

Capture-to-Disk Terabytes of Data at Gigabit Line Rate

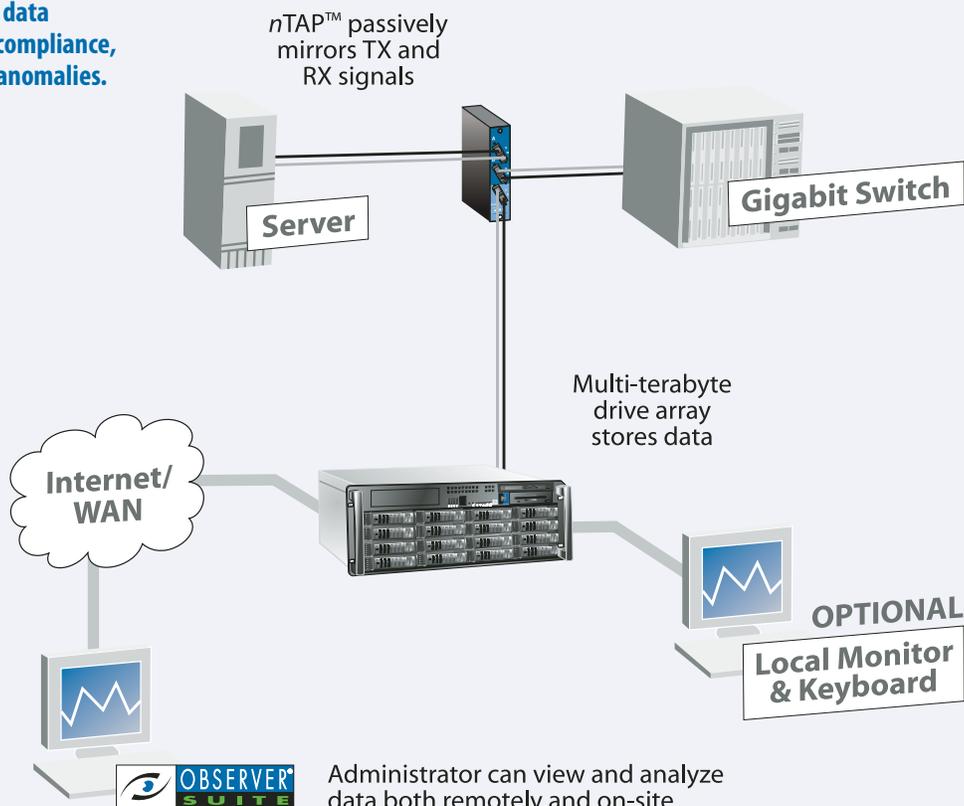
Capture Terabytes of Traffic at Gigabit Line Rate for Data Mining

Today's network problems have become more subtle and complex. Enterprise IT professionals at transaction- and data-driven corporations deal with intricate network issues while continuing to worry about computer hacking, intellectual property theft, and complying with industry regulations. To solve these problems, administrators need the ability to capture enormous amounts of network traffic directly to disk for comprehensive analysis. With gigabit line-rate capture-to-disk technology, up to 8 terabytes (TB) worth of storage, and an enhanced time-based navigation utility, the Network Instruments® GigaStor is a cost-competitive, reconstructive network analysis appliance ideal for network professionals requiring the full story of what has happened on the network.

GigaStor Advantages

- Captures hours, days, even weeks worth of data
- Monitors up to eight ports for any combination of SPAN sessions, full-duplex links, and trunked links
- Isolates network issues quickly with a unique time-based navigation utility
- Performs analysis on-site at probe, eliminating the need to transfer large amounts of data to console
- Allows multiple users to analyze the same data efficiently
- Includes in-depth VoIP analysis, with over 20 metrics to track call quality
- Supports network forensics

The GigaStor is ideal for data mining, data retention compliance, and capturing network anomalies.



The GigaStor combines a multi-terabyte, high-performance RAID array with full-duplex gigabit line-rate capture-to-disk, and a simple time-based navigation utility in an easy-to-deploy unit.

High-Performance

Capture-to-disk at 250 MBps (2000 Mbps)

- High performance RAID array permits continuous capture of live traffic at full-duplex gigabit line rate.

Monitor up to eight ports

- The GigaStor is available in four or eight ports. With Gen2™ capture technology, you can analyze data by individual port or by select ports in aggregate. Ports can support various SPAN sessions, full-duplex connections, and trunked links. For example, if a GigaStor is configured with eight ports, you can monitor two SPAN sessions, two trunked links, and a full-duplex connection.

Time-based navigation utility

- Navigate down to the nanosecond with a simple time-based navigation utility. For example, if an employee complains of a problem that happened around 10 AM, you can easily isolate a time interval (9:50 AM to 10:10 AM for instance) to capture that problem and zoom in for detailed analysis.

Expert analysis

- The GigaStor performs real-time Expert processing at the probe to identify problems and possible solutions. To minimize network overhead, all processing is done at the GigaStor and only screen updates are transferred to the console. With competitive offerings, you would have to download all the stored information for the time interval you need to analyze to a console.

64-bit Windows

- The GigaStor has a 64-bit core, utilizing the latest technology and providing tremendous speed, advantages over similar 32-bit systems.

Flexible filtering technology

- Filter and mine network data by MAC stations, IP stations, IP pairs, TCP ports, UDP ports, VLANs, and physical ports. For example, if someone complains about a slow Oracle transaction, you can mine through all the Oracle protocols around that time. Being able to drill down into individual transaction metrics helps to immediately pinpoint the problem.

Troubleshooting power

- The GigaStor captures all network data. Any Expert Observer and Observer Suite console on the network can access that data for analysis. Therefore, multiple users can connect into and analyze the mined data independently. This capability can boost troubleshooting power by allowing multiple users to work in collaboration or by relying on individual users to monitor different network events.

High Capacity

Data retention

- Capture up to 2 TB, 4 TB, or 8 TB of network data depending on configuration. Hours, days, or even weeks worth of data can be stored depending on utilization.

Industry-leading memory buffer

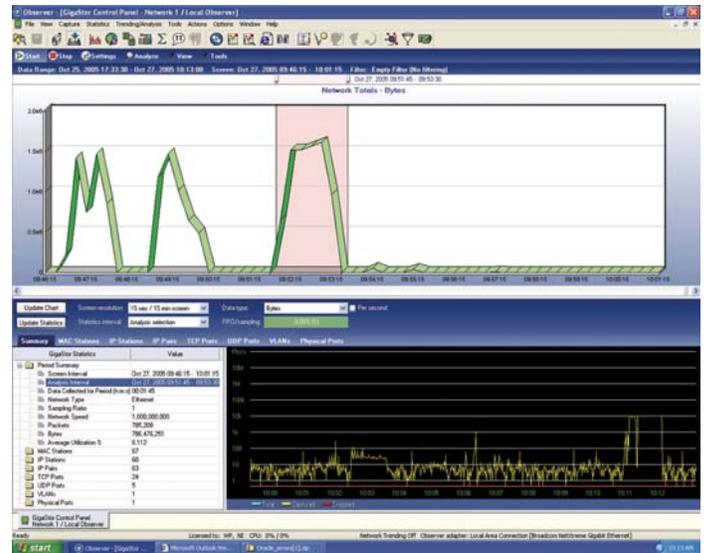
- The GigaStor's 64-bit core permits up to a 124 GB memory buffer, the largest in the industry.

Network Forensics

The GigaStor plays a significant role in data mining, network forensics, data retention compliance, and transaction-heavy organizations. For example, the GigaStor not only shows that communications took place, it can also reconstruct the mined data—providing hard evidence such as phone conversations, web pages, instant messages, and e-mails.

Comprehensive VoIP Analysis

Inside every GigaStor is an enterprise-strength VoIP Expert which displays over 70 VoIP-specific metrics, voice quality scoring, precedence (QoS), and jitter levels.



The GigaStor's convenient interface allows you to isolate a time period to quickly identify and resolve network issues on captured traffic.

Easy-to-Deploy

The GigaStor can be easily mounted in a standard rack unit. By utilizing the included nTAPS, you can insert and remove the GigaStor around the network without disruption of flow. The GigaStor reports back to Expert Observer and Observer Suite consoles for in-depth analysis. If desired, it can be configured as a local console for on-site analysis. And because the GigaStor integrates into Network Instruments' Distributed Network Analysis (NI-DNA™) architecture, it works seamlessly with other Network Instruments products.

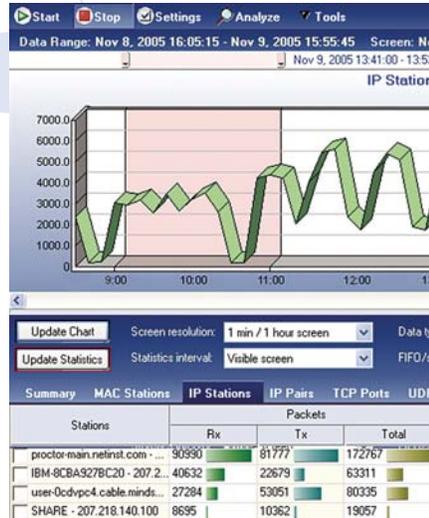
The GigaStor reports to any Expert Observer and Observer Suite console located on the network for the most comprehensive real-time analysis in the industry.

Observer Features

- Over 550 protocol decodes
- Nanosecond resolution
- A graphical filter rule editor to easily create complex filters
- Triggers and alarms for immediate alerts on network activity or errors
- Application analysis statistics, including response time and total/failed transactions for common applications such as SQL, MS Exchange, Oracle, VoIP, and DNS
- Over 550 real-time Experts
- In-depth VoIP analysis, including call detail records, aggregate call summaries, QoS, MOS, and R-factor
- Real-time statistics on network activity such as bandwidth utilization, top talkers, VLANs, and Internet use
- Data stream reconstruction, including web pages, e-mails, and instant messages
- MultiHop Analysis tracks conversations through up to 10 network segments, showing packet loss along the way
- Automated and customized network trending and reporting
- Statistics and packet captures/decodes that adhere to RMON 1, RMON 2, and HCRMON standards

The time-based navigation utility found in the GigaStor provides IT professionals with the means to effortlessly navigate through massive amounts of data to quickly resolve network issues. For example...

1 An IT administrator is asked to investigate if an employee is visiting prohibited web sites during business hours. Rather than beginning a packet capture and monitoring the employee's ongoing Internet activity, the IT administrator uses the GigaStor to quickly isolate the employee's recent web activity. The administrator starts by selecting a two-hour time period of network data. From there the administrator sorts through all the data by the employee's IP station and Internet traffic.



2 The filtered data reveals all sites visited by the employee. The IT administrator can reconstruct any of these web visits by right-clicking on any site address and selecting "Stream Reconstruction".

The screenshot shows a detailed table of network traffic data with columns for Station, Protocol, Status, Packets, Bytes, Response Time, and Network. The table lists various IP addresses and their associated traffic statistics.

| Station | Protocol | Status | Packets | Bytes | Response Time (ms) | Response Time (sec) | Network |
|-----------------------------|----------|--------|---------|-------|--------------------|---------------------|---------|
| procto-main.netinst.com | HTTP | 200 | 111 | 5984 | 19488 | 0.897 | 8.895 |
| IBM-8CBA9278C20 | HTTP | 200 | 10071 | 10274 | 30.818 | 0.030 | 28.274 |
| user-0cdvpc4.cable.minds... | HTTP | 200 | 2293 | 19891 | 7.381 | 0.028 | 36.118 |
| SHARE | HTTP | 200 | 77 | 3025 | 8207 | 27.743 | 15.608 |

3 Inside Stream Reconstruction a summary of web traffic activity appears. Each stream includes an html file. By double-clicking the link...

The screenshot shows a 'Stream Reconstruction' window displaying HTML code for a web page. The code includes headers, meta tags, and a link to a file named 'file_data_ThumbFile.html'.

```

<DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
<title>Main Page - Play Online at Full Tilt Poker Main/Title>
<meta http-equiv="content-type" content="text/html; charset=iso-8859-1">
<meta http-equiv="subject" content="Full Tilt">
</html>
    
```

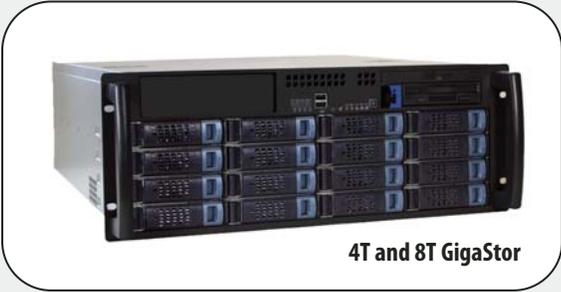
4 ...the GigaStor can recreate the web page. This provides the IT administrator with the data to verify or counteract the claim that the employee is visiting prohibited web sites.



The GigaStor offers a unique troubleshooting advantage by allowing you to mine through historical network data. Therefore, if someone has a complaint, a general idea of when the problem occurred is all that's needed to isolate the issue. There's no need to recreate the problem or attempt to catch it once again. Combined with the troubleshooting power of an Observer console, the GigaStor saves valuable time and resources, helping resolve problems quickly and effectively, including all the tools required for in-depth network analysis.



2T GigaStor



4T and 8T GigaStor

For additional technical specifications, please visit our web site at: www.networkinstruments.com/products

TECHNICAL SPECIFICATIONS

For the GigaStor 2T:

Platform 3U Rack Mount Probe

System Specs A complete appliance, running 64-bit Windows XP
 High-performance RAID array
 Includes 10/100/1000 Ethernet Management NIC
 Utilizes Gen2 Capture Card technology
 Weight: 53 lbs (24.1 kg)
 Dimensions:
Standard: 16.9 in. (W) x 5.2 in. (H) x 25.7 in. (Mounting Depth)
 (Full probe depth with handles: 27.5 in.)
Metric: 42.2 cm (W) x 13.2 cm (H) x 65.3 cm (Mounting Depth)
 (Full probe depth with handles: 69.9 cm)

For the GigaStor 4T and 8T:

Platform 4U Rack Mount Probe

System Specs A complete appliance, running 64-bit Windows XP
 High-performance RAID array
 Includes 10/100/1000 Ethernet Management NIC
 Utilizes Gen2 Capture Card technology
 Weight: 85 lbs (38.6 kg)
 Dimensions:
Standard: 19 in. (W) x 6.9 in. (H) x 26 in. (Mounting Depth)
 (Full probe depth with handles: 28.3 in.)
Metric: 48.3 cm (W) x 17.5 cm (H) x 66.0 cm (Mounting Depth)
 (Full probe depth with handles: 71.9 cm)

Includes nTAPs to Ensure Complete Full-Duplex Captures

To ensure full-duplex, wire-speed gigabit analysis, every GigaStor is equipped with multiple nTAPs (depending on configuration), which provides a copy of all the gigabit traffic traversing the links under test. In the case of optical networks, the nTAP splits the optical signal, sending one signal to the network and the other signal to the analyzer. In the case of copper networks, the nTAP electronically duplicates the gigabit signal, sending one signal to the network, and the other signal to the analyzer. With an nTAP, you can see the whole picture, and you never have to worry about interfering with network performance.

Powered by Gen2 Technology

All Network Instruments' full-duplex gigabit products include the Gen2 Gigabit Capture Card, exclusively designed by Network Instruments. Gen2 technology offers many advantages for maximizing gigabit analysis performance. For example, the card takes full advantage of 64-bit Observer to guarantee the fastest real-time Expert processing and the largest capture buffers (up to 124 GB) available in the industry. The Gen2 card delivers analysis port flexibility with the ability to monitor up to eight ports for any simultaneous combination of SPAN sessions, full-duplex connections, or trunked links. The card also uses SFP technology so you can easily switch between monitoring copper or optical links. Driver updates can be implemented in the field with a simple downloadable firmware patch, eliminating the need to swap cards or systems. Best of all, the Gen2 card ensures accurate timestamping across multiple gigabit links, relying on one card (one clock) with nanosecond resolution to timestamp all of the data across each link.



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 probes and network TAPs 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 a 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, Munich, 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.



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