Spirent **Automation Solution**

Accelerating Service Provider GPON Testing

Customer Profile

A global leader providing communication, information and entertainment solutions with over 300 million customers worldwide needed to differentiate itself from competitors with their internet access options. To maintain their competitive advantage, the service provider offered customers GPON access to all their services (data, video & voice) and multi-room Wi-Fi. Since this was a new initiative, regression and conformance testing was needed to be performed on multiple vendor products and versions. A new testing strategy was required to meet time to market needs and SLAs within new budget constraints. In addition, the need for standardized testing across their regional locations would require solution expansion across multiple continents incorporating a global test lab strategy.

Challenges Overview:

- Need to expand and amplify a global testing strategy to respond quickly and globally to changing market conditions

- Must maximize and standardize use of test cases across different countries; Address disparate testing practices across regions; Need for uniform test case orchestration across regions; Consolidated testing strategy needed; All requirements must be addressed within new budget constraints

- Require management of vendors and remote access to lab along with comprehensive test lab orchestration; Mature and legacy testing equipment must be integrated in test labs with new gear and all are required for current testing requirements

Solution Delivery Criteria

Spirent Professional Services automation experts worked closely with global department within the service provider to design, develop and deliver a customized and integrated turnkey automation ecosystem solution for test automation and lab orchestration to meet the following requirements:

- **Products—**A scalable, open platform and stable off-the-shelf automation framework facilitating accelerated and expanded GPON (ONT & OLT), WiFi and CPE testing and campaign orchestration as needed; Robust, easy-to-use tool supporting multi-national test labs; Built-in functionality for document generation, reservation management, topologies and test case execution and allowing management of vendors, third party and remote access to the test bed

- **Process—**Implementation of test and lab automation best practices; Capability to optimize & automate test team members of all skill levels; Integrate GPON analyzer (and other new, as well as, old devices) into test resources; Implementation of supervision, configuration & provisioning capabilities; Effective & transparent reporting; Optimized collaboration of all assets between regional test teams

- **People—**Qualified expertise to deploy the solution & provide engaged consulting for informed use & adoption advocacy for solution success; Post-sales solution training

Customer Pains

- Changing market conditions required advanced testing approach requiring standardization and multi-national capabilities

- Expanded and standardized testing automation requirements with tight budget constraints

- Lack of multi-lab management capability along with need to introduce new testing devices and leverage old gear

Solution Requirements

- **Product—**Comprehensive & flexible test automation; Easy-to-use multi-site lab management; remote scheduling, centralized data monitoring & storage

- **Process—**Implement proven test and lab automation best practices & automation methodologies; Foster asset sharing and collaboration across regions

- **People—**Professional Services consultation, delivery expertise & training through engagement

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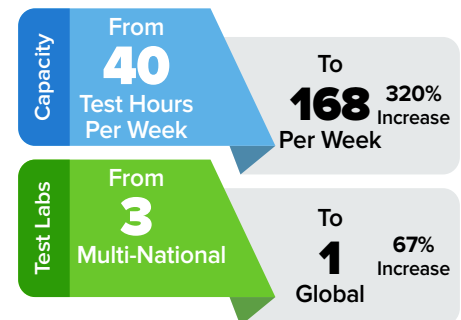
Solution Delivery Components

- Proof of Concept (PoC) trials and demonstrations
- Professional Services consultation, adoption advocacy and delivery expertise throughout the engagement
- **Spirent iTest—**Automation software for creating new test cases and test plans; Create and save test library to be run in reusable batches or individually, with ability to monitor progress; Development of automated test suites into a single execution set
- **Spirent Velocity—**Orchestration software for lab management including: device scheduling and user permissions control; Multi-Calendaring; Reservation locking; Enhanced conflict resolution with scheduling authority and administrative 'approver workflow'; Test campaign orchestration
- Integration of optical matrix from JDSU, multiple ONT and OLT units, as well as, new and reuse of old test resources for comprehensive and flexible lab management
- Training and transfer of solution information and test automation best practices with key users identified to train as champions driving adoption

Solution Outcome & Benefits

- **Expanded lab configuration capacity for each lab**
  From 8 hours per 5-day week to 24/7 and provided flexibility to remotely access and automate any device in their network
- **Increased cost savings and ROI**
  Delivered with management of multiple testbeds, reuse of old test resources, and flexible future-proofed test plans
- **Maximized lab resources and combined capacity**
  From three separate regional multi-national test labs to one global test lab; 67% improvement of resource utilization in first phase
- **Optimized testbeds**
  With standardized automation environments and uniform test orchestration
- **Test/Velocity designated as expansion platform**
  For additional phases to expand testing automation and optimize lab management across departments and regions

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With Spirent Automation Solutions Realize More…

- **Profitability—**Accelerate defect detection, earlier and increase revenue by getting products to market faster
- **Customer Satisfaction**—Reduce released defects with expanded test coverage & speed time to market
- **Productivity—**Automate repetitive tasks & reuse of test cases maximizing time and freeing test team for innovation
- **Visibility—**Increase insight into testing progress & identify resource bottlenecks

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Capacity
From **40** Test Hours Per Week
To **168** Per Week
320% Increase

Test Labs
From **3** Multi-National
To **1** Global
67% Increase

"Spirent successfully delivered the flexible multi-lab test automation and resource management solution we needed for phase one. Now we're moving to phase two with Spirent."
—Service Provider, GPON Director

Contact Us

For more information, call your Spirent sales representative or visit us on the web at www.spirent.com/ContactSpirent.

www.spirent.com

Americas 1-800-SPIRENT
+1-800-774-7368 | sales@spirent.com

US Government & Defense
info@spirentfederal.com | spirentfederal.com

Europe and the Middle East
+44 (0) 1293 767979 | emeainfo@spirent.com

Asia and the Pacific
+86-10-8518-2539 | salesasia@spirent.com