



show pxf accounting through test cef table consistency

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snmp-server host

To specify the recipient of a Simple Network Management Protocol (SNMP) notification operation, use the **snmp-server host** command in global configuration mode. To remove the specified host from the configuration, use the **no** form of this command.

```
snmp-server host {hostname| ip-address} [vrf vrf-name| informs| traps| version {1| 2c| 3} [auth| noauth| priv]] community-string [udp-port port [ notification-type ] notification-type]
```

```
no snmp-server host {hostname| ip-address} [vrf vrf-name| informs| traps| version {1| 2c| 3} [auth| noauth| priv]] community-string [udp-port port [ notification-type ] notification-type]
```

Command Syntax on Cisco ME 3400, ME 3400E, and Catalyst 3750 Metro Switches

```
snmp-server host ip-address {community-string| informs| traps} {community-string| version {1| 2c| 3} {auth| noauth}} {community-string| vrf vrf-name {informs| traps}} [ notification-type]
```

```
no snmp-server host ip-address {community-string| informs| traps} {community-string| version {1| 2c| 3} {auth| noauth}} {community-string| vrf vrf-name {informs| traps}} [ notification-type]
```

Command Syntax on Cisco 7600 Series Router

```
snmp-server host ip-address {community-string| {informs| traps} {community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string| vrf vrf-name {informs| traps} {community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string}} [ notification-type ]
```

```
no snmp-server host ip-address {community-string| {informs| traps} {community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string| vrf vrf-name {informs| traps} {community-string| version {1| 2c| 3} {auth| noauth| priv}} community-string}} [ notification-type ]
```

Syntax Description

| | |
|-------------------|---|
| <i>hostname</i> | Name of the host. The SNMP notification host is typically a network management station (NMS) or SNMP manager. This host is the recipient of the SNMP traps or informs. |
| <i>ip-address</i> | IPv4 address or IPv6 address of the SNMP notification host. |
| vrf | (Optional) Specifies that a VPN routing and forwarding (VRF) instance should be used to send SNMP notifications. <ul style="list-style-type: none"> In Cisco IOS Release 12.2(54)SE, the vrf keyword is required. |

| | |
|-----------------|--|
| <i>vrf-name</i> | <p>(Optional) VPN VRF instance used to send SNMP notifications.</p> <ul style="list-style-type: none"> • In Cisco IOS Release 12.2(54)SE, the <i>vrf-name</i> argument is required. |
| informs | <p>(Optional) Specifies that notifications should be sent as informs.</p> <ul style="list-style-type: none"> • In Cisco IOS Release 12.2(54)SE, the informs keyword is required. |
| traps | <p>(Optional) Specifies that notifications should be sent as traps. This is the default.</p> <ul style="list-style-type: none"> • In Cisco IOS Release 12.2(54)SE, the traps keyword is required. |
| version | <p>(Optional) Specifies the version of the SNMP that is used to send the traps or informs. The default is 1.</p> <ul style="list-style-type: none"> • In Cisco IOS Release 12.2(54)SE, the version keyword is required and the priv keyword is not supported. <p>If you use the version keyword, one of the following keywords must be specified:</p> <ul style="list-style-type: none"> • 1 --SNMPv1. • 2c --SNMPv2C. • 3 --SNMPv3. The most secure model because it allows packet encryption with the priv keyword. The default is noauth. <p>One of the following three optional security level keywords can follow the 3 keyword:</p> <ul style="list-style-type: none"> • auth --Enables message digest algorithm 5 (MD5) and Secure Hash Algorithm (SHA) packet authentication. • noauth --Specifies that the noAuthNoPriv security level applies to this host. This is the default security level for SNMPv3. • priv --Enables Data Encryption Standard (DES) packet encryption (also called “privacy”). |

| | |
|--------------------------|---|
| <i>community-string</i> | <p>Password-like community string sent with the notification operation.</p> <p>Note You can set this string using the snmp-server host command by itself, but Cisco recommends that you define the string using the snmp-server community command prior to using the snmp-server host command.</p> <p>Note The “at” sign (@) is used for delimiting the context information.</p> |
| udp-port | <p>(Optional) Specifies that SNMP traps or informs are to be sent to a network management system (NMS) host.</p> <ul style="list-style-type: none"> In Cisco IOS Release 12.2(54)SE, the udp-port keyword is not supported. |
| <i>port</i> | <p>(Optional) User Datagram Protocol (UDP) port number of the NMS host. The default is 162.</p> <ul style="list-style-type: none"> In Cisco IOS Release 12.2(54)SE, the <i>port</i> argument is not supported. |
| <i>notification-type</i> | <p>(Optional) Type of notification to be sent to the host. If no type is specified, all available notifications are sent. See the “Usage Guidelines” section for more information about the keywords available.</p> |

Command Default

This command behavior is disabled by default. A recipient is not specified to receive notifications.

Command Modes

Global configuration (config)

Command History

| Release | Modification |
|--|------------------------------|
| 10.0 | This command was introduced. |
| Cisco IOS Release 12 and 15 Mainline/T Train | |

| Release | Modification |
|-----------|---|
| 12.0(3)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The version 3 [auth noauth priv] syntax was added as part of the SNMPv3 Support feature. • The hsrp notification-type keyword was added. • The voice notification-type keyword was added. |
| 12.1(3)T | <p>This command was modified. The calltracker notification-type keyword was added for the Cisco AS5300 and AS5800 platforms.</p> |
| 12.2(2)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The vrf <i>vrf-name</i> keyword-argument pair was added. • The ipmobile notification-type keyword was added. • Support for the vsimaster notification-type keyword was added for the Cisco 7200 and Cisco 7500 series routers. |
| 12.2(4)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The pim notification-type keyword was added. • The ipsec notification-type keyword was added. |
| 12.2(8)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The mpls-traffic-eng notification-type keyword was added. • The director notification-type keyword was added. |
| 12.2(13)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The srp notification-type keyword was added. • The mpls-ldp notification-type keyword was added. |
| 12.3(2)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The flash notification-type keyword was added. • The l2tun-session notification-type keyword was added. |
| 12.3(4)T | <p>This command was modified.</p> <ul style="list-style-type: none"> • The cpu notification-type keyword was added. • The memory notification-type keyword was added. • The ospf notification-type keyword was added. |

| Release | Modification |
|-------------------------|---|
| 12.3(8)T | This command was modified. The iplocalpool notification-type keyword was added for the Cisco 7200 and 7301 series routers. |
| 12.3(11)T | This command was modified. The vrrp keyword was added. |
| 12.3(14)T | This command was modified. <ul style="list-style-type: none"> • Support for SNMP over IPv6 transport was integrated into Cisco IOS Release 12.3(14)T. Either an IP or IPv6 Internet address can be specified as the <i>hostname</i> argument. • The eigrp notification-type keyword was added. |
| 12.4(20)T | This command was modified. The license notification-type keyword was added. |
| 15.0(1)M | This command was modified. <ul style="list-style-type: none"> • The nhrp notification-type keyword was added. • The automatic insertion of the snmp-server community command into the configuration, along with the community string specified in the snmp-server host command, was changed. The snmp-server community command must be manually configured. |
| Cisco IOS Release 12.0S | |
| 12.0(17)ST | This command was modified. The mpls-traffic-eng notification-type keyword was added. |
| 12.0(21)ST | This command was modified. The mpls-ldp notification-type keyword was added. |
| 12.0(22)S | This command was modified. <ul style="list-style-type: none"> • All features in Cisco IOS Release 12.0ST were integrated into Cisco IOS Release 12.0(22)S. • The mpls-vpn notification-type keyword was added. |
| 12.0(23)S | This command was modified. The l2tun-session notification-type keyword was added. |
| 12.0(26)S | This command was modified. The memory notification-type keyword was added. |

| Release | Modification |
|-------------------------|--|
| 12.0(27)S | <p>This command was modified.</p> <ul style="list-style-type: none"> • Support for SNMP over IPv6 transport was added. Either an IP or IPv6 Internet address can be specified as the <i>hostname</i> argument. • The vrf <i>vrf-name</i> keyword and argument combination was added to support multiple Lightweight Directory Protocol (LDP) contexts for VPNs. |
| 12.0(31)S | This command was modified. The l2tun-pseudowire-status notification-type keyword was added. |
| Cisco IOS Release 12.2S | |
| 12.2(18)S | This command was integrated into Cisco IOS Release 12.2(18)S. |
| 12.2(25)S | <p>This command was modified.</p> <ul style="list-style-type: none"> • The cpu notification-type keyword was added. • The memory notification-type keyword was added. |
| 12.2(28)SB | This command was integrated into Cisco IOS Release 12.2(28)SB. |
| 12.2(33)SRA | This command was integrated into Cisco IOS Release 12.2(33)SRA. |
| 12.2(31)SB2 | The cef notification-type keyword was added. |
| 12.2(33)SXH | This command was integrated into Cisco IOS Release 12.2(33)SXH. |
| 12.2(33)SB | This command was integrated into Cisco IOS Release 12.2(33)SB. |
| 12.2(33)SXI5 | <p>This command was modified.</p> <ul style="list-style-type: none"> • The dhcp-snooping notification-type keyword was added. • The errdisable notification-type keyword was added. |
| 12.2(54)SE | This command was modified. See the snmp-server host , on page 2 for the command syntax for these switches. |
| 12.2(33)SXJ | This command was integrated into Cisco IOS Release 12.2(33)SXJ. The public storm-control notification-type keyword was added. |
| Cisco IOS Release 15S | |
| 15.0(1)S | This command was modified. The flowmon notification-type keyword was added. |
| Cisco IOS XE Releases | |

| Release | Modification |
|--------------------------|---|
| Cisco IOS XE Release 2.1 | This command was integrated into Cisco IOS XE Release 2.1. |
| 15.2(1)S | This command was modified. The p2mp-traffic-eng notification-type keyword was added. |

Usage Guidelines

If you enter this command with no optional keywords, the default is to send all notification-type traps to the host. No informs will be sent to the host.

The **no snmp-server host** command with no keywords disables traps, but not informs, to the host. To disable informs, use the **no snmp-server host informs** command.



Note

If a community string is not defined using the **snmp-server community** command prior to using this command, the default form of the **snmp-server community** command will automatically be inserted into the configuration. The password (community string) used for this automatic configuration of the **snmp-server community** command will be the same as that specified in the **snmp-server host** command. This automatic command insertion and use of passwords is the default behavior for Cisco IOS Release 12.0(3) and later releases. However, in Cisco IOS Release 12.2(33)SRE and later releases, you must manually configure the **snmp-server community** command. That is, the **snmp-server community** command will not be seen in the configuration.

SNMP notifications can be sent as traps or inform requests. Traps are unreliable because the receiver does not send acknowledgments when it receives traps. The sender cannot determine if the traps were received. However, an SNMP entity that receives an inform request acknowledges the message with an SNMP response protocol data unit (PDU). If the sender never receives the response, the inform request can be sent again. Thus, informs are more likely to reach their intended destination than traps.

Compared to traps, informs consume more resources in the agent and in the network. Unlike a trap, which is discarded as soon as it is sent, an inform request must be held in memory until a response is received or the request times out. Also, traps are sent only once; an inform may be tried several times. The retries increase traffic and contribute to a higher overhead on the network.

If you do not enter an **snmp-server host** command, no notifications are sent. To configure the router to send SNMP notifications, you must enter at least one **snmp-server host** command. If you enter the command with no optional keywords, all trap types are enabled for the host.

To enable multiple hosts, you must issue a separate **snmp-server host** command for each host. You can specify multiple notification types in the command for each host.

When multiple **snmp-server host** commands are given for the same host and kind of notification (trap or inform), each succeeding command overwrites the previous command. Only the last **snmp-server host** command will be in effect. For example, if you enter an **snmp-server host inform** command for a host and then enter another **snmp-server host inform** command for the same host, the second command will replace the first.

The **snmp-server host** command is used in conjunction with the **snmp-server enable** command. Use the **snmp-server enable** command to specify which SNMP notifications are sent globally. For a host to receive most notifications, at least one **snmp-server enable** command and the **snmp-server host** command for that host must be enabled.

Some notification types cannot be controlled with the **snmp-server enable** command. Some notification types are always enabled, and others are enabled by a different command. For example, the **linkUpDown** notifications are controlled by the **snmp trap link-status** command. These notification types do not require an **snmp-server enable** command.

The availability of notification-type options depends on the router type and the Cisco IOS software features supported on the router. For example, the **envmon** notification type is available only if the environmental monitor is part of the system. To see what notification types are available on your system, use the command **help ?** at the end of the **snmp-server host** command.

The **vrf** keyword allows you to specify the notifications being sent to a specified IP address over a specific VRF VPN. The VRF defines a VPN membership of a user so that data is stored using the VPN.

In the case of the NMS sending the query having a correct SNMP community but not having a read or a write view, the SNMP agent returns the following error values:

- For a get or a getnext query, returns GEN_ERROR for SNMPv1 and AUTHORIZATION_ERROR for SNMPv2C.
- For a set query, returns NO_ACCESS_ERROR.

Notification-Type Keywords

The notification type can be one or more of the following keywords.



Note

The available notification types differ based on the platform and Cisco IOS release. For a complete list of available notification types, use the question mark (?) online help function.

- **aaa server** --Sends SNMP authentication, authorization, and accounting (AAA) traps.
- **adsl** --Sends Asymmetric Digital Subscriber Line (ADSL) LINE-MIB traps.
- **atm** --Sends ATM notifications.
- **authenticate-fail** --Sends an SNMP 802.11 Authentication Fail trap.
- **auth-framework** --Sends SNMP CISCO-AUTH-FRAMEWORK-MIB notifications.
- **bgp** --Sends Border Gateway Protocol (BGP) state change notifications.
- **bridge** --Sends SNMP STP Bridge MIB notifications.
- **bstun** --Sends Block Serial Tunneling (BSTUN) event notifications.
- **bulkstat** --Sends Data-Collection-MIB notifications.
- **c6kxbar** --Sends SNMP crossbar notifications.
- **callhome** --Sends Call Home MIB notifications.
- **calltracker** -- Sends Call Tracker call-start/call-end notifications.
- **casa** --Sends Cisco Appliances Services Architecture (CASA) event notifications.
- **ccme** --Sends SNMP Cisco netManager Event (CCME) traps.
- **cef** --Sends notifications related to Cisco Express Forwarding.
- **chassis** --Sends SNMP chassis notifications.

- **cnpd** --Sends Cisco Network-based Application Recognition (NBAR) Protocol Discovery (CNPd) traps.
- **config** --Sends configuration change notifications.
- **config-copy** --Sends SNMP config-copy notifications.
- **config-ctid** --Sends SNMP config-ctid notifications.
- **cpu** --Sends CPU-related notifications.
- **csg** --Sends SNMP Content Services Gateway (CSG) notifications.
- **deauthenticate** --Sends an SNMP 802.11 Deauthentication trap.
- **dhcp-snooping** --Sends DHCP snooping MIB notifications.
- **director** --Sends notifications related to DistributedDirector.
- **disassociate** --Sends an SNMP 802.11 Disassociation trap.
- **dlsu** --Sends data-link switching (DLSW) notifications.
- **dnis** --Sends SNMP Dialed Number Identification Service (DNIS) traps.
- **dot1x** --Sends 802.1X notifications.
- **dot11-mibs** --Sends dot11 traps.
- **dot11-qos** --Sends SNMP 802.11 QoS Change trap.
- **ds1** --Sends SNMP digital signaling 1 (DS1) notifications.
- **ds1-loopback** --Sends ds1-loopback traps.
- **dspu** --Sends downstream physical unit (DSPU) notifications.
- **eigrp** --Sends Enhanced Interior Gateway Routing Protocol (EIGRP) stuck-in-active (SIA) and neighbor authentication failure notifications.
- **energywise** --Sends SNMP energywise notifications.
- **entity** --Sends Entity MIB modification notifications.
- **entity-diag** --Sends SNMP entity diagnostic MIB notifications.
- **envmon** --Sends Cisco enterprise-specific environmental monitor notifications when an environmental threshold is exceeded.
- **errdisable** --Sends error disable notifications.
- **ethernet-cfm** --Sends SNMP Ethernet Connectivity Fault Management (CFM) notifications.
- **event-manager** --Sends SNMP Embedded Event Manager notifications.
- **firewall** --Sends SNMP Firewall traps.
- **flash** --Sends flash media insertion and removal notifications.
- **flexlinks** --Sends FLEX links notifications.
- **flowmon** --Sends flow monitoring notifications.
- **frame-relay** --Sends Frame Relay notifications.

- **fru-ctrl** --Sends entity field-replaceable unit (FRU) control notifications.
- **hsrp** --Sends Hot Standby Routing Protocol (HSRP) notifications.
- **icsudsu** --Sends SNMP ICSUDSU traps.
- **iplocalpool** --Sends IP local pool notifications.
- **ipmobile** --Sends Mobile IP notifications.
- **ipmulticast** --Sends IP multicast notifications.
- **ipsec** --Sends IP Security (IPsec) notifications.
- **isakmp** --Sends SNMP ISAKMP notifications.
- **isdn** --Sends ISDN notifications.
- **l2tc** --Sends SNMP L2 tunnel configuration notifications.
- **l2tun-pseudowire-status** --Sends pseudowire state change notifications.
- **l2tun-session** --Sends Layer 2 tunneling session notifications.
- **license** --Sends licensing notifications as traps or informs.
- **llc2** --Sends Logical Link Control, type 2 (LLC2) notifications.
- **mac-notification** --Sends SNMP MAC notifications.
- **memory** --Sends memory pool and memory buffer pool notifications.
- **module** --Sends SNMP module notifications.
- **module-auto-shutdown** --Sends SNMP module autosutdown MIB notifications.
- **mpls-fast-reroute** --Sends SNMP Multiprotocol Label Switching (MPLS) traffic engineering fast reroute notifications.
- **mpls-ldp** --Sends MPLS Label Distribution Protocol (LDP) notifications indicating status changes in LDP sessions.
- **mpls-traffic-eng** --Sends MPLS traffic engineering notifications, indicating changes in the status of MPLS traffic engineering tunnels.
- **mpls-vpn** --Sends MPLS VPN notifications.
- **msdp** --Sends SNMP Multicast Source Discovery Protocol (MSDP) notifications.
- **mvpn** --Sends multicast VPN notifications.
- **nhrp** --Sends Next Hop Resolution Protocol (NHRP) notifications.
- **ospf** --Sends Open Shortest Path First (OSPF) sham-link notifications.
- **pim** --Sends Protocol Independent Multicast (PIM) notifications.
- **port-security** --Sends SNMP port-security notifications.
- **power-ethernet** --Sends SNMP power Ethernet notifications.
- **public storm-control** --Sends SNMP public storm-control notifications.
- **pw-vc** --Sends SNMP pseudowire virtual circuit (VC) notifications.

- **p2mp-traffic-eng**--Sends SNMP MPLS Point to Multi-Point MPLS-TE notifications.
- **repeater** --Sends standard repeater (hub) notifications.
- **resource-policy** --Sends CISCO-ERM-MIB notifications.
- **rf** --Sends SNMP RF MIB notifications.
- **rogue-ap** --Sends an SNMP 802.11 Rogue AP trap.
- **rsrb** --Sends remote source-route bridging (RSRB) notifications.
- **rsvp** --Sends Resource Reservation Protocol (RSVP) notifications.
- **rtr** --Sends Response Time Reporter (RTR) notifications.
- **sdlc** --Sends Synchronous Data Link Control (SDLC) notifications.
- **sdllc** --Sends SDLC Logical Link Control (SDLLC) notifications.
- **slb** --Sends SNMP server load balancer (SLB) notifications.
- **snmp** --Sends any enabled RFC 1157 SNMP linkUp, linkDown, authenticationFailure, warmStart, and coldStart notifications.

**Note**

To enable RFC-2233-compliant link up/down notifications, you should use the **snmp server link trap** command.

- **sonet** --Sends SNMP SONET notifications.
- **srp** --Sends Spatial Reuse Protocol (SRP) notifications.
- **stpx** --Sends SNMP STPX MIB notifications.
- **srst** --Sends SNMP Survivable Remote Site Telephony (SRST) traps.
- **stun** --Sends serial tunnel (STUN) notifications.
- **switch-over** --Sends an SNMP 802.11 Standby Switchover trap.
- **syslog** --Sends error message notifications (Cisco Syslog MIB). Use the **logging history level** command to specify the level of messages to be sent.
- **syslog** --Sends error message notifications (Cisco Syslog MIB). Use the **logging history level** command to specify the level of messages to be sent.
- **tty** --Sends Cisco enterprise-specific notifications when a TCP connection closes.
- **udp-port** --Sends the notification host's UDP port number.
- **vlan-mac-limit** --Sends SNMP L2 control VLAN MAC limit notifications.
- **vlancreate** --Sends SNMP VLAN created notifications.
- **vlandelete** --Sends SNMP VLAN deleted notifications.
- **voice** --Sends SNMP voice traps.
- **vrrp** --Sends Virtual Router Redundancy Protocol (VRRP) notifications.
- **vsimaster** --Sends Virtual Switch Interface (VSI) Master notifications.

- **vswitch** --Sends SNMP virtual switch notifications.
- **vtp** --Sends SNMP VLAN Trunking Protocol (VTP) notifications.
- **wlan-wep** --Sends an SNMP 802.11 Wireless LAN (WLAN) Wired Equivalent Privacy (WEP) trap.
- **x25** --Sends X.25 event notifications.
- **xgcp** --Sends External Media Gateway Control Protocol (XGCP) traps.

SNMP-Related Notification-Type Keywords

The *notification-type* argument used in the **snmp-server host** command do not always match the keywords used in the corresponding **snmp-server enable traps** command. For example, the *notification-type* argument applicable to Multiprotocol Label Switching Protocol (MPLS) traffic engineering tunnels is specified as **mpls-traffic-eng** (containing two hyphens and no embedded spaces). The corresponding parameter in the **snmp-server enable traps** command is specified as **mpls traffic-eng** (containing an embedded space and a hyphen).

This syntax difference is necessary to ensure that the CLI interprets the *notification-type* keyword of the **snmp-server host** command as a unified, single-word construct, which preserves the capability of the **snmp-server host** command to accept multiple *notification-type* keywords in the command line. The **snmp-server enable traps** commands, however, often use two-word constructs to provide hierarchical configuration options and to maintain consistency with the command syntax of related commands. The table below maps some examples of **snmp-server enable traps** commands to the keywords used in the **snmp-server host** command.

Table 1: snmp-server enable traps Commands and Corresponding Notification Keywords

| snmp-server enable traps Command | snmp-server host Command Keyword |
|--|---|
| snmp-server enable traps l2tun session | l2tun-session |
| snmp-server enable traps mpls ldp | mpls-ldp |
| snmp-server enable traps mpls traffic-eng ¹ | mpls-traffic-eng |
| snmp-server enable traps mpls vpn | mpls-vpn |
| snmp-server host <i>host-address community-string</i> udp-port <i>port</i> p2mp-traffic-eng | snmp-server enable traps mpls p2mp-traffic-eng [down up] |

¹ See the *Cisco IOS Multiprotocol Label Switching Command Reference* for documentation of this command.

Examples

If you want to configure a unique SNMP community string for traps but prevent SNMP polling access with this string, the configuration should include an access list. The following example shows how to name a community string comaccess and number an access list 10:

```
Router(config)# snmp-server community comaccess ro 10
Router(config)# snmp-server host 10.0.0.0 comaccess
Router(config)# access-list 10 deny any
```

**Note**

The “at” sign (@) is used as a delimiter between the community string and the context in which it is used. For example, specific VLAN information in BRIDGE-MIB may be polled using *community @VLAN-ID* (for example, public@100), where 100 is the VLAN number.

The following example shows how to send RFC 1157 SNMP traps to a specified host named myhost.cisco.com. Other traps are enabled, but only SNMP traps are sent because only **snmp** is specified in the **snmp-server host** command. The community string is defined as comaccess.

```
Router(config)# snmp-server enable traps
Router(config)# snmp-server host myhost.cisco.com comaccess snmp
```

The following example shows how to send the SNMP and Cisco environmental monitor enterprise-specific traps to address 10.0.0.0 using the community string public:

```
Router(config)# snmp-server enable traps snmp
Router(config)# snmp-server enable traps envmon
Router(config)# snmp-server host 10.0.0.0 public snmp envmon
```

The following example shows how to enable the router to send all traps to the host myhost.cisco.com using the community string public:

```
Router(config)# snmp-server enable traps
Router(config)# snmp-server host myhost.cisco.com public
```

The following example will not send traps to any host. The BGP traps are enabled for all hosts, but only the ISDN traps are enabled to be sent to a host. The community string is defined as public.

```
Router(config)# snmp-server enable traps bgp
Router(config)# snmp-server host myhost.cisco.com public isdn
```

The following example shows how to enable the router to send all inform requests to the host myhost.cisco.com using the community string public:

```
Router(config)# snmp-server enable traps
Router(config)# snmp-server host myhost.cisco.com informs version 2c public
```

The following example shows how to send HSRP MIB informs to the host specified by the name myhost.cisco.com. The community string is defined as public.

```
Router(config)# snmp-server enable traps hsrp
Router(config)# snmp-server host myhost.cisco.com informs version 2c public hsrp
```

The following example shows how to send all SNMP notifications to example.com over the VRF named trap-vrf using the community string public:

```
Router(config)# snmp-server host example.com vrf trap-vrf public
```

The following example shows how to configure an IPv6 SNMP notification server with the IPv6 address 2001:0DB8:0000:ABCD:1 using the community string public:

```
Router(config)# snmp-server host 2001:0DB8:0000:ABCD:1 version 2c public udp-port 2012
```

The following example shows how to specify VRRP as the protocol using the community string public:

```
Router(config)# snmp-server enable traps vrrp
Router(config)# snmp-server host myhost.cisco.com traps version 2c public vrrp
```

The following example shows how to send all Cisco Express Forwarding informs to the notification receiver with the IP address 10.0.1.1 using the community string public:

```
Router(config)# snmp-server enable traps cef
Router(config)# snmp-server host 10.0.1.1 informs version 2c public cef
```

The following example shows how to enable all NHRP traps, and how to send all NHRP traps to the notification receiver with the IP address 10.0.0.0 using the community string public:

```
Router(config)# snmp-server enable traps nhrp
Router(config)# snmp-server host 10.0.0.0 traps version 2c public nhrp
```

The following example shows how to enable all P2MP MPLS-TE SNMP traps, and send them to the notification receiver with the IP address 172.20.2.160 using the community string "comp2mpublic":

```
Router(config)# snmp-server enable traps mpls p2mp-traffic-eng
Router(config)# snmp-server host 172.20.2.160 comp2mpublic udp-port 162 p2mp-traffic-eng
```

Related Commands

| Command | Description |
|--|--|
| show snmp host | Displays recipient details configured for SNMP notifications. |
| snmp-server enable peer-trap poor qov | Enables poor quality of voice notifications for applicable calls associated with a specific voice dial peer. |
| snmp-server enable traps | Enables SNMP notifications (traps and informs). |
| snmp-server enable traps nhrp | Enables SNMP notifications (traps) for NHRP. |
| snmp-server informs | Specifies inform request options. |
| snmp-server link trap | Enables linkUp/linkDown SNMP traps that are compliant with RFC 2233. |
| snmp-server trap-source | Specifies the interface from which an SNMP trap should originate. |
| snmp-server trap-timeout | Defines how often to try resending trap messages on the retransmission queue. |
| test snmp trap storm-control event-rev1 | Tests SNMP storm-control traps. |

