

Leading Network Equipment Manufacturer Dramatically Increases Equipment Utilization, Reduces Costs using ONPATH Solution

A leading international provider of network equipment and related services delivers communications networks, telecom services, and multimedia solutions to over 180 countries. More than 1,000 networks worldwide utilize the company's network equipment.



CHALLENGE

Network equipment providers are faced daily with the need to meet increasing demand: higher capacity, lower costs, and helping their customers deploy new services quickly. In order to meet this demand, the firm delivers an end-to-end, proven solution that will enable them to establish a long-term competitive advantage.

To have leading-edge technology and to enable faster time-to-market for that technology, extensive development and testing is required. However, the equipment necessary to verify the product performance and release to market is extremely significant in quantity and expense. In order to satisfy the testing requirements and share global development across their numerous locations, the firm was faced with duplicating equipment throughout many test labs.

The firm's corporate directives included reducing both CAPEX and OPEX by adding more efficiency across the existing 400 labs and 6,000 test tools. Rather than continuing to expand the global labs and test equipment, they searched for a solution that would enable them to increase the efficiency of their labs by sharing their current test resources. Worldwide access was a critical factor for this global organization, so 24x7 operation and high reliability were important factors. As they started planning their solution, they quickly realized that they would also require a solution that would scale with their needs, in terms of both port count and speeds, since all groups were growing in both these directions. The final consideration was power consumption – their lab power was sometimes limited and usually very expensive to run, so they needed to build an automation infrastructure that was as energy-efficient as possible.

EXECUTIVE SUMMARY

CHALLENGE

- Leverage the existing 400 global labs and 6,000 test tools the firm manages to reduce CAPEX and OPEX by over 30% per year
- Enable the sharing of expensive test resources and cases both interdepartmentally and globally
- Enable faster time-to-market for product releases
- Flexible, scalable, anytime access to test tools from all global lab locations

SOLUTION

- ONPATH UCS family and HorizON Management Software with 3rd party test automation software creating a Lab-as-a-Service capability

BUSINESS RESULTS

- More than doubled the utilization of test tools added to the sharing program
- Reduced test and verification CAPEX by over \$1 Million
- Enabled around-the-world, around-the-clock lab sharing
- Increased equipment sharing among the firm's 400 global labs
- Reduced test cycle times by over one day per test reconfiguration

SOLUTION

Initially, this equipment manufacturer deployed a lab automation test case at one of their main campuses in the US and made it available to several test teams. They deployed an ONPATH UCS 2910, enabling them to automate 1,024 ports of non-blocking Gigabit Ethernet (GigE) connectivity to their routers, servers and various test tools. The initial success with the ONPATH solution included reduced setup times for test configurations and much better utilization of test tools. The firm then expanded their use of automation to include additional test teams and also accommodate their increasing need for 10G connectivity. They deployed five UCS 3903 systems, each offering 144 ports in a small 3RU footprint, for a total of 720 ports of 10G connectivity for various high-performance test cases.

The firm also uses ONPATH's HorizON software, which provides intelligent, high-performance connectivity within the firm's network. HorizON's intuitive GUI provides simple point-and-click provisioning and secure remote control of their UCS network. ONPATH also worked with the firm to successfully integrate their existing third-party lab automation software with HorizON to expand the amount of equipment under automation control and enable advanced reservation and sharing capabilities worldwide.

The connectivity automation benefits expanded for both equipment sharing and global 24x7 lab access by test teams in other US locations, as well as Europe and Asia. Two additional UCS 2910 systems were added within the first year to expand their GigE testing needs. The firm intends to expand their GigE test beds and scale further to the UCS 2920, which provides 2,048 ports of non-blocking GigE automation. The firm has also expanded their use of 10G automation with ten additional UCS 3903 systems. And their migration to 10G is gaining steam, so they are planning to deploy the ONPATH UCS 3912 for up to 576 ports of non-blocking 10G scalability. The UCS 3903 and 3912 also provide 40G and 100G connectivity automation which the firm is now exploring for an upcoming high-speed router project. Increasing utilization of the firm's existing resources which reduces CAPEX, and increasing test team velocity without increasing OPEX, are the drivers of their expansion plans.

"The ONPATH solution provides us with a robust, scalable solution that delivers great flexibility to access our lab resources, anytime and from anywhere."

–Service Delivery Manager, Leading International Network Equipment Manufacturer

BUSINESS RESULTS

Using ONPATH's UCS 2900 and 3900 platforms to automate their product and application testing worldwide, this equipment manufacturer successfully decreased their CAPEX over multiple departments, utilizing their existing equipment rather than purchasing additional equipment to meet their testing needs. Increasing their overall lab utilization, one department was able to achieve an astonishing 70% efficiency goal. Spreading this savings and efficiency throughout multiple departments, test groups, and geographic locations will increase these results dramatically!

Remote access and management of their test labs helps the firm reduce their OPEX as well – fewer people are required to set up and run tests, and connections can be made instantaneously from any location, through a simple software interface.

ONPATH's solution offers this network equipment manufacturer capital investment and operational savings; greater equipment and support efficiency; and reduced power, space, and cooling requirements. It also empowers them with more efficient testing capabilities, which in turn, translate to faster time-to-market, not only for their solutions, but for their customers' as well.