

What's On Your Mind? Risk and Controls in the Public Cloud

Natalie Freedline, Risk Technologies Lead – SAP, Partner, EY
Dr. Neil Patrick, Solution Management – GRC & Security, SAP

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In This Session

It's a discussion session

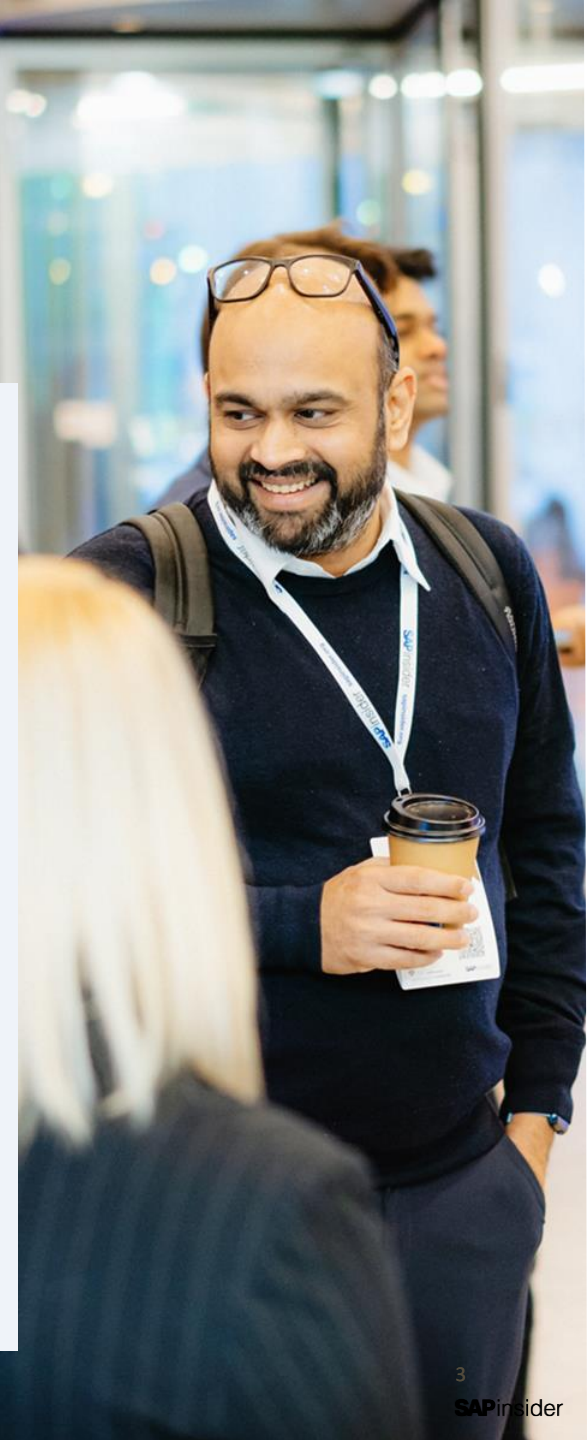
The focus is on assuring and securing S/4HANA public cloud, not specific public cloud GRC solutions.

Public cloud ERP is different, and yet the same, as private cloud – find out some details

Take an in-depth look at technology and experiences with how to deliver GRC for public cloud scenarios

What We'll Cover

- Key watch-outs during your S/4 transformation
- Solutions and new technologies to consider for pre and post go-live monitoring
- A deep understanding of roles and responsibilities during the transformation



Organization's Trends

for Governance, Risk & Compliance

30% **increase in cost of compliance expected by companies.**
90% of compliance leaders expect evolving business, regulatory, and customer demands to increase compliance-related operating costs by up to **30%**.¹

75% **of companies to increase risk management spend.**
3 out of 4 of companies are planning to increase spend across data analytics (75%), process automation (74%), and technology (72%) to support the detection and monitoring of risks.²

50% **of companies to automate controls.**
50% of organizations aim to automate controls monitoring and mgmt. capabilities to address core drivers of GRC strategy in 2023.³

1. ["Compliance Risk Study 2022 Report: Find Calm in Every Compliance Storm."](#) Accenture, May 2022.

2. ["2022 Global Risk Survey."](#) PwC, 2022.

3. ["GRC State of the Market 2023 – Benchmark Research Report."](#) SAP Insider, SAP SE 2023.



Key watch-outs during your SAP S/4HANA transformation

These are things you
should be aware of!



SAP S/4HANA Overview

Should my company consider SAP S/4HANA Public Cloud?

SAP S/4 Public Cloud

- Allows for greater agility, flexibility and faster upgrades cycle
- Subscription Licensing
- No requirement to invest in internal IT support
- Innovation upgrades happen quarterly without customer's participation

SAP S/4 Priv Cloud or On- Prem

- Best fit for large enterprises with well proven business processes
- Traditional Licensing
- Internal IT Support required
- Planning, testing, controlling, upgrades /changes within the system are the full responsibility of a customer, occur yearly

What is the impact of moving to cloud?

- Shifting responsibility model over application and infrastructure configuration and maintenance.
- Increased standardization of business processes, embedded with optimized controls.
- Enterprise cloud integration to support business processes and data movement.

SAP S/4HANA Public Cloud

SAP S/4HANA On-Premise	SAP S/4HANA Private Cloud	SAP S/4HANA Public Cloud	
User Access / Identity	User Access / Identity	User Access / Identity	
Entitlement/Role changes	Entitlement/Role changes	Entitlement/Role changes	
Data	Data	Data	
Operational effectiveness of controls	Operational effectiveness of controls	Operational effectiveness of controls	
Monitoring of segregation of duties	Monitoring of segregation of duties	Monitoring of segregation of duties	
Application	Application	App Config	App Code
Operating System	Operating System	Operating System	
Virtualization	Virtualization	Virtualization	
Network	Network	Network	
Infrastructure	Infrastructure	Infrastructure	
Physical	Physical	Physical	

Customer Responsibility

Cloud Service Provider Responsibility

Why Do Organizations Need SAP Risk and Assurance Management?

CUSTOMER FOCUS: Consistent and transparent risk-aware operations are required across finance and other major business processes to help ensure performance, assurance, resiliency and trust.

Organizations must thrive in a disruptive business environment, with ever changing risks. They are often in an ongoing state of flux (e.g. business change, IT change, regulatory change, digitalization). They must also demonstrate due diligence over financial records and ensure quarterly and annual reports accurately reflect their finances for multiple purposes. And soon to include ESG reporting.

SOLUTION FOCUS: Centralised view across enterprise for internal control status and adequacy, and related risks. Delivered content for financial, master data, SOD, IT, ESG, HRDD controls across both SAP S/4HANA cloud, and on premise deployments.

Digital / Financial Transformation to SAP S/4HANA

Based on EY Paper: 5 Common compliance myths when moving to S/4HANA

1. Our existing controls framework will suffice in the new SAP S/4HANA environment. **No.** *Ledger is different, use of S/4 will drive change, processes will change, different gaps/vulnerabilities exist, exception reports will change.*
2. SAP Security is solely IT's responsibility. **No.** *Business requests roles for teams, and everyone is busy – things get missed.*
3. We will engage auditors after go-live. **Not wise.** *Audit may stop the go-live because likelihood of financial delays / errors, misstatement is high.*
4. Our current internal controls governance and operating support model is flexible enough to support the future changes. **No.** *Being flexible requires agility which requires a single, centralized, integrated, adopted, digitalized system. Automate as much as possible, ready to use content.*

Looking ahead: Navigating the path to control maturity



Now

- › Analyze and design controls for SAP S/4 Public Cloud system
- › Validate existing controls framework controls that are relevant for SAP S/4 Public Cloud based on design during testing phase
- › Identify control owners and train for day 1 readiness
- › Final risk and controls matrix (RACM)
Typically addressed during S/4 Transformation



Next

- › Implement new SAP S/4 Public Cloud-specific controls for each rollout and update control framework
- › Update control framework with relevant control meta-data (e.g., risk statements, control owners, performance frequencies.)
- › Establish monitoring and testing plan to validate they are working as intended
- › Establish RACI and controls governance



Beyond

- › Establish enterprise-wide tool and process to monitor controls
- › Implement centralized and updated control repository
- › Perform control self-assessments
- › Establish control management automation and workflow-enabled control performance
- › Implement a continuous monitoring program

Get Clean

**Stay
Clean**

Solutions to consider for pre and post go- live monitoring

Get a proactive jump
start with your public
cloud landscape



Why does the Internal Control conversation matter?



An Internal Controls over [LoB] Reporting (ICFR) system provides evidence that:

- Financial statements are accurate and being prepared reliably (incl. ESG, Cyber etc.)
- Adequate controls are in place to safeguard financial data, policies and processes



Considerations:

- Corporate financial objectives are being achieved
- S/4HANA does not have out the box ICxR – and it shouldn't, it is an ERP system
- New/migration SAP S/4HANA adoption: bespoke implementation project to set up ICxR

Without it:

- Best endeavours, manual, Excel, effort & potential errors, reporting challenges
- Financial misstatements, material weakness audit findings => fines, imprisonment (SOX)
- Reputational damage, share value drop



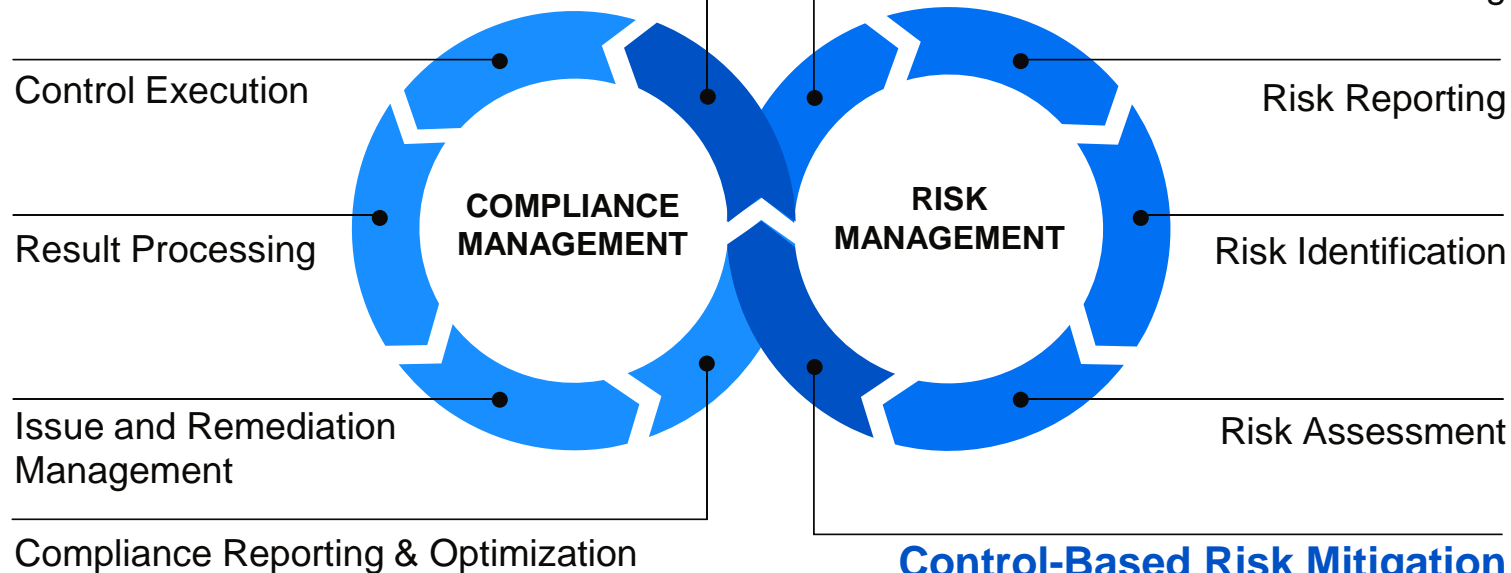
Scope of SAP Risk and Assurance Management

Next-generation
GRC control & risk
solution for public cloud

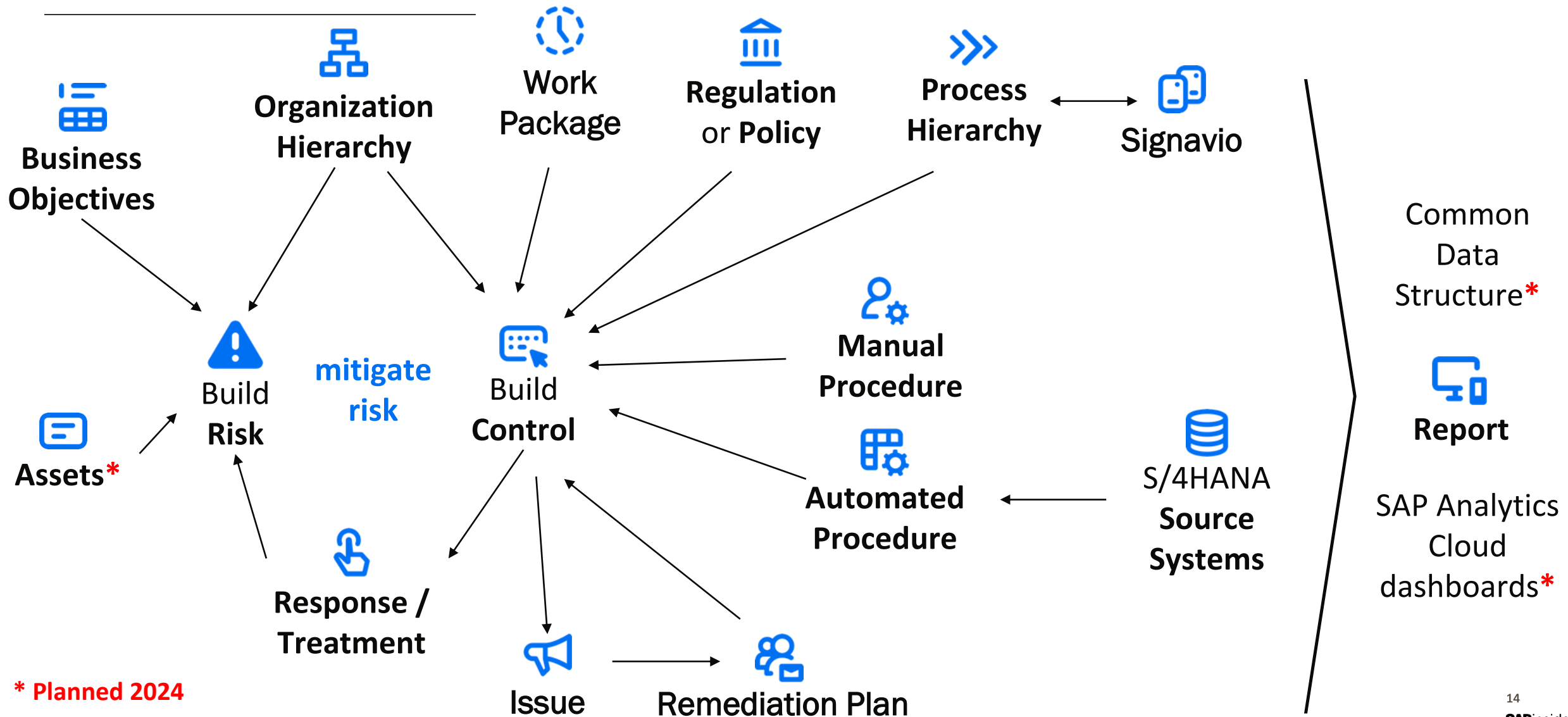


- Leverage one platform
- Governance, risk, & compliance (GRC) becomes Value-add
- Solution and Process integration

Risk-Based Control Management



Objects in SAP Risk and Assurance Management



Out the Box Content for Public Cloud

- SAP: 70+ rules, 5 more in 2402, list for 2408, Implementation starter pack, (BIS & PC rules)
- Winterhawk: 12x industries content packs, ESG pack
- Turnkey: Created most of baseline content, Implementation starter pack, (BIS & PC rules)
- EY (Germany): 140+ tax compliance rules
- PwC (UK): Tax compliance managed service with own rules
- KPMG: Looking to start tax
- Big4 & SI in general: have own PC rules

AI Use Cases – target Q4-2024

Subject to change without further notice

- Decision support with Machine Learning in IRM. Once Issue conclusions are save & closed, use that data to predict likelihood for new issues. Have done a PoC. Don't have to train a model, so simpler than BIS. Auto selection of most appropriate remediation workflows.
- Auto-detection of deviations in transactions and processes with AI. There will be AI-based logic in SAP S/4HANA finance looking for deviations (e.g. Benford's law). It automatically raises suspicious cases in RAM to be investigated in RAM. S/4HANA has all the data, RAM is the intelligence& assurance platform.
- Regulatory Compliance Intelligence. An SAP Business Technology Platform application. Uses any kind of regulatory publication or change. Upload pdf document and analyze using LLM, map against controls that exist in RAM (or potentially PC). Software proposes new controls that are required to meet requirements. Not sure yet if this will be a stand-alone purchase
- Other useful cases such as suggesting controls based on risk, detecting duplicate controls.

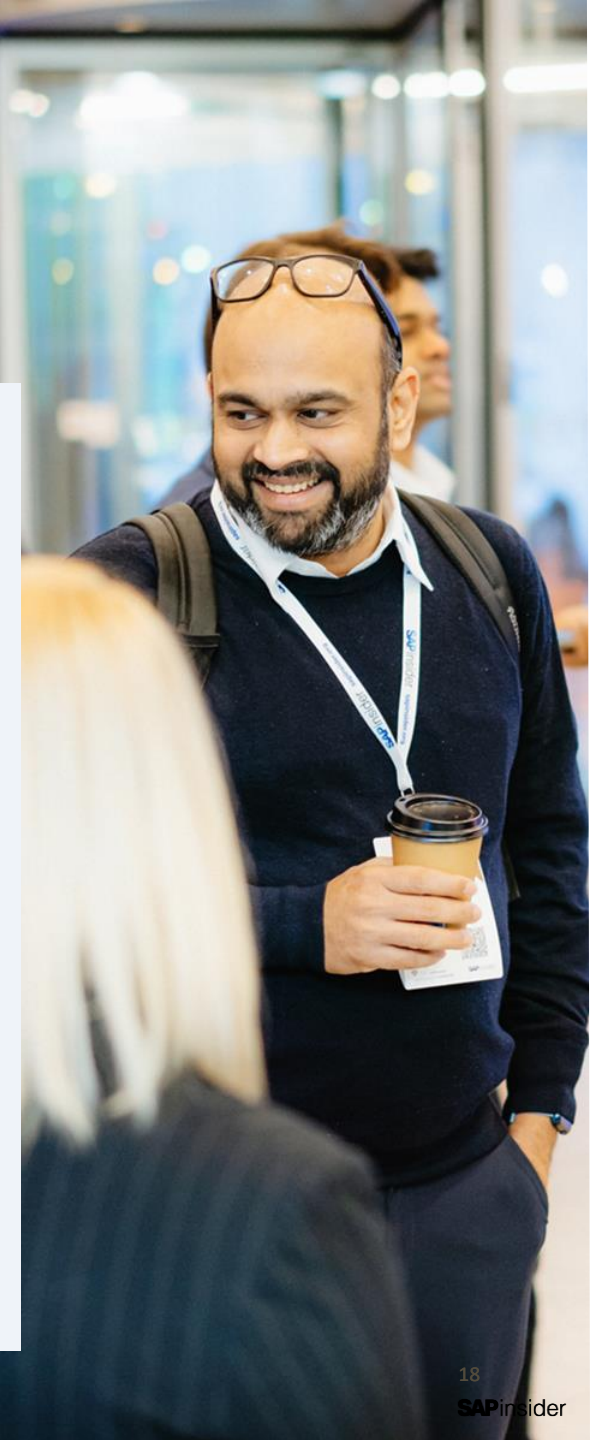
Integrations – target Q4-2024

Subject to change without further notice

- SAP Document and Reporting Compliance (target Q2-2024)
- SAP Identity and Access Governance (target Q3-2024)
- Further connectivity options for automated control execution (target Q3-2024, candidates are for example Ariba, Concur)
- Data Consolidation Services: open reporting for RAM (throughout 2024) – potential source information for other AI use cases

Benefits of SAP Risk and Assurance Management

- Low total cost of ownership
- Simple infrastructure
- Short time to operationalize
- Smoother digitalization, finance/digital transformation
- Ease of use, intuitive user interface
- Standardised best practice approach
- Access to expanding consumable content
- Leverage SAP Business Technology Platform capabilities
- In line with SAP strategy, customer strategy
- Benefits from AI





**A deep understanding of
roles and responsibilities
during the
transformation**

Prevention is nine tenths
of the solution

Roles and responsibilities

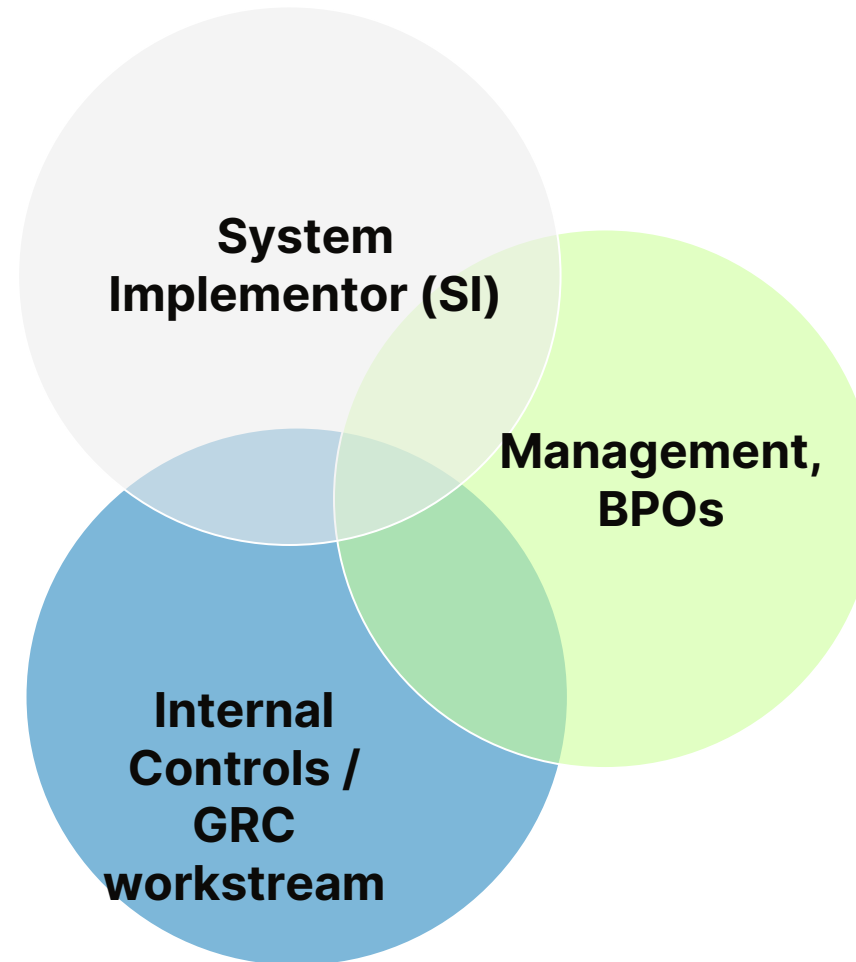
A dedicated and integrated internal controls workstream is required during the S/4 Public Cloud implementation to prevent and address critical risks.

System Implementor (SI)

- Track business requirements, design and configure future state processes in ERP
- Configure security design
- Configure GRC (if applicable)
- Conduct training

Internal Controls (IC) / GRC Workstream

- Assess future state process and identify gaps in risk mitigation
- Provide internal controls, security design and GRC requirements and direction
- Feedback on implementation strategy components
- Assist with GRC test scenario creation
- Future state GRC Governance



Management, Business Process leads (BPO) – Decision Makers

- Identify current internal controls, security design and GRC pain points and requirements
- Make decisions on future state controls and GRC processes
- Approve security role changes
- Execute testing on future state processes

Leading Practice Recommendations

- IC/GRC Workstream will design/optimize controls processes based on leading practices
- Team should have extensive IC/GRC experience within technology, internal, and external audit perspectives, to provide more holistic perspectives from multiple stakeholders
- Team should provide resources who have extensive SAP experience and bring tools/enablers to streamline

Looking ahead: Navigating the path to security compliance



Now

- › Establish SAP S/4HANA public cloud security strategy and define security functional design based on business processes
- › Define SAP S/4HANA public cloud technical design and identify restrictions
- › Build, and test SAP S/4HANA security roles
- › Identify and address segregation of duties (SOD) risks
- › Develop SAP S/4HANA Security micro learnings for technology adoption

Typically addressed during
S/4 Transformation



Next

- › Establish security governance plan and RACI
- › Establish security role maintenance process
- › Automate preventative SOD checks during roles creation and change process.
- › Establish processes to monitor SAP roles
- › Update security documentation



Beyond

- › Automate role re-certification process
- › Integration with Identity system for roles provisioning and deprovisioning
- › Robotics process automation (RPA) integration and enablement for automated testing of SAP roles
- › Artificial intelligence (AI) enablement for test execution and documentation
- › AI enablement for knowledge sharing, managing user queries and audit support
- › AI enablement for security roles and authorization troubleshooting

Get Clean

**Stay
Clean**

SAP IAG –Solution overview

SAP Cloud Identity Access Governance (SAP IAG) is a Simplified identity and access management with cloud-based governance solution to manage both cloud & on-premise applications.

IAG capabilities

Access Analysis

Analyse access, refine user assignments, and manage controls



Privileged Access Management

Achieve super-user access, log consolidation, and review with automated log assessment



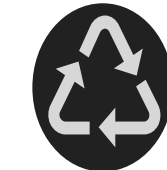
Role Design

Optimize role definition and streamline governance



Access Certification

Review access, role, risk, and mitigation control



Access Request

Optimize access, workflow, policy – based assignment, and processes

Benefits

- Reduced cost of ownership with SAP IAG SaaS model
 - Allows customers to choose & pay for only the functionalities they need
 - Rapid deployments
 - Zero maintenance and upgrade cost
- Increased compliance with preventive risk assessment across SAP cloud & on-premise solutions
 - Enables to detect cross system risks i.e., S/4 & ARIBA
- Integrations with success factors enables automated user access lifecycle management across applications (Hire to retire)
- Enable existing customers using SAP GRC to extend IAG capabilities with IAG integration to cloud applications
- Enhanced user experience with access dashboard and enabled interface with drill down capabilities

IAG vs Access Control functionality overview

Customer SAP landscape and IAM requirements						
		Access risk analysis	Access request	PAM /EAM	Business Role design	Access certification
On-prem	ECC/ S4 HANA	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
	BW/BPC	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
Cloud applications	S4 Public	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
	Cloud Success Factors	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div></div>	<div><div></div><div></div></div>	<div><div></div></div>
	ARIBA	<div><div></div></div>	<div><div></div></div>		<div><div></div></div>	<div><div></div></div>
	C4C	<div><div></div></div>	<div><div></div></div>		<div><div></div></div>	<div><div></div></div>
	IBP	<div><div></div></div>	<div><div></div></div>		<div><div></div></div>	<div><div></div></div>

- IAG offers flexibility to connect both on-premise & cloud applications for end to end identity access management
- IAG offers standard out of box delivered workflows to meet customer requirement
- IAG offers an integration scenario to extend clients existing SAP GRC system to cloud apps

Wrap-Up

Where to Find More Information

Key Points to Take Home

Thank you! Any Questions?

Where to Find More Information

SAP Risk and Assurance Management

- List of [out the box controls](#) on help.sap.com
- Videos for [setup, subscription and user authorization](#)
- Short YouTube [intro to solution](#) video

SAP Cloud Identity Access Governance

- Product [information on sap.com](#)
- Introductory [video on sap.com](#)

SAP Risk and Assurance Management: **Partner Content**

- Winterhawk [brochure on their website](#), [industry and ESG packs](#),
- Turnkey brochures in [English](#) and [German](#)
- Turnkey RAM [starter pack on SAP Store](#)
- SAP Learning Hub [RAM overview and onboarding](#) course
- SAP Consulting [RAM starter pack](#) one-pager
- EY, PwC, Deloitte, KPMG, SI's

EY Thought Leadership

- [EY and SAP Alliance - Agile Risk | EY – Global](#): How can you prepare for what you can't control?
- [5 common compliance myths when moving to S/4HANA](#): Natalie Freedline (LinkedIn Blog post)
- [Twenty questions to enhance your internal controls | EY – Global](#): Implementing the right integrated risk and control model and processes to address governance

Key Points to Take Home

- Understand what you are responsible for, and vulnerabilities in, an SAP S/4HANA Cloud, public edition environment
- You can provide assurance over public cloud with solutions from SAP
- You also need a holistic strategy for managing your public cloud landscape
- You can move up your assurance maturity curve with smart, cost-effective solutions from SAP + guidance from partners like EY

Thank you! Any Questions?

Dr Neil Patrick

neil.patrick@sap.com

+44 7833480248

<https://www.linkedin.com/in/neil-patrick/>

Natalie Freedline

Natalie.Freedline@ey.com

412 607-4282

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

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complete your session
evaluation.

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