

OptiView XG Network Analysis Tablet - Key Use Case: Traffic and Packet Analysis



OptiView XG enables Wi-Fi and wired network infrastructure troubleshooting by local technicians and engineers, giving them the portability to go anywhere – and the visibility they need – to solve problems down to the desktop. With automated discovery, mapping of the local network and multiple functions to isolate the root cause of infrastructure-related problems, OptiView XG helps distribute problem solving throughout your organization, making everyone more effective.

Core Capabilities

- **Wireless Analysis** – Integrated tools for deploying, troubleshooting and securing 802.11a/b/g/n/ac WLANs
- **Network Infrastructure Analysis** – Automated discovery, mapping, analysis and guided troubleshooting of your network infrastructure
- **Traffic and Packet Analysis** – The ONLY tablet with 10 Gbps "On the wire" analysis
- **Performance Testing** – Conduct network assessments, validate new infrastructure and devices, test service provider SLAs and QoS, and troubleshoot problems from end to end, at up to a full line-rate of 10 Gbps

For Overview and General Information about the OptiView XG, [see key use cases](#).

The wireless companion to nGeniusONE for full WLAN lifecycle management and troubleshooting network infrastructures

OptiView XG combines multiple functions and technologies in a unique tablet form factor providing engineers the mobility needed to connect, analyze and troubleshoot anywhere in the network – from the access layer to the data center and remote sites. Headquarters or data center engineers can access the analyzer remotely for collaborative troubleshooting or for direct analysis of the problem area when there is no on-site IT staff or instrumentation. Field engineers appreciate OptiView XG as their "one tool" – ideal for traveling to and troubleshooting remote locations.

- Used with nGeniusONE, OptiView XG provides infrastructure diagnostics from the access layer to WAN to data center
- Integrates the latest wired and wireless technologies with powerful dedicated hardware in a unique tablet form factor providing mobility to connect, analyze and solve network infrastructure problems anywhere on the network
- Displays your network exactly the way you want to see it through intuitive, customizable dashboards
- Provides performance testing, 'on-the-wire' and 'in-the-air' automated analysis up to 10 Gbps
- Enables proactive analysis by analyzing the information you need before problems arise
- Out-of-the-box and customizable reports

Traffic and Packet Analysis - Highlights

- Ensures line-rate packet capture up to 10 Gbps for troubleshooting difficult problems
- Performs graphically-based packet analysis with a high-level view of the traffic on the network with easy drill-down capability
- Real-time analysis shows top hosts, top conversations, top protocols – who is using your bandwidth
- Go directly in-line (up to 1 Gbps) to observe traffic in real-time or capture at line rate without the need of an external tap
- Sequential store-to-disk allows for multiple, sequential captures to be stored to the OptiView XG analyzer's internal disk or to an external storage device to capture for longer periods or to capture multiple trigger events.

Troubleshooting Network Infrastructure Performance

The ONLY Tablet with 10 Gbps "on-the-wire" Analysis

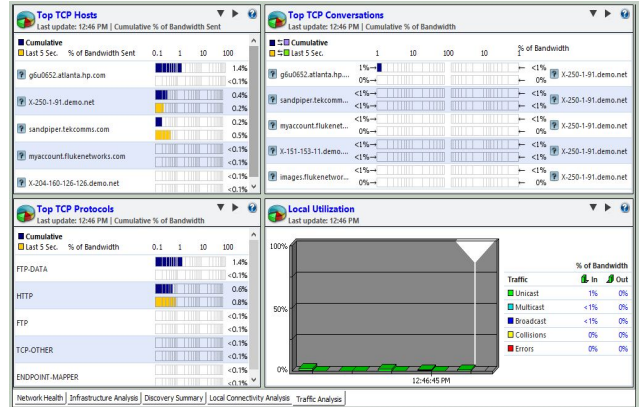
OptiView XG provides line rate, real-time traffic analysis and troubleshooting on 10/100/1000 Mbps or 10 Gbps links.

Identify top talkers, multicasters and broadcasters or select top conversations to determine which hosts may be over-utilizing resource bandwidth. Tap or span key links to determine who is using server bandwidth by viewing top conversations to a single host. Analyze protocol mix to identify top protocols being used and also discover unwanted and custom protocols and see which protocols are being used by each host. These real-time statistics for traffic "on-the-wire" enable you to understand how network resources are being used and increase user satisfaction with faster response times for networked services.

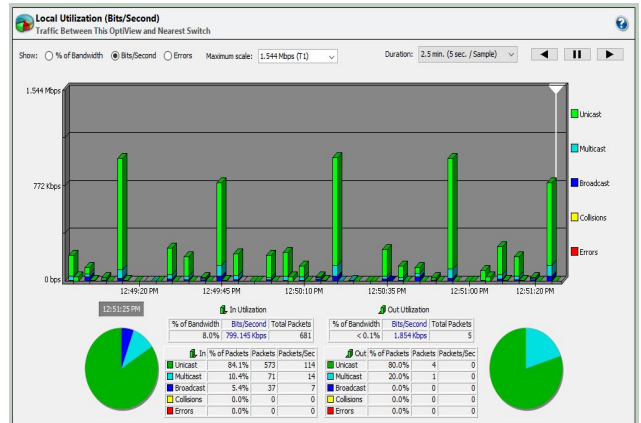
OptiView XG automatically discovers all protocols and sub-protocols from the MAC layer to the application layer. This enables IT staff to identify applications (including those that use dynamically assigned port numbers) utilizing link bandwidth to see and validate the impact of applications on network resources and also identify illicit applications. Deep packet inspection differentiates between specific audio, video, image and data applications, and shows the level of bandwidth usage for each.

VLAN Visibility and Trunk Analysis

Only "on-the-wire" analyzers provide vision into actual VLAN trunk traffic. When connected to a switch trunk port, the OptiView XG detects all VLANs available on that trunk, measures the traffic distribution across all the VLANs and provides the user with the capability of selecting a specific VLAN. If an individual VLAN is selected, device discovery, traffic statistics and packet capture data will be displayed only for that VLAN.



Real-time Traffic Analysis



Analysis of on-the-wire traffic

Simplified Packet Analysis

Network issues are often difficult to solve and slow performance or outages have serious implications for the business. It is critical to have the ability to get a packet-level view of traffic on the network -- ANYWHERE in the network -- to solve certain performance issues. But without instrumentation everywhere, this is a significant challenge; and, standard off-the-shelf laptops do not have the performance to keep up with today's network speeds. OptiView XG provides a portable, powerful platform that can go from the data center to the access layer.

Full Line-Rate Capture Ensures Complete Analysis

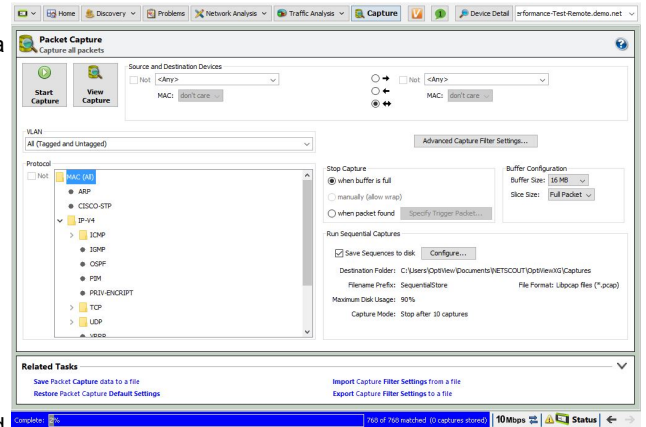
Get 10 Gbps line-rate packet capture and filtering to troubleshoot problems where packet-level analysis is required and perform advanced troubleshooting when deploying and analyzing applications.

As 10 Gbps on copper becomes more prevalent throughout networks, OptiView XG users can add an optional adapter to their analyzer for easy connectivity and testing of 10GBASE-T links.

Sophisticated capture filters allow collection of more relevant data and limit the amount of traffic to analyze by filtering on individual addresses or conversation, IPv4 address range or subnet, or IPv6 prefix and protocols. The capture size can be up to 4 GB, plenty of packets for analyzing a problem between a user and a service.

The capture process may be started or stopped through a user-defined trigger event – capture the traffic before, after or around an event occurrence without being present. This ensures you capture the event the first time and avoids initiating random traffic captures that may not contain anything of interest.

OptiView XG's unique user interface makes the complex task of setting up filters and triggers as simple as touching the devices or protocols of interest, eliminating errors that result from misconfiguration.



Packet Capture



Optional 10GBASE-T adapter

NETSCOUT

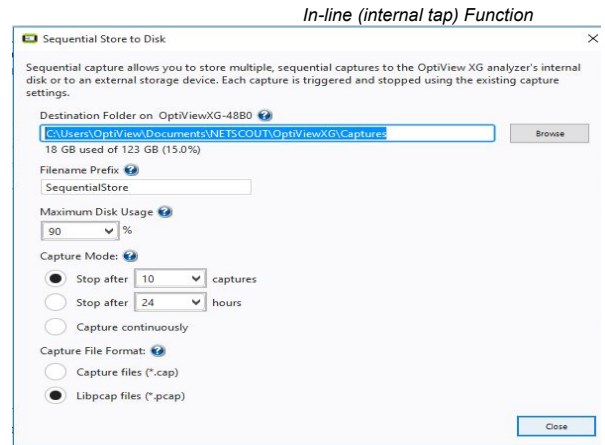
Go "In-Line" to Get to Root Cause

To get to the root cause of many network performance problems, you have to be "in the path of the packets" to examine the actual traffic. With the in-line analysis function in OptiView XG, your analyzer connects in the path to directly see and capture application traffic on its two RJ-45 ports. Instead of relying on span or mirror ports (which hide or even introduce problems) or carrying around an extra piece of hardware (external tap), OptiView XG lets you go directly in-line at up to full 1 Gbps speed to observe traffic in real time, or to capture at line rate for detailed application analysis in the onboard ClearSight Analyzer. Go in-line between the network and clients, access points, servers, or anywhere needed to get application-level visibility.



Capture and Store Multiple Trace Files

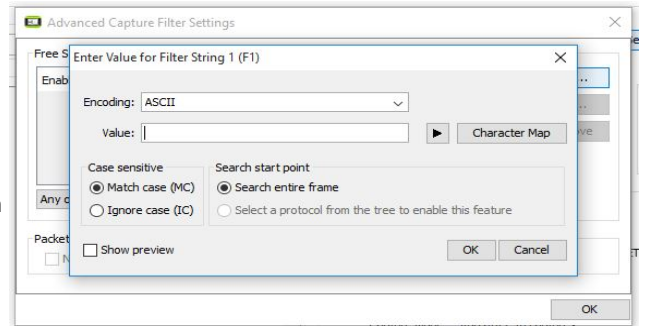
Sequential store-to-disk allows for multiple, sequential captures to be stored to the OptiView XG analyzer's internal disk or to an external storage device to capture for longer periods or to capture multiple trigger events, allowing more than 4 GB of data to be captured – this can help find elusive problems. The user can set the destination drive and folder, a filename prefix (OptiView XG assigns a timestamp for the suffix), and set rules for the maximum number of captures or size of disk usage as limits.



Sequential store-to-disk controls

Free String Match to Find and Capture Anything

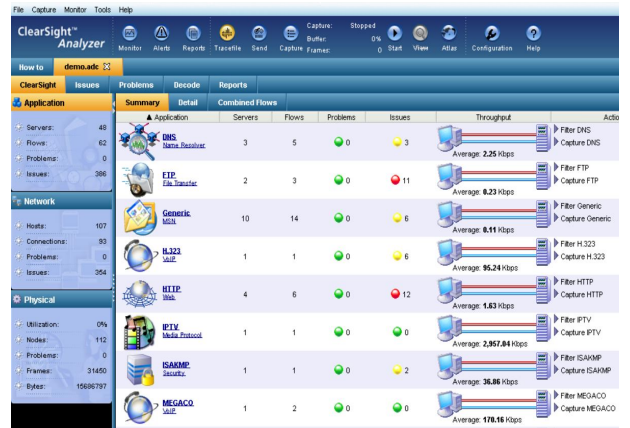
Match any set of words or phrases when detected (regardless of the position in the packet, payload or header) in real-time to trigger the OptiView XG to start or stop capturing and/or filtering traffic. Use Free String Match to capture traffic around any application error message, detect traffic containing certain words or phrases in non-encrypted emails, web pages, file transfers or documents to identify illicit use of the network or detect downloading of restricted documents based on content or filenames (.doc, .xls, .pdf). Additionally, use Free String Match to identify and track applications that are not allowed on the network such as high-bandwidth consuming streaming media, or P2P traffic that may pose a security risk. A total of eight sets of triggers or filters can be defined to trigger an unattended capture for later analysis, when you have time, not when the event occurred.



Free String Match

Simplified Troubleshooting at the Packet Level

Once traffic is captured, launch the integrated ClearSight™ Analyzer (iCSA) on OptiView XG to see a graphical view of the trace file. Through a simple and intuitive front page, iCSA presents a comprehensive, high-level overview of the health of traffic on your network. From that framework, you can drill down to gain access to more detailed information. For example, you can display all the activity for HTTP applications, then drill down to see activities on each server, and further down to the server flow to observe the actual media content of the flow. iCSA also provides time-based analysis providing detailed trending and statistical information for fast analysis of large capture files. This unparalleled level of control and visibility speeds time to problem resolution and minimizes overall network downtime.



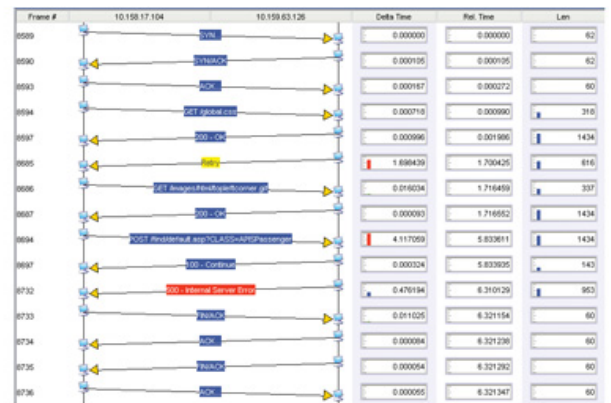
Application Summary Front Page

Automated Problem/Issue Detection

The CSA Expert Alert function automatically detects communication faults in captured packets and displays them with color-coded icons. The specific application, server, or flow that has a problem can be seen from the Application Summary Home screen. Alerts detected by CSA are classified as issues (faults in the communication sequence) or problems (faults that exceed a threshold value) and can be listed separately. Lists can be sorted by simply clicking on a column header. You can drill down to the associated communication flow by right-clicking on an alert.

Unique and Powerful Bounce Chart Illustrates Application Flow

CSA application bounce chart views reveal conversations between client and server in the application command language without manually decoding packets. It provides an extremely powerful way to understand protocol interactions between various network elements.

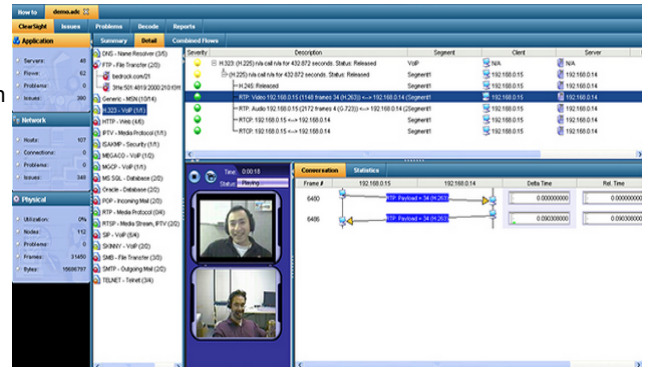


Powerful Bounce Charts Visualize Application Turns

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Content Reconstruction and Playback

You can recreate audio and video content from VoIP or video flows, either during real-time monitoring or from a trace file. In addition, Microsoft® Exchange® email, Fax over IP, Instant Messages and HTTP-based web pages can also be reconstructed. This is very valuable as proof of compliance violation or visualization of multimedia quality.



Reconstruct and Replay Content

NETSCOUT MasterCare Support

Our support plans give you exclusive services and 24/7 technical assistance. Sign up for MasterCare Support and enjoy outstanding privileges to protect and add value to your investment in NETSCOUT equipment. They include unlimited technical assistance seven days a week, 24 hours a day via phone or at our web support center. Repairs on covered items and "next day" dispatched loaner units (where available) for uninterrupted service. Free software upgrades. Web based training. Access to our extensive Knowledge Base library of operation and application related technical articles. Some benefits are not available in all countries.

See enterprise.netscout.com/gold for more information.

For more information about OptiView XG, visit enterprise.netscout.com/xg