NI-DNA™

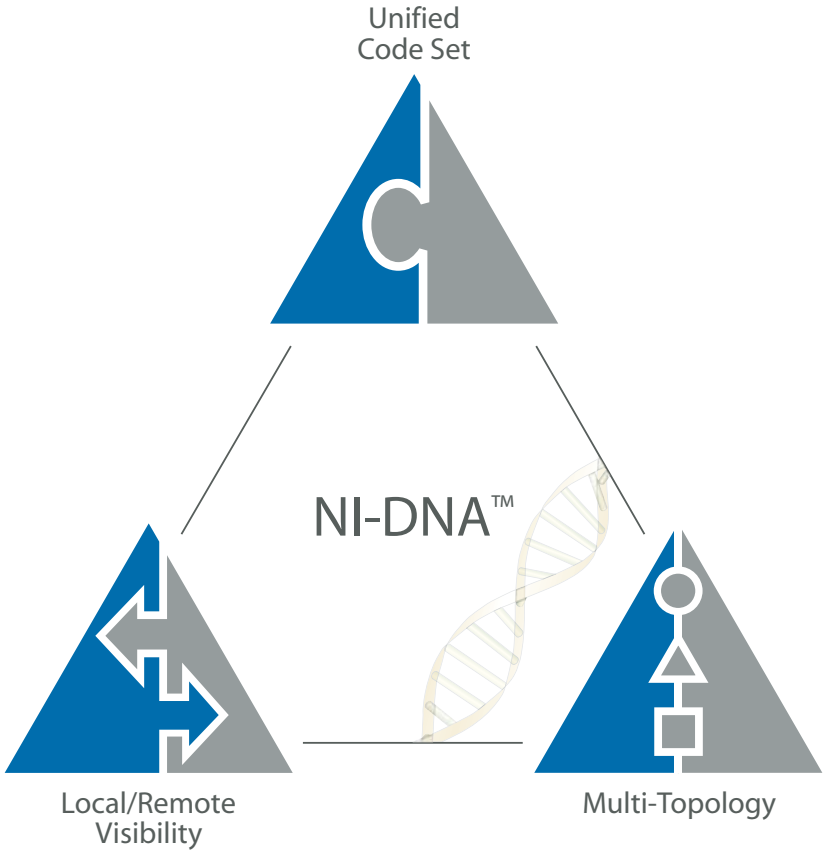
Network Instruments Distributed Network Analysis Architecture

Today's network administrator is faced with more network challenges than ever before. With countless new bandwidth-consuming applications, complex architectures, faster networks, voice/video deployments and internal/external security threats, the need for a flexible, comprehensive network management solution is critical. Network Instruments has created a unique architecture to overcome today's network issues and manage tomorrow's network concerns.

Observer® is the only network analyzer designed to deliver investment flexibility, prompt problem resolution, proactive network management, complete application analysis and integrated visibility. Built on a unique Distributed Network Analysis architecture, Observer ensures scalability, affordability and reliability across the entire network. The award-winning Observer family of products combines a comprehensive management and analysis console with high-performance Probes to provide integrated monitoring and management for the entire network (LAN, 802.11a/b/g, gigabit, WAN).

Wired and wireless. Local and remote. Data and applications. Network Instruments covers it all with proven solutions that fit any network.

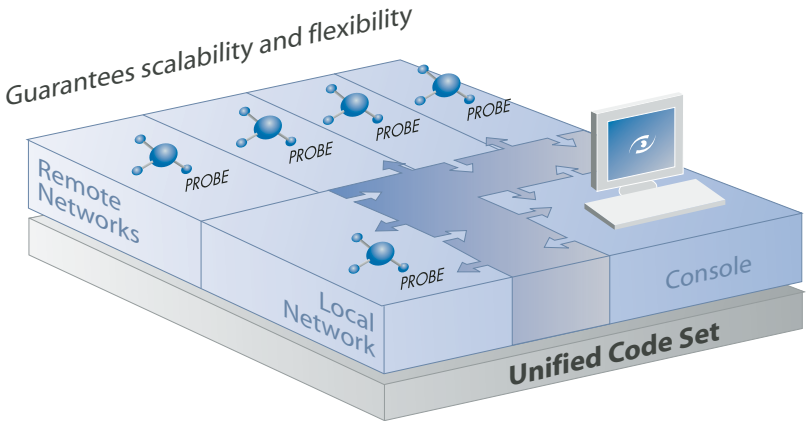
- Investment Flexibility
- Integrated Visibility
- Proactive Network Management
- Rapid Resolution
- Real-Time Application Analysis



Unified Code Set
Scalability, Flexibility, Modularity, Affordability
Two key Observer components - the console and the probe - ensure all analysis features, capabilities and enhancements are available across multiple platforms. Completely scalable, a Unified Code Set ensures analysis flexibility as your network changes.

Local/Remote Visibility
Visibility, Efficiency, Productivity, Security
Observer's distributed architecture allows integrated monitoring and management across the entire enterprise regardless of where you are located.

Multi-Topology
Adaptability, Simplicity, Transparency, Reliability
Why choose point-specific solutions when Observer covers it all? Choose one product to monitor multiple topologies–simultaneously. Observer offers analysis simplicity, identically monitoring gigabit trunked links, 802.11a/b/g connections, wide area networks and 10/100/1000 Ethernet connections.



NI-DNA *includes* a Unified Code Set

Inside Observer are two components: the console, which displays data, and the probe, which is used for data collection and processing. Since the console and the probe are derived from the same code, they work together as a seamless, integrated solution. This unique architecture ensures the entire user experience and product functionality are identical regardless of topology or location. Updates and enhancements made to Observer are made across the entire product platform. Unlike competitive offerings, Network Instruments provides a single product set to cover all components for network analysis.

Investment Flexibility

Observer's Unified Code Set offers complete investment flexibility. Regardless of your organization's size, location, or topologies, Observer can meet your monitoring and analysis needs. The Unified Code Set also guarantees scalability. As your network evolves, Observer has the architecture and product set to keep up. NI-DNA means that all products work together offering seamless visibility and ease-of-use. The flexibility of a Unified Code Set means minimal training required to monitor additional topologies, saving valuable time and money.

Network Instruments offers a complete line of high-performance probes. Regardless of topology or capacity requirements, Network Instruments probes provide a complete end-to-end solution. NI-DNA means you can place a remote probe wherever you require network visibility (WAN, wireless, 10/100/1000 Ethernet), and that you can control and monitor these probes from any location in a secure and seamless manner, viewing exactly the same interface whether local or remote.

With over 35,000 licenses sold, many network administrators already know the investment flexibility advantages of deploying Observer compared to other analyzers. Observer makes it easy to deploy an award-winning comprehensive network management solution - at a fraction of the cost of competing products.

Integrated Visibility

Network administrators can have integrated visibility over multiple topologies with Observer. Other vendors make you purchase topology-specific products, which serves no benefit and yet increases your IT budget. Observer is topology independent; with one solution, you can analyze and monitor gigabit links, wide area networks, wireless access points and Ethernet connections. The NI-DNA architecture helps you troubleshoot local and remote network problems, eliminating travel time and cost. Customizable tracking features reveal long- and short-term trends, and multiple probe or segment group reports allows you to share network visibility throughout the enterprise. Custom Reports, Ready-Made Reports and a Report Scheduler lets you deliver critical data about network health to Observer and non-Observer users alike.

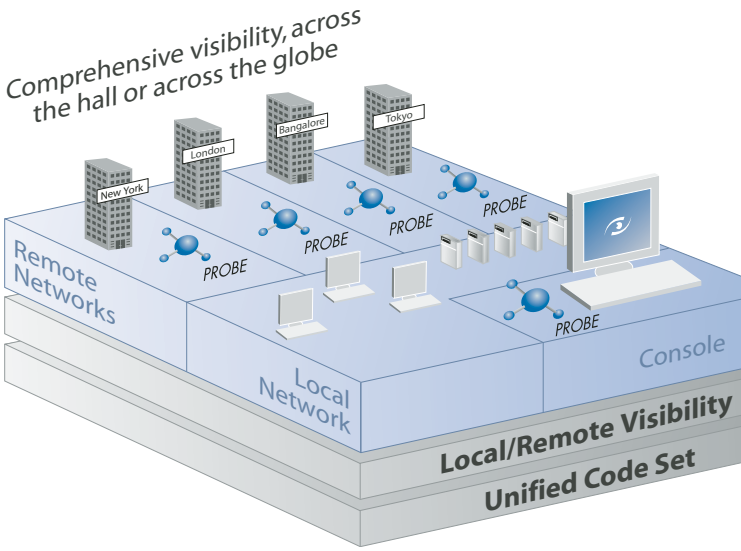
Proactive Network Management

The only thing better than prompt problem resolution is preventing problems in the first place. Through Observer you can set alarms that trigger on virtually any network condition desired. The alarms can be programmed to notify you with an e-mail or pager alert; there is even an option to automatically print a trouble ticket. Set Observer to notify your team when critical links are experiencing abnormally high utilization or error rates; have Observer alert the security team when a virus is detected. No matter what the anomaly or where you are located, Observer allows you to detect and deal with potential problems before they become real user issues.

Observer also offers insightful features to aid in network capacity planning. For example, with "What-if" Analysis you can predict network reaction to increased traffic before making costly investments. "What-if" Analysis calculates network bandwidth and response-time impact for topology and capacity changes. Comparison Analysis Reports allow you to contrast network performance against time to see if your current architecture and equipment will be sufficient in the near future. Best of all, Observer doesn't just save reports, it saves *data*, allowing you to analyze, review and check prior network conditions at any time in the future.

Comprehensive Monitoring and Performance Analysis

- Application Analysis
- Expert Analysis
- VoIP Expert
- VLAN Analysis
- Over 30 Real-Time Statistics
- Triggers and Alarms for Proactive Management
- Powerful Trending and Reporting
- SNMP Device Management
- RMON1/2 and HCRMON



Strong Return on Investment

- **Conserve Costs**
  Eliminate travel time and lower expenses by resolving remote network issues from one location
- **Watch Multiple Sites**
  Keep an eye on numerous parts of your network with concurrent interface connections
- **Collaborate to Solve Problems**
  Speed up problem resolution by allowing multiple users to simultaneously analyze the same network or segment
- **Shorten Learning Curves**
  Reduce training times by using one technology to monitor all areas of the network
- **Maximize Uptime**
  Increase data and application availability through performance analysis tools

Rapid Resolution

Observer's Distributed Expert Analysis ensures rapid diagnosis and resolution of network problems regardless of location. Whether the network you need to monitor is on the second floor, across town, or across the world, Observer delivers real-time 24/7/365 visibility and troubleshooting power. All packet capture and processing is executed by the probe; only screen updates are transmitted to the console. This saves critical network bandwidth, allows for real-time remote monitoring, and is more secure than other distributed systems which rely on probes that have no ability to analyze or process data.

For faster troubleshooting, Observer's award-winning user interface lets you navigate easily between heads-up summary displays and highly detailed databases identifying conditions and activity on your network - all in real time. For example, Observer's Drill Down features provides immediate, detailed information about a network condition. With just a few clicks you can discover and act on the source of a problem – all without the usual hassle and wasted time of multiple confirmation tests.

Network Instruments' Probes allow users to collaborate when solving problems, which can lead to faster resolution. Multiple users can simultaneously analyze the same network or segment, or share views of local conditions from separate locations. With the ability to run concurrent sessions, you can quickly identify and solve multiple problems.

Observer's Expert is designed to speed troubleshooting. With the ability to identify over 500 unique Expert Events, Observer helps both experienced and casual, "part-time" administrators solve problems more efficiently.

Real-Time Application Analysis

Quickly determine if it's a network or application problem with Observer's Application Analysis. With other network analyzers, you must purchase additional, incompatible products to measure application response time. Observer lets you monitor both network and application performance from the same program. Track application session flows, response time, and failed transactions along with statistics on network errors and delay. Additionally, key protocol-based metrics are displayed to provide an up-to-the-minute view of application performance. Automatic server and application discovery simplifies setup. Once a problem is found, Connection Dynamics lets you drill down and see session-by-session communications. With Observer there is no longer a need to purchase a separate application monitoring system.

End-to-End Network Management

Local Area Network Analysis

- 10/100/1000 Ethernet; Token Ring; FDDI
- Track Internet usage to enforce network use policies
- Decode and analyze over 500 protocols in real-time
- Configure alarm notifications on specific network events
- Differentiate between network and application problems

Wireless Networks

- Complete 802.11 a/b/g monitoring analysis
- Plan deployments using wireless site survey capabilities
- Monitor wireless from fixed consoles/probes or mobile laptops and tablet PCs
- Protect wireless networks with real-time alerts and security measures
- Watch for rogue access points and security vulnerabilities

Gigabit Networks

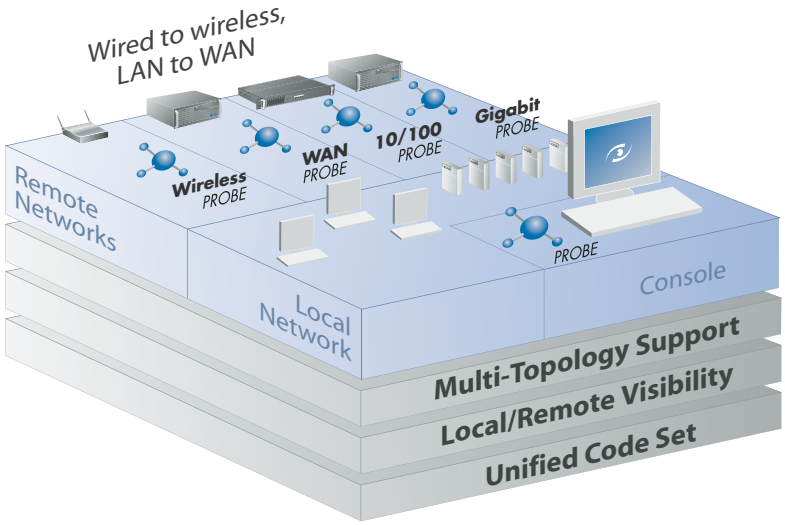
- SX/LX/TX
- Monitor gigabit links at full-duplex speeds
- Watch all gigabit data flow without disruption of the network
- Evaluate vital network statistics on trunked links
- Capture network anomalies with high-capacity probes designed for data mining

Wide Area Network Analysis

- T1/E1 and DS3/E3/HSSI
- Examine bandwidth usage to understand network inefficiencies, QoS and SLA performance
- Report on WAN problems and network trends in detail
- Solve WAN issues with Expert Analysis tools
- Review real-time error displays for faster problem resolution

NI-DNA *provides* Local/Remote Visibility

Observer's unique architecture delivers both local and remote visibility. The Observer console includes a local probe for local analysis and connects to remote probes. No longer do you need to purchase separate applications for local and distributed analysis, as NI-DNA provides a single application designed for both. Regardless of whether a segment is located on the 2nd floor, across town or across the world, NI-DNA offers monitoring and troubleshooting capabilities in real-time for fast problem resolution.



NI-DNA *delivers* Multi-Topology Support

Observer is a heterogeneous network analyzer, allowing end-to-end network management regardless of topology. With the NI-DNA architecture, Observer's probes simultaneously collect and process data from multiple network interfaces monitoring the same or different topologies. Observer's single user interface can manage multiple gigabit links, wireless connections, 10/100/1000 Ethernet and wide area networks-all at the same time. NI-DNA eliminates the need for topology-specific products, thereby reducing training times, increasing productivity and delivering a stronger return on investment.

Commitment to Product Innovation

Since 1994, Network Instruments has brought market-leading innovation, product enhancements and ongoing development to the networking world. In fact, Network Instruments created the first affordable Windows-based analyzer and was the first to market a wireless protocol analyzer supporting 802.11a and 802.11g. The company also has provided fully-scalable, distributed solutions to customers since 1995. Network Instruments continues to provide management solutions today for tomorrow's complex network configurations.

NI-DNA Advantages	End-User Benefits
Proven, Reliable Solutions	• 35,000+ Licenses Sold and Supported • Mature products with comprehensive features • Stable, customer-driven solutions and support
Clear, User-Friendly Interface	• One interface for multiple topologies • Troubleshoot quickly and intuitively with drill-down capabilities • Simple transition from other analyzers
Scalable Architecture	• Simplified control of local and remote networks • Buy what you need, when you need it • One toolset for all locations and deployments
Unified Solutions (LAN, 802.11a/b/g, WAN, Gigabit)	• Better analysis and planning • Faster troubleshooting • Dramatically lower IT training and expenses
Full Line of Remote Probes	• Allows for full analysis from distant locations • Select probes to fit any topology/infrastructure • Select hardware or software probes to fit needs
Expert Events (500+)	• Speed troubleshooting • Improve data and application management • Use Experts to analyze any topology
Detailed Trending and Reporting	• Anticipate and avoid problems • Plan and analyze potential network changes • Justify network capacity upgrades
Real-Time Dashboards	• Proactive performance management • Easier problem identification • At-a-glance network control
Configurable Event Triggers and Alarms	• Be the first to know of network problems • Identify potential problems as thresholds are broken • Launch troubleshooting functions automatically

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, Toronto and multiple cities throughout the United States with 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.

NI University

Network Instruments offers various training sessions across the country through NI University. Courses are designed to help administrators effectively monitor, troubleshoot, optimize and maintain their networks from end-to-end by giving both theory and practice in analyzing networks. Please contact Network Instruments for more information on training classes and schedules or go to:
www.networkinstruments.com/training

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