



## sample (event trigger) through snmp mib event sample

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# show snmp chassis

To display the Simple Network Management Protocol (SNMP) server serial number, use the **show snmp chassis** command in privileged EXEC mode.

**show snmp chassis**

**Syntax Description** This command has no arguments or keywords.

**Command Default** The system serial number will be displayed.

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	12.4(12)T	This command was introduced.
	12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB2.
	12.2SX	This command was integrated into Cisco IOS Release 12.2SX.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** To configure a message line identifying the SNMP server chassis ID, use the **snmp-server chassis-id** command.

**Examples** The following is sample output from the **show snmp chassis** command. The output is self-explanatory.

```
Router# show snmp chassis
01506199
```

Related Commands	Command	Description
	<b>show snmp</b>	Displays SNMP communication details.
	<b>snmp-server chassis-id</b>	Configures a message line identifying the SNMP server serial number.

# show snmp community

To display Simple Network Management Protocol (SNMP) community access strings, use the **show snmp community** command in privileged EXEC mode.

**show snmp community**

**Syntax Description** This command has no arguments or keywords.

**Command Default** All community access strings configured to enable access to SNMP entities are displayed.

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	12.4(12)T	This command was introduced.
	12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB2.
	12.2SX	This command was integrated into Cisco IOS Release 12.2SX.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** Community string consists of 1 to 32 alphanumeric characters and functions like a password enabling access to the SNMP entities.

To set up the community access string to permit access to the SNMP, use the **snmp-server community** command.

**Examples** The following is sample output from the **show snmp community** command. The output displays the community access strings configured for enabling access to an SNMP entity.

```
Router# show snmp community
Community name: ILMI
Community Index: ILMI
Community SecurityName: ILMI
storage-type: read-only active
Community name: private
Community Index: private
Community SecurityName: private
storage-type: nonvolatile active
Community name: private@1
Community Index: private@1
Community SecurityName: private
storage-type: read-only active
```

```
Community name: public
Community Index: public
Community SecurityName: public
storage-type: nonvolatile      active
```

The table below describes the significant fields shown in the display.

**Table 1: show snmp community Field Descriptions**

Field	Description
Community name	Displays the community name.
Community Index	Displays the community index.
Community SecurityName	Displays the security name of the community string.
storage-type	Displays the access type stored for the community string.

#### Related Commands

Command	Description
<b>snmp-server community</b>	Sets up the community string to permit access to SNMP entities.

# show snmp contact

To display Simple Network Management Protocol (SNMP) system contact information, use the **show snmp contact** command in privileged EXEC mode.

**show snmp contact**

**Syntax Description** This command has no arguments or keywords.

**Command Default** The SNMP system contact information is displayed.

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	12.4(12)T	This command was introduced.
	12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB2.
	12.2SX	This command was integrated into Cisco IOS Release 12.2SX.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** To set the system contact information, use the **snmp-server contact** command.

**Examples** The following is sample output from the **show snmp contact** command. The output is self-explanatory.

```
Router# show snmp contact
Dial System Operator at beeper # 27345
```

Related Commands	Command	Description
	<b>snmp-server contact</b>	Sets the system contact information.

# show snmp engineID

To display the identification of the local Simple Network Management Protocol (SNMP) engine and all remote engines that have been configured on the router, use the **show snmp engineID** command in EXEC mode.

## show snmp engineID

### Syntax Description

This command has no arguments or keywords.

### Command Modes

EXEC

### Command History

Release	Modification
12.0(3)T	This command was introduced.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

### Usage Guidelines

An SNMP engine is a copy of SNMP that can reside on a local or remote device.

### Examples

The following example specifies 00000009020000000C025808 as the local engineID and 123456789ABCDEF000000000 as the remote engine ID, 172.16.37.61 as the IP address of the remote engine (copy of SNMP) and 162 as the port from which the remote device is connected to the local device:

```
Router# show snmp engineID
Local SNMP engineID: 00000009020000000C025808
Remote Engine ID      IP-addr      Port
123456789ABCDEF000000000  172.16.37.61  162
```

The table below describes the fields shown in the display.

**Table 2: show snmp engineID Field Descriptions**

Field	Definition
Local SNMP engine ID	A string that identifies the copy of SNMP on the local device.

Field	Definition
Remote Engine ID	A string that identifies the copy of SNMP on the remote device.
IP-addr	The IP address of the remote device.
Port	The port number on the local device to which the remote device is connected.

**Related Commands**

Command	Description
<b>snmp-server engineID local</b>	Configures a name for either the local or remote SNMP engine on the router.

# show snmp group

To display the names of configured SNMP groups, the security model being used, the status of the different views, and the storage type of each group, use the **show snmp group** command in privileged EXEC mode.

**show snmp group**

**Syntax Description** This command has no arguments or keywords.

**Command Modes** Privileged EXEC

Command History	Release	Modification
	12.0(3)T	This command was introduced.
	12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
	12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** SNMP groups are configured using the `snmp-server group` command. SNMP groups and users are used in the context of the View-based Access Control Model (VACM) for SNMP (for further information, see the “VACM for SNMP” IETF internet draft document).

**Examples** The following example specifies the group name as public, the security model as v1, the read view name as vldefault, the notify view name as \*tv.FFFFFFFF, and the storage type as volatile:

```
Router# show snmp group
groupname: V1                      security model:v1
readview : vldefault              writeview: <no writeview specified>
notifyview: <no notifyview specified>
row status: active
groupname: ILMI                   security model:v1
readview : *ilmi                 writeview: *ilmi
notifyview: <no notifyview specified>
row status: active
groupname: ILMI                   security model:v2c
readview : *ilmi                 writeview: *ilmi
notifyview: <no notifyview specified>
row status: active
groupname: group1                 security model:v1
readview : vldefault             writeview: <no writeview specified>
```



```

notifyview: <no notifyview specified>
row status: active

```

The table below describes the fields shown in the example.

**Table 3: show snmp group Field Descriptions**

Field	Definition
groupname	The name of the SNMP group, or collection of users that have a common access policy.
security model	The security model used by the group, either v1, v2c, or v3.
readview	A string identifying the read view of the group. <ul style="list-style-type: none"> <li>For further information on the SNMP views, use the <b>show snmp view</b> command.</li> </ul>
writeview	A string identifying the write view of the group.
notifyview	A string identifying the notify view of the group. The notify view indicates the group for SNMP notifications, and corresponds to the setting of the <b>snmp-server group</b> <i>group-name version</i> <b>notify</b> <i>notify-view</i> command.

#### Related Commands

Command	Description
<b>snmp-server group</b>	Configures a new SNMP group or a table that maps SNMP users to SNMP views.
<b>show snmp user</b>	Displays the configured characteristics for SNMP users.
<b>show snmp view</b>	Displays a list of configured SNMP views.

# show snmp host

To display the recipient details for Simple Network Management Protocol (SNMP) notification operations, use the **show snmp host** command in privileged EXEC mode.

**show snmp host**

## Syntax Description

This command has no arguments or keywords.

## Command Default

The information configured for SNMP notification operation is displayed.

## Command Modes

Privileged EXEC (#)

## Command History

Release	Modification
12.4(12)T	This command was introduced.
12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB2.
12.2SX	This command was integrated into Cisco IOS Release 12.2SX.
Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

## Usage Guidelines

The **show snmp host** command displays details such as IP address of the Network Management System (NMS), notification type, SNMP version, and the port number of the NMS.

To configure these details, use the **snmp-server host** command.

## Examples

The following is sample output from the **show snmp host** command.

```
Router# show snmp host
Notification host: 10.2.28.6 udp-port: 162   type: inform
user: public      security model: v2c
traps: 00001000.00000000.00000000
```

The table below describes the significant fields shown in the display.

**Table 4: show snmp host Field Descriptions**

Field	Description
Notification host	Displays the IP address of the host for which the notification is generated.

Field	Description
udp-port	Displays the port number.
type	Displays the type of notification.
user	Displays the access type of the user for which the notification is generated.
security model	Displays the SNMP version used to send notifications.
traps	Displays details of the notification generated.

### Related Commands

Command	Description
snmp-server host	Configures the recipient details for SNMP notification operations.

# show snmp location

To display the Simple Network Management Protocol (SNMP) system location string, use the **show snmp location** command in privileged EXEC mode.

**show snmp location**

**Syntax Description** This command has no arguments or keywords.

**Command Default** The SNMP system location information is displayed.

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	12.4(12)T	This command was introduced.
	12.2(31)SB	This command was integrated into Cisco IOS Release 12.2(31)SB2.
	12.2SX	This command was integrated into Cisco IOS Release 12.2SX.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** To configure system location details, use the **snmp-server location** command.

**Examples** The following is sample output from the **show snmp location** command. The output is self-explanatory.

```
Router# show snmp location
building 3/Room 214
```

Related Commands	Command	Description
	<b>snmp-server location</b>	Configures SNMP system location details.

## show snmp user

To display information about the configured characteristics of Simple Network Management Protocol (SNMP) users, use the **show snmp user** command in privileged EXEC mode.

**show snmp user** [ *username* ]

### Syntax Description

<i>username</i>	(Optional) Name of a specific user or users about which to display SNMP information.
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### Command Modes

Privileged EXEC (#)

### Command History

Release	Modification
12.0(3)T	This command was introduced.
12.3(2)T	The <i>username</i> argument was added. The output for this command was enhanced to show the authentication protocol (MD5 or SHA) and group name.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SRB	This command was integrated into Cisco IOS Release 12.2(33)SRB.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.
12.2(33)SB	This command was integrated into Cisco IOS Release 12.2(33)SB.
Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

### Usage Guidelines

An SNMP user must be part of an SNMP group, as configured using the **snmp-server user** *username group-name* command.

When the *username* argument is not entered, the **show snmp user** command displays information about all configured users. If you specify the *username* argument, if one or more users of that name exists, the information pertaining to those users is displayed. Because this command displays users configured with the SNMP engine ID of the local agent and other engine IDs, there can be multiple users with the same username.

When configuring SNMP, you may see the logging message “Configuring snmpv3 USM user.” USM stands for the User-based Security Model for version 3 of the Simple Network Management Protocol (SNMPv3). For further information on the USM, see RFC 2574.

## Examples

The following is sample output from the **show snmp user** command. The output indicates the username as authuser, the engine ID string as 00000009020000000C025808, and the storage type as nonvolatile:

```
Router# show snmp user
authuser
User name: authuser
Engine ID: 00000009020000000C025808
storage-type: nonvolatile      active access-list: 10
Rowstatus: active
Authentication Protocol: MD5
Privacy protocol: DES
Group name: VacmGroupName
```

The table below describes the significant fields shown in the display.

**Table 5: show snmp user Field Descriptions**

Field	Description
User name	A string identifying the name of the SNMP user.
Engine ID	A string identifying the name of the copy of SNMP on the device.
storage-type	Indicates whether the settings have been set in volatile or temporary memory on the device, or in nonvolatile or persistent memory where settings will remain after the device has been turned off and on again.
active access-list	Standard IP access list associated with the SNMP user.
Rowstatus	Indicates whether Rowstatus is active or inactive.
Authentication Protocol	Identifies which authentication protocol is used. Options are message digest algorithm 5 (MD5), Secure Hash Algorithm (SHA) packet authentication, or None. <ul style="list-style-type: none"> <li>• If authentication is not supported in your software image, this field will not be displayed.</li> </ul>
Privacy protocol	Indicates whether Data Encryption Standard (DES) packet encryption is enabled. <ul style="list-style-type: none"> <li>• If DES is not supported in your software image, this field will not be displayed.</li> </ul>

Field	Description
Group name	Indicates the SNMP group the user is a part of. <ul style="list-style-type: none"><li>• SNMP groups are defined in the context of a View-based Access Control Model (VACM).</li></ul>

# show snmp view

To display the family name, storage type, and status of a Simple Network Management Protocol (SNMP) configuration and associated MIB, use the **show snmp view** command in privileged EXEC mode.

**show snmp view**

**Syntax Description** This command has no arguments or keywords.

**Command Modes** Privileged EXEC

Command History	Release	Modification
	12.4(2)T	This command was introduced.
	12.0(31)S	This command was integrated into Cisco IOS Release 12.0(31)S.
	Cisco IOS XE Release 3.2SE	This command was implemented in Cisco IOS XE Release 3.2SE.
	Cisco IOS XE Release 3.3SE	This command was implemented in Cisco IOS XE Release 3.3SE.

**Usage Guidelines** Use this command to display the SNMP view configuration.

**Examples** The following is sample output from the **show snmp view** command.

```
Router# show snmp view
View Family Name/View Family Subtree/View Family Mask/View Family Type/storage/status
myview          mib-2          -          included      nonvolatile active
myview          cisco          -          included      nonvolatile active
myview          atEntry        -          excluded      nonvolatile active
vldefault       iso            -          included      permanent  active
vldefault       internet       -          included      volatile   active
vldefault       internet.6.3.15 -          excluded      volatile   active
vldefault       internet.6.3.16 -          excluded      volatile   active
vldefault       internet.6.3.18 -          excluded      volatile   active
```


The table below describes the significant fields shown in the display.

**Table 6: show snmp view Field Descriptions**

Field	Description
View Family Name	Family name.
View Family Subtree	MIB name.



Field	Description
View Family Mask	Family mask. A hyphen (-) appears in this column when no mask is associated.
View Family Type	Type of family, either included or excluded.
storage	Type of memory storage, for example, volatile.
status	Status of the configuration, either active or nonactive.

 show snmp view