



Detecting, Understanding & Responding to Cyber Attacks

Paris Kaskas

Cyber Security Consultant, Greece, Cyprus & Malta

Infocom Security April 11th, 2024



SCAN ME

Trend Micro

- 35 years focused on security software
- Headquartered in Japan, Tokyo Exchange Nikkei Index
- Annual sales over \$2B
- Customers include 45 of top 50 global corporations
- 7000+ employees in over 65 countries



Enterprise



Midsize
Business



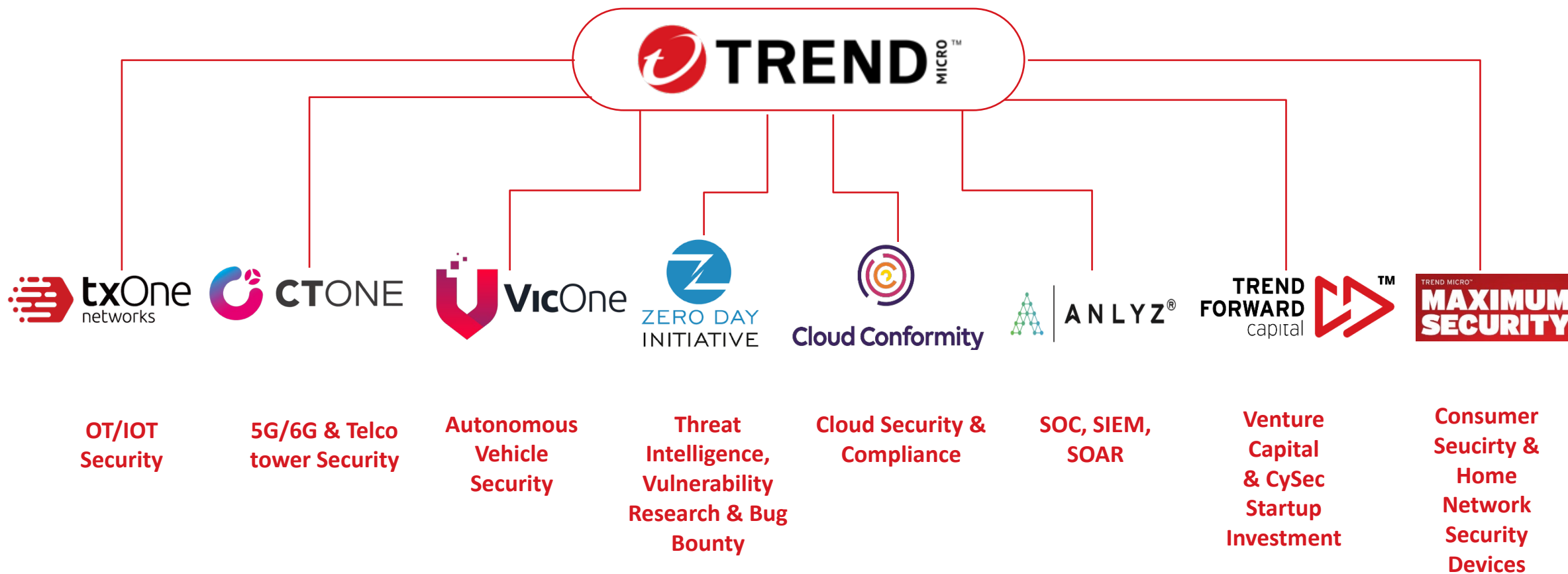
Small Business

500k commercial customers &
250M+ endpoints protected

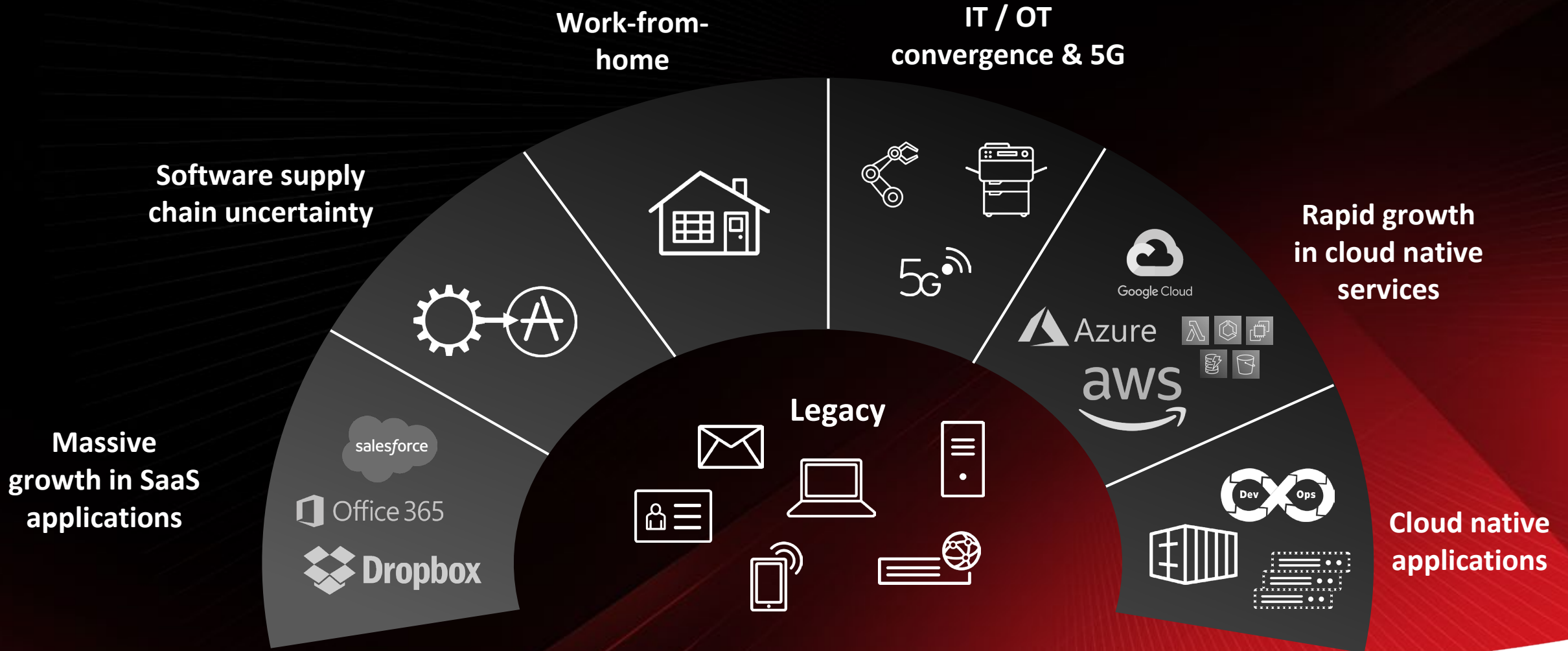


Eva Chen, CEO and Co-founder of
Trend Micro

End-To-End Cybersecurity Industry Group



Rising Complexity & Scale of Attack Surface



Security Tool Sprawl



40

Avg. Number of tools in SOC*



Data Lakes with duplicated security telemetry

Overlapping solutions
Data lake & cost proliferation
Poorly integrated
People costs rising
Challenging to measure effectiveness

*SAPIO Research –commissioned by Trend Micro, 2021

Overwhelmed security teams



Too many alerts

Where to **focus?**

What to **prioritize?**

Skills shortage

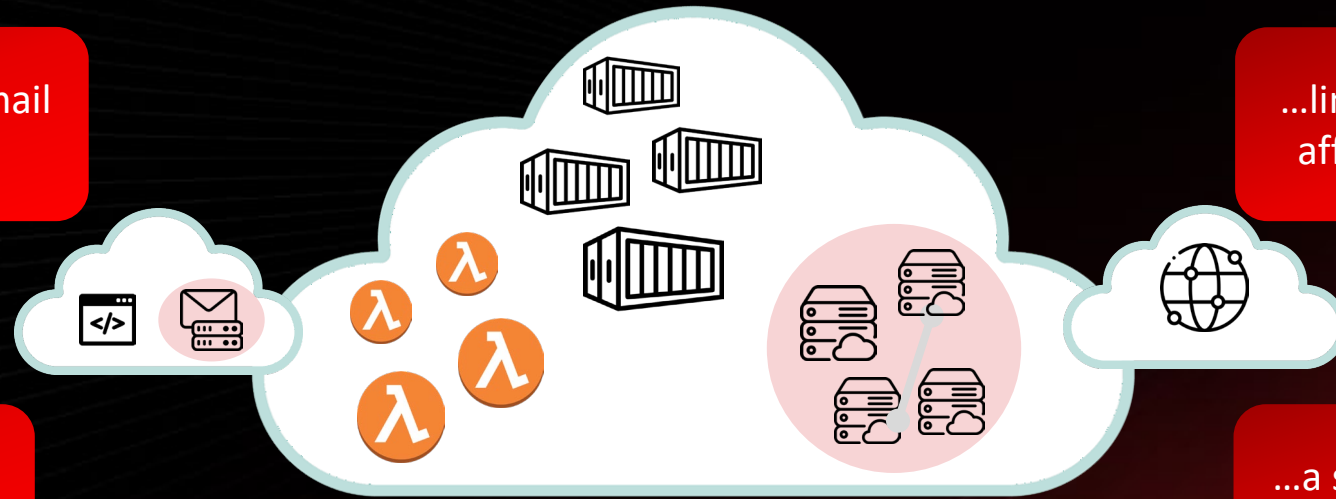
Siloed Telemetry

...and little visibility into email traffic and mailboxes

...limited visibility to threats affecting cloud workloads

Today, the SOC gets siloed insight into endpoints (EDR)...

...a separate siloed view into network events,



SecOps



But You Can't Defend What You Don't Know About

69% of organizations have experienced some type of cyberattack in which the attack itself started through the exploit of an unknown, unmanaged, or poorly managed internet-facing asset

Proactive security

Reactive security



FORRESTER



Proactive

Reactive





Attack Surface Risk Management (ASRM)

Proactive



Discovering All Assets



Assessing Cyber Risk



Prioritizing Risk Mitigation



Mapping Relationships



Classifying and Tagging Assets with AI



Analyzing Compliance



Extended Detection and Response (XDR)

Responsive



Correlating Attacks Cross-Layers



Coordinating Response Cross-Vendors



Sweeping with New Threat Intel



Powerful Hunting and Forensic Tools



Augmenting Staff with Companion AI



Automating Security Response



Data Lake

Detection Logs and Activity Data

Endpoint



+ Protection

Identity



+ Protection

Email



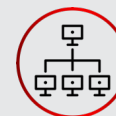
+ Protection

Cloud



+ Protection

Network



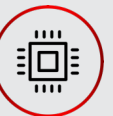
+ Protection

Data



+ Protection

OT



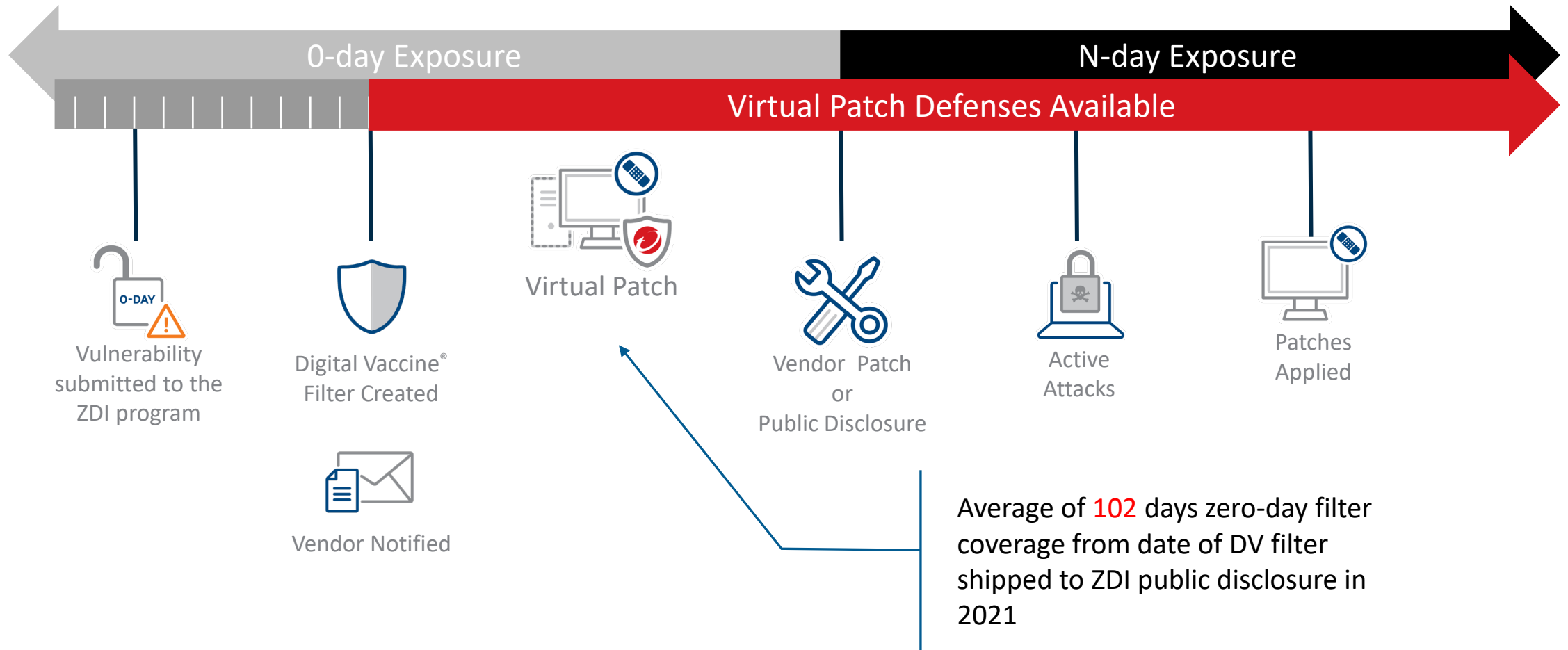
+ Protection

3rd Party



Broadest Coverage with Native Sensors

Trend Micro's Unique Position with Vulnerabilities – Virtual Patching



Attack Surface Risk Management

- Complete attack surface visibility
- Compiled through third-party connections, security products, and network telemetry
- Automatically de-duplicates assets across multiple data sources
- Classifies and tags assets automatically, establishing criticality and a baseline
- Analyzes compliance

Why Extend **XDR** to Email?

98% of malware infection source



Detect: Are there compromised accounts sending internal phishing emails? Automatic sweeping of mailboxes

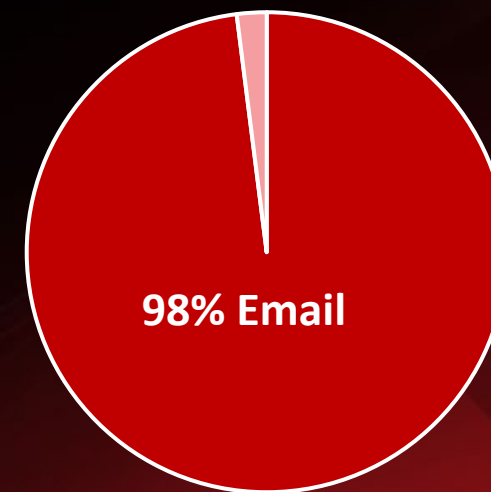


Investigate: Who else received this email / threat?



Respond Examples: Quarantine email, delete email, add to block list

Malware Infection Source



Source: Verizon Data Breach Investigations Report, 2023

Insight-based view

Trend Vision One™ Workbench > IC-23312-20230707-00000 2023-11-29 14:13

100 C&C detected, which leveraging Phishing. Score ③ Created: 2023-07-07 16:06:56 Last updated: 2023-11-29 13:47:59 (New alert correlated)

Attack Phase Initial Access, Execution, Persistence, Privilege Escalation, Defense Evasion,...

Case Open new case

Overview Impact Scope (7) Highlighted Objects (35) Alerts (14)

Highlights What's New

Possible Spearphishing Link
2023-07-06 09:17:50 | View event
sam@jaguartmpegy.onmicrosoft.com

Rarely Accessed and Noteworthy Domain
2023-07-06 11:38:48 | View event
nimda

Possible Credential Dumping via Registry Hive
2023-07-06 11:38:48 | View event
nimda

Uncommon Powershell Parameters Used in Command Line
2023-07-06 11:48:06 | View event
nimda

Bypass UAC Via Shell Open Registry
2023-07-06 11:53:52 | View event
nimda

Bypass UAC Via Shell Open Default Registry
2023-07-06 11:53:52 | View event
nimda

Suspicious Command Execution via Shell Open Registry
2023-07-06 11:53:52 | View event

Insight-Based Execution Profile Preview

Ted_Lee@trendmicro.com [Emergency] Important inf... sam@jaguartmpe... nimda

SENT INITIAL ACCESS SUSPICIOUS COMMAND

IDENTICAL USER ACCOUNT
Identical User Account
The user accounts are identical.

Companion Preview
Welcome to Companion
Your AI-powered chatbot for cyber security

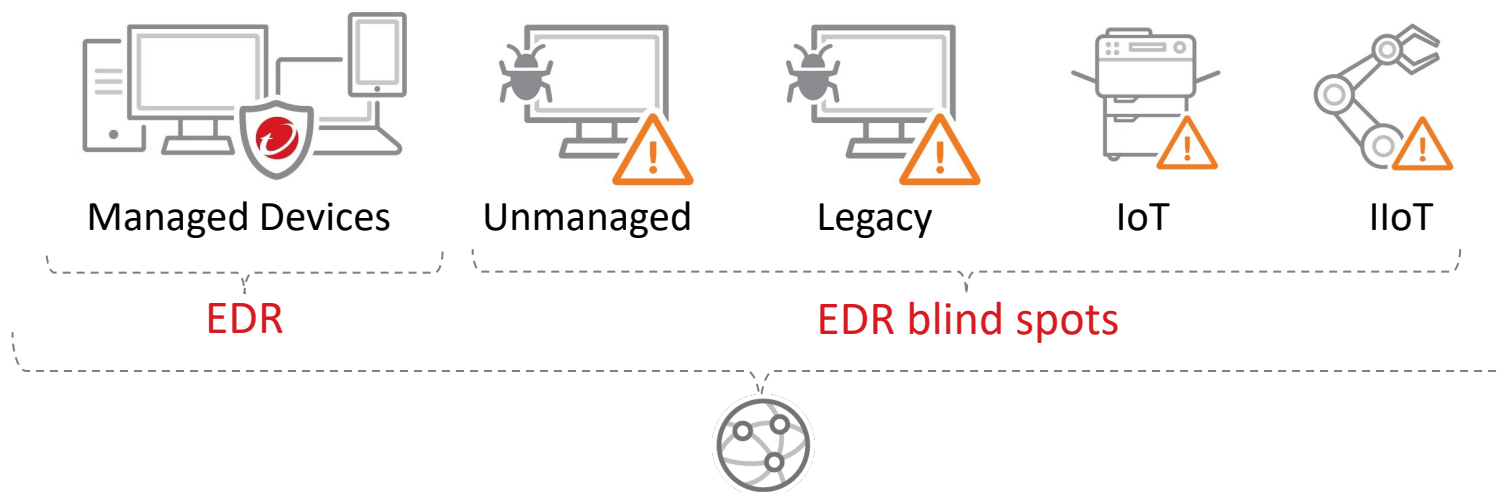
Explain Workbench Alert
Explain this cyber security alert
This cybersecurity alert is a notification about a detected threat in a critical folder on a specific endpoint. The threat was successfully blocked, and the alert provides relevant information about the affected system, the detection rule that triggered the alert, and the indicators associated with the threat. Here's a breakdown of the main components.

Explain this cyber security alert
Help me summarize this alert
C:\Windows\system32\windowspowershell\v1.0\powershell.exe -EncodedCommand...

Type a question about security

Better layout and more details to improve AX

Why Extend XDR to your Network?



Activity Data:

- Traffic Flow
- Perimeter and Lateral Connections
- Suspicious Traffic Behaviors



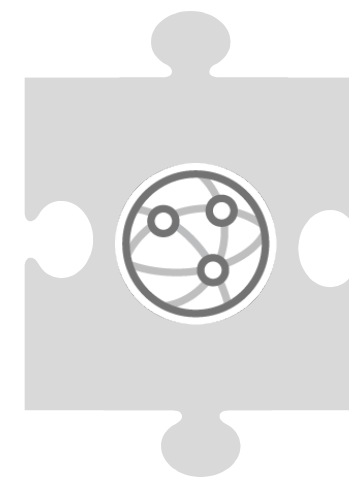
Detect: See across the network including EDR blind spots. Analytics discover complex threats. IOC sweeping.



Investigate: How is a threat communicating? How is the attacker moving across the organization?



Respond Examples: Block host, block URL, disable account (Azure AD).



Use case – network forensic and hunting

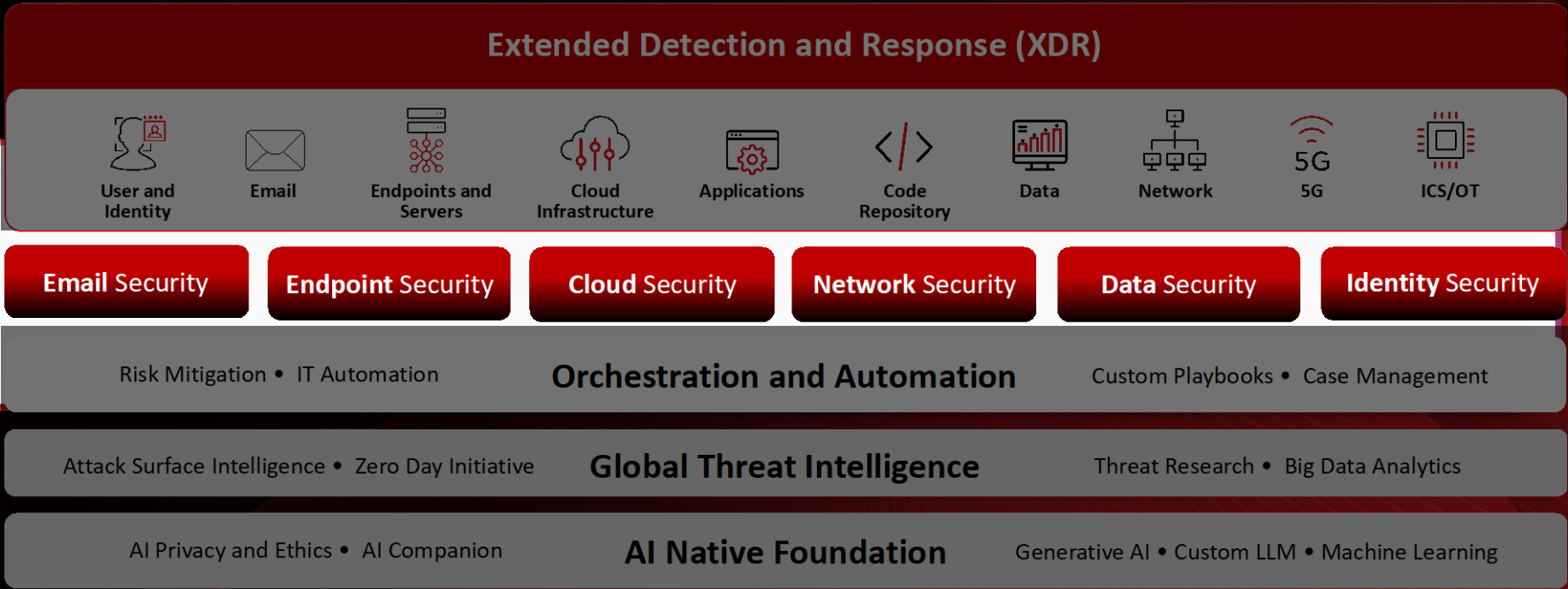
See your network's
unmanaged
attack surface

**Faster
detection
and response
with network
forensics**

TREND
MICRO
Vision One
Single Platform



Centralized visibility and management with unified protection, detection, and response.





Paris Kaskas

Cyber Security Consultant, Greece, Cyprus & Malta

Email: Paris_Kaskas@TrendMicro.com

Mobile: +30 6948661494



SCAN ME