RISE Security Framework

Lucas Ribeiro
Senior Security Architect
SAP Enterprise Cloud Services (ECS)
September 2025

SAP | Enterprise Cloud Services

SAP

RISE With SAP - Security Framework Built Into the SAP Offering…

Where you may be today

- Complex landscapes on older releases
- Home built extensions contain security vulnerabilities
- Desire to offload infrastructure
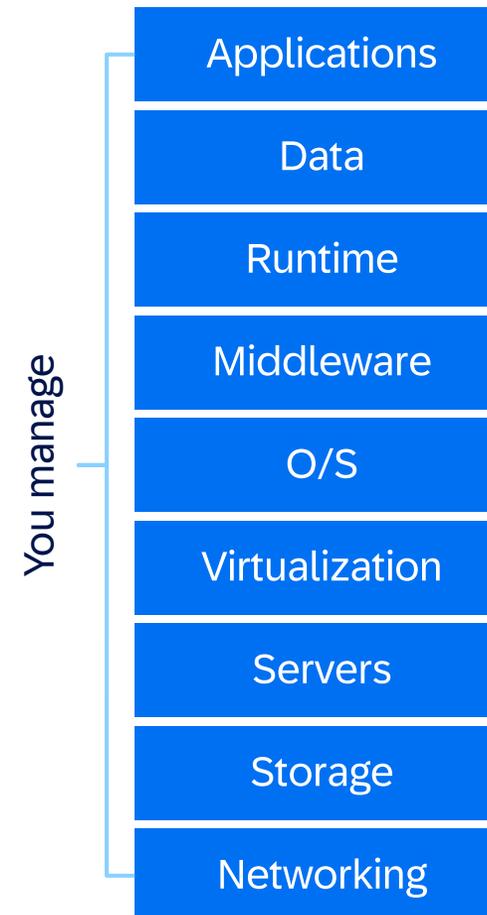- Difficult processes to secure complex hybrid landscapes

How SAP helps you run an Intelligent Enterprise

- Move your system to cloud and upgrade to S/4
- Move custom developments to BTP and standardize
- E2E responsibility for running and upgrading the system
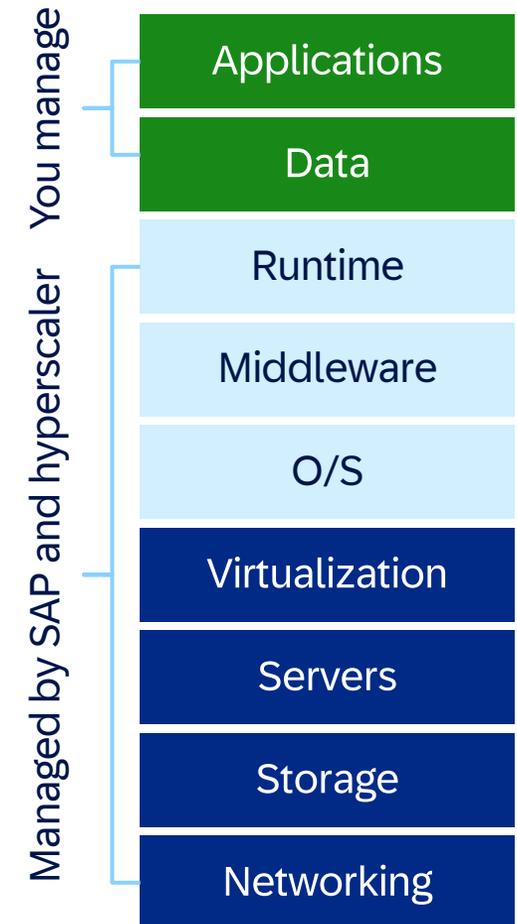- Upgrade to SAP S/4HANA, connect to BTP, Network, and LoB cloud Apps

The Result

- Standardized system architecture in the cloud
- Increased security, diminished attack surfaces and overall TCO reduction
- One contact for all matters on S/4HANA, security and resilience
- Secure integrations using BTP

Traditional on-premises

You manage

- Applications
- Data
- Runtime
- Middleware
- O/S
- Virtualization
- Servers
- Storage
- Networking

SAP RISE with Azure
(hyperscaler example)

You manage

- Applications
- Data

Managed by SAP and hyperscaler

- Runtime
- Middleware
- O/S
- Virtualization
- Servers
- Storage
- Networking

2

SAP RISE Delivers Tangible Value
by protecting business and managing risk ensuring peace of mind for the executives

Security

Improve business continuity and disaster recovery

Leverage SAP and hyperscaler service level agreements for business continuity, disaster recovery, and uptime capabilities

Increase compliance

Leverage SAP and hyperscaler third party audits (validated through various Certifications & Attestations) to increase compliance that can assist with CMMC and build Zero Trust efforts

Reduce security maintenance cost

Improve efficiency and effectiveness in the areas of patch management, security configuration, vulnerability scanning, threat management, compliance costs

Reduce talent acquisition and training costs

Leverage SAP skilled cybersecurity resources and best practices to reduce risk related to the cybersecurity talent shortage

Improve incident response time

Leverage SAP's Global Security Operations Center with 24 x 7 support including incident response, threat hunting for proactive security management

Increase enterprise security with strategic & transformational initiatives

Free up IT and security resources to focus on strategic security initiatives, manage risk related to cybersecurity, and software supply chain issues

Shared Security Responsibility Model

RISE WITH SAP
S/4HANA Cloud, Private Edition

SAP Enterprise Cloud Services (ECS)

- ✓ Resilient platform architecture (HA and DR)
- ✓ Single Tenanted Landscape
- ✓ Managed Backup and Restore
- ✓ Building Secure Virtual Machines, Operating systems, networking, HANA Database
- ✓ HANA DB Management
- ✓ Technical Managed Services (R&R Link)
- ✓ Operational Security and Managing security incidents
- ✓ 24x7 Security Monitoring
- ✓ Personal Data Breach Notification
- ✓ SLA and Support Services
- ✓ Threat Management & Patch Management

Customer

- ✓ Dedicated Private Connectivity to Hyperscaler
- ✓ Application User Identity Management
- ✓ Application User Authentication and Authorisation Management
- ✓ Application User Roles, User Groups, Access Control
- ✓ Customer Data Ownership
- ✓ Compliance to Government & Industry Regulations
- ✓ Application Security Audit Logging (SAL)
- ✓ Integration and Extensions, Custom Applications Development
- ✓ Configuration of the Customer Business Processes
- ✓ Application Change Management

IaaS Provider
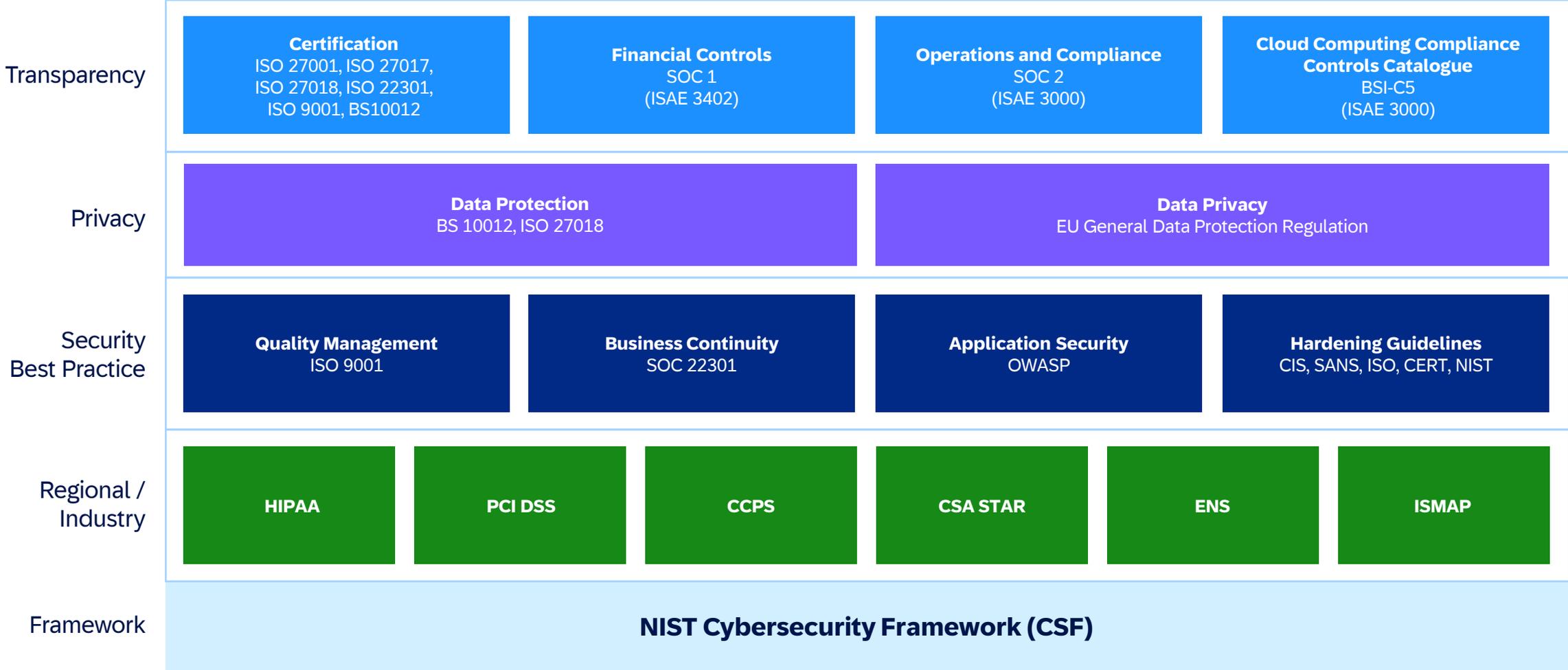(Customer selected deployment Region)
Managed by SAP SE
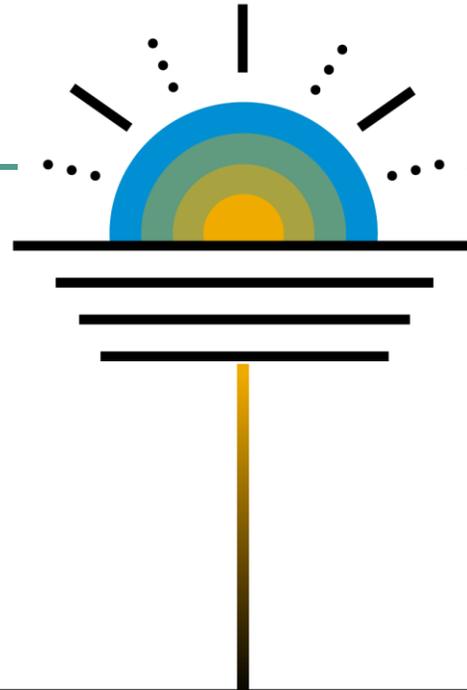
- ✓ Physical Data Center Security in multiple Regions
- ✓ Resilient Network Connectivity and Availability Zones
- ✓ Underlying Physical, Virtual Infrastructure & Hypervisor
- ✓ Network Availability with built-in basic DDoS protection
- ✓ Audit, Security and Compliance on IaaS

Supported Hyperscalers

aws   Azure   Google Cloud

Governance of Standards and Best Practices

Transparency	**Certification** ISO 27001, ISO 27017, ISO 27018, ISO 22301, ISO 9001, BS10012	**Financial Controls** SOC 1 (ISAE 3402)	**Operations and Compliance** SOC 2 (ISAE 3000)	**Cloud Computing Compliance Controls Catalogue** BSI-C5 (ISAE 3000)

Privacy	**Data Protection** BS 10012, ISO 27018	**Data Privacy** EU General Data Protection Regulation

Security Best Practice	**Quality Management** ISO 9001	**Business Continuity** SOC 22301	**Application Security** OWASP	**Hardening Guidelines** CIS, SANS, ISO, CERT, NIST

Regional / Industry	**HIPAA**	**PCI DSS**	**CCPS**	**CSA STAR**	**ENS**	**ISMAP**

Framework	**NIST Cybersecurity Framework (CSF)**

SAP | Enterprise Cloud Services

Security at SAP Enterprise Cloud Services

Mandatory Security Features; No hidden security costs

Security Monitoring
Real time visibility and decision making

- 24 x 7 Security Monitoring Center
- 24 x 7 Incident Response
- Advanced Forensics
- Advanced Detection Engineering

Vulnerability Management
State of the Art Risk-Impact Vulnerability Prioritization

- Asset Management
- Vulnerability Scanning
- Vulnerability Advisory
- Security Patch Management
- Risk Based Prioritization

Network Security
Advanced IT Security Architecture

- Isolated landscapes, Security Hardened Systems
- Network Filtering
- Web Application Firewall (Standard and Premium with API Security)
- DDoS protection
- 2 factor authentication
- Encryption
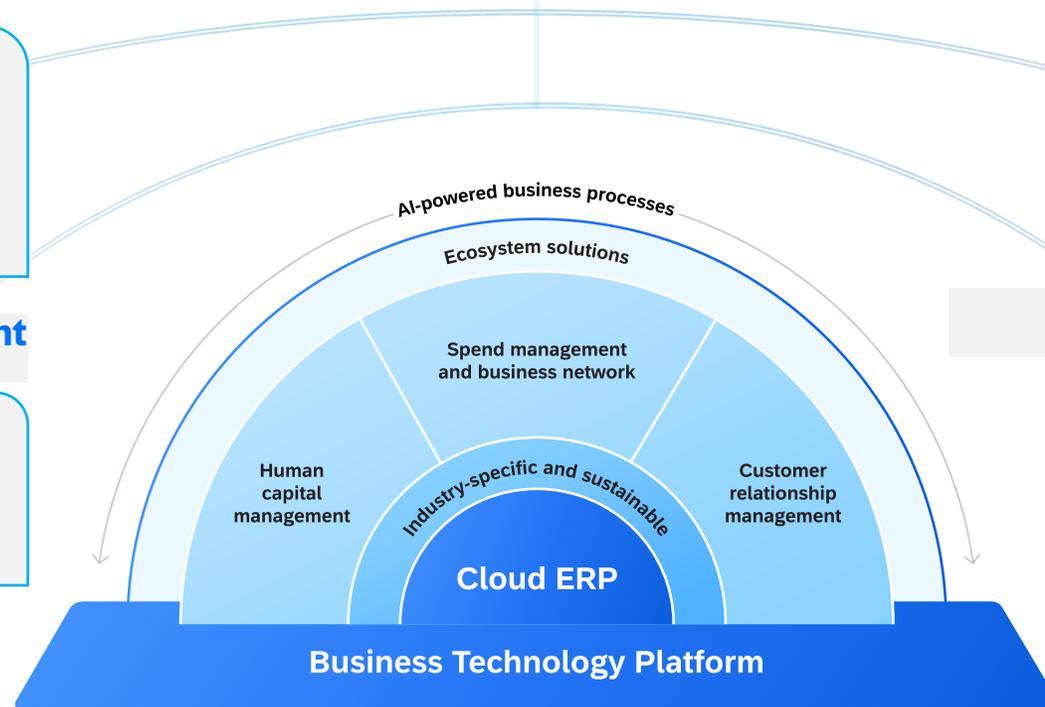- Advanced MultiCloud Defense

Threat Protection
Advanced Malware Analysis

- Endpoint Detection & Response (EDR)
- Security Orchestration Automation and Response (SOAR)
- Malware Management
- Backup immutability **

Cloud Security Posture Management
Protect data, control access, and detect threats

- Cloud Security & Compliance Umbrella
- Security Compliance Scanning
- Hardening Procedures (CIS Benchmarks + SAP Benchmarks)
- Hyperscaler Co-Innovation
- Attack Path Management

Secure Operations
User and Process level security across hybrid landscapes

- Identity & Access Management
- Privileged Identity Management
- Change Management
- Security Awareness
- Penetration Testing
- Hacking Simulations
- Purple Team Program

AI-powered business processes

Ecosystem solutions

Spend management and business network

Human capital management

Industry-specific and sustainable

Customer relationship management

Cloud ERP

Business Technology Platform

The Secured Intelligent Enterprise

End to End innovation of Compliance & Security Processes – NIST Cybersecurity Framework

Identify	Protect	Detect	Respond	Recover
Security Patch Mgmt	Malware Management*	Endpoint Detection & Response (XDR)		
Vulnerability Scanning *	Privileged Identity & Access Mgmt	24x7 Security Monitoring*	24x7 Incident Response *	
Vulnerability Advisory	BYOK (Bring Your Own Key) for Hyperscalers (2025)	Cloud Security & Compliance Umbrella	SOAR	
Penetration Testing *	Immutable Backups (2024/25)	Advanced Detection Engineering with AI*		Advanced Forensics *
Hacking Simulations *	Migration to CyberArk for PIM/PAM (2025/26) *			
Cloud Security Compliance Scanning *	HANA Default encryption and Certificate management (2025/26)*	SAP Enterprise Threat Detection		
Security Awareness	Isolated Landscapes	RAVEN Application Security Use Cases (2025)		
Asset & Change Mgmt.	Security Hardened Syst.*	LogServ		
RAVEN Security Reporting (2024)	Firewall (incl. WAF)	Micro Segmentation with Premium NGFW/IPS (FWaaS)		
	DDoS Protection	Attack Path Simulation*		
Application Security Updates	Cloud Security Configuration Checks *			

What is **LogServ** & **RAVEN**?

Protect against cyber security threats to secure your success

LogServ is an ECS service to store and access your logs. We enable our customers and our internal teams to collect & centralize the logs from all systems, applications, and ECS services that are in use.

Features

Near Realtime Log Collection
You can integrate it into your SIEM or Log Management system.

Log Retention
You can retain your logs indefinitely. You can adjust the retention policy for each data source. We are offering retention periods between 10 years and one month.

Log Recovery
You can recover the logs which were retained for you by ECS.

RAVEN (*) is an ECS service making SAP Application Security & Threats easily manageable, while delivering "Security and Compliance" reports and dashboards to customer SIEM.

Features

Infrastructure Reports & Dashboards
Bringing Security monitoring, vulnerability management and compliance to customer SIEM.

Security Use Cases as a Service
Integration with customer SIEM.

Application Alerts, Reports & Dashboards
Threat activity of SAP Applications.
UBA Analytics.

SAP | Enterprise Cloud Services

ECS Security Documentation

✅ ECS Security and Compliance Document

✅ ECS Zero Trust Architecture Whitepaper

✅ ECS Security Orchestration Architecture & Response (SOAR) Whitepaper

✅ ECS Vulnerability Management Guide v1–v2 under design phase (to be released Q3)

✅ ECS Fighting Against Ransomware Whitepaper

✅ ECS Breach Notification and Incident Management Whitepaper

✅ Zscaler for SAP RISE with SAP Zero Trust Framework

✅ Two more whitepapers

✓ ECS Cyber Resilience Framework
✓ ECS Encryption Guide

Thank you.

Contact information:

Lucas Ribeiro
SAP Enterprise Cloud Services
Lucas.de.souza.ribeiro@sap.com