

CASE STUDY

Decade of Automation: Orchestrating Network Lab Efficiency

Business Problem

This Telco places a high priority on ensuring the reliability, efficiency, and scalability of its network infrastructure. Management at the Telco had mandated the automation of all network testing due to its unique circumstances. Manual testing methods are insufficient to handle the volume and complexity of tests required within tight time constraints. Configuring network equipment and managing cable connections manually is time-consuming and error-prone. This results in delays and inaccuracies in the testing processes, impacting the ability to deploy new services and configurations promptly.

With multiple teams involved in testing, ease of use and collaboration were critical. The Telco needed a solution that allowed testers to work efficiently and collaboratively without being hindered by complex fragmented products and to enable high reuse of any assets that are created to further streamline new automated case creation.

Solution Provided

In response to the Telco's challenges, a comprehensive automation framework was implemented by integrating Quali TestShell, Quali CloudShell, and the Calient L1 Switch. This framework provides the Telco with a robust solution for automating test execution, provisioning network equipment, managing connectivity, and orchestrating lab resources. Phase Pacific demonstrated proficiency in the provided products, along with offering comprehensive support in implementation, training, and consulting services, facilitating the rapid establishment and ongoing success of a critical automation framework.

Quali CloudShell is at the core of the automation framework by providing a self-service environment for provisioning and configuring network equipment while Quali TestShell automates the execution of various tests that ensure testing is carried out efficiently and accurately, meeting the demands of its network testing requirements. Integration with the Calient L1 Switch further enhances the automation framework. This switch provides precise control over Layer 1 connectivity, enabling automated cable patching and minimising human error in network setup. Together, these components form a complete automation framework for the Telco's network testing processes.

Business Outcome

The flexibility of the framework allowed for customisation to meet specific testing requirements. By tailoring the framework to unique needs, the Telco expanded into diverse testing areas, accommodating varied network configurations and protocols. This adaptability ensured comprehensive testing coverage across different scenarios.

As the effectiveness of the framework became evident to other groups within the Telco, additional equipment and test cases were integrated, further enhancing the return on investment. This increased adoption validated the framework's efficiency and amplified its impact across different departments.

Expanding the L1 switching capability significantly increased the efficiency of the lab. With improved switching capabilities, configuring the cabling infrastructure became faster and more streamlined. As a result, setup time was reduced, allowing resources to focus more on testing activities, thereby increasing productivity.

The open-source nature of the platform facilitated further customisation, especially in designing unique network configurations. This enabled unexpected automation capabilities, empowering the Telco to automate tasks beyond initial expectations. Such capabilities contribute to increased efficiency and innovation within the testing processes.

Business Benefits

The Telco swiftly met its testing requirements within weeks of implementing the automation framework. This accelerated timeline has enabled faster product development and deployment, enhancing the Telco's agility in responding to market demands.

The automation framework has revolutionized testing processes and yielded tangible business outcomes, including accelerated testing timelines, continuous testing operations, customisation for diverse testing needs, increased ROI through expanded adoption, efficiency gains with L1 switching capability, and enhanced automation capabilities through open-source customisation.

With the ability to run fully automated tests 24x7, the Telco has achieved continuous testing operations. This ensures that testing processes are not constrained by time, resulting in increased test coverage and faster issue identification. These outcomes collectively contribute to improved product quality, faster time-to-market, and enhanced competitiveness in the industry.

About Us

We streamline network labs, software development environments, and IT Operations with advanced automation and orchestration. Additionally, we bolster application security with cutting-edge solutions that focus on efficiency and protection.

Contact Us

Phase Pacific
114 Bakehouse Rd,
Kensington, VIC, Australia
enquiries@phasepacific.com
Ph: +61 3 9381 7818

For more information, go to www.phasepacific.com

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