Connect the PC and Log into the GUI

This chapter explains how to connect PCs and workstations to the Cisco ONS 15327 and how to log into Cisco Transport Controller (CTC) software, the Cisco ONS 15327 Operation, Administration, Maintenance, and Provisioning (OAM&P) user interface.

Before You Begin

This section lists the chapter procedures (NTPs). Review the procedure for applicable tasks (DLPs).

1. NTP-B21 Set Up Computer for CTC, page 2-1—Complete this procedure if your PC or workstation has never been connected to an ONS 15327.

2. NTP-B22 Set Up CTC Computer to Connect to the ONS 15327, page 2-8—After your PC or workstation is set up for CTC, complete this procedure to set up your computer to connect to the ONS 15327.

3. NTP-B23 Log into the ONS 15327 GUI, page 2-22—Complete this procedure to log into CTC.

NTP-B21 Set Up Computer for CTC

Purpose	This procedure explains how to configure your PC or UNIX workstation to run Cisco Transport Controller (CTC).
Tools/Equipment	Cisco ONS 15327 Release 4.0 software or documentation CD
Prerequisite Procedures	None
Required/As Needed	Required
Onsite/Remote	Onsite or remote
Security Level	None

Step 1 If your computer is a Windows PC, complete the "DLP-B47 Run the CTC Installation Wizard for Windows" task on page 2-2, then go to Step 4.

Step 2 If your computer is a UNIX workstation, complete the "DLP-B48 Run the CTC Installation Wizard for UNIX" task on page 2-5.

Step 3 If your computer is a UNIX workstation and you installed the JRE in Step 2, complete the "DLP-B49 Set Up the Java Runtime Environment for UNIX" task on page 2-7.

Step 4   When your PC or workstation is set up, complete the .

Stop. You have completed this procedure.

DLP-B47 Run the CTC Installation Wizard for Windows

Purpose	This task installs CTC online help as well as programs required to run CTC on Windows PCs: Netscape 4.73 and JRE 1.3.1_02. It also modifies the Java Runtime Environment (JRE) policy file so CTC files can be downloaded to your computer when you connect to an ONS 15327.
Tools/Equipment	Cisco ONS 15327 Release 4.0 software or documentation CD
Prerequisite Procedures	None
Required/As Needed	This task is required if any one of the following is true:
	• Netscape Release 4.73 or later or Internet Explorer Release 4.0 (Service Pack 2) or later is not installed.
	• JRE 1.3.1_02 is not installed.
	• CTC online help is not installed and is needed.
	• The JRE java.policy file has not been modified for CTC.
Onsite/Remote	Onsite or remote
Security Level	None

Step 1   Verify that your computer has the following:

- Processor—Pentium II, 300 Mhz or faster.
- RAM—128 MB.
- Hard drive—2 GB is recommended. 50 MB of space must be available.
- Operating System—Windows 95, Windows 98, Windows NT 4.0, Windows 2000, or Windows XP. If your operating system is Windows NT, verify that Service Pack 5 or later is installed: from the Start menu, choose **Programs > Administrative Tools > Windows NT Diagnostics** and check the service pack on the Version tab of the Windows NT Diagnostics dialog box. If Service Pack 5 or later is not installed, do not continue. Install Service Pack 5 following the computer upgrade procedures for your site.

Note   Processor and RAM requirements are guidelines. CTC performance will be faster if your computer has a faster processor and more RAM. Refer to the *Cisco ONS 15327 Reference Manual* for computer requirements needed for small, medium, and large ONS 15327 networks.

Step 2   Insert the Cisco ONS 15327 Release 4.0 software or documentation CD into your computer CD drive. The installation program begins running automatically. If it does not start, navigate to your computer's CD directory and double-click **setup.exe**.

The Cisco Transport Controller Installation Wizard displays the components that will be installed on your computer (Figure 2-1).

Figure 2-1   Cisco Transport Controller Installation Wizard
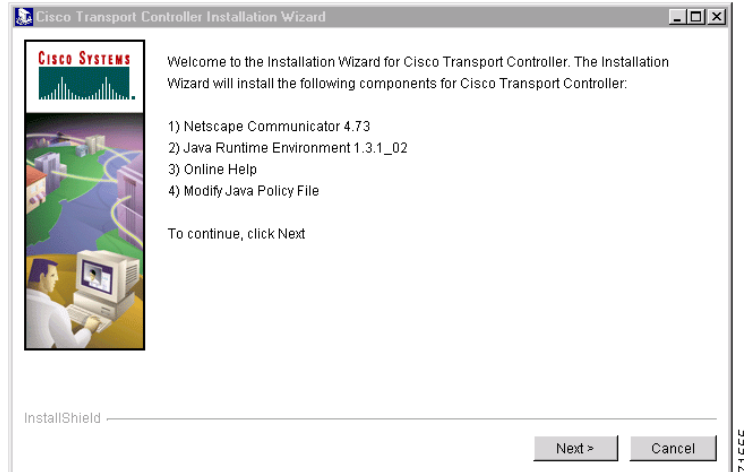
Step 3   Click **Next**.

Step 4   Choose **Typical** to install all the components shown in Figure 2-1, or choose **Custom** if you only want to install some of the components.

Step 5   Click **Next**.

Step 6   If you selected **Custom** in Step 4, select the CTC components you want to install and click **Next**. If you selected **Typical**, skip this step and proceed to Step 7.

Step 7   The directory where the installation wizard will install CTC online help is displayed. The default is C:\Program Files\Cisco\CTC\Documentation.

   a.   If you do not want to change the directory, skip this step and proceed to Step 8.

   b.   If you want to change the CTC online help directory, type the new directory path in the Directory Name field, or click **Browse** to navigate to the directory.

Step 8   Click **Next**.

Step 9   Review the components that will be installed. If you want to change them, click **Back**. If you have an active CTC session (for example, you are monitoring alarms or conditions), close CTC before going to Step 10.

Step 10   Click **Next**.

An Installation Issues dialog box is displayed.

Step 11   Review the issues, then click **OK**. The InstallShield program begins the Netscape Communicator 4.73 Setup program.

Step 12   Complete the Netscape installation:

   a.   In the Netscape Communicator 4.73 Setup dialog box, click **Next**.

   b.   In the Software License Agreement dialog box, click **Yes**.

   c.   In the Setup Type dialog box, click **Typical**, then click **Next**.

✎

Note   If the Netscape installation hangs when installing RealPlayer G2, restart the CTC installation by pressing **Ctrl-Alt-Del**. In the Windows Security dialog box, click **Task Manager.** In the Windows Task Manager dialog box, click **Cisco Transport Controller Installation Wizard**, then click the **End Task** button. Click **Yes** on the confirmation. Navigate to the drive containing the CTC CD and double-click **CTC.exe**. Repeat Steps 1 to 11. At Step 12, substep c, click **Custom**, then click **Next.** At the next panel, deselect **RealPlayer**. Continue with step d.

d.   In the Netscape Desktop Preferences Options dialog box, check the boxes that apply according to your site requirements (these options will not affect CTC operation), then click **Next**.

e.   In the Select Program Folder dialog box, click **Next**.

f.   In the Start Copying Files dialog box, click **Install**. The program begins the Netscape installation.

g.   In the Question dialog box, click **No**.

h.   In the Information dialog box, click **OK**.

i.   In the Restarting Windows dialog box, click **No, I will restart later**, then click **OK**.

Step 13   Close the Netscape Communicator directory window to display the Cisco Transport Controller Installation Wizard dialog box.

Step 14   In the CTC Installation Wizard dialog box, click **Next**. The Java 2 runtime environment installation begins.

Step 15   Complete the JRE installation:

a.   In the Software License Agreement dialog box, click **Yes**.

b.   In the Choose Destination Location dialog box, click **Next**.

c.   In the Select Browser dialog box, click the **Microsoft Internet Explorer** and **Netscape 6** check boxes, then click **Next**.

When JRE installation is complete, the Cisco Transport Controller Installation Wizard dialog box is displayed.

Step 16   Click **Next**. The CTC online help is installed. When installed, the policy file selection is displayed.

Step 17   Choose the JRE policy file to modify:

•   Choose **User Policy File** (default) to modify the policy file that applies only to your user profile. This file will not be overwritten if you upgrade or reinstall the JRE. If you are the only user who will access an ONS 15327 from the PC you are setting up, choose this option.

•   Choose **System Policy File** to modify the system JRE policy file. This policy file applies to all computer users. If more than one individual will use this computer to access the ONS 15327, choose this option. However, if you reinstall or upgrade the JRE, the system policy file is overwritten and you will need to run the CTC Installation Setup program again to modify it.

Step 18   Click **Next**.

Step 19   If you selected System Policy File in Step 17, complete the following steps. If you selected User Policy File, go to Step 20.

a.   The System Policy File Update dialog box displays the default policy file location (C:\Program Files\JavaSoft\jre). If you installed the JRE in a different location, enter the new path in the Directory Name field. After entering the path, or if the default path is correct, click **OK**.

b.   Click **OK** in the confirmation dialog box.

Step 20   Click **Finish**.

Step 21   Return to your originating procedure (NTP).

DLP-B48 Run the CTC Installation Wizard for UNIX

Purpose	This task installs CTC online help and programs required to run CTC on Solaris workstations: Netscape 4.76 and JRE 1.3.1_02. It also modifies the Java Runtime Environment (JRE) policy file to allow CTC files to be downloaded to your computer after you connect to an ONS 15327.
Tools/Equipment	Cisco ONS 15327 Release 4.0 software or documentation CD
Prerequisite Procedures	None
Required/As Needed	Required if any of the following are true:
	• Netscape Release 4.76 is not installed.
	• JRE 1.3.1_02 is not installed.
	• CTC online help is not installed and is needed.
	• The JRE java.policy file has not been modified for CTC.
Onsite/Remote	Onsite or remote
Security Level	None

Step 1   Verify that your computer has the following:

   • RAM—128 MB.

   • Hard drive—Verify that 50 MB of space is available.

   • Operating System—Solaris 2.5.x or 2.6.x.

> **Note**   These requirements are guidelines. CTC performance will be faster if your computer has a faster processor and more RAM. Refer to the *Cisco ONS 15327 Reference Manual* for computer requirements needed for small, medium, and large ONS 15327 networks.

Step 2   Change the directory. Type:

```
cd /cdrom/cdrom0/
```

Step 3   From the techdoc454 CD directory, type:

```
./setup.bat
```

The Cisco Transport Controller Installation Wizard displays the components that will be installed on your computer (Figure 2-1 on page 2-3):

   • Netscape Communicator 4.76.

   • Java Runtime Environment 1.3.1_02.

   • CTC Online Help.

   • Modify Policy File—The JRE java.policy file is modified to enable CTC to download files needed to run the Cisco Transport Controller when you connect to an ONS 15327.

Step 4   Click **Next**.

Step 5   Choose **Typical** to install all components, or choose **Custom** if you want to choose particular components to install.

Step 6   Click **Next**.

Step 7   If you selected **Custom** in Step 5, choose the CTC components you want to install and click **Next**. If you selected **Typical**, proceed to Step 8.

Step 8   The directory where the installation wizard will install CTC online help is displayed. The default is C:\Program Files\Cisco\CTC\Documentation. If you want to change the CTC online help directory, type the new directory path in the Directory Name field, or click **Browse** to navigate to the directory.

Step 9   Click **Next**.

Step 10   Review the components that will be installed. If you want to change them, click **Back**. If CTC is running (for example, you are reinstalling components) close CTC before going to the next step.

Step 11   Click **Next**. The InstallShield program begins the Netscape Communicator 4.76 Setup program.

Step 12   Complete the Netscape installation:

   a.   In the Netscape Communicator 4.76 Setup dialog box, click **Next**.

   b.   In the Software License Agreement dialog box, click **Yes**.

   c.   In the Setup Type dialog box, click **Typical**.

   d.   In the Netscape Desktop Preferences dialog box, check the boxes that apply, then click **Next**.

   e.   In the Program Folder dialog box, click **Next**.

   f.   In the Start Copying Files dialog box, click **Install**. The program begins the Netscape installation.

   g.   In the Question dialog box, click **No**.

Step 13   In the Cisco Transport Controller Installation Wizard dialog box, click **Next**. The Java 2 runtime environment installation begins.

Step 14   Complete the JRE installation:

   a.   In the Software License Agreement dialog box, click **Yes**.

   b.   In the Choose Destination Location dialog box, click **Next**.

   c.   In the Select Browser dialog box, click the **Netscape 6** check box, then click **Next**.

   When JRE installation is complete, the Cisco Transport Controller Installation Wizard dialog box is displayed.

Step 15   Click **Next**. The CTC online help is installed. When installed, the policy file selection is displayed.

Step 16   Choose the JRE policy file to modify:

   •   Choose **User Policy File** (default) to modify the policy file that applies only to your user profile. This file will not be overwritten if you upgrade or reinstall the JRE. If you are the only computer user who will access an ONS 15327, choose this option.

   •   Choose **System Policy File** to modify the system JRE policy file. This policy file applies to all computer users. If more than one individual will use this computer to access the ONS 15327, choose this option. However, if you reinstall or upgrade the JRE, the system policy file is overwritten and you will need to run the CTC Installation Setup program again to modify it.

Step 17 Click **Next**, then click **Finish**.

> ✎
> **Note** Be sure to record the names of the directories you choose for Netscape, JRE, and the online documentation.

Step 18 Return to your originating procedure (NTP).

DLP-B49 Set Up the Java Runtime Environment for UNIX

Purpose	This task sets up the Java Runtime Environment (JRE) for UNIX workstations.
Tools/Equipment	None
Prerequisite Procedures	DLP-B48 Run the CTC Installation Wizard for UNIX, page 2-5
Required/As Needed	Required if you installed the JRE during the CTC installation
Onsite/Remote	Onsite or remote
Security Level	None

> ✎
> **Note** The JRE might require certain patches to run properly. The patch tar file can be found in the JRE/Solaris directory on the CD. Please read the JRE/Solaris/Solaris.txt file for more information. In addition to installing any needed patches, set up the JRE for use with Cisco Transport Controller on your UNIX system.

> ✎
> **Note** CTC requires that the location of xterm is also in your path. If you have moved xterm from its default location, /usr/openwin/bin, you must change all occurrences of /usr/openwin/bin in the following procedures to reflect the actual path where xterm exists on your system.

Step 1 Set up the environment variable:

a. If you are using the csh shell, edit the .cshrc file in your home directory by appending the file with the lines:

```
setenv JRE JRE-path
setenv NETSCAPE Netscape-path
setenv NPX_PLUGIN_PATH $JRE/j2re1_3_1_02/plugin/sparc/ns4
set path = ( /usr/openwin/bin $NETSCAPE $path )
```

b. If you are using the ksh or bash shell, edit the .profile file in your home directory by appending the file with the lines:

```
JRE=JRE-path
NETSCAPE=Netscape-path
NPX_PLUGIN_PATH=$JRE/j2re1_3_1_02/plugin/sparc/ns4
PATH=/usr/openwin/bin:$NETSCAPE:$PATH
export JRE NPX_PLUGIN_PATH PATH
```

Step 2 Set the JRE reference:

a. Run the Control Panel by typing:

*JRE-path***/j2re1_3_0_02/bin/ControlPanel**

b. Click the **Advanced** tab.

c. From the combo box, select *JRE-path***/j2re1_3_1_02**. If the JRE is not found, select **other** and enter the following in the Path text box:

*JRE-path***/j2re1_3_1_02**

d. Click **Apply**.

✎
Note   If you are running multiple shells, before your new environment variable is set you might need to invoke the same shell for which you changed the initialization file. For example, if you added the environment variable to the .cshrc file, you must run your browser under the csh shell.

Step 3 Return to your originating procedure (NTP).

NTP-B22 Set Up CTC Computer to Connect to the ONS 15327

Purpose	This procedure explains how to set up a PC running Windows or a Solaris workstation to connect to the ONS 15327.
Tools/Equipment	Depends on connection type
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	None

Step 1 From Table 2-1, select the ONS 15327 connection type that you want to set up for your computer.

✎
Note   For initial shelf turn up, you should connect your PC directly to the LAN port on the XTC card of the ONS 15327.

Table 2-1   ONS 15327 Connection Methods

Method	Description	Requirements
Local craft	Refers to onsite network connections between the CTC computer and the ONS 15327 using: • The RJ-45 (LAN) port on the XTC, or • A hub or switch to which the ONS 15327 is connected.	If you do not use dynamic host configuration protocol (DHCP), you will need to change the computer IP address, subnet mask, and default router, or use automatic host detection.
Corporate LAN	Refers to a connection to the ONS 15327 through a corporate or network operations center (NOC) LAN.	• The ONS 15327 must be provisioned for LAN connectivity, including IP address, subnet mask, default gateway. • The ONS 15327 must be physically connected to the corporate LAN. • The CTC computer must be connected to the corporate LAN that has connectivity to the ONS 15327.
TL1	Refers to a connection to the ONS 15327 using TL1 rather than CTC. TL1 sessions can be started from CTC, or you can use a TL1 terminal. The physical connection can be a craft connection, corporate LAN, or a TL1 terminal. Refer to the *Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Guide*.	—
Remote	Refers to a connection made to the ONS 15327 using a modem.	• A modem must be connected to the ONS 15327. • The modem must be provisioned for ONS 15327. To run CTC, the modem must be provisioned for Ethernet access.

Step 2   If you need to set up your computer for corporate LAN access, complete the "DLP-B55 Set Up a Computer for a Corporate LAN Connection" task on page 2-19. If not, proceed to the next step.

Step 3   If you need to set up the computer for remote access, complete the "DLP-B58 Provision Remote Access to the ONS 15327" task on page 2-21. If not, proceed to the next step.

Step 4   If you need to set up your computer for TL1 access, refer to the *Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Guide*. If not, proceed to the next step.

Step 5   If you need to set up your computer for local craft connections, choose a task from Table 2-2.

Table 2-2   ONS 15327 Craft Connection Options

Local Craft Connection Task	Description
DLP-B52 Set Up a Windows PC for Craft Connection to an ONS 15327 Using Automatic Host Detection, page 2-15	Complete this task if: • All nodes that you will access run Software Release 3.3 or later. • You will connect to ONS 15327s at different locations and times and do not wish to reconfigure your PC's IP settings each time. • You do not need to access or use non-ONS 15327 applications such as ping and trace route. • You will connect to the ONS 15327's XTC Ethernet port either directly or through a hub.
DLP-B50 Set Up a Windows PC for Craft Connection to an ONS 15327 on the Same Subnet Using Static IP Addresses, page 2-11	Complete this task if: • You are connecting from a Windows PC. • You will connect to one ONS 15327; if you will connect to multiple ONS 15327s, you might need to configure your computer's IP settings each time you connect to an ONS 15327. • You need to access non-ONS 15327 applications such as ping and trace route.
DLP-B53 Set Up a Solaris Workstation for a Craft Connection to an ONS 15327, page 2-17	Complete this task if: • You are connecting from a Solaris workstation. • You will connect to one ONS 15327; if you will connect to multiple ONS 15327s, you might need to configure your computer's IP settings each time you connect to an ONS 15327. • You need to access non-ONS 15327 applications such as ping and trace route.
DLP-B51 Set Up a Windows PC for Craft Connection to an ONS 15327 Using DHCP, page 2-13	Complete this task if: • The CTC computer is provisioned for DHCP. • The ONS 15327 has DHCP forwarding enabled and is connected to a DHCP server.

Stop. You have completed this procedure.

DLP-B50 Set Up a Windows PC for Craft Connection to an ONS 15327 on the Same Subnet Using Static IP Addresses

Purpose	This task sets up your computer for a local craft connection to the ONS 15327 when:
	• You will access nodes running software releases before Release 3.3.
	• You will connect to one ONS 15327; if you will connect to multiple ONS 15327s, you might need to reconfigure your computer's IP settings each time you connect to an ONS 15327.
	• You need to use non-ONS 15327 applications such as ping and trace route.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	None

Step 1 Verify the operating system that is installed on your computer:

a. From the Windows Start menu, choose **Settings > Control Panel**.

b. In the Control Panel window, double-click the **System** icon.

c. In the General tab of the System Settings window, verify that the Windows operating system is one of the following: Windows 95, Windows 98, Windows 2000, Windows NT 4.0, or Windows XP.

Step 2 If you have Windows 95 or 98 installed on your PC, complete the following steps:

a. From the Windows Start menu, choose **Settings** > **Control Panel**.

b. In the Control Panel dialog box, click the **Network** icon.

c. In the Network dialog box, select **TCP/IP** for your PC Ethernet card, then click **Properties**.

d. In the TCP/IP Properties dialog box, click the **DNS Configuration** tab and choose **Disable DNS**.

e. Click the **WINS Configuration** tab and choose **Disable WINS Resolution**.

f. Click the **IP Address** tab.

g. In the IP Address window, click **Specify an IP address**.

h. In the IP Address field, enter an IP address.

i. In the Subnet Mask field, type the same subnet mask as the ONS 15327. The default is **255.255.255.0** (24 bit).

j. Click **OK**.

k. In the TCP/IP dialog box, click the **Gateway** tab.

l. In the New Gateway field, type the ONS 15327 IP address. Click **Add**.

m. Verify that the IP address appears in the Installed Gateways field, then click **OK**.

n. When the prompt to restart your PC appears, click **Yes**.

Step 3 If you have Windows NT 4.0 installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Settings** > **Control Panel**.

    b. In the Control Panel dialog box, click the **Network** icon.

    c. In the Network dialog box, click the **Protocols** tab, choose **TCP/IP Protocol**, then click **Properties**.

    d. Click the **IP Address** tab.

    e. In the IP Address window, click **Specify an IP address**.

    f. In the IP Address field, enter an IP address.

    g. In the Subnet Mask field, type **255.255.255.0**.

    h. Click the **Advanced** button.

    i. Under the Gateways List, click **Add**. The TCP/IP Gateway Address dialog box is displayed.

    j. Type the ONS 15327 IP address in the Gateway Address field.

    k. Click **Add**.

    l. Click **OK**.

    m. Click **Apply**.

    n. In some cases, Windows NT will prompt you to reboot your PC. If you receive this prompt, click **Yes**.

Step 4 If you have Windows 2000 installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Settings** > **Network and Dial-up Connections > Local Area Connection**.

    b. In the Local Area Connection Status dialog box, click **Properties**.

    c. In the General tab, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    d. Click **Use the following IP address**.

    e. In the IP Address field, enter an IP address.

    f. In the Subnet Mask field, type **255.255.255.0**.

    g. In the Default Gateway field, type the ONS 15327 IP address.

    h. Click **OK**.

    i. In the Local Area Connection Properties dialog box, click **OK**.

    j. In the Local Area Connection Status dialog box, click **Close**.

Step 5 If you have Windows XP installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Control Panel > Network Connections**.

    Note If the Network Connections menu is not available, click **Switch to Classic View**.

    b. In the Network Connections dialog box, click the **Local Area Connection** icon.

    c. In the Local Area Connection Properties dialog box, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    d. In the IP Address field, enter an IP address.

    e. In the Subnet Mask field, type **255.255.255.0**.

    f. In the Default Gateway field, type the ONS 15327 IP address.

    g. Click **OK**.

    h. In the Local Area Connection Properties dialog box, click **OK**.

    i. In the Local Area Connection Status dialog box, click **Close**.

Step 6 Return to your originating procedure (NTP).

DLP-B51 Set Up a Windows PC for Craft Connection to an ONS 15327 Using DHCP

Purpose	This task sets up your computer for craft connection to the ONS 15327 using DHCP (dynamic host configuration protocol).
Tools/Equipment	Straight-through (Category 5) LAN cable
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
	NTP-B169 Set Up CTC Network Access, page 3-7
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	None

⚠️ **Caution** You will not be able to connect to the ONS 15327 if DHCP forwarding is not enabled on the ONS 15327 or the ONS 15327 is not connected to a DHCP server. By default, DHCP forwarding is not enabled. If you are connecting to an ONS 15327 to perform initial shelf turn up, complete the "DLP-B50 Set Up a Windows PC for Craft Connection to an ONS 15327 on the Same Subnet Using Static IP Addresses" task on page 2-11 or the "DLP-B52 Set Up a Windows PC for Craft Connection to an ONS 15327 Using Automatic Host Detection" task on page 2-15.

Step 1 Verify the operating system that is installed on your computer:

    a. From the Windows Start menu, choose **Settings > Control Panel**.

    b. In the Control Panel window, double-click the **System** icon.

    c. In the General tab of the System Settings window, verify that the Windows operating system is one of the following: Windows 95, Windows 98, Windows 2000, Windows NT 4.0, or Windows XP.

Step 2 If you have Windows 95 or 98 installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Settings** > **Control Panel**.

    b. In the Control Panel dialog box, click the **Network** icon.

    c. In the Network dialog box, select **TCP/IP** for your PC Ethernet card, then click **Properties**.

    d. In the TCP/IP Properties dialog box, click the **DNS Configuration** tab and choose **Disable DNS**.

    e. Click the **WINS Configuration** tab and choose **Disable WINS Resolution**.

    f. Click the **IP Address** tab.

    g. In the IP Address window, click **Obtain an IP address from a DHCP Server**.

    h. Click **OK**.

    i. When the prompt to restart your PC appears, click **Yes**.

Step 3   If you have Windows NT 4.0 installed on your PC, complete the following steps:

    a.   From the Windows Start menu, choose **Settings** > **Control Panel**.

    b.   In the Control Panel dialog box, click the **Network** icon.

    c.   In the Network dialog box, click the **Protocols** tab, choose **TCP/IP Protocol**, then click **Properties**.

    d.   Click the **IP Address** tab.

    e.   In the IP Address window, click **Obtain an IP address from a DHCP Server**.

    f.   Click **OK**.

    g.   Click **Apply**.

    h.   If Windows prompts you to restart your PC, click **Yes**.

Step 4   If you have Windows 2000 installed on your PC, complete the following steps:

    a.   From the Windows Start menu, choose **Settings** > **Network and Dial-up Connections > Local Area Connection**.

    b.   In the Local Area Connection Status dialog box, click **Properties**.

    c.   In the General tab, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    d.   Click **Obtain an IP address from a DHCP Server**.

    e.   Click **OK**.

    f.   In the Local Area Connection Properties dialog box, click **OK**.

    g.   In the Local Area Connection Status dialog box, click **Close**.

Step 5   If you have Windows XP installed on your PC, complete the following steps:

    a.   From the Windows Start menu, choose **Control Panel > Network Connections.**

    ✎ **Note**   If the Network Connections menu is not available, click **Switch to Classic View**.

    b.   In the Network Connections dialog box, click **Local Area Connection**.

    c.   In the Local Area Connection Status dialog box, click **Properties**.

    d.   In the General tab, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    e.   Click **Obtain an IP address automatically**.

    f.   Click **OK**.

    g.   In the Local Area Connection Properties dialog box, click **OK**.

    h.   In the Local Area Connection Status dialog box, click **Close**.

Step 6   Return to your originating procedure (NTP).

DLP-B52 Set Up a Windows PC for Craft Connection to an ONS 15327 Using Automatic Host Detection

Purpose	This task sets up your computer for local craft connection to the ONS 15327 when:
	• You will connect to the ONS 15327's Ethernet port or through a hub.
	• All nodes that you will access are running Software Release 3.3 or higher.
	• You will connect to multiple ONS 15327s and do not want to reconfigure your IP address each time.
	• You do not need to access non-ONS 15327 applications such as ping and trace route.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	None

✎ **Note** If you are using automatic host detection and you disconnect a straight-through (Category 5) LAN cable from one node and connect it to another node, you must close CTC and relaunch it to reconnect to the proxy server and communicate with the new node.

Step 1 Verify the operating system that is installed on your computer:

a. From the Windows Start menu, choose **Settings > Control Panel**.

✎ **Note** In Windows XP, you can select Control Panel directly from the Start menu. Make sure you are in Classic View before continuing with this procedure.

b. In the Control Panel window, double-click the **System** icon.

c. In the General tab of the System Settings window, verify that the Windows operating system is one of the following: Windows 95, Windows 98, Windows 2000, Windows NT 4.0, or Windows XP.

Step 2 If you have Windows 95 or 98 installed on your PC, complete the following steps:

a. From the Windows Start menu, choose **Settings** > **Control Panel**.

b. In the Control Panel dialog box, click the **Network** icon.

c. In the Network dialog box, select **TCP/IP** for your PC Ethernet card, then click **Properties**.

d. In the TCP/IP Properties dialog box, click the **DNS Configuration** tab and choose **Disable DNS**.

e. Click the **WINS Configuration** tab and choose **Disable WINS Resolution**.

f. Click the **IP Address** tab.

g. In the IP Address window, click **Specify an IP address**.

h. In the IP Address field, enter any legitimate IP address other than the node IP address of the ONS 15327.

    i. In the Subnet Mask field, type the same subnet mask as the ONS 15327. The default is **255.255.255.0** (24 bit).

    j. Click **OK**.

    k. In the TCP/IP dialog box, click the **Gateway** tab.

    l. In the New Gateway field, type the address entered in Step f. Click **Add**.

    m. Verify that the IP address appears in the Installed Gateways field, then click **OK**.

    n. When the prompt to restart your PC appears, click **Yes**.

Step 3 If you have Windows NT 4.0 installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Settings** > **Control Panel**.

    b. In the Control Panel dialog box, click the **Network** icon.

    c. In the Network dialog box, click the **Protocols** tab, choose **TCP/IP Protocol**, then click **Properties**.

    d. Click the **IP Address** tab.

    e. In the IP Address window, click **Specify an IP address**.

    f. In the IP Address field, enter any legitimate IP address other than the node IP address of the ONS 15327.

    g. In the Subnet Mask field, type the same subnet mask as the ONS 15327. The default is **255.255.255.0** (24 bit).

    h. Click the **Advanced** button.

    i. Under the Gateways List, click **Add**. The TCP/IP Gateway Address dialog box is displayed.

    j. Type the IP address entered in Step f in the Gateway Address field.

    k. Click **Add**.

    l. Click **OK**.

    m. Click **Apply**.

    n. Reboot your PC.

Step 4 If you have Windows 2000 installed on your PC, complete the following steps:

    a. From the Windows Start menu, choose **Settings** > **Network and Dial-up Connections > Local Area Connection**.

    b. In the Local Area Connection Status dialog box, click **Properties**.

    c. In the General tab, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    d. Click **Use the following IP address**.

    e. In the IP Address field, enter any legitimate IP address other than the node IP address of the ONS 15327.

    f. In the Subnet Mask field, type the same subnet mask as the ONS 15327. The default is **255.255.255.0** (24 bit).

    g. Type the IP address entered in Step e in the Gateway Address field.

    h. Click **OK**.

    i. In the Local Area Connection Properties dialog box, click **OK**.

    j. In the Local Area Connection Status dialog box, click **Close**.

Step 5   If you have Windows XP installed on your PC, complete the following steps:

    a.   From the Windows Start Menu, choose **Control Panel > Network Connections**.

> ✎
> **Note**   If the Network Connections menu is not available, click **Switch to Classic View**.

    b.   In the Network Connections dialog box, click the **Local Area Connection** icon.

    c.   In the Local Area Connection Properties dialog box, choose **Internet Protocol (TCP/IP)**, then click **Properties**.

    d.   In the IP Address field, enter any legitimate IP address other than the node IP address of the ONS 15327.

    e.   In the Subnet Mask field, type the same subnet mask as the ONS 15327. The default is **255.255.255.0** (24 bit).

    f.   Type the IP address entered in Step d in the Gateway Address field.

    g.   Click **OK**.

    h.   In the Local Area Connection Properties dialog box, click **OK**.

    i.   In the Local Area Connection Status dialog box, click **Close**.

Step 6   Return to your originating procedure (NTP).

DLP-B53 Set Up a Solaris Workstation for a Craft Connection to an ONS 15327

Purpose	This task sets up a Solaris workstation for a craft connection to the ONS 15327.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	None

Step 1   Log into the workstation as the root user.

Step 2   Check to see if the interface is plumbed by typing:

```
# ifconfig device
```

For example:

```
# ifconfig hme1
```

Step 3   If the interface is plumbed, a message similar to the following appears:

```
hme1:flags=1000842<BROADCAST,RUNNING,MULTICAST,IPv4>mtu 1500 index 2 inet 0.0.0.0 netmask 0
```

Go to Step 6.

Step 4   If the interface is not plumbed, a message similar to the following appears:

```
ifconfig: status: SIOCGLIFFLAGS: hme1: no such interface.
```

Plumb the interface by typing:

```
# if config device plumb
```

For example:

```
# ifconfig hme1 plumb
```

Step 5   Configure the IP address on the interface by typing:

```
# ifconfig interface ip-address netmask netmask up
```

For example:

```
# ifconfig hme0 10.20.30.40 netmask 255.255.255.0 up
```

> **Note**   Enter an IP address that is identical to the ONS 15327 IP address except for the last three digits.
> The last three digits must be between 1 and 254. In the Subnet Mask field, type 255.255.255.0.
> Skip this step if Craft Access Only is checked at **Provisioning** > **Network** > **General** > **Gateway Settings**.

Step 6   Test the connection:

   a.   Start Netscape Navigator.

   b.   Enter the Cisco ONS 15327 IP address in the web address (URL) field. If the connection is established, a Java Console window, CTC caching messages, and the Cisco Transport Controller Login dialog box display. If this occurs, go to Step 2 of the "DLP-B60 Log into CTC" task on page 2-23 to complete the login. If the Login dialog box does not appear, complete Steps c to d.

   c.   At the prompt, type:

```
ping ONS 15327 IP address
```

For example, you would type **ping 192.168.1.1** to connect to an ONS 15327 with default IP address 192.168.1.1. If your workstation is connected to the ONS 15327, an "*IP-address* is alive" message appears.

> **Note**   Skip this step if Craft Access Only is checked at **Provisioning** > **Network** > **General** > **Gateway Settings.**

   d.   If CTC is not responding, a "Request timed out" message appears. Verify IP and submask information. Check that the cables connecting the workstation to the ONS 15327 are securely attached. Check the Link Status by typing:

```
# ndd -set /dev/device instance 0
# ndd -get /dev/device link_status
```

For example:

```
# ndd -set /dev/hme instance 0
# ndd -get /dev/hme link_status
```

The result of 1 means the link is up. The result of 0 means the link is down.

> ✎
> **Note**   Check the man page for ndd. For example: # `man ndd`.

Step 7   Return to your originating procedure (NTP).

DLP-B55 Set Up a Computer for a Corporate LAN Connection

Purpose	This task sets up your computer to access the ONS 15327 through a corporate LAN.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	None

Step 1   If your computer is connected to the corporate LAN, go to Step 2. If you changed your computer's network settings for craft access to the ONS 15327, change the settings back to the corporate LAN access settings. This generally means:

- Set the IP Address in the TCP/IP dialog box back to "Obtain an IP address automatically" (Windows 95 or 98) or "Obtain an IP address from a DHCP server" (Windows NT, 2000, or XP).

- If your LAN requires that domain name system (DNS) or workplace information system (WINS) be enabled, change the setting on the DNS Configuration or WINS Configuration tab of the TCP/IP dialog box.

Step 2   If your computer is connected to a proxy server, disable proxy service or add the ONS 15327 nodes as exceptions. To disable proxy service, complete the task for the web browser you use:

- DLP-B56 Disable Proxy Service Using Internet Explorer (Windows), page 2-20, or

- DLP-B57 Disable Proxy Service Using Netscape (Windows and UNIX), page 2-20

Step 3   Return to your originating procedure (NTP).

DLP-B56 Disable Proxy Service Using Internet Explorer (Windows)

Purpose	This task disables proxy service for PCs running Internet Explorer.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	Required if your computer is connected to a network computer proxy server and your browser is Internet Explorer.
Onsite/Remote	Onsite or remote
Security Level	None

Step 1 From the Start menu, select **Settings > Control Panel**.

✎
Note If you computer is running Windows XP, you can select Control Panel directly from the Start menu. Make sure you are in Classic View before continuing with this procedure.

Step 2 In the Control Panel window, choose **Internet Options**.

Step 3 From the Internet Properties dialog box, click **Connections** > **LAN Settings**.

Step 4 In the LAN Settings dialog box, complete one of the following:

- Deselect **Use a proxy server** to disable the service.

- Leave **Use a proxy server** selected and click **Advanced**. In the Proxy Setting dialog box under Exceptions, enter the IP addresses of ONS 15327 nodes that you will access. Separate each address with a semicolon. You can insert an asterisk for the host number to include all the ONS 15327s on your network. Click **OK** to close each open dialog box.

Step 5 Return to your originating procedure (NTP).

DLP-B57 Disable Proxy Service Using Netscape (Windows and UNIX)

Purpose	This task disables proxy service for PCs and UNIX workstations running Netscape.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	Required if your computer is connected to a network computer proxy server and your browser is Netscape.
Onsite/Remote	Onsite or remote
Security Level	None

Step 1 Open Netscape.

Step 2 From the Edit menu, choose **Preferences**.

Step 3 In the Preferences dialog box under Category, choose **Advanced > Proxies**.

Step 4 On the right side of the Preferences dialog box under Proxies, complete one of the following:

- Choose **Direct connection to the Internet** to bypass the proxy server.

- Choose **Manual proxy configuration** to add exceptions to the proxy server, then click **View**. In the Manual Proxy Configuration dialog box under Exceptions, enter the IP addresses of the ONS 15327 nodes that you will access. Separate each address with a comma. Click **OK** to close each open dialog box.

Step 5   Return to your originating procedure (NTP).

DLP-B58 Provision Remote Access to the ONS 15327

Purpose	This task connects an ONS 15327 using a LAN modem.
Tools/Equipment	Modem and modem documentation
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
Required/As Needed	Required to access the Cisco Transport Controller
Onsite/Remote	Onsite or remote
Security Level	None

Step 1   Connect the modem to the RJ-45 (LAN) port on the XTC.

Step 2   While referring to the modem documentation, complete the following tasks to provision the modem for the ONS 15327:

- For CTC access, set the modem for Ethernet access.

- Assign an IP address to the modem that is on the same subnet as the ONS 15327.

- The IP address the modem assigns to the CTC computer must be on the same subnet as the modem and the ONS 15327.

✎
Note   For assistance on provisioning specific modems, contact the Cisco Technical Assistance Center.

Step 3   Return to your originating procedure (NTP).

NTP-B23 Log into the ONS 15327 GUI

Purpose	Use this procedure to log into the Cisco Transport Controller, the graphical user interface software used to manage the ONS 15327. This procedure includes optional node login tasks.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
	NTP-B22 Set Up CTC Computer to Connect to the ONS 15327, page 2-8
Required/As Needed	Required to access the Cisco Transport Controller
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

Step 1   If the computer is not connected to the ONS 15327, complete the "DLP-B59 Connect Computer to the ONS 15327" task on page 2-22.

Step 2   Complete the "DLP-B60 Log into CTC" task on page 2-23.

✎
Note   For information about navigating in CTC, see Appendix A, "CTC Information and Shortcuts."

Step 3   As needed, complete the "DLP-B61 Create Login Node Groups" task on page 2-25. Login node groups display nodes that are not connected to the login node via data communications channel (DCC).

Step 4   As needed, complete the "DLP-B62 Add a Node to the Current Session or Login Group" task on page 2-26.

Stop. You have completed this procedure.

DLP-B59 Connect Computer to the ONS 15327

Purpose	This task connects a CTC computer to the ONS 15327.
Tools/Equipment	Straight-through (Category 5) LAN cable
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
	NTP-B22 Set Up CTC Computer to Connect to the ONS 15327, page 2-8
Required/As Needed	Required to access the Cisco Transport Controller
Onsite/Remote	Onsite or remote
Security Level	None

Step 1   If your computer is set up for a local craft connection, connect a straight-through (Category 5) LAN cable from the PC or Solaris workstation network interface card (NIC) card to one of the following:

   •   The RJ-45 (LAN) port on the XTC

   •   The RJ-45 (LAN) port on a hub or switch to which the ONS 15327 is physically connected

> **Note**   For instructions on crimping your own straight-through (Category 5) LAN cables, refer to the *Cisco ONS 15327 Troubleshooting Guide*.

Step 2   If your computer is set up for a corporate LAN connection, connect a straight-through (Category 5) LAN from the PC or Solaris workstation NIC card to a LAN port.

Step 3   Return to your originating procedure (NTP).

DLP-B60 Log into CTC

Purpose	This task logs into the Cisco Transport Controller, the graphical user interface software used to manage the ONS 15327.
Tools/Equipment	None
Prerequisite Procedures	NTP-B21 Set Up Computer for CTC, page 2-1
	NTP-B22 Set Up CTC Computer to Connect to the ONS 15327, page 2-8
Required/As Needed	Required
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

> **Note**   For information about CTC views and navigation, see Appendix A, "CTC Information and Shortcuts."

Step 1   From the PC connected to the ONS 15327, start Netscape or Internet Explorer.

Step 2   In the Netscape or Internet Explorer web address (URL) field, enter the ONS 15327 IP address. For initial setup, the default address is 192.1.0.2. Press **Enter**.

> **Note**   If you are logging into ONS 15327 nodes running different releases of CTC software, log into the node running the most recent release. If you log into a node with an older release, you receive an INCOMPATIBLE-SW alarm and the IP address of the login node appears instead of the node name. To check the software version of a node, select **About CTC** from the CTC Help menu. To resolve an alarm, refer to the *Cisco ONS 15327 Troubleshooting Guide*.

A Java Console window displays the CTC file download status. The web browser displays information about your Java and system environments. If this is the first login, CTC caching messages display while CTC files are downloaded to your computer. The first time you connect to an ONS 15327, this process can take several minutes. After the download, the CTC Login dialog box appears (Figure 2-2).

Figure 2-2   Logging into CTC

Step 3 In the Login dialog box, type a user name and password (both are case sensitive). For initial setup, type the user name CISCO15.

> ✎
>
> **Note** The CISCO15 user is provided with every ONS 15327. CISCO15 has superuser privileges, so you can create other users. You must create another superuser before you can delete the CISCO15 user. CISCO15 is delivered without a password. To create a password for CISCO15, click the **Provisioning** > **Security** tabs after you log in and change the password. To set up ONS 15327 users and assign security, go to the "NTP-B30 Create Users and Assign Security" procedure on page 3-3. Additional information is provided in the *Cisco ONS 15327 Reference Manual*.

Step 4 Each time you log into an ONS 15327, you can make selections for the following login options:

- Node Name—Displays the IP address entered in the web browser and a drop-down menu of previously entered ONS 15327 IP addresses. You can select any ONS 15327 on the list for the login, or you can enter the IP address (or node name) of any new node where you want to log in.

- Additional Nodes—Displays a list of login node groups that are created. To create a login node group or add additional groups, see the "DLP-B61 Create Login Node Groups" task on page 2-25.

  > ✎
  >
  > **Note** Topology hosts that were created in previous ONS 15327 releases by modifying the ctc.ini (Windows) or .ctcrc (UNIX) files are displayed as a Topology Host group under Additional Nodes.

- Disable Network Discovery—Check this box to view only the ONS 15327 (and login node group members, if any) entered in the Node Name field. Nodes linked to the Node Name ONS 15327 through the DCC are not displayed. Using this option can decrease the CTC startup time in networks with many DCC-connected nodes.

- Disable Circuit Management—Check this box to disable discovery of existing circuits. Using this option can decrease the CTC initialization time in networks with many existing circuits. This option does not prevent the creation and management of new circuits.

Step 5   Click **Login**.

If login is successful, the CTC window appears. From here, you can navigate to other CTC views to provision and manage the ONS 15327. If you need to perform the initial shelf turn-up, see Chapter 3, "Turn Up Node." If login problems occur, refer to the *Cisco ONS 15327 Troubleshooting Guide*.

Step 6   Return to your originating procedure (NTP).

DLP-B61 Create Login Node Groups

Purpose	This task creates a login node group to display ONS 15327s that have an IP connection but not a DCC connection to the login node.
Tools/Equipment	None
Prerequisite Procedures	DLP-B60 Log into CTC, page 2-23
	NTP-B21 Set Up Computer for CTC, page 2-1
	NTP-B22 Set Up CTC Computer to Connect to the ONS 15327, page 2-8
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   From the Edit menu, choose **Preferences**.

**Step 2**   Click **Login Node Group** and **Create Group**.

Step 3   Enter a name for the group in the Create Login Group Name dialog box. Click **OK**.

Step 4   Under Members, type the IP address (or node name) of a node you want to add to the group. Click **Add**. Repeat this step for each node you want to add to the group.

Step 5   Click **OK**.

The next time you log into an ONS 15327, the login node group will be available in the Additional Nodes list of the Login dialog box. For example, in Figure 2-3, a login node group, Test Group, is created and the IP addresses for Nodes 1, 4, and 5. During login, if you select Test Group under Additional Nodes and Disable Network Discovery is not selected, all nodes in the figure are displayed. If Test Group and Disable Network Discovery are both selected, Nodes 1, 4, and 5 are displayed. You can create as many login groups as you need. The groups are stored in the CTC preferences file on your local drive and are not visible to other users on a different CTC PC or workstation.

Figure 2-3   Login Node Group
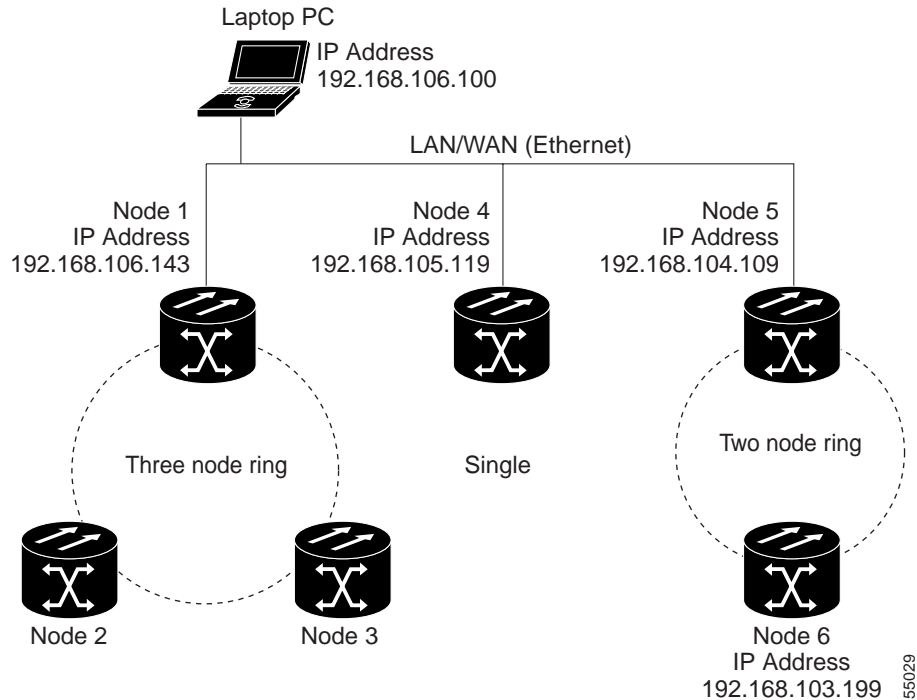
Step 6   Return to your originating procedure (NTP).

DLP-B62 Add a Node to the Current Session or Login Group

Purpose	This task adds a node to the current CTC session or login node group.
Tools	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Log into an ONS 15327 on the network. See the "DLP-B60 Log into CTC" task on page 2-23 for instructions. If you are already logged in, go to Step 2.

Step 2   From the CTC File menu, click **Add Node** (or click the **Add Node** button on the toolbar).

Step 3   In the Add Node dialog box, enter the node name (or IP address).

Step 4   If you want to add the node to the current login group, click **Add Node to Current Login Group**. Otherwise, leave it unchecked.

✎
Note   The Add Node to Current Login Group check box is active only if you selected a login group when you logged into CTC.

Step 5   Click **OK**.

After a few seconds, the new node is displayed on the network view map.

Step 6   Return to your originating procedure (NTP).