ORAN ODU VLAN Testing

OneAdvisor 800

Table of Contents

1. Scope

This document describes how to configure the OneAdvisor for ORAN ODU VLAN, including:

- RU Connectivity
- M-Plane Results

The required products and parts to complete this procedure are as follows:

Description	Diagram
OneAdvisor with the following functions: - ONA-800 mainframe equipped with the following module: o SPA06MA-O: SPA Module with Optical Board	 ONA Front View.
SFP+ for 10GBPS	 SM SFP+
Duplex Singlemode Fiber cable	 Duplex SM Fiber

2. OneAdvisor Overview

The OneAdvisor is a portable instrument for Cell Site installation and maintenance, the main test functions of OneDvisor for cell site installation include:

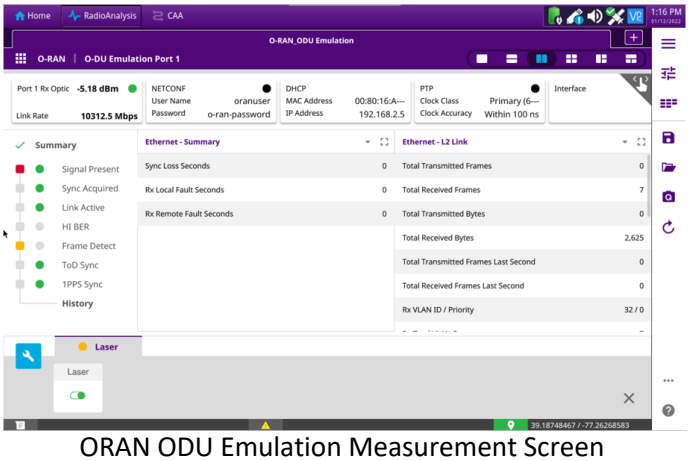
- Cable and antenna analysis up to 6GHz
- Fiber Inspection verification
- Fiber validation (OTDR)

2.1 ORAN ODU Emulation

The following procedure describes the steps to perform ORAN ODU Emulation analysis with OneAdvisor.

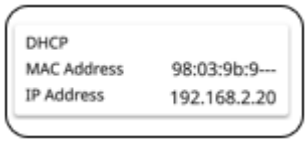
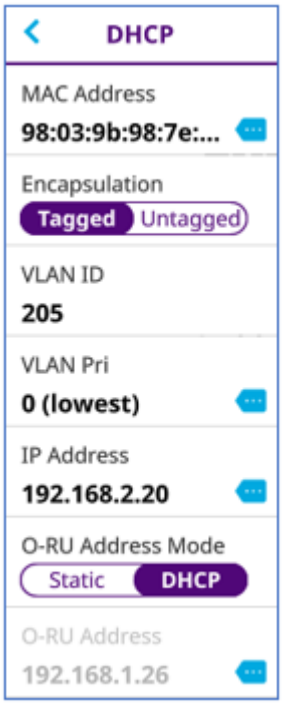
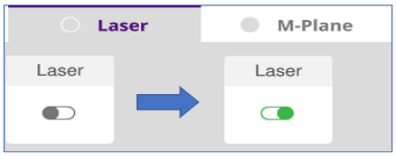
2.1.1 Initial Setup

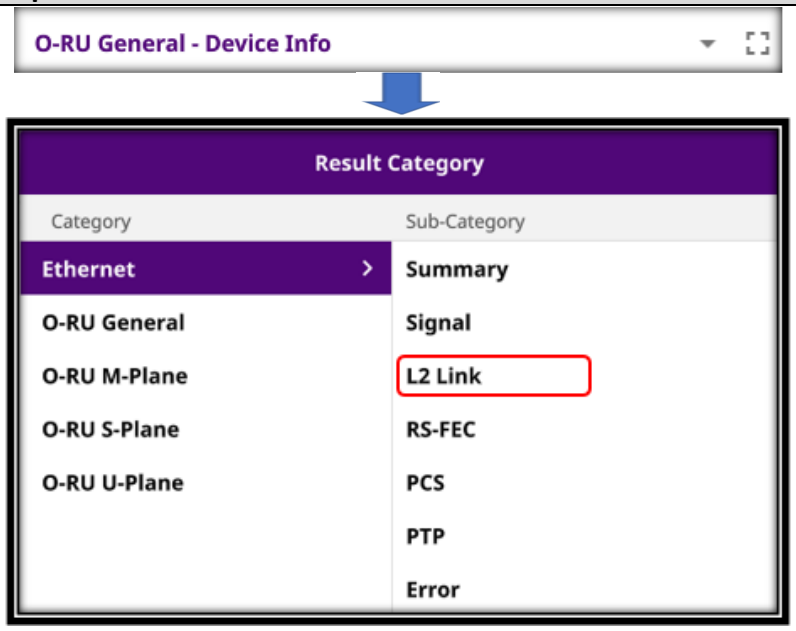
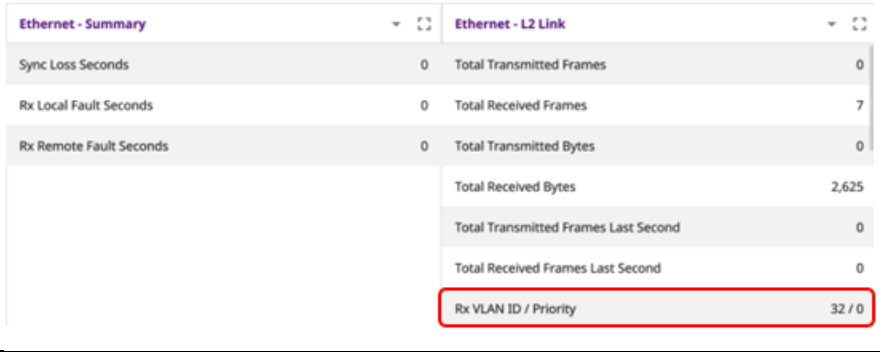
The following procedure describes the initial setup of ODU Emulation analysis, including turn-up and connectivity.

Step	Action	Description
1	Power ON OneAdvisor	Press and hold the ON/OFF button for 3 seconds to power on the One Advisor 
2	Connectivity: - Insert the SFP+ into Port 1 on the optical board - Inspect, Clean, and connect a duplex fiber between the ONA and the RU under test	 ONA Front View. ORU Example
3	ORAN ODU Emulation mode: - Select {Home}, {Tests}, {Radio Analysis}, {O-DU Emulation}	 ORAN ODU Emulation Measurement Mode  ORAN ODU Emulation Measurement Screen

2.1.2 ORAN ODU VLAN Testing

The following procedure describes the steps to perform ODU Emulation tests with OneAdvisor.

Step	Action	Description
1	ODU Emulation Link Rate: - Set the Optical Link Rate to 10312.5 Mbps. *Note: If testing a 25Gbps RU, use an SFP28 and set the link rate to 25781.5 Mbps*	 SFP+ Optical Link Rate
2	Set the Master (ONA) IP Address and VLAN ID : - Select the DHCP field and set the IP Address to 192.168.2.20 - Set the VLAN to a value between than 200 and 210 (i.e., 205) - Verify the Encapsulation is set to Tagged - Verify the O-RU Address Mode is set to DHCP	 Top bar DHCP group  Side-bar configuration icon  Setting IP Address and VLAN Information
3	Start the ODU Emulation Process: - Turn ON the ONA Laser	

Step	Action	Description
	- Change the Screen Menus to display the VLAN of the RU - Drop down the window and select Ethernet>>L2 Link	 Link Stats
4	Reading the VLAN: - After the RU “wakes up” the VLAN will start scanning and the ONA will show the VLAN once per second (or so).	

3. Technical Support

Technical support is provided by:

- Phone: 1-844-GO-VIAVI (1-844-468-4284) options 3-2-3
- Email: diagnostics.tac@viavisolutions.com

Regularly new firmware updates for the CellAdvisor 5G are released and it is recommended to keep the instrument in the latest firmware to provide all the enhancements and bug fixes.

- For additional information of cell site test go to: http://www.viavisolutions.com/en/products/network-test-and-certification/cell-site-test