

Unlock the Power of Seamless Deep Observability with Gigamon and Datadog

Overview

Organizations face daunting challenges in achieving full stack observability and securing their hybrid cloud infrastructure. Siloed tools, visibility blind spots in traffic, and the sheer volume of data make it difficult to detect threats, pinpoint root causes, and address performance bottlenecks. Legacy security and monitoring tools struggle to keep pace with today's dynamic workloads, creating blind spots in visibility, performance monitoring, and security. As a result, teams encounter delays in incident response, performance issues, and vulnerabilities that put critical operations and sensitive data at risk.

The Gigamon Deep Observability Pipeline and Datadog Full Stack Observability combine network-derived intelligence with full-stack observability to deliver a comprehensive solution for modern security and performance monitoring operations. This joint solution empowers organizations to gain actionable insights, optimize performance, pinpoint issues faster, and strengthen security across hybrid and multi-cloud infrastructure.

Gigamon provides granular visibility into lateral (East-West) and encrypted traffic across hybrid cloud infrastructure and efficiently delivers network-derived intelligence and insights to cloud, security, and observability tools. This centralized approach to accessing data-in-motion enables organizations to detect previously unseen threats and anomalies.

In addition, Gigamon deep packet inspection extracts network and application metadata from traffic, providing organizations with a granular understanding of the applications currently communicating in lateral traffic, filtering out low-risk traffic from the data stream sent to Datadog. This contextual level of actionable intelligence extracted from traffic and shared with Datadog is what Gigamon defines as deep observability.

The result: organizations can establish robust security and monitoring postures, simplifying access to critical intelligence, eliminating blind spots, and shifting resources to focus on high-risk traffic.

Datadog leverages network-derived intelligence from Gigamon, integrating it with other sources of intelligence, and analyzing the traffic collectively to provide real-time insights that drive actionable outcomes across security and performance monitoring teams. Datadog processes metric, event, log, and trace data (MELT), complementing it with Gigamon network telemetry derived from packets, flows, and metadata to identify patterns, detect anomalies, and uncover potential issues before the escalate. This enables organizations to optimize network and application performance, quickly resolve incidents, and detect security threats that may have previously flown under the radar. Integrated machine learning, AI, and dashboards help to visualize trends based on the gathered intelligence, while automation streamlines response to various risks.

- **Slow Incident Response:** Lack of real-time threat intelligence and contextual data delays incident response, allowing attacks to escalate and cause significant operational disruption.
- **Scaling Visibility Challenges:** Rapidly expanding hybrid cloud environments make it nearly impossible to scale visibility, creating new security vulnerabilities and performance risks.
- **Inadequate Threat Detection:** Relying solely on traditional log and metric data fails to detect sophisticated cyberattacks that exploit network traffic, leaving organizations vulnerable to breaches.
- **Resource Constraints:** Limited budgets, outdated systems, and a shortage of skilled security professionals hinder organizations' ability to maintain a strong security posture.

The Challenge

Key Challenges: Identifying the Need for Unified Security and Management

- **Visibility Blind Spots:** Siloed tools and fragmented data leave critical gaps in visibility, exposing organizations to hidden threats and performance bottlenecks.

The Solution

Gigamon and Datadog deliver unified security and performance visibility across your entire hybrid cloud infrastructure. The Gigamon Deep Observability Pipeline taps into all network traffic, including lateral and encrypted traffic, using physical and virtual taps. Traffic is then aggregated, inspected, and filtered to provide rich network-derived intelligence.

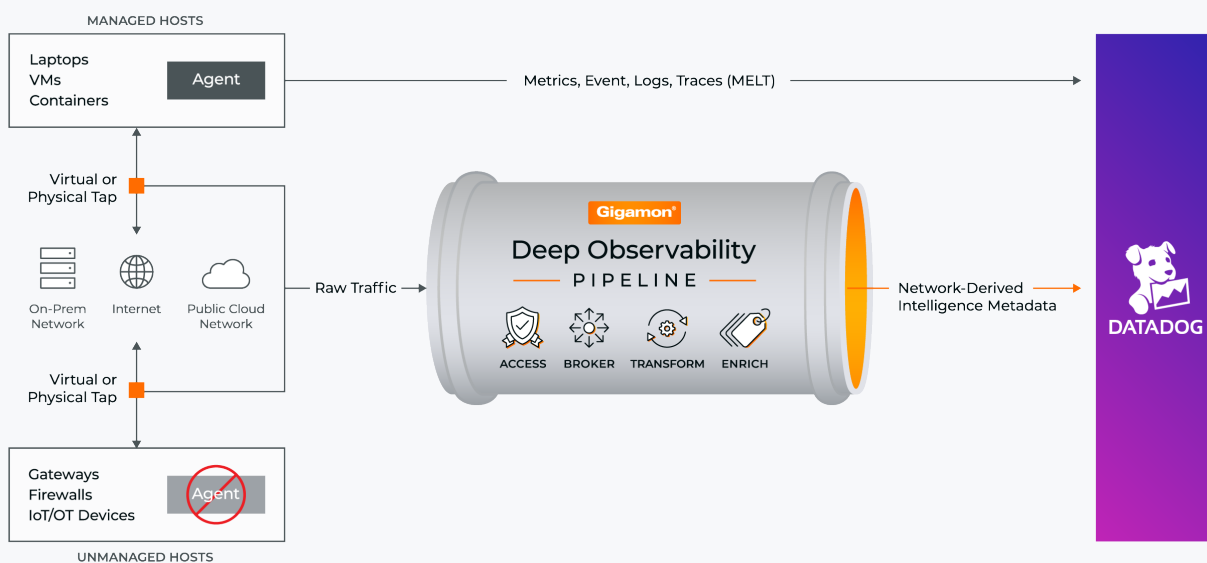


Figure 1. Gigamon accesses all network traffic and efficiently delivers network-derived intelligence and insights to Datadog for comprehensive application monitoring and security.

This rich network telemetry is then delivered to Datadog, where it's combined with other sources for comprehensive analysis.

The result: organizations gain real-time insights, enabling faster threat detection, proactive incident response, and optimized performance across their infrastructure.

Key Features

- **Deep Application Insights:** Gain granular visibility into application behavior across your hybrid cloud, enabling faster troubleshooting and performance optimization.
- **Unified Hybrid Cloud Visibility:** Eliminate blind spots with centralized visibility into all network traffic, including encrypted and lateral movement, across any environment.
- **Streamlined Data Delivery:** Deliver actionable network-derived intelligence to your existing security and observability tools, simplifying workflows and maximizing tool value.
- **Real-Time Application Awareness:** Instantly identify and analyze application communication patterns to detect anomalies and potential security risks.
- **Accelerated Threat Detection:** Real-time network-derived intelligence enables rapid containment and remediation of cyberattacks.

Key Benefits

Enhanced Security:

- **Proactive Threat Detection:** Fortify your security posture by combining log data with network-derived intelligence to detect lateral movement, geographic anomalies, and vulnerable systems.
- **API Security:** Enhance API security by identifying improper inventory management, broken access controls, and PII exposure risks.
- **Encryption Management:** Take control of encryption by identifying expired or untrusted SSL/TLS certificates and ensuring compliance with trusted certificate authority (CAs).

- **DNS Security:** Analyze DNS activity to detect and prevent DNS-based attacks.
- **Complex Area Coverage:** Gain visibility into unmanaged hosts like IoT devices, container communications, and non-standard port usage to uncover hidden threats.

Improved Performance:

- **Faster Incident Resolution:** Minimize MTTR by gaining network insights into application and network round-trip times, bandwidth, and CRCs.
- **Application and Protocol Visibility:** Pinpoint known and unknown applications and protocols, including crypto mining and non-standard port usage, to optimize performance.
- **DHCP Monitoring:** Simplify DHCP troubleshooting by gaining insights into server responsiveness and client-server communication.

Comprehensive Visibility:

- **Unified Log and Network Intelligence:** Complement log usage by combining log data with network-derived metadata to create comprehensive dashboards.
- **Deep Network Analysis:** Analyze DNS queries, identify DNS servers, and gain a deep understanding of network traffic patterns.

Summary

Transform your security and performance posture with the Gigamon and Datadog joint solution. Gain deep observability into your hybrid cloud infrastructure, enabling you to proactively mitigate threats, optimize application performance, and deliver exceptional user experiences. Stop reacting to incidents and start driving innovation. Gain the confidence to innovate and grow, knowing your critical assets are protected.

About Datadog

Datadog is the observability and security platform for cloud applications. Our SaaS platform integrates and automates infrastructure monitoring, application performance monitoring, log management, user experience monitoring, cloud security and many other capabilities to provide unified, real-time observability and security for our customers' entire technology stack. Datadog is used by organizations of all sizes and across a wide range of industries to enable digital transformation and cloud migration, drive collaboration among development, operations, security, and business teams, accelerate time to market for applications, reduce time to problem resolution, secure applications, and infrastructure, understand user behavior, and track key business metrics.

About Gigamon

Gigamon® offers a deep observability pipeline that efficiently delivers network-derived intelligence to cloud, security, and observability tools. This helps eliminate security blind spots and reduce tool costs, enabling you to better secure and manage your hybrid cloud infrastructure. Gigamon has served 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. To learn more, please visit gigamon.com.

For more information on Gigamon and Datadog, please visit gigamon.com | datadog.com

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