



Preparing for CWM Installation

This chapter describes those items that should be checked and/or taken care of before Cisco WAN Manager (CWM) can be installed. This includes such items as checking that the hardware is sufficient for the installation, that the correct version of Solaris is installed and so on.

Specifically this chapter contains the following sections:

Section	Description
CWM Server Prerequisite Checklist	Provides you with details about how to gather the information you will require during the installation of the software.
CWM Server Workstation Requirements	Lists minimum workstation requirements to install and achieve the desired performance.
CWM Standalone Statistics Collector Requirements	Lists the minimum hardware and software requirements to install and operate the Standalone Statistics Collector.
CWM Client System Requirements	Lists the minimum hardware and software requirements to install and operate the CWM Client
Solaris Operating System 2.7 Installation	Lists pre-installation tasks, describes the installation and disk partitioning processes.
Disk Partitioning	Provides details of the required disk partition sizes.
Installing Solaris 2.7 patches	Lists the required Solaris patches and how to install them.
CiscoView 5.4 Considerations	Provides the installation process for the CiscoView prerequisites (Netscape Communicator 4.75 and Java Plug-in 1.3.1).
Installing HP OpenView 6.2	Provides installation and setup procedures. HP OpenView is used in conjunction with the SNMP Service Agent and for viewing the Event Log. It is not required for any other CWM procedures.
Installing Wingz Version 2.5.1	Provides installation and setup procedures.

CWM Server Prerequisite Checklist

It also provides information that the user will need prior to beginning the installation of Release 11 of CWM.

The section lists information that is required during the CWM server software installation. The following information is required:

- Workstation hostname
- Root password
- IP Address and subnet address
- Connection method (direct, hub, or router)

Some of this information can be gathered by issuing commands at the existing network management system (NMS) workstation. If there is no existing NMS workstation, gather this information from another source.

**Note**

Prerequisites for CWM client and SCMSA workstations are provided in Chapters 7 and 8 respectively.

Table 2-1 *Gathering Required Information*

Command	Comment
host% hostname	Obtains workstation's hostname Note Hostnames for CWM workstations must begin with an alpha character and may contain only alpha and numeric characters. Do not use a hostname that contains any other characters such as a dash (-) or other special characters.
host% more /etc/defaultrouter	Record the information if it exists
host% more /etc/hosts	Record the addresses and hostnames
host% more /usr/users/svplus/config.sv	If upgrading, record the gateway node
host% netstat -rn	Displays information about static routes
host% more /etc/rc2.d/S72inetsvc	Record the static routes (lines listed under /usr/sbin...224.0.0.0...).
host% more /etc/netmasks	Record the IP addresses and subnet masks
host% more /etc/resolv.conf	Record this information required for Netscape domain

CWM Server Workstation Requirements

The following tables show the CWM Server hardware and software requirements

Hardware Requirements

Four types of machines are supported for CWM Release 11 servers. They are low-end, mid-range, high-end, and carrier grade platforms. [Table 2-2](#) describes the configuration for each platform.

Table 2-2 CWM Server Platform Requirements

Type	Low End	Mid Range	High End	Carrier Grade
Example Machine Type	Ultra 60	Ultra 60	Enterprise 450	Enterprise 4500
CPU's	1	2	4	16
RAM	1 GB	2 GB	4 GB	8 GB
Minimum Disk Drives	18 GB	18 GB	36 GB	36 GB
Swap Space	4 GB	8 GB	16 GB	16 GB
Number of Connections	Up to 5,000	100,000	200,000	Up to 1,000,000
Number of Nodes	Up to 20	200	1000	2000
Number of Desktops	1	1	12	12
Number of Clients	5	10	20	100



Note

The minimum CPU speed requirement for all platforms is 300 MHz. The newer versions of the Sun Ultra 10 have a 450-MHz processor. All platforms require a 24-bit graphics card.

Rebooting the system displays the workstation type, amount of memory, and CPU speed.

The **format** command enables you to determine information about the disk drives on your workstation. Select a disk from the list of those available, and enter the **verify** command to determine the current partitioning of each disk.

Software Requirements

The CWM 11 Server must be run on a Sun workstation with the following software:

Table 2-3 Required Software

Software	Comments
Sun Solaris 2.7 operating system	Purchased separately from another vendor
Solaris 2.7 patches	See the CWM 11 release notes for the most up-to-date list of required patches
Wingz 2.5.1	CD-ROM provided in the Cisco CWM package
Cisco WAN Manager 11	CD-ROM provided in the Cisco CWM package. Also included on this CD-ROM are CiscoView 5.4, Informix 9.2, Orbix, and the Java Development Kit (JDK).

Table 2-3 Required Software

Software	Comments
Netscape Communicator 4.75	Required to run CiscoView 5.4. Provided in the Cisco CWM 11 package.
Java 1.3.1 Plug-in	Required to run CiscoView 5.4. Provided in the Cisco CWM 11 package

Table 2-4 Optional Software

Software	Comments
CWM Release 11 SNMP Service Agent	An optional package (on a separate CD) available at an additional charge. While the CWM Release 11 SNMP Service Agent software is not required to run CWM Release 11, it is used for flow through provisioning of PNNI SPVC supported by both Cisco BPX SES and Cisco MGX 8850 Release 2 networks.
HPOV 6.2	Purchased separately from another vendor. HP OpenView is used in conjunction with the SNMP Service Agent and for viewing the Event Log. It is not required for any other CWM procedures.

CWM Standalone Statistics Collector

The following tables show the CWM Standalone Statistics Collector hardware and software requirements

Hardware Requirements

Four types of machines are supported for CWM 11 statistic collectors. They are low-end, mid-range, high-end, and carrier grade platforms. [Table 2-5](#) describes the configuration for each platform.

Table 2-5 CWM Standalone Statistics Collector Platform Requirements

Type	Low End	High End
Machine Type	Ultra 60	Enterprise 450
CPU's	1	2
RAM	1 GB	2 GB
Disk Drives	18 GB	18 GB
Swap Space	1 GB	4 GB
Number of Connections	100,000	250,000


Note

All platforms require a 24-bit graphics card and Ethernet connectivity to the CWM host.

Software Requirements

The CWM Release 11 Standalone Statistics Collector must be run on a machine with the following software

- Solaris 2.7 or Solaris 8

CWM Client System Requirements

The following sections list the CWM Client hardware and software requirements

Hardware Requirements

CWM Client is supported on both a Windows based system and a Solaris based system.

Windows Based System

The following hardware is required for a Windows based CWM Client.

- Intel Pentium III (or compatible) processor with a clock speed of at least 200 Mhz
- 256 Mbytes of RAM
- 50 Mbytes of free disk space
- Ethernet connectivity to a CWM host machine

Solaris Based System

The following hardware is required for a Solaris based CWM Client.

- Sun Ultra 5 with 1 CPU or better
- 128 Mbytes RAM
- 50 Mbytes Disk Free
- Ethernet connectivity to a CWM host machine

Software Requirements

The software requirements for CWM Client are as follows.

Windows Based System

The following software is required for a Windows based CWM Client.

- MicroSoft Windows 2000 or Windows NT 4.0 operating system
- IP connectivity to a CWM host machine
- Windows versions of:
 - Netscape Communicator browser version 4.75 or later

- Sun Microsystems Webstart version 1.01 or later
- Sun Microsystems JRE version 1.2.2
- Sun Microsystems Java 2 plug in 1.3.1

Solaris Based System

The following software is required for a Windows Solaris CWM Client.

- Solaris 2.7 or 2.8
- IP connectivity to CWM host machine
- Solaris versions of:
 - Netscape Communicator browser version 4.75 or later
 - Sun Microsystems Webstart version 1.01 or later
 - Sun Microsystems JRE version 1.2.2
 - Sun Microsystems Java 2 plug in 1.3.1

Solaris Operating System 2.7 Installation

The following procedure need only be performed if Solaris 2.7 is not already installed on the intended CWM workstation.



Note

A CWM server requires Solaris 2.7, a CWM client and a CWM standalone statistics collector require Solaris 2.7 or Solaris 8.

For more details on the process, refer to the documentation you received from Sun Microsystems for Solaris 7 (also known as Solaris 2.7) installation instructions.

Preparing the Disk

Perform the following steps to prepare the disk for Solaris installation.

-
- Step 1** Login to the system as the root user.
- Step 2** Use the **sync** command to line up all the cylinders and the **halt** command to halt the system. As user **root**, type the following commands:
- ```
sync ;sync ;halt
```
- The system displays the **ok** prompt.
- ```
ok
```
- Step 3** If Step 2 fails, as a last resort, depress the **stop** key and the **a** key simultaneously.
-

Solaris 2.7 Initial Configuration

Perform the following steps to configure the installation process.

Step 1 Insert the Solaris 2.7 CD.

Step 2 At the ok prompt, enter the following command to boot the Solaris 2.7 CD:

```
ok boot cdrom
```

The installation process for Solaris 2.7 is straightforward and consists mainly of answering a series of questions as they are displayed on the screen.

Step 3 The Set Language and Locale dialog box is the first to be displayed. Select the following values in the Set Language and Locale dialog box:

Language	English
Locale	USA English (ASCII only)

Step 4 Left-click on **Continue** to accept your chosen values and move to the next screen.

The Solaris Installation Program banner displays.

Step 5 Read the information displayed and left-click on **Continue**.

The Identify This System dialog box displays.

Step 6 Read the information displayed and left-click on **Continue**.

The Host Name dialog box displays.

Step 7 Enter the hostname and left-click on **Continue**.



Note Do not begin the host name with a number or use a “-” sign in the name.

The Network Connectivity dialog box displays.

Step 8 Read the information displayed, select **Yes** at the Networked prompt, and left-click on **Continue**.

At this point, the process may prompt you for the Primary Network Interface.

Step 9 Read the information displayed, enter **hme0** at the Pri Network Interface prompt, and left-click on **Continue**.

The IP Address dialog box displays.

Step 10 Read the information displayed, enter the IP address of the CWM workstation at the **IP Address** prompt, and left-click on **Continue**.

The **Confirm Information** dialog box displays. This dialog box contains all the choices you made in Steps 3 through 9.

Step 11 Carefully examine the information displayed. If you are satisfied with the information displayed, left-click on **Continue**.

If any values need to be changed, left-click on **Change** and repeat steps 3 through 10 entering any information that needs to be changed. The Confirm Information dialog box is displayed again, left-click on **Continue** if the information is correct or, if not, click **Change** and repeat the process.

The Name Service dialog box displays.

Step 12 Read the information displayed, normally, for a CWM workstation, select **None** at the **Name Service** prompt, and left-click on **Continue**.

Another Confirm Information dialog box displays. This dialog box contains the choice you made for Name Service in Step 12.

Examine the information displayed. If you are satisfied with the information displayed, left-click on **Continue**. If the Name Service needs to be changed, left-click on **Change** and repeat step 12 entering the correct value. The **Confirm Information** dialog box is displayed again. If you are satisfied with the information now displayed, left-click on **Continue** or, if not, click on **Change** and repeat the process.

At this point, the Subnets dialog box displays.

- Step 13** Read the information displayed. Enter **Yes** at the **Force Subnet Mask Choice** prompt, and left-click on **Continue**.

The Netmask dialog box displays.

- Step 14** Read the information displayed. Normally, for a CWM workstation, type in **255.255.255.0** at the **Netmask** prompt, and left-click on **Continue**.

The Time Zone dialog box displays.

- Step 15** Read the information displayed. Select **Geographic Region** and left-click on the **Set** button.

The Geographic Region dialog box displays.

- Step 16** Select the appropriate Geographic Region and Time Zone, and left-click on **Continue**.

The Date and Time dialog box displays.

- Step 17** Read the information displayed, enter today's date and the current time at the **Date and Time** prompt, and left-click on **Continue**.

Another **Confirm Information** dialog box displays. This dialog box contains the choices you made in Steps 13 through 17.



Note

An alternative to the Geographic Region option in Step 15 is to select the Greenwich Mean Time (GMT) option. This option causes the timestamp of local messages and messages from the network to be consistent.

- Step 18** Carefully examine the information displayed. If you are satisfied with the information displayed, left-click on **Continue**.

If any values need to be changed, left-click on **Change**. The Subnets dialog box displays. Re-do Steps 13 through 17, correcting any values. Once have reentered the corrected values, the Confirm Information dialog box displays, with the revised values you just entered. If you are satisfied with the information now displayed, left-click on **Continue**.

At this point, the first Solaris Interactive Install dialog box displays.

- Step 19** Read the information displayed on the Solaris Interactive Install display, and left-click on **Continue**.

At this point, the second Solaris Interactive Install dialog box displays.

- Step 20** Read the information displayed on the second Solaris Interactive Install display, enter **Initial** at the **Initial Install or Upgrade** prompt, and left-click on **Continue**.

The Allocate Client Services? dialog box displays.

- Step 21** Read the information displayed, and left-click on **Continue**.

The Select Languages? dialog box displays.

- Step 22** Read the information displayed, and left-click on **Continue**.

The Select Software dialog box displays.

Step 23 Read the information displayed, select **Entire Distribution**, and left-click on **Continue**.



Note Do NOT choose Entire Distribution plus OEM. Leave default for 64-bit support.

The Select Disks dialog box displays. At least two 9.1-GB disk should be displayed.

Step 24 Read the information displayed.

Step 25 Add the appropriate disk or disks (for multiple hard drives) by moving them to the **Selected** column, and left-click on **Continue**.

The Preserve Data? dialog box displays.

Step 26 Read the information displayed. Choose the default (Not Preserving data), and left-click on **Continue**.

The Automatically Layout File Systems? dialog box displays.

Step 27 Read the information displayed, select **Manual Layout**, and left-click on **Continue**.

The File System and Disk Layout dialog box displays.

Step 28 Read the information displayed, confirm that it is correct, and left-click on **Customize...**

Step 29 Proceed to the next section to partition your hard drives.

Disk Partitioning Requirements

Sufficient disk space and proper disk partitioning are essential to achieving the best performance from CWM and your network management workstation. The Solaris 2.7 installation procedure continues from Step 29 with a series of screens which lead the user through the partitioning process.



Note The minimum disk space requirement for Release 11 of CWM is two, 9-GB disk drives.

Partitioning Two 9-GB Disks

This section describes how to partition a CWM workstation that has two 9-GB disk drives. When you come to the Solaris disk partition screens make sure that both disks are in selected column on the screen before you start the partitioning. Partition the first disk drive as shown in [Table 2-6](#). Partition the second disk drive as shown in [Table 2-7](#).

Table 2-6 Partitioning the First 9-GB Disk

Slice	Partition	Space	Comments
s0	/	1500 MB	Root partition, allocate this partition third .
s1	swap	2048 MB	Swap partition, allocate this partition second , allows for 1024 MB memory, allocate double the amount of RAM for swap.
s2	<overlap>	8692 MB	Total amount of space on the disk; do not attempt to modify.
s3	/opt	2000 MB	Allocate this partition fourth .

Table 2-6 Partitioning the First 9-GB Disk (continued)

Slice	Partition	Space	Comments
s4	/var	1044 MB	Variable partition that occupies the remainder of the disk; allocate this partition last .
s5			
s6	/usr/users	2000 MB	Must be at least 2000 MB; allocate this partition first .
s7			

**Note**

The total space should equal the space shown in s2.

Table 2-7 Partitioning the Second 9-GB Disk

Slice	Partition	Space	Comments
s0	swap	2048 MB	Allocate this partition first , allows for 1024 MB memory, allocate double the amount of RAM for swap.
s1			
s2	<overlap>	8692 MB	Total amount of space on the disk; do not attempt to modify.
s3	/spare	4649 MB	Allocate this partition last , This partition can be used for customer use or can be used for multiple 2 GB Informix raw partitions.
s4			
s5			
s6			
s7		1995 MB	Allocate this partition second . Informix raw DB (maximum 1.995 GB, minimum 1 GB).

**Note**

The total space should equal the space shown in s2.

Partitioning an 18-GB Disk

This section describes how to partition a CWM workstation that has an 18-GB disk drive. When you install Solaris, partition the disk drive as shown in [Table 2-8](#).

Table 2-8 Partitioning an 18-GB Disk

Slice	Partition	Space	Comments
s0	/	1995 MB	Allocate this partition third , allows for patch downloads, etc.
s1	swap	4096 MB	Allocate this partition second , allows for 2048 MB memory, allocate double the amount of RAM for swap.
s2	<overlap>	17692 MB	Total amount of space on the disk; do not attempt to modify.

Table 2-8 Partitioning an 18-GB Disk

Slice	Partition	Space	Comments
s3	/opt	3000 MB	Allocate this partition fourth . Used for HPOV.
s4	/var	1611 MB	Remainder of disk; allocate this partition last
s5	/usr/users	3000 MB	Must be at least 2000 MB; allocate this partition first
s6	/spare	1995 MB	Allocate this partition sixth , /spare or optional second informix raw DB
s7		1995 MB	Allocate this partition fifth , informix raw DB (maximum 1.995 GB, minimum 1 GB)

**Note**

If two Informix raw databases are needed, then make s6 <blank>....1995 MB.)

Installing Solaris on the Newly-Partitioned Disk

Step 1 After you have completed partitioning your disk (or disks), the Solaris installation process will prompt you to set up the file system:

The File System and Disk Layout dialog box displays.

Step 2 Read the information displayed, confirm that it is correct, and left-click on **Continue**.

The Mount Remote File Systems? dialog box displays.

Step 3 Read the information displayed, confirm that it is correct, and left-click on **Continue** to accept the default. Do not select Remote Mounts.

Step 4 The Profile screen displays. Choose **Begin Installation**

The Solaris installation process now asks you what kind of action it should take after installing the files:

AutoReboot/manualReboot

Step 5 Choose **AutoReboot**.

**Note**

This part of the process (downloading the files) may take up to 1 hour. There is no input required.

Step 6 The Solaris installation process now displays the **Set Password** screen.

Step 7 Choose the option to set the root password after autoreboot.

After auto reboot set root's password.

Step 8 The Solaris installation process prompts you to setup autosutdown:

Shut down after 30 min?

Step 9 Choose **No**.

Step 10 The Solaris installation process prompts you to setup multiple confirmation:

Ask again?

Step 11 Choose **No**

Installing Solaris 2.7 Patches

Solaris patches 106300-09, 106327-12, 106541-19, 106950-18, 106980-18, 107078-10, 107081-11, 107153-01, 107544-03, 107607-01, 107636-03, 108376-03, 109104-01, 110881-01, and 111980-01 must be installed before CWM 11 and CiscoView can be launched.

Consult the CWM release notes, they may contain a more up-to-date list of patches.

You can display which patches are already installed in the CWM workstation by entering the Solaris **showrev -p** command. Patches can be obtained from SunService (if the user has a SunSpectrum contract) or from the SunSolve Recommended and Security Patches web site.

Patches are available to Sun Microsystems customers over the World Wide Web at this URL:

www.sunsolve.sun.COM/pub-cgi/show.pl?target=home

If the search facility on the SunSolve site is used, search for the search ID number and do not include the two-digit patch version number. Patches with the highest version numbers should be used.



Note

If the CWM workstation is behind a corporate firewall, it may not be possible to connect to the Internet. In this case the workstation should be removed and set to a location where an Internet connection can be made. After the patches have been downloaded, the workstation can again be located behind the firewall again.

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- Step 1** At the Sun Microsystems web site, click on Patch Finder.
 - Step 2** Under “Recommended and Security Patches” click on 7 (nn.nM), [where nn.n is a size in Mbytes, for example 7 (48.9M)].
 - Step 3** Download the file. The file downloads under the filename of 7_recommended.zip.
 - Step 4** Unzip the file on the workstation and in the newly created 7_recommended directory, enter the **install cluster** command.
 - Step 5** Install individual patches by entering the **patchadd** command.
-

First Time Login to Solaris

After installing the Sun Solaris 2.7 operating system, perform the following steps:

-
- Step 1** Log in to the workstation as user **root**. Using the Solaris Login interface, select **CDE**.
 - Step 2** Close the File Manager and Help windows, leaving only the CDE menu bar.
 - Step 3** Right click on the blank screen. Highlight **Tools**, then **Terminal**.

- Move this terminal window to the upper right corner of the screen.
- Step 4** Right click on the blank screen select **Hosts**, then select **Terminal Console**.
Lower the height to display four lines and move this window so that it rests above the CDE menu bar. This window provides a display of workstation system messages.
- Step 5** Left-click the CDE icon labeled **TTT**.
The Style Manager window is displayed.
- Step 6** Left-click on **Screen**. Click screen saver **on** and screen lock **off**. Click **OK**.
If you prefer to use the screen saver, highlight **choice(s)** and start the screen saver at 29 minutes. Start the screen lock at 30 minutes. Click **OK**.
- Step 7** Click on **Backdrop** and select **GrayDk**, click **Apply**.
Do the same to all four screens, labeled One, Two, Three, and Four in the CDE icon bar. In screen Four click **OK** and return to screen One. This helps to conserve workstation resources.
- Step 8** Click the CDE icon labeled **TTT**. Click **Startup** in the Style Manager. Click **Set Home Session** and click **OK**.
The next login session will use this same screen configuration. Click **OK** and close the Style Manager.
- Step 9** Type **eject** in the Terminal Window to remove the Solaris 2.7 CD, if necessary.

CiscoView 5.4 Considerations

Installation of CiscoView is simply clicking **Yes** to one of the CWM server screens when asked during the installation process. A standalone procedure for installing CiscoView is also available that can be used to re-install CiscoView without re-installing CWM.



Note

Instructions for the standalone installation of CiscoView and for uninstalling CiscoView are included in Chapter 5.

Netscape Communicator should be installed at this point in the process. It must be installed **before** CWM and CiscoView are installed.

Installation of Netscape Communicator

The Sun Microsystems Netscape Communicator for the Solaris package (version 4.76) is included on the Cisco-provided CWM CD-ROM#2 under the filename of **NSCPcom.sparc.tar.gz**

Netscape Communicator should be installed before the installation of CWM and CiscoView. Netscape Communicator requires:

- 20Mbytes of free disk space
- The basic Solaris software end-user cluster (SUNWCuser) be installed.

Install Netscape Communicator using the following steps.

- Step 1** Log in to the CWM workstation as user **root**.

Step 2 Insert the Cisco WAN Manager Release 11 CD-ROM # 2 into the CD-ROM drive.

Step 3 The **NSCPcom.sparc.tar.gz** file is located on the CD-ROM in the tools directory. You can check that it is present by changing to the tools directory and listing the files as in the following commands.

```
# cd /cdrom/cdrom0/110tools
# ls
```



Note The 110 tools directory on the CD#2 also contains a copy of Adobe Acrobat Reader under the filename of **sunsparc-rs-405.tar.gz**. This software can be used for viewing documentation in the pdf format.

Step 4 Copy the Netscape file to the workstation hard drive.

```
cp /cdrom/cdrom0/110tools/NSCPcom.sparc.tar.gz /tmp
```

Step 5 Copy the gzip utility to the workstation hard drive.

```
cp /cdrom/cdrom0/110tools/gzip /tmp
```

Step 6 Change to the tmp directory.

```
cd /tmp
```

Step 7 Change the permission of the copied gzip file so that it can be executed.

```
chmod 555 /tmp/gzip
```

Step 8 Unzip the file the Netscape Communicator file.

```
./gzip -d /tmp/NSCPcom.sparc.tar.gz
```



Note The **gzip** utility is a compression software tool that compresses files and assigns them the .gz suffix. Use **gzip -d** to decompress .gz files. In addition to being provided on CD#2, installing CWM automatically installs **gzip** in the usr/users/svplus/tools folder and its path is defined in the users account.

Step 9 Untar the file.

```
tar xvf /tmp/NSCPcom.sparc.tar
```

Step 10 If not already logged in as **root**, log in now.

```
myhhost% su
Password:
#
```

Step 11 Install Netscape Communicator

```
pkgadd -d /tmp NSCPcom
```

This command installs the Netscape Communicator package in the **/opt/NSCPcom** directory.

Step 12 Add the **/opt/NSCPcom** directory to the PATH variable.

```
setenv PATH $PATH:/opt/NSCPcom'
```



Note The instructions for uninstalling Netscape Communicator are included in Chapter 5.

HP OpenView 6.2 Installation

HP OpenView is used in conjunction with the SNMP Service Agent and for viewing the Event Log. It is not required for any other CWM procedures. Before installing the HP OpenView 6.2 software, ensure that the Solaris 2.7 operating system software is installed.

Obtaining HP OpenView Software

You can purchase the HP OpenView software via FTP (or by ordering the CD) from the Hewlett Packard external website at the following URL.

<http://openview.hp.com/products/nnm/>

Installing HP OpenView Software

To install the HP OpenView software, complete the following steps:

-
- Step 1** Insert the HP Openview CD-ROM into the CD-ROM drive.
- Step 2** Enter the following commands:
- ```
cd /cdrom/cdrom0
ls
```
- Step 3** Check for the **install** file. Begin the install process by entering the following command:
- ```
# ./install
```
- Step 4** Reply to the following questions that will be displayed during the installation process:
- | | |
|------------------------------|---|
| Install man pages? | y |
| Install on line manuals | n |
| Discover network? | y |
| snmp string default gateway? | s |
| display interface? | n |
| Web browser? | s |
| continue? | y |

No further interaction is required. You should see the *Install Successful!!* message.

Setting Up CWM to HP OpenView Communication

All the libraries in HP OpenView are shared libraries. In order to get CWM and ovw communicating properly, you need to configure the LD_LIBRARY_PATH with the following commands:

If you are using the Korn shell, enter the following commands as root:

```
# LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/OV/lib
# export LD_LIBRARY_PATH
```

If you are using the C shell, enter the following command as root:

```
# setenv LD_LIBRARY_PATH ${LD_LIBRARY_PATH}:/opt/OV/lib
```

Check the /etc/services File

Examine the **/etc/services** file, and check to see if an entry exists for **snmp 8161/udp**. Enter the following command:

```
# more /etc/services
```

If an entry exists for **snmp 8161/udp**, change it to the following value:

```
snmp    161/udp
```



Note

To save your changes while using the vi editor, remember to press **Esc**, **colon (:)**, then **wq!**.

If you changed the **/etc/services** file, you must reboot the CWM workstation for the changes to take effect. Enter the following command:

```
# sync ;sync ;reboot
```

Starting HP OpenView

To start HP OpenView, you must have installed the CWM software and the optional CWM SNMP Service Agent software (see Chapters 3 and 6 for details). Complete the following steps to start HP OpenView.

-
- Step 1** Open a terminal window as user **svplus**.
 - Step 2** Enter the following command:

```
hostname% ovw &
```
 - Step 3** When the root map is displayed, double-click on the StrataCom icon.
 - Step 4** Drag the nodes from the holding area to the map.
 - Step 5** Minimize the root map, move the Event Categories window to the lower left of the screen.
 - Step 6** To download from the HPOV StrataCom map, choose **node > StrataCom > Image Download**.
 - Step 7** Locate the image and highlight it. Click Download. The results of the action are displayed.
-

Wingz Version 2.5.1 Installation

Solaris 2.7 should be installed before installing the Wingz package. If you are installing the optional HP OpenView package, install it before installing the Wingz package.

-
- Step 1** Log in as **root**.
 - Step 2** Insert the Wingz 2.5.1 CD into the drive.

Step 3 Access the CD by entering the following commands:

```
# cd /cdrom/cdrom0
# ./Install.sh
```

The following prompts appear:

```
Appear to be using Solaris 2.7 (5.7)
Install product for platform?
```

Step 4 Enter **y** to begin installing the product from the CD.

Step 5 Choose the appropriate Wingz product to install. A menu of installation choices appears as well as the following prompt:

```
Choose product
```

Step 6 Select Item 2, Wingz for Solaris 2.7 by entering **2**.

The installation process prompts you to confirm your choice:

```
Install Wingz for Solaris 2.7 (5.7)
```

This is the correct product, so enter **y** to confirm use of Solaris 2.7.

Step 7 The next step is to choose the appropriate Wingz package to install. A menu of installation choices appears as well as the following prompt:

```
Choose package
```

Step 8 Select Item 1, **Install All** (install the entire Wingz package for Solaris 2.7) by entering **1**.

Step 9 The next step is to choose a path on the workstation disk in which to install the files. The installation process prompts you to enter a path by displaying the following prompt:

```
To be installed in
```

Step 10 The path is **/usr/users/Wingz**. Enter **/usr/users/Wingz** at the prompt:

The installation process prompts you to confirm the path you entered:

```
/usr/users/Wingz?
```

This is the correct path. Enter **y** to confirm that the path is **/usr/users/Wingz**.

Step 11 After the Wingz files are copied from the CD to the **/usr/users/Wingz** path on the workstation hard disk, the Wingz software needs to be branded (basically licensing the software for your use).

Branding consists of the following steps.

a. The installation process prompts you to enter the Wingz serial number:

```
Enter serial number>
```

b. Enter the serial number (obtained from the paper shipped with Wingz 2.5.1).

c. Next, the installation process prompts you to enter the Wingz license key:

```
Enter key>
```

d. Enter the Wingz license key (obtained from the paper shipped with Wingz 2.5.1).

e. Next, the installation process prompts you to enter the Wingz product number:

```
Enter Product Number>
```

f. Enter the Wingz product number (obtained from the paper shipped with Wingz 2.5.1).

- g. Once the correct branding numbers are entered, the installation process displays the following confirmation message:

Brand successful.

At this point, the installation process returns to the package menu. The installation of Wingz 2.5.1 is complete.

- Step 12** Select Item 6 for **Exit** (exit the Wingz package menu and return to the Solaris 2.7 Unix prompt) by entering **6**.

- Step 13** Exit the install process. Eject the CD by entering the following commands:

```
# cd /  
# eject
```
