

Securing SAP on Azure

Achieving CIS Level 1 Compliance with SUSE Linux

Allen Bannon, Vnomic CEO

Prakash Pattaiyan, Microsoft Principal Product Manager

Sherry Yu, SUSE Director of SAP Domain Architect

Las Vegas

2024

SAPinsider



In This Session

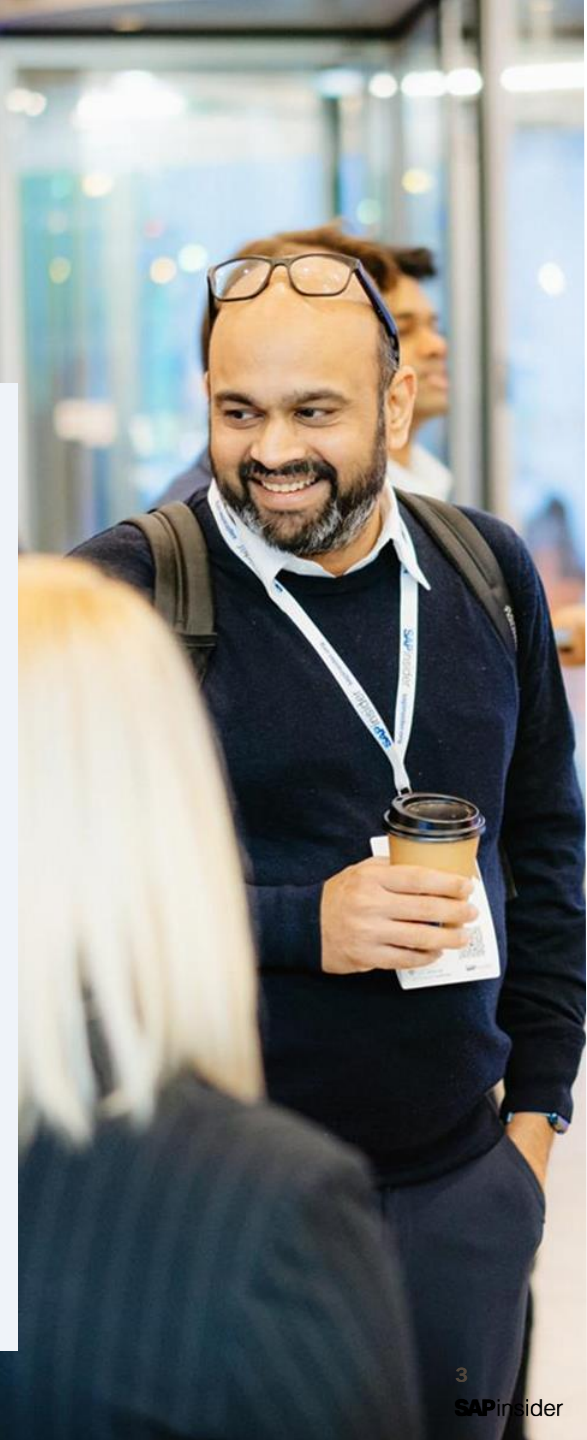
As organizations increasingly leverage SAP solutions hosted on Microsoft Azure, ensuring robust security measures is paramount. This talk delves into the intricacies of achieving CIS (Center for Internet Security) Level 1 security compliance specifically tailored for SAP landscapes running on SUSE Linux within the Azure cloud environment.

The presentation kicks off with a comprehensive overview of the CIS Level 1 security benchmarks, then transitions to the unique considerations and challenges involved in implementing CIS security measures within an Azure infrastructure running SUSE Linux.

The talk will also explore the role of continuous monitoring, threat detection, and incident response strategies in maintaining CIS Level 1 compliance over time.

What We'll Cover

- Securing your SAP applications
- SUSE – secure and robust foundation
- Microsoft – unmatched security and compliance
- Vnomic - bringing CIS level 1 compliance to your enterprise
- Wrap-Up



Why all the security concerns?

APPLICATION SECURITY

SAP Patches Critical Command Injection Vulnerabilities

Enterprise software maker SAP documents multiple critical-severity issues and warns of risk of command injection attacks.



By Ionut Arghire
March 12, 2024



Enterprise software maker SAP on Tuesday released 10 new and two updated security notes as part of its March 2024 Security Patch Day, calling attention to serious bugs in business-facing products.

CPO
MAGAZINE

HOME NEWS INSIGHTS RESOURCES

In one instance, SRI observed a mass scanning activity on July 16, 2020, and ran functional exploit code on July 17 after releasing a [CVE-2020-6287](#) patch on July 14.

SAP critical security vulnerabilities targeted by sophisticated threat actors

CVE-2020-6287, also known as Remotely Exploitable Code On NetWeaver (RECON), exists in the LM Configuration Wizard component. It has a CVSS score of 10.0 and gives an unauthenticated attacker privileged access to vulnerable SAP systems. An attacker could corrupt data, steal personally identifiable information

TRENDING

1 Broadcom Merges Symantec and Carbon Black Into New Business Unit

SECURITYWEEK
CYBERSECURITY NEWS, INSIGHTS & ANALYSIS

Malware & Threats Security Operations Security Architecture Risk Management CISO Strategy ICS/OT Funding/M&A

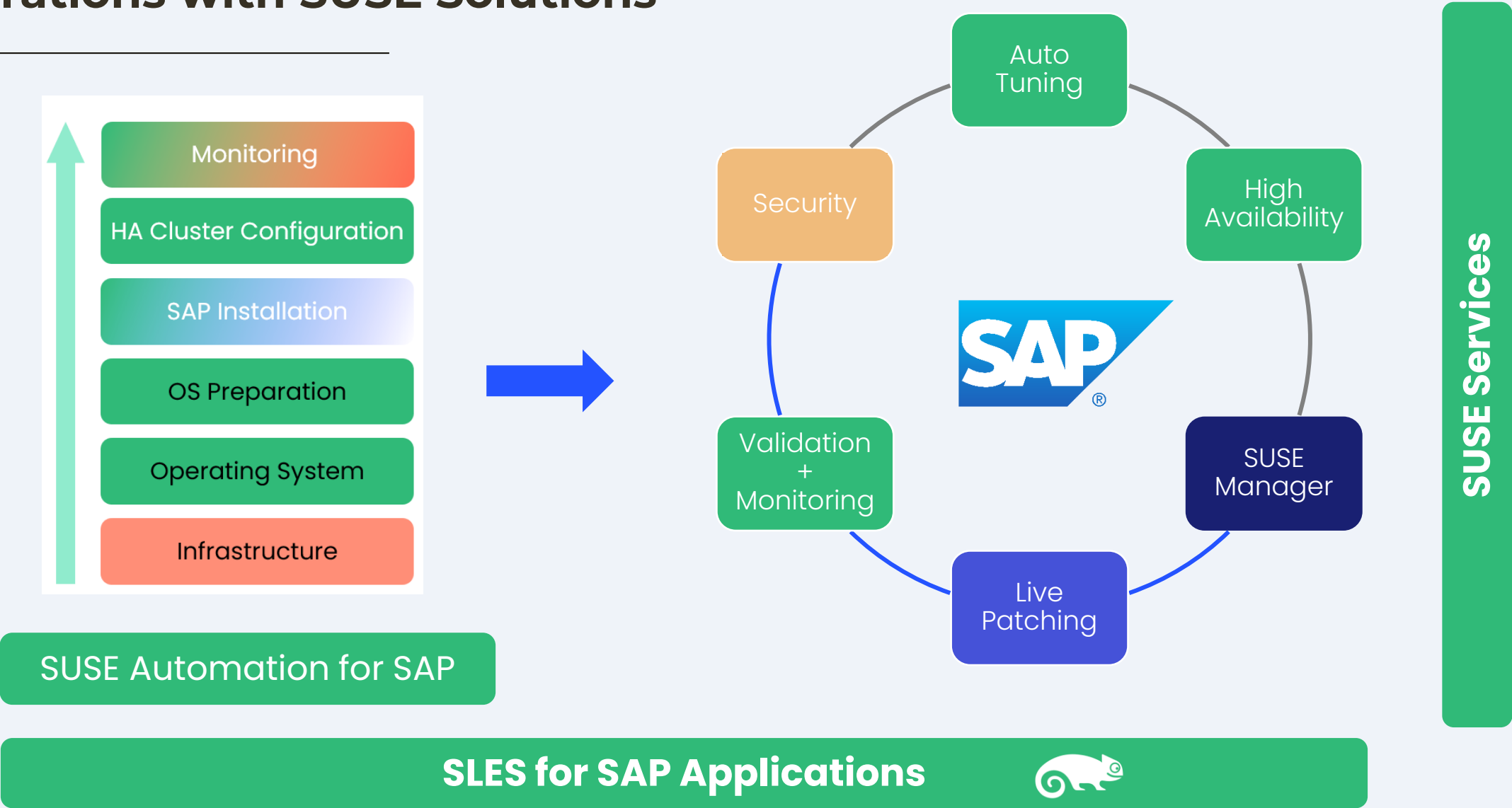
SUMMIT

REGISTER NOW

VULNERABILITIES

Details Disclosed for Critical SAP Vulnerabilities, Including Wormable Exploit Chain

Safeguard Your SAP Landscape & Operations with SUSE Solutions



The Role of SUSE in SAP Security



- ❑ Supply Chain Security - the only general-purpose OS that's EAL 4+ certified
- ❑ CIS + STIG Security Hardened cloud images
- ❑ Frequent patches and updates to quickly address Common Vulnerabilities & Exposures (CVEs)
 - ❑ CVE level 7 & higher generally require immediate action
- ❑ SUSE Linux Enterprise Live Patching allows for fixes to be applied outside of maintenance windows
 - ❑ No need to stop kernel or applications
 - ❑ Minimize planned downtime
- ❑ Confidential Computing with Intel and Azure

SAP and the Microsoft Cloud



Trust

30 years of building solutions for others and ourselves



Innovation

World-leading innovation in ERP, cloud, app dev / integration (BTP), security and AI



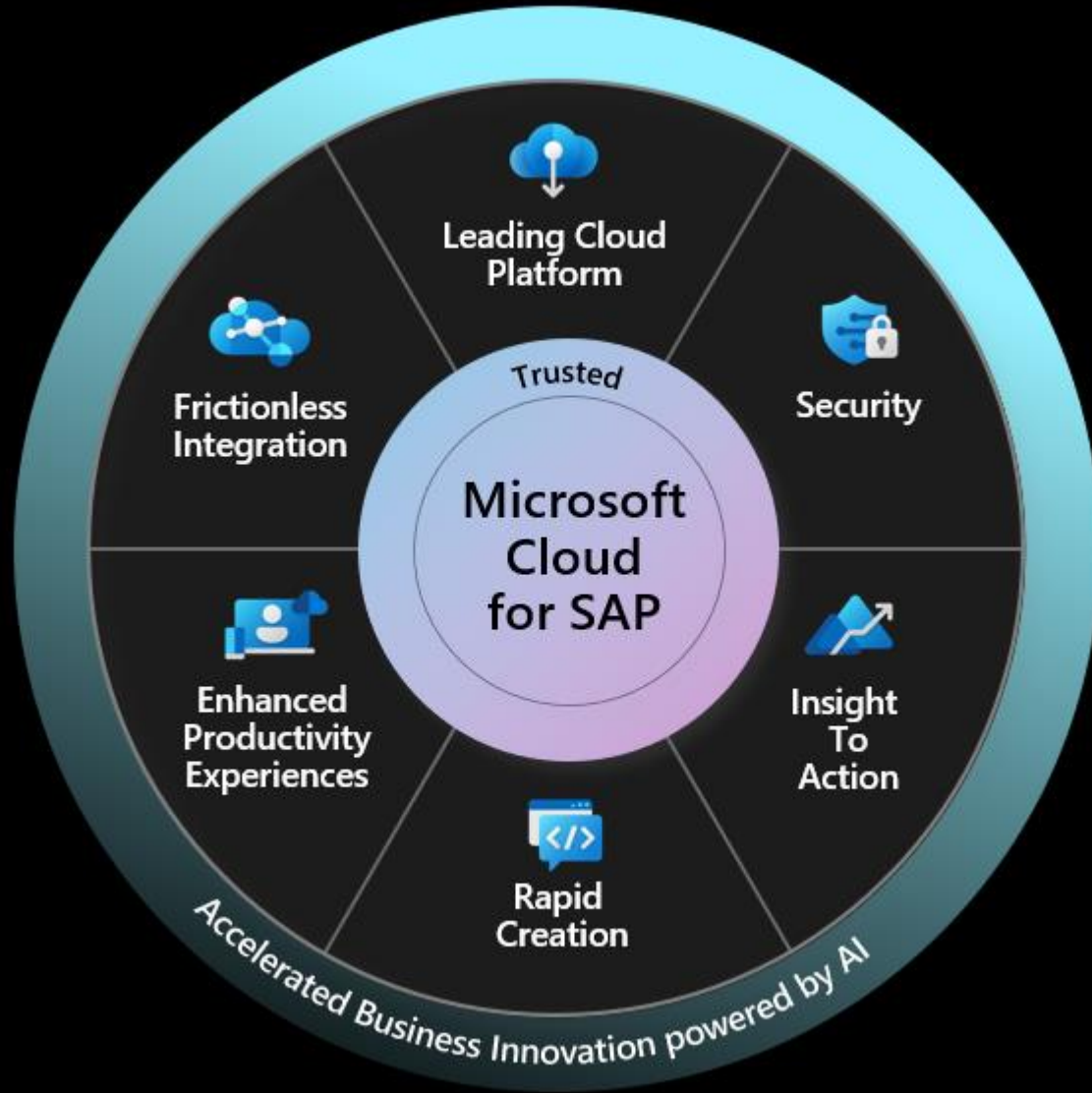
Expertise

Industry-leading apps and cloud together with decades of experience developing solutions for virtually every business vertical



Leadership

More capabilities together than any other competitor derived through industry leadership in ERP, cloud, AI and security



Over 30-year SAP partnership of co-engineering and innovation

In the age of AI,
every experience
should be assisted
by an intelligent
Copilot and/or
Azure AI

What attackers look for

- ∅ Sensitive information hosted in SAP applications
- ∅ Exfiltration and modification of financial records
- ∅ Extraction and modification of banking details
- ∅ Process details
- ∅ Logistics & Supply chain details
- ∅ Control/Disruption of operations

Microsoft Security

Unmatched security and compliance

Comprehensive visibility, automation, and intelligence

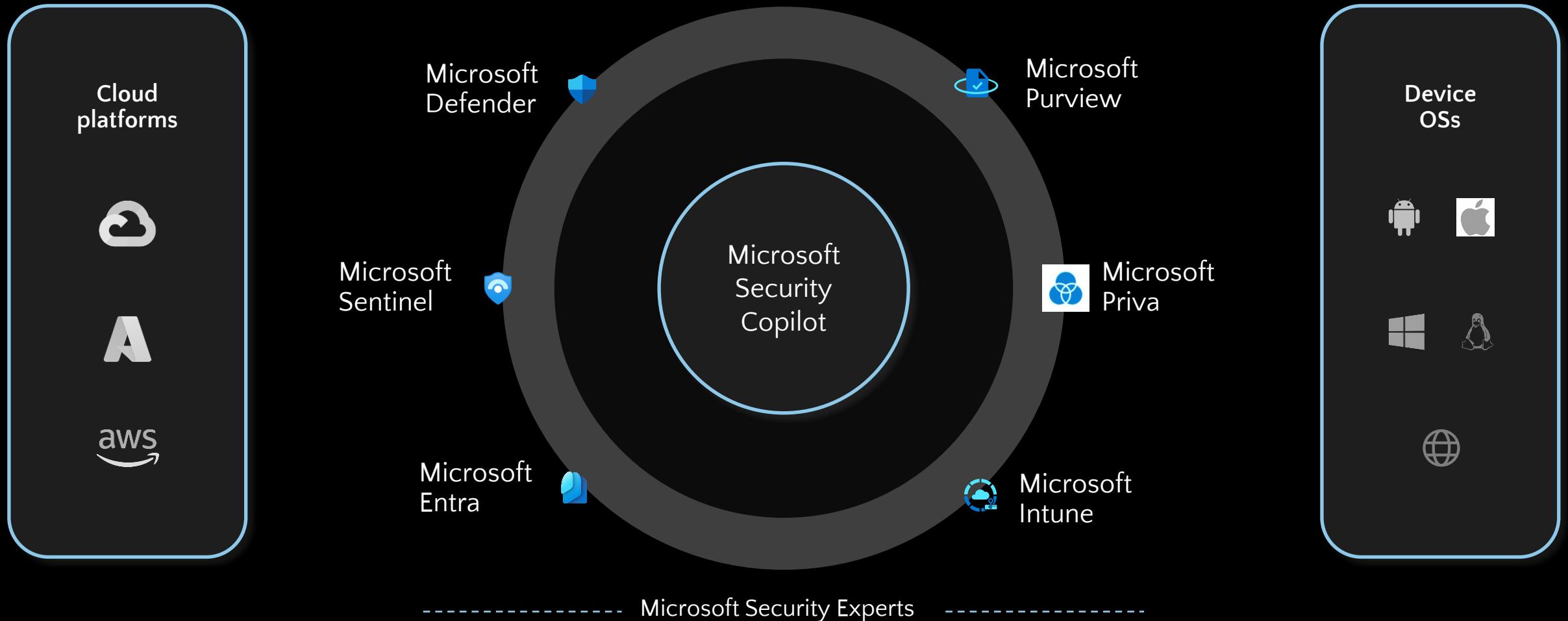
Protect
everything

Simplify the
complex

Catch what
others miss

Grow your
business

Defend at machine speed with Microsoft Security Copilot



Vnomic Automated & Engineered SAP Migration & Management

✓ Automated & Engineered SAP systems

Meet all SAP & Microsoft

Best practices

72%

Deployment
cost reduction

91%

Time to value
reduction

100%

Manual error
reduction

✓ CIS Level Hardened SAP Systems


✓ Business Resiliency with Automated High Availability

✓ Business Continuity with Automated Disaster Recovery


✓ Time to Recovery in Minutes with Snap- Based backup solution

✓ Azure Cost Management & Governance

Understanding CIS Level 1 Hardening

- 
- CIS Level 1 Hardening refers to basic cyber hygiene practices recommended by the Center for Internet Security.
 - These benchmarks aim to reduce vulnerabilities and protect against widespread cyber threats.
 - Applying these standards to SAP systems is critical for maintaining secure and compliant operations.


Challenges in SAP Security

- 
- SAP systems are complex and integral to business operations, making them prime targets for cyberattacks.
 - Common challenges include unauthorized access, data breaches, and compliance with regulatory standards.
 - Addressing these challenges is essential for operational efficiency and protecting sensitive data.

Vnomic's Solution Overview

- Vnomic's CIS Level 1 Hardening Solution is tailored for SAP environments, offering advanced security features.
- Our solution automates the implementation of CIS benchmarks, ensuring your SAP systems are protected and compliant.

Key Benefits

- 
- Compliance with industry standards and regulatory requirements.
 - Enhanced security posture with automated threat detection and response.
 - Streamlined security management processes, saving time and resources.

Implementation Process


- 
- Our solution can be seamlessly integrated into your existing SAP landscape.
 - The implementation process involves initial assessment, configuration, deployment, and ongoing monitoring.
 - We ensure minimal disruption to your operations while enhancing your security capabilities.

Case Studies/Success Stories

- Many businesses have successfully implemented our solution, resulting in significant security improvements.
- For example, Coca-Cola Hellenic achieved full compliance within weeks and experienced a noticeable reduction in security incidents.



Customer Support and Services

- 
- Vnomic provides comprehensive support and services to ensure your success.
 - Our offerings include 24/7 customer support, training sessions, and regular updates to the solution.

CIS Level 1 Hardening Solution

- 1 Enhanced Security:** Establishes a secure baseline, reducing the risk of breaches.
- 2 Compliance Readiness:** Meets regulatory requirements, aiding in compliance.
- 3 Reduced Attack Surface:** Minimizes vulnerabilities by removing unnecessary services.
- 4 Automated Monitoring:** Facilitates setup of automated security and compliance tools.
- 5 Cost Savings:** Prevents expensive security incidents, leading to potential savings.

Compliance and Scoring With Vnomic Hardening

Rule results



Severity of failed rules



Score

Scoring system	Score	Maximum	Percent
um_xccdf_scoring.default	88.428017	100.000000	88.43%

Compliance and Scoring Without Vnomic Hardening

Rule results



Severity of failed rules



Score

Scoring system	Score	Maximum	Percent
um_xccdf_scoring.default	60.816295	100.000000	60.82%

Key Points to Take Home

- **Engage with security experts** to find out more on how to implement strong security solutions for your enterprise.
- **Vnomic:** Register to get a FREE evaluation of your current security CIS level hardening [here](#).
- **Microsoft:** Engage with Microsoft security experts to understand comprehensive security solutions for your enterprise [here](#).
- **SUSE:** Pick SUSE as the secure and robust foundation for SAP landscape.

Where to Find More Information

To learn more about:

Vnomic – CIS Level Hardened SAP systems on Azure marketplace – Link [here](#)

Vnomic – Case studies – Link [here](#)

SUSE - Pre-hardened SLES for SAP in Azure marketplace- Link [here](#)

SUSE & Microsoft alliance – Link [here](#)

Microsoft security – Link [here](#)

SAP on the Microsoft Cloud – Link [here](#)

Thank you! Any Questions?

Sherry Yu

<https://www.linkedin.com/in/sherryxyu/>

[Contact SUSE Azure Sales: azure@suse.com](mailto:azure@suse.com)

Prakash Pattaiyan

<https://www.linkedin.com/in/prakashpattaiyan/>

[Contact Azure Sales | Microsoft Azure](#)

Allen Bannon

<https://www.linkedin.com/in/allenbannon/>

[Contact Vnomic: https://vnomic.com/contact/](https://vnomic.com/contact/)

Please remember to
complete your session
evaluation.

SAPinsider



SAPinsider.org

PO Box 982Hampstead, NH 03841
Copyright © 2024 Wellesley Information
Services. All rights reserved.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. Wellesley Information Services is neither owned nor controlled by SAP SE.

**SAPinsider
comprises the
largest and fastest
growing SAP
membership group
with more than
800,000 members
worldwide.**
