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Fortifying your Security Operations with Enhanced Visibility

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Best-in-Class Technology

Security Services

Gartner. Forrester EDC



Research and Community



Global Ecosystem



11,500+ Customers

49% of Fortune 100 NASDAQ: RPD Global Footprint

144 Countries

4 SOCs worldwide (24/7/365) Leader of Innovation

56 Patents Open Source Communities

Rapid7 2024 Attack Intelligence Report

Rapid7's 2024 Attack Intelligence Report offers analysis and insights to help security practitioners **understand** and **anticipate** modern cyber threats.

This research is based on:

- **1,500+** curated vulnerability and exploit data points
- Analysis of **180+** advanced threat campaigns
- Thousands of tracked **ransomware incidents**, extortion communications, and dark web posts
- Insights from trillions of security events across
 Rapid7 MDR and threat analytics telemetry





5,600+

Ransomware incidents tracked by Rapid7 Labs in 2023 and early 2024



of mass compromise events began with a zero-day attack

RAPID

\$1B+

2023 ransomware payouts

36%

of widespread threat CVEs affected network edge tech

41%

Rapid7-observed incidents where victim had no MFA



Median time to known vulnerability exploitation

The Defender's Dilemma...



"Defenders have to be right every time. Attackers only need to be right once"

- Continuous Vigilance vs Opportunistic attacks
- Large and evolving attack surface
- Asymmetry of knowledge



Organisations need Visibility and Clarity over...

Internal Environment

Attack Surface

External Threat Landscape



How do we Detect and Respond to Threats?

Functional Requirements of a Security Operations Centre

	Core SOC Operations				Expanded SOC Operations		
Process	SOC Engineering	Incident Triage & Investigation	Threat Hunting	Incident Response	Vulnerability Management	Threat Intelligence	Attack Simulation
Technology	Security Incident and Event Monitoring (SIEM), Endpoint/Network/eXtended Detection and Response, Threat Feeds, User Entity Behaviour Analytics, Case Management, Security Orchestration, Automation and Response (SOAR)			Digital Forensics and Incident Response	Vulnerability Assessment / Management platform	Digital Risk Protection Threat Intelligence Platform	Penetration testing tools
People	SOC Engineers	SOC Analysts	Threat Hunters	Incident Responders	Vulnerability Analysts	Security Engineers	Penetration testers
	Actual number of analysts depend on coverage hours, number of assets, geography, skill, risk profile, funding, automation, etc.						

Delivering outcomes with Managed Detection and Response





What are we exposing to Attackers?

The Attack Surface continues to evolve



- Expanding rapidly beyond traditional infrastructure
- Security teams often play catch-up and might be bypassed in deployment
- Introduces an expanded attack surface
- Requires broader context & visibility
- Traditional scanning and detection mechanisms may not work



Examples of exposure weaknesses

- Exposed misconfigured APIs
- Exposed High Risk Ports
- Vulnerabilities in Enterprise applications and

Infrastructure

Misconfigured Cloud Applications

What the massive Optus breach tells us about API security risks

The attack on Australian telecom Optus appears to show the danger of having a lack of visibility into APIs, the services that provide apps with much of their functionality.

Attacks against internet-exposed RDP servers surging during COVID-19 pandemic

News Analysis 08 May 2020 • 4 mins

Cyberattacks Network Security Security

EMERGENT THREAT RESPONSE

Zero-Day Exploitation of Ivanti Connect Secure and Policy Secure Gateways

CVE-2023-46805 and CVE-2024-21887 are zero-day vulnerabilities affecting Ivanti Connect Secure and Ivanti Policy Secure gateways. They have been exploited in the wild to gain access to corporate networks and conduct a rang.



Microsoft explains how Russian hackers spied on its executives



/ A test environment without twofactor authentication led to Microsoft's corporate systems getting popped open.

Understanding your evolving attack surface



- Considerations for visibility for exposure visibility especially in increasingly complex environment:
 - How quickly will you become aware of new exposures to the Internet?
 - Are there known vulnerabilities or active exploits against these exposures
 - Can these vectors lead to the compromise of internal systems?
 - How effective are your controls to prevent compromise



Extending your view of external threats (Who, What, When, Where, How?)

Categories of Cyber Threat Intelligence



Monitoring the Clear, Deep and Dark Web

Clear Web

- Approx 5%-10% of the Internet
- Search engines
- Media, blogs, etc.

Dark Web

- Approx 0.1% of the Internet
- Anonymous, closed sources, Telegram groups, invite-only (sometimes)
- Tor, P2P, hacker forums, criminal marketplaces, C2s, etc.



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- Approx 90-95% of the Internet
- Unindexed by search engines
- Webmail, online banking, corporate intranets, walled gardens, cloud storage, etc.



The value of Digital Risk Protection

Improving your Cyber Peripheral Vision



Summary

- While we can't predict every element (Who, What, When, Where, How) of an attack, clarity and visibility can help minimise risk in the following ways:
 - Consider all of the elements required of Extended SOC Operations and how these can be best delivered either through internal or external resources
 - Visibility across our External Attack Surface can reduce the risk of exposures being exploited
 - Visibility across the Clear, Deep and Dark Web can help raise our awareness of potential weaknesses or exposed sensitive data

COMMAND YOUR ATTACK SURFACE

MDR & Managed Services



•••• Detection and Response





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