



CHAPTER 5

SNMP Agent Commands

This chapter describes the command line interface (CLI) commands that you can use to manage and monitor the SNMP agent in the Broadband Access Center (BAC) Device Provisioning Engine (DPE).

The commands described in this chapter are:

- [snmp-server community, page 5-1](#)
- [no snmp-server community, page 5-2](#)
- [snmp-server contact, page 5-2](#)
- [no snmp-server contact, page 5-3](#)
- [snmp-server host, page 5-3](#)
- [no snmp-server host, page 5-4](#)
- [snmp-server inform, page 5-4](#)
- [no snmp-server inform, page 5-5](#)
- [snmp-server location, page 5-5](#)
- [no snmp-server location, page 5-5](#)
- [snmp-server reload, page 5-6](#)
- [snmp-server start | stop, page 5-6](#)
- [snmp-server udp-port, page 5-7](#)
- [no snmp-server udp-port, page 5-7](#)

snmp-server community

Use this command to set up the community access string to allow access for external SNMP managers to the DPE SNMP agent.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To delete a specified community string, use the **no** form of this command (see [no snmp-server community, page 5-2](#)).

Syntax Description

snmp-server community *string* [**ro** | **rw**]

- *string*—Identifies the SNMP community.
- **ro**—Assigns a read-only (ro) community string. Only Get requests (queries) can be performed. The NMS and the managed device must reference the same community string.
- **rw**—Assigns a read-write (rw) community string. SNMP applications require rw access for Set operations. The rw community string enables write access to OID values.

**Note**

The default **ro** and **rw** community strings are **bacread** and **bacwrite**, respectively. Cisco recommends that you change these values before deploying BAC.

Examples

```
dpe# snmp-server community test_community ro
% OK ()
Requires SNMP agent restart "# snmp-server reload"
```

no snmp-server community

Use this command to delete the specified community string.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To set up the community access string to allow access for external SNMP managers to the DPE SNMP agent, use the **snmp-server community** command. See [snmp-server community, page 5-1](#), for more information.

Syntax Description

no snmp-server community *string*

string—Identifies the SNMP community.

Examples

```
dpe# no snmp-server community test_community
% OK ()
Requires SNMP agent restart "# snmp-server reload"
```

snmp-server contact

Use this command to enter a string of characters that identify the system contact (sysContact) as defined in the MIB II.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To remove the system contact that was responsible for the DPE, use the **no** form of this command. See [no snmp-server contact, page 5-3](#), for more information.

Syntax Description

snmp-server contact *text*

text—Identifies the name of the contact responsible for the DPE.

Examples

```
dpe# snmp-server contact joe
% OK (Requires SNMP server restart "# snmp-server reload")
```

no snmp-server contact

Use this command to remove the system contact that was responsible for the DPE.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To enter a string of characters that identify the system contact, use the **snmp-server contact** command. See [snmp-server contact, page 5-2](#), for more information.

Syntax Description

No keywords or arguments.

Examples

```
dpe# no snmp-server contact
% OK (Requires SNMP server restart "# snmp-server reload")
```

snmp-server host

Use this command to specify the recipient of all SNMP notifications. It is possible to use multiple instances of this command to specify more than one notification recipient.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To remove the specified notification recipient, use the **no** form of this command. See [no snmp-server host, page 5-4](#), for more information.

Syntax Description

snmp-server host *host-addr* **notification** **community** *community* **udp-port** *port*

- *host-addr*—Specifies the IP address of the host to which notifications are sent.
- *community*—Specifies the community string to use while sending SNMP notifications.
- *port*—Identifies the UDP port used to send SNMP notifications. The default UDP port number is 162.

Examples

```
dpe# snmp-server host 10.10.10.5 notification community public udp-port 162
% OK ()
Requires SNMP agent restart "# snmp-server reload"
```

no snmp-server host

Use this command to remove the specified notification recipient.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To specify the recipient of all SNMP notifications, use the **snmp-server host** command. See [snmp-server host, page 5-3](#), for more information.

Syntax Description

no snmp-server host *host-addr* **notification**

host-addr—Identifies the IP address of the host

Examples

```
dpe# no snmp-server host 10.10.10.5 notification
% OK ()
Requires SNMP agent restart "# snmp-server reload"
```

snmp-server inform

Use this command to specify the type of SNMP notification sent, from the SNMP agent, to the SNMP manager. Use it to send SNMP informs rather than traps; although traps are sent by default.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To switch the SNMP notifications back to the default setting of traps, use the **no** form of this command. See [no snmp-server inform, page 5-5](#), for more information.

Syntax Description

snmp-server inform [**retries** *count* **timeout** *time*]

- *count*—Identifies the number of times that an inform can be sent from the SNMP agent to the manager. If the timeout period expires before the configured number of retries is reached, the SNMP server will cease sending informs.
- *time*—Identifies the length of time (in milliseconds) that the SNMP server will continue sending informs. If the maximum number of retries is reached before the timeout expires, the SNMP server will cease sending informs.



Note

Specification of the retry count and timeout, while configuring SNMP informs, is optional. If not specified, the default values of 1 retry and 5000 milliseconds are used.

Examples

```
dpe# snmp-server inform retries 5 timeout 500
% OK ()
Requires SNMP server restart "# snmp-server reload"
```

From this example, an SNMP inform will be sent up to a maximum of 5 times, before the retries stop. If the timeout of 500 milliseconds expires before the 5 retries takes place, the inform is not sent again.

no snmp-server inform

Use this command to switch the SNMP notifications that are sent to the SNMP manager, back to the default setting of traps.

To specify the type of SNMP notification sent, use the **snmp-server inform** command. See [snmp-server inform, page 5-4](#), for more information.

Syntax Description	No keywords or arguments.
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Examples	<pre>dpe# no snmp-server inform % OK</pre>
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snmp-server location

Use this command to enter a string of characters that identify the system location (sysLocation) as defined in the MIB II.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To remove a system location, use the **no** form of this command. See [no snmp-server location, page 5-5](#), for more information.

Syntax Description	snmp-server location <i>text</i>
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text—Identifies the physical location of the DPE.

Examples	<pre>dpe# snmp-server location st_louis % OK (Requires SNMP server restart "# snmp-server reload")</pre>
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no snmp-server location

Use this command to remove a system location.

After you use this command, run the **snmp-server reload** command to restart the SNMP agent. See [snmp-server reload, page 5-6](#), for additional information.

To enter a string of characters that identify the system location, use the **snmp-server location** command. See [snmp-server location, page 5-5](#), for more information.

Syntax Description	No keywords or arguments.
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Examples

```
dpe# no snmp-server location
% OK (Requires SNMP server restart "# snmp-server reload")
```

snmp-server reload

Use this command to reload the SNMP agent process on the DPE. After this command is entered the SNMP agent processes that are reloaded appear.

**Note**

When the SNMP process is started on the RDU and DPE, a trap containing the system uptime is sent. BAC trap notifications, however, are disabled by default. You can only enable trap notifications by setting the corresponding MIB object via SNMP. You cannot enable trap notification via the CLI or the administrator user interface.

This BAC release supports only the trap notifications defined in the CISCO-BACC-SERVER-MIB file. For more information, refer to the MIB files under the *BPR_HOME/rdu/mibs* directory.

Syntax Description

No keywords or arguments.

Examples

```
dpe# snmp-server reload
Process snmpAgent has been restarted
dpe#
```

snmp-server start | stop

Use this command to start or stop the SNMP agent process on the DPE.

Syntax Description

snmp-server start | stop

- **start**—Starts the SNMP agent process on the DPE.

**Note**

Use this command only when the SNMP agent is not running. If you run this command when the SNMP agent is already running, the following message appears:

```
Process snmpAgent is already running
```

- **stop**—Stops the SNMP agent process on the DPE.

Examples**Example 1**

```
dpe# snmp-server start
Process snmpAgent has been started
% OK
```

Example 2

```
dpe# snmp-server stop
Process snmpAgent has been stopped
dpe#
```

snmp-server udp-port

Use this command to identify the UDP port number to which the SNMP agent listens.

The DPE requires this command to prevent potential sharing violations between ports that other applications use. The changing of port numbers is used to resolve potential port conflict.

The SNMP agent's default port number, 8001, is different from the standard well-known SNMP agent port to eliminate potential port conflicts with other SNMP agents on the Solaris computer.

**Note**

Cisco recommends that you change the UDP port to the well-known port, number 161, for the SNMP agent.

To change the port to which the SNMP agent listens back to the default UDP port number, use the **no** form of this command. See [no snmp-server udp-port, page 5-7](#), for more information.

Syntax Description

snmp-server udp-port *port*

port—Identifies the UDP port to which the SNMP agent listens.

Examples

```
dpe# snmp-server udp-port 161
% OK
```

no snmp-server udp-port

Use this command to change the port to which the SNMP agent listens back to the default UDP port number (8001).

**Note**

Using a port number other than the standard, well-known SNMP agent port number of 161 may increase the likelihood of potential port conflicts with other SNMP agents running on the same Solaris computer.

To identify the UDP port number to which the SNMP agent listens, use the **snmp-server udp-port** command. See [snmp-server udp-port, page 5-7](#), for more information.

Syntax Description

No keywords or arguments.

Examples

```
dpe# no snmp-server udp-port
% OK
```

no snmp-server udp-port