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# Running an Effective Vulnerability Management Program

*An InfoSec Practitioner's Guide*  
*Rich Ingersoll*



# AGENDA

01 Introduction & Why VM Matters

02 Core Components of a VM Program

03 Risk-Based Prioritization

04 Remediation Workflows

05 Metrics & Reporting

06 Governance & Maturity

07 Common Pitfalls

08 Tooling & Special Considerations

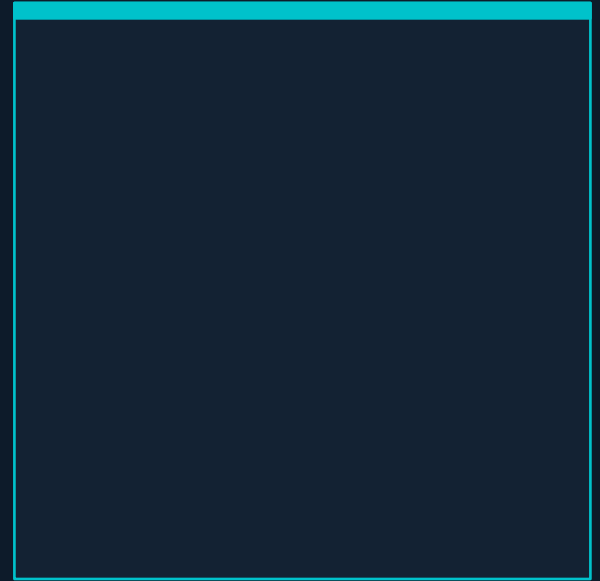
09 Building Organizational Buy-In

10 Key Takeaways

11 Mythos...

12 Q&A & Contact

# What Is Vulnerability Management & Why It Matters



## Building Blocks of a VM Program



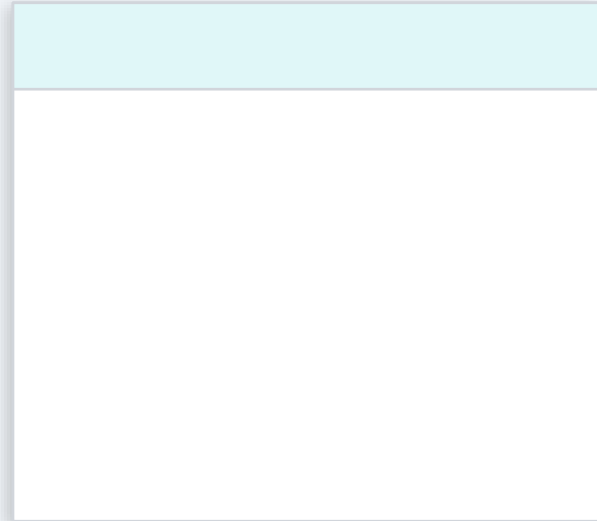
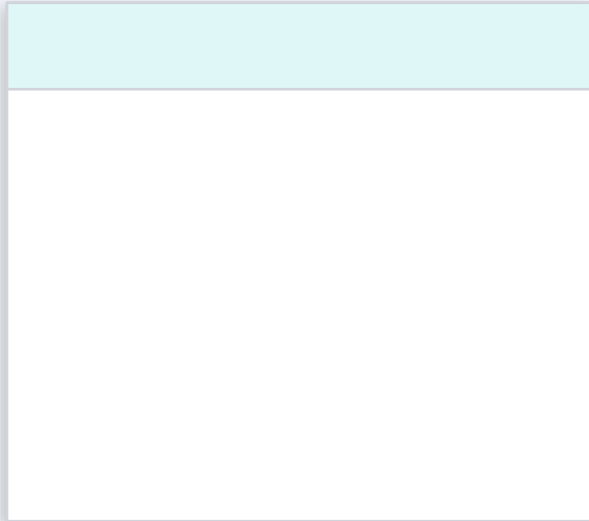
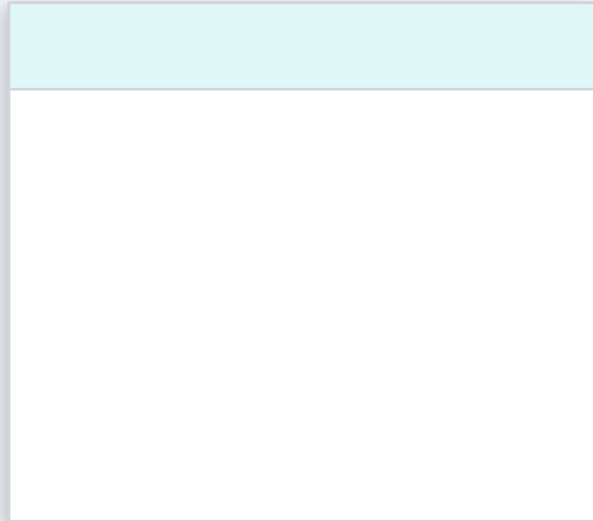
## 03 | RISK-BASED PRIORITIZATION

*Risk Score = f(*

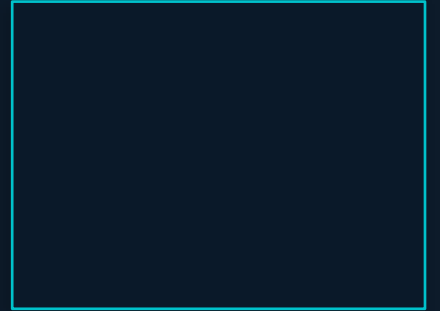
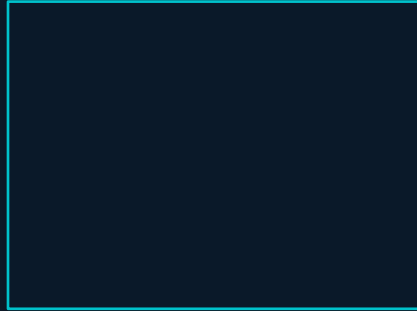
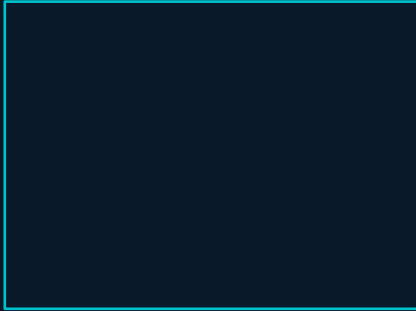
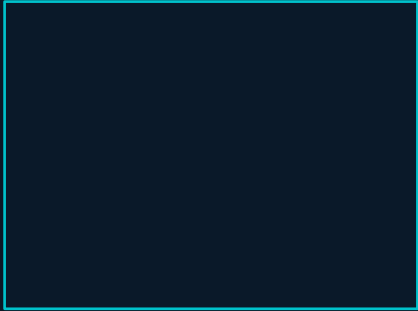
	<b>CVSS Score</b>	<i>Useful baseline, not sufficient alone</i>
	<b>Exploitability (EPSS)</b>	<i>How likely is active exploitation?</i>
	<b>CISA KEV Catalog</b>	<i>Known exploited vulnerabilities in the wild</i>
	<b>Asset Criticality</b>	<i>Crown jewels vs. dev sandbox?</i>
	<b>Data Sensitivity</b>	<i>PII, PCI, PHI exposure?</i>
	<b>Exposure / Reachability</b>	<i>Internet-facing vs. isolated?</i>



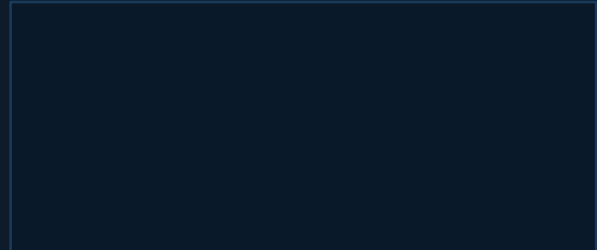
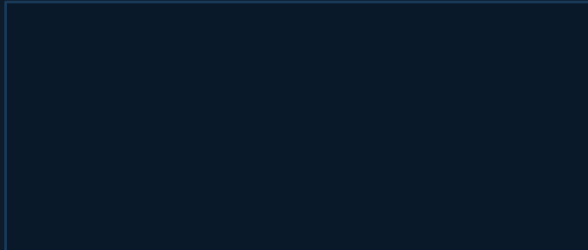
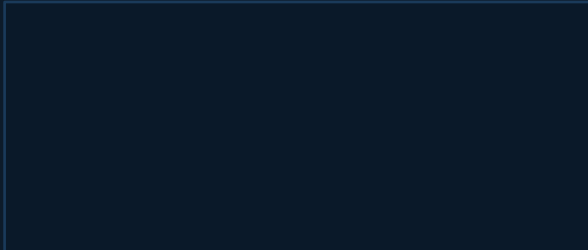
# From Discovery to Resolution



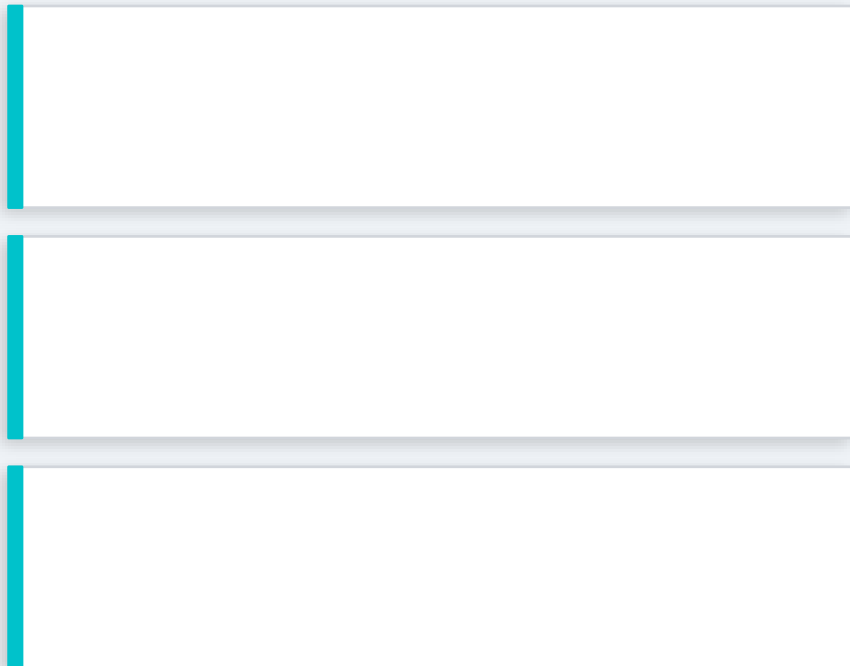
# Measuring What Matters



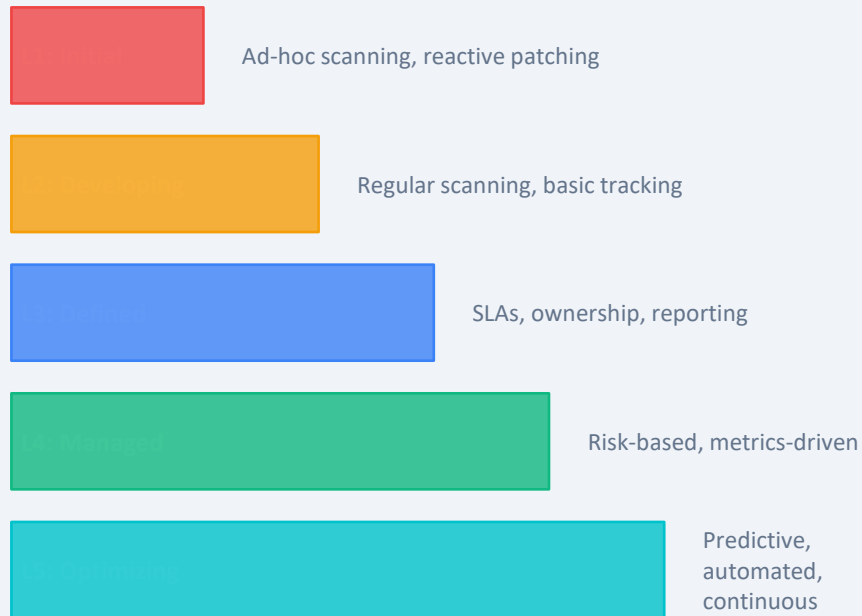
## Tailor Reporting to Your Audience



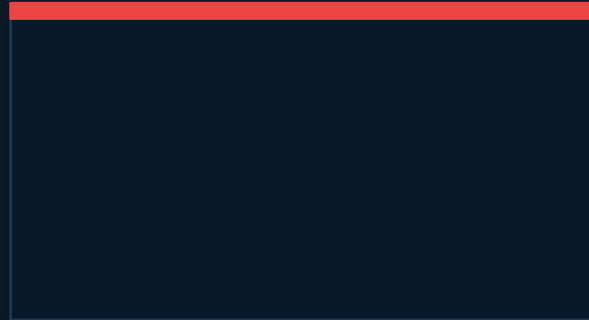
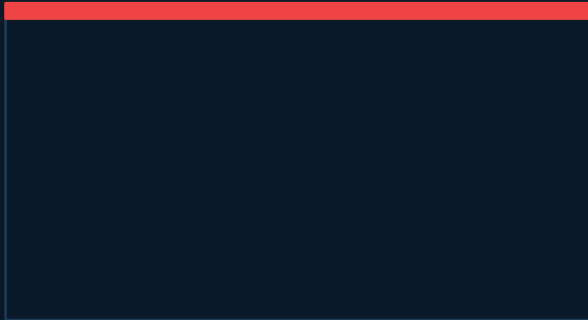
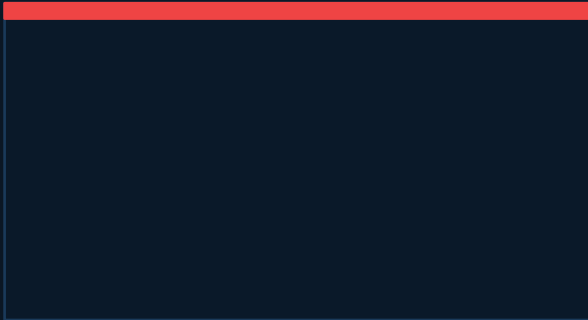
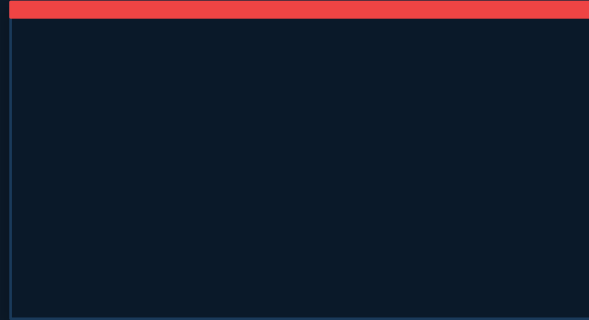
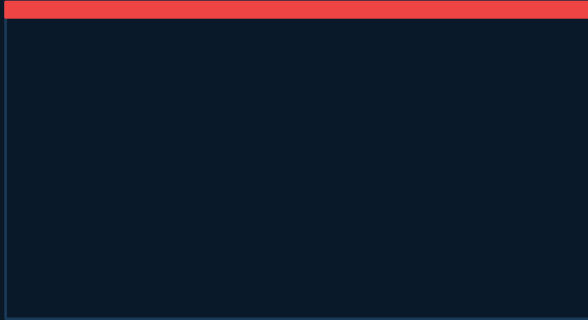
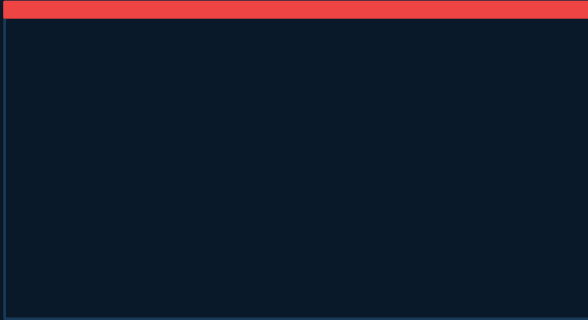
# Program Structure & Compliance Alignment



## VM Maturity Model



# What Breaks VM Programs



# Technology & Unique Environments

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## Special Environments

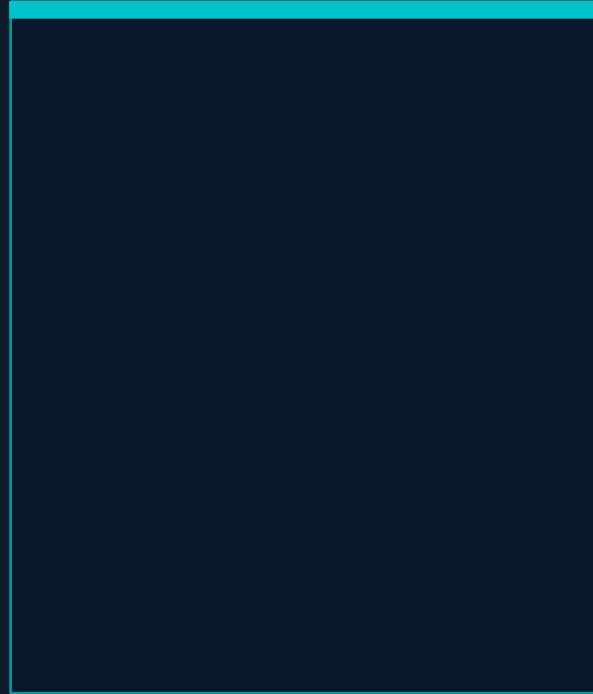
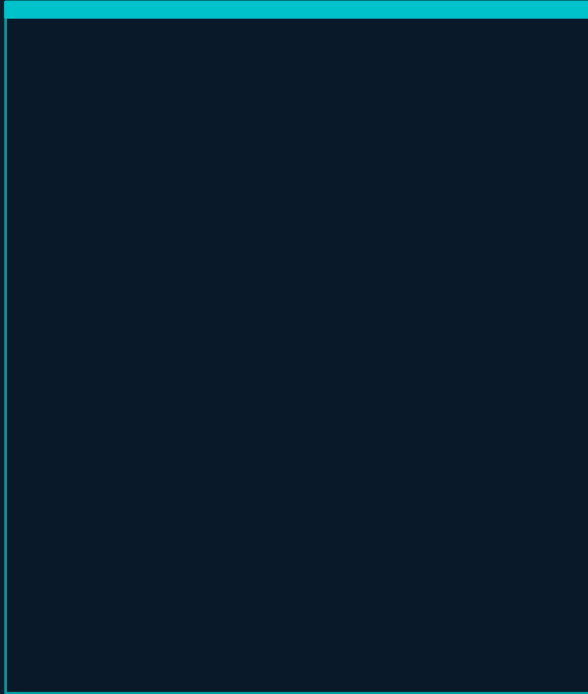
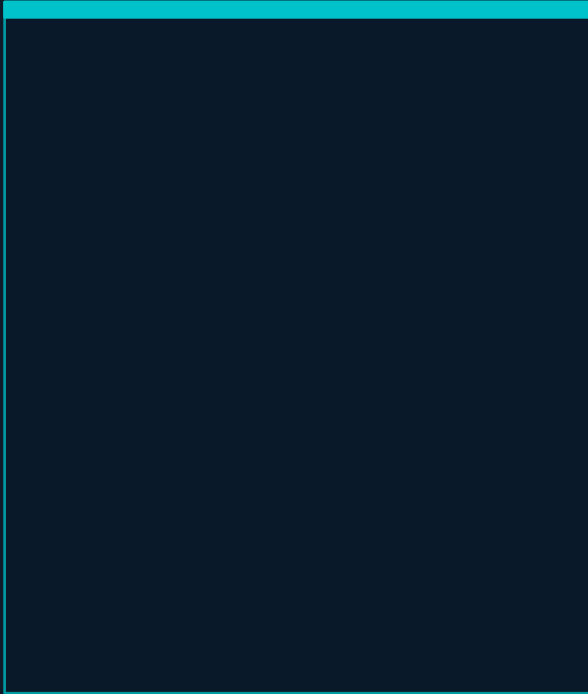
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# Getting the Whole Organization Behind VM





NEW SECTION

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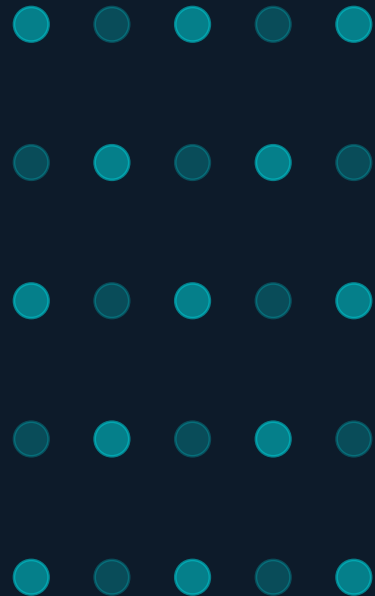
# The AI Vulnerability Storm

*Preparing Your VM Program for the Mythos Era*

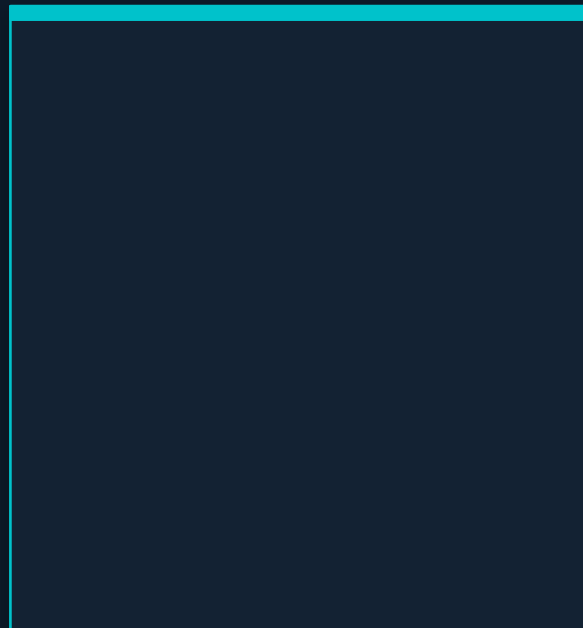
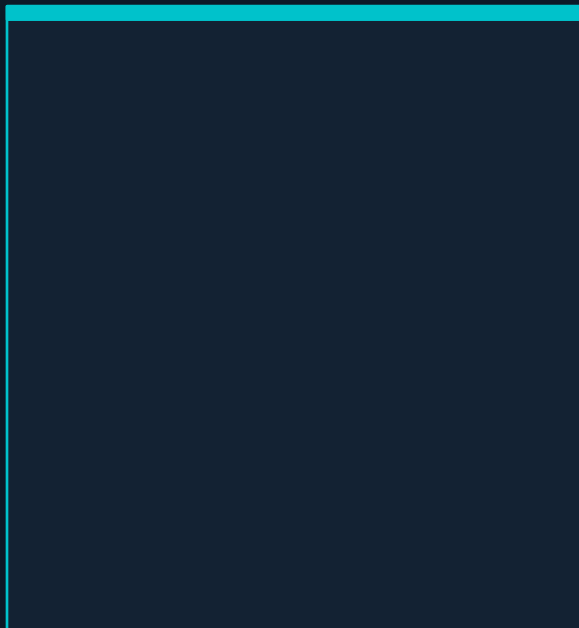
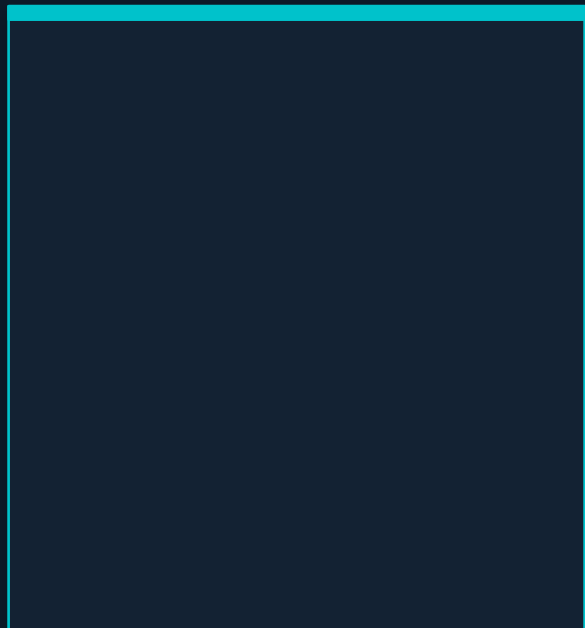
*Based on the CSA / SANS / OWASP Strategy Briefing — April 2026*



AI-driven vulnerability discovery has fundamentally changed the threat landscape.



# A Step Change in AI-Driven Vulnerability Research



# From Discovery to Exploitation: Now Measured in Hours



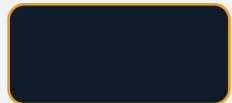
## **XBOW #1 on HackerOne**

First autonomous system to outperform all human hackers on the platform



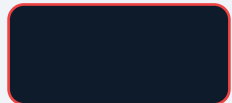
## **Google Big Sleep: 20 Zero-Days**

Real zero-days in FFmpeg, ImageMagick — found and reproduced autonomously



## **First AI Espionage Campaign**

Chinese state-sponsored group used Claude Code for full attack chains across ~30 global targets



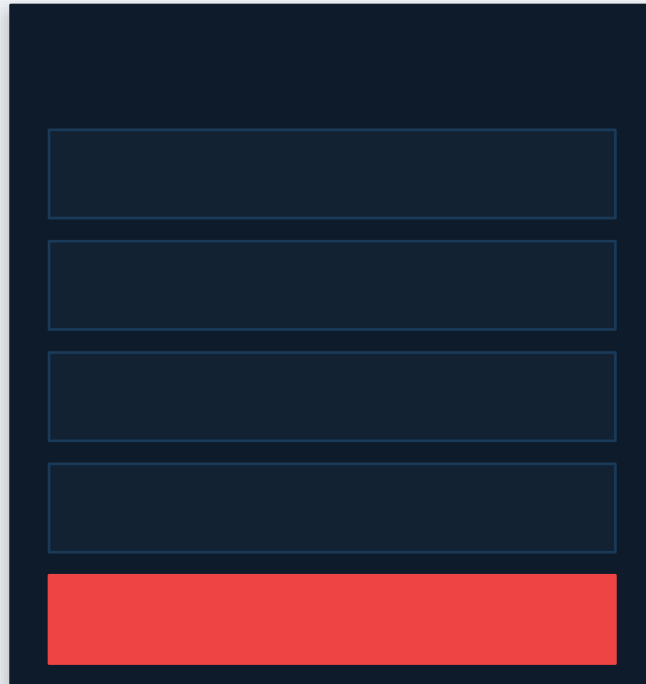
## **500+ High-Severity Bugs Found**

Including 12 OpenSSL zero-days. AI-based attack reached admin access in 8 minutes.



## **Claude Mythos Preview**

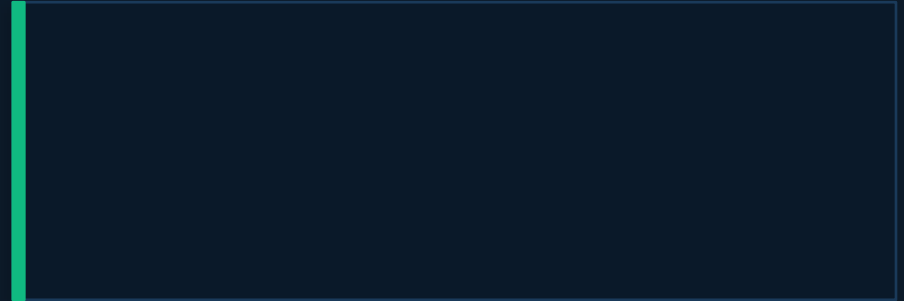
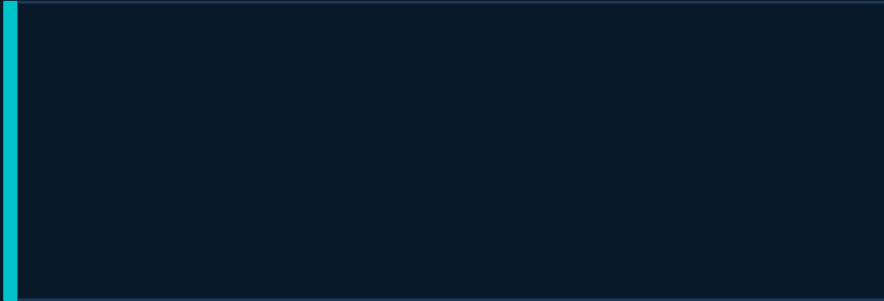
Thousands of zero-days. 72% exploit success rate. Time-to-exploit now under 24 hours.







# We Can't Outwork Machine-Speed Threats — But We Can Adapt

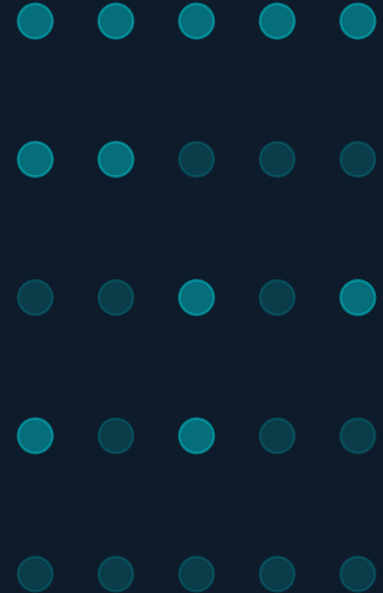
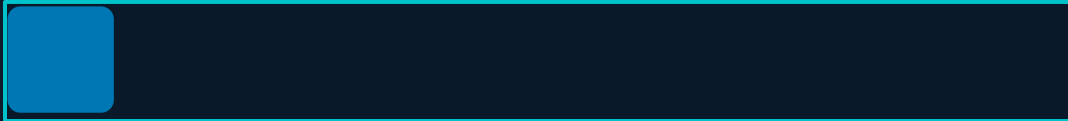


# Thank You

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*Let's keep the conversation going.*

Connect with me on LinkedIn:



# Rich Ingersoll

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