



Application Analysis

Get Unique Depth and Detail from One System

Solve Application Headaches Quickly and Effectively

It's no longer the network—it's the application. Network managers and engineers are switching their focus from network performance issues to application problems. Whether it's custom applications, VoIP traffic, or HTTP, Network Instruments® provides comprehensive application analysis, allowing for rapid problem resolution and long-term planning.

Network Instruments is the only monitoring company to fully integrate application performance management into its entire line of monitoring solutions.

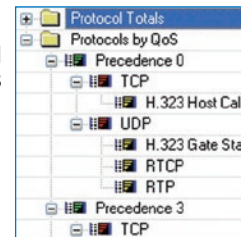
Network Instruments Application Analysis allows you to:

- Monitor application response times and latency
- Gain in-depth information for business-critical applications
- Monitor server delay
- Isolate transaction issues
- Track multi-tier applications

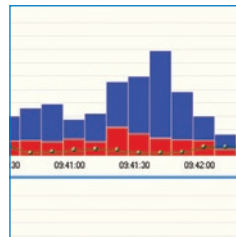
TRACK Application Latency



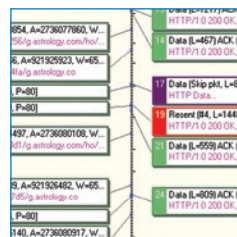
SOLVE VoIP Call Quality Issues



MONITOR Response Time



PINPOINT Application Slowdowns



RECONSTRUCT Application Data



Track Application Response Time and Performance Degradation

Measuring and monitoring application response time is critical in today's on-demand environment. Fortunately, Network Instruments Observer® provides response time data for thousands of standard and user-defined applications. Understand application performance enterprise-wide or focus on specific locations with the Observer Reporting Server. Our solutions also provide historical views to measure response time degradation and better plan for future updates.

Our Connection Dynamics view is especially useful in applications like VoIP that depend on more than one connection. For example, if VoIP analysis indicates call-setup time is increasing, Connection Dynamics will show whether the client or the call manager is causing the problem. With Observer it's easy to pinpoint the exact cause of application slowdown.

Measure Performance Degradation

Server latency, transaction issues, network delay—all of this impacts application availability. Observer provides detailed metrics that allow you to pinpoint the exact cause of bottlenecks or slowdowns—ensuring a faster time to resolution.

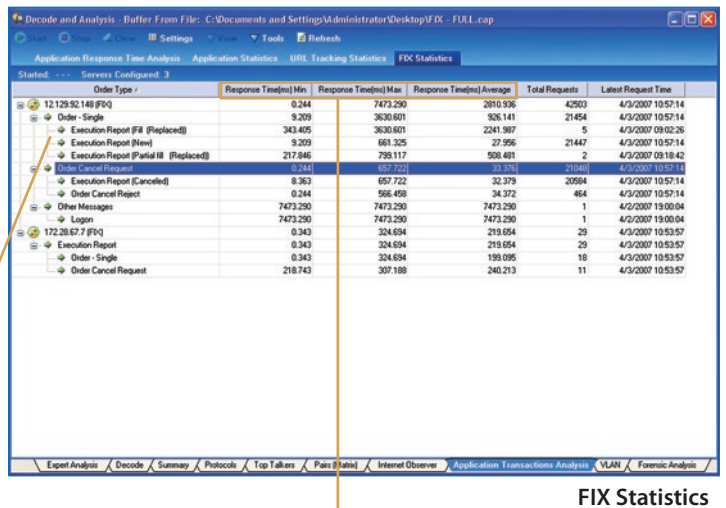


Unmatched Application Detail

Sometimes response time is not enough to accurately troubleshoot performance problems. In those instances, our Application Transaction Analysis goes beyond tracking response times to provide detailed application-specific performance metrics. Observer has hard-coded knowledge of how applications are designed and how clients and servers communicate. Utilize Observer's application and server discovery, obtain error statistics, and gain up-to-the-minute application performance metrics for common applications including:

- Citrix
- DNS
- Exchange
- FIX
- FTP
- HTTP
- IMAP
- MS Networking (SMB)
- Oracle (TNS)
- POP3
- SMTP
- SNMP
- SQL (TDS)
- Telnet
- VoIP

Track trade executions and performance



Review minimum, maximum, and average response time

Track and Solve Transaction Issues

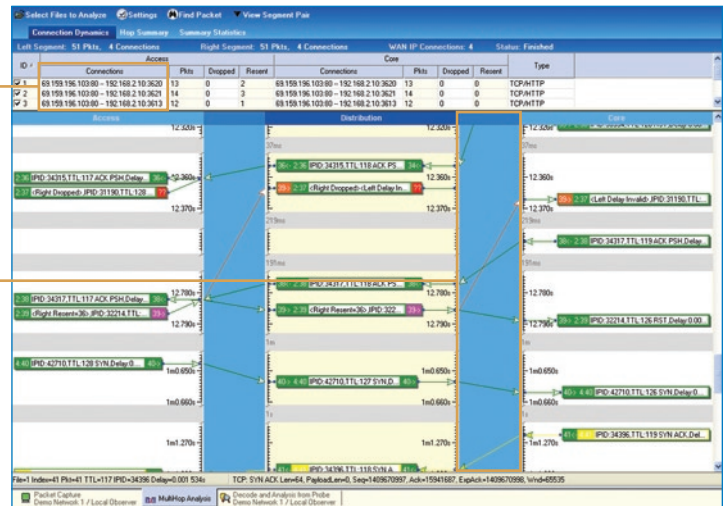
Observer's application analysis makes it easy to pinpoint transaction problems. Observer provides unique views of system conversations for instant identification of abnormal response times. For example, retransmissions and lost packets are flagged for quick identification.

Find problems caused by network congestion, fragmentation, and packet loss by isolating transaction problems, delay, and intermittent connectivity.

Observer's application performance tools provide insight into complex applications which may involve routers, switches, load balancers, and multiple servers. Its MultiHop Analysis tool answers the critical question, "Is it the access layer, the core, or my service provider?" by starting and automatically synchronizing simultaneous packet captures from different network segments.

Track individual network segments

Pinpoint transaction delay



MultiHop Analysis

Aggregate Application Reporting for the Enterprise

Does the call center have enough bandwidth to run their applications? Is the new CRM package slowing your servers? Observer provides large-scale, network-wide reporting with the unique ability to drill down from the report to begin immediate problem resolution. Use this data to gauge long-term application use, monitor trends, and segment application health by location or department.

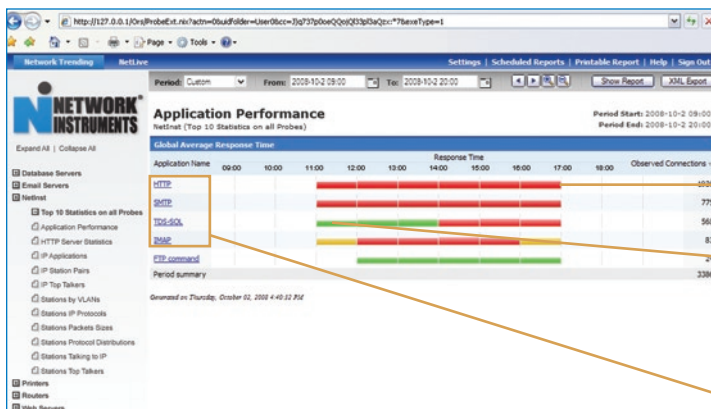
Now with ORS NetLive receive real-time application health on a global scale. NetLive provides 20-second resolution on top applications, response times, and other critical network and application metrics. Organize reports by business group and allow anyone in your organization access via a web secure login.

Quick list of commonly used applications

Instantly obtain error rates, total requests, and response time



Observer Reporting Server NetLive



Provides transaction volume

Visual display of performance rankings that are met or exceeded

Aggregate application list

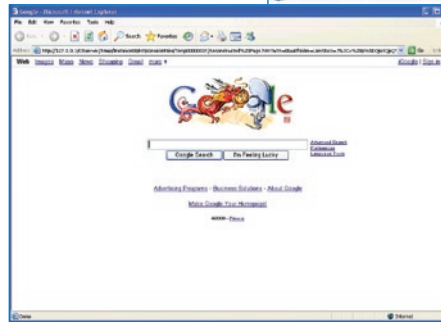
Application Performance

Forensics Analysis with Stream Reconstruction

When troubleshooting application problems, it is often important to know what file was accessed, what spreadsheet was sent, or what web page was viewed. Observer's Stream Reconstruction helps maintain corporate Internet usage policies, assist law enforcement, and contribute towards Sarbanes-Oxley, PCI, and HIPAA compliance.

Use Stream Reconstruction for:

- Web pages (including images)
- E-mails
- Documents
- Instant messaging



Client IP	Server IP	Type	Start Time	End Time	Description
10.0.0.20	64.233.167.99	HTTP	2008-08-14 14:05:22.210	2008-08-14 14:05:22.429	http://www.google.com
10.0.0.20	72.14.207.104	HTTP	2008-08-14 14:05:25.432	2008-08-14 14:05:31.207	http://www.google.com
10.0.0.20	206.18.125.55	HTTP	2008-08-14 14:05:37.180	2008-08-14 14:06:00.562	http://news.rdbbox.com
10.0.0.149	131.107.115.28	HTTP	2008-08-14 15:53:46.803	2008-08-14 15:53:22.888	http://ol.microsoft.com
10.0.0.149	65.55.25.125	HTTP	2008-08-14 15:54:09.094	2008-08-14 15:54:09.339	http://update.microsoft.com
10.0.0.149	209.84.1.126	HTTP	2008-08-14 15:54:09.302	2008-08-14 15:54:16.309	http://download.windowsupdate.com
10.0.0.149	207.46.209.122	HTTP	2008-08-14 15:55:20.014	2008-08-14 15:56:16.725	http://www.update.microsoft.com
10.0.0.149	207.46.20.252	HTTP	2008-08-14 15:55:30.119	2008-08-14 15:55:30.191	...
10.0.0.149	15.56.19.789	HTTP	2008-08-14 15:56:19.789	2008-08-14 15:58:26.203	http://www.download.windowsupdate.com
10.0.0.149	16.04.04.673	HTTP	2008-08-14 16:04:04.673	2008-08-14 16:04:05.745	http://ol.verisign.com
10.0.0.149	16.05.25.493	HTTP	2008-08-14 16:05:25.493	2008-08-14 16:10:41.652	http://download.windowsupdate.com
10.0.0.149	16.05.25.687	HTTP	2008-08-14 16:05:25.687	2008-08-14 16:05:27.818	http://www.update.microsoft.com
10.0.0.149	16.05.41.835	HTTP	2008-08-14 16:05:41.835	2008-08-14 16:05:58.619	http://www.download.windowsupdate.com
10.0.0.149	16.11.36.100	HTTP	2008-08-14 16:11:36.100	2008-08-14 16:16:12.125	http://www.download.windowsupdate.com

Stream Reconstruction

Review what web sites were visited and reconstruct pages as they appeared when accessed

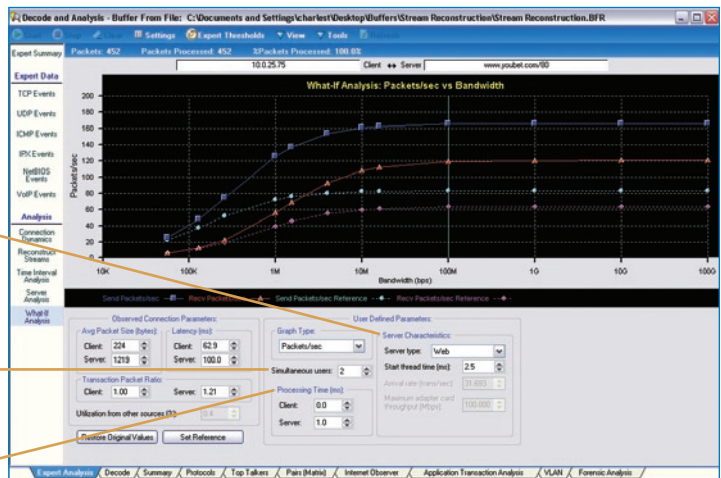
Manage Application Rollouts

Measure twice, cut once. Too often organizations roll out applications without adequate testing. With Observer it is simple to test and review application impact before deployment. Observer offers on-board tools to conduct network assessments, identify potential deployment obstacles, and make configuration adjustments. Use Observer's predictive expert to forecast the impact of new applications on current bandwidth conditions.

Modify server variables

Simulate network response with more or less users

Simulate a faster client or server



Application Rollouts

Application Analysis Options

Network Instruments provides Application Analysis capabilities throughout our solution set. The Observer Product Family includes consoles and probes to help track application performance and provide response time and detailed conversation metrics. The Observer Reporting Server connects to Observer Suite consoles for large-scale, enterprise-wide application performance monitoring. For complex application problem resolution, the GigaStor™ provides long-term packet capture and data mining for back-in-time or retrospective network analysis. Finally, Link Analyst® monitors at the device and infrastructure level and provides application status by detailing which servers are up or down.

About Network Instruments

Network Instruments provides in-depth network intelligence and continuous network availability through innovative analysis solutions. Enterprise network professionals depend on Network Instruments' Observer product line for unparalleled network visibility to efficiently solve network problems and manage deployments. By combining a powerful management console with high-performance analysis appliances, Observer simplifies problem resolution and optimizes network and application performance. The company continues to lead the industry in ROI with its advanced Distributed Network Analysis (NI-DNA™) architecture, which successfully integrates comprehensive analysis functionality across heterogeneous networks through a single monitoring interface. Network Instruments is headquartered in Minneapolis with sales offices worldwide and distributors in over 50 countries. For more information about the company, products, technology, NI-DNA, becoming a partner, and NI University please visit www.networkinstruments.com.

Solution Bundles

Contact a Network Instruments representative or dealer to ask about product bundles that cover all of your network management needs.



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