Change Node Settings

✎ **Note**   The terms "Unidirectional Path Switched Ring" and "UPSR" may appear in Cisco literature. These terms do not refer to using Cisco ONS 15xxx products in a unidirectional path switched ring configuration. Rather, these terms, as well as "Path Protected Mesh Network" and "PPMN," refer generally to Cisco's path protection feature, which may be used in any topological network configuration. Cisco does not recommend using its path protection feature in any particular topological network configuration.

This chapter explains how to modify node provisioning for the Cisco ONS 15454. To provision a new node, see Chapter 4, "Turn Up a Node." To change default network element settings and to view a list of those settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

Before You Begin

Before performing the following procedures, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15454 Troubleshooting Guide* as necessary.

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

1. NTP-A81 Change Node Management Information, page 11-2—Complete this procedure as needed to change node name, contact information, latitude, longitude, date, time, and login legal disclaimer.

2. NTP-A201 Change CTC Network Access, page 11-2—Complete this procedure as needed to change the IP address, default router, subnet mask, network configuration settings, and static routes.

3. NTP-A319 Modify OSI Provisioning, page 11-3—Complete this procedure as needed to modify Open System Interconnection (OSI) parameters including the OSI routing mode, Target Identifier Address Resolution Protocol (TARP), routers, subnets, and IP over OSI tunnels.

4. NTP-A202 Customize the CTC Network View, page 11-4—As needed, complete this procedure to create domains and customize the appearance of the network map, including specifying a different default map, creating domains, selecting your own map or image, consolidating links, toggling global and local domain settings, and changing the background color.

5. NTP-A203 Modify or Delete Card Protection Settings, page 11-5—Complete as needed.

6. NTP-A292 Modify or Delete Communications Channel Terminations and Provisionable Patchcords, page 11-5—Complete this procedure as needed to modify or delete Section DCC (SDCC) or Line DCC (LDCC) terminations or provisionable patchcords.

7. NTP-A85 Change Node Timing, page 11-6—Complete as needed.

8. NTP-A205 Modify Users and Change Security, page 11-7—Complete this procedure as needed to make changes to user settings, including security level and security policies, to change Remote Authentication Dial In User Service (RADIUS) server settings, and to delete users.

9. NTP-A87 Change SNMP Settings, page 11-7—Complete as needed.

NTP-A81 Change Node Management Information

Purpose	This procedure changes the node name, date, time, contact information, and the login legal disclaimer.
Tools/Equipment	None
Prerequisite Procedures	NTP-A25 Set Up Name, Date, Time, and Contact Information, page 4-5
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3 Complete the "DLP-A140 Change the Node Name, Date, Time, and Contact Information" task on page 18-15, as needed.

Step 4 Complete the "DLP-A265 Change the Login Legal Disclaimer" task on page 19-48, as needed.

Step 5 After confirming the changes, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A201 Change CTC Network Access

Purpose	This procedure changes essential network information, including IP settings, static routes, and Open Shortest Path First (OSPF) options.
Tools/Equipment	None
Prerequisite Procedures	NTP-A169 Set Up CTC Network Access, page 4-7
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note Additional ONS 15454 networking information and procedures, including IP addressing examples, static route scenarios, OSPF protocol, and Routing Information Protocol (RIP) options are provided in the *Cisco ONS 15454 Reference Manual*.

Step 1 Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3 Perform any of the following tasks as needed:

- DLP-A266 Change IP Settings, page 19-49
- DLP-A142 Modify a Static Route, page 18-16
- DLP-A143 Delete a Static Route, page 18-17
- DLP-A144 Disable OSPF, page 18-17
- DLP-A250 Set Up or Change Open Shortest Path First Protocol, page 19-33
- DLP-A382 Delete a Proxy Tunnel, page 20-77
- DLP-A383 Delete a Firewall Tunnel, page 20-78
- DLP-A434 Lock Node Security, page 21-12
- DLP-A435 Modify Backplane Port IP Settings, page 21-12
- DLP-A436 Disable Node Security Mode, page 21-13

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A319 Modify OSI Provisioning

Purpose	This procedure modifies the ONS 15454 OSI parameters including the OSI routing mode, TARP, routers, subnets, and IP over CLNS tunnels.
Tools/Equipment	None
Prerequisite Procedures	NTP-A318 Provision OSI, page 4-14
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note Additional information about the ONS 15454 implementation of OSI is provided in the "Management Network Connectivity" chapter of the *Cisco ONS 15454 Reference Manual*.

Step 1 Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3 Perform any of the following tasks as needed:

- DLP-A535 Provision or Modify TARP Operating Parameters, page 22-41
- DLP-A536 Add a Static TID to NSAP Entry to the TARP Data Cache, page 22-43
- DLP-A537 Remove a Static TID to NSAP Entry from the TARP Data Cache, page 22-44

- DLP-A538 Add a TARP Manual Adjacency Table Entry, page 22-44

- DLP-A543 Remove a TARP Manual Adjacency Table Entry, page 22-48

- DLP-A544 Change the OSI Routing Mode, page 22-49

- DLP-A545 Edit the OSI Router Configuration, page 22-50

- DLP-A546 Edit the OSI Subnetwork Point of Attachment, page 22-51

- DLP-A547 Edit an IP-Over-CLNS Tunnel, page 22-52

- DLP-A548 Delete an IP-Over-CLNS Tunnel, page 22-53

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A202 Customize the CTC Network View

Purpose	This procedure modifies the Cisco Transport Controller (CTC) network view, including grouping nodes into domains for a less-cluttered display, changing the network view background color, and using a custom image for the network view background.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2   Complete the following tasks, as needed:

- DLP-A145 Change the Network View Background Color, page 18-18

- DLP-A528 Change the Default Network View Background Map, page 22-28

- DLP-A268 Apply a Custom Network View Background Map, page 19-50

- DLP-A148 Create Domain Icons, page 18-19

- DLP-A149 Manage Domain Icons, page 18-19

- DLP-A269 Enable Dialog Box Do-Not-Display Option, page 19-51

- DLP-A498 Switch Between TDM and DWDM Network Views, page 21-66

- DLP-A495 Consolidate Links in Network View, page 21-63

Stop. You have completed this procedure.

NTP-A203 Modify or Delete Card Protection Settings

Purpose	This procedure modifies and deletes card protection settings.
Tools/Equipment	None
Prerequisite Procedures	NTP-A324 Create Protection Groups, page 4-11
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

⚠
Caution   Modifying and deleting protection groups can be service affecting.

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A150 Modify a 1:1 Protection Group, page 18-20
- DLP-A152 Modify a 1:N Protection Group, page 18-21
- DLP-A154 Modify a 1+1 Protection Group, page 18-22
- DLP-A35 Modify an Optimized 1+1 Protection Group, page 17-41
- DLP-A155 Delete a Protection Group, page 18-23

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A292 Modify or Delete Communications Channel Terminations and Provisionable Patchcords

Purpose	This procedure changes or deletes SDCC and LDCC terminations and deletes provisionable patchcords on the ONS 15454.
Tools/Equipment	None
Prerequisite Procedures	DLP-A377 Provision Section DCC Terminations, page 20-68 or
	DLP-A378 Provision Line DCC Terminations, page 20-70 or
	DLP-A367 Create a Provisionable Patchcord, page 20-50
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

⚠
Caution   Deleting a data communications channel (DCC) termination can cause you to lose visibility of nodes that do not have other DCCs or network connections to the CTC computer.

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2   As needed, complete the following tasks to modify DCC settings:

- DLP-A374 Change a Section DCC Termination, page 20-59.
- DLP-A375 Change a Line DCC Termination, page 20-59.

Step 3   As needed, complete the following tasks to delete DCC terminations:

- DLP-A156 Delete a Section DCC Termination, page 18-23.
- DLP-A359 Delete a Line DCC Termination, page 20-44.

Step 4   As needed, complete the "DLP-A368 Delete a Provisionable Patchcord" task on page 20-51.

Stop. You have completed this procedure.

NTP-A85 Change Node Timing

Purpose	This procedure changes the SONET timing settings for the ONS 15454.
Tools/Equipment	None
Prerequisite Procedures	NTP-A28 Set Up Timing, page 4-10
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

⚠
Caution   Internal timing is Stratum 3 and not intended for permanent use. All ONS 15454s should be timed to a Stratum 2 or better primary reference source.

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   As needed, complete the "DLP-A157 Change the Node Timing Source" task on page 18-24.

Step 4   If you need to change any internal timing settings, follow the "DLP-A70 Set Up Internal Timing" task on page 17-78 for the settings you need to modify.

Step 5   If you need to verify timing after removing a node from a bidirectional line switched ring (BLSR) or path protection, see the "DLP-A195 Verify Timing in a Reduced Ring" task on page 18-63.

Step 6   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A205 Modify Users and Change Security

Purpose	This procedure modifies user and security properties for the ONS 15454.
Tools/Equipment	None
Prerequisite Procedures	NTP-A30 Create Users and Assign Security, page 4-4
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Superuser

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A462 View and Terminate Active Logins, page 21-44
- DLP-A271 Change Security Policy on a Single Node, page 19-51
- DLP-A272 Change Security Policy on Multiple Nodes, page 19-53
- DLP-A512 Change Node Access and PM Clearing Privilege, page 22-5
- DLP-A457 Grant Superuser Privileges to a Provisioning User, page 21-40
- DLP-A158 Change User Password and Security Level on a Single Node, page 18-25
- DLP-A160 Change User Password and Security Level on Multiple Nodes, page 18-26
- DLP-A159 Delete a User from a Single Node, page 18-26
- DLP-A161 Delete a User from Multiple Nodes, page 18-27
- DLP-A456 Configure the Node for RADIUS Authentication, page 21-38; this task includes instructions for modifying or deleting a RADIUS server.

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A87 Change SNMP Settings

Purpose	This procedure modifies Simple Network Management Protocol (SNMP) settings for the ONS 15454.
Tools/Equipment	None
Prerequisite Procedures	NTP-A256 Set Up SNMP, page 4-13
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66. If you are already logged in, continue with
Step 2.

Step 2   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A273 Modify SNMP Trap Destinations, page 19-54
- DLP-A163 Delete SNMP Trap Destinations, page 18-28

Step 4   Complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.