



## CHAPTER 9

# Before Contacting Technical Support

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This chapter describes the steps to take before calling for technical support.

This chapter includes the following sections:

- [Gathering Information for Technical Support, page 9-1](#)
- [Obtaining a File of Core Memory Information, page 9-2](#)
- [Copying Files, page 9-2](#)



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**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](http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html)

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## 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.



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

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### DETAILED STEPS

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- Step 1** Configure your Telnet or Secure Shell (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 by entering the **show tech-support** command.
- Step 4** Capture the error codes that appear in your message logs by entering the following commands:
- **show logging logfile**—Displays the contents of the logfile.
  - **show logging last *number***—Displays the last few lines of the logfile.
- Step 5** Gather your answers to the following questions:

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- On which Cisco VSG is the problem occurring?
- Are Cisco Virtual Security Gateway (VSG) software, driver versions, operating systems versions and storage device firmware in your fabric?
- Are you running ESX and vCenter Server software?
- What is your network topology?
- Did you make any changes to the environment (VLANs, adding modules or upgrades) before 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?
  - Ethalyzer, 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 VSG version?
- What is the new Cisco VSG version?

## Obtaining a File of Core Memory Information

Cisco customer support engineers often use files from your system for analysis. One such file that contains memory information 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 TAC representative, and send it to a TFTP server so that it can be e-mailed to them.

This example shows how to generate a file of core memory information, or a core dump:

```
vsg(config)# system cores tftp://10.91.51.200/svr15svc_cores
vsg(config)# show system cores
Cores are transferred to tftp://10.91.51.200/svr15svc_cores
vsg(config)#
```



**Note**

The filename (indicated by svr15svc\_cores) must exist in the TFTP server directory.

## Copying Files

You might need to move files to or from the switch. These files may include log, configuration, or firmware files.

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The Cisco VSG always acts as a client. For example, an ftp/scp/tftp session always originates from the switch and either pushes files to an external system or pulls 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 4 transfer protocols and 12 different sources for files.

This example shows the results of the command:

```
vsg# copy ?
bootflash:      Select source filesystem
core:           Select source filesystem
debug:          Select source filesystem
ftp:            Select source filesystem
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
startup-config Copy startup configuration to destination
system:         Select source filesystem
tftp:           Select source filesystem
volatile:       Select source filesystem
vsg#
```

This example shows how to use secure copy (scp) as the transfer mechanism:

```
vsg# scp: [//[username@]server] [/path]
vsg#
```

This example shows how to copy /etc/hosts from 172.22.36.10 using the user user1, where the destination would be hosts.txt:

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

This example shows how to back up the startup-configuration to a sftp server:

```
vsg# 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:
vsg#
```



### Tip

You should back up the startup-configuration file to a server on a daily basis and before you make any changes. A short script could be written to be run on Cisco VSG to perform a save and a backup of the configuration. The script needs to contain two commands: **copy running-configuration startup-configuration** and **copy startup-configuration tftp://server/name**. To execute the script, use the **run-script [filename]** command.

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