C H A P T E R **16**

Troubleshooting OSCP Problems

This chapter describes how to troubleshoot OSCP problems. This chapter includes the following sections:

16.1 Overview

The OSC (optical supervisory channel) module supports an optional out-of-band management channel for communicating between systems on the network. The OSC (channel 0) allows control and management traffic to be carried without requiring a separate Ethernet connection to each Cisco ONS 15530 in the network. Up to two OSC modules can be installed in the carrier motherboard, one module for the west direction and one for the east direction.

16.2 Initial Troubleshooting Checklist

Follow this initial checklist before proceeding with the troubleshooting procedures:

- Check that the LEDs on the cards show the proper state.
- Verify patch configuration.
- Ensure that all optical connectors are clean. Refer to the *Cisco ONS 15530 Cleaning Procedures for Fiber Optic Connections* document.

16.3 Troubleshooting OSCP Problems

This section contains troubleshooting procedures for OSCP problems.

16.3.1 OSC Wave Interface Down

Symptom   The OSC wave interface is down.

Table 16-1 describes the potential causes of the symptom and the solutions.

Table 16-1   OSC Wave Interface Is Down

Possible Problem	Solution
Interface is administratively down.	Issue a **show interfaces wave** command to verify the OSC wave interface status. If it is administratively down, issue a **no shutdown** command.
Receive power level is low.	Check the receive power level from the OADM module. Ensure that it is between –19 dBm and –1.5 dBm.
The optical connectors are dirty.	Refer to the *Cisco ONS 15530 Cleaning Procedures for Fiber Optic Connections* document.
The patch cables are faulty.	Check the patch cables between the OSC module and the OADM module for pinches or breaks. Correct any problems with the fiber.

16.3.2 EthernetDcc Interface Down

Symptom   The ethernetdcc interface is down.

Table 16-2 describes the potential causes of the symptom and the solutions.

Table 16-2   EthernetDcc Interface Is Down

Possible Problem	Solution
Interface is administratively down.	Issue a **show interfaces wave** command to verify the ethernetdcc interface status. If it is administratively down, issue a **no shutdown** command.
Receive power level is low.	Check the receive power level from the OADM module. Ensure that it is between –19 dBm and –1.5 dBm.
The optical connectors are dirty.	Refer to the *Cisco ONS 15530 Cleaning Procedures for Fiber Optic Connections* document.
The patch cables are faulty.	Check the patch cables between the OSC module and the OADM module for pinches or breaks. Correct any problems with the fiber.

16.3.3 EthernetDcc Interface Is Up But Line Protocol Is Down

Symptom   The EthernetDcc interface is up but line protocol is down.

Table 16-3 describes the potential cause of the symptom and the solutions.

Table 16-3   EthernetDcc Interface Is Up But Line Protocol Is Down

Possible Problem	Solution
The remote ethernetdcc interface is shut down.	1. Issue the **show oscp interface** command to check the OSCP status.
	2. If the ethernetdcc interface is in the "attempt" state, issue the **show interfaces** command on the remote system to determine the administrative state of the ethernetdcc interface. Issue the **no shutdown** command to bring it up, if necessary.

16.3.3   EthernetDcc Interface Is Up But Line Protocol Is Down