

European Service Provider Increases Mobile Testing Efficiency with Spirent's Test as a Service Platform

Test as a Service cuts testing time by more than 50%, improves getting to market with improved quality.

Highlights

- Increase customer retention and reduce churn by meeting SLAs and UX metrics
- Quickly deliver high quality products to market by accelerating device and service validation
- Enable global access for 24x7 automated testing
- Address future demands, such as 5G with iTest's scalable testing environment

Overview

This leading European Service Provider offers mobile, Internet and IPTV services across France. It identified the certification process for new mobile phones as a key bottleneck, hindering the ability to satisfy customer demands for new mobile devices and mobile services. The service provider approached Spirent to automate its testing environment. The objective was to drastically reduce the certification process time and increase the overall testing efficiency.

The Challenge

Mobile network operators need to keep pace with the ever-increasing demands placed on their networks. Users expect high quality video streaming, multiplayer games and all types of social networking from their mobile devices.

While the operators are working hard to deliver a consistently positive customer experience, they understand that their survival depends on customer acquisition and retention. For example, just a few negative customer reviews are enough to trigger large scale customer churn, impacting their revenue and their very future. They need to deliver the latest services with a consistently high performance and a great user experience.

This European Service Provider adopted an automated testing approach to satisfy its growing customer needs. Using Spirent's Test as a Service (TaaS) automation solution, the operator expects to increase the overall testing efficiency by more than 50% and enabling it to deploy mobile devices and services far more quickly with much less engineering time.

Key Requirements

The operator had to validate a wide variety of mobile handsets and mobile services before deploying them live in their production network. Unfortunately, because the validation processes were manually intensive, the operator was unable to keep pace with the demands. Furthermore, since manual testing could only occur during business hours, it wasn't feasible to scale the existing testing environment.

A completely new testing approach was required to accelerate the time to market and meet the growing customers' appetite for new services. But, reinventing the test environment posed several obstacles to be overcome. The following were two of the most important barriers:

- **Controlling Mobile Devices:** This is necessary to ensure not only device/service functionality, but also—more importantly—to meet/exceed the service level agreements (SLA) and user experience (UX) metrics. However, achieving a full, automated control of mobile hardware was quite difficult.
- **Trace Analysis:** ensuring that test messages can be analysed and sent back and forth with the right content—and in the right order—is necessary to ensure consistent behavior in an automated environment.

"iTest helped cut testing time by more than 50%."

— VP of Engineering

About Spirent Communications

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks.

We help bring clarity to increasingly complex technological and business challenges.

Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled.

For more information, visit:
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The Solution

Spirent was chosen to solve these challenges by building an automated testing environment to accelerate device and service validation. It involved developing automation workflows and a state machine to manage trace analysis. The solution needed to be extensible and maintainable to satisfy the evolving testing needs.

The service provider's test campaigns covers the entire range of their mobile technologies including 2G, 3G, 4G and the handover between them. After analysing their current test environment and future needs (5G is happening soon) Spirent's automation experts decided to automate their test cases using Spirent iTest. iTest is a proven solution for automation authoring and simultaneous test case execution. Spirent's team further customized iTest to meet the customer's unique testing needs with:

- Full support for mobile device control and testing
- A state machine to manage trace analysis
- Integration with the customer's validation network

By creating automated test cases as outlined above, Spirent helped the customer cut test time by more than 50% on average, thus speeding their time to market and addressing customer demand. The service provider recognized a few other benefits as part of this project:

- **More efficient testing.** With automated test suites, testing was now faster, and validation cycles scaled better to meet the fluctuating testing demands. The customer could schedule automation test runs 24x7, thus freeing the engineers to take on higher value assignments; resource utilization was improved as well.
- **Peace of mind—today and tomorrow.** Spirent devised the solution using iTest, a Test as a Service platform. This ensured that new automation requirements could be easily added to the platform.
- **Integration with existing systems and processes.** The Spirent team leveraged existing automation scripts by importing them to iTest. The mobile device controller software was also integrated with iTest. This saved them many man-hours of code rewrites.

Contact Us

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