

Understanding the shift from legacy SAP systems to resilient, modern infrastructure

Focus on enhancing cyber resilience while modernizing SAP environments





Legacy to Resilience



Surya Chavali

- Global Director SAP Infrastructure & SAP Security
- Email: surya.chavali@kcc.com
- LinkedIn: https://www.linkedin.com/in/surya-chavali-6281709/













IAM

- Centralized user management with SAP IDM or Cloud Identity Services
- Strong authentication and Single Sign-On (SSO)
- Automated user provisioning and de-provisioning
- Logging and monitoring with SAP Security Audit Log



Role Design and Authorization

- Principle of Least Privilege
- Task-based role design for clarity
- Derived vs. Composite roles
- Role testing with SAP GRC Access Control





Segregation of Duties (SoD)

- Prevent conflicting access rights
- Maintain SoD matrix of critical functions
- Use SAP GRC for automated SoD checks
- Implement mitigation controls

	Critical Function A	Critica Function
Role 1	/	✓
Role 2	/	X
Role 3	/	/
Role 4		

"We've Built The Digital Fortress but Forgot the Locks"

Security Governance & Trends



ALIGN WITH ISO 27001, NIST FRAMEWORKS



CONDUCT PERIODIC ACCESS REVIEWS



ZERO TRUST ARCHITECTURE AND CLOUD SECURITY



AI-DRIVEN THREAT DETECTION



Why Modernization Is Critical



Security Risks in Legacy Systems:



- Outdated OS and database versions



 Lack of real-time monitoring and patching



- Limited support for zero-trust architecture



Operational Inefficiencies:



- High maintenance costs



- Performance bottlenecks

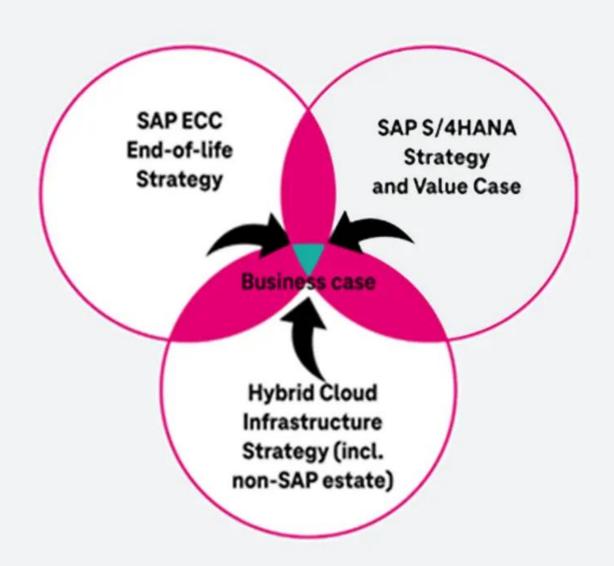


- Inflexibility in scaling or integrating with cloud-native services

SAP Ecosystem Migration: S/4HANA Deadline

- SAP announced end of mainstream maintenance for ECC by 2027
- Organizations worldwide are migrating from SAP ECC to S/4HANA
- Transition to S/4HANA enhances scalability, performance, and support for cloud modernization





SAP Migration Security Risks

- Role redesign risks
- Elevated access during migration
- Data exposure
- Interface security







SAP Migration Audit Checklist

- Ensure full logging during migration
- Perform role and SoD analysis
- Review access cleanup process
- Document migration activities



Pillars of Cyber Resilience in SAP

VISIBILITY & MONITORING

ACCESS CONTROL & IDENTITY MANAGEMENT

PATCH & VULNERABILITY MANAGEMENT

DISASTER RECOVERY & HIGH AVAILABILITY

Case Study

Before Modernization:

- SAP ECC on physical servers
- Manual patching
- Limited monitoring

After Modernization

- SAP S/4HANA on cloud
- Automated security controls
- Integrated threat detection

Outcome:

- 40% reduction in security incidents
- Improved audit compliance
- Faster recovery times

Conclusion

Modernizing SAP infrastructure is a strategic imperative.

Invest in secure, scalable, and intelligent platforms.

Protect mission-critical systems through cyber resilience.