Upgrade Procedures for ONS 15216 EDFA2 Release 2.0.1

Release 2.0.1 is a bug fix for CSCdy08521in release 2.0.0.

CSCdy08521 Issue: Power Fail alarm does not indicate single -48V wire failure.

Description: The Power LED should blink to indicate a power failure when the -48V wire is removed from either the A or B power feed (with or without the RET wire still connected). In cases where the -48V wire fails and the RET wire remains, the ONS 15216 EDFA2 does not alarm.

To fix this bug, complete the 2.0.1 software upgrade and the power bus calibration procedures below.

ONS 15216 EDFA2 2.0.0 to 2.0.1 Software Upgrade

The following procedure is used to upgrade the software image from 2.0.0 to 2.0.1. A power bus calibration procedure is required after the software has been upgraded. This procedure is not service affecting.

Step 1   If the ONS 15216 EDFA2 already has been assigned and IP address, subnet mask, gateway address, and host name, skip to Step 7.

Step 2   Log into the ONS 15216 EDFA2 using HyperTerminal as a user with administrative privileges.

Step 3   Enter the correct user name and password (default is root, root).

Step 4   Verify that the following login response is displayed:

```
Welcome to ONS15216 EDFA2 Console (v2.0.0)
hostname:ONS15216 EDFA2>
```

Step 5   At the command prompt, enter the following command, entering the response information line by line:

```
hostname:ONS15216 EDFA2> snmp row set local cerent15216EdfaSromIpMgmtGroup

cerent15216EdfaSromIpMgmtEnetAddress 0.0.0.0
cerent15216EdfaSromIpMgmtEnetSubNetMask 0.0.0.0
cerent15216EdfaSromIpMgmtDefaultRouterAddress 0.0.0.0
cerent15216EdfaSromIpMgmtHostName ""
```

Step 6   To save the changes, enter the following command:

```
hostname:ONS15216 EDFA2> snmp attribute set local cerent15216EdfaOpSaveConfig perform
```

Step 7   Verify that the ONS 15216 EDFA2 is connected to the LAN via the module's LAN port.

If not, use a straight-through Cat5 Ethernet cable with RJ-45 connectors to connect from the LAN port to a LAN switch or hub.

Step 8   If any changes have been made, the system must be rebooted to make the IP address active. Enter the following command:

```
hostname:ONS15216 EDFA2> processor reset
```

Step 9   Put the 2.0.1 software image on a PC or server that has a FTP server and is on the same LAN as the ONS 15216 EDFA2.

Step 10   Log into the ONS 15216 EDFA2 as a user with administrative privileges.

Step 11   Enter the correct user name and password (default is root, root).

Step 12   Verify that the following login response is displayed:

```
Welcome to ONS15216 EDFA2 Console (v2.0.0)
hostname:ONS15216 EDFA2>
```

Step 13   At the hostname prompt, enter the command as shown below to log in to the ftp site.

```
hostname:ONS15216 EDFA2> network host ftp <FTP Server IP Address>
```

The ONS 15216 EDFA2 should respond as follows:

```
connecting to <IP Address>
connected to <IP Address>
```

Once the login process is completed, the ftp prompt should be available.

Step 14   At the ftp prompt, enter the command as shown below to complete the ftp log in.

```
ftp> login <FTP username>
```

Step 15   When prompted, enter the FTP user password as shown.

```
Password: *****
```

The ONS 15216 EDFA2 should respond as follows:

```
230 User johndoe logged in.
```

Step 16   At the ftp prompt, enter the following command:

```
ftp> cd /<Directory of FTP site>
```

Step 17   At the ftp prompt, enter the following command:

```
ftp> type i
```

The ONS 15216 EDFA2 should respond as follows:

```
type set to BINARY
```

Step 18   At the ftp prompt, enter the following command:

```
ftp> get 15216EdfaSw_2.0.1
```

Once the command is entered, the file transfer will begin. Once the file transfer is completed, the following information should be displayed.

```
Bytes received: xxxxx
Transfer complete.
```

Step 19   At the ftp prompt, enter the following command:

```
ftp> quit
```

The ftp session will be terminated and the following response should be displayed.

```
Ftp session terminated.
```

The ONS 15216 EDFA2 will then return to the hostname prompt.

Step 20 At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> srom cfg boot modify
```

Step 21 After the response message, enter the following:

```
Boot Count = 4
2 <enter>
```

After the response message, enter the following:

```
Boot Record 0 type 2 Flash
2 <enter>
```

Step 22 After the response message, enter the following:

```
Filename = 15216EdfaSw_2.0.0
15216EdfaSw_2.0.1 <enter>
```

After the response message, enter the following:

```
Boot Record 1 type 2 Flash
2 <enter>
```

Step 23 After the response message, enter the following:

```
Filename = 15216EdfaSw_x.x.x
15216EdfaSw_2.0.0 <enter>
```

Step 24 At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> processor reset
```

The software upgrade procedure is complete. Proceed to the power bus calibration procedure below.

ONS 15216 EDFA2 2.0.1 Power Bus Calibration Procedure

The following procedure is used to calibrate the power bus so voltages can be measured accurately. The software upgrade to 2.0.1 is required before performing this procedure. This procedure only needs to be done once. This procedure is not service affecting if done step by step.

Step 1 Log into the ONS 15216 EDFA2 as a user with administrative privileges.

Step 2 Verify that the following is displayed:

```
Welcome to ONS15216 EDFA2 Console (v2.0.1)
hostname:ONS15216 EDFA2>
```

Step 3 At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> snmp table display local cerent15216EdfaCfgGroup
```

The ONS 15216 EDFA2 should respond as follows:

```
CLASS CERENT-15216-EDFA-MIB.cerent15216EdfaCfgGroup ::=
{
```

```
...
cerent15216EdfaPowerBusDCVoltageMin = 400;
cerent15216EdfaPowerBusDCVoltageMax = 570;
};
```

⚠
Warning   **Observe all electrostatic discharge and electrical safety precautions.**

Step 4   Use a volt meter to measure the voltages across the -48V and RET of each power bus to ensure that both power buses are operating correctly within the power bus voltage minimum and maximum alarm thresholds for your ONS 15216 EDFA2. Correct any source power bus voltage irregularities before proceeding.

Step 5   At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> manufacturer mode enable
```

Step 6   At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> pdm cfg calibrate diode modify
```

⚠
Warning   **Observe all electrostatic discharge and electrical safety precautions.**

The system responds with four line-by-line steps to be completed one at a time. Follow each instruction step by step, pressing any key after completing each step:

```
1) Please apply -48V to Bus A & B....
Press any key to continue...
2) Disconnect -48V & RET on Bus A
Press any key to continue...
channel 0: 304 (0x00000130)
3) Re-connect -48V & RET on Bus A
Press any key to continue...
4) Disconnect -48V & RET on Bus B
Press any key to continue...
channel 1: 305 (0x00000131)
Calibration successful.
```

Step 7   Re-connect -48V & RET on Bus B.

Step 8   At the hostname prompt, enter the following command:

```
hostname:ONS15216 EDFA2> logoff
```

The power bus calibration procedure is complete.