System Requirements

Enterprise Guide® Version 2.0 for Windows®

This document provides requirements for installing and running Enterprise Guide software. You must update your system to meet the minimum requirements before running Enterprise Guide software. These are the major requirements listed in the document:

- □ Software Requirements
- □ Hardware Requirements
- Additional Features
- □ Space Requirements
- □ Specific Product Requirements

For additional information and to view the latest system requirements for your system, access the SAS Web site at:

http://www.sas.com/software/enclosures/system_req.html

or contact SAS Technical Support. Sites in the U.S. and Canada may call (919) 677-8008. Other sites should contact their SAS Installation Representative or SAS Support Consultant for the nearest SAS office.

Software Requirements

Operating System

Important: Administrator privilege is required to install various system updates. To insure that Enterprise Guide software can be completely and safely installed, it is required that the installer have administrator privilege.

File System Recommendations

- The use of file systems supporting long filenames is required.
- For Windows XP, Windows 2000, and Windows NT, NTFS is recommended.

Network Installations

Long filename support is required on any Windows Server or Novell Server where a server installation is performed.

Windows XP

Version 2.0 of Enterprise Guide is supported on Windows XP, Professional and Home editions, on 32-bit architecture only.

Windows 2000

Version 2.0 of Enterprise Guide is supported on Windows 2000 Professional and all Windows 2000 Server Editions. Windows 2000 requires Service Pack 1 or higher.

Windows NT and Windows NT Server

Running Version 2.0 of Enterprise Guide under Windows NT requires Windows NT, Version 4.0 updated with Service Pack 5 or higher (excluding Service Pack 6, but including Service Pack 6a or higher), plus additional Year 2000 software updates as provided by Microsoft.

Windows 98 and Windows Me

Version 2.0 of Enterprise Guide software is supported on Microsoft Windows 98 and Microsoft Windows Me operating systems. Windows 98 must be updated *with* Service Pack 1 or *to* Windows 98, Second Edition.

Online Help Browser

To view Enterprise Guide Help and the Getting Started tutorial, Internet Explorer, Version 4.01 with Service Pack 2 or higher is required. It is recommended that Internet Explorer, Version 5 be installed because this will update certain Microsoft system files and greatly reduce the number of reboots required during the installation of Enterprise Guide software.

Hardware Requirements

Machines Supported

Intel or Intel-compatible Pentium class processor (minimum 133MHz required)

Memory Requirements

Windows 98, Windows Me, Windows NT, Windows 2000 Professional, Windows XP

- 128 MB minimum or more for improved performance
- 128 MB minimum of swapfile space

Windows NT Server and Windows 2000 Server Editions:

- 256 MB minimum or more for improved performance
- 256 MB minimum of swapfile space

Monitors Supported

• SVGA (resolution of 800x600 or higher)

Additional Features

Web Browser

A Web browser is required for use with Enterprise Guide software. This Web browser must be Internet Explorer, Version 5 or higher. These are some of the features that require a Web browser:

- Viewing results in an integrated browser window within Enterprise Guide software. Other browsers can be
 used to view HTML results in a separate application window.
- Viewing Enterprise Guide Help and the Getting Started tutorial, both of which use the Microsoft HTML Help standard.
- Previewing styles in the Style Editor tool.
- Previewing printer output of HTML results, if you have Internet Explorer, Version 5.5 or higher installed. (Earlier versions of Internet Explorer do not support print preview.)

Viewing HTML Pages Created with ActiveX and Java Device Drivers

The ActiveX and Java device drivers allow you to create HTML pages from within the SAS System using Enterprise Guide software.

- The HTML pages created with the ActiveX device driver can only be viewed *with* Internet Explorer, Version 5.5 or higher *on* Windows operating systems.
- The HTML pages created with the Java device driver can only be viewed *with* the following Java-enabled versions of Internet Explorer, Version 5.5 or higher, or Netscape, Version 6.2 or higher.

Electronic Mail

Send to Mail Recipient is provided as a menu item in the File pull-down menu. This feature allows electronic mail messages to be initiated from within Enterprise Guide software using the MAPI subsystem. 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 e-mail server access via MAPI requires an Internet connection.

Rich Text (RTF) Viewer

Enterprise Guide software, when used in conjunction with Release 8.2 or later of the SAS System, can produce RTF (Rich Text Format) output. Enterprise Guide software can display this output within an integrated window. If you have Microsoft Word 97 or later installed, Enterprise Guide software will use components from Microsoft Word to render the RTF results; this should provide the best viewing experience for RTF output.

If you do not have Microsoft Word installed, Enterprise Guide software can still render the RTF results in an integrated window. It will use a system-provided RTF viewer (similar to that used in the Wordpad application that is supplied with Windows). This RTF viewer does not have as many capabilities to render text and graphics as Microsoft Word does.

Portable Document Format (PDF) Viewer

Enterprise Guide software, when used in conjunction with Release 8.2 or later of the SAS System, can produce PDF files that can be viewed with the Adobe Acrobat Reader application. You can download the Adobe Acrobat Reader for free from http://www.adobe.com. If you have Acrobat Reader 4.0 or later installed, Enterprise Guide software can display PDF output in an integrated window. You can also choose (through Enterprise Guide preferences) to view the PDF output in a separate Acrobat Reader window, external to Enterprise Guide software.

System Requirements Wizard

The System Requirements Wizard is used to ensure that a computer onto which you would like to install Enterprise Guide software meets the minimum system requirements. Space requirements will vary depending upon the third-party components and the individual files on your computer that need to be updated. The System Requirements Wizard will inform you of the components that do not meet the minimum system requirements before updating them. The following table shows which updates the System Requirements Wizard performs on the versions of Windows that are supported.

Update	Windows 98	Windows Me	Windows NT	Windows 2000	Windows XP
Microsoft Shell Folder Service 5.50.4027.300	Yes	No	Yes	No	No
Microsoft Distributed Component Object Model 1.2	No	No	No	No	No
Microsoft Distributed Component Object Model Utility 1.2	No	No	No	No	No
Microsoft Custom Controls Library 5.80.2614.3600	Yes	No	Yes	No	No
Microsoft HTML Help Control 4.74.8875	Yes	No	Yes	No	No
Microsoft Data Access Components	Yes	Yes	Yes	Yes	No

Update	Windows	Windows	Windows	Windows	Windows
	98	Me	NT	2000	XP
(MDAC) 2.7 ¹					
Microsoft Jet 4.0 Components	Yes	No	Yes	No	No
Microsoft Runtime Components ²	Yes	Yes	Yes	Yes	No
Microsoft Active Directory Service	Yes	Yes	Yes	No	No
Interfaces (ADSI) 2.5 ³					

^{1.} More information about the MDAC distribution, including a complete file manifest, can be found at http://www.microsoft.com/data.

2. The following table displays files that are installed by Microsoft Runtime Components.

File	Release Number	Windows Versions
Mfc42.dll	6.0.8447.0	All versions
Mfc42u.dll	6.0.8447.0	Windows NT, Windows 2000
Mfc42loc.dll	6.0.8168.0	All versions
Msvcrt.dll	6.0.8397.0	All versions
Msvcirt.dll	6.0.8168.0	All versions
Msvcp60.dll	6.0.8168.0	All versions
Atl.dll (ansi)	3.0.8449.0	Windows 98
Atl.dll (unicode)	3.0.8449.0	Windows NT, Windows 2000
Msjet35.dll	3.51.2723.0	All versions
Msjint35.dll	3.51.623.0	All versions
Msjter35.dll	3.51.623.0	All versions
Msrdx35.dll	3.51.623.0	All versions
Expsrv.dll	6.0.0.8167	All versions
Vbajet32.dll	6.0.1.8167	All versions
Msexch35.dll	3.51.623.0	All versions
Msexcl35.dll	3.51.623.2	All versions
Mspdox35.dll	3.51.623.0	All versions
Msltus35.dll	3.51.623.0	All versions
Mstext35.dll	3.51.623.0	All versions
Msxbse35.dll	3.51.623.0	All versions

3. The System Requirements Wizard will install the ADSI support for Windows 98 and Windows NT for the following operating system languages: English, Japanese, French, and German. For other supported languages on these operating systems, you will need to download and install the appropriate language version of the Active Directory Client Extensions. These are freely available in the download area of the Microsoft Web site. Note that ADSI support is already provided with Windows 2000 and Windows XP, so no additional ADSI redistributable is necessary for those systems.

Space Requirements

The following list contains space requirements in MB for Enterprise Guide software. Use this information to help you determine how much free disk space you must have available before you can install Enterprise Guide software. Disk space requirements will vary depending upon the blocking factor and compression algorithms that are in use on the installation disk drive.

Software Product	Enterprise Guide Software	Enterprise Guide /SAS Common*	Microsoft
Enterprise Guide Software	21		
SAS Syntax Help	53**		
Common		58	
Images		12**	
Microsoft's MDAC Support			17
and ADSI Support			
Total	74	70	17

^{*}Enterprise Guide/SAS Common includes files that are shared between Enterprise Guide software and Version 8 and later releases of the SAS System.

Specific Product Requirements

^{**}SAS Syntax Help and Texture images are optional.

Accessing Local ODBC Data

DBMS Products Required:

A 32-bit ODBC driver for the data source from which you want to access data

Note: Before you can use Enterprise Guide software to access ODBC data, a 32-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 32-bit-compliant.

Accessing Local OLE DB Data

DBMS Products Required:

An OLE DB data source provider

Note: Before you can use Enterprise Guide software to access OLE DB data, 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 32-bit-compliant.

Connecting to Remote SAS Servers via IOM Bridge for COM

IOM Bridge for COM requires the installation of Microsoft's TCP/IP networking protocol, which is provided with all supported versions of Windows.

Product Requirements for the SAS Server

Enterprise Guide Software, Version 2.0 is compatible with all releases of Version 8 and higher of the SAS System. However, certain features of Enterprise Guide Software, Version 2.0 are only available when used with later releases of the SAS System. For example, Version 8 (TS M0) users will not be able to use Enterprise Guide software to create and navigate MDDB tables surfaced by SAS/MDDB Servers. It is recommended that all SAS System users migrate to at least Release 8.2 of the SAS System.

The SAS System, Release 8.2 (TS2M0) is the minimum recommended SAS Server release level.

Product	Required for Version 9 and all Version 8 releases of the SAS System	Recommended for Version 9 and all Version 8 releases of the SAS System
Base SAS Software	$\sqrt{}$	
SAS Integration Technologies Software ¹		
SAS/STAT Software		$\sqrt{}$
SAS/GRAPH Software		V
SAS/GRAPH Map Data Sets		V
SAS/ETS Software		V
SAS/MDDB Server Software		V
SAS/QC Software		V
SAS/SECURE 168-bit Software ²		V

^{1.} SAS Integration Technologies software is not required when accessing a SAS server running on the same PC as the client software (a local server), unless you intend to use certain SAS Integration Technologies features, such as Publish.

^{2.} SAS/SECURE 168-bit software is required to establish certain encrypted sessions between Enterprise Guide software and the SAS Server. A proprietary weak encryption is supported without the use of SAS/SECURE 168-bit software.

 $SAS^{\#}$ and all other SAS Institute product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries.

IBM and all other International Business Machines Corporation product or service names are registered trademarks or trademarks of International Business Machines Corporation in the USA and other countries. Oracle and all other Oracle Corporation product or service names are registered trademarks or trademarks of Oracle Corporation in the USA and other countries. Other brand and product names are registered trademarks or trademarks of their respective companies.

[®] indicates USA registration.