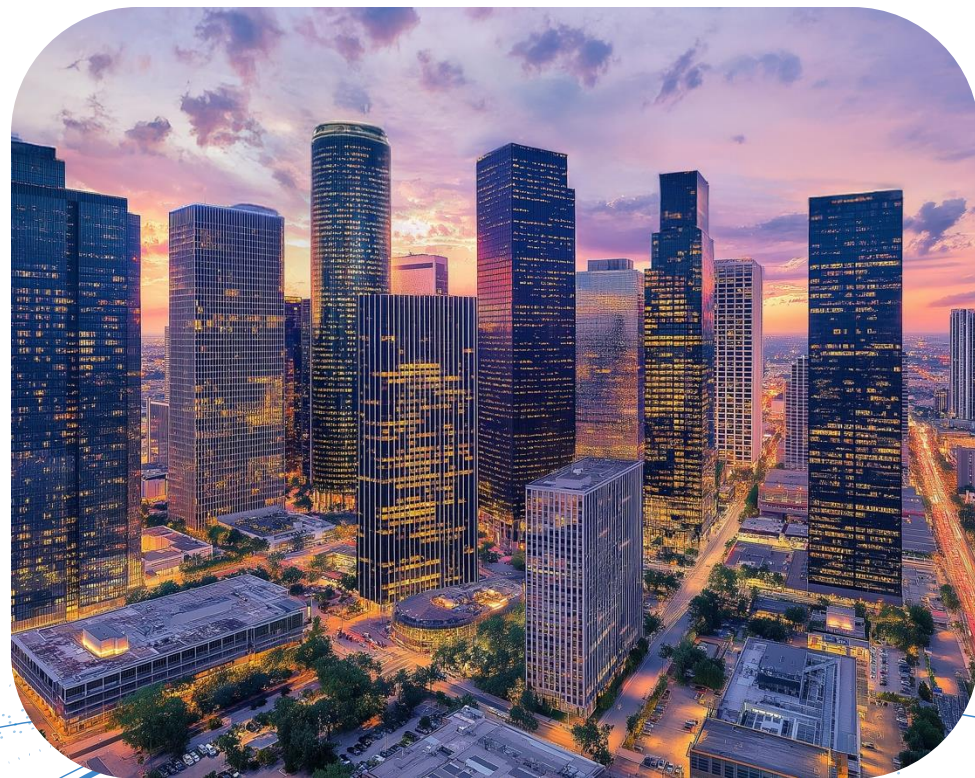


Innovations to Power your Risk Operations Center (ROC)



Shailesh Athalye

Senior Vice President,
Product Management and GTM

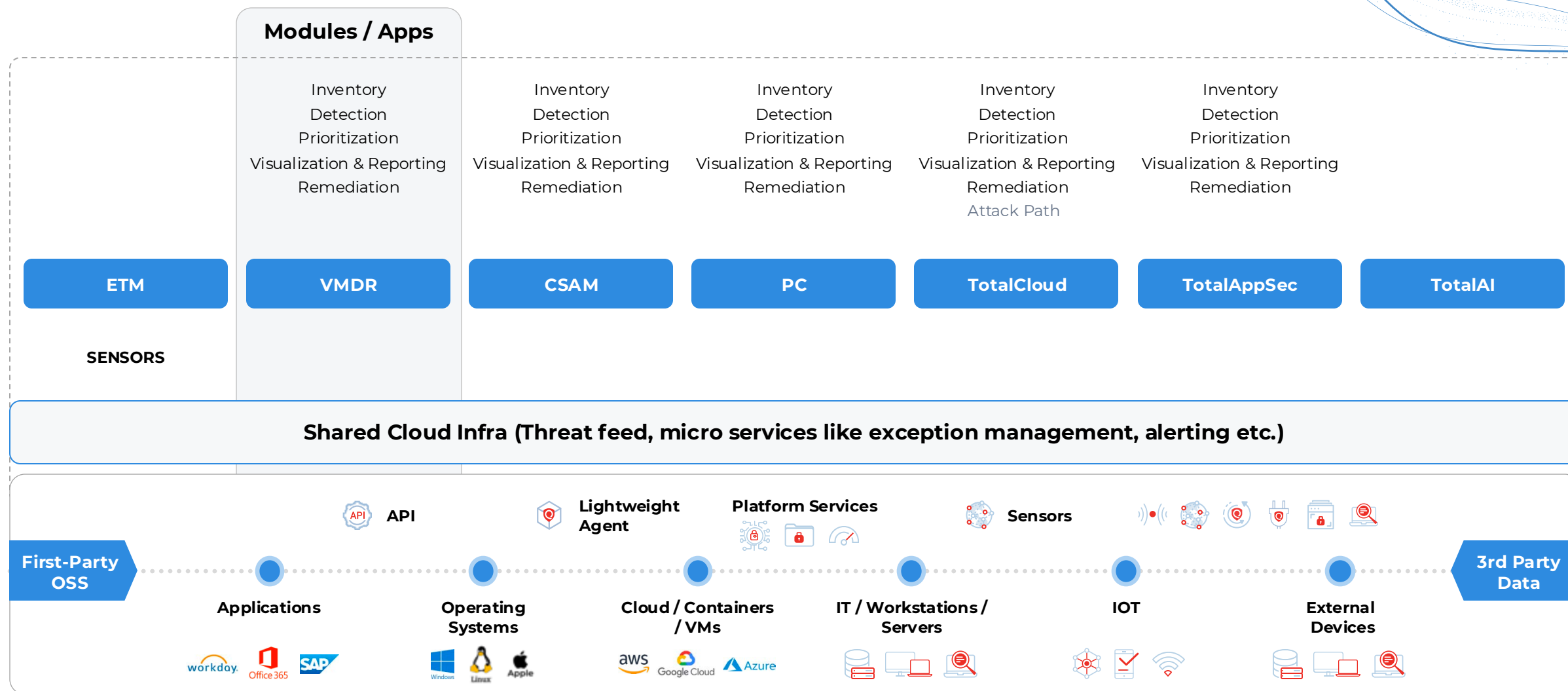


Risk Operations Center (ROC)



How ROC gets operational with Qualys Innovations

Previous view of the Platform



Qualys TruRisk Platform

Use-cases

CTEM	ASPM	CNAPP	Cyber Risk Quantification	Compliance & Audit
Cyber Risk Management	App Security (ASPM)	Money-minded CNAPP	CRQ	ETM Audit

Enterprise TruRisk Management (ETM)

Native Agentic AI

Threat Intelligence
TruLens

Asset Intelligence
EOL/EOS, EASM

Business Context
GRC/BIA/Cyber Insurance

Exposures

VMDR	TC	TAS	PC	ISPM	...	Tenable	CRWD	Wiz	MS Defender	...
Qualys Sensors						3rd Party Sensors				



The World's First
ROC in the Cloud
QUALYS

**Enterprise
TruRisk
Management**

Qualys Enterprise TruRisk Management (ETM)

First Risk Operations Center (ROC)

885 Critical
TruRisk™ Score





**Unified Asset
Inventory**



**Risk Factors
Aggregation**



Threat
Intelligence



Business
Context



Risk
Prioritization



Risk Response
Orchestration



Compliance
& Executive
Reporting

Unified Asset Discovery & Inventory

Known Asset Sources

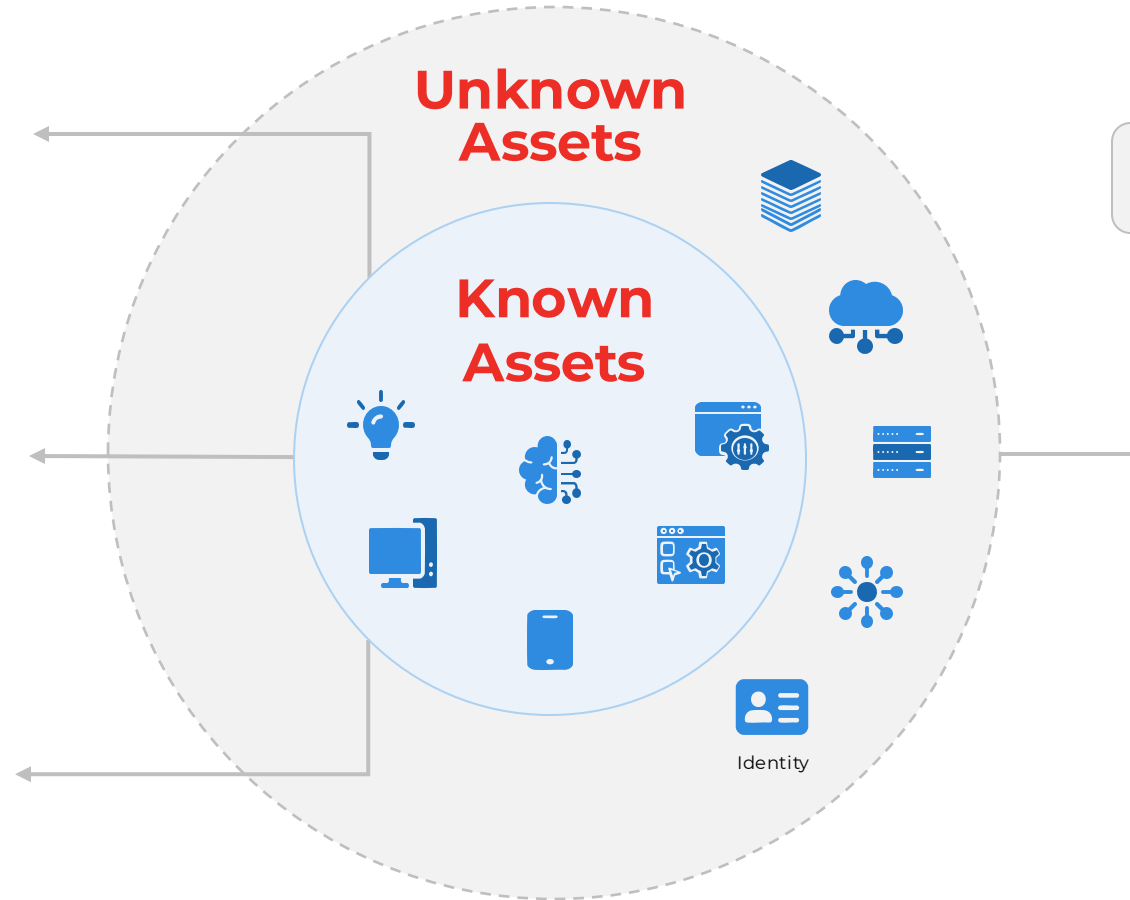
Qualys Native Sensors



Qualys 3rd Party Connectors



CMDB Connectors

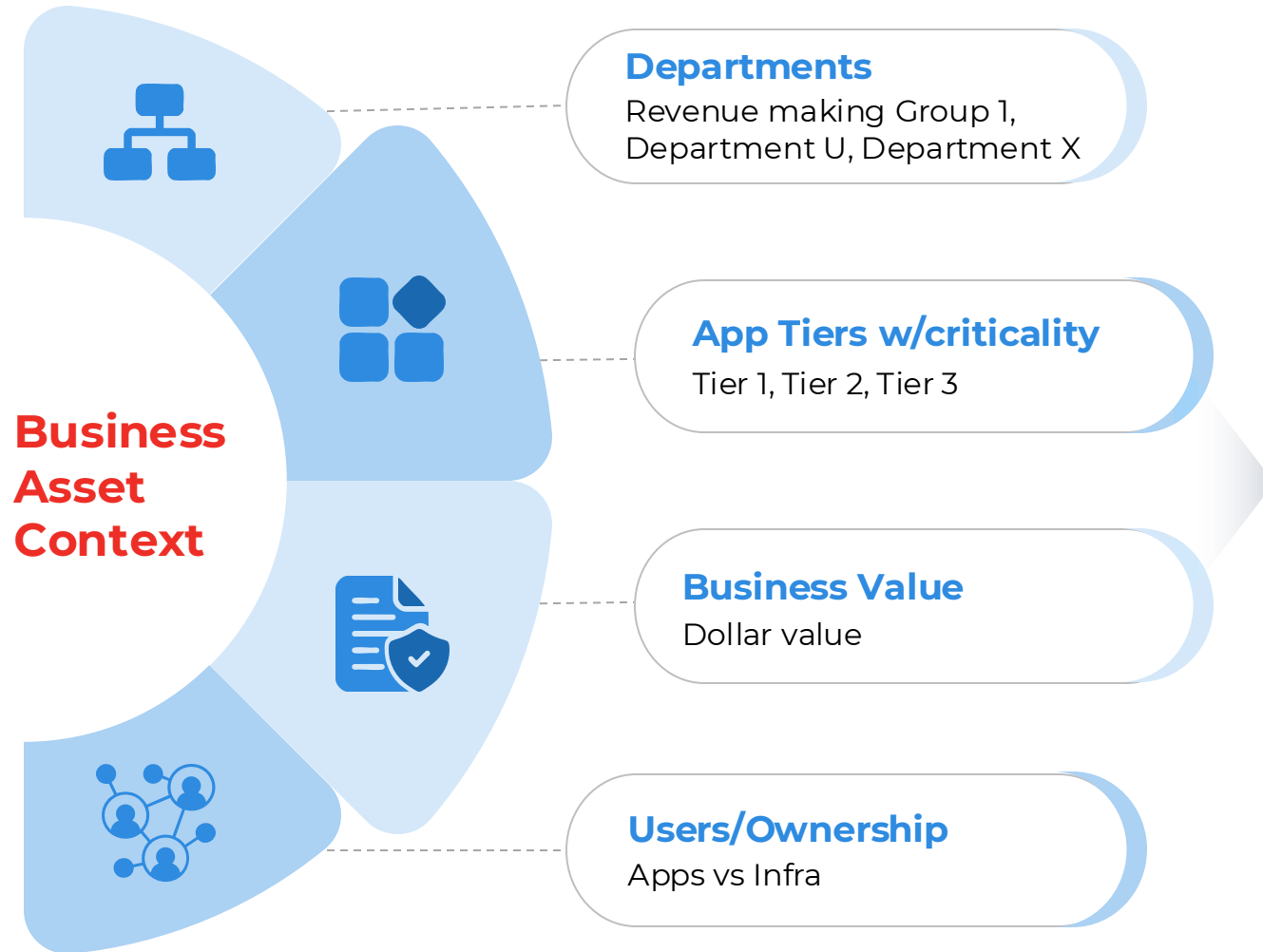


Unknown External Assets

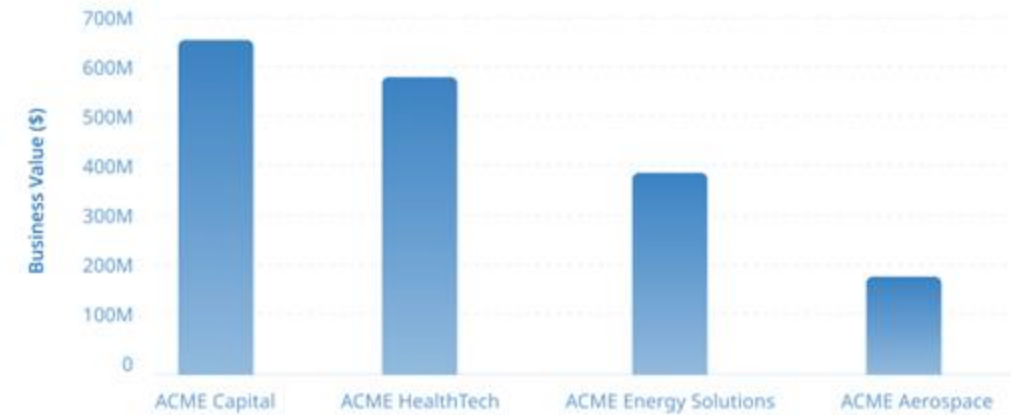


Unified Asset Inventory: Business Context

A Real-World Illustration



Organizations / Subsidiaries



Unified Asset Inventory

Purpose built for cyber risk management

**Smartly
Aggregate & de-
duplicate assets**

**One Inventory to
track blind spots
for cyber risk**

30% more assets
included in cyber
program

**Tech-Debt
(EOS/EOL) with
risk context**

**Proactively
manage EOL/EOS
up to**

12 months in
advance for risk-
based decisions
on upgrades

**Get hacker's
view of your
external assets**

**Mitigate risk
from**

**21% of unknown
assets** with risky
open ports (on
average)

**With ownership
sync, close
tickets faster**

**Close tickets
faster with**

96% accuracy
with bi-directional
CMDB sync &
ITSM integration

Unified Asset Inventory: Risk Forest

Know exactly which assets drive your TruRisk with a **live asset relationship graph** from business entities → apps → asset types/components, with TruRisk at every node

Risk Forest

01

Business-first visualization (not just assets) to find asset components increasing TruRisk

02

Agentic AI to get insights on asset risk, down to root cause of asset components to drive remediation

03

With ownership data, go from risky node to owners, SLAs, and Eliminate plans



Unified Asset
Inventory



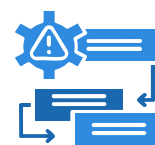
**Risk Factors
Aggregation**



**Threat
Intelligence**



**Business
Context**



**Risk
Prioritization**



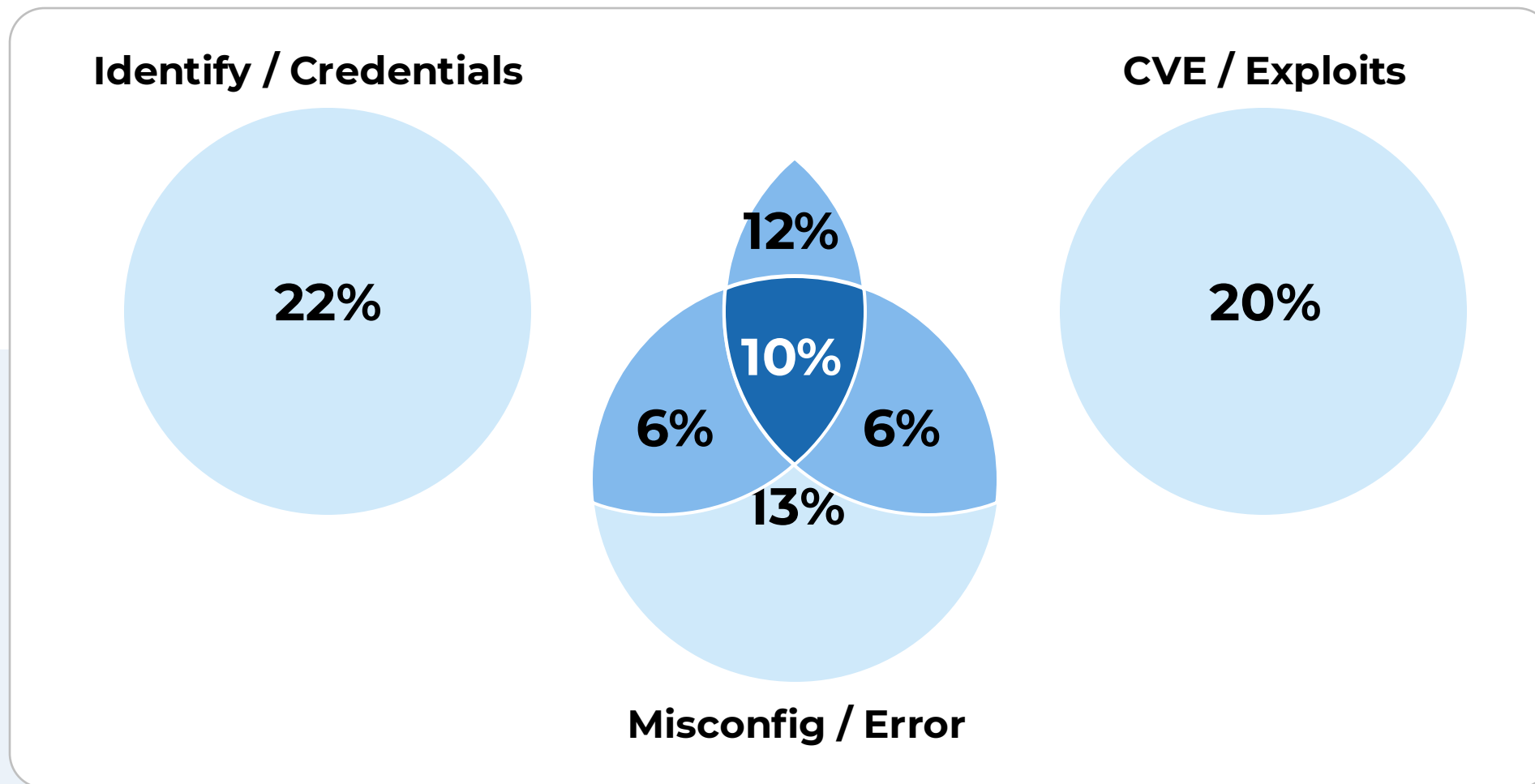
Risk Response
Orchestration



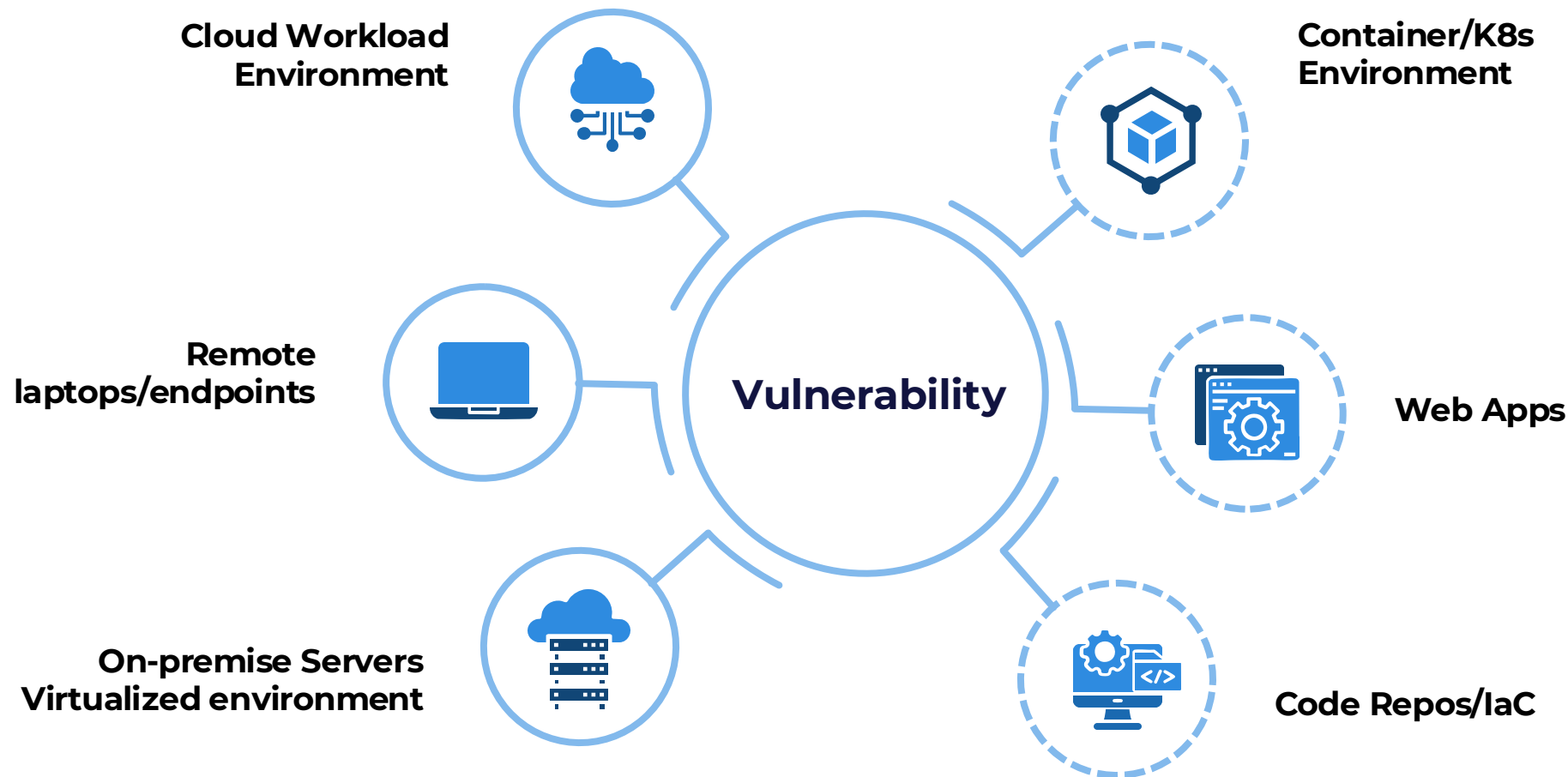
Compliance
& Executive
Reporting

Which exposures should we bring in?

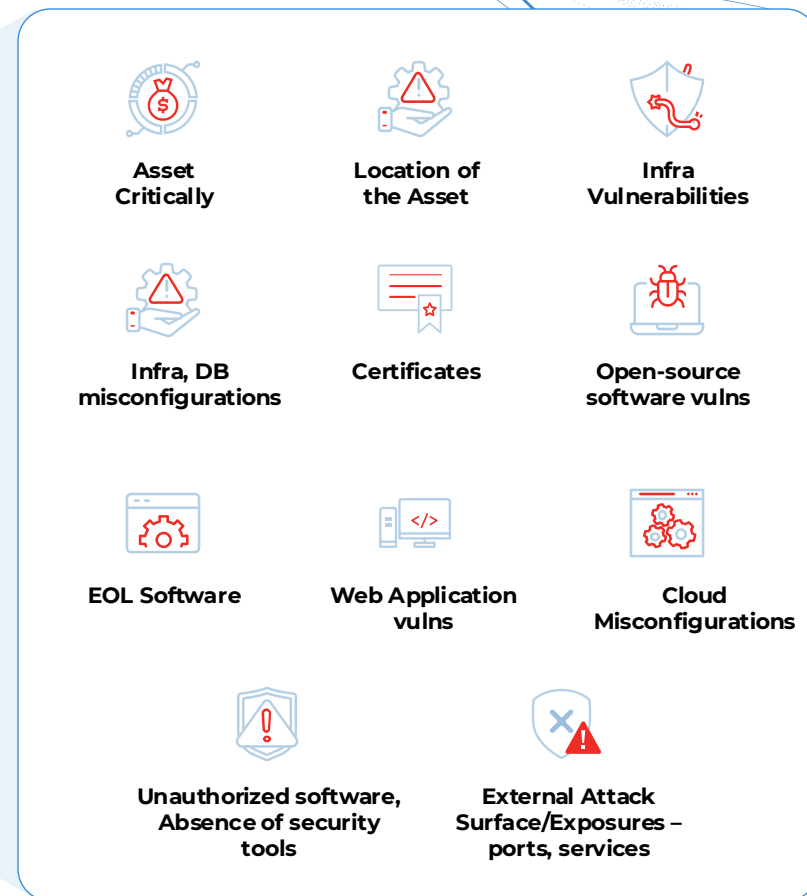
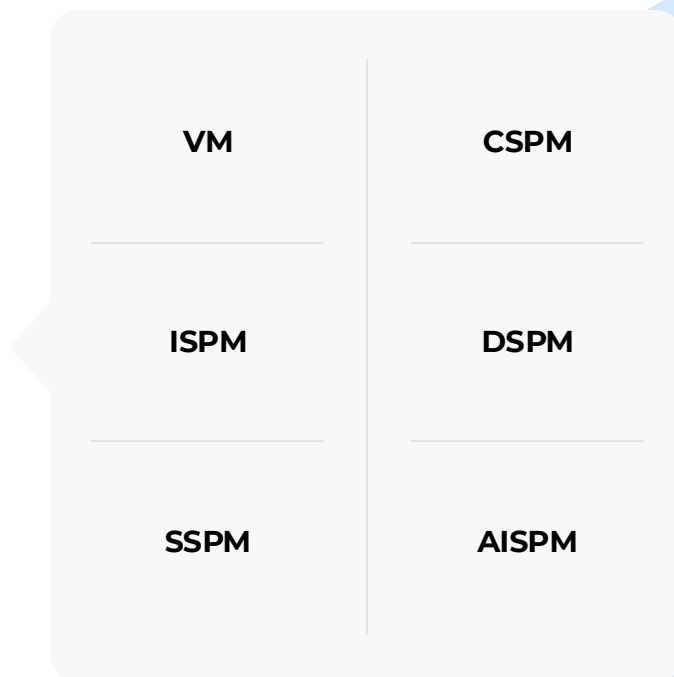
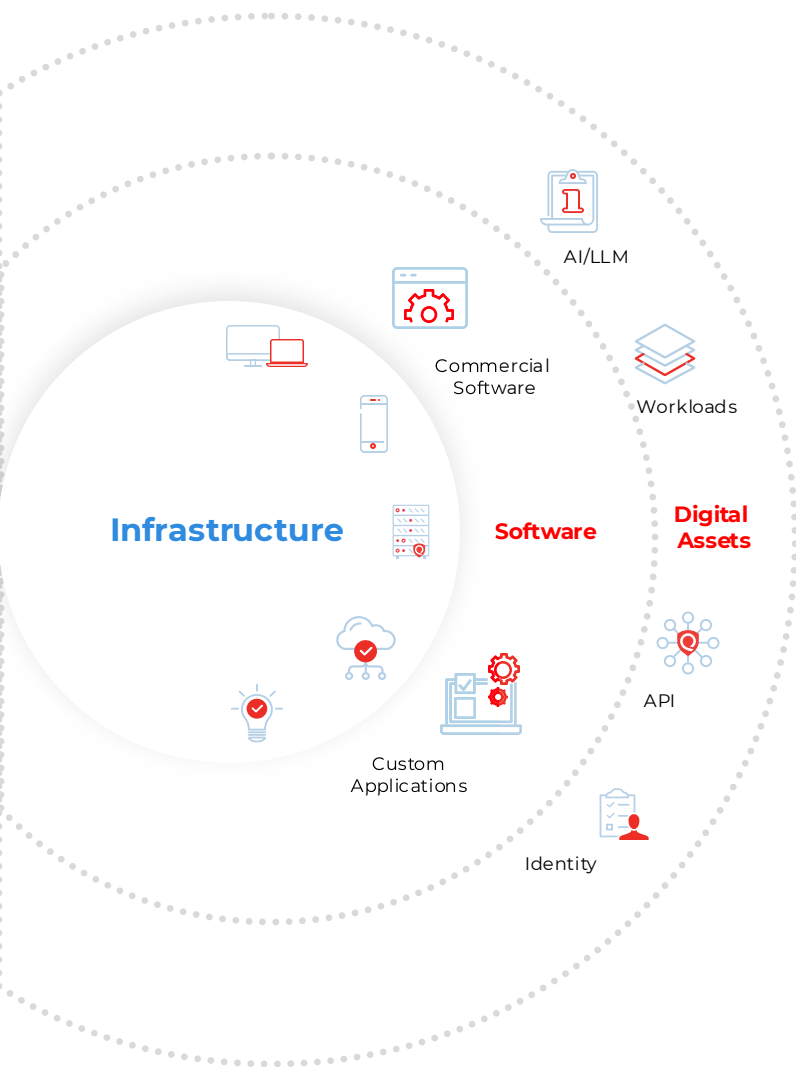
34% of the breach vectors are a combination of Identity, CVEs, & Misconfigs.



One Security Finding Spans Across Multiple Environments



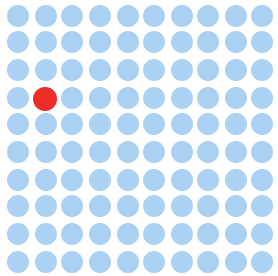
Multiple SPM tools and Scattered exposures...



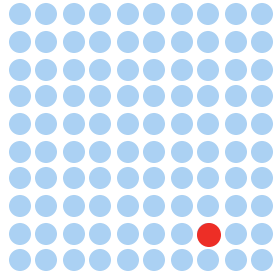
*Enterprises have **70+ security tools on average**

Aggregate millions of exposures effectively

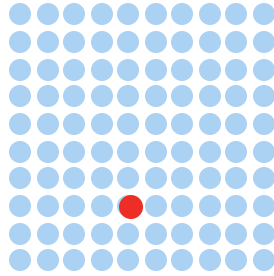
 16.5M



 9.5M

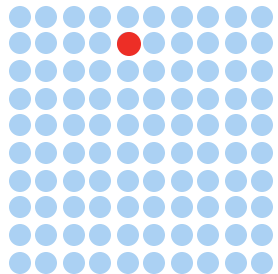


 7M

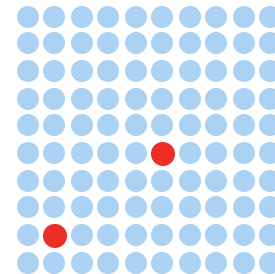


Aggregating All Findings

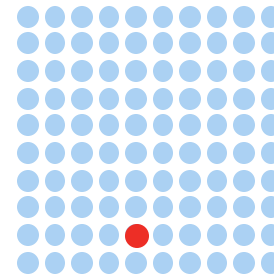
 5.5M



 11M



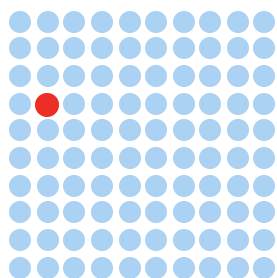
 13M



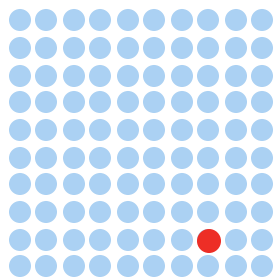
62.5M
ALL FINDINGS

Aggregate millions of exposures effectively

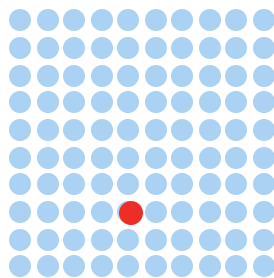
 16.5M



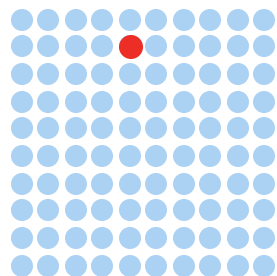
 9.5M



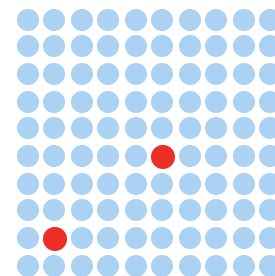
 7M



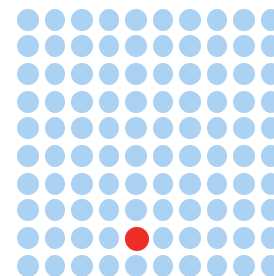
 5.5M



 11M



 13M



62.5M

ALL FINDINGS

Democratizing Threat Intel through Award Winning Threat Research Unit (TRU)

Continuously curated and auto-cross-mapped to every security finding for prioritization by 120+ threat engineers



25+ Threat Sources



Prioritize the exposure with threat-context

7.6

CVSS
CVE-2013-3900



46 Exploits



Weaponized
Exploit Exists



2 Malware



10 Threat Actors



CISA KEY



0.74
EPSS



**2 Month
Trending**



**Dec 2013
NVD
published**



July 2024
CISA KEY

9.5

Qualys
Vulnerability
Scoring
System
(QVSS)

Deprioritize the exposure, if no threat-context

9.9

CVSS

CVE-
CVE-2021-34458



Exploits



No POC
No Weaponization



Malware



Threat Actors



NOT in
CISA KEV



0.01
EPSS



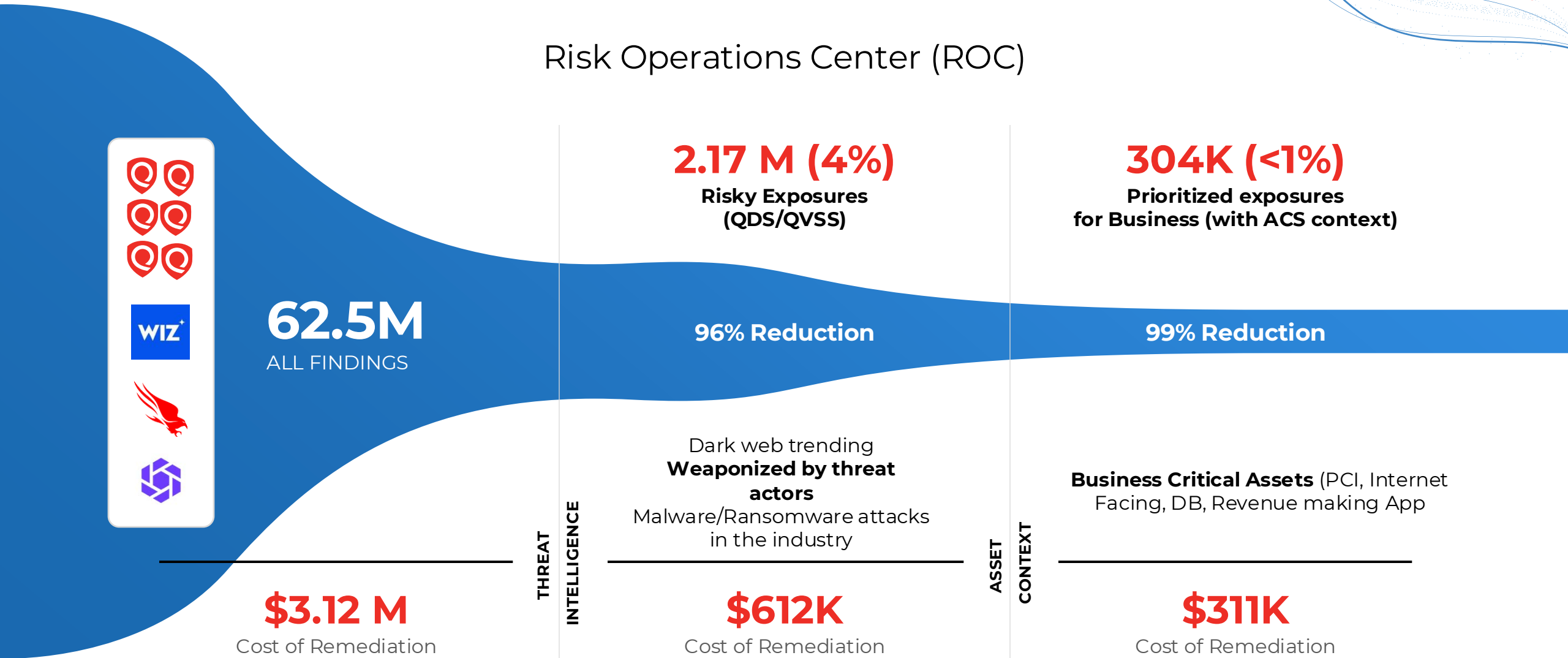
NO
Trending

6.5

QVSS

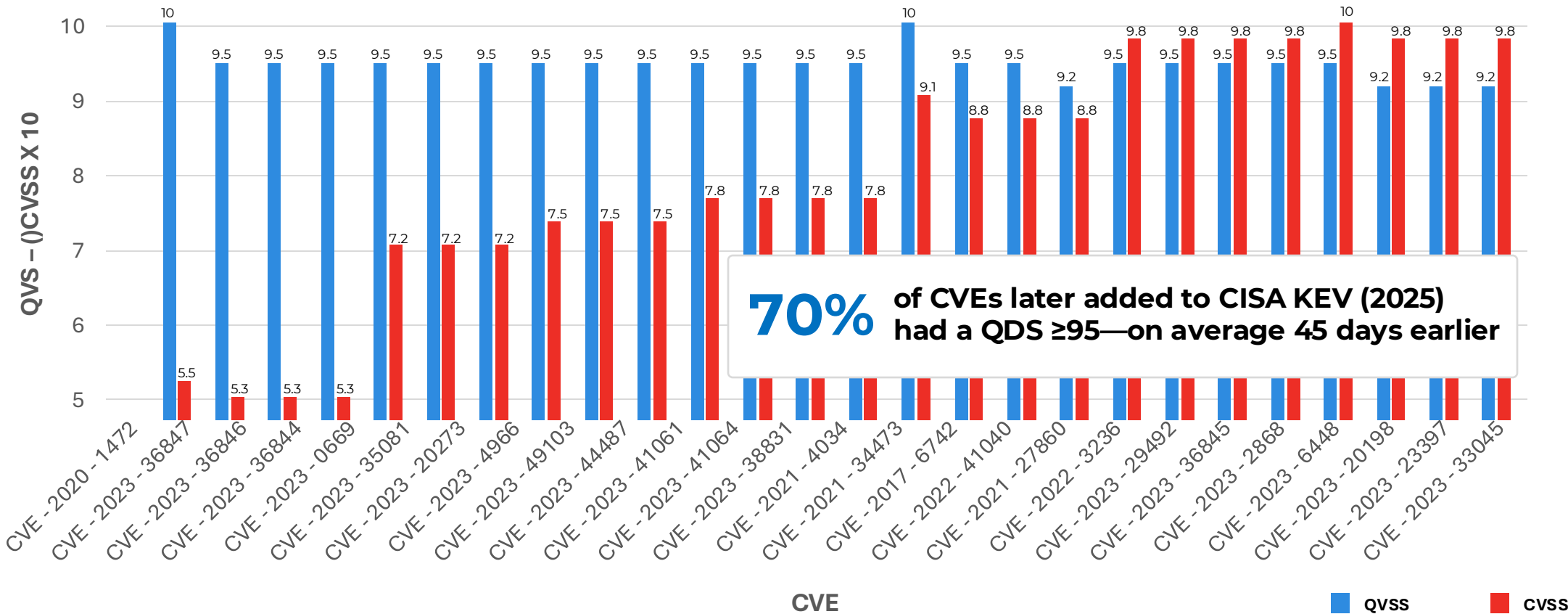
Prioritizing risky exposures which Matter, from millions of exposures

Risk Operations Center (ROC)



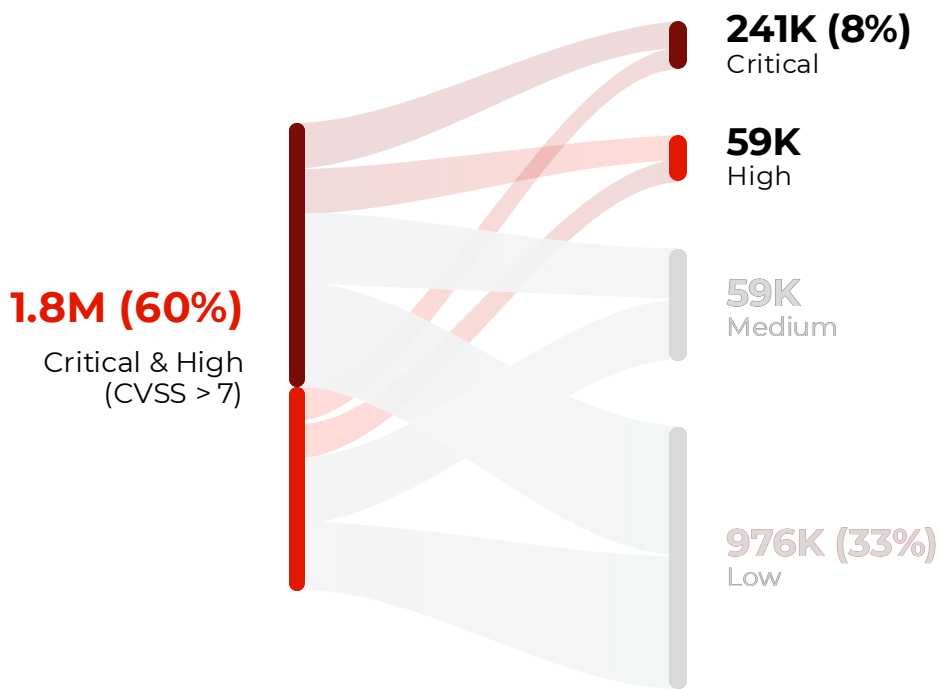
With TruRisk, You are Prioritizing Vulnerabilities before they are in CISA KEV

The graph depicts QVSS (QDS is x10) vs CVSS comparison for sample CVEs from CISA KEVs (2025) for their criticality 45 days before they got added to CISA KEV.

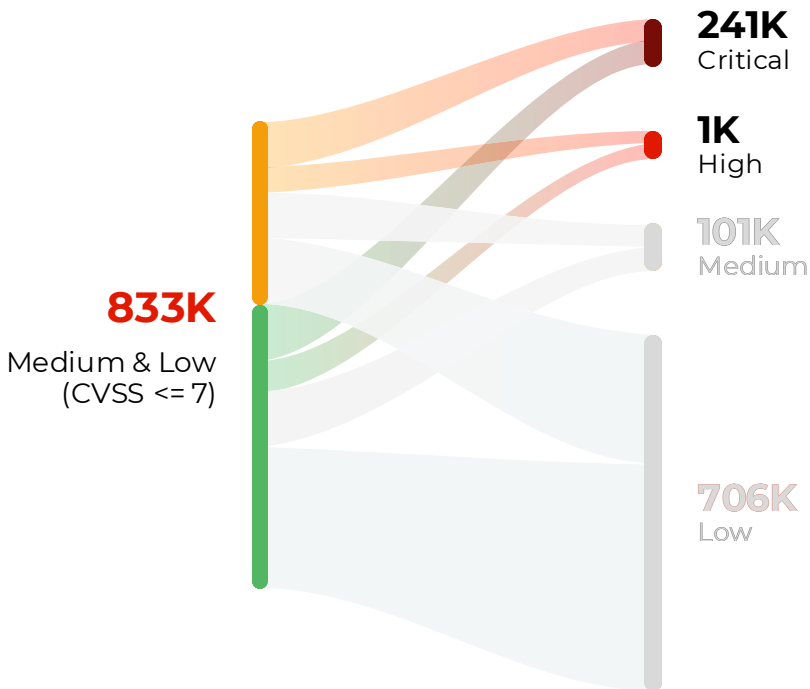


Risk Prioritization and De-Prioritization

3.02M Total exposures



84.9% of critical & high CVSS reduced to Low & Medium severity.



3.0% of critical & high vulnerabilities are overlooked by CVSS.

Risk Exposures

Combines Asset Environmental Factors Considers Only

- Active Service/Process
- Attack Path
- Public Exploit
- Public Asset Exposure



Qualys Threat
DB of 25+
Threat Intel
Sources

Qualys
Research

Vulnerability
Environmental

Risk Exposures Accurately Prioritized



Dark web chatter

Trending patterns

POC vs Weaponization

Easy vs complex exploitation (remote vs local)

Threat actors associated

Exploited by Malware, Ransomware?

Celebrity

100

95

90

80

70

60

50

40

30

20

10

CVE-2023-4487

- POC of Exploit Exists
- Unattributed Threat Actors
- Trending In Mar & Apr 2025
- CISA Known Exploited Vulnerabilities
- CVSS – **7.5** & EPSS – **0.94437**

CVE-2020-1147

- POC Exists and Weaponized
- CISA Known Exploited Vulnerabilities
- Trending in Mar & Apr 2025
- CVSS – **7.8** & EPSS – **0.92695**

CVE-2020-11203

- POC of Exploit Exists
- Threat Actors – **Emissary Panda, Comment Panda**
- CISA Known Exploited Vulnerabilities
- Trending in Mar & Apr 2025
- CVSS – **6.1** & EPSS – **0.11526**

CVE-2021-41303

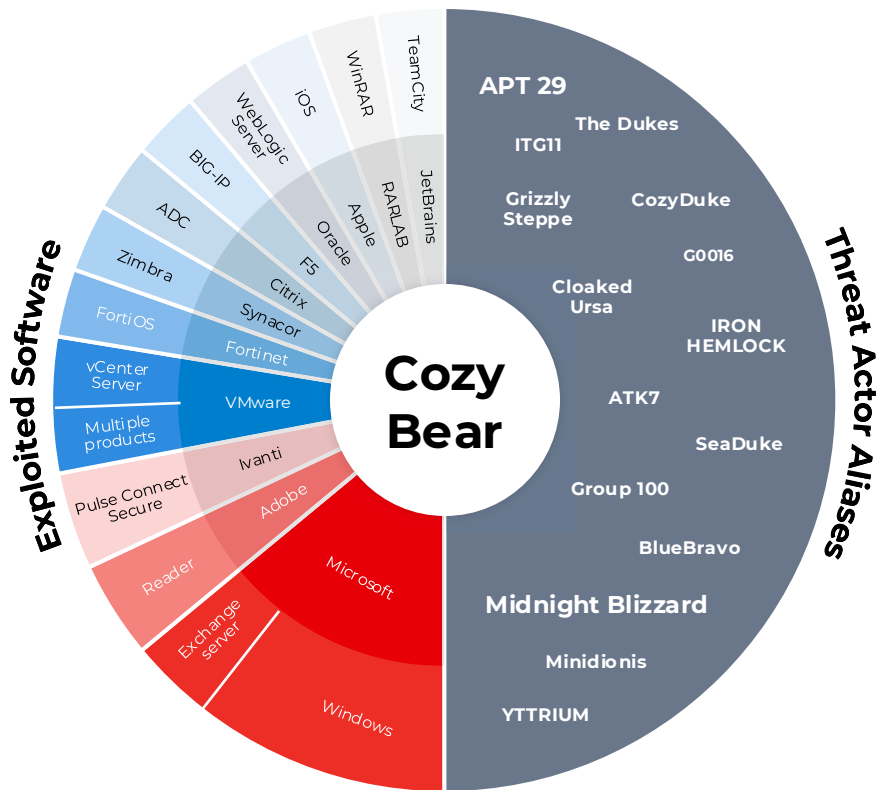
- Last Trending in Mar 2025
- CVSS – **9.8** & EPSS – **0.65449**
- CVE Is Not Exploited and No
- Other Significant Contributing Factors Observed

WIZ

CROWDSTRIKE

Risk of trending threats in the industry

Threat Actor Profile – Cozy Bear (Espionage)



MITRE ATT&CK® TECHNIQUES					
T1001	T1053-005	T1090-003	T1203	T1547-009	T1566-002
T1027	T1059-006	T1090-004	T1204-002	T1547-001	T1583-006
T1027-002	T1059-001	T1095	T1218-011	T1548-002	T1587-003
T1043	T1070-004	T1102-002	T1546-003	T1550-003	
T1047	T1078-002	T1190	T1546-008	T1566-001	

Known Exploited CVEs			
CVE-2010-0232	CVE-2019-9670	CVE-2020-14882	CVE-2021-36934
CVE-2010-4398	CVE-2019-11510	CVE-2021-21972	CVE-2022-30170
CVE-2013-0640	CVE-2019-19781	CVE-2021-26855	CVE-2023-38831
CVE-2013-0641	CVE-2020-4006	CVE-2021-1879	CVE-2023-42793
CVE-2018-13379	CVE-2020-5902	CVE-2021-22893	

Suspected Victim Countries



Target Industries



- ✓ What are the trending threats for my industry'
- ✓ What are my exposures
- ✓ What's my risk – high value assets, exposures
- ✓ Plan to reduce risk

Adversary based Risk Prioritization & Remediation

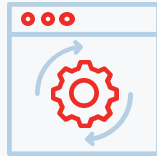
TruLens



01

Industry threat knowledge

CLOP
Scattered Spider



02

Exposures

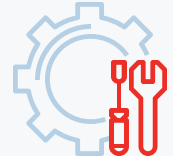
Vulns
Identities
Misconfigs



03

Prioritized Risk

High value assets
Internet facing assets

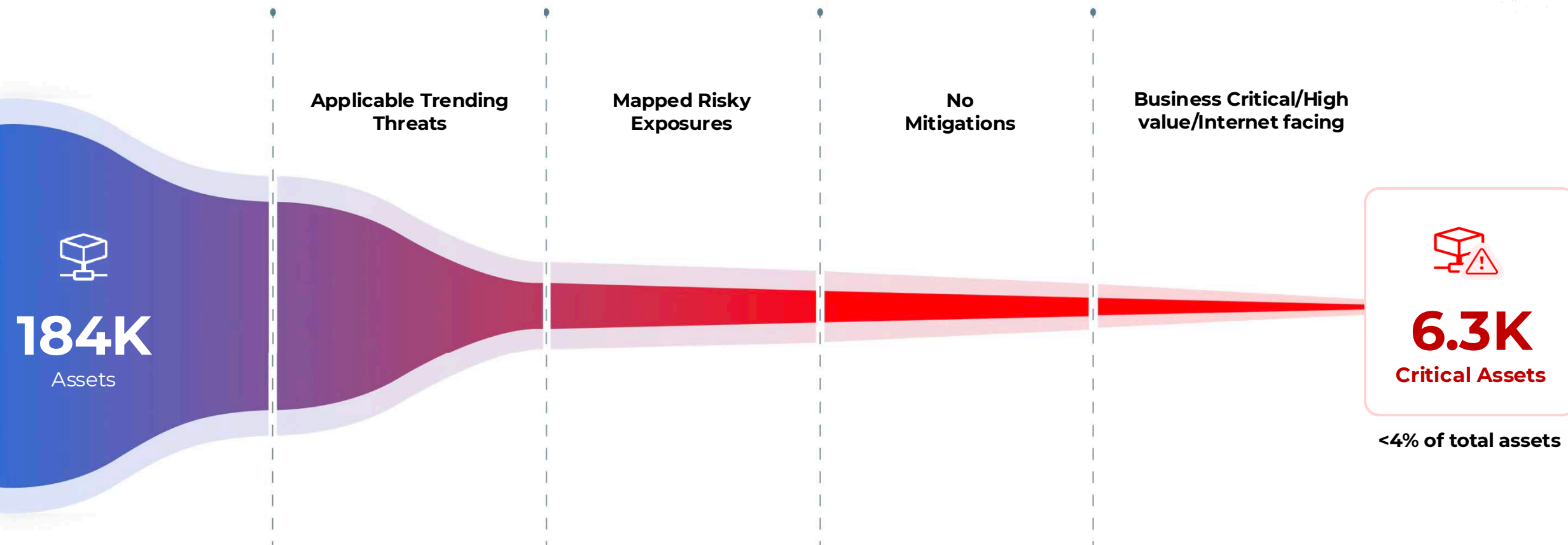


04

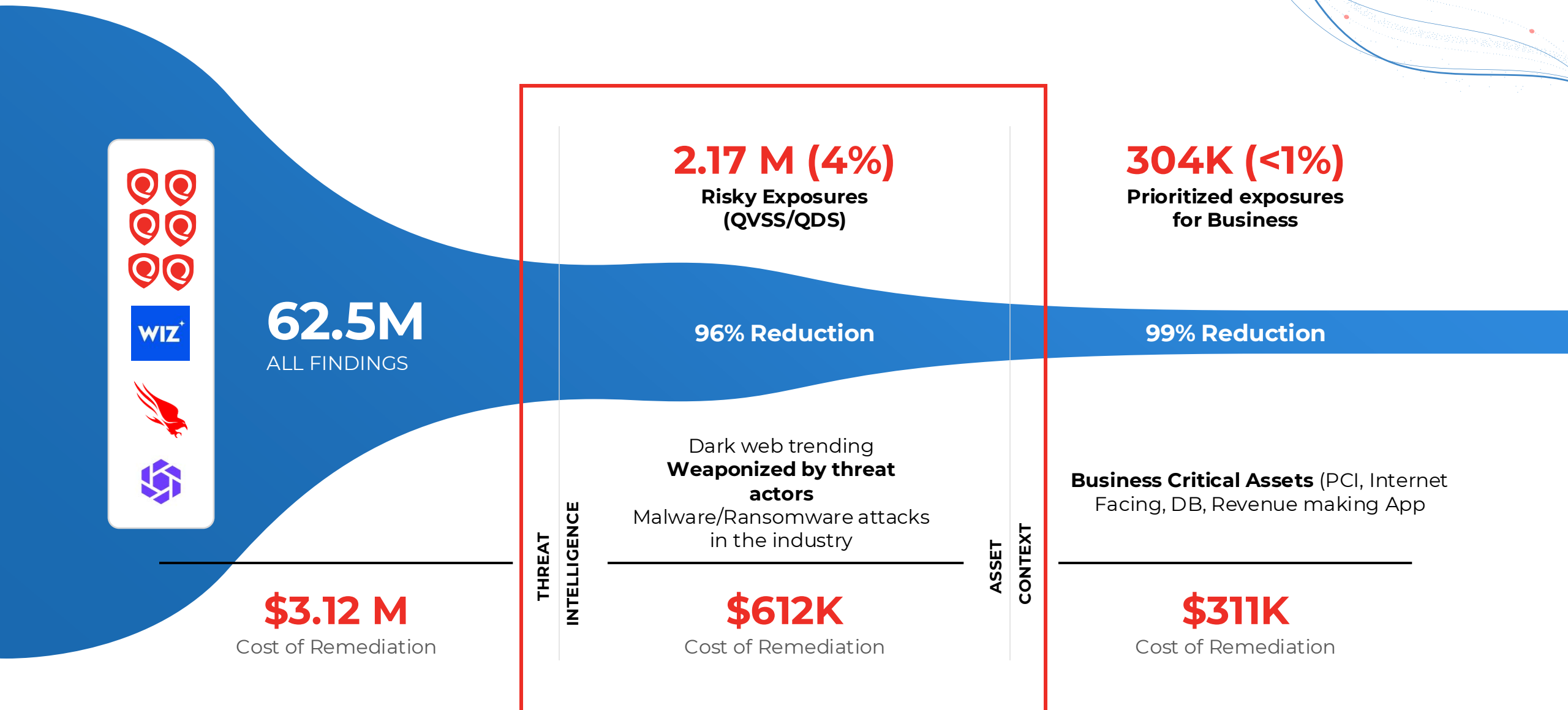
Remediation

Patch
Mitigation

TruLens: Prioritizing Assets with Toxic Combinations



Prioritizing risky exposures which Matter, from millions of exposures



Prioritize riskiest vulnerabilities for your environment

You have the working Mitigations
you did not know about

You have failed
mitigations/know about

Mitigated
25%

Out of
2.17M (4%)

Exposures (Risky
vulnerabilities on critical
assets – Internet, PCI,
business apps)

10%
confirmed
exploitation

What if I tell you

Out of 2.17M (4%)

Exposures (Risky vulnerabilities on critical assets – Internet, PCI, business apps)

**You have the working Mitigations
you did not know about**

33 % Mitigated

Mitigations failed

10% confirmed exploitation

Validate Exploitability of risky vulnerabilities in your environment

1/3rd

Mitigations/Security controls Fail

1/3rd times the theoretical Mitigations/ Security controls failed to prevent exploitation in production

~50%

CISA KEV List

Known Exploited Vulnerabilities could be prevented with validation

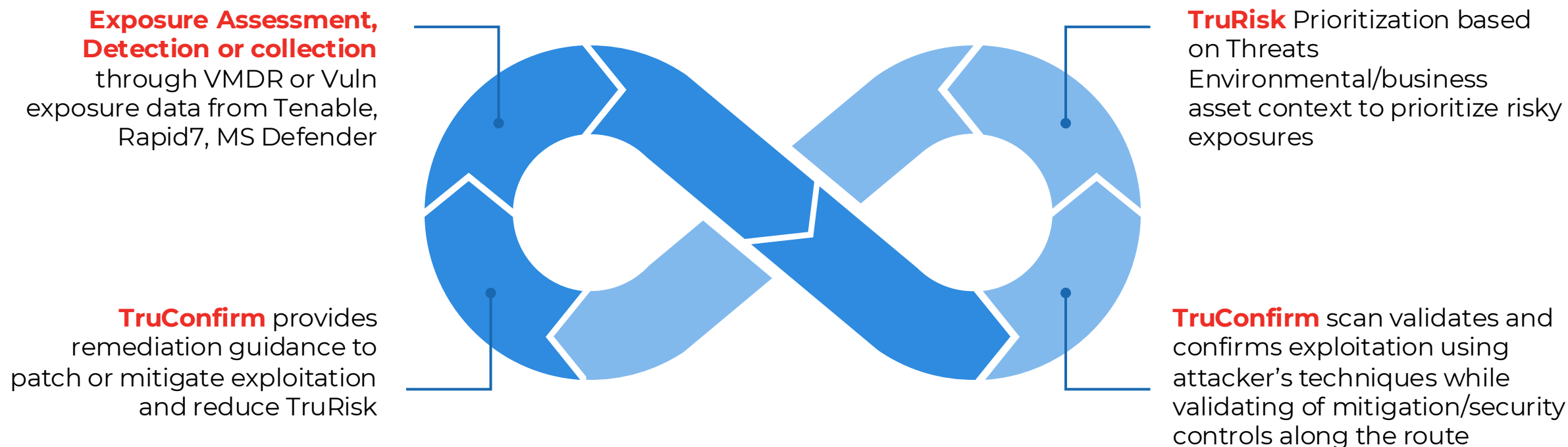
01

Gap between risk prioritization based on industry threat intel and actual exploitability in your environment from hacker's eyes

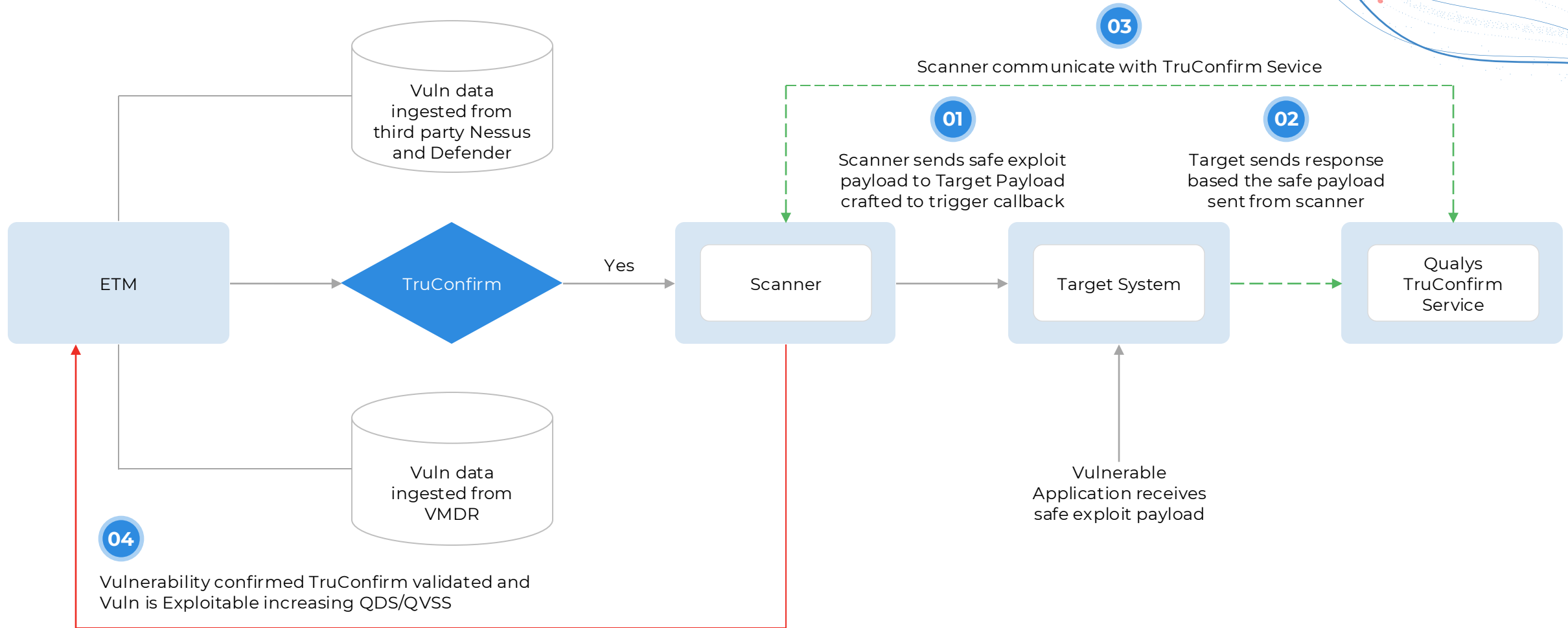
02

BAS teams simulate in non-production environment, relying on data from underlying vulnerability detection and asset attributions

TruConfirm: Validate Exposures, Confirm Exploitation, Accelerate Remediation



TruConfirm: Safe Exploitation Route



This capability extends core TruRisk scoring with real-world exploitation confirmation, helping you prevent exploitation of 88%+ the ransomware vulnerabilities by confirming/validating they celebrity risky vulnerabilities like [BlueKeep](#) and [Log4Shell](#) are actually exploitable in your specific environment despite of theoretical mitigation controls

Risk prioritization: Misconfigurations...

Assessing CIS/hardening benchmarks to prioritizing risk

CIS Controls for consideration

Bearing in mind the breadth of activity found within this pattern and how actors leverage a wide collection of techniques and tactics, there are a lot of safeguards that organizations should consider implementing. To the right is a small subset of the things an organization could do. They should serve as a starting point for building out your own risk assessments to help determine what controls are appropriate to your organization's risk profile.

- Protecting devices**
 - Secure Configuration of Enterprise Assets and Software [4]
 - Establish and Maintain a Secure Configuration Process [4.1]
 - Establish and Maintain a Secure Configuration Process for Network Infrastructure [4.2]
 - Implement and Manage a Firewall on Servers [4.4]
 - Implement and Manage a Firewall on End-User Devices [4.5]
 - Email and Web Browser Protections [9]
 - Use DNS Filtering Services [9.2]
 - Malware Defenses [10]
 - Deploy and Maintain Anti-Malware Software [10.1]
 - Configure Automatic Anti-Malware Signature Updates [10.2]
 - Continuous Vulnerability Management [7]
 - Establish and Maintain a Vulnerability Management Process [7.1]
 - Establish and Maintain a Remediation Process [7.2]
 - Data Recovery [11]
 - Establish and Maintain a Data Recovery Process [11.1]
 - Perform Automated Backups [11.2]
 - Protect Recovery Data [11.3]
 - Establish and Maintain an Isolated Instance of Recovery Data [11.4]

- Protecting accounts**
 - Account Management [5]
 - Establish and Maintain an Inventory of Accounts [5.1]
 - Disable Dormant Accounts [5.3]
 - Access Control Management [6]
 - Establish an Access Granting/Revoking Process [6.1, 6.2]
 - Require MFA for Externally-Exposed Applications [6.3]
 - Require MFA for Remote Network Access [6.4]
- Security awareness programs**
 - Security Awareness and Skills Training [14]



still one of the breaches

40%

Avg.

Misconfigurations
from CIS
benchmarks

70%

Misconfigurations
mapped to
Ransomware
Risks

Control ID	Statement	Criticality	Ransomware Risk	Remote Risk	Risk Explanation
2181	Current list of Groups and User Accounts granted the 'Access this computer from the network' right	URGENT	IBM DB2 11	✓	Database Allows lateral movements and unauthorized remote access.
2196	Current list of Groups and User Accounts granted the 'Deny Access to this computer from the network' right	CRITICAL	Microsoft Windows 10	✓	Operating System Unauthorized users may access the system remotely.
2200	Current list of Groups and User Accounts granted the 'Deny logon through terminal (Remote Desktop) service' right	CRITICAL	Microsoft Internet Explorer 10	✓	Browser Attackers can exploit RDP to gain remote access and deploy ransomware.
9830	Status of the 'Prevent users from sharing files within their profile' setting	CRITICAL	Microsoft Office Enterprise	✗	Middleware Ransomware can spread through user-shared folders.
9304	Status of the "Do not preserve zone information in file attachments" setting for Windows	CRITICAL	Google Chrome	✗	Browser Downloaded files lack zone info, allowing ransomware to run without warnings.
1318	Status of the 'Enforce password history' setting	URGENT	Microsoft Windows 11	✓ (Indirectly)	Operating System Users may reuse weak or old passwords, aiding brute-force or credential stuffing attacks.
504	Status of 'Block all Office applications from creating child processes' ASR rule (D4F940AB-401B-4EFC-AA0C-401B4EFC401B)	CRITICAL	Check Point Firewall	✗	Network Ransomware can use malicious Office macros to download additional malware.

Prioritize Misconfigurations based on Risk



Misconfiguration

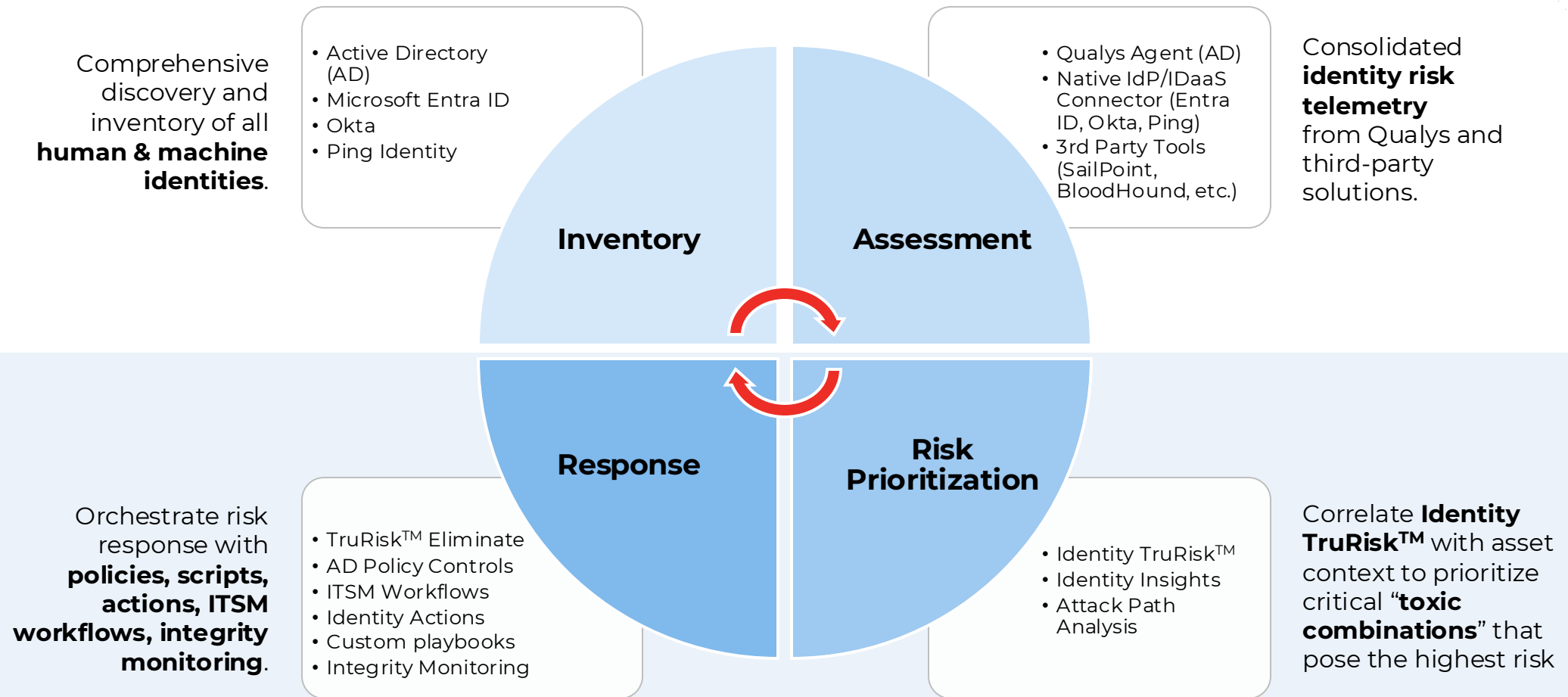
RDP Access
Restriction
CIS control



95
Critical

Risk prioritization: Identities...

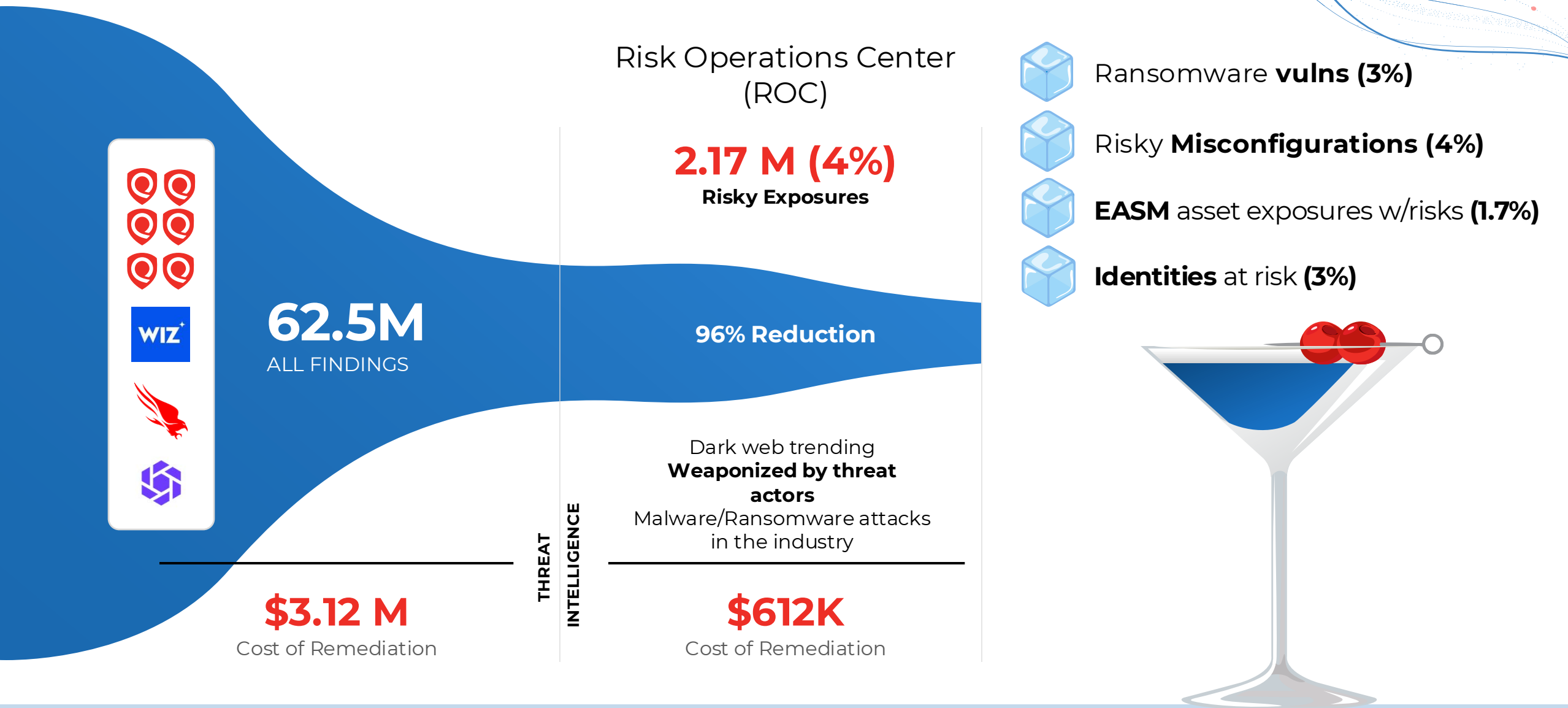
Integrated with ETM



Prioritize Identities based on Risk



Prioritizing risky exposures beyond vulnerabilities



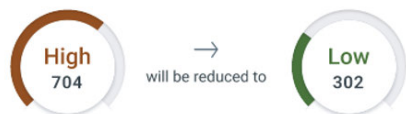
Selection Prioritization Approach

Decide the approach to filter the findings for prioritization. Explore these Qualys-defined templates.

Highest Risk Reduction ☐

Critical Vulnerabilities
(Ransomware, CISA
KEVs) on all assets

Potential TruRisk Reduction



Low Risk Reduction ☐

Patch Critical
Vulnerabilities on non-
critical assets

Potential TruRisk Reduction



Balanced Risk Reduction ☐

Patch Critical
Vulnerabilities on non-
critical assets & Mitigate
on critical assets

Potential TruRisk Reduction



Let Me Decide

Build a custom template
based on your business
requirements.

Cancel

Previous

Prioritize Now



Unified Asset
Inventory



Risk Factors
Aggregation



Threat
Intelligence



Business
Context



Risk
Prioritization

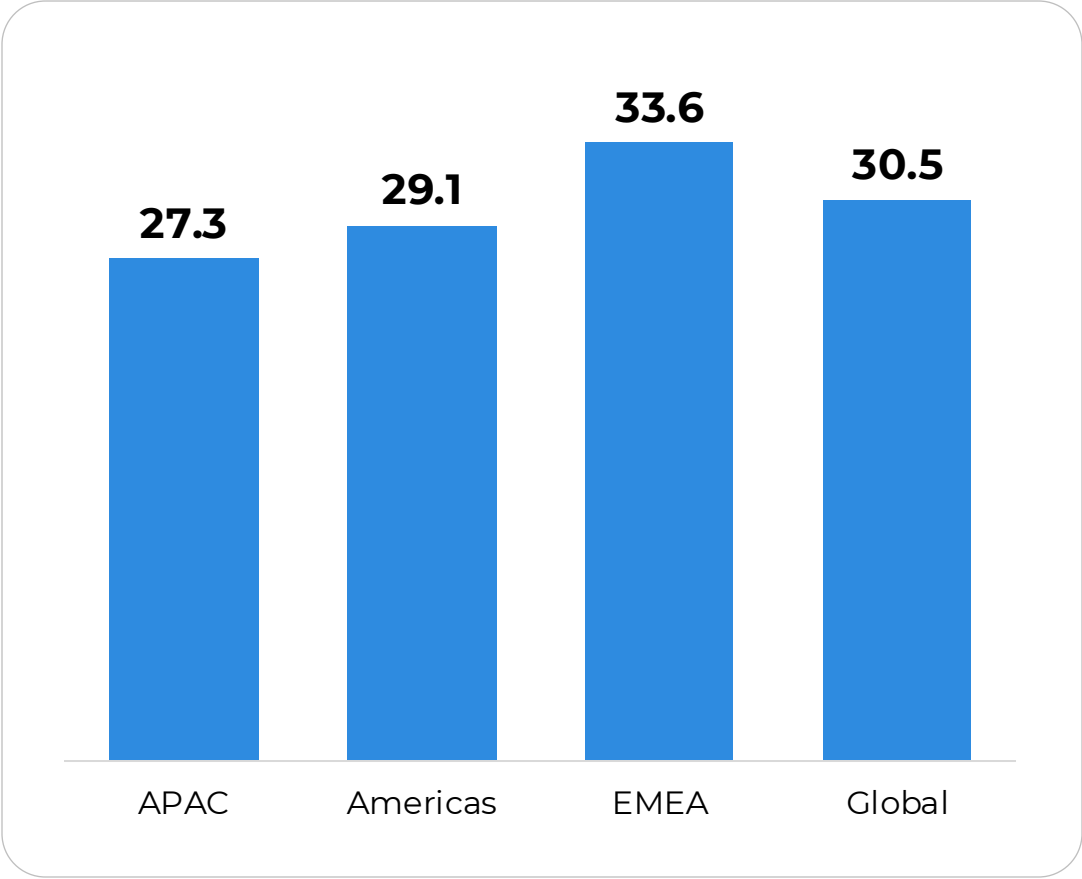


Risk Response
Orchestration



Compliance
& Executive
Reporting

Problem in Risk Reduction is 2-Fold



Impact of Qualys Patch Management

01

Maps right Remediations to Risky Vulns & Assets to reduce mean time to communicate

02

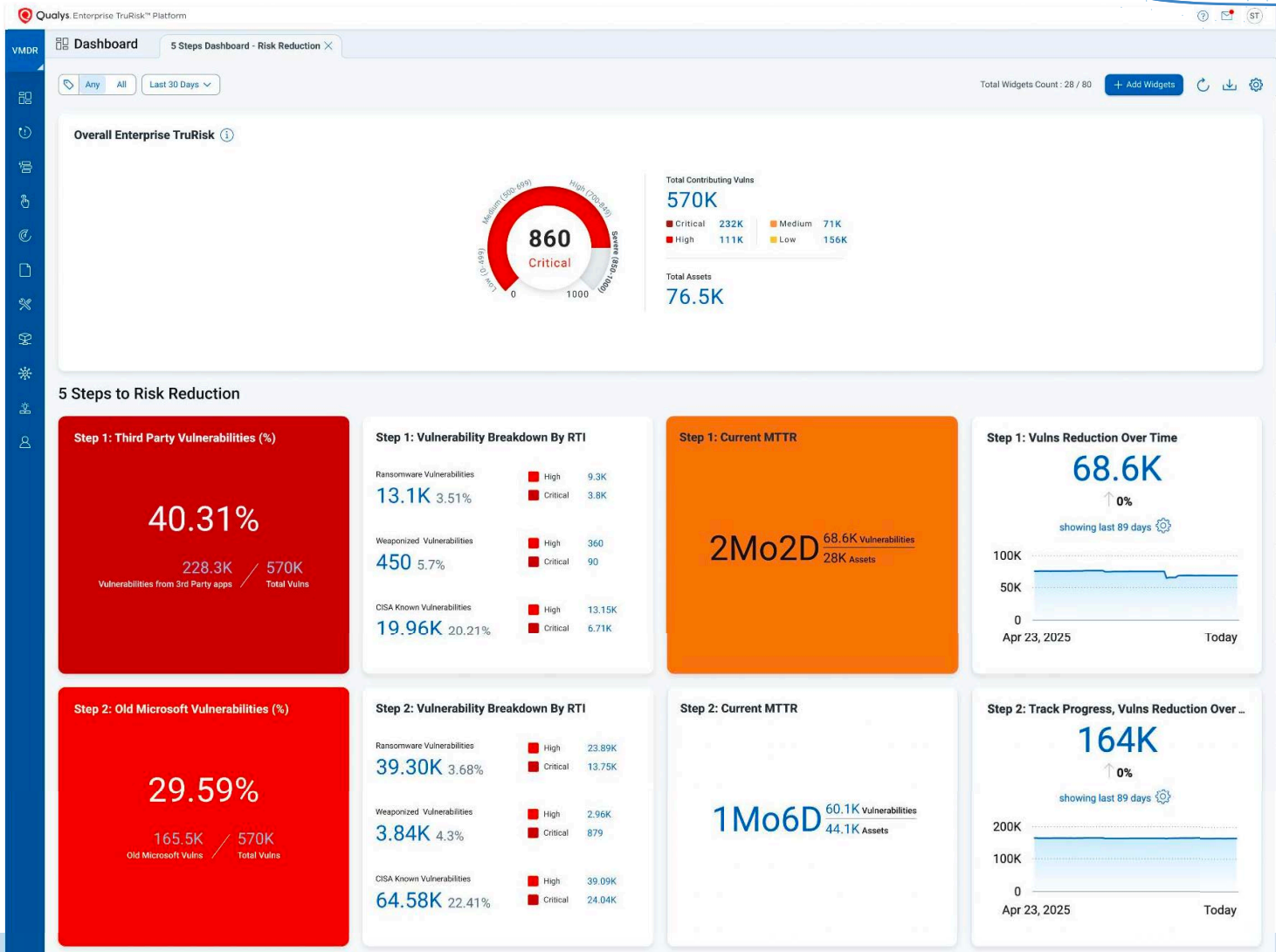
Patches Win, Mac, Linux and 200+ 3rd party apps, no need of VPN

03

Now provides a Risk elimination plan to reduce risk

04

Drives patching thr' MS SCCM/Intune RBAC, ITSM Integrated



Impact of Qualys TruRisk Eliminate

140M

Patches + Mitigations
Deployed in last 12 months

Exchange

Smart Chaining

Microsoft No VPN

Rollback

RBAC

Patch via SCCM

Linux Inte

ServiceNow

Zoom

Junos

PowerShell

ivanti

solarwinds

Cisco

SQL Server

VMware ESXi

5% Windows

Customers in 0-5 days MTTR

Android

9% iOS

Customers in 6-10 days MTTR

Red Hat Enterprise Linux

32%

Customers in 11 to 17 days MTTR

Java

40%

Faster MTTR than traditional patch

Python

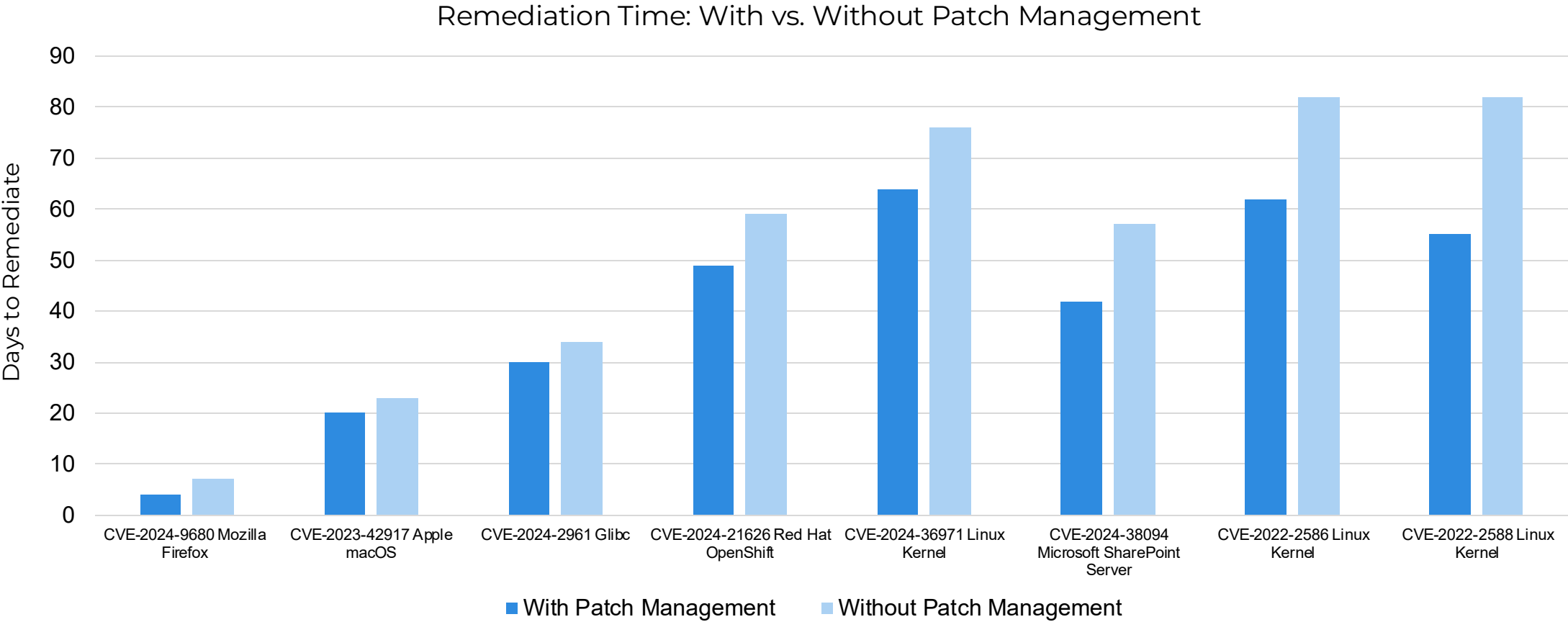
Apache HTTP Server Project

Jenkins

Progress MOVEit

mongoDB

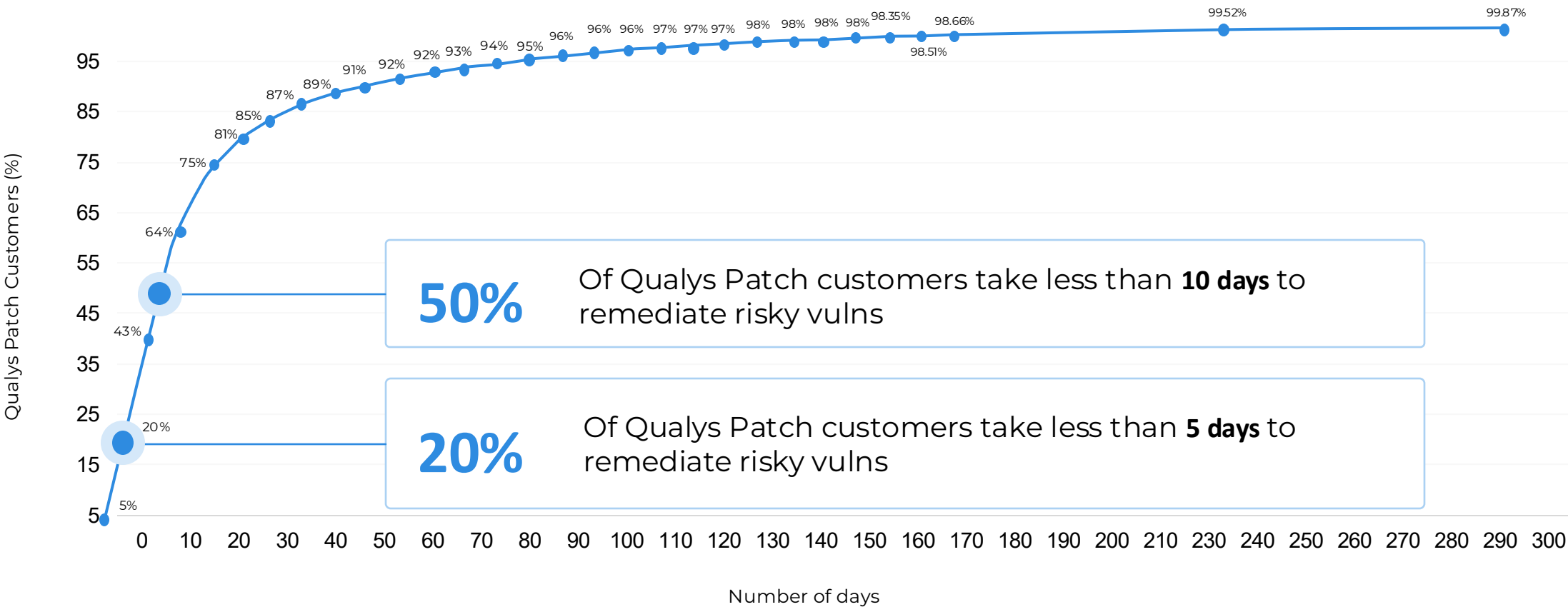
Patching Risky Vulns Faster than any other patch tool



Formal patch management accelerates high-risk vulnerability remediation, cutting exposure windows.

With TruRisk Eliminate, You are Remediating Risky Vulnerabilities, before they are in CISA KEV

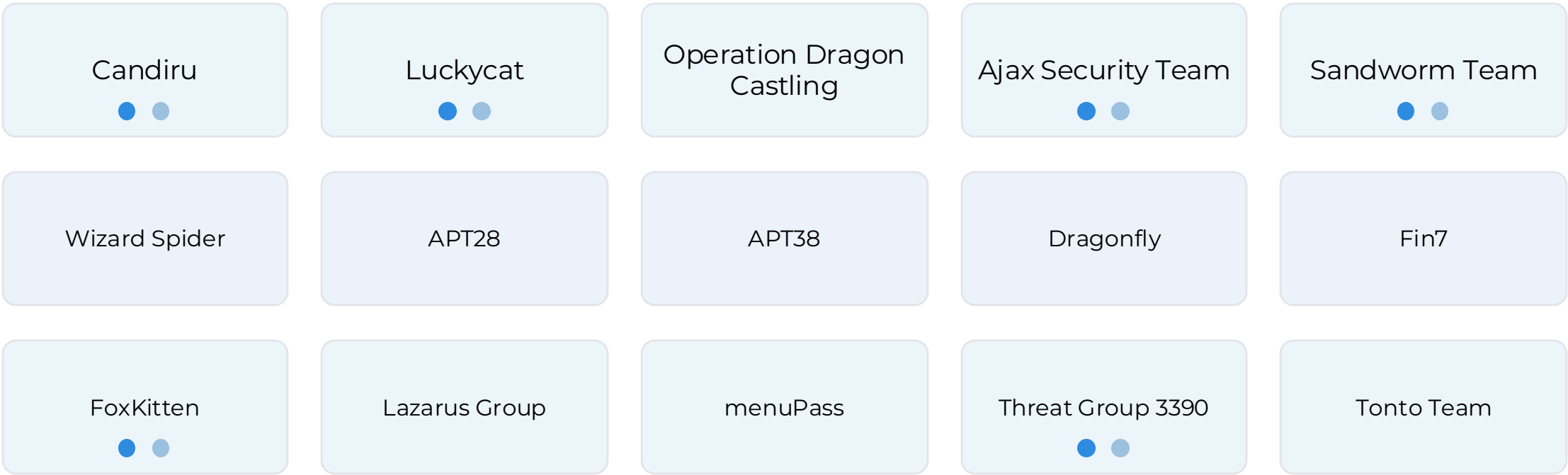
Swift Remediation of CISA KEVs in Focus



Make your ITOps the Heroes

Let them know that they would prevent **8 out of 10 Attacks** Before Attackers could Exploit them...

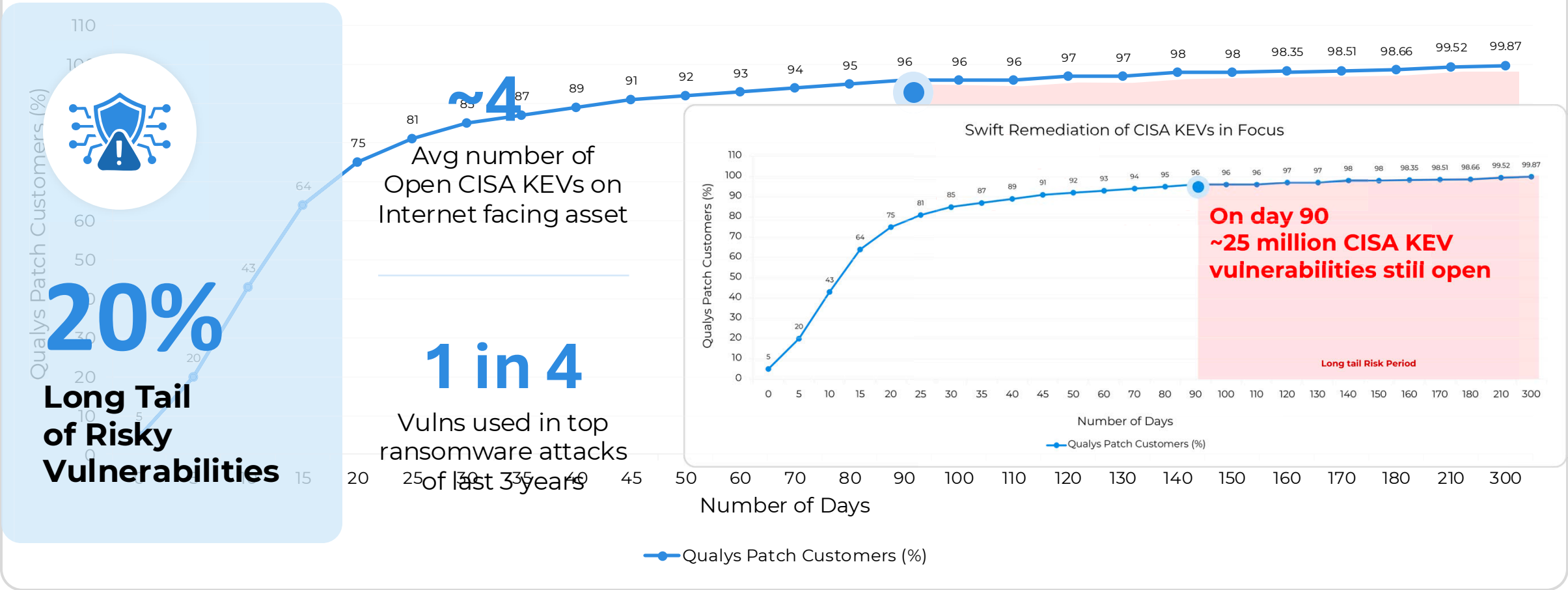
● Cloud
● Ransomware



Top attacks of 2023 and 2024

Long Tail of Vulnerabilities are what Attackers are After...

Swift Remediation of CISA KEVs in Focus



In 2024, while most CISA KEV vulnerabilities are rapidly patched, the last 1-2% can remain open well past six months, exposing organizations to unnecessary risk



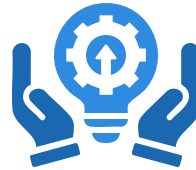
The patch can break my critical assets

Remediate Smart, Break Less with AI-powered Patch Reliability Score



Automate the safe majority

- Classify each patch (High, Medium or Low)
- Risky vulns with **high-reliability** recommended for automated patching.
- Cutting **MTTR by 50–75%**



Fewer outages, smarter testing

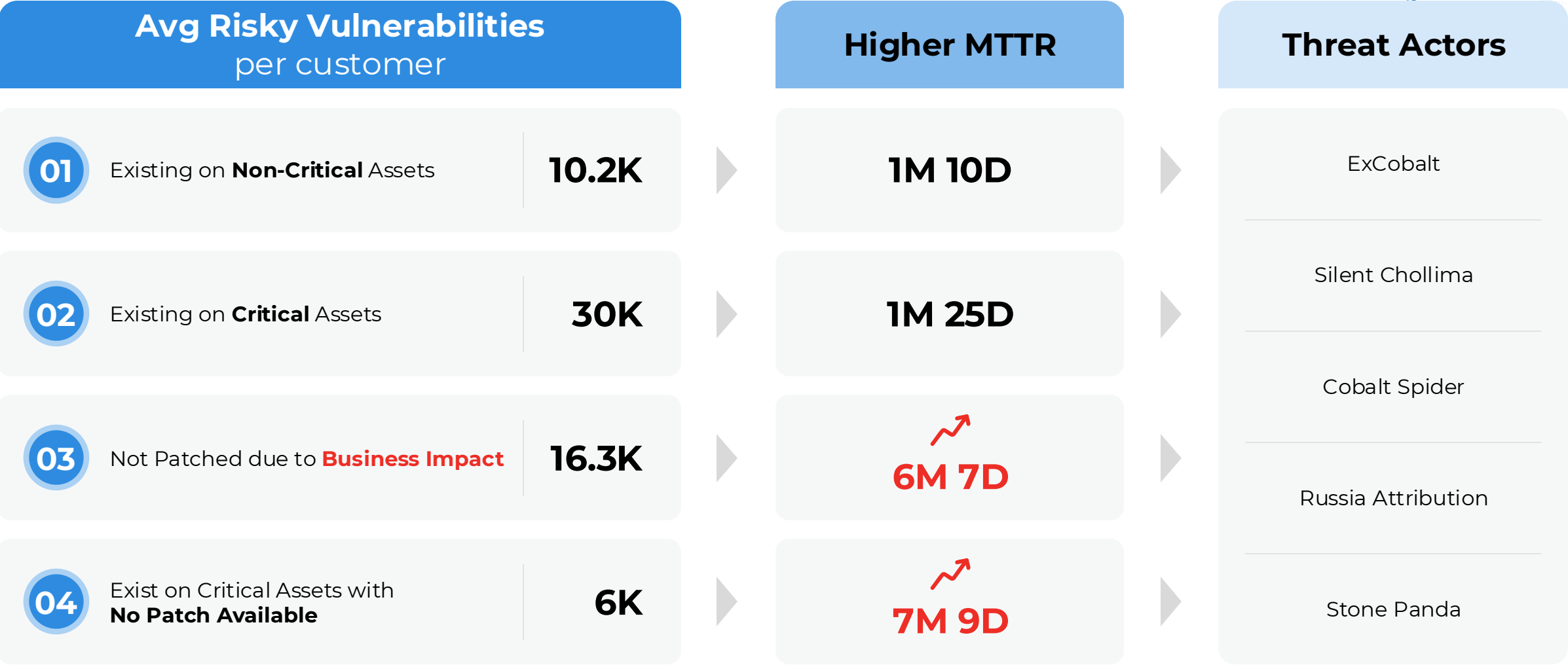
- Focus human effort on **Medium** with smart patch ring jobs.
- Result: **change-failure rate ≤5–10%** and fewer SEV incidents tied to patching.



Risk-aware when patching is risky

- When reliability is **low**, recommends mitigate / isolate until safe to patch.
- Keeping MTTR for risky vulns in single digits while protecting crown-jewel assets.

Accelerate MTTR with Patch Reliability Score



Enterprise TruRisk

This report presents your TruRisk posture from open vulnerabilities that can be patched or mitigated with Qualys TruRisk Eliminate.



Total Assets

15.1K

2.4K

Internet Facing Assets



Total Vulnerabilities

450K

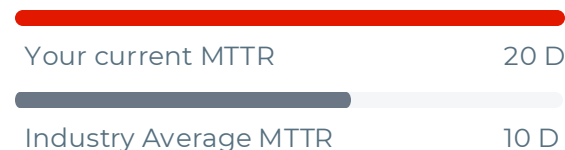
* Only vulnerabilities with detection source 'Cloud Agent' are considered



MTTR Analysis

2x Slower

Than Peers



Risk Elimination Options to Accelerate MTTR

82% (369K/450K)

Patchable Vulnerabilities

42% (369K/450K)

Have Mitigations Available

18% (81K/450K)

Vulnerabilities with **No Patch Available**

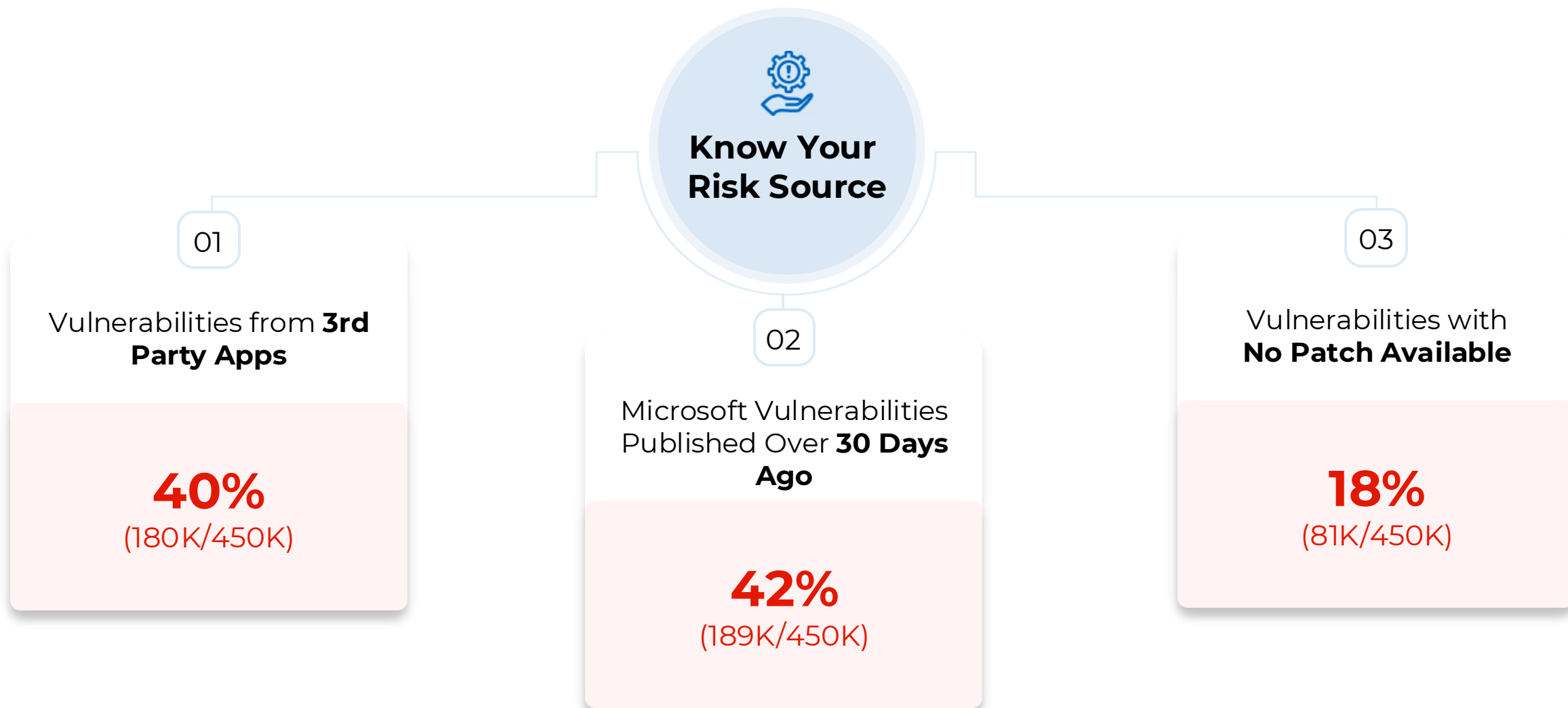
Have Permanent Fixes Provided by
TruRisk Eliminate



TruRisk Eliminate ensures the reduction of Cyber Risk and MTTR through focused Risk Elimination Strategies

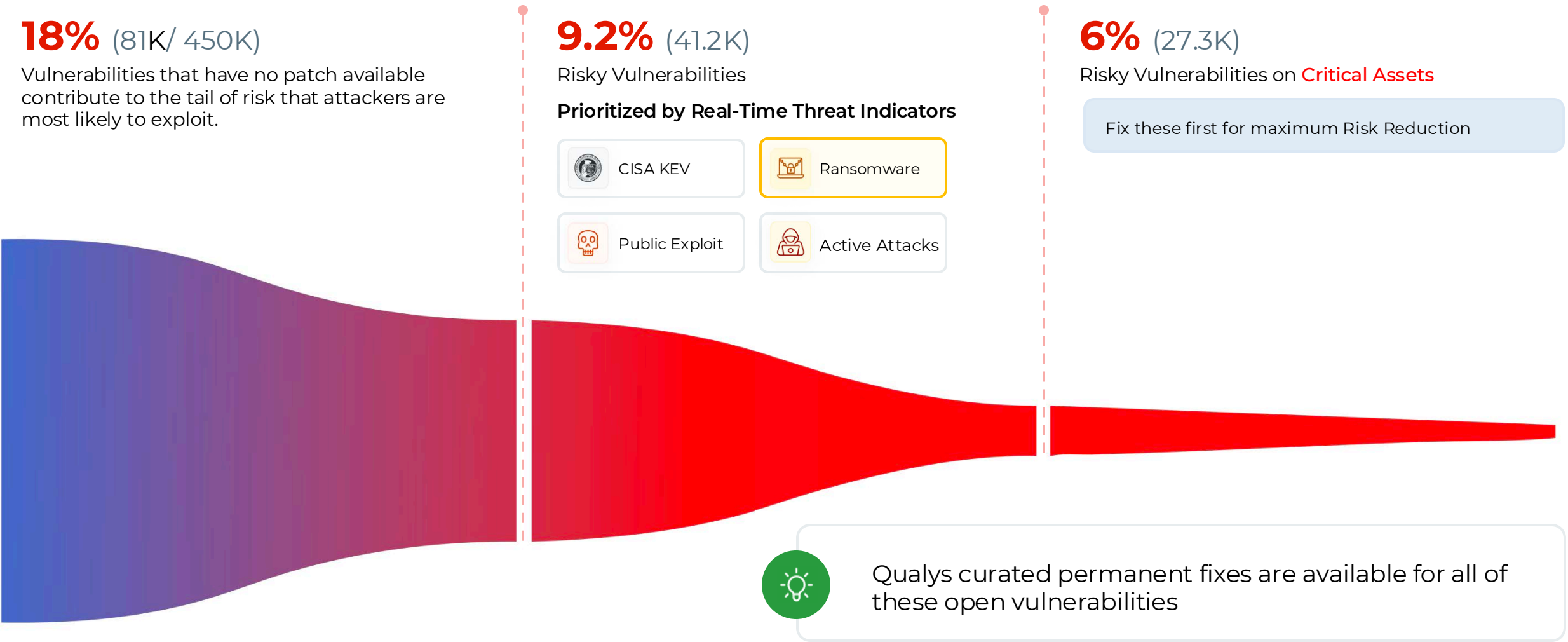
Know Your Risk Source

Identify the areas contributing most to your cyber risk and prioritize remediation



Vulnerabilities with **No Patch Available**

Primary reason for increased MTTR and delayed patch SLAs



Vulnerabilities with No Patch Available: MTTR Overview

Primary reason for increased MTTR and delayed patch SLAs

Peer Benchmarking

Your MTTR Performance

3 Months



Current MTTR: Below Average (28% slower)

Your current MTTR

3 M

Industry Average MTTR

25 D

Critical Patch Compliance SLAs



PCI DSS
30 Days



NCSC UK (Internet-facing)
5 Days



NCSC UK (Internal)
14 Days



CIS Patch Management
7 Days



CISA
15 Days



IRS (USA)
30 Days



NIST
30 Days

Vulnerabilities with No Patch Available: **Industry Trends in Applying Permanent Fixes**

Top CVEs being fixed by peer organizations using Qualys permanent fixes

CVE-2013-3900

Critical

Microsoft WinVerifyTrust function Remote Code Execution

11K

Affected Assets In Your Environment

CVE-2014-8439

Critical

Adobe Flash Player Dereferenced Pointer Vulnerability

17

Affected Assets In Your Environment

CVE-2016-2183

Medium

Birthday attacks against Transport Layer Security (TLS) ciphers with 64bit block size

22.8K

Affected Assets In Your Environment

CVE-2024-39818

Low

Zoom Workplace Apps and SDKs - Protection Mechanism Failure

472

Affected Assets In Your Environment

CVE-2025-0167

Low

Microsoft Curl Exposure of Sensitive Information Vulnerability

19.5K

Affected Assets In Your Environment

RISK BUSTERS

CAPTURE THE FLAG EVENT



**Wednesday
October 15, 2025
5:15 – 6:30PM**



***ENTER TO
WIN PRIZES***

*1st Place: **16" MacBook Pro**
2nd Place: **13" iPad Air**
3rd Place: **Apple Watch Series 11***

***Do you have what it
takes to earn the title
of Agent TruRisk?***



Unified Asset
Inventory



Risk Factors
Aggregation



Threat
Intelligence



Business
Context



Risk
Prioritization



Risk Response
Orchestration



Compliance
& Executive
Reporting

Compliance Assessment and Reporting

Audit-Ready, Continuously Compliant to 100+ mandates from assessment to fixing

Audit Readiness for NIST 800-53 (Special Publication)

Selected Asset Tags:

Unassigned Business Unit | Cloud Agent | Asset Groups | AZURE-SD-CAP | GCP-SD-CAP



Total Assets
2925

Unique Controls
8070

Audit Gaps

50.43%

1538.9k of 3051.3k
Total Audit Gaps

44.49%

684.6k of 1538.9k
Critical Audit Gaps

Critical

Asset Summary

72.03%

2.1k of 2.9k
Assets with Audit Gaps

99.95%

2.1k of 2.1k
Assets with Critical Audit Gaps

Critical

Top 5 Failing NIST 800-53 (Special Publication)

Requirements contributing to the audit readiness for NIST 800-53 (Special Publication)

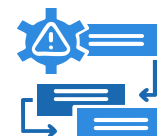
Access Control



System And Communications Protection



Risk enrichment on top of your exposure data



**Unified Asset
Inventory**

**Risk Factors
Aggregation**

**Threat
Intelligence**

**Business
Context**

**Risk
Prioritization**

**Risk Response
Orchestration**

**Compliance
& Executive
Reporting**

**Business-first
visualization** of
assets and their
risk

**Tech-debt
(EOL/EOS)**
based on risk of
the exposures

**Aggregation &
Risk-based
prioritization** –
know which
exposures
matter the
most to reduce
risk

TruLens
Threat actor
mapping to
exposures to
for
Adversary-
based risk
prioritization
and
remediation

**Cyber Risk
Rationalizer**
To see how
much
effective the
controls are
getting to
reduce impact
and likelihood
of loss to
business

TruConfirm
To get
exposures
validated/conf
irmed for
exploitation

**Eliminate/Re
mediate**
**Get exact
remediations
(patch/mitiga
tions)**
mapped to
exposures to
reduce risk

**Audit-ready
report**
Mapped to 100+
mandates to
get compliance
friendly report

If I have VMDR, What does ETM give me



Unified Asset Management

Comprehensive visibility across **external and internal attack surfaces** with risk context. Automatically link your technical assets to their business entities with criticality and associated risks.



TruRisk: Quantifying Cyber Risk for Business

Aggregating all siloed exposures at scale, across your security tooling to measure and visualize risk in **business value**. See how your exposures get re-prioritized. **Track SLAs. Customize Risk** based on **environmental and mitigation factors**



Adversary-Based Risk Prioritization

Stay ahead of emerging and **trending threats in your industry** with visibility into your risk prioritization and reduction plans for the threats



Specialized Cyber Risk Views – ETM Identity

Get unified view of risk from emerging attack surfaces – Identity security posture management, Post-Quantum readiness etc., instead of looking into it in a siloed manner



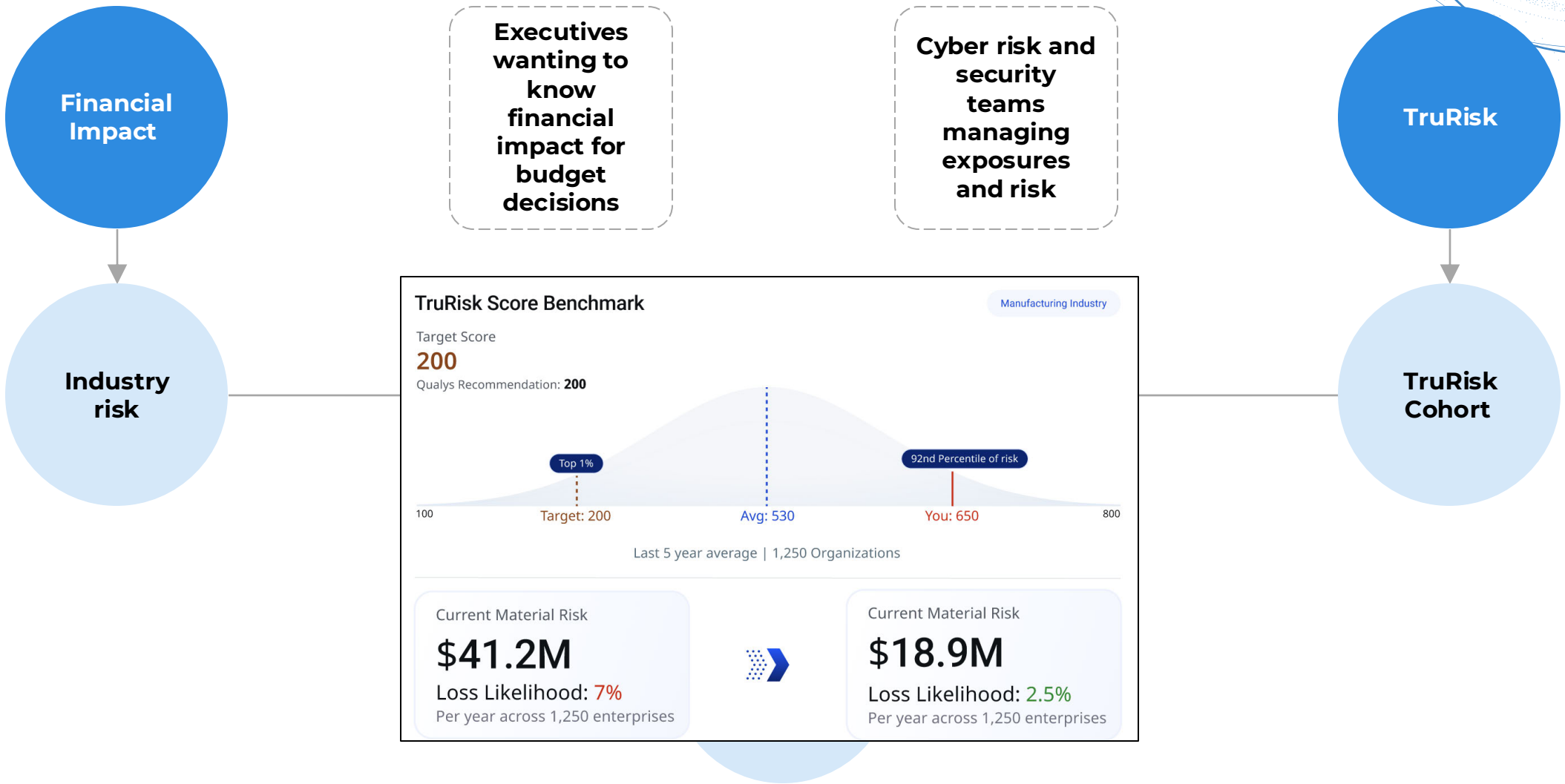
Native Agentic AI: Ready to use Cyber Risk Agents and Cyber Risk AI Assistant



TruConfirm: Validate exposures, Confirm Exploitation

confirm exploitation of exposures while validating security mitigations, to accelerate remediation of exposures, validated for exploitation

Speaking the language of the executives...



Thank You

