CASE STUDY

Test Automation for Telecom Networking Devices

Client

The customer is an US based manufacturer of next generation, ultra-high capacity, over-the-air connectivity solutions for global communication networks..

Challenge

The customer's product is ultra-high RF capacity solution with an intelligent switch that provides advances across traffic management, speed, latency and distance to improve capacity, efficiency and cost per megabit. The customer wanted to maximize test coverage using automation within a short time frame.

Solution

The customer engaged with Veryx because of Veryx's expertise in diverse networking features, as well as in automation. Veryx custom developed a test automation framework with features such as:

- ✓ **Multiuser access**: Multiple users can execute tests concurrently.
- ✓ **Batch Processing**: Capability to execute tests in batches.
- ✓ Support for **GUI** and **CLI** based test automation.
- ✓ Generation of **HTML based test results**
- ✓ **Test reports** with CLI command execution/GUI screenshots and traffic generator logs along with packet capture.
- ✓ Generates **email notification** along with test result at the end of the test execution.
- ✓ Flexibility to develop test scripts using languages such as **Python**

Veryx developed Python-based test scripts to run over this framework.

Benefits

✓ Improved product quality by increasing the test coverage, performing daily and weekly regression.

✓ Achieved 70% test automation in six months.

✓ Effectively utilized test setups overnight, when customer teams were not using them.

✓ Improved test productivity without increase in infrastructure investment.

Technology

✓ OS: CentOS 7.3

✓ Scripting Languages: Python

✓ Traffic generator used : Spirent , Xena

✓ Features automated:

   o Layer 2 features - LACP, VLAN, L2CP etc.
   o System features - QoS (VLAN Classification, PCP Classification), firmware upgrade etc.
   o Diagnostics features - RMON, Port Mirroring etc.
   o Security features - AAA, TACACS etc.
   o Management features - SNMP, NETCONF etc.

✓ Types of tests supported:

   o Functionality tests
   o Robustness tests
   o CLI command tests
   o GUI interface tests
   o Impairment tests

Email : info@veryxtech.com

Web : www.veryxtech.com

USA : +1 267 440 0140

International : +44-203-371-8691