Decryption

Powered by the Gigamon Visibility Fabric with GigaSMART

Bad actors are now instigating 50 percent of new malware campaigns using encryption to conceal delivery and ongoing communications, including data exfiltration. This is why network and security operations teams must not give a free pass to encrypted traffic.

The Gigamon Visibility Fabric with licensed GigaSMART® Decryption enables operations teams to have full visibility into encrypted traffic on any TCP port or application.

"By 2020 more than 60% of organizations will fail to decrypt HTTPs, missing most targeted with malware"

"Through 2019, more than 80% of enterprise's web traffiic will be encrypted."

"During 2019, more than 50% of new malware campaigns will use various forms of encryption and obfuscation to conceal delivery, and to conceal ongoing communication, including data infiltration."

Source: Gartner Security and Risk Management Summit Presentation, The Role of Network Traffic Analysis in Today's Threat Environment, Jeremy D'Hoinne and Lawrence Orans, 17-20 June 2019

KEY FEATURES

- Automatic SSL and TLS detection on any TCP port

- Scalable interface support (10M–100Gbs)

- Decrypt once, feed many tools

- Policy-based selective decryption

KEY BENEFITS

- No blind spots on the network

- Legacy tools can connect to the fabric

- Enhanced tool performance

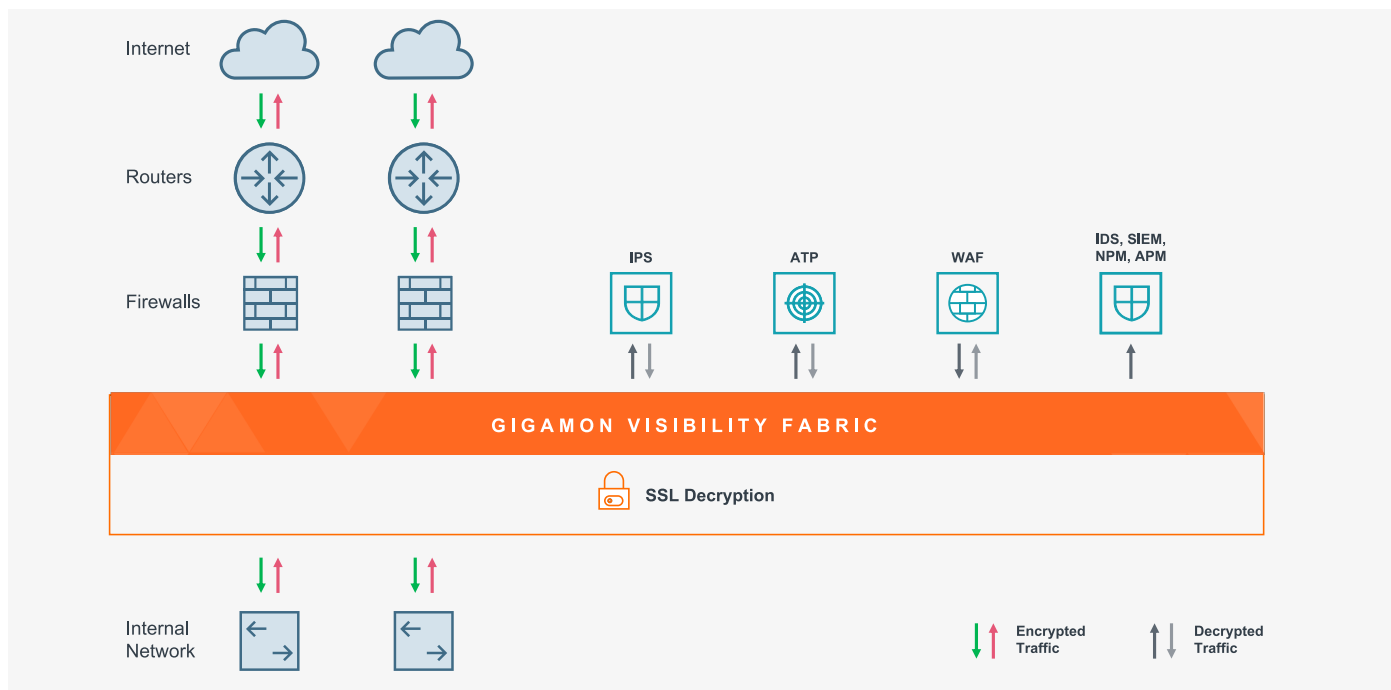- Preserve data privacy and compliance

Figure 1: Network topology with the Gigamon Visibility Fabric decrypting and sharing plain-text traffic with inband and out-of-band tools

Gain Visibility and Control

To gain visibility and control of the sharply rising amount of encrypted traffic, and its attendant security threats, you need to first decrypt inbound and outbound encrypted communications.

Decryption is a processor-intensive function that steals a large amount of resources from security tools. In a study of eight leading next-generation firewalls, NSS Labs found that turning on SSL decryption degraded the firewall performance by as much as 80 percent and reduced transactions per second by as much as 92 percent.

In contrast, by using the Gigamon Visibility Fabric with GigaSMART you can offload decryption processing so security tools focus on detection and mitigation of malware. The GigaSMART license gives your operations teams automatic visibility into encrypted traffic, regardless of TCP port or application to secure networks against data breaches and hidden malware in encrypted networks.

Stowe, Jen. "NSS Labs Expands 2018 NGFW Group Test with SSL/TLS Security and Performance Test Reports." NSS Labs, Inc. July 24, 2018. Accessed July 10, 2019. https://www.nsslabs.com/news/2019/2/25/wwihrm3z1u70.

THE SOLUTION

Using the Gigamon Visibility Fabric with GigaSMART lets you offload decryption processing so security tools focus on detection and mitigation of malware.

A GigaSMART license gives your operations teams automatic visibility into encrypted traffic, regardless of TCP port or application— to secure their networks against data breaches and hidden malware in encrypted networks.

Gigamon also integrates with the Venafi Trust Protection Platform™ to centralize key management and validation.

Flex Inline and Decryption

It's easy to configure Flex Inline Decryption using either the GigaVUE-Fabric Manager or GigaVUE-FM with the built-in fabric maps feature.

Figure 2 shows a standard fabric map. The GigaSMART "GS" cards create a decryption zone within the inline map.

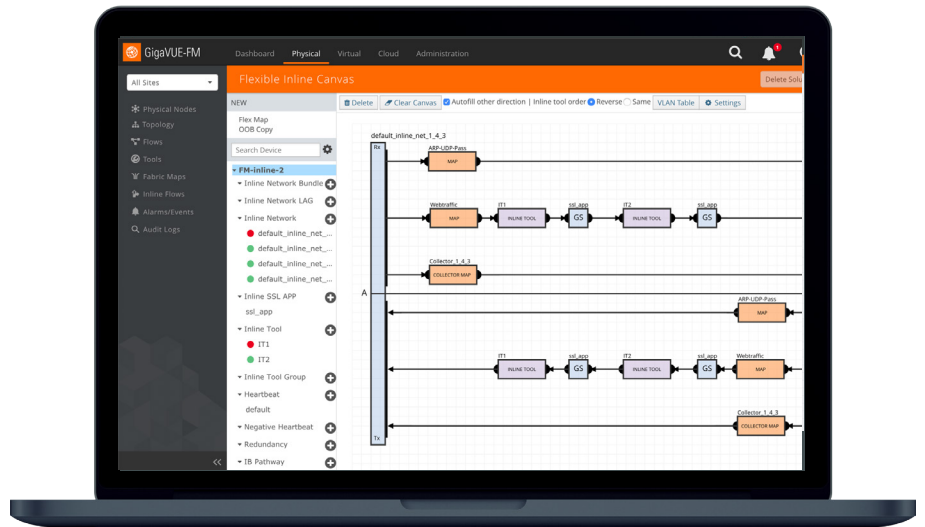Need to make changes? Simply drag and drop to move tools in and out of the zone as needed.

Figure 2: GigaVUE-FM flex inline and deceryption

Technical Features

FEATURES	SPECIFICATIONS		
Products supported	GigaVUE-HC1	GigaVUE-HC2	GigaVUE-HC3
Hardware required	At least 1 GigaSMART module		
Software required	GigaSMART SSL/TLS Decryption license		
Interfaces Supported	1 and 10Gbps	1, 10 and 40 Gbps	10, 40 and 400 Gpbs
# of categories supported for selective decryption	83		
Inline SSL Decryption Throughput per engine	2Gbps	3Gbps	12Gbps
Physical Inline Bypass Options:	1 and 10Gbps	1, 10 and 40 Gbps	40 and 400 Gpbs

Conclusion

Identify hidden threats in both inbound and outbound encrypted traffic with the Gigamon Visibility Fabric and GigaSMART. Decrypt once and share across all tools, scaling and increasing the efficacy of each by eliminating the processor overhead. The result: Tools operating at peak performance to do what they are best at, malware mitigation.

For more information on Decryption, please visit www.gigamon.com/products/optimize-traffic/traffic-intelligence/gigasmart/ssl-tls-decryption.html.

Gigamon®

Worldwide Headquarters
3300 Olcott Street, Santa Clara, CA 95054 USA
+1 (408) 831-4000 | www.gigamon.com