

# 6 Essential Pillars for Comprehensive Prioritization

Legacy vulnerability and patching tools use primitive risk metrics to prioritize vulnerabilities. Their calculation is typically based on CVE scores and a simple business impact model (high, medium, low), which leads to priority inversion and wasted effort.

Comprehensive risk-based prioritization of vulnerabilities factors in 5 elements vulnerability severity, threat level, business criticality, exposure/usage and the risknegating effect of compensating controls. This results in very accurate prioritization and helps you avoid needless busy work fixing low priority issues.

Read this handy guide to learn more about 6 essential pillars for comprehensive prioritization.



# **Pillar # 1** Vulnerabilities across 100+ attack vectors

Vulnerabilities are not just unpatched software CVEs. Any attack vectors that put your enterprise at risk are dangerous. Vulnerabilities arising from weak or stolen passwords, phishing, misconfigurations, ransomware, and encryption issues can be equally damaging and all types of vulnerabilities need to be considered while prioritizing.



What known weaknesses leave assets open to attack?



# **Pillar # 2** Threats

New threats emerge almost on a daily basis and it is key to understand which ones are important from an organization's standpoint. Mapping real and emerging threats - what is currently fashionable (or possible) for the adversary – to specific assets and then observing and prioritizing them is critical.



What weaknesses are being exploited in the wild?



# **Pillar # 3** Business criticality

With a myriad of assets in your network, it is important to understand the impact of each on your business. To properly estimate the adverse effect to the enterprise if an asset were to be breached, take into account both inherent (e.g. asset category, business unit) and contextual properties of the asset (roles, applications, user privilege, and interaction with other assets).

What is the importance or "business value" of each asset?



### **Pillar # 4** Asset exposure

Exposure due to asset usage is multidimensional, encompassing factors such as duration for which the asset has been present on the network, availability and frequency of use, as well as type of use. A device with unpatched IE is not necessarily a critical risk if the default browser of the user is Chrome and they never use IE. Similarly, risky behavior of privileged users increases exposure.



Based on how an asset is used, what is its exposure to a particular vulnerability?



# **Pillar # 5** Mitigating controls

Investments into security controls like firewalls, anti-phishing systems, and EDR successfully mitigate risk. Get an inventory of existing security controls scored by their effectiveness. Combine it with a mitigated risk model to users prioritize actions that preferentially focus on critical, highly used, and vulnerable assets that are ineffectively mitigated or unmitigated.



Are there any current security controls in use that are reducing the risk?



# **Pillar # 6** Automatic asset inventory

The foundation of prioritization is built on an accurate inventory of what you are defending. The ability to automatically and continuously discover and categorize all enterprise assets including all devices, apps, and services; managed and unmanaged infrastructure; on-prem and cloud; fixed and mobile; IoT, ICS, etc., and how they are used by your users forms the basis of your prioritization strategy.



Do you have accurate visibility into *all* your enterprise IT assets?





