OCAP Installation and Upgrade Instructions

Please Read

Important

Please read this entire guide. If this guide provides installation or operation instructions, give particular attention to all safety statements included in this guide.

Notices

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Contents

About This Guide

Introduction

This guide provides step-by-step instructions for installing and configuring the OpenCable™ Application Platform (OCAP™) component of a Cisco Digital Broadband Delivery System (DBDS). The OCAP software is contained on a DVD. You need a technician on-site to insert the OCAP DVD into the OCAP server. Installation engineers then perform the OCAP software installation from the DNCS that has a remote connection to the OCAP server.

Audience

This guide provides Cisco field service engineers with instructions for upgrading the OCAP component of an existing DBDS.

Read Me

Please read this entire guide before beginning the upgrade. If you are uncomfortable with any of the procedures, contact Cisco Services.

Important: Perform all of the procedures in this guide in the order in which they are presented. Failure to follow all of the instructions may lead to undesirable results.

Related Publications

You may find the following publications useful as resources when you implement the procedures in this document.

- *Configuring the DBDS System for Using the Common Download Process With OpenCable Hosts Application Guide* (part number 78-4011041-01)
- *OCAP Architecture Guide* (part number 78-738184-01)
- *TSBroadcaster User's Guide* Cisco's *OCAP Object Carousel Solution* (part number 78-4011043-01)

UNIX and System Expertise Requirements

System operators and Cisco engineers who install OCAP software need the following skills:

- Advanced knowledge of UNIX
  - Experience with the UNIX vi editor. Several times throughout the system upgrade process, the system files are edited using the UNIX vi editor. The UNIX vi editor is not intuitive. The instructions provided in this guide are no substitute for an advanced working knowledge of vi
  - The ability to review and edit cron files
- Extensive DBDS system expertise
  - The ability to identify keyfiles that are unique to the site being upgraded
  - The ability to add and remove user accounts

Document Version

This is the fourth release of this guide. In addition to minor text and graphic changes, the following table provides the technical changes to this guide.

Description	See Topic
The Sun Fire V245 server is now a supported OCAP server.	The addition of the Sun Fire V245 as an OCAP server is reflected throughout this guide.
Software installation commands that were specific to the Sun Fire V240 server have been made more generic.	The modification of the software installation commands are reflected throughout this guide.

1

Installing OCAP Software for the First Time

Introduction

This chapter contains the procedures that you will follow to prepare the server for the initial installation of OCAP software, as well as the procedures for installing the OCAP software.

Note: If you are upgrading OCAP software at a site that already supports the OCAP feature, go instead to Chapter 2, ***Upgrading OCAP Software*** (on page 29).

In This Chapter

Introducing the OCAP Servers and the ALOM Port

The OCAP Servers

Cisco has chosen the Sun Fire V240 and V245 servers for the OCAP feature. These servers use Sun's existing SPARC and Solaris architecture, and are designed to easily mount within a standard computer rack. These servers are configured with the following components:

Sun Fire V240	**Sun Fire V245**
Two UltraSPARC III processors	Two UltraSPARC III processors
Four GB of memory	One GB of memory
■ 2 X 36 hard drives ■ 2 X 73 hard drives	■ 2 X 73 GB hard drives ■ 4 X 72 GB hard drives
Four Gigabit Ethernet ports	Four Gigabit Ethernet ports
Serial management port	Serial management port
Network management port	Network management port
Three PCI slots	■ Two PCI-e slots ■ Two PCI-x slots
Two redundant power supplies	Two redundant power supplies
A system configuration card	A system configuration card

The ALOM Port

Taken as a whole, the serial management port and the network management port of the Sun Fire V240 and V245 servers constitute the Sun Advanced Lights Out Manager (ALOM) port. The ALOM port is a system controller that allows the servers to be managed and administered from a remote location. Through the ALOM port, an engineer can monitor and control the server through a serial connection (using the SERIAL MGT port) or an Ethernet connection (using the NET MGT port).

Before You Begin

Before beginning to install the OCAP software, meet with the network administrator at the headend. The installation process requires that you obtain specific information regarding the network management port of the OCAP server. Obtain this information from the network administrator and record it in the space provided.

- The IP address of the network management port:
- The netmask of the network management port:
- The IP address of the gateway or router used to connect to the network management port:

Log on to the OCAP Server

Introduction

These instructions are to be completed at the remote location and assume that the OCAP server has not yet been configured to serve as a remote server in the OCAP design.

Logging on to the OCAP Server

Follow these instructions to log on to the OCAP server.

1. Connect a laptop computer to the serial network management port of the OCAP server.
2. Start the HyperTerminal application on the laptop and configure the application with the following parameters:
   - Baud rate—9600
   - Data bits—8
   - Parity—none
   - Stop bit—1
   - Flow control—no

   Note: The HyperTerminal application allows one computer to communicate with another computer. The communications port you use on the laptop depends upon the configuration of the laptop.

   Result: A HyperTerminal window opens.
3. If necessary, power-on the OCAP server.
4. Type **#.** and then press **Enter**. One of the following results occurs:
   - The **Login** prompt appears.
   - The **sc>** prompt appears.
5. Did the Login prompt appear after you completed step 4?
   - If **yes**, go to step 6
   - If **no** (the **sc>** prompt appeared), skip to step 7
6. Follow these instructions (the Login prompt appeared after completing step 4).
   a. Type **admin** and then press **Enter**.
   b. Type the admin password and then press **Enter**. The **sc>** prompt appears.
7. Type **break** and then press **Enter**. The system interrupts the boot process of the OCAP server.
8. Type **console -f** and then press **Enter**. A message appears that instructs you to type **#.** to return to the ALOM port.

9 Press **Enter** again.

Results:

- Control transfers to the console of the OCAP server (rather than the ALOM port).
- The **ok** prompt appears.

10 After completing step 9, did the **ok** prompt appear, as described?

- If **yes**, go to step 11.
- If **no**, repeat this procedure from step 7.

11 Type **#.** (the **#** key followed by a period).

Results:

- Control returns to the ALOM port.
- The **sc>** prompt appears.

Configure the ALOM Port

Configuring the ALOM Port of the OCAP Server

Now that you have successfully connected the laptop computer to the OCAP server and logged on, complete the following steps to configure the ALOM port.

1 At the **sc>** prompt, type **setsc if_network true** and then press **Enter**.

Result: One of the following results occurs:

- If you have never before set the admin password for this server, the system responds with a message similar to the following:
  Warning: the setsc command is being ignored because the password for admin has not been set.
  Setting password for admin.
  New password:
- If the system detects that the admin password for this server has previously been set, then the network management port of the server becomes functional.

2 Did the system display the "setting password" message described in the first bullet of step 1?

- If **yes**, go to step 3.
- If **no**, go to step 4.

3 Follow these instructions.

a Type the new admin password and then press **Enter**. The **Re-enter new password** prompt appears.

b Retype the new admin password and then press **Enter**.

c Type **setsc if_network true** and then press **Enter**. The network management port of the server becomes functional.

4 Type **setsc netsc_dhcp false** and then press **Enter**. This command prevents the Dynamic Host Configuration Protocol (DHCP) from obtaining the network configuration.

5 Type **setsc netsc_ipaddr [IP address]** and then press **Enter**. This command establishes the unique IP address of the network management port.

Note: Refer to the information you obtained from the network administrator, in the ***Introducing the OCAP Servers and the ALOM Port*** (on page 8) section.

6 Type **setsc netsc_ipnetmask [netmask]** and then press **Enter**. This command establishes the netmask of the network management port.

Note: Refer to the information you obtained from the network administrator, in the ***Introducing the OCAP Servers and the ALOM Port*** (on page 8) section.

7 Type **setsc netsc_ipgateway [IP address of gateway or router]** and then press **Enter**. This command establishes the IP address of the gateway or router of the network management port.

8 Type **setsc sc_powerstatememory true** and then press **Enter**. This command sets the sc_powerstatememory variable to true.

9 Type **showsc** and then press **Enter**. The system displays the value of variables associated with the ALOM port.

10 Is the **sc_powerstatememory** variable set to *true*?

- If **yes**, type **q** to exit from the showsc display.
- If **no**, type **q** to exit from the showsc display and then repeat this procedure from step 8.

11 Type **resetsc** and then press **Enter**. A confirmation message appears.

12 Type **y** and then press **Enter**. After a few messages, the system prompts you to type **#.** to return to the ALOM port.

13 Type **#.** (Do not press Enter.). The **Login** prompt appears.

14 Did the Login prompt appear after you completed step 13?

- If **yes**, go to step 15.
- If **no**, go to step 16.

15 Follow these instructions.

a Type **admin** and then press **Enter**.

b Type the admin password and then press **Enter**. The **sc>** prompt appears.

16 Type **shownetwork** and then press **Enter**. The system displays the configuration settings you just established.

17 Review the settings you established in steps 1 through 16 and choose one of the following options:

- If the settings are correct, go to step 18.
- If a setting is incorrect, re-run the appropriate command and then go to step 18.

18 Type **console -f** and then press **Enter**. A informational message appears that instructs you to type #. to return to the ALOM port.

Important: Do not type "**#.**" Go instead to step 19.

19 Press **Enter** again.

Results:

- Control transfers to the console of the OCAP server (rather than the ALOM port).
- The **ok** prompt appears.

Choices Regarding Installation

The OCAP server is now ready for the installation of OCAP software. You have the following two options:

- Telnet from the DNCS to the just-configured ALOM port by following the instructions in the next procedure, ***Connect to the Console of the OCAP Server*** (on page 15).

  Note: Cisco recommends that you select this option in order to test the just-configured ALOM port.

- Use the laptop to install the OCAP software by following the instructions in ***Install the OCAP Software*** (on page 16).

Connect to the Console of the OCAP Server

Connecting to the Console of the OCAP Server

After configuring the ALOM port of the OCAP server, you are ready to connect to the console. Follow these instructions to connect to the console of the OCAP server.

1 Follow these instructions to remotely log on to the ALOM port of the OCAP server.

   a Type **telnet [IP address of ALOM port]** and then press **Enter**. A prompt for the user ID appears.

   Note: Substitute the IP address of the ALOM port for [IP address of ALOM port].

   Example: telnet 10.201.0.2

   b Type the admin user ID and then press **Enter**. A prompt for the password appears.

   c Type the password for the admin user and then press **Enter**. The **SC >** prompt appears as the system establishes a telnet session between the DNCS and the ALOM port.

2 Type **console -f** and then press **Enter**.

Results:

- A message appears that instructs the user on how to return to the ALOM port.
- Control of the server is returned to the console, rather than the ALOM port.

3 Go to ***Install the OCAP Software*** (on page 16).

Install the OCAP Software

Notice to Installation Engineers

Be sure that you are using the procedures in this section to install the OCAP software for the first time. If you are upgrading OCAP software at a site that already supports the OCAP feature, use the upgrade procedures in Chapter 2, instead.

Installing the OCAP Software For the First Time

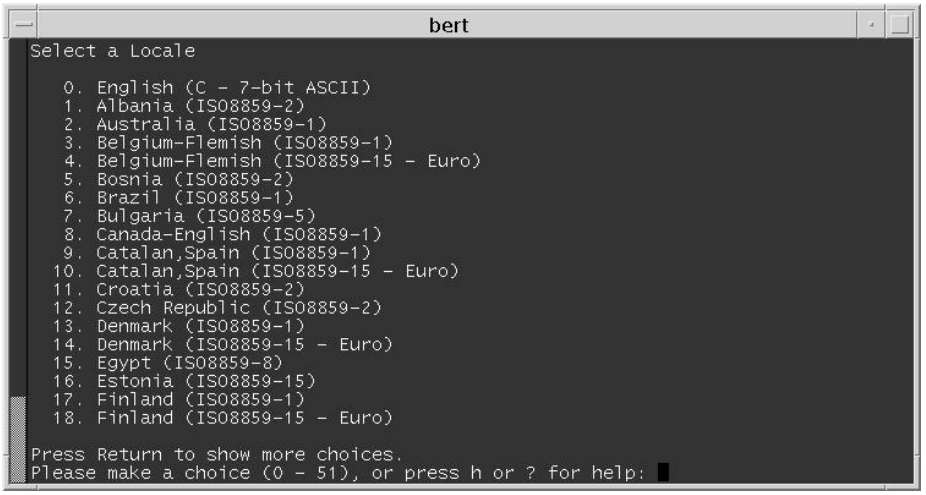
Now that you have established the correct environment for the OCAP server, you can install the software. Follow these instructions to install the software.

1. If necessary, have the technician who is on-site at the OCAP server insert the DVD labeled similarly to **OCAP Install DVD** into the DVD drive of the OCAP server.
2. Type **boot cdrom – install** and then press **Enter**.

   Results:

   - The OCAP server reboots as the installation script begins.
   - The Select a Language window opens.

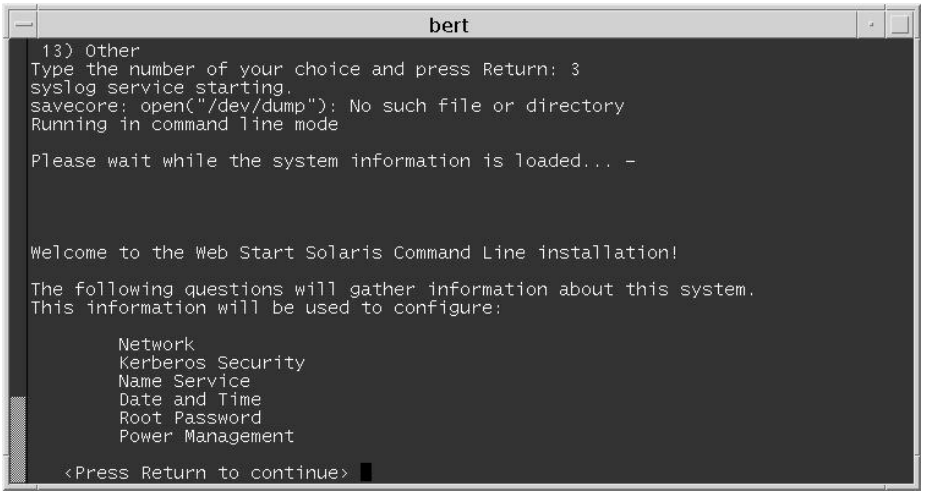
3 Type the number that corresponds with **English** and then press **Enter**. The Select a Locale window opens.



4 Type the number associated with where the OCAP server is geographically located — probably **USA (en-US. ISO 8859-1)**, and then press **Enter**. The **What type of terminal are you using** message appears.

Note: That selection is typically number **49**.

5 Type **3** (for DEC VT100) and then press **Enter**. A series of messages appear, as well as a prompt to **Press Return to continue**.



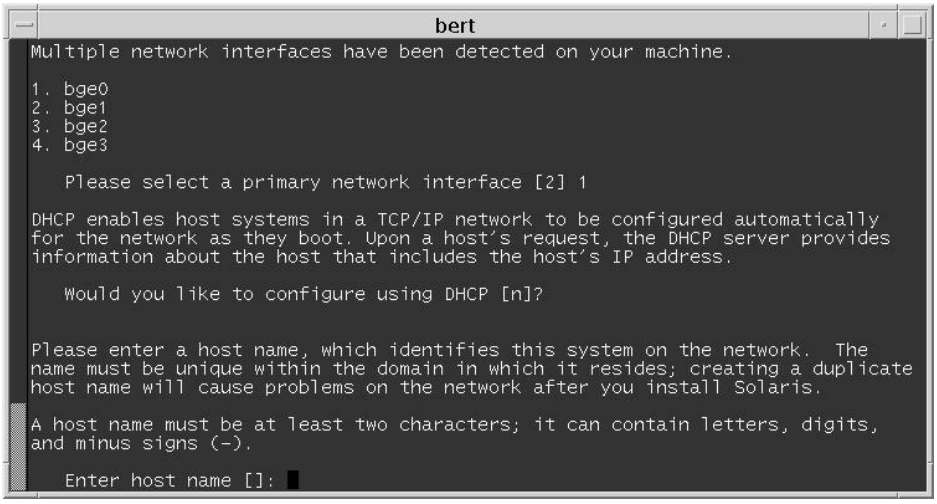
6 Press **Enter**. The **Is this machine networked** question appears.

7 Type **y** (for yes) and then press **Enter**. The window updates to acknowledge that multiple networks have been detected and prompts you to select a primary network interface.

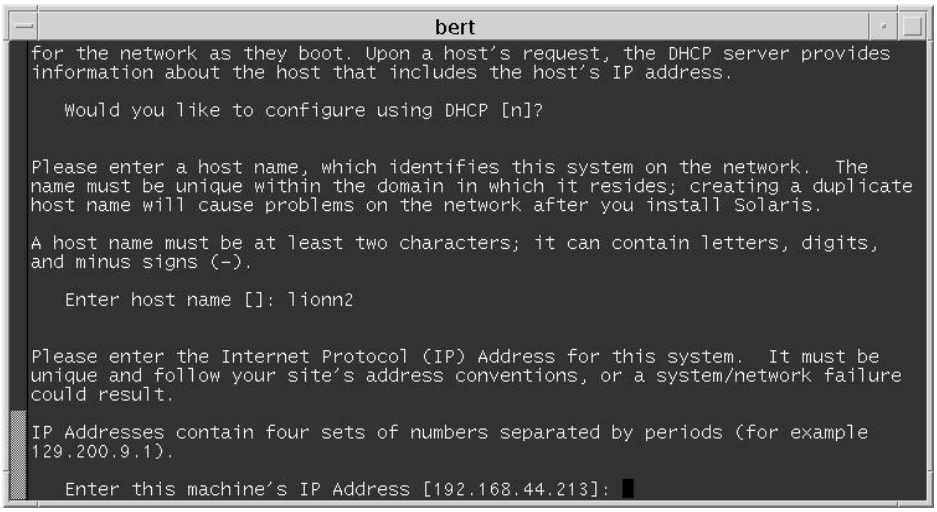
8 Type **1** (for bge0) and then press **Enter**.

Result: The window updates to display a message that describes Dynamic Host Configuration Protocol (DHCP) and then asks if you want to configure your system using DHCP.

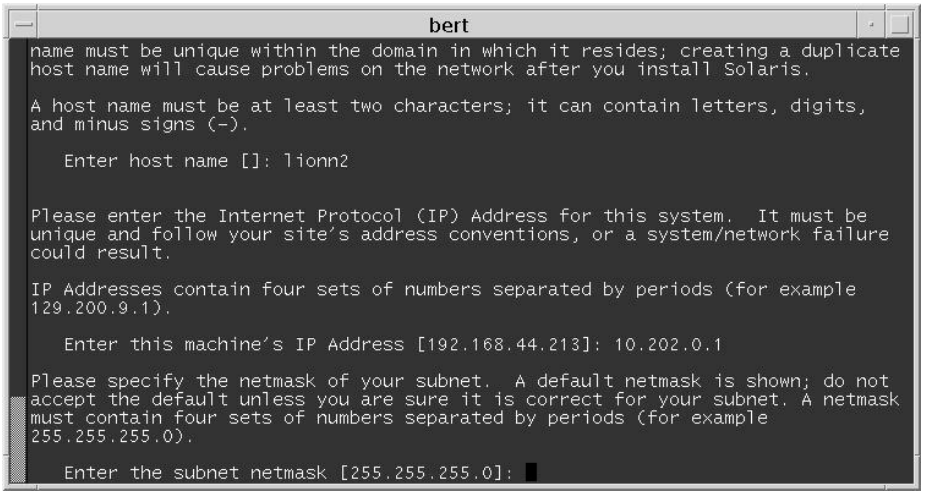
9 Type **n** (for no) and then press **Enter**. The window updates and prompts you to enter a host name.



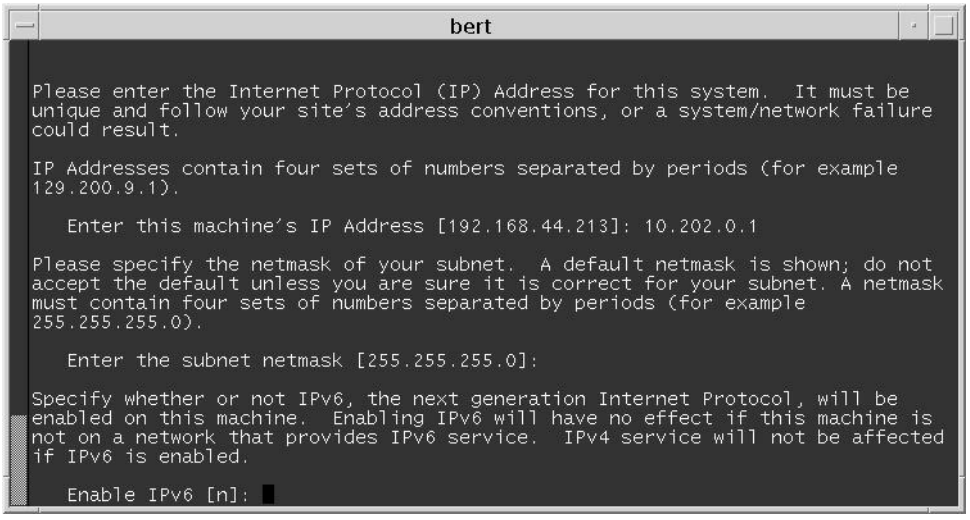
10 Type the host name of the OCAP server and then press **Enter**. The window updates and prompts you to enter an IP address.



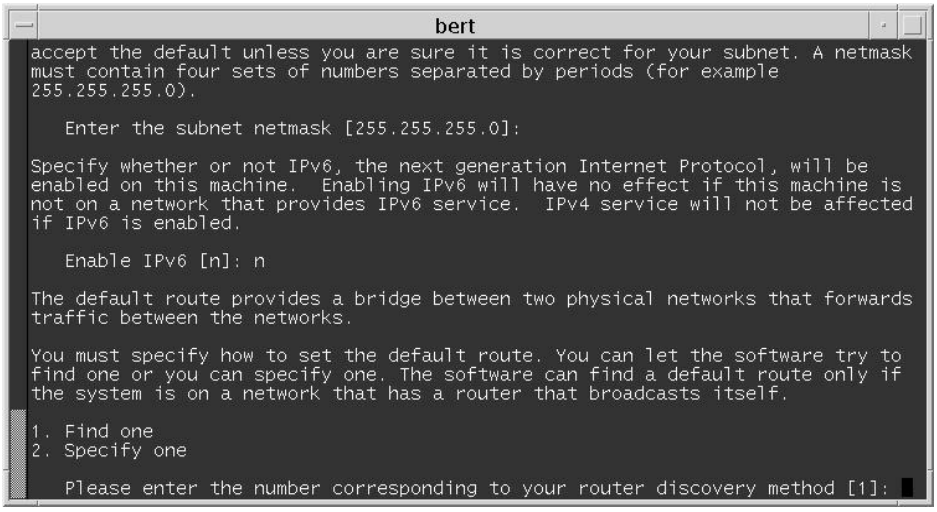
11 Type the IP address of the OCAP server and then press **Enter**. The window updates and prompts you to enter the netmask of the OCAP server.



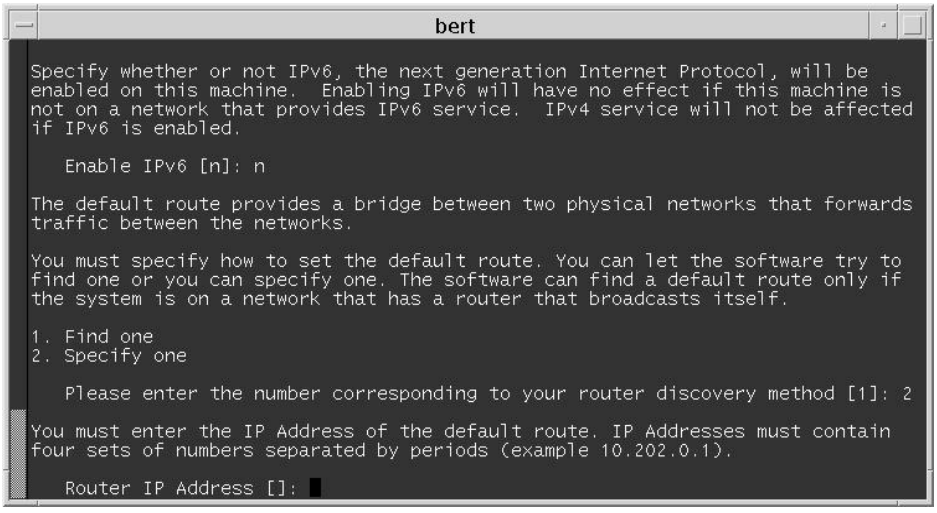
12 Press **Enter** to accept the default value of 255.255.255.0. The window updates and prompts you to specify whether you want to enable IPv6, an Internet protocol.



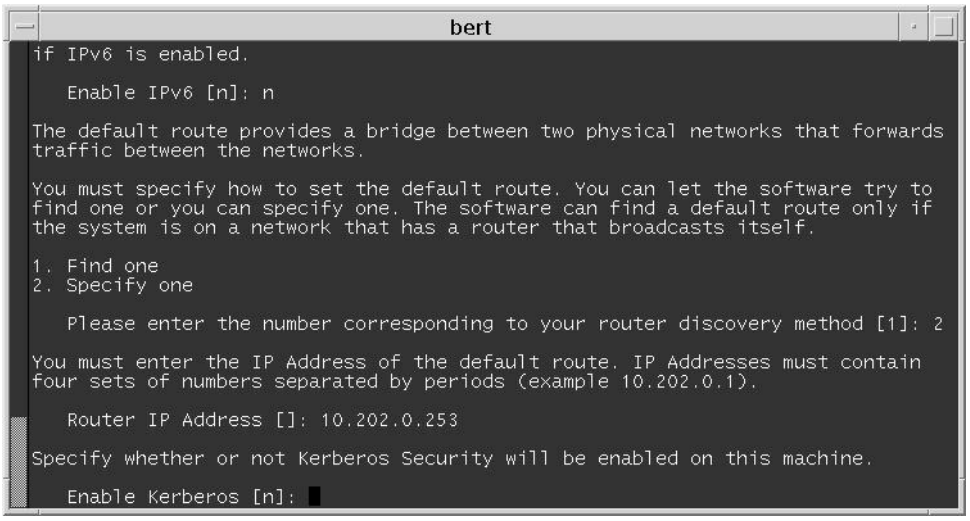
13 Press **Enter** to accept the default value of no. The window updates and prompts you to specify how you want to set the default route.



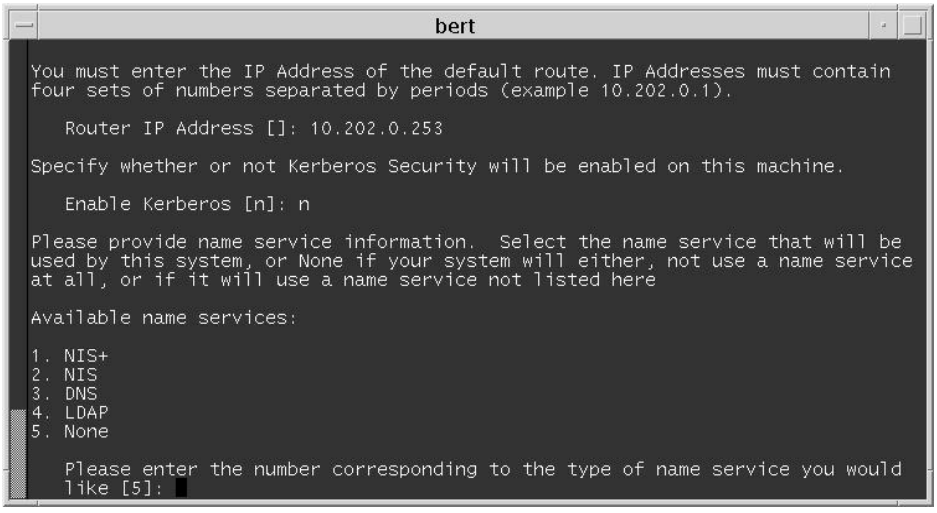
14 Type **2** (for Specify one) and then press **Enter**. The window updates and prompts you to enter the IP address of the default route.



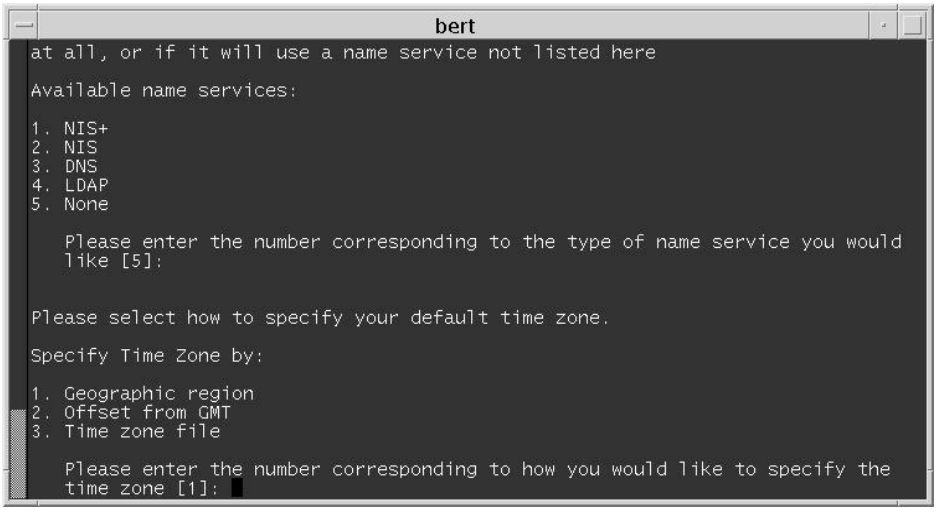
15 Type the IP address of the default route and then press **Enter**. The window updates and prompts you to specify whether Kerberos Security is to be enabled on the computer.



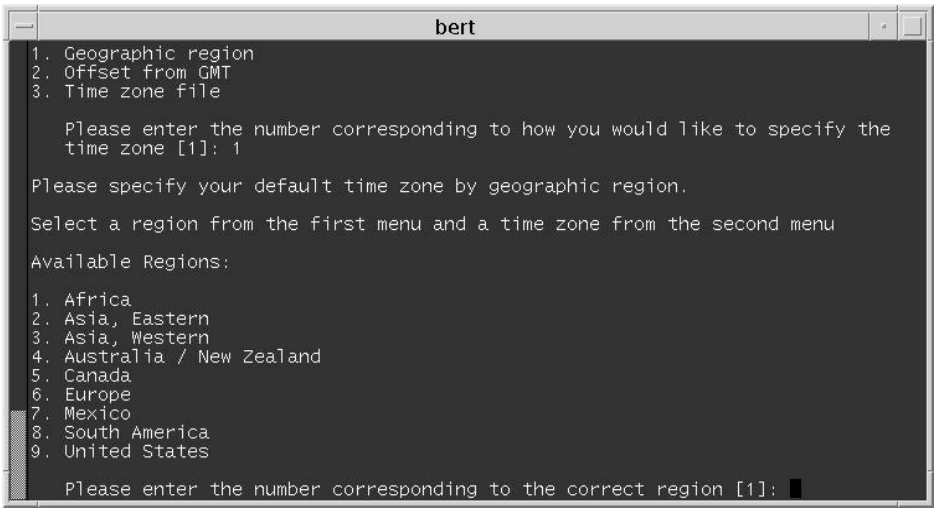
16 Type **n** (for no) and then press **Enter**. The window updates and prompts you to select the name service that will be used by the system.



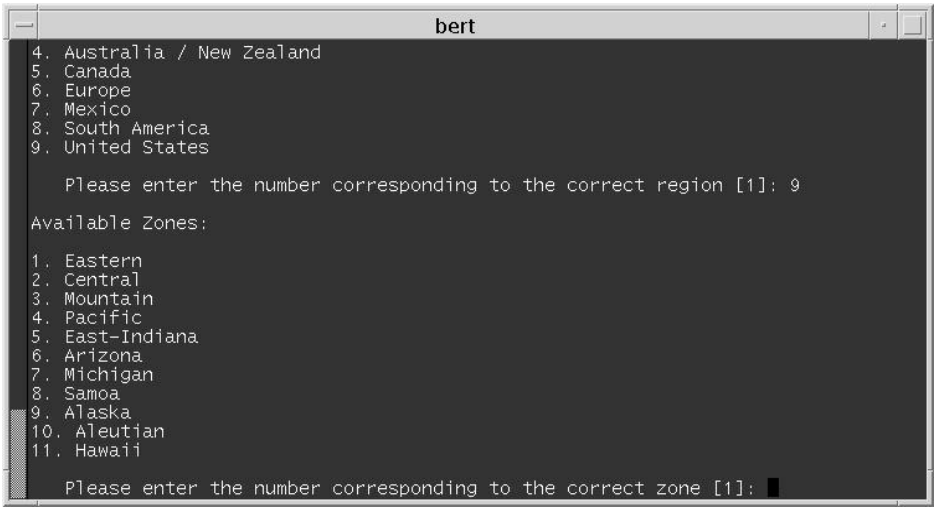
17 Type **5** (for none) and then press **Enter**. The window updates and prompts you to select your default time zone.



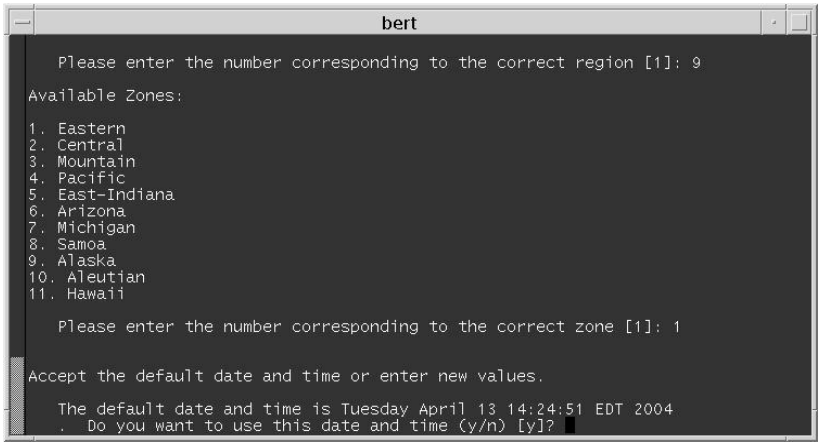
18 Type **1** (for Geographic region) and then press **Enter**. The window updates and prompts you to select a geographic region.



19 Type **9** (for United States) and then press **Enter**. The window updates and prompts you to select a time zone.

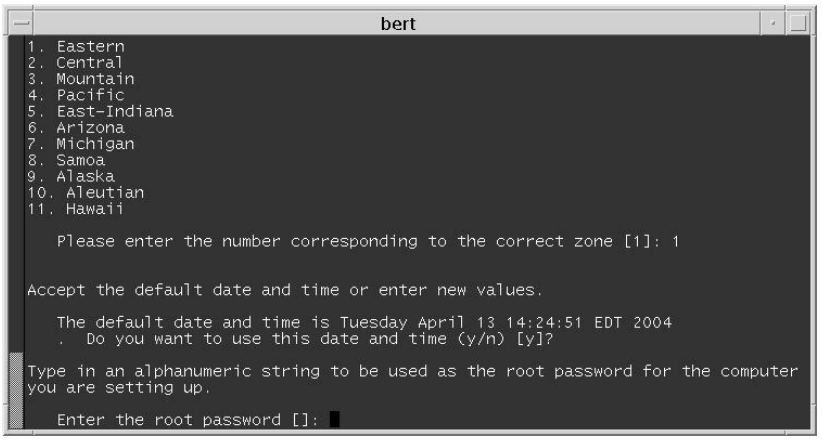


20 Type the number that corresponds to the appropriate time zone and then press **Enter**. The window updates by displaying the current date and time and asks that you confirm the display.



21 Are the current date and time accurately displayed?

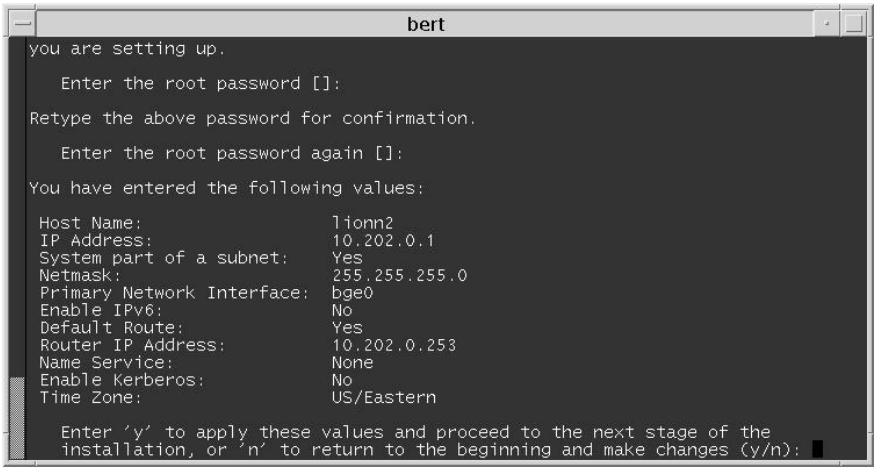
- If **yes**, type **y** and then press **Enter**. The window updates to prompt you to enter the root password.



- If **no**, type **n** and then press **Enter**. The window returns to the display shown in step 18. Repeat these instructions from step 18.

22 Type the root password and then press **Enter**. The window updates by prompting you to re-enter the root password.

23 Retype the root password and then press **Enter**. The window updates to display a list of the configuration parameters you have just set and asks that you confirm their accuracy.

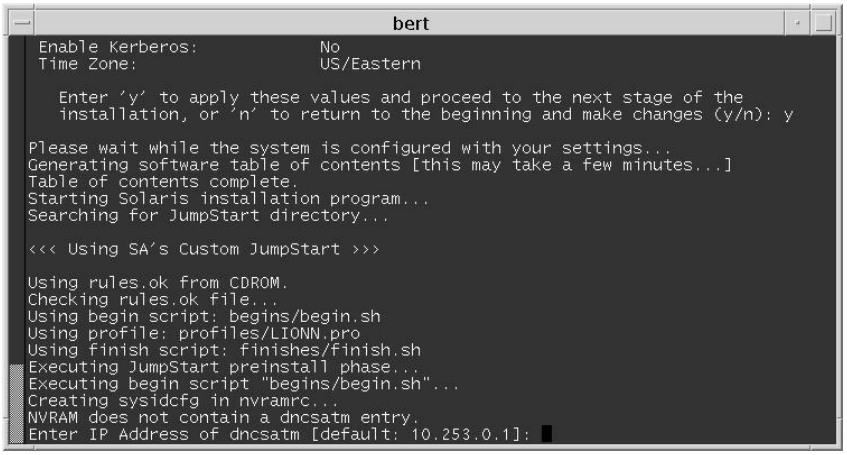


24 Are the parameters correct?

- If **yes**, type **y** and then press **Enter**.

  Results:

  - The system saves the parameters.
  - The OCAP software begins to install.
  - The system prompts you for the IP address of dncsatm.



- If **no**, type **n** and then press **Enter**. The system provides you with another opportunity to supply configuration parameters beginning with step 2 of this procedure.

25 Type the IP address of dncsatm and then press **Enter**. The OCAP software continues to install.

Note: The console login prompt appears when the installation process has ended.

26 Go to *Attaching Mirrors* (on page 26).

Attaching Mirrors

In this procedure, you will log in to the OCAP server and enable the disk-mirroring function of the server. Follow this procedure to log on to the OCAP server and then to attach the server's mirrors.

1 Log on to the OCAP server as **root** user, through either the ALOM port or the laptop.

2 Type **cd /cdrom/cdrom0/s0/sai/scripts** and then press **Enter**. The /cdrom/cdrom0/s0/sai/scripts directory becomes the working directory.

3 Type **./OCAP_attach_mirrors** and then press **Enter**. A confirmation message appears.

4 Type **y** and then press **Enter**. The system runs a script that enables the disk-mirroring function of the OCAP server.

5 Has the password for the sandt user already been set?

- If **yes**, go to step 7.
- If **no**, go to step 6.

6 Follow these instructions if the password for the sandt user has not already been set.

a Type **passwd sandt** and then press **Enter**. The **New password** prompt appears.

b Type a password for the sandt user and then press **Enter**. A message appears that prompts you to re-enter the password.

c Type the password again and then press **Enter**.

Note: The sandt account is required by one of the TSBroadcaster packages.

7 Follow these instructions to enable telnet functionality for the root user.

a Type **cd /etc/default** and then press **Enter**.

b Open the login file using a text editor.

c Locate the line beginning with CONSOLE LOGIN and insert the pound symbol (#) at the beginning of the line. The line becomes a comment.

d Save the login file and close the text editor.

Note: By enabling telnet functionality in this manner, Cisco engineers have an easier time accessing log files on the OCAP server.

8 Type **exit** and then press **Enter**. The root user logs out of the OCAP server.

Suggestion Regarding the OCAP Software DVD

Leave the OCAP software DVD in the DVD drive of the OCAP server. You need the DVD in place in case you ever have to re-install the software.

2

Upgrading OCAP Software

Introduction

Use the procedures in this chapter for upgrading a site that already supports OCAP software.

In This Chapter

Upgrade the OCAP Software

Introduction

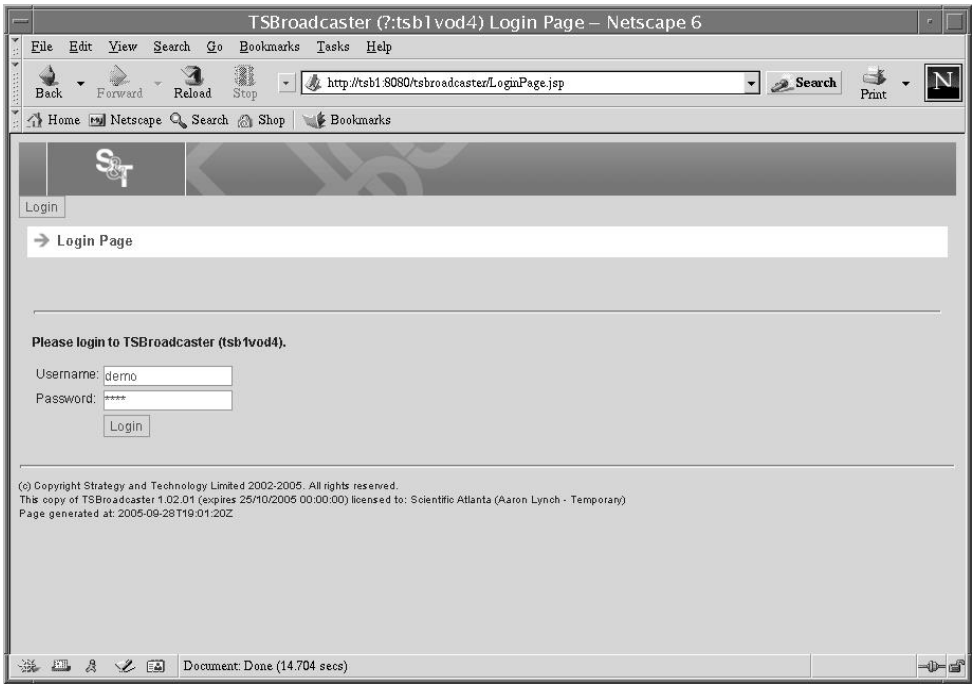
The OCAP server is to be upgraded with OCAP software using the Solaris Live Upgrade utility. The Live Upgrade utility allows operating system or application upgrades in an inactive boot environment while the active boot environment continues to run without interruption. Therefore, do *not* shut down the TSBroadcaster processes unless you are instructed to do so.

Important: If you are installing OCAP software on a server for the first time, do not perform the procedures in this chapter. Instead, go to Chapter 1, ***Installing OCAP Software for the First Time*** (on page 7).

Exporting Existing Configuration

Before upgrading, you need to preserve your system's current configuration. Then, after the upgrade, you will restore the current configuration. Follow these steps to export the existing configuration.

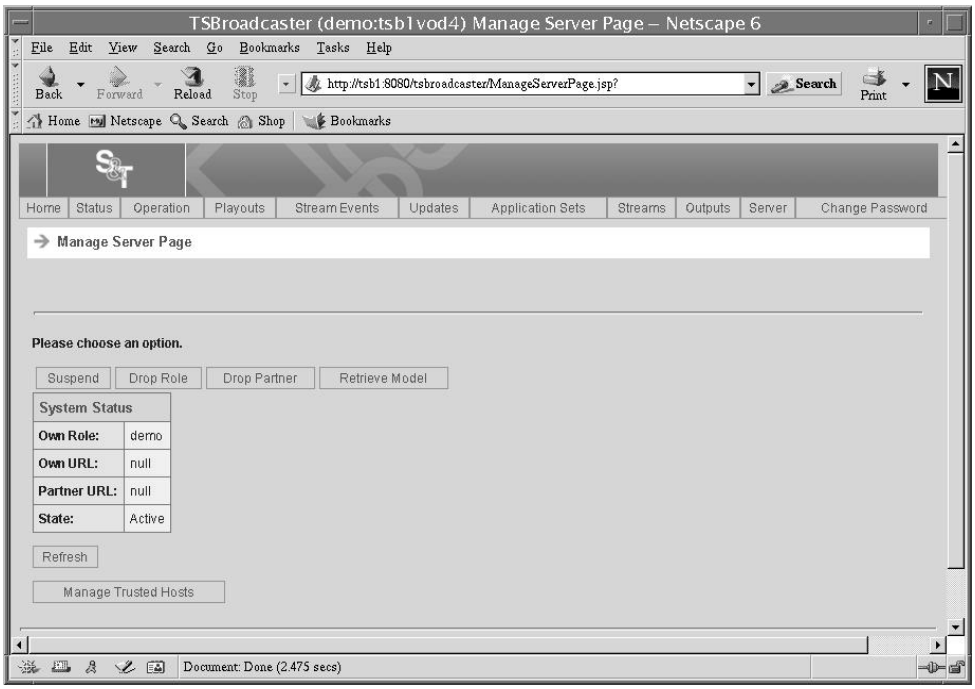
1 Using the Netscape browser installed on the DNCS, point the browser to the following address:
<IP address of TSBroadcaster>:8080/tsbroadcaster. The Login page appears.



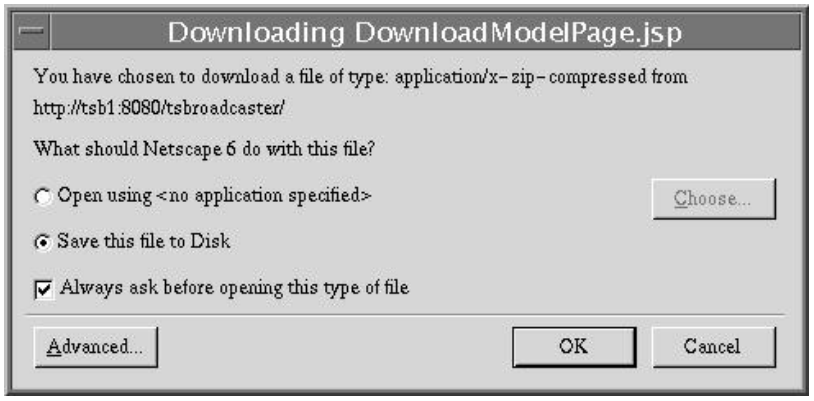
2 Log on using the default username of **demo** and the default password of **demo**, or the username and password of some other privileged user.

3 Click **Login**.

4 Click **Server** from the top of the navigation bar. The Manage Server page appears.



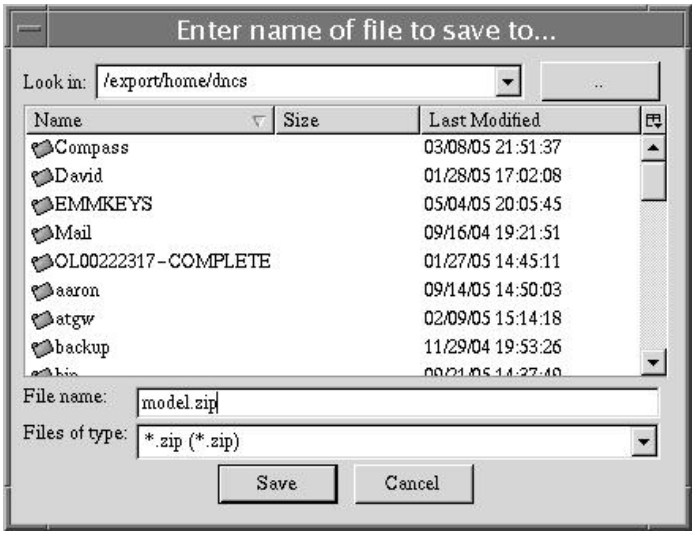
5 Click **Retrieve Model** on the Manage Server page. The Downloading DownloadModel page appears.



6 Click **Save this file to Disk**. A confirmation message appears.

7 Click **OK**. A text box that enables you to select the location for saving the file locally appears.

8 Save the file in the **/export/home/dncs** directory.



9 Click **Save**. The system saves the configuration to the selected directory and the Manage Server page window reappears.

10 Close the Manage Server page window.

Upgrading the OCAP Software

Follow these instructions to upgrade the OCAP software.

1 Follow these instructions to remotely log on to the ALOM port of the OCAP server.

   a Type **telnet [IP address of ALOM port]** and then press **Enter**. A prompt for the user ID appears.

   Note: Substitute the IP address of the ALOM port for [IP address of ALOM port].

   Example: telnet 10.201.0.2

   b Type the admin user ID and then press **Enter**. A prompt for the password appears.

   c Type the password for the admin user and then press **Enter**. The **SC >** prompt appears as the system establishes a telnet session between the DNCS and the ALOM port.

2 Type **console -f** and then press **Enter**.

Results:

- A message appears that instructs the user on how to return to the ALOM port.
- Control of the OCAP server is returned to the console, rather than the ALOM port.

Note: If a login prompt does not appear, press **Enter**.

3 Log on to the OCAP server as **root** user.

Result: In some cases, the following message appears:

Warning: User <user_name> currently has write permissions to the console and forcibly removing them will terminate any current write actions and all work will be lost. Would you like to continue? [y/n]

4 Did the message described in step 3 appear?

- If **yes**, type **y** and then press **Enter**.
- If **no**, go to step 5.

5 In the event that there is an existing CD or DVD in the drive of the OCAP server, type **eject cdrom** and then press **Enter**.

6 Have the technician who is on-site at the OCAP server insert the DVD, labeled similarly to **OCAP Install DVD**, into the DVD drive of the OCAP server.

7 Follow these instructions to stop and restart the vold process, which manages the auto-mount functions for the CDROM drive.

a Type **/etc/init.d/volmgt stop** and then press **Enter**.

b Type **/etc/init.d/volmgt start** and then press **Enter**.

8 Type **cd /cdrom/cdrom0/s0/sai/scripts** and then press **Enter**. The /cdrom/cdrom0/s0/sai/scripts directory becomes the working directory.

9 Type **./OCAP_detach_mirrors** and then press **Enter**. A warning/confirmation message appears.

10 Type **y** and then press **Enter**.

11 Type **./LU_OCAP** and then press **Enter**. A confirmation message appears.

12 Type **y** and then press **Enter**. A message seeking confirmation to back up the key files appears.

13 Type **y** and then press **Enter**.

Results:

- The system lists the key files and directories that will be backed up and then later restored.
- The system displays a **Do you want to add to the above list** message.

Note: The system may take 10 minutes to list all the files and directories.

14 Examine the list of key files and directories that will be backed up and then choose one of the following options.

- If you want to add to the list of key files and directories to be backed up, type **y** and then press **Enter**. Then, follow the on-screen instructions to add to the list of files or directories.
- If you do not want to add to the list of key files and directories to be backed up, type **n** and then press **Enter**.

Result: The loading of the new OCAP image files completes.

15 Examine the log file for errors.

Note: The log file is /tmp/install_log.

16 Type **lustatus** and then press **Enter**. The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

```
BE_name              Complete    Active   ActiveOnReboot  CopyStatus
-------------------------------------------------------------------------------------------------
pre_OCAP_V1.0.0.x    yes         yes      yes             -
OCAP_V1.0.0.x        yes         no        no             -
```

Note: The example shows that the pre-OCAP environment is in place and that the OCAP software is not yet active.

17 Type **luactivate OCAP_V1.x.x.x** and then press **Enter**. The system activates the new OCAP software and displays the following message:

```
**********************************************************************

The target boot environment has been activated. It will be used when you
reboot.
NOTE: You must use either init or shutdown when you reboot.  If you do not
use one of these commands, the system will not boot using the target BE.

**********************************************************************

In case of a failure while booting to the target BE, the following process needs
to be followed to fallback to the currently working boot environment:

1. Enter the PROM monitor (ok prompt).

2. Change the boot device back to the original boot environment by typing:

     setenv boot-device disk:a

3. Boot to the original boot environment by typing:     boot

**********************************************************************

Activation of boot environment <OCAP_V1.0.0.x> successful.
```

18 Type **lustatus** and then press **Enter**.

Result: The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

```
# lustatus

BE_name              Complete    Active   ActiveOnReboot  CopyStatus
-------------------------------------------------------------------------------------------------
pre_OCAP_V1.0.0.x    yes         yes      no              -
OCAP_V1.0.0.x        yes         no       yes             -
```

Note: The example shows that the new OCAP environment will become active after the next reboot.

19 Type **init 6** and then press **Enter**.

Important: Do not use the *reboot* or *halt* command to reboot the server.

Results:

- The system reboots and the login prompt appears.
- The system activates the OCAP software.

Note: It may take about 8 minutes for the system to reboot and activate the OCAP software.

20 Type your username and password.

21 Type **lustatus** and then press **Enter**. The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

```
BE_name                    Complete    Active   ActiveOnReboot  CopyStatus
-------------------------------------------------------------------------------------------
pre_OCAP_V1.0.0.x          yes         no       no              -
OCAP_V1.0.0.x              yes         yes      yes             -
```

Note: The example shows that the new OCAP version is active.

22 Is the system stable after upgrading the OCAP software?

- If **yes**, go to ***Importing the Existing Configuration*** (on page 36).
- If **no**, go to Appendix A, ***OCAP Rollback Procedure*** (on page 41), to restore your system to its pre-upgrade condition.

Important: Contact Cisco Services before deciding to roll back.

Importing the Existing Configuration

In this procedure, you will restore the configuration that you saved earlier in this section. Follow these instructions to import the existing configuration.

1 Type the following address into your Internet Web browser: **<IP address of TSBroadcaster>:8080/tsbroadcaster**. The Login page appears.

2 Type your username and password.

3 Click **Login**.

4 Click **Server** from the top of the navigation bar. The Manage Server page appears.

5 Click **Suspend** from the Manage Server page.

6 Select **Drop Role** from the Manage Server page.

7 Select **Load Model** from the Manage Server page. The Load Model page appears.

8 Select **Browse** and navigate to the directory in which you saved the existing configuration file in ***Exporting Existing Configuration*** (on page 30).

9 Click **Load**. The Manage Server page appears.

10 Click **Assume Role**. The Assume Role page appears.

11 Type **demo** in the **Role** field.

12 Click **Assume Role**. The system restores the existing configuration.

13 Close the Manage Server page window.

14 Go to *Attaching Mirrors* (on page 37).

Important: Once you attach the mirrors, you are committed to the upgrade. Be certain that your system is stable before attaching the mirrors.

Attaching Mirrors

After upgrading the OCAP software, follow this procedure to attach the server's mirrors.

Important: After attaching the server's mirrors, you are committed to the upgrade. Be certain that the OCAP server is stable before committing to the upgrade.

Note: It should take about 15 minutes to attach the mirrors.

1 Log on to the OCAP server as root user, through either the ALOM port or the laptop.

2 Type **cd /cdrom/cdrom0/s0/sai/scripts** and then press **Enter**. The /cdrom/cdrom0/s0/sai/scripts directory becomes the working directory.

3 Type **./OCAP_attach_mirrors** and then press **Enter**. A confirmation message appears.

4 Type **y** and then press **Enter**. The system runs a script that enables the disk-mirroring function of the OCAP server.

5 When the mirrors have been enabled, type **exit** and then press **Enter**. The root user logs out of the OCAP server.

Suggestion Regarding the OCAP Software DVD

Leave the OCAP software DVD in the DVD drive of the OCAP server. You need the DVD in place in case you ever have to re-install the software.

3

Customer Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

Access your company's extranet site to view or order additional technical publications. For accessing instructions, contact the representative who handles your account. Check your extranet site often as the information is updated frequently.

A

OCAP Rollback Procedure

Introduction

This appendix is intended for Cisco field service engineers who encounter problems while upgrading existing OCAP software. Prior to executing these rollback procedures, contact Cisco Services.

In This Appendix

Roll Back the OCAP Software

Introduction

If your upgrade of OCAP software is unsuccessful, you may need to use the procedures in this appendix to restore your system to its condition prior to the upgrade.

Important: Be sure to notify Cisco Services before concluding that an upgrade has failed and before following any of the procedures in this section. In many cases, Cisco Services can help you easily resolve the problems related to the failed upgrade.

Rolling Back the OCAP Software

Follow these instructions to roll back from an unsuccessful upgrade of OCAP software.

Note: You should still be remotely logged in to the OCAP server with root permissions.

1 Type **lustatus** and then press **Enter**. The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

```
# lustatus
BE_name                  Complete    Active   ActiveOnReboot  CopyStatus
-------------------------------------------------------------------------------
pre_OCAP_V1.0.0.1        yes         no             no              -
OCAP_V1.0.0.1            yes         yes            yes             -
```

Note: This example shows that the new version of OCAP software is installed and is now active.

2 Type **luactivate pre_OCAP_V1.x.x.x** and then press **Enter**. The system activates the version of OCAP software that was installed on your system prior to the upgrade and displays the following message:

****

The target boot environment has been activated. It will be used when you reboot.
NOTE: You must use either init or shutdown when you reboot. If you do not use one of these commands, the system will not boot using the target BE.

****

In case of a failure while booting to the target BE, the following process needs to be followed to fallback to the currently working boot environment:

1. Enter the PROM monitor (ok prompt).

2. Change the boot device back to the original boot environment by typing:
setenv boot-device disk:a

3. Boot to the original boot environment by typing: boot

****

Activation of boot environment <pre_OCAP_V1.0.0.1> successful.

3 Type **lustatus** and then press **Enter**. The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

```
# lustatus
lBE_name                Complete    Active   ActiveOnReboot  CopyStatus
----------------------------------------------------------------------------------------
pre_OCAP_V1.0.0.1       yes         no       yes             -
OCAP_V1.0.0.1           yes         yes      no              -
```

Note: The example shows that the old OCAP environment will become active after the next reboot.

4 Type **init 6** and then press **Enter**. The system reboots and activates the old OCAP software.

Important: Do not use the *reboot* or *halt* command to reboot the server.

5 Type **lustatus** and then press **Enter**. The system displays the status of the Live Upgrade boot environment.

Example: You should see results similar to this example:

BE_name	Complete	Active	ActiveOnReboot	CopyStatus
pre_OCAP_V1.0.0.1	yes	yes	yes	-
OCAP_V1.0.0.1	yes	no	no	-

Note: The example shows that the old OCAP software is active.

6 Go to *Attaching Mirrors* (on page 44).

Attaching Mirrors

After rolling back the OCAP software, follow this procedure to attach the server's mirrors.

Important: After attaching the server's mirrors, you are committed to the rollback.

1 Log on to the OCAP server as root user, through either the ALOM port or the laptop.

2 Type **cd /cdrom/cdrom0/s0/sai/scripts** and then press **Enter**. The /cdrom/cdrom0/s0/sai/scripts directory becomes the working directory.

3 Type **./OCAP_attach_mirrors** and then press **Enter**. A confirmation message appears.

4 Type **y** and then press **Enter**. The system runs a script that enables the disk-mirroring function of the OCAP server.

5 When the mirrors have been enabled, type **exit** and then press **Enter**. The root user logs out of the OCAP server.

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