

CHAPTER 3

Connect the PC and Log into the GUI

This chapter explains how to connect Windows PCs and Solaris workstations to the Cisco ONS 15310-CL and Cisco ONS 15310-MA, and how to log into Cisco Transport Controller (CTC) software. CTC is the Cisco ONS 15310-CL and Cisco ONS 15310-MA Operation, Administration, Maintenance and Provisioning (OAM&P) user interface. Procedures for connecting to the ONS 15310-CL and ONS 15310-MA using Transaction Language 1 (TL1) are provided in the Cisco ONS SONET TL1 Command Guide.

Before You Begin

This section lists the chapter procedures (NTPs). Turn to a procedure for applicable tasks (DLPs).

- 1. NTP-C13 Set Up Computer for CTC, page 3-2—Complete this procedure if your PC or workstation has never been connected to an ONS 15310-CL.
- 2. NTP-C14 Set Up CTC Computer for Local Craft Connection to the Node, page 3-3—Complete this procedure to set up your computer for an onsite craft connection to the ONS 15310-CL and ONS 15310-MA.
- 3. NTP-C15 Set Up a CTC Computer for a Corporate LAN Connection to the Node, page 3-5—Complete this procedure to set up your computer to connect to the ONS 15310-CL and ONS 15310-MA using a corporate LAN.
- **4.** NTP-C16 Set Up a Remote Access Connection to the Node, page 3-6—Complete this procedure to set up your computer for remote modem access to the ONS 15310-CL and ONS 15310-MA.
- **5.** NTP-C17 Log into the GUI, page 3-7—Complete this procedure to log into CTC.
- **6.** NTP-C147 Use the CTC Launcher Application to Manage Multiple ONS Nodes, page 3-8—Complete this procedure to use the CTC Launcher Application.

NTP-C13 Set Up Computer for CTC

Purpose This procedure explains how to configure your Windows PC or Solaris

workstation to run CTC.

Tools/Equipment Cisco ONS 15310-CL Release 8.5 software CD or Cisco ONS 15310-MA

Release 8.5 software CD

Prerequisite Procedures Chapter 1, "Install the Cisco ONS 15310-CL" or

Chapter 2, "Install the Cisco ONS 15310-MA"

Required/As Needed Required

Onsite/Remote Onsite or remote

Security Level None



JRE 5.0 is required to log into nodes running Software Release 8.5. To log into nodes running Software R4.5 or earlier, you must uninstall JRE 1.4.2 or 5.0 and install JRE 1.3.1. JRE 5.0 is provided on the Software R8.5 software CD. Complete the "DLP-C35 Change the JRE Version" task on page 17-50 as needed.

Step 1 If your computer does not have an appropriate browser installed, complete the following:

- To install Netscape 7.x on a Windows PC, download the browser from the following site: http://channels.netscape.com/ns/browsers/default.jsp
- To install Internet Explorer 6.x on a PC, download the browser at the following site: http://www.microsoft.com/windows/ie/default.mspx
- To install Mozilla 1.7 on a Solaris 9 or 10 workstation, download the browser from the following site: http://www.mozilla.org/releases/#1.7.12



For Windows PCs, only Internet Explorer 6.x and Netscape 7.x are supported. For Solaris workstations, Mozilla 1.7 is the only supported browser.

- Step 2 Complete the "DLP-C231 Adjust the Java Virtual Memory Heap Size" task on page 19-31 to increase the size of the JVM heap in order to improve the CTC performance.
- **Step 3** Complete one of the following:
 - If your computer is a Windows PC, complete the "DLP-C21 Run the CTC Installation Wizard for Windows" task on page 17-29, then go to Step 4.
 - If your computer is a UNIX workstation, complete the "DLP-C22 Run the CTC Installation Wizard for UNIX" task on page 17-32.
- **Step 4** When your PC or workstation is set up, continue with one of the following procedures:
 - NTP-C14 Set Up CTC Computer for Local Craft Connection to the Node, page 3-3
 - NTP-C15 Set Up a CTC Computer for a Corporate LAN Connection to the Node, page 3-5
 - NTP-C16 Set Up a Remote Access Connection to the Node, page 3-6



Cisco recommends that you configure your browser to disable the caching of user IDs/passwords on computers used to access Cisco optical equipment.

In Internet Explorer, choose **Tools > Internet Options > Content**. Click **Auto Complete** and uncheck the **User names and passwords on forms** option.

In Netscape 7.0, choose **Edit > Preferences > Privacy & Security > Forms** and uncheck the option to save form data. For passwords, choose **Edit > Preferences > Privacy & Security > Passwords** and uncheck the option to remember passwords. Note that passwords can be stored in an encrypted format. Netscape versions earlier than 6.0 do not cache user IDs and passwords.

Stop. You have completed this procedure.

NTP-C14 Set Up CTC Computer for Local Craft Connection to the Node

Purpose This procedure sets up a PC running Windows or a UNIX/Solaris

workstation for an onsite local craft connection to the node.

Tools/Equipment Network interface card (NIC), also referred to as an Ethernet card

Straight-through (CAT-5) LAN cable

Prerequisite Procedures NTP-C13 Set Up Computer for CTC, page 3-2

Required/As Needed As needed

Onsite/Remote Onsite or remote

Security Level None

Step 1 Complete one of the CTC computer setup tasks shown in Table 3-1 based on your CTC connection environment. For initial setup, use Option 1 or 3 if you are setting up a Windows PC. Use Option 4 if you are setting up a Solaris workstation.

Table 3-1 CTC Computer Setup for Local Craft Connections to the ONS 15310-CL and ONS 15310-MA

Option	CTC Connection Environment	CTC Computer Setup Task
1	 You are connecting from a Windows PC. You will connect to one ONS 15310-CL or ONS 15310-MA. If you connect to multiple nodes, you might need to configure your computer's IP settings each time you connect to the node. 	DLP-C23 Set Up a Windows PC for Craft Connection to an ONS 15310-CL or ONS 15310-MA on the Same Subnet Using Static IP Addresses, page 17-35
	 You need to access non-ONS applications such as ping and tracert (trace route). 	
2	You are connecting from a Windows PC.	DLP-C24 Set Up a Windows PC for Craft
	Your network uses Dynamic Host Configuration Protocol (DHCP) for assignment of host IP addresses.	Connection to an ONS 15310-CL or ONS 15310-CL Using Dynamic Host Configuration Protocol, page 17-37
	The CTC computer is provisioned for DHCP.	Note Do not use this task for initial node turn-up. Use the task only if DHCP forwarding is enabled on the ONS 15310-CL or ONS 15310-MA. By default, DHCP is not enabled. To enable it, see the "NTP-C21 Set Up CTC Network Access" procedure on page 4-6.
	• The ONS 15310-MA or ONS 15310-CL has DHCP forwarding enabled.	
	The ONS 15310-CL or ONS 15310-MA is connected to a DHCP server.	
	Note The ONS 15310-CL and ONS 15310-MA do not provide IP addresses. If DHCP is enabled, it passes DHCP requests to an external DHCP server.	
•	You are connecting from a Windows PC.	DLP-C25 Set Up a Windows PC for Craft
	• You will connect to ONS 15310-CL or ONS 15310-MA nodes at different locations and times and do not wish to reconfigure your PC's IP settings each time.	Connection to an ONS 15310-CL or ONS 15310-MA Using Automatic Host Detection, page 17-40
	• You will not access or use non-ONS applications such as ping and tracert (trace route).	
	You will connect to the ONS 15310-CL or ONS 15310-MA LAN port either directly or through a hub.	
4	You are connecting from a Solaris Workstation.	DLP-C265 Set Up a Solaris Workstation for a
	• You will connect to one ONS 15310-CL or ONS 15310-MA. If you connect to multiple nodes, you might need to configure your computer's IP settings each time you connect to an ONS 15310-CL or ONS 15310-MA.	Craft Connection to an ONS 15310-CL or ONS 15310-MA, page 19-80
	You need to access non-ONS applications such as ping and tracert (trace route).	

Step 2 Connect a straight-through CAT-5 LAN cable from the PC or Solaris workstation NIC to one of the following:

- RJ-45 (CRAFT) port on the ONS 15310-CL or ONS 15310-MA
- RJ-45 (LAN) port on a hub or switch to which the ONS 15310-CL or ONS 15310-MA is physically connected



Note

For instructions on crimping your own straight-through (CAT-5) LAN cables, refer to the Cisco ONS 15310-CL and Cisco ONS 15310-MA Troubleshooting Guide.



Note

For initial shelf turn-up, you should connect your PC directly to the CRAFT port on the ONS 15310-CL or ONS 15310-MA. On the ONS 15310-CL, the CRAFT port is located on the front of the node. On the ONS 15310-MA, the CRAFT port is located on the CTX2500 card.

Step 3 After setting up the CTC computer, continue with the "NTP-C17 Log into the GUI" procedure on page 3-7, as applicable.

Stop. You have completed this procedure.

NTP-C15 Set Up a CTC Computer for a Corporate LAN Connection to the Node

Purpose This procedure sets up your computer to access the ONS 15310-CL or

ONS 15310-MA through a corporate LAN.

Tools/Equipment NIC, also referred to as an Ethernet card

Straight-through (CAT-5) LAN cable

Prerequisite Procedures

- NTP-C13 Set Up Computer for CTC, page 3-2
- The ONS 15310-CL or ONS 15310-MA must be provisioned for LAN connectivity, including IP address, subnet mask, and default gateway.
- The ONS 15310-CL or ONS 15310-MA must be physically connected to the corporate LAN.

Required/As Needed

As needed

Onsite/Remote

Onsite or remote

Security Level

None

- **Step 1** If your computer is already connected to the corporate LAN, go to Step 3. If you changed your computer's network settings for craft access to the ONS 15310-CL or ONS 15310-MA, change the settings back to the corporate LAN access settings. This generally means:
 - Set the IP Address on the TCP/IP dialog box back to **Obtain an IP address automatically** (Windows 2000 and XP) or **Obtain an IP address from a DHCP server** (Windows NT 4.0).
 - If your LAN requires that DNS or WINS be enabled, change the setting on the DNS Configuration or WINS Configuration tab of the TCP/IP dialog box.
- Step 2 Connect a straight-through CAT-5 LAN cable from the PC or Solaris workstation NIC card to a corporate LAN port.

- Step 3 If your computer is connected to a proxy server, disable proxy service or add the ONS 15310-CL/ONS 15310-MA nodes as exceptions. To disable proxy service, complete one of the following tasks, depending on the web browser that you use:
 - DLP-C27 Disable Proxy Service Using Internet Explorer (Windows), page 17-42
 - DLP-C28 Disable Proxy Service Using Netscape (Windows), page 17-43
- **Step 4** Continue with the "NTP-C17 Log into the GUI" procedure on page 3-7.

Stop. You have completed this procedure.

NTP-C16 Set Up a Remote Access Connection to the Node

Purpose This procedure connects an ONS 15310-CL or ONS 15310-MA using a

LAN modem. To complete this procedure:

• A LAN modem must be connected to the ONS 15310-CL or

ONS 15310-MA.

 The LAN modem must be provisioned for the ONS 15310-CL or ONS 15310-MA. To run CTC, the modem must be provisioned for

Ethernet access.

Tools/Equipment Modem and modem documentation

Prerequisite Procedures NTP-C13 Set Up Computer for CTC, page 3-2

Required/As Needed As needed
Onsite/Remote Onsite
Security Level None

- Step 1 Connect the modem to the ONS 15310-CL or ONS 15310-MA RJ-45 (CRAFT) port. On the 15310-CL, the CRAFT port is located on the front of the node. On the 15310-MA, the CRAFT port is located on the CTX2500 card faceplate.
- **Step 2** While referring to the modem documentation, complete the following tasks to provision the modem for the node:
 - For CTC access, set the modem for Ethernet access.
 - Assign an IP address to the modem that is on the same subnet as the node.
 - The IP address the modem assigns to the CTC computer must be on the same subnet as the modem and the node.



For assistance on provisioning specific modems, contact the Cisco Technical Assistance Center (Cisco TAC). See the "Obtaining Documentation and Submitting a Service Request" section on page xlviii for more information.

Step 3 Continue with the "NTP-C17 Log into the GUI" procedure on page 3-7

Stop. You have completed this procedure.

NTP-C17 Log into the GUI

Purpose This procedure logs into CTC, the graphical user interface software used to

manage the ONS 15310-CL and ONS 15310-MA. This procedure includes

optional node login tasks.

Tools/Equipment None

Prerequisite Procedures NTP-C13 Set Up Computer for CTC, page 3-2

One of the following procedures:

• NTP-C14 Set Up CTC Computer for Local Craft Connection to the Node, page 3-3. or

 NTP-C15 Set Up a CTC Computer for a Corporate LAN Connection to the Node, page 3-5, or

• NTP-C16 Set Up a Remote Access Connection to the Node, page 3-6

Required/As Needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher

Step 1 Complete the "DLP-C29 Log into CTC" task on page 17-44.

Required

If a Java Plug-in Security Warning dialog box appears during log in, complete the "DLP-C30 Install Public-Key Security Certificate" task on page 17-47 to install the public-key security certificate required by Software Release 4.1 and later.

During network topology discovery, CTC polls each node in the network to determine which one contains the most recent version of the CTC software. If CTC discovers a node in the network that has a more recent version of the CTC software than the version you are currently running, CTC generates a message stating that a later version of the CTC has been found in the network and offers to install the CTC software upgrade JAR files. If you have network discovery disabled, CTC will not seek more recent versions of the software. Unreachable nodes are not included in the upgrade discovery.



Note

Upgrading the CTC software will overwrite your existing software. You must restart CTC after the upgrade is complete.

- Step 2 As needed, complete the "DLP-C31 Create Login Node Groups" task on page 17-47. Login node groups allow you to view and manage nodes that have an IP connection but no data communications channel (DCC) connection to the login node.
- Step 3 As needed, complete the "DLP-C32 Add a Node to the Current Session or Login Group" task on page 17-48.
- **Step 4** As needed, complete the "DLP-C33 Delete a Node from the Current Session or Login Group" task on page 17-49.
- Step 5 As needed, complete the "DLP-C36 Configure the CTC Alerts Dialog for Automatic Popup" task on page 17-51.

Stop. You have completed this procedure.

NTP-C147 Use the CTC Launcher Application to Manage Multiple ONS Nodes

Purpose This procedure uses the CTC Launcher to start a CTC session with an ONS

NE that has an IP connection to the CTC computer; create TL1 tunnels to connect to ONS NEs on the other side of third-party, OSI-based GNEs; and

view, manage, and delete TL1 tunnels using CTC.

Tools/Equipment None

Prerequisite Procedures NTP-C13 Set Up Computer for CTC, page 3-2

One of the following procedures:

• NTP-C14 Set Up CTC Computer for Local Craft Connection to the Node, page 3-3

• NTP-C15 Set Up a CTC Computer for a Corporate LAN Connection to the Node, page 3-5

Required/As Needed As needed
Onsite/Remote Onsite or remote
Security Level Retrieve or higher



JRE 1.5 must be installed on the PC you are using with the CTC Launcher application.

- **Step 1** As needed, complete one of the following tasks to install the CTC Launcher:
 - DLP-C266 Install the CTC Launcher Application from a Release 8.5 Software CD, page 19-82
 - DLP-C267 Install the CTC Launcher Application from a Release 8.5 Node, page 19-82
- Step 2 As needed, complete the "DLP-C268 Connect to ONS Nodes Using the CTC Launcher" task on page 19-83 to connect to an ONS network element with direct IP connectivity.
- Step 3 As needed, complete the "DLP-C275 Install or Reinstall the CTC JAR Files" task on page 19-91 to install or reinstall the CTC JAR files.
- Step 4 As needed, complete one of the following tasks to create a TL1 tunnel, which enables you to connect to an ONS network element residing behind OSI-based, third-party GNEs:
 - DLP-C269 Create a TL1 Tunnel Using the CTC Launcher, page 19-84
 - DLP-C270 Create a TL1 Tunnel Using CTC, page 19-85
- **Step 5** As needed, complete the "DLP-C271 View TL1 Tunnel Information" task on page 19-86.
- **Step 6** As needed, complete the "DLP-C272 Edit a TL1 Tunnel Using CTC" task on page 19-88.
- **Step 7** As needed, complete the "DLP-C273 Delete a TL1 Tunnel Using CTC" task on page 19-89.

Stop. You have completed this procedure.