



Joint Solution Brief

Improve Network Performance Management and Anomaly Detection with Kentik Detect and the Gigamon Visibility Fabric

The Challenge

Skyrocketing network and traffic growth has made it difficult for companies to achieve the level of traffic visibility required to maintain peak performance and protection within today's hybrid data centers and cloud environments.

Integrated Solution

Together with Gigamon's Visibility Fabric™, Kentik Technologies offers a next-generation, technically-superior alternative to current appliance-based flow analytics solutions. Kentik's SaaS solution, Kentik Detect, gives today's Internet-dependent companies the network intelligence they need to help optimize performance and better detect anomalous activity.

Joint Solution Benefits

- Broad and deep visibility across both physical and virtual network traffic helps Kentik Detect deliver fast ad-hoc analytics, turning network telemetry into actionable intelligence
- GigaSMART® technology augments the real-time visibility, anomaly detection, and analytics capabilities of Kentik Detect by acting as a fully functional flow data source, generating NetFlow v5 or v9 records, or IPFIX records for delivery to Kentik Detect
- Kentik Detect leverages Gigamon's automatic traffic load balancing and aggregation functionality that helps simplify metadata flow record generation
- The Gigamon platform can generate unsampled metadata records where network analysis requires complete granularity, or operators can define a sampling rate to reduce total flow volume and overhead

Introduction

As networks grow and traffic skyrockets, effective network management and security are essential to the smooth functioning of businesses across the globe. Network operators need fast, clear, and pervasive visibility to detect attacks and performance issues, and they need flexible access to detailed, long-term data for forensics and analytics.

Currently, however, there is a disconnect between these requirements and the capabilities of available tools. Architected with inherent limitations, existing systems cannot keep pace with the steep growth of network utilization. What's needed instead is a scalable, open, multi-tenant solution which provides network visibility for the challenges today's non-stop operations presents—a solution like Kentik Detect.

Built on a scalable Big Data backend, Kentik Detect can free network operators from the limits of legacy approaches to visibility, alerting, and analytics. With unbounded ad-hoc analytics and lightning-fast query response, Kentik Detect helps provide the capabilities needed to turn network data into valuable and actionable intelligence.

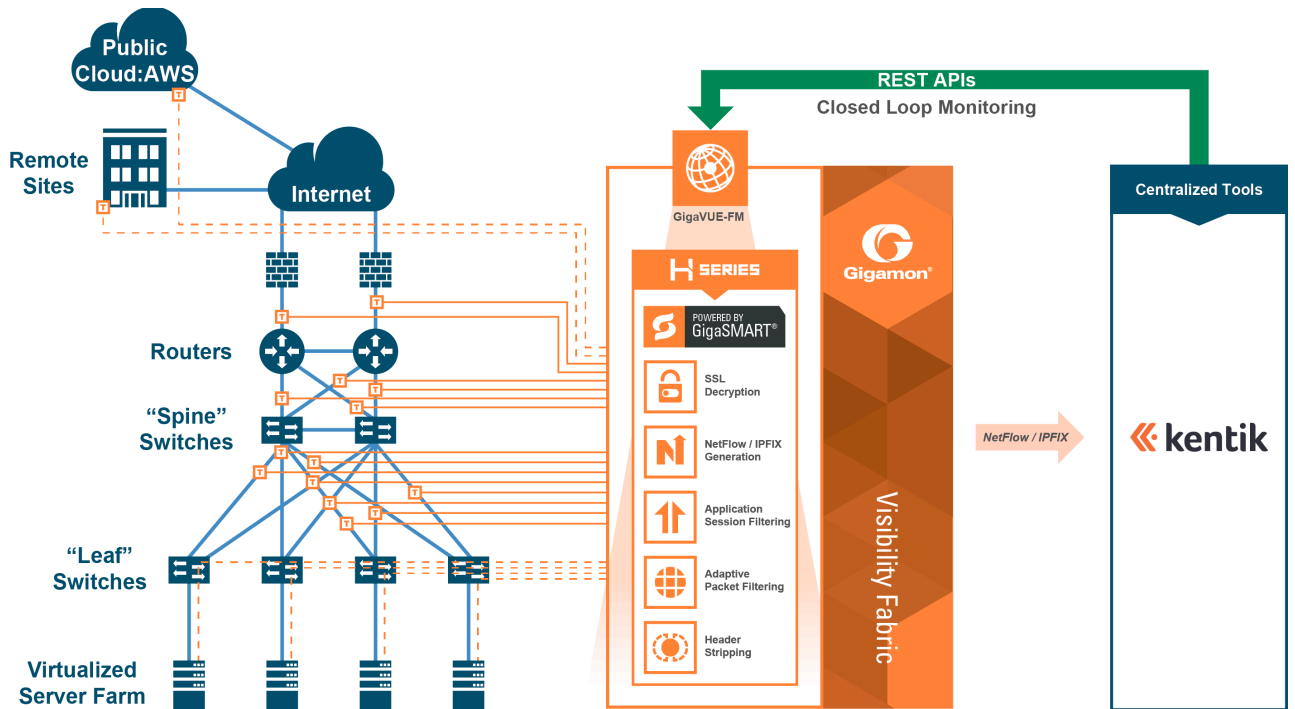
The Gigamon and Kentik Joint Solution

More than ever, network performance can equal business performance. When companies depend upon the Internet—whether from a service provider or Web-centric operating model perspective—they also require accurate, real-time visibility into network traffic. No visibility means no effective approach to assuring performance, security, and business success.

Together with the Gigamon Visibility Fabric, Kentik offers a next-generation alternative to current appliance-based flow analytics solutions. Delivered as a secure Software as a Service (SaaS), Kentik Detect leverages Big Data technology to turn network data (e.g., NetFlow, sFlow, IPFIX, Border Gateway Protocol (BGP), and geo-location) into valuable intelligence.

The joint solution helps optimize network capacity, hastens anomaly recognition, and offers accurate detection of volumetric attacks such as DDoS. Combined, these capabilities add up to better application and service protection that can improve quality of user and customer experience.

Network TAP



Key Gigamon Visibility Fabric features that augment the value of the Kentik technology include:

- Metadata generation:** Metadata is often the most efficient source of information about what is happening on the network. Gigamon's Visibility Fabric can generate this information from any monitored flow in the network and send the results to Kentik Detect. Rather than requiring infrastructure devices like routers and switches to generate flow records (NetFlow, IPFIX), the integrated Gigamon and Kentik Detect solution reduces load on those devices and allows them to better perform their core capabilities. This becomes even more valuable in instances when brands and models of network devices are unable to generate accurate or reliable flow records.
- Easy access to traffic from physical and virtual networks:** Gigamon's Visibility Fabric manages and delivers flow metadata from any and all network traffic—in the format required—to Kentik Detect. To monitor east-west data center traffic, Gigamon taps virtual traffic and delivers it to Kentik Detect. Extending the scope of Kentik Detect into hybrid environments helps ensure that all traffic is monitored and analyzed together to eliminate blind spots and increase the probability of discovering suspicious behavior.
- Filtering traffic to only send relevant telemetry:** The Gigamon platform can be configured to generate flow metadata for sending to Kentik Detect only on relevant traffic or sessions of monitoring interest. Advanced filtering options mean only the useful, required data needs to be processed and forwarded.

- Masking for security:** The Gigamon platform is able to mask any sensitive data (e.g., credit card numbers in e-commerce and patient identification in healthcare) within packets before generating metadata flow records for sending to tools such as Kentik Detect. This masking helps ensure policy enforcement along with proper handling and access to personally identifiable information (PII).
- De-duplication:** Pervasive visibility requires tapping or copying traffic from multiple points in the network, which, in turn, means tools may see the same traffic flow record more than once. To avoid the unnecessary processing overhead on Kentik Detect, the Gigamon Visibility Fabric has a highly effective de-duplication engine that removes duplicates before they consume resources and helps ensure the most accurate monitoring visibility.

Learn More

For more information on Kentik and Gigamon solutions, contact:

