OBSERVER® 10

New Features Guide

Advanced Expert Probe
VLAN Statistics
50+ New Wireless Experts
New Ready-Made Reports
Expanded Data Mining
Network Instruments Authentication Server (NIAS)
Full Duplex 10/100 Advanced Probe Appliance
WAN RMON Probe Support
SNMP v3 Support
and much more

One Network Complete Control
Wired to Wireless • LAN to WAN

Observer 10 includes more real-time statistics, more packet capture and decode features and more Expert conditions than ever before. Check out our new enhancements for wireless, new reporting tools and VLAN analysis.

Advanced Expert Probe New Product

With Network Instruments' new Distributed Expert Probe, IT Administrators can now perform packet captures and real-time Expert analysis at remote locations for faster and easier troubleshooting.

Faster Expert Analysis at Remote Locations
With Expert Probes all Expert analysis and Expert processing is completed at the individual probe level and only the results (i.e. updated screens) are transferred to the local console. With the Advanced Expert Probe real-time analysis can occur over longer periods of time at remote locations greatly reducing network traffic. This offers faster troubleshooting and a quicker breakdown of critical issues.

Real-Time Screen Updates, Not Raw Packets
With packet capture decode, only the packet header is transferred to the console. When a full decode is desired, administrators simply click on the packet header to instantly review the decode in real-time. The entire decode is no longer transmitted over the wire, only screen updates – allowing for quicker review of key data without any impacts to the network.

Supports all network topologies
Like all of Network Instruments products, the Expert Probe is applicable for all network topologies (LAN, 802.11a/b/g, Gigabit, WAN).

Console Options: The Advanced Expert Probe is a new level of probe functionality combining all the features of the Advanced Multi-Probe with real-time remote Expert Analysis. The Advanced Expert Probe is sold separately and reports back to any Expert Observer or Observer Suite console.

VLAN Analysis

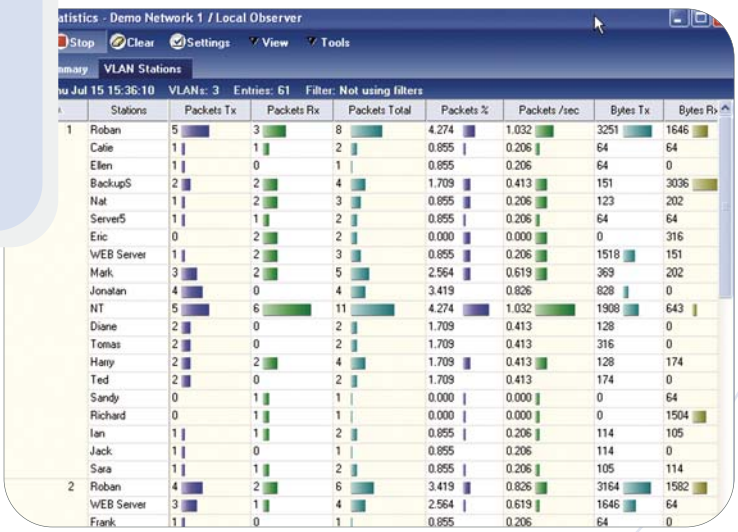
Observer 10 introduces Real-Time Statistics for VLANs. View VLAN data independently or in aggregate with a new VLAN mode. Administrators can determine if their VLANs are overloaded and verify VLAN setups.

VLAN Summary
Real-time aggregate statistics by VLAN

VLAN Stations
Ability to determine loads by station for each VLAN

VLAN Statistics Include:
- Packets Sent/Received/Total
- Bytes Sent/Received/Total
- Broadcasts
- Multicasts
- Utilization levels

Console Options: Available with Observer, Expert Observer and Observer Suite.



VLAN Statistics

Wireless Enhancements

One of the key advantages of Observer is the ability to simultaneously monitor both wired and wireless networks. Network analyzers can provide an additional line of defense from internal and external network threats. This is especially true for WLAN network monitoring.

Observer offers more wireless Expert Conditions than any other analyzer. WLAN administrators can configure Observer to alert them as wireless network thresholds hit warning levels, when unauthorized access points are recognized, as signal strength or as signal quality weakens and much more.

New Wireless Expert Conditions
Observer now alerts on more WLAN situations so IT Administrators can quickly respond to conditions affecting their wireless network. For Observer 10, we packed in scores of Wireless Expert Conditions, and ultimately have added over 50 new Expert Conditions that cover WLAN security and performance. Here is just a sample of the new Wireless Expert Thresholds that Observer monitors:

Wireless Security Expert Conditions:
- Access Point Encryption Disabled, Enabled
- Open System or Shared Key Authentication
- Authentication and Deauthentication Rates
- Spoofed MAC Addresses
- Unknown Stations

Wireless Performance Indicators:
- Signal Strength and Quality
- Directed Data Rates
- Error Rates
- Association, Reassociation and Disassociation Rates
- Station Overloads

Console Options: Available with Expert Observer or Observer Suite.

Expanded Data Mining

For Observer 10, we've added additional features to improve data mining. For example, we took a more expansive look at filtering, creating the ability to filter before the capture file is loaded for a quicker breakdown of data.

- Improve data-mining capabilities by allowing users to search through multiple files for any user-defined pattern (ex. MAC, IP Addresses, data, text patterns)
- Vital for analysis of large volumes of captured data (Gigabit and/or long term captures)
- Select the file or files you wish to filter, choose the filter, and Observer will load only the packets that match the filter for analysis

Console Options: Data Mining Filters are available with Observer, Expert Observer and Observer Suite.

New Reporting Options

With Observer 10, Network Instruments has greatly enhanced Network Trending and Reporting. Administrators can now choose from a variety of common, ready-made reports and can also create user-definable reports.

Ready-Made Reports
Observer now offers more than 20 templates of the most commonly requested reports offering instant snapshots of network health. It is also easier to specify time intervals – choose to review network data for just today, yesterday, last week, last quarter and more. Ready-Made reports include:

Network Summary	Packet Size Distribution Network Activity Protocol Distribution IP Subprotocol Distribution IP Group Protocol Distribution IP Applications Distribution IPX Subprotocol Distribution Errors Distribution
Network Stations	Top Talkers Top Error Stations Top Packet Sizes Rx Top Packet Sizes Tx Top Packet Sizes Total Top Multicasters Top Broadcasters Top Broadcasters (Broadcast + Multicast)
Internet Web Sites and Servers	Top Web Sites Visited by Data Top Web Sites Visited by Stations Top Local Web Servers
Internet Usage	Top Protocols Used Top Local Internet Users Top External (Remote) Visitors

Time Intervals
Choose from popular time intervals or define a time period for easy access to trending information. Examples include:

- Today
- Yesterday
- Last Week
- This Week
- Last Month
- This Month
- Last Quarter
- This Quarter

Custom Reports
Any of the pre-configured reports can be customized and saved as templates for later use.

Web Publishing Security
Define user accounts and access levels by individual reports.

Console Options: New reporting options are available with all levels of Observer. Web Publishing options are only available with Observer Suite.

Triggers & Alarms Enhancements

New Interface
We've given our popular Triggers & Alarms a new interface and brought it to the forefront of Observer. Triggers & Alarms can now be easily configured for any probe from one convenient location. All alarms are now displayed on the Log Window at the top of the screen.

WLAN Additions
Wireless Triggers & Alarms can now be configured to trigger a notification on any WLAN activity, significantly expanding options for pro-active management of your wireless network.

- Wireless alarms based on user definable filters help WLAN administrators create alerts for custom network conditions
- Examples:
  - Filter for default SSID
  - No security or low security
  - Unauthorized stations
  - Unauthorized Ad-Hoc communication

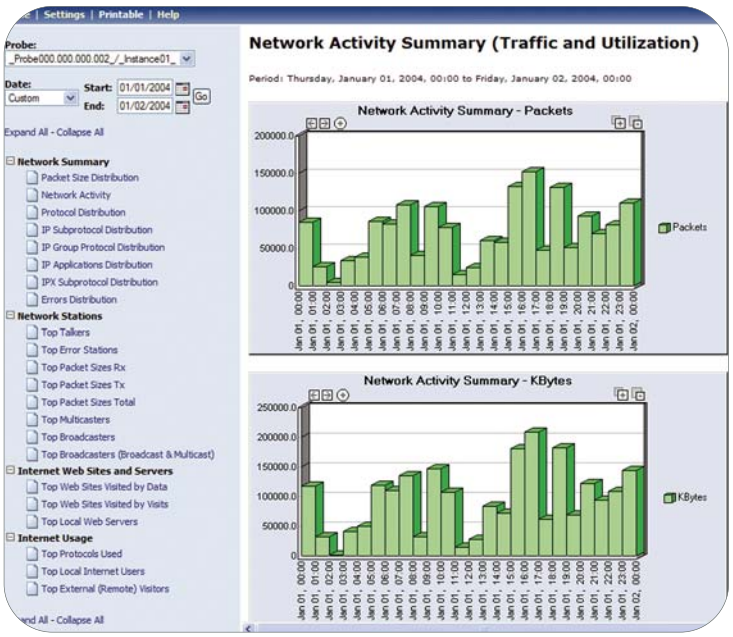
Console Options: Available with Observer, Expert Observer and Observer Suite.

Network Instruments Authentication Server (NIAS) New Product

To better manage the security of Console/Probe connections, Network Instruments has created the Network Instruments Authentication Server (NIAS). This server makes authenticating probe users safe, secure and simple by providing centralized management of Probe users and passwords.

- Authenticate users from one central location
- User permissions management from one location
- Administrators can choose the most suitable authentication scheme:
  - Authentication through Active Directory
  - Internal NIAS authentication

Console Options: The NIAS is an additional software product sold separately and works with the Advanced Multi-Probe, Advanced Expert Probe and our many appliance units.



Web Reporting

NEW REMOTE PROBE OPTIONS

Full Duplex 10/100 Advanced Probe Appliance **New Product**

With the release of Observer 10, Network Instruments also introduces a new 100Mb Full-Duplex 1U hardware appliance. This slim, easy-to-install, competitively priced unit was created at the request of many of our customers. The 10/100 Appliance includes:

- 512MB Memory
- 160GB Hard drive
- 100MB Full Duplex TAP

Console Options: The Full Duplex 10/100 Remote Probe is a 1U hardware unit sold separately and reports back to any Expert Observer or Observer Suite console.

WAN RMON Probe Option **New Feature**

Although Network Instruments recognizes there is no WAN RMON standard, we have created an open standards RMON-like approach to monitoring WAN traffic fully supporting RMON1, RMON2 and HCRMON MIBs.

Licensed separately from our standard RMON Probe, the WAN RMON Probe works with Network Instruments WAN capture hardware (WAN Rack Mount Probe, WAN Probe Kit, and WAN Observer Suite System) to track WAN-specific statistics (FECNs, BECNs, etc.) through an included open standard Management Information Base (MIB).

Console Options: The WAN RMON Probe is sold separately and reports back to the Observer Suite console.

WAN RMON Console Support **New Feature**

With the release of Observer 10, the RMON console included with Observer Suite works with the WAN RMON Probe to display WAN-specific statistics in Observer's familiar interface.

Console Options: The WAN RMON display is included with Observer Suite.

New Decodes

At the heart of Observer is superior packet capture and decode. With version 10, we've released new decodes and provided greater depth into existing decodes. Most decodes were added based on user requests and evolving standards such as the increased usage of MSRPC in Microsoft applications. For a complete list of decodes please visit: http://www.networkinstruments.com/products/decode_listing.html.

Console Options: New decodes are included with Observer, Expert Observer and Observer Suite.

Improved Console/Probe Transfer Speeds

At Network Instruments, we relentlessly review our technology to ensure we're offering the fastest troubleshooting and analysis times possible. We're pleased to offer a significant improvement in packet capture transfer speeds from remote Probes to the Observer console. By making adjustments to the compression algorithms and communications parameters of Observer, users will notice speeds up to 12 times faster than before.

- Observer can now transfer up to 600MB per minute
- A 12-fold improvement in data transfer speeds from previous versions
- Transfer speeds for Network Trending are also 12 times faster

Console Options: All levels of Observer offer greater console/probe transfer speeds.

Ongoing Support for New Chipsets

Version 10 provides full support for the new Atheros Chip Driver offering better signal-to-noise ratio in WLAN monitoring than ever before.

Console Options: New chip sets are supported by all levels of Observer.

Network Trending Enhancements

With version 10, you can now specify the time of day for automatic transfers of data to take place. This is an excellent way to control heavy amounts of data captured for data-mining purposes.

Console Options: Time selection for Network Trending data transfers is available for all levels of Observer.

SNMP v3 Support

Take advantage of the enhanced security provided by SNMP v3. Observer now allows you to add SNMP v3 devices and configure its password and encryption options.

Console Options: SNMP v3 support is only available with Observer Suite.

About Network Instruments

Network Instruments is the industry leading developer of distributed, user-friendly, and affordable network management, analysis and troubleshooting solutions. The award-winning Observer family of products combines a comprehensive management and analysis console with high-performance remote Probes to provide integrated monitoring and management for the entire network (LAN, 802.11 a/b/g, Gigabit, WAN). All Network Instruments products are designed utilizing our Distributed Network Analysis (NI-DNA™) architecture. With NI-DNA, the Observer solution set simplifies network troubleshooting and management, optimizes network and application performance and scales to meet the needs of any organization. Founded in 1994, Network Instruments is headquartered in Minneapolis, Minnesota with offices in London, Paris, throughout the USA and distributors in over 50 countries. More information about the company, products, innovation, technology, NI-DNA, becoming a partner and NI University can be found at: 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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