

Vulnerability Management and Penetration Testing Best Practices

Workshop Objective: Support peer learning through sharing of key practices in vulnerability management and penetration testing.

Workshop Discussion Questions

- How would you describe your organization’s current vulnerability mgt and pen testing maturity?
- Which processes/tools are most effective at identifying, prioritizing and remediating vulnerabilities?
- What are the biggest gaps or difficulties you face? (e.g., authenticated scans, tracking acceptable risks, remediation prioritization, etc.)
- What recent changes in requirements or your business practices have had the biggest impact?
- Looking ahead, what would a mature, effective vulnerability mgmt. and pen testing program look like in your organization and what collaboration would you like to see from the industry?

Industry Insights:

- + Automation is increasingly being adopted (asset identification, ticketing, etc.); but manual review and human verification remain essential.
- + There is a shift from annual assessment-driven activities to integrating security into business-as-usual processes.
- + Partnerships with third party vendors for penetration testing are common and necessary.
- + Executive sponsorship and leadership buy-in are critical for program success.
- Authenticated scans are a significant challenge, especially for legacy systems and credential management.
- Cloud and containerized environments may introduce new complexities in scope and responsibility.
- False positives and manual review of findings can result in increased overhead costs, especially in response to enhanced automation.
- With the increased number of vulnerabilities being detected, remediation prioritization and tracking are becoming more complex to manage.

Ongoing Industry Opportunities

- Facilitated peer discussions and workshops for information sharing are considered high-value.
- Industry interest in more practical implementation guidance for penetration testing in cloud environments.
- Need for continued pen testing and vulnerability management process education.