brillio

Future-proofing telecom networks through comprehensive scalability testing

A telecom infra provider scales network with a cost-optimized, automated testing platform.

A trusted telecom infra supplier providing uninterrupted service.

The US-based telecommunications equipment manufacturer specializes in providing scalable and secure networking and communications solutions to service providers and businesses. Their extensive product and service portfolio encompasses broadband access equipment, network infrastructure, software-defined networking (SDN) solutions, and cloud-based managed services. These offerings are instrumental in facilitating high-speed internet connectivity, voice, and data services.

Committed to ensuring uninterrupted connectivity and customer satisfaction, the company faced the challenge of achieving seamless operations with its ever-expanding scale of networks. Consequently, the network equipment manufacturer recognized the need to test their systems under peak load conditions, a task particularly challenging to replicate in a controlled lab environment. Testing their NMS (Network Management System) with thousands of devices proved to be a capital-intensive proposition.

In order to address the need for scale and stability, the client looked for a service provider who could help simulate real-world conditions and test their SD Controller and NMS solutions under heavy loads and high levels of traffic. The objective was to proactively detect potential issues before they could adversely affect end-users.

Leveraging our experience partnering with similar clients and deep understanding of industry ecosystem, Brillio presented a solution which was scalable, efficient, cost optimized, reusable and fully automated - a comprehensive package that precisely met the client's needs and requirements.

A scalable, cost-optimized, and fully automated solution to uninterrupted connectivity.

A scale testing platform on public cloud

Brillio crafted a solution that would not only meet the client's immediate needs but also provide a future-proof solution capable of adapting as their systems continued to evolve and scale.

A robust scale testing platform was developed harnessing the on-demand resources offered by the public cloud. The solution helped scale the North Bound devices and Southbound OSS system and put the NMS system under stress test using simulators. As network demands fluctuated, public cloud allowed us to simulate on-demand resources and seamlessly automate the entire process from start to finish.

We adhered to a set of design principles, each playing a pivotal role in shaping a cost-effective, efficient, and future-proof system that was easy to manage:
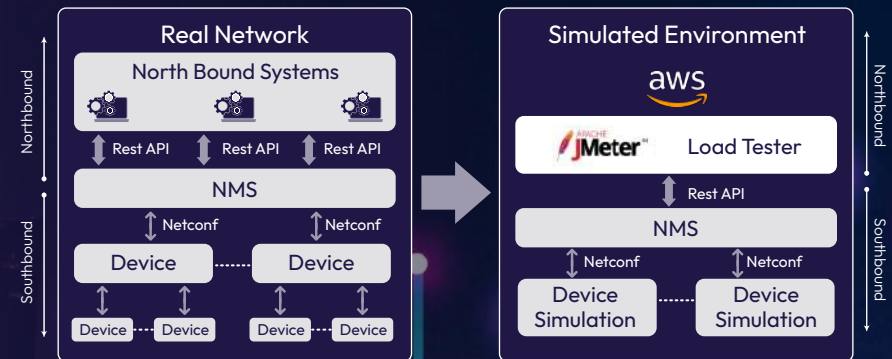
Scalability for the Future: The system was engineered to accommodate higher capacities as the client's network continued to expand and evolve.

Efficiency and Cost Optimization: Utilizing on-demand resources in the public cloud not only reduced expenditure but also simplified the management of resources, ensuring they were consumed exclusively during test execution.
Reusable Foundation: The platform possessed the adaptability to cater to various product families with minimal modifications.

Zero-Touch Automation: Seamlessly integrated into the client's existing Jenkins pipeline, the solution introduced a zero-touch approach. This end-to-end automation not only eliminated management overheads but also enhanced efficiency.

Integration for Seamless Adoption: Test management was seamlessly connected with Qtest and other existing DevOps tools ensuring a hassle-free adoption process.

Optimized resources consumption delivering cost benefits

Brillio's approach embraced a cost-optimized model, effectively converting capital expenditures (CAPEX) into operational expenditures (OPEX). With a pay-as-you-go framework, resources were only utilized during test executions, mitigating unnecessary costs, and ensuring efficient resource management. Furthermore, the solution was future-proofed, capable of adapting to the evolving needs of the system under test.

The solution was easy to manage due to zero-touch provisioning of infrastructure and test-specific environments seamlessly integrated with the client's DevOps pipeline. Lastly, the project was structured as a fixed-price, fixed-duration endeavor, ensuring incremental, demonstrable outcomes.

Learn more about our **Telecom services.**

ABOUT BRILLIO

At Brillio, our customers are at the heart of everything we do. We were founded on the philosophy that to be great at something, you need to be unreasonably focused. That's why we are relentless about delivering the technology-enabled solutions our customers need to thrive in today's digital economy. Simply put, we help our customers accelerate what matters to their business by leveraging our expertise in agile engineering to bring human-centric products to market at warp speed. Born in the digital age, we embrace the four superpowers of technology, enabling our customers to not only improve their current performance but to rethink their business in entirely new ways. Headquartered in Silicon Valley, Brillio has exceptional employees worldwide and is trusted by hundreds of Fortune 2000 organizations across the globe.

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