Mindtree
Welcome to possible

Automation test bed at offshore to optimize cost, effort and timing for a world leader in networking technology.

Testing networking equipment on multiple server and operating system configurations can be a highly effort-intensive process, especially if the software components impacting compatibility are frequently updated.

Here is how Mindtree helped a world leader in networking technology perform testing more efficiently by using an automation framework to reduce effort and accelerate timelines. By leveraging offshore delivery we further helped to reduce testing costs incurred by the customer.

The challenge

The customer needed to validate their network and fiber channel drivers on multiple standalone operating systems and hypervisors. Since releases of software took place frequently necessitating repeated testing, the customer required a robust automation framework to reduce the effort and duration of testing. Specific technical challenges included:

- Designing an effective framework with the necessary flexibility and extensibility
- The need to perform unattended installation of STAF installer, and kick start installation of ESX servers on blade servers
- The need to conduct failover test cases using the MRV switch which emulates the cable pull conditions across the selected devices

Our solution

Mindtree collaborated with the customer to deliver a solution based on the open source Software Test Automation Framework (STAF). The Mindtree team was given complete ownership of the automation framework, test cases and test infrastructure. We also helped the customer move automation test beds from labs in North America to our labs in India. Solution highlights included:

- Automation setup deployed using virtual machines on an ESX server in fault tolerance mode
- Implementing code for the creation of the test case files dynamically which replaced the existing static process

Business impact

- 50% shortened timeline for operating system testing
- Higher team satisfaction due to reduction in repetitive manual testing

- Separating the test bed configuration parameters from the test case configuration parameters to enable test case configurations from the command line
- Ensuring more robust testing through a greater number of regression cycles

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,500+ experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.