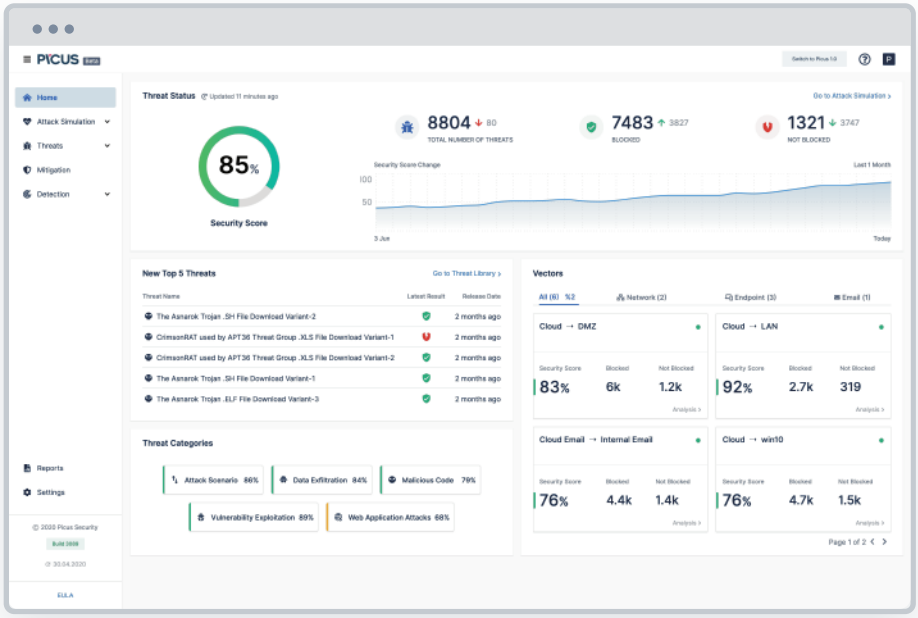
PICUS

SECURITY CONTROL VALIDATION & MITIGATION

Threat-centric, pervasive, flexible end-to-end security validation

Today's security leaders face a herculean task: maintaining a hard baseline against ever evolving cyber threats, while balancing requirements and investment. Modern cyber security stacks are often complex, but hardly gap-free. While security analysts try to weather a storm of threat intelligence coming from multiple sources, skills and resources are required to turn huge amounts of data into concrete tactics to validate security effectiveness. The foundation of readiness is frequent testing and validation. With all these tools and responsibilities, how often do you ask yourself "am I secure?"

Picus Security Control Validation and Mitigation is a threat centric, flexible platform that allows to measure security effectiveness and quickly assess controls, automatically and consistently identify gaps, and instantly apply selected mitigation advice for the purpose of security validation, hardening and mitigation. The platform is powered by an extensive Threat Library curated by Picus Labs, and a broad set of mitigation advice coming from the Picus Technology Alliance Network.



HIGHLIGHTS

- **Maximise ROI**
  Utilise your security investments at their maximum. Manage your security estate effectively.
- **Automated and consistent validation**
  Streamline the validation process through automatic, continuous and pervasive security testing.
- **Elevate the quality of the visibility insight**
  Monitor your security posture through consistent and continuous validation.
- **Speed up mitigation and change management**
  Automate and speed up security policy and signature management.
- **Empower your teams with threat-centric validation**
  Leverage on the Picus Threat Library and benefit from constant vigilance and awareness of the global threat landscape for timely and precise operations.

THREAT EMULATION BASED ON THE MOST EXTENSIVE THREAT LIBRARY

By undertaking global threat watch, imminent threat analysis and commonality evaluation processes, Picus Labs maintains a proprietary Threat Library around the clock and provides thousands of curated, indicative real-world threat samples and scenarios. All content is tied to MITRE ATT&CK with over 90% coverage.

FAST DEPLOYMENT, EASY MANAGEMENT

The Picus Platform engine assesses the readiness level of network, web application, endpoint and email security controls in production networks, either while operating 24×7 or on-demand when required. Picus is categorically safe, technology agnostic, requires limited deployment effort and fully automated.

VENDOR-SPECIFIC MITIGATION FOR PRECISION AND SPEED

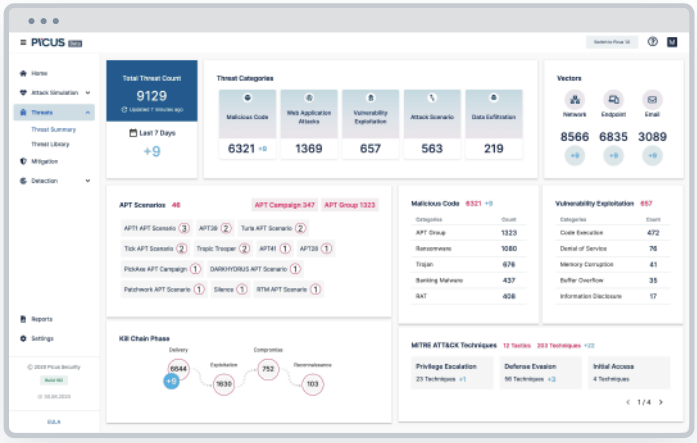
Picus Mitigation Library carries technology-specific security policy insights. Laser-focused mitigation advice from our Technology Alliance Ecosystem can be applied to alliance vendors for rapid remediation. Solutions include next-generation firewall, network intrusion prevention systems, and web application firewalls.

HOW IT WORKS

The Picus Security Control Validation and Mitigation solution consists of Picus Threat Library, Threat Emulation Module, and Mitigation Library. While the Threat Emulation Module continually collects adversarial content from the Threat Library and runs assessments, the Mitigation Library reveals available signatures and policies developed by the vendors to address the identified security control gaps.

PICUS THREAT LIBRARY

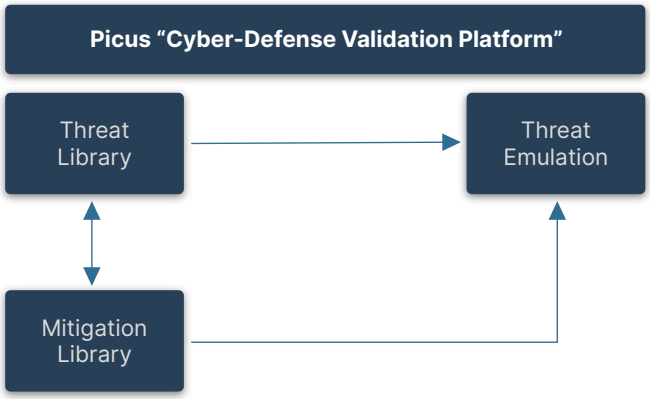
Picus Threat Library contains thousands of daily-updated malware, vulnerability exploits, web application attack samples, and atomic adversarial techniques selected via commonality evaluation of global threat watch data. Hundreds of nation-state and vertical driven attack scenarios are included. Content is mapped to the frameworks of MITRE ATT&CK, Cyber Kill Chain, and OWASP and presented in relation to targeted applications, targeted operating systems, severity level as well as Common Vulnerabilities and Exposures/Common Weakness Enumeration (CVE/CWE) references. Through the Threat Library, users find samples of the most recent adversarial techniques at their fingertips, allowing them to stay ahead of newest threats, saving the hassle of setting up and maintaining an in-house repository. SOC analysts, threat hunters and incident responders, security operations teams, red team and pen-testers can utilize this granular content for various testing scenarios.



PICUS MITIGATION LIBRARY

While Picus Labs' Red Team adds new adversarial content to the Threat Library, the Blue Team examines the solution inventory of Picus' technology partners to enrich each threat and technique sample with mitigation alternatives. New threats and associated mitigation alternatives are added daily.

Picus Mitigation Library provides vendor-specific policy insights for the following categories: network security controls, next-generation firewall, network intrusion prevention systems, web application firewalls, Endpoint Detection & Response (EDR) solutions, SIEM platforms.



PICUS THREAT EMULATION MODULE

Picus Threat Emulation Module is the pivotal piece of the Picus Platform, bridging your defensive capabilities with the largest adversarial library available and with the Mitigation Library for eliminating risks quickly.

The Threat Emulation Module assesses the "readiness level" of network, web application, endpoint, and email security controls in production networks, either while operating 24×7 or on-demand for red team practices. The emulation module can be configured over multiple attack vectors simultaneously and can process thousands of adversarial scenarios from the Picus Threat Library across your whole defensive estate, cloud based or on-premise, in a matter of hours.

Picus assessments are categorically safe, technology agnostic, and require limited deployment effort. Emulated attacks are run between agent peers. Each Picus peer has the capability of taking the attacker or victim side of the emulation based on the scenario, significantly simplifying the deployment requirements. The validation output collected by Picus is presented in real time and in retrospect, distilled as security scoring and threat-based checks (blocked vs unblocked threats) and drives prevention advice and mitigation actions.

Picus Threat Emulation Module has an easy to use and functional user interface.

TECHNOLOGY ALLIANCES

NETWORK SECURITY

Check Point SOFTWARE TECHNOLOGIES LTD. · cisco Solution Partner · CITRIX · FORCEPOINT · FORTINET · f5 · McAfee · paloalto NETWORKS · SNORT · TREND MICRO

SIEM

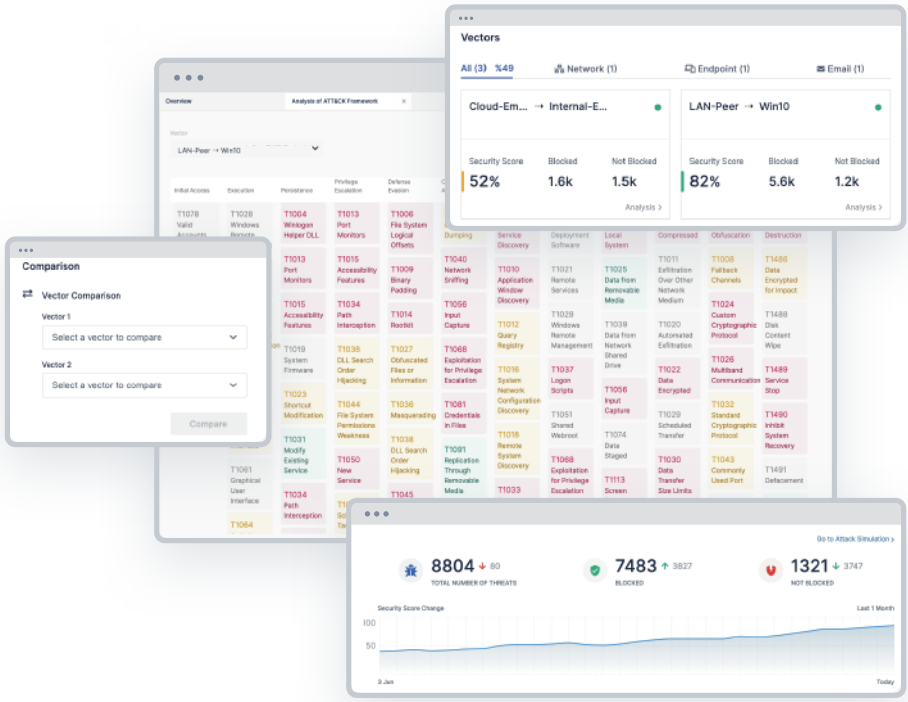
IBM Radar · splunk>

EDR

vmware Carbon Black

KEY USABILITY FEATURES

- Executive level reporting.
- Advanced notification features on sudden success rate drop situations.
- Easy navigation among different attacks vectors.
- Advanced historical and vector-based comparisons.
- Enriched threat or technique information visibility containing CVE, CWE, OWASP, cyber-kill chain, MITRE ATT&CK references, hash information, targeted operating systems, targeted applications and others.



USE CASES

FOR SECURITY LEADERS

- Build cross-departmental defense capabilities through clear-cut cyber-attack readiness visibility.
- Manage cyber-security function based on attack readiness based metrics and KPIs.
- Help answer questions on the readiness status about the threats covered publicly.
- Support budget discussion with evidence on limitations and explain cybersecurity risk in the business context.
- Demonstrate the value delivered by cybersecurity operations against a stream of adversarial activities.
- Empower cyber-security teams by giving them the toolset for uncovering new configuration requirements against the changing adversarial landscape instantly.
- Reveal systemic shortcomings such as poor service quality, network flaws, new employee onboarding shortcomings, aged technologies, and others.

FOR SOC MANAGERS

- Gain granular and technology-related visibility on security control gaps.
- Empower threat hunters and incident responders by providing real threat samples and specific validation capacity.

FOR SecOps MANAGERS

- Build, sustain, and harden the security baseline across the security controls such as next-generation firewall, intrusion prevention systems, web application firewalls, email gateways, and endpoint controls.
- Respond to emerging threats quicker and speed up change management during mitigation operations.
- Run quicker and easier proof of concept processes.

FOR RED TEAMERS

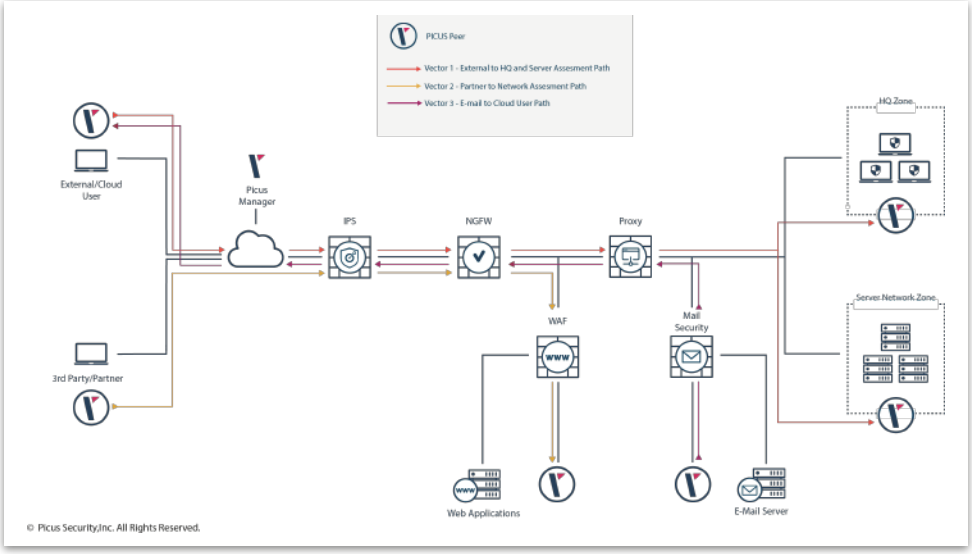
- Automate the test process using the readily available threat samples and attacker and victim attributes.
- Apply larger number of test scenarios in a given time frame.
- Gain flexibility in delivering continuous and on-demand assessments.

REQUIREMENTS

Picus Manager
VMware ESX/i 5.1 or later. Hyper-V Server 2008 and later. Physical Servers: Any hardware supporting CentOS 7 x64 (minimal installation).

Picus Network and Email Peer
VMware ESX/i 5.1 or later. Hyper-V Server 2008 and later. Physical Servers: Any hardware supporting CentOS 7 x64 (minimal installation).

Picus Endpoint Peer
Supports Windows 7 SP1, Windows 8.1, Windows 10, Windows Server 2012 R2 and Windows Server 2016 with .NET Framework 4.5.2 or above.



DEPLOYMENT COMPONENTS

Picus Manager – provides an easy-to-use web user interface from which Picus assessments and reports are managed.

Picus Network and Email Peer – A vector defines the network path followed by an attack. Any vector terminates in two peers (an attacker and a victim). A network peer can be selected either as a victim or attacker peer.

Picus Endpoint Peer – Simulation peer to test endpoint security. It can only be configured as a victim peer.

Picus Integration Peer – provides integration with security solutions/systems in the customer environment for Picus Security modules.

DEPLOYMENT OPTIONS

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About Picus

Picus Security is a breach and attack simulation (BAS) vendor. BAS was categorized as a new security assessment domain in 2018 by Gartner, and Picus has been named as a Cool Vendor in 2019. Picus is an intelligence-driven security validation platform that simplifies security operations and optimizes defenses. The platform safely emulates cyber threats and provides mitigation guidance - allowing organizations to improve visibility and security investment utilization.

For more information: www.picussecurity.com

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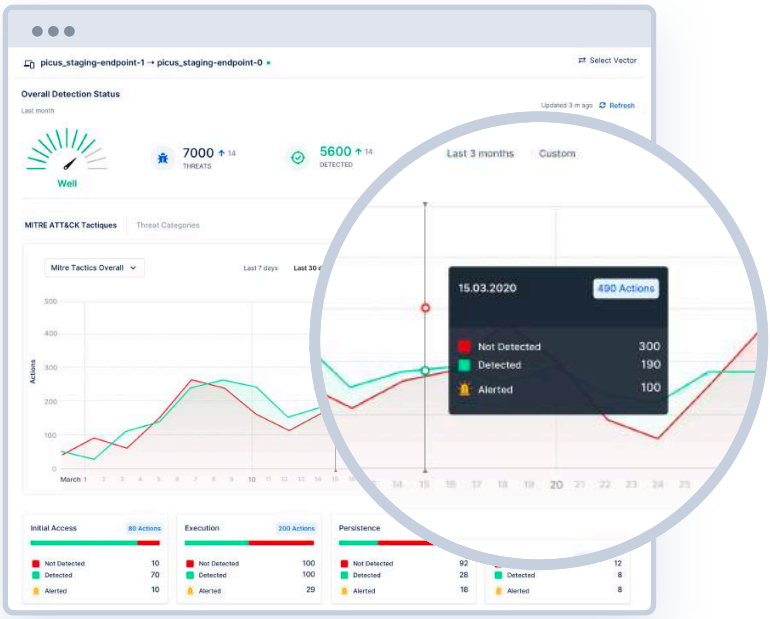
DETECTION ANALYTICS & MITIGATION

Continuous security validation that boosts detection effectiveness

Modern cyber threats require that SOC teams work hard to handle a multitude of complex data collection and analytics tasks. Processing massive volumes of information from heterogeneous environments, SOCs strive to detect all indicators of compromise swiftly, assign the right priorities and take actions without leaving anything meaningful behind. The risk is to have overly complicated security controls, inefficient budgets, and frustrated security teams. SOC teams have to make sure that logs are collected consistently, that alert fatigue resulting from inefficient SIEM rules is minimised, and that cross-team communication and reporting are streamlined.

Picus Detection Analytics & Mitigation is a threat-centric, multi-component solution based on Picus Threat Library, Detection Analytics Module and Mitigation Library that allows SOC teams to highlight risks associated with data collection challenges and exposes undetected malicious activities. The solution offers easy-to-implement mitigation suggestions and updates, improving SOC processes across the board – from threat intelligence to incident analysis and incident response.



HIGHLIGHTS

- **Log Collection Validation**
  Remove your blind spots by collecting required level of logs for SOC operations and assess detection capabilities on existing vectors to gain visibility to undetected gaps.

- **Improve Alerting Capability**
  Assess and improve alerting capabilities and avoid any human-related shortcomings and errors on detection content.

- **Visualize Residual Risk**
  Measure, report, and communicate technical risk with stakeholders and identify configuration problems to enhance the security stack.

- **Decrease Dwell Time**
  Decrease delay between attack occurrence and alert generation and increase the value delivered by the Detection products.

- **Targeted Mitigation Advice**
  Our vendor-specific mitigation advice covers a large set of security controls sourced from our Technology Alliance Ecosystem for instant mitigation.

DELIVERING FALSE-POSITIVE FREE RESULTS

Picus Detection Analytics is designed to provide minimal to zero false positives thanks to its wide angled analytics capabilities that can process large sets of data over multiple network segments and security control activities.

THREAT CENTRIC DETECTION ANALYTICS

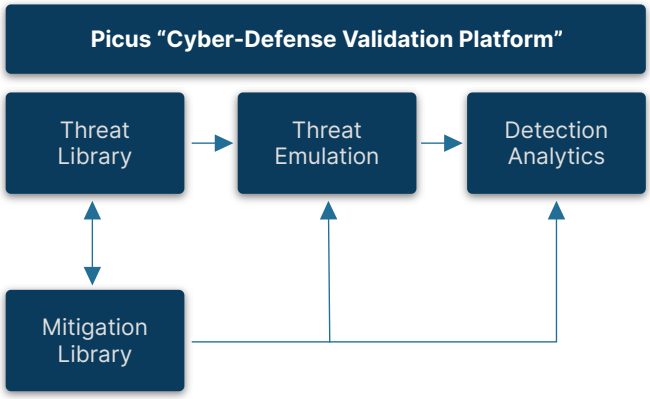
Picus Detection Analytics has an intelligent 24×7 modus operandi. It utilizes the most extensive adversarial context, covering more than 90% of the MITRE ATT&CK techniques and the largest number of malware, vulnerability exploits, and web application attacks samples, thanks to Picus Threat Library.

GOING BEYOND "VISIBILITY ONLY" APPROACHES

The unique integration between the Detection Analytics and Mitigation Library makes vendor-specific EDR and SIEM detection policy improvements easy and possible. Picus' existing technology alliance partners in this category are IBM, Splunk, and VMware Carbon Black.

HOW IT WORKS

The Picus Detection Analytics and Mitigation solution consists of Picus Threat Library, Detection Analytics Module, and Mitigation Library. While adversarial content from the Threat Library is used to run assessments, the Detection Analytics Module continually processes log and event monitoring data matching patterns, and the Mitigation Library reveals available signatures and policies developed by the vendors to address the identified security control gaps.



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PICUS DETECTION ANALYTICS MODULE

Picus Detection Analytics is an automated module that queries SIEM and EDR security logs to find the difference between the available and expected. Every emulated threat and adversary technique creates a log in the relevant security controls should these emulations be detected or prevented. Querying SIEM and EDR platforms in customer environments, the Picus Detection Analytics module matches query findings using advanced algorithms, with the real threat samples and techniques emulated by Picus Threat Emulation Module. As a result, undetected, unlogged, and non-alerted attacks are identified on the spot.

Detection Analytics Module adds intelligence to the query findings by providing alert validation, log granularity concerning deployed security control technologies and MITRE ATT&CK mapping.

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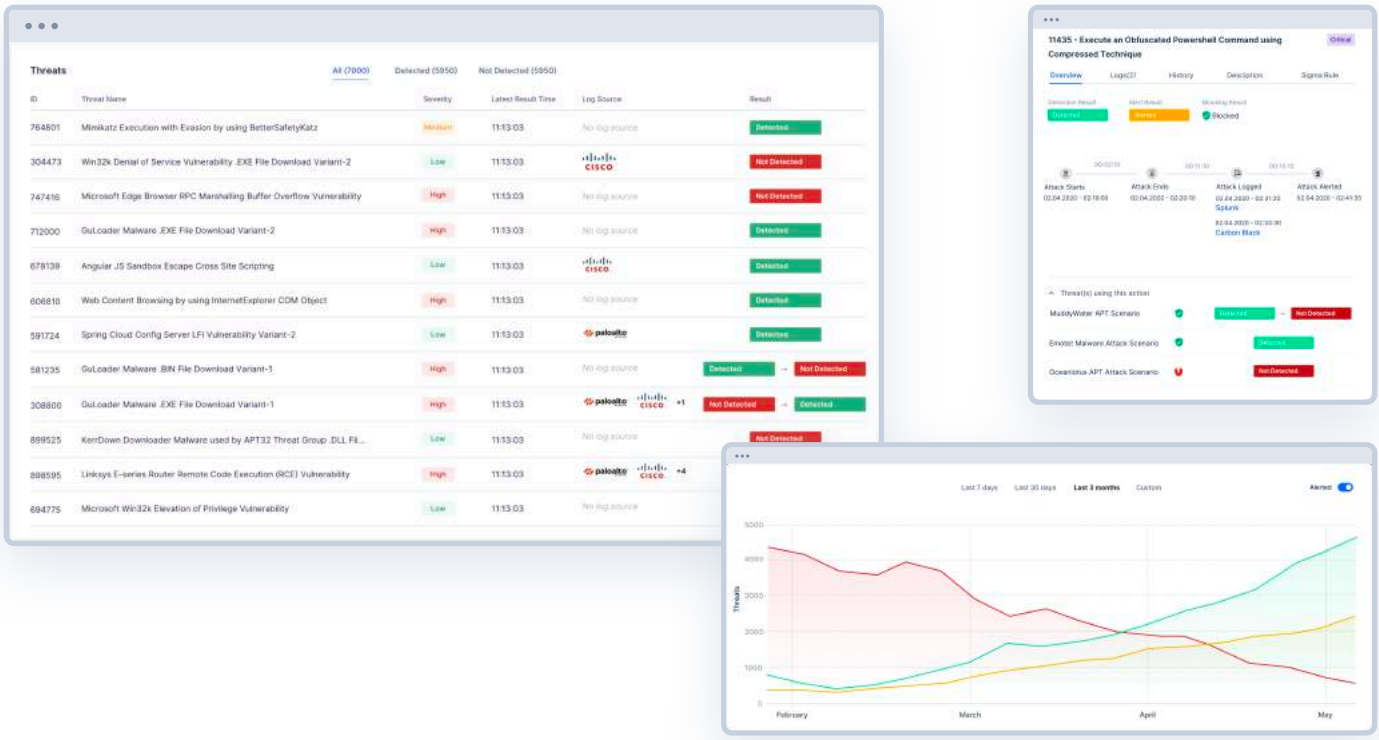


USE CASES

FOR SOC TEAMS

- Validate if the log mechanisms work across the whole network consistently.
- Measure detection coverage in full alignment with MITRE ATT&CK.
- Reveal the detection capabilities and configuration problems of the security stack.
- Assess and enhance alerting capabilities of SIEM platforms.
- Decrease the time between detection and response.
- Make residual risk visible to all stakeholders.
- Empower threat hunters and incident responders by providing real threat samples and specific validation capacity.
- Request test scenarios from red-team practitioners relevant to detection shortcomings and get insights that will have the immediate impact on cyber-defense capabilities.
- Increase the detection capabilities of security controls by instrumenting Picus Mitigation library and achieving a threat informed communication with IT SecOps teams.

FOR SECURITY LEADERS

- Gain visibility over post-comprise detection in addition to the prevention capabilities provided by Picus Security Control Validation & Mitigation Solution.
- Increase operational efficiencies by identifying possible misalignments between people, process and technologies, concerning Information Technology and Cyber Security.

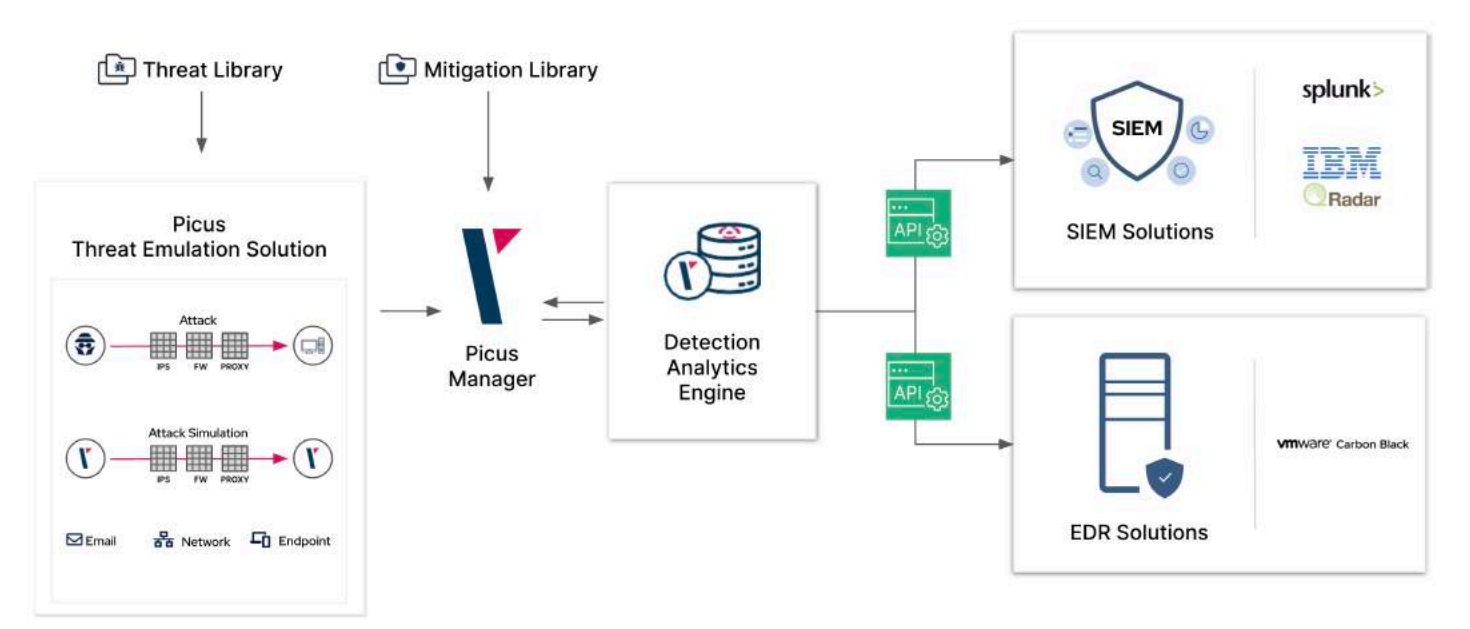
FOR SecOps MANAGERS

- Understand and fix infrastructure related problems that may affect cyber-security operations and efficacy.

FOR RED TEAMERS

- Prioritise test scenarios relevant to detection shortcomings and deliver insights that will have immediate impact on cyber-defense capabilities.

REQUIREMENTS



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4 GB memory,
50 GB disk space,
one network interface

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2 GB memory,
20 GB disk space,
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