

ikeGPS

Manual testing processes made it difficult for ikeGPS to keep up with demand. To automate testing, the organization turned to Micro Focus® Silk Mobile™.

Overview

ikeGPS hardware and software is used across the world by utility companies, defense forces, intelligence groups, energy companies, city councils, police and other companies or organizations that need to map, measure or otherwise record physical objects or geographical features.

Challenge

The team at ikeGPS is dedicated to providing innovative solutions to remotely take complex measurements of these 'targets'—such as utility poles—and capture their geospatial data efficiently and safely. Their handheld devices are in play across the globe, enabling users to quickly record the geodata and photographs of multiple targets from up to 1,000 meters away. This is vital when users are tasked with

recording hard-to-reach or dangerous targets. It's this unique capability that gave ikeGPS the 2013 NZ High Tech award for Innovative High Tech Hardware Product (www.hitech.org.nz/winners/).

The ikeGPS platform is an integrated hardware and software package based on Windows Mobile. It can generate instant CAD models and exact-scale, geo-located 3D models at the touch of a button.

Jeremy Gold, software architect for ikeGPS, explains the importance of software testing: "Quality and reliability are crucial to our customers. We test the devices and software in real world conditions using 'Scrum,' an iterative and incremental, agile software development process. Our development cycle runs in two week sprints with lots of testing and daily Scrum meetings to determine priorities. Short sprints and complex test requirements made it increasingly difficult to meet demands using a heavily manual testing process. We needed more automation."

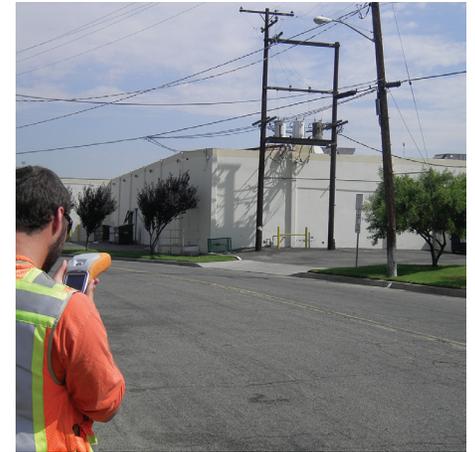
Solution

Silk Mobile was the right solution. "We selected Silk Mobile for its easy-to-use interface enabling a fast uptake with our developers, as well as its deployment flexibility and the ability to be used across multiple hardware platforms."

"We selected Silk Mobile for its easy-to-use interface, which meant a fast uptake with our developers, as well as its deployment flexibility across multiple hardware platforms."

JEREMY GOLD

Software Architect
ikeGPS



At a Glance

■ Industry

Computer Services

■ Location

New Zealand

■ Challenge

Short sprints and complex test requirements made it increasingly difficult to meet demands using a heavily manual testing process.

■ Solution

Use Silk Mobile to automate testing in an easy-to-use interface.

■ Results

- + Reduced testing effort by 25 percent
- + Increased development resources to enhance products
- + Automated testing framework, which eliminates human error

“Following the Silk Mobile implementation, the testing effort was reduced by 25 percent, and we expect to achieve full ROI on Silk Mobile within six months.”

JEREMY GOLD
Software Architect
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The testing effort needed to be reduced. Manual test procedures contain a level of subjectivity due to human input. An expansion of automated testing is gradually reducing all human input. Regression, unit and memory tests are carried out through the testing framework, which integrates Silk Mobile. Tests were run nightly and HTML test results saved to server for further analysis.

Results

Gold could immediately see the benefit: “Following the Silk Mobile implementation, the testing effort was soon reduced by 25 percent—four-person testing days were reduced to three. Every day saved on testing can be spent on developing innovative product features. In a two week development sprint with four team members, this represents a significant increase in resources and will translate to cost savings too. In fact, we expect to achieve full ROI on Silk Mobile within six months.”

The Silk Mobile user interface made integration into the testing framework very easy. A software engineer at ikeGPS says: “I love how easy it is to add GUI tests.”

The plan is to extend the test suite, further reduce human input to achieve at least 50 percent automation, and continue developing tests in parallel with new functionality. The products are continually enhanced and the development resources freed up. The increased use of automated testing contributes towards a better product with improved functionality and greater features.

Because Micro Focus supports Android, iOS, and BlackBerry in addition to Windows, ikeGPS is investigating these additional platforms. Gold concludes: “The testing framework we have put in place with Silk Mobile is completely scalable and will support our move towards new hardware platforms. With increased automation in the test process, we are set up to take full advantage of new business opportunities with a superior product. The support from Micro Focus during this process has been great. Silk Mobile is an easy-to-use solution and expert guidance has ensured a smooth introduction into our testing environment.”