VIAVI Solutions

**VIAVI Observer**

Network Performance Monitoring and Diagnostics

Solve Performance Problems and Strengthen IT Security Initiatives

**The Observer Advantage**

VIAVI Observer® is a comprehensive network performance monitoring and diagnostics (NPMD) solution developed to ensure peak IT service delivery both on-premises and within a cloud or hybrid IT environment. It also strengthens IT security with advanced intelligence and active defense capabilities like threat hunting.

Using multiple data sources including wire data and enriched flow, Observer provides situational awareness with simple, clear dashboards and the industry’s first End-User Experience Score. Enriched flow records provide details on traffic and supporting infrastructure in the context of user specific information. Observer is the first NPMD solution to combine these two powerful sources of data to aid NetOps and SecOps teams.

**Introducing Observer v18**

Now, with the release of Observer v18, packet and enriched flow data now coexist in the Observer Apex. This means all levels of expertise access to various tiers of IT visibility, using their preferred data sources for QoS measurements, baselining, capacity planning, and more. This single, integrated interface improves operational efficiencies through boosted data quality, intuitive visualizations, and simplified workflows for any level of IT user.
**Apex**

**Centrally Manage End-User Experience, Performance and Security**
Observer Apex offers comprehensive real-time visibility into critical IT resources, whether in the data center core, network edge, or cloud. It provides a centralized point to troubleshoot performance issues with advanced End-User Experience Scoring and out-of-box workflows. For network security, Apex strengthens defenses aiding investigations of incidents of concern (IOC) or confirmed security breaches while providing in-depth post-event forensics. It also offers profiling of each device and host so IT teams can quickly assess what is communicating on the network and what they are saying while also enabling active defense threat hunting.

**Features and Benefits**
- User-defined dashboards enable integrated, enterprise-wide situational awareness into service delivery health and security posture
- Threat maps offer real-time insight into current security attack vectors with integrated workflows
- End-User Experience Scoring, with domain level root cause detail, accelerates service troubleshooting at the individual transaction or site level
- On-demand application dependency mapping delivers comprehensive multi-tier application understanding
- Intelligent analysis and long-term retention of high-fidelity data facilitates forensic investigations
- Industry first synthesis of user, device, host, and infrastructure information into a single record linked to wire data enables advanced profiling and empowers threat hunting

**GigaStor**

**Capture Critical IT Service Events**
The undisputed leader in back-in-time analysis, Observer GigaStor™ eliminates the time-consuming task of recreating problems for troubleshooting. Go back in time to review past network activity. Navigate to the exact moment of any service anomaly to see detailed, packet-level views before, during, and after the occurrence. GigaStor packet-based analytics offer robust data intelligence for regulatory compliance, security forensics, and network troubleshooting. GigaStor is available in rack-based and portable form factors or as software for cloud and hybrid IT applications.

**Features and Benefits**
- Independently validated line-rate performance capture to 60 Gbps with support for 100 Gbps networks for quick service anomaly resolution and security investigations
- Back-in-time functionality eliminates waiting for an intermittent issue to repeat before resolution
- Scalability to more than a petabyte of 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 insight including deep-packet inspection 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
**GigaFlow**

**Enriched Flow Intelligence for NetOps and SecOps**

Observer GigaFlow provides user-focused insight for managing performance and security challenges by combining previously siloed data sets into a single enriched record. The aggregated intelligence provides immediate understanding of end user, application and infrastructure behavior and performance across virtual, cloud, and traditional networks and expands edge visibility into branch offices and remote resources.

This provides in-depth detail for security and performance investigations on network device types, connectivity, traffic control, usage patterns and behavior down to the individual user and session.

**Features and Benefits**

- End-user experience and infrastructure insights provide situational awareness for IT stakeholders driving better decisions for optimizing service delivery and assessing security challenges
- High-fidelity forensic visibility into every network conversation over time reducing mean time to resolution
- A new, easy wizard-driven configuration method for Threat Profiles allows you to quickly and confidently define the hosts and services you want to monitor for suspicious traffic patterns
- Cloud and virtual device insight deliver real-time understanding of performance in virtual, cloud, and remote environments

By compiling Layer 2 to Layer 3 insights into a single enriched flow record, Observer can produce unique, interactive visualizations that illustrate the relationships between User, IP, MAC, and application usage in the network. A NetOps or SecOps user can simply enter a name enter in a username and immediately find all devices, interfaces, and applications associated with it. Finding out what’s connected and who’s communicating across your network has never been easier.

An IP Viewer that lets you navigate between User, IP, MAC Address, and application usage in the network.
VIAVI Observer Overview

Observer is a network performance monitoring and diagnostics (NPMD) solution with active defense security capabilities like threat hunting and profiling giving NetOps and SecOps teams actionable operational information on IT resource health and status.

Leveraging high-fidelity data from GigaFlow and GigaStor, Apex serves as the launch point for fast troubleshooting workflows or security investigations.

Putting Flow and Wire Data together with Apex’s Workflows

Observer v18 delivers unification of packed and enriched flow data with optimized workflows and powerful analytics. As a result, the complementary nature of wire data and flow data becomes clear:

1. **Wire Data from GigaStor**: Packet-level wire data remains the ultimate source of end-to-end visibility and the best source for accurate measurements of end-user experience and high-fidelity forensic analysis.

2. **Enriched Flow from GigaFlow**: By collecting information from the devices that see that data as it traverses the network, additional information about the user, the physical connectivity, traffic classification, prioritization (or blocking), behavioral patterns, and other critical details can be observed.

With data visualizations and stream-lined workflows, Apex pulls together information from GigaStor and GigaFlow for comprehensive views of performance and threat landscapes across your environment. Pin-point problems with patent-pending End-User Experience Scores and real-time Threat Maps for actionable insights that decrease time to know and time to resolution.

By combining wire data and flow based analyses, Observer Apex offers SecOps and NetOps teams with comprehensive visibility into their network, allowing them to manage daily operations, mitigate risk, and solve problems faster than ever before.