Brochure

VIAVI Observer
GigaStor
Post-event analysis
and security forensics

Rewind. Review. Resolve.

Stop Missing Critical IT Service Events

Observer® GigaStor™ is instrumental in solving IT service delivery issues whether related to network and application anomalies or security threats. The undisputed leader in packet-based forensic analysis, GigaStor eliminates the time-consuming task of recreating problems for troubleshooting or investigation. Just hit rewind to go "back in time" and review past network activity. Then, navigate to the exact moment a problem was detected or a malicious event is suspected to see detailed network conversations at the conversation level before, during, and after the occurrence.

Key Features

Time Navigation Interface

Simplify problem isolation with GigaStor's unique time-based navigation system. Identify time of problem occurrence, and then navigate down to the nanosecond for quick and accurate root-cause location. GigaStor also offers a big-picture view with a macro timeline graph for proactive management.
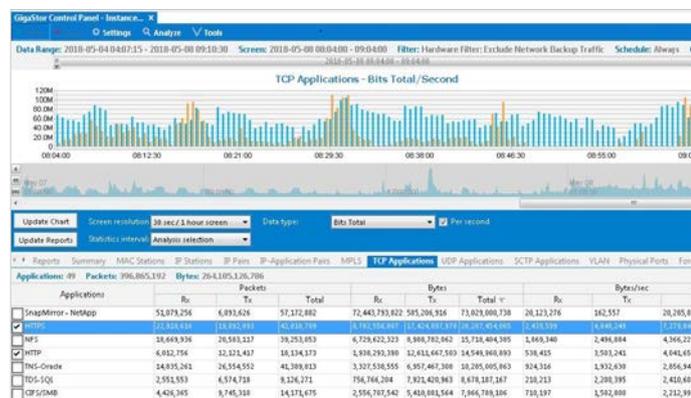
"In the financial industry, losing any data is a big deal. That's why we use Observer GigaStor to ensure we see everything."

- Chicago Board Options Exchange

Root-Cause Analysis

Find the problem through root-cause analysis, minimizing downtime and user impact. From an enterprise-wide view, you can track numerous operational metrics including bandwidth utilization, network top talkers, application metrics, and even VoIP quality statistics.


High-Speed Packet Capture

The GigaStor's custom Gen3 capture card provides the fastest write-to-storage performance and mining speeds in the industry. Designed to integrate nearly all core packet processing and analytics functionality in hardware, GigaStor keeps up with the world's fastest enterprise networks. The advanced analytics and capture engines process, index, and then store each packet providing detailed breakouts of all network conversations and transactions while also making every packet retrospectively available for advanced application troubleshooting and security breach remediation.
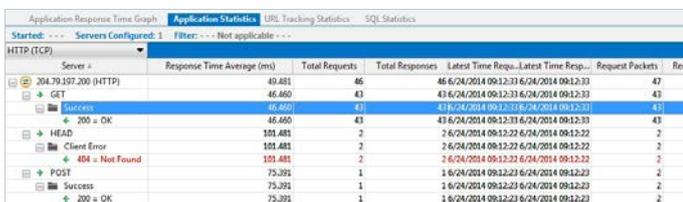
Security Forensics

GigaStor serves as a network eyewitness, determining whether a problem relates to the network, security, or application. It passively captures and archives all data traversing the network for later analysis and reporting. Beyond rapid application troubleshooting, GigaStor is ideal for augmenting existing security initiatives and can provide crucial operational information for compliance objectives. It can also aid in determining which assets and data were compromised in the event of a security breach, making it ideal for post-event investigation and clean-up.
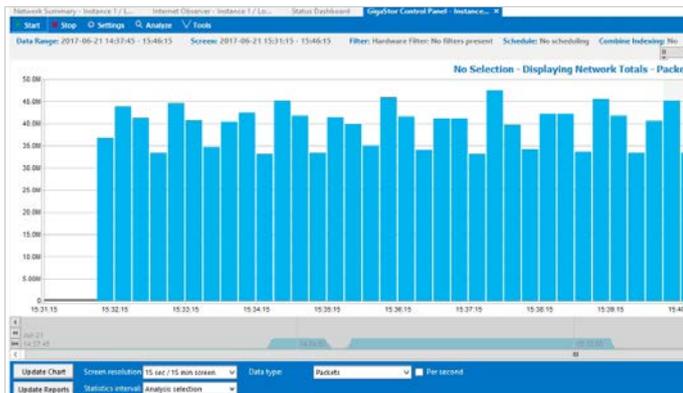
Application Analysis

GigaStor provides detailed intelligence for many well-known and user defined custom applications. Beyond basic response time, using expert analytics offers awareness into actual service error, reason, and response codes held within the payload, invaluable when the issue ultimately resides with non-network or operations teams. Together these capabilities mean fast problem resolution and improved user experience.

Fault Tolerant Designs

GigaStor rack-mounted models are designed with tuned components and enclosures along with the custom Gen3 capture card. The GigaStor appliance family offers transaction visibility at up to 100 Gb network interface speeds and more than a petabyte of data storage. All this while supporting 100% duty cycle, 365X24X7 traffic capture for five years.

Portable Troubleshooting Flexibility

GigaStor Portable is unique in the industry, a compact long-term packet capture, analytics and storage solution that can be moved anywhere the service issue is located. Built with high performance SSD drives, GigaStor Portable leverages the same advanced, custom Gen3 capture card and user interface as the rackmount with support for networks up to 100 Gb. Take the power of back-in-time analysis wherever intelligent network troubleshooting is required with GigaStor Portable.

Features and Benefits Summary

GigaStor is the perfect solution for troubleshooting service issues, security investigations, and regulatory compliance reporting. It ends finger pointing between network and application teams providing fast and accurate problem identification and resolution while augmenting real-time security efforts—offering corporate-wide benefits and advantages. Features and benefits include:

- Independently validated line-rate capture performance at 40 Gbps with support for 100 Gb networks; accelerates service anomaly resolution and security investigations

- Back-in-time functionality means never having to wait for a service anomaly to repeat before resolving

- Scalable to more than a petabyte of storage capacity enables extended visibility into past service delivery health; AES-256 data-at-rest encryption ensures regulatory data privacy compliance

- Expert analytics offers detailed network and application intelligence including deep-packet inspection; ideal for in-depth transaction-level awareness into service and potential security issues

- Fault-tolerant custom design supports five years of uninterrupted, 100 percent duty-cycle capture without dropping a single packet

> "Observer lets us quickly isolate and resolve routing and retransmission issues with the e-mail server. Without GigaStor, we could have spent hours trying to replicate the slowdown."
>
> **- Central Du Page Hospital**

Observer Overview and GigaStor Integration

Observer is a comprehensive network performance monitoring and diagnostics (NPMD) solution that offers valuable insight and assistance to network, operations, and security teams.

As the central dashboard and reporting resource, Observer Apex serves as the launch point with pre-engineered workflows for navigation into either GigaFlow or GigaStor for real-time or historical perspectives into service health.

Observer Apex

Observer GigaStor
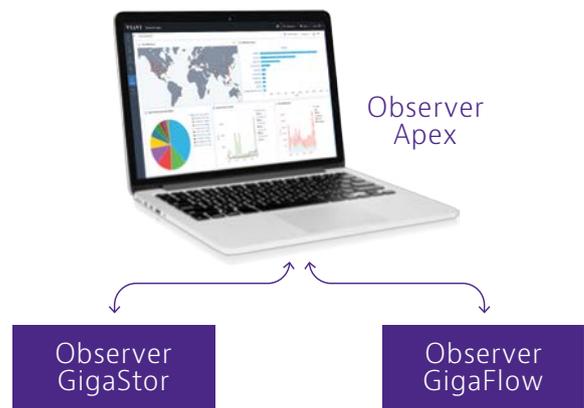
Observer GigaFlow

As an integral part of the Observer, GigaStor plays a pivotal role in providing detailed transaction and network level conversations. Beginning at an Apex dashboard, IT teams can easily navigate to the root cause of the service anomaly or security concern. Then investigate—if required—by mining the relevant conversations from GigaStor.

Observer Platform Overview

Observer is ideally suited for satisfying business goals and overcoming challenges across the entire IT enterprise lifecycle.

Observer GigaStor Models

Choose the right GigaStor for your organization's size and needs. An array of options in an assortment of form factors, network speeds, port counts, and capacities are available.

Deployment	Software Edition (Virtual Machine)	Portable for Remote Troubleshooting	Small Data Center or Network Edge	Medium Data Center
Monitoring Interfaces	–	8 x 1 Gb/10 Gb 2 x 40 Gb 2 x 100 Gb	4 x 1 Gb	4 x 1 Gb/10 Gb
Base Storage	256 GB – 64 TB	8 TB	16 TB	32 TB
Ingress Performance	–	20 Gbps	3 Gbps	6 Gbps

Deployment	ObserverONE	Medium/Large Data Center	Large Data Center	Multiple Large Data Centers
Monitoring Interfaces	8 x 1 Gb/10 Gb	8 x 1 Gb/10 Gb	8 x 1 Gb/10 Gb	8 x 1 Gb/10 Gb 2 x 40 Gb 2 x 100 Gb
Base Storage	96 TB	96 TB	192 TB	288 TB
Storage Capacity Upgrades (Via optional JBODs)	—	—	384 or 768 TB	576 TB or 1152 TB
Ingress Performance	10 Gbps	10 Gbps	20 Gbps	40 Gbps

VIAVI Solutions

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