Content Analysis
Advanced, Multi-Layer Threat Protection

At A Glance

- Multi-layered security for effective defense against known and unknown threats.

- A unique, multi-detection approach to quickly analyze suspicious files and URLs, interact with running malware to reveal its complete behavior, and expose zero-day threats and unknown malware.

- Filtered, on-prem or cloud sandbox analysis for efficient and thorough inspection of truly unknown files.

- Prioritized analysis to reduce the number of alerts SOC and incident response teams must address.

- Deployed on the same hardware as Symantec Proxy, as a VM, or in the cloud for improved ROI and flexibility.

- An innovative layered approach to security.

- Integrated with Symantec and partner ecosystem.

Block, Detect and Analyze Threats with Automated, Advanced Threat Protection at the Gateway

Enterprises are vulnerable to increasingly sophisticated exploits. Increased exposure requires a new defense that combines prevention with more effective attack detection, analysis, and response.

Symantec™ Content Analysis uses a comprehensive approach to security that offers unequaled protection against known, unknown, and targeted attacks. Paired with Symantec ProxySG, Secure Messaging Gateway, Symantec Endpoint Protection, Security Analytics, or other third party tools, Content Analysis takes a layered approach to threats targeting network, mail, or endpoint traffic. Content Analysis uses both Symantec and other leading security vendors for allow list/block list and file reputation services, dual antimalware engines, machine learning, and deep inspection and detonation through on-box or cloud sandboxing. Together, this fusion of content and malware analysis is the best protection against targeted malware attacks. Content Analysis is designed to protect organizations from viruses, Trojans, worms, spyware, and other malicious content across the network, endpoints, or targeting email.

Inline Threat Analysis

Sophisticated attacks come in many forms, designed to avoid detection by siloed, single-purpose blocking tools; no single technology effectively stops all threats. Content Analysis takes a different approach and offers a platform for multi-layered/multi-vendor threat detection and protection to dramatically reduce the number of alerts that SOC and Incident Response teams need to address. By incorporating ProxySG and Secure Messaging Gateway, Content Analysis:

- Blocks known malicious URLs and emails at the gateway

- Leverages Symantec File Reputation Services (FRS) and conducts extensive allow list and block list scanning

- Analyzes unknown files through advanced machine learning and static code file analysis

- Scans content with dual antimalware engines for greater detection accuracy

- Detonates unknown files via sophisticated sandboxing

- Integrates with many security tools including Symantec Endpoint Protection to provide endpoint visibility, protection, and response

Symantec File Reputation Services

Content Analysis generates hashes for each file it processes. These hashes are then compared with Symantec's cloud-based File Reputation Services (FRS) classification to identify known files. The service uses reputation scores that indicate whether files are "known" trusted or malicious. Depending on the reputation score, files are then either blocked if malicious, passed to the user if safe, or further processed with anti-virus scanning and sandboxing. Symantec FRS enables crowd sourced security – any file that is detonated in a Content Analysis sandbox by one customer is shared with the FRS service and therefore blocked if that file shows up at another Symantec customer.

Endpoint Integration

Content Analysis integrates with Symantec Endpoint Protection and other endpoint solutions. When sandbox analysis determines a file is malicious, Content Analysis queries the endpoint manager to determine if any workstations in the network have been infected. That information is then included in the report to the administrator and provides the options to add the file hash to a blacklist or run a remediation policy to protect against further infection throughout the organization.

Content Analysis architecture allows the Symantec Enterprise Division of Broadcom to partner with technology vendors to offer enhanced protection. Leading antimalware engines from Symantec, Kaspersky, Sophos, and McAfee are supported with up-to-the-minute updates, providing better protection than desktop antimalware alone. Up to two antimalware engines can be employed simultaneously to improve detection and blocking. Threat detection engines include:

• Checksum signature matching for known threats
• Command and control behavioral analysis for preemptive detection
• Emulation mode for deep script and executable analysis

Figure 1: After ProxySG scrutinizes web traffic, Content Analysis analyzes any files within that traffic based on hash reputation, advanced machine learning, and then scans for malware and viruses using dual-antivirus/antimalware engines. Any remaining unknown files are sent on to dynamic sandboxing.
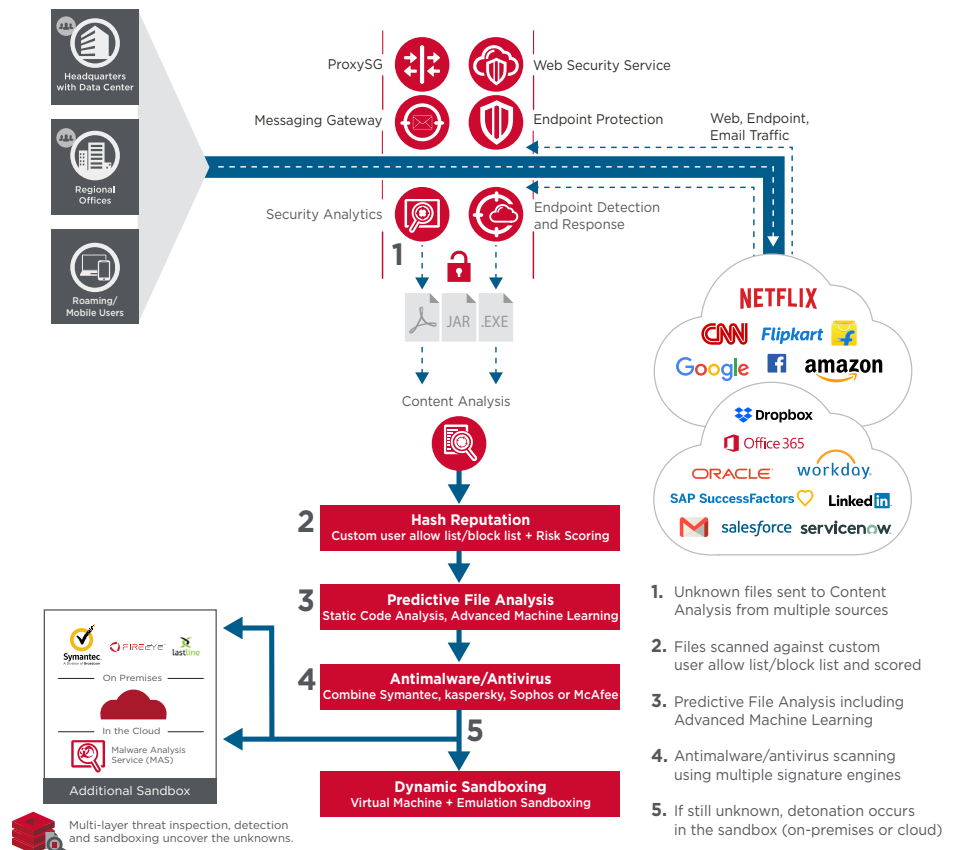
Flexible configuration allows both inbound and outbound traffic analysis and includes options such as set time-out duration, drop file if errors in detection occur, real-time sandboxing to prevent patient zeros, and defining trusted sites. Set policies for allow/deny lists, with extensions, along with file size and content type restrictions. Alerts and log files can also be customized. This powerful Advanced Threat Protection at the gateway is available though Symantec Enterprise Licensing for flexible deployment and to meet the needs of any organization.
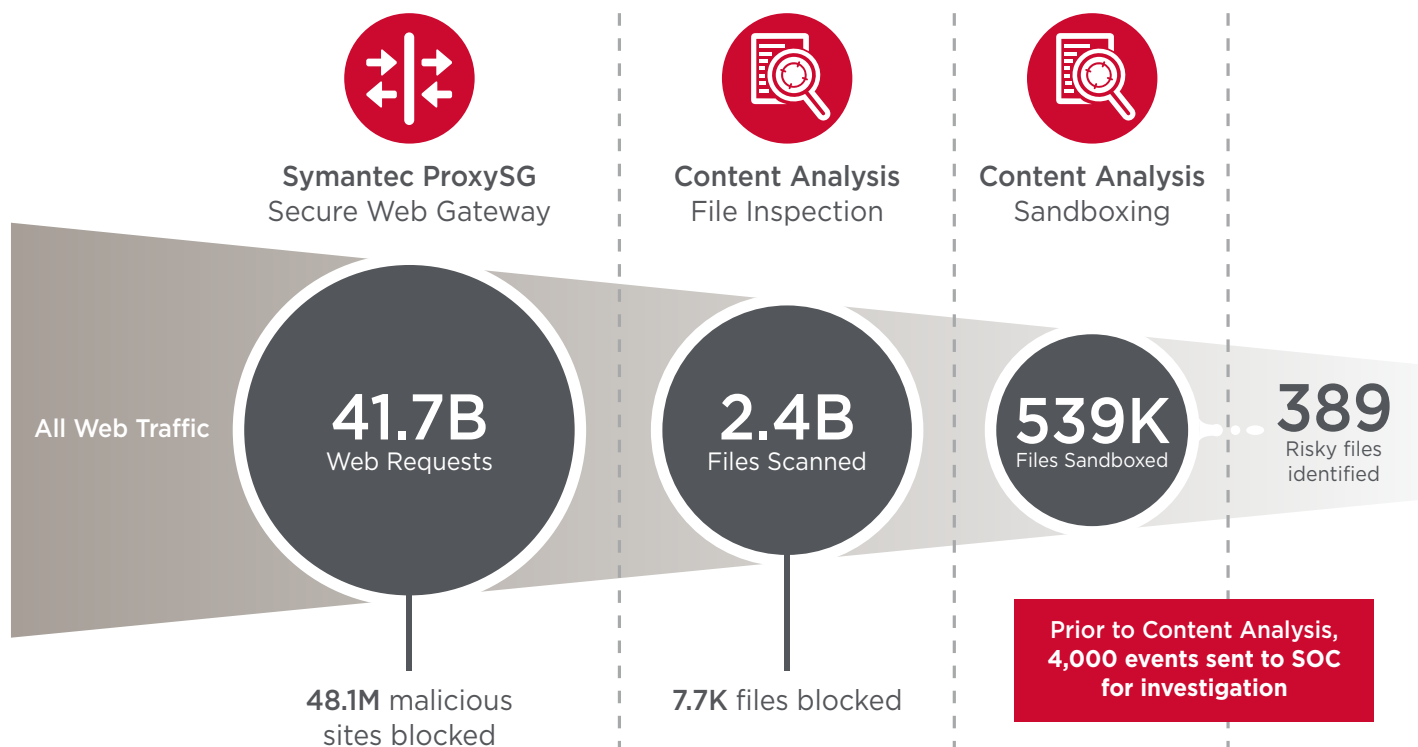
Deployment options include:

• High-performance hardware to meet the demanding needs of the largest networks

• Optimized virtual appliances to reduce hardware expense, support branch offices, or for deployments in cloud environments like AWS

• Cloud-hosted Web Security and Malware Analysis (sandboxing) Services that deliver industry-leading threat protection

Effectively Combat Advanced Threats

Content Analysis thwarts targeted attacks with threat intelligence from multiple sources, integrated with leading web proxy and email gateway architectures to block malicious web sessions and emails. Traffic is filtered through multiple levels of inspection to stop malware from entering your organization. Detect and block more exploits, better manage threat analysis—even on the fastest of networks—and reduce false positives. The strongest protection available requires layered, orchestrated technology that only Symantec provides.

30 Days of Actual Traffic at Fortune 20 Customer

Figure 2: In this example, Symantec ProxySG and Content Analysis analyzed billions of web requests using a multi-stage process and filtered them down to only a handful of valid alerts that required further investigation by a security team.

Symantec ProxySG
Secure Web Gateway

Content Analysis
File Inspection

Content Analysis
Sandboxing

All Web Traffic

41.7B
Web Requests

2.4B
Files Scanned

539K
Files Sandboxed

389
Risky files identified

48.1M malicious sites blocked

7.7K files blocked

Prior to Content Analysis, 4,000 events sent to SOC for investigation

Content Analysis Physical Appliance Options

Content Analysis can be deployed on the same Secure Web Gateway appliances as Symantec Proxy.

Secure Web Gateway Appliances	SSP-S410-10	SSP-S410-20	SSP-S410-30	SSP-S410-40
Platform Specifications				
System				
CPU	1x10 core 2.2 GHz 4210 Cascade Lake	2x10 core 2.2 GHz 4210 Cascade Lake	2x16 core 2.1 GHz 4216 Cascade Lake	2x20 core 2.1 GHz 6230 Cascade Lake
Memory	48 GB (DDR4 SDRAM)	96 GB (DDR4 SDRAM)	192 GB (DDR4 SDRAM)	384 GB (DDR4 SDRAM)
Storage SSD	2x 480 GB	2x 960 GB	2x 960 GB	2x 1.9 TB
Boot Drive (SATA)	2x 64 GB	2x 64 GB	2x 64 GB	2x 64 GB
Power Supply	2x 1200W	2x 1200W	2x 1200W	2x 1200W
Network Interface - Data	4-port 10G Copper	4-port 10G Copper	4-port 10G Copper	4-port 10G Copper
Network Interface - Management	1G Copper	1G Copper	1G Copper	1G Copper
Optional Network Interface Cards	Quad-Port 10G Copper (with bypass capability), Dual-Port 10G Copper, Quad-Port 1G Copper (with bypass capability), Quad-Port 10G Fiber (LC, with bypass capability), Dual-Port 100G Fiber			

Secure Web Gateway Appliances	SSP-S410-10	SSP-S410-20	SSP-S410-30	SSP-S410-40
Rack Specifications				
Shipping Dimensions and Weight				
Width	610 mm (24.01 in.)	610 mm (24.01 in.)	610 mm (24.01 in.)	610 mm (24.01 in.)
Overall Depth	995 mm (39.17 in.)	995 mm (39.17 in.)	995 mm (39.17 in.)	995 mm (39.17 in.)
Height (on pallet)	290 mm (11.41 in.)	290 mm (11.41 in.)	290 mm (11.41 in.)	290 mm (11.41 in.)
Shipping Weight (pounds)	~26 kg (57 lb)	~26 kg (57 lb)	~26 kg (57 lb)	~26 kg (57 lb)
Appliance Dimensions and Weight				
Width	483 mm (19.01 in.)	483 mm (19.01 in.)	483 mm (19.01 in.)	483 mm (19.01 in.)
Overall Depth	826.8 mm (32.55 in.)	826.8 mm (32.55 in.)	826.8 mm (32.55 in.)	826.8 mm (32.55 in.)
Height (one rack unit (RU) with casters)	43.5 mm (1.71 in.)	43.5 mm (1.71 in.)	43.5 mm (1.71 in.)	43.5 mm (1.71 in.)
Appliance Weight	~22 kg (48.5 lb)	~22 kg (48.5 lb)	~22 kg (48.5 lb)	~22 kg (48.5 lb)
Operating Environment				
Main Input Power - PDU	Dual 100 to 240 VAC, 7.08A, 47 Hz to 63 Hz			
Facility Power Interface	Type B, 5-15R, 120 VAC			
Power	1200W (Max)	1200W (Max)	1200W (Max)	1200W (Max)
Thermal Rating (Maximum)	4096 BTU	4096 BTU	4096 BTU	4096 BTU
Operating Temperature (Celsius)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Non-Operating Temperature	−40°C to 70°C (−40°F to 158°F)	−40°C to 70°C (−40°F to 158°F)	−40°C to 70°C (−40°F to 158°F)	−40°C to 70°C (−40°F to 158°F)
Operating Relative Humidity	20% to 85% RH	20% to 85% RH	20% to 85% RH	20% to 85% RH
Non-Operating Relative Humidity	10% to 85% RH	10% to 85% RH	10% to 85% RH	10% to 85% RH
Operating Altitude	3K Meters	3K Meters	3K Meters	3K Meters
Non-Operating Altitude	12K Meters	12K Meters	12K Meters	12K Meters

Content Analysis Physical Appliance Options (cont.)

Secure Web Gateway Appliances		
Regulations	**Safety**	**Electromagnetic Comp**
International	UL: UL 60950 1, 2nd Edition cUL: CAN/CSA C22.2 No. 60950 1 07, 2nd Edition CB: IEC 60950 1:2005 +A2:2013+ Summary with National Differences: EN 60950 1:2006+A2:2013	CISPR22:2008 Class A; CISPR32 Class A
USA	UL: UL 62368 1, 2nd Edition	FCC part 15, Class A /ANSI C63.4 2014
Canada	cUL: CAN/CSA C22.2 No. 62368 1 14, 2nd Edition	ICES-003, Issue 6 Class A / CAN/CSA CISPR 22 10
European Union (CE)	CB: IEC 62368 1:2014 (Second Edition) Summary with National Differences: EN 62368 1:2014+A11:2017	EN 55011, EN 61000 6 3, EN 55032, CISPR 32, Class A EN 61000 3 2 / EN 61000 3 3, EN 55024 / EN 61000 6 1, EN 61000 4 2 / EN 61000 4 3, EN 61000 4 4 / EN 61000 4 5, EN 61000 4 8 / EN 61000 4 11
Japan	---	VCCI V-3, Class A
Mexico	NOM-019-SCFI by NRTL Declaration	---
Argentina	S Mark – IEC 60950-1	---
Taiwan	BSMI – CNS-14336-1	BSMI – CNS13438, Class A
China	CCC – GB4943.1	CCC – GB9254; GB17625
Australia/New Zealand	AS/NZS 60950-1, Second Edition	AS/ZNS-CISPR32, AN/NZS CISPR 32:2015 + C1:2016 ED.2.0
Korea	---	KC – RRA, Class A, KN32/KN35, KN61000 4 2 / KN61000 4 3, KN61000 4 4 / KN61000 4 5, KN61000 4 6 / KN61000 4 11
Russia	EAC - TP TC 004/2011	EAC - TP TC 020/2011
Environmental	RoHS-Directive 2011/65/EU, REACH-Regulation No 1907/2006	
Product Warranty	Limited, non-transferable hardware warranty for a period of one (1) year from date of shipment. Support contracts available for 24/7 software support with options for hardware.	