

# CASE STUDY

## Test Automation for Industrial Ethernet Devices



### Client

The customer is a world leader in industrial networking solutions, with operations around the globe.

### Challenge

The customer had multiple product variants that were being supported and desired to implement a system to efficiently perform repetitive verification of features implemented across multiple product variants. The customer also wanted to track and monitor test results of all the test cycles, while driving up the overall quality and productivity over time.

### Solution

The customer engaged with Veryx to form a team which had a good knowledge of diverse networking protocols, as well as expertise in using Veryx ATTEST test execution solution and developing scripts for test automation. Multi-instance support in ATTEST allowed execution of test scripts in multiple devices simultaneously. The solution included the following:

- ✓ Test automation using TCL
- ✓ Configuration file to use same test script in different hardware variants
- ✓ Support for management of the device using CLI and SNMP
- ✓ Summary test reports after performing automated tests
- ✓ Historical database of test results to track the quality and stability of releases

## Benefits

- ✓ Productivity increases of more than 60% due to test automation
- ✓ Improved quality of software with continuous regression testing on each build.
- ✓ Better utilization of resources by concurrent test execution.
- ✓ Effective utilization of test setups overnight, when the customer teams were not using them

## Technology

- ✓ OS: Windows 7, Windows 10, Fedora 21
- ✓ Scripting Languages: TCL
- ✓ Features tested:
  - Time Synchronization features like PTP
  - Redundancy features like Spanning Tree, LACP, MRP, PRP etc.
  - Unicast Routing like RIP, OSPF, etc.
  - Multicast routing like IGMP, PIM-SM, PIM-DM etc.
  - System features like QoS, firmware upgrade etc.
  - Diagnostics features like LLDP, Port Mirroring etc.
  - Security features like ACL, 802.1X etc.

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### About Veryx Technologies

Veryx Technologies is a provider of innovative testing, automation and monitoring solutions for network service providers, cloud service providers, data centers, Enterprise IT and network equipment vendors. Veryx offers solutions for network testing, performance monitoring and equipment testing applications for technologies such as Carrier Ethernet, IP, Cloud, SDN, NFV and Smart Networks.

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