

SNMP Commands

This chapter describes the commands you use to configure System Network Management Protocol (SNMP) parameters, such as management station and traps.

Note The command syntax includes a combination of bold and regular uppercase and lowercase alphanumeric characters. You can enter commands in full or you can enter abbreviated forms of many commands. The abbreviated form consists of the first characters in each word of the syntax that appear in bold uppercase type in command syntax in this chapter. These characters represent the minimum you must enter for the command to be recognized and executed.

reset snmp trap host

To delete one or all of the configured trap hosts, use the **reset snmp trap host** command.

REset SNmp TRaphost [<**ip address**> | **ALl**]

Syntax Description

ip address IP address of the configured trap host in four part dotted decimal notation.

all Deletes all configured trap hosts.

Default

None

Command Mode

System level

Example

The following example deletes one trap host:

```
Host> reset snmp traphost 150.150.50.25
```

Related Command

set snmp trap host

set snmp contact

To enter the username that is associated with all SNMP information that is forwarded to the trap host, use the **set snmp contact** command.

SEt SNmp COn tact <contact name>

Syntax Description

contact name User name that is associated with all SNMP information. Must be between 1 and 64 characters. If it includes spaces, the entire string of characters must be enclosed in quotation marks.

Default

None

Command Mode

System level

Usage Guidelines

To delete the contact name, enter the command without the contact name argument.

Examples

The following example configures a contact name to be associated with SNMP information:

```
Host> set snmp contact John Doe
```

The following example deletes the contact name:

```
Host> set snmp contact
```

set snmp contact

Related Commands

set snmp location

set snmp trap

set snmp trap host

show snmp

set snmp location

To configure the location name of the router that is associated with all SNMP information, use the **set snmp location** command.

SEt SNmp LOcation <location>

Syntax Description

location Location name that is associated with all SNMP information. Must be between 1 and 64 characters. If the name includes spaces, the entire string of characters must be enclosed in quotation marks.

Default

None

Command Mode

System level

Usage Guidelines

To delete the contact name, enter the command without the location-name argument.

Examples

The following example configures a location name to be associated with SNMP information:

```
Host> set snmp location San Jose
```

The following example deletes the location name:

```
Host> set snmp location
```

set snmp location

Related Commands

set snmp contact

set snmp trap

set snmp trap host

show snmp

set snmp trap

To configure when traps are sent to the network management station, use the **set snmp trap** command.

```
SEt SNmp TRap [COldstart = ON| OFF] [WArmstart = ON| OFF] [LInkup=
ON| OFF] [LInkdown ON | OFF] [AUthenticationfail ON| OFF]
```

Syntax Description

on	Traps are sent when any of the listed conditions (coldstart, warmstart, linkup, linkdown, or authentication failure) occur.
off	Traps are not sent when any of the listed conditions (coldstart, warmstart, linkup, linkdown, or authentication failure) occur.
coldstart	(Optional) Permanent storage is determined to be invalid. If this happens, the router automatically reverts to default values.
warmstart	(Optional) The router is rebooted, except when it sends a coldstart.
linkup	(Optional) A new connection is established. Does not apply to individual B channel establishment.
linkdown	(Optional) A connection is closed. Does not apply to individual B channels closing.
authenticationfail	(Optional) Authentication fails.

Default

Traps are never sent (all off).

Command Mode

System level

set snmp trap

Example

The following example configures the router to send traps when the router is rebooted and when authentication fails:

```
Host> set snmp trap warmstart on authenticationfail on
```

Related Commands

set snmp contact

set snmp trap host

show snmp

set snmp trap host

To configure the router with the IP address of a network management station that receives SNMP traps, use the **set snmp trap host** command.

SEt SNmp TRAPHost <ip address>

Syntax Description

ip address IP address of a network management station that receives the SNMP traps in four part dotted decimal notation. A maximum of eight different IP addresses can be entered with this command.

Default

The default IP address is 0.0.0.0.

Command Mode

System level

Example

The following example configures the router with the IP address of a network management station that will receive traps from the router:

```
Host> set snmp traphost 150.150.50.25
```

Related Commands

reset snmp trap host
set snmp contact
set snmp trap
show snmp

show snmp

show snmp

To display SNMP configuration for the router, use the **show snmp** command.

SHow **S**Nmp

Syntax Description

This command has no arguments or keywords.

Default

None

Command Mode

System level or profile mode

Sample Display

The following sample display shows output from the **show snmp** command:

```
Host> show snmp

SNMP
Contact John Doe
Location San Jose
Trap COLDSTART OFF
Trap WARMSTART ON
Trap LINKDOWN OFF
Trap LINKUP OFF
Trap AUTHENTICATIONFAIL ON
Trap Host 150.150.50.25
Trap Host 150.150.30.35
```

Table 11-1 describes the fields shown in the display.

Table 11-1 Show SNMP Field Descriptions

Field	Description
Contact	Router's contact name.
Location	Router's location.
Coldstart	Indicates whether a trap is sent when permanent storage is determined to be invalid. Can be On or Off.
Warmstart	Indicates whether a trap is sent when the unit is rebooted. Can be On or Off.
Linkdown	Indicates whether a trap is sent when a connection closes. Can be On or Off.
Linkup	Indicates whether a trap is sent when a connection opens. Can be On or Off.
Authentication fail	Indicates whether a trap is sent when authentication fails. Can be On or Off.
Trap Host	IP address(es) of management stations where traps are sent.

show snmp
