SAS® 9.2 Foundation System Requirements for HP-UX® for the Itanium® Processor Family Architecture

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Overview

This document provides requirements for installing and running SAS 9.2 Foundation for HP-UX for the Itanium Processor Family Architecture. You must update your system to meet the minimum requirements before running SAS 9.2 Foundation. The major requirements listed in the document are:

- Software Requirements
- Hardware Requirements
- Space Requirements
- Specific Product Requirements
- Graphics Hardware and Software Compatibility

Software Requirements

Operating System

SAS 9.2 Foundation is supported on the following operating system:

- HP-UX 11i version 2, operating system release identifier B.11.23 and above

If you are running SAS on HP-UX IPF, Release 11i version 2, the following patches should be applied to your operating system:

- June 2007 patch bundle
- PHKL_36853

If you are running SAS on HP-UX 11.31, the following patch should be applied to your operating system:

- PHNE_41004 11.31 cumulative ARPA Transport patch or later

If you have a need to authenticate user credentials with PAM (Pluggable Authentication Module) under HP-UX 11.23, have your Systems Administrator install the following patches where SAS Foundation is installed:

- PHCO_40360
- PHCO_40361

If you intend to install SAS from DVD media, you should apply the PHCO_41366 patch to your operating system.

Note: *The patch level listed was correct at the time this document was printed. However, patches required for HP-UX for the Itanium Processor Family Architecture are subject to unexpected change. To ensure you have the latest patch requirements, go to the Install Center Web page (http://support.sas.com/installcenter) to find the most recent updates to this System Requirements document.*

SAS requires the filesystems that SAS is installed on to have the `setuid` mount option enabled because `sasauth`, `sasperm`, and `elssrv` need it at SAS runtime.

Streams

SAS for HP-UX requires that HP Streams be installed and enabled. The Streams product is generally installed by default. This can be quickly verified by performing the following command:

```
/usr/sbin/swlist –l product | grep Streams
```

If the Streams product is not found, it must first be installed before continuing. The software may be found on the HP-UX installation media that accompanied the system. The Systems Administrator would typically perform this installation.

Once installed, Streams must also be enabled in the HP-UX kernel. Streams status can be checked by performing the following command:

```
/usr/sbin/kctune –v streampipes
```

If "Current Value" is "1", Streams is enabled and you can skip the remaining steps which describe how to enable Streams.

If "Current Value" is "0", first the streampipes kernel variable must be changed and then the system must be rebooted to enable streams. These actions are privileged and are generally performed by the Systems Administrator.

To change the streampipes kernel variable, issue the following command:

```
/usr/sbin/kctune streampipes=1
```

Upon success, you will see a message showing that the "Value at Next Boot" is "1." You may now reboot the system or wait for a more convenient time.

Direct I/O

If you wish to use Direct I/O to improve system I/O throughput (see the UNIX Host Companion for more information), SAS requires that the "Online features of the VxFS File System" be installed. This product is not usually installed by default. This can quickly be verified by performing the following command:

```
/usr/sbin/swlist –l product | grep Online
```

If the product is not found, it must be installed in order to enable Direct I/O. The software may be found on the HP-UX installation media that accompanied the system. The Systems Administrator would typically perform this installation.

Web Browser

SAS 9.2 Foundation uses a new system, Remote Browsing, for displaying Web-based information. Instead of running a browser on the UNIX workstation, SAS 9.2 Foundation sends the URL to your desktop computer for display in a Web browser. This removes the browser overhead from the UNIX server. A small software agent named the Remote Browser Server is installed on your desktop computer to enable SAS to communicate with your browser. The process is illustrated below.

SAS creates a URL that references the information to be displayed (usually program help or ODS output), then sends the URL to the SAS Remote Browser Server on your desktop computer (step 1). The Remote Browser Server then sends a request to the browser to display a page (step 2). The

browser then reconnects to SAS to retrieve the information to be displayed and displays it in the browser (step 3).

SAS 9.2 Foundation

SAS Remote Browser Server

Browser (IE shown)

Desktop Computer (Linux/Windows 32bit)
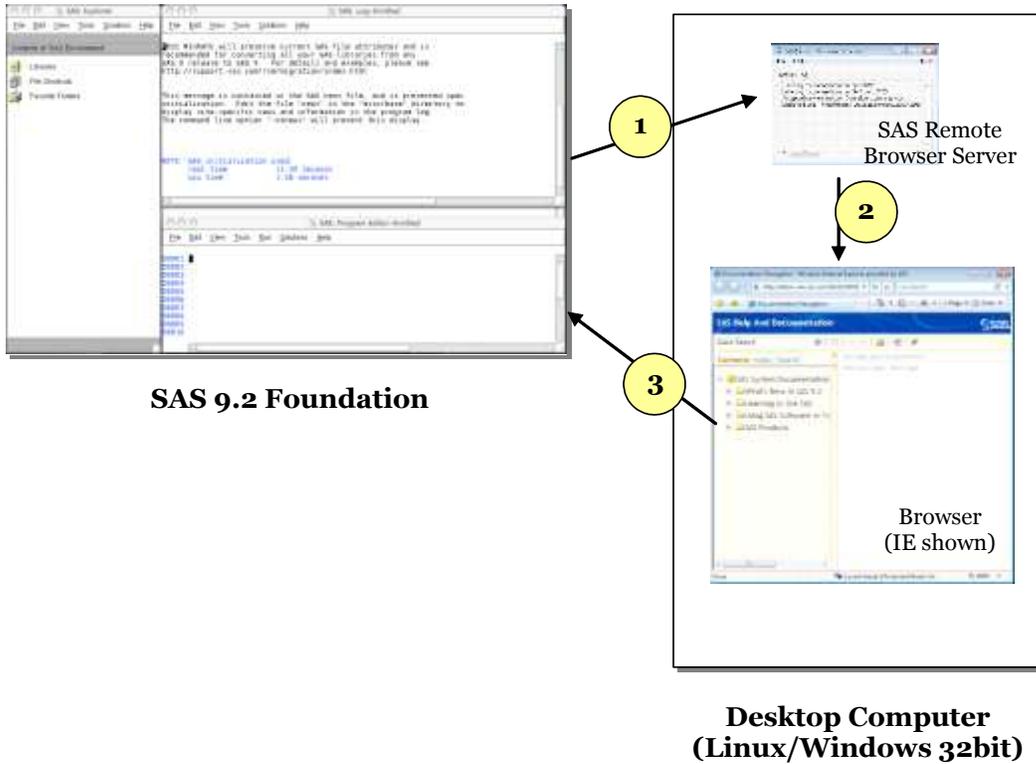
To use remote browsing, your desktop computer must be one of the following platforms, and have installed one of the supported browsers.

Platform	Supported Browser
Windows XP/Vista 32-bit	Firefox 3.0.6
	Internet Explorer 6 with SP2 or Internet Explorer 7
Linux	Firefox 3.0.6

The Remote Browser Server must be installed and running for SAS to display web information. The installer for the Remote Browser Server can be found on support.sas.com (http://support.sas.com/documentation/configuration/thirdpartysupport/v92/thirdparty92.html), or directly downloaded from a SAS session.

For SAS to be able to use your Web browser, the browser must be configured to allow pop-up windows.

Hardware Requirements

Machines Supported

- HP machines conforming to IA64

Distribution Media

- Electronic Software Delivery
- DVD

Memory Requirements

For general SAS activities (for example, query and reporting, simple statistics, data manipulation), we recommend 96 MB per user.

More memory is needed for memory-intensive tasks such as OLAP, data mining, heavy statistical analysis, multivariate analysis, formats, and any GUI-based applications. Please see the "Specific Products Requirements" section for more details on memory requirements for specific products.

Supported Displays

- Any X11-based display server. Monitors must support a minimum of 256 colors (PseudoColor).

Space Requirements

The following list contains space requirements in MB for all of the products available with this release of SAS 9.2 Foundation for HP-UX for the Itanium Processor Family Architecture. Use this information to help you determine how much free disk space you must have available before you can install SAS 9.2. In addition, SAS 9.2 Foundation requires approximately 30 MB of disk space on the /tmp partition to complete the installation.

Software Product	Required Disk Space	Additional Space for Samples/Optional Files
Base SAS software	993.5	8.0
Base SAS Versioned JAR Repository	174.7	0.0
BIS Common Server software	65.3	0.0
Credit Scoring for SAS Enterprise Miner software	1.5	0.0
ODS Templates software	6.7	0.0
Report Fonts for Server software	368.7	0.0
SAS Accelerator Publishing Agent software	0.8	0.0
SAS Anti-Money Laundering Alert Generation software	553.2	6.8
SAS Asset and Liability Management for Banking Server software	0.5	0.0
SAS Case management Server software	1.5	0.0
SAS Clinical Standards Toolkit Framework software	0.8	0.0
SAS Clinical Standards Toolkit Framework Versioned JAR Repository	0.3	0.0
SAS Credit Risk for Banking Server software	0.4	0.0
SAS Credit Risk Management for Banking Server Component software	88.5	0.0
SAS Credit Scoring for Banking Server software	189.6	0.0
SAS Customer Intelligence Processes software	5.1	0.1
SAS Data Quality Server software	45.8	0.1
SAS Data Surveyor for Clickstream Data Server Components software	1.3	0.0
SAS Detail Data Store for Banking software	55.4	0.0
SAS Enterprise Miner software	155.3	39.1
SAS Enterprise Miner Versioned JAR Repository	76.1	0.0
SAS Firmwide Risk for Banking Server software	0.3	0.0
SAS Forecast Server Batch Interface software	1.9	0.0
SAS Forecast Server Batch Interface Versioned JAR Repository	69.3	0.0
SAS High-Performance Forecasting software	36.1	0.2
SAS Installation and Qualification Verification software	0.2	0.0
SAS Integration Technologies software	17.2	0.4
SAS Integration Technologies Versioned JAR Repository	67.5	0.0
SAS Inventory Optimization software	5.1	0.1
SAS Market Risk for Banking Server software	0.3	0.0
SAS Marketing Optimization Server software	7.4	91.6
SAS Model Manager Common Components software	2.0	5.0
SAS Model Manager Reports Registration Client software	0.1	0.0
SAS Model Manager Reports Registration Client Versioned JAR Repository	70.5	0.0
SAS Model Manager Server software	0.1	0.0
SAS Model Manager Server Versioned JAR Repository	70.5	0.0
SAS Network Algorithms software	0.9	0.0
SAS OLAP Server software	11.8	0.0

Software Product	Required Disk Space	Additional Space for Samples/Optional Files
SAS OpRisk Monitor Server software	7.9	0.0
SAS OpRisk VaR Server software	53.8	0.0
SAS Risk Dimensions software	53.1	817.3
SAS Risk Management for Banking Server software	335.9	0.0
SAS Risk Management for Insurance Server software	277.7	0.0
SAS Risk Reporting Repository software	1.6	0.0
SAS Service Parts Optimization Server software	.8	0.0
SAS Table Server Components software	68.5	0.0
SAS Text Miner Arabic software	128.5	0.0
SAS Text Miner Chinese software	150.2	0.0
SAS Text Miner Client software	325.8	27.2
SAS Text Miner Dutch software	30.0	0.0
SAS Text Miner French software	25.8	0.0
SAS Text Miner German software	289.3	0.0
SAS Text Miner Italian software	59.9	0.0
SAS Text Miner Japanese software	76.8	0.0
SAS Text Miner Korean software	194.5	0.0
SAS Text Miner Polish software	219.1	0.0
SAS Text Miner Portuguese software	78.7	0.0
SAS Text Miner Spanish software	79.0	0.0
SAS Text Miner Swedish software	36.1	0.0
SAS Warranty Analysis Server software	7.1	0.0
SAS Web Analytics software	5.4	0.0
SAS Web Analytics Versioned JAR Repository	169.3	0.0
SAS/ACCESS Interface to DB2 software	1.8	0.1
SAS/ACCESS Interface to Greenplum software	1.3	0.1
SAS/ACCESS Interface to HP Neoview software	1.4	0.0
SAS/ACCESS Interface to Informix software	1.2	0.1
SAS/ACCESS Interface to Microsoft SQL Server software	25.6	0.1
SAS/ACCESS Interface to MySQL software	1.0	0.1
SAS/ACCESS Interface to Netezza software	1.7	0.1
SAS/ACCESS Interface to ODBC software	3.1	0.1
SAS/ACCESS Interface to Oracle software	2.3	0.1
SAS/ACCESS Interface to PC Files software	7.7	0.1
SAS/ACCESS Interface to R/3 software	6.2	0.1
SAS/ACCESS Interface to Sybase software	2.2	0.1
SAS/ACCESS Interface to Sybase IQ software	1.7	0.1
SAS/ACCESS Interface to Teradata software	2.9	0.1
SAS/AF software	12.0	0.0
SAS/ASSIST software	23.0	0.0
SAS/CONNECT software	5.6	0.2
SAS/EIS software	21.8	10.4
SAS/ETS software	129.3	2.2
SAS/FSP software	2.9	0.0
SAS/Genetics software	20.9	0.2
SAS/GIS software	72.1	0.3
SAS/GRAPH software	308.3	2.3
SAS/IML software	41.4	0.6
SAS/INSIGHT software	30.5	0.4
SAS/IntrNet software	4.9	1.2
SAS/LAB software	18.0	0.0
SAS/OR Math Program Common software	17.1	0.0

Software Product	Required Disk Space	Additional Space for Samples/Optional Files
SAS/OR software	95.1	2.3
SAS/QC software	81.2	2.9
SAS/SECURE 168-bit software	3.6	0.0
SAS/SECURE SSL software	4.7	0.0
SAS/SHARE software	2.1	0.2
SAS/STAT software	308.2	3.9
SAS/TOOLKIT software	3.5	0.0
SAS/Warehouse Administrator software	47.8	0.0
Scalable Performance Data Client software	2.0	0.0

SAS/GRAPH Map Data Sets

Data Set	Required Disk Space
Countries in Africa and Middle East Maps	4.1
Countries in Asia and Pacific Maps	32.3
Countries in Europe Maps	19.9
North America Maps	1.9
Countries in Latin America and Caribbean Maps	3.4
Canada Maps	0.8
Continents Maps	28.0
World Map	5.4
Very Large US County Map, Unprojected	3.4
Large US County Map, Unprojected and Reduced	0.6
Large US Mainland County Map, Projected and Reduced	1.3
Large US State Outline Map, Unprojected	0.5
Total for all entries	**101.6**

DBCS Support

The following list contains space requirements in MB for SAS 9.2 components that offer DBCS support.

Software Product	Required Disk Space
Base SAS software	79.8
SAS/ACCESS Interface to DB2 software	1.5
SAS/ACCESS Interface to Greenplum software	1.2
SAS/ACCESS Interface to HP Neoview software	1.2
SAS/ACCESS Interface to Informix software	0.3
SAS/ACCESS Interface to Microsoft SQL software	1.4
SAS/ACCESS Interface to MySQL software	0.8
SAS/ACCESS Interface to Netezza software	1.6
SAS/ACCESS Interface to ODBC software	2.7
SAS/ACCESS Interface to Oracle software	0.6
SAS/ACCESS Interface to PC Files software	4.0
SAS/ACCESS Interface to R/3 software	0.3
SAS/ACCESS Interface to Sybase software	1.1

SAS/AF software	0.8
SAS/CONNECT software	2.7
SAS/EIS software	0.7
SAS/FSP software	1.1
SAS/GRAPH software	67.3
SAS/INSIGHT software	13.6
SAS/LAB software	3.5
SAS/QC software	1.5
SAS/STAT software	2.9

Chinese (Simplified) Language

Chinese (Simplified) Support	Required Disk Space
Base SAS software	6.1
ODS Templates software	6.8
SAS Anti-Money Laundering Alert Generation samples	0.1
SAS OLAP Server software	0.2
SAS/GRAPH software	0.2
SAS/IntrNet software	0.3

Chinese (Traditional) Language

Chinese (Traditional) Support	Required Disk Space
Base SAS software	0.7
ODS Templates software	6.7
SAS Anti-Money Laundering Alert Generation samples	0.1
SAS OLAP Server software	0.2

French Language

French Support	Required Disk Space
Base SAS software	16.1
ODS Templates software	6.7
SAS Anti-Money Laundering Alert Generation software	0.1
SAS Anti-Money Laundering Alert Generation samples	0.4
SAS Data Quality Server software	0.1
SAS Enterprise Miner software	0.2
SAS Risk Dimensions software	0.6
SAS Text Miner Client software	0.1
SAS/EIS software	9.7
SAS/ETS software	1.0
SAS/Genetics software	0.1
SAS/GRAPH software	0.3
SAS/OR software	0.6
SAS/QC software	0.2
SAS/STAT software	1.4

German Language

German Support	Required Disk Space
Base SAS software	2.4
ODS Templates software	6.7
SAS Data Quality Server software	0.1
SAS Risk Dimensions software	0.6
SAS/ETS software	1.0
SAS/Genetics software	0.1
SAS/GRAPH software	0.3
SAS/OR software	0.6
SAS/QC software	0.2
SAS/STAT software	1.4

Italian Language

Italian Support	Required Disk Space
Base SAS software	20.1
ODS Templates software	6.7
SAS Anti-Money Laundering Alert Generation software	0.1
SAS Anti-Money Laundering Alert Generation samples	0.3
SAS Data Quality Server software	0.1
SAS Enterprise Miner software	0.2
SAS Risk Dimensions software	0.6
SAS/ETS software	1.0
SAS/Genetics software	0.1
SAS/GRAPH software	0.5
SAS/OR software	0.7
SAS/QC software	0.2
SAS/STAT software	1.5

Japanese Language

Japanese Support	Primary Encoding Required Disk Space	Secondary Encoding Required Disk Space
Base SAS software	10.3	10.3
ODS Templates software	6.8	6.8
SAS Anti-Money Laundering Alert Generation samples	0.1	0.1
SAS OLAP Server software	0.2	0.2
SAS/ETS software	0.9	0.9
SAS/GRAPH software	0.3	0.3
SAS/IntrNet software	0.3	0.3
SAS/QC software	0.2	0.2
SAS/STAT software	1.4	1.4
Countries in Asia and Pacific Maps	1.1	1.1

Korean Language

Korean Support	Required Disk Space
Base SAS software	5.9
ODS Templates software	6.8
SAS OLAP Server software	0.2
SAS/GRAPH software	0.3
SAS/QC software	0.2

Russian Language

Russian Support	Required Disk Space
SAS Anti-Money Laundering Alert Generation software	0.1
SAS Anti-Money Laundering Alert Generation samples	0.2

Spanish Language

Spanish Support	Required Disk Space
Base SAS software	15.1
ODS Templates software	6.7
SAS Anti-Money Laundering Alert Generation software	0.1
SAS Anti-Money Laundering Alert Generation samples	0.4
SAS Data Quality Server software	0.1
SAS Enterprise Miner software	0.2
SAS Risk Dimensions software	0.6
SAS/ETS software	1.0
SAS/Genetics software	0.1
SAS/GRAPH software	0.4
SAS/OR software	0.7
SAS/QC software	0.2
SAS/STAT software	1.5

UTF-8 Encoding

UTF-8 Support	Required Disk Space
Base SAS software	0.1
ODS Templates software	40.5
SAS Text Miner Client Samples	2.2

Specific Product Requirements

Base SAS Software

Requirements for SPD Engine on HP-UX for the Itanium Processor Family

- An SMP (symmetric multiprocessing) computer with at least two CPUs; four are preferred
- At least one I/O channel per two CPUs
- Enough disk drives to have at least one mount point per CPU isolated on its own disk; two mount points per CPU are bette

ODS Graphics

The use of ODS Graphics in Base SAS software requires a SAS/GRAPH license.

Credit Scoring for SAS Enterprise Miner Software

SAS Enterprise Miner software is a prerequisite for the installation of Credit Scoring for SAS Enterprise Miner.

SAS Enterprise Miner Server includes Credit Scoring for SAS Enterprise Miner. Unless explicitly licensed, use of this software is limited to SAS Enterprise Miner Server.

Disk Space Required for SAS Enterprise Miner Server:

SAS Enterprise Miner Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Enterprise Miner Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Activity-Based Management Software

The following products are included in SAS Activity-Based Management Data Integration and Enterprise BI Server. Unless explicitly licensed, use of this software is limited to SAS Activity-Based Management Data Integration and Enterprise BI Server.

- Base SAS software
- SAS Integration Technologies software
- SAS Metadata Bridges, three of choice
- SAS OLAP Server software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/GRAPH software

Disk Space Required for SAS Activity-Based Management Data Integration and Enterprise BI Server:

SAS Activity-Based Management Data Integration and Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Activity-Based Management Data Integration and Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Analytics Accelerator for Teradata Software

The SAS Analytics Accelerator for Teradata requires Base SAS, SAS/STAT, and SAS/ACCESS Interface to Teradata.

In-Database DBMS Products Required

SAS Analytics Accelerator for Teradata requires Teradata Tools and Utilities (TTU) 13 with patch 1.9 or later.

SAS Anti-Money Laundering Software

The following products are included in SAS Anti-Money Laundering Alert Generation Server. Unless explicitly licensed, use of this software is limited to SAS Anti-Money Laundering Alert Generation Server.

- SAS Anti-Money Laundering Alert Generation Server software
- Base SAS software
- SAS Data Quality Server software
- SAS Enterprise Miner software
- SAS Integration Technologies software
- SAS Metadata Bridges, three of choice
- SAS OLAP Server software
- SAS Threaded Kernel Extensions for Data Mining software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/GRAPH software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Anti-Money Laundering Alert Generation Server:

SAS Anti-Money Laundering Alert Generation Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Anti-Money Laundering Alert Generation Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Asset and Liability Management for Banking Software

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

- SAS Asset and Liability Management for Banking Server software
- SAS Risk Management for Banking Server software
- Base SAS software
- SAS Detail Data Store for Banking 3.1 software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Banking Server:

SAS Risk Management for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Banking applications (up to and including all four), an **additional minimum of 250 MB** of disk space is required.

SAS Banking Analytics Architecture Software

SAS Banking Analytics Architecture Data Integration Server

The following products are included in SAS Banking Analytics Architecture Data Integration Server. Unless explicitly licensed, use of this software is limited to SAS Banking Analytics Architecture Data Integration Server.

- SAS Banking Analytics Architecture Data Integration Server software
- Base SAS software
- SAS Detail Data Store for Banking software
- SAS Integration Technologies software
- SAS/ACCESS engine of choice
- a second SAS/ACCESS engine of choice
- SAS/CONNECT software

Disk Space Required for SAS Banking Analytics Architecture Data Integration Server:

SAS Banking Analytics Architecture Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Banking Analytics Architecture Data Integration Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Banking Analytics Architecture Enterprise BI Server

The following products are included in SAS Banking Analytics Architecture Enterprise BI Server. Unless explicitly licensed, use of this software is limited to SAS Banking Analytics Architecture Enterprise BI Server.

- Base SAS software
- SAS BI Lineage Scheduling Server software
- SAS BI Lineage Plug-in for SAS Management Console software
- SAS Enterprise Guide software
- SAS Integration Technologies software
- SAS Management Console software
- SAS/GRAPH software
- SAS/STAT software

Disk Space Required for SAS Banking Analytics Architecture Enterprise BI Server:

SAS Banking Analytics Architecture Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Banking Analytics Architecture Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS BI Server Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS/GRAPH software

Disk Space Required for SAS BI Server:

SAS BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS BookRunner Advanced Analytics Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS BookRunner Advanced Analytics Server:

SAS BookRunner Advanced Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS BookRunner Advanced Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS BookRunner Analytics Workbench Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS BookRunner Analytics Workbench Server:

SAS BookRunner Analytics Workbench Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS BookRunner Analytics Workbench Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS BookRunner Commodity Capture Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software

- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS BookRunner Commodity Capture Server:

SAS BookRunner Commodity Capture Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS BookRunner Commodity Capture Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Campaign Management Software

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

- Base SAS software
- SAS Customer Intelligence Processes software
- SAS Integration Technologies software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Campaign Management Server:

SAS Campaign Management Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Campaign Management Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Clinical Standards Toolkit Software

Base SAS is a prerequisite for the installation of SAS Clinical Standards Toolkit software.

Software Included in SAS Clinical Standards Toolkit software:

SAS Clinical Standards Toolkit Framework software is included in SAS Clinical Standards Toolkit Server software. Unless explicitly licensed, use of this software is limited to SAS Clinical Standards Toolkit Server software.

Disk Space Required for SAS Clinical Standards Toolkit Server:

SAS Clinical Standards Toolkit Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Clinical Standards Toolkit Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Credit Risk for Banking Software

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

- SAS Credit Risk for Banking Server software
- SAS Risk Management for Banking Server software
- Base SAS software
- SAS Detail Data Store for Banking 3.1 software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Banking Server:

SAS Risk Management for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Banking applications (up to and including all four), an **additional minimum of 250 MB** of disk space is required.

SAS Credit Risk Management for Banking Software

The following products are included in SAS Credit Risk Management for Banking Server. Unless explicitly licensed, use of this software is limited to SAS Credit Risk Management for Banking Server.

- SAS Credit Risk Management for Banking Server Component software
- Base SAS software
- SAS Detail Data Store for Banking
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Credit Risk Management for Banking Server:

SAS Credit Risk Management for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Credit Risk Management for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Credit Scoring for Banking Software

SAS Credit Scoring for Banking includes SAS Banking Analytics Architecture.

The following products are included in SAS Credit Scoring for Banking Server. Unless explicitly licensed, use of this software is limited to SAS Credit Scoring for Banking Server.

- SAS Credit Scoring for Banking Server software
- Base SAS software
- BIS Common Server software
- Credit Scoring for SAS Enterprise Miner software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/INSIGHT software
- SAS/OR software
- SAS/STAT software

Disk Space Required for SAS Credit Scoring for Banking Server:

SAS Credit Scoring for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Credit Scoring for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Data Integration Server Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS Metadata Server software
- SAS/CONNECT software

Disk Space Required for SAS Data Integration Server:

SAS Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Data Integration Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Data Surveyor for Clickstream Data Software

SAS Data Integration Studio is a prerequisite for the installation of SAS Data Surveyor for Clickstream Data.

SAS Data Surveyor for Clickstream Data Server requires SAS Data Surveyor for Clickstream Data Server Components. Unless explicitly licensed, use of this software is limited to SAS Data Surveyor for Clickstream Data Server.

Disk Space Required for SAS Data Surveyor for Clickstream Data Server:

SAS Data Surveyor for Clickstream Data Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Data Surveyor for Clickstream Data Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Data Surveyor for SAP Software

Base SAS software is a prerequisite for the installation of SAS Data Surveyor for SAP.

The following products are included in SAS Data Surveyor for SAP. Unless explicitly licensed, use of this software is limited to SAS Data Surveyor for SAP.

- SAS Integration Technologies software
- SAS Metadata Server software
- SAS/ACCESS Interface to R/3 software
- SAS/CONNECT software

Disk Space Required for SAS Data Surveyor for SAP:

SAS Data Surveyor for SAP is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Data Surveyor for SAP should be decreased by the disk space of any of the above products that have been previously installed.*

Configuring SAS/ACCESS Interface to R/3 Software

SAS/ACCESS Interface to R/3 software requires extensive post-installation configuration before it can be used. Refer to the *Configuration Instructions for SAS/ACCESS 4.3 Interface to R/3* on Install Center (http://support.sas.com/documentation/installcenter/92/documents/index.html) for detailed information.

SAS Digital Marketing Software

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

- Base SAS software
- SAS/GRAPH software
- SAS/SHARE software
- SAS Integration Technologies software

Disk Space Required for SAS Digital Marketing SAS Server:

SAS Digital Marketing SAS Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Digital Marketing SAS Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise BI Server Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/AF software
- SAS/GRAPH software

Disk Space Required for SAS Enterprise BI Server:

SAS Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise Data Integration Server Software

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

- Base SAS software
- Quality Knowledge Base locale of choice
- SAS Data Quality Server software
- SAS Integration Technologies software
- SAS Metadata Server software
- SAS/ACCESS engine of choice
- a second SAS/ACCESS engine of choice
- SAS/CONNECT software
- SAS/SHARE software

Disk Space Required for SAS Enterprise Data Integration Server:

SAS Enterprise Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Enterprise Data Integration Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise GRC Software

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

- SAS Enterprise GRC Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS engine of choice (Oracle, ODBC, or DB2)
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/GRAPH software

Disk Space Required for SAS Enterprise GRC Server:

SAS Enterprise GRC Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation installed already, then the amount of disk space required to install SAS Enterprise GRC Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise Miner 4.3 and 6.2

Base SAS software and SAS/STAT software are prerequisites for the installation of SAS Enterprise Miner Server.

The following products are included in SAS Enterprise Miner Server 4.3 and 6.2. Unless explicitly licensed, use of this software is limited to SAS Enterprise Miner Server.

- SAS Enterprise Miner software
- SAS Integration Technologies software
- SAS/ACCESS to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/OR software

Memory Required for SAS Enterprise Miner Server 4.3 and 6.2:

- 2 GB required per concurrent user

Disk Space Required for SAS Enterprise Miner Server 4.3 and 6.2:

The disk space required for the SAS Enterprise Miner Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install the SAS Enterprise Miner Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fair Banking Software

The following products are included in SAS Fair Banking Data Integration and Enterprise BI Server. Unless explicitly licensed, use of this software is limited to SAS Fair Banking Data Integration and Enterprise BI Server.

- Base SAS software
- SAS Integration Technologies software
- SAS Metadata Server software
- SAS OLAP Server software
- SAS/ACCESS Interface to PC Files software
- SAS/ACCESS engine of choice
- SAS/AF software
- SAS/CONNECT software
- SAS/GRAPH software
- SAS/SHARE software

Disk Space Required for SAS Fair Banking Data Integration and Enterprise BI Server:

SAS Fair Banking Data Integration and Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fair Banking Data Integration and Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Firmwide Risk for Banking Software

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

- SAS Firmwide Risk for Banking Server software
- SAS Risk Management for Banking Server software
- Base SAS software
- SAS Detail Data Store for Banking 3.1 software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software

- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Banking Server:

SAS Risk Management for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Banking applications (up to and including all four), an **additional minimum of 250 MB** of disk space is required.

SAS Firmwide Risk Management for Insurance Software

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

- SAS Firmwide Risk Management for Insurance Server software
- SAS Risk Management for Insurance Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Insurance Server:

SAS Risk Management for Insurance Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Insurance Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Insurance applications (up to and including all four), an **additional minimum of 450 MB** of disk space is required.

SAS Forecast Server Software

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

- Base SAS software
- SAS Forecast Server Batch Interface software
- SAS High-Performance Forecasting software
- SAS Integration Technologies software
- SAS/ETS software
- SAS/GRAPH software
- SAS/OR Mathematical Programming Common Components software

Disk Space Required for SAS Forecast Server

The disk space required for SAS Forecast Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Forecast Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fraud Framework for Banking Software

The following products are included in SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server. Unless explicitly licensed, use of this software is limited to SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server.

- Base SAS software
- SAS/ACCESS engine of choice
- SAS/ETS software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Enterprise BI Server
- SAS Enterprise Data Integration Server
- SAS Enterprise Miner Server
- SAS Model Manager Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server:

SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fraud Framework for Government Software

The following products are included in SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server. Unless explicitly licensed, use of this software is limited to SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server.

- Base SAS software
- SAS/ACCESS engine of choice
- SAS/ETS software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Enterprise BI Server
- SAS Enterprise Data Integration Server
- SAS Enterprise Miner Server
- SAS Model Manager Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server:

SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fraud Framework for Health Care Software

The following products are included in SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server. Unless explicitly licensed, use of this software is limited to SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server.

- Base SAS software
- SAS/ACCESS engine of choice
- SAS/ETS software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Enterprise BI Server
- SAS Enterprise Data Integration Server
- SAS Enterprise Miner Server
- SAS Model Manager Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server:

SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fraud Framework for Insurance Software

The following products are included in SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server. Unless explicitly licensed, use of this software is limited to SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server.

- Base SAS software
- SAS/ACCESS engine of choice
- SAS/ETS software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Enterprise BI Server
- SAS Enterprise Data Integration Server
- SAS Enterprise Miner Server
- SAS Model Manager Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server:

SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Fraud Framework for Telecommunications Software

The following products are included in SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server. Unless explicitly licensed, use of this software is limited to SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server.

- Base SAS software
- SAS/ACCESS engine of choice
- SAS/ETS software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Enterprise BI Server
- SAS Enterprise Data Integration Server
- SAS Enterprise Miner Server
- SAS Model Manager Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server:

SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Fraud Framework Enterprise DI, Enterprise BI, and Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Information Delivery Portal Software

Base SAS is a prerequisite for the installation of SAS Information Delivery Portal software.

Software Included in SAS Information Delivery Portal software:

SAS Integration Technologies software is included in SAS Information Delivery Portal Server software. Unless explicitly licensed, use of this software is limited to SAS Information Delivery Portal Server software.

Disk Space Required for SAS Information Delivery Portal software:

SAS Information Delivery Portal Server software is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install Information Delivery Portal Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Insurance Analytics Architecture Software

SAS Insurance Analytics Architecture Data Integration Server

The following products are included in SAS Insurance Analytics Architecture Data Integration Server. Unless explicitly licensed, use of this software is limited to SAS Insurance Analytics Architecture Data Integration Server.

- SAS Insurance Analytics Architecture Data Integration Server software
- Base SAS software
- SAS Detail Data Store for Insurance software
- SAS Integration Technologies software
- SAS/ACCESS engine of choice
- a second SAS/ACCESS engine of choice
- SAS/CONNECT software

Disk Space Required for SAS Insurance Analytics Architecture Data Integration Server:

SAS Insurance Analytics Architecture Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Insurance Analytics Architecture Data Integration Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Insurance Analytics Architecture Enterprise BI Server

The following products are included in SAS Insurance Analytics Architecture Enterprise BI Server. Unless explicitly licensed, use of this software is limited to SAS Insurance Analytics Architecture Enterprise BI Server.

- Base SAS software
- SAS Enterprise Guide software
- SAS Integration Technologies software

- SAS/GRAPH software
- SAS/STAT software

Disk Space Required for SAS Insurance Analytics Architecture Enterprise BI Server:

SAS Insurance Analytics Architecture Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Insurance Analytics Architecture Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Inventory Optimization Software

Base SAS is a prerequisite for SAS Inventory Optimization.

SAS Inventory Optimization software is included in SAS Inventory Optimization 2.1.

Disk Space Required for SAS Inventory Optimization software:

SAS Inventory Optimization is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Inventory Optimization should be decreased by the disk space of any of the above products that have been previously installed.*

SAS IT Resource Management Server Software

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

- SAS IT Resource Management Server software
- SAS IT Resource Management MVA Data software
- Base SAS software
- SAS High Performance Forecasting software
- SAS Integration Technologies software
- SAS IT Management Solutions Core Components MVA Data software
- SAS OLAP Server software
- SAS Threaded Kernel Extensions for Operations Research
- SAS/ACCESS to DB2 software
- SAS/ACCESS to ODBC software
- SAS/ACCESS to Oracle software
- SAS/ACCESS to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS IT Resource Management Server:

The disk space required for the SAS IT Resource Management Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 already installed, then the amount of disk space required to install SAS IT Resource Management Server should be decreased by the disk space of any of the above products that have been previously installed.*

Other Requirements for SAS IT Resource Management Server:

- SAS IT Resource Management requires a screen resolution of at least 800x600. If your display is set to a lower screen resolution, some windows may be truncated to fit the screen. If you experience font display problems, you may want to use the default SAS font. To set the default font type, issue the SAS command **dlgfont** at the command prompt. In the Font window, select the font `Sasfont`, a style of *regular,* and font size 10.
- SAS IT Resource Management requires an Xwindows device that supports 256 or more colors.
- Adobe Acrobat Reader is required for some online documents supplied in printable form

SAS Market Risk for Banking Software

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

- SAS Market Risk for Banking Server software
- SAS Risk Management for Banking Server software
- Base SAS software
- SAS Detail Data Store for Banking 3.1 software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Banking Server:

SAS Risk Management for Banking Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Banking Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Banking applications (up to and including all four), an **additional minimum of 250 MB** of disk space is required.

SAS Market Risk Management for Insurance Software

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

- SAS Market Risk Management for Insurance Server software
- SAS Risk Management for Insurance Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Insurance Server:

SAS Risk Management for Insurance Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Insurance Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Insurance applications (up to and including all four), an **additional minimum of 450 MB** of disk space is required.

SAS Marketing Automation Software

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

- Base SAS software
- SAS Customer Intelligence Processes software
- SAS Enterprise Miner software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Marketing Automation Server:

SAS Marketing Automation Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Marketing Automation Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Marketing Optimization Software

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

- SAS Marketing Optimization Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/GRAPH software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Marketing Optimization Server:

SAS Marketing Optimization Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Marketing Optimization Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Metadata Server Software

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

- Base SAS software
- SAS/CONNECT software

Disk Space Required for SAS Metadata Server:

SAS Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Model Manager Software

SAS Model Manager Server Software

Base SAS is a prerequisite for the installation of SAS Model Manager software.

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

- SAS Integration Technologies software
- SAS Model Manager Common Components software
- SAS Model Manager Server software
- SAS/GRAPH software

Disk Space Required for SAS Model Manager Server:

SAS Model Manager Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Model Manager Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Model Manager Report Registration Client Software

Base SAS is a prerequisite for the installation of SAS Model Manager Report Registration Client software.

The following products are included in SAS Model Manager Report Registration Client. Unless explicitly licensed, use of this software is limited to SAS Model Manager Report Registration Client.

- SAS Model Manager Common Components software
- SAS Model Manager Report Registration Client software

Disk Space Required for SAS Model Manager Report Registration Client:

SAS Model Manager Report Registration Client is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Model Manager Report Registration Client should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Offer Optimization for Communications

The following products are included in SAS Offer Optimization for Communications Server. Unless explicitly licensed, use of this software is limited to SAS Offer Optimization for Communications Server.

- SAS Foundation for Communications Server software
- SAS Offer Optimization for Communications Server software
- Base SAS software
- SAS Enterprise Miner software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS Engine of choice (currently Oracle only)
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/OR software
- SAS/STAT software

Disk Space Required for SAS Offer Optimization for Communications Server:

SAS Offer Optimization for Communications Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Offer Optimization for Communications Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS OLAP Server Software

Base SAS is a prerequisite for the installation of SAS OLAP Server software.

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

- SAS OLAP Server software
- SAS/AF software
- SAS/GRAPH software

Memory:

The memory requirements for SAS OLAP Server software are dependent upon the complexity of the data. A minimum of 512 MB of space is required. Large applications will see performance improvements with more available memory.

SAS OpRisk VaR Software

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

- SAS OpRisk VaR Server software
- Base SAS software
- SAS High Performance Forecasting software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/IML software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS OpRisk VaR Server:

SAS OpRisk VaR Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS OpRisk VaR Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS OpRisk VaR Consortium Software

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

- SAS OpRisk VaR Server software
- Base SAS software
- SAS High Performance Forecasting software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/ACCESS engine of choice
- SAS/ACCESS Interface to PC Files software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GRAPH software
- SAS/IML software
- SAS/OR software
- SAS/STAT software

Disk Space Required for SAS OpRisk VaR Consortium Server:

SAS OpRisk VaR Consortium Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS OpRisk VaR Consortium Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Profitability Management Software

SAS Profitability Management SAS Server Software

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Transaction Assignment Server software
- SAS/ACCESS engine of choice
- SAS/AF software
- SAS/GRAPH software
- SAS/SHARE software

Disk Space Required for SAS Profitability Management SAS Server:

SAS Profitability Management SAS Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Profitability Management SAS Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Profitability Management Data Integration and Enterprise BI Server Software

The following products are included in SAS Profitability Management Data Integration and Enterprise BI Server. Unless explicitly licensed, use of this software is limited to SAS Profitability Management Data Integration and Enterprise BI Server.

- Base SAS software
- SAS Integration Technologies software
- SAS Metadata Server software
- SAS OLAP Server software
- SAS/ACCESS Interface to PC Files software
- SAS/ACCESS engine of choice
- SAS/AF software
- SAS/CONNECT software
- SAS/GRAPH software
- SAS/SHARE software

Disk Space Required for SAS Profitability Management Data Integration and Enterprise BI Server:

SAS Profitability Management Data Integration and Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Profitability Management Data Integration and Enterprise BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Risk Dimensions Software

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

- Base SAS software
- SAS High-Performance Forecasting software
- SAS Risk Dimensions Server Component software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Threaded Kernel Extensions for Operations Research
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software

- SAS/ETS software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Dimensions Server:

SAS Risk Dimensions Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Dimensions Server should be decreased by the disk space of any of the above products that have been previously installed.*

Disk Space Required for SAS Risk Dimensions Server:

SAS Risk Dimensions Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Dimensions Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Scalable Performance Data Server Software

Base SAS is the prerequisite for the installation of SAS Scalable Performance Data Server software. Scalable Performance Data Client software is included with Base SAS.

Disk Space Required for SAS Scalable Performance Data Server Software:

SAS Scalable Performance Data Server Software is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Scalable Performance Data Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Scoring Accelerator for DB2 Software

The SAS Scoring Accelerator for DB2 requires Base SAS, SAS/STAT, and SAS/ACCESS Interface to DB2. It also requires SAS Enterprise Miner.

In-Database DBMS Products Required

- Client utilities for IBM DB2 9.5
- IBM DB2 9.5 FixPack 3: AIX 5.3 or IBM DB2 9.5 FixPack 3: Linux for x64: RHEL 4

SAS Scoring Accelerator for Netezza Software

The SAS Scoring Accelerator for Netezza requires Base SAS, SAS/STAT, and SAS/ACCESS Interface to Netezza. It also requires SAS Enterprise Miner.

In-Database DBMS Products Required

- Client utilities for Netezza 4.6
- Netezza Performance Data Server 4.6

SAS Scoring Accelerator for Teradata Software

The SAS Scoring Accelerator for Teradata requires Base SAS, SAS/STAT, and SAS/ACCESS Interface to Teradata. It also requires SAS Enterprise Miner (preferred) or SAS Model Manager.

In-Database DBMS Products Required

- Client environment
  - Client utilities for Teradata (12 and higher)
  - Client utilities for Teradata 8.2 (V2r6)
- Database release
  - Teradata 12.0 (Linux)
  - Teradata V2r6.2 (Linux, MP-RAS)

SAS Service Parts Optimization Software

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

- SAS Service Parts Optimization Server software
- Base SAS software
- SAS Forecast Server Batch Interface software
- SAS High-Performance Forecasting software
- SAS Integration Technologies software
- SAS Inventory Optimization software
- SAS/ACCESS engine of choice
- a second SAS/ACCESS engine of choice (or SAS Data Surveyor for SAP software)
- SAS/ETS software
- SAS/GRAPH software
- SAS/OR software
- SAS/QC software
- SAS/STAT software

In addition, SAS Service Parts Optimization Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Data Integration Server
- SAS Enterprise BI Server

Disk Space Required for SAS Service Parts Optimization Server:

SAS Service Parts Optimization Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Service Parts Optimization Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Service Parts Optimization Adapter for SAP Server

The following products are included in SAS Service Parts Optimization Adapter for SAP Server. Unless explicitly licensed, use of this software is limited to SAS Service Parts Optimization Adapter for SAP Server.

- SAS Service Parts Optimization Adapter for SAP Server software
- Base SAS software
- SAS Integration Technologies software
- SAS/ACCESS Interface to R/3 software
- SAS/CONNECT software

Disk Space Required for SAS Service Parts Optimization Adapter for SAP Server:

SAS Service Parts Optimization Adapter for SAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Service Parts Optimization Adapter for SAP Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Social Network Analysis Server Software

SAS Social Network Analysis SAS Server Software

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

- SAS Social Network Analysis Server software
- Base SAS software
- SAS Data Quality Server software
- SAS Integration Technologies software
- SAS Network Algorithms software
- SAS Quality Knowledge Base locale of choice
- SAS/ACCESS engine of choice
- a second SAS/ACCESS Engine of choice
- Threaded Kernel Extensions for Graph Analytics software

Disk Space Required for SAS Social Network Analysis SAS Server:

SAS Social Network Analysis SAS Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Social Network Analysis SAS Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Social Network Analysis Enterprise Data Integration and BI Server Software

The following products are included in SAS Social Network Analysis Enterprise Data Integration and BI Server. Unless explicitly licensed, use of this software is limited to SAS Social Network Analysis Enterprise Data Integration and BI Server.

- Base SAS software
- SAS/ACCESS engine of choice

In addition, SAS Social Network Analysis Enterprise Data Integration and BI Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Data Integration Server
- SAS Enterprise BI Server

Disk Space Required for SAS Social Network Analysis Enterprise Data Integration and BI Server:

SAS Social Network Analysis Enterprise Data Integration and BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Social Network Analysis Enterprise Data Integration and BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Text Miner Software

SAS Enterprise Miner is a prerequisite for SAS Text Miner Server.

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

- SAS Text Miner for English software
- SAS Text Miner language of choice (if requested)

Disk Space Required for SAS Text Miner Server:

The disk space required for the SAS Text Miner Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation installed already, then the amount of disk space required to install the SAS Text Miner Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Underwriting Risk Management for Life Insurance Software

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

- SAS Risk Management for Insurance Server software
- SAS Underwriting Risk Management for Life Insurance Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Insurance Server:

SAS Risk Management for Insurance Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Insurance Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Insurance applications (up to and including all four), an **additional minimum of 450 MB** of disk space is required.

SAS Underwriting Risk Management for P&C Insurance Software

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

- SAS Risk Management for Insurance Server software
- SAS Underwriting Risk Management for P&C Insurance Server software
- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS Risk Dimensions Server Component software
- SAS Risk Reporting Repository software
- SAS/ACCESS engine of choice
- A second SAS/ACCESS engine of choice
- SAS/ACCESS Interface to ODBC software
- SAS/ACCESS Interface to PC Files software
- SAS/AF software
- SAS/CONNECT software
- SAS/EIS software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/IML software
- SAS/INSIGHT software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Risk Management for Insurance Server:

SAS Risk Management for Insurance Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Risk Management for Insurance Server should be decreased by the disk space of any of the above products that have been previously installed.*

In addition, if you install any of the available Risk Management for Insurance applications (up to and including all four), an **additional minimum of 450 MB** of disk space is required.

SAS Visual Data Discovery Software

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

- Base SAS software
- SAS Integrations Technologies software

- Standard SAS/ACCESS engine of choice
- SAS/GRAPH software
- SAS/STAT software

Disk Space Required for SAS Visual Data Discovery Server:

SAS Visual Data Discovery Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Visual Data Discovery Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Warranty Analysis Software

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

- SAS Warranty Analysis Server software
- Base SAS software
- SAS Integration Technologies software
- Three SAS/ACCESS engines of choice (or one SAS/ACCESS engine of choice and one SAS Data Surveyor)
- SAS/CONNECT software
- SAS/GRAPH software
- SAS/QC software
- SAS/SHARE software
- SAS/STAT software

In addition, SAS Warranty Analysis Server includes the following servers from other offerings. Please refer to the appropriate sections of this document for information about the composition of each.

- SAS Data Integration Server
- SAS Enterprise BI Server
- SAS Enterprise Miner Server
- SAS Text Miner Server, including a SAS Text Miner language of choice

Disk Space Required for SAS Warranty Analysis Server:

SAS Warranty Analysis Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Warranty Analysis Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Web Analytics Software

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

- Base SAS software
- SAS Web Analytics software
- SAS Data Surveyor for Clickstream Data Server Components software
- SAS Enterprise Miner Server software
- SAS High-Performance Forecasting software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/AF software
- SAS/CONNECT software
- SAS/ETS software
- SAS/GIS software
- SAS/GRAPH software
- SAS/OR Mathematical Programming Common Components software
- SAS/STAT software

Disk Space Required for SAS Web Analytics Server:

SAS Web Analytics Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table for more information.

Note: *If you have SAS 9.2 Foundation already installed, then the amount of disk space required to install SAS Web Analytics Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS/ACCESS Interface to DB2 Software

Base SAS is required for the installation of SAS/ACCESS Interface to DB2 software.

Products Included

- SAS/ACCESS Interface to DB2 software
- SAS Accelerator Publishing Agent software

DBMS Product Required

- DB2 Universal Database, Version 8.1 FixPak 4 or higher (64-bit libraries)

SAS/ACCESS Interface to DB2 can be installed on a DB2 server or on a DB2 client node with an installation of the DB2 Run-Time Client, DB2 Application Development Client, or DB2 Administration Client. In addition, DB2 Connect must be installed to connect to DB2 databases that reside on AS/400, VSE, VM, MVS, and OS/390 systems.

SAS/ACCESS Interface to Greenplum Software

Base SAS is required for the installation of SAS/ACCESS Interface to Greenplum software.

Products Included

- SAS/ACCESS Interface to Greenplum software

Additional Software Requirements

SAS/ACCESS Interface to Greenplum requires the DataDirect Driver Manager and Driver for Greenplum. Contact SAS Technical Support for details on how to obtain these components. You must install these components before using SAS/ACCESS Interface to Greenplum.

SAS/ACCESS Interface to HP Neoview Software

Products Required:

- Base SAS software
- SAS/ACCESS Interface to HP Neoview software
- Neoview ODBC driver, release 2.2 or later

SAS/ACCESS Interface to HP Neoview requires an ODBC driver from HP. To get the driver, go to http://software.hp.com and click on "HP Neoview Platform" under "Our top featured products".

In addition, you may choose to use the Transporter SAI facility with SAS/ACCESS Interface to HP Neoview. This facility is used when you specify either BULKLOAD=YES or BULKEXTRACT=YES data set options. To receive this facility, you must contact Hewlett-Packard and request the "Transporter SAI libraries." Since the libraries are not publicly available on the Hewlett-Packard Web site, you will receive the location and a user ID/password to download the package in response to your request.

SAS/ACCESS Interface to Informix Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to Informix software

DBMS Product Required

- Informix Client SDK 2.90FC1(64-bit libraries)

SAS/ACCESS Interface to Informix uses an ODBC connection. The ODBC driver included with Informix Connect must be installed and configured prior to using the SAS/Access to Informix software.

SAS/ACCESS Interface to Informix software also requires the use of communication protocols such as TCP/IP to function properly.

SAS/ACCESS Interface to Microsoft SQL Server Software

Base SAS is required for the installation of SAS/ACCESS Interface to Microsoft SQL Server software.

DBMS Product Required

Microsoft SQL Server Version 7.0 or later

SAS/ACCESS Interface to MySQL Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to MySQL software

DBMS Products Required

- MySQL Client 4.1 or 5.0
- MySQL Server 5.0 or later

For more information about SAS/ACCESS Interface to MySQL software, please see the MySQL chapter in *SAS/ACCESS Software for Relational Databases: Reference.*

SAS/ACCESS Interface to Netezza Software

Base SAS is required for the installation of SAS/ACCESS Interface to Netezza software.

Software Included in SAS/ACCESS Interface to Netezza software:

- SAS/ACCESS Interface to Netezza software
- SAS Accelerator Publishing Agent software

SAS/ACCESS Interface to Netezza requires an ODBC driver from Netezza. To get the Netezza ODBC driver, release 3.1.4 or above, please contact Netezza technical support at (877) 810-4441 or visit the Netezza customer support Web site, http://www.netezza.com/support/login.cfm.

SAS/ACCESS Interface to ODBC Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to ODBC software

DBMS Products Required

- A compliant ODBC driver manager and ODBC driver (64-bit libraries)

ODBC drivers are often available from DBMS vendors and other third party ODBC driver developers. The ODBC driver you choose may require additional DBMS software in order to access the data.

You may have to edit the .odbc.ini file in your home directory with a text editor to configure data sources. Some ODBC driver vendors may allow a system administrator to maintain a centralized copy by setting an environment variable.

The ODBC drivers are ODBC API-compliant dynamic link libraries, referred to in UNIX as shared objects. You must include the full path to the dynamic link libraries in SHLIB_PATH so that the ODBC drivers can be loaded dynamically at run time.

For more information, please consult your ODBC driver vendor.

SAS/ACCESS Interface to Oracle Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to Oracle software

DBMS Products Required

SAS/ACCESS Interface to Oracle software can be installed on either a full Oracle RDBMS server node or on an Oracle client node.

The minimum required Oracle Client release is:

- Oracle 9i, Release 2 (64-bit libraries)

Note: *In order to use the Bulk Load feature of this SAS product, you must have Oracle's SQL*Loader data-loading utility installed. This utility can be obtained by running the Oracle installer and selecting the Oracle Utilities product. Please refer to your Oracle documentation for information on SQL*Loader.*

SAS/ACCESS Interface to PC Files Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to PC Files software

Products Required on Windows

- SAS PC Files Server, running on Windows 32-bit System or WOW64

DBMS Products Required on Windows

- Microsoft Office 2007 System Driver: Data Connectivity Components (ACE)
- Microsoft Data Access Components (MDAC), Version 2.8 or higher

SAS/ACCESS Interface to PC Files software supports access to delimited files (csv, tab), dBase files (.dbf), JMP files (.jmp), SPSS files (.sav), Stata files (.dta), Excel files (.xls), Microsoft Access database files (.mdb or .accdb) and virtually any data source through ODBC support on Windows.

However, to access Microsoft Access database files (.mdb or .accdb), Microsoft Excel workbook files (.xls, .xlsb, .xlsm or .xlsx) or any ODBC supported data sources, SAS/ACCESS Interface to PC Files software requires the PC Files Server (`pcfserver.exe` or `pcfservice.exe`) running on Windows 32-bit System or Windows 64-bit system with WOW(Windows-On-Windows) subsystem.

SAS/ACCESS Interface to Sybase Software

Products Required

- Base SAS software
- SAS/ACCESS Interface to Sybase software

DBMS Products Required

The following release of Sybase Open Client software is required:

- Sybase Open Client SDK (Software Developer's Kit) Software, Release 12.5.x (64-bit libraries)

The following is recommended:

- Adaptive Server Enterprise, Release 11.x or higher

Note: *SAS/ACCESS Interface to Sybase software no longer supports access to Microsoft SQL Server data. SAS/ACCESS Interface to Sybase software uses the CTLIB API calls to access the Sybase DBMS product. These CTLIB API calls are not supported by Microsoft SQL Server; therefore, you will have to use SAS/ACCESS Interface to ODBC software with an appropriate ODBC driver to obtain access to Microsoft SQL Server data.*

Note: *Sybase ASIQ, Release 12.x is not supported; SAS/ACCESS Interface to ODBC software must be used instead.*

SAS/ACCESS Interface to Sybase IQ Software

Base SAS is required for the installation of SAS/ACCESS Interface to Sybase IQ software.

Products Included

- SAS/ACCESS Interface to Sybase IQ software

SAS/ACCESS Interface to Sybase IQ requires an ODBC driver (64-bit version) from Sybase. The Sybase IQ ODBC driver is included in the Sybase IQ Network Client. To obtain the IQ Network Client, release 12.7 or 15.1 and above, please contact Sybase technical support at 1-800-8-SYBASE or visit the Sybase IQ Technical Resources Web site at http://www.sybase.com/products/datawarehousing/sybaseiq/technicalresources.

SAS/ACCESS Interface to Teradata Software

Base SAS is required for the installation of SAS/ACCESS Interface to Teradata software.

Products Included

- SAS/ACCESS Interface to Teradata software
- SAS Accelerator Publishing Agent software

DBMS Products Required

The following release of Teradata Client software is required:

- Teradata CLIv2 client libraries, TTU 8.2 or later for HP-UX Itanium(64-bit libraries)

The following is recommended:

- Teradata FastExport utility, TTU 8.2 or later for HP-UX Itanium.
- Teradata MultiLoad utility, TTU 8.2 or later for HP-UX Itanium.
- Teradata Parallel Transporter API, TTU 8.2 or later for HP-UX Itanium.

SAS/AF Software

Products Required for Build Mode

- Base SAS software
- SAS/AF software
- SAS/GRAPH software (to create and display some graphics objects)
- Other products may be required depending on the application

Products Required for Run Mode

- Base SAS software
- SAS/GRAPH software (to display some graphics objects)
- Other products may be required depending on the application

Printers

- For printing graphics-based objects, a color or gray scale printer is required.
- Certain non-graphic objects may require SAS/GRAPH software to print depending on the object.

SAS/EIS Software

Products Required for Build Mode

- Base SAS software
- SAS/AF software
- SAS/EIS software
- SAS/FSP software
- SAS/GRAPH software
- Other products may be required depending on the application

Products Required for Run Mode

- Base SAS software
- SAS/GRAPH software
- SAS/EIS software
- Other products may be required depending on the application

Memory

- 96 MB required per concurrent user
- 128 MB recommended per concurrent user

Printers

- For printing graphics-based objects, a color or gray scale printer is required.

SAS/ETS Software

The use of ODS Graphics in SAS/ETS software requires a SAS/GRAPH license.

SAS/Genetics Software

Products Required:

- Base SAS software
- SAS/Genetics software
- SAS/GRAPH software

SAS/GIS Software

Products Required for Build Mode

- Base SAS software
- SAS/AF software (recommended)
- SAS/GIS software
- SAS/GRAPH software
- Other products may be required depending on the application

Products Required for Run Mode

- Base SAS software
- SAS/FSP software (recommended)
- SAS/GIS software
- SAS/GRAPH software
- Other products may be required depending on the application

Printers

- A color or gray scale printer is required. The list of possible printers can be found in the Graphics Hardware and Software Compatibility section.

SAS/IntrNet Software

SAS/IntrNet software consists of several components that may be installed independently. SAS/IntrNet Server software is installed on an existing SAS system and is included on SAS 9.2 media.

CGI Tools and Applications

Application Dispatcher

Requires Base SAS software and SAS/IntrNet Server software. The Application Broker component of the Application Dispatcher must be installed on a Web server.

htmSQL

Requires Base SAS software, SAS/SHARE software, and a SAS/IntrNet software license (SETINIT). The htmSQL component must be installed on a Web server.

MDDB Report Viewer Application

Requires Base SAS software, SAS/GRAPH software, SAS/IntrNet software, and SAS/EIS software or SAS OLAP Server software. The Application Dispatcher component must be installed and configured.

Xplore Sample Web Application

Requires Base SAS software and SAS/IntrNet Server software. The Application Dispatcher component must be installed and configured.

Java Tools and Applications

SAS/CONNECT Driver for Java

Requires Base SAS software, SAS/CONNECT software, and SAS/IntrNet Server software. SAS/SHARE software must also be installed if data services are used. The Java Tools package must be installed on a Web server or client system.

Tunnel Feature

Must be installed on a Web server running on a UNIX or Windows system.

SAS/LAB Software

Products Required:

- Base SAS software
- SAS/FSP software (required for interactive data entry)
- SAS/GRAPH software
- SAS/LAB software

SAS/OR Software

The use of traditional graphics in SAS/OR software requires a SAS/GRAPH license.

SAS/QC Software

The use of ODS Graphics and traditional graphics in SAS/QC software requires a SAS/GRAPH license.

SAS/STAT Software

The use of ODS Graphics in SAS/STAT software requires a SAS/GRAPH license.

SAS/Warehouse Administrator Software

Products Required for Build Mode

- Base SAS software
- SAS/AF software (required only for API usage)

Products Required for Run Mode

- Base SAS software
- Other products depending on application (e.g., SAS/ACCESS software for access to DBMS tables, SAS/CONNECT software for access to remote data, or SAS/AF software to access warehouse via method calls)

Printers

- For printing graphics-based objects, a color or gray scale printer is required.
- Certain non-graphic objects may require SAS/GRAPH software to print depending on the object.

Graphics Hardware and Software Compatibility

Printers

SAS/Graph software supports PostScript, HP-GL, HP-GL/2, PCL, and other printer languages on printers from manufacturers such as Brother, Canon, Hewlett-Packard, IBM, Konica Minolta, Lanier, Lexmark, Okidata, QMS, Ricoh, Sharp, Xante, and Xerox.

Displays

Display of graphs requires an Xwindows-capable display, terminal, or emulation software.

Images and Interfaces to Other Software

Included with SAS/GRAPH software are drivers that can produce Computer Graphics Metafiles (CGM) in binary, character, and clear-text formatted output for use by devices or software that support CGM, such as Word for Windows, WordPerfect for Windows, Harvard Graphics, and Lotus Freelance.

SAS/GRAPH software can generate encapsulated PostScript vector files, which can be exported to word processing packages such as Microsoft Word and WordPerfect. SAS/GRAPH software can also generate Windows metafiles that can be exported to numerous packages including Microsoft Office, Lotus Smart Suite, and Perfect Office. Contact SAS Technical Support for details.

SAS/GRAPH software's HPGL or HPGL2 driver can be used to produce files that can be transferred to most vector-based drawing programs such as CorelDraw and Micrografx Designer.

SAS/GRAPH software also has drivers for PDF and SVG along with image file formats of BMP, DIB, EMF, EPSI, PBM, PPM, GIF, JPEG, EMF, WMF, PNG, TIFF, and PaintBrush image formats. In addition, SAS/GRAPH software can import graphics in the following formats:

- BMP - Microsoft Windows Bitmap
- DIB - Device Independent Bitmap
- EMF - Microsoft NT Enhanced Metafile
- EPSI - Encapsulated PostScript Interchange
- GIF - Graphics Interchange Format
- JPG – JPEG Files
- PBM - Portable Bitmap
- PCD - PHOTO CD
- PCX - PC PaintBrush
- PNG - Portable Network Graphics
- TGA - TARGA Format
- TIF - Tagged Image File Format
- WMF - Microsoft Windows Metafile Format
- XBM - X Window Bitmaps
- XWD - X Window Dump

Viewing SVG output requires a browser capable of displaying SVG content, such as Mozilla 1.8+ based browsers (for example, Firefox 1.5+), a plug-in such as Adobe's SVG plug-in, or an application such as Batik's SVG viewer.

Viewing PDF output requires Adobe Reader.

Viewing HTML Pages Created with the ActiveX and Java Device Drivers

The ActiveX and Java device drivers allow you to create HTML pages from within SAS 9.2 Foundation.

Refer to the "Web Browser" section in this document for an overview of Remote Browsing.   This is used to view HTML pages.

To view the Java applets, the Java plug-in must be installed on your desktop computer where the Remote Browser Server is running. On Windows systems, the user can install the plug-in when prompted if it is not already installed.