

Automating hybrid SAP Operations

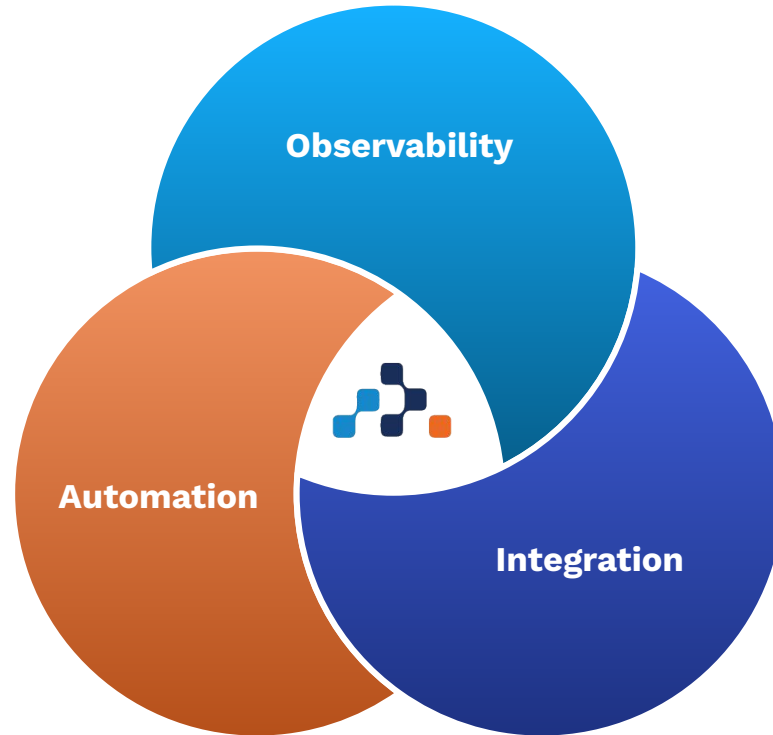
**How leading enterprises are preparing for
RISE with SAP**

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Head of SAP Engineering

24th April 2026

The right mix for SAP



Automation Across the Technical Stack

SAP

Start / Stop SAP

SPAM Updates

System Refresh

Import
Transports

Profile
Parameter Maint

Trigger ABAP
Events

SSL Certificate
Automation

Start / Stop
Instance

ST - PI, ST-A/PI
Updates

Kernel
Upgrades

Call BAPIs

Job Create /
Release / Delete

HotNews
Analysis

Software
Update Manager

Database

Run SQL Scripts

Start / Stop SAP
Database

Operating System

OS Patching

Distribute Files

OS Hardening
Checks

Run Scripts

SSH

Start / Stop
Public Cloud
and VMWare

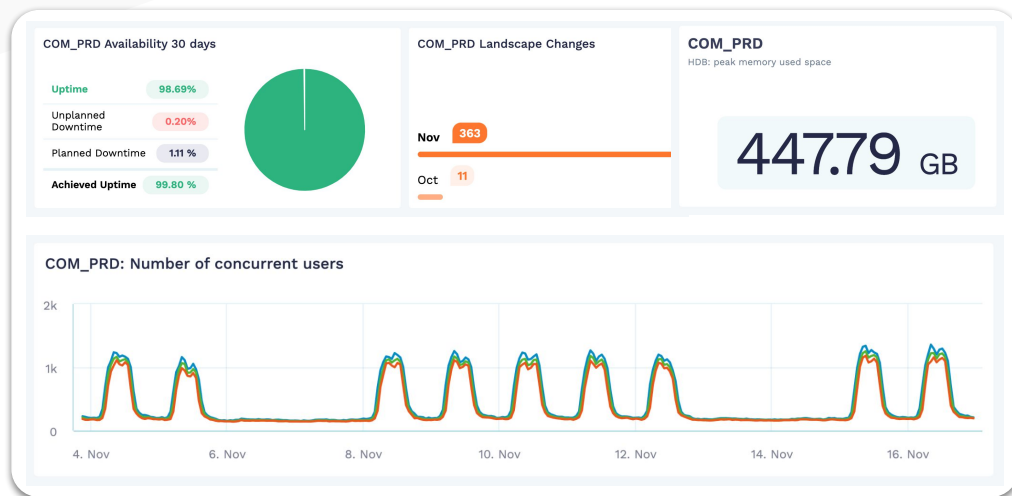
IaaS Public Cloud and VMWare

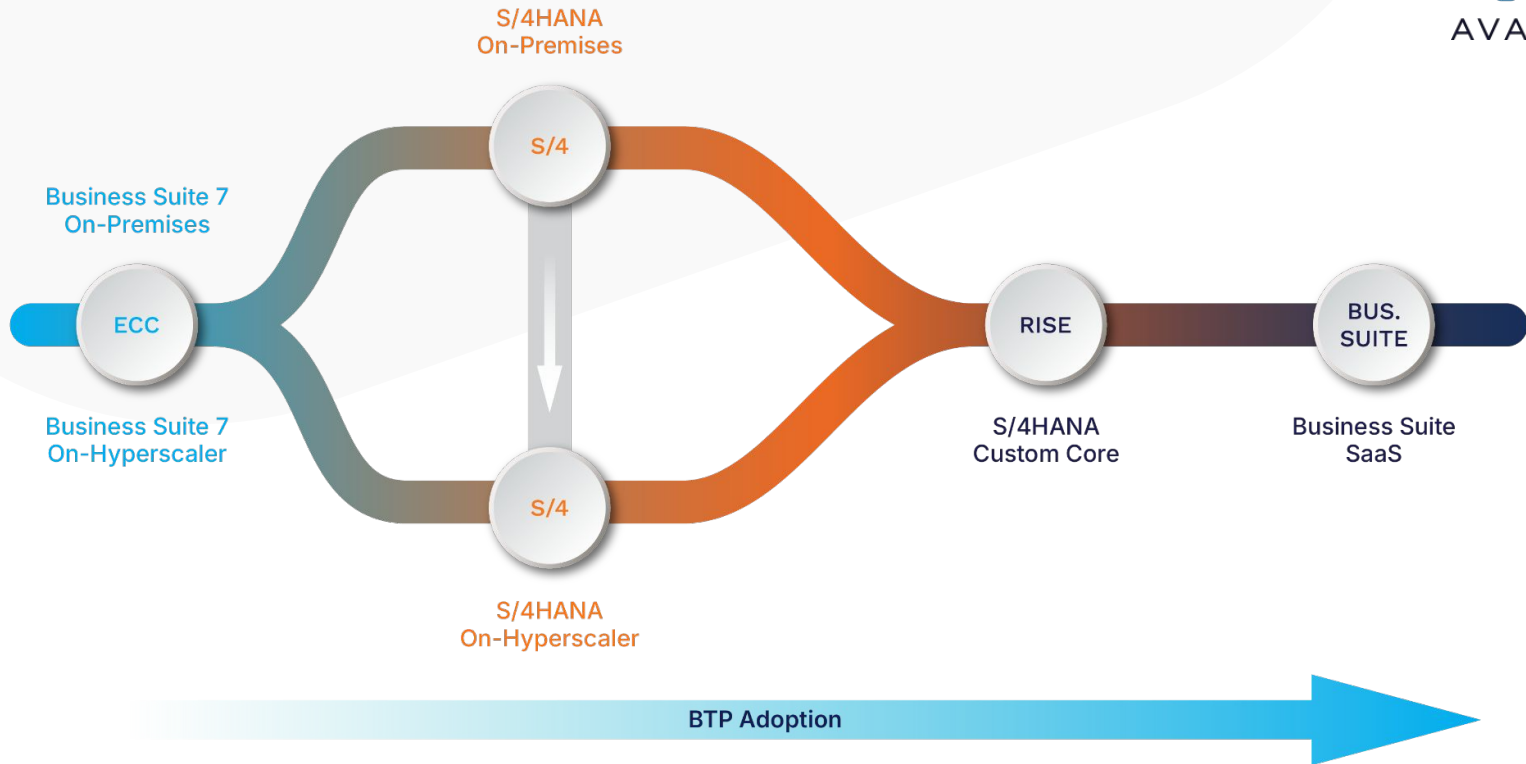
Start / Stop
Scheduled and
Triggered

Observation

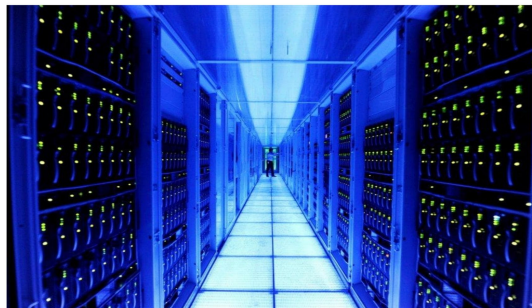
Know everything happening across your landscape

- End to end **automated landscape observation** powered by machine learning
- System specific **best practice applied out of the box**
- **Automated analysis of critical security alerts** from SAP (HotNews) including system-impact detection
- **Real-time visibility** into the total health of your SAP landscape including customizable service-level reports
- Flexibility to customize **design & deploy your own landscape-specific checks**
- **Trigger automations** based on observations in real-time





Roles and Responsibilities (“R&R”)



SAP | Enterprise Cloud Services

ROLES AND RESPONSIBILITIES (“R&R”)

RISE with SAP S/4HANA Cloud, private edition and SAP ERP, PCE v.3-2025
 (Also applicable for SAP BW and SAP BW/4/HANA systems as part of an SAP
 Business Data Cloud agreement.)

[Link](#)

Standard Services	Must be performed by SAP
Optional Services	
Additional Service	
SAP Cloud Application Services ¹ (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer responsibility
Excluded Tasks	

Roles and Responsibilities (“R&R”)

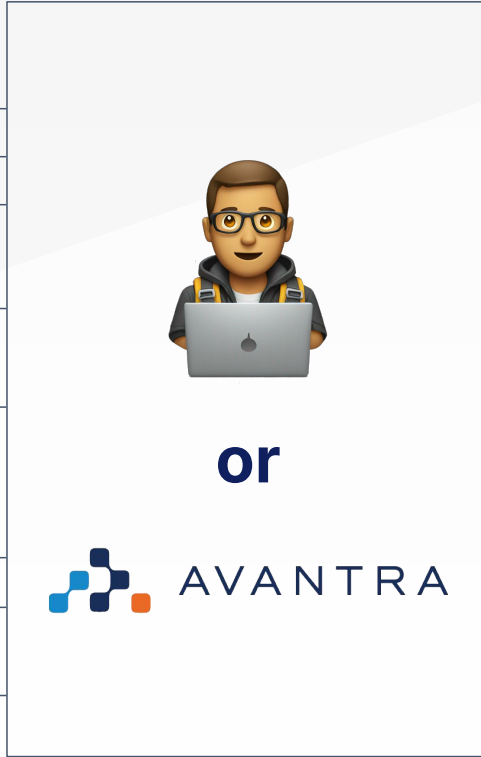
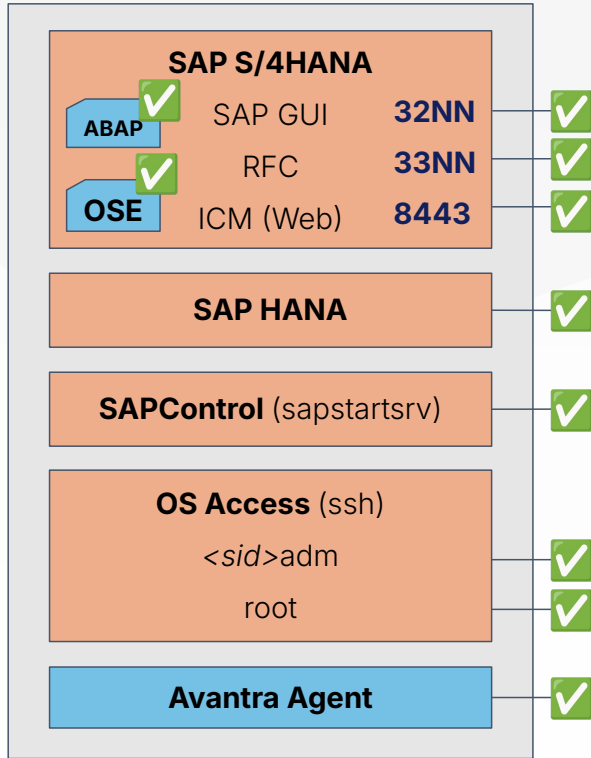
SAP Enterprise Cloud Services
RISE with SAP S/4HANA Cloud, private edition and SAP ERP,
private cloud edition

ROLES AND RESPONSIBILITIES

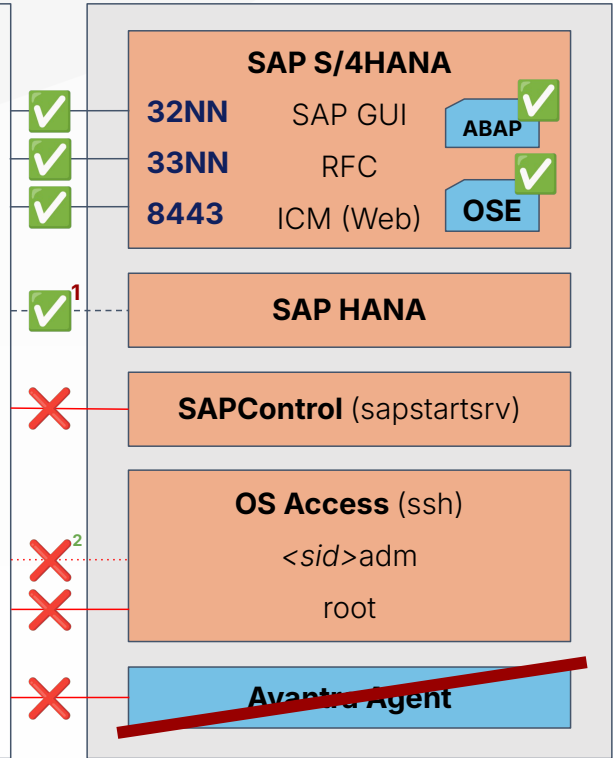
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Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
323		SAP Security Management				
324	BASIC_1.2.22	Define and implement security concept for application	Excluded Tasks	Customer may engage other SAP services to define and implement security concept for application.	n/a	n/a
325	BASIC_1.2.23	Define and implement infrastructure security concept	Standard Services		n/a	n/a
326	BASIC_1.2.19	Customer specific Security Audit Log analysis	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Audit Readiness	S4
327	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	Standard Services	Security notes for installed systems can be evaluated and analyzed to identify critical notes relevant for the ABAP-stack. This task is automatically delivered if Customer has relevant CAS Package(s). Customers without relevant CAS Package(s) can check security notes on SAP for Me (formerly known as the ONE Support Launchpad) and create a Service Request using BASIC_1.2.27 to implement security note(s) that are not application related.	n/a	n/a
328	BASIC_1.2.27	Implement SAP Security Notes - SAP Basis / ABAP related	Standard Services	Implement SAP Security Notes for SAP Basis without manual activities - This task is automatically delivered if Customer has relevant CAS Package(s). Customers without relevant CAS Package(s) can check security notes on SAP for Me (formerly known as the ONE Support Launchpad) and create a Service Request to implement note(s).	n/a	n/a
329	BASIC_1.2.28	Implement relevant SAP Security Notes - Application related (ABAP and JAVA stack only)	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Relevant SAP Security Notes with and without manual activities will be analyzed and implemented in DEV systems. Perform transport of implemented Notes to QAS and PROD systems (for ABAP stack only). Analyze relevant Security Notes for Java and create service request on behalf of Customer to initiate implementation of required Java components. Testing of implemented Notes is Customer's responsibility.	Application Security Updates	S1
330	BASIC_1.2.18	Administer customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, source data and passwords)	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
331	BASIC_1.2.15	Maintain user profiles, roles, authorizations, source data and passwords in client 000	Standard Services		n/a	n/a
332	BASIC_1.2.16	Provide access to client 000 for customer	Standard Services	Restricted, predefined profile only; limited set of users provided; service provided on request only.	n/a	n/a
333	BASIC_1.2.25	Design / Architecture of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	n/a	n/a
334	BASIC_1.2.24	Implementation of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	n/a	n/a
335	BASIC_1.2.21	Provide audit log information to customers	Standard Services	By request only to support incident investigations, but not on a regular basis e.g. to monitor administrative activities. Format, content and procedure used will be determined by SAP and by general security and data protection policies.	n/a	n/a
336	BASIC_1.2.26_AE	Update Global Change parameters (SE06) and default system settings (SCC4)	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
337	BASIC_1.2.30	Security Risk Check	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Provides a detailed profile of the Customer's system landscape related to security risks and initiate remediation to address areas of high risk.	Security Risk Check	S6
338	BASIC_1.2.31	Security for Interface	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Provides guidance for secure access to remote function call (RFC) modules by implementing a secure framework for RFC modules and restricting access to needed modules only.	Security for Interface	S7
339	BASIC_1.2.32	Application Security Monitoring	SAP Cloud Application Services (“CAS”) available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Monitor Customer's applications related to security statuses. Report Security KPIs and remediation activities.	Application Security Monitoring	S8
340		SAP Infrastructure and Application Logging service (LogServ)				
341	BASIC_1.2.33	Enable SAP Infrastructure and Application Logging service (LogServ) for systems within SAP ECS	Optional Services	SAP ECS systems only. The SAP Infrastructure and Application Logging service (LogServ) allows for centralization, real-time collection, retention, and recovery of logs for systems, applications and other services.	n/a	n/a
342	BASIC_1.2.34	LogServ activities on Customer SIEM	Excluded Tasks	Service does not include the following activities in Customer SIEM: validation and confirmation of receiving logs; creating correlation rules; or monitoring of offenses.	n/a	n/a

On-prem Hyperscale Cloud



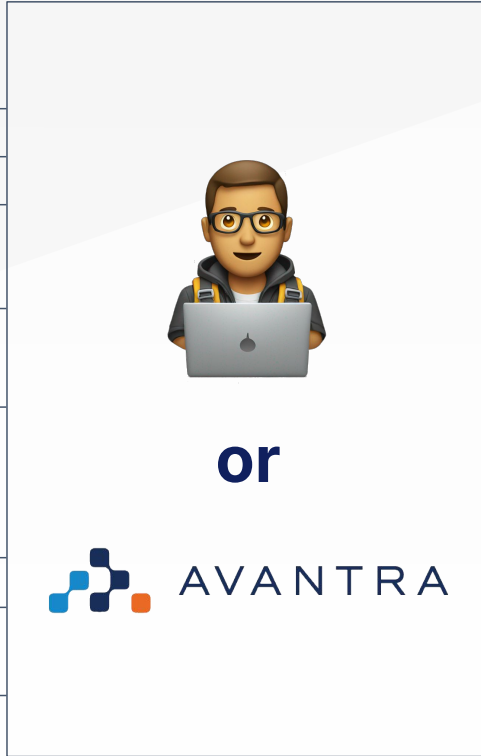
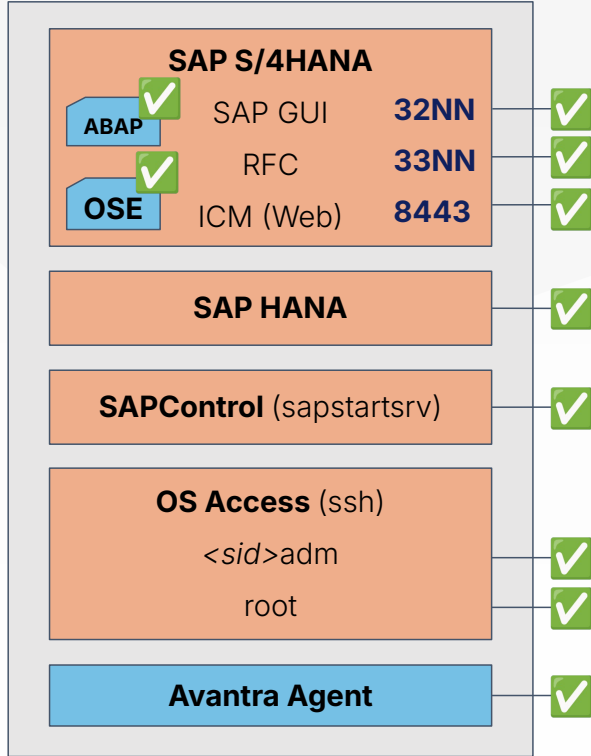
S/4HANA Cloud Private Edition



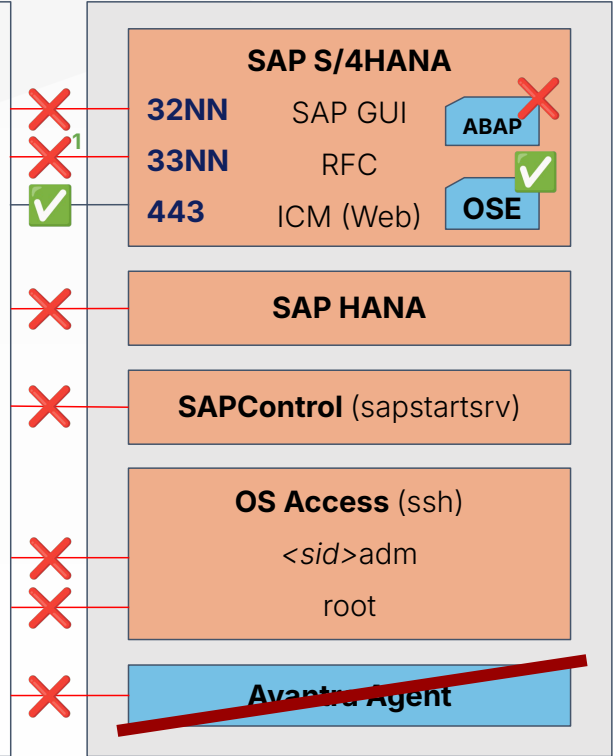
¹ with restrictions on roles

² innocuous commands can be executed from application server

On-prem Hyperscale Cloud



S/4HANA Cloud Public Edition



What is the most common observability request for RISE with SAP?

Server metrics

CPU

RAM

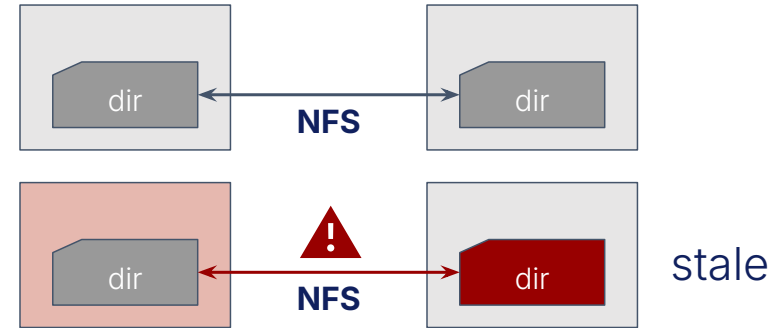
Disk

Filesystems

Paging

RISE with SAP requirements

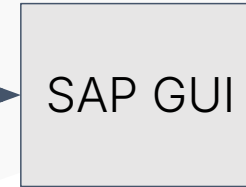
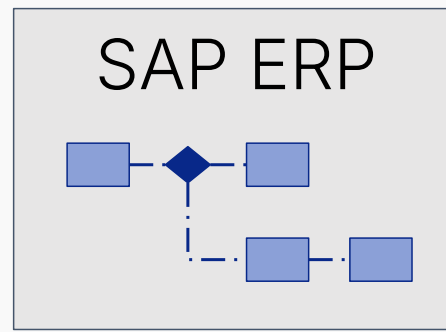
Monitor for stale mount points



RISE with SAP requirements

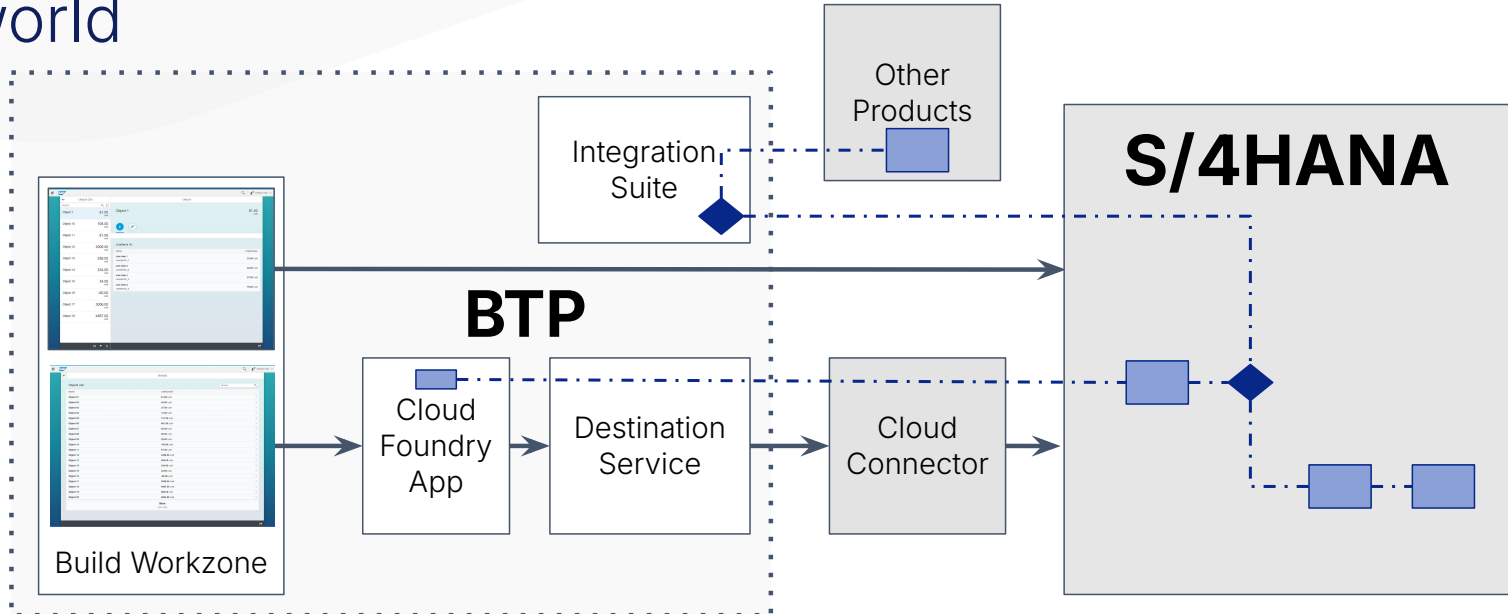
Is any table partition in SAP HANA
approaching 2 billion rows?

Table row count			
All tables/partitions rows count below warning threshold (1717986917 rows (80.00%)).			
Host	Table name	Partition ID	Total count
sap-1	QASE	0	1,143,550,114
sap-1	CDPOS	0	430,092,236
sap-1	Z	0	306,729,269
sap-1	DMUTMX_META	0	305,147,586
sap-1	ACDOCA	0	220,063,829
sap-1	WBCROSSGT	0	208,774,260
sap-1	ZI	0	192,824,870
sap-1	FAGLFLEXA	0	159,715,158
sap-1	D010TAB	0	155,280,666
sap-1	/1CADMC/00001476	0	144,826,766

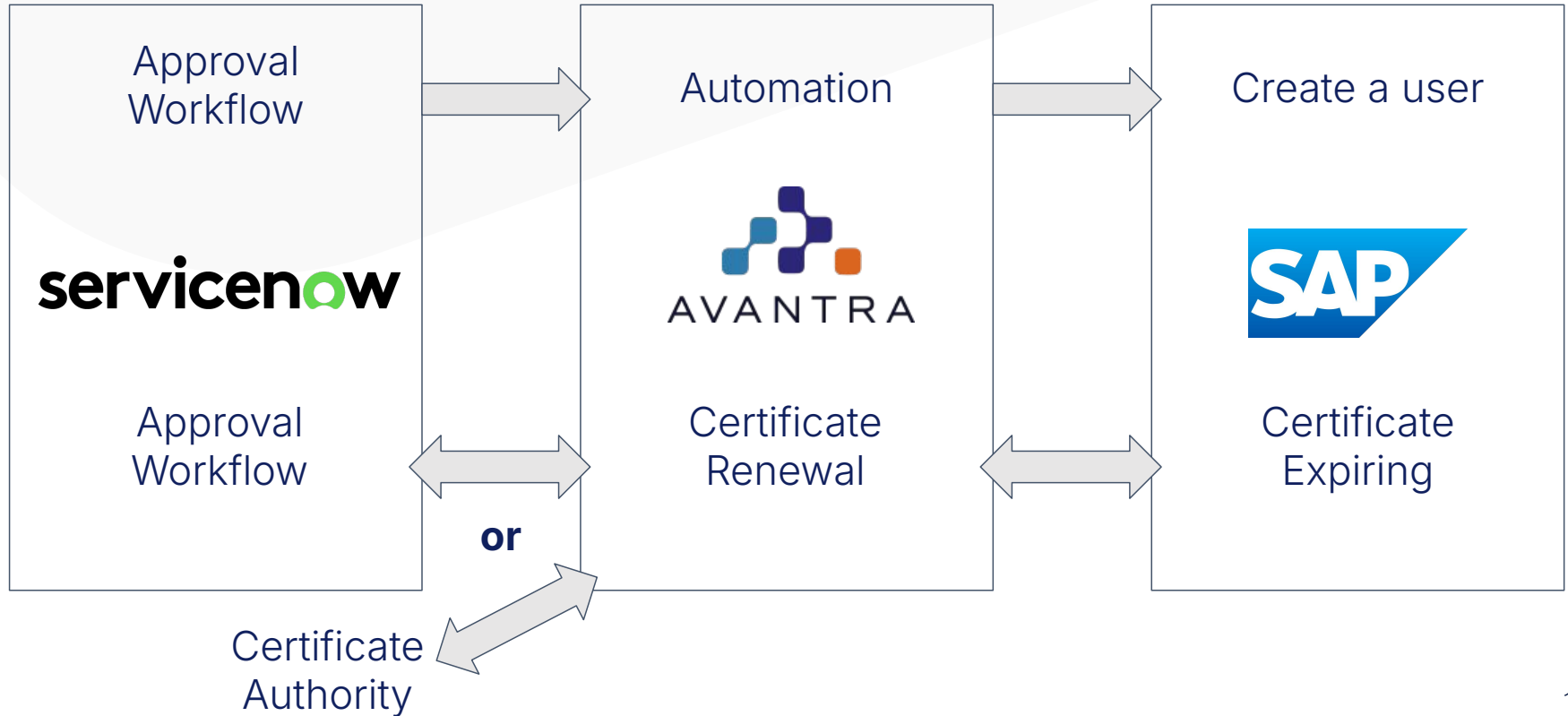


Old world

New world



ITSM Integrations with SAP



How do your team stay skilled?

HDB_Alerts on AVA_S4D is CRITICAL for 2h 47m

 Open Avantra AIR Report

Last checked 3m 48s ago (cycle time is 5m)

CRITICAL

Total number of alerts reported in last 60 minutes: 34
Errors: 0, High Prio: 33, Medium Prio: 0, Low Prio: 1



Timestamp	Alert ID	Excluded	Priority	Description
2025-12-01 08:42:40.015	109		High	Backup history broken on volume 5 (gdevrl-s4d:31049)
2025-12-01 08:42:40.015	109		High	Backup history broken on volume 4 (gdevrl-s4d:31046)
2025-12-01 08:42:40.015	109		High	Backup history broken on volume 2 (gdevrl-s4d:31043)
2025-12-01 08:42:40.015	109		High	Backup history broken on volume 3 (gdevrl-s4d:31040)
2025-12-01 08:42:39.874	38		High	The last log backup for volume 3 (indexserver on gdevrl-s4d:31040) failed.
2025-12-01 08:42:39.874	38		High	The last log backup for volume 5 (docstore on gdevrl-s4d:31049) failed.

Potential Next Steps for Investigation or Resolution

This situation requires immediate attention as the recoverability of your HANA database is severely at risk.

A. Immediate Actions (Highest Priority - Backup Related):

1. Verify Backup Configuration:

- Log into SAP HANA Studio or Cockpit.
- Check the backup.log and backint.log (if using a third-party backup tool like Commvault, NetBackup, etc.) for detailed error messages regarding the failed data and log backups.
- Review the backup setup (destination, retention, schedule) in the HANA Backup Catalog.

2. Check Backup Destination:

- Verify the backup target location (filesystem path or network share) has sufficient free disk space.
- Check network connectivity and permissions for the HANA system to write to the backup destination.
- If using a third-party backup solution (Backupint), verify the backup agent/server is running and accessible.

3. Investigate HANA Services/Volumes:

- The alerts point to specific volumes (2, 3, 4, 5) and services (indexserver, docstore, dpserver, xsengine). Check the status of these services within HANA.
- Review HANA trace files (e.g., indexserver trace, logbackup trace) for more specific errors related to these services failing their backups.

4. Manual Backup Attempt:

- Attempt to trigger a manual data backup and a manual log backup to observe the exact failure point and error messages interactively.

5. Filesystem Issues:

- Check the filesystem where HANA log volumes reside for any issues like full disks, I/O errors, or corruption.

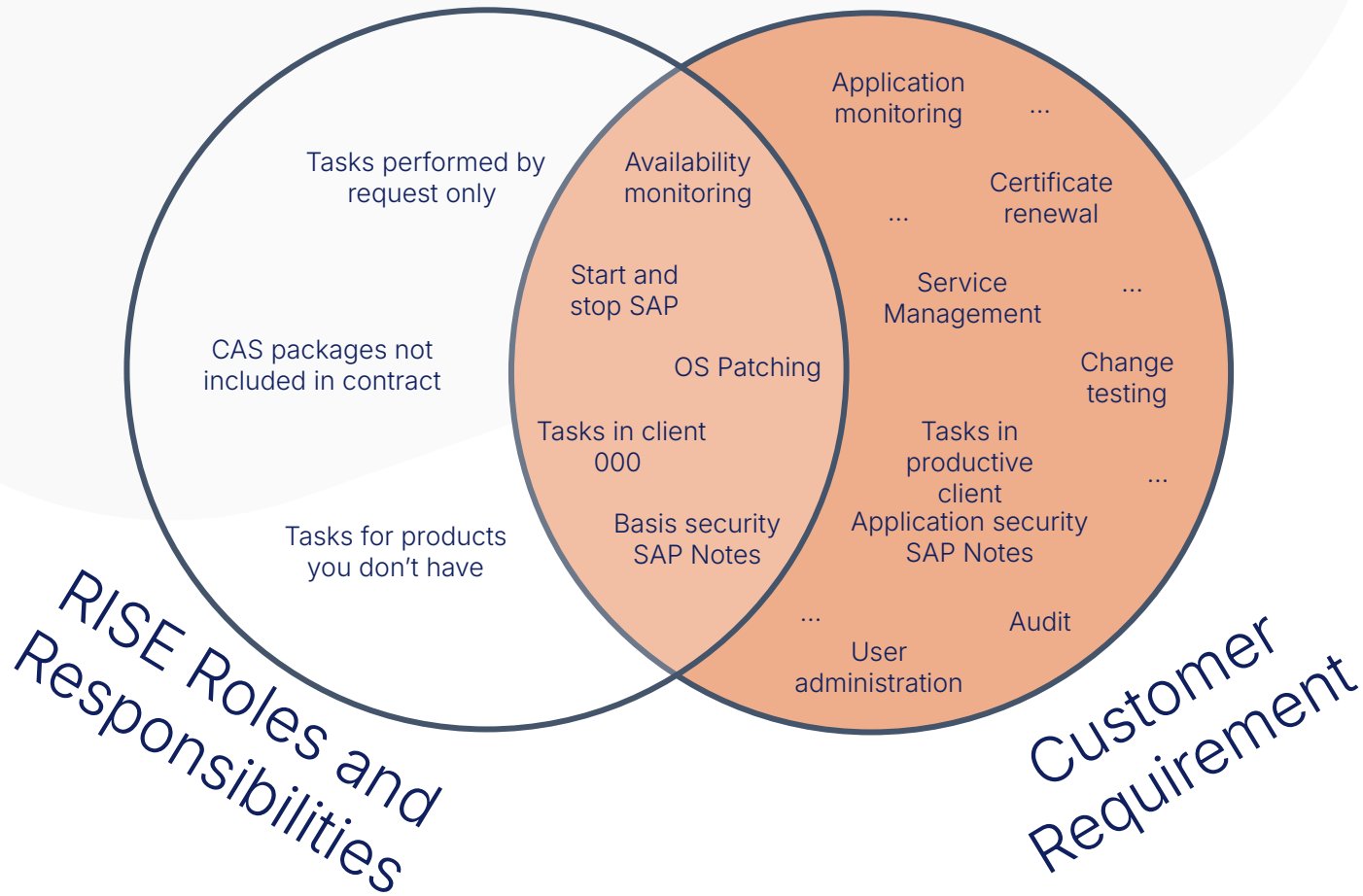
Generate PDF

Observability and Automation

A fundamental requirement for modern SAP operations

Getting more critical as complexity grows

Essential to avoid business-impacting downtime



Helping SAP customers run their business
at their best for 20+ years

Now you're *really* running.™

Deloitte.

 nagarro

coop

Gordon
FOOD SERVICE

STIHL®

SEW
EURODRIVE

GRACE

 WÜRTH

DNOW

TOPGOLF
CALLAWAY
BRANDS



and more...



SAP® Certified
Integration with SAP NetWeaver®

SAP® Certified
Integration with SAP® S/4HANA



 Google Cloud

 Azure

servicenow.