



Risk Based Approach to Vulnerability Management Program



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What Would Be A Good Vulnerability Management Program



It is always **GOOD** to know your weaknesses.....

..... and its the **BEST** to timely take care of them!

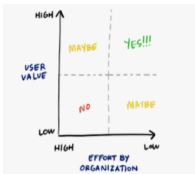
Minimize the Risk around Vulnerable Systems and Vulnerabilities by helping you **rightly and quickly identify** the vulnerabilities and helping you **prioritize efforts** towards the **high risk items first**.

Areas of Focus for a Good Vulnerability Management Program



Sound Inventory Management System & Practices (A)

Speed and Efficacy of Vulnerability Identification (B)



Risk Prioritization around Relevant Aspects (C)

Promptness in Remediation (D)



Important Questions To Get You There



A



Is my inventory up-to-date always?

B



How soon I get to know about my vulnerable systems?

C



Which are the potential low hanging fruits?

D



How much time I have to patch the vulnerabilities?
- SLA for Closure



Which are my important assets?
- Crown Jewels



Which all systems are suffering from critical vulnerabilities?



Which are being exploited globally?



Is there enough bandwidth to patch all vulnerabilities?



Which of my important assets are significantly vulnerable?



Are these vulnerabilities confirmed?



Which vulnerabilities have known exploit available for?



So, which vulnerabilities should I patch first?

EXL's Vulnerability Management Program Maturity Synopsis



Maturity Dimensions

Coverage

Which all systems are under scope

Depth

Outside vs inside view

Frequency

How soon to assess the environment

Independence

Who should do the assessments

LifeCycle

Pre-Production vs Post-Production

Response Priority

Which one to focus on

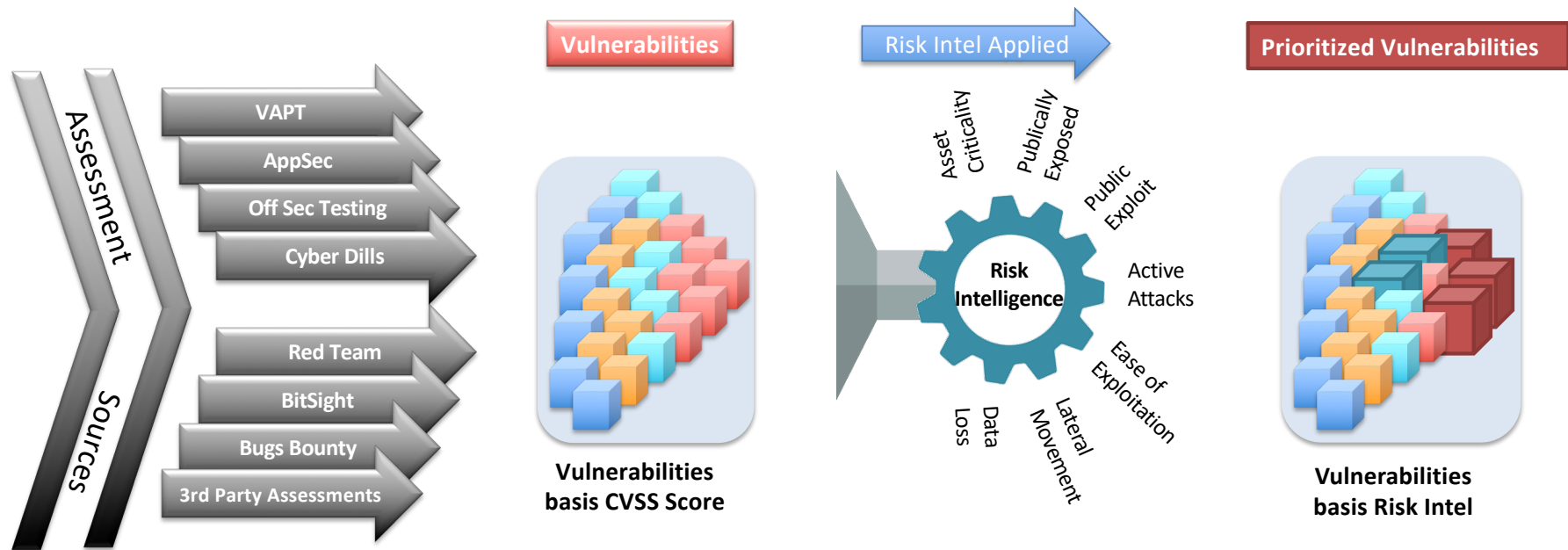
Erstwhile Practices

- ➡ All Production Environment
- ➡ Unauthenticated Scans
Remote scanning
- ➡ Periodic (YY→QQ→MM)
- ➡ InfoSec Team
- ➡ Ongoing
- ➡ Same SLA for Internal & External
+ Critical and High Severity
+ Public Facing

Maturity Steps

- ➡ Both - Prod and Non-Prod
- ➡ Authenticated Scans
Local (Cloud Agent) scanning
Policy Compliance
- ➡ Real-time
- ➡ Technology Team → InfoSec Team
- ➡ Pre-Production + Ongoing
- ➡ Differentiated SLAs
+ Asset Criticality (Context)
+ **Risk Intelligence** (Context)
+ **Threat Intel** (Context)

Risk and Context Driven – Remediation Approach



RISK VIEW OF THE VULNERABILITIES



Next Level - Risk Intel + Threat Intel



Fire Eye GTI



HP RepSM



Malware Analysis



MSSP Intel

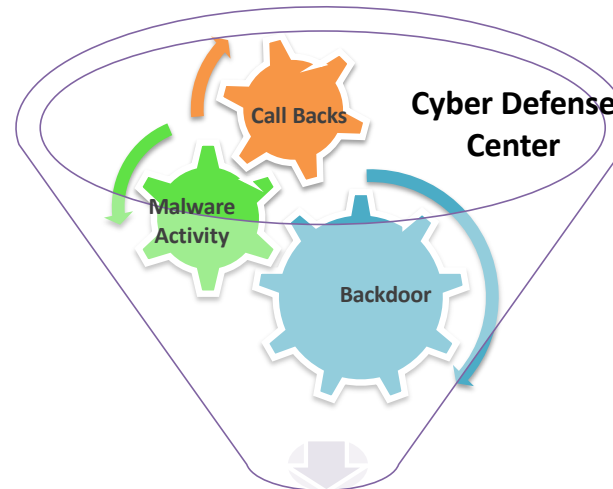


Threat Intel



Vulnerabilities basis

Risk Intel



Risk Intel + Threat Intel = PO Tickets

ACHIEVED BENEFITS



- ☐ **Comprehensive** Coverage of Threat Landscape
- ☐ **Real Time** Risk Status & Dashboard
- ☐ Lesser **False Positives**
- ☐ Prioritized **Real Critical Risks** Remediation
- ☐ Self Capable Technology Team – **no dependency** on InfoSec team
- ☐ **Quick** Identification, Remediation and Validations
- ☐ Centralized **Policy Compliance** management
- ☐ **Higher Team Efficiency** through Technology Automation and Process Enhancement

THANK YOU