



Monitoring System Status

This chapter provides information on how to use the SNMP-based CIAgent tool to monitor Cisco SIP proxy server (Cisco SPS) system status. It contains the following sections:

- [Prerequisites, page 5-1](#)
- [Information About CIAgent, Subagents, and Traps, page 5-1](#)
- [How to Set Up and Use CIAgent, page 5-3](#)
- [How to Configure Subagents, page 5-4](#)
- [How to Configure Traps, page 5-12](#)
- [How to Monitor System Status and Components, page 5-14](#)

Prerequisites

- Install CIAgent as described in the *Cisco SIP Proxy Server Installation Guide*. Be sure that each server in a proxy-server farm has its own CIAgent.
- Make a note of the CIAgent location on each server. When a step instructs you to access CIAgent, go to this directory. Default is as follows:

Linux: /usr/local/ciagent

Solaris: /opt/ciagent

- Make a note of the CIAgent Dr-Web location:
http://<localhost, machine IP or host name running CIAgent>:280
(For example: http://172.16.1.1:280)

Information About CIAgent, Subagents, and Traps

A management information base (MIB) is a database of network management information that is used and maintained by a network management protocol such as Simple Network Management Protocol (SNMP) or Common Management Information Protocol (CMIP).

MIB objects are organized in a tree structure that includes public (standard) and private (proprietary) branches. You can retrieve or change the value of a MIB object using SNMP or CMIP commands, usually through a GUI network management system.

Functions

CIAgent is an SNMP agent with which you can perform certain Cisco SPS operations, including the following:

- Start, stop, and gracefully restart Cisco SPS
- Monitor proxy-server log file sizes
- Monitor CPU usage
- Check memory size and disk space
- Check system status

For most of these, you can instruct CIAgent to let you know when file size, CPU usage, memory size, or disk space exceeds a certain threshold.

CIAgent has a master agent (snmpdm) that communicates with a few subagents (critagt, smagt, logagt, and more) that serve their respective MIBs. Here is the sequence that is followed:

1. You issue an SNMP request to the master agent.
2. The master agent passes the request to the appropriate subagent.
3. The subagent retrieves or sets a particular MIB object value and sends a response back to the master agent.
4. The master agent passes the response back to you.

Responses might be issued immediately, as for system status, or they might be issued when certain events occur, such as when Cisco SPS goes up or goes down, when the size of a log file exceeds a specified limit, or when the CPU load rises above or falls below a specified threshold.

Architecture

CIAgent runs as a set of processes as root on the same system that runs Cisco SPS.

Each server in a proxy-server farm should have its own CIAgent. A system therefore has multiple CIAgents, each of which controls and monitors a particular farm member.

MIB files are located in the CIAgent installation directory under the mibs directory. They are text files with the extension .my, and are a good source for learning what a MIB or subagent provides.

Standard MIBs and the subagents that serve them are listed in [Table 5-1](#).

Table 5-1 MIBs and Subagents

MIB	Subagent	MIB Function
CIAgent MIBs		
CRITAPP-MIB (critagt)	Critical application	Starts and stops Cisco SPS
LOG-MIB (logagt)	Log file	Monitors error-log and access-log file sizes and sends traps when thresholds are exceeded
Standard MIBs		
DISMAN-SCRIPT-MIB (smagt)	Script MIB	Gracefully restarts Cisco SPS

Table 5-1 MIBs and Subagents (continued)

MIB	Subagent	MIB Function
DISMAN-EVENT-MIB (eventagt)	Event MIB	Monitors CPU load by setting rising and falling thresholds; sends traps when thresholds are exceeded
HOST-RESOURCES-MIB (hostagt)	Host resources	Checks CPU usage, memory size, and disk space
RFC1213-MIB (mib2agt)	MIB-II	Checks link status
SYSAPPL-MIB (sappagt)	System applications	Checks what applications are installed and running on the system

How to Set Up and Use CIAgent

This section contains the following:

- [Stopping and Restarting CIAgent Manually, page 5-3](#)
- [Creating a CIAgent Dr-Web User ID, page 5-3](#)

Stopping and Restarting CIAgent Manually

Detailed Steps

-
- Step 1** Access CIAgent.
- Step 2** To stop CIAgent, use the **stop** command:
- ```
ciagent stop
```
- Step 3** To restart CIAgent, use the **start** command:
- ```
# ciagent start
```
-

Creating a CIAgent Dr-Web User ID


Detailed Steps

-
- Step 1** Access CIAgent.
- Step 2** Open the SNMP directives (/etc/srconf/agt/snmpd.cnf) file.
- Step 3** Add the following line to the end of the file:
- ```
httpUserNameEntry <your-login-name> SystemAdmin - nonVolatile <your-login-password>
```

- Step 4** If security is an issue, remove the comment markers of, or remove entirely, the other `httpUserNameEntries`. Doing so limits access to just the system administrator.
  - Step 5** Change the file permission to read-only by root.
  - Step 6** Save and close the file.
  - Step 7** Stop and restart CIAgent.
- 

## Starting and Stopping Cisco SPS from CIAgent

### Detailed Steps

- Step 1** Log in to CIAgent Dr-Web.
  - Step 2** Click **Critical Application Monitor**.
  - Step 3** Do any of the following:
    - To start Cisco SPS, set the sipd intended operation status to up.
    - To stop Cisco SPS, set the sipd intended operation status to down.
- 
-  **Note** In the following commands, the variable `<location>` indicates the local host or the IP address or host name of the system that runs CIAgent.
- 
- To check Cisco SPS running status, use the following command:
 

```
getone -v2c <location> cspsAdmin critAppOperStatus.1
```
  - To gracefully restart Cisco SPS, use the following command:
 

```
setany -v2c <location> cspsAdmin smLaunchStart.1.67.1.68 0
```
- Step 4** If Cisco SPS should be running at this point, reload the page and check the operational status to so verify.
- 

## How to Configure Subagents

The section contains the following:

- [Configuring CIAgent for Subagent Use, page 5-5](#)
- [Configuring the Critical Application Subagent \(critagt\), page 5-6](#)
- [Configuring the Script Subagent \(smagt\) to Gracefully Restart Cisco SPS, page 5-7](#)
- [Configuring the Log File Subagent \(logagt\) to Monitor Log Sizes, page 5-9](#)
- [Configuring the Event MIB Subagent to Monitor CPU Usage, page 5-10](#)

## Configuring CIAgent for Subagent Use

If you used the Cisco SPS CIAgent install (cspc\_ciagent\_install) script to install CIAgent, a preset configuration is included in the installation. This configuration is extendable.

To send SNMP requests to CIAgent, use the Dr-Web interface, command-line CIAgent utility, or any other SNMP product. If you use the command-line CIAgent utility, a default community string, cspcAdmin, is provided in the SNMP directives (snmpd.cnf) file.



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**Note** You can always remove or add logins in the SNMP directives (/etc/snmp/snmpd.conf) file. For more information, refer to the CIAgent online manual chapter on the emanate master agent.

---

CIAgent supports SNMP versions 1, 2c, and 3. The examples in this document and the readme file use Version 2c to show how to retrieve and set certain MIB objects. If security is a major concern, use Version 3.



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**Note** For more information on CIAgent and subagent configurations and how to set up users and passwords, refer to the CIAgent Dr-Web online manual.

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### Detailed Steps

- 
- Step 1** Log in to CIAgent Dr-Web.
- Step 2** At the CIAgent home page, do the following:
- Locate, in the CIAgent online manual, information on how to configure subagents.
  - Click the listed subagents to see a sample list of Cisco SPS configurations. [Table 5-1](#) shows a list of sample subagents.
- Step 3** As needed, change the following default settings as instructed in the CIAgent Dr-Web online manual:
- sipd's intended operation status—Initialized to down. To start Cisco SPS, change to up.
  - Start and stop commands—Initialized into the critical-applications MIB with appropriate path to the Cisco SPS installation directory.
  - Graceful restart command—Initialized into the script MIB with appropriate path to the Cisco SPS installation directory.
  - Cisco SPS log files monitored by CIAgent—Initialized to error\_log and access\_log each with a maximum size of 5 MB. If either one grows bigger than 5 MB, a trap is sent.
  - CPU average load over the last minute, monitored by the event subagent—Rising threshold is initialized to 75 percent; falling threshold is initialized to 20 percent. When the CPU average load over the last minute falls outside that range, a trap is sent.
- 



---

**Note**

- You cannot configure the script MIB subagent through this home page.
- MIB files are located in the CIAgent installation directory under mibs.

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- Utility programs in the CIAgent bin directory that can interact with MIB objects include setany, getone, getmany, and traprcv.

## Configuring the Critical Application Subagent (critagt)

You can configure critagt to start and stop Cisco SPS. You can also add an entry for sipd, provide the **Start** and **Terminate** commands, and set desired options.

### Detailed Steps

- 
- Step 1** Log in to CIAgent Dr-Web.
  - Step 2** Open the critical application subagent (/etc/srconf/agt/critagt.cnf) file with a text editor.
  - Step 3** Add a critAppProcEntry line for sipd, SIP provisioning agent (spa), provisioning server (pserver), and the license manager (licenseMgr).

### Example

The following example is for Linux. For Solaris, change the path to sip from /usr/local/sip/bin/sip to /opt/sip/bin/sip.

```
Entry type: critAppProcEntry
Entry format: integer - index number (continuous positive integer)
octetString - process name (real process name)
octetString - start command (string of characters)
octetString - stop command (string of characters)
integer - intended operation status (up(1), down(2))
integer - restart on exit (true or false)
integer - restart interval in centisecond
integer - send trap on exit (true or false)
integer - send trap on start (true or false)
integer - find process on startup (true or false)
critAppProcEntry 1 sipd \
 "/usr/local/sip/bin/sip start" \
 "/usr/local/sip/bin/sip stop" 2 false 3000 \
 true true true

critAppProcEntry 2 spa \
 "/usr/local/sip/bin/sip start" \
 "/usr/local/sip/bin/sip stop" 2 false 3000 \
 true true true

critAppProcEntry 3 pserver \
 "/usr/local/sip/bin/sip start" \
 "/usr/local/sip/bin/sip stop" 2 false 3000 \
 true true true

critAppProcEntry 4 licenseMgr \
 "/usr/local/sip/bin/sip start" \
 "/usr/local/sip/bin/sip stop" 2 false 3000 \
 true true true

Entry type: critAppTrapWhenNotAllRunning
Entry format: integer - send trap when some process is down
critAppTrapWhenNotAllRunning false
Entry type: critAppTrapWhenAllRunning
Entry format: integer - send trap when all are running
critAppTrapWhenAllRunning false
```

**Step 4** Save and close the file.

**Step 5** Stop and restart critagt to activate the new configuration.

**Linux:** # ps -ef|grep critagt  
# kill -9 <critagt's PID>  
# cd /usr/local/ciagent/bin  
# ./critagt &

**Solaris:** # ps -ef|grep critagt  
# kill -9 <critagt's PID>  
# cd /opt/ciagent/bin  
# ./critagt &

**Step 6** As needed, start or stop Cisco SPS using Dr-Web or the following commands:



**Note** setany is an SNMP utility program that you run from CIAgent. You can achieve the same functionality with any other SNMP **set** command. Refer to the MIB files (located in the CIAgent installation directory under mibs) for the object information before setting it.



**Note** In the following commands, the variable <location> indicates the local host name or the IP address or host name of the system that runs CIAgent.

- To start Cisco SPS:  
# setany -v2c <location> cspsAdmin critAppAdminStatus.1 1
- To stop Cisco SPS:  
# setany -v2c <location> cspsAdmin critAppAdminStatus.1 2
- To learn the Cisco SPS running status:  
# getone -v2c <location> cspsAdmin critAppOperStatus.1
- To learn about the Cisco SPS **start** command:  
# getone -v2c <location> cspsAdmin critAppStartCommand.1
- To learn about the Cisco SPS **stop** command:  
# getone -v2c <location> cspsAdmin critAppTerminateCommand.1

## Configuring the Script Subagent (smagt) to Gracefully Restart Cisco SPS

### Detailed Steps

**Step 1** Log in to CIAgent Dr-Web.

**Step 2** In the ciagent/conf directory and, under that, the Cisco SPS distribution directory, open the MIB-population script (smPopScript) file with a text editor.

**Step 3** Modify the following variables for the environment.

```
Agent="localhost"
Version="-v2c"
User="cspAdmin"
AuthPassword=""
PrivPassword=""
```

**Step 4** Modify the following line as shown to cause the Cisco SPS installation path to do a graceful restart.

**Linux:** `setany $Version $Agent $User \ smCodeRowStatus.$SOwner.$SName.1 createAndGo \ smCodeText.$SOwner.$SName.1 -D "exec(\"/usr/local/sip/bin/sip graceful\");"`

**Solaris:** `setany $Version $Agent $User \ smCodeRowStatus.$SOwner.$SName.1 createAndGo \ smCodeText.$SOwner.$SName.1 -D "exec(\"/opt/sip/bin/sip graceful\");"`

**Step 5** Save and close the file.

**Step 6** Copy the file to the CIAgent installation bin directory.

**Linux:** `# /usr/local/ciagent/bin`

**Solaris:** `# /opt/ciagent/bin`

**Step 7** Change the file permission to be executable by root.

**Step 8** Run the MIB-population script.

```
./smPopScript
```

**Step 9** Do one of the following:

- If Cisco SPS is already running, gracefully restart CIAgent.




---

**Note** In the following command, the variable *<location>* indicates the local host or the IP address or host name of the system that runs CIAgent.

---

```
setany -v2c <location> cspAdmin smLaunchStart.1.67.1.68 0
```

- Otherwise, stop and restart CIAgent by running a script to populate the script MIB subagent.




---

**Note** To avoid doing this every time, add a call to the script in the ciagent script file (CIAgent installation directory). See the following example in the ciagent script file.

---

```
./critagt
./mib2agt
./eventagt &
./fsagt &
./hostagt &
./htmlagt
./logagt
./sappagt &
./schdagt
./smagt
sleep 5
./smPopScript
```

**Note**

In this example, it is assumed that the MIB-population script (smPopScript) file is modified and exists in the CIAgent bin directory. The **sleep 5** command runs smPopScript after sleeping 5 seconds, which allows smagt to fully start. An alternative is to use the customized start/stop csps\_ciagent\_ctl script (Linux: in /usr/local/sip/ciagent; Solaris: in /opt/sip/ciagent). Copy it to your CIAgent installation directory (Linux: /usr/local/ciagent; Solaris: /opt/ciagent) and give it execution permission. The customized script starts CIAgent and then calls smPopScript.

## Configuring the Log File Subagent (logagt) to Monitor Log Sizes

### Detailed Steps

- Step 1** Log in to CIAgent Dr-Web.
- Step 2** Open the log file subagent (/etc/srconf/agt/logagt.cnf) file with a text editor.
- Step 3** Make changes as needed.

### Example

The following example is for Linux. For Solaris, change the path for error\_log and access\_log to /opt/sip/logs/error\_log and /opt/sip/logs/access\_log respectively.

```
Entry type: siLogGlobalPollInterval
Entry format: integer
siLogGlobalPollInterval 60
Entry type: siLogEntry
Entry format: integer - index number
octetString - description of the file to be monitored
octetString - full path to the file
octetString - regular expression to match in the file
integer - leave it as is
integer - character position to start matching
integer - character position to stop matching
integer - number of matches found so far
octetString - command to run on match
integer - send trap on match (yes(1), no(2))
integer - current size of the file in bytes
integer - maximum file size as threshold
octetString - command to run when maximum size reached
integer - send trap on maximum size (yes(1), no(2))
integer - polling interval in seconds
integer - leave it as is
octetString - file owner
integer - leave it as is
siLogEntry 1 "CSPS error log" \
 /usr/local/sip/logs/error_log - 2 0 0 0 - 2 \
 316687 5000000 - 1 10 2 csps 1 316687 "tent-Length: 0\r\n\r\n\r\n\r\n"

siLogEntry 2 "CSPS access log" \
 /usr/local/sip/logs/access_log - 2 0 0 0 - 2 \
 316687 5000000 - 1 10 2 csps 1 316687 "tent-Length: 0\r\n\r\n\r\n\r\n"
```

- Step 4** Save and close the file.

**Step 5** View your current log file size from Dr-Web, or use the following commands to retrieve it.



**Note** In the following command, the variable *<location>* indicates the local host or the IP address or host name of the system that runs CIAgent.

```
getone -v2c <location> cspsAdmin siLogSize.1
getone -v2c <location> cspsAdmin siLogSize.2
```



**Note** In the preset configurations, siLogSize.1 refers to log file size for the file at index 1 (error\_log). siLogSize.2 refers to access\_log.

## Configuring the Event MIB Subagent to Monitor CPU Usage

### Detailed Steps

**Step 1** Log in to CIAgent Dr-Web.

**Step 2** Do one of the following:

- Configure a Trigger-Event-Notification set for the hrProcessorLoad object in Host Resources MIB for CPU rising and falling thresholds.
- Modify the following sample event agent (eventagt.cnf) file accordingly.

#### Example

In this example, the rising threshold is set to 75%, the falling threshold to 20%, and the polling interval to 5 seconds.

```
Entry type: mteResourceSampleMinimum
Entry format:
mteResourceSampleMinimum (integer) mteResourceSampleMinimum 1
Entry type: mteResourceSampleInstanceMaximum
Entry format:
mteResourceSampleInstanceMaximum (unsigned)
mteResourceSampleInstanceMaximum 0u
Entry type: mteTriggerEntry
Entry format:
mteOwner (text)
mteTriggerName (text)
mteTriggerComment (text)
mteTriggerTest (bits)
mteTriggerSampleType (integer)
mteTriggerValueID (ObjectID)
mteTriggerValueIDWildcard (integer)
mteTriggerTargetTag (text)
mteTriggerContextName (text)
mteTriggerContextNameWildcard (integer)
mteTriggerFrequency (unsigned)
mteTriggerObjectsOwner (text)
mteTriggerObjects (text)
mteTriggerEnabled (integer)
mteTriggerEntryStatus (integer) mteTriggerEntry 61 loadTrigger " " 20 1
```

```

iso.3.6.1.2.1.25.3.3.1.2.1 2 - - 2 \
5u - - 1 1
Entry type: mteTriggerDeltaEntry
Entry format:
mteTriggerDeltaDiscontinuityID (ObjectID)
mteTriggerDeltaDiscontinuityIDWildcard (integer)
mteTriggerDeltaDiscontinuityIDType (integer)
mteOwner (text)
mteTriggerName (text)
Entry type: mteTriggerExistenceEntry
Entry format:
mteTriggerExistenceTest (bits)
mteTriggerExistenceStartup (bits)
mteTriggerExistenceObjectsOwner (text)
mteTriggerExistenceObjects (text)
mteTriggerExistenceEventOwner (text)
mteTriggerExistenceEvent (text)
mteOwner (text)
mteTriggerName (text)
Entry type: mteTriggerBooleanEntry
Entry format:
mteTriggerBooleanComparison (integer)
mteTriggerBooleanValue (integer)
mteTriggerBooleanStartup (integer)
mteTriggerBooleanObjectsOwner (text)
mteTriggerBooleanObjects (text)
mteTriggerBooleanEventOwner (text)
mteTriggerBooleanEvent (text)
mteOwner (text)
mteTriggerName (text)
Entry type: mteTriggerThresholdEntry
Entry format:
mteTriggerThresholdStartup (integer)
mteTriggerThresholdRising (integer)
mteTriggerThresholdFalling (integer)
mteTriggerThresholdDeltaRising (integer)
mteTriggerThresholdDeltaFalling (integer)
mteTriggerThresholdObjectsOwner (text)
mteTriggerThresholdObjects (text)
mteTriggerThresholdRisingEventOwner (text)
mteTriggerThresholdRisingEvent (text)
mteTriggerThresholdFallingEventOwner (text)
mteTriggerThresholdFallingEvent (text)
mteTriggerThresholdDeltaRisingEventOwner (text)
mteTriggerThresholdDeltaRisingEvent (text)
mteTriggerThresholdDeltaFallingEventOwner (text)
mteTriggerThresholdDeltaFallingEvent (text)
mteOwner (text)
mteTriggerName (text)
mteTriggerThresholdEntry 1 75 20 0 0 - - 61 rising 61 falling - - - - 61 \
loadTrigger
Entry type: mteObjectsEntry
Entry format:
mteObjectsName (text)
mteObjectsIndex (unsigned)
mteObjectsID (ObjectID)
mteObjectsIDWildcard (integer)
mteObjectsEntryStatus (integer)
mteOwner (text)
mteObjectsEntry loadValue 1u iso.3.6.1.2.1.25.3.3.1.2.1 2 1 61
Entry type: mteEventEntry
Entry format:
mteEventName (text)
mteEventComment (text)

```

```

mteEventActions (bits)
mteEventEnabled (integer)
mteEventEntryStatus (integer)
mteOwner (text)
 mteEventEntry falling "Falling threshold trap" 80 1 1 61
 mteEventEntry rising "Rising threshold trap" 80 1 1 61
Entry type: mteEventNotificationEntry
Entry format:
mteEventNotification (ObjectID)
mteEventNotificationObjectsOwner (text)
mteEventNotificationObjects (text)
mteOwner (text)
mteEventName (text)
 mteEventNotificationEntry 0.0 61 loadValue 61 falling
 mteEventNotificationEntry 0.0 61 loadValue 61 rising
Entry type: mteEventSetEntry
Entry format:
mteEventSetObject (ObjectID)
mteEventSetObjectWildcard (integer)
mteEventSetValue (integer)
mteEventSetTargetTag (text)
mteEventSetContextName (text)
mteEventSetContextNameWildcard (integer)
mteOwner (text)
mteEventName (text)

```

**Note**

The hrProcessorLoad object represents the average CPU usage over the last minute. (This is not the same as the CPU usage output in the Unix program "top," which shows CPU usage in the sampling moment.) The hrProcessorLoad value rises and drops slowly, because it is an average value over a minute.

**Step 3** Save and close the file.

**Step 4** Check the current hrProcessorLoad object value.

**Note**

In the following command, the variable *<location>* indicates the local host or the IP address or host name of the system that runs CIAgent.

```
getone -v2c <location> cspsAdmin hrProcessorLoad.1
```

## How to Configure Traps

This section contains the following:

- [Configuring SNMP and Trap Target Addresses, page 5-13](#)
- [Configuring Trap Sinks for CIAgent Traps, page 5-13](#)

## Configuring SNMP and Trap Target Addresses

Instructions on SNMP and trap target address configuration are in the CIAgent online manual (see [Table 5-2](#)).

**Table 5-2 Location of Instructions for SNMP and Trap Target Address Configuration**

| Topic                                                                    | CIAgent Online Manual Section                                |
|--------------------------------------------------------------------------|--------------------------------------------------------------|
| Add or configure SNMP v2c community strings for Cisco SPS administrators | emanate master agent                                         |
| Configure trap target addresses                                          |                                                              |
| Modify the system environment                                            | SNMP Community/userName configuration and trap configuration |

### Configuration Examples

The following are examples from the SNMP directives (/etc/srconf/agt/snmpd.cnf) file:

- To add community string cspsAdmin with security level proxySec:
 

```
snmpCommunityEntry t0000001 cspsAdmin proxySec localSnmpID - - nonVolatile
```
- To add a new group, proxyGroup, with snmpv2c access permissions:
 

```
vacmAccessEntry proxyGroup - snmpv2c noAuthNoPriv exact All All All nonVolatile
```
- To associate security level proxySec with proxyGroup:
 

```
vacmSecurityToGroupEntry snmpv2c proxySec proxyGroup nonVolatile
```
- To specify an IP address, 172.17.140.131, to which to send traps:
 

```
snmpTargetAddrEntry 40 snmpUDPDomain 172.17.140.131:0 100 3 Console v2cExampleParams nonVolatile 255.255.255.255:0
```
- To specify a community string, cspsAdmin, for use in v2c traps:
 

```
snmpTargetParamsEntry v2cExampleParams 1 snmpv2c proxySec noAuthNoPriv nonVolatile
```

## Configuring Trap Sinks for CIAgent Traps

### Detailed Steps

- 
- Step 1** Access CIAgent.
  - Step 2** Run the CIAgent utility traprcv as root.
  - Step 3** Configure the SNMP directives (snmpd.cnf) file where the trap sink is located.
  - Step 4** Restart CIAgent.

**Note**

Usually the loopback address (127.0.0.1) is one of the default trap sink addresses. When a trap-triggering event occurs, such as Cisco SPS going up or down, a trap message appears in the traprcv program window. A trap message also appears when log files exceed limits and to any CPU load that is over or under threshold.

## How to Monitor System Status and Components

This section contains the following:

- [Changing Cisco SPS System Information, page 5-14](#)
- [Checking System Status and Components, page 5-14](#)

### Changing Cisco SPS System Information

#### Detailed Steps

- 
- Step 1** Access CIAgent.
  - Step 2** Open the SNMP directives (/etc/srconf/agt/snmpd.cnf) file.
  - Step 3** Change the default information in any of the following:
    - sysLocation—Physical location of this managed system (for example, 2nd rack, 3rd floor)
    - sysContact—Contact person for this managed system
    - sysName—fully qualified domain name (FQDN) of this managed system
  - Step 4** Save and close the file.
  - Step 5** Stop and restart CIAgent.
- 

### Checking System Status and Components

#### Detailed Steps

- 
- Step 1** Log in to CIAgent Dr-Web.
  - Step 2** Click **System Applications Monitor**.
  - Step 3** Do any of the following.

**Note**

In the following commands, the variable <location> indicates the local host or the IP address or host name of the system that runs CIAgent.

- To check memory size, use the following **getmany** command:

```
getmany -v2c <location> cspsAdmin hrMemorySize
```

- To check disk space, use the following **getmany** command:

```
getmany -v2c <location> cspsAdmin hrStorageEntry
```




---

**Note** Refer to the HrStorageEntry in the Host Resources MIB for more detail.

---

- To check link status from MIB-2, use the following **getmany** command:

```
getmany -v2c <location> cspsAdmin ifTable
```

**Link Description Output Example**

```
ifDescr.1 = lo0
ifDescr.2 = hme0
```

**Link Up/Down Status Output Example**

```
ifOperStatus.1 = up(1)
ifOperStatus.2 = up(1)
```

**Link Type Output Example**

```
ifType.1 = softwareLoopback(24)
ifType.2 = ethernet_csmacd(6)
```

**Link MTU Output Example**

```
ifMtu.1 = 8232
ifMtu.2 = 1500
```




---

**Note** Refer to MIB-2 for more detail.

---

- To check system components, use the following **getmany** commands.




---

**Note** In the following commands, the variable *<location>* indicates the local host or the IP address or host name of the system that runs CIAgent.

---

```
getmany -v2c <location> cspsAdmin sysApplInstalled
getmany -v2c <location> cspsAdmin sysAppRun
getmany -v2c <location> cspsAdmin sysApplInstallPkgProductName
getmany -v2c <location> cspsAdmin sysApplInstallPkgDate
getmany -v2c <location> cspsAdmin sysApplInstallPkgLocation
```

**Step 4** Reload the page and check the operational status to verify that Cisco SPS is running.

---

