

CASE STUDY

# Automated device testing slashes test time in half

Delivering new mobile devices to market faster than ever



# European service provider accelerates complex device testing with Spirent's Test Automation Solution

## Highlights

- Enabled 24x7 automated testing, cutting time to completion by half or greater
- Delivered new mobile devices to market faster than ever to drive more revenue from mobile devices and services
- Ensured customer Service Level Agreements (SLAs) and user experience (UX) metrics could be met
- Empowered provider to meet future demands, such as 5G, with Spirent's scalable testing environment



Spirent's automated testing solution allowed us to validate numerous mobile devices, giving our customers more choices and access to the latest technology and services."

VP of Engineering

## Overview

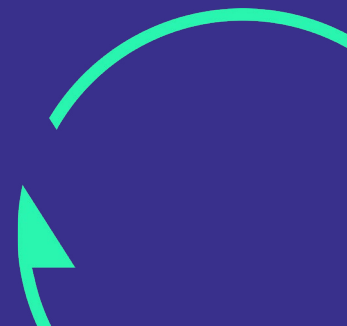
Mobile users expect uninterrupted, high-quality video streaming, multiplayer games and all types of social networking from their devices. This, in turn, puts pressure on mobile network operators to deliver the latest services with consistent, high performance and a great user experience.

A leading European service provider offering mobile, internet and IPTV services across France identified a key bottleneck to satisfying the demand for new mobile and mobile services: the certification process for new mobile phones. By delivering more devices to market faster, the service provider could drive more revenue from applications and services that those devices enable.



## The Challenge:

Needing to provide a consistent, positive customer experience, the provider approached Spirent to automate its mobile device testing environment. This would drastically reduce certification process time and increase overall testing efficiency so that the service provider could deliver more devices to customers faster than ever.





## Spirent Solution:

Spirent was selected to resolve these key customer challenges based on deep knowledge of mobile technologies, its automated testing environment that accelerates device and service validation and the solid relationship built with the provider. The results justified the provider's confidence: what would normally take two to four weeks was slashed to just one to two weeks on average.

The solution involved developing automation workflows and a state machine to manage trace analysis. However, the new processes also needed to be extensible and maintainable to satisfy evolving testing needs.

The service provider's test campaigns covered the entire range of their mobile technologies, including 2G, 3G and 4G, and the handover between them. Spirent's automation experts began by analyzing the current test environment and understanding future requirements, such as 5G.

Spirent's Test Automation platform, iTest – a proven solution for automation authoring and simultaneous test case execution – was customized by the team to meet the provider's unique testing demands with:

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

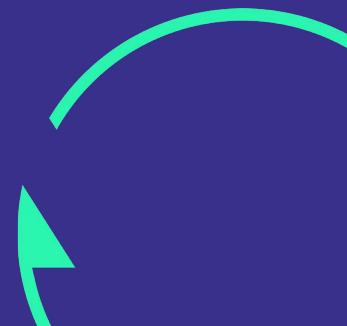


## Key Requirements:

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

Still, the provider faced two major hurdles to reinventing its test environment:

- **Full, Automated Control of Mobile Devices:** This is necessary to ensure not only device and service functionality, but also to meet or exceed customer SLAs and UX metrics.
- **Trace Analysis:** This would ensure that test messages could be analyzed and sent back and forth with the right content—and in the right order—in an automated environment.





## The Results

By creating automated test cases as outlined above, Spirent helped the provider cut test times in half, on average, speeding time to market and ensuring that SLAs could be met. The service provider recognized other benefits, as well:

- **Test Efficiency.** With automated test suites, testing is now faster than ever and validation cycles scale better to meet fluctuating testing demand. The provider's team can now schedule automated test runs 24x7, thus freeing engineers to take on higher value assignments
- **Systems and Process Integration.** The Spirent team leveraged existing automation scripts by importing them to iTest. The mobile device controller software was also integrated with iTest. This saved the provider's developers many man-hours of code rewrites, thereby reducing costs and bringing the test system online quickly
- **Long-term Agility.** By using iTest, the Spirent team ensured that additional automation requirements could be easily added to the platform, positioning the service provider to meet new requirements as customer needs evolve



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### Contact Us

For more information, call your Spirent sales representative or visit us on the web at [www.spirent.com/ContactSpirent](http://www.spirent.com/ContactSpirent).

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