

Cymulate and Cylance

Solution Brief



The threat landscape is constantly evolving with new types of malware and attack techniques. Enterprise security teams must validate and optimize the effectiveness of their security controls against a myriad of attacks that develop over time and to changes in the IT environment that may create new security gaps.

CylancePROTECT and CylanceOPTICS

By constantly training on a vast set of real-world threat information, CylancePROTECT takes a formulaic data science approach to protection, harnessing the power of the cloud with the scalability and efficiency of artificial intelligence and machine learning.

Cylance's mathematical approach statistically determines whether a file is safe to run before it is executed. CylanceOPTICS provides built-in incident investigation and threat hunting capabilities in addition to automated and manual response options. Cylance has evolved endpoint security to tackle the volume and sophistication of threat developments by introducing new technologies that learn and adapt to changes in the threat landscape.

Security Validation Integration with Cylance

Cymulate integration with Cylance provides automatic correlation of attack simulations to Cylance findings in the Cymulate platform. Whether using customizable or out-of-the-box scenarios, Cymulate enables security teams to simulate malicious payloads and threat behaviors on their endpoints and correlate Cylance findings and actions to a broad spectrum of attacks. By challenging a Cylance endpoint security deployment with adversarial activity, an organization can validate effective and accurate baselines, quarantine and blocking policies.

Using Cymulate Breach and Attack Simulation to Continuously Validate and Optimize the Effectiveness of Your Cylance Endpoint Security Controls

Immediate Threats

Security teams are challenged knowing whether their security controls protect them against the latest threats. The Cymulate Immediate Threats Intelligence module is updated daily with new threats, so that security teams can test the efficacy of their Cylance endpoint security controls to the evolving threat landscape.

One such example is a new version of a Windows malware called Sarwent. Once Sarwent is active on a system, the malware creates a new Windows user account, modifies the Firewall, and then opens the RDP ports. This enables the attacker to use the new

Windows user they created on the infected system to access the host without being blocked by the Windows firewall. The assessment is executed, and in this case, Cylance detects and prevents the attack. The security team sees the result in both the Cymulate platform and the Cylance platform.

In cases where the simulated attack is successful the platform provides the IoCs and the URLs associated with the attack. The assessments can be repeated to confirm protection.

The screenshot shows the 'Threat Protection' dashboard. On the left, there is a sidebar with navigation icons. The main area is divided into 'Threats', 'Script Control', and 'External Devices'. The 'Threats' section shows a summary of threat levels: High (0), Medium (0), and Low (0). Below this, there are status sections for 'Last 24 Hours' and 'Total', each showing counts for Quarantined, Unsafe, Abnormal, and Unique to Cylance. The main table lists detected threats with columns for Icon, Name, File Type, Priority, Auto Run, and a 'RU' column. Five threats are listed, all with a priority of 'Low' and 'No' for 'Auto Run'. Each threat name includes a link to 'Search Google' and 'Check VirusTotal'.

ICON	NAME	FILE TYPE	PRIORITY	AUTO RUN	RU
<input type="checkbox"/>	Sar				
<input type="checkbox"/>	Sarw1_edrExe.exe Search Google Check VirusTotal	Executable	Low	No	No
<input type="checkbox"/>	Sarw2_edrExe.exe Search Google Check VirusTotal	Executable	Low	No	No
<input type="checkbox"/>	Sarw3_edrExe.exe Search Google Check VirusTotal	Executable	Low	No	No
<input type="checkbox"/>	Sarw4_edrExe.exe Search Google Check VirusTotal	Executable	Low	No	No
<input type="checkbox"/>	Sarw5_edrExe.exe Search Google Check VirusTotal	Executable	Low	No	No

Integration Detection

Attack indicators (1 indicators)

Sarw5_edrExe.exe

Security alerts/events

Attack indicator	Timestamp	Vendor	Agent	Alert/Event	Alert Name	Type
Sarw5_edrExe.exe	2020-7-22 14:51	BlackBerry Cylance Protect	N/A	Alert	N/A	N/A

Validating Efficacy to MITRE ATT&CK Techniques

In many cases the security team will want to validate the efficacy of their security controls to a specific technique or set of techniques. These can be performed to identify specific weaknesses or to exercise an incident response playbook.

For example, a memory dump to access credential material stored in the process memory of the Local Security Authority Subsystem Service (LSASS), MITRE Technique: T1003.001 - LSASS Memory. This technique can be achieved using a variety of tools like LaZagne, Mimikatz, and ProcDump. Cylance integration with Cymulate enables the security team to validate accurate detection and response to this technique. It also enables them to exercise their incident response playbook to this scenario, to contain the attack and gather artifacts related to the attack.

More Info

Execution Name
Dump *memry* credentials using LaZagne

Tactics
TA006 - Credential Access

Techniques
T1003.001 - LSASS Memory
T1003.002 - Security Account Manager
T1003.004 - LSA Secrets
T1003.005 - Cached Domain Credentials
T1003.003 - NTDS

<p>OS & Platform</p> <p>> 📱</p>	<p>Elevation Requirement</p> <p>Not requires</p>
---	---

Description

The LaZagne project is an open source application used to retrieve lots of passwords stored on a local computer. Each software stores its passwords using different techniques (plaintext, APIs, custom algorithms, databases, etc.). This tool has been developed for the purpose of finding these passwords for the most commonly-used software. Supported software: KeePass, Dumps LSAs using Mimikatz method.

Execution show inputs

```
01 #{{zip_collection_path}}\windows\LaZagne.py memory -0
02
```

Integration Benefits

- Immediate insights: Security validation results and IOCs are always at the SOC team's fingertips, enabling them to optimize EDR capabilities.
- Latest threat intelligence: Detailed attacker TTPs and daily threat updates give SOC teams the latest insight on threat landscape developments.
- Unified visibility: Integration with CylancePROTECT and CylanceOPTICS maximizes team productivity for decision making and developing remediation or mitigation procedures based on true-to-life attack simulations.
- Mitigation guidelines: Teams receive guidance mapped to the MITRE ATT&CK™ framework for accelerating remediation of security gaps.
- Comprehensive coverage: Cymulate challenges controls across all vectors, as well as the entire kill chain, for comprehensive coverage and visibility.
- Continuous automated testing: Automation enables security teams to continuously challenge controls and immediately identify infrastructure changes or security gaps before they are exploited.
- Process optimization: Cymulate emulates full kill chain APTs to exercise a security teams detect and respond capabilities and outcomes, manual and automated.

About Cymulate

With a Research Lab that keeps abreast of the very latest threats, Cymulate proactively challenges security posture end to end, automatically and continuously, allowing hyper-connected organizations in all maturity levels to avert damage and stay safe. Founded by an elite team of cyber researchers with world-class experience in offensive cyber solutions, Cymulate is trusted by hundreds of companies worldwide, from small businesses to large enterprises, including leading banks and financial services. They share our vision to be the gold standard for security professionals and leaders to manage, know and control their Cybersecurity Posture. Today it's simple for anyone to protect their company with the highest levels of security. Because the simpler cybersecurity is, the more secure your company—and every company—will be.

Contact us for a live demo, or get started with a free trial

Start Your Free Trial