is a large number of objects so that mapping objects is more comfortable now. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Extended editing > ARIS and Alfabet", page "Map Alfabet objects to ARIS objects".) (Pivotal 5374649)
- Corrections were made to the preview of expanded objects of the "Subprocess" type used in BPMN diagrams. The subprocess content is now displayed correctly. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Use BPMN modeling support", page "Expand subprocess".) (Pivotal 5375518)
- In ARIS Connect, method content is now displayed correctly when two or more variants of the same language are used in a modification set (for example, "English (Ireland)" and "English (United States)"). (See also "Help", topic area "Manage ARIS Connect > Manage ARIS Connect > Configure Portal > Manage configuration and modification sets", page "Edit modification set".) (Pivotal 5381160)
- In ARIS Architect/ARIS Designer, you can now delete the "ARIS document storage Link" attribute by selecting it on the "Attributes" tab and pressing the "Del" key. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Extended editing > Edit attributes > Extended editing", page "Specify link to a document in ARIS document storage".) (Pivotal 5382482)
- The "Smart Modeling" functionality was improved. You can now use the combination "Shift + Del" to delete a connection within a process flow along with the connected object. If you press only "Del" instead, a connection is created between the remaining objects. This connection is automatically selected so that you can easily delete it by pressing the "Del" key again when necessary. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model", page "Use Smart Modeling" and ARIS Architect/Designer: "ARIS > Help"

> Working with ARIS", topic area "Create models > ARIS models", page "Use Smart Modeling".) (Pivotal 5382796)

- When a model assignment is created for a model that is being edited by another user and can therefore be accessed only in read-only mode, now a message is displayed indicating that the model cannot be assigned. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Extended editing > Assign models", page "Assign a model to an object".) (Pivotal 5385113)

ARIS Server

- Corrections were made to the ARIS session cleaner so that valid sessions are now no longer terminated. An unwanted cancelation of long-running operations such as tenant backups or report executions can no longer occur. (Pivotal 5380369)
- It is now generally possible to create new tenants in a multi-node environment. (Pivotal 1370465)
- When you use the "setSynchronizeAssignments(true)" option, assignments are now correctly updated in the target database during a merge procedure. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Global objects > Report component interfaces > Merge > MergeBase Options", page "setSynchronizeAssignments(boolean):void".) (Pivotal 5361591)
- If the "Database administrator" function privilege of a user is revoked in the user management, the corresponding system user privileges for ARIS Clients, such as access privileges and function privileges, are now automatically revoked as well. (See also "Help", topic area "Manage ARIS Connect > Manage users > Valuable information", page "What function privileges can be assigned?".) (Pivotal 5362775)
- In the database statistics, access privileges of users and user groups are now correctly displayed for versioned content of a database. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases", page "Display database statistics".) (Pivotal 5378169)
- The "SetAccessRights()" ARIS report script API method now always returns correct results. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Objects > User", pages "Set AccessRights(Group[],int):boolean" and "UserGroup", page "Set AccessRights(Group[],int):boolean".) (Pivotal 5383874)

ARIS for SAP

- The "Test" button for ARIS Business Publisher links on the last page of the Synchronization Wizard now works correctly for synchronization towards SAP Solution Manager.

(Pivotal 5371128)

ARIS Connect

- Soft hyphens used in object names are now correctly displayed in ARIS Connect. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Basic modeling", page "Use optional hyphens".) (Pivotal 5363375)
- The overview page of databases now always shows correct data for databases from which a version was published, for example, "Last version". (See also "Help", topic area "Manage ARIS Connect > Configure Portal", page "Publish database as a process portal".) (Pivotal 5366564)
- If highlighting connections is not necessarily required, you can speed up highlighting by removing the <highlightWith> section from the highlighting configuration. As a result, only objects are highlighted. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Highlight model items >Valuable information", page "What is highlighting?".) (Pivotal 5372049)
- In the "My favorites" area, pagination now works correctly. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use favorites", page "Open My favorites".) (Pivotal 5373302)
- With version ARIS 10 SR10, models of the "DTD" type or model types derived from this type can be edited in ARIS Connect. (Pivotal 5374479)
- Now, searching for attribute values works correctly in the advanced search of ARIS Connect. (See also "Help", topic area "Use ARIS Connect > Search content", page "Use search context and filters".) (Pivotal 5375787)
- In the search result area of the advanced search, properties of items found are now newly sorted when a filter criterion is removed. (See also "Help", topic area "Use ARIS Connect > Search content", page "Use search context and filters".) (Pivotal 5379921)
- Using the "Related objects" bar of a model ("Diagram" fact sheet > "Properties" bar), you can now open the fact sheets of all objects that are connected with another object by clicking their name. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Model Viewer", page "Show properties".) (Pivotal 5381069)

ARIS BPMN

- You can now export and import Enterprise BPMN diagrams using the "Entire method" filter as well as other filters. (See also "ARIS > Help > Working with ARIS", topic area "Export/Import", page "BPMN import/export".) (Pivotal 5374821)
- BPMN-specific XML files now contain definitions of data input and data output objects that are connected with a task symbol. (See also "Help", topic area "Use ARIS Connect > Use the

repository > Create and edit models > Model > Extended editing > Export", page "Export BPMN diagram".) (Pivotal 5377237)

ARIS Report

- Improvements were made to the font fallback in reports and to font substitution warnings so that fonts are now always readable in report output results. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions > Valuable information", page "How do fonts affect graphics and PDF output files?".) (Pivotal 1381486)
- The ARIS standard report "Output database information" now outputs access privileges correctly for users that are associated with a user group to which neither access privileges nor function privileges were assigned. Furthermore, the report output result is now also correct when a user starts the report while being logged in to the database with another filter than "Entire method". (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Administration", page "Report: Output database information".) (Pivotal 5368727)
- In ARIS Report dialogs, items that are added to or changed in a table are now sorted correctly. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Create report > Using the design view", page "Insert data tables into report scripts".) (Pivotal 5369165)
- Improvements were made to error messages used for Visio imports. It is now easier to identify errors in invalid Visio files. (See also "ARIS > Help > Working with ARIS", topic area "Export/Import > Visio import", page "Import models from Microsoft Visio".) (Pivotal 5371723)
- A correction was made to the ARIS report script API. In a report, you can now use documents that contain multiple columns and are based on different templates. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic checks > Objects > ModelOptions", page "getModelGridSize():int" and "setModelGridSize(int):void".) (Pivotal 5373394)
- The orientation in reports that were created using the design view now remains unchanged in the report output result. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create script > Create report > Using the design view", page "Create report scripts in design view".) (Pivotal 5375994)
- The ARIS report script API now supports changing the default grid size for new models:
  ArisData.getModelOptions().getModelGridSize()
  ArisData.getModelOptions().setModelGridSize(nGridLometric)
  (Pivotal 5378150)
- Disabling buttons in ARIS Report scripts now works again in ARIS Connect.

ARIS Simulation

- The time format used for the statistics export of ARIS Simulation was changed from "dddd:hh:mm:ss" to "hh:mm:ss". (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Simulation > Evaluate", page "Export statistical data".) (Pivotal 5369879)

ARIS Document Storage

- A document URL that is copied using the buttons "Copy current view code" and "Copy to clipboard" is now correctly encoded so that it works properly when inserted into a Wiki page, for example. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models", page "Copy view code".) (Pivotal 5385117)

ARIS User Management

- Processes running in the background are more resilient so that active sessions are now correctly closed in the event of an unexpected outage. As a result, the number of available licenses is now correctly managed and displayed. (See also "Help", topic area "Manage ARIS Connect > Manage licenses", page "Display information about licenses/license file".) (Pivotal 5366016)
- Users that were deleted are no longer displayed on the page "Privileges > Database privileges" in the user management. (See also "Help", topic area "Manage ARIS Connect > Manage users", page "Delete user".) (Pivotal 5378144)

ARIS Publisher

- Swimlane model headers are now displayed in ARIS Publisher in the same way as in ARIS Architect/ARIS Designer. (Pivotal 5374091)

ARIS Collaboration

- Sending e-mail notifications from ARIS Collaboration now works correctly when the "Use authentication" option is enabled. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Set up user management", page "Customize SMTP settings" and "Set up user management > Valuable information", page "What SMTP properties are available?".) (Pivotal 1386414)
- In the Collaboration API, you are now allowed to use spaces and rounded brackets in database names. (Pivotal 5367244)

ARIS Analysis

- The names of models of the "Spreadsheet" type are now correctly displayed in the Versioning Wizard. (See also "ARIS > Help > Working with ARIS", topic area "Create models > Spreadsheets > ", page "Create spreadsheet" and "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Version models", page "Version selected models".) (Pivotal 5373007)

24 Fixes in ARIS 10.0 SR9b

ARIS Risk & Compliance Manager

- Error fixed in data migration with MS SQL Server.

  Error only occurred with an update of older ARIS 10.0 version and only if MS SQL Server is used. Customers with a new installation of ARIS 10.0 SR9 do not need this fix (update to SR9b).

25 Fixes in ARIS 10.0 SR9

ARIS Server

- The creation of new tenants in multi-node environments now no longer fails if tenants were previously deleted from the environment. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > ARIS Server and Tenant Management" > Managing tenants".) (Pivotal 1370465)
- The connection from ARIS Server Administrator and Script Runner installed under Linux to a corresponding server is now correctly established. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports", page "Automatically start reports with Script Runner" and "ARIS Configuration and Administration > ARIS Server and Tenant Management > ARIS Server Administrator".) (Pivotal 5369680)
- The "Select change list" dialog of the login wizard now opens even if no description is available for the relevant change list. (See also "ARIS > Help > Working with ARIS", topic area "Navigate and edit items", page "Open database", link "Versionable databases".)

ARIS Connect

- The performance of the portal in ARIS Connect was improved so that loading and displaying data is faster now. (Pivotal 5363161)
- The navigation button „Go up in hierarchy" is now no longer deactivated when the navigation tree is collapsed. (See also „Help", topic area „Use ARIS Connect > Work in the portal > Views > Navigate", page „Navigate using fact sheet buttons".) (Pivotal 5363975)
- The performance of the Model Viewer in ARIS Connect was improved so that loading and displaying models is faster now. (Pivotal 5364572)
- A correction was made to the standard configurations of ARIS Connect so that users can now view only components for which they have the required privileges. Users are no longer redirected to a component other than the one selected when they click a link to access a component for which they do not have the required privileges. (Pivotal 5365249)
- Highlighting is now refreshed correctly in the Model Viewer when a user with the „ARIS Connect Viewer" and „Contribution" license privileges changes the value of a highlighted attribute. (See also „Help", topic area „Use ARIS Connect > Work in the portal > Contribute as a viewer", page „Change values of items" and „Use ARIS Connect > Work in the portal > Use models > Model Viewer", page „Switch highlighting on".) (Pivotal 5366707)
- Scroll bars are now no longer displayed when the content of the Home area fits entirely in the browser window. (Pivotal 5367745)
- In Collaboration, links included in the message body of e-mail notifications are now displayed in such a way that users can recognize them as links. Furthermore, they are now shown with

the color specified for them in ARIS Administration. (Pivotal 5367335)

ARIS for SAP

- Test path recording was improved in such a way that the memory consumption on ARIS Client no longer exceeds a given threshold, especially when large images are contained in the recorded test models. (See also: "ARIS > Help > Working with ARIS", topic area " Special topics and functions > Test Designer ", page "Generate test paths".) (Pivotal 5358651)
- Document descriptions are now transferred to the SAP system. (See also: "ARIS > Help > Working with ARIS", topic area " Special topics and functions > ARIS for SAP Solutions > Common handling (version independent) > Use SAP documentation", page "Transfer SAP documentation to SAP Solution Manager".)

ARIS Architect / Designer

- When connections are deleted in a model, the layout of the connections that remain in the model is no longer updated. (Pivotal 5365870)
- Corrections were made in order to improve the display of attribute values within object symbols. Values of attributes placed in an object now no longer overlap. (Pivotal 5366753)
- A JDK 1.7-related sorting algorithm was replaced so that saving models now works correctly. (Pivotal 5368423)
- Corrections were made in order to improve the display of graphics in EMF (Enhanced Metafile) format. Graphics of this type are now displayed correctly in ARIS Architect/Designer and in the Model Viewer of ARIS Connect. (Pivotal 5362910, 5368701)
- Improvements were made to the layout algorithms used for Smart Modeling in ARIS Architect/Designer and ARIS Connect. (See also "ARIS > Help" > Working with ARIS", topic area "Create models > ARIS models > Use Smart Modeling" and "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model", page "Use Smart Modeling".)

ARIS Analysis

- Hiding and showing a large number of columns and rows was improved in such a way that all hidden columns and rows now remain hidden when a table is saved and opened again. They are shown again only if a user clicks "Show columns" or "Show rows". (See also "ARIS > Help > Work with ARIS", topic area "Create models > Spreadsheets > Advanced editing", pages "Show hidden columns" and "Show hidden rows".)

ARIS Process Governance

- APG Web services are now able to correctly process input data that does not comply with the UTF-8 format, for example, language-specific special characters. (Pivotal 5369663)

ARIS Report

- Generating a table of contents using ARIS report script API now no longer results in the creation of empty chapters. Instead, the required subchapters are created. (Pivotal 5364167)
- An improvement was made to the report-based import of user-defined models from an Excel file. The objects are now correctly aligned in the models and do no longer overlap. (Pivotal 5364462)
- A correction was made to the ARIS report script API so that texts and table cells are now correctly aligned. (Pivotal 5365264)
- A correction was made to the ARIS report script API so that changes made to a text box are now correctly identified. (Pivotal 5365722)
- Object symbols that are output using ARIS report script API now have a normal size in the report output. (Pivotal 5367043)
- The ARIS report "Output database information" now returns a correct result regarding the user privileges of a user associated with a user group to which no database privileges (neither access privileges nor function privileges) are assigned. If you select the name of an open database, you can start the functionality using the pop-up menu or clicking "Start" > "Database > Output database information". (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases", page "Output database information".) (Pivotal 5368727)
- Documents generated by a report are now correctly assigned the name that the user specified for the report.
- The "IoT device import" report now issues an appropriate error message indicating that no server protocol was specified or that the server protocol specified is wrong.

ARIS Document Storage

- Report script API method "getDocumentById" now returns NULL if a requested document ID is not available. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and semantic > Global objects > Report component interfaces > ADS > ADSRepository", page " getDocumentById(String : ADSDocument).) (Pivotal 5364381)

ARIS Method

- In ARIS Connect, the fact sheet "Option sets" was added to the GDPR configuration set.

ARIS Risk & Compliance Manager

- The GDPR report "Output record of processing activities" is now available in other languages than English.
- Corrections were made to the behavior of date filters. If you specify a point in time for filtering, such as the beginning of a month or the start of a fiscal year, and then manually enter a date, the date entered manually is now used for filtering. This date is no longer overwritten with the point in time that was specified before.
- When a user session expires, now the login dialog is displayed so that the user can log in again.
- The version displayed for an object from the "My issue-relevant objects" list is now the one that was valid when the object was marked as issue-relevant.
- The "My GRC tasks" area in the portal of ARIS Connect is now displayed only to users that have the required privileges. (See also ARIS Risk & Compliance Manager, "Help > Work with ARIS Risk & Compliance Manager" topic area "Manage data in ARIS Connect", page "Show my GRC tasks".)
- If you remove the assignment of a document to an issue, it is now possible for you to assign the document to the issue again.
- ARIS Risk & Compliance Manager now issues an appropriate message during startup if the database user does not have the privileges required for checking the existing database schema.
- Environment backups now also include the current tasks assigned to users (Home > My tasks). (See also ARIS Risk & Compliance Manager, "Help > Work with ARIS Risk & Compliance Manager" topic area "Manage data in ARIS Connect > Use Administration", page "Back up environments".)
- The time for reloading data feeds used in ARIS Risk & Compliance Manager dashboards was set to 15 seconds so that updating data is faster now.
- Migrating data now works correctly even if the internal object ID of the system user changes during database migration.
- It is now possible to specify an end date that is later than 2100.
- Improvements were made to the behavior of ARIS Risk & Compliance Manager in a multi-node installation with a high load and a high access rate.
- The tooltip for model shortcuts in hierarchy forms was changed to "Open model in ARIS Connect".
- User ID and GUID conflicts are now automatically resolved during user synchronization.
- If the "Frequency" attribute is set to "None (only event-driven)", specifying the "Time limit for execution in days" and "Start date" attributes is no longer mandatory. The values for the "Time limit for execution in days" and "Start date" attributes are queried in a dialog during event-

driven generation.

26 Fixes in ARIS 10.0 SR8

ARIS Server

- When a search is performed in ARIS, the name attribute of items found is now always displayed first in the list of search results.
  (See also „ARIS > Help > Working with ARIS", topic area „Navigate and edit items", page „Search for database content".) (Pivotal 5351572)
- When reports containing graphics are run, temporary files are now always correctly deleted from the 'base/temp' directory on ARIS Business Server and High Duty Server.
  (Pivotal 5353690)
- Restarting the cloud search runnable no longer results in the corruption of internal cloud search memory structures in the RAM. This problem and subsequent errors can no longer occur. (Pivotal 5354380, 5356658, 5351826)
- Models including user-defined attributes that were created using older versions of ARIS (older than ARIS 7.0.2) now always successfully open in ARIS Connect Designer.
  (Pivotal 5355213)
- The size of backup files for ARIS databases now no longer increases significantly when a database contains a large number of graphic images.
  (See also „ARIS > Help > Working with ARIS", topic area „ARIS Configuration and Administration > Manage databases", page „Back up databases".) (Pivotal 5357444)
- Unique constraint violation errors can no longer occur during versioning.
  (See also „ARIS > Help > Working with ARIS", topic area „Edit models > Check and approve models", page „Version models".) (Pivotal 5359719)

ARIS BPMN

- The error message relating to the EPC-to-BPMN transformation was improved. It now indicates that the transformation has failed because the method filter in use does not contain the required BPMN object(s).
  (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance", page "Transform models".) (Pivotal 5352854)
- Corrections were made to the 'Start events and end events in a process' semantic check rule. The corresponding semantic check now complies with the BPMN specification.
  (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts", page "Create semantic check".)
  (Pivotal 5354391)

ARIS Connect

- The sorting function used for table-based modeling was improved in such way that sorting model items is now easier and more user-friendly.
  (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Model table-based".) (Pivotal 5336873)
- Diagrams that you open by clicking a link are now always correctly displayed.
  (Pivotal 5349900)
- When 'Fit to window' is selected in the 'Diagram' fact sheet, now the entire space of the window is used for displaying a graphic. Margins are no longer created.
  (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Model Viewer", page "Use the view bar".) (Pivotal 5351721)
- When you refresh a browser, the focus now always stays on the current tab.
  (Pivotal 5351848)
- In ARIS Connect Designer, user-defined symbols now always have the correct size (height and width) when being placed. (Pivotal 5354852)
- If an existing object is placed within another object, this action no longer results in an additional object being created.
  (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Extended editing > Use objects", page "Place an object in an object".) (Pivotal 5352710)
- Toolbars are no longer displayed twice in the diagram view of ARIS Connect.
  (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Customize ARIS Connect Designer > Valuable information", page "How is ARIS Connect Designer structured?".) (Pivotal 5353118)
- When a user tries to access an item component in ARIS Connect without having the required privileges, the user is no longer directed to error page 404. (Pivotal 5354373)
- Customized buttons are no longer displayed twice in ARIS Connect. (Pivotal 5355038)
- Refreshing the display of report notifications now works correctly with Internet Explorer® 11. (Pivotal 5355085)
- The tooltips for the 'Reports', 'Edit tasks', and 'My content filters' buttons are now correctly displayed when the mouse pointer is positioned over them.
  (For example, see "Help", topic area "Use ARIS Connect > Basics", page "Show tasks in My tasks".) (Pivotal 5357379)
- The columns of a matrix from the 'Table' fact sheet are now correctly aligned.
  (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Table", page "Open the matrix of a table".) (Pivotal 5360078)
- The 'Description' column of the 'Overwiew' fact sheet now displays the entire text.
  (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Classic", page

"Groups", Link "Fact sheets of ARIS models".) (Pivotal 5360442)

ARIS Architect / Designer

- Document links that are used as placed model or object attributes and that reference documents whose names use Arabic characters now work correctly. Clicking such a link now opens the relevant document.
  (See also "ARIS > Help > Working with ARIS", topic area "Create models > Place attributes".) (Pivotal 1358189)
- Information marks indicating errors or warnings in a model are now no longer displayed when the relevant semantic check is run again after the errors were fixed.
  (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models", page "Run semantic checks".) (Pivotal 5344373)
- Macros triggering the 'Object is to be copied (vetoable)' event now always run correctly when a definition copy is created in a model.
  (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data", page "Use macros ".) (Pivotal 5350135)
- The names of lanes inserted into BPMN diagrams are now aligned correctly (in the lane headers) when a template is applied to the diagram.
  (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Assign a template to an ARIS model type".) (Pivotal 5350433)
- Links of user-defined link attributes that are read-only are now clickable again.
  (See also "ARIS > Help > Working with ARIS", topic area "Create models > ARIS models", page "Insert executable links for model items".) (Pivotal 5350946)
- In BPMN diagrams, it is now possible to draw a connection from an event subprocess to another pool.
  (See also "ARIS > Help > Work with ARIS", topic area "Create models > BPMN diagrams.) (Pivotal 5353705)
- User-defined symbols are now displayed with the correct size (hight and width) when a model template is applied to a model using a script.
  (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Specify conventions", page "Create template".)
  (Pivotal 5353828)
- Combined values are now correctly displayed. (Pivotal 5354263)

ARIS Publisher

- Links that are used as placed model attributes are now always clickable. (Pivotal 5344739)

- After having selected 'Filters > Characteristics', you can now search for any value in the list. (Pivotal 5356779)

ARIS Report

- When the report script API is used to specify a time zone-dependent attribute, now the correct time is used on servers that are being operated at locations in other time zones. (Pivotal 5347960)
- Reports that are run by the report script API now correctly apply the margin settings specified in the report script. (Pivotal 5348117)
- Corrections were made to the 'Export attribute values for translation' report so that exporting attribute values now works correctly when UML elements are not allowed by the filter in use. (See also „ARIS > Help > Working with ARIS", topic area „Evaluate data > Use reports > ARIS reports > Standard", page „Report: Export attribute values for translation".) (Pivotal 5350935)
- During the procedure of debugging a macro that calls a report, the debugging window now always displays the corresponding report code. (Pivotal 5351697)
- ARIS report script API method „getBpmnParent ()" was improved so that it now returns NULL instead of a null pointer exception when no lane or pool is assigned to a BPMN diagram. (See also „ARIS > Help > ARIS Script", topic area „Methods for reports and semantic checks > Global objects > Report component interfaces > Designer > BPMN 2 Support > Bpmn2ReportServices", page „setBpmnParent (ObjOcc,ObjOcc) : void „.) (Pivotal 5352346)
- Corrections were made to the „Context.getExcelReader()" ARIS report script API method so that this method now successfully opens large Microsoft Excel files on the server. (See also „ARIS > Help > ARIS Script", topic area „Methods for reports and semantic checks > Global objects > Context", page „getExcelReader (byte[])".) (Pivotal 5352498)
- If 'English (United Kingdom)' is configured in addition to the alternative language 'English (United States)' in the ARIS Connect portal, the language fallback mechanism for reports now works correctly, which means that the appropriate language is used for displaying report names. (See also „ARIS > Help > Working with ARIS", topic area „General > Valuable information", page „What are languages in ARIS?".) (Pivotal 5356780)

ARIS Risk & Compliance Manager

- Audit steps that were deactivated are no longer taken into account during audit progression and in evaluations. (Pivotal 5349321)

- Changes were made in order to improve synchronization between ARIS and ARIS Risk & Compliance Manager. In this context, special attention was given to optimizing the deletion of deactivated objects. (Pivotal 5354415)
- Server tasks that become obsolete after the migration of a database are now canceled to make sure that subsequent tasks are able to run. (Pivotal 5359743)

ARIS Method

- Models containing user-defined attribute types that use the 'Value' data type now correctly open in ARIS Connect.
  (See also ARIS Architect, „ARIS > Help > Working with ARIS", topic area „ARIS Configuration and Administration > Manage ARIS Method", page „Create attribute type with values".) (Pivotal 5350065)
- When 'Value-added chain' symbols (ST_VAL_ADD_CHN_SML_1 and ST_VAL_ADD_CHN_SML_2) are zoomed in, now the gray line at the top is no longer removed. (Pivotal 5356996)

27 Fixes in ARIS 10.0 SR7

ARIS Connect

- In ARIS Connect Designer, improvements were made so that sorting a table in table-based modeling is more user-friendly now. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Model table-based".) (Pivotal 5336873)
- The search result is now sorted alphabetically in ARIS Connect. (See also "Help", topic area "Basics", page "Open the search area".) (Pivotal 5338727)
- ARIS Connect now responds immediately when work is resumed (for example, by clicking an assignment icon in a model) after an idle time of several minutes has elapsed. (Pivotal 5338759)
- When you switch to another database on the "Home" tab in ARIS Connect, the models of the other database are now correctly displayed. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Navigate", page "Select database".) (Pivotal 5344137)
- The model viewer in ARIS Connect now correctly displays user-defined attributes, for example, attributes specified for the duration of an operation. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use models > Model viewer".) (Pivotal 5344855)
- The glossary/catalog now always shows the filter options for column headers. (See also "Help", topic area "Use ARIS Connect > Use the Catalog.) (Pivotal 5346667)
- Applying a content filter (role-based filter) now correctly filters the result of the ARIS Connect search. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Use filters.) (Pivotal 5347235)
- A scroll bar was added to the drop-down list box of the glossary/catalog so that you can now select any entry contained in the list. (See also "Help", topic area "Use ARIS Connect > Use the Catalog.) (Pivotal 5347260)
- When you use SSO (Single Sign-On), you are now correctly forwarded to the pages defined in the SAML configuration (entries: "Single sign-on URL" and "Single logout URL"), for example, when you log out from SSO. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Set up user management > Customize ARIS for LDAP server operations", page "Configure single sign-on".) (Pivotal 5347587)
- Temp files generated during a tenant backup are now deleted when the backup is complete. (Pivotal 5347595)
- The "Steps" fact sheet now displays the full name of objects as multi-line text. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information, page "What is the Steps fact sheet for?".) (Pivotal 5347739)

- In a RACI table, columns are now correctly aligned even if a high number of connections is evaluated. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Views > Valuable information, page "What is the RACI fact sheet for?".) (Pivotal 5348209)
- Now, the correct amount of data is displayed for user-defined item types in ARIS Contribution and the corresponding items are editable. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal > Manage configuration and modification sets > Valuable information", page "What is ARIS Viewer Contribution?".)

ARIS Server

- Restoring databases no longer fails with the error message "The file is not a valid ADB file (database archive)" when the network connection is slow or the database is very large. (See also ARIS Architect "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases", page "Restore databases".) (Pivotal 5332789)
- Database reorganization is no longer canceled when locked objects are found in the database. When reorganization is complete, the corresponding result dialog lists all objects that are currently locked by a user. (See also ARIS Architect "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases", page "Reorganize databases".) (Pivotal 5343155)
- Using graphic objects in a high number of models in an ARIS database no longer significantly increases the size of the corresponding ADB backup file. (Pivotal 5347788)

ARIS Report

- The report component is now always correctly initialized in ARIS Connect after ARIS version 9.8 SR7 was migrated to ARIS version 10 SR6. (Pivotal 5349758)

ARIS BPMN

- When you create a call activity in a BPMN diagram but do not have the required privileges for accessing the task or process you selected as a reference, a corresponding message is now displayed. (See also ARIS Architect "ARIS > Help > Work with ARIS", topic area "Create models > BPMN diagrams", page "Place activity of the Call activity type" and ARIS Connect "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Model > Use BPMN modeling support", page "Assign global reference to call activity".) (Pivotal 5341751)

ARIS Analysis

- The "Policy" object is now available in the function view of a macro. (Pivotal 5328060)

- Corrections were made so that showing a subset of hidden columns in a query result now works properly. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use queries".) (Pivotal 5344266)

ARIS Process Governance

- The name of the date selection dialog is now correct and no longer suggests that you can also select a time. (Pivotal 5345641)
- When the "None" button is clicked in the date selection dialog, the selection now closes correctly and the button is no longer renamed. (See also ARIS Architect help "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information > Elements pane", page "Date and time".) (Pivotal 5345644)
- Properties such as "Title" or "Description" are now correctly displayed in Japanese documents uploaded from ARIS Process Governance. (See also "Help", topic area "Use ARIS Connect > Use the repository > Handle documents".) (Pivotal 5346119)
- Links included in e-mails sent from Collaboration are now correctly directed to the configured loadbalancer scheme. (See also "Help", topic area "Manage ARIS Connect > Administrate Collaboration", page "Customize e-mail notifications".)

ARIS Risk & Compliance Manager

- Surveys are no longer closed when the end date of the underlying survey task is reached. They are closed on the end date of the survey itself. (Pivotal 5346365)
- Objects that are deactivated in ARIS Architect and not available in ARIS Risk & Compliance Manager are now ignored during data synchronization.
- The report "Import user data from User Management" now imports a user only once regardless of the number of times the report is run.
- When dashboard links are generated in ARIS Risk & Compliance Manager, ARIS GUIDs (Globally Unique Identifiers) are now provided instead of ARIS Risk & Compliance Manager GUIDs for objects of type "Section", "Questionnaire template", "Question", and "Answer" if these objects were imported from ARIS.
- ARIS Risk & Compliance Manager icons are now correctly displayed in the headers of configuration sets used in ARIS Connect.
- When ARIS 9.8.x is updated to version 10.x by restoring a tenant in ARIS 10.x, the file "aris2arcm-mapping.xml" is now removed from the "Evaluation/Common files" folder ("Administration" tab in ARIS Architect).
- Deleted audits steps are no longer counted in the audit progress or audit evaluation.

- The hierarchy structure in ARIS Risk & Compliance Manager is no longer corrupted when the procedure of synchronizing ARIS and ARIS Risk & Compliance Manager includes only a part of the hierarchy.

ARIS Publisher

- Symbols are now displayed without distortion in published matrix models. (Pivotal 5349074)

ARIS Documentation

- The descriptions of supported commands used by the command-line tool "y-admintool.bat" were updated in the documentation. (Pivotal 5347526)

ARIS for SAP

- When process variants are transferred to SAP Solution Manager, all process variants are now correctly created even if a process variant model in ARIS contains BPMN objects of the 'Call activity' or 'Subprocess' type.

ARIS Document Storage

- You can now perform a tenant backup even if the repository contains files whose size exceeds 2 GB.

28 Fixes in ARIS 10.0 SR6

ARIS Connect

- Long names now have proper line breaks in objects. (Pivotal 5322294)
- When a database was published it now remains selected and visible in the portal if a new change set is activated in ARIS Administration and a hierarchy was added. (Pivotal 5324203)
- Attribute formatting, such as bold and soft hyphens are properly displayed again in ARIS Connect. (Pivotal 5325397)
- Matrix models are now displayed in their entirety even if the representation is set to another value than 100%. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Use models > "Use matrix models".) (Pivotal 5334325)
- Now, the "Model Viewer" shows the "Swimlane View" correctly for models of databases that were published with the "Latest version" option. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Change view" and topic area "Use ARIS Connect > Use the repository > Manage versions", page "Version models".) (Pivotal 5337818)

ARIS Architect / Designer

- Bold and italics and text attribute indentations are now properly displayed in ARIS Connect. (Pivotal 1336224)
- Using BPMN models has been improved. If lanes containing object occurrences are deleted in ARIS Architect using ARIS Explorer, the occurrences are placed in a superior or automatic lane. (See also „ARIS > Help" > Working with ARIS", topic area „Create models > BPMN diagrams".) (Pivotal 5325373)
- The attribute dialog of an object type now shows only those attribute types groups that are allowed for the item type. (See also „ARIS > Help > Working with ARIS", topic area „Edit models > Extended editing > Edit attributes".) (Pivotal 5332745)
- Two new settings are available for ARIS Connect. They used to be available for ARIS Architect only:
    1. Use the entire symbol surface for placing text
    2. Hide non-configured objects

  You can either specify the settings across servers via „defaultserversettings.cfg" or for a tenant by means of the „ARIS Server Administrator" command line tool. (Pivotal 5335732)
- Keyboard control has been improved so that the tab key can now be used for indentation of text attributes and free-form texts. You can also use Shift+Tab to undo an indent. (Pivotal 5335923)

- The model comparison was corrected, so modifications for objects of models within a database are now shown correctly. (See also „ARIS > Help > Working with ARIS“, topic area „Edit models > Check and approve models > Compare models“.) (Pivotal 5336525))

ARIS Process Governance

- The line breaks for the "German" language pack in e-mails from ARIS Process Governance and the "Approve model" mini-workflow have been corrected. (See also ARIS Architect help, "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model data flows > Valuable information", page "What notifications exist?" and ARIS Connect help, "Help", topic area "Use ARIS Connect > Work in the portal > Use models", page "Ask for model approval".)
  (Pivotal 5327769)
- If an operator symbol is selected in a data flow chart by means of a drop-down list, the selected operator symbol now remains selected and can be placed again by a direct click on the symbol in the bar. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model data flows > Operators", page "What are operators?".)
  (Pivotal 5335636)
- The Process board "Tracking" tab is now visible also for users with an ARIS Connect Viewer license. These users can track the tasks started.
  (Pivotal 5335931)
- When downloading documents using the ARIS Process Governance dialog "ADS control", country-specific file names are now properly handled.
  (Pivotal 5337530)
- If the text of the "Date and time" element is changed in Dialog editor, this change is now applied to this dialog element only. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information", page "Which elements can be edited directly in the dialog?".)
  (Pivotal 5338655)
- Write-protected ARIS Process Governance dialog elements can no longer be selected or changed. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information", page "What does read-only mean?".)
  (Pivotal 5340789)
- Write-protected dialog elements of the "Check box list" type (ARIS Process Governance) are now properly handled in ARIS Architect/Designer and in the ARIS Connect portal: they can no longer be selected or changed. (See also "ARIS > Help > Working with ARIS", topic area "Special topics and functions > Process Governance > Evaluate", page "Mandatory semantic

checks macro".)
(Pivotal 5340795)

ARIS Document Storage

- Temporary files are now deleted after ARIS Document storage data has been backed up. (Pivotal 5326189)
- ARIS Document storage data backup is now more robust while backing up the tenant. (Pivotal 5333810)
- ARIS Process Governance Web services now output date values properly based on Coordinated Universal Time (UTC).
  (Pivotal 5336158)
- ARIS Document storage history events are now properly output with language-specific characters, such as Cyrillic.
  (Pivotal 5338047)

ARIS Documentation and Localization

- Help and dialog texts have been improved in various languages, including German and Russian. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage databases", page "Reorganize databases".)
  (Pivotal 5334042)
- The following features are described in the English Online Help. The descriptions will be available in the other language packs from version 10.0 SR 7.
  - Connect - Server requests
  - Dashboards: Map with markers, vector map, heat matrix
  - GRC (non-GDPR) Dashboard for UMG
  - Connect keyboard shortcuts

ARIS Publisher

- It is now possible to select the XLSX file format as the output format of user-defined reports. (Pivotal 5326611)
- The HTML export executes properly now even if not all connection types are allowed by the current method filter. (Pivotal 5330057)

- The "Create process manual" report now executes properly for models in Japanese. (Pivotal 5330802)
- Descriptions are now output for all link attributes in the summary of a newly created Publisher export profile. (See also "ARIS > Help > Working with ARIS", topic area "Publisher > Publisher export", page "Create Publisher export profiles".)
  (Pivotal 5332274)

ARIS Report

- The "Time of last semantic check" value attribute output by the "Mandatory semantic checks" macro now considers the time zone of the client on which the macro runs. (Pivotal 1340920)
- The processing sequence and thus the sort order now remain in the generated document remain the same when performing a semantic check multiple times. (See also ARIS Architect, "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Use Script Editor > Valuable Information", page "What is a semantic check?" and ARIS Connect, "Help", topic area "Use ARIS Connect > Use the repository > Check models and objects > Valuable Information", page "What should you know about semantic checks?".)
  (Pivotal 1341087)
- The ARIS report output object has been corrected so that the background color is now applied to headers even when the headers are numbered. (Pivotal 5328089)
- The ARIS macro script API "Designer.getOID(oObjOcc)" method now returns the proper value. (Pivotal 5328378)
- The "BrowseArisItems" report script API method has been corrected so that dialogs load faster now. (Pivotal 5330524)
- It is now possible to set (set) or query (get) the arrow style using a macro. The following methods are available:
  - Designer.getSourceArrow(model, occ);
  - Designer.getTargetArrow(model, occ);
  - Designer.setSourceArrow(model, occ, arrow type number);
  - Designer.setTargetArrow(model, occ, arrow type number);

  (Pivotal 5333202)
- When ARIS is synchronized with Alfabet, object names renamed in Alfabet are now properly updated in ARIS. (Pivotal 5336129)
- The "Model created" macro event now works properly in ARIS Connect. (Pivotal 5336586)
- If the "inheritAccessRights" function of the ARIS Report script API is used to withdraw privileges, they are now no longer withdrawn from just the superior group, but also from the sub-groups. (See also "ARIS > Help > ARIS Script", topic area "Methods for reports and

semantic checks > Objects > Group", page "inheritAccessRights():boolean".)
(Pivotal 5337237)

- Headers of models containing graphics in EMF format are now properly placed in generated Microsoft Word documents. (Pivotal 5338036)
- Various methods of the "picture" report script API class have been enhanced, and errors concerning the positioning of lines and rectangles over objects have been eliminated. (Pivotal 5338120)

- The "Import data in Excel format" ARIS report script has been corrected, so that the standard symbols of the objects are now properly displayed after the import. (See also "ARIS > Help > Working with ARIS", topic area "Evaluate data > Use reports > ARIS reports > Standard", page "Report: Import data in Excel format".) (Pivotal 5338461)
- Text generated by an OLE object by means of an ARIS report script API into an output document is now properly displayed. (Pivotal 5338751)
- ARIS Connect now supports multi-line text attributes within tables in report dialogs. (Pivotal 5338930)

ARIS Server

- The "updatesystemdb" command can now be run for multiple tenants without causing errors. (See also "ARIS > Help > Working with ARIS", topic area "Glossary > S", page "System database".) (Pivotal 5333258)
- Identifiers are now properly assigned during a merge, even if the "Assign identifiers when creating new database items" property was selected for the target database and new items are created. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Manage Databases", page "Enable automatic ID assignment" and topic area "ARIS Configuration and Administration > Manage Databases > Merge databases".) (Pivotal 5340630)
- All elements considered invalid from an ARIS Method perspective are now removed during database reorganization. (Pivotal 5342774))

ARIS User Management

- The preview of the advanced template configuration of user HTML templates is now properly sent by e-mail. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Set up user management > Customize user-defined notifications", page "Customize default HTML templates for notifications".)
(Pivotal 1330109)

ARIS Accelerators for GDPR

- Several enhancements were made for fact sheets of ARIS Connect:
  - The mandatory attributes have been adapted in several fact sheets.
  - New fact sheets for easy creation of simple questionnaire templates with ARIS Connect are created for the respective objects and models (questionnaire template, section, question, etc.)
  - To facilitate the creation of questionnaire templates with ARIS Connect, new fact sheets are available for objects and models (questionnaire template, section, question, etc.).

29 Fixes in ARIS 10.0 SR5b

General

- Due to an update to version ARIS 10.0 SR5 or during a restore of tenant backup certain ARIS Document Storage data might get lost irrecoverably.

  An update to SR5b will prevent future occurrence of this problem and is recommended even if the problem does not occur yet. If a problem occurs one must restore the latest tenant backup from previous version (before you updated to version ARIS 10.0 SR5), after applying ARIS 10.0 SR5b.

  Only customers using documents from ARIS Document Storage with multiple revisions are affected. Customers using only MS SharePoint are not affected.

ARIS Connect

- If the database is switched, the navigation menu and the breadcrumb path now refresh properly. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Navigate", page "Select database".) (Pivotal 5339381)
- The result is now sorted alphabetically in the "Search" field (quick search), as well as in the search area. (See also "Help", topic area "Use ARIS Connect > Search content", pages "Start quick search" and "Open Search area directly".) (Pivotal 5338727)
- Now, the "Model Viewer" shows the "Swimlane View" correctly for models of databases that were published with the "Latest version" option. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Change view" and topic area "Use ARIS Connect > Use the repository > Manage versions", page "Version models".) (Pivotal 5337818)
- The "Model Viewer" now shows the "Swimlane View" correctly for models of the type "BPMN process diagram (BPMN 2.0)". (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Change view".) (Pivotal 5335339)
- The displayed timestamp was adjusted, so corresponding attributes will now receive correct data. (Pivotal 5331168)
- Now, it is possible to modify Configuration-Sets for own view properly. (See also "Help", topic area "Manage ARIS Connect > Configure ARIS Connect > Configure Portal > Manage configuration and modification sets".) (Pivotal 5338903)

ARIS Process Governance

- Now, the ARIS Document Storage dialog correctly shows document names containing local specific characters of a certain language, for example Turkish. (Pivotal 5337530)

ARIS Risk & Compliance Manager

- The ARIS Risk and Compliance Manager now sends only the specified number of e-mails per second to the User Management Parameter "com.aris.umc.notification.smtp.sendrate".
- Correctly, a control execution task is now displayed only once.
  (Pivotal 5318692)

ARIS Architect / Designer

- The model comparison was corrected, so modifications for objects of models within a database are now shown correctly. (See also "ARIS > Help > Working with ARIS", topic area "Edit models > Check and approve models > Compare models".)
  (Pivotal 5336525)

ARIS Document Storage

- If search restriction by role is activated for ARIS Document Storage then search results will now be linked to the correct document revision. (See also "Help", topic area "Use ARIS Connect > Use the repository > Handle documents > Handle document versions", page "Show version history".)

ARIS Publisher

- Models are now being exported with their complete content, during ARIS publisher exports. (Pivotal 1335415)

30 Fixes in ARIS 10.0 SR5

General

- German user interface items and help texts were updated. (Pivotal 5325922)
- The 'Basic Troubleshooting Guide' and 'ARIS Download Client Configuration' documents are now available for you to solve any problems that might occur when you are trying to start ARIS Download Client using SSL (HTTPS). (Pivotal 5319400)
- Security vulnerabilities were eliminated that might otherwise have been exploited for attacks on ARIS Symbol Editor or XML imports.
- To prevent third-party products from causing security vulnerability, xalan was updated to version 2.7.2.
- The risk of potential Cross-Site Scripting (XSS) attacks on ARIS Connect was eliminated.
- All unnecessary httpd modules were deleted from the load balancer configuration file for security reasons. (Pivotal 5328868)

ARIS Architect / Designer

- The search in ARIS Architect was improved in such way that multi-column search results are now easier to read. (Pivotal 5318945)
- The 'OK' button in the ARIS Architect login dialog now remains active when the 'SSO' and 'Kerberos' options were enabled. (Pivotal 5323420)
- Assigning access privileges in ARIS Architect now works fast regardless of the number of existing users or user groups. (Pivotal 5322347)
- In ARIS Architect, link attributes, such as 'Link1', now work correctly regardless of whether or not the 'Parameter' attribute is also specified. (Pivotal 5325997)
- In ARIS Architect, now the correct model opens when you click a model in a change list. (Pivotal 5329105)
- In ARIS Connect Designer, now all existing object definitions that are allowed by the method are offered to you for selection when you are creating new object occurrences in models. (Pivotal 5329416)
- All changes made to templates in ARIS Architect are now saved correctly. (Pivotal 5331954)

ARIS Setup

- When performing ARIS installations on Linux operating systems, you can use 'y-setenv.sh' scripts to specify the path to the JRE file. (Pivotal 5322055)

ARIS Connect

- It is now possible to add the 'My tasks' area to the ARIS Connect configuration.
- The time for loading the start page of ARIS Cloud Enterprise was significantly reduced. (Pivotal 5325533)
- Renaming a favorite in ARIS Connect no longer results in a copy of the favorite being created. (Pivotal 5324548)
- When a customer-specific database filter is used, the 'Overview' fact sheet no longer shows unfiltered objects. (Pivotal 1329567)
- Sorting GDPR-relevant tables in ARIS Connect now works correctly. (Pivotal 5327738)
- Displaying diagrams in ARIS Enterprise Cloud now always works correctly. (Pivotal 5328227)
- In ARIS Connect, the performance was improved in such way that models to which a filter containing a great number of user-defined models is applied are now displayed much faster when opened for the first time. (Pivotal 5327912)
- The 'My tasks' icon is now correctly displayed in modification sets. (Pivotal 1332924)
- Clicking 'My tasks' in ARIS Connect now correctly opens the 'My tasks' area. (Pivotal 1332932)
- Improvements were made to the sorting and pagination of GDPR-relevant information in ARIS Connect Portal. (Pivotal 5327738)
- Opening models that were imported as XML files from Natural Engineer into an ARIS database no longer causes any problems. (Pivotal 5331605)
- The size of user-defined symbols is now adapted again to the size of the symbols from which they were derived. (Pivotal 5329792)
- The correct model templates are now used in the swimlane view. (Pivotal 5331116)
- Role filters now work correctly again when applied to favorites and search results. (Pivotal 5331991)
- In ARIS Connect, BPMN diagrams are now correctly generated in the swimlane view. (Pivotal 5325563)
- When copied objects are pasted into matrix models in ARIS Connect Designer, also the hierarchy is now displayed correctly. (Pivotal 5329990)

ARIS Analysis

- The performance when working with queries and spreadsheets was significantly improved. (Pivotal 5311809, 1317672, 5315652)

ARIS Process Governance

- Links contained in e-mails sent by Process Governance now reference the correct tenant. (Pivotal 5327919)

ARIS Document Storage

- ARIS document storage now always correctly loads the configuration from the relevant tenant. (Pivotal 5327919)
- ARIS document storage now correctly identifies the relevant tenant even if schema names differ from the standard names 'aris_default' and 'aris_master'.
- ARIS document storage now works correctly when you use the 'Folder administration' access privilege after having updated your ARIS version. (Pivotal 5329520)
- Memory utilization was improved so that restoring tenant data for ARIS document storage now consumes less memory.
- Users are now no longer logged out when they click the 'Copy to clipboard' button in order to copy a document link (ARIS document storage). (Pivotal 5331744)

ARIS Report

- Hyperlinks exported to a Microsoft Excel file by a report are now corrected if they are not URI-compliant. (Pivotal 5324166)
- If you have changed a font format in a report and the corresponding font format is not available on the relevant ARIS Server, the missing font format is now automatically transferred to the '<ARIS installation directory>\fonts' directory.
- The report script API method 'User.getAccessRights(oGroup[], int)' now returns correct values again. (Pivotal 5326738).
- The ARIS report 'Output object information' now correctly displays the background color of a text heading even if numbering is used for this heading. (Pivotal 5328089)
- A correction was made to the macro script API method 'Designer.getOID(oObjOcc)' used in multiple macros so that this method now returns the value NULL only if no result was found by the search. (Pivotal 5328378 & 5330524)
- The report script method 'OutputFormattedText(String p_sHTMLTextString)' no longer inserts unnecessary spaces or line breaks. (Pivotal 5328237)
- The 'Export attribute values for translation' report now also includes attributes specified for UML elements.
- Corrections were made to the report script method 'setLaneAttributeModellingProperties(oTemplateLaneProperties)'. (Pivotal 5329586)

ARIS for SAP

- In ARIS for Process-Driven SAP, reusing process steps from the Process Step Library now works as required. (Pivotal 5327914)

ARIS User Management

- You can now successfully perform a tenant backup even if other operations, such as the execution of a report or a Web service, are running at the same time.
  (Pivotal 5325925)
- The error message that can occur when a user is created by means of LDAP synchronization now has an appropriate wording. (Pivotal 5327550)
- The error that occasionally occurred during validation of user names after an export of user data to a CSV file had been performed (ARIS Administration > User Management > Additional functions > Export user statistics) was fixed.

ARIS Risk & Compliance Manager

- When using the 'ARCM attribute maintenance_CBA' and 'ARCM attribute maintenance_RBA' macros, you can now specify the 'Automatic numbering' and 'Description' attributes as an answer option for questionnaire templates.
- You can now specify the value 0 or higher values for the 'Reserves' loss attribute.
- Object-specific risk management roles are now provided with risk management impact type data that can be used as an input to dashboards. (Pivotal 5324701)
- Synchronizing data between ARIS Architect and ARIS Risk & Compliance Manager now works correctly even if the hierarchy of the database structure is rather complex.
- The button that you can use in ARIS Risk & Compliance Manager to show detailed descriptions for questions now no longer becomes invisible after you have saved a questionnaire.
- Users that have logged in to ARIS Risk & Compliance Manager are now able to edit dashboards and data feeds after having switched to ARIS Connect using the same session.
- The 'questionnaire_answer_data' data view was extended in the REST API (/arcm/api/). The new 'optionset_guid' column is used in DPIA dashboards of the GDPR accelerator.
- In ARIS Risk & Compliance Manager, hierarchy assignment lists now include deleted objects only if the filter specifies that deleted objects are to be displayed.
  (Pivotal 1332550)
- ARIS Risk & Compliance Manager now provides you with shell scripts (*.sh) for creating a database schema (user).

- The ARIS Risk & Compliance Manager macro 'ARCM attribute maintenance_RBA' was adapted in such way that you can now use it to manage user-defined attributes.

ARIS Accelerators for GDPR

- Enhanced questionnaires for processing activity documentation:
  - Recommendations of the German Bitkom association for the record of processing activities include two different sets of subjects to document for Controller role or Processor role. From version 10.0.5, a processing activity documentation questionnaire template is available for each role (Controller and Processor). These questionnaire templates have the following ARIS attribute values:
    - PAD-C for controller role
    - PAD-P for processor role
- Enhanced report for record of processing activities:
  - This feature is in relation with the enhanced questionnaires for processing activity documentation. The Record of processing activities report of ARIS Risk & Compliance Manager selects automatically the correct questionnaire for the organizational unit regarding the role for each processing activity. If the organizational unit is a controller, the report outputs the PAD-C questionnaire template. If the organizational unit is a processor, the report outputs the PAD-P questionnaire template.
- Enhanced dashboard for GDPR Workflow:
  - This feature is in relation with the enhanced questionnaires for processing activity documentation. The GDPR Workflow dashboard of ARIS Aware also includes surveys and questionnaires with the new GDPR questionnaire templates. The attribute value must now be GDPR-PAD, GDPR-PAD-C, or GDPR-PAD-P.
- Several enhancements were made for fact sheets of ARIS Connect:
  - On the fact sheet of a function, the respective processing activity description diagram is shown.
  - On the fact sheet of a processing activity description diagram, a link to the respective fact sheet of the function is shown.
  - On the fact sheet of an organizational unit, the attributes Data protection officer and Data protection representative are available.
  - The fact sheet for the Function object type is separated into two fact sheets. One for the Control symbol type and another for all other Function symbol types. Both fact sheets, control and function, are adapted to GDPR requirements.
- Performance improvements of ARIS queries
  - With Service Release 5, ARIS queries for GDPR dashboards were enhanced in order to improve performance for large ARIS databases.

- New questionnaire for application system qualification
  In some cases, no detailed data object inventories are available. In this case, an assessment of the entire application system can also be the first step to GDPR compliance. Also, data security aspects can serve for a better assessment of data protection risks and measures. With Service Release 5, the application system qualification questionnaire template allows a score-based assessment of application systems. Several data protection and IT security questions with a risk level-based scoring method are included. The total score of the answered questionnaire is an indicator for the risk level of the respective application system.
- New questionnaire for GDPR data protection impact assessment (DPIA)
  In some cases, a data protection impact assessment (DPIA) must be executed for a processing activity. For a better structure and execution of such DPIA workshops, the GDPR data protection impact assessment questionnaire templates include all areas to assess as recommended by the German Bitkom association. Several impact assessment questions with a fulfillment-based scoring method are included. The total score of the answered questionnaire is an indicator for the data protection impact level of the respective processing activity. Furthermore, aspects that are not completely fulfilled can be assigned to issues (mitigation measures) directly from the questionnaire in ARIS Risk & Compliance Manager.
- New report for GDPR data protection impact assessment (DPIA)
  Whenever a data protection impact assessment was executed for a processing activity, the GDPR data protection impact assessment report shows all relevant information regarding the processing activity, related documentation and qualification, risk assessments, any issues or incidents, and the results of the GDPR data protection impact assessment questionnaire.
- New dashboard for GDPR data protection impact assessment (DPIA)
  Whenever a data protection impact assessment was executed for a processing activity, the GDPR data protection impact assessment dashboard shows all relevant information regarding the workflow of the workshop (represented in answered subjects) and the resulting issues (mitigation measures) for a processing activity. New issues regarding aspects that are not completely fulfilled can be created directly from the dashboard.
- New ARIS Connect configuration delta installation files
  From version 10.0.5, you can install the AC configuration for G with the new delta files more easily in your customized AC version. For more information on how to use ARIS Connect delta files, contact your ARIS Service team.
- Fix for GDPR extended management report: The missing Issues chapter was added to the table of content.
- Fix for GDPR record of processing activities and GDPR data protection impact assessment report: If a user to whom the required Survey manager role is not assigned runs these reports in ARIS Risk & Compliance Manager, a message is now displayed.

ARIS Dashboards

- When you click 'My tasks', Process Board now opens correctly and correctly shows a user's tasks even if 'My tasks' was configured as a list entry in modification sets.
  (Pivotal 5327214)
- Dashboards added to the ARIS Connect configuration are displayed in the default language if the interface language is switched to a language in which the name of the dashboard is not specified.
- Modification sets in ARIS Aware now correctly record changes made to the location of dashboards.
- In ARIS Aware, improvements were made to the assignment list display (Modification sets > Dashboards > Edit component).
- Improvements were made to the dialog used for assigning dashboards (Modification sets > Dashboards > Edit component).
- It is now possible to delete dashboard assignments from modification sets (ARIS Administration > Portal > Manage configuration sets > Edit > Components > Dashboards).

31 Fixes in ARIS 10.0 SR4b

General

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

ARIS Connect

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

ARIS Server

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

ARIS Document Storage

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

ARIS Dashboards

- For ARIS Aware content to be displayed faster, the communication protocol is now being compressed.
  (See also "Help", topic area "Use ARIS Connect > Use the repository", page "Use dashboards".) (Pivotal 5320076)
- An error was fixed in ARIS Aware creating the Oracle backend schema for other than the default tenant.

ARIS Process Governance

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

ARIS Risk & Compliance Manager

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

ARIS Publisher

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

32 Fixes in ARIS 10.0 SR4

General

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

The X-Forwarded-For (XFF) HTTP header is a common method for identifying the originating IP address of a client connecting to a web application (like ARIS) through an HTTP proxy or load balancer.
Without this header, the application would see the IP address of the HTTP proxy or the load balancer as the apparent client IP address instead of the IP address of the actual client.

ARIS protection mechanism against brute force login attacks

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

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

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

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

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

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

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

Security

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

ARIS Server

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

ARIS Dashboards

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

ARIS Architect / Designer

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

ARIS User Management

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

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

ARIS Connect

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

ARIS Report

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

Connect. (Pivotal 5311862)

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

ARIS Process Governance

- It is now possible to configure how hyperlinks are to be displayed in input tables used for ARIS Process Governance dialogs. When adding an input table to a screen diagram, you can use the "Display links as icons" check box to specify whether a link is to be displayed as an icon (check box enabled) or as an entire link (check box not enabled). (See also "ARIS > Help > Working

with ARIS", topic area "Special topics and functions > Process Governance > Model > Model dialogs > Valuable information > Element pane", page "Input table".)
(Pivotal 5315987)

ARIS BPMN

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

ARIS Business Publisher

- The folder icon is now correctly displayed in HTML exports. (See also "ARIS > Help > Working with ARIS", topic area "Publish > HTML export", page "Publish models as HTML export".)
(Pivotal 5312654)

- Report script API method "MatrixContentCell.getCxns()" no longer returns only NULL objects, but now returns the required information. (See also "ARIS > Help > ARIS Script, topic area "Methods for reports and semantic checks > Objects > Matrix", page "getContentCells() : MatrixContentCell[]".)
  (Pivotal 5313084)

ARIS Risk & Compliance Manager

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

ARIS Document Storage

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

- ARIS document storage links now correctly refer to the latest document version available. (See also "Help", topic area "Use ARIS Connect > Use the repository > Handle documents > Handle document versions", page "Show version history".)
  (Pivotal 5312227)

ARIS UML Designer

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

Localization

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

33 Fixes in ARIS 10.0 SR3

ARIS Server

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

ARIS Architect / Designer

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

ARIS User Management

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

ARIS Connect

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

ARIS Report

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

ARIS Dashboards

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

the dashboard URL.

ARIS BPMN

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

ARIS Process Governance

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

ARIS Risk & Compliance Manager

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

ARIS Document Storage

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

ARIS Analysis

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

34 Fixes in ARIS 10.0 SR2c

ARIS Server

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

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

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

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

Sample entry for 'optimizedb':

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

Sample entry for restore using '-c checkrebuildall':

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

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

Impact

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

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

Fix

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

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

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

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

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

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

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

35 Fixes in ARIS 10.0 SR2b

General

- ARIS 10.0 SR2b supports now also Amazon AWS Linux.

ARIS Server

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

ARIS Report

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

ARIS for SAP

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

ARIS User Management

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

ARIS Analysis

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

36 Fixes in ARIS 10.0 SR2

ARIS Architect / Designer

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

ARIS Connect

- Text that is entirely displayed in ARIS Architect/Designer is now also entirely displayed in Model Editor instead of being abbreviated by three dots.
  (Pivotal 5297752)

- The attributes "Last user" and "Last change" are no longer updated if no model changes were made.
  (Pivotal 5294234)
- Model Editor now creates assignments correctly when a model is assigned whose name contains a line break. (See also "Help", topic area "Use ARIS Connect > Use the repository > Create and edit models > Extended editing", page "Assign a model to an object".)
  (Pivotal 5289214)
- The configuration of start elements used by the "Steps" fact sheet was corrected.
  (Pivotal 5289554)
- Columns that were added to a matrix can now be deleted by moving the mouse pointer to the column header and clicking the "Delete" icon behind the column name. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Table", page "Remove a column of a matrix".)
  (Pivotal 5284731)
- In Model Viewer, double-clicking an object symbol now opens the corresponding assignment. (See also "Help", topic area "Use ARIS Connect > Work in the portal > Use the portal > Model Viewer", page "Open assignment".)
  (Pivotal 5283974)
- The text wrap functionality now works correctly for all attributes of all objects.
  (Pivotal 5278786)
- The error message that is displayed when logging in to a Japanese version of ARIS Connect fails is now correctly displayed in Japanese.
  (Pivotal 1296327)

ARIS Server

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

ARIS Report

- The "Replace symbol types" report now replaces symbols correctly when the "[All symbols]" option is selected for the current object symbols.
  (Pivotal 5293222)
- A rounding error that occurred when applying the "OutputObject.SetLeftMargin()" and "GetLeftMargin()" report script API methods was corrected so that these methods no longer return wrong values (for example, 12 is no longer returned for a value that is actually 13).
  (Pivotal 5294181)
- The "Database.find(..)" report script API method now handles wildcards correctly.
  (Pivotal 5293159)
- The "SingleSelectElement.getSelectedIndex()" report script API method now returns the correct index when the index was preset.
  (Pivotal 5290796)
- If two carriage returns are inserted between two tables in the design view, only two instead of four spaces are now returned. (See also "ARIS > Help > Working with ARIS", topic area "ARIS Configuration and Administration > Create scripts > Create report > With design view", page "Create report scripts in design view".)
  (Pivotal 5289324)
- When the "Import data in Excel format" report is run, now an automatic layout is subsequently performed to prevent objects from overlapping.
  (Pivotal 5285382)
- Corrections were made to the "XlsSheet.setPicture(...)" report script API method so that results are now also output correctly when the XLSX format is used.
  (Pivotal 5278180, 5294460)
- The 'Export graphic as PDF' report is now available in multiple languages.
  (Pivotal 5297345)
- The ARIS Script help page for the "XlsCell.getCellValue" report script API method now correctly states that the return value of the cell is a string.
  (Pivotal 5289950)

ARIS BPMN

- Pressing F2 now starts direct editing from a condition expression attribute placed for a connection.
  (Pivotal 5294322)
- When a task is transformed into a call activity, the system now checks whether a valid symbol is used for the task. If not, the action is canceled. Thus, the semantic check that is subsequently run to validate the BPMN diagram no longer returns a symbol-related error.
  (Pivotal 5278385)

- It used to be possible to insert more than one lane into a pool when using drag and drop. Now, only the first lane is allowed to be inserted via drag and drop. To add an additional lane to a pool, you have to proceed as follows:
  1. Place a lane in the model window.
  2. Select both the newly placed lane and the pool to which you want to add the lane.
  3. Activate the BPMN tab.
  4. Click "Insert lane" (ARIS Connect) or "Pool and lane > Insert lane (ARIS Architect/Designer)".

  (Pivotal 5279298)
- Transforming BPMN object types sometimes resulted in connections no longer being allowed, for example, after having transformed a function into a manual task. It is now possible to add required connections via a corresponding filter.
  (Pivotal 5276811)

ARIS Setup

- The ARIS Server setup now allows white spaces in the server installation path.
  (Pivotal 5288382)

ARIS User Management

- ARIS Cloud Controller (ACC) commands now work correctly when the user password contains an @ character.
  (Pivotal 5298229)
- The expiry date is now exported correctly when usage statistics are exported to a CSV file. The field names of the JSON export now match the column names of the CSV export.
  (Pivotal 5293022)
- During LDAP user synchronization, users that were deleted from the configured LDAP system are now also removed from User Management.
  (Pivotal 5287731, 5285602)

ARIS Dashboards

- If the language is changed in the "Repository" view for dashboards, the view is automatically refreshed and shown in the language selected (ARIS Connect > Repository > Dashboards & Data feeds).
  (Pivotal 5296180)

- Dashboards are now filtered even if no dashboard description is available.
  (Pivotal 5294453)

ARIS Process Governance

- When you jump from an error list of a failed governance process deployment to an incorrect object, now the relevant model opens and the incorrect object is selected (i.e., the selection is no longer removed).
  (Pivotal 5292682)

ARIS Analysis & Queries

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

ARIS Publisher

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

ARIS Risk & Compliance Manager

- If a questionnaire is generated, the interviewee in charge receives a corresponding notification.
- The monitor job now closes migrated task items properly.
- Once the import of an ARCM backup including configured dashboards is complete, the "My dashboards" button is now immediately available in the "Home" area.
- Object-specific control managers now can view the data available in assignment lists ("Control -> Control executions" and "Control execution tasks-> Control execution").
- If you want to assign an existing question to a section, you can now filter the questions in the assignment list.
- The test manager, tester, and test reviewer now can also view the data available in the assignment list (Test case -> Surveys and test case -> Questionnaires).

- Performing a backup or restore on a tenant other than the tenant configured for ARCM now completes without errors.
- It is no longer possible to enter negative values for integer parameters in the system configuration in the "Administration" area.
- The "News" panel in the "Home" area is visible only if news is actually available. Otherwise, this panel is hidden.
- Now, the correct module is highlighted in the module navigation when the module is changed starting from a form, for example, when a hierarchy is opened from a risk form.

37 Fixes in ARIS 10.0 SR1

ARIS Architect / Designer

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

ARIS Server

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

ARIS Report

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

ARIS BPMN

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

ARIS Setup

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

ARIS Risk and Compliance Manager

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

ARIS Mobile API

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

38 Disclaimer

ARIS products are intended and developed for use by persons. Automated processes, such as the generation of content and the import of objects/artifacts via interfaces, can lead to an outsized amount of data, and their execution may exceed processing capacities and physical limits. For example, processing capacities are exceeded if models and diagrams transcend the size of the modeling area or an extremely high number of processing operations is started simultaneously. Physical limits may be exceeded if the memory available is not sufficient for the execution of operations or the storage of data.

Proper operation of ARIS products requires the availability of a reliable and fast network connection. Networks with insufficient response time will reduce system performance and may cause timeouts.

If ARIS products are used in a virtual environment, sufficient resources must be available there in order to avoid the risk of overbooking.

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

If projects or repositories are larger than the maximum size allowed, a powerful functionality is available to break them down into smaller, more manageable parts.

Some restrictions may apply when working with process administration, ARIS Administration ARIS document storage, and ARIS Process Board, and when generating executable processes. Process Governance has been tested and approved for 1000 parallel process instances. However, the number may vary depending on process complexity, for example, if custom reports are integrated.

Versioning: Length of a changelist description is limited to 1000 chars.

39 Data protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

40 Support and legal information

This section provides you with some general information regarding product support and legal aspects.

40.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product. Please read the Release Notes and take the information into account when installing, setting up, and using the product.

If you want to install technical and/or business system functions without using the consulting services provided by Software GmbH, you require extensive knowledge of the system to be installed, its intended purpose, the target systems, and their various dependencies. Due to the number of platforms and interdependent hardware and software configurations, we can describe only specific installations. It is not possible to document all settings and dependencies.

When you combine various technologies, please observe the manufacturers' instructions, particularly announcements concerning releases on their Internet pages. We cannot guarantee proper functioning and installation of approved third-party systems and do not support them. Always follow the instructions provided in the installation manuals of the relevant manufacturers. If you experience difficulties, please contact the relevant manufacturer.

If you need help installing third-party systems, contact your local Software GmbH sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard Software GmbH software maintenance agreement and can be performed only on special request and agreement.

40.2 Support

PRODUCT SUPPORT

We provide support for ARIS products to all customers with a valid support contract.

Contact our Global Support services at ARIS Community to raise and update support incidents and post ideas and feature requests.

COMMUNITY

Register with ARIS Community to download products, updates and fixes, find expert information, and interact with other users.

DOCUMENTATION

For information on how to use and activate products and for other technical support questions, visit the ARIS Documentation website.

If you want to give feedback on any documentation topic, write to documentation@aris.com.