S-Blade Pro 1/10/40G Layer 1 Switching with Lab Equipment Utilization Metrics

Traditional Test Lab Environments
Keeping up with the fast pace in today’s test labs can be challenging. The ability to increase the efficiency of lab equipment is imperative in order to keep capital expenditures from sky rocketing. Yet keeping track of where devices are actually available for use – and where those devices are – can prove nearly impossible. Therefore, expensive lab equipment often goes greatly underutilized.

As test requirements grow, lab techs can quickly become inundated – requests for moves, adds, and changes are ever-increasing, making it difficult to keep up, and nearly impossible to determine what devices are in use at any given time. Are there available devices? Are there available ports? Often, the only way to keep pace with this demand is to add more equipment – unnecessarily increasing CAPEX, and/or more lab techs – contributing to OPEX.

Layer 1 Switch Alternative
A Layer 1 switch offers an intelligent alternative to the drawbacks of a manual patch panel. Much like manual patching, a Layer 1 switch enables connectivity between the devices in your test lab, but with the Layer 1 switch, you have complete visibility into your network topology, and can monitor and manage your lab from anywhere, without the need for physical access.

S-Blade Pro for nGenius 3900 Series Packet Flow Switch
The nGenius® 3900 Series Packet Flow Switch (PFS) with integrated S-Blade Pro from NETSCOUT delivers an intelligent Layer 1 switch solution for 1, 10 and 40G connections.

Available in 1 to 3 blade configuration options, the 3900 with S-Blade Pro offers 24 QSFP ports per blade with advanced Layer 1 switching capabilities. With this Layer 1 solution, you will know what ports are available on which devices in your test lab, and you can make assured connections between them through a simple software interface.

Our TestStream Management Software serves as a secure access portal, enabling you to make moves, adds, and changes confidently via its user interface or an automation system, ensuring those connections are accurate. No more running to the lab to troubleshoot cabling faults or failed test sets due to ports already in use.

Measure Network Infrastructure Utilization
TestStream provides utilization statistics based on test traffic, enabling you to optimize the usage of each expensive device in your lab. Optimizing these devices enables savings in both CAPEX and OPEX. And with the 3900 with S-Blade Pro solution, you can remotely manage lab connectivity and topologies.

Figure 1: In a traditional patch panel solution, connections are difficult to trace. As cables are added or moved, confusion can set in, quickly making the test lab highly inefficient. It is easy to lose track of equipment, and therefore expensive tools often go under utilized.

Figure 2: With TestStream and S-Blade Pro, connections are automated and instantaneous. Utilization is measured accurately using actual traffic so you know exactly what devices and ports are available. Customers can see dramatic improvement in lab equipment utilization, often resulting in the ability to nearly double the efficiency of their test lab.
S-Blade Pro Features

- 24 QSFP ports, each port 4x1G, 4x10G, or 1x40G
- Up to 288 10G ports or 72 40G ports per chassis
- Hot-swappable QSFPs with auto speed
- Real time and historical Utilization Statistics
- Utilization Statistics available on all ports
- Media conversion for SM fiber, MM fiber, or copper
- Low latency: Standard L1 ports <10ns, Smart L1 ports <500ns
- Connection options: Port, group, multi-cast
- Productivity tools: port flap, TAP/test, port locking, QSFP diagnostics
- One click non-disruptive code load

Utilization Statistics – visibility into actual device usage to optimize your test devices

Replication – create multiple test streams to multiple interfaces from a single input source to increase load

Layer 1 Switching – automates network topology moves, adds, changes, passing unaltered traffic at line rate, protocol agnostic

TAP – passive tapping to deliver real-time packet streams to analysis tools for diagnostics

Figure 3: TestStream Management Software screens showing lab equipment utilization.

Figure 4: S-Blade-Pro.

For more information, please visit www.netscout.com or contact NETSCOUT at 800-309-4804 or +1 978-614-4000