

Failure to Create Circuit Between CE Card on ONS 15310 and ML Card on ONS 15454

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Introduction

This document describes why the circuit creation fails between the Cisco ONS CE-Series Ethernet card on Cisco ONS 15310-CL and the Cisco ML-Series card on Cisco ONS 15454.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco ONS 15454
- Cisco ONS 15310
- Cisco ONS 15454 ML-Series Ethernet Cards
- Cisco ONS CE-Series Ethernet Card

Components Used

The information in this document is based on these software and hardware versions:

- Cisco ONS 15454 that runs Cisco ONS version 6.0
- Cisco ONS 15310 version 6.0
- ML (bundled as part of the ONS 6.0 release) that runs Cisco IOS® Software Release 12.2(27)SV and later

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Background

The Cisco ONS CE-Series Ethernet card and ML-series cards support Packet Over Sonet (POS)/Resilient Packet Ring (RPR) Encapsulation on two Virtual Concatenation Group (VCG)/POS ports using GFP-F (ITU-T G.7041) or LEX (HDLC) Encapsulation.

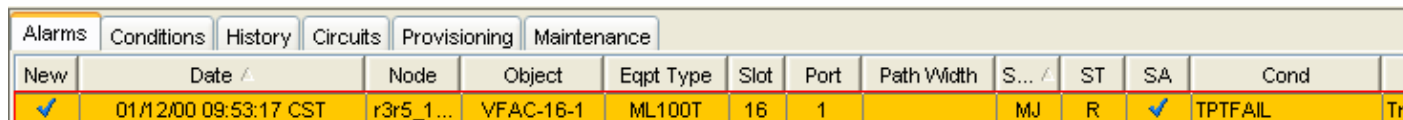
Problem

When creating a circuit between CE-Series Ethernet card and ML-series cards, the error message (see arrow A in Figure 1) appears on Cisco Transport Controller (CTC).

Here is the data flow for this specific circuit:

Cisco CE-series Card <--> ONS 15310 <--> OC12/SONET Connection <--> ONS 15454 <--> Cisco M

Figure 1: Error Message – Transport Layer Failure



New	Date	Node	Object	Eqpt Type	Slot	Port	Path Width	S...	ST	SA	Cond	
✓	01/12/00 09:53:17 CST	r3r5_1...	VFAC-16-1	ML100T	16	1		MJ	R	✓	TPTFAIL	Tr

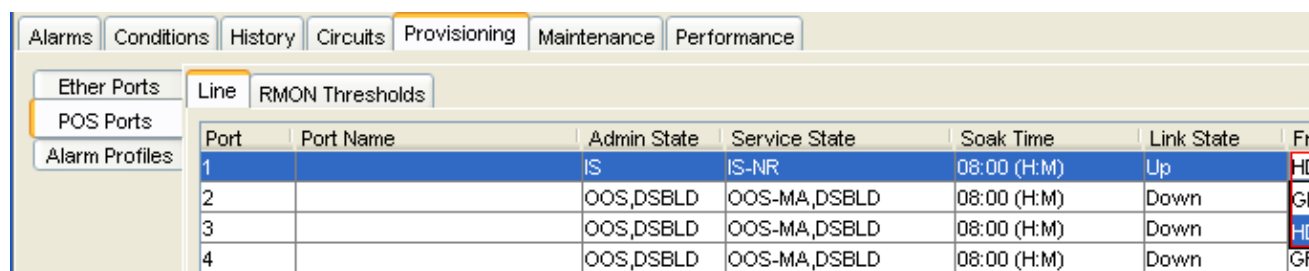
Solution

The failure is caused by the encapsulation mismatch on POS ports between CE-Series Ethernet card and ML-Series card. Both cards support GFP-F and LEX (HDLC) encapsulation. If the POS port on one card is configured to use the GFP-F encapsulation, and the POS port on the other card is configured to use the LEX encapsulation, the circuit creation between these two cards fails.

Complete these steps to configure the port encapsulation for Cisco ONS CE-series card on Cisco ONS 15310:

1. Log in to Cisco Transport Controller (CTC).
2. Go to the CE-Series card view.
3. Select **Provisioning > POS Ports > Line**.
4. Select either HDLC or GFP-F from the Framing Type dropdown list (see arrow A in Figure 2).

Figure 2: Port Configuration on the CE-series Card

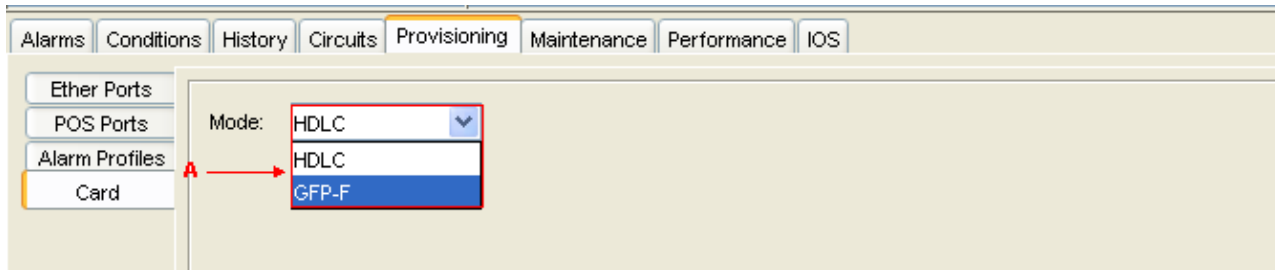


Port	Port Name	Admin State	Service State	Soak Time	Link State	F
1		IS	IS-NR	08:00 (H:M)	Up	HD
2		OOS_DSBLD	OOS-MA_DSBLD	08:00 (H:M)	Down	GF
3		OOS_DSBLD	OOS-MA_DSBLD	08:00 (H:M)	Down	HD
4		OOS_DSBLD	OOS-MA_DSBLD	08:00 (H:M)	Down	GF

Complete these steps to configure the port encapsulation for Cisco ONS ML-Series card on Cisco ONS 15454:

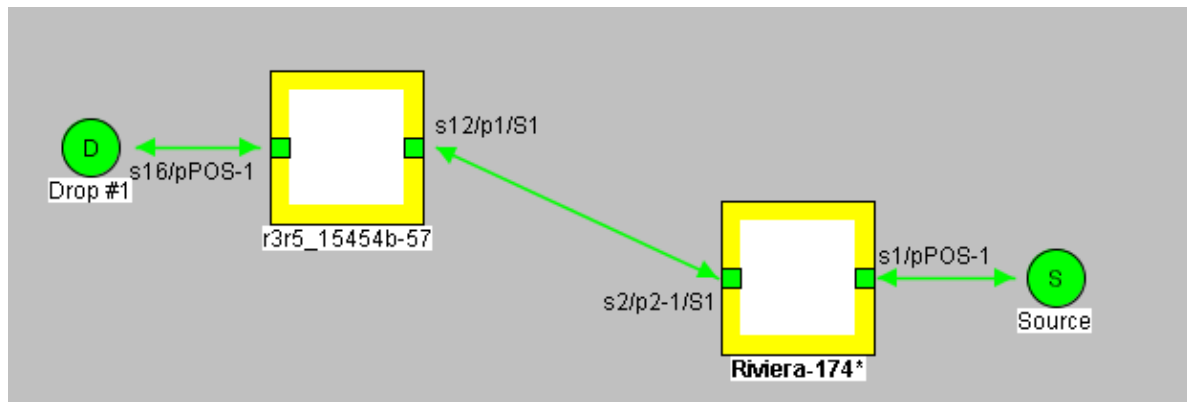
1. Log in to Cisco Transport Controller (CTC).
2. Go to the ML-Series card view.
3. Select **Provisioning > Card > Line**.
4. Select either HDLC or GFP-F from the Mode dropdown list (see arrow A in Figure 3).

Figure 3: Port Configuration on the ML-series Card



If both ports are configured with the same encapsulation using HDLC or LEX, the circuit successfully comes up (see Figure 4).

Figure 4: Circuit Detailed Map



Related Information

- [Optical Networking Support Resources](#)
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