Symantec

DATA SHEET

Symantec SSL Visibility Appliance

Remove Security Blind Spots Created by SSL/TLS Encryption

Overview

Provides unmatched visibility into encrypted traffic to protect against advanced threats

- Automatically identifies all SSL/TLS traffic – regardless of port number or application
- Uncovers hidden threats that use SSL to bypass detection, such as the Dyre and Zeus trojans, Upatre Command and Control (C&C), VMZeus C&C, etc.

Supports privacy and compliance initiatives

- Selectively decrypts traffic to meet data privacy and compliance requirements
- Enforces acceptable use policies for encrypted traffic

Integrates seamlessly with the existing security infrastructure

- Preserves and extends the ROI of the infrastructure
- Supports multiple network segments and can feed active and passive security appliances simultaneously as well as feeding ProxySG

Simplifies management and administration

- Delivers detailed logs and alerts to easily spot trends and potential issues with SSL use
- Integrates with Management Center for configuration backup, scheduling and synchronization

Introduction

Encryption protects the privacy and integrity of data, but also creates a blind spot that attackers can exploit to evade security controls. Considering over half of all Internet traffic today is encrypted, it creates a rather large gap in an organization's security posture, leading to increased vulnerability and risk, as well as a damaged reputation. The Symantec SSL Visibility Appliance, a key component of the Encrypted Traffic Management solution set, enables organizations to cost-effectively eliminate blind spots within their environment and maximize the effectiveness of their security infrastructure investments. With Symantec, organizations have the visibility and control they need over encrypted traffic to ensure compliance with their privacy, regulatory and acceptable use policies.

Provides Visibility into Encrypted Traffic to Improve Security

The SSL Visibility Appliance is an integral component to any organization's traffic management strategy, providing visibility into encrypted traffic that ensures attacks cannot slip by undetected.Symantec identifies and decrypts all SSL connections and applications across all network ports (even irregular ports). The decrypted feeds can be used by the existing security infrastructure to strengthen their ability to detect and protect against advanced threats; by offloading process intensive decryption, the SSL Visibility Appliance also helps improve the overall performance of the organization's network and security infrastructure.

Figure 1. The SSL Visibility Appliance model SV2800B.

Supports Privacy and Compliance Initiatives

The SSL Visibility Appliance serves as an effective policy enforcement point to control SSL traffic throughout the enterprise, reducing risks posed by encrypted traffic, while maintaining compliance with relevant privacy policies and regulatory requirements. Using Host Categorization and SSL traffic types for policies, organizations can easily create and customize granular policies to selectively decrypt traffic to meet their business needs (e.g. “do not decrypt financial or banking traffic going out of the business”). And policies can easily be set to control obsolete or weak ciphers and standards – such as traffic using SSL v3.0.

This enables organizations to focus on the communications that represent the highest risks effectively balancing security with data privacy and compliance requirements. These policies also utilize Symantec’s market-leading Global Intelligence Network to exchange and update SSL host categorization, threat and malware knowledge across the globe.

Delivers Unmatched Performance and Scale

The SSL Visibility Appliances operate at line-rate, providing visibility into encrypted traffic and potential threats, without hindering device or network performance. The Appliances provide:

- **Line-rate Network Performance**: port-to-port latency for non-SSL flows is less than 40 microseconds. The appliance supports decryption of up to 10 Gbps of SSL traffic for all SSL/TLS versions and more than 70 cipher suites.
- **High Connection Rate/Flow Count**: inspecting up to 900,000 concurrent SSL sessions and supporting the setup and teardown of up to 33,000 new sessions per second.
- **High Availability**: offering integrated fail-to-wire/fail-to-open hardware and configurable link state monitoring and mirroring for guaranteed network availability and network security.

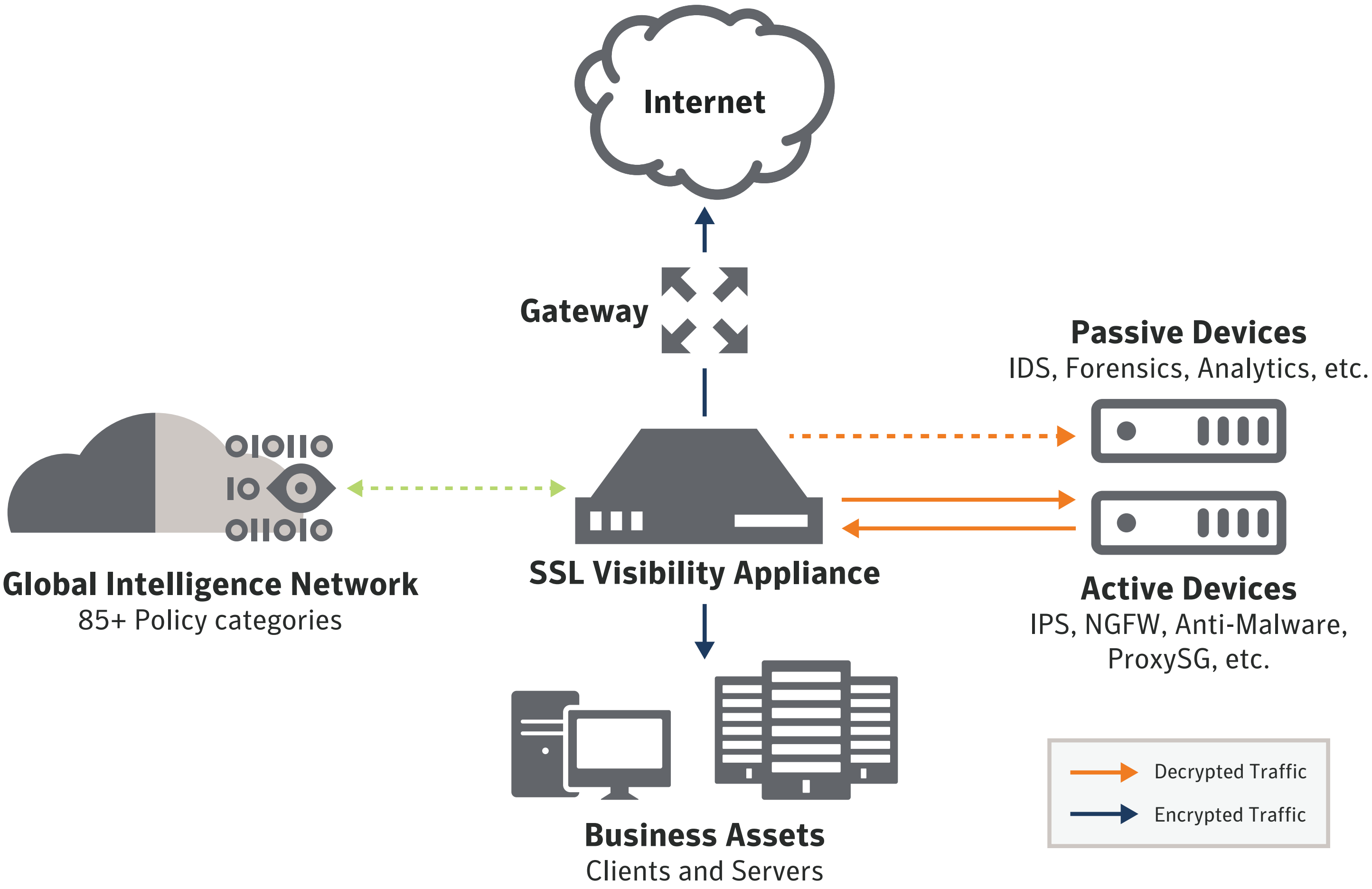
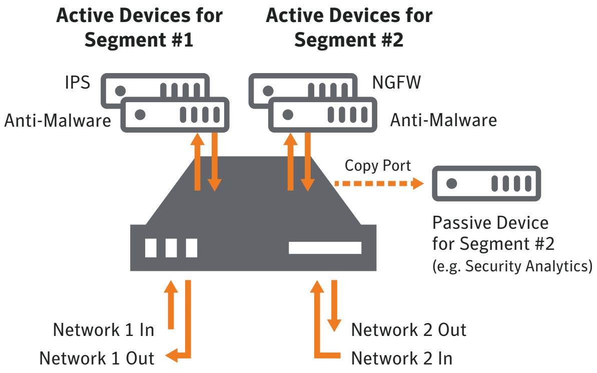


Figure 1. Symantec SSL Visibility Appliance helps you centralize the management of encrypted traffic.

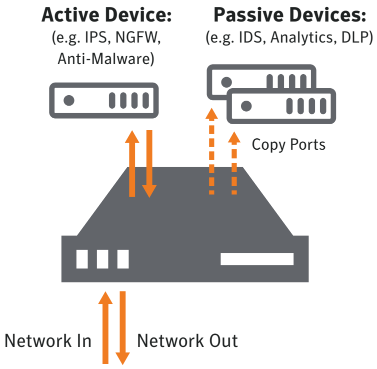
Integrates Seamlessly with Existing Infrastructure

The SSL Visibility Appliances are simple to deploy within your existing infrastructure; there is no need to duplicate security appliances or re-architect the network infrastructure. The Appliances provide:

- **Improved ROI of Infrastructure**: enhancing the performance and existing capabilities of network and security appliances, by offloading the decryption and providing visibility into formerly encrypted traffic to help uncover hidden threats.
- **Network Transparency**: deploying the SSL Visibility Appliance is transparent to end systems and to intermediate network elements. It does not require network reconfiguration, IP address or topology changes, or modifications to client IP and web browser configurations.


Active Devices for Segment #1
Active Devices for Segment #2
IPS
Anti-Malware
NGFW
Anti-Malware
Copy Port
Passive Device for Segment #2 (e.g. Security Analytics)
Network 1 In
Network 1 Out
Network 2 Out
Network 2 In

- **Flexible Deployment Options**: supporting multiple in-line or tap segments that feed one or more active or passive attached appliances (the number of segments supported varies depending on model number).


Active Device: (e.g. IPS, NGFW, Anti-Malware)
Passive Devices: (e.g. IDS, Analytics, DLP)
Copy Ports
Network In
Network Out

- **Copy Ports**: the SSL Visibility Appliance can send copies out to many devices over the additional ports on the device. This allows organizations to feed all traffic (decrypted and non-SSL) to additional passive devices on the network.
- **Application Preservation**: delivering decrypted plain-text to security appliances as a generated TCP stream, with the packet headers as they were received. This allows applications and appliances, such as next-generation firewalls (NGFW), intrusion detection/prevention systems (IDS/IPS), data loss prevention (DLP) systems and security analytics, to expand their scope and provide protection from threats hiding in the previously encrypted traffic. This is done without requiring any special software or capabilities in the attached security tools. When feeding ProxySG the SSL Visibility Appliance must be running a 4.x software release and ProxySG must be running 6.7.2.x or later software.
- **Comprehensive Support**: delivering complete visibility into inbound and outbound SSL sessions; supporting networks with asymmetric traffic routing; providing support for multiple re-signing Certificate Authorities (CA) when inspecting outbound SSL flows; allowing the import of many server key/cert pairs to inspect inbound SSL flows to enterprise SSL servers.
- **Input Aggregation**: allowing the aggregation of traffic from multiple network taps onto a single passive-tap segment for inspection.

Simplifies Management and Administration

The SSL Visibility Appliances are simple to configure and manage, providing:

- **Single Device Management**: offering a powerful, SSL-secured, simple-to-use, web-based user interface (UI) for configuration and management with Role-based Access Control (RBAC).
- **Centralized Management**: allowing administration of multiple appliances to be administered by Symantec Management Center for inventory and system performance monitoring, health monitoring, configuration backup and scheduling and configuration synchronization. Management Center also supports RBAC.
- **Email Alerting**: configuring logs to trigger alerts that can be immediately forwarded via email or sent at intervals to designated network administrators.
- **SSL Session Identification**: providing session logs that detail all SSL flows, inspected or not, allowing suspicious trends or patterns of SSL use to be detected.
- **Syslog Reporting**: supporting up to 8 remote syslog servers to enable enhanced reporting and logging applications within distributed environments.
- **SNMP Support**: Enables monitoring and management by 3rd party devices via the SNMP v3 standard.

	SV800-250M-C	SV800-500M-C	SV1800B-C / SV1800-F	SV2800B	SV3800B	SV3800B-20
Performance with 3.X Series Software						
Total Packet Processing Capability	8 Gbps	8 Gbps	8 Gbps	20 Gbps	40 Gbps	40 Gbps
SSL Inspection Throughput	250 Mbps	500 Mbps	1.9 Gbps	5.0 Gbps	7.5 Gbps	10.0 Gbps
Cut-through Latency	<40µs	<40µs	<40µs	<40µs	<40µs	<40µs
Concurrent SSL Flow States	20,000	20,000	100,000	200,000	400,000	800,000
Full Handshake RSA 1024 bit	1,000 per second	2,000 per second	10,000 per second	16,000 per second	18,000 per second	29,000 per second
Full Handshake RSA 2048 bit	1,000	2,000	3,400	3,400	6,500	6,500
Full Handshake ECDHE256	450	900	3,400	8,000	9,000	11,000
SSL Session Log Entries	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000
Performance with 4.X Series Software						
Total Packet Processing Capability	8 Gbps	8 Gbps	8 Gbps	20 Gbps	40 Gbps	40 Gbps
Classic segment Inspection capacity	250 Mbps	500 Mbps	1.80 Gbps	3.80 Gbps	6.50 Gbps	9.0 Gbps
Concurrent SSL Flow States	50,000	50,000	100,000	200,000	500,000	900,000
Proxy segment Inspection capacity	0.18 Gbps	0.36 Gbps	1.50 Gbps	2.80 Gbps	3.80 Gbps	6.30 Gbps
Concurrent SSL Flow States	25,000	25,000	50,000	100,000	250,000	450,000
Chained segment capacity A+B				2.2 Gbps	2.6 Gbps	4.0 Gbps
New Full Handshake RSA 1024 bit	1,000 per second	2,000 per second	10,000 per second	16,000 per second	21,000 per second	33,000 per second
New Full Handshake RSA 2048 bit	1,000	2,000	4,000	6,500	9,500	12,000
New Full Handshake ECDHE256	450	900	4,000	6,500	8,000	14,000
SSL Session Log Entries	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000
Specifications						
Configurations	Network Interfaces: Fixed 8 x 1 Gbps Copper	Network Interfaces: Fixed 8 x 1 Gbps Copper	Network Interfaces: Fixed 8 x 1 Gbps Copper or 8 x 1 Gbps Fiber (SX)	Network Interfaces: 3 Netmod Slots - Various 1 Gbps and 10 Gbps Interface Options	Network Interfaces: 7 Netmod Slots - Various 1 Gbps and 10 Gbps Interface Options	
Power Supplies	1 x 150W	1 x 150W	1+1 Redundant 450W	1+1 Redundant 750W	1+1 Redundant 750W	
Management Interfaces	1x RJ45	1x RJ45	1x RJ45	1 x RJ45	1 x RJ45	
Manageability	SNMP v1, v2c and v3 supported; GETs and TRAPs supported across multiple Symantec MIBs; SETs supported only for the System Group					
Display	LCD 16 x 2 Char. Display	LCD 16 x 2 Char. Display	LCD 16 x 2 Char. Display	LCD 16 x 2 Char. Display	LCD 16 x 2 Char. Display	
Operating Temperature	5°C to 40°C	5°C to 40°C	5°C to 40°C	10°C to 35°C	10°C to 35°C	
Storage Temperature	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	
Dimensions (in.) H x W x D	1.75 x 8 x 12.75	1.75 x 8 x 12.75	1.75 x 17 x 20	1.75 x 17.5 x 29	3.5 x 17.5 x 29	
Regulatory and Environmental Standards/Compliance	CE (EN55022, EN55024, EN60950), FCC part 15 class A, UL60950-1					
Certifications	None	None	FIPS 140-2 level 2 for the SV1800-C, SV1800-F, SV1800B-C, SV2800, SV2800B, SV3800, SV3800B and SV3800B-20 models. These models also have Common Criteria NDPP and SOGIS certification and are in process for EAL3+. These models also have UC/APL certification.			
Modes of Operation (per network segment)	Passive-Tap (3.x only), Passive-Inline, Active-Inline Fail to Network (FTN) and Fail to Appliance (FTA), ProxySG segment (4.x only)					
Visibility Modes	Controlled-client (Re-sign) Mode [In-line Only], Controlled-server (Known-key) Mode. A full list of Modes is available in the Administrator Guide.					
Encryption	TLS 1.3 (draft 18-28), TLS 1.2, TLS 1.1, TLS 1.0, SSLv3, partial SSLv2					
Public Key Algorithms	RSA, DHE, ECDHE					
Symmetrical Key Algorithms	AES, AES-GCM, AES-CCM, 3DES, DES, RC4, ChaCha20-Poly1305, Camellia					
Hashing Algorithms	MD5, SHA-1, SHA-2, SHA256, SHA384					
RSA Keys	512 to 4096 bits					
Software						
Software Licensing	A Symantec License is required for inspection activation for each appliance. Please refer to the Licensing section within the Symantec Support portal. Host Categorization is an optional, subscription-based service that requires an additional license per appliance.					

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