



# **Using the Recovery CD**

You can use the recovery CD to re-install NAM application software on your Cisco NAM 2204 appliance if your appliance should suffer a catastrophic event, such as a hard disk crash, and you can no longer boot the NAM application.

Ø Note

The information found in Chapter 5, "Backing up and Restoring NAM Configuration", helps you prepare to recover from a catastrophic event.

After you use the recovery CD to re-install the NAM application image, you can use the command-line interface (CLI) to restore the most recent configuration file to the NAM appliance if you have stored a configuration file at an accessible location. See "Backing Up Your Configuration" section on page 5-1, for more information.

The recovery CD is part of the NAM software kit (part number NAM-APPL-SW-5.1).

# **Booting the Recovery CD**

When you boot the Cisco NAM 2204 appliance from the recovery CD, the NAM appliance console will temporarily display the bootloader window. After this window displays for ten seconds, the Cisco NAM 2204 appliance will automatically boot the NAM application software.

When using the recovery CD, choose **helper** and press **Enter** within that 10 second interval to get to the helper utility Menu. Otherwise, you might have to reboot the Cisco NAM 2204 appliance again.

To use the recovery CD:

- Step 1 Insert the NAM Software Recovery CD-ROM into the DVD-ROM drive on the front panel of the Cisco NAM 2204 appliance.
- **Step 2** From the NAM console or command line, enter the **reboot** command.

The Cisco NAM 2204 appliance performs a reset and launches the GNU GRUB boot loader and displays the window shown in Figure F-1. This window displays for about ten seconds enabling you to select to boot the **helper utility** instead of the NAM application software (NAM-AP in Figure F-1).

Figure F-1 GNU GRUB Boot Loader

+	
	NAM-AP.
	helper

GNU GRUB version 1,96

Per the instructions, use the  $^{\text{and }} \mathbf{v}$  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 F-2.

```
Figure F-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 shutdown 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.



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]

Selection [123r]: 3

**Step 3** Check your network configuration using Configure Network menu option 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
                           Genmask
                                                                Use Iface
Destination Gateway
                                           Flags Metric Ref
            0.0.0.0
172.20.122.0
                             255.255.255.128 U 0 0 eth0
                             0.0.0.0 UG 0
                                                    0 eth0
0.0.0.0
              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]:
```

### **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 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 2204 appliance 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 application image and write the image to the hard disk drive. This option downloads a version of the NAM 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 3 - Install Application Image from CD**

Use **Option 3** to install the NAM application image from the recovery CD. This option might be necessary if you are unable to connect to your network and download a version of NAM software you archived earlier.



The version of NAM software available on the recovery CD is the first release of the software and has no patches or upgrades. If you use this option, see Restoring Your Configuration, page 5-2.

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

#### **Option 4 - Display Software Versions**

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

```
Selection [123456789dnfrh]:5
-----
NAM application version: 5.1(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]: 7
-----
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=0.125 ms 64 bytes from 172.20.122.91: icmp\_seq=3 ttl=64 time=0.102 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 NAM appliance prior to rebooting the newly installed NAM application image.

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

## **Option h- Exit and Shutdown Services Engine**

Use **Option h** to reset and shut down the NAM 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.
```

```
: 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 NAM 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 Your Configuration" section on page 5-1 and Restoring Your Configuration, page 5-2.