Quick Card

T-BERD®/MTS-5800 Network Tester
Ethernet J-Profiler VLAN Analysis

This document outlines how to use the T-BERD/MTS-5800 J-Profiler application to analyze live network traffic for bandwidth utilization (top talker analysis) by VLAN ID.

Equipment Requirements:
- T-BERD/MTS-5800 equipped with the following:
  - BERT software release V27.0 or greater
  - 10 Megabit to 1 Gigabit Ethernet option (C510M1GE)
  - J-Profiler analysis option (C5JPROFILER)
- SFP optical transceiver to match the line under test
- Patch Cords to match the optical transceiver and the line under test
- Fiber optic inspection microscope (VIAVI P5000i or FiberChek Probe)
- Fiber Optic Cleaning supplies

The following information is required to complete the test:
- Physical Interface (10/100/1000BASE-T, 1000BASE-SX, 1000BASE-LX)
- Auto Negotiation settings of the port under test

Fiber Inspection Guidelines:
- All fiber end-faces must be clean and pass an inspection test prior to connection.
- Use the VIAVI P5000i, FiberChek Probe, or Sidewinder microscope to inspect both sides of every connection being used (SFP Port, bulkhead connectors, patch cords, etc.)
Connect to SPAN Port or TAP:

1. For copper 10/100/1000BASE-T interface testing with the T-BERD/MTS 5800v2, connect the Port 1 10/100/1000 RJ-45 jack to the SPAN port or network TAP using CAT 5E or better cable.
2. For copper 10/100/1000BASE-T interface testing with the T-BERD/MTS 5800-100G, insert a copper SFP into the Port 1 SFP+/SFP28 slot and connect to the SPAN port or network TAP using CAT 5E or better cable.
3. For optical interfaces:
   - Inspect and, if necessary, clean all SFPs, fibers, and bulkheads, as described on page 1.
   - Insert desired SFP into the Port 1 slot on the top of the T-BERD/MTS.
   - Connect the SFP to the SPAN port or network TAP using a Single Mode or Multimode patch cable compatible with the SPAN or network TAP interface.

Launch Test:

1. Press the Power button to turn on the test set and view the startup screen.
2. Using the Select Test menu, Quick Launch menu, or Job Manager, launch an Ethernet, J-Profiler, Monitor test on port 1 for the desired physical interface. For example: Ethernet ► 10/100/1000 ► J-Profiler ► P1 Monitor.
3. If the test is not in the default settings, tap the Tools icon, and select Reset Test to Defaults. Press OK to continue and wait for test to reconfigure.
Configure and run J-Profiler Test:

1. Press the **Setup** Soft Key, to display the **Interface** settings tab.
2. Select the **Physical Layer** tab and make appropriate selections to match the SPAN port or network TAP configuration.

3. Move to the **Profile** tab and select **VLAN ID** in the **Group incoming traffic into streams by** combo box.
4. Tap on the **Results** soft key in the upper right screen corner to view the test results screen.

5. If using the optical test port on T-BERD/MTS, press the **Laser Off** button at the bottom of the screen to turn on the port laser. The button will turn yellow and be relabeled **Laser On**. Ensure the **Signal Present, Sync Acquired** and **Link Active** LEDs are green. Green LEDs indicate successful connection to the SPAN port or network TAP.
6. Tap the **Restart** slot key on the right side of the screen.

7. Tap on the left combo box in the middle of the screen and select **Traffic Profile** to display VLAN traffic profiles.

8. Observe the real-time VLAN traffic profile.

9. To save the results, tap the **Reports** button at the bottom left screen corner and select the **Create Report** option.

Figure 9: Results Category selection

Figure 10: Traffic Profile