

Client

Network Solutions

Technologies

Java, CORBA, Jython

Testimonies

"(Stelligent) engineered a scalable test platform that provided a framework for quickly adding complex test scenarios with verification points throughout our complex business rules and workflow processes. (Stelligent) integrated with the existing engineers, proved the viability of the test framework and departed after fully transitioning the tools. The framework exists today as an integral part of our development process and is a key factor in our ability to provide world-class robust software to the market."

*Mike Cocozza
Director, Software Engineering*

"(Stelligent)'s fundamental understanding of complex technologies and its ability to effectively apply them was paramount in the success of several mission-critical projects."

Pete Fox VP of Engineering

Automated Quality Framework Case Study

A fresh look into the testing methodologies utilized by Network Solutions Engineering team was spearheaded by Stelligent in an effort to create a viable unit and functional testing platform easy enough for any developer to adopt and capable of exercising all present and future components of the system.

The Problem: *Network Solutions* is a leading domain registrar. It operates extensive Java-based enterprise systems that support high volume sales of domain names and related services. As the product line evolved, there was interest in refactoring the enterprise software, at a component or even an architectural level, in order to improve maintainability and other characteristics. Making such changes, however, would involve expensive recurrent regression testing. In addition, even without major refactorings, there was a desire to develop a higher level of confidence that release candidates were working properly prior to subjecting them to exhaustive system testing.

The Solution: An automated integration testing framework was developed based on the Jython dynamic scripting language. Jython facilitates rapid test development while integrating seamlessly with Java.

Stelligent used its expertise in automated testing to develop a suite of automated integration tests that would serve as a "smoke test" for the system. The framework was extended as needed, and test results were displayed on a web site. The web site soon gained a high profile and came to be regarded as a primary indicator of the sanity of the system as it exited the development phase.

The Stelligent team implemented over 200 unit, component and system level tests as part of a two iteration rollout of the testing framework; moreover, Stelligent engineers provided training to both Network Solutions Engineering and Management Staffs to facilitate framework adoption.

The Benefits: Because the automated tests were run frequently, many problems were discovered earlier in the development cycle than they otherwise would have been. This allowed issues to be addressed with much less expense.

Software releases became more consistent and reliable, and less stressful, because integration testing complemented the testing done during system test, eliminating software defects prior to deployment.

After two iterations of full framework support and adoption, 50% fewer defects were released into the integration environment; additionally, the integration cycle itself was deemed a success and future cycle times were reduced by half.

The framework's adoption has continued to grow and is in continual use by the Network Solutions team to ensure quality early and often.