

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 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:

```
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
  dlsw         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	1.3.6.1.4.1.9.1 0.56.2.0.1	casServerChange
bgp	Sends Border Gateway Protocol (BGP) / state change notifications.		/	BGP4-MIB	1.3.6.1.2.1.15. 7.1	bgpEstablished bgpBackwardTransition
calltracker	Sends notification whenever a new active call / entry is created in the cctActiveTable		/	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	cctCallSessionNotification cctCallTerminationNotification

	or a new history call entry is created in the cctHistoryTable.					
config	Sends configuration notifications.	/	/	CISCO-CONFIG-MAN-MIB	1.3.6.1.4.1.9.9.43.2.0.1	ciscoConnEvent
dial	<p>Sends notification whenever</p> <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	dialCtlPerfInformatic dialCtlPerfSetup
dls	Sends notifications from DLSw agents. When the dls keyword is used, you can specify a notification-option value.	/	/	CISCO-DLSW-MIB	1.3.6.1.4.1.9.1.0.9.1.7.1 1.3.6.1.4.1.9.1.0.9.1.7.2 1.3.6.1.4.1.9.1.0.9.1.7.3 1.3.6.1.4.1.9.1.0.9.1.7.4 1.3.6.1.4.1.9.1.0.9.1.7.5 1.3.6.1.4.1.9.1.0.9.1.7.6	ciscoDlsvTConnPa Reject ciscoDlsvTConnPr ation ciscoDlsvTConnUp ciscoDlsvTConnDo ciscoDlsvCircuitUp ciscoDlsvCircuitDo
ds0-busyout	Sends notification whenever the busyout of a DS0 interface changes state.	12.1(3)T	AS5300	CISCO-POP-MGMT-MIB	1.3.6.1.4.1.9.1.0.19.2.0.1	cpmDS0B utNotifica
ds1-loopback	Sends	12.1(3)T	AS5300	CISCO-POP-	1.3.6.1.4.1.9.1	cpmDS1L

	notification whenever the DS1 interface goes into loopback mode.			MGMT-MIB	0.19.2.0.2	ackNotific
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	newdspu teChange newdspu ivationFa rap newdspu teChange dspuLuAc onFailure
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	cdspMIB tateNotific
entity	Sends Entity MIB modification notifications.	/	/	ENTITY-MIB	1.3.6.1.2.1.47.2.0.1	entConfig ge
envmon	Sends Cisco enterprise-specific environmental monitor notifications when an environmental threshold is exceeded. When the envmon keyword is used, you can specify a notification-option value.	/	/	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	ciscoEnvl utdownM ation ciscoEnvl oltageNot on ciscoEnvl emperatu ification ciscoEnvl anNotifica ciscoEnvl edundant yNotificat
frame-relay	Sends Frame Relay notifications.	/	/	RFC1315-MIB	1.3.6.1.2.1.10.32.0.1	frDLCISta hange
hsrp	Sends Hot Standby Router Protocol (HSRP)	12.0(3)T	/	CISCO-HSRP-MIB	1.3.6.1.4.1.9.9.106.2.0.1	chSrpSta nge

	notifications.						
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	demandN Informati demandN IDetails demandN yer2Char demandN ANotificat ciulfLoop sNotificat
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	msdpESta ed msdpBac dTransitio
repeater	Sends Ethernet hub repeater notifications.	/		Cisco-HUB	CISCO-REPEATER-MIB	1.3.6.1.4.1.9.9.22.3.0.1	ciscoRptr SrcAddrT
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	rttMonCo onChang ication rttMonTin Notificatio rttMonThr dNotificat
snmp	Sends Simple Network Management Protocol (SNMP) notifications.	/	/		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 1.3.6.1.6.3.1.1.5.5	coldStart linkDown linkUp authentic Failure egpNeigh oss reloa
syslog	Sends error message notifications (Cisco Syslog MIB). Specify the level of messages to	/	/		CISCO-SYSLOG-MIB	1.3.6.1.4.1.9.9.41.2.0.1	clogMess enerated

	be sent with the log history level command.				
voice	Sends poor quality of voice notification.	/	/	CISCO-VOICE-DIAL-CONTROL-MIB	1.3.6.1.4.1.9.9.63.2.0.1 cvdcPoor Notification
xgcp	Sends External Media Gateway Control Protocol (XGCP) notifications. This trap indicates that a significant link event has	/	/	XGCP-MIB	1.3.6.1.3.90.2.0.1 xgcpUpD otification
channel-failures	been recognized and resulted in the degradation of the interface line quality. Sends Logical Link Control, type2 notifications	/	/	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 cipCardL lure cipCardD LinkFailur
llc2	Indicates that the state of an RSRB remote peer has transitioned to Active or Inactive.	/	/	CISCO-SDLLC-MIB	1.3.6.1.4.1.9.9.28.2.1 convSdllc StateCha otification
rsrb	Indicates that the state of an SDLC port has transitioned.	/	/	CISCO-RSRB-MIB	1.3.6.1.4.1.9.9.29.2.1 rsrbPeerS ChangeN ation
sdlc	Indicates that the state of an SDLC station has transitioned to Contacted or Discontacted. Indicates that the state of an SDLC link has transitioned to Contacted or	/	/	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 sdlcPortS Change sdlcLSSta hange sdlcLSSta hange1

Discontacted.

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

stunPeerChangeNotification

Related Information

- [Cisco Technical Support & Downloads](#)