



Remediation & Beyond: Alternative Mitigation Paths for Reducing Operational Risk

Eran Livne
Sr Director Product Management



Enterprise TruRisk™ Platform

Measure, Communicate, and eliminate cyber risk.

De-risk your business.



Weaponized Vulns



19.5

Time to Weaponize (Days)



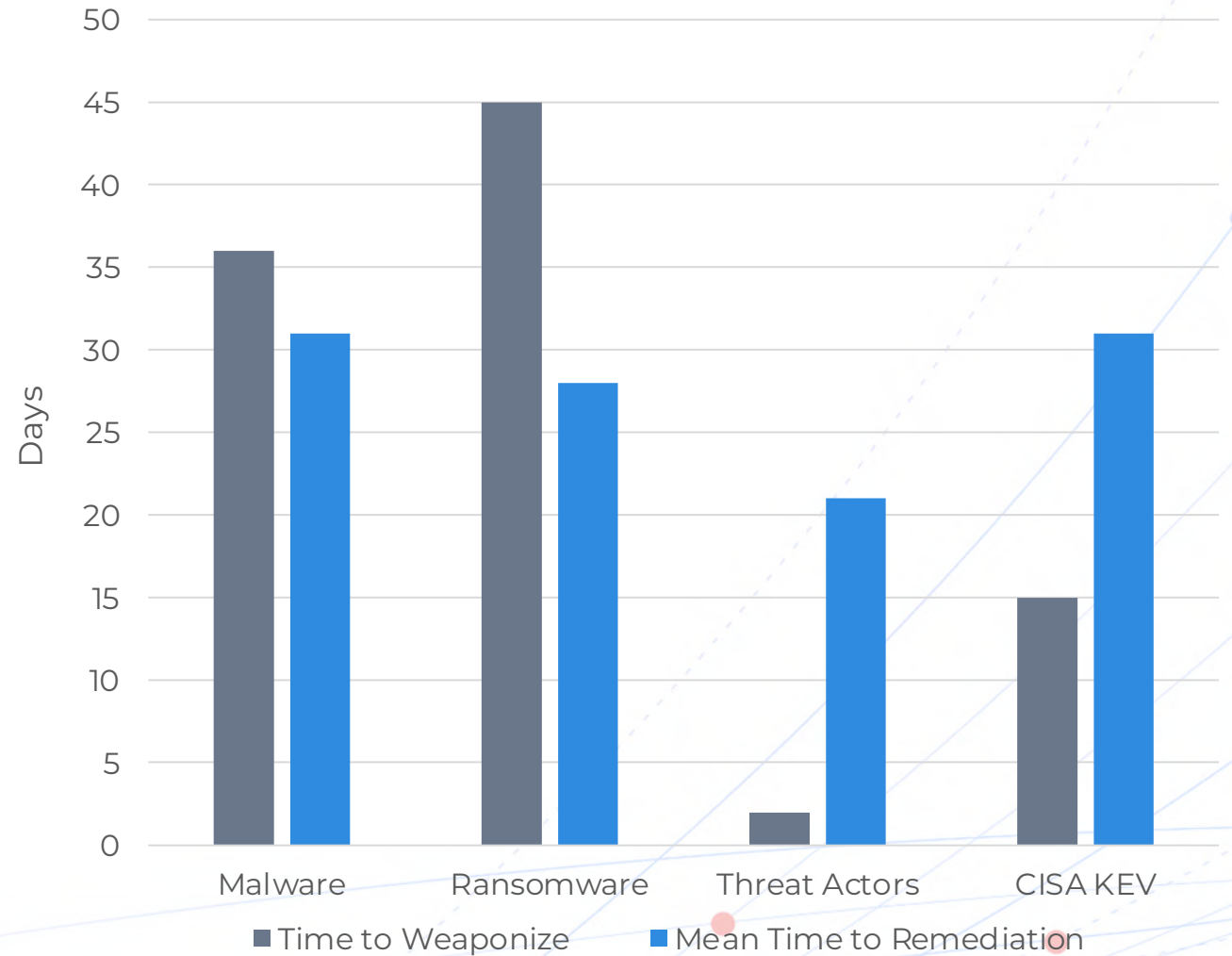
30.6

Mean Time to Remediate (Days)



57.7%

Remediated Vulnerabilities



Top Detected Weaponized Vulnerabilities

# of detections	CVE	Product	RTI
1	CVE-2022-2856	Google Chrome	Weaponized, CISA
2	CVE-2022-41049	MS Windows	Weaponized, CISA
3	CVE-2022-4135	Google Chrome	CISA
4	CVE-2022-2294	Google Chrome	Weaponized, CISA, APT
5	CVE-2022-3075	Google Chrome	Weaponized, CISA
6	CVE-2022-30170	MS Windows	Weaponized, APT
7	CVE-2022-24521	MS Windows	Weaponized, CISA, APT, Ransomware, Malware
8	CVE-2022-26904	MS Windows	Weaponized, CISA
9	CVE-2022-37969	MS Windows	Weaponized, CISA
10	CVE-2022-1096	Google Chrome	Weaponized, CISA



TruRisk Eliminate



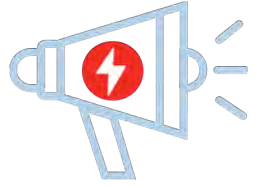
Patch Management (Remediation)

- ✓ Qualys Patch Management
- ✓ Jeff Huffman, Senior Director, IT Security and Administration - **New Orleans Saints**
- ✓ Panel:
Haydur Agha, VP, Global InfoSec – **Sony Music**
Nick Shimmen, Technical Consultant, CISO group
Associated British Food



Mitigation

- ✓ Announcing Mitigation



How Qualys Patch Management helps Organizations Eliminate Risk?

(without replacing IT patching tools)



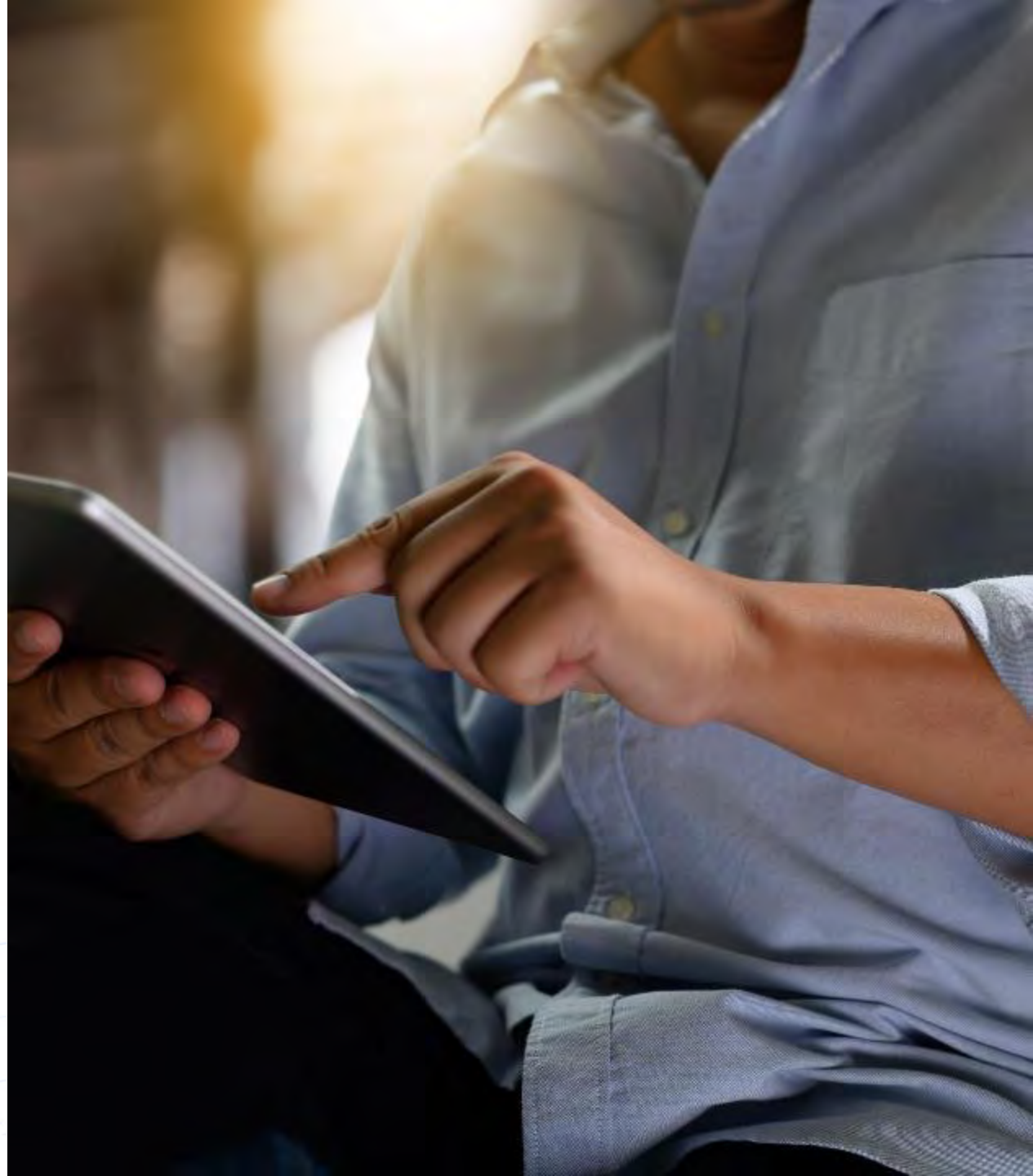


54M

Patches Deployed
Last Year



Smart Automation for your Low Hanging Fruits





Chrome: 2647
(2008-2023)



Firefox: 2131
(2003-2023)



Adobe

Adobe: 1530
(2004-2023)



iTunes: 613
(2005-2023)



VLC: 105
(2007-2022)

Smart Automation



Automate Low Hanging Fruits: Make sure products that introduce low risk of breaking when patched are always up to date



Focus on High-Risk high Reward Products: identify products that introduce the most risk to your environment and focus on those first

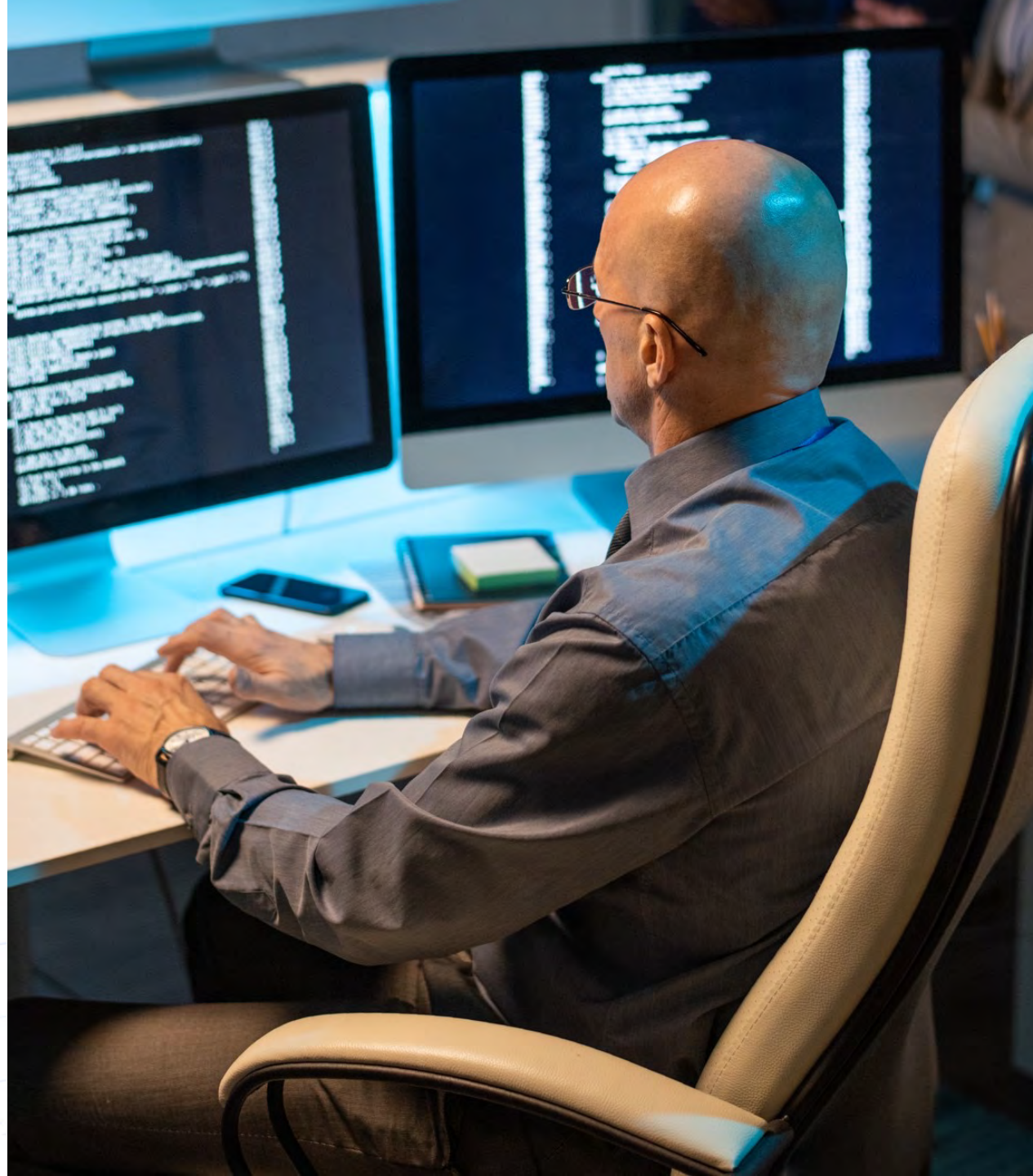


Automate based on Risk where Possible: Automatically patch assets if a ransomware related vuln is detected, a CISA related one etc.





Simplify
Remediation for the
Measured Risk
Smart Automation



Vulnerability **Not** Equals a Patch

CVE-2021-34527 “PrintNightmare”

“In addition to installing the updates, in order to secure your system, you must confirm registry settings are set to 0”

Remediation = RegKey Change + Latest Patch

Smart Automation



Let the Product do the research for you: Find the right patches and configuration changes required to remediate vulnerabilities



Test, Approve, Deploy: fully integrated with current IT best practices & tools



Communicate Results: view results in your risk and vulnerabilities dashboards.

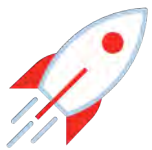


Automation is Key



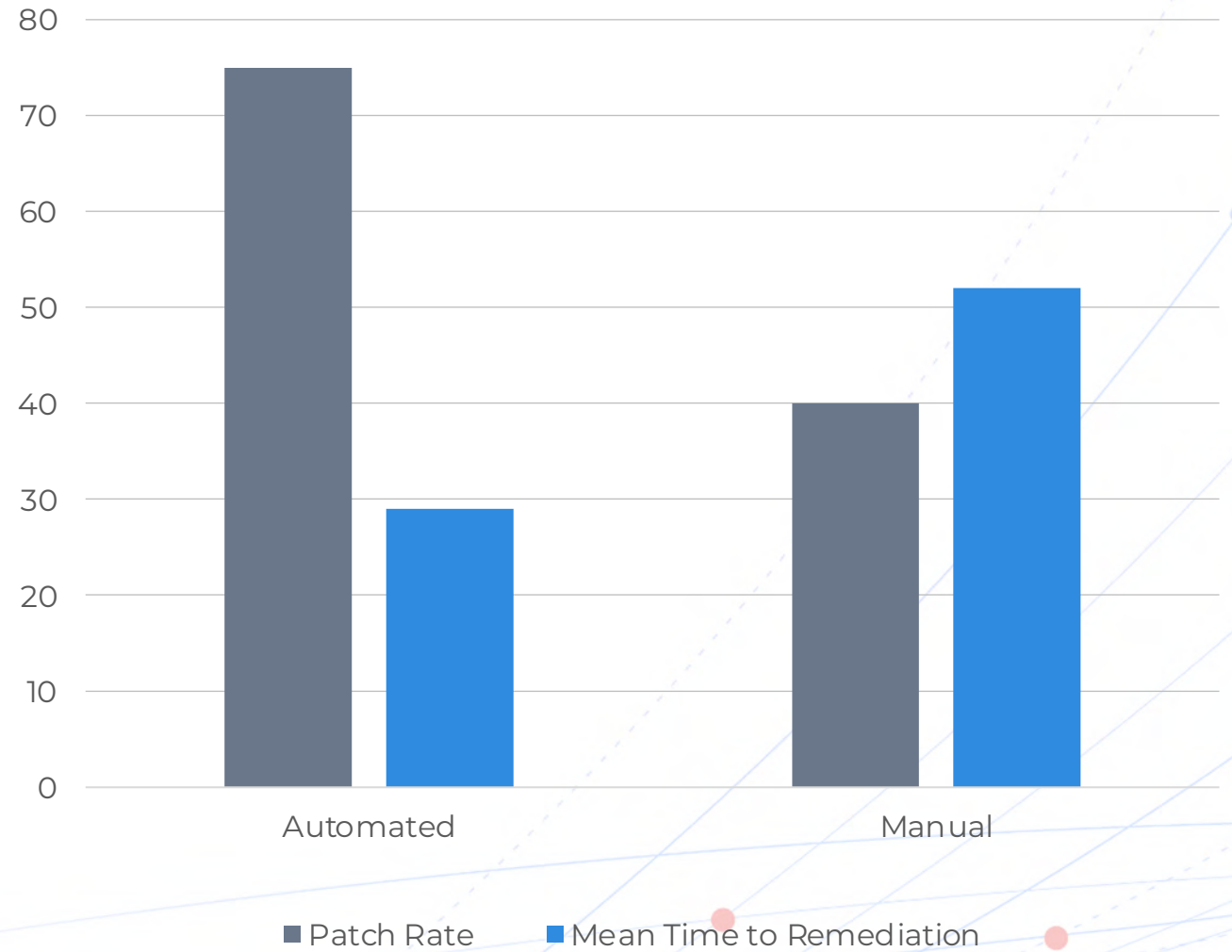
89.5%

Improvement in Patching Rates



43.1%

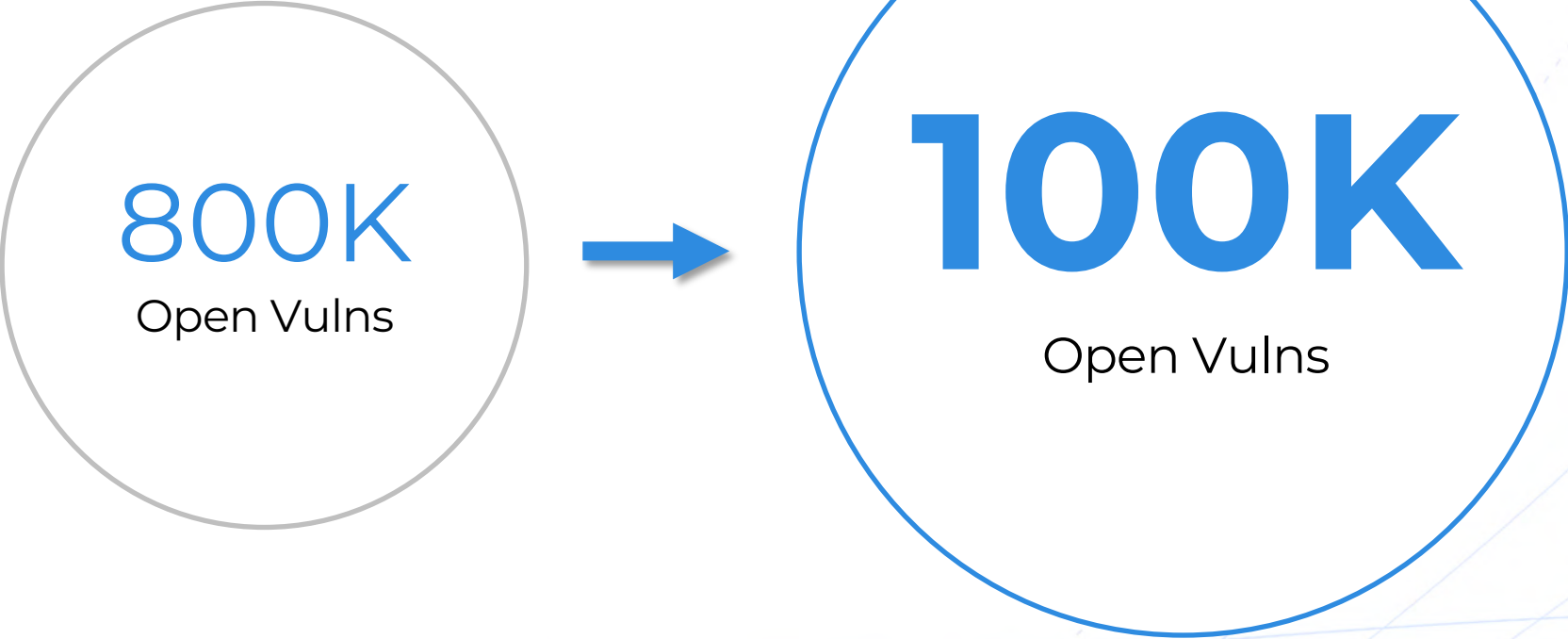
Improvement in MTTR Speed



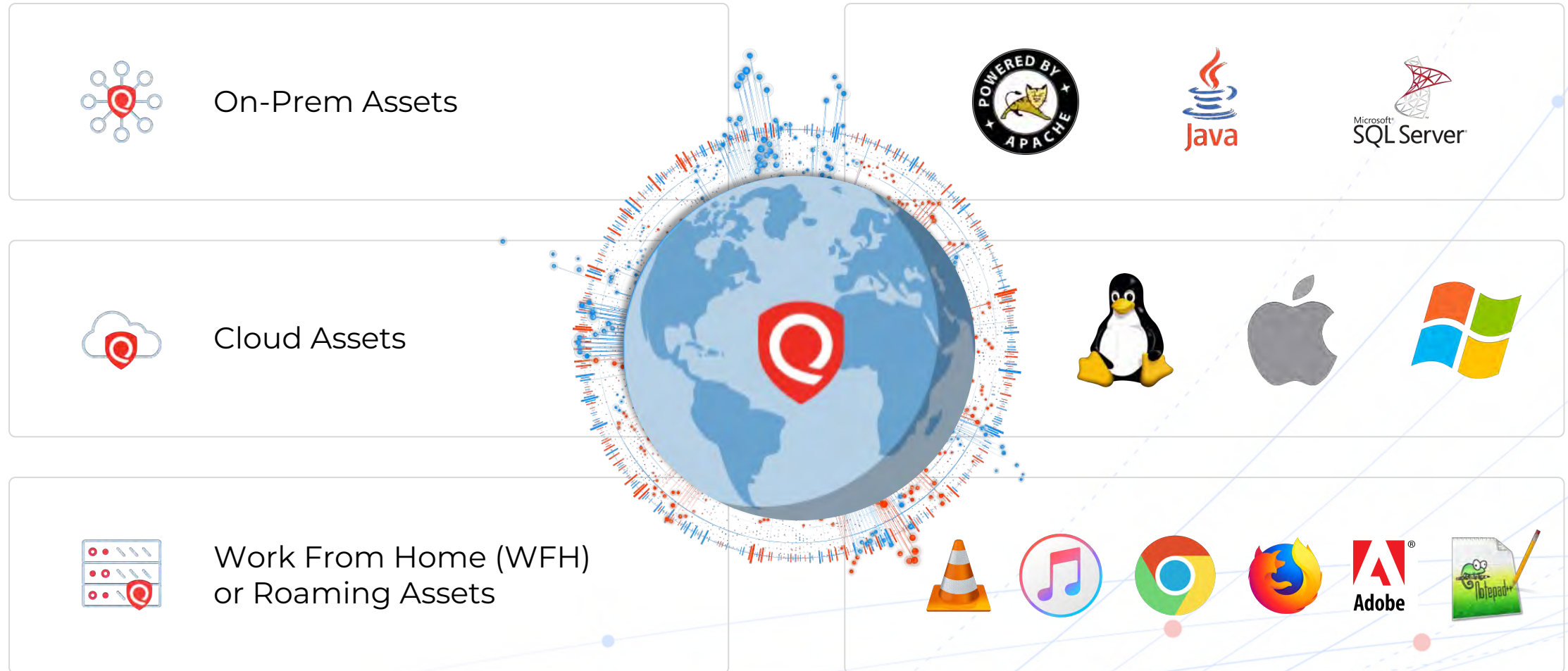
Customer's Real Risk Elimination



Customer's Real Risk Elimination: in a Month



Risk Elimination Across Multiple Attack Surfaces



5 Easy Steps for Eliminating your Risk by Complimenting your SCCM

Last 30 Days

Total Widgets Count: 26 / 80 + ↻ ↓ ⚙️

440K
All Vulnerabilities

128K
Patchable with Automation

193K
Patchable Old MS Vulns

92.5K
Fixable No Patch Vulns

53.6K
Patchable Server 3rd Party

866
Patchable Mac Vulns

STEP 1: FIX BY AUTOMATION

18.36%

128K Fix by automation / 700K Total vulns

STEP 1: AUTOMATE: VULNERABILITY BREAKDOWN BY QDS

QDS	Count
HIGH	~10K
CRITICAL	~100K
MEDIUM	~100K
LOW	~100K

STEP 1: AUTOMATE: CURRENT MEAN TIME TO R...

1M 1.1M Vulnerabilities / 33.3K Assets

STEP 1: AUTOMATE: VULNS REDUCTION OVER TIME

128K
↑ 9.13%
showing last 63 days

0 to 200,000 scale

STEP 2: OLD MICROSOFT VULNS THAT CAN BE FIXED AS ...

STEP 2: VULNERABILITY BREAKDOWN BY QDS

HIGH

STEP 2: CURRENT MEAN TIME TO REMEDIATE

STEP 2: TRACK PROGRESS, VULNS REDUCTION OVER TIME

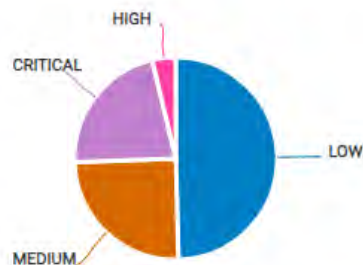
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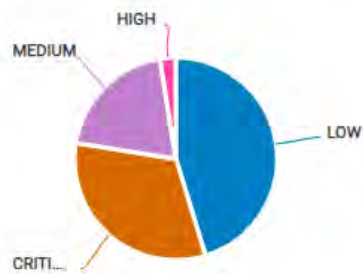


STEP 2: OLD MICROSOFT VULNS THAT CAN BE FIXED AS ...

27.54%

193K Old Microsoft Vulns / 700K Total Vulns

STEP 2: VULNERABILITY BREAKDOWN BY QDS



STEP 2: CURRENT MEAN TIME TO REMEDIATE

1M 1.56M Vulnerabilities / 35.4K Assets

STEP 2: TRACK PROGRESS, VULNS REDUCTION OVER TIME

193K

↓ -0.07%

showing last 63 days

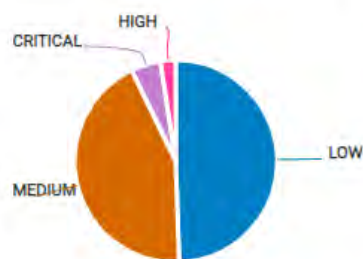


STEP 3: VULNS WITHOUT A PATCH THAT CAN BE FIXED OU...

13.22%

92.5K / 700K

STEP 3: VULNERABILITY BREAKDOWN BY QDS



STEP 3: CURRENT MEAN TIME TO REMEDIATE

5M 50.5K Vulnerabilities / 30.4K Assets

STEP 3: TRACK PROGRESS, VULNS REDUCTION OVER TIME

92.5K

↑ 0.32%

showing last 63 days



13.22%

92.5K No Patches Vulns / 700K Total Vulns



5M 50.5K Vulnerabilities / 30.4K Assets

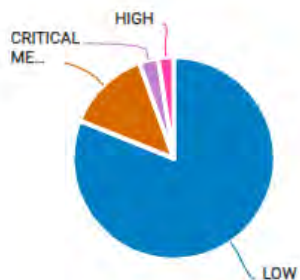


STEP 4: JAVA, WEBSERVERS, SQL, ETC OUT OF TOTAL VUL...

7.65%

53.6K Fix by automation / 700K Total vulns

STEP 4: VULNERABILITY BREAKDOWN BY QDS



STEP 4: CURRENT MEAN TIME TO REMEDIATE

6M 72.4K Vulnerabilities / 12.1K Assets

STEP 4: TRACK PROGRESS, VULNS REDUCTION OVER TIME

53.6K

↑ 0.32%

showing last 63 days

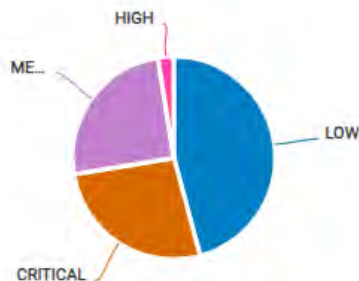


STEP 5: PATCHABLE MAC VULNS OUT OF TOTAL VULNS

0.12%

866 Fix by automation / 700K Total vulns

STEP 5: VULNERABILITY BREAKDOWN BY QDS



STEP 5: CURRENT MEAN TIME TO REMEDIATE

24D 883 Vulnerabilities / 34 Assets

STEP 5: TRACK PROGRESS, VULNS REDUCTION OVER TIME

35

↑ 0%

showing last 63 days



Demo



A close-up, slightly angled view of a New Orleans Saints football helmet. The helmet is gold with a blue and white fleur-de-lis logo on the side. The facemask is silver and black. The background is dark with some light streaks.

Jeff Huffman
**Senior Director, IT Security and
Administration**
New Orleans Saints
Patch Management

Real Value with Real ROI



SONY MUSIC

Haydur Agha,
VP, Cybersecurity

**Associated
British Foods**
plc

Nick Shimmen
Technical Consultant, CISO Group

Introducing TruRisk Eliminate with Mitigation



Critical Vuln Detected but, Patch Cannot be Deployed



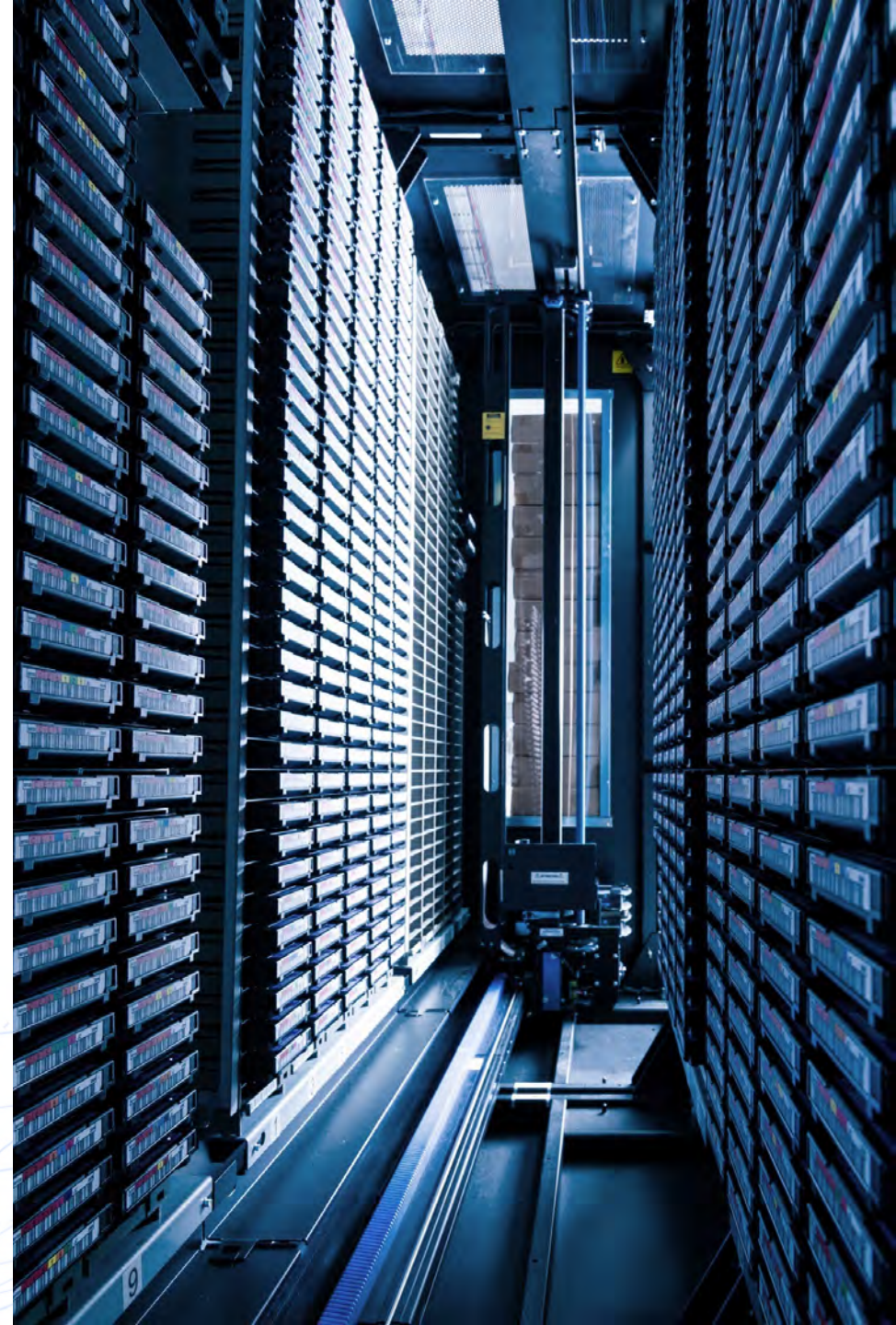
Business Continuity: The **operational risk** of deploying the patch is too high



Cannot Wait for the Next Maintenance Window: a critical vuln has been released but the next maintenance window is in 2 month!

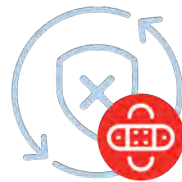


JDK 1.5 Only! Cannot update Java



Eliminate risk by applying the **right remediation** or **mitigation** action in the **context** of your business application.

REMEDIATION: Any action required to **fix** the risk completely as defined by the vendor.



Patches

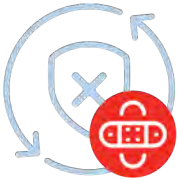
Deploy patches to the right devices, anywhere



Configuration Changes

Some vulns require conf changes for remediation – provide the visibility and apply

REMEDIATION: Any action required to **fix** the risk completely as defined by the vendor.



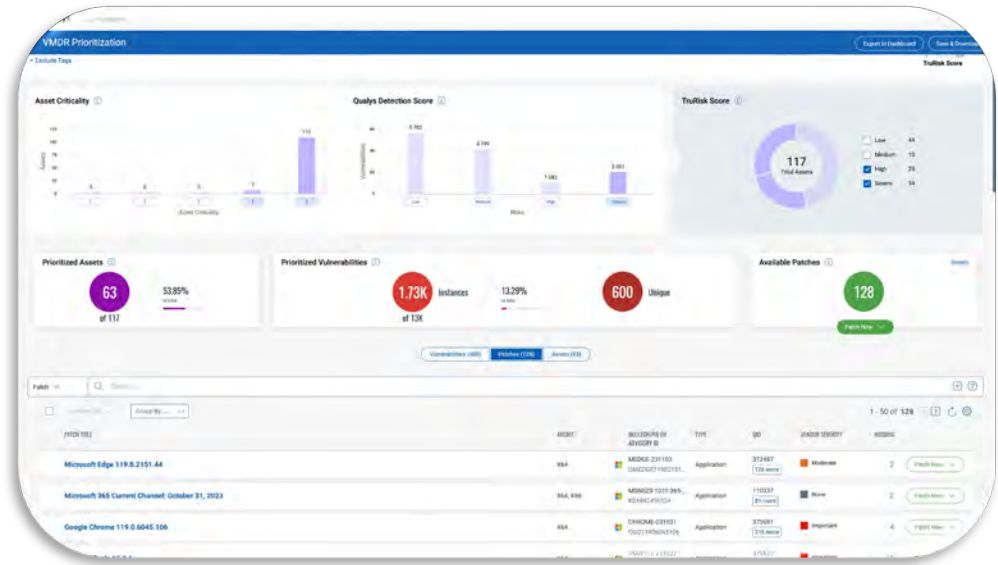
RIGHT Patches

Deploy the right patches to the right devices, anywhere



RIGHT Configuration Changes

Some vulns require conf changes for remediation – provide the visibility and apply

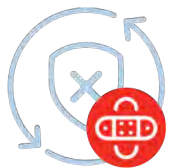


MITIGATION: Qualys researched alternatives to remediation



RIGHT Mitigation Actions

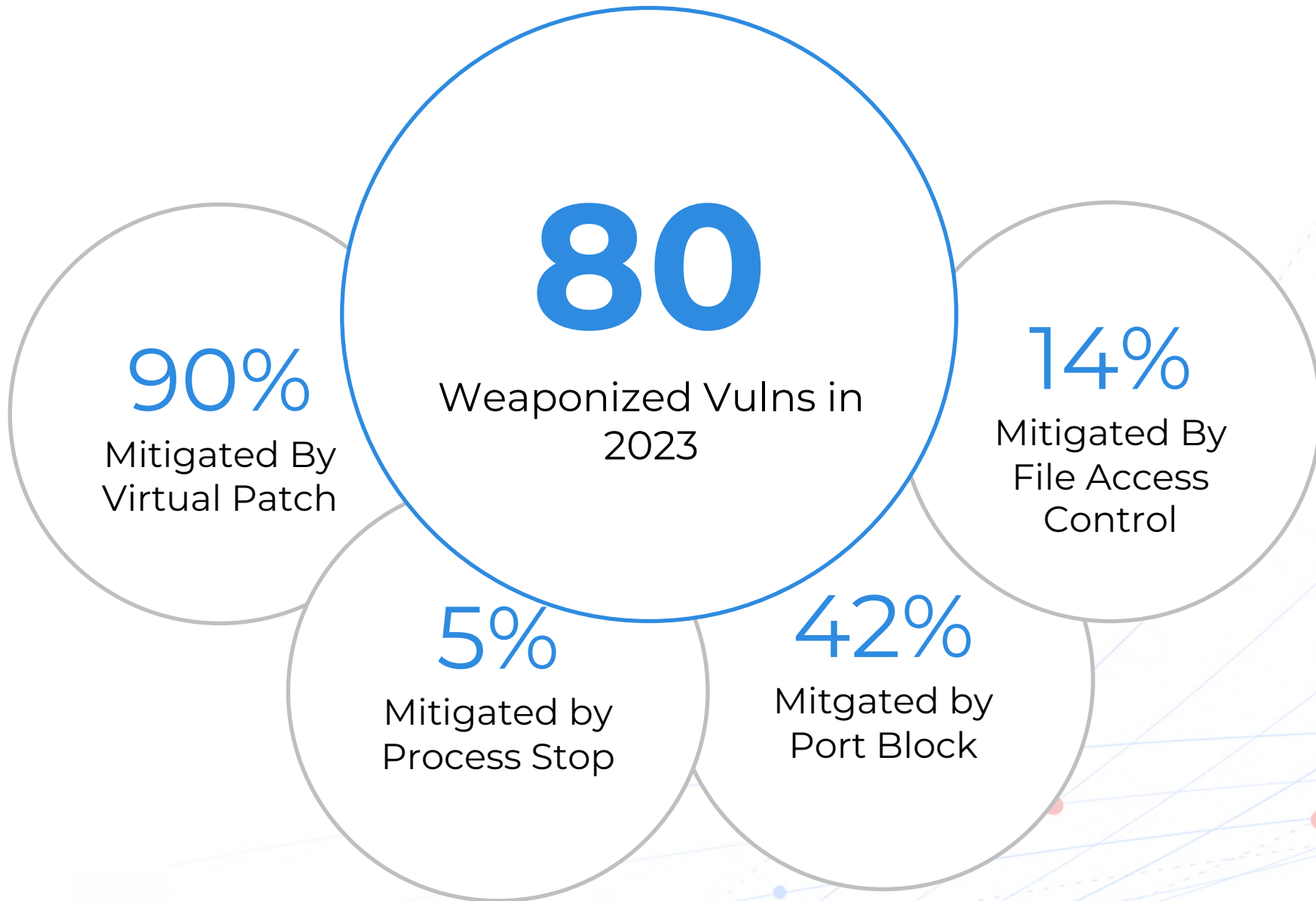
- Block port
- Isolate
- Restrict access
- Stop services
- Update network devices, firewalls, IPS etc
- Update cloud network policies
- Etc



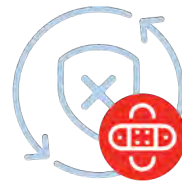
RIGHT Virtual Patch

In-memory protect a vulnerable asset



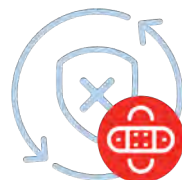


TruRisk Eliminate: Powered by AI



Reliability Analysis

Suggest best actions based on contextual historical patch and mitigation reliability



Learn from Others

Learn the operational impact of deploying patches & mitigations to similar customer's environments and suggest the best action



Automation

Automate where operational risk is minimal

Demo



TruRisk Eliminate



RIGHT Remediation or Mitigations: Based on Qualys research team



Test, Approve, Deploy: the remediation or mitigation actions that fits your needs



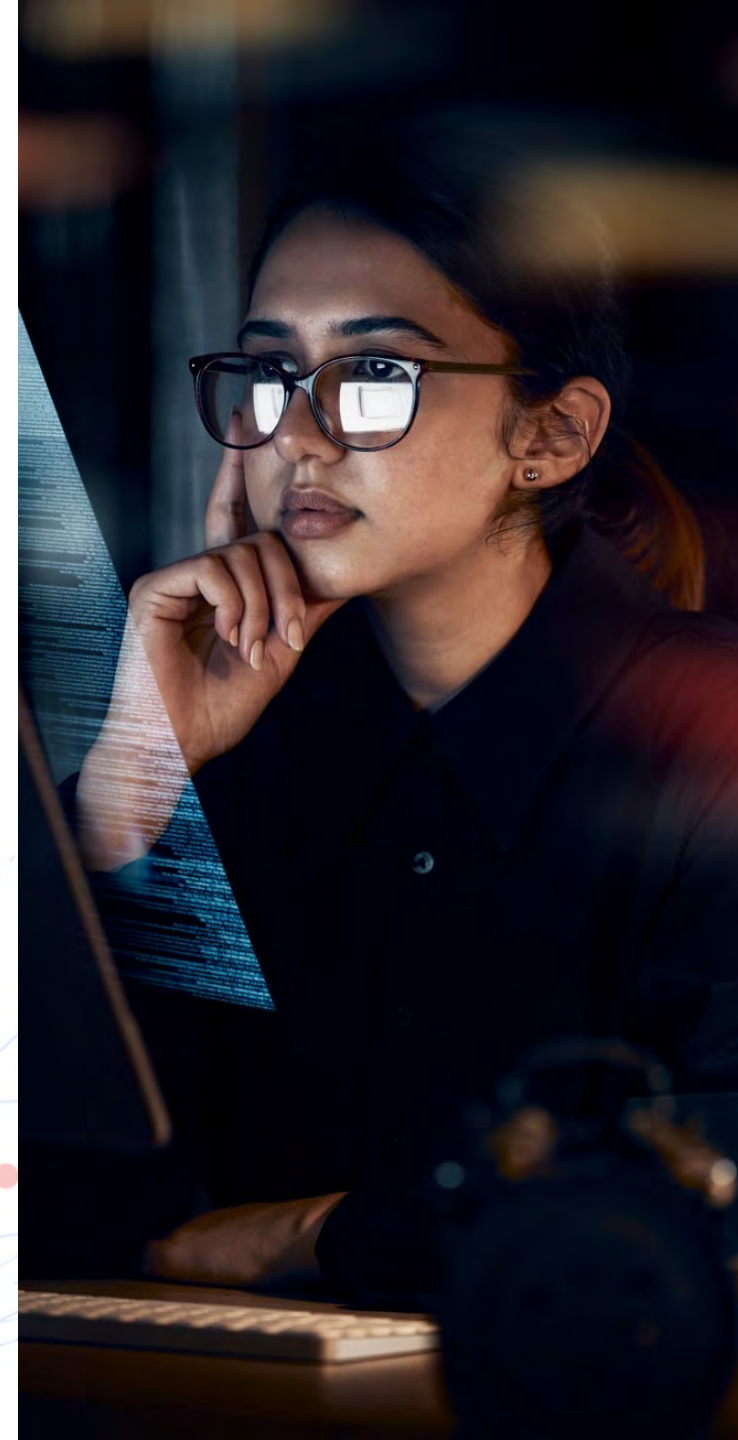
Fully Integrate: into Qualys TruRisk Platform



Smart Automation: ensure software is always up-to-date or mitigate new weaponized vulns automatically before patch is deployed



Works with your current IT tools: work with your SCCM, rollback mitigation when patch deployed etc.





TruRisk Eliminate



Mitigation Management

- ✓ Available Q2 2024!
- ✓ Accepting Design Partners Starting TODAY!

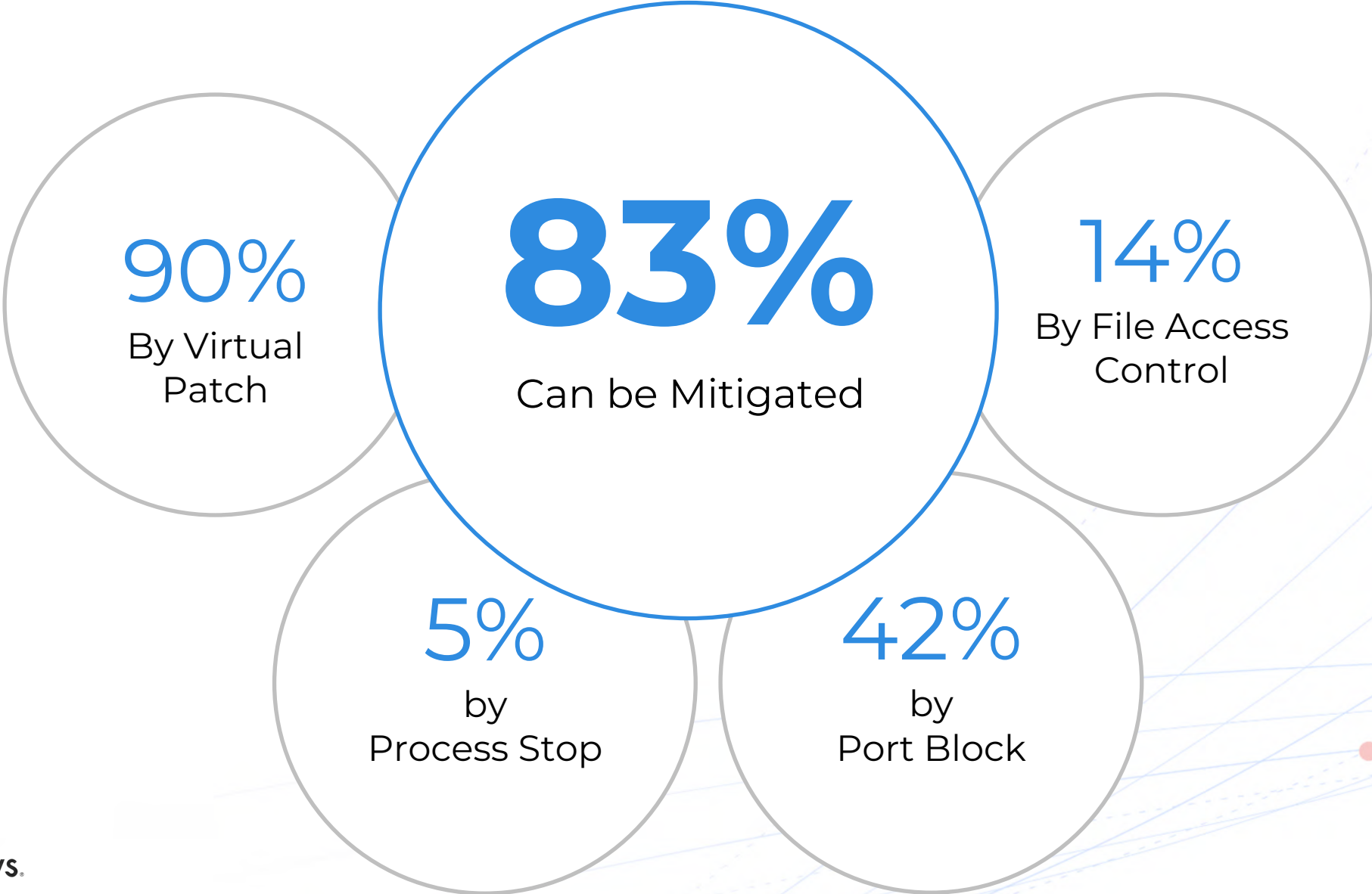


Patch Management (Remediation)

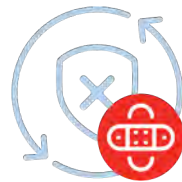
- ✓ Already Available!



96 Weaponized vulns in 2023



REMIEDIATION: Any action required to **fix** the risk completely as defined by the vendor.



Patches

Deploy patches to the right devices, anywhere



Configuration Changes

Some vulns require conf changes for remediation – provide the visibility and apply



TruRisk Eliminate



Mitigation Management

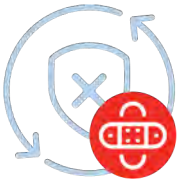
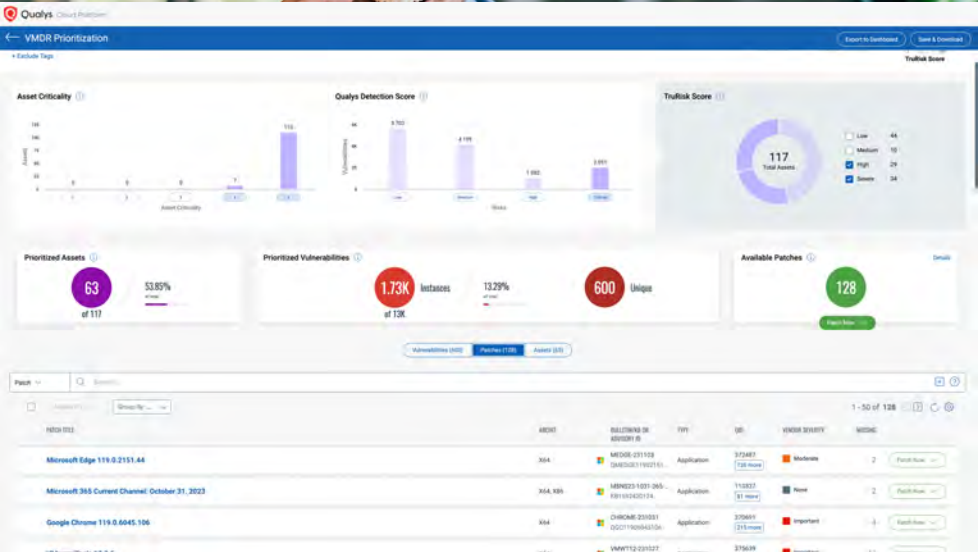
- ✓ Virtual patching
- ✓ Contextual Mitigation Actions
- ✓ Block ports
- ✓ Kill processes
- ✓ Etc



Patch Management (Remediation)

- ✓ Deploy patches & conf changes
- ✓ **Already Available!**

REMEDIATION: Any action required to **fix** the risk completely as defined by the vendor.



RIGHT Patches

Deploy the right patches to the right devices, anywhere



RIGHT Configuration Changes

Some vulns require conf changes for remediation – provide the visibility and apply

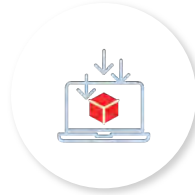


Real World Risk Elimination

Customers



Within few days of POC: 40% risk reduction in CISA vulns and 32% in 80+ QDS



Patched installed without Qualys Q4 2020 – Q1 2022 = **1.2M**
Patches installed with Qualys Patch Q2 2022 – Q3 2022 = **3M**



From 800K to 100K in a month



Reduced avg number of vulns per Windows 10 device by 90%

Vulnerability **Not** Equals a Patch

CVE-2021-34527 “PrintNightmare”

“In addition to installing the updates, in order to secure your system, you must confirm registry settings are set to 0”

Remediation = RegKey Change + Latest Patch

250K

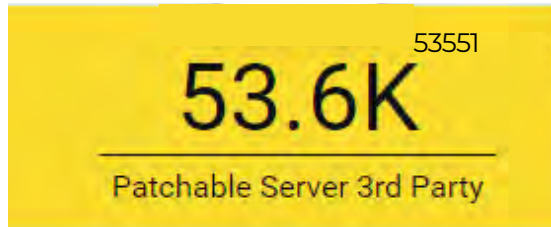
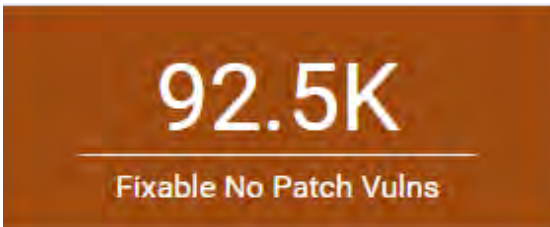
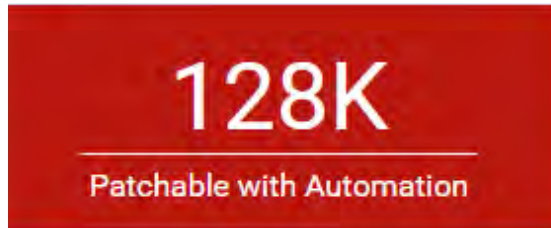
Active Jobs

54M

Patches Deployed
Last Year

11K

Smart Automation,
Zero Touch Jobs



Any All

Last 30 Days

Total Widgets Count: 26 / 80

STEP 1: FIX BY AUTOMATION

18.36%

128K / 700K
Fix by automation / Total vulns

STEP 2: OLD MICROSOFT VULNS THAT CAN BE FIXED AS ...

27.54%

193K / 700K
Old Microsoft Vulns / Total Vulns

STEP 3: VULNS WITHOUT A PATCH THAT CAN BE FIXED OU...

13.22%

92.5K / 700K
No Patches Vulns / Total Vulns

STEP 4: JAVA, WEBSERVERS, SQL, ETC OUT OF TOTAL VUL...

7.65%

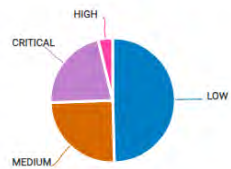
53.6K / 700K
Fix by automation / Total vulns

STEP 5: PATCHABLE MAC VULNS OUT OF TOTAL VULNS

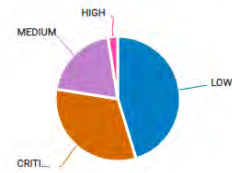
0.12%

866 / 700K
Fix by automation / Total vulns

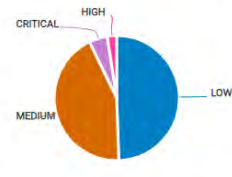
STEP 1: AUTOMATE: VULNERABILITY BREAKDOWN BY Q...



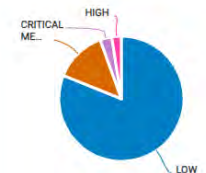
STEP 2: VULNERABILITY BREAKDOWN BY QDS



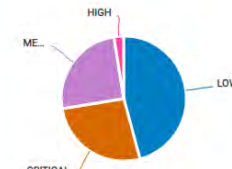
STEP 3: VULNERABILITY BREAKDOWN BY QDS



STEP 4: VULNERABILITY BREAKDOWN BY QDS



STEP 5: VULNERABILITY BREAKDOWN BY QDS



ZzKO - Patch Five Steps

ZzVM Dashboard

ZzTruRisk Vs VPD (DEFAULT)

Go Back to the Classic UI

Don't show again

Any All

Last 30 Days

Total Widgets Count: 26 / 80

STEP 1: AUTOMATE: CURRENT MEAN TIME TO R...

1M 1.1M Vulnerabilities
33.3K Assets

STEP 2: CURRENT MEAN TIME TO REMEDIATE

1M 1.56M Vulnerabilities
35.4K Assets

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34 Assets

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128K

↑ 9.13%

showing last 63 days



STEP 2: TRACK PROGRESS, VULNS REDUCTION OVER TIME

193K

↓ -0.07%

showing last 63 days



STEP 3: TRACK PROGRESS, VULNS REDUCTION OVER TIME

92.5K

↑ 0.32%

showing last 63 days



STEP 4: TRACK PROGRESS, VULNS REDUCTION OVER TIME

53.6K

↑ 0.32%

showing last 63 days



STEP 5: TRACK PROGRESS, VULNS REDUCTION OVER TIME

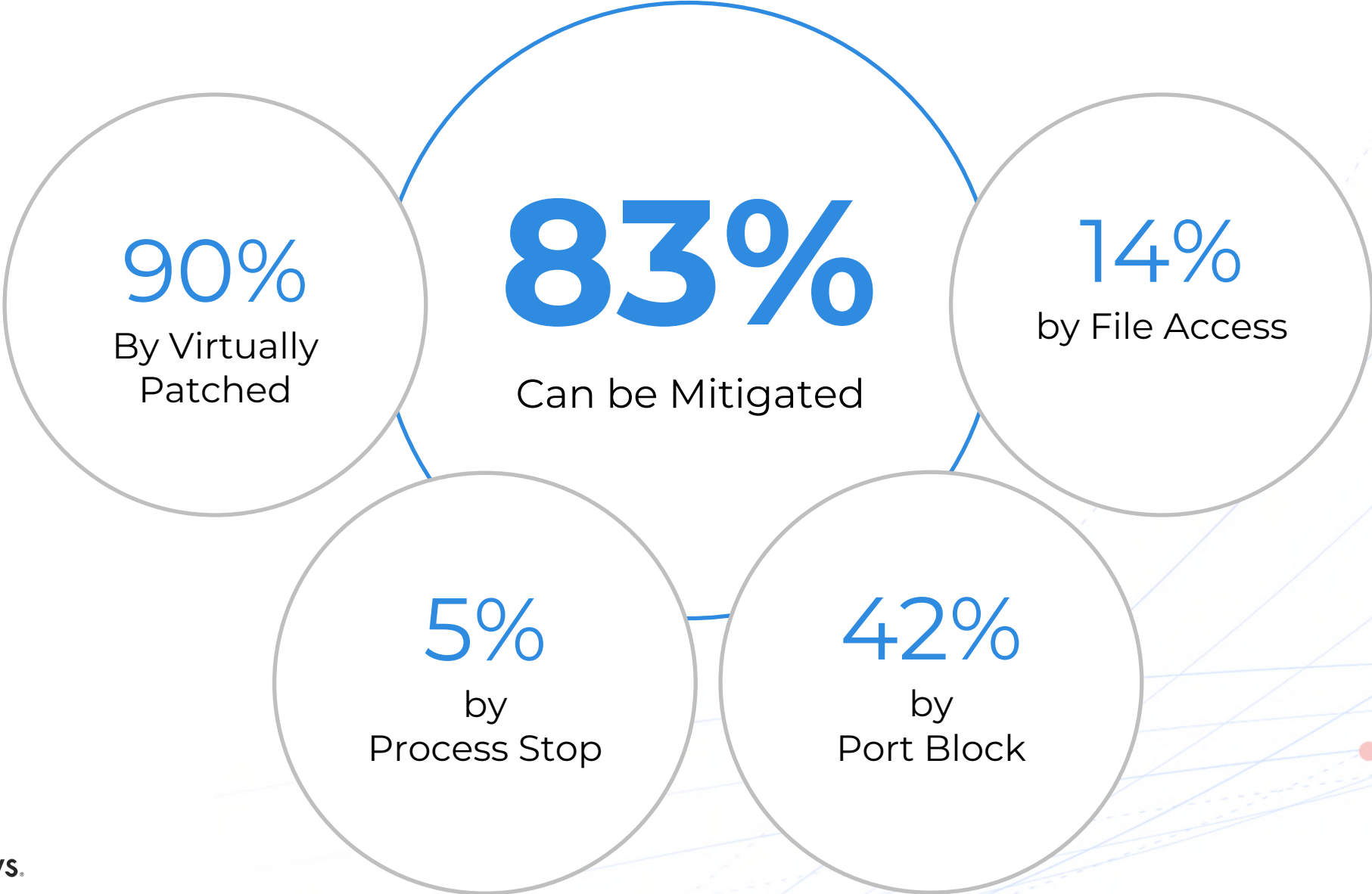
35

↑ 0%

showing last 63 days



96 Weaponized vulns in 2023



96 Weaponized vulns in 2023

83%

Coverage

90%

Virtual Patch

5%

Process Stop

100%

Qualys Guarantees

42%

Block Ports

14%

File Mitigation

96 Weaponized vulns in 2023

83%

Coverage

90%

Virtual Patch

5%

Process Stop

100%

Qualys Guarantees

42%

Block Ports

14%

File Mitigation