

Configure and Send Traps with SNMP-Server Enabled Command

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Conventions](#)

[An Overview of the Traps Enabled on Your Device](#)

[Traps Sent When You Enable Commands from the List](#)

[Related Information](#)

Introduction

This document describes the traps sent when you configure the `snmp-server enable traps` command on a Cisco device.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- How to configure Simple Network Management Protocol (SNMP) on a Cisco device.
- Use of SNMP `get` and `walk` commands.

Components Used

This document applies to Cisco devices (routers and switches) that run Cisco IOS® which supports SNMP. The information in this document is based on several releases of Cisco IOS® because the trap command differs from release to release and platform to platform. For example, you do not have the capacity to send ATM related traps on a system that has no ATM interface.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Conventions

Refer to [Cisco Technical Tips Conventions](#) for more information on document conventions.

An Overview of the Traps Enabled on Your Device

In order to get an overview of the traps you have enabled on your device, issue this command on every Cisco IOS device:

```
<#root>

cognac#

configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.
cognac(config)#

snmp-server enable traps ?

  atm          Enable SNMP atm traps
  bgp          Enable BGP state change traps
  config       Enable SNMP config traps
  dial         Enable SNMP dial control traps
  dls          Enable SNMP dlsw traps
  dsp          Enable SNMP dsp traps
  entity       Enable SNMP entity traps
  envmon       Enable SNMP environmental monitor traps
  frame-relay  Enable SNMP frame-relay traps
  hsrp         Enable SNMP HSRP traps
  ipmulticast  Enable SNMP ipmulticast traps
  isdn         Enable SNMP isdn traps
  msdp         Enable SNMP MSDP traps
  rsvp         Enable RSVP flow change traps
  rtr          Enable SNMP Response Time Reporter traps
  snmp         Enable SNMP traps
  syslog       Enable SNMP syslog traps
  tty          Enable TCP connection traps
  voice        Enable SNMP voice traps
  xgcp         Enable XGCP protocol traps
  <cr>

cognac(config)#
```

Once you know the traps you have enabled, you can enable them as you need. This document helps you find which traps are sent when you enable a command.

 **Note:** This list can differ from platform to platform and release to release because of the features in a specific device and available interfaces.

Traps Sent When You Enable Commands from the List

aaa-server	Sends AAA server notifications.	12.1(3)T	AS5300 AS5800	CISCO-AAA-SERVER-MIB	1.3.6.1.4.1.9.10.56.2.0.1	casServerStateChange
bgp	Sends Border Gateway	/	/	BGP4-MIB	1.3.6.1.2.1.15.7.1	bgpEstablished bgpBackw

	Protocol (BGP) state change notifications.					
calltracker	Sends notification whenever a new active call entry is created in the cctActiveTable or a new history call entry is created in the cctHistoryTable.	/	/	CISCO-CALL-TRACKER-MIB	1.3.6.1.4.1.9.9.163.2.0.1 1.3.6.1.4.1.9.9.163.2.0.2	cctCallSetupNotification cctCallTerminateNotification
config	Sends configuration notifications.	/	/	CISCO-CONFIG-MAN-MIB	1.3.6.1.4.1.9.9.43.2.0.1	ciscoConfigManEvent
dial	Sends notification whenever: <ul style="list-style-type: none"> • A successful call clears. • A failed call attempt is determined to have ultimately failed. • Whenever a call setup message is received or sent. 	/	/	DIAL-CONTROL-MIB	1.3.6.1.2.1.10.21.2.0.1 1.3.6.1.2.1.10.21.2.0.2	dialCtlPeerCallInformation dialCtlPeerCallSetup
dls	Sends notifications from DLSw agents. When the dls keyword is used, you can specify a notification-option value.	/	/	CISCO-DLSW-MIB	1.3.6.1.4.1.9.10.9.1.7.1 1.3.6.1.4.1.9.10.9.1.7.2 1.3.6.1.4.1.9.10.9.1.7.3 1.3.6.1.4.1.9.10.9.1.7.4 1.3.6.1.4.1.9.10.9.1.7.5 1.3.6.1.4.1.9.10.9.1.7.6	ciscoDlswTrapTConnPart ciscoDlswTrapTConnProt ciscoDlswTrapTConnUp ciscoDlswTrapTConnDown ciscoDlswTrapCircuitUp ciscoDlswTrapCircuitDown

ds0-busyout	Sends notification whenever the busyout of a DS0 interface changes state.	12.1(3)T	AS5300	CISCO-POP-MGMT-MIB	1.3.6.1.4.1.9.10.19.2.0.1	cpmDS0BusyoutNotificati
ds1-loopback	Sends notification whenever the DS1 interface goes into loopback mode.	12.1(3)T	AS5300	CISCO-POP-MGMT-MIB	1.3.6.1.4.1.9.10.19.2.0.2	cpmDS1LoopbackNotifica
dspu	Sends notification whenever the operational state of the physical unit (PU) or the logical unit (LU) changes or activation failure is detected.	/	/	CISCO-DSPU-MIB	1.3.6.1.4.1.9.9.24.1.4.4.0.1 1.3.6.1.4.1.9.9.24.1.4.4.0.2 1.3.6.1.4.1.9.9.24.1.5.3.0.1 1.3.6.1.4.1.9.9.24.1.5.3.0.2	newdspuPuStateChangeTr newdspuPuActivationFailu newdspuLuStateChangeTr dspuLuActivationFailureT
dsp	Sends notification whenever the DSP card goes up or down.	/	/	CISCO-DSP-MGMT-MIB	1.3.6.1.4.1.9.9.86.2.0.1	cdspMIBCardStateNotifica
entity	Sends Entity MIB modification notifications.	/	/	ENTITY-MIB	1.3.6.1.2.1.47.2.0.1	entConfigChange
envmon	Sends Cisco enterprise-specific environmental monitor notifications when an environmental threshold is exceeded. When the envmon keyword is used, you can specify a	/	/	CISCO-ENVMON-MIB	1.3.6.1.4.1.9.9.13.3.0.1 1.3.6.1.4.1.9.9.13.3.0.2 1.3.6.1.4.1.9.9.13.3.0.3 1.3.6.1.4.1.9.9.13.3.0.4 1.3.6.1.4.1.9.9.13.3.0.5	ciscoEnvMonShutdownNo ciscoEnvMonVoltageNotifi ciscoEnvMonTemperature ciscoEnvMonFanNotificati ciscoEnvMonRedundantSu

	notification-option value.					
frame-relay	Sends Frame Relay notifications.	/	/	RFC1315-MIB	1.3.6.1.2.1.10.32.0.1	frDLCIStatusChange
hsrp	Sends Hot Standby Router Protocol (HSRP) notifications.	12.0(3)T/		CISCO-HSRP-MIB	1.3.6.1.4.1.9.9.106.2.0.1	cHsrpStateChange
isdn	Sends Integrated Services Digital Network (ISDN) notifications. When the isdn keyword is used, you can specify a notification-option value.	12.1(1)T/12.1(5)T/		CISCO-ISDN-MIB CISCO-ISDNU-IF-MIB	1.3.6.1.4.1.9.9.26.2.0.1 1.3.6.1.4.1.9.9.26.2.0.2 1.3.6.1.4.1.9.9.26.2.0.3 1.3.6.1.4.1.9.9.26.2.0.4 1.3.6.1.4.1.9.9.18.2.0.1	demandNbrCallInformation demandNbrCallDetails demandNbrLayer2Change demandNbrCNANotification ciuIfLoopStatusNotification
msdp	Sends Multicast Source Discovery Protocol (MSDP) notifications.	/	/	MSDP-MIB	1.3.6.1.3.92.1.1.7.1 1.3.6.1.3.92.1.1.7.2	msdpEstablished msdpBack
repeater	Sends Ethernet hub repeater notifications.	/	Cisco-HUB	CISCO-REPEATER-MIB	1.3.6.1.4.1.9.9.22.3.0.1	ciscoRptrIllegalSrcAddrTr
rsvp	Sends Resource Reservation Protocol (RSVP) notifications.	/	/	RSVP-MIB	1.3.6.1.2.1.51.3.0.1 1.3.6.1.2.1.51.3.0.2	newFlow lostFlow
rtr	Sends Service Assurance Agent RTR (RTR) notifications.	/	/	CISCO-RTTMON-MIB	1.3.6.1.4.1.9.9.42.2.0.1 1.3.6.1.4.1.9.9.42.2.0.2 1.3.6.1.4.1.9.9.42.2.0.3	rtrMonConnectionChange rtrMonTimeoutNotification rtrMonThresholdNotificati
snmp	Sends Simple Network Management	/	/	CISCO-GENERAL-TRAPS	1.3.6.1.6.3.1.1.5.1 1.3.6.1.6.3.1.1.5.3 1.3.6.1.6.3.1.1.5.4	coldStart linkDown linkUp authenticationFailure egpN reload

	Protocol (SNMP) notifications.				1.3.6.1.6.3.1.1.5.5	
syslog	Sends error message notifications (Cisco Syslog MIB). Specify the level of messages to be sent with the log history level command.	/	/	CISCO-SYSLOG-MIB	1.3.6.1.4.1.9.9.41.2.0.1	clogMessageGenerated
voice	Sends poor quality of voice notification.	/	/	CISCO-VOICE-DIAL-CONTROL-MIB	1.3.6.1.4.1.9.9.63.2.0.1	cvdcPoorQoVNotification
xgcp	Sends External Media Gateway Control Protocol (XGCP) notifications.	/	/	XGCP-MIB	1.3.6.1.3.90.2.0.1	xgcpUpDownNotification
channel-failures	This trap indicates that a significant link event has been recognized and resulted in the degradation of the interface line quality.	/	/	CISCO-CHANNEL-MIB	1.3.6.1.4.1.9.9.20.1.5.1 1.3.6.1.4.1.9.9.20.1.5.2	cipCardLinkFailure cipCardDtrBrdLinkFailure
llc2	Sends Logical Link Control, type2 notifications	/	/	CISCO-SDLLC-MIB	1.3.6.1.4.1.9.9.28.2.1	convSdllcPeerStateChange
rsrb	Indicates that the state of an RSRB remote peer has transitioned to Active or Inactive.	/	/	CISCO-RSRB-MIB	1.3.6.1.4.1.9.9.29.2.1	rsrbPeerStateChangeNotifi

sdlc	Indicates that the state of an SDLC port has transitioned. Indicates that the state of an SDLC station has transitioned to Contacted or Disconnected. Indicates that the state of an SDLC link has transitioned to Contacted or Disconnected.	/	/	SNA-SDLC-MIB	1.3.6.1.2.1.41.1.3.1 1.3.6.1.2.1.41.1.3.2 1.3.6.1.2.1.41.1.3.3	sdlcPortStatusChange sdlc sdlcLSStatusChange1
stun	Indicated that the state of a STUN route has transitioned to Active or Inactive.	/	/	CISCO-STUN-MIB	1.3.6.1.4.1.9.9.30.2.1	stunPeerStateChangeNotif

Related Information

- [Cisco Technical Support & Downloads](#)