EMS Installation

This chapter provides instructions for installing the Element Management System (EMS) software on a user workstation.

Workstation Requirements

The following sections list the minimum system requirements for each supported operating system: Windows 95/98, Windows NT, and UNIX.

EMS Lite (Windows 95/98)

- Windows 95/98 workstation
- 166 MHz Pentium-class CPU
- 32 MB of RAM (64 MB RAM recommended)
- VGA+ compatible display adapter
- 1024 x 768 resolution monitor, set for at least 256 colors
- Ethernet port
- CD-ROM drive (required if installing EMS from a CD-ROM)
- 100 MB of free disk space (1 GB of disk space recommended)

EMS NT (Windows NT 4.0)

- Windows NT 4.0 workstation with Service Pack 3 installed
- 233 MHz Pentium-class CPU
- 128 MB of RAM
- VGA+ compatible display adapter
- 1024 x 768 resolution monitor, set for at least 256 colors
- Ethernet port
- CD-ROM drive (required if installing EMS from a CD-ROM)
- 1 GB of free disk space

EMS UNIX

- Ultra 5 workstation or greater

- 128 MB of RAM

- 1024 x 768 resolution color monitor, set for at least 256 colors

- Ethernet port

- CD-ROM drive (required if installing EMS from a CD-ROM)

- 1 GB of free disk space

Installing EMS

This section contains instructions for the following procedures:

- Installing EMS (Windows NT)

- Installing EMS Lite (Windows 95)
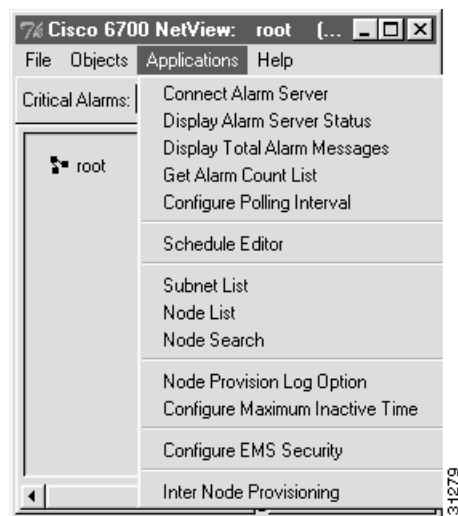
- Installing EMS UNIX

Installing EMS (Windows NT)

Use the following procedures to install EMS on a Windows NT workstation.

Shutting Down the EMS Alarm Server

EMS users must shut down the EMS alarm server before installing a new version of EMS.

Step 1   Select **Applications > Display Alarm Server Status** from the net view. (See Figure 2-1.)

Figure 2-1   Display EMS Alarm Server
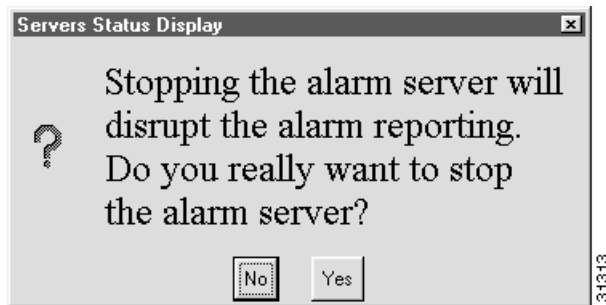

Step 2   EMS launches the alarm server status display. (See Figure 2-2.)

Figure 2-2   EMS Alarm Server Status

Step 3   Click the **Stop Alarm Server** button. EMS displays the following dialog box. (See Figure 2-3.)

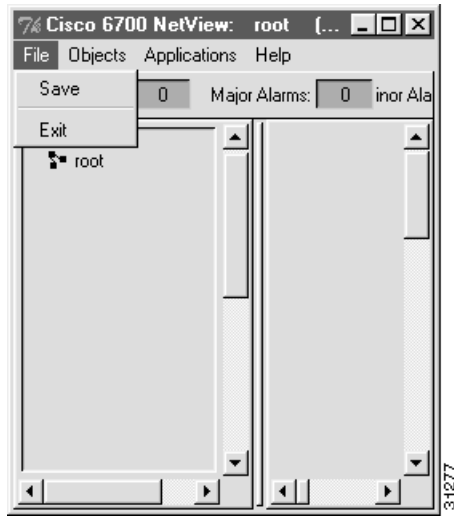**Figure 2-3   Shut Down EMS Alarm Server**

Step 4   Click **Yes** to shut down the alarm server and return to the net view.

Exiting EMS

You must exit EMS on the workstation before installing a new version of EMS. To exit EMS, select **File > Exit** from the net view. (See Figure 2-4.)

Figure 2-4   Exit EMS


Installing EMS

Step 1   Launch the Cisco 6700 EMS setup file (see Figure 2-5). The EMS setup file can be found on the included software CD-ROM, or it can be downloaded from Cisco Connection Online (see the "About This Guide" section for more information).
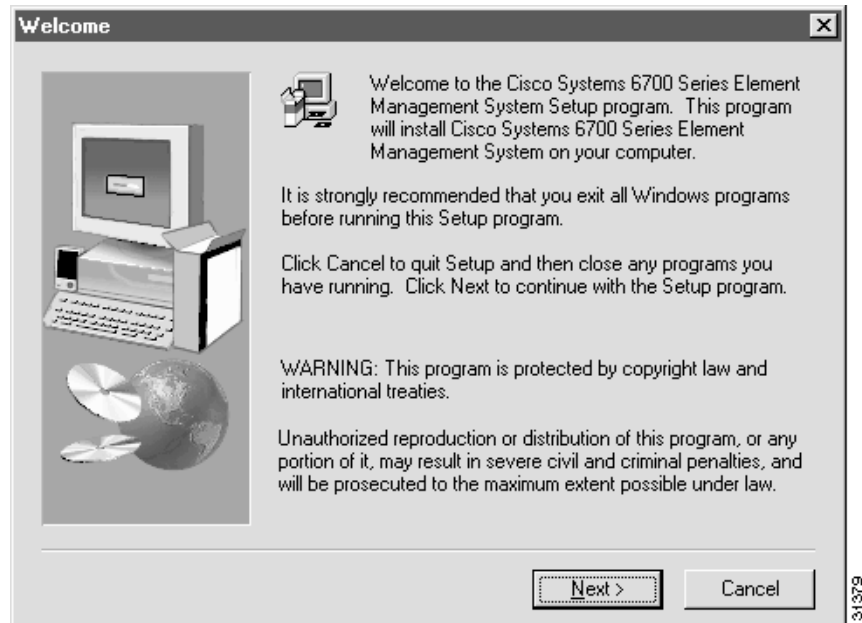
Figure 2-5   CIsco 6700 EMS Setup File

Cisco6700S...

The Cisco 6700 Element Management System installation window appears. (See Figure 2-6.)

Figure 2-6 **EMS Installation**
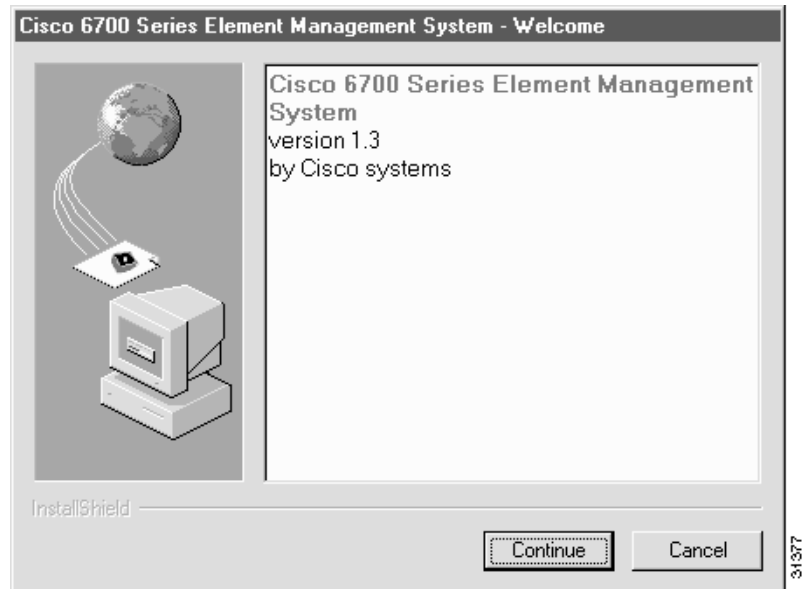
Step 2 Click **Continue** to begin the installation. Cisco recommends that you close all other applications before proceeding. (See Figure 2-7.)
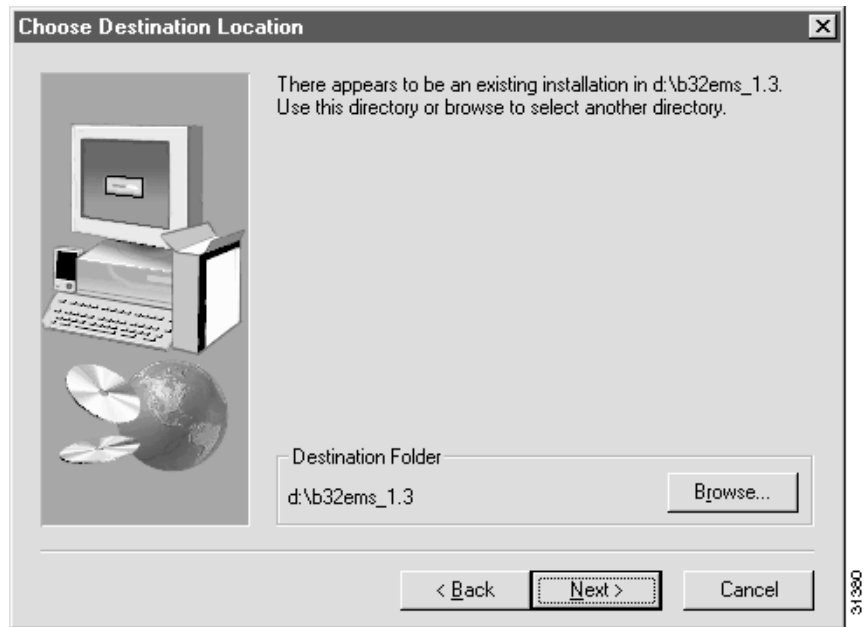
Figure 2-7 **EMS Installation (continued)**

Step 3 Click **Next** to proceed.

Step 4 Select the directory in which EMS will be installed. (See Figure 2-8.)

Figure 2-8   EMS Directory Selection

Step 5   If you are performing a first-time installation of EMS on your workstation, a folder called **EMS** will be created on the root directory (**C:\EMS**). You can accept this directory by clicking on the **Next** button, or you can change the directory with the **Browse** button.

If you are upgrading your EMS software from a previous version, the installation program will replace the old version with the new version.

Step 6   When prompted for the alarm server IP address, enter the IP address of the EMS alarm server. (See Figure 2-9.) Contact your EMS administrator for the correct IP address.

Figure 2-9   Enter Alarm Server IP Address
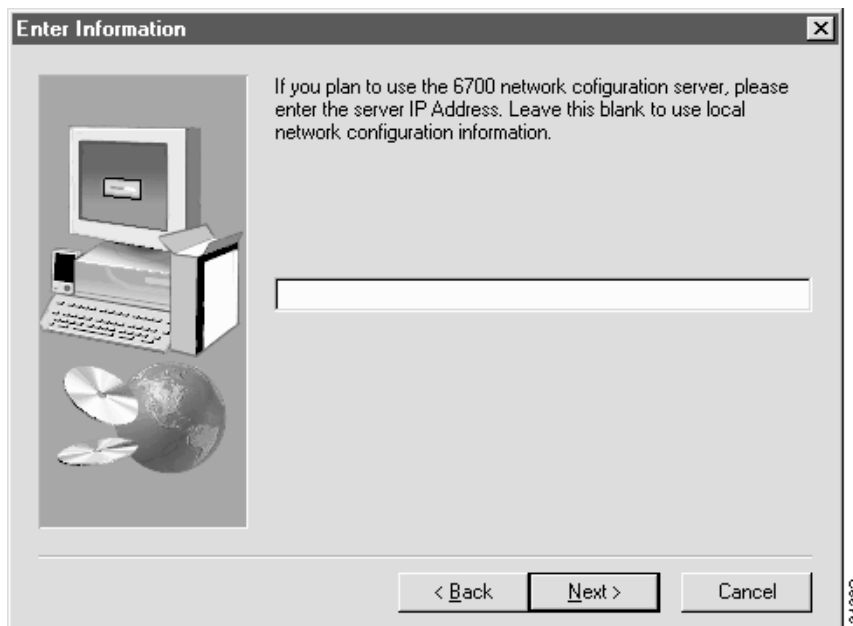
Step 7   Click **Next** to proceed.

> **Note**   If you are upgrading EMS from a previous version, EMS will provide the alarm server IP address from the previous EMS installation. Click **Next** to accept this IP address, or replace it with a new IP address.

Step 8   When prompted for the network configuration server IP address, enter the IP address of the EMS network configuration server. (See Figure 2-10.) Contact your EMS administrator for the correct IP address.

Figure 2-10   Enter Network Configuration Server IP Address
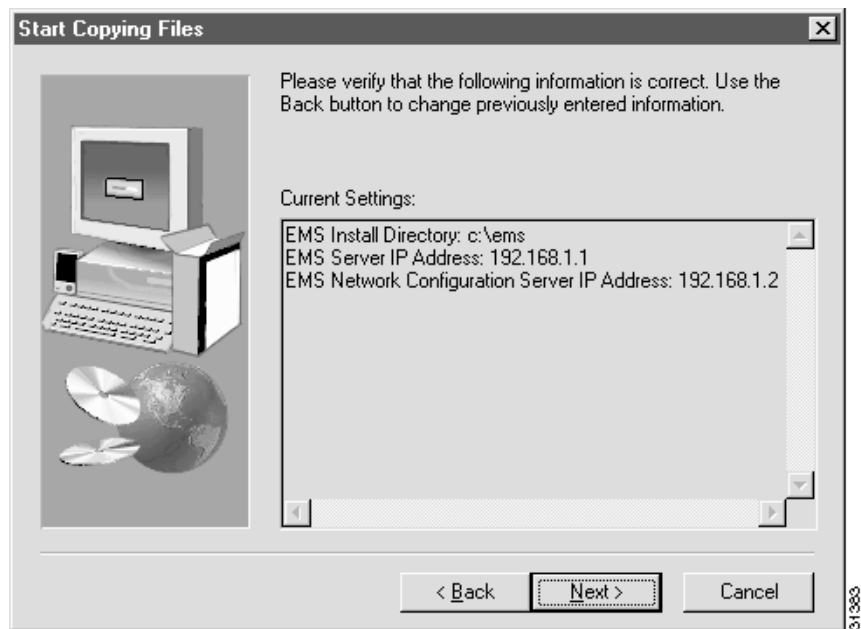

Step 9   Click **Next** to proceed.

> **Note**   If you are upgrading EMS from a previous version, EMS will provide the network configuration server IP address from the previous EMS installation. Click **Next** to accept this IP address, or replace it with a new IP address.

Step 10   You will be prompted to verify the installation information you have supplied. (See Figure 2-11.)

Figure 2-11   Confirm EMS Installation

Step 11   If you wish to change this information, use the **Back** button to make changes.

Step 12   Click **Next** to proceed with the installation of EMS program and data files.

Step 13   When the installation file transfer is complete, click **Finish** to end EMS installation and reboot the workstation. (See Figure 2-12.)

Figure 2-12   EMS Installation Complete

When the installation is complete, EMS will place the EMS net view and EMS alarm server icons on your desktop. (See Figure 2-13 and Figure 2-14.)

Figure 2-13   EMS Net View Icon

Cisco 6700
EMS Netview

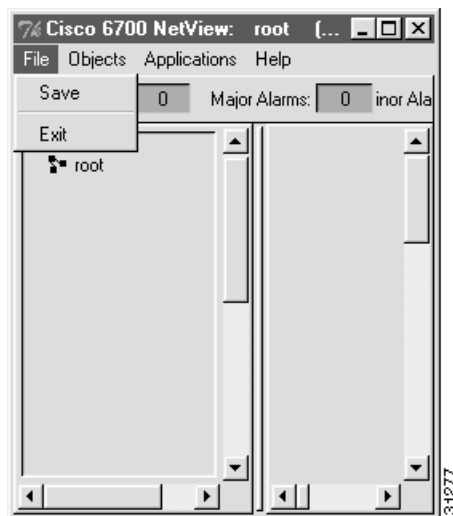**Figure 2-14   EMS Alarm Server Icon**

Cisco 6700
EMS Alar...

Installing EMS Lite (Windows 95)

Use the following procedures to install EMS on a Windows 95/98 workstation.

Exiting EMS

You must exit EMS on the workstation before installing a new version of EMS. To exit EMS, select **File > Exit** from the net view. (See Figure 2-15.)

Figure 2-15   Exit EMS

Installing EMS Lite

Step 1   Launch the Cisco 6700 EMS Lite installation file. (See Figure 2-16.) The EMS installation file can be found on the included software CD-ROM, or it can be downloaded from Cisco Connection Online (see the "About This Guide" section for more information).

Figure 2-16   Clsco 6700 EMS Lite Installation File

Cisco6700S...

The Cisco 6700 Element Management System Lite installation window appears. (See Figure 2-17.)

Figure 2-17   EMS Lite Installation
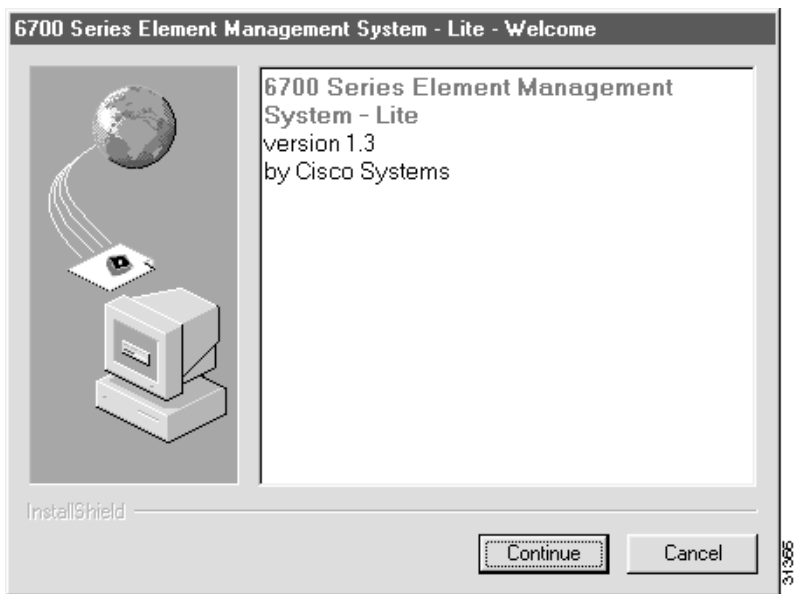
Step 2 Click **Continue** to begin the installation. Cisco recommends that you close all other applications before proceeding. (See Figure 2-18.)
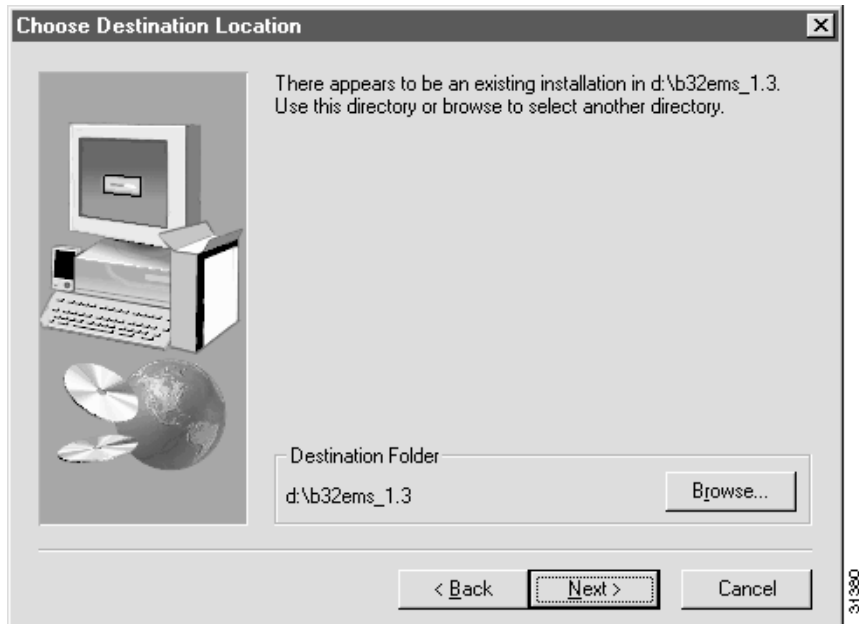
Figure 2-18   EMS Lite Installation (continued)

Step 3   Click **Next** to proceed.

Step 4   Select the directory in which EMS Lite will be installed. (See Figure 2-19.)

**Figure 2-19   EMS Lite Directory Selection**

If you are performing a first-time installation of EMS on your workstation, a folder called **EMS** will be created on the root directory (**C:\EMS**). You can accept this directory by clicking **Next**, or you can change the directory with the **Browse** button.

If you are upgrading your EMS software from a previous version, the installation program will replace the old version with the new version.

You will be prompted to verify the installation information you have supplied. (See Figure 2-20.)

Figure 2-20   Confirm EMS Lite Installation
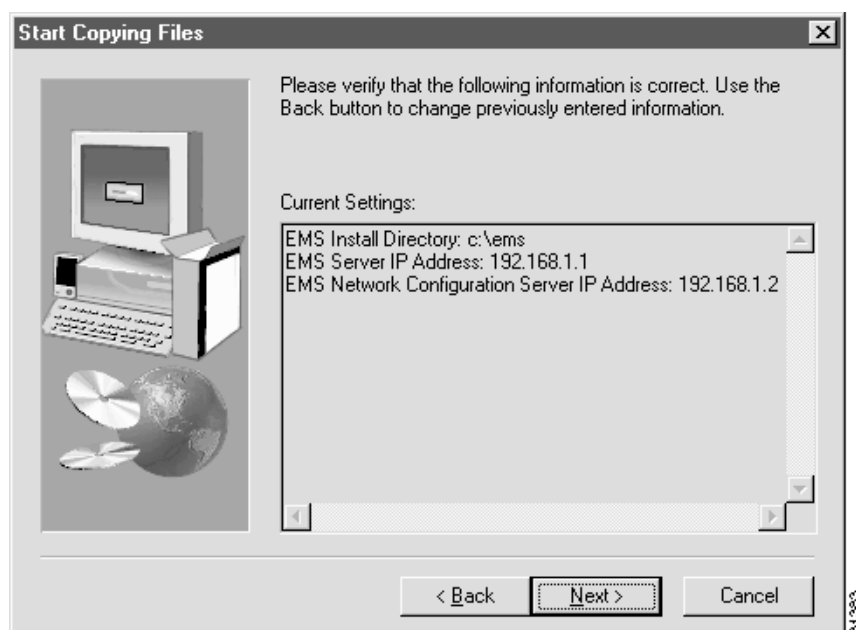
Step 5   If you wish to change this information, use the **Back** button to make changes.

Step 6   Click **Next** to proceed with the installation of EMS program and data files.

Step 7   During the installation, EMS updates the AUTOEXEC.BAT file on the workstation. (See Figure 2-21.)

Figure 2-21   AUTOEXEC.BAT File Updated
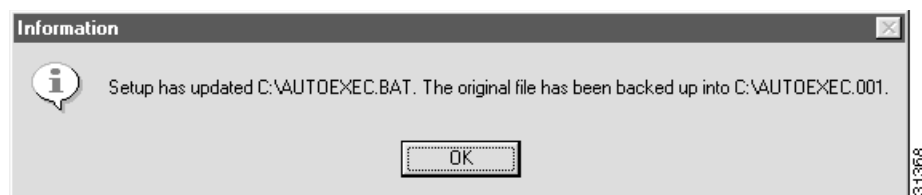
Step 8   Click **OK** to proceed.

⚠ **Caution**   During the installation, you may see a window with the message "**Warning: Batch file update failed. Please update file by hand.**" This message indicates that the EMS install application was unable to edit the **AUTOEXEC.BAT** file on your workstation. Complete the following steps, then proceed to the "Editing AUTOEXEC.BAT" section on page 2-13 for further instructions.

Step 9 When the installation file transfer is complete, click **Finish** to end EMS installation and reboot the workstation. (See Figure 2-22.)

Figure 2-22   EMS Lite Installation Complete
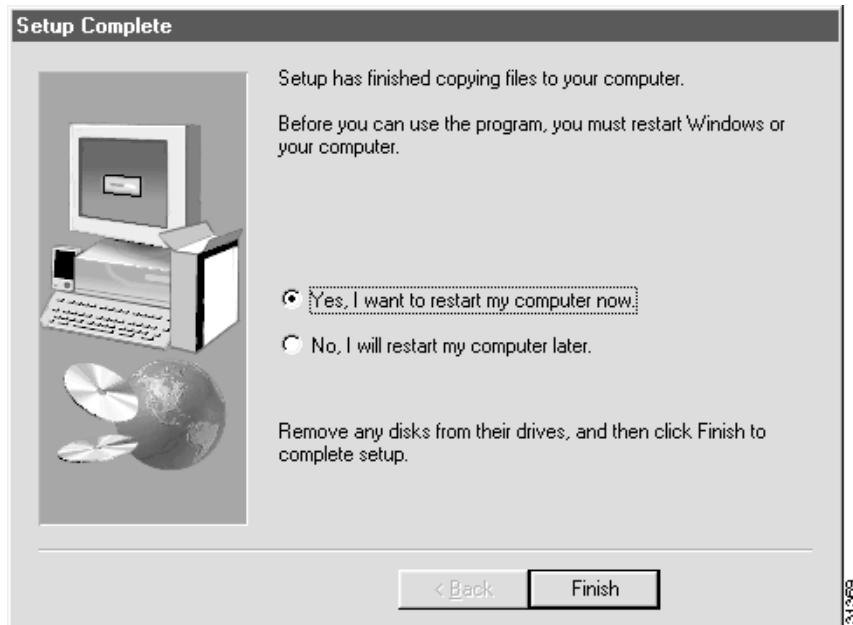
Step 10 After the workstation has been rebooted, EMS will place the net view icon on your desktop. (See Figure 2-23.)

Figure 2-23   EMS Lite Net View Icon

Cisco 6700
EMS-Lite...

Editing AUTOEXEC.BAT

The following procedure shows how to enter EMS system variables into the AUTOEXEC.BAT file for your workstation.

**Note** This procedure should only be used in the event of a batch update failure in the EMS Lite installation. If you did not receive a failure message while installing EMS Lite, do not perform this procedure.

Step 1 From the **Start** menu on your workstation, select **Run**.

Step 2 Type **edit autoexec.bat** in the text window, and click **OK** to launch the MS-DOS editor. (See Figure 2-24.)

Figure 2-24   Edit AUTOEXEC.BAT
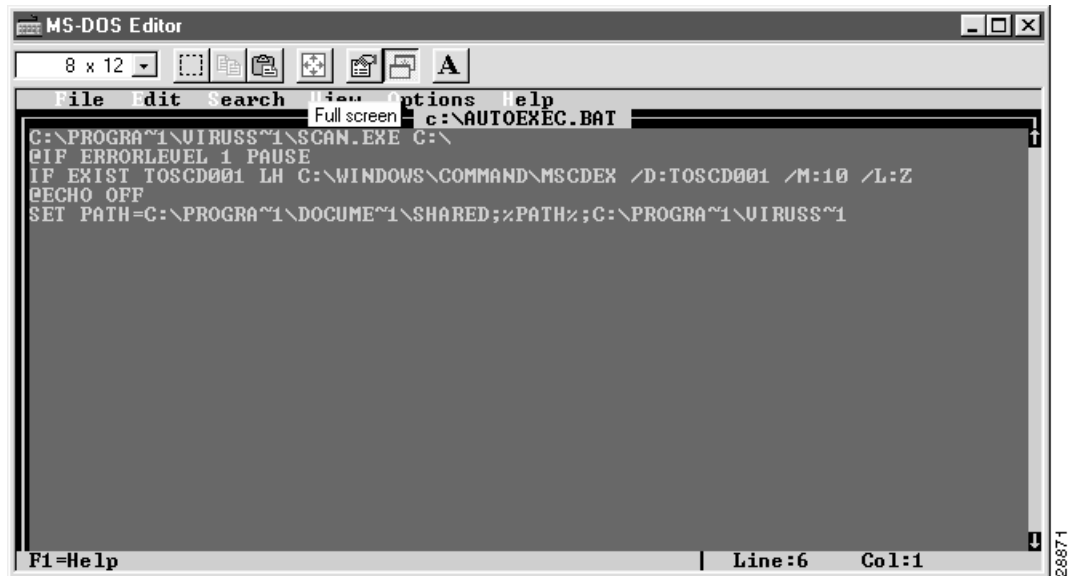
Step 3   Use the down arrow key to scroll down past the last line of existing text, and enter the following lines of text exactly as shown (see Figure 2-25):

```
SET B10EMS_HOME=C:/EMS
SET TCL_LIBRARY=C:/EMS/LIB/TCL
SET TK_LIBRARY=C:/EMS/LIB/TK
SET TNM_LIBRARY=C:/EMS/LIB/TNM
```

Note   You must use the forward slash character (/) when entering these variables. This procedure assumes that EMS was installed to the default folder, **C:\EMS**.

Figure 2-25   Enter EMS System Variables
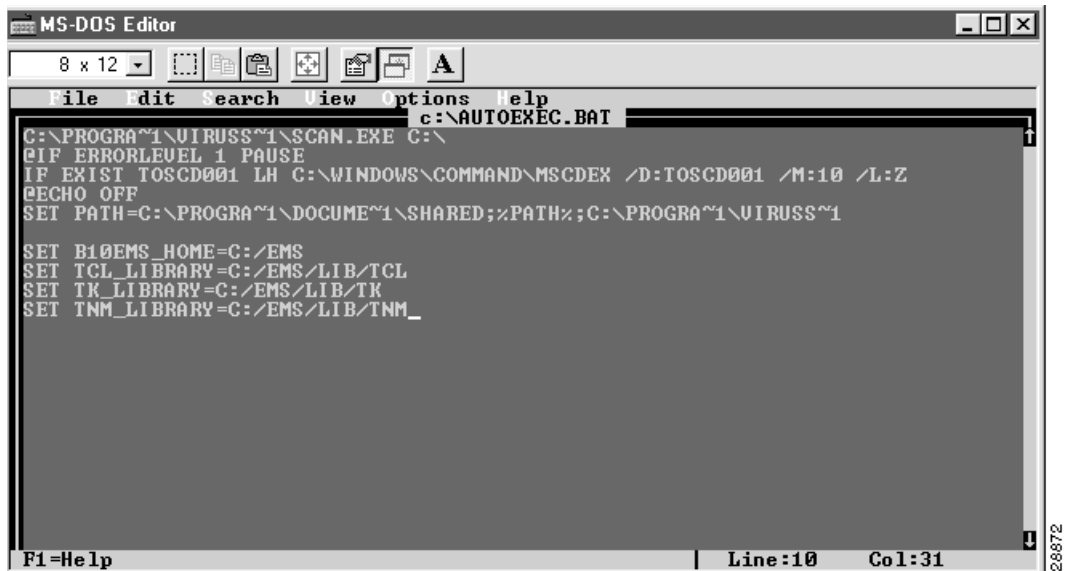
Step 4   Select **File > Save** to save this configuration.

Step 5   Select **File > Exit** to close the editor.

Step 6   Close all applications and reboot the workstation to load the EMS system variables.

Installing EMS UNIX

EMS can be installed in any directory in which the user has write privileges. The EMS distribution package for UNIX contains two files:

- **ems.tar**

- **emsinstall**

To install EMS:

Step 1   Choose whether you want to install directly from the CD-ROM or first copy the distribution into a user account. If installing directly from the CD-ROM, skip to the third step. Otherwise:

- **% cp *** <user directory>

- **% cd** <user directory>

Step 2   Add execute rights to the emsinstall script:

- **% chmod +x emsinstall**

Step 3   Execute the installation script:

- **% ./emsinstall**

Step 4   The script will prompt for the following information:

- Tar filename [default **./ems.tar** (that is, file **ems.tar** in the current directory)]

- EMS Installation directory. If the B10EMS_HOME environment variable (described later) has already been set, the script permits the user to use that value. Otherwise, enter a FULLY QUALIFIED path name.

The emsinstall file creates two scripts—**ems.csh** and **ems.ksh**—in the EMS installation directory. If the files exist from a previous invocation of eminstall, they will NOT be overwritten. Also, if an existing EMS installation is being upgraded with emsinstall, the *EMS installation directory*/**data** directory will NOT be overwritten. This preserves network configuration and alarm information.

Environment Variables

The environment variables in Table 2-1 are specified in the **ems.csh** and **ems.ksh** files.

Table 2-1   EMS Environment Variables

B10EMS_HOME	The EMS installation directory
B10EMS_SERVER	IP address of the computer running the EMS Alarm Server
LD_LIBRARY_PATH	*EMS installation directory*/lib
TCL_LIBRARY	*EMS installation directory*/lib/tcl
TK_LIBRARY	*EMS installation directory*/lib/tk
TNM_LIBRARY	*EMS installation directory*/lib/tnm

Table 2-1   EMS Environment Variables

TNM_NMTRAPD	*EMS installation directory*/bin/nmtrapd

The generated **ems.csh** and **ems.ksh** files leave the value of **B10EMS_SERVER** blank. Please edit the appropriate file and fill in the IP value of the alarm server. Contact your EMS administrator for the alarm server IP address if needed.

To update the environment, complete one of the following steps:

- For **csh**, append the ems.csh file to the **~/.cshrc** file. For **ksh**, append the **ems.ksh** file to the **~/.profile** file. Then log out and log back in.

  or

- For **csh**, execute "**source ems.csh**" in any window that the EMS is going to be started in. For **ksh**, execute "**.ems.ksh**".

AlarmServer

The nmtrapd program needs to be installed with root privileges (this program is required by the EMS alarm server). To make the necessary changes, complete the following steps after obtaining the root password:

Step 1   Set user to root:

% su

Step 2   Execute the emsinstall script with root privileges:

% ./emsinstall root

Again, the script will prompt for the FULLY QUALIFIED path name of the EMS installation directory unless it is already defined in the environment.

Step 3   Exit from the root login:

% exit