VIAVI Observer
Network Performance Monitoring and Diagnostics

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. Cloud-based service deployments, complex multi-tier applications, remote employees, and customer expectations of anytime, anywhere availability of IT services make performance monitoring difficult.

Observer helps IT teams overcome these challenges to effectively manage and optimize services. 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.

With Observer, teams can more effectively:
- Manage service delivery with multi-dimensional end-user experience scoring; accelerate resolution with problem domain awareness—network, server, client, or application
- Streamline troubleshooting with site or pre-engineered workflows
- Gain global IT operational awareness with interactive dashboards and real-time alerts
- Baseline web or SaaS-based services and supporting link performance
- Proactively test critical web-based apps, network, and VoIP
- Resolve security breaches with reliable, packet and flow forensic analysis
- Tune application or service performance and optimize hybrid IT investments
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.

**Features and Benefits**

- Multi-Dimensional End-User Experience Scores take the guesswork out of TCP-based network troubleshooting at the individual and aggregated dashboard level
- Dual site-based geolocation or technology-based starting points offer direct paths to problem resolution
- Out-of-the-box workflows deliver actionable insight into network, application, and unified communications performance to reduce finger pointing in three steps or less
- On-demand application dependency mapping enables fast multi-tier application visibility with no configuration required
- Custom dashboard builder enables logical, aggregated, user-defined views into service delivery health and status
- Integrates with GigaFlow for in-depth, end-user experience details, device profiling and threat identification

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, or for investigating possible security threats. 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 offers 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 40 Gb with support for 100 Gb networks for quick service anomaly resolution and security investigations
- Back-in-time functionality eliminates waiting for an intermittent issue to repeat before resolving them
- 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 of user, machine, network and application metrics 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.

GigaFlow collects unaltered flow data and stitches and structures multiple data sources (flow, SNMP, user identity, and session syslogs), delivering enhanced end-user experience insight with enriched high-fidelity forensics. 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 in-depth 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 to support performance and security investigations reduces mean time to resolution
- Advanced service path visibility ensures immediate problem domain isolation across a complex hybrid IT environment
- Automated threat assessment strengthens defense through immediate identification of rogue activity and unauthorized devices
- Cloud and virtual device insight deliver real-time understanding of performance in virtual, cloud, and remote environments

ObserverLIVE

Active Testing for Optimal End-User Experience

ObserverLIVE™ is a SaaS-based offering that complements Observer on-premises monitoring capabilities via ongoing, proactive testing of critical web-based apps, VoIP, and network links. It also solves individual user complaints with on-demand, remote diagnostics. ObserverLIVE detects and streamlines the triage and resolution of user-experience issues in a cloud or hybrid IT environment.

Features and Benefits

- Rapidly solve end-user service problems with on-demand, ad-hoc, remote diagnostic functionality independent of user location
- Achieve global 24x7x365 service availability validation with real-world synthetic transactions to SaaS and internally hosted web applications
- Quickly isolate service problem domain to application, network, or server for streamlined IT team processing escalation and resolution
• Confirm acceptable connectivity between data centers, branches, and remote user access through open-ended link assessments
• Verify VoIP service uptime and quality between test endpoints or handsets by completing periodic, repeated, simulated calls including setup, data transmission, and teardown
• Confidently deploy new services globally, migrate apps to the cloud, or upgrade network capacity with automated performance KPI baselining insight
• Improve tier 3 support efficiency by expanding problem-solving capabilities of all network and operations engineers and techs
• Verify SLA agreements with carriers, MSP, and third-party applications with open-ended synthetic testing

Analyzer

Powerful Network Performance Analytics
Observer Analyzer integrates with GigaStor and Apex to increase NPMD capabilities. Analyzer is used with GigaStor for long-term data capture and in-depth analysis of historical events, forensics analysis, and stream reconstruction. Analyzer is paired with Apex to deliver packet-level details, high-level dashboarding, long-term reporting, and enterprise-wide alerting.

Features and Benefits
• Advanced, built-in analytics automatically detect service anomalies to simplify network troubleshooting
• Contextual application analysis helps reduce downtime and increase productivity
• Expert analysis tracks port-based protocols for slow response and differentiates between network and application problems with local traffic and WAN/Internet traffic distinctions

VIAVI Observer Overview
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, Apex serves as the launch point with pre-engineered workflows for navigation into either GigaFlow or GigaStor offering real-time or historical perspectives into service health.

Observer Apex is ideally suited for satisfying business goals and overcoming challenges across the entire IT enterprise lifecycle – whether managing IT initiatives/daily operations, mitigating the risk of change and unexpected events, or solving performance and security issues.