

# Gigamon Deep Observability Pipeline

## Unify and Protect Your Hybrid Cloud Infrastructure

As organizations accelerate their migration to multi-cloud environments to support modern application requirements and respond to evolving business needs, they face increasing complexity in securing and managing their hybrid cloud infrastructure. While public cloud adoption offers agility and scalability, it also introduces new security challenges.

Maintaining a consistent security posture across multiple cloud platforms and on-premises environments is difficult, especially given the rise of sophisticated threats like ransomware and data exfiltration.

Traditional security and observability tools often struggle to provide adequate visibility into complex, hybrid cloud environments. With the majority of web traffic now encrypted, organizations also face the challenge of detecting hidden threats within encrypted communications. Additionally, the lateral movement of threats within and across networks represents a significant risk.

The Gigamon Deep Observability Pipeline addresses these challenges by providing unparalleled visibility into all network traffic. Our solution goes beyond traditional monitoring by providing deep insights into network behavior, enabling organizations to identify and respond to threats and performance bottlenecks more efficiently and effectively.

By extracting critical telemetry data directly from network traffic and efficiently delivering it to security and observability tools, we empower organizations to eliminate security blind spots, optimize network traffic, and reduce tool costs so they can better secure and manage their hybrid cloud infrastructure.

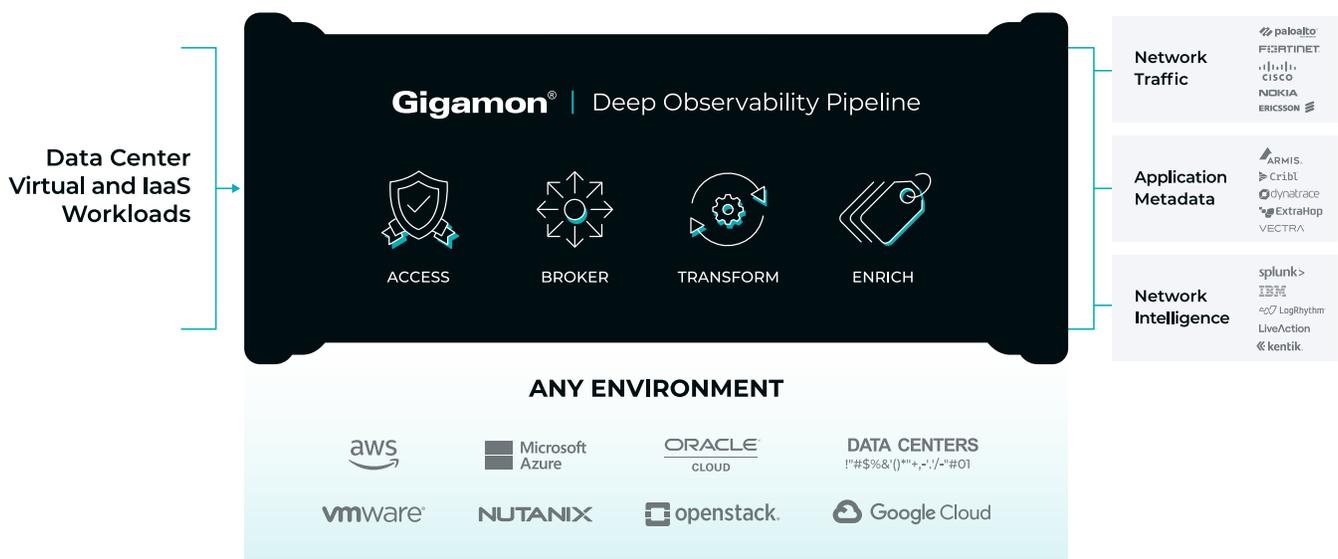


Figure 1: The Gigamon Deep Observability Pipeline acquires data-in-motion from any source and sends actionable network-level intelligence to any security or observability tool.

	FEATURES	BENEFITS
<b>Access</b>	Traffic acquisition from any VM, container, or physical network infrastructure; Gigamon Automatic Target Selection dynamically adapts to changes in VM or container instances and locations	Achieve complete visibility into North-South, lateral East-West, and container traffic across your hybrid cloud infrastructure
<b>Broker</b>	Send network traffic packets or metadata to any security, observability, or monitoring tool running on any platform	Extend on-premises security and compliance controls to the cloud
<b>Transform</b>	Filtering, packet de-duplication, advanced flow slicing, load balancing, and NetFlow generation	Significantly reduce tool costs while boosting tool efficiency and effectiveness
<b>Enrich</b>	Application Metadata Intelligence, with close to 6,000 traffic-protocol and application-related metadata attributes, for your SIEM and observability tools	Detect anomalies faster and speed root-cause analysis of security incidents and performance bottlenecks
<b>Manage</b>	Unified visibility management and orchestration via GigaVUE-FM fabric manager or native DevOps approaches	Reduce operational overhead associated with securing and managing hybrid cloud Infrastructure

## Accelerate Your Cloud Migration

How can you ensure that your applications and services stay secure as you ramp up cloud migration? For security assurance and effective security governance, you need consistent visibility across all environments.

Modernizing infrastructure and applications also entails big changes that require IT organizations to adapt. However, change management takes time. We buy you time because teams no longer need to refactor security and monitoring infrastructure for new cloud deployments on day one. Instead, you can rely on familiar, proven data center tools, processes, and procedures. Using existing tools not only saves time and money, but helps you achieve a consistent security and compliance posture.

With the Gigamon Deep Observability Pipeline, you can realize the full transformational promise of the cloud. Address security and operational issues that slow digital initiatives and leave your organization vulnerable to threats and breaches.

With Gigamon, you can:

- + **Eliminate Security Blind Spots** Efficiently deliver all relevant network traffic to tools and observability dashboards while optimizing tools' performance and effectiveness by eliminating redundancy.
- + **Gain the Complete Picture with Deep Observability** Deliver network and application metadata to SIEMs and observability tools, providing comprehensive security, performance, and troubleshooting intelligence, bringing the complete picture into focus.
- + **Align Teams and Resources** Enhance security and business performance, and align your NetOps, InfoSec, CloudOps, and Compliance teams around a common view of the single source of truth within any organization — network data.
- + **Build Customer Trust and Mitigate Risk** Minimize business, regulatory, and technical risk by deploying the Gigamon Deep Observability Pipeline to build trust with your customers and partners.
- + **Save On Operational Costs** Optimize and improving signal-to-noise ratio of network traffic ingestion, and achieve an average of 50-60 percent savings on tools spend and can defer in-year new capacity purchases. Eliminate cloud gateway and load balancing services, reducing cloud traffic acquisition costs from 0.75 cents to 0.04 cents per gigabyte.

# The Solution

The Gigamon Deep Observability Pipeline efficiently delivers network-derived intelligence and insights to your cloud, security, and observability tools, enabling you to eliminate security blind spots, optimize network traffic, and reduce tool costs so you can better secure and manage your hybrid cloud infrastructure.

The solution consists of:

- + GigaVUE® Cloud Suite with GigaVUE V Series visibility nodes and virtual G-vTaps for traffic acquisition, processing, and forwarding within virtual and container infrastructure
- + GigaVUE HC/TA physical appliances and physical G-Taps for traffic acquisition, processing, and forwarding within physical infrastructure
- + GigaVUE-FM fabric manager for unified management of the Gigamon Deep Observability Pipeline across hybrid and multi-cloud infrastructure
- + GigaSMART® applications — such as SSL/TLS decryption, de-duplication, and Application Metadata Intelligence — improve tool efficiency and visibility

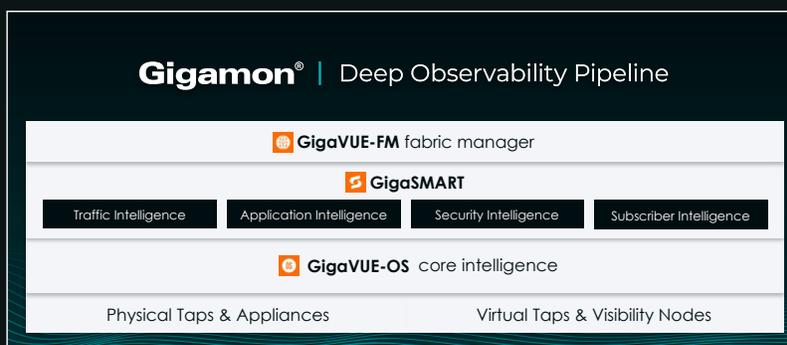


Figure 2: The Gigamon Deep Observability Pipeline components for both physical and cloud infrastructures.

## Traffic Intelligence

Key benefits:

- + Reduce traffic by more than 50 percent by removing duplicate packets that result from network switch mirror/SPAN ports, multiple TAP points, or multiple virtual mirroring sources
- + Remove or truncate packets or flows, resulting in 75 percent or more reduction in traffic forwarded to tools
- + Gain visibility into TLS/SSL encrypted traffic, including TLS 1.3 encrypted flows
- + Comply with data privacy rules with data masking
- + Remove unwanted tagging and encapsulation, increasing the effectiveness and efficiency of your tools
- + Tunneling support for virtual traffic sources, multi-site interconnection, and forwarding to virtual tools

## Application Intelligence

Key benefits:

- + Identify all applications running across your cloud and physical infrastructure — including shadow IT and other unauthorized apps
- + Filter out or focus on specific applications within user traffic, making your monitoring and security more efficient and effective
- + Generate rich application metadata to feed monitoring and security tools that can't ingest raw packets
- + Create video data records for video analytics tools (e.g., Nokia AVA's PVA) without the need for separate probes

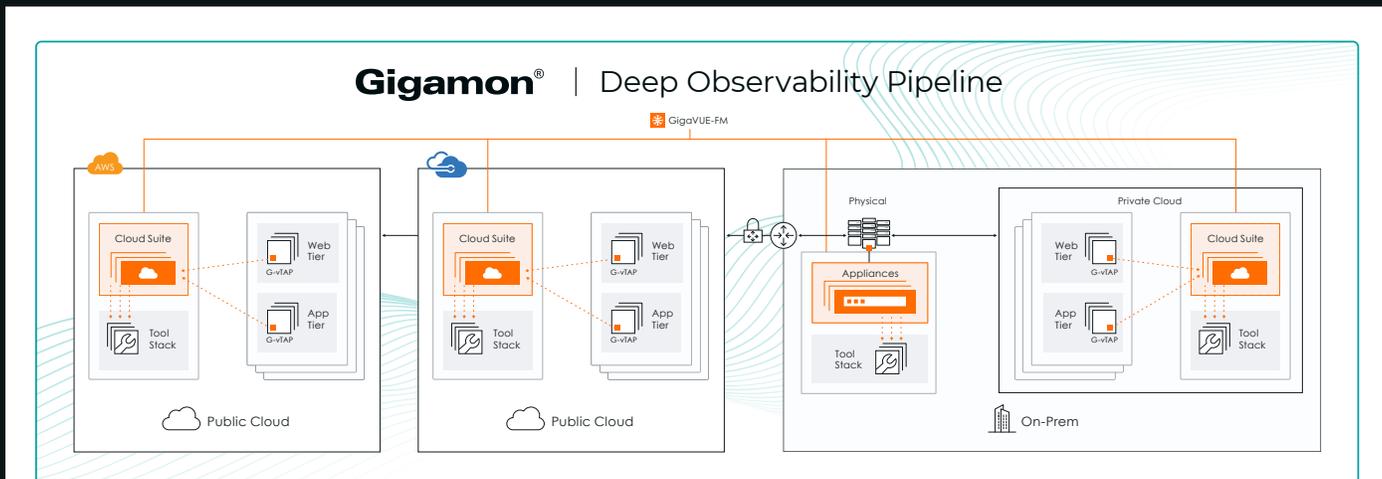


Figure 3: Hybrid cloud deployment with the Gigamon Deep Observability Pipeline.

## Conclusion

The Gigamon Deep Observability Pipeline lets you enjoy the agility and resiliency benefits of hybrid and multi-cloud infrastructure while driving down security and non-compliance risks. Gigamon offers a deep observability pipeline that efficiently delivers network-derived intelligence to cloud, security, and observability tools. This helps organizations to eliminate security blind spots, optimize network traffic, and reduce tool costs so organizations can better secure and manage their hybrid cloud infrastructure. Gigamon serves more than 4,000 customers worldwide, including over 80 percent of Fortune 100 enterprises, 9 of the 10 largest mobile network providers, and hundreds of governments and educational organizations.



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