Ethernet Y.1564 Layer 2 Traffic

This quick card describes how to set up the OneAdvisor 800 400G Module or OneAdvisor 1000 400G Module to run an ITU Y.1564 Layer 2 Traffic Test for Metro Ethernet service activation.

- OneAdvisor 800 or OneAdvisor 1000 equipped with the following:
  - 400G Transport Module
  - Transport software release V4.0.0 or greater
  - Software option for data rate to be tested:
    - CA10M1GE test option for 10/100/1000M Copper or 1 Gigabit Optical Ethernet
    - CA10GELAN test option for 10 Gigabit Ethernet
    - CA25GE test option for 25 Gigabit Ethernet
    - CA40GE test option for 40 Gigabit Ethernet
    - CA50GE test option for 50 Gigabit Ethernet
    - CA100GE test option for 100 Gigabit Ethernet
    - CA200GE test option for 200 Gigabit Ethernet
    - CA400GE test option for 400 Gigabit Ethernet
- Optical Transceiver supporting the Ethernet data rate to be tested (SFP, QSFP, or OSFP)
- Cables to match the optical transceiver and the line under test
- Fiber optic inspection microscope (P5000i or FiberChek Probe)
- Fiber optic cleaning supplies

LAUNCH TEST

1. Press the Power button to turn on the OneAdvisor.
2. Press the 400G Module icon at the top of the screen.
3. Using the Select Test menu, Quick Launch menu, or Job Manager, launch the Ethernet Layer 2 Traffic test for the desired data rate on the desired port (P1 or P2). For example:
   Ethernet ► 400GigE Optical ► Y.1564 SAMComplete ► Layer 2 Traffic ► P2 Terminate.
4. Tap the button next to “Start a New Configuration (reset to defaults)"
The following Information is needed to configure the test:

- Frame Size
- VLAN ID, if VLAN tagging is used.
- Committed Information Rate (CIR)
- Pass/Fail Threshold for Frame Loss Ratio, Delay, and Delay Variation (Jitter)

1. Tap the button to display the Local Network Settings 1 screen.
   - Select the Frame Size you wish to generate.

2. Tap to display the Local Network Settings 2 screen.
   - If you are testing a VLAN, set Encapsulation to VLAN and enter the VLAN ID.
4. Tap Next to display the **SLA Throughput** screen.
   - Enter the Committed Information Rate (CIR).
   - If you are testing at full line rate or if traffic is not being policed, uncheck the **Policing** checkbox.

5. Tap the Next button twice to display the **SLA Performance** screen.
   - Enter the Frame Loss Ratio, Frame Delay, and Delay Variation pass/fail criteria.

6. Tap the Next button 5 times to display the **J-QuickCheck** screen.
QUICK CARD

CONNECT TO LINE UNDER TEST AND LOOP BACK DEVICE

▶ For Optical Interfaces:
1. Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (SFP, attenuators, patch cables, bulkheads)
   - Focus the fiber on the screen.
   - If it appears dirty, clean the fiber end-face and re-inspect.
   - If it appears clean, run the inspection test.
   - If it fails, clean the fiber and re-run inspection test. Repeat until it passes.
2. Insert desired Optical Transceiver into the Port 1 SFP or QSFP slot on the top of the OneAdvisor.
3. If necessary, insert optical attenuators into the SFP/QSFP TX and/or RX ports.
4. Connect the SFP/QSFP to the port under test using a jumper cable compatible with the line under test.

▶ For Copper 10/100/1000BASE-T interfaces:
1. Insert Copper SFP into the Port 1 SFP or slot on the top of the OneAdvisor.
2. Connect the copper SFP to the port under test using CAT 5E or better cable.

▶ Verify that Local Port status UP and Full Duplex (FD)

▶ Tap the button.

▶ Verify that the Remote Loop is recognized.

▶ Tap the button to display the Run Y.1564 Tests screen.
**RUN TEST**

1. Tap the [Start] button.

2. Wait for the test to complete and verify that all tests pass or complete as indicated by a green or blue checkmark.

**CREATE REPORT**

1. Tap the [Next] button three times to display the Report screen.

2. Tap [Create Report].

3. Tap [Exit] buttons three times to close the report and exit the Y.1564 test.