

Ping MIB Implementation

Document ID: 13383

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Introduction

The Ping Group is part of the Cisco proprietary MIB under the Cisco Management branch (.1.3.6.1.4.1.9.9.16.). The Ping Group can be used to set up, perform, and retrieve Internet Control Message Protocol (ICMP) activity between remote devices from a management station.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

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, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Example Script

You can use the example script to initiate this sequence on HP OpenView or NetView. You can also enter these commands as **snmpsets** and **snmpgets** using the GUIs of the network management platforms. Use one of the following methods to access the GUI:

- From the menu bar, select **Tools**, then **MIB Browser: SNMP**.
- At the command line type **xnmbrowser**.

The Script

```
Management_Station-----Router_Source-----Router_Dest
echo "##### Create the instance #####"
```

```
##### We've chosen 333 at random. 333 will be the row instance to use for this particular
##### ping experiment. After the ping, the row will be deleted.
##### This keeps the table clean. Router_Source is the dns name of the device we are
##### working with, and public is its RW community string. The values for
##### ciscoPingEntryStatus status are as follows (see Ping MIB):
```

```
##### 1 - active
```

```
##### 2 - notInService
```

```
##### 3 - notReady
```

```
##### 4 - createAndGo
```

```
##### 5 - createAndWait
```

```
##### 6 - destroy
```

```
##### We will clear out any previous entries by setting ciscoPingEntryStatus = 6 (destroy)
```

```
snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.16.333 integer 6
```

```
##### We start building the row by setting ciscoPingEntryStatus = 5 (createAndWait)
```

```
echo
```

```
snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.16.333 integer 5
```

```
echo
```

```
echo "##### Now let's set the characteristics of the ping #####"
```

Only the first three sets below are REQUIRED. The rest have default

values.

#Set ciscoPingEntryOwner = any_name

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.15.333 octetstring any_name

#Set ciscoPingProtocol = 1 = ip (see CISCO-TC-V1SMI.my CiscoNetworkProtocol)

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.2.333 integer 1

#Set ciscoPingAddress = #.#.#.#--take Remote_Dest's ip & convert each octet to hex

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.3.333 octetstringhex AB 44 76 6

#Set the packet count to 20 (ciscoPingPacketCount)

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.4.333 integer 20

#Set the packetsize to 100 (ciscoPingPacketSize)

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.5.333 integer 100

echo

echo "##### Now let's verify that the ping is ready to go and launch it #####"

#Get ciscoPingEntryStatus and make sure it is now equal to 2. This means

notInService which indicates that we're ready to go.

snmpget -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.16.333

```
# Set ciscoPingEntryStatus = 1 to tell it to activate.

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.16.333 integer 1

echo

echo "##### Let's look at the results. #####"

snmpwalk -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1

echo

echo "##### Now that we've gotten the results, let's destroy the row #####"

snmpset -c public Router_Source .1.3.6.1.4.1.9.9.16.1.1.1.16.333 integer 6
```

Related Information

- **Technical Support – Cisco Systems**
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Updated: Nov 02, 2005

Document ID: 13383
