

ARIS SYSTEM REQUIREMENTS

VERSION 10.0 - SERVICE RELEASE 22 April 2023

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 S (only 6	ystem (1) 64 bit) (3)		Windows Server 2019	Windows Server 2022	Linux RedHat ES 8.x (5)	Linux RedHat ES 9.x (6)	Linux CentOS 7.x (7)	SUSE Linux ES 12	SUSE Linux ES 15	Hosted Software (Microsoft Azure)	Hosted Software (Amazon EC2 with Windows / Linux)
ARIS Connect Server	10.0	YCS	√ (10)	✓	✓	✓	✓	✓	✓	✓	✓	✓
ARIS Design Server	10.0	YDS	√ (10)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Process Extractor for ARIS Process Mining SaaS (9)	10.0.22	YMS	√ (10)	✓	✓	✓	✓		✓	✓	✓	✓
ARIS Risk and Compliance Manager	10.0	YRC	√ (10)	✓	✓	✓	✓	✓			✓	✓

Legend	
✓	Supported / Released
	Not supported / Not released / Not planned
1	Including all manufacturer's service packs & updates
2	Planned for next Release (October 2023)
3	x86_64 platforms
4	ARIS Process Performance Manager only supports Windows based Images on Amazon EC2
5	Tested with Linux RedHat ES 8.5
6	Tested with Linux RedHat ES 9.0
7	Tested with Linux CentOS 7.9. End of support announced for 2024-06-30. We recommend to use other Linux versions.
8	SAP-2-PPM Extractor supports the following SAP components: SAP R/3 >= 4.6C or SAP System with BASIS component >= 620 or S/4HANA Requires SAP connector >= JCO 3.0.9
9	Process Extractor for ARIS Process Mining SaaS supports SAP Systems with SAP BASIS component >= 700 or S/4HANA Requires SAP connector >= JCO 3.1
10	Windows Server 2016 will no longer be supported with the next version (October 2023)

Supported Client Operating System Platforms												
Operating System (1 (only 64 bit) (4				Windows 11	Windows Server 2016	Windows Server 2019	Windows Server 2022	Linux RedHat ES 8.x / 9.x	SUSE Linux ES 12 7 ES 15	MacOS 10.13 / 10.14 (3)	Hosted Software (Microsoft Azure)	Hosted Software (Amazon EC2 with Windows)
ARIS Designer (6)	10.0	YAD	✓	✓	√ (7)	✓	✓				✓	✓
ARIS Architect (6)	10.0	YAA	✓	✓	√ (7)	✓	✓				✓	✓
UML Designer (6)	10.0	YUD	✓	✓	√ (7)	✓	✓				✓	✓
ARIS Connect Viewer (5) (6)	10.0	YCSCC	✓	✓	√ (7)	✓	✓			✓	✓	✓
ARIS Connect Designer (5) (6)	10.0	YCSDC	✓	✓	√ (7)	✓	✓			✓	✓	✓

Legend	
✓	Supported / Released
	Not supported / Not released / Not planned
1	Including all manufacturer's service packs & updates
2	Planned for next Release (October 2023)
3	Tested with MacBook Pro
4	x86_64 platforms
5	Supported minimal resolution size: 1152 x Y or higher
6	To increase ARIS security, the TLS 1.0 protocol is not supported. TLS 1.2 is supported.
7	Windows Server 2016 will no longer be supported with the next version (October 2023)

Supported Database Systems										
	Database S	ystem (1)	Standard database system	Oracle 12.2	Oracle 19.x (8)	MS SQL Server 2016 Service Pack 2	MS SQL Server 2017	MS SQL Server 2019	IBM DB2 UDB 10.5	IBM DB2 UDB 11.5
ARIS Connect Server	10.0	YCS	✓ (3)	✓ (5)	√ (5)	✓ (6)	✓ (6)	✓ (6)		
ARIS Design Server	10.0	YDS	✓ (3)	✓ (5)	√ (5)	✓ (6)	✓ (6)	√ (6)		
ARIS Risk and Compliance Manager	10.0	YRC	√ (3)	√ (5)	✓ (5)	✓ (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 (October 2023)
3	Only for demo scenarios or small number of users
4	Installation only with support from Software AG
5	Supported JDBC driver: 12.2.0.0 and higher.
6	Supported JDBC driver: 6.4.0 and higher. SQL Server Standard and Enterprise Editions are supported.

Supported Web Browser & JAVA version											
	Web Br	owser (1)	Microsoft Edge (6)	Firefox (7)	Google Chrome (8)	Safari 13 or higher		JAVA version	Java 8.x (4)	Java 11.x	Java 17.x (5)
ARIS Designer	10.0	YAD	✓	✓	✓				✓ (3)	✓ (3)	✓ (3)
ARIS Architect	10.0	YAA	✓	✓	✓				✓ (3)	✓ (3)	✓ (3)
UML Designer	10.0	YUD	✓	✓	✓				√ (3)	✓ (3)	✓ (3)
ARIS Connect Viewer	10.0	YCSCC	✓	✓	✓	✓			n.a.	n.a.	n.a.
ARIS Connect Designer	10.0	YCSDC	✓	✓	✓	✓			n.a.	n.a.	n.a.
ARIS Process Mining SaaS	10.0.22	YPM	✓	✓	✓	✓			n.a.	n.a.	n.a.
ARIS Risk and Compliance Manager	10.0	YRC	✓	✓	✓				n.a.	n.a.	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 (October 2023)
3	The download clients use Java 11 per default. The download can also be started using Java 8 or Java 17, but in that case, a JRE 11 is downloaded into the user's profile and used to start the ARIS client.
4	Minimum version for Java 8.x: 8u141
5	After upgrade of JRE to 17, Triple-DES (3DES) and RC4 won't be supported encryption types for Kerberos. Under some circumstances the older hardware is not comaptible with the used JRE17 and ARIS can not be installed. In such cases we recommend to use more recent hardware.
6	Chromium-based version 96 or higher is recommended.
7	Firefox 107 or higher is recommended.
8	Google Chrome 106 or higher is recommended.

Supported Web Application Server	Supported Web Application Server								
Web Ap	plication S	Server (1)	Tomcat 8.5.x						
ARIS Connect Server (3)	10.0	YCS	✓						
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 (October 2023)
3	ARIS Connect Applications are running within Apache Tomcat 8.5.x. Deployment within other Application Server is currently not supported.

Supported Mobile Platforms									
	ile OS (1) XX XX XX	iOS 13.x							
ARIS Connect Viewer 10.0	YCSCC ✓	<i>√</i>							
			-						
Tested Mobile	o consider the consideration (3)	iPhone							
ARIS Connect Viewer 10.0	YCSCC ✓								
Legend									
	d / Released								
Not supp	orted / Not release	d / Not planned							

Legend	
✓	Supported / Released
	Not supported / Not released / Not planned
1	Including all manufacturer's service packs & updates
2	Planned for next Release (October 2023)
3	Tested with iPad 6th generation (2019)

Supported LDAP systems	upported LDAP systems											
Other LDAP systems have to be configured by Software AG Global Consulting Services (GCS).												
	LDAP s	ystem (1)	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 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 (October 2023)

Supported Single Sign-On Technologie											
	Single Si	gn-On (1)	Kerberos	SAML 2.0 (3)							
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 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 (October 2023)
3	For more details see "ARIS SSO, LDAP, KERBEROS, SAML, SCIM.pdf"

Supported External Systems											
Ext	ernal Syst	em (1) (3)	Microsoft SharePoint 2016	Microsoft SharePoint 2019	Microsoft SharePoint Online		Matomo				
ARIS Connect Server	10.0	YCS	✓	✓	✓		✓ (4)				
ARIS Design Server	10.0	YDS	✓	✓	✓		√ (4)				

Legend	
✓	Supported / Released
	Not supported / Not released / Not planned
1	Including all manufacturer's service packs & updates
2	Planned for next Release (October 2023)
3	Provided by the SharePoint Adapter for ARIS (SAA). Requires ARIS version 10.0 SR10 and additional license
4	Tested with version 4.11

ARIS Compatibility with other Software AG Products Software AG Products	Alfabet 10.0	API Portal 10.0	ARIS 10.0	ARIS Process Performance Manager 10.5	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	MashZone NextGen 10.15
ARIS 10.0	√	√	4	✓ (4)	√	√ (1)	√ (1)	√ (1)	√ (1,3)	√	
ARIS Process Performance Manager 10.5			✓								√ (5)
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 (October 2023)
3	Support of REST service in service request szenario between ARIS and CentraSite
4	Compatible with ARIS 10.0 SR13 and higher for full functionality
5	Compatible with PPM 10.5.2 and higher for full functionality

Languages	anguages																			
		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)
Process Extractor for ARIS Process Mining SaaS	10.0.22	YMS						√ (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 Service Release (October 2023)
3	No RTL layout, translation only

Recommended Hardware											
Scenario	# Conc. Users	Single Server	Distributed / Fail safe								
Recommended Hardware Configuration AR	IS Design / Conne	ct 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)	(only with Oracle or MS SQL) Configuration (1)										
Recommended Hardware Configuration AR	IS Design / Conne	ct 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) (Individual) (only with Oracle or MS SQL) Configuration (1)											
Recommended Hardware Configuration AR	IS Design / Conne	ct Server (with ARIS Risk & Compliancer Manager with	out 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	· · · · · · · · · · · · · · · · · · ·	vidual) ration (1)								
Recommended Hardware Configuration AR	IS Design / Conne	ct Server (with ARIS Risk & Compliancer Manager & AR	RIS 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	· ·	vidual) ration (1)								
Recommended Hardware Configuration Da	tabase Server (O	racle or MS SQL)									
Large (Oracle or MS SQL recommended)	50-200	64 GB (free RAM) / >= 24 CPU Cores >= 1TB free HD Space (2)	(Individual) Configuration (1)								
XL, XXL, (Custom) (only with Oracle or MS SQL)	>200	· · · · · · · · · · · · · · · · · · ·	vidual) ration (1)								
Recommended Hardware Configuration AR	IS Clients										
Scenario	# Users	Hardware	Network								
ARIS Client	1	4 CPU Cores / 4GB (free RAM) >= 2GB free HD Space	Recommended bandwidth: >100 Mbit/s Lower bandwidths can result in reduced performance. Recommended latency: <150ms Higher latency can result in reduced performance.								
(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

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 DMBS 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.

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.

Legal information

Data protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR).

Where applicable, appropriate steps are documented in the respective administration documentation.

Restrictions

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

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

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

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

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

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

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

'Export user statistics' procedure: Ensure that the maximum number of entries included do not exceed 500.000.

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.

Using software or hardware that directly creates, reads, updates, or deletes data in the underlying database systems or data storage services instead of using the officially documented application level APIs is not supported. It could lead to a loss of data, malfunction of the product, or data security breaches.

Web Application Firewall (WAF) with "blocking mode" is not officially supported.