Getting Started with Cisco Voice Manager on Solaris

Cisco Voice Manager (CVM) Version 1.1 is the web-based solution to manage Voice over IP (VoIP) functionality in Cisco 2600 series and Cisco 3600 series routers, Cisco AS5300 universal access servers, and Cisco MC3810 multiservice access concentrators. With this task-oriented, easy-to-use application, you can:

- Configure dial plans and voice interfaces
- Monitor Simple Network Management Protocol (SNMP) traps and resource utilization
- Test dial path configuration and connectivity
- Generate call history reports

Note Cisco MC3810 multiservice access concentrator support is limited to call history polling and database backup.

System Requirements and Recommendations

This section lists the software requirements to run Cisco Voice Manager (CVM) on Solaris and provides recommendations for running CVM on clients. Clients can access CVM from a variety of web browsers; however, for best results, Cisco recommends using one of the browsers listed in this section.

Server Requirements

- Minimum 100 MB of available disk space—For high call volume networks, additional disk space is required. The required disk space is approximately 4K per call times the number of days the call history data is stored in the database. For example, 10,000 calls per day requires an additional 80 MB (10,000 calls x 4K x 2 days storage).
- Minimum 256 MB of memory—Additional memory required for high call volume networks.
- Processor running at 333 MHz—Additional processor speed needed for networks with high call volume.

- Solaris 2.5.1 or 2.6 OS installed.
- Java web server, Java Development Kit 1.1.6, and Sybase SQLAnywhere database bundled with the CVM Solaris CD-ROM.

Client System Recommendations

- Netscape Communicator 4.0.4
- With Microsoft Internet Explorer 4.01, the following browser configuration is required for the SNMP Trap Monitor to work:

Click **View > Internet Options > Security > Custom** (under Internet Zone).

Click the Settings button to bring up the Security Settings menu.

Under Java Permissions, select Custom.

Click Java Custom Settings to bring up the Internet Zone menu.

Click the Edit Permissions tab.

Under Run Unsigned Content, click Run in sandbox.

Under Additional Unsigned Permissions > Access to all Network Addresses, click **Enable**. Click **OK** three times.

- Telnet enabled on the browser.
- Java enabled on the browser.
- Minimum 32 MB of memory; 64 MB recommended.
- Virtual memory set to 64 MB for PC clients.

Client Display Setting Recommendations

- Resolution: 1024 x 768
- Color Palette: 16 bit color (minimum)

Router Requirements

- For Cisco 2600 and Cisco 3600 series, Cisco IOS Release 11.3(3a)T
- For Cisco AS5300, Cisco IOS Release 11.3(2)NA
- For Cisco Voice Manager Version 1.1 features:
 - Cisco MC3810, Cisco IOS Release 12.0(1)XA, 12.0(2)T
 - Cisco 2600 or Cisco 3600 BRI, Cisco IOS Release 12.0(2)XD, 12.0(2)XD1, 12.0(3)T
 - Cisco AS5300, Cisco IOS Release 12.0(3)XH, 12.0(5)T

- SNMP enabled using the following command: Router(config)# snmp-server community public RW
- Enable or secret password configured as follows: Router(config)# enable password password
- Line password in the line configuration set to enable Telnet: Router(config)# line vty 0 4
 Router(config)# password <password>
- Line password configured
- "Session timeout" configured for all vty lines (because Telnet is used to communicate with the router) as follows:

```
Router# config term
Router(config)# line vty 0 4
Router(config-line)# session-timeout 10
```

Installing CVM

This section describes the following:

- First-Time Installation
- Upgrading a Previous Version

First-Time Installation

- 1 Log in as root user.
- **2** Insert the CD in the CD-ROM drive.
- **3** Extract the files from the CD-ROM. Enter:

pkgadd -d CDROM directory

where *CDROM directory* identifies the CD-ROM drive on the machine.

CVM will be installed in the /opt/CSCOvoip directory. Using any other option with **pkgadd** to override this location will cause the installation to fail.

4 Choose **CSCOvoip** from the package list to install the CVM software.

- **5** Answer **yes** each time **pkgadd** asks you to continue. The CVM installation will check the following:
 - Available disk space—A warning will appear if there is not enough disk space available.
 - Adequate memory—A warning will appear if the recommended memory size is not met.

If these criteria are met, you will see "Installation was successful."

- **6** Type **q** to quit installation.
- 7 See the "Starting CVM" section on page 9 to start the program.

Upgrading a Previous Version

- 1 Log in as root user.
- **2** Uninstall CVM following the instructions in the "Uninstalling CVM" section on page 10.
- **3** Insert the CD in the CD-ROM drive.

4 Extract the files from the CD-ROM. Enter:

pkgadd -d CDROM directory

where *CDROM directory* identifies the CD-ROM drive on the machine.

CVM will be installed in the /opt/CSCOvoip directory. Using any other option with **pkgadd** to override this location will cause the installation to fail.

- 5 Enter CSCOvoip to install the package
- 6 Answer **yes** each time pkgadd asks you to continue, until you see "Installation was successful."
- **7** Type **q** to quit installation.
- 8 See the "Starting CVM" section on page 9 to start the program.

Starting CVM

1 To start CVM as root user, enter:

cd /opt/CSCOvoip

./start_CVM

This will start the CVM tasks, including the Java web http server.

2 If installation was successful, access the following URL from your web browser:

http://host_name:8080/CVMHomePage.html

where *host_name* is the name of the Solaris server.

Note Do not use localhost as the host name.

- **3** Log in as **admin** at the CVM login prompt. The default password is **admin**.
- **4** Click **Getting Started** on the left frame for more information about getting started with CVM.

Disabling CVM

- 1 Log in as root user.
- 2 Enter:

cd /opt/CSCOvoip

./stop_CVM

This will stop all CVM tasks, including the Java web http server and the Sybase SQLAnywhere database.

Uninstalling CVM

- 1 Log in as root user.
- 2 Enter:

pkgrm CSCOvoip

3 Answer **yes** when **pkgrm** asks if you want to remove CSCOvoip.

This will remove all files installed under /opt/CSCOvoip. Files created dynamically by CVM (such as logs) are not removed.

Backing Up Router and User Lists

To back up router and user lists, enter:

```
/opt/CSCOvoip/backup_rtr
```

```
/opt/CSCOvoip/backup_user
```

These scripts will work only if CVM is running. The backup files are written to rtr.backup and user.backup, respectively, in the /opt/CSCOvoip/ directory.

Restoring Router and User Lists

To restore the router and user lists, enter the following commands:

```
/opt/CSCOvoip/restore_rtr
```

```
/opt/CSCOvoip/restore_user
```

These scripts will work only if CVM is running. The router list and user list are read from rtr.backup and user.backup, respectively.

Restart CVM after restoring the router and user lists by entering the following commands:

cd/opt/CSCOvoip

./start_CVM

Getting Started for Administrative Users

All administrative users must complete the tasks in the Administrative Task List before end users can use the Cisco Voice Manager (CVM) application to configure and monitor their VoIP network. To access the CVM Administrative Task List, log in as **admin** with the default password, **admin**. After logging in, you can change the password by accessing the User List.

The administrator always has read/write privileges for all routers. This cannot be changed.

The administrative tasks are as follows:

• Create Router List—Create a list that contains all the voice-enabled routers to be managed and their SNMP and router configuration passwords. Use this Router List in all the Router selection pull-down menus in the VoIP tasks.

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- Create User List—Create a list that contains all the valid end users that can access the CVM application and configure and monitor VoIP. The access privilege (Read only or Read/Write) for each router and for each CVM end user can also be specified here.
- Define Message Log Options—Configure what types of messages to keep on the server.
- Define System Parameters—Configure call history polling on the routers, which is required to generate the call history reports. This task also configures the parameters for the database in CVM.
- Go to Voice Manager—Access the VoIP task list.

Additional Documentation

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

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