



CHAPTER 3

Installing CWVM on Solaris Systems

This chapter describes how to install or upgrade CiscoWorks Voice Manager (CWVM) on a Solaris system.



Note

Before you install CWVM, make sure your server and client environments meet the requirements described in [System Requirements, page 1-6](#). Before you upgrade CWVM, upgrade your server environments as described in [Upgrading Common Services and the Solaris Operating System, page 3-3](#).

This chapter contains the following sections:

- [Preparing to Install or Upgrade CWVM, page 3-1](#)
- [Upgrading to CWVM 3.1, page 3-5](#)
- [Installing CWVM, page 3-10](#)
- [Verifying the Installation, page 3-14](#)

Preparing to Install or Upgrade CWVM

Consider these factors before undertaking an installation or upgrade of CWVM:

- Successful use of CWVM depends upon proper configuration. See [Planning a Distributed CWVM Installation, page 1-5](#) for information on configuring CWVM.
- The amount of time required to install or upgrade CWVM depends upon whether you must upgrade additional Cisco software. See [Estimating Installation or Upgrade Time, page 3-1](#) for more information.
- The installation procedure requires that you be ready to supply CWVM server names, port numbers, and passwords. See [Collecting Installation Parameters, page 3-2](#) for more information.
- A more rapid CWVM deployment is possible when network devices are ready to be added to CWVM. See [Preparing Network Devices, page 3-2](#) for more information.

Estimating Installation or Upgrade Time

Before you can install CWVM 3.1 to manage your voice network, Common Services 3.0.2 must already be installed. Common Services 3.0.2 is included on the CWVM 3.1 product CD and includes Common Services SP1 as well as the additional features and bug fixes introduced by Common Services SP2.

It takes about 15 minutes to install or upgrade a CWVM server after Common Services has been installed or upgraded. Time estimates for installing or upgrading Common Services are included in *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris*.

If you are upgrading from CVM 2.3 or CWVM 3.0:

- CVM 2.3 or CWVM 3.0 must already be installed.
- Common Services 3.0.*n* (3.0, 3.0.1 or 3.0.2) must already be installed. (Common Services 3.0.2 is recommended.)

If you perform a local upgrade, the order in which you install service packs, upgrade Common Services and upgrade the Solaris operating system is important. See [Upgrading Common Services and the Solaris Operating System, page 3-3](#).

Collecting Installation Parameters

You must enter the following parameters for each CWVM server or master that you install or upgrade. You may want to determine the values to supply for these parameters in advance of the installation:

- CWVM Name—Each CWVM server, including the master, must be given a name. The name can contain only alphanumeric characters and must not include any spaces. Except for the CWVM server that is installed on the same system as the CWVM master, CWVM server names should be configured by a Master Administrator. See [Registering a CWVM Server with the CWVM Master, page 3-12](#) for more information.
- Ports:
 - Trap Port—Default trap port used by CWVM. The default value is 162. Valid port numbers for the poller port are 162 and numbers between 5000 and 65000.



Note If DFM or HPOV is running on the same machine as CWVM, enter a port other than 162 for the trap port, and then configure DFM or HPOV to forward traps to this port.

- Server Port—Port used by CWVM clients to access the CWVM server. The default port is 10000. Valid port numbers for the CWVM port are those between 5000 and 65000.
- Poller Port—Default poller port used by the CWVM server and poller. The default port is 10001. Valid port numbers for the poller port are those between 5000 and 65000.
- Passwords:
 - Database Password—Each CWVM server including the master has a database for which you must provide a password.
 - Master Administrator Password—When installing the CWVM master, provide a password for the *superadmin* user who will hold the Master Administrator role for CWVM.

Preparing Network Devices

Before you install CWVM, make sure that your devices are ready to be added.

- For all routers and Cisco UBE gatekeepers that will be added to CWVM:
 - Simple Network Management Protocol (SNMP) must be enabled.
 - You must have network access.

- You must know the IP address, all passwords, and the SNMP community string.
- All routers that will be added to CWVM must have Telnet enabled. Because CWVM uses Telnet to communicate with a router, session timeout should be configured to a nonzero value for all vty lines (see the “Preparing a Gateway for CWVM” section in *User Guide for CiscoWorks Voice Manager*).
- All Cisco UBE gatekeepers that will be added to CWVM must be running Cisco IOS software. For a table of supported devices with Cisco IOS software versions, see *Supported Devices Table for CiscoWorks Voice Manager 3.1*. You can access this document on Cisco.com at this URL:
<http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/voicemgr/cwvm3x/cwvm3/index.htm>

Upgrading Common Services and the Solaris Operating System

**Note**

If Common Services 3.0 is already installed and you do not plan to upgrade to Common Services 3.0.2, use the procedures in this section to ensure that any required service packs and patches are installed.

To ensure that you upgrade Common Services and the Solaris operating system in the correct order, applying any service packs and patches, use one of the following procedures, as appropriate:

- [Performing a Local Upgrade from Common Services 2.2, page 3-3](#)
- [Performing a Local Upgrade from Common Services 3.0, page 3-4](#)

Performing a Local Upgrade from Common Services 2.2

Complete this procedure before you perform a local upgrade from CVM 2.3 to CWVM 3.1.

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- Step 1** Check and fix Solaris package errors before upgrading to Common Services 3.0 by doing the following:
- a. Log in to Cisco.com and go to this URL:
<http://www.cisco.com/cgi-bin/tablebuild.pl/cw2000-cd-one>
 - b. Download these files:
 - `check_pkg_errors.sh`
 - `check_pkg_errors_sh.readme`
 - c. Open `check_pkg_errors_sh.readme` with a text editor and follow the instructions in it.
- Step 2** Upgrade Common Services 2.2 to Common Services 3.0.2. Perform the upgrade by installing Common Services 3.0.2 from the CWVM 3.1 CD, as described in [Installing Common Services 3.0.2, page 3-10](#).

- Step 3** Upgrade the operating system to Solaris 2.9.
- Step 4** Install the required patches for Solaris:
- See Table 1-3 in *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris* at this URL:
http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0/installation/solaris/guide/prereq.html#wp1031729
 - Solaris patch 112874-31 is also recommended. See *Readme for Common Services 3.0 Service Pack 2 on Solaris* at this URL:
http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0/service_pack_2/cs30sp2s.html
-

Performing a Local Upgrade from Common Services 3.0

Complete this procedure before you perform a local upgrade from CWVM 3.0 to CWVM 3.1.

- Step 1** If Common Services 3.0 is installed on Solaris 2.8, perform the following steps:
- Upgrade to Solaris 2.9.
 - Install the required patches for Solaris 2.9:
 - See Table 1-3 in *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris* at this URL:
http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0/installation/solaris/guide/prereq.html#wp1031729
 - Solaris patch 112874-31 is also recommended. See *Readme for Common Services 3.0 Service Pack 2 on Solaris* at this URL:
http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0/service_pack_2/cs30sp2s.html
- Step 2** Optionally, upgrade Common Services 3.0 to Common Services 3.0.2. You can upgrade to Common Services 3.0.2 by doing either of the following:
- Download and install Common Services 3.0 Service Pack 2 from Cisco.com. For instructions, see *Readme for Common Services 3.0 Service Pack 2 on Solaris* at this URL:
http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0/service_pack_2/cs30sp2s.htm
 - Install the complete Common Services 3.0.2 product as explained in [Installing Common Services 3.0.2, page 3-10](#).



Note The upgrade to Common Services 3.0.2 is recommended. For more information, see *Readme for Common Services 3.0 Service Pack 2 on Solaris*.

Upgrading to CWVM 3.1

CWVM 3.1 supports an upgrade from CVM 2.3 or CWVM 3.0. The upgrade accomplishes several tasks:

- Preserves the following information:
 - Data in the database
 - Call history data
 - CWVM log files
- Renames duplicate usernames to *username.CWVMid*. The following example describes the renaming of duplicate usernames:
 - Username jsmith exists in two separate CVM 2.3 or CWVM 3.0 servers.
 - You supply a name for each CWVM server when you upgrade it; for example, CWVM1 and CWVM2. The name must not include any spaces.
 - The two usernames jsmith become jsmith.CWVM1 and jsmith.CWVM2 in the CWVM master database.

You must perform the following tasks to upgrade from CVM 2.3 or CWVM 3.0:

1. Upgrade a single CVM 2.3 or CWVM 3.0 master to a CWVM 3.1 master; to do so, perform either of these upgrades:
 - (Optional) Remote upgrade—Perform a remote upgrade if you do not want to overwrite your current version of CWVM. See [Performing a Remote Upgrade to CWVM 3.1 from CVM 2.3 or CWVM 3.0, page 3-6](#).
 - Local upgrade—Perform the upgrade directly on the system where CVM 2.3 or CWVM 3.0 is installed; see [Upgrading the CWVM Master, page 3-7](#) for instructions.
2. If there are additional CWVM servers to upgrade, proceed as follows:
 - a. Register each CWVM server with the CWVM master. See [Registering a CWVM Server with the CWVM Master, page 3-12](#) for instructions.
 - b. Upgrade each CWVM server to CWVM 3.1. See [Upgrading the CWVM Server, page 3-8](#) for instructions.
3. Synchronize devices to update all current device configurations. See the “Synchronizing Devices” section in the *User Guide for CiscoWorks Voice Manager* for more information on how to synchronize them.



Note After a CVM 2.3 or CWVM 3.0 master is upgraded to CWVM 3.1, any existing CVM 2.3 or CWVM 3.0 servers are no longer connected to this master.



Note CME, SRST and new dial peer capabilities, and SIP and Cisco UBE gatekeeper configuration features will not be available for the currently managed devices unless you synchronize them.

Performing a Remote Upgrade to CWVM 3.1 from CVM 2.3 or CWVM 3.0

To preserve data from a CVM 2.3 or CWVM 3.0 system and migrate that data to a CWVM 3.1 system, you can perform a remote upgrade. It is recommended that you export Common Services data before you export CWVM data. For more information, see *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView 6.1) on Solaris*.

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- Step 1** On the new system, make sure that the master, server, and client requirements listed in [System Requirements, page 1-6](#) are met. (If you have not installed Common Services on the new system, do so. See [Installing Common Services 3.0.2, page 3-10](#).)
- Step 2** Install CWVM 3.1 on the new system. See [Installing CWVM, page 3-10](#) for more information.
- Step 3** (Optional) Preserve data from Common Services and CiscoWorks applications other than CVM 2.3 or CWVM 3.0:

- a.** On the system where CVM 2.3 or CWVM 3.0 is installed, back up the Common Services databases. You can do so from:
- The command line—Use `backup.pl` which is located in the `%NMSROOT%/bin` directory. (The default `%NMSROOT%` directory is `/opt/CSCOPx`.)
 - The GUI—Use the Common Services Administration GUI.

For more information, see the [Remote Migration Path for CS 3.0 / Campus Manager 4.0 / RME 4.0](#) section in *CiscoWorks LAN Management Solution LMS 2.5 Data Migration Guidelines* located at this URL: http://www.cisco.com/en/US/products/sw/cscowork/ps2425/products_quick_start09186a00803ed826.html#wp1028267.

- b.** Copy the backup files from the old system to a temporary directory on the new system.
- c.** On the new system, migrate the data in the backup files to Common Services 3.0 from the command line. To do so, use the `restorebackup.pl` command (located in the `%NMSROOT%/bin` directory).

For more information, see the [Remote Migration Path for CS 3.0 / Campus Manager 4.0 / RME 4.0](#) section in *CiscoWorks LAN Management Solution LMS 2.5 Data Migration Guidelines* located at this URL: http://www.cisco.com/en/US/products/sw/cscowork/ps2425/products_quick_start09186a00803ed826.html#wp1028267.

- Step 4** Export the required data from the CVM 2.3 or CWVM 3.0 system to the system where CWVM 3.1 was installed:

- a.** Insert the CWVM 3.1 for Solaris CD-ROM into the CVM 2.3 or CWVM 3.0 system.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the `mount` command.

- b.** Run the data export script from the CD-ROM.

Assuming the CD-ROM is mounted as `/cdrom/cdrom0`, run the following commands:

1. `# cd /cdrom/cdrom0/cwvm3_1`
2. `# ./export_cvm.pl`

The script prompts you for the location where the data to be exported will be stored.

- c.** Specify a location and then press **Enter**.

The script exports the data and then creates the CWVM and manifest directories at the location specified. For example, if you specify */backup* as the backup location, the script creates the */backup/CWVM* and */backup/manifest* directories and stores the exported data there.



Note If you do not specify a location, the exported data is stored in the *%NMSROOT%/rigel/CWVM* and *%NMSROOT%/rigel/manifest* directories, where *%NMSROOT%* is the directory in which CWVM is installed. The default *%NMSROOT%* directory is */opt/CSCOpX*.

- d. Copy the contents of the newly created CWVM and manifest directories on the CVM 2.3 or CWVM 3.0 system into the *%NMSROOT%/rigel* directory on the CWVM 3.1 system.
- e. On the CWVM 3.1 system, run the CWVM data import script by entering the following commands:
 1. `cd %NMSROOT%/CVM/scripts`
 2. `./import_cvm.pl`

The remote upgrade is now complete. All necessary data from the CVM 2.3 or CWVM 3.0 system has been exported to the CWVM 3.1 system. In addition, all devices that need to be synchronized have been set as out of sync.



Note A cross-platform (Windows-to-Solaris or Solaris-to-Windows) upgrade is not supported.

Upgrading the CWVM Master

This procedure applies only when you are upgrading a CVM 2.3 or CWVM 3.0 master to a CWVM 3.1 master.

- Step 1** Log in as superuser (root).
- Step 2** Complete upgrades to Common Services and the Solaris operating system following the instructions in [Upgrading Common Services and the Solaris Operating System, page 3-3](#).
- Step 3** Upgrade to CWVM 3.1:
 - a. Insert the CWVM 3.1 for Solaris CD-ROM.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the **mount** command.

- b. Run the installation script from the CD-ROM to start the installation process.
- Assuming the CD-ROM is mounted as */cdrom/cdrom0*, run the following commands:

1. `# cd /cdrom/cdrom0/cwvm3_1`
2. `# ./setup.sh`

You are prompted to read a software license agreement.

- c. Press **Enter** to view the first section of the agreement; press **Enter** again, as needed, to view subsequent sections.

After reading the agreement, you are prompted to accept its terms.

- d. To accept the terms and proceed with the installation, enter **y** (yes).

The installation process performs a system check and detects that you are performing an upgrade.

- e. Enter values for the following parameters:



Note Default values appear for each of these parameters, with the exception of passwords.

- Name for the CWVM server—Each CWVM server must be given a name. The name can contain only alphanumeric characters and must not include any spaces.
- TCP port for the CWVM server—The CWVM client uses this server port to pass data to the CWVM server.
- TCP port for the CWVM poller—The CWVM server connects to this port to communicate with the poller on certain events.
- TCP port for receiving traps by CWVM—The CWVM server listens at this port for any traps sent by devices.



Note If DFM or HPOV is running on the same machine as CWVM 3.1, enter a port other than 162 (the default value) for the trap port, and then configure DFM or HPOV to forward traps to this port.

- Password for the CWVM database—Enter and then confirm the password. The installation process detects that you are performing a master upgrade.
- Password for the CWVM superadmin user—Enter and then confirm the password for the CWVM superadmin user. The superadmin user has the CWVM Master Administrator role.

The CWVM master upgrade is complete when you see the following message:

```
Software Installation Tool Completed.
```

Any errors encountered during the upgrade are listed after this message.



Note You can find the installation log file in /var/tmp at the end of the installation as /var/tmp/ciscoinstall.log.

Upgrading the CWVM Server

This procedure applies only when you are upgrading a CVM 2.3 or CWVM 3.0 server to a CWVM 3.1 server. Before beginning this procedure, you must already have upgraded one CWVM server to a CWVM 3.1 master. See [Upgrading the CWVM Master, page 3-7](#) for instructions.

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- Step 1** Register the CWVM server with its CWVM master, following the procedures in [Registering a CWVM Server with the CWVM Master, page 3-12](#).
- Step 2** Log in as superuser (root).

Step 3 Complete upgrades to Common Services and the Solaris operating system following the instructions in [Upgrading Common Services and the Solaris Operating System, page 3-3](#).

Step 4 Upgrade to CWVM 3.1:

- a. Insert the CWVM 3.1 for Solaris CD-ROM.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the **mount** command.

- b. Run the installation script from the CD-ROM to start the installation process.

Assuming the CD-ROM is mounted as /cdrom/cdrom0, run the following commands:

1. # `cd /cdrom/cdrom0/cwvm3_1`
2. # `./setup.sh`

You are prompted to read a software license agreement.

- c. Press **Enter** to view the first section of the agreement; press **Enter** again, as needed, to view subsequent sections.

After reading the agreement, you are prompted to accept its terms.

- d. To accept the terms and proceed with the installation, enter **y** (yes).

The installation process performs a system check and detects that you are performing an upgrade.

- e. Enter values for the following parameters:



Note Default values appear for each of these parameters, with the exception of passwords.

- Name for the CWVM server—Enter the same name you entered when registering the CWVM server with the CWVM master.
- TCP port for the CWVM server—The CWVM client uses this server port to pass data to the CWVM server.
- TCP port for the CWVM poller—The CWVM server connects to this port to communicate with the poller on certain events.
- TCP port for receiving traps by CWVM—The CWVM server listens at this port for any traps sent by devices.



Note If DFM or HPOV is running on the same machine as CWVM 3.1, enter a port other than 162 (the default value) for the trap port, and then configure DFM or HPOV to forward traps to this port.

- Password for the CWVM database—Enter and then confirm the password. The installation process detects that you are performing a server upgrade.
- Hostname or IP address of the CWVM master—Enter either the hostname or the IP address of the machine where the CWVM master is installed.
- CWVM master port—Enter the port number for the CWVM master.

The CWVM server upgrade is complete when you see the following message:

```
Software Installation Tool Completed.
```

Any errors encountered during the upgrade are listed after this message.



Note You can find the installation log file in /var/tmp at the end of the installation as /var/tmp/ciscoinstall.log.

- f. Synchronize devices to update all current device configurations. CME, SRST and new dial peer capabilities, and SIP and Cisco UBE gatekeeper configuration features will not be available for the currently managed devices unless you synchronize devices. See the “Synchronizing Devices” section in the *User Guide for CiscoWorks Voice Manager* for more information on how to synchronize them.
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Installing CWVM



Note Before you install CWVM 3.1:

- Make sure that the master, server, and client requirements listed in [System Requirements, page 1-6](#) are met.
 - Install Common Services 3.0.2 on the CWVM master and on any CWVM server. See [Installing Common Services 3.0.2, page 3-10](#).
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You must install CWVM components in the following order:

1. CWVM master—Install one CWVM server as the master. If you are installing only one CWVM server, install it as the CWVM master. See [Installing the CWVM Master, page 3-11](#).
2. CWVM server—Install any number of additional CWVM servers as follows:
 - a. Register the CWVM server with the CWVM master. See [Registering a CWVM Server with the CWVM Master, page 3-12](#).
 - b. Install the CWVM server; be prepared to provide the host name and web port of the CWVM master during installation. See [Installing the CWVM Server, page 3-13](#).

Installing Common Services 3.0.2

Before installing Common Services 3.0.2, make sure your system meets the requirements for Common Services 3.0.2 and for CWVM 3.1. For more information, see:

- CWVM 3.1—[Master and Server System Requirements, page 1-7](#).
- Common Services—*Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris*. (Common Services documentation is available on the CWVM 3.1 product CD-ROM.)

Step 1 Insert the CWVM 3.1 for Solaris CD into the system.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the `mount` command.

Step 2 Start the setup program:

Assuming the CD-ROM is mounted as `/cdrom/cdrom0`, run the following commands:

1. `# cd /cdrom/cdrom0/cs3_0`
2. `# ./setup.sh`

Step 3 Follow the instructions displayed by the installation script. For more information, see *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris* in the Documentation/CommonServices folder.

Installing the CWVM Master

The CWVM master must be installed before any other CWVM servers can be installed.

Step 1 Log in as superuser (root).

Step 2 Install Common Services 3.0.2. For installation instructions, see [Installing Common Services 3.0.2, page 3-10](#).

Step 3 Install CWVM 3.1:

- a. Insert the CWVM 3.1 for Solaris CD-ROM.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the `mount` command.

- b. Run the installation script from the CD-ROM to start the installation process.

Assuming the CD-ROM is mounted as `/cdrom/cdrom0`, run the following commands:

1. `# cd /cdrom/cdrom0/cwvm3_1`
2. `# ./setup.sh`

You are prompted to read a software license agreement.

- c. Press **Enter** to view the first section of the agreement; press **Enter** again, as needed, to view subsequent sections.

After reading the agreement, you are prompted to accept its terms.

- d. To accept the terms and proceed with the installation, enter `y` (yes).

The installation process performs a system check.

- e. Enter values for the following parameters:



Note Default values appear for each of these parameters, with the exception of passwords.

- Name for the CWVM server—Each CWVM server must be given a name. The name can contain only alphanumeric characters and must not include any spaces.
- TCP port for the CWVM server—The CWVM client uses this server port to pass data to the CWVM server.
- TCP port for the CWVM poller—The CWVM server connects to this port to communicate with the poller on certain events.
- TCP port for receiving traps by CWVM—The CWVM server listens at this port for any traps sent by devices.



Note If DFM or HPOV is running on the same machine as CWVM 3.1, enter a port other than 162 (the default value) for the trap port, and then configure DFM or HPOV to forward traps to this port.

- Password for the CWVM database—Enter and then confirm the password.
- Install Master—Enter **y** (yes).
- Password for the CWVM superadmin user—Enter and then confirm the password for the CWVM superadmin user. The superadmin user has the CWVM Master Administrator role.

The CWVM master installation is complete when you see the following message:

```
Software Installation Tool Completed.
```

Any errors encountered during the installation are listed after this message.



Note You can find the installation log file in `/var/tmp` at the end of the installation as `/var/tmp/ciscoinstall.log`.

Registering a CWVM Server with the CWVM Master

Before you install an additional CWVM server, you must first register it with the CWVM master.

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- Step 1** Start CiscoWorks. See [Starting CiscoWorks, page 3-15](#).
- Step 2** Start CWVM from CiscoWorks by clicking the **CiscoWorks Voice Manager** link.
- Step 3** Log in to CWVM as the superadmin user.
- Step 4** Select **Configuration** from the **Master** menu.
- Step 5** Select the CWVM radio button and then click **Add**.
- Step 6** Enter the following information for the CWVM server that you will install:
- Name—Enter a name for the CWVM server. The name can contain only alphanumeric characters and must not include any spaces.

- IP address—Enter the IP address of the machine where you will install the CWVM server.
- Description—Enter a description of the CWVM server.
- Web server port—Enter the web port to use for the CWVM server.
The default value is 1741.

- Step 7** Jot down the name you assign to the CWVM server. You will need to provide this name when you install the server.
- Step 8** Click **Apply**, and then click **OK**.
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Installing the CWVM Server

With the CWVM master installed, you can now install a CWVM server.

- Step 1** Register the CWVM server with its CWVM master, following the procedures in [Registering a CWVM Server with the CWVM Master, page 3-12](#).
- Step 2** Log in as superuser (root).
- Step 3** Install Common Services 3.0.2. For more information, see [Installing Common Services 3.0.2, page 3-10](#).
- Step 4** Install CWVM 3.1:
- Insert the CWVM 3.1 for Solaris CD-ROM.



Note If you have volume management configured on your system, the CD-ROM is mounted automatically. If you do not have volume management configured on your system, you will have to mount the CD-ROM manually, using the **mount** command.

- Run the installation script from the CD-ROM to start the installation process.
Assuming the CD-ROM is mounted as /cdrom/cdrom0, run the following commands:

- # cd /cdrom/cdrom0/cwvm3_1
- # ./setup.sh

You are prompted to read a software license agreement.

- Press **Enter** to view the first section of the agreement; press **Enter** again, as needed, to view subsequent sections.
After reading the agreement, you are prompted to accept its terms.
- To accept the terms and proceed with the installation, enter y (yes).
The installation process performs a system check.
- Enter values for the following parameters:



Note Default values appear for each of these parameters, with the exception of passwords.

- Name for the CWVM server—Enter the same name you entered when registering the CWVM server with the CWVM master.

- TCP port for the CWVM server—The CWVM client uses this server port to pass data to the CWVM server.
- TCP port for the CWVM poller—The CWVM server connects to this port to communicate with the poller on certain events.
- TCP port for receiving traps by CWVM—The CWVM server listens at this port for any traps sent by devices.



Note If DFM or HPOV is running on the same machine as CWVM 3.1, enter a port other than 162 (the default value) for the trap port, and then configure DFM or HPOV to forward traps to this port.

- Password for the CWVM database—Enter and then confirm the password.
- Install Master—Enter **n** (no).
- Hostname or IP address of the CWVM master—Enter either the hostname or the IP address of the machine where the CWVM master is installed.
- CWVM master port—Enter the port number for the CWVM master.

The CWVM server installation is complete when you see the following message:

```
Software Installation Tool Completed.
```

Any errors encountered during the installation are listed after this message.



Note You can find the installation log file in `/var/tmp` at the end of the installation as `/var/tmp/ciscoinstall.log`.

Verifying the Installation

To verify that the installation has been successful, log in to the CWVM server. See [Logging In to CWVM, page 3-16](#).

Starting CWVM

After you install or upgrade to CWVM 3.1, CWVM processes start automatically at system boot or CiscoWorks Daemon Manager restart. If you want to start the processes automatically, you can do so from the Common Services Server Admin menu (see Common Services online help for instructions).

When you start the processes manually, do so in this order:

1. Start CWVM processes on the CWVM master node.
2. Start CWVM processes on other CWVM servers.

To start CWVM processes manually, use this procedure.

Step 1 Start CiscoWorks. See [Starting CiscoWorks, page 3-15](#).

Step 2 Using the CiscoWorks Start Process tool, start the processes in the following order:

- a. CMDbEngine
- b. CVMDbMonitor
- c. CVMServer
- d. CVMPoller

For instructions, refer to the Common Services online help for Server Admin.

**Note**

If you need to start only the CWVM Server and CWVM Poller processes, you can do so without logging in to CiscoWorks. See [Starting CWVM Daemons, page 3-15](#).

Starting CiscoWorks

Step 1 Open a supported browser.

Step 2 Enter the appropriate URL:

- If SSL is disabled and if you have installed Common Services on the default port, enter
`http://server_name:1741`
- If SSL is enabled, and if you have installed Common Services on the default port, enter
`https://server_name:443`

For more information, see Common Services documentation.

Starting CWVM Daemons

To start the CWVM Server and CWVM Poller processes on a CWVM server, use this procedure.

Step 1 Log in as superuser (root).

Step 2 Run the following command:

```
/opt/CSCOpX/CVM/scripts/startCVM
```

Installing the Java Plug-in on Client Machines

Before you can use CWVM on a client machine, you need to install the Java Plug-in (JPI). You will be prompted to install the JPI if you do not have it installed. Detailed plug-in installation instructions for the Windows and Solaris platforms can be found by clicking **Help** on the CiscoWorks main page; from the help Contents, select **Java Plugins > Installing the Java Plug-in on Windows**.

**Note**

Common Services 3.0.2 supports Java Plug-in version 1.4.2_08; Common Services 3.0.1 supports Java Plug-in version 1.4.2_06; Common Services 3.0 supports Java Plug-in version 1.4.2_04. The appropriate version will be installed.

Logging In to CWVM

When you first install CWVM, you must log in as the Master Administrator to add users to CWVM and to assign users access privileges to CWVM servers and networks.

-
- Step 1** Start CiscoWorks. See [Starting CiscoWorks, page 3-15](#).
 - Step 2** Start CWVM from CiscoWorks by selecting the **CiscoWorks Voice Manager** link.
 - Step 3** Log in as superadmin user, providing the superadmin password.
-

Other users can log in to CWVM using the username and password the CWVM Master Administrator assigns them.

Stopping CWVM

If you want to completely shut down all CWVM servers, stop them in this order:

1. Stop CWVM processes on each CWVM server except the CWVM master node.
2. Stop CWVM processes on the CWVM master.

If you need to stop only CVMServer and CVMPoller processes, you can do so without logging in to CiscoWorks (see [Stopping CWVM Daemons, page 3-17](#)).

-
- Step 1** Start CiscoWorks. See [Starting CiscoWorks, page 3-15](#).
 - Step 2** Using the CiscoWorks Stop Process tool, stop the processes in the following order:
 - a. CVMPoller
 - b. CVMServer
 - c. CVMDbMonitor
 - d. CVMDbEngine

For instructions, refer to the Common Services online help for Server Admin.

**Caution**

Stopping CVMDbMonitor or CVMDbEngine on the CWVM master makes the CWVM master, and therefore the overall CWVM system, unusable.

Stopping CWVM Daemons

User this procedure to stop the CWVM Server and CWVM Poller processes on a CWVM server.

-
- Step 1** Log in as superuser (root).
- Step 2** Run the following command:
- ```
/opt/CSCOpX/CVM/scripts/stopCVM
```
-