

System Requirements

SAS® IT Resource Management 3.2

This document provides minimum requirements for installing and running SAS IT Resource Management software. You must update your system to meet the minimum requirements before installing SAS IT Resource Management software.

The requirements listed in the document are software requirements and hardware requirements. These requirements are listed separately for each tier required by the software. Note that if you install more than one tier on a single hardware machine, this will require you to adjust the recommended memory requirements higher to handle the additional workload.

For information and to view the latest system requirements for your system, access the SAS Institute Web site at <http://support.sas.com/documentation/installcenter/index.html> or contact SAS Institute Technical Support. Sites in the U.S. and Canada may call (919) 677-8008. Other sites should contact their SAS Installation Representative or SAS Support Consultant for the nearest SAS Institute office.

Overall Requirements

SAS IT Resource Management 3.2 requires that the SAS System be at version 9.2, maintenance level 3 (TS2M3).

Migration from previous release of SAS IT Resource Management requires the following minimum levels of software:

- To migrate IT data marts from SAS IT Resource Management 3.1.1 on SAS 9.1.3 to SAS IT Resource Management 3.2, the 311IS04 hot fix must be applied to the 3.1.1 system.
- To migrate Performance Data Bases (PDB) from SAS IT Resource Management 2.7, the 27IS06 hot fix must be applied to the 2.7 system.

The 2.7 and 3.1.1 releases of SAS IT Resource Management on SAS 9.1.3 are the only previous releases to support direct migration to 3.2.

Server Tier

There are two major components on the SAS IT Resource Management server tier that have specific software and hardware requirements: the SAS IT Resource Management Server and the SAS Metadata Server. The SAS Metadata Server may be installed on the SAS IT Resource Management Server host or on a separate machine (of any supported host) of equal or smaller size than the SAS IT Resource Management Server.

SAS IT Resource Management Server

Supported Hosts: (64-bit architecture is assumed unless specified otherwise)

- AIX
- Solaris on SPARC
- Solaris on x64
- HP/UX on RISC
- HP/UX on Itanium
- Linux (SUSE and Red Hat Enterprise)
- Linux (SUSE and Red Hat Enterprise 32-bit)
- Microsoft Windows for x64 (XP, Vista, 2003, 2008, 2008R2)
- Microsoft Windows 32-bit (XP, Vista, 2003, 2008)
- z/OS (running in 31-bit mode)

Disk Space Requirements:

The following SAS IT Resource Management components are included in the SAS IT Resource Management Server and require the specified disk space:

Component	Disk Space Required
SAS IT Management Solutions Core Components MVA Data	4 MB
SAS IT Resource Management MVA Data	1 MB
SAS IT Resource Management Data Tier	5 MB
SAS IT Resource Management Logical Types	1 MB
Versioned Jar Repository for above components	175 MB

In addition, SAS IT Resource Management may require up to 5 GB of temporary space during installation and configuration, depending on options selected. The total space requirement for the entire SAS IT Resource Management server tier installation is approximately 4 GB or less. This may vary depending on operating system and options chosen.

Hardware Requirements:

The following hardware requirements are recommended for the SAS IT Resource Management server tier for each operating system:

Operating System	Hardware Requirements
z/OS	Varies widely based on hardware configuration and workloads; 500 MIPS processor, 8GB real storage minimum recommended
UNIX or Windows	Minimum - Dual Processor 32-bit, 2.0 GHz, 4 GB RAM Preferred - Quad Processor 64-bit, 3.0 GHz or higher, 8 GB RAM or higher

Additional Memory Requirements for z/OS:

Batch jobs using SAS IT Resource Management software on a z/OS server tier require a region specification of at least 1024M.

TSO user IDs that will be using SAS IT Resource Management software should have an ASSIZEMAX specification of at least 1024M. The installer TSO user ID requires an ASSIZEMAX of 2000M. A CPUTIMEMAX value of 20000 is also recommended for the installer TSO user ID, particularly if migrations are being performed.

Third-party Software Requirements:

SAS IT Resource Management requires a Java Runtime Environment (JRE) on the server tier for all operating systems. Please refer to the SAS 9.2 (TS2M3) section of the Third Party Software Requirements Web page, <http://support.sas.com/resources/thirdpartysupport/> for the minimum version requirements for Java Runtime Environments.

SAS IT Resource Management requires MXG Software from Merrill Consultants for the processing of SMF-based data sources on the server tier for all operating systems. This software is included with SAS IT Resource Management on the z/OS operating system. Customers processing SMF data on other operating systems should contact Merrill Consultants for a license to run MXG software.

An X11 server is required for the installation of SAS on z/OS and UNIX. This server is required for the end-user display of the SAS Deployment Wizard (a JAVA application that performs SAS installation and configuration steps.)

Included Products:

The following SAS products are included in SAS IT Resource Management Server. Unless explicitly licensed, use of this software is limited to SAS IT Resource Management Server.

- Base SAS software
- SAS BI Lineage Scheduling Server
- SAS Integration Technologies software
- SAS Management Console
- SAS Metadata Bridges
- SAS Metadata Investigator
- SAS OLAP Server software
- SAS Table Server
- SAS/ACCESS to DB2 software
- SAS/ACCESS to ODBC software
- SAS/ACCESS to Oracle software
- SAS/ACCESS to PC Files
- SAS/AF software
- SAS/Connect software
- SAS/ETS software
- SAS/High Performance Forecasting software
- SAS/GRAPH software
- SAS/SHARE software
- SAS/STAT software

For information about each product's specific requirements, please see its System Requirements document available from Install Center

(<http://support.sas.com/resources/sysreq/index.html>).

SAS Metadata Server

Hosts: (64-bit architecture is assumed unless specified otherwise)

- AIX
- Solaris on SPARC
- Solaris on x64
- HP/UX on RISC
- HP/UX on Itanium
- Linux (SUSE and Red Hat Enterprise)
- Linux (SUSE and Red Hat Enterprise 32-bit)
- Microsoft Windows for x64 (XP, Vista, 2003, 2008, 2008R2)
- Microsoft Windows 32-bit (XP, Vista, 2003, 2008)
- z/OS (running in 31-bit mode)

Additional Memory Requirements for z/OS:

A modification of the REGION size specified in the Metadata Server started task is recommended. By default, the value is REGION=1024M, but this should be REGION=2000M for use with SAS IT Resource Management.

Included Products:

The following SAS products are also included in SAS Metadata Server. Unless explicitly licensed, use of this software is limited to SAS Metadata Server.

- Base SAS software
- SAS/CONNECT software

For information about each product's specific requirements, please see its System Requirements document available from Install Center

(<http://support.sas.com/resources/sysreq/index.html>).

Middle Tier

***Note:** If you are using an application server on a UNIX machine, SAS strongly recommends that you set the ulimit on that machine to 10240. For details about the procedure to set the ulimit for your operating system, contact your system administrator.*

Supported Hosts: (64-bit architecture is assumed unless specified otherwise)

- AIX
- Solaris on SPARC
- Solaris on x64
- HP/UX on Itanium
- Linux (SUSE and Red Hat Enterprise)
- Microsoft Windows for x64 (XP, Vista, 2003, 2008, 2008R2)
- Microsoft Windows 32-bit (XP, Vista, 2003, 2008)
- z/OS (running in 31-bit mode)

Disk Space Requirements:

The following SAS IT Resource Management components are included for the middle tier and require the specified disk space:

Component	Disk Space Required
SAS IT Management Solutions Mid-Tier	10 MB
SAS IT Resource Management Help and Documentation	1 MB
SAS IT Resource Management Logical Types	1 MB
Versioned Jar Repository for above components	85 MB

In addition, SAS IT Resource Management may require up to 5 GB of temporary space during installation and configuration, depending on options selected. The total space requirement for the entire SAS IT Resource Management middle tier installation is approximately 20 GB or less. This may vary depending on operating system and options chosen.

Hardware Requirements:

The following hardware requirements are recommended for the SAS IT Resource Management middle tier for each operating system:

Operating System	Hardware Requirements
z/OS	Varies widely based on hardware configuration and workloads; 500 MIPS processor, 8GB real storage minimum recommended
UNIX or Windows	Minimum - Dual Processor 32-bit, 2.0 GHz, 4 GB RAM Preferred - Quad Processor 64-bit, 3.0 GHz or higher, 8 GB RAM or higher

Third-party Software Requirements:

SAS IT Resource Management requires a Web application server, such as JBoss, Oracle WebLogic or IBM WebSphere. Please refer to the SAS 9.2 (TS2M3) section of the Third Party Software Requirements Web page, <http://support.sas.com/resources/thirdpartysupport/> for the minimum version requirements for supported Web application servers.

SAS IT Resource Management also requires a Java Runtime Environment (JRE) and Java Development Kit (JDK) on the middle tier. Please refer to the SAS 9.2 (TS2M3) section of the Third Party Software Requirements Web page, <http://support.sas.com/resources/thirdpartysupport/> for the minimum version requirements for Java Runtime Environments and Java Development Kits.

Included Products:

The following SAS products are also included in SAS IT Resource Management Middle Tier. Unless explicitly licensed, use of this software is limited to SAS IT Resource Management.

- SAS BI Dashboard
- SAS BI Portlets
- SAS Information Delivery Portal Web Application
- SAS Management Console
- Web Report Studio

For information about each product's specific requirements, please see its System Requirements document available from Install Center (<http://support.sas.com/resources/sysreq/index.html>).

Client Tier

Supported Hosts:

Microsoft Windows 32-bit products:

- Microsoft Windows XP Professional, updated with Service Pack 2
- Microsoft Windows Vista - Enterprise, Business, and Ultimate Editions
- Microsoft Windows 7

Microsoft Windows 64-bit products:

- Microsoft Windows XP Professional for x64 systems
- Microsoft Windows Vista for x64 systems - Enterprise, Business, and Ultimate Editions
- Microsoft Windows 7 via 32-bit compatibility

Disk Space Requirements:

The following SAS IT Resource Management components are included for the client tier and require the specified disk space:

Component	Disk Space Required
SAS IT Resource Management Client	8 MB
SAS IT Resource Management Enterprise Guide Components	75 MB
SAS IT Resource Management Logical Types	1 MB
Versioned Jar Repository for above components	250 MB

In addition, SAS IT Resource Management may require up to 5 GB of temporary space during installation and configuration, depending on options selected. The total space requirement for the entire SAS IT Resource Management client tier installation is approximately 2 GB or less. This may vary depending on operating system and options chosen.

Hardware Requirements:

The following hardware requirements are recommended for the SAS IT Resource Management client tier:

Operating System	Hardware Requirements
Windows	Minimum - 1.5 GHz, 2 GB RAM, 1024 x 768 screen area and 16-bit color quality display Preferred - 3.0 GHz or higher, 3 GB RAM or higher, 1280 x 1024 screen area and 32-bit color quality display

Third-party Software Requirements:

SAS IT Resource Management requires a Web browser, such as Microsoft Internet Explorer or Mozilla Firefox. Please refer to the SAS 9.2 (TS2M3) section of the Third Party Software Requirements Web page, <http://support.sas.com/resources/thirdpartysupport/> for the minimum version requirements for supported Web browsers.

To run the SAS IT Resource Management Gallery Manager application in a Web browser, Flash Player release 10.0.32.18 or higher is required. The Flash Player may be downloaded from Adobe Systems at <http://get.adobe.com/flashplayer/>. If you are not sure what release of Flash your browser is running, you can determine your current release by going to http://kb2.adobe.com/cps/155/tn_15507.html.

SAS IT Resource Management also requires a Java Runtime Environment (JRE) on the client tier to display Java-based graphics. Please refer to the SAS 9.2 (TS2M3) section of the Third Party Software Requirements Web page, <http://support.sas.com/resources/thirdpartysupport/> for the minimum version requirements for Java Runtime Environments.

Included Products:

The following SAS products are also included in SAS IT Resource Management Client Tier. Unless explicitly licensed, use of this software is limited to SAS IT Resource Management.

- SAS Add-in for Microsoft Office
- SAS Data Integration Studio
- SAS Enterprise Guide
- SAS Information Map Studio
- SAS Management Console
- SAS Metadata Bridges
- SAS OLAP Cube Studio
- SAS OLAP Server Monitor

For information about each product's specific requirements, please see its System Requirements document available from Install Center

(<http://support.sas.com/resources/sysreq/index.html>).

Other Requirements:

Many supplied reports in SAS IT Resource Management 3.2 are based on Microsoft's ActiveX technology. To display those reports in a Web browser, you must install the SAS/Graph Control for ActiveX on the client tier. This can be installed from the installation media or manually downloaded and installed from the SAS/Graph Downloads Web site,

<http://www.sas.com/apps/demosdownloads/setupcat.jsp?cat=SAS%2FGRAPH+Software>.

Further information may be found in Usage Note 10102,

<http://support.sas.com/kb/10/102.html>.

The SAS/Graph Control for ActiveX is only supported for Microsoft Internet Explorer.

For More Information

Documentation and other reference information for SAS IT Resource Management 3.2 may be found on the SAS IT Resource Management support Web site,

<http://support.sas.com/documentation/onlinedoc/itsv/>.

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