Indonesia Stock Exchange (Bursa Efek Indonesia)—IDX

Micro Focus® Silk solutions deliver higher quality application testing at reduced costs, giving IDX full control over its testing processes.

Overview
The Indonesia Stock Exchange (IDX) has over 522 listed companies with a combined market capitalization of $375 billion.

Challenge
With the rapid growth of the Indonesian capital market and the development of its rich-client online trading system, IDX needed to automate the process of testing trading systems.

Testing was done in two main areas; internal users would test the development environment, and 120 IDX member stockbrokers would test the production environment through a series of mock trades. If discrepancies were found in either test, the whole process, development and production environments, would need to be repeated. As the brokers were in different locations, this involved a lot of coordination and preparation and the potential for human error was always present.

There was also a fixed period in which trading hours could be simulated which meant that test coverage was restricted.

Sulistyo Budi, Director of Information Technology and Risk Management at IDX, comments: “We realized an automated testing tool could really help us increase the scope and depth of testing, and minimize testing errors which inevitably occur when testing is done manually.”

Solution
Micro Focus partner PT Prima Systems Integrated, responded to IDX’s request and put a proof-of-concept together with Micro Focus Silk Test™ and Silk Central™ to show IDX how this solution could meet its requirements. IDX evaluated testing tools from three leading vendors, and concluded that the Micro Focus functionality and support was best suited to its situation, as Sulistyo Budi explains: “Micro Focus took the time to share knowledge with us and was very responsive when we asked for some clarifications. We liked that we could automate test cases using Visual Test so that we didn’t have to do much script coding.”

PT Prima Systems provided the services to implement and configure almost 100 automated test cases in Silk Central while Silk Test was deployed for test execution. In order to simulate individual brokers, IDX prepared one virtual image of its trading platform which represented one trading partner. This is then executed using

“At a Glance

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<th>Industry</th>
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<td>Location</td>
<td>Indonesia</td>
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<tr>
<td>Challenge</td>
<td>With the rapid growth of the Indonesian capital market and the development of its online trading system, IDX needed to automate the process of testing trading systems.</td>
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<tr>
<td>Solution</td>
<td>Micro Focus Silk Central and Silk Test were deployed to create and execute almost 100 automated test cases.</td>
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| Results             | + Improved test execution time  
|                     | + Increased test coverage  
|                     | + Automated reporting saved time  
|                     | + Improved testing accuracy |

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SULISTYO BUDI  
Director of Information Technology and Risk Management  
IDX
automated scripts by calling Silk Test from Silk Central. In total, 50 virtual images were introduced which means the Silk solutions are able to simultaneously execute tests for 50 trading platform partners.

Sulistyo Budi comments: “The integration between Silk Central and Silk Test is appreciated and it is so much easier for us do stress tests in the new, automated, test environment.”

Results
The Silk solutions have optimized the testing process and improved the testing accuracy. Test coverage has been increased as time is no longer a limiting factor and tests can run unattended. Automatic report generation means less time is spent manually analyzing the test results, and simulated trading tests are executed automatically.

Sulistyo Budi concludes: “Our objective to improve the testing accuracy and increase our test coverage has been achieved. We can execute our automated tests 40% faster than we could before which makes us much more responsive to business demands. We feel in full control of the testing process and plan to extend use of the Silk tools to our other applications.”