

How to set up the Cisco Trap message in the DV6

D-Link D-View6 SNMP NMS provides an advantage to monitor/control most of D-Link products. However, it does not include third-party products. In some case, customer might need use DV6 to monitor, control or receive third-party Trap messages.

This chapter provides some setup procedure to achieve this target.

Component used

Cisco2960 Switch (software Version 12.2(44)SE5)

D-Link D-View6 Professional Version (software version 6.00.01B22)

Topology

Cisco2960(192.168.1.149)(port1)---(192.168.1.150/24)DV6-Pro

Understanding Cisco Trap MIB structure

```
Simple Network Management Protocol
  version: version-1 (0)
  community: private
  data: trap (4)
    trap
      enterprise: 1.3.6.1.4.1.9.9.43.2 (SNMPv2-SMI::enterprises.9.9.43.2)
      agent-addr: 192.168.1.149 (192.168.1.149)
      generic-trap: enterprisespecific (6)
      specific-trap: 1
      time-stamp: 764829
    variable-bindings: 3 items
      SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.3.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.3.26): 1
      SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.4.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.4.26): 3
      SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.5.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.5.26): 4
```

SNMP Trap MIB combines with enterprise OID and other Variable-Binding OIDs, like above example.

you can download Cisco MIB via:

1. FTP <ftp://ftp.cisco.com> Password: *your e-mail address*
2. HTTP <http://tools.cisco.com/Support/SNMP/do/BrowseMIB.do?local=en&step=2>

Or you can use Cisco SNMP Object Navigator to Translate OID into object name or object name into OID to receive object details, like below example.

SNMP Object Navigator

TRANSLATE/BROWSE [SEARCH](#) [VIEW & DOWNLOAD MIBS](#) [MIB SUPPORT IN SOFTWARE](#)

Translate | [Browse The Object Tree](#)

Translate OID into object name or object name into OID to receive object details

Enter OID or object name: examples -
 Translate OID: 1.3.6.1.4.1.9.9.27
Object Name: ifIndex

Object Information

Specific Object Information	
Object	ciscoConfigManMIBNotificationPrefix
OID	1.3.6.1.4.1.9.9.43.2
MIB	CISCO-CONFIG-MAN-MIB ; - View Supporting Images

Finding the required information from the Cisco Trap message

Here we set up the Cisco2960 config-copy trap message into the DV6 Trap database, the Cisco2960 config-copy Trap message is included in the “CiscoConfigManMIBNotificationPrefix” MIB. The detailed info is listed below.

```
Simple Network Management Protocol
version: version-1 (0)
community: private
data: trap (4)
  trap
    enterprise: 1.3.6.1.4.1.9.9.43.2 (SNMPv2-SMI::enterprises.9.9.43.2)
    agent-addr: 192.168.1.149 (192.168.1.149)
    generic-trap: enterprisespecific (6)
    specific-trap: 1
    time-stamp: 764829
  variable-bindings: 3 items
    SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.3.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.3.26): 1
    SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.4.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.4.26): 3
    SNMPv2-SMI::enterprises.9.9.43.1.1.6.1.5.26 (1.3.6.1.4.1.9.9.43.1.1.6.1.5.26): 4
```

The following OIDs are included in the config-copy trap message

Enterprise OID: 1.3.6.1.4.1.9.9.43.2

Variable-bindingsOID: 1.3.6.1.4.1.9.9.43.1.1.6.1.3
 1.3.6.1.4.1.9.9.43.1.1.6.1.4
 1.3.6.1.4.1.9.9.43.1.1.6.1.5

DV6 only can recognize the Enterprise OID in the Trap message, so we need use Enterprise OID + Specific-trap number to set the third-party Trap message.

Set up the Cisco SNMP Trap MIB into the DV6 Trap database

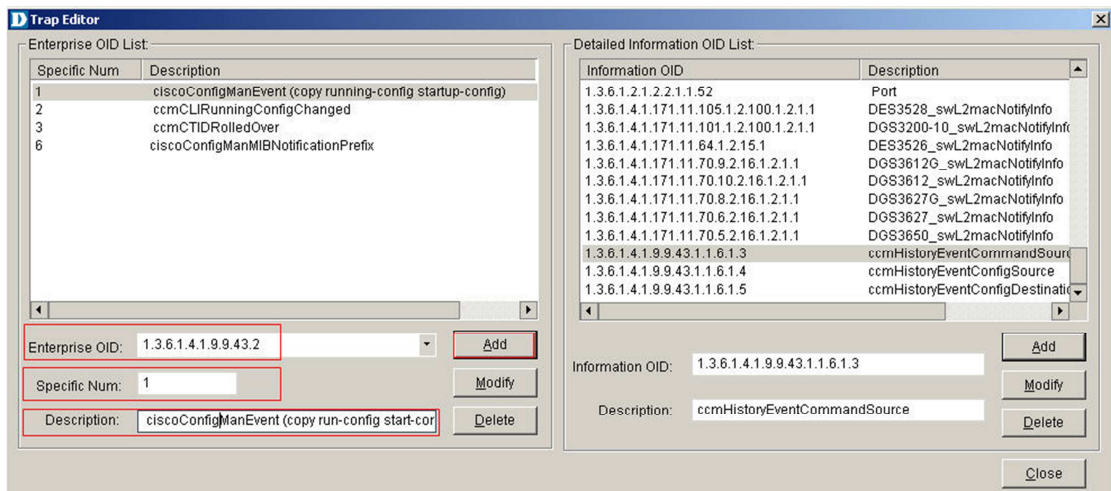
Go to *System > Event Manager > Trap Editor*

Create a new Enterprise OID:

Enterprise OID: 1.3.6.1.4.1.9.9.43.2

Specific Number: 1

Description: ciscoConfigManEvent(copy run-config start-config)



Set up the Cisco2960 SNMP configuration

```
snmp-server group public v2c read public
snmp-server group private v2c write private
snmp-server enable traps config
snmp-server host 192.168.1.150 private
```

Trigger this Trap message

Save Cisco Switch configuration via **write** command

Check Result

Time	Source Device IP	Description
2010-10-21 19:24:30	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:24:53	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:25:46	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:26:11	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:26:45	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:27:15	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)
2010-10-21 19:28:05	192.168.1.149	Second_Domain::Net-10.90.90.0 Cisco2960 ciscoConfigManEvent (copy running-config startup-config)

End