

# Securing the Hybrid Cloud with AI and Deep Observability

Extending the Gigamon Deep Observability Pipeline with AI-powered intelligence to drive smarter decisions and stronger governance policy

As organizations embrace AI and hybrid cloud to drive innovation, the speed and complexity of associated threats continue to outpace the detection capabilities of traditional log- and metric-based tools. GenAI workloads are accelerating data growth, expanding attack surfaces, and introducing new risks as employees engage with GenAI applications that bypass existing controls, increasing the risk of exposing proprietary information. At the same time, security and IT teams are expected to operate faster and more efficiently, often with fewer or less experienced resources.

This shifting landscape demands more than incremental change. It requires complete visibility, faster insights, and smarter governance across today's increasingly distributed and dynamic environments. In response, Gigamon is enhancing the deep observability pipeline with AI-powered intelligence, built on network-derived telemetry and application metadata intelligence (AMI), enabling organizations to better secure and manage hybrid cloud infrastructure by turning data in motion into real-time insights and control at scale.

**From the Gigamon 2025 Hybrid Cloud Security Survey:**

**91%**

of security leaders are recalibrating risk due to the impact of AI

**55%**

say existing tools are ineffective in detecting modern threats, including AI

**1 IN 3**

organizations report network traffic has more than doubled due to GenAI workloads

**47%**

lack visibility into East-West traffic, creating blind spots where threats move laterally and undetected

## Challenges

- **Unmanaged AI risk.** Without visibility into how GenAI and LLM applications are used, organizations struggle to enforce governance, manage spend, and protect sensitive data.
- **Operational strain.** Infrastructure teams are stretched thin, and Tier 1 staff often lack the expertise to configure, troubleshoot, and manage distributed environments efficiently.
- **Fragmented workflows.** Analysts are forced to toggle across dashboards and tools, slowing investigations and losing valuable context, which increases mean time to resolution.
- **Evolving threats and compliance gaps.** Traditional log-centric tools struggle to keep pace with AI-powered adversaries and cannot reliably detect hidden threats such as lateral movement, command-and-control activity, encrypted traffic risks, or expired certificates.

## The Solutions

### AI Traffic Intelligence

Integrated into the deep observability pipeline, AI Traffic Intelligence identifies and classifies traffic from more than 30 GenAI and LLM engines, without deploying intrusive agents.

- Gain real-time visibility into sanctioned and unsanctioned AI usage across public, private, virtual, and container environments.
- Uncover shadow AI usage to mitigate risk and support compliance oversight.
- Quantify actual usage to enforce governance policies and optimize spend.

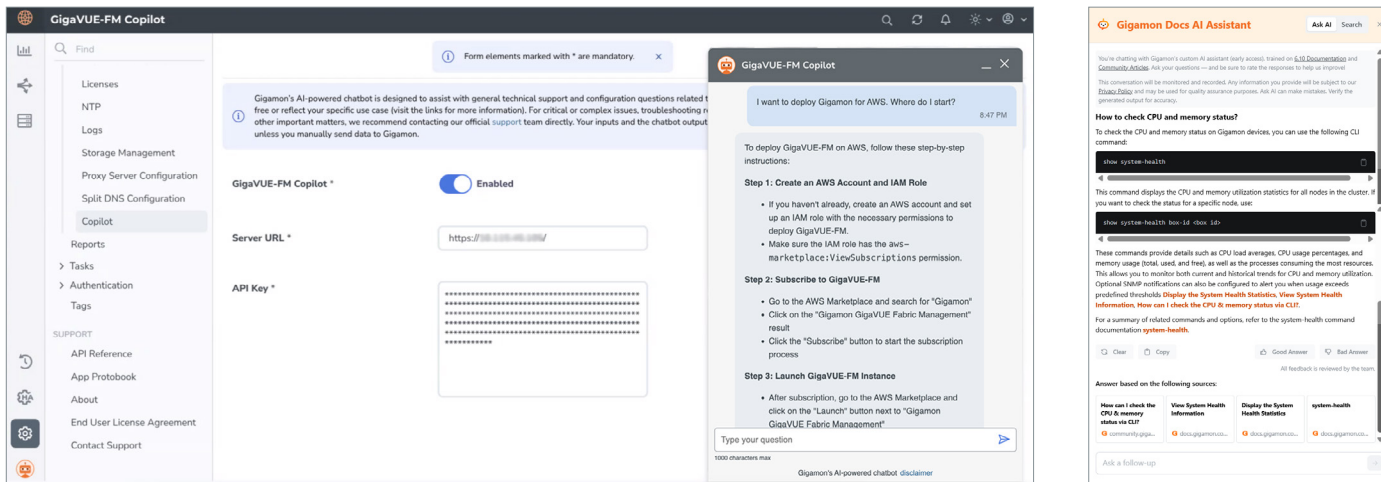
### GigaVUE-FM Copilot and Tech Doc Assistant

This digital assistant, embedded in GigaVUE-FM, delivers AI-powered guidance to simplify Gigamon configuration and operations.

- Environment-aware configuration assistance reduces time-to-deployment.
- Automated configuration allows for human-in-the-loop verification.

**Figure 1.** GenAI traffic is automatically detected, identified, and classified across hybrid cloud environments—enabling informed policy and data governance.





**Figure 2.** GigaVUE-FM Copilot and the Tech Docs AI Assistant deliver GenAI support in workflows—speeding troubleshooting and reducing time-to-deployment.

- AI-assisted setup, validation, and feature discovery reduces rework.
- Built-in chatbot-style interface offers real-time help for Fabric Manager users, DevOps teams, and non-power users.
- Accelerates onboarding and troubleshooting while lowering reliance on manual processes and Tier 3 support services.

### Gigamon Insights

Gigamon has fused network-derived telemetry with AI to deliver the visibility and immediate guidance teams need to meet performance expectations of modern organizations. This agentic AI application integrates with leading SIEM, observability, and cloud platforms such as Elastic, Splunk, and AWS. By enriching network-derived telemetry with application-level context, and sending it through an AI engine, Gigamon Insights delivers powerful, context-rich answers within existing analyst workflows.

- Expand capabilities of security teams to detect advanced threats such as lateral movement, command-and-control, or AI-driven ransomware campaigns.
- Give compliance teams visibility to identify and remediate gaps including expired certificates, weak encryption, and segmentation drift.
- Empower application and network performance teams to quickly identify network performance issues

- Accelerate troubleshooting and investigations to reduce mean time to resolution (MTTR).
- Empower Tier 1 analysts to quickly pitch in like seasoned professionals.

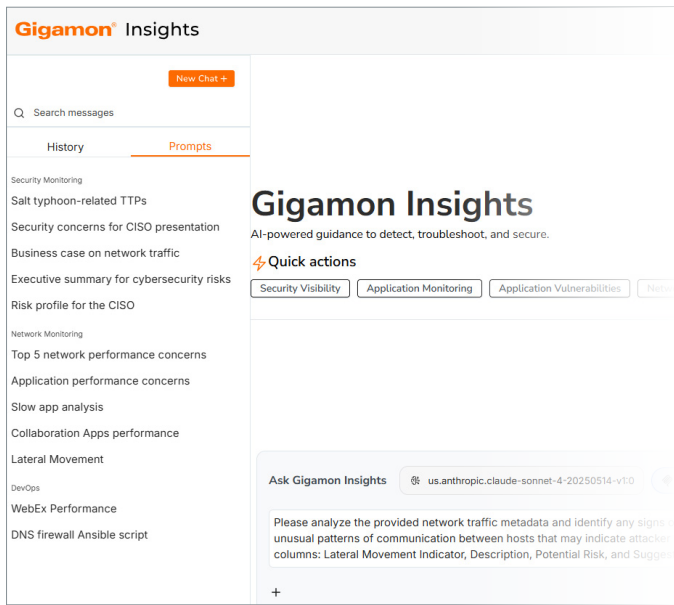
## How it works

- **Gigamon Deep Observability Pipeline + AMI:** Network packets and flows are enriched with application-level metadata and delivered to your security, observability, and cloud platforms.
- **Agentic interface in your workflow:** Gigamon Insights surfaces guidance directly in Elastic Security and Splunk, and pairs with AWS services to accelerate investigations.
- **Flexible AI architecture:** Supports private hosted models or bring-your-own enterprise LLMs, ensuring full data privacy and control.

## Key Features

### Product Snapshot

- **AI Traffic Intelligence:** Real-time identification and classification of GenAI and LLM traffic across data centers, private cloud, public cloud, and containers, without intrusive agents. This uncovers shadow AI, supports governance policies, and informs spend optimization.
- **GigaVUE-FM Copilot:** An embedded assistant in Fabric Manager and the public tech docs experience



**Figure 3.** Gigamon Insights delivers AI-powered guidance directly within analyst workflows, enabling teams to detect threats, troubleshoot performance issues, and validate compliance with speed and precision.

that helps users configure, validate, and troubleshoot visibility workflows quickly and confidently.

- **Gigamon Insights:** An agentic AI application that integrates with AWS, Elastic, and Splunk to deliver powerful, context-rich answers from trusted network telemetry. Analysts ask questions, query AML-enriched metadata, receive recommended actions, and much more.

## Key Benefits

- **Stronger Security Posture:** Eliminate blind spots, validate Zero Trust and microsegmentation policies, and detect hidden threats in encrypted and East-West lateral traffic.
- **Improved Governance:** Guided workflows and instant answers reduce mean time to resolution across NOC and SOC.
- **Improved governance and lower risk:** Track and control AI usage, align to policy, and reduce data exposure.

- **Greater team efficiency:** AI-assisted configuration and troubleshooting reduce manual effort and training burden.
- **Tool and cloud ROI:** Deliver the right, high-fidelity telemetry to the right platforms, improving signal quality and decision speed.

## Conclusion

In the AI era, hybrid cloud infrastructure is under growing pressure from surging traffic volumes, evolving threats, rising governance expectations, and resource constraints. Conventional log and metric-based tools alone can no longer keep pace.

By extending the deep observability pipeline with AI-powered intelligence, Gigamon enables organizations to meet these challenges directly. Network-derived telemetry, fused with Application Metadata Intelligence and enriched through intelligent automation, is transformed into trusted insights that detect hidden risks, accelerate investigations, and strengthen governance. With this visibility across all data in motion, teams can move beyond reactive defense to proactive, AI-driven control.

This is AI-powered deep observability, elevated to meet the complexity, speed, and opportunity of what comes next.

## About Gigamon

Gigamon® offers a deep observability pipeline that efficiently delivers network-derived telemetry 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](https://gigamon.com).



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