SERVER UPDATE INSTALLATION GUIDE

ARIS 10

October 2026

This document applies to ARIS Version 10 and to all subsequent releases.

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

Copyright © 2010-2026 SAG Aris GmbH, Saarbrücken, Germany and/or its subsidiaries and/or its affiliates and/or their licensors.

The name ARIS and all SAG Aris GmbH product names are either trademarks or registered trademarks of SAG Aris GmbH and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

The Software may contain or be distributed with certain commercial third party components (“Third Party Components”), which may be subject to special license terms and conditions (“Third Party Terms”) located at https://aris.com/terms.

Third Party Terms include important licensing and warranty information and disclaimers of third party licensors. For the avoidance of doubt, if Customer uses the Software in accordance with the Documentation, the Third Party Terms do not restrict the rights granted under this Agreement. In the event that a third party manufacturer no longer provides active support for any Third Party Component, Supplier will use commercially reasonable efforts to respond to any issues with the Software related to the Third Party Components.

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with SAG Aris GmbH and/or its subsidiaries and/or its affiliates and/or their licensors.

Table of Contents

1. Update installation 4
1.1. How to prevent the setup from failing 5
1.1.1. Check all files 5
1.1.2. Set write attribute to all files 6
1.1.3. Make files accessible that are used by other processes 6
1.1.4. Update from ARIS version 10.0.21 or lower 6
1.2. Backup and restore data 7
1.3. Update ARIS server 9
1.4. Update Linux installation 11
1.4.1. How to check the virtual memory setting 12
1.5. Manually restore installation 13
1.6. Reindex modeling data for each tenant 15
1.7. Reindex Enterprise Search (CES) 16
1.8. Automatic system database updates 17
1.9. Make online help available (optional) 17
1.9.1. Update the ARIS online help 18
1.10. Security advice 19
1.10.1. Safety recommendation: Block AJP ports 19
1.10.2. Check open AJP ports (Ghostcat vulnerability) 19
1.11. Database connection 21
1.11.1. Configure the database connection for additional schemes 22
1.11.2. Update external service (database clusters) 23
1.11.3. Encrypt passwords 24
1.12. Make fonts available 25
1.13. Add fonts in ARIS Architect 25
1.14. How to start ARIS Cloud Controller (ACC) 26
2. Support and legal information 29
2.1. Documentation scope 29
2.2. Support 29
2.3. Legal notices 30

1. Update installation

The update installation setup is available for ARIS 10 servers that have been installed by a setup program. So each ARIS server is installed on one machine (single-node installation). If you currently run ARIS in version 10.0.18 or lower, you must update to version 10.0.21 first and then update to ARIS in the current version. The direct update to the current version is blocked in server setup, the agent setup, and via ACC **update** command.

Check whether the intermediate ElasticSearch 8 migration to service release 21 is finished

Check the extended state of the ElasticSearch runnables using the ACC **list** command. There must not be an extended state **red** displayed anymore.

You can now continue with the update from ARIS service release 21 to ARIS in the current version.

ARIS Risk and Compliance

The update setup also updates ARIS Risk and Compliance installations with customizing. If the customizing contains unsupported changes or additional files, the warning **Update/patch setup not supported** and a list containing the affected files are output in the log file. To ensure that all customized files are available, the customizing must be enhanced again. For detailed information, refer to **ARCM – Installation Guide > Installation of a customer-specific version (Customizing)**. The ARIS Risk and Compliance server update procedure is described in the ARIS Risk and Compliance Installation Guide.

On Linux systems you must first
update ARIS Cloud Controller (ACC) and the ARIS agent. Then perform an update setup [11].

The **default** tenant will be updated and migrated automatically. All other tenant's system databases must be updated manually to get the most current script and method update.

To update customized installations, for example, multi-node systems, when an ARIS installations spans across several computers, contact your local sales organization [29].

When you update or uninstall ARIS by an ARIS setup, the current installation will automatically be backed up. This process takes additional time and requires additional disk space while the setup is running. Make sure that the size of the free disk space is at least 15 GB larger than the folder size of the working directories <ARIS installation path>\server\bin\work (Windows®) or /home/ARIS10/cloudagent/work (Linux). The update will fail if there is insufficient free disk space. If the update process fails, all ARIS components will be rolled back automatically.

If you use an external database management system backup these systems before running an update setup. In case of a failed update you will be able to restore the external database systems, too.

Before updating backup all tenant's data [7] (see: **ARIS Cloud Controller Command-Line Tool.pdf**) and read the **ARIS Release Notes.pdf** for last-minute information which couldn't be included in this document anymore. Read the documents on the ARIS Documentation website or download them from the ARIS Download Center.

Prerequisites

- You have downloaded the ARIS installation package to have access to the required files. To download the package, you need access to the ARIS Download Center where a login is required.
- Due to the current Tomcat (Ghostcat) vulnerability, block [19] all ports except the load balancer HTTPS port.
- In the highly unlikely event of running reports during an update, the system database might fail to be updated. Make sure to lock scheduled reports before starting the update.
- Use the **reconfigure** ACC command to change settings, such as ports.
- Make sure that no file in the installation directory is locked. Therefore, close all Command Prompts pointing into the ARIS installation folder. If the prerequisites are not met and files are not writable [5], the setup fails because files cannot be updated. In this case, your installation cannot be automatically restored, and ARIS may no longer run. To restore your installation, you must take further action.
- Make sure to exit ACC before running the update setup.

1.1. How to prevent the setup from failing

If the prerequisites are not met and files are not writable [5], the setup fails because files cannot be updated. In this case, your installation cannot be automatically restored, and ARIS may no longer run. To restore your installation, you must take further action.

It is a good idea to check whether all files stored in the ARIS server installation directory are not locked by other users or processes. You can also force all files to be writable. The user account running the **ARIS agent 10** Windows service must have permission to delete and write files. This is the **system** user on **Windows** operating systems and the **ARIS10 user** on **Linux** operating systems.

1.1.1. Check all files

If you currently use ARIS 10.0.6 or a later ARIS version, the **check file system permissions** ARIS Cloud Controller command is executed automatically when you run the setup. This command checks whether all files in the ARIS server installation work directory can be deleted. This check takes quite a while if executed on a running ARIS system. As a result, the first 10 detected files causing a problem are listed. If more files were found not to be writable, they are listed in the **agent.log** file.

You can manually execute this command before you start the setup to discover possible problems. If you do so while all runnables are started, this check will take a long time and a lot of wrong warnings are reported. This is because some files are regularly locked when ARIS is running, such as files related to the **elastic** runnable.

To reduce runtime and the number of warnings, it is recommended that you stop all runnables before you execute the **check file system permissions** ARIS Cloud Controller command.

This is an example of the **check file system permissions** ARIS Cloud Controller command that was executed on a distributed ARIS server installation containing three nodes.

```
Node n1: Permission problems found in one runnable:
Permission problems found for runnable adsadmin_1:
       Found 1 file that is missing the permission WRITE:
       U:\ARIS10.0\server\bin\work\work_adsadmin_1\tools\bin\Documents.zip

Node n2: No permission problems found.
Node n3: No permission problems found.
```

```
Problems were found on node n1 regarding the file permissions of the runnable
adsadmin_l.
Command failed with exit code 100.
Elapsed Time : 0h 54min
```

1.1.2. Set write attribute to all files

To force all files to be writable, execute the following commands.

In **Windows** operating systems, this command sets the **write** attribute to all files:

```
attrib -r <Installation Directory>\bin\work\*.* /s
```

In **Linux** operating systems, the following commands are executed by the RPM package. The commands allow the **aris10** user accessing all files:

```
ARIS Version >= 10.2
. /etc/aris10.conf
cd $TARGETDIR
chown -R aris10 *

ARIS Version < 10.2
cd /home/ARIS10
chown -R aris10 *
```

1.1.3. Make files accessible that are used by other processes

Even if files are readable, they can be blocked when accessed by other processes. To release all locks make sure to:

- Close all ARIS command-line tools, such as **ARIS Cloud Controller**, **ARIS server Administrator**, **ARIS document storage Command-Line Tool**, or **Process Governance Command-Line Tool**.
- Close all command prompt boxes that you use to start command-line tools, such as **y-datadump.bat**, **y-elasticsearch.bat**, **y-ldapsync.bat**, **y-password.bat**, or **y-tenantmgmt.bat**. Use the task manager or the process explorer to identify processes accessing the files.
- Sign off all other users to release all possible file locks.
- Reboot the machine to assure that no user has access to any file.

1.1.4. Update from ARIS version 10.0.21 or lower

If you currently run ARIS version 10.0.21 or lower, you cannot update directly to the current ARIS version. If you are running version 10.0.18 or lower, two intermediate updates are required before you can reach the current version. The direct update to the current version is blocked in server setup, the agent setup, and via ACC update command.

Procedure

1. Check your current ARIS version.
   - If you are running version 10.0.18 or lower, first update to version 10.0.21, then continue to step 2.
   - If you are running version 10.0.21, continue directly to step 2.
2. Update to version 10.2026.4.
3. Start your ARIS installation to initiate the required migration step.
4. Wait until all runnables have reached the `STARTED` state.

   Some runnables, in particular Elasticsearch, may remain in the `STARTING` state while the migration is running. Do not interrupt this process.
5. Check the extended state of the ElasticSearch runnables using the ACC `list` command. There must not be an extended state **red** displayed anymore.
6. Update from ARIS version 10.2026.4 to the current ARIS version.

1.2. Backup and restore data

Before you perform an update installation [4], please make sure to save all tenant's important data before starting the setup process. Administrators can save tenant data in different ways.

- Using the Tenant Management tool is a way to backup and restore the infrastructure tenant (master) as well as all productive tenants.

  By default, backups are stored in the ARIS server installation directory (..\server\bin\work\work_umcadmin_<s, m or l>**backup**). If you have not yet defined a different folder on a physical drive, make sure to save the backup folder. As the default **backup** folder is overwritten by the update, all backups are lost.
- Using the ACC command **backup tenant** will save all important data of a specific tenant at once. Tenants can be restored using the **restore tenant co**mmand.

If you use an external database management system, backup these systems before running an update setup. If the update process fails all ARIS runnables will be restored automatically. In case of a failed update you will be able to restore the ARIS content managed from the external database systems, too. We recommend making a backup of your ARIS related relational database management system.

You can also save data individually:

Database

In ARIS, click **Application launcher > Administration > Databases**, select the database, and click **Back up**. In ARIS Architect on the **Administration** tab, use the **Backup** functionality.

On the command line tool ARIS Server Administrator, using the **backup** or **backupasn** commands.

In ARIS Server Administrator, use the backupsystemdb command to backup filters, method modifications (such as user-defined attributes, model types etc.), configuration, queries, report scripts, macros and semantic checks. Alternatively, you can back up the data mentioned before individually as follows.

Filter

In ARIS, click **Application launcher > Administration** > **Conventions > Filters**, select a filter and click **Export**. In ARIS Architect on the 'Administration' tab, use the function **Export**.

Method and configuration

In ARIS Server Administrator, using the **backupsystemdb** command.

Report scripts and macros

In ARIS, click **Application launcher > Administration > Evaluations**, select a report or macro, and click **Export**. In ARIS Architect on the **Administration** tab individually backup scripts with the function **Export** in the pop-up menu for a script. If you have adapted standard scripts and standard files instead of copies the individual backup is mandatory. All standard scripts and standard files, except XML files, will be overwritten by an updated. Modifications will be lost.

In ARIS Server Administrator, using the **backupsystemdb** command.

Queries and ad hoc analyses

In ARIS Architect on the **Administration** tab with the **Back up analysis data** function.

When you perform an update installation, add languages, or uninstall a component, the relevant files and directories are backed up automatically. A selection of files is listed here to provide examples for server installations:

- <ARIS installation directory>\server\backup
- <ARIS installation directory>\server\data (saved databases after uninstallation)
- <ARIS installation directory>\server\sysconfig
- <ARIS installation directory>\server\templates

Configuration and modification sets

You can back up the configurations that you configured via the graphical user interface in ARIS Administration on the **Configuration** tab with the **Backup** function (Publication settings > Manage configuration sets).

The **default** and the **classic** configuration set must not be modified. These sets, holding all new features, are used as template for all future modification sets. The **default** and the **classic** configuration sets are automatically updated.

If the **default** or the **classic** configuration set was modified on file level, all changes are lost after the update. To keep the modifications, proceed as follows:

Copy the folders of the modified default or custom configuration sets from <ARIS installation path>\server\bin\work\, for example:

- **work_copernicus_<s**, **m** or **l>**\base\webapps\ROOT\WEB-INF**config\default**
- **work_abs_<s**, **m** or **l>**\base\webapps\abs\WEB-INF**config\default**
- If a Heavy-duty Server (HDS) is in use, the related folder of the **hds_<s**, **m** or **l>** runnable must be copied as well.

After the update, the content of the **default** and the **classic** folders are updated, and your modifications are lost. Paste the copied folders into the <ARIS installation path>\server\bin\work\ subfolders, for example:

- **work_copernicus_<s**, **m** or **l>**\base\webapps\ROOT\WEB-INF**config**\<name of the customized **default** configuration set>
- **work_abs_<s**, **m** or **l>**\base\webapps\abs\WEB-INF**config**\<name of the customized **default** configuration set>
- If a Heavy-duty Server (HDS) is in use, the related folder of the **hds_<s**, **m** or **l>** runnable must be copied as well.

Warning
To make the content update-proof, the folder must be named other than **default**, for example, **customized_default**.

New ARIS functionality will not be available in the copied configuration sets. You can manually copy additional lines from the updated **default** or **classic** configuration sets and paste them to the related customized configuration sets. This advanced configuration requires high knowledge on XML configuration, that can be acquired in the instructor-led **ARIS Connect Portal Configuration** training course, which is available to partners and customers at ARIS Academy. Errors in XML configuration files may cause strong impact. You might not be able to start ARIS again.

Depending on the level of customization, you are recommend using a prepared customization package obtained by the original customizer. If you need help, contact SAG ARIS GmbH for a customization request. Customization and training services are not subject to the standard software maintenance agreement. Configuration changes can only be performed by SAG ARIS GmbH if you requested and agreed on them.

1.3. Update ARIS server

To update the installed version run the most recent ARIS server installation program. If you currently run ARIS in version 10.0.18 or lower, you must update to version 10.0.21 first and then update to ARIS in the current version. The direct update to the current version is blocked in server setup, the agent setup, and via ACC **update** command.

Check whether the intermediate ElasticSearch 8 migration to service release 21 is finished

Check the extended state of the ElasticSearch runnables using the ACC **list** command. There must not be an extended state **red** displayed anymore.

You can now continue with the update from ARIS service release 21 to ARIS in the current version.

When you update or uninstall ARIS by an ARIS setup, the current installation will automatically be backed up. This process takes additional time and requires additional disk space while the setup is running. Make sure that the size of the free disk space is at least 15 GB larger than the folder size of the working

directories <ARIS installation path>\server\bin\work (Windows®) or /home/ARIS10/cloudagent/work (Linux). The update will fail if there is insufficient free disk space. If the update process fails, all ARIS components will be rolled back automatically.

Restrictions

- If you use an external database management system backup these systems before running an update setup. In case of a failed update you will be able to restore the external database systems, too.
- If you update ARIS make sure to exit ARIS Cloud Controller before running the update setup.
- During the update, you will in general need the following credentials:

  User name/password of the ARIS agent (default values are **Clous**/**g3h31m**)

Warning
Process Governance backup archives greater than 2 GB might lead to insufficient TEMP space issue when restoring them into ARIS with Oracle back end. For such large backups, extend the temp tablespace size before restoring operation executed.

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

- Deleting any Process Governance process instance, process version, or process

- Archiving Process Governance process instances

- Backup/restore tenant (containing Process Governance or ARIS document storage data)

Procedure

1. Back up all tenants data [7].
2. Exit ARIS Cloud Controller.
3. Start the update setup as the same administrator that has installed ARIS.
4. Enter the ARIS agent user's credentials. The update process starts. The **default** tenant's system database is updated automatically.
5. When the setup is completed
   a. Reindex modeling data for each tenant [15].
   b. Update the system databases for all additional tenants.
6. If you previously had added certificates to your current system in order to allow SSL connections between ARIS server and external systems, you must make these certificates available again after each update of the ARIS agent. Certificates stored in the JRE of the ARIS agent are used, for example, if you use SSL access and dashboards or LDAP. These certificates are overwritten by an update. If you update ARIS server, the latest JRE will be installed with its own cacert keystore.

7. If you use ARIS document storage, adjust timestamps manually.

   In previous ARIS versions, ARIS document storage stored timestamps, for example **Creation time** and **Update time**, referred to documents and folders in local server time and without any time zone information. If data was moved between ARIS servers or if a tenant was restored from a backup file, timestamps were likely adjusted using a wrong time offset.

   Since ARIS 10 SR6, **Coordinated Universal Time** (UTC) is mandatory for timestamps stored by ARIS document storage. Because time zone information in existing data is not available, the timestamps of existing documents and folders cannot be adjusted automatically. After the update to ARIS 10 SR6, you must manually adjust the timestamps. In a Windows-based installation with local time UTC-2, for example, use the **y-admintool.bat** command-line tool and, considering UTC offset of your ARIS servers, enter the following:

   y-admintool.bat -s https://localhost -t default adjustTimestamps -offset "-120" -u system -p manager

   If you have restored a tenant from backup file created with ARIS 10 SR5 or earlier, you must adjust the timestamps as well.
8. Make sure that all fonts are available [25].

ARIS is up to date.

Make sure that you also update locally installed clients.

If the update process has failed all ARIS runnables will be restored automatically. Please restore your external database system using the backup.

1.4. Update Linux installation

To update one ARIS version to the next you must update ARIS Cloud Controller (ACC) and the ARIS agent. After ACC and the ARIS agent are up to date, you must run the update setup remotely from a Windows machine. If you currently run ARIS in version 10.0.18 or lower, you must update to version 10.0.21 first and then update to ARIS in the current version. The direct update to the current version is blocked in server setup, the agent setup, and via ACC **update** command.

Check whether the intermediate ElasticSearch 8 migration to service release 21 is finished

Check the extended state of the ElasticSearch runnables using the ACC **list** command. There must not be an extended state **red** displayed anymore.

You can now continue with the update from ARIS service release 21 to ARIS in the current version.

Prerequisites

- Make sure to copy the new installer packages contained in the ARIS installation package (..\Linux setup) to the Linux system's hard drive that fit to your system:

  ARIS agent

  Red Hat: aris10-cloud-agent-<version>.x86_64.rpm

  SUSE: aris10-cloud-agent-SLES<version>.x86_64.rpm

  Optionally copy aris10adm-<number>-1.x86_64 and aris10-scriptrunner-<number>-1.x86_64 and aris10-acc-<version>-1.x86_64.rpm
- Ensure that the virtual memory available on your Linux operating system is set to [12] **262144 [12]**.

Procedure

1. Update ARIS Cloud Controller (ACC):
   rpm –Uvh aris10-acc-<version>-1.x86_64.rpm
2. When ACC is updated, run the commands depending on the Linux operating system.
   a. Using **Red Hat**, run:
      rpm –Uvh aris10-cloud-agent-<version>.x86_64.rpm
   b. Using **SUSE**, run:
      rpm –Uvh aris10-cloud-agent-SLES<version>.x86_64.rpm
      Due to changed paths warnings are logged. These warnings can be ignored, for example:

```
Cleaning up / removing
2:aris10-cloud-agent-10.0.1.1168090warning: file /home/ARIS10/
support.xml: remove failed: No such file or directory
warning: file /home/ARIS10/jre/plugin/desktop/sun_java.png: remove
failed: No such file or directory
```

3. If you updateARIS version **10.0.0** or **10.0.1**, start the ARIS agent, enter:
   service ArisCloudagent10 start
4. Start the update setup remotely from a Windows machine. Start the update setup as the same administrator that has installed ARIS.
5. Select the **Perform installation on a remote computer** option and enter the name of the remote server.
6. If you have changed the remote access credentials you must enter the new credentials using the **Enter changed credentials** option. Once after the installation process is completed, reindex modeling data for each tenant [15], update the system databases for all additional tenants, and configure the system if required.
7. Make sure that all fonts are available [25].

1.4.1. How to check the virtual memory setting

From ARIS 10 SR4, the **elastic** runnable (elastic search) requires more virtual memory on your Linux operating system in order to prevent indices from causing out-of-memory exceptions. On the machine where the **elastic** runnable is installed, check which value the **vm.max_map_count** system parameter is currently set to.

For this, use the **sysctl vm.max_map_count** command. If the value is lower than **262144**, change it to **262144**.

To change the value for this session only, use the following command (root access permissions required):

sudo sysctl -w vm.max_map_count=262144

This command changes the value for the current session only. After a reboot, this change is undone.

To change the value persistently, add this line to the **sysctl.conf** configuration file that is available in the ARIS installation directory on your machine:

vm.max_map_count=262144

1.5. Manually restore installation

If the setup failed because prerequisites were not met, you must recover your ARIS installation [13] and run the setup again.

Procedure

1. Check the tasks, log files, and error messages to locate the locked files and make them writable again [5].
2. Check if all files are writable [5].
3. List all backups that were made from the runnables on this node and identify the backup ID of the backup you want to use. To do so, execute the **list runnable backups** ARIS Cloud Controller command, such as:

```
ACC+ n1>list runnable backups
On node n1:
for instance abs_1 (GroupId = com.aris.modeling.components, ArtifactId = y-
server-run-prod):
   BackupId = 0    Date = 2020-07-11 Time : 01:11:14 Version = 10.0.12
   BackupId = 1    Date = 2020-07-13 Time : 01:17:10 Version = 10.0.12
```

   BackupId = 2 Date = 2020-07-14 Time : 11:29:16 Version = 10.0.12
4. Restore all runnables that caused the setup to fail. Therefore, execute the **restore runnable backup** command one after another for each related runnable.

   Syntax:

   <nodeSpecWithAllNodes>? "restore" ("instance" | "runnable")? (backups | backup) (<instanceId> <backupId>?)?

   This command restores runnable backups on the current node, a specified node, or on all nodes. If only an instance ID is specified, the last backup of this instance is restored. If a backup ID is specified in addition to the instance ID, the backup with the given backup ID is restored. If no instance ID is specified for any of the configured runnables, the last backup available is restored.

   Example:

```
ACC+ n1>restore runnable backup abs_1 1
This will restore the backup 1 (created at 2020-07-13 01:17:10) for
runnable abs_1 on n1 (GroupId = com.aris.modeling.components, ArtifactId =
y-server-run-prod, Version = 10.0.12.1).
Are you sure? (Y/N)
y
Restore confirmed by user.
Successfully restored runnable abs_1 from backup 2020-07-13 01:17:10.
```

5. If the remote repository cannot be accessed, switch to the internal repository. To do so, enter:

   set local.repository.only=true
6. When you restored all related runnables, enter **list** and check if all runnables are available in the recovered state.
7. Make sure again that all prerequisites are met so that the setup can access and delete the required files.

8. Run the setup again related to your operating system.

> **Warning**
> Do not start the setup before the runnables are restored because the setup will fail again. Since the maximum number of backups created by a setup is three, you risk data loss after unsuccessfully updating your installation three times.

9. Adapt your modified files if required according to your installation protocol.
10. Check the patched installation.
11. Start all runnables. Therefore, you can use the **startall** ARIS Cloud Controller command or the ARIS > Administration > **Start ARIS Connect Server** link in the Windows **Start** menu.

Your ARIS server installation is patched. All bugs mentioned in the related **Readme** document are fixed.

Restore an ARIS installation

If you updated your installation successfully, all listed bugs are fixed. If you have problems with these fixes, you can manually restore all runnables to their pre-patched state using the **Restore runnable backup** ARIS Cloud Controller command.

Procedure

1. Stop all runnables using the **stopall** ARIS Cloud Controller command on each node.
2. Check if all files are writable [5].
3. List all backups that were made from the runnables on this node and identify the backup ID of the backup you want to use. To do so, execute the **list runnable backups** ARIS Cloud Controller command, such as:

```
ACC+ n1>list runnable backups
On node n1:
for instance abs_1 (GroupId = com.aris.modeling.components, ArtifactId = y-
server-run-prod):
   BackupId = 0    Date = 2020-07-11 Time : 01:11:14 Version = 10.0.12
   BackupId = 1    Date = 2020-07-13 Time : 01:17:10 Version = 10.0.12
```

BackupId = 2 Date = 2020-07-14 Time : 11:29:16 Version = 10.0.12

4. Restore all runnables. Therefore, execute the **restore runnable backup** command one after another for each related runnable. You can identify the runnables by the build number that is related to the build.

   Syntax:

   <nodeSpecWithAllNodes>? "restore" ("instance" | "runnable")? (backups | backup) (<instanceId> <backupId>?)?

   This command restores runnable backups on the current node, a specified node, or on all nodes. If only an instance ID is specified, the last backup of this instance is restored. If a backup ID is specified in addition to the instance ID, the backup with the given backup ID is restored. If no instance ID is specified for any of the configured runnables, the last backup available is restored.

   Example:

```
ACC+ n1>restore runnable backup abs_l 1
This will restore the backup 1 (created at 2020-07-13 01:17:10) for
runnable abs_l on n1 (GroupId = com.aris.modeling.components, ArtifactId =
y-server-run-prod, Version = 10.0.12.1).
Are you sure? (Y/N)
y
Restore confirmed by user.
Successfully restored runnable abs_l from backup 2020-07-13 01:17:10.
```

5. If the remote repository cannot be accessed, switch to the internal repository. To do so, enter:

   set local.repository.only=true

6. When you restored all related runnables, enter **list** and check if all runnables are available in the recovered state.

The setup was rolled back and your installation is in the same state as before.

1.6. Reindex modeling data for each tenant

Depending on the ARIS version used, this step is optional but strongly recommended. If you are updating from ARIS version **10.0.16.0**, **10.0.18.0**, **10.0.24.0** or from an ARIS version lower than one of the previously mentioned versions, it is strongly recommended to reindex the modeling data.

By default, reindexing is started automatically at the first login to each database. Alternatively, you can reindex a specific database manually. Go to **Publication settings**, select a database and click **Reindex**. Reindexing takes some time to complete, which may delay user logins. The database is unavailable while it is being reindexed. If your databases contain large amounts of data, we recommend reindexing all databases on each tenant during the update maintenance window.

Warning
Do not use ARIS while databases are reindexed using the **maintainAll** ACC command. Make sure that no scheduled tasks are running, such as backups or reports. During **maintainAll** users cannot log into a database.

If you attempt an update without backing up your data, you run the risk of system outages and/or data loss, for which SAG ARIS GmbH assumes no responsibility.

The syntax of the ACC command is as follows:

on <node name> invoke maintainAll on <abs instance ID> tenant.name="<tenant ID>" tenant.user.name="<user name>" tenant.user.pwd="<password>"

- **<node name>**: Name of a node that contains an ABS instance.
- **<abs instance ID>**: Instance ID of this ABS instance.
- **<tenant ID>**: ID of the related tenant.
- **<user name>** and **<password>**: User credentials of a user related to the specified tenant. This user must have ether have the Database administrator or the Server administrator function privilege. You can also enter the credentials of the superuser user. Make sure to use quotes to avoid any problems with special characters.

Example (ACC)

If you want to reindex your databases contained in the **mycompany** tenant on node **n1** that contains the **abs_m** instance, and you use the **system** user (password is **1234ArisAdmin**), enter:

on n1 invoke maintainAll on abs_m tenant.name="mycompany" tenant.user.name="system" tenant.user.pwd="1234ArisAdmin"

Example (ARISserver> Administrator)

As an alternative to the **maintainAll** ACC command, after login to each tenant, you can use the **maintain all** ARIS server Administrator command:

Interactive mode

server <server name>:<port> <tenant> <user> <password> maintain all

Batch mode

arisadm.bat -s <server name>:<port> -t <tenant> -u <user> <password> maintain all

1.7. Reindex Enterprise Search (CES)

After you updated your ARIS version, you must reindex the Enterprise Search (CES). One option is to use the **createcesindex** ARIS Server Administrator command. Another option is to manually trigger a reindex.

Use ARIS Server Administrator

Procedure

1. If you have installed ARIS server, navigate to **<ARIS installation path>\server\bin\work\work_abs_<s, m,** or **l>\tools\arisadm** and run the batch file.

2. Establish a connection to the ARIS server and tenant:

   Syntax: **server <ARIS server name>:<port number> <tenant> <user name> <password>**

   Example: **server arissrv:1080 default system manager** or **server arissrv:443 default system manager -ssl**

   To use the interactive mode, enter: **server <server name>:<port> <tenant> <user> <password> createcesindex** or use the batch mode and enter: **arisadm.bat -s <server name>:<port> -t <tenant> -u <user> <password> createcesindex**

Reindex manually

Procedure

1. In ARIS click **Application launcher > Administration.** **Configuration** is displayed.
2. Click **Publication settings**. The databases are listed.
3. Enable the check box of the database you want to reindex.
4. Click **Reindex**.
5. The Enterprise Search (CES) is being reindexed.

1.8. Automatic system database updates

The system databases of all tenants are updated automatically. The system configuration, which includes ARIS method extensions, report scripts, scheduled reports, macros, filters, and templates, will be updated. Default semantic checks will no longer be updated automatically, with the following exceptions:

- Allocation rules
- Model attribute rules
- Object attribute rules
- Relationship attribute rules
- Existence rules
- Rules for BPMN diagrams (BPMN 2.0)

For these six rule types, the code is updated while the configuration remains unchanged. Any user-defined modifications made to the configuration will not be overwritten. To use the latest semantic checks, you can import them manually from the ARIS installation package (ARIS_Installation_and_Documentation\Content\Reports\Common_files and ARIS_Installation_and_Documentation\Content\Semantic Checks).

1.9. Make online help available (optional)

From **Service Release 28** and higher, documents and online help are no longer installed. If your company does not allow access to the ARIS Documentation Website, you can provide this content using an internal Web server with SSL configuration and redirecting ARIS.

Prerequisites

- You have access to a Web server with SSL configuration.
- You have downloaded the zipped help file from the ARIS Download Center, for example **ARIS_Installation_and_Documentation_<version>.zip**, and unzipped it to the **Root** directory of your Web server.

Procedure

1. Start ARIS Cloud Controller (ACC) [26] and establish a connection.
2. Enter the path to your internal Web server on which the documents and the online help are provided:
   help.url="<URL to your Web server>"
   Syntax: "https://<server>:<port number>"
   The default path is: **help.url="https://docs.aris.com/"**
3. To reconfigure the **abs**, **copernicus**, and **arcm** runnables using the **help.url** of your Web server, enter the following on all nodes:
   reconfigure abs_<s, **m**, or **l> help.url="<URL to your Web server>"**
   reconfigure copernicus_<s, **m**, or **l> help.url="<URL to your Web server>"**
   reconfigure arcm_<s, **m**, or **l> help.url="<URL to your Web server>"**
4. To specify the version of the content to be used, enter the following for each runnable on all nodes:
   reconfigure <runnable> help.version="10.2026.4.0"
   Example
   reconfigure abs help.version="10.2025.10"

The help is redirected to your internal Web server.

After an update setup, the help on your internal Web server will keep the current version until you have downloaded the corresponding zipped help file from the ARIS Download Center and updated your Web server.

1.9.1. Update the ARIS online help

From **Service Release 28** and higher, the **online help** files are no longer part of the runnables. That is why help files must be updated by so-called **enhancements** that add files to a runnable. Updating a runnable removes such enhancements. Hence, the help files of the new ARIS version must be added again.

The basic structure of an enhancement command for adding the help to runnables **apg**, **umcadmin**, **adsadmin**, is as follows:

on <node name> enhance <instance ID> with help <help artifact> <version> type war

where:

<node name> is the logical name of the node, for example, **n1**.

<instance ID> is the instance ID of the runnable you want to add the help to, for example, **umcadmin_m**.

<help artifact> is the technical name of the actual set of help files, for example, **com.aris.documentation.architect**. The technical name can be different for the help of different runnables.

<version> is the version you are updating to, for example, **10.2026.4.0**.

1.10. Security advice

Due to the Tomcat (Ghostcat) vulnerability, you are recommended to block [19] access to all **AJP** ports if you use an ARIS version prior to **10.0.12.0**.

1.10.1. Safety recommendation: Block AJP ports

The **Apache JServ Protocol** (AJP) is a binary protocol that can proxy incoming requests from a web server to an application server behind the web server. AJP is a highly trusted protocol. It must not be made available to untrusted clients because they could gain access to confidential information or execute code on the application server.

ARIS uses AJP for communication between the **loadbalancer** runnable that bases on Apache HTTPD and ARIS applications that base on Apache Tomcat. The vulnerable Tomcat AJP connector is mandatory and must stay active for ARIS applications.

If you have installed ARIS server according to our recommendations, you can block access to the ports of all runnables except the HTTP and HTTPS ports used by the **loadbalancer** runnable by setting appropriate firewall rules. By default these HTTP and HTTPS ports are **80** and **443** on Windows operating systems and **1080** and **1443** on Linux operating systems.

To prevent unauthorized access, check that the [19] **AJP [19]**
ports of your ARIS installations are only accessible from networks from which users access ARIS [19]. The **show node** ACC command gives an overview of open **AJP** ports. It lists all ports used by ARIS runnables. The **connector.ajp.port** parameter (in former ARIS versions called **CATALINA_AJP_PORT**) identifies **AJP** ports. If any of these ports are accessible from an external network, you must block access immediately by your firewall.

Important: If your ARIS system is a multiple node installation, the **AJP** ports must remain open for data transfer between multiple nodes. These open **AJP** ports do not represent a security gap, because distributed ARIS installations must always be protected by a firewall.

1.10.2. Check open AJP ports (Ghostcat vulnerability)

To prevent unauthorized access,
check that the **AJP** ports of your ARIS installations are only accessible from networks from which users access ARIS [19].

Procedure

1. Start ARIS Cloud Controller (ACC) [26] and establish a connection.

2. To check ports used by runnables, enter: show node
   The list is displayed. Navigate to the Known used ports section.

```
Port   Runnable       Port                                          Parameter
443    loadbalancer_m HTTPD.ssl.port                                Set
explicitly
1080   loadbalancer_m HTTPD.port                                    Set
explicitly
14200  cloudsearch_m  zookeeper.application.instance.port           Set
explicitly
14201  cloudsearch_m  JAVA-DCSHTTPPORT                              Set
explicitly
14206  cloudsearch_m  JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14220  elastic_m      ELASTICSEARCH.http.port                       Set
explicitly
14226  elastic_m      JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14230* elastic_m      ELASTICSEARCH.transport.tcp.port              Set
explicitly
14240  postgres_m     postgresql.port                               Set
explicitly
14250  cdf_m          connector.http.port                           Set
explicitly
14251  cdf_m          connector.ajp.port                            Set
explicitly
14256  cdf_m          JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14281  zoo_m          clientPort                                    DEFAULT
14296  zoo_m          JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14400  abs_m          connector.http.port                           Set
explicitly
14401  abs_m          connector.ajp.port                            Set
explicitly
14406  abs_m          JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14410  adsadmin_m     connector.http.port                           Set
explicitly
14411  adsadmin_m     connector.ajp.port                            Set
explicitly
14416  adsadmin_m     JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14420  apg_m          connector.http.port                           Set
explicitly
14421  apg_m          connector.ajp.port                            Set
explicitly
14426  apg_m          JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
14430  copernicus_m   connector.http.port                           Set
explicitly
14431  copernicus_m   connector.ajp.port                            Set
explicitly
14436  copernicus_m   JAVA-Dcom.sun.management.jmxremote.port       Set
explicitly
```

```
14440  ecp_m          connector.http.port                          Set
explicitly
14441  ecp_m          connector.ajp.port                           Set
explicitly
14446  ecp_m          JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14450  hds_m          connector.http.port                          Set
explicitly
14451  hds_m          connector.ajp.port                           Set
explicitly
14456  hds_m          JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14460  octopus_m      connector.http.port                          Set
explicitly
14461  octopus_m      connector.ajp.port                           Set
explicitly
14466  octopus_m      JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14470  simulation_m   connector.http.port                          Set
explicitly
14471  simulation_m   connector.ajp.port                           Set
explicitly
14476  simulation_m   JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14480  umcadmin_m     connector.http.port                          Set
explicitly
14481  umcadmin_m     connector.ajp.port                           Set
explicitly
14486  umcadmin_m     JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14490  dashboarding_m connector.http.port                          Set
explicitly
14491  dashboardging_m connector.ajp.port                          Set
explicitly
14496  dashboarding_m JAVA-Dcom.sun.management.jmxremote.port      Set
explicitly
14497  dashboarding_m JAVA-Xrunjdwp\:transport                     Set
explicitly
```

The highlighted connector.ajp.port Port parameter indicates all open AJP ports.

3. If any of these ports are accessible from an external network, you must block access immediately by your firewall.

You have secured the system.

Important: If your ARIS system is a multiple node installation, the AJP ports must remain open for data transfer between multiple nodes. These open AJP ports do not represent a security gap, because distributed ARIS installations must always be protected by a firewall.

1.11. Database connection

This chapter provides information on configuring the ARIS server in order to use an external database management system.

1.11.1. Configure the database connection for additional schemes

Assign tenant to database schema

During the setup process you have created an empty Oracle or Microsoft SQL schema for an additional tenant (see Technical Help: ARIS server Installation - Windows or ARIS server Installation Linux). Read the documents on the ARIS Documentation website or download them from the ARIS Download Center. Additionally created tenants must be assigned to the database schema. Replace values in angle brackets, such as **<tenant name>** with your own values, such as new **tenant1**.

1. Start ARIS Cloud Controller (ACC) [26] and establish a connection.
2. To discover the database service ID (<dbserviceID>, such as db000000000), enter:

   list external services

   assign tenant <tenant name> to service <dbserviceID> com.aris.cip.db.schema =<schema name>

   > **Warning**
   > Only use up to 25 lowercase ASCII characters and numbers for tenant names. Names must begin with a character. Special characters, such as the underscore (_), as well as characters in Chinese, Cyrillic, or Arabic, cannot be used.

3. To create a new tenant, enter:

   create tenant <tenant name>

The new tenant is available on ARIS server.

Additional Settings

To enable **validationQuery** for external database connections (Oracle & Microsoft SQL) use the correct validation query for the DBMS.

For Oracle use:

validationQuery="select 1 from dual" and testOnBorrow=true

For Microsoft SQL use:

validationQuery="select 1" and testOnBorrow=true

For better readability, the parameters of the command are shown with line-wraps. For execution you must enter a single-line command.

During registration of external service add parameters, for example, for Oracle:

```
register external service db
url="jdbc:oracle:thin:@<target_host>:<target_port>:<oracle_sid>"
driverClassName="oracle.jdbc.OracleDriver"
username="<cip_app_user>
password="<cip_app_pwd>"
```

```
maxIdle=15
maxActive=100
maxWait=10000
removeAbandoned=false
removeAbandonedTimeout=600
defaultAutoCommit=false
rollbackOnReturn=true
host=<target_host>
port=<target_port>
jmxEnabled=true
validationQuery="select 1 from dual"
testOnBorrow="true"
```

After the external service was already registered, for example, for Oracle:

```
update external service <dbserviceID>
url="jdbc:oracle:thin:@<target_host>:<target_port>:<oracle_sid>"
driverClassName="oracle.jdbc.OracleDriver"
username="<cip_app_user>"
password="<cip_app_pwd>"
maxIdle=15
maxActive=100
maxWait=10000
removeAbandoned=false
removeAbandonedTimeout=600
defaultAutoCommit=false
rollbackOnReturn=true
host=<target_host>
jmxEnabled=true
validationQuery="select 1 from dual"
testOnBorrow="true"
```

Enable validationQuery for external PostGreSQL connection

1. Enter: **stopall**
2. Enter: **reconfigure <postgres_runnable> dbsp.validationQuery="select 1" dbsp.testOnBurrow=true**
3. Enter: **startall**

The database connection is configured.

1.11.2. Update external service (database clusters)

If you have performed an installation using an Oracle or Microsoft SQL database cluster you need to reconfigure the external service after the installation process.

This procedure shows an example for an Oracle database.

Procedure

1. Start ARIS Cloud Controller (ACC) [26] and establish a connection.
2. To connect to an Oracle cluster using a JDBC URL you may use this example:

   update external service <dbserviceID>
   url="jdbc:oracle:thin:@(DESCRIPTION=ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)
   (HOST=<virtual-ip-oracle-cluster>)(PORT =
   <target port>)))(CONNECT_DATA=(SERVICE_NAME=cluster-database-name)))"
   driverClassName="oracle.jdbc.OracleDriver" username="<cip_app_user>"
   password="<new_cip_app_pwd>" maxIdle=15 maxActive=100 maxWait=10000
   removeAbandoned=false removeAbandonedTimeout=600 logAbandoned=true
   defaultAutoCommit=false rollbackOnReturn=true host=<target_host> jmxEnabled=true
   validationQuery="select 1 from dual" testOnBorrow=true

ARIS server can be started using the Oracle cluster.

1.11.3. Encrypt passwords

You can encrypt passwords, such as the **superuser** password. The command line tool **ARIS Server Administrator** is available if you have installed ARIS server or the ARIS Administrator Tools (see Technical Help: ARIS client Installation Guide. Read the documents on the ARIS Documentation website or download them from the ARIS Download Center.

If you have installed ARIS server, navigate to **< ARIS installation path>\server\bin\work\work_abs_<s, m,** or **l>\tools\arisadm** and run the batch file.

Procedure

1. Start **ARIS Server Administrator**. This command line tool is available, if you have installed ARIS server, or the ARIS Administrator Tools (see Technical Help: ARIS client Installation Guide. Read the documents on the ARIS Documentation website or download them from the ARIS Download Center.

   If you have installed ARIS server, navigate to <**ARIS installation path>\server\bin\work\work_abs_<s, m,** or **l>\tools\arisadm** and run the batch file. Under a Linux operating system, execute the **arisadm.sh** shell script instead. The command prompt opens and ARIS Server Administrator is launched in interactive mode.

   If you accepted the program group suggested by the installation program, click **Start > Programs > ARIS > Administration > ARIS Server Administrator 10**.
2. Establish a connection to the server using the server command:

   syntax: server <server name>:<port number> <tenant> <user name> <password>

   example: server localhost:80 default system manager
3. Enter command: **encrypt <pwd_to_be_encrypted>**

   Example:

   encrypt databaseuser

   encrypted password:{crypted}123456789abcdefg
4. Copy the encrypted password, such as **{crypted}123456789abcdefg** to a text editor file.

You can paste the encrypted password to related fields.

1.12. Make fonts available

Fonts define how text attribute values are displayed, such as names or descriptions in models, tables, output files, print outs and PDF outputs. These fonts are related to languages used in ARIS. The fonts used are taken from different sources, such as the operating system (OS), the JRE used and the system database of the tenant.

Since ARIS version 10.0.6, **Azul Zulu** JRE is used as an internally used JRE. This JRE provides no fonts anymore.

Make sure that all the fonts needed are available on the operating system of the machine were by ARIS server is installed or in the related tenant.

- To make fonts available server wide, use the tools and procedures related to the operating system in use.

  If you add fonts to the operating system or delete fonts, you must restart ARIS server so that the changes take effect.
- To make fonts available tenant wide, you must add the missing fonts to the system database of each tenant. You can add fonts using ARIS Architect or ARIS.

  Adding fonts to the system database has the advantages that font sets are update-prove and there is no need restarting ARIS server to make changes available.

1.13. Add fonts in ARIS Architect

Fonts define how text attribute values are displayed, such as names or descriptions in models, tables, output files, print outs and PDF outputs. These fonts are related to languages used in ARIS. The fonts used are taken from different sources, such as the operating system (OS), the JRE used and the system database of the tenant.

When ARIS server is installed on a Windows® operating system, all fonts saved in the **Fonts** folder of the operating system are available for report and model graphic generation. Linux operating systems usually provide a smaller set of fonts.

If you use additional fonts in report scripts or in models, you must add the missing fonts to the system database of this tenant. If a used font is missing, unreadable content appears in report output files or incorrect line breaks show up in model graphics. This can occur, for example, in Japanese, if the default attribute font **MS UI Gothic** is missing. In this case, add at least the **msgothic.ttc** font file.

Warning
If ARIS server is installed on a Linux operating system, usually no Windows® standard fonts are available. To prevent unreadable content or incorrect line breaks, make sure to add all used fonts from your Windows® operating system to the system database of the tenant.

Prerequisite

- You are the script administrator for this tenant.
- You have access to the required font file (*.**ttf** or *.**ttc**).

Procedure

1. In ARIS Architect, click **ARIS >** **Administration**.
2. Click **Navigation** in the bar panel if the **Navigation** bar is not activated yet.
3. In the navigation tree, click the folder **Evaluations >** **Fonts**. All additional fonts available in the system database of this tenant are listed. If no fonts are displayed, only the fonts of the Windows® operating system are in use. These fonts are not displayed here.
4. Click **Add font**. The dialog for file selection opens.
5. Navigate to the required **ttf** or **ttc** file.

   If you want to add fonts, such as the **msgothic.ttc** font file from your **Windows/Fonts** folder, you must first copy them to a different folder. The **Windows/Fonts** folder cannot be used as source folder because the Windows® operating system does not allow direct access.
6. Select the font files and click **Open**.

The fonts are added to the system database of this tenant. They are available for reports and model graphic generation.

If you want to delete a font, move the mouse pointer to the required font, right-click, and click **Delete**.

1.14. How to start ARIS Cloud Controller (ACC)

ACC is a command-line tool for administrating and configuring an ARIS installation. ACC communicates with the ARIS agents on all nodes. You can use ACC in multiple modes (see Technical Help: ARIS Cloud Controller Command-Line Tool). Read the documents on the ARIS Documentation website or download them from the ARIS Download Center.

> **Warning**
> ACC commands will majorly impact your system. They require profound knowledge of the technical ARIS infrastructure and environment. This knowledge can be acquired only by attending related training courses. These are provided by ARIS Academy. According to the standard software maintenance agreement, we cannot guarantee proper functioning if you use ACC commands without this knowledge or without our services.

ARIS Cloud Controller (ACC) can be used in three modes:

Interactive mode (default)

ACC runs with an interactive shell, allowing you to manually issue commands.

Batch mode

Batch mode is activated by specifying a command file with the **-f** command line parameter (see ACC command line parameters below). ACC will execute the commands in the file in the given sequence and exit after execution or if one of the commands fails.

A command file line starting with **#** will be interpreted as a comment line and ignored by ACC.

Command mode

You can directly pass a single command to ACC as a command line parameter. The command will be executed and ACC will exit.

When passing commands directly as a command line parameter, you must be careful when escaping strings in your command, for example, double-quote-delimited parameters. The operating system command shell will eliminate the double quotes, leaving your string parameter un-escaped. Therefore, make sure to escape the quote characters and special characters.

Examples

If you issue the command in command mode, for example:

```
    set remote.repository.url="http://something.com/repo"
```

you must enter:

```
    acc.bat -h localhost -u <user name> -pwd <remoteAccessPassword> set
remote.repository.url=\"https://something.com/repo\"
```

If you enter:

```
    acc.bat -h localhost -u <user name> -pwd <remoteAccessPassword> set
remote.repository.url="https://something.com/repo"
```

ACC will return an error message, for example:

```
    line 1:52 mismatched character '<EOF>' expecting '\n'
    Invalid or erroneous command "set     remote.repository.url=https://
something.com/repo ": line 1:30 extraneous i    nput ':' expecting EOF
    Use "help" to display a list of available commands.
```

This also affects passwords and names containing special characters. If you try to back up your tenants with the following command, make sure to escape the quote characters and the special character **&** used in the password **User&12345**.

If your user name or password includes any special character, add a backslash (****) before the character for ACC to process the special character as a string. If your password contains an ampersand (**&**), add a backslash before the ampersand.

```
    ./acc.bat -h localhost -u Clous -pwd g3h31m -p 18011 -c     ../
generated.apptypes.cfg backup tenant default username=\"admin\"
password=\"User\&12345\"
```

To obtain information about the usage of ACC commands, enter **help** or **help <command>**.

Windows operating system

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

Linux operating system

To start ACC under a Linux operating system, execute the **acc10.sh** shell script. To do so, enter: **su -c acc10.sh aris10**. After the ARIS server installation was completed on a Linux operating system, the **aris10** user is locked and has no password. Command-line tools (**sh** files), such as **ARIS server Administrator** or **ARIS Cloud Controller** can only be started by the **aris10** user related to the ARIS agent.

- To unlock the **aris10** user, enter: **passwd -u aris10**
- To interactively enter a password, enter: **passwd aris10**
- To start the command-line tools, enter: **su -c acc10.sh aris10** or **su -c arisadm.sh aris10**
- To execute these command-line tools as an ARIS user without **root** privileges, you must enter the password of the **aris10** user.
- To copy files manually into the **ARIS** directory, as the **aris10** user enter the commands: **su aris10** and **sudo aris10**

  As an ARIS user without **root** privileges, you must make sure that the files have the correct ownership (**aris10**).
- To lock the **aris10** user again enter: **passwd -l aris10**

2. Support and legal information

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

2.1. 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 SAG ARIS 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 ARIS sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard ARIS software maintenance agreement and can be performed only on special request and agreement.

2.2. Support

Product support

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

Information on product version availability and support, as well as sustained support dates, is available at ARIS Community.

Contact our Global Support services at ARIS Community to raise and update support incidents, or 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.

2.3. Legal notices

This document applies to ARIS Version 10 and to all subsequent releases.

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

Copyright © 2010-2026 SAG Aris GmbH, Saarbrücken, Germany and/or its subsidiaries and/or its affiliates and/or their licensors.

The name ARIS and all SAG Aris GmbH product names are either trademarks or registered trademarks of SAG Aris GmbH and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

The Software may contain or be distributed with certain commercial third party components (“Third Party Components”), which may be subject to special license terms and conditions (“Third Party Terms”) located at https://aris.com/terms.

Third Party Terms include important licensing and warranty information and disclaimers of third party licensors. For the avoidance of doubt, if Customer uses the Software in accordance with the Documentation, the Third Party Terms do not restrict the rights granted under this Agreement. In the event that a third party manufacturer no longer provides active support for any Third Party Component, Supplier will use commercially reasonable efforts to respond to any issues with the Software related to the Third Party Components.

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with SAG Aris GmbH and/or its subsidiaries and/or its affiliates and/or their licensors.