



## CHAPTER 2

# Installing Cisco NAC Guest Server

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This chapter contains the following sections:

- [Connecting the Cisco NAC Guest Server](#)
- [Command Line Configuration](#)
- [Re-Imaging the Appliance](#)

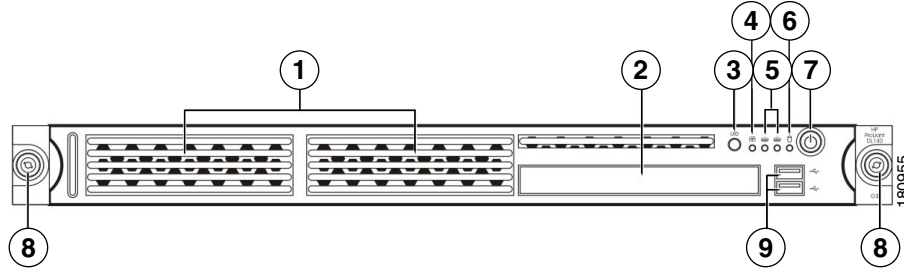
## Connecting the Cisco NAC Guest Server

The Cisco NAC Guest Server is based on the Cisco NAC Appliance 3310 (NAC-3310) hardware platform and comes preloaded with a default system image. When you receive the Guest Server, perform the initial configuration described in [Command Line Configuration, page 2-3](#). If you need to perform CD installation to re-image the appliance, refer to [Re-Imaging the Appliance](#) for instructions.

To perform initial configuration, you will need to connect to your appliance and access its command line, as described below.

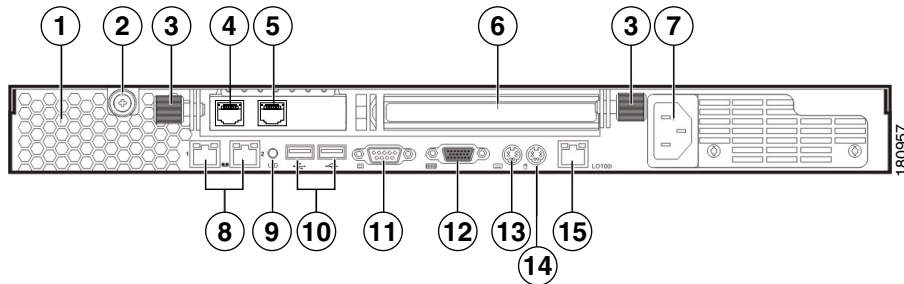
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- Step 1** You can access the Cisco NAC Guest Server command line in one of two ways:
- a. Connect a monitor and keyboard directly to the machine via the keyboard/video monitor connectors on the back panel of the machine ([Figure 2-2](#))(preferred method).
  - b. Connect a null modem serial cable from a workstation (PC/laptop) to the serial port on the appliance. Open a serial connection on the workstation using terminal emulation software (such as HyperTerminal or SecureCRT) with settings set to 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- Step 2** Connect a straight-through Category 5 Ethernet cable to the eth0 (NIC1) 10/100/1000 Ethernet port on the back panel of the appliance and to your local area network.
- Step 3** Connect the AC power cord to the back panel of the appliance and to a grounded AC outlet, and power on the appliance([Figure 2-1](#)).
- Step 4** Proceed to the instructions in [Command Line Configuration, page 2-3](#).

Figure 2-1 Cisco NAC Guest Server Front Panel



1	Hard disk drive (HDD) bay	6	HDD activity LED indicator (green)
2	CD-ROM/DVD drive	7	Power button with LED indicator (bicolor: green/amber)
3	UID (Unit identification) button with LED indicator (blue)	8	Thumbscrews for the front bezel
4	System health LED indicator (amber)	9	Front USB ports
5	Activity/link status LED indicators for NIC 1 (eth0) and NIC2 (eth1) (green)		

Figure 2-2 Cisco NAC Guest Server Rear Panel



1	Ventilation holes	9	UID button with LED indicator (blue)
2	Thumbscrew for the top cover	10	Rear USB ports (black)
3	Thumbscrews for the PCI riser board assembly	11	Video port (blue)
4	NIC 3 (eth2) and NIC 4 (eth3) PCI Express GbE LAN (RJ-45) ports (Intel)	12	Serial port
5		13	PS/2 keyboard port (purple)
6	Standard height/full-length PCI Express x16/PCI-X riser board slot cover	14	PS/2 mouse port (green)
7	Power supply cable socket	15	10/100 Mbps iLO LAN port for IPMI management (RJ-45)
8	NIC 1 (eth0) and NIC 2 (eth1) integrated GbE LAN (RJ-45) ports (Broadcom)		

**Note**

The three LAN ports each have their own LED indicators for activity/link status and network speed.

## Command Line Configuration

A very minimal amount of command line configuration is needed on the Cisco NAC Guest Server appliance. This is to perform two tasks.

- [Configure IP Address and Default Gateway, page 2-3](#) so that the appliance can be accessed on the network
- [Change Root Password, page 2-5](#) on the appliance from the default

## Configure IP Address and Default Gateway

To allow the appliance to be accessed on the network you need to configure the IP address and default gateway for the first interface on the appliance (eth0 or NIC1). To configure these details perform the following steps.

- Step 1** Using either keyboard and monitor connection to the appliance, or serial console connection, authenticate to the command line interface. The user name for the console is **root** and the default password is **cisco** ([Figure 2-3](#)).

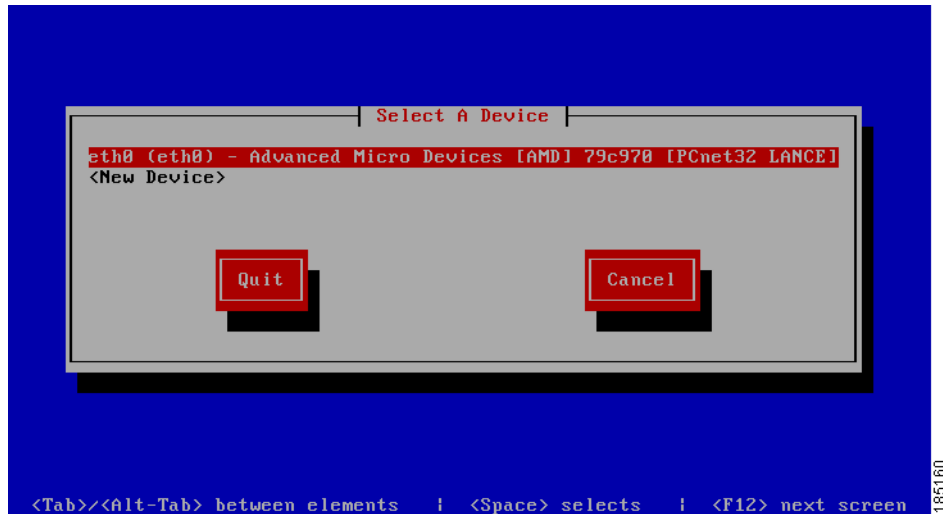
**Figure 2-3 Authenticate to the Console**

```
Fedora Core release 6 (Zod)
Kernel 2.6.20-1.2962.fc6 on an i686

localhost login: root
Password:
*****
* To configure the network settings please enter *
* system-config-network <ENTER> *
* when changed enter *
* reboot <ENTER> *
*****
[root@localhost ~]# _
```

- Step 2** To configure the network settings, type the command **system-config-network** and press **<enter>**. The Select A Device menu appears ([Figure 2-4](#)).

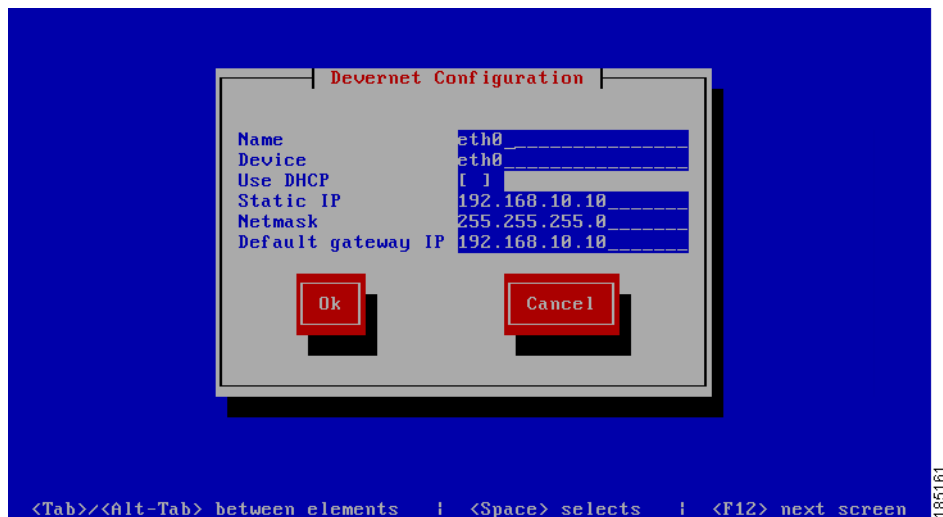
Figure 2-4 Choose eth0 Interface



**Step 3** Select the eth0 interface from the list using the up and down arrow keys and press **<enter>**

**Step 4** You can now enter all the correct network settings for the appliance (Figure 2-5).

Figure 2-5 Change Network Configuration Details



Enter the following information:

- **Static IP**—The IP Address that you want to assign to the Cisco NAC Guest Server
- **Netmask**—The corresponding subnet mask
- **Default gateway IP**—The default gateway for the network

You can use the Tab key, Arrow keys or **<Enter>** to move between fields,. When finished, tab to the **Ok** button and press **<Enter>**.

**Step 5** Exit the system-config-network by selecting Quit from the network selection screen (Figure 2-6).

Figure 2-6 Quit the Utility



- Step 6** At the command line either reboot the appliance by typing **reboot** and pressing <Enter> or follow the instructions to [Change Root Password, page 2-5](#) before entering **reboot**.

## Change Root Password



**Note** You should change the root password from the default of cisco, it is advised to use a complex password for enhanced security.

- Step 1** From the command line enter the command **passwd** and press <Enter>
- Step 2** Enter the new password and press <Enter>
- Step 3** Repeat the password and press <Enter>

Continue to [System Setup, page 3-1](#) to access and configure the admin console.

# Re-Imaging the Appliance

When the Cisco NAC Guest Server is shipped, the system image already preloaded on the unit, so imaging is unnecessary. If you need to re-image the appliance to factory defaults, you can download the system image ISO from Cisco Secure Software Downloads on Cisco.Com and burn this ISO file to a blank CD-ROM. Once you have the system image on a bootable CD, you can perform the following steps to install the system image onto the appliance. Refer to the [Release Notes for Cisco NAC Guest Server, Release 1.0.0](#) for additional details.



## Caution

Imaging the appliance will delete all data on the appliance, there will be no method of recovery of data from the Guest Server after imaging has been started. Make sure to backup any data that you need before starting this process.

- Step 1** Insert the bootable CD into the CD-ROM drive of the Cisco NAC Guest Server appliance.
- Step 2** Decide whether to perform the installation using a connected keyboard and monitor or over a serial console. Connect either a keyboard and monitor to the back of the unit, or attach a null modem cable to the serial port on the back of the appliance. From the computer the serial cable is attached you will need to run a terminal emulation program with settings set to 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- Step 3** Once you have connected to the appliance and inserted the CD containing the image, power on the appliance. Switch the appliance on, or if already started switch it off and then back on again.
- Step 4** The appliance should now boot from the CD-ROM drive and the initial install screen displays (Figure 2-7).

**Figure 2-7** Initial Install Screen

```

- Welcome to the Cisco NAC Guest Server Installation Process
- To install using a keyboard and monitor press the <ENTER> key.
- To install using the console enter 'serial' and press <ENTER>.
- Use the function keys listed below for more information.

[F1-Main] [F2-Options] [F3-General] [F4-Kernel] [F5-Rescue]
boot: _

```

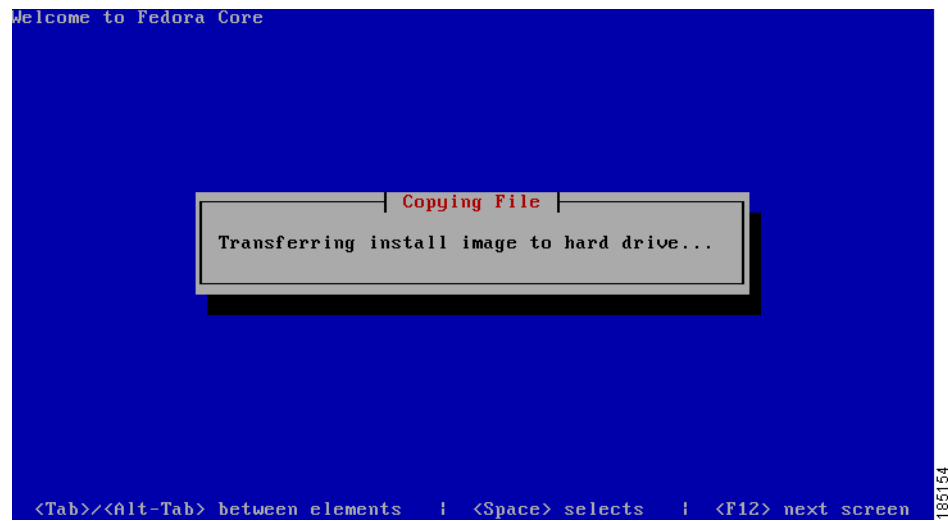
- Step 5** At the Initial Install Screen, choose how to run the installation according to how you are connected to the appliance.
  - If directly connected using a keyboard and monitor, press <ENTER>.
  - If you using a serial connection, type `serial` at the boot prompt, then press <ENTER>.



**Note** If you press <ENTER> by mistake on a serial connection, the imaging process will still run, but there is no display until the appliance reboots at the end of the process.

**Step 6** The system image automatically installs on the hard disk (Figure 2-8).

**Figure 2-8** Transferring Install Image



**Step 7** When the install image is successfully transferred the system reboots automatically (Figure 2-9).

**Figure 2-9** Appliance Reboots



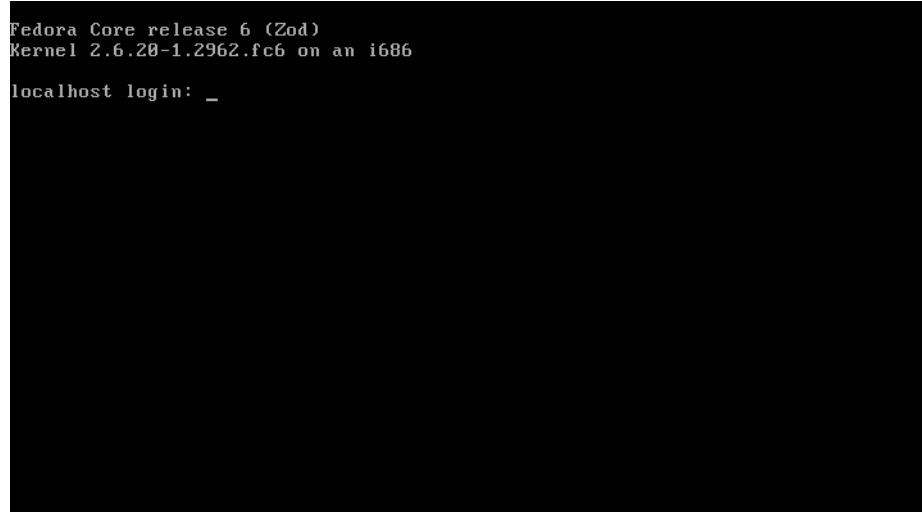
**Step 8** The CD-ROM automatically ejects from the appliance.



**Note** Remove the CD and store it safely so that the appliance does not accidentally reboot from it at a later time.

- Step 9** The appliance boots and runs the final setup of the image automatically. The imaging process is complete when the login screen displays ([Figure 2-10](#)).

**Figure 2-10** *Imaging Complete*

A terminal window showing the boot process of Fedora Core. The text displayed is: "Fedora Core release 6 (Zod)", "Kernel 2.6.20-1.2962.fc6 on an i686", and "localhost login: \_". The rest of the terminal is black. A vertical number "185156" is visible on the right side of the terminal window.

```
Fedora Core release 6 (Zod)
Kernel 2.6.20-1.2962.fc6 on an i686
localhost login: _
```

- Step 10** Login as user root, and continue to the instructions in [Command Line Configuration, page 2-3](#) to complete the installation.
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