



## CHAPTER 6

# Backing Up the NAM Virtual Services Blade

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This chapter contains the following sections:

- [Backing Up the Cisco NAM Virtual Services Blade](#)
- [Reinstalling WAAS Software](#)
- [Helper Utility Menu Options](#)
- [Restoring the WAAS Appliance Configuration](#)

## Backing Up the Cisco NAM Virtual Services Blade

If you need to replace your WAAS device, we recommend that you back up the Virtual Services Blade so that the NAM configuration can be restored on the replacement device.

To make a backup image of the VSB, follow these steps:

- 
- Step 1** Shut down NAM before stopping the VSB.
- Step 2** Stop the VSB as follows:
- a. From the WAAS Central Manager GUI navigation pane, choose **My WAN > Manage Devices**.
  - b. Click the Edit icon next to the device containing the VSB.
  - c. From the navigation pane, choose **Admin > Virtualization > Actions**.
  - d. Click the **Stop Virtual Blade** button.
- Step 3** Log into the WAAS device command line interface.
- Step 4** Copy the VSB image to an FTP server with the **copy ftp** command, as follows:

```
copy virtual-blade 1 disk 1 ftp ftp_server_ip ftp_server_directory filename
```

For example, to copy the VSB image to the FTP server at 10.0.2.4, to the WAAS directory, in the **vb1.img** file, use this command:

```
copy virtual-blade 1 disk 1 ftp 10.0.2.4
```

---

To restore the VSB image to a WAAS device from an FTP server, use the **copy ftp** command again:

```
copy ftp virtual-blade 1 disk 1 ftp_server_ip ftp_server_directory filename
```

For example, to copy the VSB image to the WAAS device from the FTP server at 10.0.2.4, from the WAAS directory, in the file **vb1.img**, use this command:

```
copy ftp virtual-blade 1 disk 1 10.0.2.4 WAAS VB1.img
```

## Reinstalling WAAS Software

If all of the WAAS software needs to be reinstalled, follow these steps.

- Step 1** Copy the ISO image by downloading it from Cisco.com, or locate it on your network.
- Step 2** Boot from the ISO image and enter the **reboot** command.

The Cisco NAM Virtual Blade performs a reset and launches the GNU GRUB boot loader and displays the window shown in [Figure 6-1](#). This window displays for about ten seconds enabling you to select to boot the **helper utility** instead of the NAM 5.0 application software (NAM-AP in [Figure 6-1](#)).

**Figure 6-1** GNU GRUB Boot Loader

```

GNU GRUB version 1.96
-----
| NAM-AP |
| helper |
|        |
|        |
|        |
-----
5795

```

Per the instructions, use the **^** and **v** keys to select which entry is highlighted. Press **Enter** to boot the selected OS, **e** to edit the commands before booting or **c** for a GNU command-line.

- Step 3** Use the **v** key to select **helper**, and press **Enter**. The helper utility menu displays as shown in [Figure 6-2](#).

**Figure 6-2** Helper Utility Menu

```

=====
Cisco Systems, Inc.
Network Analysis Module (NAM2200) helper utility
Version 1.1(0.5-Eng)

-----
Main menu
1 - Download application image and write to HDD
2 - Download application image and reformat HDD
3 - Install application image from CD
4 - Display software versions
5 - Reset application image CLI passwords to default
6 - Change file transfer method (currently ftp/http)
7 - Send Ping
n - Configure network
r - Exit and reset Services Engine
h - Exit and shut down Services Engine
Selection [1234567dnfrh]:

```

See the next section, [Helper Utility Menu Options](#), for more information about the options.

## Helper Utility Menu Options

This section describes the [Helper Utility Menu](#), what each option does, and any requirements for using a particular option.



### Note

Before you can use menu items 1 and 2, you must first use menu item **n** to configure network parameters for the appliance.

Possible selections for the top level of the helper utility menu are **1, 2, 3, 4, 5, 6, 7 d, n, f, r, and h**.

### Option n - Configure Network

Use **Option n** to configure the network parameters for the appliance.

**Step 1** When the Configure Network Interface menu displays, enter **2** to configure manually.

```
-----
Configure Network interface:
1 - Use application image configuration
2 - Configure manually
3 - Show config
r - return to main menu

Selection [123r]: 2
```

**Step 2** The utility prompts you for the IP address, netmask, and default gateway for the appliance.

```
Enter IP configuration:
IP address []: 172.20.122.93
netmask []: 255.255.255.128
default gateway []: 172.20.122.1
```

```
-----
Configure Network interface:
1 - Use application image configuration
2 - Configure manually
3 - Show config
r - return to main menu

Selection [123r]
```

**Step 3** Check your network configuration using Configure Network menu option 3.

```
Selection [123r]: 3

eth0      Link encap:Ethernet  HWaddr 00:0E:0C:EE:50:3E
          inet addr:172.20.122.93  Bcast:172.20.122.127  Mask:255.255.255.128
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:210 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
```

```

RX bytes:13632 (13.3 KiB) TX bytes:0 (0.0 b)

Kernel IP routing table
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface
172.20.122.0     0.0.0.0        255.255.255.128 U         0      0 eth0
0.0.0.0         172.20.122.1   0.0.0.0        UG        0      0 eth0
-----
Configure Network interface:
1 - Use application image configuration
2 - Configure manually
3 - Show config
r - return to main menu

Selection [123r]:

```

---

## Option 1 - Download Application Image and Write to HDD

Prior to using **Option 1**, first use **Option n** to configure the network.

Use **Option 1** to download a version of the NAM 5.0 application image from an FTP server location and write the image to the hard disk drive. This option requires network connectivity and that network parameters be configured for the Cisco NAM Virtual Blade using helper menu item **n**.

This option enables you to download an image you might have stored at an FTP location or at a location you can access using **http**. You can download the latest version of NAM software from the following URL:

<http://www.cisco.com/cgi-bin/tablebuild.pl/nam-appl>

This URL requires you to have a Cisco service agreement and access to the internet to download the zipped software.

## Option 2 - Download Application Image and Reformat HDD

Prior to using **Option 2**, first use **Option n** to configure the network.

Use **Option 2** to download the NAM 5.0 application image and write the image to the hard disk drive. This option downloads a version of the NAM 5.0 application image from an FTP server location or at a location you can access using **http**.

Using this option reformats the hard disk drives before writing the application image and will destroy all data such as reports or data captures.

You can also [download the latest version](#) from Cisco.com.

## Option 4 - Display Software Versions

Use **Option 4** to display the current NAM application image version stored on your hard disk.

```

Selection [123456789dnfrh]:4
-----
NAM application version: 5.0(1)

Selection [123456789dnfrh]:

```

## Option 5 - Reset Application Image CLI Passwords to Default

Use **Option 5** to reset the password for users **root** and **admin** to their default values.

## Option 6 - Change File Transfer Method

Use **Option 6** to change the file transfer method. This option is only necessary if you change the file transfer method by mistake. Only **FTP** and **http** are supported.

```
Selection [123456789dnfrh]: 6
-----
Change file transfer method menu
The current file transfer method is ftp/http.
1 - Change to FTP/HTTP
r - return to main menu
```

## Option 7- Send Ping

Use **Option 7** to send a ping to determine if network connectivity exists. When prompted, enter the IP address or full domain name of the location to send the ping.

```
IP address to ping []: 172.20.122.91

Sending 5 ICPM ECHO_REQUEST packets to 172.20.122.91.
PING 172.20.122.91 (172.20.122.91) 56(84) bytes of data.
64 bytes from 172.20.122.91: icmp_seq=1 ttl=64 time=0.151 ms
64 bytes from 172.20.122.91: icmp_seq=2 ttl=64 time=0.153 ms
64 bytes from 172.20.122.91: icmp_seq=3 ttl=64 time=0.125 ms
64 bytes from 172.20.122.91: icmp_seq=4 ttl=64 time=0.102 ms
64 bytes from 172.20.122.91: icmp_seq=5 ttl=64 time=0.166 ms

--- 172.20.122.91 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4000ms
rtt min/avg/max/mdev = 0.102/0.139/0.166/0.025 ms
```

## Option r- Exit and Reset Services Engine

Use **Option r** to reset the WAAS appliance prior to rebooting the newly installed NAM 5.0 application image.

Before using **Option r**, remove the recovery CD from the CD drive to enable the WAAS appliance to boot the application image.

## Option h- Exit and Shut down Services Engine

Use **Option h** to reset and shut down the WAAS appliance.

```
-----
Option h for recovery CD
Selection [123456789dnfrh]: h
About to exit and reset NAM.
Are you sure? [y/n] :y
Stopping internet superserver: inetd.
Stopping OpenBSD Secure Shell server: sshd.
Stopping internet superserver: xinetd.
```

```

Stopping internet superserver: xinetd-ipv4.
: done.
Shutting down NAM (NAM2200), part 1:
Stopping klogd . . .
Stopping syslogd . . .
Sending all processes the TERM signal... done.
Sending all processes the KILL signal... done.
Unmounting remote filesystems... done.
Deactivating swap...done.
Unmounting local filesystems...done.
Starting halt command: halt
md: stopping all md devices.
Synchronizing SCSI cache for disk sdb:
FAILED
  status = 1, message = 00, host = 0, driver = 08
  <6>sd: Current: sense key=0x5
  ASC=0x20 ASCQ=0x0
Synchronizing SCSI cache for disk sda:
FAILED
  status = 1, message = 00, host = 0, driver = 08
  <6>sd: Current: sense key=0x5
  ASC=0x20 ASCQ=0x0
ACPI: PCI interrupt for device 0000:07:00.1 disabled
ACPI: PCI interrupt for device 0000:07:00.0 disabled
Power down.
acpi_power_off called
-----

```

## Restoring the WAAS Appliance Configuration

If you have stored your NAM configuration file at a remote server location you can access using FTP or HTTP, you can restore your NAM configuration file after a system recovery. See [Backing Up the Cisco NAM Virtual Services Blade, page 6-1](#).