

Predict Device and System Performance Under Realistic Load Conditions

- Test Triple Play Performance
- Determine Effective QoS Policies
- Test Wireless LANs
- Assess IPv4/IPv6 Device and Network Behavior



IxChariot®

How Can You Take Advantage of IxChariot®?

The extreme flexibility of IxChariot makes it a truly dynamic test solution for a wide range of users who have an equally wide range of testing objectives:

Network Equipment Manufacturers use IxChariot to mirror customers' networks and validate the performance of network equipment. IxChariot identifies the efficiency of QoS implementations and provides crucial assistance to win RFQs and Performance Benchmark Tests by proving the competitive advantage of diverse solutions.

Field Engineers use IxChariot to capture and duplicate customer issues for rapid problem resolution. Track down hardware and configuration issues before increased data loads bring the network to a crawl.

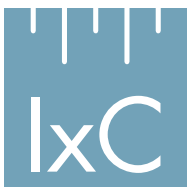
Network Administrators use IxChariot to stage new devices and measure the implications of protocol and application changes before they are implemented. Test the performance of 'best-of-breed' networking equipment before making a purchase commitment.

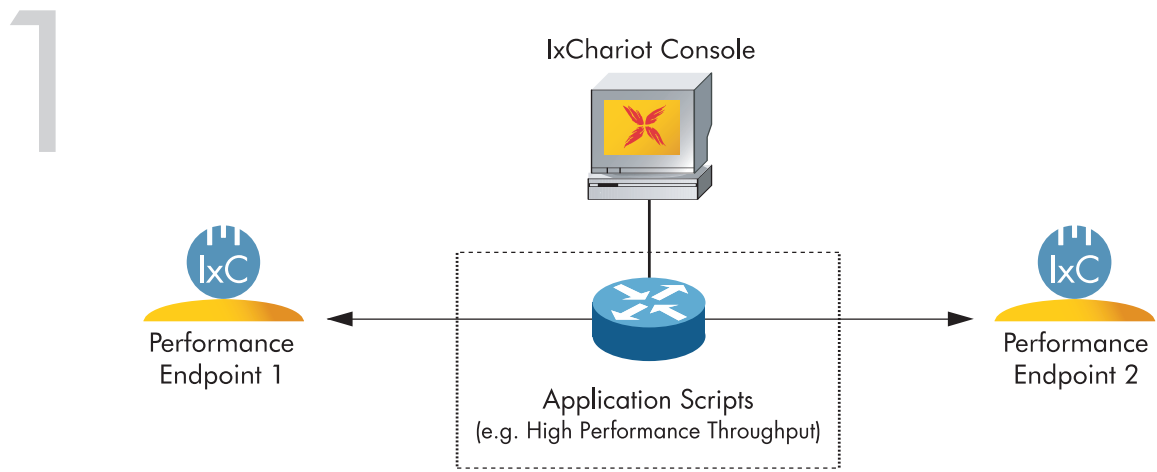
Silicon Chip Developers use IxChariot to stress-test the performance of processors and reference designs using realistic application data patterns. IxChariot provides easy mechanisms to rapidly repeat tests across multiple platforms.

Application Developers use IxChariot to emulate the impact of solutions on customer networks and forecast the effect of increased application uptake, as well as its relationship with existing applications and network infrastructures.

Network Service Providers use IxChariot to measure the performance of Internet and private WAN services to identify application driven issues before they create customer disappointment.

QA Engineers use IxChariot to verify interoperability for integrated solutions. Stress test the network and devices to identify and document extreme-case behavior.





Predict Device and System Performance Under Realistic Load Conditions

Voice over IP, unicast and multicast video, multicast streaming media, peer-to-peer applications, application-based QoS policies, enterprise application traffic – all these elements of today's business networks are constantly evolving, making it tough to anticipate the behavior of the network and its devices.

IxChariot is the industry's leading analysis application to test, model and assess the impact of application traffic, without the need to install and maintain extensive client/server networks. Proven at thousands of customer locations worldwide, IxChariot is relied upon for comprehensive testing of wired and wireless networks.

Incorporating the IxChariot Console, Performance Endpoints, and IxProfile, the IxChariot product family offers thorough network performance assessment and device testing by emulating hundreds of real-world protocols and applications across thousands of network endpoints.

Who is Ixia?

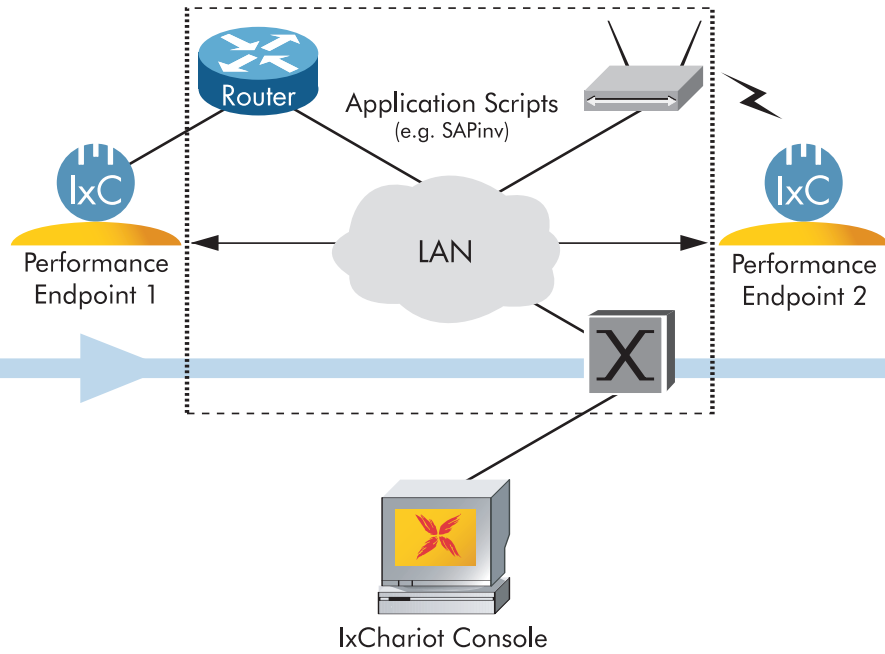
Ixia is a leading provider of performance test systems for IP-based infrastructure and services

What distinguishes Ixia Test Systems from the competition?

- Single Platform for Layer 2-7 that is forwardly and backwardly compatible
- Superior Functionality through granular control of a greater number of test parameters
- Universal Automation of every function throughout the test environment

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From Staged Network

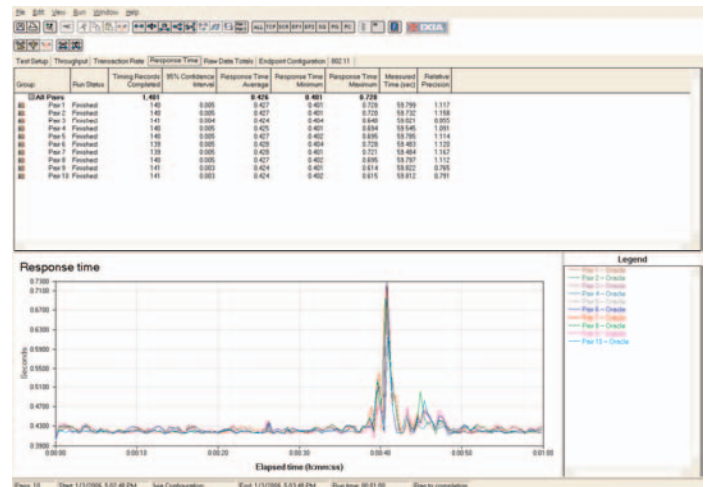
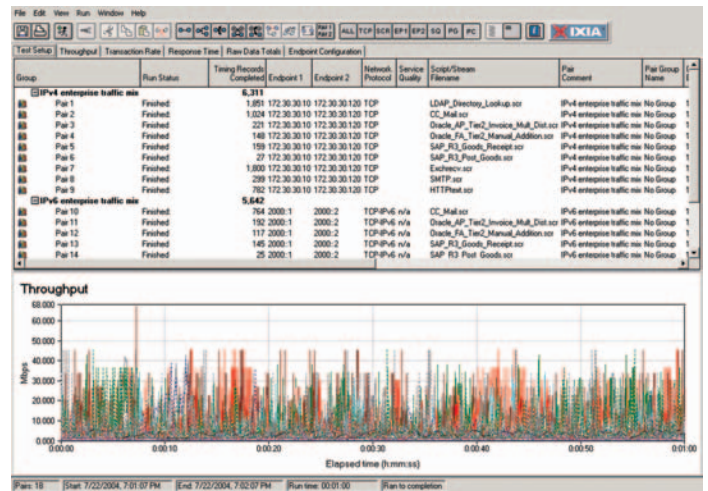


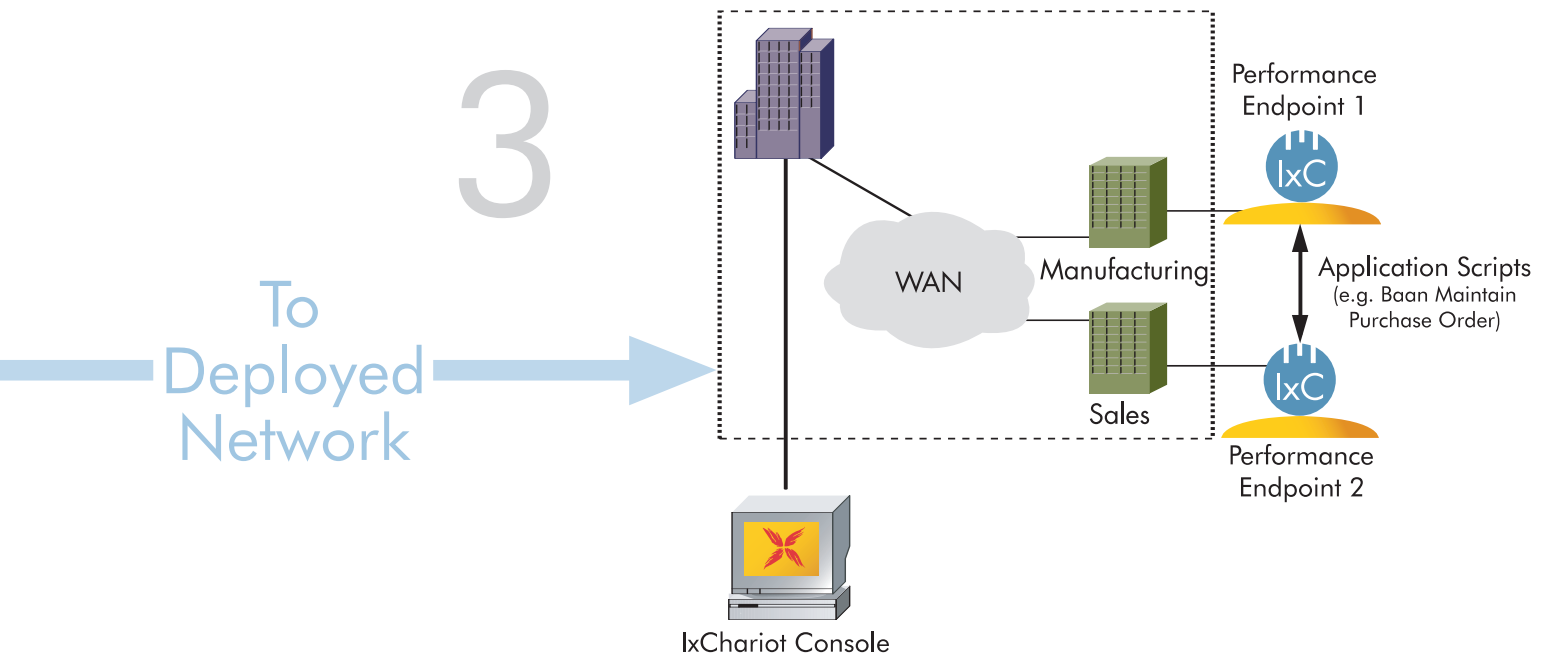
Measure Network and Device Performance under Real-World Traffic Load

IxChariot is a traffic generation and analysis solution that accurately emulates the data flows generated by client/server transactions. Using more than 140 pre-programmed application scripts, IxChariot offers realistic traffic flows between network endpoints for all major transport protocols (TCP, UDP, RTP, IPX). As a result, detailed performance data measuring the end-user's experience is provided (e.g., MOS estimates when assessing VoIP, MDI for video), as well as comprehensive network measurements (e.g., throughput, latency, packet loss, jitter). IxChariot also offers the ability to tweak TCP parameters to help optimize your network.

Validate the Performance Impact of New Technologies

Every network administrator faces the constant challenge of successfully integrating new applications scheduled to be deployed on the network. IxChariot provides powerful analysis tools to comprehensively assess the network and device readiness of these new applications and services. In addition, it helps to determine the most effective application-level QoS policies across the network (e.g., prioritize SAP, set email traffic to Best Effort, etc.) and can measure the impact of Denial of Service (DoS) attacks on IPv4 and IPv6 application performance.





Troubleshoot Critical Network Performance Issues

Application traffic is dynamic, thus presenting an ever-changing set of performance statistics to the network administrator. Widely distributing the free IxChariot Performance Endpoints across the network allows the administrator to perform daily network checks during off-peak times. This can help to track and prevent performance issues of mission-critical applications before they appear.

Future-proof Your Network and Devices

IxChariot contains advanced IPv6 support for all common business applications, VoIP, and streaming media traffic. IxChariot supports IPv6 multicast for video and other multimedia applications. In addition, IPv6 QoS policies can be tested, allowing network administrators and QA managers to perform comprehensive dual-stack IPv4/IPv6 tests.

Multi-Platform Support

IxChariot supports a set of lightweight Performance Endpoints to generate traffic on more than 30 platforms including:

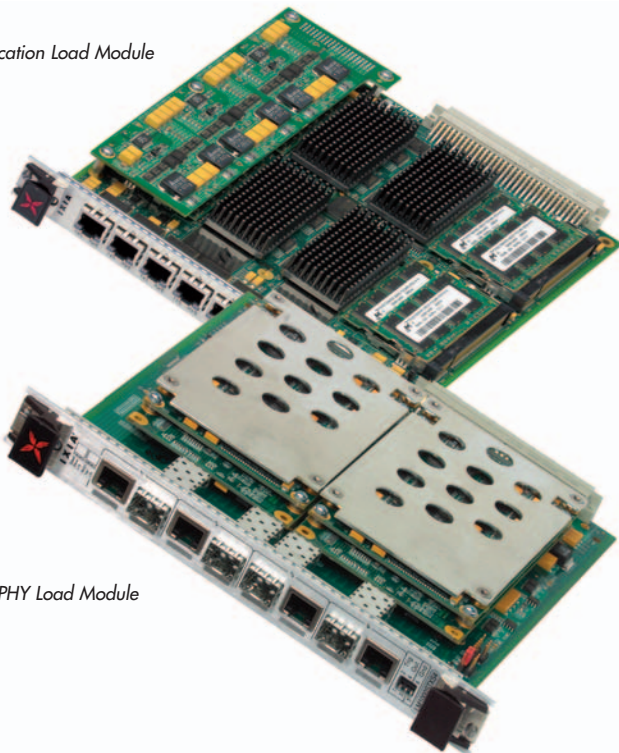
- Ixia's performance testing systems
- HP-UX
- IBM AIX
- Linux
- Mac OS X
- Microsoft Windows CE, NT, XP, 2000, 2003, Vista
- Sun Solaris

Running on the Ixia platform enables the creation of wire-speed Layer 2/3 traffic running in conjunction with L4-7 application traffic patterns created by IxChariot. This allows the easy creation and analysis of complete L2-7 tests, which is especially useful when determining application performance in congested networks.

Flexible Automation

IxChariot also includes comprehensive TCL and C APIs. This enables complete automation of tests and precise measurement of scenarios tailored to the unique requirements of each environment. By using custom test scripts, IxChariot can replicate the behavior of current and future end users and maximize the value of testing.

Application Load Module



Dual-PHY Load Module

IxChariot®

IxChariot tests the transport network – whether wired or wireless, access or core. This is accomplished by emulating application traffic – including data, voice, and video – and measuring end-to-end performance and quality. Measurements include throughput, latency, jitter, Mean Opinion Score (MOS), and Media Delivery Index (MDI).



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