System Requirements

SAS® Profitability Management 2.2

This document provides the requirements for installing and running SAS Profitability Management 2.2 software. You must update your computer to meet these minimum requirements before installing SAS Profitability Management. The major requirements listed in the document are

- Server requirements - hardware and software
- Client requirements- hardware and software

For additional information, 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.

Deployment

SAS Profitability Management 2.2 can be installed on multiple servers with Windows or UNIX operating system. The following is an outline of the most complex deployment.

- Server Machine 1: Web Server

- Server Machine 2: Workspace Server, OLAP Server and Transaction Assignment Server

- Server Machine 3: Metadata Server. This could be an existing SAS Metadata server.

- (Optional) Server Machine 4: Database Server

The SAS Profitability Management client is only available on a Windows operating system. The following table displays the products available depending on the operation system of the SAS Profitability Management Mid-Tier.

Mid-Tier Architecture	Database	Web Server
Windows 2003 32-bit	SAS Datasets	JBoss or
Windows 2003 64-bit		WebLogic or
Windows 2008 32-bit	Microsoft SQL Server	WebSphere (64-bit Windows only)
Windows 2008 64-bit	Oracle	
	MySQL	

Solaris	SAS Datasets	WebLogic
	Oracle	
	MySQL	
AIX	SAS Datasets	WebSphere
	Oracle	
	MySQL	
Linux	SAS Datasets	JBoss
	Oracle	
	MySQL	

Server Requirements

The number and size of models and their associated analysis cubes affect all factors of hardware-related performance. The applicability of a specific server platform is primarily dependent on data volumes. The minimum and preferred hardware platforms are estimations only. The minimum server configuration is required to operate the software and perform relatively small analyses. As data volumes increase, the processing times will increase as well. There may come a point where the server hardware must be upgraded for faster processing.

Server *Hardware Requirements*

	Minimum	Preferred
Hardware	This configuration is recommended for small-size transaction tables (up to 10 million transaction rows per period) and up to 10 report viewers. 1) **Unified Server** (X86, X86-64, Power PC or Sparc): Two 2 GHz or more CPUs, 4GB RAM, 200GB of disk space (for models, transaction tables, and cubes) [1]	This configuration is recommended for medium-size transaction tables (up to 100 million transaction rows per period) and up to 50 report viewers. [2] 1) **Web Server** (X86, X86-64, Power PC or Sparc): Two 2 GHz or more CPUs, 4GB RAM or more, 100GB of disk space 2) **Metadata Server**[3] (X86, X86-64, Power PC or Sparc): Two 2 GHz or more CPUs, 4GB RAM or more, 100GB of disk space 3) **Workspace Server, OLAP Server and Transaction Assignment Server** (X86, X86-64, Power PC or Sparc): Four 2 GHz or more CPUs, 8GB RAM, 800GB of disk space (preferably with an enhanced hard disk subsystem)[1]

[1] Calculating OLAP fact tables and cubes may require hundreds of gigabytes of additional disk space in some cases. The disk space estimates provided represent typical usage. The actual amount of disk space used by any particular installation will vary based upon the types and number of analyses performed. Please consult your sales executive or technical support for more information.

[2] For larger transaction tables and/or a larger number of report viewers, please consult with SAS Technical Support.

[3] For typical installations, the Metadata Server will be a shared computer amongst all installed SAS applications. It is not necessary that this server be dedicated to SAS Profitability Management.

Unified Server Software Requirements

		Minimum	Preferred
Operating System		Windows Server 2003 SP2 (32-bit or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10	Windows Server 2008 R1 SP2 (32-bit or 64-bit) or Windows Server 2008 R2 SP1 (32-bit or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10 update 1
SAS Components		SAS Web Report Studio 4.3	
SAS Servers		Base SAS 9.2M3 and SAS Metadata Server 9.2 M3 and SAS Workspace Server 9.2 M3 and SAS OLAP Server 9.2 M3 SAS/ACCESS if you access any RDMS[4]	
Web Server		JBoss 4.2.0. or Oracle WebLogic Server 10.3 or IBM WebSphere 6.1 with fix Pack 6.1.0.17	JBoss 4.3.0. or Oracle WebLogic Server 10.3 or IBM WebSphere 7 with fix Pack 6.1.0.17
Java SDK	JBoss 4.2 or 4.3	Java SDK 5 Update 15 for Windows (Match 32-bit with 32 JDK and 64-bit with 64 JDK) Java SDK 5 Update 14 (64-bit) for Linux	
	WebLogic 10.3	Java 2 SDK 6 Update 16 for Windows (Match 32-bit with 32 JDK and 64-bit with 64 JDK) Java 2 SDK 6 Update 16 (64-bit) for Solaris	
	WebSphere 6.1 or 7.1	It is not necessary to download a JDK for IBM WebSphere Application Server. IBM WebSphere Application Server comes embedded with a specific version of the IBM JDK that is automatically installed and used by WebSphere	
Java Diagnostic Tool		JUnit 3.8.1	JUnit 4.0
Optional RDMS Servers Can use SAS for all data needs		Microsoft SQL Server 2005 SP2 Standard Edition or My SQL Server 5.0.80 [5] , or My SQL Server 5.0.86[5] , or Oracle Server 11g R1	Microsoft SQL Server 2008 SP2 Standard Edition or My SQL Server 5.0.80 [5] , or My SQL Server 5.0.86 [5] , or Oracle Server 11g R2
Java Runtime Environment JRE		JRE 6 Update 14 (32-bit) for Windows Server JRE 5 Update 12 (32-bit) for Solaris IBM JRE 6 SR3, 6.0.0.75 file set, pap3260sr3-20081106_07 JRE 5 Update 14 (32-bit) for Linux	

[4]A SAS/ACCESS product is required for each RDMS system.

[5]If you are planning on installing any SAS solutions (SAS Financial Management, SAS Human Capital Management, or SAS Strategy Management) that use the MySQL database, you should install them first.

Web Server Software Requirements

	Minimum	Preferred
Operating System	Windows Server 2003 SP2 (32 or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10	Windows Server 2008 R1 SP2 (32 or 64-bit) or Windows Server2008 R2 SP2 (32 or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10 upgrade 1
SAS Components	SAS Web Report Studio 4.3	
Web Server	JBoss 4.2 Oracle WebLogic Server 10.3 IBM WebSphere 6.1	JBoss 4.3 Oracle WebLogic Server 10.3 IBM WebSphere 7.1
Java SDK Pick the one for your operating system and Web server	Java SDK 5 Update 15 for Windows Java SDK 5 Update 12 for Solaris Java SDK 5 Update 14 for Linux IBM JDK 6 SR4 + IZ51489+IZ45701+IZ52413+IZ52880+IZ53551 64-bit	
Java Runtime Environment JRE	JRE 6 Update 14 (32-bit) for Windows Servers JRE 5 Update 12 (32-bit) for Solaris IBM JRE 6 SR3, 6.0.0.75 file set, pap3260sr3-20081106_07 JRE 5 Update 14 (32-bit) for Linux	
Java Diagnostic Tool	JUnit 3.8.1	JUnit 4.0

Metadata Server Software Requirements

	Minimum	Preferred
Operating System	Windows Server 2003 SP2 (32 or 64-bit) or IBM AIX 6.1 or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10	Windows Server 2008 R1 SP2 (32 or 64-bit) or Windows Server 2008 R2 SP1 (32 or 64-bit) or IBM AIX 6.1 or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10 upgrade 1
SAS Servers	Base SAS 9.2M3 and SAS Metadata Server 9.2 M3	

Java	JRE 5 Update 15 for Windows
Pick the one for your operating system	JRE 5 Upgrade 12 for Solaris
	JRE5 Update 14 for Linux
	IBM JRE 6 SR3, 6.0.0.75 file set, pap3260sr3-20081106_07

Workspace Server, OLAP Server, and Transaction Assignment Server Software Requirements

Due to the disk-intensive nature of OLAP and Transaction Assignment processing, this computer preferably should have an enhanced hard disk subsystem for greater data throughput.

	Minimum	**Preferred**
Operating System	Windows Server 2003 SP2 (32 or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10	Windows Server 2008 R1 SP2 (32 or 64bit) or Windows Server 2008 R2 SP2 (32 or 64-bit) or IBM AIX 6.1 (Power PC) or Linux Red Hat 5 (64-bit) or Solaris on SPARC Version 10 Upgrade 1
SAS Servers	Base SAS 9.2M3 and SAS OLAP Server 9.2M3 and SAS Workspace Server 9.2M3 SAS/ACCESS if you access any RDMS[6]	
Java Pick the one for your operating system	JRE 5 Upgrade 15 for Windows Server 2003 JRE 6 Upgrade 14 for Windows Server 2008 JRE 5 Upgrade 12 for Solaris JRE 5 Update 14 for Linux IBM JDK 6 SR4 + IZ51489+IZ45701+IZ52413+IZ52880+IZ53551 64-bit	
Java Tool for diagnostics	JUnit 3.8.1	JUnit 4.0
Optional RDMS Servers Can use SAS for all data needs	MySQL GUI Tools Bundle for 5.0. if the database is not on this machine	

[6]A SAS/ACCESS product is required for each RDMS system.

Client Requirements

Hardware Requirements

	Minimum	Preferred
Processor	2.0 GHz	2.0 GHz or faster
Memory	2GB	2GB or more
Hard Disk	4GB available disk space with 2GB available on System drive	
Screen Resolution	1024x768 pixels screen area and High Color (16-bit) display	1280 × 1024 pixels screen area and True-Color 32-bit) display.

Software Requirements

	Minimum	Preferred
Operating System	Windows XP Professional SP3 (32-bit) or Windows Vista (Enterprise, Business or Ultimate 32-bit editions) (32-bit) or Windows XP Professional x64 (via 32-bit compatibility) or Windows Vista (Enterprise, Business or Ultimate 64-bit via 32-bit compatibility) or Windows 7 (Enterprise, Ultimate, or Professional 32 or 64-bit via 32-bit compatibility)	
Web Browser	Microsoft Internet Explorer 6.0 SP3 for Windows XP Microsoft Internet Explorer 7.0 for Windows XP or Window Vista Microsoft Internet Explorer 8.0 for Windows 7	
Java	JRE 5 Update 15 for Windows XP or JRE 6 Update 14 for Windows Vista or Windows 7	
Java Diagnostic Tool	JUnit 3.8.1	JUnit 4.0
Optional Database software Pick the one for your database	Microsoft SQL Server JDBC version 2.0 and Microsoft SQL Server Client tools 2005 or MySQL Connector/J -5.0.8, or Oracle Database 11*g* Release 1 (10.2.0.4) JDBC Drivers and Oracle Database 11g Client Tools	Microsoft SQL Server JDBC version 2.0 and Microsoft SQL Server Client tools 2008 or MySQL Connector/J -5.0.8, or Oracle Database 11*g* Release 1 (10.2.0.4) JDBC Drivers and Oracle Database 11g Client Tools

6 February 2009