



Troubleshooting

This section provides information the helps you troubleshoot your Prime NAM installation.

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Field Replaceable Unit Installation

The memory or hard disk can be replaced using the following instructions:



Note

For safety precautions, see the [Safety Guidelines](#).

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- | | |
|---------------|--|
| Step 1 | Shut down the NAM-3 using the CLI shutdown command, or by pushing the shutdown button on the front panel with a pin. Wait until the lights go off and unplug it. |
| Step 2 | Carefully remove the NAM blade out of the switch slot. |
| Step 3 | To remove old memory DIMMs, push down on the white latches. All size DIMMs are uncovered, not screwed in, and not soldered, and there is no other component blocking them, so they can be easily removed. |
| Step 4 | Follow all necessary antistatic standards in handling the hard disk drives.
Danger Remember to use an ESD or antistatic wrist strap, a conductive foam pad or mat (recommended), and follow all necessary antistatic standards when handling the hard disk drives. |
| Step 5 | If a hard drive is already installed in the hard drive tray, you can remove it by unfastening the four screws that attach it to the drive tray with a Number 2 Phillips screwdriver. |
| Step 6 | Install the new DIMMs or hard drive. Avoid extra force when removing and inserting DIMMs. |
| Step 7 | Plug the NAM-3 back in. You would see the STATUS button go red, and then green when it is booting up. |
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Recovery Procedure

Complete the following steps for the recovery:

Step 1

Access the switch CLI in enable mode using Telnet or SSH.

At this point you will need to set the management vlan for the blade correctly. The IP address used for the Prime NAM will also be used to download and install the recovery image from rommon. However, for connectivity to occur, the switch will need to be set to route traffic to the management interface. The vlan ID in the command below must contain the IP address that must be used for the Prime NAM management port.

Replace **X** below with the valid module and **XX** with valid vlan information.

```
Cisco6500# conf t
Cisco6500(config)# analysis module X management-port X access-vlan XX
Cisco6500(config)#
```

Optionally, save the config.

```
Cisco6500# wr mem
Building configuration...
[OK]
Cisco6500#
```

Step 2

Plug the blade into an open slot on the switch.

Step 3

Session into the console from your switch session.

```
Cisco6500#service-module session slot X
You can type Ctrl-^, then x at the remote prompt to end the session
Trying 127.0.0.20, 2065 ... Open
```

At this point you may see a bootup sequence on the session terminal, or a rommon prompt. You must get to the blade's rommon prompt to start the recovery process.

Look for this output during bootup:

```
Break out with <ESC>
```

Press **Esc** within 10 seconds. You will see the rommon prompt very soon after that. After you have the rommon prompt, you will need to set up networking.

```
Use ? for help.
```

```
Sending Cisco Catalyst 6500 Series NAM (WS-SVC-NAM3-6G-K9) recovery start SCP message
to supervisor.
```

```
ACK received.
```

```
rommon #0>
```

Several parameters need to be set at the rommon.

- ◦ ADDRESS – NAM IP address on the switch vlan as set up on the switch
- GATEWAY – Gateway for the vlan as set up on the switch
- SERVER – TFTP server to use for downloading the recovery image
- IMAGE – Complete path to and including the recovery image on the TFTP server
- VLAN – Switch vlan which contains allocated Cisco Prime NAM IP address
- PORT - Set to Data0 for internal port

Replace the addresses below with the Prime NAM IP address and gateway you are using in the following sequence. Also, enter the IP address of the TFTP server as **SERVER**. The **IMAGE** parameter is the path to and including the recovery image on the TFTP server.

```
rommon #1> ADDRESS=1.1.1.2
rommon #2> GATEWAY=1.1.1.1
rommon #3> SERVER=2.2.2.2
rommon #4> IMAGE=/tftpboot/path/to/and/including/nam_recv.img
rommon #5> PORT=Data0
rommon #6> VLAN=35
```

Now you can download and boot the Prime NAM recovery image:

```
rommon #7> tftpdnld
...
tftp /tftpboot/trifecta/latest-recv@172.20.98.174 via 172.20.103.1
Starting download. Press ESC to abort.
!!!! .....
```

Starting download. Press ESC to abort.

!!!!

This procedure will take up to 15 minutes to complete. At some point you will see a menu. You can install the Prime NAM image from that menu. For recovery purposes, you will only need to use menu item 4. After the image has been validated, you will be prompted for confirmation. Here is the sequence:

```
=====
Cisco Systems, Inc.
Network Analysis Module (WS-SVC-NAM3-6G-K9) recovery utility
Version 1.0(0.6)
-----
Network Analysis Module (WS-SVC-NAM3-6G-K9) Recovery Menu
1 - Download and install application image from network (destructive)
2 - Re-initialize eUSB
3 - Display software versions
4 - Install Application Image from Ramdisk (destructive)
5 - Change file transfer method (currently ftp/http)
6 - Send Ping
n - Configure network
r - Exit and reset Services Engine
h - Exit and shutdown Services Engine
Selection [123456nrh]: 4
uncompressing image . . .
Checking nam-app
Do you want to proceed installing it? [y/N] y
Executing pre install actions...
Initializing the hard disk. This process may take several minutes...
Required disk size: 22020096 Kb (blocks)
Available disk size: 586061784 Kb (blocks)sd 0:0:0:0: [sda] Assuming drive cache:
write through
sd 0:0:0:0: [sda] Assuming drive cache: write through
Applying the image, this process may take several minutes...
Performing post install, please wait...
Running post install script: /tmp/post-install
Application image upgrade complete. You can boot the image now.
Selection [123456nrh]: r
About to exit and reset NAM.
```

```
Are you sure? [y/N] y
rebooting...
```

Now the Prime NAM login prompt will come up on the console after rebooting. If you are still on the console, you will see the rommon bootup sequence as well as the Prime NAM bootup sequence. You should wait for the Prime NAM login prompt. No user interaction is needed until that point is reached.

```
...
Cisco Network Analysis Module
nam.localdomain login:
Prime NAM is installed and ready to be configured.
```

Switch Commands

show users

This command is executed when you do not log out of a session command, and the subsequent logins fail. In order to clear the session created by the service-module session slot X command, use the following procedure.

From the switch CLI, in execution mode, issue this command:

```
show users
Note the vty connected to the slot ip
ip addresses are: 127.0.0.[X]0
clear line vty X
Where X is the switch slot which contains the NAM blade.
```

Output shows the vty used for the session open for a NAM module. Note the vty connected to the slot IP you want to clear.

For example, a NAM in slot 1 would produce this output, after the show users command is executed:

```
1 vty 0 127.0.0.10
```

In this example, to clear the Cisco Prime NAM session, issue this command:

```
clear line vty 1
```

show analysis module version

This command is used to identify the version of the Cisco Prime NAM software on a standalone switch.

show analysis switch module version

This command is used to identify the version of the Cisco Prime NAM software on VSS.

For example,

```
sw12-SUP4-VSS# show analysis switch 1 module 4 version
NAM-3 module 4:
Sw Version: 6.1
```