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. J-Profiler can be used on Ethernet active Switch ports or SPAN (Switch Port Analyzer) ports. A SPAN port is a spare switch port configured to transmit a copy of the packets sent or received on another switch port. It allows the T-BERD to receive all network traffic from a given port, without being physically attached to that port. Bidirectional Traffic can be transmitted to the T-BERD using a single port.

Equipment Requirements:
- T-BERD/MTS-5800 equipped with the following:
  - BERT software release V28.0 or greater
  - Ethernet test options:
    - C510M1GE
    - CSJPROFILER
  - SFP optical transceiver to match the line under test
- Patch Cables to match the optical transceiver and line under test (CAT5E, Single mode or Multimode Fiber)
- 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-LX, etc.)
- 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/QSFP Port, bulkhead connectors, patch cables, etc.)
Connect to Port under Test:

- For copper 10/100/1000BASE-T interfaces on the T-BERD 5800v2, use CAT 5E or better cable to connect the T-BERD’s Port 1 RJ-45 port to the port under test.
- For copper 10/100/1000BASE-T interfaces on the T-BERD 5800-100G, use CAT 5E or better cable to connect the T-BERD’s Port 2 RJ-45 port to the port under test.
- For optical interfaces, insert the required SFP into the Port 1 slot on the T-BERD and connect the T-BERD’s SFP to the SFP in the port under test. Use yellow Single mode patch cables with Single Mode optics; use orange or teal Multimode fiber patch cables with multimode optics.

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 a J-Profiler test as follows:
   - For 10/100/1000BASE-T Copper interfaces on the T-BERD 5800v2:
     Ethernet ► 10/100/1000 ► J-Profiler ► P1 Monitor
   - For 10/100/1000BASE-T copper interfaces on the T-BERD 5800-100G:
     Ethernet ► 10/100/1000 ► J-Profiler ► P2 Monitor
   - For GigE optical interfaces:
     Ethernet ► 1GigE Optical ► J-Profiler ► P1 Monitor
Configure Test:

1. Tap to display the T-BERD’s **Tools Panel.** Tap and press to continue.

2. Tap the **Setup** soft key.

3. Tap the **Interface/Physical Layer** tab and set **Auto Negotiation** selections to match the configuration of the port under test.

4. Tap the **Profile** tab and set “**Group incoming traffic into streams by**” to VLAN ID.

5. Press the **Results** soft key to return to the Results screen.
Packet Capture/Decode:

1. If using the optical test port, tap Laser off in the Actions panel at the bottom of the screen. The button will turn yellow and be relabeled Laser On.

2. Press the Restart Soft Key on the right side of the screen.

3. Check LEDs: a green Signal Present LED ● indicates the T-BERD is receiving an optical signal from the port under test. Green Sync Acquired and Link Active LEDs indicate that the T-BERD has successfully connected to the port under test.

4. Set the Results Window to display Traffic Profile/Streams results.

5. Tap Columns..., deselect SVLAN ID(s) and SVLAN Priority, and tap OK.

6. View the Traffic Profile.