

SOLUTION BRIEF

Web Gateway Validation

Malicious Websites and Links Present a Constant Threat to Users

Filtering web traffic is a constant challenge given the prevalence of malicious websites. Threat actors pervasively use obfuscation techniques to hide malicious payloads within secure web traffic and bypass many standard detection methods.

Today, 1 out of every 100 URLs leads to phishing sites, malicious advertisements, drive-by downloads, and exploit kits, all of which are often concealed within legitimate-looking web pages and links.

(Source: Cloudflare: State of Application Security 2024)

Secure Web Gateways Require Continuous Validation to Block Malicious Web Traffic

Cybersecurity leaders need to constantly test and optimize the effectiveness of their secure web gateway controls and policies to detect and prevent the delivery of malicious web content and protect their end users from inadvertently succumbing to a malicious payload.

Cymulate enables your security team to conduct comprehensive assessments of your web gateway, to test and validate against thousands of known malicious payloads and links in a production-safe mode.

The best practice assessment simulates different types of web-based threats for both inbound validation of malicious payloads and outbound validation of malicious links. The simulated attack types include:

The results of these assessments highlight the gaps and weaknesses in your web security controls that could be used to exploit your users and lead to a cyber breach.

Inbound Validation

- Malicious Payloads (Files)
- File Policies

Outbound Validation

- Malicious Links
- URL Category Policies

Solution Benefits



Continuous validation

Automated continuous testing of secure web gateway controls and policies against the latest web-based threats.



Identify gaps

Find gaps and weaknesses in your web gateway that could expose your users to malicious content.



Optimize controls

Configure and tune your web gateway controls with mitigation guidance to block websites containing malicious content.



Reduce exposure

Continuously measure and improve your web gateway security controls to reduce the risk of a cyber attack.



During a Web Gateway assessment we discovered that we do not monitor or log any traffic that does not originate from a web browser. We would never have been able to discover this without Cymulate.

– SecOps Team Member, Healthcare Industry

Automated Security Validation for your Secure Web Gateway

Cymulate breach and attack simulation delivers production-safe security testing of your web gateway using a wide range of malicious links and payload variants to simulate the latest web-based threats. The solution lets you identify the gaps and weaknesses in your web security controls that could enable a malicious payload to reach your systems and initiate a cyber attack on your environment. The assessment enables you to optimize the investment you have made in your secure web gateway by configuring and tuning your web defenses with mitigation guidance from Cymulate.

Detailed Report and Findings

Gain deep insight into the effectiveness of your web gateway controls and policies with detailed reports and findings that include:

- **Risk Score** to measure the overall performance of your secure web gateway
- **Exposure Level** to measure your security posture
- **Penetration Ratio** highlighting the number of malicious links and payloads not blocked by the web gateway
- **Ratio by Attack Type** to focus efforts on least protected areas of the web gateway controls
- **High Risk Attacks** to prioritize risk and focus mitigation efforts
- **Least Protected File Types** to prevent malicious payloads
- **Mitigation Guidance** to help optimize controls and enhance policies



Why choose Cymulate?



Depth of attack simulations

The assessment contains a comprehensive suite of over 20,000 malicious payloads and links to fully validate the effectiveness of your web gateway.



Production safe

The full suite of test cases is completely production-safe with no malicious payload or code execution that could impact your production environment.



Automated validation

The assessment is fully automated enabling continuous validation and performance optimization of your web gateway control effectiveness every week.

About Cymulate

Cymulate, the leader in exposure management and security validation, provides the single source of truth for threat exposure and the actions required to close security gaps before attackers can exploit them. More than 500 customers worldwide rely on the Cymulate platform to baseline their security posture and strengthen cyber resilience with continuous discovery, validation, prioritization, and guided remediation. For more information, visit www.cymulate.com.

Get a Demo