Administering the Cisco Video Management and Storage System Module

Last Updated: April 22, 2010

This chapter contains the following information for administering the Cisco Video Management and Storage System application:

Note
- The tables in these sections list only common router commands and network module commands.
  - To view a complete list of the available commands, enter **?** at the prompt.

    Example: `Router(config-if)#` **?**
  - To view a complete list of command keyword options, enter **?** at the end of the command.

    Example: `Router#` **service-module sm ?**
- The commands are grouped in the tables by the configuration mode in which they are available. If the same command is available in more than one mode, it can act differently in each mode.

Establishing a Session

After you have configured the Cisco SM-SRE module interfaces (see Configuring Host Router and Cisco SM-SRE Module Interfaces), establish a session with the module to configure the Cisco Video Management and Storage System. This section describes how to enter and exit the command environment and open a session with the module.

Entering and Exiting the Command Environment

The Cisco Video Management and Storage System user EXEC, privileged EXEC, and configuration command modes are similar to those used by Cisco IOS CLI commands. The description for each command in this section indicates the command mode.

This section provides the procedures for entering and exiting the command environment, It also provides procedures for establishing a session with the Cisco Video Management and Storage System that is running on the Cisco SM-SRE module, where configuration commands are executed.

Entering the Command Environment

Use the following procedure to enter the Cisco Video Management and Storage System command environment using the Telnet network protocol. In the configuration mode, you can configure the Cisco Video Management and Storage System application.

SUMMARY STEPS

1. Open a Telnet or console session.
2. **telnet** *ip-address*
3. Enter the user ID and password of the router.
4. **service-module sm** *slot*/*port* **session**
5. (Optional) **enable**

DETAILED STEPS

	Command or Action	Purpose
Step 1	Open a Telnet or console session.	To open a Telnet or console session, use a Microsoft Windows command prompt window, a software emulation tool such as WRQ Reflection, or connect to the console port of the host router. The following examples use a Telnet session.
Step 2	**telnet** *ip-address* or Connect to the router console port and start a session **Example:** `C:\>telnet 172.16.231.195`	Specifies the IP address of the router at the Telnet prompt Connects the router to a PC or other Data Terminal Equipment device and start a session

Step 3	`Enter the`
	`Username: userid and`
	`Password: password.`
		Enters your user ID and password for the router.

Step 4	**service-module sm** *slot*/*port* **session**
	
	Example:
	`Router> service-module sm 1/0 session`
	`cvmss-10-0-0-0>`
		Enter the Cisco SM-SRE module command environment from the host router, using the module *slot* and *port* numbers. The router prompt changes to the service module prompt.
		
		Note If the message
		`"Trying ip-address slot/port ..."`
		`Connection refused by remote host`
		appears, enter the command **service-module sm** *slot*/*port* **session clear** and repeat Step 4.

Step 5	**enable**
	
	Example:
	`cvmss-10-0-0-0> enable`
	`cvmss-10-0-0-0#`
		(Optional) Enters Cisco Video Management and Storage System application's privileged EXEC mode. You can now begin configuring the Cisco Video Management and Storage System.

Exiting the Command Environment

To leave the Cisco Video Management and Storage System command environment and return to the Cisco IOS router command environment, enter the **exit** command twice, or enter **Alt-Ctrl-6** and **x**.

The following example shows the exit procedure:

```
cvmss-10-0-0-0# exit
cvmss-10-0-0-0> exit
Router#
```

or

```
cvmss-10-0-0-0# Alt-Ctrl-6, x
```

Opening and Closing a Cisco SM-SRE Module Session

This section describes how to open and close a session on the Cisco SM-SRE module, on which the Cisco Video Management and Storage System is running. To configure the Cisco Video Management and Storage System using configuration commands, you must first open a session with the module, use the appropriate configuration commands, and then close the session. For a summary and description of the Cisco Video Management and Storage System configuration commands, see Administering the Cisco Video Management and Storage System Module.

The boot helper is a small subset of the system software that runs on the module. It is used in the following example. It boots the module from the network and assists in software installation and upgrades, disaster recovery, and other operations when the module cannot access its software.

> **Note**
> - You can conduct only one module session at any one time.
> - Steps 1 and 2 open the host-router CLI and access the Cisco SM-SRE module. The remaining steps open a session with the module, configure the boot helper example, and clears the module session, returning you to the host-router Cisco IOS software CLI.

SUMMARY STEPS

From the Host-Router CLI

1. **enable**

2. **service-module sm** *slot***/0 status**

3. **service-module sm** *slot***/0 session**

From the Service-Module Interface

4. Use Cisco SR-SME module configuration commands. In this example, the boot loader.

5. **Control-Shift-6 x**
   or
   exit

From the Host-Router CLI

6. **service-module sm** *slot***/0 session clea**r

DETAILED STEPS

	Command or Action	Purpose
	From the Host-Router CLI	

Step 1	`enable`
	`<password>`
	
	Example:
	`Router> enable`
	`Router> <password>`
	`Router#`
		Enters privileged EXEC mode on the host router. If prompted, enter your password.

	Command or Action	Purpose

Step 2	`service-module sm slot/0 status`
	
	Example:
	`Router# service-module sm 2/0 status`
		Displays the status of the module, so that you can ensure that the module is running (that is, the module is in a steady state).
		
		Note If the module is not running, start it with one of the startup commands listed in the "Common Cisco IOS Software and Cisco SM-SRE Commands" section on page 14.

Step 3	`service-module sm slot/0 session`
	
	Example:
	`Router# service-module sm 1/0 session`
	
	`Trying 10.10.10.1, 2065 ... Open`
		Begins a module session on the specified module. Do one of the following:
		
		• To interrupt the auto-boot sequence and access the boot loader, quickly type ***.
		
		• To start a configuration session, press **Enter**.

	From the Service-Module Interface (boot loader prompt or configuration prompt)	

Step 4	.
	.
	.
	
	Example (boot loader):
	`cvmss-module boot loader> config`
	
	    or
	
	Example (configuration):
	`cvmss-module> configure terminal`
	`cvmss-module(config)>`
	`.`
	`.`
	`.`
	`cvmss-module(config)> exit`
	`cvmss-module> write`
		Enters boot loader or configuration commands on the module as needed.
		
		• Boot loader command choices include **boot**, **config**, **exit**, **help**, **ping**, **reboot**, **show**, and **verify**.
		
		    or
		
		• Configuration command choices are similar to the Cisco IOS commands that are available on the host router. To access global configuration mode, use the **configure terminal** command. Enter the appropriate configuration commands to set application parameters. Then exit global configuration mode by using the **exit** command. Save your new configuration by using the **write** command.
		
		Note You do not need to use the **enable** command and the prompt does not change from **>**.

Step 5	**Example (boot loader):**
	Press **Control-Shift-6 x**
	
	or
	
	exit
	
	Example (Configuration):
	`cvmss-module(config)> exit`
	`cvmss-module> exit`
		Closes the module session and returns to the router's Cisco IOS CLI.
		
		Note The module session stays up until you clear it in Step 6. While the session remains operational, you can return to it from the router's Cisco IOS CLI by pressing **Enter**.

	From the Host-Router CLI	

Step 6	`service-module sm slot/0 session clear`
	
	Example:
	`Router# service-module sm 1/0 session clear`
		Clears the module session for the specified module. When prompted to confirm this command, press **Enter**.

Common Cisco IOS Software and Cisco SM-SRE Commands

Table 1 summarizes and briefly describes commonly used Cisco IOS software and Cisco SM-SRE commands. For a more complete description of the Cisco SM-SRE commands on which the Cisco Video Management and Storage System runs, see "Common Cisco Video Management and Storage System Module Commands" section on page 39. For a more complete description of the Cisco IOS software commands, see "Cisco IOS Commands" section on page 69.

To start up or shut down the Cisco SR-SRE module, use the **shutdown** and **startup** commands as necessary from Table 1.

Note
- Some shutdown commands can potentially disrupt service. If command output for such a command displays a confirmation prompt, confirm by pressing **Enter** or cancel by typing **n** and pressing **Enter**. Alternatively, prevent the prompt from displaying by using the **no-confirm** keyword.
- Some commands shut down the module or application and then immediately restart it.

Table 1   Common Cisco IOS Software and Cisco SM-SRE Module Commands

Configuration Mode	Command	Purpose
Router#	**service-module sm** *slot*/*port* **default-boot**	Configures the Cisco SM-SRE module to use the default BIOS and bootloader.
Router#	**service-module sm** *slot*/*port* **heartbeat-reset** {**disable** | **enable**}	Prevents Cisco IOS software from rebooting the Cisco SM-SRE service module when the heartbeat is lost.
Router#	**service-module sm** *slot*/*port* **install url** *url* [**script** *filename*] [**argument "***string***"**] [**force**]	Installs an application on a Cisco SM-SRE module.
Router#	**service-module sm** *slot*/*port* **install abort** [**force**]	Aborts the application install process on a Cisco SM-SRE.
Router#	**service-module sm** *slot*/*port* **reload**	Gracefully shuts down and reboots the Cisco SM-SRE module operating system.
Router#	**service-module sm** *slot*/**0 reset**	Resets the hardware on a module. Used only to recover from shutdown or a failed state. ⚠ **Caution** Use this command with caution. It does *not* provide an orderly software shutdown, and it can affect file operations in progress.
Router#	**service-module sm** *slot*/**0 session**	Begins a configuration session for a Cisco SM-SRE module through a console connection.

Table 1   Common Cisco IOS Software and Cisco SM-SRE Module Commands (continued)

Configuration Mode	Command	Purpose
`Router#`	**service-module sm** *slot***/0 shutdown**	Gracefully shuts down the Cisco SM-SRE module operating system. Use this command when removing or replacing a hot-swappable module during online insertion and removal.
`Router#`	**service-module sm** *slot***/***port* **statistics**	Displays reset and reload information for the Cisco SM-SRE module and its Cisco IOS software.
`Router#`	**service-module sm** *slot***/0 status**	Displays configuration information related to the hardware and software on a Cisco SM-SRE module.
`Router#`	**service-module sm** *slot***/***port* **uninstall** [**force**]	Uninstalls an application on the Cisco SM-SRE.
`Router(config)#` `Router(config-if)#`	**interface** *slot***/0 shutdown**	Shuts down the module gracefully.
`cvmss-module boothelper>`	**boot**	Starts the boot helper or application.
`cvmss-module>`	**disk remove {0	1}**	Allows the local disk drive to be physically removed from the Cisco SM-SRE module after a disk drive failure; the disk drive can now be hot swapped with a new disk drive. **Note** The CLI keeps track of which drive has failed. If the selected drive (0 or 1) is not the failed drive, the CLI does not allow the command to take effect and an error appears.
`cvmss-module>`	**disk add {0	1}**	Adds new local disk drive after a new drive is swapped for the failed drive and physically plugged into the Cisco SM-SRE module. **Note** The CLI keeps track of which drive has been replaced. If the selected drive (0 or 1) is not the newly swapped drive, the CLI does not allow the command to take effect and an error appears.
`cvmss-module(config)`	**event poll-interval** *seconds*	Sets the HTTP trigger event polling interval in seconds.
`cvmss-module(offline)>`	**reload**	Performs a graceful halt and reboot of the module operating system.
`cvmss-module>`	**reload**	Shuts down the module application gracefully and then reboots the module from the boot loader.
`cvmss-module>`	**shutdown**	Shuts down the module application gracefully and then shuts down the module.

Backing Up and Restoring Configurations on the Cisco Video Management and Storage System

To back up or restore configuration settings or to manage previous backups, use the commands listed in Table 2.

Note   The backup server can be configured using either the configuration mode or the offline mode.

Table 2   Common Backup and Restore Commands

Configuration Mode	Command	Purpose
`cvmss-module(config)>`	**backup revisions**	Specifies the number of previous backups to keep on the server. A value of zero removes all previous backups and saves only the current backup.
`cvmss-module(config)>`	**backup server**	Configures an external FTP backup server for storage.
`cvmss-module(offline)>`	**backup category** {**all** | **configuration** | **data** | **VSMS** | **VSOM**}	Performs a backup of the configuration files to a backup server. **VSMS**[1] backs up the Video Surveillance Management System data files. **VSOM**[2] backs up the Video Surveillance Operations Management data files. See also Appendix A: Backing Up Files in the *Cisco Video Management and Storage System Installation and Upgrade Guide*
`cvmss-module(offline)>`	**backup revisions**	Specifies the number of previous backups to keep on the server. A value of zero removes all previous backups and saves only the current backup.
`cvmss-module(offline)>`	**backup server**	Configures an external FTP backup server for storage.
`cvmss-module(offline)>`	**restore**	Restores the system to its factory default configuration or to the specified backup. See also Appendix B: Restoring Files in the *Cisco Video Management and Storage System Installation and Upgrade Guide*
`cvmss-module>`	**show backup**	Displays information about previous backups and about the configured backup server.

1.VSMS = Video Surveillance Management System

2.VSOM = Video Surveillance Operations Management

Verifying System Status

To verify the status of an installation, upgrade or downgrade, or to troubleshoot problems, use verification and troubleshooting commands as necessary from Table 3.

Note
- Among keyword options for many **show** commands is the provision to display diagnostic output on your screen or to "pipe" it to a file or a URL (that is, to read the output from one command and write it to the file or URL).

- In Table 3 through Table 5, the *Router#* prompt indicates that the command is a host-router Cisco IOS privileged EXEC command prompt; the *cvmss-module>* prompt indicates the command is a Cisco Video Management and Storage System application command prompt.

Table 3   Common Verification and Troubleshooting Commands

Configuration Mode	Command	Purpose
`Router#`	**ping**	Pings a specified IP address to check network connectivity (does not accept a hostname as destination).
`Router#`	**show arp**	Displays the current ARP[1] table.
`Router#`	**show clock**	Displays the current date and time.
`Router#`	**show configuration**	Displays the current configuration as entered by means of the **configure** command.
`Router#`	**show controllers integrated-service-engine**	Displays interface debug information.
`Router#`	**show diag**	Displays standard Cisco IOS diagnostics information, including information about the Cisco Video Management and Storage System module.
`Router#`	**show hardware**	Displays information about network module and host router hardware.
`Router#`	**show hosts**	Displays the default domain name, style of name lookup, list of name-server hosts, and cached list of hostnames and addresses.
`Router#`	**show interfaces**	Displays information about all hardware interfaces, including network and disk.
`Router#`	**show interfaces sm**	Displays information about the module side of the router-module interface.
`Router#`	**show ntp status**	Displays information about NTP[2].
`Router#`	**show processes**	Displays a list of the application processes that are running.
`Router#`	**show running-config**	Displays the configuration commands that are in effect.

Table 3   *Common Verification and Troubleshooting Commands (continued)*

Configuration Mode	Command	Purpose
`Router#`	**show startup-config**	Displays the startup configuration.
`Router#`	**show tech-support**	Displays general information about the host router that is useful to Cisco technical support for problem diagnostics.
`Router#`	**show version**	Displays information about the router software or network module hardware.
`Router#`	**test scp ping**	Pings the network module to check network connectivity.
`cvmss-module>`	**ping**	Pings a specified IP address to check network connectivity (does not accept a hostname as destination).
`cvmss-module>`	**show arp**	Displays the current ARP table.
`cvmss-module>`	**show disk stats**	Displays the statistics of the local disk drives.
`cvmss-module>`	**show clock**	Displays the current date and time.
`cvmss-module>`	**show config**	Displays the current boot loader configuration as entered by the **configure** command.
`cvmss-module>`	**show hosts**	Displays the default IP domain name, lookup style, name servers, and host table.
`cvmss-module>`	**show interfaces**	Displays information about the network-module interfaces.
`cvmss-module>`	**show ntp status**	Displays information about NTP.
`cvmss-module>`	**show processes**	Displays a list of the application processes that are running.
`cvmss-module>`	**show running-config**	Displays the configuration commands that are in effect.
`cvmss-module>`	**show snmp**	Displays the SNMP[3] statistics are stored in system counters.
`cvmss-module>`	**show software directory download**	Displays the contents of the downgrade or download directory on the download FTP file server.
`cvmss-module>`	**show software download server**	Displays the name and IP address of the configured download FTP file server.
`cvmss-module>`	**show software licenses**	Displays license information for installed packages.
`cvmss-module>`	**show software packages**	Displays version information for installed packages.
`cvmss-module>`	**show software versions**	Displays version information for installed software.

Table 3   Common Verification and Troubleshooting Commands (continued)

Configuration Mode	Command	Purpose
`cvmss-module>`	**show startup-config**	Displays the startup configuration.
`cvmss-module>`	**show tech-support**	Displays general information about the network module that is useful for problem diagnosis to Cisco technical support. **Note** Other **tech-support** commands should only be used under the guidance of Cisco TAC[4].
`cvmss-module>`	**show trace**	Displays the contents of the trace buffer.
`cvmss-module>`	**show version**	Displays information about the hardware and devices.
`cvmss-module>`	**show video-surveillance**	Displays video surveillance configurations, logs, reports, and tasks.
`cvmss-module>`	**software remove**	Removes downloaded files (all files, downloaded package and payloads, or stored downgrade files created during an upgrade).

1. ARP = Address Resolution Protocol

2. NTP = Network Time Protocol

3. SNMP = Simple Network Management Protocol

4. Cisco TAC = Cisco Technical Assistance Center

Diagnostics and Logging Options

To configure logging options for Cisco Video Management and Storage System, use logging commands listed in Table 4.

> **Note** Among the keyword options for many **log** and **trace** commands is the provision to display diagnostic output on your screen or to save it to a file or a URL.

Table 4   Common Logging Commands

Configuration Mode	Command	Purpose
`cvmss-module>`	**log console monitor**	Configures error logging by means of console logging (logged messages are displayed on the console).
`cvmss-module>`	**log console**	Configures error logging by means of console logging (logged messages are displayed on the console).
`cvmss-module>`	**log server**	Configures error logging by means of a system-log (syslog) server (syslog is an industry-standard protocol for capturing log information for devices on a network).

Diagnostics are of two types:

- System log (syslog)—Syslog is an industry-standard protocol for capturing the following events:
  - Fatal exceptions that cause an application or system crash, during which normal error-handling paths are typically nonfunctional
  - Application run-time errors that cause unusual conditions and configuration changes

  The syslog file size is fixed at 10 MB. Syslog configurations survive a power failure.

- Traces—Trace logs capture events related to the progress of a request through the system.

  Trace logs survive a CPU reset; trace configurations survive a power failure. Log and display these configurations with the **trace** commands.

To generate and display syslog and trace diagnostics, use trace commands from Table 5.

Table 5   Common Trace Commands

Configuration Mode	Command	Purpose
`cvmss-module>`	**clear trace**	Clears logged trace events for specified modules.
`cvmss-module>`	**log trace**	Logs configured traces to the network module (can be done locally or remotely).
`cvmss-module>`	**no trace**	Disables tracing for specified modules, entities, or activities.
`cvmss-module>`	**show errors**	Displays error statistics by module, entity, or activity.

Table 5   Common Trace Commands (continued)

Configuration Mode	Command	Purpose
`cvmss-module>`	**show trace**	Displays trace settings.
`cvmss-module>`	**show trace buffer**	Displays the contents of the trace buffer.
`cvmss-module>`	**show trace store**	Displays the contents of the stored trace messages.
`cvmss-module>`	**trace**	Enables tracing (that is, generates error reports) for specified modules, entities, or activities.

SNMP CLI Commands

Table 6 lists and describes the **snmp-server** SNMP command-line interface commands.

Table 6　　　*SNMP CLI Commands*

Configuration Mode	Command	Purpose
`cvmss-module(config)#`	**snmp-server community** *community-string* [**RO** | **RW**] **no snmp-server community** *community-string* [**RO** | **RW**] Example: `cvmss-module(config)# snmp-server community cisco-snmp RO`	Enables the SNMP agent with the configured case sensitive community string. The password and the mode of access can be set to read-only or read-write. Up to five community strings that can be set for each read-only or read-write category. *community-string*—case sensitive character string with a maximum length of 15 characters. RO—Read-Only access mode. RW—Read-Write access mode. Use the **no** form of this command to remove the configuration associated with the community string. **Note**　Even after all community string configurations are removed, you can still have read-only access of MIB variables using the *default* community strings. The default read-only community string is *broadware-snmp*.
`cvmss-module(config)#`	**snmp-server contact** *contact-name* **no snmp-server contact** *contact-name* Example: `cvmss-module(config)# snmp-server contact "John Doe"`	Sets or clears the contact name. *contact-name*—character string with a maximum length of 31 characters. Use the **no** form of this command to clear the contact name.

Table 6   SNMP CLI Commands (continued)

Configuration Mode	Command	Purpose
`cvmss-module(config)#`	**snmp-server enable traps** **no snmp-server enable traps** Example: `cvmss-module(config)# snmp-server enable traps`	Enables SNMP traps to be sent to the SNMP trap destination. **Note** This command is effective only for certain types of notifications. Not all types of notifications are controlled by this command. The notifications generated as a result of archive creation or deletion are not configured by this CLI, but are configured in the Video Surveillance Management Console web page with the "SNMP Trap Destination" link. Also, this CLI does not control the traps generated from exceeding the system resource thresholds. The only form of notifications enabled (or disabled) by this CLI are the traps generated from syslog messages with severity level greater than or equal to that of warning level. Use the **no** form of this command to disable trap notifications to be sent to the trap destination.
`cvmss-module(config)#`	**snmp-server host** *ip-address community-string* **no snmp-server host** *ip-address community-string* Example: `cvmss-module(config)# snmp-server host 1.100.10.219 cisco-snmp`	Configures the IP address of the host that is to receive the trap notifications. The community string must also be specified. Up to a maximum of 5 hosts that can be configured. **Note** The **snmp-server enable traps** command must be executed for the hosts to receive the trap notifications. *ip-address*—IP address (IPv4 only is supported) in dotted decimal notation of the host that is to receive the trap notifications. *community-string*—character string with a maximum length of 15 characters. Use the **no** form of this command to clear the host configuration.

Table 6   SNMP CLI Commands (continued)

Configuration Mode	Command	Purpose
`cvmss-module(config)#`	**snmp-server location** *location-name* **no snmp-server location** *location-name* Example: `cvmss-module(config)# snmp-server contact "San Jose"`	Sets or clears the location name. *location-name*—character string with a maximum length of 31 characters. Use the **no** form of this command to clear the location name.
`cvmss-module(config)#`	**snmp-server monitor disk** *percentage* **no snmp-server monitor disk** *percentage* Example: `cvmss-module(config)# snmp-server monitor disk 20`	Sets the threshold for monitoring the disk usage for all the disks, including local and NFS servers. *percentage*—Integer variable in the range of 1 to 30 that represents the percentage of free space within each disk partition. If the free disk space percentage falls below this threshold, the system will generate a trap. Use the **no** form of this command to disable disk monitoring.
`cvmss-module(config)#`	**snmp-server monitor cpu** *percentage* **no snmp-server monitor cpu** *percentage* Example: `cvmss-module(config)# snmp-server monitor cpu 10`	Sets the threshold for monitoring the CPU utilization. *percentage*—Number in the range of 0 to 20 that represents the percentage of idle CPU time. This number includes *wait* states. Use the **no** form of this command to disable CPU monitoring
`cvmss-module(config)#`	**snmp-server monitor swap** *percentage* **no snmp-server monitor swap** *percentage* Example: `cvmss-module(config)# snmp-server monitor swap 25`	Sets the threshold for monitoring the utilization of swap space. *percentage*—Number from 1 to 50 that represents the percentage of available free swap space. Use the **no** form for this command to disable swap space monitoring.

Table 6 **SNMP CLI Commands (continued)**

Configuration Mode	Command	Purpose
`cvmss-module>`	**show snmp configuration**	Displays the configuration of all SNMP commands. It also lists all the resource monitoring threshold configurations.

Example:

```
cvmss-module> show snmp configuration
Contact:           1234
Location:          SAN JOSE
Community 1 RO:    test1
Community 2 RO:    test2
Community 3 RO:    test3
Community 4 RO:    test4
Community 5 RO:    test5
Traps:             disabled
Host Community 1:  1.100.10.219 cisco-snmp
Host Community 2:  1.100.10.218 cisco-snmp
Host Community 3:  1.100.10.217 cisco-snmp
Host Community 4:  1.100.10.216 cisco-snmp
Host Community 5:  1.100.10.215 cisco-snmp
monitor disk limit:   8
monitor memory limit: 10
monitor cpu limit:    15
cvmss-module>
```

Adding a DNS Server (Optional)

Cisco Video Management and Storage System uses a cache-only Domain Name System (DNS) server that listens on port 53 for both User Datagram Protocol (UDP) and Transmission Control Protocol (TCP) packets. A typical use for such a server is to enable the application to continue operation in a branch office when the WAN is down and the server is on the other side of the WAN in an enterprise or service-provider data center.

The DNS server cache policy is to automatically revaluate a cached entry when its time to live (TTL) expires and to discard an entry only when the parent DNS server is accessible and no longer contains the name. This differs from most DNS caches, which simply discard an entry when the TTL expires.

Note • Step 1 opens a session to the Cisco SRE module from the host router Cisco IOS CLI. The remaining steps configure the Cisco SRE module and return to the host router Cisco IOS CLI.

SUMMARY STEPS

From the Host-Router CLI

1. **service-module sm** *slot***/0 session**

From the Service-Module Interface

2. **configure terminal**

3. **hostname** *hostname*

4. **ip domain-name** *domain*

5. **ip name-server** *<ip-address>* [*<ip-address>* …]

6. **exit**

7. **show hosts**

8. **write**

9. **Control-Shift-6 x**

From the Host-Router CLI

10. **service-module sm** *slot***/0 session clear**

DETAILED STEPS

	Command or Action	Purpose
	From the Host-Router CLI	

Step 1	`service-module sm` *`slot`*`/0 session`
	
	Example:
	`Router# service-module sm 2/0 session`
		Opens a Cisco SM-SRE module session.

	From the Service-Module Interface	

Step 2	`configure terminal`
	
	Example:
	`cvmss-module> configure terminal`
		Enters global configuration mode on the module.

Step 3	`hostname` *`hostname`* **Example:** `cvmss-module(config)> hostname hostname1`	Specifies the hostname of the Cisco Video Management and Storage System that appear in the prompt.
Step 4	`ip domain-name` *`domain`* **Example:** `cvmss-module(config)> ip domain-name domain1.com`	Defines a default domain name for use in completing unqualified hostnames (names without a dotted-decimal domain name).
Step 5	`ip name-server` *`ip-address`* [*`<ip-address>`* …] **Example:** `cvmss-module(config)> ip name-server 10.0.0.0`	Specifies the IP address for one or more DNS servers. The argument is as follows: *ip-address*—Server IP address

Step 6	`exit`
	
	Example:
	`cvmss-module(config)> exit`
		Exits global configuration mode on the module.

Step 7	`show hosts`
	
	Example:
	`cvmss-module> show hosts`
		Displays the default domain name, style of name lookup, list of name-server hosts, and cached list of hostnames and addresses.

	Command or Action	Purpose

Step 8	`write`
	
	Example:
	`cvmss-module> write`
		Saves the new running configuration of the module.

Step 9	Press **Control-Shift-6 x**.	Closes the session.
	From the Host-Router CLI	

Step 10	`service-module sm `*slot*`/0 session clear`
	
	Example:
	`Router# service-module`
	`integrated-service-engine 1/0 session clear`
		Clears the session for the specified module. When prompted to confirm this command, press **Enter**.

Additional References

The following sections provide references related to the Cisco Video Management and Storage System application.

Related Documents

Related Topic	Document Title
Cisco Video Management and Storage System and the Cisco Video Surveillance Solution	• *Release Notes for the Cisco Video Management and Storage System SRE* • *Installing Cisco Network Modules and Service Modules in Cisco Access Routers* • *Cisco Video Management and Storage System SRE Installation and Upgrade Guide* • *Cisco Integrated Storage System Installation and Upgrade Guide* • *Cisco Integrated Storage System CLI Administrator Guide* • *Cisco Analog Video Gateway Installation and Upgrade Guide* • *Cisco Analog Video Gateway CLI Administrator Guide* • *Cisco Analog Video Gateway XML API Guide* • *Open Source License Notice*
Cisco IOS software	*Cisco IOS Software*
Technical documentation, including feedback and assistance	*What's New in Cisco Product Documentation* (including monthly listings of new and revised documents)

Technical Assistance

Description	Link
For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at: Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.	http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html
Cisco Feature Navigator website	http://www.cisco.com/go/cfn Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. An account on Cisco.com is not required.
Cisco Software Center website	http://www.cisco.com/public/sw-center/