

PHÒNG CHỐNG RANSOMWARE VỚI CÔNG NGHỆ WATCHGUARD XDR & ENDPOINT SECURITY





BÓI CẢNH RANSOMWARE ĐANG GIA TĂNG



Hậu quả nghiêm trọng, bao gồm:

- Mất dữ liệu: Dữ liệu bị mã hóa và không thể truy cập được, gây ảnh hưởng nghiêm trọng đến hoạt động kinh doanh.
- Gián đoạn hoạt động: Doanh nghiệp có thể buộc phải ngừng hoạt động trong thời gian dài để giải mã dữ liệu, dẫn đến thiệt hại về tài chính và uy tín.
- Thiệt hại về tài chính: Nạn nhân phải trả tiền chuộc cho kẻ tấn công, gây ra gánh nặng tài chính lớn.
- Mất uy tín: Việc bị tấn công ransomware có thể làm hỏng danh tiếng của tổ chức và khiến khách hàng mất niềm tin.

Quan điểm cá nhân:

"Các chuyên gia IT/an ninh mạng ngày nay càng phải giỏi và nhanh hơn để giữ cho hạ tầng CNTT của các doanh nghiệp không bị tấn công hoặc càng ít vấn đề càng tốt"







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IT Support 365°



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ZERO TRUST FRAMEWORK MÔ HÌNH BẢO MẬT TIÊN TIẾN



Thuật ngữ "zero trust" lần đầu tiên được đặt ra bởi **John Kindervag** là một kiến trúc sư bảo mât.

Trong một bài báo được xuất bản vào năm 2010, Kindervag giải thích cách các mô hình an ninh mạng truyền thống không cung cấp sự bảo vệ đầy đủ vì tất cả chúng đều yêu cầu một yếu tố tin cậy.

"không tin tưởng ai, bất kể họ là ai hoặc đến từ đâu"



https://www.watchguard.com/wgrd-solutions/security-trends/zero-trust/understanding-zero-trust

IT Support 365°



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IT CONSULTING IT HELP & MANAGEMENT

CLOUD

INFORMATION SECURITY



WatchGuard EDR

WatchGuard's Endpoint Security products boast a secret advantage that sets them apart and redefines threat detection



Daniel Phuan Senior Principal Consultant

WatchGuard Endpoint Security in numbers

Global. Experienced. Trusted.



The **Zero-Trust Application Service**, empowered by advanced AI technologies, classifies **over 5 million new binaries every week**



Unmatched security. **Al-based technology**, working hand in hand with our team of **cybersecurity experts**, guarantees a **100% application classification** rate



3 out of 1,000 unknown applications, blocked by the Zero-Trust Application Service are classified as **new malware**



WatchGuard protects +4 million endpoints



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Founded in 1996



Operations in **7** countries; direct presence in **21**



1,200 Employees



250K+ Customers



100+ Distributors16,000+ Active Partners







Cybersecurity Landscandosagnus an hac habitass

Insider Threats

Security Risks Are Rising

CYBER ATTACK

54% of companies have experienced a thirdparty DATA BREACH in the past year

CVE-ID

RANSOMWARE

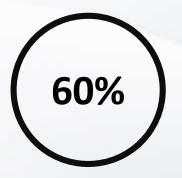
Vulnerabilities

Cost of Downtime

Business Challenges



74%



Of organizations lack sufficient visibility into endpoint activities

Of all breaches include the human element

Of victims were breached due to an unpatched known vulnerability where the patch was not applied









An Expanding, Highly Complex Threat Surface

The number of network environments, users, devices, and connections is exploding



62% of midmarket organizations report their **IT environments** are more complex now than two years ago.





Relating Endpoint Security and Home Security

Locks



Blocks access to protect the valuables inside. Locks can be picked or bypassed, and the homeowner would not immediately become aware of the intrusion.

Sensors



Cameras, motion sensors, lights and alarms alert on the presence of potential intruders. They can also be a deterrent. However, actions are delayed if the homeowner does not see the alert immediately and there are false alarms.

Monitoring



Security professionals install security technology and monitor 24/7 to evaluate real threats from false alarms and take immediate action to address home intrusions by dispatching security guards and/or police.

Traditional AV Protection is Not Enough!

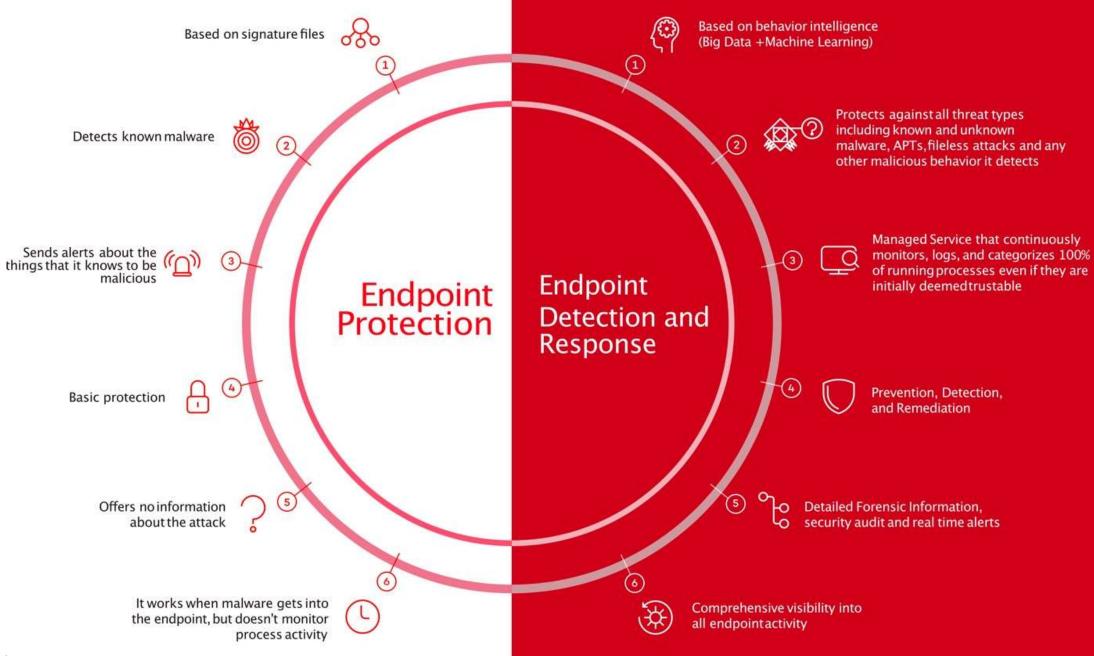
- Baseline protection for all endpoints based on legacy methodologies
- No protection for unknown threats, fileless attacks, or in-memory exploits
- No proactive detections



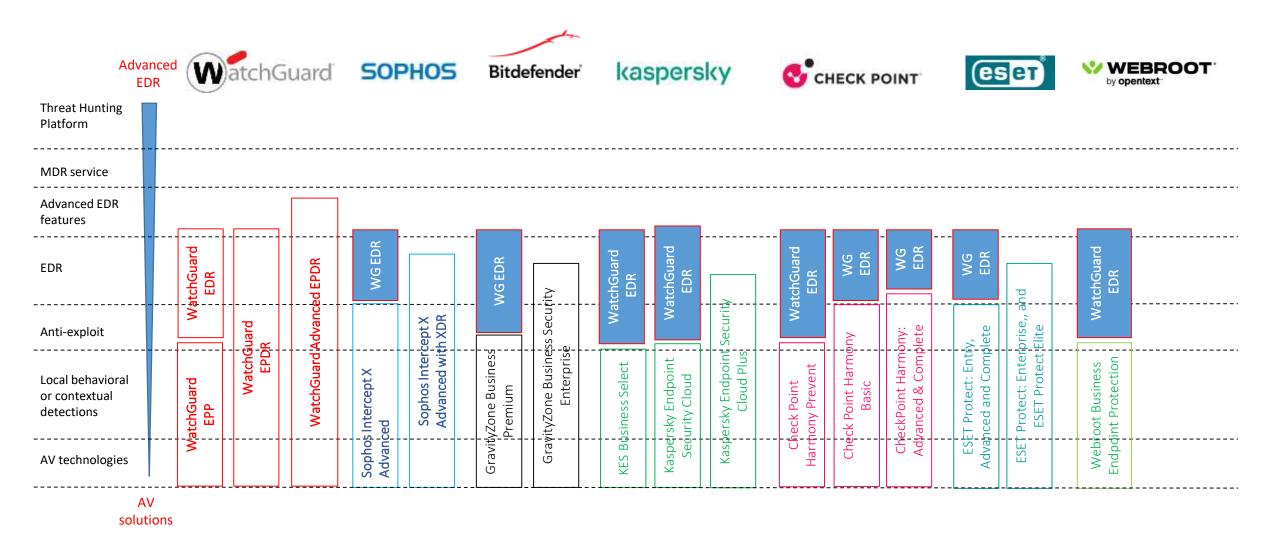
Evolving threat landscape

- Continually growing number of threats
 - Increasing sophistication of threats





WatchGuard EDR, On Top of Existing Solutions for Complete Protection



Why WatchGuard EDR?

The Endpoint Is the Epicenter of Today's Cybersecurity Attacks

Deploying an evolved endpoint security solution such as **WatchGuard EDR** offers a preventive zero-day approach.

Good, Better, Best:

- Antivirus or traditional endpoint protection is a necessary, base security layer
- Adding an EDR (Endpoint Detection and Response) solution complements existing antivirus endpoint protection, introducing advanced security capabilities
- A combination of AV + EDR gives your clients an integrated Antivirus + EDR product, creating a comprehensive solution for complete security





WatchGuard EDR Is Compatible with Third-Party AV-like Solutions

Our backend shows that we run alongside other products

- % of WG Endpoint Security deployments with other AVs/EDRs:
 - 12.60% representing nearly 500K devices!
- Main products we are coexisting with are listed below:

Sophos	Bitdefender
Kaspersky	Trend Micro
Malwarebytes	SentinelOne
Microsoft Defender	Broadcom (Symantec)
Trellix (McAfee)	Carbon Black
Cylance	and more.

Exclusions for third-party products are not a requirement

Customer Objections



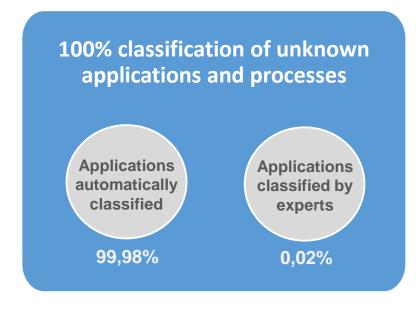
We've been using our current antivirus for years without any issues. Our current system seems to be working fine. Why should we change something that works?

- Traditional antivirus solutions are excellent at detecting known threats. However, they can miss advanced threats, like zero-day attacks and fileless malware that are present in today's landscape of cyber threats. You don't need to change anything; EDR complements your current protection.
- Why should I buy another endpoint security solution when you've provided the best endpoint security solution as a partner? Having two security systems seems redundant. Aren't they doing the same thing?
- While it might seem that way, EDR and traditional antivirus serve different purposes. Antivirus is excellent for catching known threats using signature-based detection. EDR provides advanced behavioral analysis and continuous monitoring to detect and respond to unknown threats. Together, they offer a more comprehensive security solution, ensuring no threat goes unnoticed.
- Can the EDR handle the noise from constant alerts? Our current system generates too many alerts, making it hard to manage.
- WatchGuard EDR significantly reduces alert noise with its AI-driven detection and Zero-Trust Application Service. It filters out irrelevant alerts and prioritizes genuine threats, allowing your team to focus on high-priority tasks. This streamlined approach improves efficiency and ensures faster response times, making your work easier and more effective.

What Makes Our EDR Technology Unique

- Innovative deny-by-default approach to endpoint security there is no other endpoint solution on the market with the Zero-Trust philosophy built in.
- Classifies all the UNKNOWNS; only allows goodware to execute.
- Extremely effective protection model.
 - Low level of unknowns due to the knowledge in our Collective Intelligence and the AI-powered classification technologies
 - No burden for administrators to classify UNKNOWNs, the Zero-Trust Application Service does it for them.
 - Continuously classifying processes that were already classified as goodware, to detect supply chain attacks or silent attacks that use goodware to perform malicious actions.

The Zero-Trust Application Service



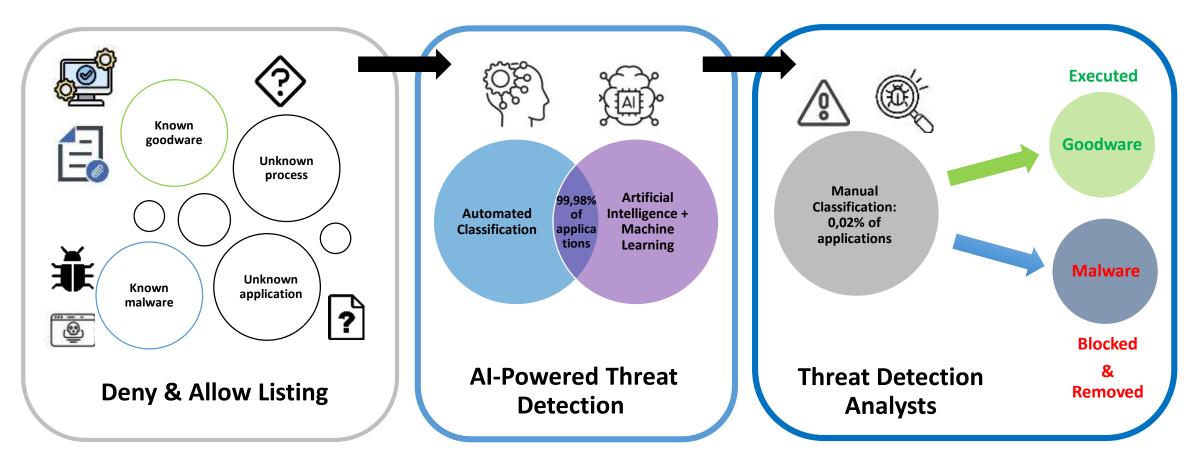


3 out of 1.000 unknown files are new malware



The Zero-Trust Application Service: Your Guard Against the Unknown

How the Zero-Trust Application Was Born



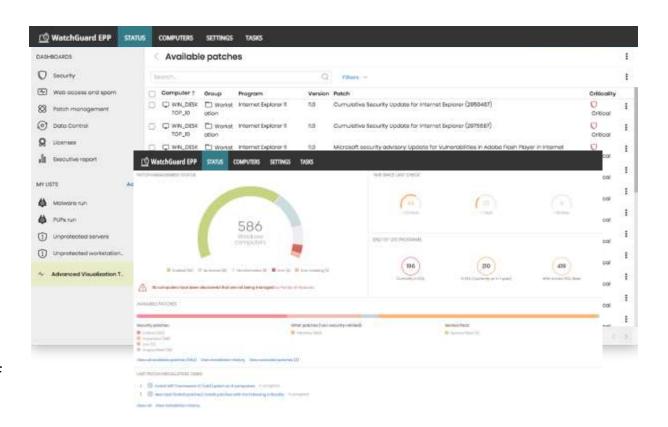
100% Classification

Add-on: WatchGuard Patch Management

Patch assessment and management for OS and 3rd-party applications

Patch Management is a module for managing vulnerabilities of the operating systems and third-party applications on Windows workstations and servers but also to:

- Audit, monitor and prioritize operating systems and application updates.
- **Prevent incidents**, systematically reducing the attack surface created by software vulnerabilities.
- Contain and mitigate vulnerability exploitation attacks with immediate updates.
- Reduce operating costs. It does not require the deployment of additional agents. Updates are launched remotely and provides complete, unattended visibility into all vulnerabilities, pending updates and EOL (End of Life) applications.



More than 80% of all successful cyberattacks exploited known vulnerabilities, where existing patches hadn't been applied. WannaCry and Petya exploited vulnerabilities that had been known for months.

WatchGuard EPDR Delivers Superior Security

It goes beyond the traditional security with the Zero-Trust approach, the combined classification service, machine learning and threat hunting service.

Zero-day, ransomware, crypto-jacking and advanced targeted attack are not a challenge anymore for any SMB, mid-size company or large enterprise.

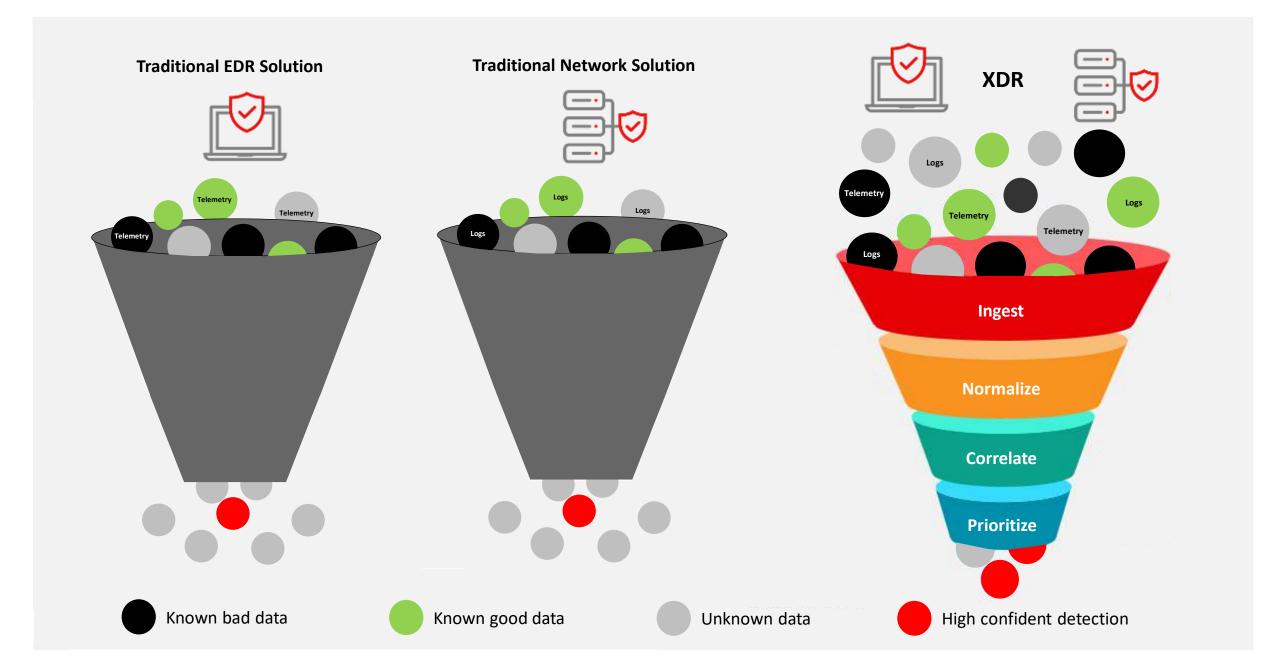
- On top of its EPP capabilities against known & zero day malware
- Advanced protection against never-seen before threats
- Proactive defense against emerging and APT threats
- Built on new and evolving ML and Deep Learning models
- Automatic detailed forensic analysis
- Immediate protection against all threat, known and unknown
- True "Zero-Trust" Model:
 - Zero-Trust Application Service: 100% classification of applications
 - Threat Hunting Service: detecting hackers and insiders



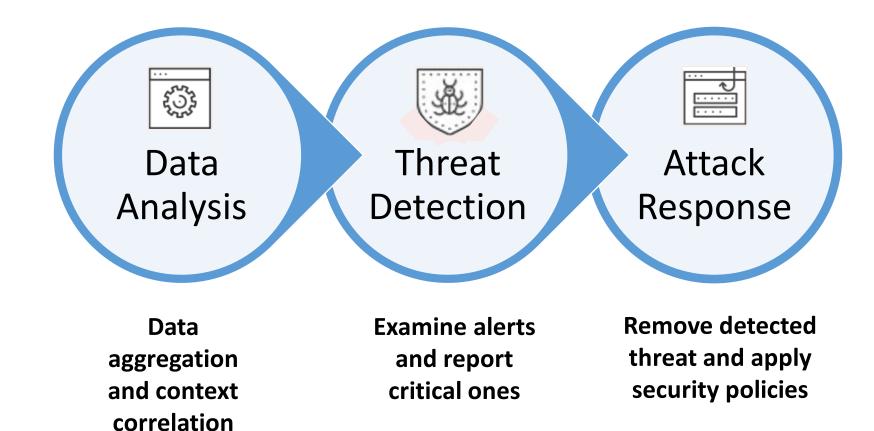




How Does XDR Work?



What is XDR used for?



Why is XDR Important?

1 - Prioritized View

XDR correlates and combines activity data at different security levels, enabling a prioritized view of threats.

3 - Contextual View

Many individual events as a whole can be indicators of an incident. XDR enables more insightful data and crossdomain contextualization to detect earlier.

2 – Security Consolidation

Integrating XDR into workstations, devices, servers, and networks leads to a more effective and unified threat viewpoint.

4 – Stop Attacks Faster

XDR provides better protection for your business through earlier detection and faster response.

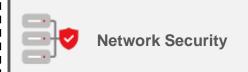
XDR Is a Key Element of Shared Knowledge and Automation

WatchGuard's Unified Security Platform Architecture



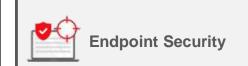
WatchGuard Cloud™ Centralized management layer providing a single pane of glass for administration, operational automation, deep visibility, and advanced reporting.







Multi-Factor
Authentication







ThreatSync™ XDR layer for detecting, correlating and prioritizing advanced threats for automated or manual remediation.



Identity Framework™ zero-trust layer with flexible rules to configure users and devices based on risk.





A robust integration layer featuring hundreds of outof- the box **integrations**, and direct access to **APIs** quick and easy customization.



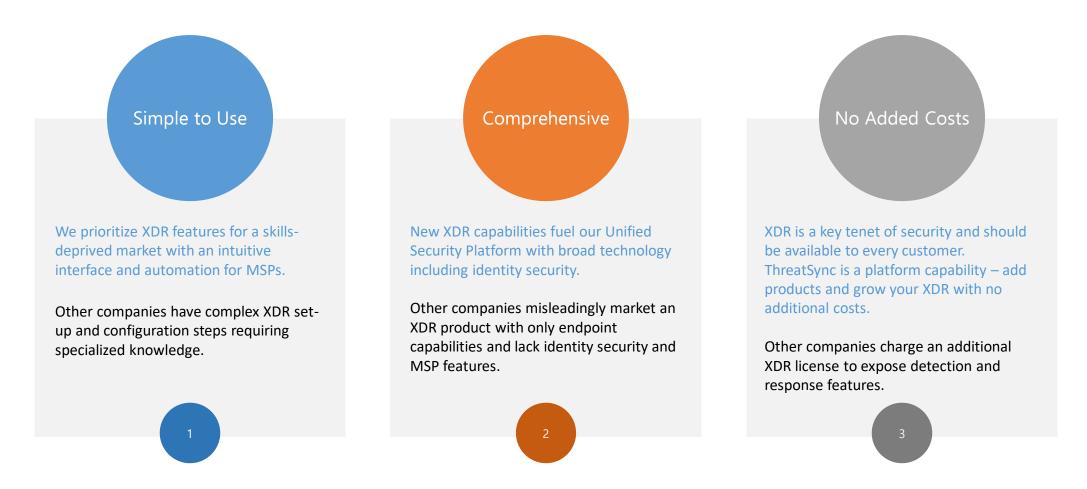
A rich business enablement layer featuring FlexPay™ consumption, subscription, and term-based business models.





With the Automation Core™ the Unified Security Platform can operate in near-autonomy delivering the highest resilience to cyberattacks while minimizing wasted IT time

WatchGuard ThreatSync Is the Right Answer



"Another benefit of XDR products is that they can provide what traditionally have been complex security operations capabilities and make them more accessible to security teams that do not have the resources for more custom-made point solutions."

Gartner Innovation Insight for Extended Detection and Response, Refreshed April 8, 2021





Uses Cases: Let's see XDR in Action! (I)

Problem: Zero Day Advanced Persistent Threats (APTs) Detections

§ Due to the near instant expectation for files to be downloaded over HTTP(S), today the firewall must allow unknown files to be downloaded while it submits the file for sandbox analysis.

Solution: XDR Solution Unmasks a Zero-Day APT

- § Detect using behavioral analysis and machine learning, to identify anomalous behavior that may indicate a zero-day APT.
- § Prioritize the potential zero-day APT, with a risk score based on the severity and potential impact of the threat.
- § Contain the risk using containment actions, such as isolating affected endpoints, blocking malicious traffic, quarantine files or terminating suspicious processes of the zero-day APT.
- § Remediate automatically using security policies to prevent future incidents.
- § **Notify** security teams through an email alert that includes relevant details about the suspicious behavior and affected devices.

Uses Cases: Let's see XDR in Action! (II)

Problem: Processes Making Malicious Connections

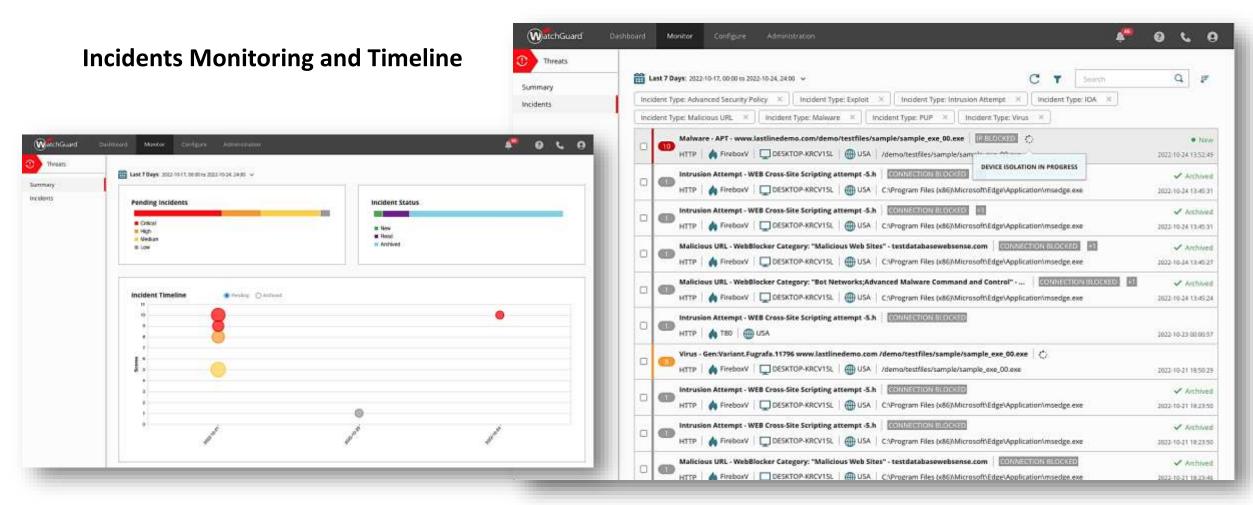
§ There are many processes running on our computers that are not malicious but can make malicious connections, including browsers and email clients.

Solution: XDR Solution alerts Unusual Connection Behaviors

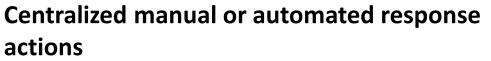
- § **Detect** potentially malicious connections made by processes on endpoints.
- § Prioritize and Score the Risk if the process making the potentially malicious connection is a known and trusted application like a browser or email client.
- § **Respond** by blocking the connections at the firewall or terminate the process on endpoints to correlate them to individual applications running on endpoints.
- § Remediate automatically using security policies to prevent future incidents.
- § **Notify** security teams through an email alert that includes relevant details about the suspicious behavior and affected devices.

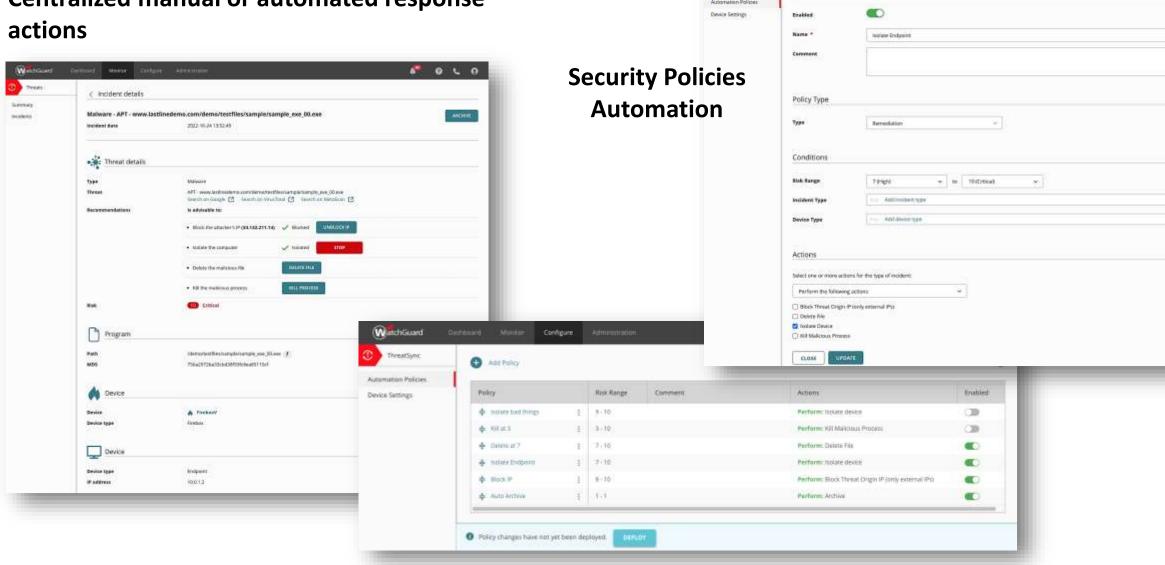
WatchGuard ThreatSync in WatchGuard Cloud

Correlated telemetry provides context and defines incidents



WatchGuard ThreatSync in WatchGuard Cloud





Watching

Distribunt Monne Configure Subsensivation

< Update Policy

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Did you know that ...



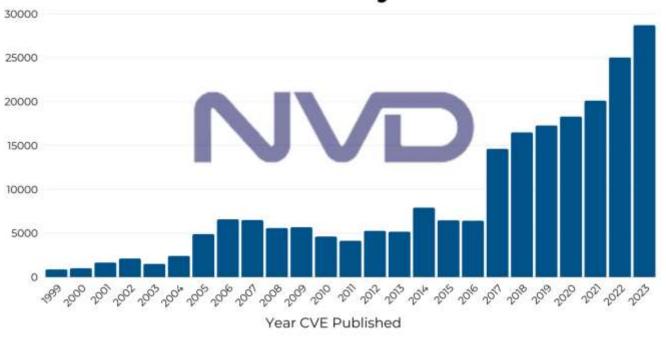
⁽¹⁾ IBM Security X-Force Threat Intelligence Index 2023

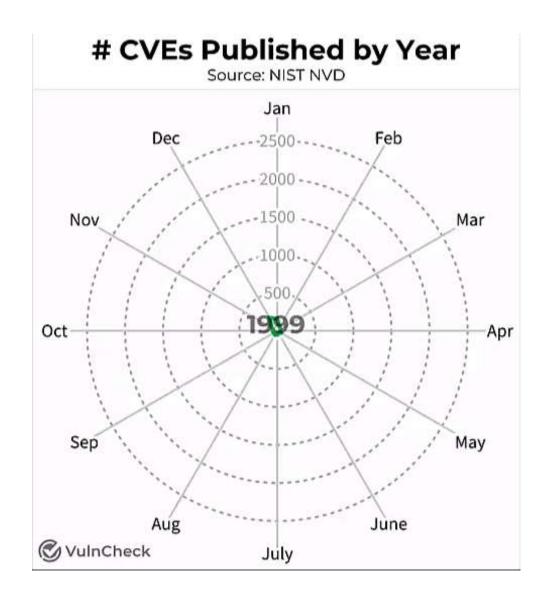
⁽²⁾ https://www.ptsecurity.com/ww-en/analytics/vulnerabilities-corporate-networks-2020/

⁽³⁾ Ponemon Institute Vulnerability Survey

Why Patch Management

CVEs Published by NIST NVD





Compliance









 All regulations emphasize vulnerability assessment and patern management

National Institute of Standards and Technology

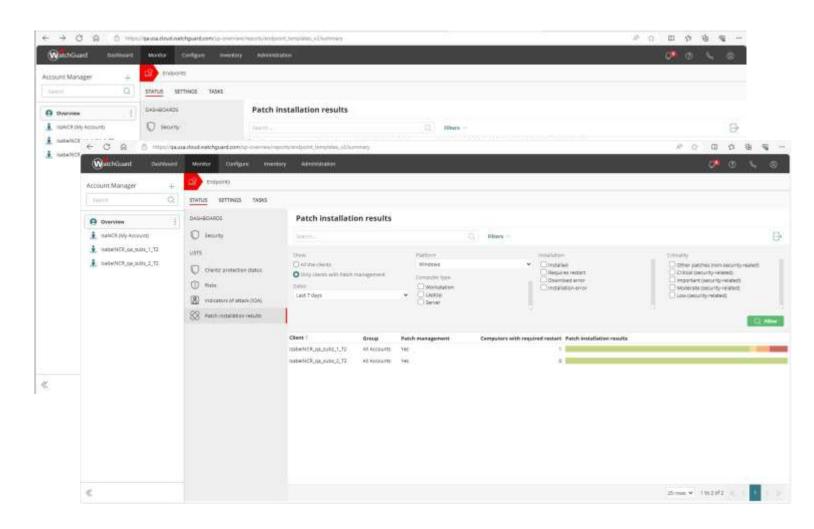


Regulation	Reference	
CIS	7.5 7.6	Perform Automated Vulnerability Scans of Internal Enterprise Assets Perform Automated Vulnerability Scans of Externally-Exposed Enterprise Assets
PCI-DSS	11.3 11.4	External and internal vulnerabilities are regularly identified, prioritized, and addressed. External and internal penetration testing is regularly performed, and exploitable vulnerabilities and security weaknesses are corrected.
GDPR	Security Measures	Processes for regularly testing, assessing and evaluating the effectiveness of technical and organizational measures in order to ensure the security of the processing.
NIST SP 800-171	3.11.12	Scan for vulnerabilities in organizational systems and applications periodically and when new vulnerabilities affecting those systems and applications are identified.

Service Providers Offering Patch- Management-as-a-Service (PMaaS)

Endpoint Manager (multi-client view):

- Patch Management allows scheduling tasks to install patches or do it on demand
- New! Visibility into patching installation status from the service provider
- New! Identify subscribers with patch installation tasks that generated errors and drill down to review them.
- New! Export option



WatchGuard Patch Management

Scanning

- Scan all computers from anywhere, at anytime.
- No need for additional deployments (single agent).

Assessment and planning

- Verification of impacted software component, priority of missing patch, etc.
- Gradual roll out of patches after testing, for standard and highly sensitive endpoints.
- Automatic updates with conditional rules and exceptions as needed.



WatchGuard Patch Management

Keeps systems and applications free from vulnerabilities at a minimal cost (reducing infrastructure, communication, and technical staff costs), without interrupting users' work.

Interdept Control C

Intelligence

- Update all versions of Windows.
- Update hundreds of third-party applications.
- Add the patch or software exclusions that you need.

Deployment

- Update hundreds or thousands of computers in real time.
- Automatic management of patch interdependencies.
- · Control computer restarts.