System Requirements for SAS® 9.1.3 Foundation for Microsoft® Windows® for 64-Bit Itanium-based Systems

Table of Contents

iv

Using the System Requirements

This document provides requirements for installing and running SAS 9.1.3 Foundation on Microsoft Windows for 64-Bit Itanium-based Systems. You must update your system to meet the minimum requirements before running SAS 9.1.3 Foundation.

These are the major requirements listed in the document:

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

For additional information and to view the latest system requirements, please visit the SAS Install Center Web site, located at
`http://support.sas.com/documentation/installcenter/913/kit/index.html`

SAS Technical Support

Should you need assistance with the software, we ask that only the SAS Installation Representative or onsite SAS support personnel call our Technical Support Division. For U.S. and Canadian customers, support is provided from our corporate headquarters in Cary, North Carolina. You may call (919) 677-8008, Monday through Friday.

Customers outside of the U.S. can obtain local-language technical support through the local office in their country. Customers in these locations should contact their local office for specific support hours. See `http://support.sas.com/techsup/contact/index.html` for contact information for local offices.

Before calling, you may want to explore the SAS Technical Support Web site at `http://support.sas.com/techsup/`. The Technical Support Web site offers a Knowledge Base, FAQs, Technical Support Documents and more information that may answer your questions. This Web site also provides a mechanism for reporting problems.

Software Requirements

Preparing for Installation

Administrator Privilege

An installer must have administrator privilege to install various updates. This requirement ensures that SAS 9.1.3 Foundation can be completely and safely installed.

Anti-virus and/or Firewall Software

Before you start the System Requirements Wizard, it is recommended that you close your anti-virus and firewall software. Some anti-virus and/or firewall configurations can prevent an application from installing successfully.

If you are unable to close the anti-virus or firewall software, make sure that your configuration allows you to install software and to update the registry. If your SAS installation fails and you have mandatory anti-virus or firewall software running, please check with your system administrator.

Operating System

Windows Environments

SAS 9.1.3 Foundation is supported in the following environments:

Microsoft Windows XP 64-Bit Edition with Service Pack 1 or higher.
Microsoft Windows Server 2003 Enterprise 64-Bit Edition
- Microsoft Windows Server 2003 Datacenter 64-Bit Edition

File System Recommendations:

The use of file systems supporting long filenames is required.
- NTFS is recommended.

Hardware Requirements

SAS 9.1.3 Foundation on Microsoft Windows

Please note the following requirements for installation of SAS 9.1.3 Foundation for 64-Bit Windows.

Machines Supported

Intel Itanium processor family

Memory Requirements

Microsoft Windows XP 64-Bit Edition and Microsoft Windows Server 2003 64-Bit Editions

1GB minimum or more for improved performance
- 1GB minimum of swapfile space

Monitors Supported

SVGA (resolution of 800x600 or higher)

Additional Features

The User Installation Experience in SAS 9.1.3

If you are upgrading to SAS 9.1.3 Foundation, please note that some of these features were not available in earlier releases of SAS software.

Internet Access

With Internet access, you can view and download documents from the SAS Install Center, and review material on the SAS Support Web site.

Web Browser

A Web browser is required to use two features of SAS 9.1.3 Foundation. Internet Explorer, Version 6 that you received with Windows XP meets SAS 9.1.3 Foundation requirements.

1. Output is rendered as HTML pages using the SAS 9.1.3 Output Delivery System (ODS). Any Web browser can be used for basic viewing, but if Internet Explorer, Version 6 is used, ODS output can be viewed in an integrated browser window that functions as part of SAS 9.1.3 Foundation. Other browsers can be used to view ODS output in a separate application window.

2. To conform to the native Windows environment, SAS Help and Documentation is provided in the compiled HTML format supported by the Microsoft HTML Help Viewer, which presents help information in the same layout used in newer Windows applications. This format is very compact and provides extensive searching capabilities. The highest level of functionality is available when Internet Explorer, Version 6 is installed.

SAS System Viewer

The SAS System Viewer is an application intended for the Windows environment as a *lightweight viewer* for SAS data files and other simple text-based files. The application lets you view the contents of SAS data files without using SAS and without requiring SAS 9.1.3 Foundation to be installed on your machine. You may distribute this application royalty-free in order to give other people the ability to view your SAS data.

The SAS System Viewer lets you view the following types of SAS data sets and SAS catalogs, which can reside on a local or network disk:

- SAS data sets generated by SAS 9 or SAS 9.1.3 Foundation for Windows.

- SAS Data sets generated by Version 8 of the SAS System for Windows, Windows NT, and Windows 2000.

- SAS data sets generated by any Version 6 release of the SAS System for Windows, OS/2, or DOS. These data sets can be compressed and/or encrypted. If you attempt to access an encrypted data set, the SAS System Viewer prompts you for the read password.

- SAS catalogs created by the SAS System for Windows or OS/2 generated by Release 6.04 through Release 6.12.

- SAS programs (`.sas` files), output listings (`.lst` files), logs (`.log` files), configuration files (`.cfg` files).

- Files created by SAS Institute's JMP product (`.jmp` files) that reside on a local or network disk.

- Other simple (ASCII) text-based files.

- HTML pages, such as output rendered by SAS 9 or SAS 9.1.3 Foundation.

You can also view cross-platform Version 6 data sets and catalogs (OpenVMS, MacOS, UNIX, OS/2, Windows, and DOS) that you can access from a disk, file server, or using the HTTP and FTP network protocols.

The SAS System Viewer is available to users during a CD installation from the **Client-Side Components Volume 1** CD, and after an Administrator lays down the image on the server. About 4.8 MB of disk space is required to install the SAS System Viewer. For more information about the SAS System Viewer, please see "Installing the SAS System Viewer" in the *User Installation Guide for SAS 9.1.3 Foundation on Microsoft Windows for 64-Bit Itanium-based Systems.*

Windows XP Performance Monitor and Event Log Support

Support for Windows XP Performance Monitor will allow advanced users and administrators to observe some internal characteristics of SAS 9.1.3 Foundation. This facilitates performance analysis and tuning of SAS 9.1.3 Foundation. Also, support for the Event Log on these operating systems allows the tracking of critical errors in SAS 9.1.3 Foundation and SAS Setup.

The user account installing SAS 9.1.3 Foundation must have administrator privileges to install these features, so non-administrators will not get these features by default. They can be added later by invoking setup.exe (found under the sas folder on the Setup Disk). To install the Windows XP Performance Monitor and Event Log, use this command:

```
Setup /zperfmon
```

The XP Performance Monitor is uninstalled when SAS 9.1.3 Foundation 64-bit is uninstalled.

Dynamic Data Exchange

Dynamic Data Exchange (DDE) allows for the exchange of data between SAS 9.1.3 Foundation and any other application supporting DDE. SAS 9.1.3 Foundation will act as a client only.

Electronic Mail

`Send Mail...` is provided as a menu item in the File pull-down menu. `Send Mail...` allows electronic mail messages to be initiated from SAS 9.1.3 Foundation. It is also possible to send mail using a data step file access method or SCL via SAS/AF software. The following mail APIs are supported - MAPI and VIM. This requires installation of third party products such as Microsoft Outlook, Microsoft Outlook Express, or Lotus Notes 4.0 (32-bit version only) and above. SMTP email server access via MAPI requires an Internet connection.

Lotus Notes

The Lotus Notes access method, NOTESDB, allows populating new documents directly to Lotus Notes from SAS 9.1.3 Foundation. The NotesSQL ODBC driver allows Lotus Notes documents to be accessed from within SAS 9.1.3 Foundation. An installed license of Lotus Notes Desktop is required. SAS 9.1.3 Foundation supports the 32-bit version of Lotus Notes 4.0 or later.

SAS Service Configuration Utility

The SAS Service Configuration Utility allows administrators to customize the operation of SAS 9.1.3 Foundation running as a service on a particular computer. It requires only 0.5 MB of space on the computer using the SAS Service Configuration Utility.

For additional information, refer to the SAS Service Configuration Utility chapter in *Post-Installation Configuration Guide for SAS 9.1.3 Foundation on Microsoft Windows for 64-Bit Itanium-based Systems.*

Space Requirements

The media you received contains all SAS software products. This media is customized by the SAS Installation Data for easy identification of the products for which you are licensed. The following list contains space requirements in MB for all of the products available with SAS 9.1.3 Foundation for Windows. Use this information to help you determine how much free disk space you must have available before you can install SAS 9.1.3 software. Disk space requirements will vary depending upon the blocking factor and compression algorithms that are in use on the installation disk drive. Product disk space values were determined with the HTMLHelp System in use.

Software Product	Disk Space (in MB)
Base SAS Software	550.2
SAS/ACCESS Interface to DB2 Software	1.0
SAS/ACCESS Interface to ODBC Software	1.0
SAS/ACCESS Interface to OLEDB Software	1.0
SAS/ACCESS Interface to Oracle Software	1.0
SAS/ACCESS Interface to R/3 Software	69.4
SAS/ACCESS Interface to SAP BW Software	2.5
SAS/AF Software	4.9
SAS Anti-Money Laundering Alert Generation	183.3
SAS/ASSIST Software	20.5
SAS/CONNECT Software	4.2
SAS Credit Scoring	0.5
SAS Data Quality Server	107.7
SAS/EIS Software	25.1
SAS Enterprise Miner Software	134.4
SAS/ETS Software	57.9
SAS/FSP Software	1.4
SAS/Genetics Software	2.7
SAS/GIS Software	63.2
Census Tract Maps	430.7
SAS/GRAPH Software	88.2
SAS/GRAPH Map Data Sets	114.1
SAS High-Performance Forecasting Software	13.7
SAS/IML Software	17.4
SAS/INSIGHT Software	21.5
SAS Integration Technologies Software	8.8
SAS/IntrNet Software	4.9
SAS Inventory Optimization Software	0.9
SAS IT Service Level Management Server	4.0
SAS/LAB Software	10.6
SAS Marketing Optimization Software	2.0
SAS OLAP Server Software	6.5
SAS/OR Software	50.3
SAS/QC Software	44.4
SAS Risk Dimensions	532.0
SAS/SECURE	0.9

Software Product	Disk Space (in MB)
SAS/SHARE Software	1.1
SAS/SPECTRAVIEW Software	18.1
SAS/STAT Software	90.4
SAS Text Miner	135.7
SAS Text Miner for Danish	2.2
SAS Text Miner for Dutch	27.1
SAS Text Miner for Finish	5.7
SAS Text Miner for French	8.7
SAS Text Miner for German	27.8
SAS Text Miner for Italian	4.6
SAS Text Miner for Portuguese	2.2
SAS Text Miner for Spanish	9.5
SAS Text Miner for Swedish	2.0
SAS/TOOLKIT Software	1.1
SAS/Warehouse Administrator Software	22.5
SAS Web Analytics	1.6

DBCS Support

The following list contains space requirements in MB for SAS 9.1.3 components that offer DBCS support.

Software Product- DBCS Support	Disk Space (in MB)*
Core of SAS 9.1.3 DBCS Support Files	34.0
SAS/ACCESS Interface to DB2 DBCS Support Files	0.9
SAS/ACCESS Interface to ODBC DBCS Support Files	0.9
SAS/ACCESS Interface to Oracle DBCS Support Files	0.3
SAS/ACCESS Interface to PC Files DBCS Support Files	1.0
SAS/AF DBCS Support Files	0.5
SAS/CONNECT DBCS Support Files	1.1
SAS/EIS DBCS Support Files	0.4
SAS Enterprise Miner DBCS Support	0.2
SAS/FSP DBCS Support Files	0.6
SAS/GRAPH DBCS Support Files	6.0
SAS/INSIGHT DBCS Support Files	8.5
SAS/Lab	1.9
SAS/QC DBCS Support Files	1.0
SAS/SHARE DBCS Support Files	0.1
SAS/STAT DBCS Support Files	1.5
Total	**58.90**

Note about the DBCS Table

* The actual disk space size has been rounded to the nearest tenth. Therefore, the values will differ slightly from the ones shown by the installer.

National Language Support (NLS)

The following list contains space requirements in MB for SAS 9.1.3 components that support Asian languages.

Languages Supported	Disk Space (in MB)*	See Table
Chinese – simplified	174.0	below
Chinese – traditional	54.0	below
Japanese	262.0	Page 9
Korean	174.0	Page 10

Asian Language Support

The following list contains space requirements in MB for SAS System components that support various Asian Languages.

Traditional Chinese Support	Disk Space (in MB)*
Base SAS Traditional Chinese Support Files	3.0
SAS/GRAPH Traditional Chinese Support Files	72.6
SAS OLAP Server Traditional Chinese Support Files	0.2
SAS/Warehouse Administrator Traditional Chinese Support Files	0.2
Total	**76.0**

Simplified Chinese Support	Disk Space (in MB)*
Base SAS Simplified Chinese Support Files	47.8
SAS/ACCESS Interface to DB2 Simplified Chinese Support Files	0.9
SAS/ACCESS Interface to ODBC Server Simplified Chinese Support Files	0.9
SAS/ACCESS Interface to OLE DB Simplified Chinese Support Files	1.0
SAS/ACCESS Interface to Oracle Simplified Chinese Support Files	0.9
SAS/ACCESS Interface to R/3 Simplified Chinese Support Files	0.7
SAS/ACCESS Interface to SAP BW Simplified Chinese Support Files	0.7
SAS/AF Simplified Chinese Support Files	2.0
SAS/ASSIST Simplified Chinese Support Files	5.2
SAS/CONNECT Simplified Chinese Support Files	0.9
SAS Data Quality Server Simplified Chinese Support Files	0.3
SAS Enterprise Miner Simplified Chinese Support Files	18.4
SAS/EIS Simplified Chinese Support Files	1.9
SAS/ETS Simplified Chinese Support Files	20.3
SAS/Genetics Simplified Chinese Support Files	0.7
SAS/GIS Simplified Chinese Support Files	1.8
SAS/GRAPH Simplified Chinese Support Files	8.3
SAS/IML Simplified Chinese Support Files	2.8
SAS/INSIGHT Simplified Chinese Support Files	13.2
SAS Integration Technologies Simplified Chinese Support Files	0.2
SAS/IntrNet Simplified Chinese Support Files	1.8
SAS Inventory Optimization Simplified Chinese Support Files	0.1
SAS/LAB Simplified Chinese Support Files	0.6

Simplified Chinese Support	Disk Space (in MB)*
SAS OLAP Server Simplified Chinese Support Files	0.6
SAS/OR Simplified Chinese Support Files	7.8
SAS/QC Simplified Chinese Support Files	10.1
SAS/SHARE Simplified Chinese Support Files	0.8
SAS/SPECTRAVIEW Simplified Chinese Support Files	1.0
SAS/STAT Simplified Chinese Support Files	20.1
SAS/TOOLKIT Simplified Chinese Support Files	0.7
SAS/Warehouse Administrator Simplified Chinese Support Files	5.3
Total	**177.8**

Japanese Support	Disk Space (in MB)*
Base SAS Japanese Support Files	78.1
SAS/ACCESS Interface to DB2 Japanese Support Files	0.9
SAS/ACCESS Interface to ODBC Server Japanese Support Files	0.9
SAS/ACCESS Interface to OLE DB Japanese Support Files	1.0
SAS/ACCESS Interface to Oracle Japanese Support Files	0.9
SAS/ACCESS Interface to R/3 Japanese Support Files	0.7
SAS/AF Japanese Support Files	2.0
SAS/ASSIST Japanese Support Files	17.2
SAS/CONNECT Japanese Support Files	0.9
SAS Data Quality Server Japanese Support Files	0.3
SAS Enterprise Miner Japanese Support Files	44.6
SAS/EIS Japanese Support Files	10.1
SAS/ETS Japanese Support Files	20.1
SAS/Genetics Japanese Support Files	0.7
SAS/GIS Japanese Support Files	1.8
SAS/GRAPH Japanese Support Files	11.2
SAS/Graph Map Data Sets Japanese Support Files	2.1
SAS/IML Japanese Support Files	2.8
SAS/INSIGHT Japanese Support Files	13.2
SAS/IntrNet Japanese Support Files	1.8
SAS Integration Technologies Japanese Support Files	0.2
SAS IRP Japanese Support Files	0.6
SAS/LAB Japanese Support Files	0.4
SAS OLAP Server Japanese Support Files	0.6
SAS/OR Japanese Support Files	7.8
SAS/QC Japanese Support Files	10.0
SAS/SHARE Japanese Support Files	0.8
SAS/SPECTRAVIEW Japanese Support Files	1.0
SAS/STAT Japanese Support Files	19.9
SAS/TOOLKIT Japanese Support Files	0.1
SAS/Warehouse Administrator Japanese Support Files	12.7
Total	**265.4**

Korean Support	Disk Space (in MB)*
Base SAS Korean Support Files	47.8
SAS/ACCESS Interface to DB2 Korean Support Files	0.1
SAS/ACCESS Interface to ODBC Server Korean Support Files	0.1
SAS/ACCESS Interface to OLE DB Korean Support Files	0.1
SAS/ACCESS Interface to Oracle Korean Support Files	0.1
SAS/ACCESS Interface to R/3 Korean Support Files	0.7
SAS/ACCESS Interface to SAP BW Korean Support Files	0.7
SAS/AF Korean Support Files	2.0
SAS/ASSIST Korean Support Files	5.3
SAS/CONNECT Korean Support Files	0.9
SAS Data Quality Server Korean Support Files	0.3
SAS/EIS Korean Support Files	1.9
SAS/ETS Korean Support Files	20.3
SAS Enterprise Miner Korean Support Files	18.4
SAS/Genetics Korean Support Files	0.7
SAS/GIS Korean Support Files	1.8
SAS/GRAPH Korean Support Files	8.3
SAS/IML Korean Support Files	2.8
SAS/INSIGHT Korean Support Files	13.2
SAS Integration Technologies Korean Support Files	0.2
SAS/IntrNet Korean Support Files	1.6
SAS Inventory Optimization Korean Support Files	0.1
SAS/LAB Korean Support Files	0.6
SAS OLAP Server Korean Support Files	0.6
SAS/OR Korean Support Files	7.8
SAS/QC Korean Support Files	10.3
SAS/SHARE Korean Support Files	0.8
SAS/SPECTRAVIEW Korean Support Files	1.0
SAS/STAT Korean Support Files	20.1
SAS/TOOLKIT Korean Support Files	0.2
SAS/Warehouse Administrator Korean Support Files	5.3
Total	**174.1**

Specific Product Requirements

SAS/ACCESS Interface to DB2 Software

Products Included:

Base SAS software
SAS/ACCESS Interface to DB2 software
- IBM DB2 Run-Time client, Version 8.1 or later, for 64-bit Windows

Before using SAS/ACCESS Interface to DB2 software, you must install the appropriate IBM DB2 Client software to allow your PC to connect to a DB2 server. Contact your database administrator for assistance with the Client Setup utility.

For more information about SAS/ACCESS Interface to DB2 software, please see the DB2 chapter in *SAS/ACCESS Software for Relational Databases: Reference.*

SAS/ACCESS Interface to ODBC Software

Products Included:

Base SAS software
- SAS/ACCESS Interface to ODBC software

DBMS Product Required: A 64-bit ODBC driver for the data source from which you want to access data

Before you can use SAS/ACCESS Interface to ODBC software, a 64-bit ODBC driver for the data source from which you want to access data is required. 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 for network access. All required network software supplied by your database system vendor must be 64-bit-compliant.

Please see the *Post-Installation Configuration Guide for SAS 9.1.3 Foundation on Microsoft Windows for 64-Bit Itanium-based Systems.*

SAS/ACCESS Interface to OLE DB Software

Products Included:

Base SAS software
- SAS/ACCESS Interface to OLE DB software

DBMS Product Required: An OLE DB data source provider

Before you can use SAS/ACCESS Interface to OLE DB software, an OLE DB provider for the data source from which you want to access data is required. OLE DB providers are often available from DBMS vendors and other third party software vendors. The OLE DB provider you choose may require additional DBMS software for network access. All required network software supplied by your database system vendor must be 64-bit-compliant.

SAS/ACCESS Interface to Oracle Software

Products Included:

Base SAS software
- SAS/ACCESS Interface to Oracle software

DBMS Products Required:

Oracle Server, Release 8.1.7 or later
- Oracle Client, Release 9.2 (64-bit) or later

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

Note: *In order to use the Bulk Load feature of this SAS product, you must have Oracle's SQL*Loader data-loading utility installed on your PC. 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 R/3 Software

Note: *The graphical user interface of the SAS/ACCESS Interface to R/3 is not supported for 64-bit Windows.*

Products Included:

Base SAS software
- SAS/ACCESS Interface to R/3 software

Additional functionality is obtained if the following products are installed:

SAS/Warehouse Administrator software
SAS/CONNECT software
- SAS/SHARE software

SAS/ACCESS Interface to R/3 software requires the use of communication protocols such as TCP/IP to function properly.

SAP R/3 Product Required: SAP Kernel Release 4.6C or higher

The SAS RFC Server requires the SAP RFC library which is provided by SAP AG. Refer to SAP Note 413708 for the current version, download and installation instructions.

For Windows, the recommended installation method is to install the SAP GUI or the RFC SDK.

For the RFC servers on Windows, z/OS, and Linux, download the 32-bit version; for all other platforms, download the 64-bit version of the RFC library.

For the Unicode RFC server, download the Unicode RFC library and the shared libraries required by the Unicode RFC library.

SAS/ACCESS Interface to SAP BW Software

Note: *The graphical user interface of the SAS/ACCESS Interface to SAP BW is not supported for 64-bit Windows.*

Products Included:

Base SAS software
SAS/ACCESS Interface to R/3 software
- SAS/ACCESS Interface to SAP BW Software

Additional functionality is obtained if the following products are installed:

SAS/EIS software
- SAS OLAP Server Software

SAP BW Product Required: SAP BW, Release 2.0B or higher

SAS Activity-Based Management Software

SAS Activity-Based Management Data Integration and Enterprise BI Server

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

SAS Activity-Based Management ETL Server
Base SAS software
SAS/ACCESS engine of choice
SAS/ACCESS Interface to PC Files software
SAS/AF software
SAS/CONNECT software
SAS/GRAPH software
- SAS Integration Technologies software

Disk Space Required:

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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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.*

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

Base SAS software
- SAS Metadata Server software

SAS Activity-Based Management Server Metadata Server

Disk Space Required for SAS Activity-Based Management Metadata Server:

SAS Activity-Based Management Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Activity-Based Management Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

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:

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

SAS Anti-Money Laundering Software

SAS Anti-Money Laundering Alert Generation Server

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 software
- Base SAS software
- SAS/ACCESS engine of choice (SAS/ACCESS Interface to DB2, SAS/ACCESS Interface to Oracle, or SAS/ACCESS Interface to Teradata—please note that SAS Anti-Money Laundering software is considered "Pre-Production" when used with SAS/ACCESS Interface to Teradata)
- SAS/CONNECT software
- SAS Data Quality Server
- SAS Enterprise Miner software
- SAS/EIS Software
- SAS/ETS Software
- SAS/FSP Software
- SAS/GRAPH software
- SAS/INSIGHT software
- SAS Integration Technologies software
- SAS Metadata Server
- SAS OLAP Server software
- SAS/OR software
- SAS/SHARE software
- SAS/STAT software

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

The disk space required for 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 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 Anti-Money Laundering Discovery Clients

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

- Base SAS software
- SAS/CONNECT software
- SAS/EIS Software
- SAS Enterprise Miner software
- SAS/ETS software
- SAS/FSP software
- SAS/GRAPH software
- SAS/INSIGHT software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/OR software
- SAS/STAT software

Disk Space Required for SAS Anti-Money Laundering Discovery Clients:

The disk space required for SAS Anti-Money Laundering Discovery Clients is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Anti-Money Laundering Discovery Clients should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Banking Intelligence Architecture Software

SAS Banking Intelligence Architecture EBI Server

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/STAT software

Disk Space Required for SAS Banking Intelligence Architecture EBI Server:

The disk space required for SAS Banking Intelligence Architecture EBI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Banking Intelligence Architecture EBI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Banking Intelligence Architecture Metadata Server

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

- Base SAS software
- SAS/CONNECT software
- SAS Integration Technologies 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Banking Intelligence Architecture OLAP Server

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

- Base SAS software
- SAS Integration Technologies
- SAS OLAP Server

Disk Space Required for SAS Banking Intelligence Architecture OLAP Server:

The disk space required for SAS Banking Intelligence Architecture OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Banking Intelligence Architecture OLAP Server should be decreased by the disk space of any of the above products that have been previously installed.*

Base SAS Software

Requirements for SPD Engine on Microsoft Windows:

The following are general guidelines for a minimum computer system to support SPD Engine:

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 better

SAS BI Server

SAS BI Server

The following products are included in SAS BI Server:

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

Disk Space Required for SAS BI Server:

The disk space required for SAS BI Server 9.1.3 is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS BI Server 9.1.3 should be decreased by the disk space of any of the above products that have been previously installed.

SAS BI Server Metadata Server

Products Included in SAS BI Server Metadata Server:

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS BI Server Metadata Server:

The disk space required for SAS BI Server Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS BI Server Metadata 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 Metadata Server. Unless explicitly licensed, use of this software is limited to SAS Campaign Management Metadata Server.

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Campaign Management Metadata Server:

SAS Campaign Management Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Campaign Management Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS/CONNECT Software

Product Included: Base SAS software

SAS/CONNECT software uses the TCP/IP access method and supports Microsoft's TCP/IP System Driver, which is provided with Windows.

SAS Credit Risk Management for Banking Software

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

Base SAS software
- SAS Metadata Server software

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

SAS Credit Risk Management for Banking Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Credit Risk Management for Banking Metadata 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

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.

Base SAS software
SAS/CONNECT software
SAS Credit Scoring for SAS Enterprise Miner software
SAS/EIS software
SAS Enterprise Miner software (installation code)
SAS/ETS software
SAS/FSP software
SAS/GRAPH software
SAS Integration Technologies software
SAS/INSIGHT software
SAS OLAP Server software
SAS/OR software
- SAS/STAT software

Disk Space Required:

The disk space required for the SAS Credit Scoring for Banking Server package is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

SAS Credit Scoring for SAS Enterprise Miner Software

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

SAS Cross-Sell and Up-Sell for Banking Software

The following products are included in SAS Cross-Sell and Up-Sell for Banking Metadata Server. Unless explicitly licensed, use of this software is limited to SAS Cross-Sell and Up-Sell for Banking Metadata Server.

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Cross-Sell and Up-Sell for Banking Metadata Server:

The disk space required for SAS Cross-Sell and Up-Sell for Banking Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Cross-Sell and Up-Sell for Banking Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Customer Retention for Banking Software

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Customer Retention for Banking Metadata Server:

The disk space required for SAS Customer Retention for Banking Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Customer Retention for Banking Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Customer Segmentation for Banking Software

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Customer Segmentation for Banking Metadata Server:

The disk space required for SAS Customer Segmentation for Banking Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Customer Segmentation for Banking Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Data Integration Server

SAS Data Integration Server

The following products are included in SAS Data Integration Server:

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

Disk Space Required:

The disk space required for SAS Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Integration Server Metadata Server

The following products are included in SAS Data Integration Server Metadata Server:

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

Disk Space Required for SAS Data Integration Metadata Server:

The disk space required for SAS Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Data Integration Server Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Data Quality Server

Product Included: Base SAS software

Memory: 100 MB recommended per locale

Note: The memory requirements for SAS Data Quality Server software are dependent upon the complexity of the data and the number of locales loaded from the Quality Knowledge Base at one time.

SAS Data Surveyor for Oracle

An installation of SAS Data Surveyor for Oracle requires one of the following products as a prerequisite:

SAS ETL Server
SAS Enterprise ETL Server
- any solution containing SAS ETL Studio

SAS Data Surveyor for Oracle contains SAS/ACCESS Interface to Oracle. When determining the file space required for this product from the file size tables, use only the figure for SAS/ACCESS Interface to Oracle.

SAS Data Surveyor for PeopleSoft

An installation of SAS Data Surveyor for PeopleSoft requires one of the following products as a prerequisite:

SAS ETL Server
SAS Enterprise ETL Server
- any solution containing SAS ETL Studio

SAS Data Surveyor for PeopleSoft contains a SAS/ACCESS engine of your choice. When determining the file space required for this product engine from the file size tables, use only the figure for your chosen SAS/ACCESS.

SAS Data Surveyor for SAP

An installation of SAS Data Surveyor for SAP requires one of the following products as a prerequisite:

SAS ETL Server
SAS Enterprise ETL Server
- any solution containing SAS ETL Studio

SAS Data Surveyor for SAP contains SAS/ACCESS Interface to R/3 and SAS/ACCESS Interface to SAP BW. When determining the file space required for this product from the file size tables, use only the figures for these two SAS/ACCESS products.

SAS Data Surveyor for Siebel

An installation of SAS Data Surveyor for Siebel requires one of the following products as a prerequisite:

SAS ETL Server
SAS Enterprise ETL Server
- any solution containing SAS ETL Studio

SAS Data Surveyor for Siebel contains a SAS/ACCESS engine of your choice. When determining the file space required for this product from the file size tables, use only the figure for your chosen SAS/ACCESS engine.

SAS Digital Marketing

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 Integration Technologies software
- SAS/SHARE 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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.*

Education Analytical Suite

The following products are included in Education Analytical Suite Server. Unless explicitly licensed, use of this software is limited to Education Analytical Suite Server.

Base SAS software
SAS/ACCESS Interface to DB2 software
SAS/ACCESS Interface to ODBC software
SAS/ACCESS Interface to OLE DB software
SAS/ACCESS Interface to Oracle software
SAS/AF software
SAS/ASSIST software
SAS/EIS software
SAS/ETS software
SAS/FSP software
SAS/GRAPH software
SAS/IML software
SAS/INSIGHT software
SAS Integration Technologies software
SAS/LAB software
SAS/OR software
SAS/QC software
SAS/SECURE software
SAS/SHARE software
- SAS/STAT software

Disk Space Required for Education Analytical Suite Server:

The disk space required for Education Analytical Suite Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install Education Analytical Suite Server should be decreased by the disk space of any of the above products that have been previously installed.*

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: 128 MB required

SAS Enterprise BI Server

SAS Enterprise BI Server

The following products are included in SAS Enterprise BI Server:

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

Disk Space Required for SAS Enterprise BI Server:

The disk space required for SAS Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 BI Server Metadata Server

Products included in SAS Enterprise BI Server Metadata Server:

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Enterprise BI Server Metadata Server:

The disk space required for SAS Enterprise BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Enterprise BI Server Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise Data Integration Server

SAS Enterprise Data Integration Server

The following products are included in SAS Enterprise Data Integration Server:

Base SAS software
SAS/ACCESS software of choice
A second SAS/ACCESS software of choice
SAS/CONNECT software
SAS Data Quality Server and a Quality Knowledge Base of choice
SAS Integration Technologies software
- SAS/SHARE software

Disk Space Required:

The disk space required for SAS Enterprise Data Integration Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 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 Data Integration Server Metadata Server

Products included in SAS Enterprise Data Integration Server Metadata Server:

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

Disk Space Required in SAS Enterprise Data Integration Server Metadata Server:

The disk space required for SAS Enterprise Data Integration Server Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Enterprise Data Integration Server Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Enterprise Intelligence Suite for Education

SAS Enterprise Intelligence Suite Server

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

Base SAS software
Quality Knowledge Base locale of choice
SAS/ACCESS engine of choice
A second SAS/ACCESS engine of choice
SAS/CONNECT software
SAS Data Quality Server software
SAS/ETS software
SAS/GRAPH software
SAS/IML software
SAS/INSIGHT software
SAS Integration Technologies software
SAS OLAP Server software
SAS/SHARE software
- SAS/STAT software

Disk Space Required for SAS Enterprise Intelligence Suite Server:

The disk space required for SAS Enterprise Intelligence Suite Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Enterprise Intelligence Suite Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Enterprise Intelligence Suite Metadata Server

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

    Base SAS software
    SAS/Connect software
- SAS Metadata Server software

Disk Space Required for SAS Enterprise Intelligence Suite Metadata Server:

The disk space required for SAS Enterprise Intelligence Suite Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Enterprise Intelligence Suite Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise Intelligence Suite OLAP Server

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

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

Disk Space Required for SAS Enterprise Intelligence Suite OLAP Server:

The disk space required for SAS Enterprise Intelligence Suite OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Enterprise Intelligence Suite OLAP Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS Enterprise Management for Six Sigma Software

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

    Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Enterprise Management for Six Sigma Metadata Server:

SAS Enterprise Management for Six Sigma Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Enterprise Management for Six Sigma Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Enterprise Miner Solution 4.3 and 5.3

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 5.3. Unless explicitly licensed, use of this software is limited to SAS Enterprise Miner Server.

SAS Enterprise Miner software
SAS/CONNECT software
SAS/EIS software
SAS/ETS software
SAS/FSP software
SAS/GRAPH software
SAS/INSIGHT software
SAS Integration Technologies software
SAS OLAP Server software
- SAS/OR software

Memory Required for SAS Enterprise Miner Server 4.3 and 5.3: 1 GB required

Disk Space Required for SAS Enterprise Miner Server 4.3 and 5.3:

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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install the SAS Enterprise Miner Server Solution should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Forecast Server Software

SAS Forecast Server

Products Included in SAS Forecast Server:

- SAS Forecast Server Batch Interface
- Base SAS software
- SAS/ETS software
- SAS/GRAPH software
- SAS High-Performance Forecasting software
- SAS Integration Technologies software
- SAS/OR software (unless explicitly licensed, use of SAS/OR is limited to SAS Forecast Server)

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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Forecast Server Metadata Server

Products Included in SAS Forecast Server Metadata Server:

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Forecast Server Metadata Server:

The disk space required for SAS Forecast Server Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Forecast Server Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS/GIS Software

Products Required for Build Mode:

Base SAS software
SAS/AF software
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
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 on page 44.

Display: 256 color display adapter strongly recommended.

SAS/GRAPH Software

The 32-bit version of Internet Explorer, Version 6 is required to run the SAS/GRAPH ActiveX Graph Control from a Web browser. The ActiveX Graph control is not supported on the 64-bit version of Internet Explorer.

The 32-bit version Internet Explorer, Version 6 is also required to run the SAS/GRAPH Java Applets from a Web browser.

SAS Grid Manager Software

SAS Grid Server Metadata Server

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Grid Manager Metadata Server:

SAS Grid Manager Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Grid Manager Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Grid Manager Node

Base SAS software and SAS/CONNECT software are prerequisites for the installation of SAS Grid Manager Node.

SAS GridClient

Base SAS software and SAS/CONNECT software are prerequisites for the installation of SAS GridClient.

SAS High-Performance Forecasting Software

Base SAS software is a prerequisite for the installation of SAS High-Performance Forecasting.

Products Included in SAS High-Performance Forecasting:

- SAS High-Performance Forecasting software
- SAS/OR software (unless explicitly licensed, use of SAS/OR is limited to SAS High-Performance Forecasting)

Disk Space Required for SAS High-Performance Forecasting:

The disk space required for SAS High-Performance Forecasting is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS High-Performance Forecasting 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 software is a prerequisite for the installation of SAS Information Delivery Portal Server.

Products Included in the SAS Information Delivery Portal Server:

SAS Information Delivery Portal is included. This software contains SAS Integration Technologies.

Disk Space Required for SAS Information Delivery Portal Server:

SAS Information Delivery Portal 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 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Information Delivery Portal Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Insurance Intelligence Architecture Software

SAS Insurance Intelligence Architecture EBI Server

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

Base SAS software
SAS Integration Technologies software
SAS OLAP Server software
- SAS/STAT software

Disk Space Required for SAS Insurance Intelligence Architecture EBI Server:

The disk space required for SAS Insurance Intelligence Architecture EBI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Insurance Intelligence Architecture EBI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Insurance Intelligence Architecture Metadata Server

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

Base SAS software
SAS/CONNECT software
- SAS Integration Technologies 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 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 Insurance Intelligence Architecture OLAP Server

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

Base SAS software
SAS Integration Technologies
- SAS OLAP Server

Disk Space Required for SAS Insurance Intelligence Architecture OLAP Server:

The disk space required for SAS Insurance Intelligence Architecture OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Insurance Intelligence Architecture OLAP Server should be decreased by the disk space of any of the above products that have been previously installed.*

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 9.1.3 media. Other SAS/IntrNet software components may be installed from the **SAS Client-Side Components** CD.

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.

Design-Time Controls:

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

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 a client system.

Tunnel Feature:

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

SAS Inventory Optimization

Base SAS is a prerequisite for the installation of SAS Inventory Optimization.

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

SAS Inventory Optimization software
- SAS Integration Technologies software

Disk Space Required for SAS Inventory Optimization Server:

SAS Inventory Optimization Server is the combined total space requirements for the SAS software products listed above. Please see the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Inventory Optimization Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS IT Management Adapter for SAP Software

SAS IT Management Adapter for SAP requires Base SAS software and SAS IT Resource Management Server software to be installed. In addition, it requires SAP R/3 (release 4.5B or higher) to be installed prior to the installation of the Adapter itself.

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

SAS IT Management Adapter for SAP
- SAS/ACCESS Interface to R/3 software

Disk Space Required for SAS IT Management Adapter for SAP:

The disk space required for SAS IT Management Adapter for SAP is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install the SAS IT Management Adapter for SAP should be decreased by the disk space of any of the above products that have been previously installed.*

SAS IT Resource Management 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
Base SAS software
SAS/ACCESS to DB2 software
SAS/ACCESS to ODBC software
SAS/ACCESS to Oracle software
SAS/AF software
SAS/CONNECT software
SAS/EIS software
SAS/ETS software
SAS/FSP software
SAS/GRAPH software
SAS/INSIGHT software
SAS Integration Technologies software
SAS IT Management Solutions Core Components MVA Data software
SAS/MDDB Server 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 on page 6 for more information.

Note: If you have SAS 9.1.3 installed already, 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 3.x is required for some online documents supplied in printable form.

SAS IT Service Level Management Server Software 2.1

SAS IT Resource Management Server is a prerequisite for the installation of SAS IT Service Level Management Server.

Products Included in SAS IT Service Level Management Server:

SAS IT Service Level Management software
- SAS/IntrNet software

Disk Space Required for SAS IT Service Level Management Server:

The disk space required for SAS IT Service Level Management Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 already installed, then the amount of disk space required to install SAS IT Service Level Management Server should be decreased by the disk space of any of the above products that have been previously installed.

SAS/LAB Software

Products Included:

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

SAS Manufacturing Intelligence Architecture Software

SAS Manufacturing Intelligence Architecture EBI Server

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/STAT software

Disk Space Required for SAS Manufacturing Intelligence Architecture EBI Server:

The disk space required for SAS Manufacturing Intelligence Architecture EBI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Manufacturing Intelligence Architecture EBI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Manufacturing Intelligence Architecture Metadata Server

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

- Base SAS software
- SAS/CONNECT software
- SAS Integration Technologies 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Manufacturing Intelligence Architecture OLAP Server

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

- Base SAS software
- SAS Integration Technologies
- SAS OLAP Server

Disk Space Required for SAS Manufacturing Intelligence Architecture OLAP Server:

The disk space required for SAS Manufacturing Intelligence Architecture OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Manufacturing Intelligence Architecture OLAP Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Marketing Automation Software

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Marketing Automation Metadata Server:

SAS Marketing Automation Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation already installed, then the amount of disk space required to install SAS Marketing Automation Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Marketing Optimization Software

SAS Marketing Optimization Server Metadata Server

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Marketing Optimization Metadata Server:

SAS Marketing Optimization Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Marketing Optimization Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

Marketmax Base and Performance Analysis and Micromarketing Software

The following products are included in Marketmax Base and Performance Analysis and Micromarketing Metadata Server. Unless explicitly licensed, use of this software is limited to Marketmax Base and Performance Analysis and Micromarketing Metadata Server.

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

Disk Space Required for Marketmax Base and Performance Analysis and Micromarketing Metadata Server:

The disk space required for Marketmax Base and Performance Analysis and Micromarketing Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install Marketmax Base and Performance Analysis and Micromarketing Metadata 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 software 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
- SAS Integration Technologies software

Memory: 512 MB required

The memory requirements for SAS OLAP Server software depend upon the complexity of the data. Large applications will see performance improvements with more available memory.

SAS OpRisk Monitor Software

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

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

Disk Space Required for SAS OpRisk Metadata Server:

SAS OpRisk Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS OpRisk Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS OpRisk VaR Software

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

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

Disk Space Required:

The disk space required for the SAS OpRisk Metadata Server package is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Portal Server Components 9.1

Products Included:

Base SAS software
- Portal Server Components, which contains necessary elements of SAS Integration Technologies software

Disk Space Required:

The disk space required for Portal Server Components 9.1 is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you already have SAS 9.1.3 Foundation installed, then the amount of disk space required to install Portal Server Components 9.1 should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Profitability Management Software

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

Base SAS software
SAS/ACCESS engine of choice
SAS/ACCESS Interface to PC Files software
SAS/CONNECT software
SAS/GRAPH software
* SAS Integration Technologies software

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

SAS Profitability Management Data Integration and BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Profitability Management Data Integration and BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Retail Intelligence Architecture Software

SAS Retail Intelligence Architecture EBI Server

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

* Base SAS software
* SAS Integration Technologies software
* SAS OLAP Server software
* SAS/STAT software

Disk Space Required for SAS Retail Intelligence Architecture EBI Server:

The disk space required for SAS Retail Intelligence Architecture EBI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Retail Intelligence Architecture EBI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Retail Intelligence Architecture Metadata Server

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

- Base SAS software
- SAS/CONNECT software
- SAS Integration Technologies 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Retail Intelligence Architecture OLAP Server

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

- Base SAS software
- SAS Integration Technologies
- SAS OLAP Server

Disk Space Required for SAS Retail Intelligence Architecture OLAP Server:

The disk space required for SAS Retail Intelligence Architecture OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Retail Intelligence Architecture OLAP 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 Metadata Server. Unless explicitly licensed, use of this software is limited to SAS Risk Dimensions Metadata Server.

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Risk Dimensions Metadata Server:

SAS Risk Dimensions Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Risk Dimensions Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS/SECURE Software

Products Required:

Base SAS software
one or more of the following software products:
- o   SAS/CONNECT
- o   SAS Integration Technologies
- o   SAS/SHARE

SAS/SECURE software supports CryptoAPI from Microsoft in order to access the cryptographic services that are provided with Windows. CryptoAPI is an application programming interface that is installed as part of the Windows operating system installation. Therefore, no additional installation is required to use SAS/SECURE on Windows.

SAS/SHARE Software

Product Included: Base SAS software

SAS/CONNECT software uses the TCP/IP access method and supports Microsoft's TCP/IP System Driver, which is provided with Windows.

SAS Space Optimizer Software

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

- Base SAS software
- SAS/GRAPH software
- SAS/OR software

Disk Space Required for SAS Space Optimizer SAS Server:

SAS Space Optimizer SAS Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Space Optimizer SAS Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Space Planning Software

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

- Base SAS software
- SAS/GRAPH software

Disk Space Required for SAS Space Planning SAS Server:

SAS Space Planning SAS Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Space Planning SAS Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS/SPECTRAVIEW Software

SAS/SPECTRAVIEW software, an interactive data visualization and modeling tool, allows a user to create, analyze, and modify geometric images representing multidimensional data. It is possible to visually explore both surface and interior views of the data to identify and analyze trends and relationships represented by the data.

Hardware:

Minimum screen resolution - 800x600
- Minimum of 256 colors

SAS Spend Analysis Software

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

Base SAS software
- SAS Metadata Server software

Disk Space Required for SAS Spend Analysis Metadata Server:

SAS Spend Analysis Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Spend Analysis Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS StoreCAD Plus Software

SAS StoreCAD Plus software requires SAS Space Planning.

SAS StoreCAD Plus software is included in SAS StoreCAD Plus. Unless explicitly licensed, use of this software is limited to SAS StoreCAD Plus.

Disk Space Required for SAS StoreCAD Plus:

SAS StoreCAD Plus is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS StoreCAD Plus should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Telecommunications Intelligence Architecture Software

SAS Telecommunications Intelligence Architecture EBI Server

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

- Base SAS software
- SAS Integration Technologies software
- SAS OLAP Server software
- SAS/STAT software

Disk Space Required for SAS Telecommunications Intelligence Architecture EBI Server:

The disk space required for SAS Telecommunications Intelligence Architecture EBI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Telecommunications Intelligence Architecture EBI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Telecommunications Intelligence Architecture Metadata Server

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

- Base SAS software
- SAS/CONNECT software
- SAS Integration Technologies 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 on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, 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 Telecommunications Intelligence Architecture OLAP Server

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

- Base SAS software
- SAS Integration Technologies
- SAS OLAP Server

Disk Space Required for SAS Telecommunications Intelligence Architecture OLAP Server:

The disk space required for SAS Telecommunications Intelligence Architecture OLAP Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Telecommunications Intelligence Architecture OLAP Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS/TOOLKIT Software

Products Included:

Base SAS software
- A compiler

The only language with a Production status for SAS/TOOLKIT software is C. Other languages have a Beta status.

SAS Value Chain Analytics Software

SAS Value Chain Analytics ETL and BI Server

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

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

Disk Space Required for SAS Value Chain Analytics ETL and BI Server:

SAS Value Chain Analytics ETL and BI Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Value Chain Analytics ETL and BI Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Value Chain Analytics Metadata Server

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

Base SAS software
- SAS Metadata Server

Disk Space Required for SAS Value Chain Analytics Metadata Server:

SAS Value Chain Analytics Metadata Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Value Chain Analytics Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.*

SAS Visual Data Discovery Software

SAS Visual Data Discovery Server

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/ACCESS engine of choice
SAS/GRAPH software
SAS Integration Technologies software
- SAS/STAT software

Disk Space Required for SAS IT Visual Data Discovery Server:

The disk space required for the SAS Visual Data Discovery Server is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: *If you have SAS 9.1.3 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 Visual Data Discovery Metadata Server

Base SAS software is included in SAS Visual Data Discovery Metadata Server. Unless explicitly licensed, use of this software is limited to SAS Visual Data Discovery Metadata Server.

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 (for example, 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)

Memory: 64 MB recommended

CPU: 200 MHz Pentium Processor or higher recommended

Monitors Supported:

VGA
SVGA
- XGA

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 Warranty Analysis Software

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

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

Disk Space Required:

The disk space required for the SAS Warranty Analysis Metadata Server package is the combined total space requirements for the SAS software products listed above. See the Space Requirements table on page 6 for more information.

Note: If you have SAS 9.1.3 Foundation installed already, then the amount of disk space required to install SAS Warranty Analysis Metadata Server should be decreased by the disk space of any of the above products that have been previously installed.

Graphics Hardware and Software Compatibility

Printers

SAS/GRAPH software supports any graphics printer that has a Microsoft Windows device driver available. This support is provided via the WINPRTM (for monochrome printers), WINPRTG (for printers that support gray-scale shading), and WINPRTC (for color printers) device drivers.

As an alternative to the WINPRTx series of drivers, SAS/GRAPH native device drivers are available for all Hewlett-Packard printers (and compatibles), and printers that support PostScript, HP-GL, HP PCL, and other printer languages.

Here is a partial list of printers that SAS/GRAPH software supports with native device drivers:

CalComp ColorMaster, ColorMaster Plus, PlotMaster
Canon Bubble Jet, Laser Shot
Digital printers which support either SIXEL, HP PCL, Tektronix, or PostScript emulation modes
Epson FX and LQ series printers (and all printers running in Epson emulation mode)
Hewlett-Packard LaserJet, DeskJet, PaintJet, and DesignJet printers (and compatibles)
IBM Graphics, Proprinter, and ColorJet printers
PostScript printers (including color and gray-scale PostScript printers)
QMS Colorgrafix with CGM interpreter
QMS 800, 1200, 1500, 2200, and 2400 using QUIC or Tektronix emulation modes
Talaris 800, 802, 1200, 1500, and 2400 using QUIC or Tektronix emulation modes
Talaris printers using the EXCL language
Tektronix Phaser printers (all models)
Tektronix 4693 printers with Tektronix 4510 rasterizer
Xerox 2700 and 4045 printers with a GRAPHX cartridge
Xerox 3700 (with imaging board and at least 1M of memory)
Xerox 4030 (contact Technical Support), 4213, 4235, and 4700
Xerox 4700 printer
- Xerox 5775 color copier with an EFI Fiery attachment

Native drivers may also be available for additional printers not listed above and that do not support PostScript, HP-GL, or HP PCL. Contact SAS Technical Support for additional information on these drivers.

Plotters

SAS/GRAPH software supports any plotter that has a Microsoft Windows plotter driver available. This support is provided via the WINPLOT device driver.

As an alternative to the WINPLOT device driver, SAS/GRAPH software also provides native device drivers for all HP plotters supporting HP-GL or HP-GL/2, and plotters from other manufacturers that support the HP-GL or HP-GL/2 language. SAS/GRAPH software also supports Houston Instruments plotters using the DMPL language and ZETA plotters that support the GML language.

Film Recorders

SAS/GRAPH supports any film recorder that has a Microsoft Windows driver available. This support is provided via the WINPRTC device driver. As an alternative to the WINPRTC device driver, SAS/GRAPH software also provides native device drivers that support the following film recorders:

Genigraphics Masterpiece Camera System with SCODL interface
Lasergraphics MPS 2000 film recorder with a Lasergraphics UI-100 or RASCOL rasterizer
Matrix QCR and PCR cameras with Matrix QVP, MVP, or Lasergraphics rasterizers
Polaroid Palette CI-3000 and CI-5000
- Presentation Technologies Montage film recorder

Support may be available for other film recorders not listed here. Contact SAS Technical Support for details.

Interfaces to Other Graphics Software

Included with SAS/GRAPH software is a series of drivers that can produce Computer Graphics Metafiles (CGM) in binary, character, and clear-text formats. These drivers can be used to transfer SAS/GRAPH output to other products that support CGM input, such as Word for Windows, WordPerfect for Windows, Harvard Graphics, and Lotus Freelance, or to devices that can process CGM input.

SAS/GRAPH software can also generate encapsulated PostScript vector files, which can be exported to word processing packages such as Microsoft Word, WordPerfect, and several others.

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.

Many other graphics and word processing applications can process files in Hewlett-Packard (HP-GL) format. The HPGL driver can be used to produce files that can be transferred to most applications that can process HP-GL files. In addition, there are drivers for PDF, PBM, PPM, GIF, JPEG, EMF, WMF, PNG, TIFF, EPSI, and PaintBrush image formats. To view a complete list of all SAS/GRAPH device drivers, submit the following SAS program:

```
proc gdevice c=sashelp.devices nofs;
    list _all_;
run; quit;
```

SAS/GRAPH software can also export 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
PNG - Portable Network Graphics
PS - PostScript Bitmap
TIF - Tagged Image File Format
- WMF - Microsoft Windows Metafile Format

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 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 9.1.3 Foundation.

Refer to the "SAS/GRAPH Software" section on page 27 for a list of browsers with which you can view HTML pages on this operating environment.

To view the Java applets, the Java plug-in must be installed on each client machine. On Windows systems, the user can install the plug-in when prompted if it is not already installed. On other systems, the plug-in can be installed from one of the **Third Party Software Components** CDs. Follow the instructions included with the Java and web browser installation for your system to enable the Java plug-in.