



## **Test Automation**

New converging IP networking technologies create enormous pressures on QA teams to validate system functionality, conformance, and interoperability. New devices and services place unique requirements on networks, including intolerance for lost or out of order data packets, synchronized/hyperaccurate clocks, and priority delivery of data to high performance applications. NEMs scramble to bring new products to market to meet the demands of their customers ahead of their competitors, while service providers are racing to deploy new offerings based on new devices and protocols. Enterprise IT departments are seeing their networks morph into higher capacity, more cost effective, and environmentally friendly systems.

All of these companies require comprehensive testing to ensure correct design, low cost delivery, high performance, and better quality of experience (QoE). Test case quantity and complexity is growing faster than teams can manage. QA teams need the means to shorten test cycles and improve processes, while maintaining quality and reducing costs. How easy is it to introduce new testing tools into my automation environment?

Ixia provides the best test automation solutions designed specifically for IP network test engineers and is the only one designed by the leader in testing converged IP networks.

Ixia's premiere automation software suite can help shorten QA cycles and free up resources. Ixia's automation package can help answer questions about testing practices, such as:

- How can we get more testing done with the equipment we already have?
- Have we maximized our resources and done the best to shorten our test cycle without sacrificing coverage and quality?

- Have we improved the performance of our product with this release through thorough and repetitive testing?
- Are test results consistent from iteration to iteration?
- Do I have the means of comparing results between vendors and test runs?
- Will test automation actually save me time overall?
- How can we better utilize the test engineers we have on more productive activities?
- Can we build the test automation as part of our normal activities?
- How easy is it to introduce new testing tools into my automation environment?

Ixia's automation solution is both easy to use and highly scalable. It helps test engineering teams create, organize, and catalog their tests using a full automation foundation framework, and schedule the tests to run unattended or on-demand.

## Some of the benefits to using Ixia's automation solution include:

- Higher test engineer productivity
- Accelerated test cycles
- Consistent and repeatable results.
- Unmonitored test execution
- Test traceablility
- Impoved test coverage

Product	Description	Features
Test Composer	A test automation development environment that reduces test development time and unifies the configuration and results collection from multiple vendor devices and test equipment into a single script.	Test IDE provides a simplified test development working environment Multi-vendor test authoring unifies, coordinates, and synchronizes scripting environments Complete coverage of Ixia products, including IxNetwork, IxLoad, IxAutomate, IxChariot and many more Live interactive capture/replay creates tests by entering commands in one or more live sessions Configure live sessions to passively monitor logs and consoles for various messages, such as errors or warnings Full-featured debugging environment that shortens the time between creating and debugging a test
Test Conductor	An easy to use and highly scalable complete test automation solution, that helps test engineering teams create, organize, and catalog their tests using a full automation foundation framework.	Full-featured test authoring IDE simplifies test authoring and shortens test creation time Centralized test repository reduces time spent finding previous tests with catalogues and test case versions Organized regression manager consolidates and catalogs test regressions Outlook™ style scheduler quickly and easily schedule tests and regressions to run at specific times. Review trends over the course of a project lifecycle
IxAutomate	A powerful, customizable test tool to automate the performance, scalability, and functional testing of network devices by providing a rich suite of pre-built tests based on industry standard RFCs and customer requirements.	SNMP monitoring of DUT statistics during a test run by selecting MIB variables from the SNMP GUI, with side-by-side comparison between test statistics and DUT monitoring statistics Multi-user functionality allows multiple users to independently access individual test ports, enabling users to execute individual tests without disrupting other users on the system Multiple methods to customize the test environment through Tcl configuration scripts generated Automated batch scheduling allows for multiple pre-defined tests in a single batch job, which can then be scheduled to run on a particular day of the week, or every day

Visit Ixia's solution page at http://www.ixiacom.com/solutions/ip\_test\_automation/index.php.

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