



ARIS SYSTEM REQUIREMENTS

VERSION 10.0 - SERVICE RELEASE 11
December 2019

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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| Supported Server Operating System Platforms | | | | | | | | | | | | | | | |
|--|------|-----|---------------------------------|---------------------|------------------------|---------------------|---------------------|------------|-------------------------|-------------------------|--------------------------|-----------------------|------------------|--------------------------------------|--|
| Operating System (only 64 bit) (1) (4) | | | Windows Server 2008 R2 SP1 (12) | Windows Server 2012 | Windows Server 2012 R2 | Windows Server 2016 | Windows Server 2019 | Windows 10 | Linux RedHat ES 6.x (8) | Linux RedHat ES 7.x (9) | Linux RedHat ES 8.x (10) | Linux CentOS 7.x (11) | SUSE Linux ES 12 | Hosted Software (Microsoft Azure) | Hosted Software (Amazon EC2 with Windows / Linux) |
| ARIS Connect Server | 10.0 | YCS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓(6) | ✓(6) | ✓(6) | ✓ | ✓ | ✓ |
| ARIS Design Server | 10.0 | YDS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓(6) | ✓(6) | ✓(6) | ✓ | ✓ | ✓ |
| ARIS Publisher Server (3) | 10.0 | YPS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- |
| ARIS Process Performance Manager | 10.5 | YPI | --- | ✓ | ✓ | ✓ | ✓ | ✓ | ✓(7) | ✓(7) | ✓(7) | ✓(7) | ✓(7) | --- | ✓(5) |
| ARIS Risk and Compliance Manager (3) | 10.0 | YRC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓(6) | ✓(6) | ✓(6) | --- | ✓ | ✓ |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | For ARIS Publisher Server and ARIS Risk and Compliance Manager you need a dedicated machine. This cannot be installed on a machine that running ARIS Connect / Design Server. Please follow instructions in Installation guideline. |
| 4 | x86_64 platforms |
| 5 | PPM only supports Windows based Images on Amazon EC2 |
| 6 | For RedHat/CentOS 7.4 also provided as Docker containers to be used with Docker 17.09, 18.06, 19.03 or Kubernetes 1.9 ff. The update of a Docker/Kubernetes-based ARIS installation from any older version to ARIS 10 SR8 has to be done via a side-by-side installation. Download ARIS Connect on Docker: https://hub.docker.com/_/softwareag-aris-connect Download ARIS Risk & Compliance Manager on Docker: https://hub.docker.com/_/softwareag-arcmm |
| 7 | SAP Content packages SD and MM for ARIS PPM SAP-2-PPM Extractor are not supported on Linux OS |
| 8 | Tested with Linux RedHat ES 6.10 |
| 9 | Tested with Linux RedHat ES 7.7 |
| 10 | Tested with Linux RedHat ES 8.0 |
| 11 | Tested with Linux CentOS 7.7 |
| 12 | End of maintenance Windows Server 2008 R2 will be 14.01.2020 |

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| Supported Client Operating System Platforms | | | Windows 7 (Prof., Ult.) | Windows 8 | Windows 10 (Prof., Ent.) | Windows Server 2008 R2 SP1 (15) | Windows Server 2012 Windows Server 2012 R2 | Windows Server 2016 | Windows Server 2019 | Linux RedHat ES 6.x (10) | Linux RedHat ES 7.x (11) | Linux RedHat ES 8.x (12) | SUSE Linux ES 12 | Linux CentOS 7.x (13) | MacOS 10.13 (14) | Hosted Software (Microsoft Azure) | Hosted Software (Amazon EC2 with Windows) |
|--|------|-------|-------------------------|-----------|--------------------------|---------------------------------|---|---------------------|---------------------|--------------------------|--------------------------|--------------------------|------------------|-----------------------|------------------|--------------------------------------|--|
| Operating System (only 64 bit) (1) (4) | | | | | | | | | | | | | | | | | |
| ARIS Viewer (5) (7) (9) | 10.0 | YBU | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| ARIS Designer (3) (7) (9) | 10.0 | YAD | ✓ (3) | ✓ (3) | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | --- | ✓ | ✓ |
| ARIS Architect (3) (7) (9) | 10.0 | YAA | ✓ (3) | ✓ (3) | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | --- | ✓ | ✓ |
| UML Designer (7) (9) | 10.0 | YUD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | --- | ✓ | ✓ |
| ARIS Connect Viewer (6) (7) (9) | 10.0 | YCSCC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | ✓ | ✓ | ✓ |
| ARIS Connect Designer (6) (7) (9) | 10.0 | YCSDC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | ✓ | ✓ | ✓ |
| ARIS PPM Analysis GUI (7) (9) | 10.5 | YPI | --- | ✓ | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | --- | --- | ✓ (8) |
| ARIS Business Optimizer (7) (9) | 10.0 | YBO | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | --- | --- | --- | --- | ✓ | ✓ |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | ARIS Client with LOCAL only under 64bit Windows |
| 4 | x86_64 platforms |
| 5 | A single license to view ARIS repository contents on all information in ARIS Publisher, to access and maintain IT system attributes in ARIS IT Inventory, and to manage ARIS Process Governance tasks using a browser. |
| 6 | Supported minimal resolution size: 1152 x Y or higher |
| 7 | Please be aware the user interface will be hard to read in case you are using a very high screen resolution (e.g. 4k). |
| 8 | PPM GUI only supports Windows based images on Amazon EC2. |
| 9 | To increase ARIS security, the TLS 1.0 protocol is not supported. TLS 1.2 is supported. |
| 10 | Tested with Linux RedHat ES 6.10 |
| 11 | Tested with Linux RedHat ES 7.7 |
| 12 | Tested with Linux RedHat ES 8.0 |
| 13 | Tested with Linux CentOS 7.7 |
| 14 | Tested with MacBook Pro (2017) |
| 15 | End of maintenance Windows Server 2008 R2 will be 14.01.2020 |

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| Supported Database Systems | | | | | | | | | | | | | |
|--------------------------------------|------|-------|--------------------------|-------------|-------------|-----------|--------------|--------------|--------------|--------------|------------------|----------------|--|
| Database System (1) | | | Standard database system | Oracle 11.x | Oracle 12.x | Oracle 19 | IMS SQL 2012 | IMS SQL 2014 | IMS SQL 2016 | IMS SQL 2017 | IBM DB2 UDB 10.5 | IBM DB2 UDB 11 | |
| ARIS Connect Server | 10.0 | YCS | ✓ (3) | --- | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ (4) | --- | |
| ARIS Design Server | 10.0 | YDS | ✓ (3) | --- | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ (4) | --- | |
| ARIS Publisher Server | 10.0 | YPS | ✓ (3) | --- | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | --- | |
| ARIS Process Performance Manager (7) | 10.5 | YPI | --- | ✓ | ✓ (5) | ✓ | --- | --- | ✓ (6) | ✓ (6) | ✓ | ✓ | |
| ARIS Process Extractor JDBC-2-PPM | 10.5 | YPIJP | --- | ✓ | ✓ | ✓ | --- | --- | ✓ | ✓ | ✓ | ✓ | |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ (3) | --- | ✓ (8) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | --- | |

| Legend | |
|--------|---|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | Only for demo scenarios or small number of users |
| 4 | Installation only with support from Software AG |
| 5 | Supported JDBC driver: 11.2.0.2.0 and higher |
| 6 | SQL Server Standard and Enterprise Editions are supported. |
| 7 | Database connections use the standard JDBC interface. The required JDBC drivers are database-specific and are either part of the database installation or can be acquired from the database manufacturer. |
| 8 | Oracle 12.2.0.2 is recommended. If Oracle 12.1.0.2 is used, the Patch 19509982 must be installed |

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| Supported Web Browser & JAVA version | | | | | | | | | | |
|--------------------------------------|------|-------|----------------------|----------------|-------------|---------------|---------------------|--|--------------|-------------------------|
| Web Browser (1) | | | Internet Explorer 11 | Microsoft Edge | Firefox (7) | Google Chrome | Safari 11 or higher | | JAVA version | Zulu Java 8.x (1.8.0_x) |
| ARIS Viewer | 10.0 | YBU | ✓ (3) | ✓ (5) | ✓ (5) | ✓ (5) | ✓ (5) | | | n.a. |
| ARIS Designer | 10.0 | YAD | ✓ (3) | ✓ | ✓ (5) | ✓ (5) | --- | | | ✓ (4) |
| ARIS Architect | 10.0 | YAA | ✓ (3) | ✓ | ✓ (5) | ✓ (5) | --- | | | ✓ (4) |
| UML Designer | 10.0 | YUD | ✓ (3) | ✓ | ✓ (5) | ✓ (5) | --- | | | ✓ (4) |
| ARIS Connect Viewer | 10.0 | YCSCC | ✓ (3) | ✓ | ✓ | ✓ | ✓ | | | n.a. |
| ARIS Connect Designer | 10.0 | YCSDC | ✓ (3) | ✓ | ✓ | ✓ | ✓ | | | n.a. |
| ARIS Business Optimizer | 10.0 | YBO | ✓ (3) | ✓ | ✓ (5) | ✓ (5) | --- | | | ✓ (4) |
| ARIS Process Performance Manager | 10.5 | YPI | ✓ (3) | ✓ | ✓ (6) | ✓ (6) | --- | | | ✓ |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ (3) | ✓ | ✓ | ✓ | --- | | | n.a. |

| Legend | |
|--------|---|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| n.a. | Not applicable |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | Enterprise mode of Internet Explorer 11 is not supported. (due to various control incompatibilities) |
| 4 | Locally installed clients (e.g. ARIS Architect/Designer, UML-Designer etc) require a 32-Bit JRE. 64-Bit-JREs are not supported for locally installed products. Download clients run with 64-Bit-JREs, but with partly limited functionality, such as using OLE objects in models or saving statistics in Minitab format during simulation. |
| 5 | For security reasons, Java applets are blocked by an increasing number of recent versions of browsers. Due to this blocking behavior, the ARIS download clients can be neither downloaded nor started in such browsers. For this reason, for some releases we provide the ARIS downloader as an additional means of starting download clients. This downloader is a JAR file that can be run using a locally installed Java Runtime Environment (JRE). The download process is identical to the one performed with a Java applet. The downloader checks whether the ARIS download client already exists, downloads a newer version of the ARIS download client, if required, and then launches ARIS. With some browser versions, the new download option is used as the default. Further information is available in the documents on ARIS installation and ARIS administration (Configuration → Download Client). ARIS Publisher extension "SAP connectivity" (start SAP transactions from Publisher) is not supported due to this reason with Microsoft Edge, Google Chrome and Firefox 52 or higher. |
| 6 | For security reasons, Java applets are blocked by an increasing number of recent versions of browsers. Due to this blocking behavior, the ARIS PPM Applet based client can not be started in such browsers. Furthermore Java Applets and Java Webstart are not supported anymore for ARIS PPM 10.3. In this case the ARIS PPM Download Client needs to be used. To use ARIS PPM Download Client on your local desktop computer, you need to have a JRE 1.8.0 installed. |
| 7 | Firefox 60 or higher is recommended. |

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| Supported Web Application Server | | | | | | | | | | |
|----------------------------------|------|-----|--------------|--|--|--|--|--|--|--|
| Web Application Server (1) | | | Tomcat 8.5.x | | | | | | | |
| ARIS Connect Server (3) | 10.0 | YCS | ✓ | | | | | | | |
| ARIS Publisher Server | 10.0 | YPS | ✓ | | | | | | | |
| ARIS Process Performance Manager | 10.5 | YPI | ✓ | | | | | | | |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ | | | | | | | |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | ARIS Connect Applications are running within Apache Tomcat 8.5.x. Deployment within other Application Server is currently not supported. |

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| Supported Mobile Platforms | | | | | | | | | | | | |
|----------------------------|------|-------|----------|----------|----------|----------|--|--|--|--|--|--|
| Mobile OS (1) | | | iOS 10.x | iOS 11.x | iOS 12.x | iOS 13.x | | | | | | |
| ARIS Connect Viewer | 10.0 | YCSCC | ✓ | ✓ | ✓ | ✓ | | | | | | |

| Tested Mobile Devices | | | iPad 6 th generation (3) | iPhone | | | | | | | | |
|-----------------------|------|-------|-------------------------------------|--------|--|--|--|--|--|--|--|--|
| ARIS Connect Viewer | 10.0 | YCSCC | ✓ | --- | | | | | | | | |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | Tested with iPad 6th generation (2019) |

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Supported LDAP systems

Other LDAP systems have to be configured by Software AG Global Consulting Services (GCS).

| LDAP system (1) | | | Active Directory Domain Services Windows 2008 Server | Active Directory Domain Services Windows 2012 Server | Active Directory Domain Services Windows 2016 Server | Active Directory Domain Services Windows 2019 Server | Net IQ eDirectory 8.8 SP8 | Oracle Directory Server Enterprise Edition 11g | IBM Tivoli Directory Server 6.1 | | | | |
|----------------------------------|------|-----|--|--|--|--|---------------------------|--|---------------------------------|--|--|--|--|
| ARIS Connect Server | 10.0 | YCS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| ARIS Design Server | 10.0 | YDS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| ARIS Publisher Server | 10.0 | YPS | ✓ | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | | | | |
| ARIS Process Performance Manager | 10.5 | YPI | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | ✓ (3) | | | | |

| Legend | |
|--------|---|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | If Publisher authenticates against ARIS Central User Management (UMC) |

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| Supported Single Sign-On Technologie | | | | | | | | | | | |
|--------------------------------------|------|-------|----------|--------------|--|--|--|--|--|--|--|
| Single Sign-On (1) | | | Kerberos | SAML 2.0 (3) | | | | | | | |
| ARIS Viewer | 10.0 | YBU | ✓ | ✓ | | | | | | | |
| ARIS Designer | 10.0 | YAD | ✓ | --- | | | | | | | |
| ARIS Architect | 10.0 | YAA | ✓ | --- | | | | | | | |
| UML Designer | 10.0 | YUD | ✓ | --- | | | | | | | |
| ARIS Connect Viewer | 10.0 | YCSCC | ✓ | ✓ | | | | | | | |
| ARIS Connect Designer | 10.0 | YCSDC | ✓ | ✓ | | | | | | | |
| ARIS Publisher Server | 10.0 | YPS | ✓ | --- | | | | | | | |
| ARIS Business Optimizer | 10.0 | YBO | ✓ | --- | | | | | | | |
| ARIS Process Performance Manager | 10.5 | YPI | ✓ | --- | | | | | | | |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ | ✓ | | | | | | | |

| Legend | |
|--------|---|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | For more details see "ARIS Installation and Administration Guide" |

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| Supported Document Management Systems | | | | | | | | | | | |
|---------------------------------------|------|-----|------------------------------|------------------------------|------------------------------|--------------------------------|--|--|--|--|--|
| Document Management System (1) (3) | | | Microsoft SharePoint 2013 | Microsoft SharePoint 2016 | Microsoft SharePoint 2019 | Microsoft SharePoint Online | | | | | |
| ARIS Connect Server | 10.0 | YCS | ✓ | ✓ | ✓ | ✓ | | | | | |
| ARIS Design Server | 10.0 | YDS | ✓ | ✓ | ✓ | ✓ | | | | | |

| Legend | |
|--------|---|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Including all manufacturer's service packs & updates |
| 2 | Planned for next Release (April 2020) |
| 3 | Provided by the SharePoint Adapter for ARIS (SAA). Requires ARIS version 10.0 SR10 and additional license |

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| ARIS Compatibility with other Software AG Products | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|---------------------------------------|---------------------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------|
| Software AG Products | Alfabet 10.0 | API Portal 10.0 | ARIS 10.0 | ARIS Process Performance Manager 10.x | ARIS Risk and Compliance Manager 10.0 | CentraSite / webMethods 9.8 | CentraSite / webMethods 9.9 | CentraSite / webMethods 9.10 | CentraSite / webMethods 9.12 | CentraSite / webMethods 10.x | webMethods/IOT Analytics 10.5 | MashZone NextGen 10.x |
| ARIS 10.0 | ✓ | ✓ | | ✓ (4,5) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1,3) | ✓ | --- | --- |
| ARIS Process Performance Manager 10.5 | --- | --- | ✓ (4,5) | | --- | --- | --- | --- | --- | --- | ✓ | ✓ (4) |
| ARIS Risk and Compliance Manager 10.0 | --- | --- | ✓ | --- | | --- | --- | --- | --- | --- | --- | ✓ |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | M2E Use case |
| 2 | Planned for next Release (April 2020) |
| 3 | Support of REST service in service request szenario between ARIS and CentraSite |
| 4 | PPM Widgets delivered with MashZone Next Gen/Aware are compatible with all PPM versions > 10.1 |
| 5 | Only ARIS 10.0 SR10 and PPM 10.5 |

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| Languages | | | Arabic | Chinese (Simplified Chinese) | Czech | Danish | Dutch | English | French | German | Hungarian | Korean | Italian | Japanese | Polish | Portuguese (Brazilian Portuguese) | Russian | Spanish | Swedish | Turkish |
|----------------------------------|------|-------|--------|------------------------------|-------|--------|-------|---------|--------|--------|-----------|--------|---------|----------|--------|-----------------------------------|---------|---------|---------|---------|
| ARIS Connect Server | 10.0 | YCS | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Design Server | 10.0 | YDS | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Viewer | 10.0 | YBU | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Designer | 10.0 | YAD | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Architect | 10.0 | YAA | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| UML Designer | 10.0 | YUD | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Connect Viewer | 10.0 | YCSCC | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) |
| ARIS Connect Designer | 10.0 | YCSDC | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) |
| ARIS Business Optimizer | 10.0 | YBO | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Publisher Server | 10.0 | YPS | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) | ✓ | ✓ | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ | ✓ (1) | ✓ (1) | ✓ (1) | ✓ (1) | --- | ✓ (1) |
| ARIS Process Performance Manager | 10.5 | YPI | --- | ✓ (1) | --- | --- | --- | ✓ | ✓ (1) | ✓ | --- | --- | --- | ✓ | --- | ✓ | ✓ (1) | --- | --- | --- |
| ARIS Risk and Compliance Manager | 10.0 | YRC | ✓ (3) | ✓ (1) | --- | --- | --- | ✓ | ✓ | ✓ | ✓ (1) | --- | ✓ (1) | ✓ | --- | ✓ (1) | --- | ✓ | --- | --- |

| Legend | |
|--------|--|
| ✓ | Supported / Released |
| --- | Not supported / Not released / Not planned |
| 1 | Documentation and online help in English |
| 2 | Planned for next Release (April 2020) |
| 3 | No RTL layout, translation only |

Unless otherwise specified in our documentation, we encourage installing the latest service packs, patch bundles and fixes for the supported operating systems and products if those are recommended by the respective vendor. Please report defects resulting from fixes, patches, or service packs supplied by 3rd parties to the vendor directly.

Software AG tests its software against specific versions of operating systems and supported products (RDBMSs, JDKs, browsers, application servers, directory servers) and not specifically against all possible combinations of patches, fixes, and hardware that may include that platform. Therefore, Software AG might not use the exact same versions of fixes, patches, or service packs for operating systems and supported software products when troubleshooting a customer issue.

Recommended Hardware Configuration ARIS Design / Connect Server

| Scenario | # Conc. Users | Single Server | Distributed / Fail safe |
|----------|---------------|---------------|-------------------------|
|----------|---------------|---------------|-------------------------|

Recommended Hardware Configuration ARIS Design / Connect Server (without Dashboarding)

| | | | |
|---|---------------|--|-----------------------------------|
| Demo scenario | only for demo | 7 GB (free RAM) / 6 CPU Cores >= 50GB free HD Space | |
| Medium | 1-50 | 24 GB (free RAM) / 12 CPU Cores >= 100GB free HD Space (2) | |
| Large (Oracle or MS SQL recommended) | 50-200 | 36 GB (free RAM) / >= 16 CPU Cores >= 200GB free HD Space (2) | (Individual) Configuration (1) |
| XL, XXL, ... (Custom) (only with Oracle or MS SQL) | >200 | | (Individual) Configuration (1) |

Recommended Hardware Configuration ARIS Design / Connect Server (with Dashboarding)

| | | | |
|---|---------------|--|-----------------------------------|
| Demo scenario | only for demo | 8 GB (free RAM) / 6 CPU Cores >= 50GB free HD Space | |
| Medium | 1-50 | 28 GB (free RAM) / 12 CPU Cores >= 100GB free HD Space (2) | |
| Large (Oracle or MS SQL recommended) | 50-200 | 44 GB (free RAM) / >= 16 CPU Cores >= 200GB free HD Space (2) | (Individual) Configuration (1) |
| XL, XXL, ... (Custom) (only with Oracle or MS SQL) | >200 | | (Individual) Configuration (1) |

Recommended Hardware Configuration ARIS Design / Connect Server (with ARIS Risk & Compliancer Manager without ARIS Aware)

| | | | |
|---|---------------|--|-----------------------------------|
| Demo scenario | only for demo | 9 GB (free RAM) / 8 CPU Cores >= 50GB free HD Space | |
| Medium | 1-50 | 28 GB (free RAM) / 16 CPU Cores >= 100GB free HD Space (2) | |
| Large (Oracle or MS SQL recommended) | 50-200 | 44 GB (free RAM) / >= 24 CPU Cores >= 200GB free HD Space (2) | (Individual) Configuration (1) |
| XL, XXL, ... (Custom) (only with Oracle or MS SQL) | >200 | | (Individual) Configuration (1) |

Recommended Hardware Configuration ARIS Design / Connect Server (with ARIS Risk & Compliancer Manager & ARIS Aware)

| | | | |
|---|---------------|--|-----------------------------------|
| Demo scenario | only for demo | 10 GB (free RAM) / 8 CPU Cores >= 50GB free HD Space | |
| Medium | 1-50 | 32 GB (free RAM) / 16 CPU Cores >= 100GB free HD Space (2) | |
| Large (Oracle or MS SQL recommended) | 50-200 | 52 GB (free RAM) / >= 24 CPU Cores >= 200GB free HD Space (2) | (Individual) Configuration (1) |
| XL, XXL, ... (Custom) (only with Oracle or MS SQL) | >200 | | (Individual) Configuration (1) |

(1) Please contact ARIS Support

(2) We recommend this disc space for a new installation. For an update, we recommend more free HD space (at least 100GB plus size of current work space). We recommend to use SSD (> 5.000 IOPS) for best performance.

(free RAM) This is the memory required for ARIS itself. Additional memory for the operating system or other applications must be added.

Software AG recommends to install ARIS 10.0 not on the same host together with ARIS 9.x. Due to additional functionality, hardware requirements are higher as ARIS 9.8.

Software AG recommends to monitor utilization (of RAM & CPU Cores) in productive environment. Due to the number of users / databases, complexity of databases and other influencing factors, hardware recommendation could be higher. Software AG recommends to run ARIS on dedicated hardware (no other application systems than ARIS on the same host).

The database server (MSSQL/Oracle) must be installed, configured and sized according to the manufacturer's instructions.

To avoid performance issues, the following is recommended:

- A dedicated Oracle database instance should be provided to host ARIS data only
- ARIS Servers and the DBMS server should be on different hosts
- The DBMS server should be on a physical host
- ARIS servers and the DBMS server have to be connected with a high performance network (> 1Gbit/s, very low latency). Network bandwidth and latency should be monitored and have to be ensured at all times, independent from the load on the ARIS servers or other systems that might share the same network connection.

Concerning the sizing of an Oracle database server we recommend to set the memory_target to a minimum value of 4 GB or 10% of the total size of all segments in all schemas, whichever is higher.

Concerning the sizing of a SQL Server instance we recommend to set the "max server memory (MB)" parameter to a minimum of 4000 or 10% of the space that is used in the SQL Server database for ARIS, whichever is higher. In case the SQL server is not dedicated to host only ARIS as application, the value has to be increased in the respective sense.

Recommended Hardware Configuration ARIS Client (Installed ARIS Architect)

| Scenario | # users | Hardware | Bandwidth |
|-------------------------------|---------|---|---|
| without local database system | 1 | 4 CPU Cores / 4GB (free RAM) >= 2GB free HD Space | 100 Mbit/s Lower bandwidths can result in reduced performance. |
| with local database system | 1 | 4 CPU Cores / >8GB (free RAM) >= 20GB free HD Space (plus sufficient disk space for user databases) | |

Recommended Hardware Configuration ARIS Download Client

| Scenario | # users | Hardware | Bandwidth |
|-------------------------------|---------|--|---|
| without local database system | 1 | 4 CPU Cores / 4GB (free RAM) >= 200MB free HD Space | 100 Mbit/s Lower bandwidths can result in reduced performance. |

Recommended Hardware Configuration ARIS Publisher Server

| Scenario | # Conc. Users | Single Server | Controller & Hard disk |
|-----------------------|---------------|---|---|
| Demo scenario | only for demo | 3 GB / 4 CPU Cores >= 10GB free HD Space | |
| Medium | 1 - 100 | 12 GB (2) / 8 CPU Cores >= 50GB free HD Space | SAS/SATA/SSD with RAID 0 option Rapid RAID array |
| Large | 100 - 300 | 32GB (2) / 16 CPU Cores >= 100GB free HD Space | SAS/SATA/SSD with RAID 0 option Rapid RAID array |
| XL, XXL, ... (Custom) | > 300 | (Individual) Configuration (1) | |

(1) Please contact ARIS Support

(2) ARIS Publisher Server setup will configure the memory lower. To increase the memory settings, please provide additional memory for publisher runnable.

Please contact ARIS Support for XL or larger scenarios.

Software AG recommends to monitor utilization (of RAM & CPU Cores) in productive environment. Due to the number of users / databases, complexity of databases and other influencing factors, hardware recommendation could be higher.

If you are about to use all ARIS server types in your system, ARIS Connect Server, ARIS Design Server, ARIS Publisher Server and ARIS Risk & Compliance Manager Server must be installed on different machines. You can only install one server on one machine.

Recommended Hardware Configuration ARIS Risk & Compliance Manager

| Scenario | # Conc. Users | Single Server | Distributed / Fail safe |
|---|---------------|--|-----------------------------------|
| Demo scenario | only for demo | 8 GB / 4 CPU Cores >= 10GB free HD Space | |
| Medium | 1-50 | 24 GB / 8 CPU Cores >= 50GB free HD Space | |
| Large (Oracle or MS SQL recommended) | 50-300 | 32 GB / 16 CPU Cores >= 100GB free HD Space | (Individual) Configuration (1) |
| XL, XXL, ... (Custom) (only with Oracle or MS SQL) | >300 | (Individual) Configuration (1) | |

(1) Please contact ARIS Support

Hardware Scenarios ARIS Process Performance Manager

| Scenario (1) | # Conc. Users | Single Server (Recommended HW) | Distributed / Fail Safe |
|------------------------------|---------------|---|-----------------------------------|
| Small (Demo scenario) | up to 5 | 4 GB 2 CPU Cores >= 20GB free HD Space | |
| Medium | up to 10 | 8 GB 4 CPU Cores >= 50GB free HD Space | |
| Large | up to 100 | 32 GB 8 CPU Cores >= 80GB free HD Space | |
| PPM Client configuration (2) | - | (individual) Configuration (2) | (individual) Configuration (2) |

(1) Small, Medium and Large configuration scenarios only affect ARIS Infrastructure, PPM Core and PPM Web component. PPM Client configuration is not covered

(2) Hardware estimations for PPM Client depend on many attributes of the PPM Customizing. Please contact ARIS Support

Virtual Machine Support

Software AG provides for all its software the definitions of supported, documented platform configurations (referred to here just as 'supported platform') which will include specific Operating System (OS) and hardware configurations, and may include Java Virtual Machine (JVM) and database versions. Customers can use a commercially available virtualization environment for a Software AG production environment if it accurately and completely emulates one of the supported platforms.

Customers who use virtual environments are required to comply fully with their contractual terms and conditions for licensing.

Software AG tests its software for operation on the supported platforms and not specifically against all possible combinations of hardware that might be comprised that operating system (for example, file system, disk controllers, memory configuration, display devices and so on). Therefore, the correct expertise, provision and management of a hardware configuration to support the platform remain the responsibility of our customers, whether directly using physical hardware or a virtualization environment. Software AG recommends physical hardware or, if ARIS products are used in a virtual environment, sufficient resources must be available in order to avoid the risk of overbooking.

Software AG tests and supports certain products on the specific virtualized environments listed in the system requirements section of the product documentation. Customers can use a different virtualized environment that accurately and completely emulates one of the supported platforms; however, if they encounter an issue that Software AG judges might be caused by the virtualized environment, then the customer is responsible for reproducing the issue on an actual supported platform before further analysis can take place. Software AG Global Support will refer customers to the Global Consulting Services group for guidance or recommendation about the use of virtualization software, or, if required, the best approaches for copying a system to a supported platform.

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.

ARIS document storage was tested with 40.000 document items. This includes documents, document versions or folders. We recommend monitoring the number and overall size of stored document items and archiving some document items if needed.