CHAPTER 18

Before Contacting Technical Support

This chapter describes the steps to take before calling for technical support and includes the following sections:

Note If you purchased Cisco support through a Cisco reseller, contact the reseller directly. If you purchased support directly from Cisco, contact Cisco Technical Support at this URL: http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html

Gathering Information for Technical Support

Use this procedure to gather information about your network that is needed by your customer support representative or Cisco TAC.

Note Required logs and counters are part of volatile storage and will not persist through a reload. Do not reload the module or the switch until you have completed this procedure.

DETAILED STEPS

Step 1 Configure your Telnet or SSH application to log screen output to a text file.

Step 2 Set the number of lines that appear on the screen so that pausing is disabled.

terminal length 0

Step 3 Display the configuration information needed to troubleshoot your network.

show tech-support svs

Step 4 Capture the error codes that appear in your message logs.

- **show logging logfile**
  Displays the contents of the logfile.
- **show logging last** *number-of-lines*
  Displays the last few lines of the logfile.

Step 5 Gather your answers to the following questions:

- On which switch or port is the problem occurring?
- Cisco Nexus 1000V software, driver versions, operating systems versions and storage device firmware are in your fabric?
- ESX and vCenter Server software that you are running?
- What is the network topology?
- Were any changes being made to the environment (VLANs, adding modules, upgrades) prior to or at the time of this event?
- Are there other similarly configured devices that could have this problem, but do not?
- Where was this problematic device connected (which switch and interface)?
- When did this problem first occur?
- When did this problem last occur?
- How often does this problem occur?
- How many devices have this problem?
- Were any traces or debug output captured during the problem time? What troubleshooting steps have you attempted? Which, if any, of the following tools were used?
  - Ethanalyzer, local or remote SPAN
  - CLI debug commands
  - traceroute, ping

Step 6 Is your problem related to a software upgrade attempt?

- What was the original Cisco Nexus 1000V version?
- What is the new Cisco Nexus 1000V version?

Obtaining a File of Core Memory Information

Cisco customer support engineers often use files from your system for analysis. One of these is a file containing memory information, and is referred to as a core dump. The file is sent to a TFTP server or to a Flash card in slot0: of the local switch. You should set up your switch to generate this file under the instruction of your customer support representative, and send it to a TFTP server so that it can be e-mailed to them.

To generate a file of core memory information, or a core dump, use the command in the following example.

```
n1000v# system cores tftp://10.91.51.200/jsmith_cores
n1000v# show system cores
Cores are transferred to tftp://10.91.51.200/jsmith_cores
```

Note The file name (indicated by jsmith_cores) must exist in the TFTP server directory.

Copying Files

It may be required to move files to or from the switch. These files may include log, configuration, or firmware files.

Cisco Nexus 1000V always acts as a client, such that an ftp/scp/tftp session will always originate from the switch and either push files to an external system or pull files from an external system.

```
File Server: 172.22.36.10
File to be copied to the switch: /etc/hosts
```

The **copy** CLI command supports four transfer protocols and 12 different sources for files.

```
n1000v# copy ?
    bootflash: Select source filesystem
    core: Select source filesystem
    debug: Select source filesystem
    ftp: Select source filesystem
    licenses Backup license files
    log: Select source filesystem
    modflash: Select source filesystem
    nvram: Select source filesystem
    running-config Copy running configuration to destination
    scp: Select source filesystem
    sftp: Select source filesystem
    slot0: Select source filesystem
    startup-config Copy startup configuration to destination
    system: Select source filesystem
    tftp: Select source filesystem
    volatile: Select source filesystem
```

Use the following syntax to use secure copy (scp) as the transfer mechanism:

```
"scp:[//[username@]server][/path]"
```

To copy `/etc/hosts` from 172.22.36.10 using the user `user1`, where the destination would be `hosts.txt`, use the following command:

```
n1000v# copy scp://user1@172.22.36.10/etc/hosts bootflash:hosts.txt
user1@172.22.36.10's password:
hosts 100% |***************************| 2035 00:00
```

To back up the startup-configuration to a sftp server, use the following command:

```
n1000v# copy startup-config sftp://user1@172.22.36.10/test/startup-configuration.bak1
Connecting to 172.22.36.10...
User1@172.22.36.10's password:
n1000v#
```

Tip Backing up the startup-configuration to a server should be done on a daily basis and prior to any changes. A short script could be written to be run on Cisco Nexus 1000V to perform a save and then backup of the configuration. The script only needs to contain two commands: **copy running-configuration startup-configuration** and then **copy startup-configuration tftp://*server/name***. To execute the script use: **run-script** filename.