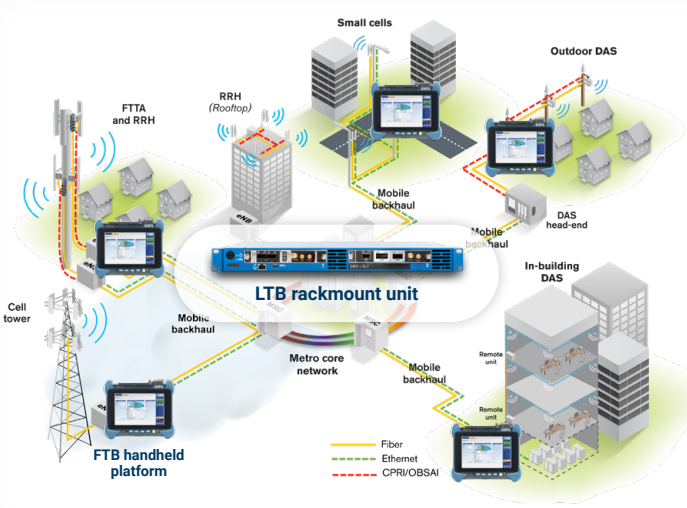# Remote test solutions

Validating 100G networks—from the central office to the field

EXFO

Smarter network in sight.

The explosive growth of internet-connected devices is placing extreme demands on networks in terms of bandwidth, latency and reliability. Whether you're activating a service or troubleshooting in real time, remote test and monitoring solutions are critical for quickly detecting and resolving issues—and delivering the quality of experience consumers expect.

Testing from the field to the central office

Use the LTB in your central office as the ultimate loopback tool

- Run up to ten 10G tests simultaneously to a single module on the LTB
- Run up to twenty 1G tests simultaneously to a single module on the LTB
- Always-on SMART LOOPBACK test application means field technicians will not require remote assistance
- Use both ports on the remote unit: one for loopback and another to initiate tests

Testing from the central office to the field

Initiate test from the central office using the loopback capabilities of your network element

- Test from your LTB to any device in your network (including 3rd-party test equipment) with loopback capability
- Use OAM devices to loopback EtherSAM traffic

Test TCP throughput with only one unit

- Test multiple iPerf 2 clients against EXFO's centralized iPerf 2 server **simultaneously**
- Run up to 16 clients against a 10G port or 128 clients against a 100G port **simultaneously**
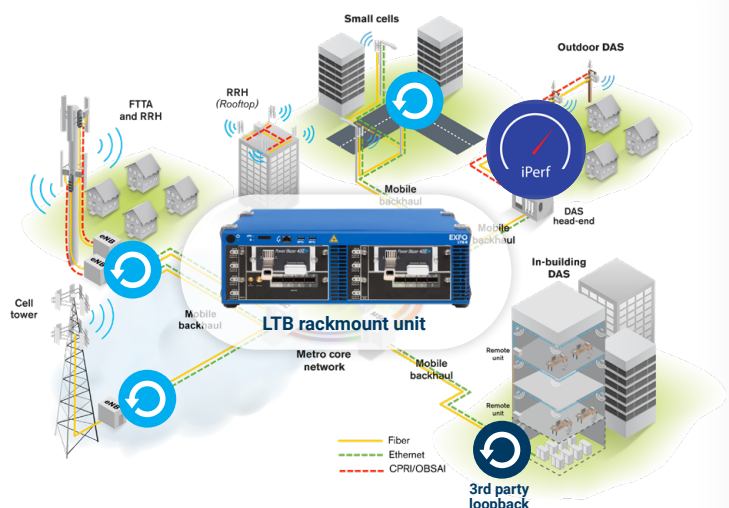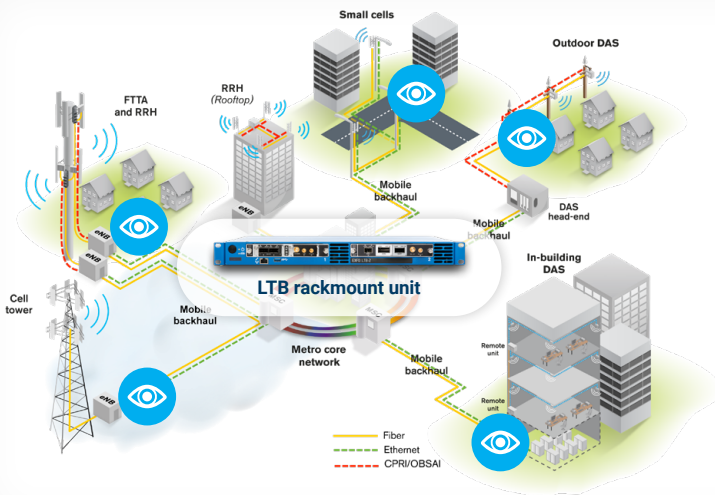
Monitor your network

Keep an eye on your network and detect issues before they happen

- Get critical QoS metrics 24/7 to monitor network performance

- Use a low-bandwidth EtherSAM test application over a longer time period to monitor QoE

- Use OAM devices across your network as loopback or monitoring tools

The EXFO Advantage

Always-on loopback device

Technician efficiency is measured by time spent on each task. With an always-on device to test against, technicians don't require remote assistance, so they can close out jobs faster.

Faster response time

By monitoring your network 24/7, you can get alerts on any incoming issues and act faster.

Save on truck rolls

By initiating your tests from a central location and using loopback devices in the network as test points, operators don't need to dispatch technicians to sites.

Reporting

Execute your methods of procedure (MOP) and store resulting reports in the cloud.

EXFO | MULTILINK

Control all modules from a single location

The value of connectivity comes from the ability to connect your platform anywhere at any time. The EXFO Multilink multi-module, multi-user and multi-chassis application enables remote control of each chassis and module throughout a centralized network.

User → Virtualized GUI → **Host server** ← Remote GUI ← **Chassis**
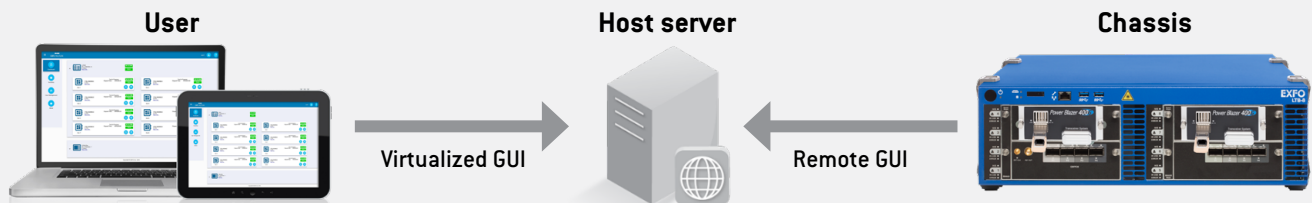
LTB-2 - rackmount modular mainframe

The LTB-2 is a powerful, scalable, two-slot modular rackmount platform designed for multiservice testing at central office environments and labs.

LTB-8 - rackmount modular mainframe

The LTB-8 brings power to your lab or central office with a scalable, hot-swappable eight-slot rackmount platform designed for advanced lab and manufacturing applications.

## FTB-1v2 Pro - ultra-portable multiservice test solution

The FTB-1v2 Pro is a modular, intelligent and automated test solution delivering unmatched operational efficiency when turning up networks. It combines, fiber characterization, Ethernet testing up to 100G, optical transceiver validation and many more test capabilites. This solution integrates all the testing functionalities required to effectively install, activate and validate fronthaul, midhaul and backhaul networks.

### EtherSAM

RFC 6349

iOptics
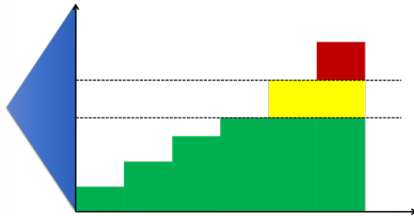
EtherSAM enables complete validation of all SLA parameters within a single test to ensure optimized QoS with multiservice offerings. EtherSAM can simulate all types of services that will run on the network and simultaneously qualify all key SLA parameters for each of these services—resulting in more accurate validation, and much faster deployment and troubleshooting.
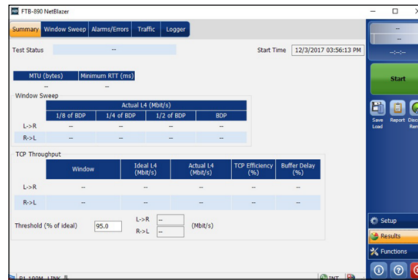
The RFC 6349 test will automatically determine the path maximum transmission unit (MTU) and measure the baseline round-trip time (RTT) for a TCP packet to be sent out and acknowledged by the receiver. Based on the baseline RTT and the committed information rate (CIR), the optimum window size, will be calculated and used to perform the TCP throughput test. Field technicians will then be able to quickly determine if the circuit under test is operating as expected.
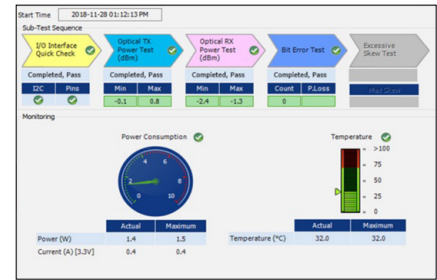
The iOptics intelligent pluggable optics test application offers a complete, powerful and easy-to-use tool for validating any type of 100M to 100G transceiver or AOC cable. It is a first-alert test that can be used to efficiently evaluate the proper operation of an optical transceiver device with minimal user configuration.

Need help? Ask an expert.
For more information visit **EXFO.com.**

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