

# Installation Instructions and System Requirements for Enterprise Miner™ Software, Version 3.0

**Server: Digital™ UNIX®**

**Client: Windows® 95, Windows® 98, Windows NT®**

For the latest installation and system requirements information on Enterprise Miner software, download the **Installation Instructions and System Requirements** from the **documentation** section of the Enterprise Miner software home page, located at:

<http://www.sas.com/software/components/miner.html>

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## Glossary:

- References to a ***Windows platform*** indicate the following Windows operating systems: Windows NT, Windows 95, and Windows 98.
- References to a ***server Windows platform*** indicate the following Windows operating system: Windows NT.
- References to a ***client Windows platform*** indicate the following Windows operating systems: Windows NT, Windows 95, and Windows 98.
- References to a ***server UNIX platform*** indicate the following UNIX operating system: Digital UNIX.
- References to ***Enterprise Miner products*** indicate the SAS System products that are automatically included on the media for the SAS System when you order Enterprise Miner software, client or server.
- References to the ***EM*** product refer to Enterprise Miner software.

# I. Overview of Enterprise Miner Software, Version 3.0

## Enterprise Miner Software

SAS Institute defines *data mining* as the process of selecting, exploring, modifying, and modeling large amounts of data to uncover previously unknown patterns in data for a business advantage. The data mining process is applicable across a variety of industries and provides methodologies for such diverse business problems as fraud detection, customer retention and attrition, database marketing, market segmentation, risk analysis, affinity analysis, customer satisfaction, bankruptcy prediction, and portfolio analysis.

Enterprise Miner software is an integrated product that provides an end-to-end business solution for data mining. A Graphical User Interface (GUI) provides a user-friendly front-end to the SEMMA (Sample, Explore, Modify, Model, and Assess) process. You may or may not include all of these steps in your analysis and it may be necessary to iterate through one or more of the steps several times before you are satisfied with the results. The SEMMA process is driven by a Process Flow Diagram (PFD), which you can modify and save. The GUI is designed in such a way that the business technologist who has little statistical expertise can easily navigate through this data mining methodology, while the quantitative expert can go "behind the scenes" to fine tune the analytical process.

Enterprise Miner software contains a collection of sophisticated analysis tools that have a common user-friendly interface that enables you to create and compare multiple models. Statistical tools include clustering, variable selection, decision trees, linear and logistic regression, and neural networks. Data preparation tools include outlier detection, data imputation, variable transformations, random sampling, and the partitioning of data sets (into train, test, and validate data sets). Advanced visualization tools enable you to quickly and easily examine large amounts of data in multidimensional histograms and to graphically compare modeling results.

## Enterprise Miner Software - Client/Server Functionality

Enterprise Miner software establishes a client/server session using SAS/CONNECT software as the cooperative processing software between the remote and local host. The client/server functionality provides the following advantages:

- distributes data-intensive processing to the most appropriate machine,
- minimizes network traffic by processing the data on the server machine,
- minimizes data redundancy by maintaining one central data source,
- distributes server profiles to multiple clients,
- regulates access to data sources, and
- toggles between remote and local processing.

Each single server license comes with five client Windows platform licenses. You should install the server on a server-class UNIX machine and the clients on five client Windows machines.

Enterprise Miner Server Software runs on server Windows and UNIX platforms.

Enterprise Miner Client Software runs only on Windows platforms and can access data and perform computation on remote server Windows or UNIX platforms.

## Enterprise Miner Software Documentation

- **Installation Instructions and System Requirements for Enterprise Miner Software, Version 3.0, Server: Digital UNIX, Client: Windows 95, Windows 98, Windows NT**

The **Installation Instructions and System Requirements for Enterprise Miner Software, Version 3.0, Server: Digital UNIX, Client: Windows 95, Windows 98, Windows NT** are included with this software shipment, as well as on the Enterprise Miner software home page, located at:

<http://www.sas.com/software/components/miner.html>

- **Getting Started with Enterprise Miner Software**

**Getting Started with Enterprise Miner Software** is included with this software shipment, as well as online. Please refer to the online document for a more up-to-date version. The online document can be found in the Enterprise Miner Windows user interface by selecting the Help pull-down menu and then the Getting Started with the Enterprise Miner software menu option.

- **Enterprise Miner Reference Guide**

**Enterprise Miner Reference Guide** is available online in the Enterprise Miner Windows user interface by selecting the Help pull-down menu and then the Enterprise Miner Reference menu option.

- **Enterprise Miner Software: Changes and Enhancements, Version 3.0**

**Enterprise Miner Software: Changes and Enhancements, Version 3.0** is included with this software shipment.

## II. System Requirements

### Server UNIX Platforms

#### *Hardware*

Disk space required is 75 MB.

Memory required is 512 MB.

**Note:** The disk space requirement for Enterprise Miner software on server UNIX platforms is the combined total disk space required for the SAS software products listed in **Appendix A - Custom Installation for UNIX Platforms** and the disk space required for Enterprise Miner Software, Version 3.0. See the **System Requirements** for the SAS System included with your media for a list of any other hardware requirements for Enterprise Miner products.

#### *Software*

##### **Operating System**

Enterprise Miner software requires specific operating system versions to provide support for files larger than 2 GB.

Digital UNIX, Version 4.0A, 4.0B, or 4.0D

**Note:** The SAS System, Release 6.12 (TS051) and (TS060) do not support Digital UNIX, Version 5.0.

##### **The SAS System**

For the server UNIX platform, Enterprise Miner software requires the installation of the SAS System, Release 6.12 with Enterprise Miner products and the installation of Release 6.12 (TS060) maintenance. See the **System Requirements** for the SAS System included with your media for a list of any other software requirements for Enterprise Miner products.

##### **Required SAS Products**

Base SAS software and SAS/STAT software with Enterprise Miner products

**Note:** The server and clients must be running the same version of Enterprise Miner software.

## Client Windows Platforms

### *Hardware*

Disk space required is 107 MB.

Memory required is 48 MB.

**Note:** The disk space requirement for Enterprise Miner software on client Windows platforms is the combined total disk space required for the SAS software products listed in **Appendix B - Custom Installation for Windows Platforms** and the disk space required for Enterprise Miner Software, Version 3.0. See the **System Requirements** for the SAS System included with your media for a list of any other hardware requirements for Enterprise Miner products.

### *Software*

#### **Operating System**

Windows 95, Windows 98, or Windows NT, Version 4.0

#### **The SAS System**

For client Windows platforms, Enterprise Miner software requires the installation of the SAS System, Release 6.12 with Enterprise Miner products and the installation of Release 6.12 (TS050 or above) maintenance. See the **System Requirements** for the SAS System included with your media for a list of any other software requirements for Enterprise Miner products.

#### **Client-required SAS Products**

Enterprise Miner products

#### **Screen Resolution**

The recommended screen resolution for Enterprise Miner software is at least 800x600. If your display is set to a lower resolution, some windows may be truncated to fit the screen.

#### **Fonts**

If you experience font display problems, you may want to use the default SAS System font. To set the default font, issue the SAS command `dlgfont` at the command prompt. In the `Font` window, select the font `Sasfont` with a style of `Regular` and a font size of 10.

**Note:** The server and clients must be running the same version of Enterprise Miner software.

### III. Enterprise Miner Installation Roadmap

**Important Note:** Please read this section before beginning your Enterprise Miner software installation. If Enterprise Miner software is installed incorrectly, you will have problems modeling successfully. Details on the installation are found in the following sections.

#### New Enterprise Miner Software Users

Your Enterprise Miner software will be packaged in three parts.

##### 1. Enterprise Miner Solution - Open me first

contains two Enterprise Miner software CDs and product documentation listed previously. The **Enterprise Miner, Version 3.0, Digital UNIX** CD should be installed on the UNIX server. The **Enterprise Miner, Version 3.0, Windows** CD should be installed on the Windows client. Install Enterprise Miner software after installing the SAS System and SAS System maintenance.

Also contains **Enterprise Miner Software Updates, Release 3.01** CD, which contains important maintenance updates for Enterprise Miner software. The **Enterprise Miner Software Updates, Release 3.01** CD should be installed on both the server and the client. There are not separate server and client CDs. Install **Enterprise Miner Software Updates, Release 3.01** last, after installing Enterprise Miner, Version 3.0.

##### 2. The SAS System for Enterprise Miner Server Software

contains installation instructions for the SAS System and two SAS System CDs:

**SAS System, Release 6.12 TS051 for Digital UNIX** CD - Install **first** on your server. The CD is labeled **Server**.  
**SAS System, Rel 6.12 Maintenance (TS060) for Digital UNIX** CD - Install **second** on your server.

Your SAS System must be at maintenance level TS060 or above for Enterprise Miner Software, Version 3.0 to function correctly. The **SAS System, Release 6.12 TS051 for Digital UNIX** CD contains SAS System Year 2000 fixes, but does not contain enhancements required for Enterprise Miner software. You must install and run Enterprise Miner software with the SAS System, Release 6.12 (TS060), which contains SAS System Year 2000 fixes and Enterprise Miner-required maintenance, for Enterprise Miner software to function correctly. If you are receiving any other SAS System products for the first time, you may have an additional box that contains SAS System product documentation.

**Note:** Your server SAS System must be at maintenance level TS060 or above for Enterprise Miner Software, Version 3.0 to function correctly.

##### 3. The SAS System for Enterprise Miner Client Software

contains installation instructions for the SAS System and two SAS System CDs:

**SAS Software, Rel 6.12 TS025 for Windows** CD - Install **first** on your client. The CD is labeled **Client**.  
**SAS System, Rel 6.12 Maintenance (TS060) for Windows** CD - Install **second** on your client.

Your SAS System must be at maintenance level TS050 or above for Enterprise Miner Software, Version 3.0 to function correctly. If you are receiving any other SAS System products for the first time, you may have an additional box that contains SAS System product documentation.

**Note:** Your client SAS System must be at maintenance level TS050 or above for Enterprise Miner Software, Version 3.0 to function correctly.

# Enterprise Miner Software, Version 2.0x Users Upgrading to Version 3.0

Your Enterprise Miner software will be packaged in three parts.

## 1. Enterprise Miner Solution - Open me first

contains two Enterprise Miner software CDs and product documentation listed previously. The **Enterprise Miner, Version 3.0 Digital UNIX** CD should be installed on the UNIX server. The **Enterprise Miner, Version 3.0, Windows** CD should be installed on the Windows client. Install Enterprise Miner software after installing the SAS System and SAS System maintenance.

Also contains **Enterprise Miner Software Updates, Release 3.01** CD, which contains important maintenance updates for Enterprise Miner software. The **Enterprise Miner Software Updates, Release 3.01** CD should be installed on both the server and the client. There are not separate server and client CDs. Install **Enterprise Miner Software Updates, Release 3.01 last**, after installing Enterprise Miner, Version 3.0.

**Note:** Enterprise Miner Software, Version 2.0x users upgrading to Version 3.0 do not need to uninstall their Version 2.0x software to install Enterprise Miner Software, Version 3.0. Enterprise Miner Software, Version 3.0 will install to a unique location and will provide separate shortcuts for launching.

## 2. The SAS System for Enterprise Miner Server Software

contains installation instructions for the SAS System and two SAS System CDs:

**SAS System, Release 6.12 TS051 for Digital UNIX** CD - Install **first** on your server. The CD is labeled **Server**.  
**SAS System, Rel 6.12 Maintenance (TS060) for Digital UNIX** CD - Install **second** on your server.

Your SAS System must be at maintenance level TS060 or above for Enterprise Miner Software, Version 3.0 to function correctly. The **SAS System, Release 6.12 TS051 for Digital UNIX** CD contains SAS System Year 2000 fixes, but does not contain enhancements required for Enterprise Miner software. You must install and run Enterprise Miner software with the SAS System, Release 6.12 (TS060), which contains SAS System Year 2000 fixes and Enterprise Miner-required maintenance, for Enterprise Miner software to function correctly.

If you are receiving any other SAS System products for the first time, you may have an additional box that contains SAS System product documentation.

**Note:** Your server SAS System must be at maintenance level TS060 or above for Enterprise Miner Software, Version 3.0 to function correctly.

**Note:** SAS/GRAPH software has been added to the Enterprise Miner product bundle. SAS/GRAPH software is used on your server to enhance performance of Enterprise Miner graphics. Please verify that you have installed SAS/GRAPH software and applied maintenance to SAS/GRAPH software on your server.

## 3. The SAS System Maintenance for Enterprise Miner Client Software

contains installation instructions for the SAS System and one SAS System CD:

**SAS System, Rel 6.12 Maintenance (TS060) for Windows** CD - Install **first** on your client.

**Note:** Your client SAS System must be at maintenance level TS050 or above for Enterprise Miner Software, Version 3.0 to function correctly.



## IV. Installing and Configuring Enterprise Miner Server Software on the Digital UNIX Platform

Enterprise Miner software comprises two parts, a server installation and a client installation. This means that you will be installing server media on the server UNIX platform and client media on the client Windows platform. Please read section V. **Installing and Configuring Enterprise Miner Client Software on Windows Platforms**. There is not an Enterprise Miner UNIX client. None of the installation steps are optional.

### Installing the SAS System for Enterprise Miner Server Software

You must install the SAS System with Enterprise Miner products to use Enterprise Miner Server Software. The package contains two copies of the SAS System. One copy is for your server UNIX platform and the other copy is for your client Windows platform. The **SAS System, Release 6.12 TS051 for Digital UNIX** CD for the UNIX server install is labeled **Server**. This CD contains the SAS System, Release 6.12 (TS051) Year 2000 fixes. Fix modules to upgrade the SAS System for the Year 2000 and for Enterprise Miner software are on a separate CD labeled the **SAS System, Rel 6.12 Maintenance (TS060) for Digital UNIX**.

**Note:** You should run the SAS System installation to validate that you have all Enterprise Miner products. This step is mandatory.

Base SAS Software  
SAS/CONNECT Software  
SAS/ETS Software  
SAS/GRAPH Software  
SAS/STAT Software

**Note:** You must install and run Enterprise Miner software with the SAS System, Release 6.12 (TS060), which contains SAS System Year 2000 fixes and Enterprise Miner-required maintenance, for Enterprise Miner software to function correctly.

**Note:** SAS/GRAPH software has been added to the Enterprise Miner product bundle. SAS/GRAPH software is used on your server to enhance performance of Enterprise Miner graphics. Please verify that you have installed SAS/GRAPH software and applied maintenance to SAS/GRAPH software on your server.

1. Choose the **SAS System, Release 6.12 TS051 for Digital UNIX** media labeled **Server**.
2. Insert the **SAS System, Release 6.12 TS051 for Digital UNIX** media.
3. Perform a default installation as outlined in the **Addendum to the Installation Instructions for the SAS System, Release 6.12 (TS051) for Digital UNIX** (document included with your SAS System shipment). See the section **Performing a Default Installation**. A *default installation* installs everything on the installation medium. If the *default installation* is not appropriate for you, follow the instructions in **Appendix A: Custom Installation for UNIX Platforms** later in this document instead of these instructions.

**Note:** If you have not separately licensed SAS/ETS software or SAS/GRAPH software, you may see the following messages after the SAS System integrity check. You may ignore these messages.

```
Error: Encountered errors while executing
'/sas612/sastest/testets.sas'. Compare the blg
and log files for this test to determine
the cause. Save these files if you need
to contact SAS Institute Technical Support
for assistance.
```

```
Error: Encountered errors while executing
'/sas612/sastest/testgraf.sas'. Compare the blg
and log files for this test to determine
the cause. Save these files if you need
to contact SAS Institute Technical Support
for assistance.
```

4. Use the `umount` command to unmount the SAS System media. For example:

```
umount /cdrom
```

## Installing SAS System Maintenance (TS060) for Enterprise Miner Server Software

You must install and run Enterprise Miner software with the SAS System, Release 6.12 (TS060), which contains SAS System Year 2000 fixes and Enterprise Miner-required maintenance, for Enterprise Miner software to function correctly. As you follow the instructions in this section to apply the Technical Support (TS060) maintenance fixes, you will not overwrite pieces of your production system, but will apply staged maintenance. This maintenance is intended for use by Enterprise Miner software customers only.

Release 6.12 (TS060) of the SAS System requires an additional 100 MB of disk space to install. For more information on the total disk space required to install Release 6.12 (TS060), refer to the **Space Requirements** section in the SAS System **System Requirements**.

**Note:** This section uses `/usr/local/sas612` as the pathname for your SASROOT directory. This pathname is just an example. Substitute your installation directory, ending with `sas612`, for this name in these instructions.

1. Insert the **SAS System, Rel 6.12 Maintenance (TS060) for Digital UNIX** CD into your CD-ROM drive.
2. Mount the CD-ROM.

**Note:** This release of the SAS System supports ISO-9660 CD-ROM and Rockridge extensions where available.

The following command is an example of mounting the CD-ROM:

```
mount -rt cdfs -o noversion /dev/rz33c /cdrom
```

**Notes:** Refer to your system documentation for the correct device name.

Mounting and unmounting a CD-ROM device requires root privileges. The remainder of the installation process does not. After mounting the CD-ROM, you can return to the standard privilege set.

For information on mounting a remote CD-ROM, see the section **Extracting SAS Manager from the CD-ROM** in **Chapter 2, Installing the SAS System on Digital UNIX** of the **Installation Instructions for the SAS System, Release 6.12 for Digital UNIX, TS040**.

3. Copy Release 6.12 (TS060) files from the mailer CD into the `!SASROOT/maint` directory using the `tar` command. An example using the SAS System, Release 6.12 (TS051) installed in the `/usr/local/sas612` directory with the CD mounted as `/cdrom` is as follows:

```
cd /usr/local/sas612
mkdir maint
cd maint
tar xvf /cdrom/*
```

Six directories are installed from the CD.

```
!sasroot/maint/misc
!sasroot/maint/samples
!sasroot/maint/sasautos
!sasroot/maint/sasexe
!sasroot/maint/sashelp
!sasroot/maint/sasmsg
!sasroot/maint/utilities/bin
```

4. A `config.sas612` file is located in the `!SASROOT/maint` folder. This config file contains the default settings for Digital UNIX. If you have customized your `!SASROOT/config.sas612` file to change settings such as `-memsize`, you will need to make these modifications in your maintenance config file, `!SASROOT/maint/config.sas612`.

5. To complete the installation, run the following script:

```
cd /usr/local/sas612/maint
/usr/local/sas612/maint/utilities/bin/install
```

**Note:** You must be in the `maint` directory when running this script. Failure to do so may damage your SAS System installation.

6. You must re-apply your license after applying maintenance. Invoke the SAS System by issuing the following command:

```
cd /usr/local/sas612
sas -setinit setinit.sas
```

Check the `SETINIT.LOG` file for the following lines:

o NOTE: Siteinfo data have been updated.

indicates that the SETINIT applied correctly.

o NOTE: No update of the secondary setinit since either the password was omitted or zero, or the SECstatement was omitted.

indicates that the secondary SETINIT information was not updated. This is normal.

7. To invoke the SAS System, Release 6.12 (TS060), issue the following command:

```
/usr/local/sas612/maint/sas -config /usr/local/sas612/maint/config.sas612
```

## Installing Enterprise Miner Server Software

After you have installed the SAS System, Release 6.12 (TS060) with Enterprise Miner products, you can install Enterprise Miner Server Software on the machine you plan on using as a server. See the section **System Requirements** for hardware and software requirements.

1. Insert the **Enterprise Miner, Version 3.0, Digital UNIX** CD into the CD-ROM drive.
2. Mount the CD-ROM.

**Note:** This release of the SAS System supports ISO-9660 CD-ROM and Rockridge extensions where available.

The following command is an example of mounting the CD-ROM:

```
mount -rt cdfs -o noversion /dev/rz33c /cdrom
```

**Notes:** Refer to your system documentation for the correct device name.

Mounting and unmounting a CD-ROM device requires root privileges. The remainder of the installation process does not. After mounting the CD-ROM, you can return to the standard privilege set.

For information on mounting a remote CD-ROM, see **Extracting SAS Manager from Tape or CD-ROM in Chapter 2, Installing the SAS System on Digital UNIX** of the **Installation Instructions for the SAS System, Release 6.12 for Digital UNIX, TS040**.

3. Install the Enterprise Miner Software, Version 3.0 files from the mailer CD into the !SASROOT/addon/dmine3 directory. Run the INSTALL.SH script from the **Enterprise Miner, Version 3.0, Digital UNIX** CD:  

```
/cdrom/INSTALL.SH -f fully-qualified-pathname-of-Cdrom \  
                  -t SASROOT-directory-to-install-DMINE-into
```
4. The following example assumes that your CD-ROM device is mounted in the directory /cdrom and that the SAS System, Release 6.12 is installed in /usr/local/sas612:

```
/cdrom/INSTALL.SH -f /cdrom -t /usr/local/sas612
```

Enterprise Miner Software, Version 3.0 installs to a unique location, !SASROOT/addon/dmine3, so both Version 2.0x and Version 3.0 can be executed from the same SAS System installation. The following directories are installed from the CD:

```
!sasroot/addon  
!sasroot/addon/dmine3  
!sasroot/addon/dmine3/sasmsg  
!sasroot/addon/dmine3/sasautos  
!sasroot/addon/dmine3/samples/dmine  
!sasroot/addon/dmine3/sasexe/dmine  
!sasroot/addon/dmine3/sashelp  
!sasroot/addon/dmine3/sastest
```

5. Compare the current config.sas612 file to the config.dmine file in the !SASROOT/addon/dmine3 directory. Reconcile any site-specific differences such as -memsize. The config.sas612 file is usually found in SASROOT. Disregard any differing lines that reference !SASROOT/maint. For example:

```
cd addon/dmine3  
diff /usr/local/sas612/config.sas612 config.dmine
```

**Note:** The `memsize` option is the upper limit of the amount of memory the SAS System can use on a per session basis. Each session uses only as much memory as it needs and can never use more than the `memsize` option dictates. The `config.dmine` file defines a recommended `memsize` of 128 MB. This option can be adjusted in relation to the amount of physical RAM on the server and the number of concurrent users. Do not set the `memsize` option to a value so high that if every session allocated the maximum allowed amount, it would exceed the amount of physical memory on the server.

6. Edit the `autoexec.sas` file in `!SASROOT` and add the line:

```
libname sampsiso '!SASROOT/addon/dmine3/samples/dmine';
```

**Note:** Enterprise Miner Software, Version 2.0x users upgrading to Version 3.0 should change the `libname` statement to point to the Version 3.0 `samples` directory.

## Applying Enterprise Miner Software Updates to your Enterprise Miner Server Software

1. Insert the CD labeled **Enterprise Miner Software Updates, Release 3.01**.
2. Mount the CD-ROM.

**Note:** This release of the SAS System supports ISO-9660 CD-ROM and Rockridge extensions where available.

The following command is an example of mounting the CD-ROM:

```
mount -rt cdfs -o noversion /dev/rz33c /cdrom
```

**Notes:** Refer to your system documentation for the correct device name.

Mounting and unmounting a CD-ROM device requires root privileges. The remainder of the installation process does not. After mounting the CD-ROM, you can return to the standard privilege set.

For information on mounting a remote CD-ROM, see **Extracting SAS Manager from Tape or CD-ROM in Chapter 2, Installing the SAS System on Digital UNIX** of the **Installation Instructions for the SAS System, Release 6.12 for Digital UNIX, TS040**.

3. Install the software using the following command:

```
/cdrom/INSTALL.SH -f <cdpath> -t <sasroot>
```

where `<cdpath>` is the pathname of the CD-ROM drive and `<sasroot>` is the SAS System directory.

The following example assumes that your CD-ROM drive is mounted in the directory `/cdrom` and that the SAS System, Release 6.12 is installed in `/usr/local/sas612`:

```
/cdrom/INSTALL.SH -f /cdrom -t /usr/local/sas612
```

Fixes will be installed into `SASROOT/addon/dmine3`.

**Note:** Enterprise Miner Software Updates, Release 3.01 must be installed on top of the Enterprise Miner Software, Version 3.0 installation on your UNIX server. Both your server and client must be at the same release level of Enterprise Miner software.

## Configuring Enterprise Miner Server Software

### *Default Data Library Setup*

Make sure that the server has a directory to which Enterprise Miner Client Software users have read/write access. This directory should be different from the location where you installed Enterprise Miner Server Software. If you need to create a directory, do it now (for example, `/bigdisk/eminprj`).

### *Information Needed to Configure Enterprise Miner Client Software*

Provide the following information to the users of your Enterprise Miner Client Software so they can complete the steps outlined in the **Configuring Enterprise Miner Client Software for Remote Projects** section.

- machine name and IP address
- maintenance directory location

For example, if you installed the SAS System, Release 6.12 into the `/usr/local/sas612` directory, then the path needed for client configuration is `/usr/local/sas612/maint`.

- `addon/dmine3` directory location

For example, if you installed Enterprise Miner Server Software into the `/usr/local/sas612/addon/dmine3` directory, then the path needed for client configuration is `/usr/local/sas612/addon/dmine3`.

- path to the default data library

For example, if a server named `emserv` has a directory `/bigdisk/eminprj` created to store Enterprise Miner projects, then `/bigdisk/eminprj` is the path needed for client configuration. Do not use an NFS mount point, such as `/net/emserv/eminprj`.

## Uninstalling Enterprise Miner Server Software

To remove Enterprise Miner Software, Version 3.0, run the `uninstal.sh` script from the **Enterprise Miner, Version 3.0, Digital UNIX CD**:

```
/cdrom/UNINSTAL.SH sasroot-directory
```

This assumes the **Enterprise Miner, Version 3.0, Digital UNIX CD** is locally mounted as `/cdrom`.

## V. Installing and Configuring Enterprise Miner Client Software on Windows Platforms

Enterprise Miner software comprises two parts, a client installation and a server installation. This may mean that you will be installing media on two different platforms. Please read all the relevant sections below. You should not perform the client installation on the server. None of the installation steps are optional.

### Installing the SAS System for Enterprise Miner Client Software

You must install the SAS System with Enterprise Miner products to use Enterprise Miner Client Software. If you have licensed Enterprise Miner Server Software on a server Windows platform and Enterprise Miner Client Software on a client Windows platform, your package contains two copies of the SAS System for Windows. These copies are not identical. One copy is for your server machine and the other copy is for your client machines. The **SAS Software, Rel 6.12 TS025 for Windows** CD for the client installation is labeled **Client**.

1. Choose the **SAS Software, Rel 6.12 TS025 for Windows** CD labeled **Client**.
2. Insert the **SAS Software, Rel 6.12 TS025 for Windows** CD into your CD-ROM drive.
3. Perform a *Typical* installation of the SAS System as outlined in the **Installation Instructions for the SAS System under Microsoft Windows, Release 6.12**.
4. If you are installing Enterprise Miner software as an add-on to a previously installed SAS System, Release 6.12, you will be asked whether to *Purge* or *Modify* the existing SAS System. Respond *Modify* at this point. The following SAS products must be installed on your client:

- Base SAS Software
- SAS/CONNECT Software
- SAS/EIS Software
- SAS/ETS Software
- SAS/FSP Software
- SAS/GRAPH Software
- SAS/INSIGHT Software
- SAS/MDDDB Server Software
- SAS/STAT Software

5. During the installation, you are asked if you want to install the SAS Job Spawner. You should not install the SAS Job Spawner at this time.
6. During the installation, you may be asked if you want to install the SAS Viewer or the 16-bit or 32-bit SAS ODBC Driver. You do not need these components to use Enterprise Miner software, but you may install them if you wish.

### Applying Release 6.12 Maintenance to Your SAS System for Enterprise Miner Client Software

You must apply maintenance - Release 6.12 (TS050 or above) of the SAS System - for Enterprise Miner products.

1. Insert the **SAS System, Rel 6.12 Maintenance for Windows** CD into your CD-ROM drive.
2. Perform an installation of SAS System maintenance as outlined in **Chapter 2, Applying Maintenance to Your SAS System** in the **Installation Instructions for the SAS System under Microsoft Windows, Release 6.12**.

## Installing Enterprise Miner Client Software

After you have:

- installed the **SAS Software, Rel 6.12 TS025 for Windows** CD with Enterprise Miner products, and
- applied maintenance - Release 6.12 (TS050 or above) - to your SAS System,

you can install Enterprise Miner Client Software on the machines you plan on using as clients. See the section **System Requirements** for hardware and software requirements.

**Note:** Enterprise Miner Software, Version 2.0x users upgrading to Version 3.0 do not need to uninstall their Version 2.0x software to install Enterprise Miner Software, Version 3.0. Enterprise Miner Software, Version 3.0 will install to a unique location and will provide separate shortcuts for launching.

1. Insert the **Enterprise Miner, Version 3.0, Windows** CD into your CD-ROM drive.
2. Select the `Run . . .` menu option from the `Start` menu on the taskbar.
3. Type the following command and follow the instructions of the Setup wizard to complete your installation.

```
<source_drive>\setup.exe
```

For example, if the source media is in drive E:, type

```
e:\setup.exe
```

4. Select `Client` on the screen that asks you to select components to install.
5. You will have three types of installations to choose from. We highly recommend that you install the samples.

*Typical* installs Enterprise Miner Software, Version 3.0 and samples (default).

*Compact* installs Enterprise Miner Software, Version 3.0 without samples.

*Custom* allows you to install the samples separately.

**Note:** This installation will install Enterprise Miner software in an `addon` directory. This is a subfolder of the directory where your SAS System is installed (`!sasroot\addon`).

Enterprise Miner Software, Version 3.0 will install to the directory `!sasroot\addon\dm3`. If you have installed any of the following SAS software products to your SAS System, Enterprise Miner software will be installed to a `dm3` folder in the same `addon` location:

SAS/GIS Software  
SAS/PH-Clinical Software  
SAS/Warehouse Administrator Software  
SAS Analyst Application  
SAS Application Sampler  
SAS ADX Interface  
Enterprise Miner Software, Version 2.0x

**Note:** If you have Enterprise Miner Software, Version 2.0x software installed, Enterprise Miner Software, Version 3.0 will be installed in a separate directory structure in the `addon` subfolder. Version 2 and Version 3 of Enterprise Miner software can run on the same machine, allowing Version 2.0x projects to be exported for conversion. See **Chapter 2, Working with Projects** from the document titled **Getting Started with Enterprise Miner Software** for more information. You must run the same version of Enterprise Miner software on both your client and server machines.



6. To support enhanced printing for Enterprise Miner software, you will be prompted whether to modify four entries in the SAS/GRAPH devices catalog. Respond `Yes` to dialogs such as the following if you want to modify this catalog.

```
GIF1200 is Institute-supplied. Do you wish to modify?  
Yes  
or  
No
```

If you want to modify the catalog at a later time, then respond `No` to the dialogs and run the program `!SASROOT\addon\dm3\sample\emgifs.sas` when needed.

## Applying Enterprise Miner Software Updates to your Enterprise Miner Client Software

1. Insert the CD labeled **Enterprise Miner Software Updates, Release 3.01**.
2. Select the `Run` menu option from the `Start` menu on the taskbar.
3. Type the following command and follow the instructions of the Setup wizard to complete your installation.

```
<source_drive>\WIN.EXE
```

For example, if the source media is in drive E:, type:

```
e:\WIN.EXE
```

**Note:** Enterprise Miner Software Updates, Release 3.01 must be installed on top of the Enterprise Miner Software, Version 3.0 installation on all Windows server or client systems. Enterprise Miner Software Updates, Release 3.01 should be installed on both the client and the server.

4. Follow the instructions given during the installation.

## Starting the Enterprise Miner Client Software User Interface

Enterprise Miner software will start automatically if you double-click on the shortcut installed on your desktop labeled `Enterprise Miner 3.0`. To start Enterprise Miner software from your Windows desktop, go to the `Start` menu on the taskbar and select the `Programs` menu option, then the `Enterprise Miner` menu option, and then the `Enterprise Miner 3.0` menu option.

To restart Enterprise Miner software from within the SAS System, you can enter the `miner` command in the SAS toolbox command area or after the `Command` prompt (obtained by selecting the `Globals` menu, then the `Options` menu option, and then the `Command Line` menu option). Enterprise Miner software cannot be invoked directly from your SAS System installation - please use the shortcuts provided.

## Configuring Enterprise Miner Client Software for Remote Projects

To use Enterprise Miner software in client/server mode, you will need to edit the SAS/CONNECT startup script provided in your client installation to invoke Enterprise Miner software. The script files are installed into the !SASROOT\CONNECT\SASLINK area by default or you can check for the value of SASSCRIPT in your configuration file. For instance, if the SAS System is installed in d:\sas, then look in d:\sas\connect\saslink. You should use em3tcpux.scr to connect to Enterprise Miner software on the server UNIX platform. You will need the maint and addon location from the server installation to complete this step. See section IV. **Installing and Configuring Enterprise Miner Server Software on the Digital UNIX Platform.**

Edit !SASROOT\CONNECT\SASLINK\em3tcpux.scr and change these lines to reference the path where Enterprise Miner Server Software was installed.

```
type '/usr/local/sas612/sas ';
type ' -config /usr/local/sas612/addon/dmine3/config.dmine ';
type ' -autoexec /usr/local/sas612/autoexec.sas ';
type ' -largefile sasvlf';
type ' -dmr -comamid tcp -device grlink -noterminal ';
type '-nosyntaxcheck' LF;
```

Assuming that the server add-on was installed in /disk1/sas612/addon, change the path to the SAS executable from !SASROOT/sas to !SASROOT/maint/sas. Notice that the original emtcpux.scr file has /usr/local/sas612/sas, not /usr/local/sas612/maint/sas. This line must be changed to use the modified SAS executable located in the maint folder. You should also remove the -largefile sasvlf option. The following example contains all of these changes.

For instance, if the server add-on was installed in /disk1/sas612/addon and the maintenance was installed in /disk1/sas612/maint, then the lines would be changed to:

```
type '/disk1/sas612/maint/sas ';
type ' -config /disk1/sas612/addon/dmine3/config.dmine ';
type ' -autoexec /disk1/sas612/autoexec.sas ';
type ' -dmr -comamid tcp -device grlink -noterminal ';
type '-nosyntaxcheck' LF;
```

See the **Getting Started with Enterprise Miner Software** documentation included online and with your media.

## Uninstalling Enterprise Miner Client Software

To remove Enterprise Miner software from a Windows platform, go to the Start menu on the taskbar and select the Programs menu option, then the Enterprise Miner menu option, and then the Uninstall Enterprise Miner 3.0 menu option.

## VI. Appendices

### Appendix A - Custom Installation for UNIX Platforms

To install the SAS System on a server UNIX platform using a *Custom* installation, follow the instructions in **Appendix H, Performing a Custom Installation of the SAS System** in the **Installation Instructions for the SAS System, Release 6.12 for Digital UNIX**. Select the following components to ensure that you will have full functionality of all areas of Enterprise Miner software:

Base SAS Software  
SAS/STAT Software  
SAS/CONNECT Software  
SAS/ETS Software  
SAS/GRAPH Software

When making your selections for the Custom Installation Menu, you must choose *SAS Notes* to extract maintenance fixes from the media in addition to the products above. See the **Addendum to the Installation Instructions for the SAS System, Release 6.12 (TS051) for Digital UNIX** for more information.

Continue with the section **Installing the SAS System Maintenance TS060 for Enterprise Miner Server Software** in **IV. Installing and Configuring Enterprise Miner Server Software on the Digital UNIX Platform** to apply maintenance.

### Appendix B - Custom Installation for Windows Platforms

To install the SAS System on a PC using a *Custom* installation, do the following.

Follow the instructions in the **Installation Instructions for the SAS System under Microsoft Windows, Release 6.12** and select *Custom* on the *Select Setup Type* screen. After making the appropriate customization choices for any non-Enterprise Miner components you are installing in the *Custom Installation* screen, select the following components to ensure that you will have full functionality of all areas of Enterprise Miner software:

Base SAS Software  
SAS/STAT Software  
SAS/CONNECT Software  
SAS/GRAPH Software  
SAS/INSIGHT Software  
SAS/EIS Software  
SAS/FSP Software  
SAS/ETS Software  
SAS/MDDb Server Software

Complete the steps for performing a SAS System installation beginning with step 4 in section **V. Installing and Configuring Enterprise Miner Client Software on Windows Platforms**. Continue with **Applying Release 6.12 Maintenance to Your SAS System for Enterprise Miner Client Software**.

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