Installing TrafficDirector Software

Introduction

This chapter tells you how to install the TrafficDirector software. It includes:

- An overview of the installation procedure.

- Hardware and software configuration requirements.

- An installation flow chart.

- Detailed step-by-step instructions.

If you have obtained the TrafficDirector software as a component of CiscoWorks for Switched Internetworks (CWSI) please follow the installation instructions for that bundle.

Installation Procedure Overview

Step 1 Determine that you have the required hardware, software and network configuration already installed. Table 2-1 lists the supported configurations.

Step 2 If you are using a SwitchProbe, physically connect the SwitchProbe hardware to your network using a null modem connection. Give the agent its own address and install the agent software. The procedure in this manual assumes that you have already performed this step. If you have not, see the appropriate manual for the SwitchProbe agent installation procedure.

Step 3 Set up the environment variables and use the **tar** command to extract the program files from CD-ROM.

Step 4 Install the TrafficDirector software by running the Install script described below. When you install the TrafficDirector file, make sure that you do *NOT* do so as Superuser.

Step 5 Perform any appropriate network diagnostics to ensure that your network and the SwitchProbe or other RMON agents are functioning properly.

Step 6 Begin using TrafficDirector to monitor and troubleshoot your network.

System and Software Configuration Requirements

Table 2-1 lists the supported hardware/software configurations and the TrafficDirector models that apply to each. If your configuration does not match one of those listed, call Cisco's Technical Assistance Center for custom information.

Table 2-1   Supported Hardware/Software Configurations

If you have this configuration	Use this TrafficDirector model
• Sun SPARC station or compatible	TRAFFDIR3.3-SUN
• SunOS 4.1.3 (NOTE: you will see warning messages if you are using either 4.1.1 or 4.1.2. Ignore these messages.)	
• Solaris 2.3 or 2.4	
• OpenWindows 3.3 SunOS Patch #100444-x must be applied when using without Motif	
• Motif Window Manager (GUI applications are statically linked with Motif 1.2.4 and X11R5 libraries)	
• 48 MB RAM	
• 80 MB minimum free disk space	
• CD-ROM	
• HP 9000 series 700	TRAFFDIR3.3-HP
• HP/UX v 9.9 and higher	
• Motif 1.2 and X11R5 libraries (included with HP-UX)	
• 48 MB RAM	
• 40 MB minimum free disk space	
• CD-ROM	
• IBM RS/6000	TRAFFDIR3.3-IBM
• AIX Version 3.2.4 and higher	
• Motif 1.2.4 and X11R5 libraries	
• 48 MB RAM	
• 40 MB minimum free disk space	
• CD-ROM	

Performing the Installation

This section describes the steps needed to install TrafficDirector.

⚠️ **Caution** Install TrafficDirector file as a **User**, not as **Superuser** (**Root**). This avoids potential write-protection conflicts that could interfere with a lower-privileged user's ability to fully use the TrafficDirector. However, you will need to know the root password to install the software correctly.

General Installation Guidelines

You must install the TrafficDirector software in a directory defined by the environment variable **$NSHOME**. The installation procedure installs files in various subdirectories of the **$NSHOME** directory as described in this section.

- The **$NSHOME/bin** directory contains executables, icon files, and other permanent files. *These files are overwritten* when you install a new version of the software.

- The **$NSHOME/man** directory contains documentation. *These files are also overwritten* when you install a new version of the software.

- The **$NSHOME/samples** directory contains sample and default configuration files. *These files are overwritten* when you install a new version of the software.

- The **$NSHOME/usr** directory contains user-specific configuration files, the license file, and status log files created by daemon processes. These files are NOT overwritten when you install a new version of the software.

- The **$NSHOME/reports** directory is the default directory for report output files.

- The **$NSHOME/db** directory contains log files created by the logging daemon.

Mounting the CD Under Solaris 2.x

If you are running under Solaris 2.x, find out if the volume daemon is running. If it is, it automatically mounts the CD for you, and you can skip the mounting step in the installation instructions. If the volume daemon is not running, you'll need to follow all the steps in the procedure to properly mount the CD and install the software.

To determine if the the volume daemon is running, type the following command:

```
ps -ela | grep vold
```

If the volume daemon is running, the process **automoun** will appear in the list produced by the **ps** command.

Determining Which UNIX Shell is Running

Some UNIX commands differ depending on which "shell", or command interface, you are using. You can install the TrafficDirector software using the C Shell, Korn Shell or Bourne Shell. If you do not know which shell you are using, follow the steps below.

Step 1 Type the command **setenv** at the UNIX prompt.

If the command responds with a list of environment variable definitions, you are using the C Shell. The list should include the line **SHELL=/bin/csh**.

If the response to the command is **setenv: not found**, then you are not using the C Shell.

Step 2 If the response to the **setenv** command was not found, type **set** at the UNIX prompt. You should see a list of environment variable definitions.

If the list includes **SHELL=/bin/sh**, you're using the Bourne Shell.

If the list includes **SHELL=/bin/ksh**, you're using the Korn Shell.

Installation Procedure

Note You must perform the installation while in csh (the C Shell), the Korn Shell, or the Bourne Shell. Set environment variables appropriate to the shell (Steps 3, below).

To install the TrafficDirector software:

Step 1 Log in as a non-root user. Installed files will belong to this user.

Step 2 Decide where the distribution files will reside. You should create a new directory to hold the distribution files. You can use this example or define your own directory:

```
mkdir /usr/traffdir
```

Step 3 Set the environment variable **NSHOME** to this directory. For example:
In the C Shell:

```
setenv NSHOME /usr/traffdir
```

In the Korn or Bourne Shells:

```
NSHOME=/usr/traffdir
export NSHOME
```

Step 4 Make this your current directory:

```
cd $NSHOME
```

Step 5 Insert the Cisco TrafficDirector CD into your CD-ROM drive and enter one of the following sets of commands, depending on your platform. The device names shown below may differ at your site.

- If your platform is *Solaris 2.x* and the volume daemon is running, type the following:

```
tar xvf /cdrom/cdrom0/tdir/tdir_sun.tar
```

- If your platform is *Solaris 2.x* and the volume daemon is NOT running, type the following:

```
mount -r -F hsfs /dev/sr0 /cdrom
tar xvf /cdrom/tdir/tdir_sun.tar
```

- If your platform is *SunOS 4.1.x*, type the following:

```
mount -r -t hsfs /dev/sr0 /cdrom
tar xvf /cdrom/tdir/tdir_sun.tar
```

- If your platform is *IBM-AIX 3.2.x*, type the following:

```
mount -v cdrfs -r /dev/cd0 /cdrom
tar xvf /cdrom/tdir/tdir_ibm.tar
```

- If your platform is *HP-UX 9.x*, type the following:

  ```
  mount -t cdfs /dev/dsk/c201d2s0 /cdrom
  tar xvf /cdrom/tdir/tdir_hp.tar
  ```

  The files are extracted into the current directory.

Step 6 Run the Install script:

```
./Install
```

The install script un-compresses the files. This will take several minutes. It then installs ASCII configuration files in the **$NSHOME/usr** directory, prompts for licensing information, and sets up special privileges and ownership for certain files.

Step 7 The licensing program prompts you to enter the following information:

- Serial number

- Password

- Expiration date

Enter the information provided on the pink or yellow password form, or the permanent password you've been assigned.

Note The licensing program is found in the $NSHOME directory. If you're using a temporary or evaluation license, you may need to access it again later.

Step 8 The following two commands (shown below) require root permission. You are prompted to enter the root password, or Control-C to abort.

```
chown root bin/dvtrapd bin/dvconfd bin/tdir
chmod 477 bin/dvtrapd bin/dvconfd/bin/tdir
```

Step 9 Look at the contents of the file **.traffdir**, found in the TrafficDirector installation directory ($NSHOME).

If you are using the C Shell, verify that the following lines are present in the **.traffdir** file:

```
setenv NSHOME /usr/traffdir
```
(or the appropriate directory you used in Steps 2 and 3 above).
```
setenv HHHOME $NSHOME/help
setenv XUSERFILESSEARCHPATH $NSHOME/X/%N
setenv XLIBI18N_PATH $NSHOME/X
setenv MANPATH $NSHOME/man
```

If you are using the Korn or Bourne Shell, verify that the following lines are present in the **.traffdir** file:

```
NSHOME=/usr/traffdir
```
(or the appropriate directory you used in Steps 2 and 3 above).
```
HHHOME=$NSHOME/help
XUSERFILESEARCHPATH=$NSHOME/X/%N
XLIBI18N_PATH=$NSHOME/X
MANPATH=$NSHOME/man
export NSHOME
export HHHOME
export XUSERFILESEARCHPATH
export XLIBI18N_PATH
export MANPATH
```

If any of these lines are missing or incorrect, use a text editor to change them.

If you are using the Korn or Bourne Shell, you can also use the following, more compact form for these lines:

```
export NSHOME=/usr/traffdir
export HHHOME=$NSHOME/help
export XUSERFILESEARCHPATH=$NSHOME/X/%N
export XLIBI18N_PATH=$NSHOME/X
export MANPATH=$NSHOME/man
```

Step 10 If you are using the C Shell, type the following command:

```
cd $NSHOME
source ./.traffdir
```

If you are using the Bourne or Korn Shell, type the following:

```
cd $NSHOME
. ./.traffdir
```

Step 11 To ensure that TrafficDirector environment variables are present every time you log in, concatenate the **.traffdir** file with the **.cshrc** or **.profile** file in your home directory.

If you are using the C Shell, change to your home (login) directory and type the following:

```
cat $NSHOME/.traffdir >> .cshrc
```

If you are using the Korn or Bourne Shell, change to your home directory and type the following:

```
cat $NSHOME/.traffdir >> .profile
```

Step 12 To start TrafficDirector in the background, do the following:

```
run $NSHOME/bin/tdir &
```

This completes your TrafficDirector installation.