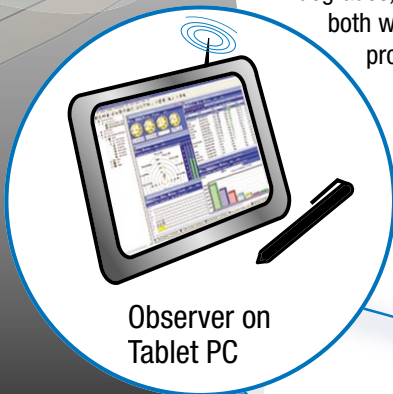
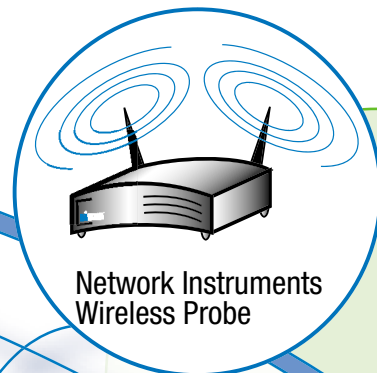


WIRELESS SOLUTIONS

Network Instruments provides a complete, scalable solution for deploying and managing wireless networks locally or remotely. Observer's award-winning analysis solutions allow network professionals to monitor, manage and troubleshoot their wireless network. When security is breached or performance degrades, Observer will provide alerts and identify the problem. With one complete solution to monitor both wired and wireless traffic, IT organizations save money and speed troubleshooting while proactively managing and streamlining their network.



Observer on Tablet PC



Network Instruments Wireless Probe

Network Instruments wireless solutions scale to fit any network.

Observer monitors wired and wireless traffic and can be deployed on desktops, laptops and tablets.



Observer on Desktop



Observer on Laptop



BENEFITS

- Improve wireless network availability and performance
- Monitor and control all WLAN traffic—802.11a/b/g
- Find and tame rogue Access Points and clients
- Unify management of wireless and wired networks
- Reduce cost of managing wireless networks

Complete Control of Wireless Networks

Deployment Control

- Ensure complete wireless coverage using integrated site survey capabilities
- Analyze WLAN capacity and WLAN to LAN uplink capacity
- Track performance as clients and applications are added to the WLAN

Security Control

- Enforce security policies in real-time
- Be notified of security violations via alerts by email, pager, SNMP trap, etc.
- Monitor Access Point security settings, including WEP keys, SSIDs and uptime

Performance Control

- Watch wireless network Vital Signs in a real time dashboard
- Review and investigate trends in wireless activity
- Analyze clients, activity and capacity by Access Point

Multiple Site Control

- Monitor remote wireless networks 24x7x365
- Manage remote devices with full SNMP functionality
- See wired and wireless traffic with a single Probe

Troubleshooting Control

- Speed troubleshooting with over 450 Expert Events
- Isolate wired and wireless problems with one solution
- Correct local and remote equipment settings

Complete Security

Security is a primary concern for organizations deploying wireless networks. Observer monitors wireless activity to ensure that tight security policies are followed. When there is a problem, such as a rogue Access Point or rogue client, Observer immediately notifies administrators via alarms, such as email or pager.

Examples of Observer enforced security policies:

- Rogue Access Point
- Unknown Client
- Access Point not using WEP
- Client not using WEP
- Device Using Open Authentication
- Unconfigured Access Point
- Shared Key Authentication in Use
- Naked SSID on Access Point

One Network - Complete Control

- Instant email or pager alerts on network issues
- Unmatched ease of use
- Unparalleled depth of analysis
- Over 450 Expert Events
- Fully distributed with wireless probes
- Includes wired and wireless support

Wireless Vital Signs

At-a-glance knowledge of wireless health helps network professionals stay on top of their network. With Observer, network administrators can track directed data packets by speed, error packets and management control broadcasts. Observer's Wireless Vital Signs monitor and provide drill-down analysis on key performance characteristics such as:

- Connection speeds
- Signal strength and signal quality
- WLAN utilization
- Error conditions

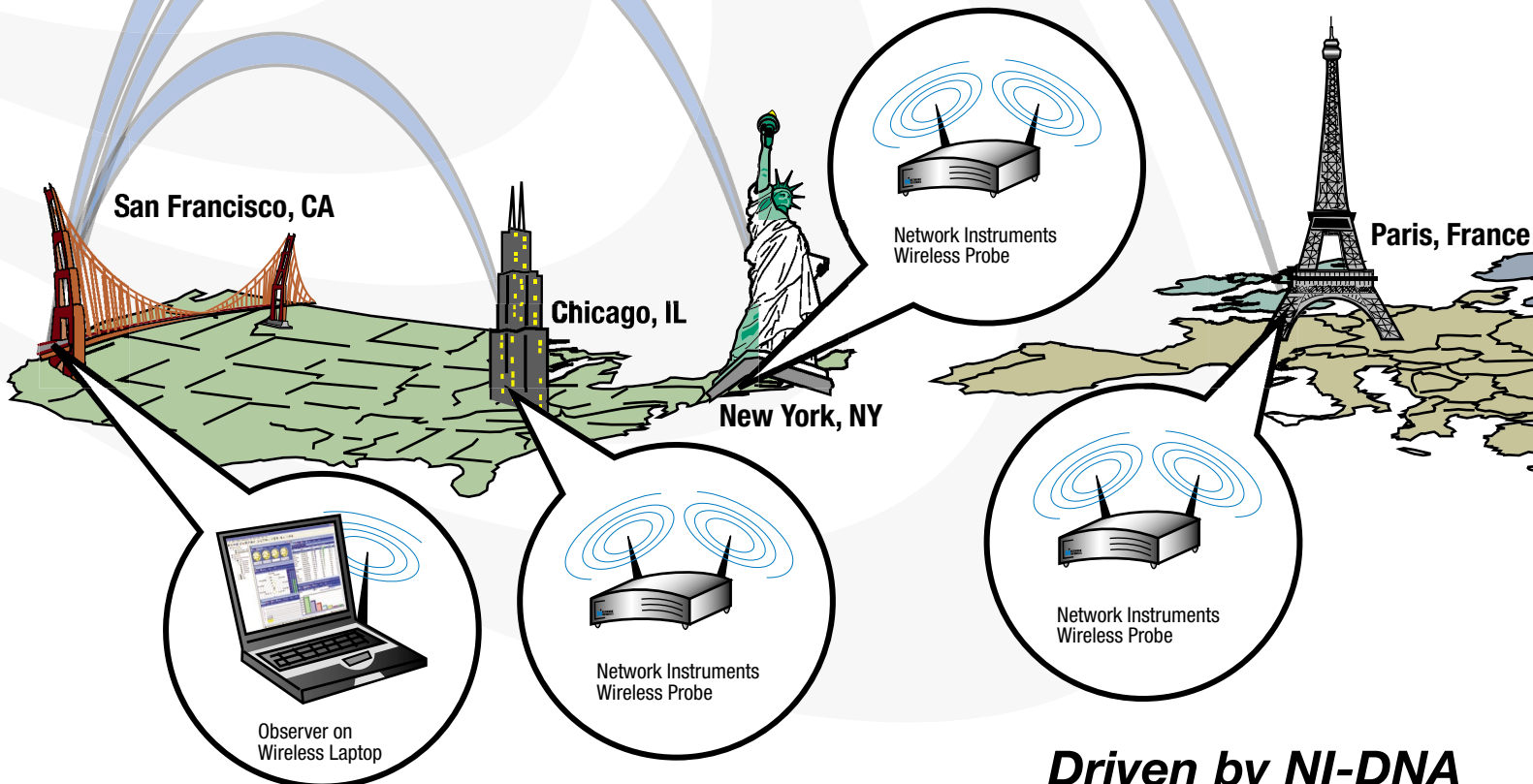
Virus and Attack Signatures

Isolate network threats at once. Observer watches for virus and attack signatures on your network for quick removal of unauthorized traffic.

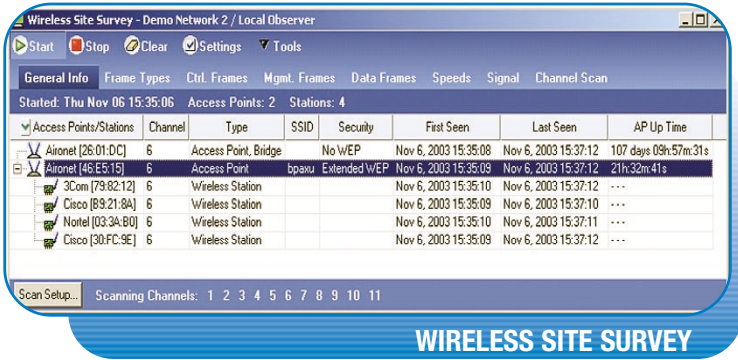
- Set triggers and alarms to be alerted immediately when security threats are detected
- Infected devices can be detached from the network, isolating the concern
- New filters released periodically, keeping up with the latest security threats

Scalable for Local and Remote Wireless Networks

Network Instruments' solutions fit networks of any size and are always built to scale, using our unique Distributed Network Analysis (NI-DNA™) architecture. For local networks, Observer provides a full-line of monitoring capabilities for deploying, securing, and managing wireless traffic. Observer can also view and monitor remote locations by linking with Probes. Any remote Probe or remote Observer installation can sense wireless activity and share it with any Observer console anywhere in the world to provide scalability without sacrificing functionality.



Driven by NI-DNA



WIRELESS SITE SURVEY

Site Survey / Channel Scan

Network professionals can improve wireless performance by spreading Access Points and users among the available channels. Monitoring unused channels protects against rogue wireless networks on channels that should be dormant.

Observer's channel scanning capabilities include:

- Concurrent monitoring of 802.11a/b/g
- Activity by channel
- Channels used by Access Points and clients
- View device association by Access Point

Over 450 Expert Events

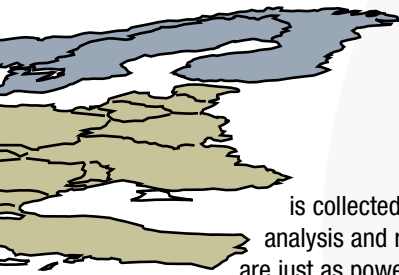
Observer's real-time Expert analysis provides automated problem detection by quickly sorting through vast volumes of network traffic. Novice or seasoned wireless administrators alike can benefit from Observer's extensive problem identification and suggested resolutions.

Individual Access Point Statistics

Administrators gain greater control by managing their wireless networks one Access Point at a time. Observer's Access Point statistics include:

- Signal strength and signal quality
- Supported clients
- Wired traffic communicating through Access Points
- Data and management packet transfer rates
- Traffic totals

Powerful Trending and Analysis



Observer's historical baselining provides network professionals insight into key trends in wireless networks. Observer's trend reports are the most powerful in the industry because they are built using stored data and are not limited in time. Data

is collected and stored for future investigation, analysis and reporting. Reports on remote locations are just as powerful because Probes gather the same data remotely that Observer gathers on-site. Observer also provides easy collaboration to solve tough problems faster and build a shared base of knowledge. All Observer reports can be viewed in tables or graphs and be published to the web using a built-in web server.

Event Alarms and Actions

Network professionals must know immediately when issues strike. Any of Observer's security and performance event triggers can be configured to alert networks administrators and even start diagnostics to speed troubleshooting.

Remote Monitoring With Full Featured Probes

Wireless tools that require professionals to be on-site do not meet the needs of distributed organizations. All Network Instruments tools use NI-DNA and as a result the administrator simply connects Observer with a Probe for the best in anywhere, anytime monitoring of remote wireless networks.

Network Instruments Probes are superior because they:

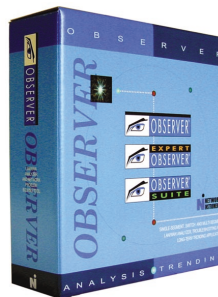
- **Demonstrate more intelligence**—Collect and store data on wireless activity
- **Maintain lower overhead**—Store and sift through information themselves rather than blindly pushing packets over the network
- **Offer wireless and wired monitoring**—Unified, superior functionality for every side of your network

Unquestionable Price and Performance Leadership

Network Instruments provides complete, scalable network troubleshooting solutions removing the need to purchase separate components for different parts of the network. There is no need to purchase additional management servers, acquire different trending and reporting tools or even invest in separate wired and wireless analyzers. Observer has all of this functionality built in. By offering affordable, award-winning solutions the Observer family of products continues to lead the industry in price and performance.

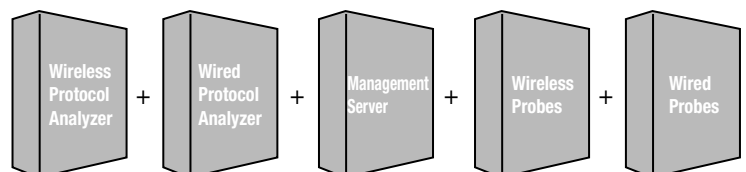
THE OBSERVER ADVANTAGE

Choose one complete solution for the entire network...



- Wireless Protocol Analyzer
- Wired Protocol Analyzer
- Wireless Probe
- Wired Probe

...or topology-specific products from competing vendors



Commitment to Product Innovation

Since 1994, Network Instruments has brought market leading innovation, product enhancements and ongoing development to the networking world. Observer was the first protocol analyzer to support 802.11a, the first to support 802.11g and will continue to add support as new wireless and security technologies arise. The company has also served customers fully scalable, distributed solutions since 1995. Network Instruments continues to provide management solutions today for tomorrow's complex network configurations.

NI University

Training sessions at NI University help administrators effectively troubleshoot, maintain, optimize and monitor their 802.11 wireless networks by giving both theory and practice in analyzing wireless networks. Please contact Network Instruments for more information on wireless training or go to www.networkinstruments.com/training.

Key Features and Benefits of Observer's Wireless Solutions

Feature	Benefits
Unified Wired and Wireless Console	<ul style="list-style-type: none"> • Faster troubleshooting • Lower solution cost • One solution for all locations and wireless deployments
Wireless Vital Signs	<ul style="list-style-type: none"> • Proactive network and application performance management • Easier, earlier problem identification
Security Alerts and Monitors	<ul style="list-style-type: none"> • Brings WLAN security up to LAN standards • Notification of rogue Access Points and clients
Site Survey Capabilities	<ul style="list-style-type: none"> • Faster, better wireless rollouts
Scalable Architecture	<ul style="list-style-type: none"> • Complete management of remote wireless and wired networks • Purchase additional components as your network grows
Wireless Experts	<ul style="list-style-type: none"> • Speed troubleshooting • Improve network availability
Wireless Trending and Reporting	<ul style="list-style-type: none"> • Broad coverage with deep analysis to understand trends • Anticipate and avoid problems in growing wireless networks

Technical Summary

Supported 802.11 Standards	A, B, G
Radio Frequency	2.4GHz and 5GHz bands; concurrent with multiple NICs
Full SNMP Support	Yes
Integration to 3rd Party Consoles	HP OpenView
802.11 Security & Encryption Support	Yes
Web-enabled Reporting	Yes
Real-time Decode	Yes
Multi-NIC Support	Yes
Decode Level	Layers 2-7

Observer Specifications

Form Factor	Tablet, Notebook, Probe, or Desktop PC
Operating System	Windows 2000, XP and 2003
Processor	Pentium III 800Mhz or above
RAM	256MB or more
WLAN NIC	See website for complete list

Probe Specifications

Form Factor	Software-based (existing system) or Hardware-based (rack-mounted)
Operating System	Windows 2000, XP and 2003
Processor	Pentium III 800Mhz or above
RAM	256MB or more

About Network Instruments

Network Instruments is the industry leading developer of superior, 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, 802.11a/b/g, Gigabit, WAN). All Network Instruments products are designed with 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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