

SAP Journey to Open Hybrid Cloud with Red Hat and AWS

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Las Vegas

2024

SAPinsider

Agenda

SAP journey to cloud via 3 example scenarios:

- Scenario 1: on-premise
- Scenario 2: hybrid = on-premise + IaaS + PaaS
- Scenario 3: SaaS (Rise)



AWS and Red Hat Partnership Helps Customers Meet Digital Needs

Red Hat and AWS are industry leaders with extensive experience in **IT infrastructure, hybrid cloud, digital transformation, and open source innovation.**

Through **collaborative engineering** activities, they offer integrated, certified solutions to meet modern, digital business needs.

Consistent, enterprise-grade platforms with advanced security and management features help organizations build IT infrastructure that supports their business efficiently and cost-effectively and adapts on their schedule.

“Given that Red Hat is the world’s leading provider of open-source solutions, our enterprise customers have been passionate about seamlessly running Red Hat Enterprise Linux and various other Red Hat solutions on AWS.”

Andy Jassy | CEO, Amazon

**Red Hat and AWS
by the numbers**

Partners since
2008

>60,000
of AWS customers
consume Red Hat
products and solutions

Three Solution Areas to Support SAP workloads

The Best Hybrid Platform for
all SAP workloads

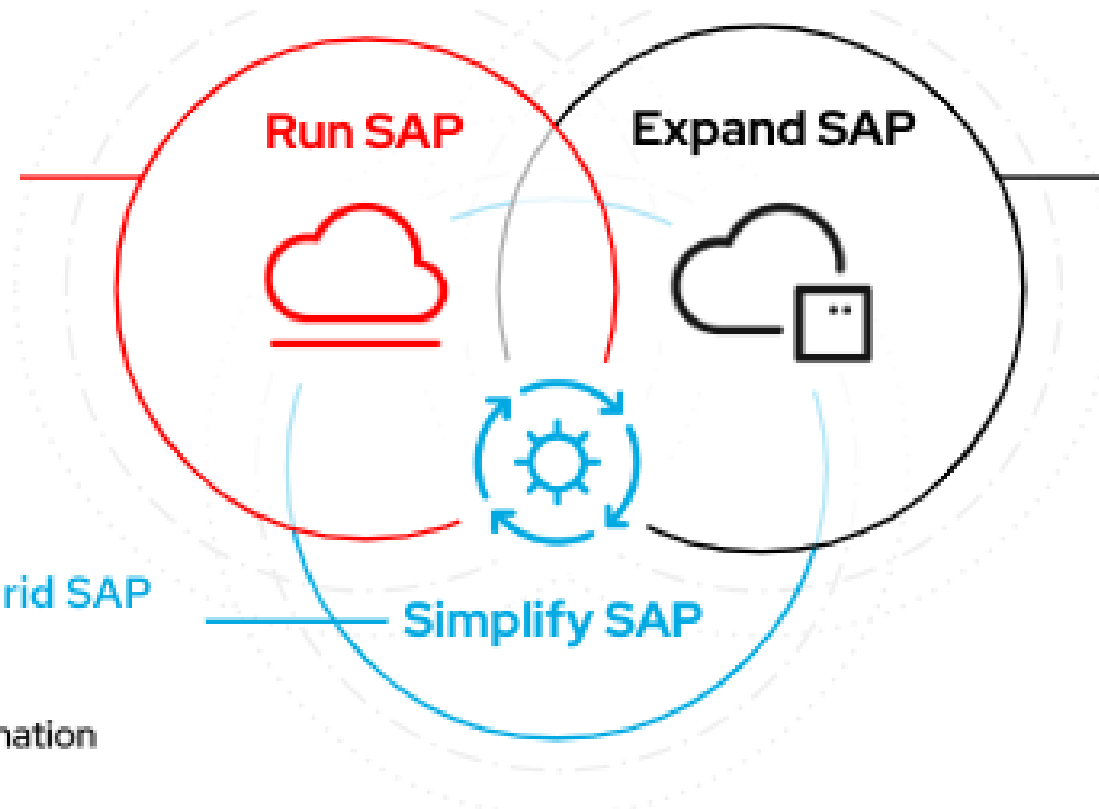


Red Hat
Enterprise Linux

Automate the Hybrid SAP
Enterprise



Red Hat
Ansible Automation
Platform



Complement, Extend and
Surround SAP with modern
Cloud Native Applications



Red Hat
OpenShift



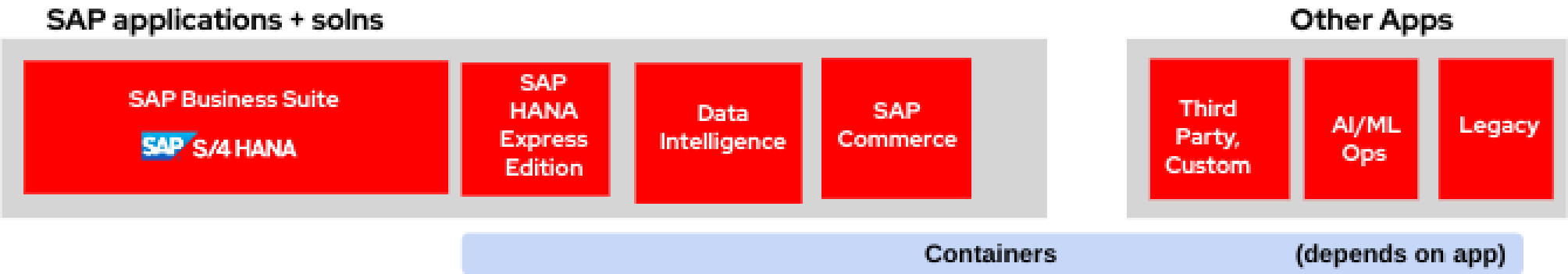
Red Hat
Application
Foundations

Scenario 1 Example: On-Premise



Cloud

On-premise



Red Hat Enterprise Linux

Red Hat OpenShift

Red Hat Application Foundations

Red Hat Enterprise Linux (RHEL) for SAP



High availability
failover
orchestration



Up to 4 years of
minor release
updates³



SAP-specific
packages and
content



Red Hat
Insights

Predictive risk
analytics and
guidance



Red Hat
Satellite

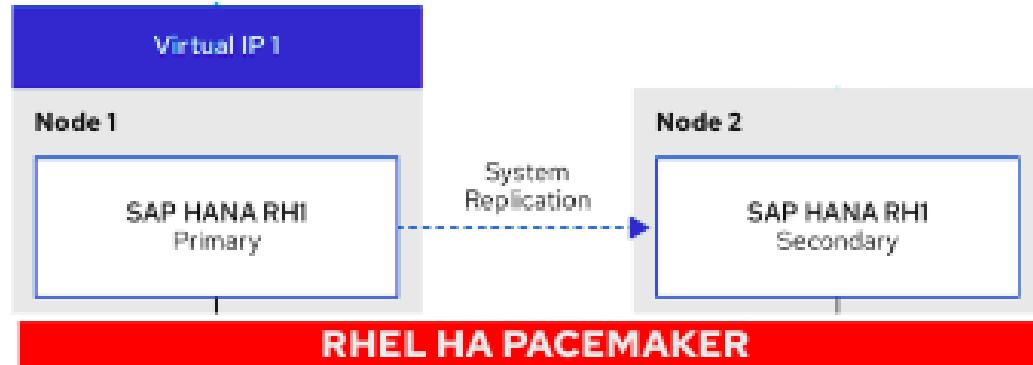
Infrastructure
management
tools

Latest RHEL versions supported for SAP HANA: 8.4, 8.6, 8.8, 9.0, 9.2

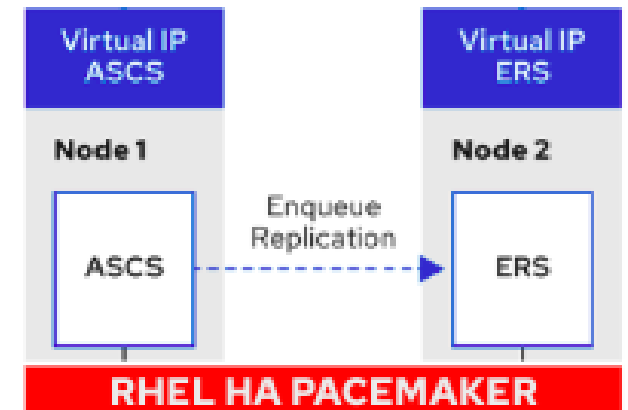
Purchase directly from AWS or from Red Hat

Some RHEL High Availability Scenarios for SAP

HANA
Scale-up
System
Replication



Central
Services +
Replicated
Enqueue



Other scenarios supported: multi-target; multi-tier; HANA scale-out; etc . See [product docs](#)

Proactive Monitoring & Remediation of RHEL for SAP

Red Hat Insights identify & remediate threats to security, performance, availability and stability



General information

Advisor

Vulnerability

Compliance

Patch

Resource Optimization

>

1 selected

Description

Filter by description

Q

Remediate

Description

Modified

>

☐

SAP HANA is not supported when running on an uncertified AWS EC2 instance

Incident

4 years ago

>

☐

Red Hat discontinues technical support services for Ansible Engine as RHEL 8.6 and RHEL 9.0 have introduced Ansible Core

1 year ago

>

☒

The performance of SAP components related to VMC (Virtual Machine Container) degrades when the size of tmpfs for /dev/shm is insufficient for SAP.

3 years ago

>

☐

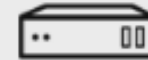
SAP applications will not work well when /etc/hosts is set incorrectly

4 years ago

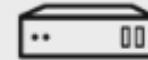
Red Hat Satellite is a scalable platform to manage patching, provisioning, and subscription management of your Red Hat infrastructure.



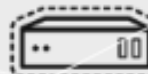
Satellite



Host A



Host B



Host C



Host D

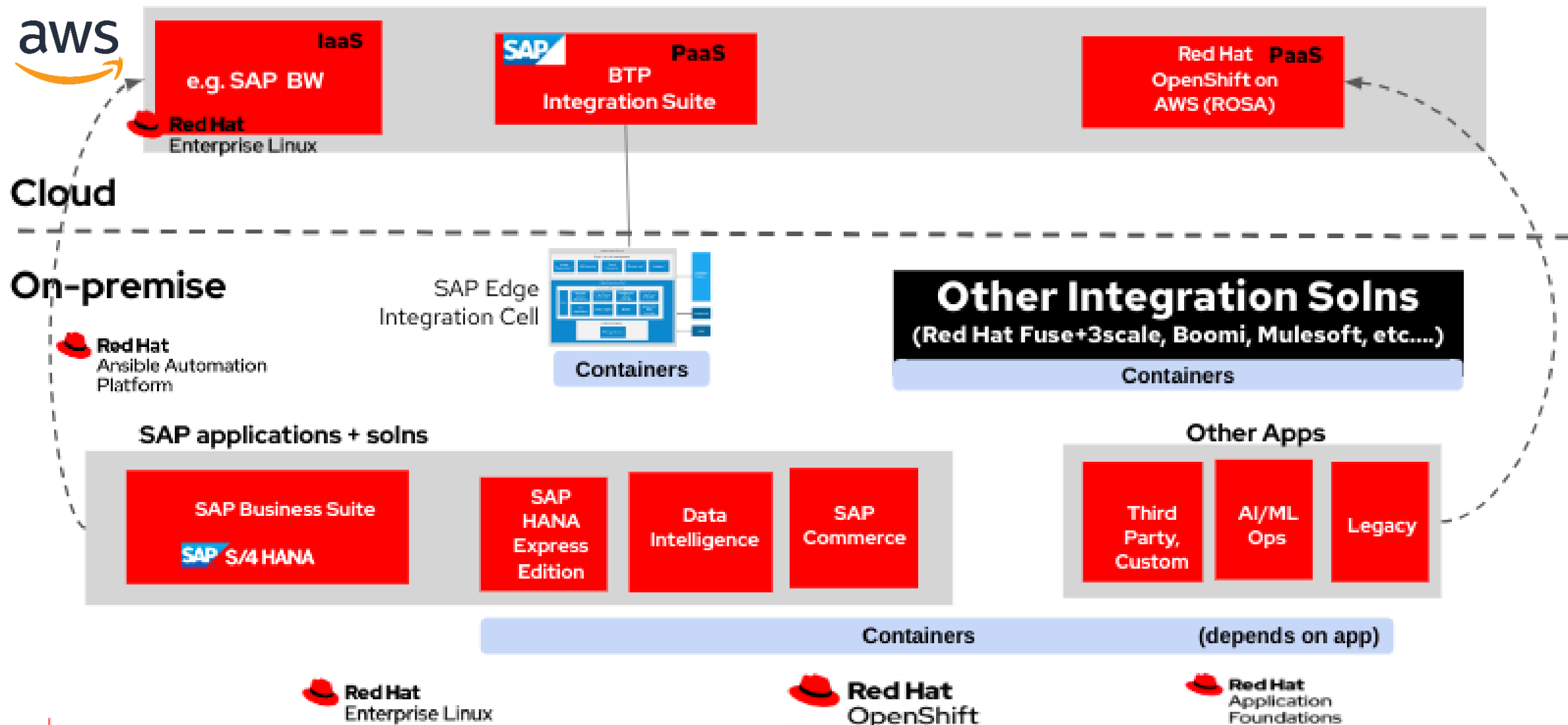
>600 Rules including many specific to SAP system configuration requirements and best practices, you can identify vulnerabilities before they impact critical operations.

Accelerate IT automation with Red Hat Ansible Automation Platform

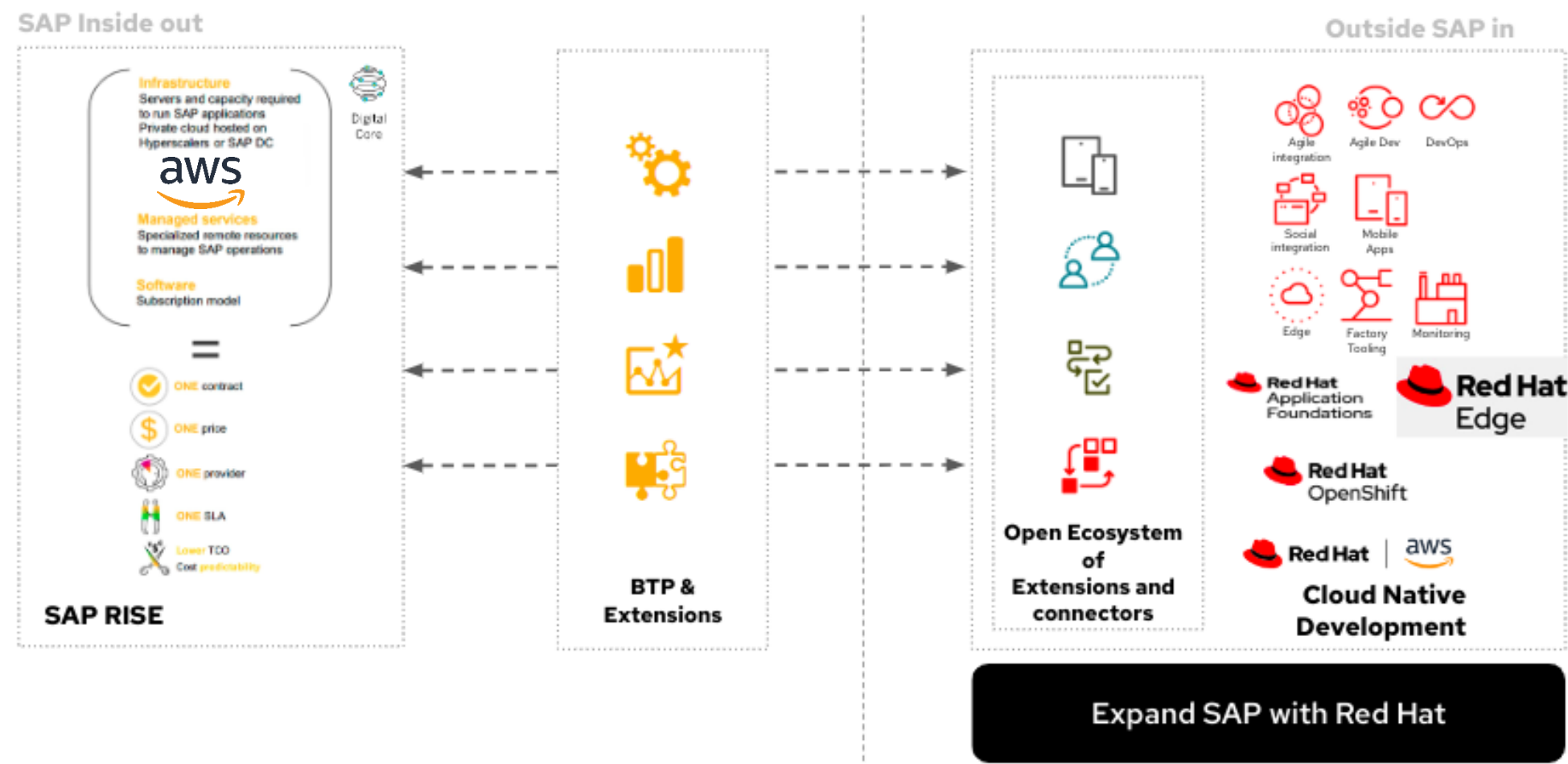


140+ Certified Collections from Technology Partners Including SAP & AWS
Supported pre-built automation code: Playbooks/Roles (YAML syntax)

Scenario 2 Example Hybrid: On-Premise + IaaS + PaaS



Scenario 3 Example SaaS



Thousands of SAP customers trust AWS



The benefits of running on AWS

Reliability

58%

less unplanned downtime
for S/4HANA on AWS
vs. on-premises¹

Performance

35%

better price performance for
SAP's analytic workloads with
Graviton-based processors²

Cost Savings

503%

3-year ROI moving from legacy
ERP to S/4HANA on AWS¹

Security

45%

reduction in security incidents
for enterprise applications
vs on-premises³

Sustainability

88%

lower carbon footprint
vs on-premises data centers⁴

Certainty

6x

ISG SAP HANA Infrastructure
Services Provider Lens Leader

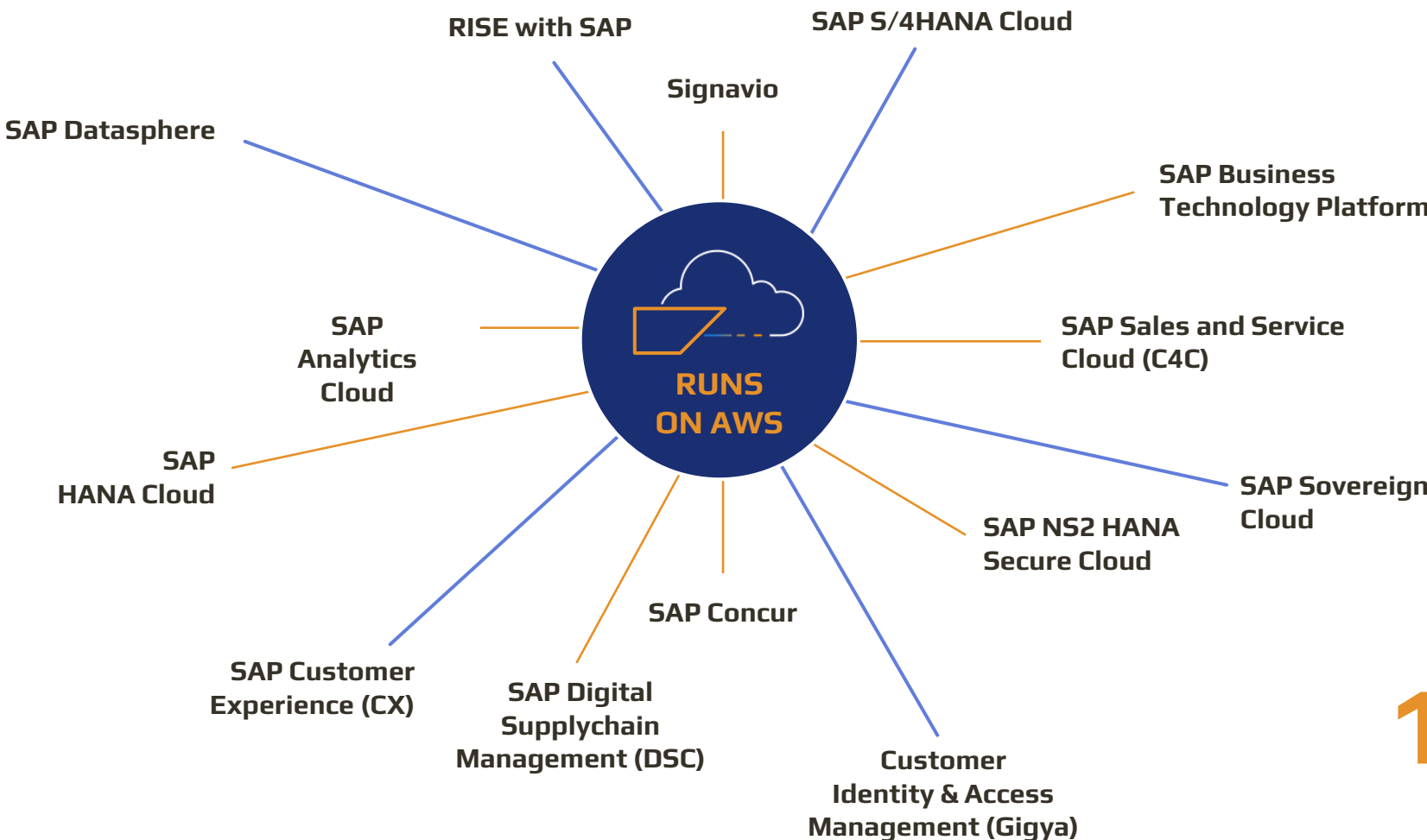
1. The Business Value of SAP S/4HANA on Amazon Web Services, IDC, 2023 <https://aws.amazon.com/sustainability/resources/>

2. https://www.youtube.com/watch?v=9W0i_k5afg

3. The Business Value of Migration to Amazon Web Services, The Hackett Group, 2022

SAP has trusted AWS for over 15 years

AWS HAS THE LONGEST TRACK RECORD PARTNERING WITH SAP IN THE CLOUD



81 BTP services run on AWS, the full extent available on CSPs¹

19 BTP services powered only by AWS¹

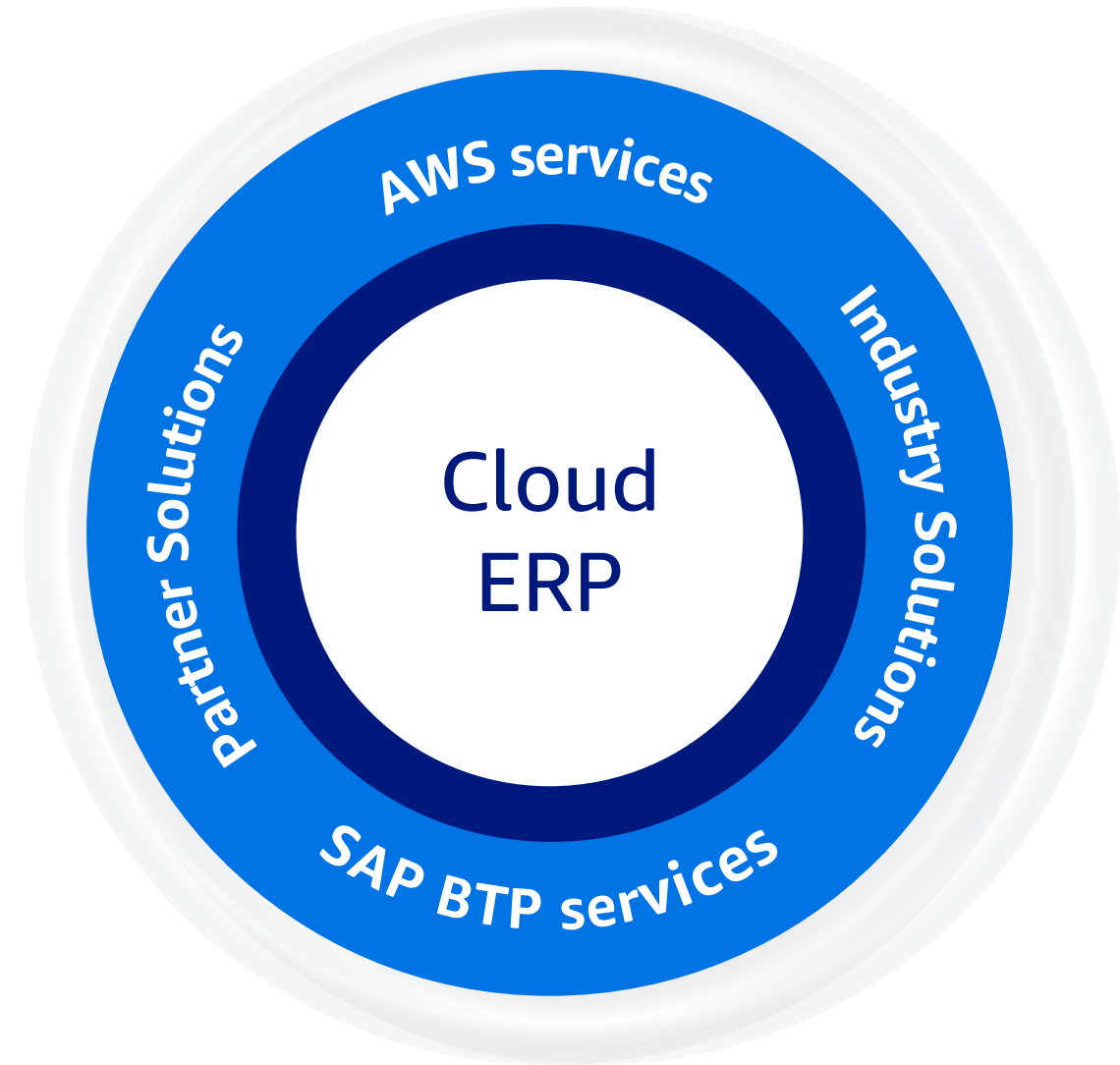
9 Publicly available regions for BTP services, more than any other CSP¹

100% Signavio services run on AWS¹

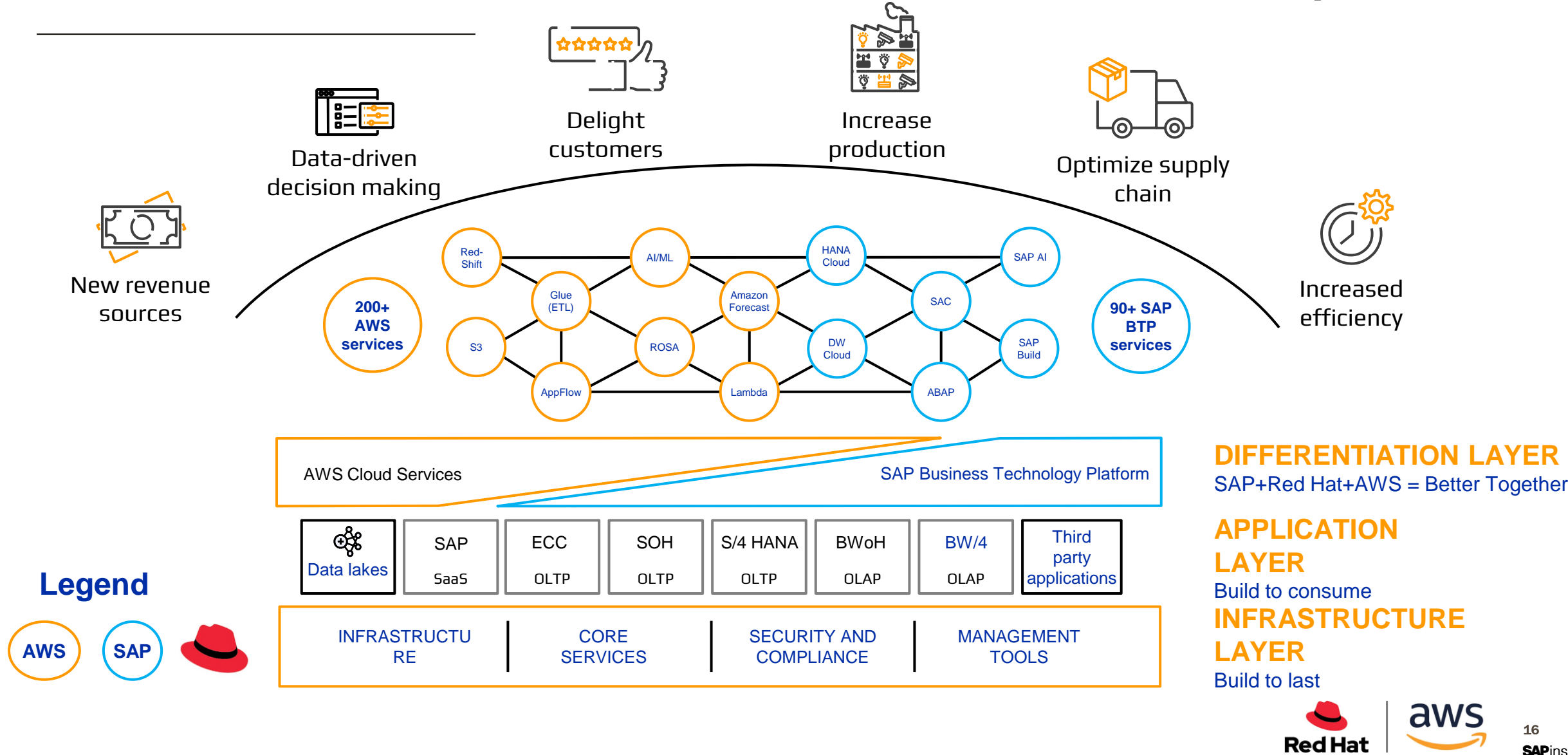
Proven architecture

Innovate faster with a clean core

Future-proof your business



Clean Core + SAP BTP + Red Hat + AWS = Vast Innovation Options



Reimagine your business processes with AWS and SAP BTP

81

SAP BTP services run on AWS, more than any CSP¹

200+

AWS services in analytics, IoT, AI/ML, and more

Document processing

with Amazon Textract and SAP BTP Adobe Form Print

Custom app development

with SAP Build Apps running on AWS

Forecasting

with Amazon SageMaker and SAP Datasphere

Quality management

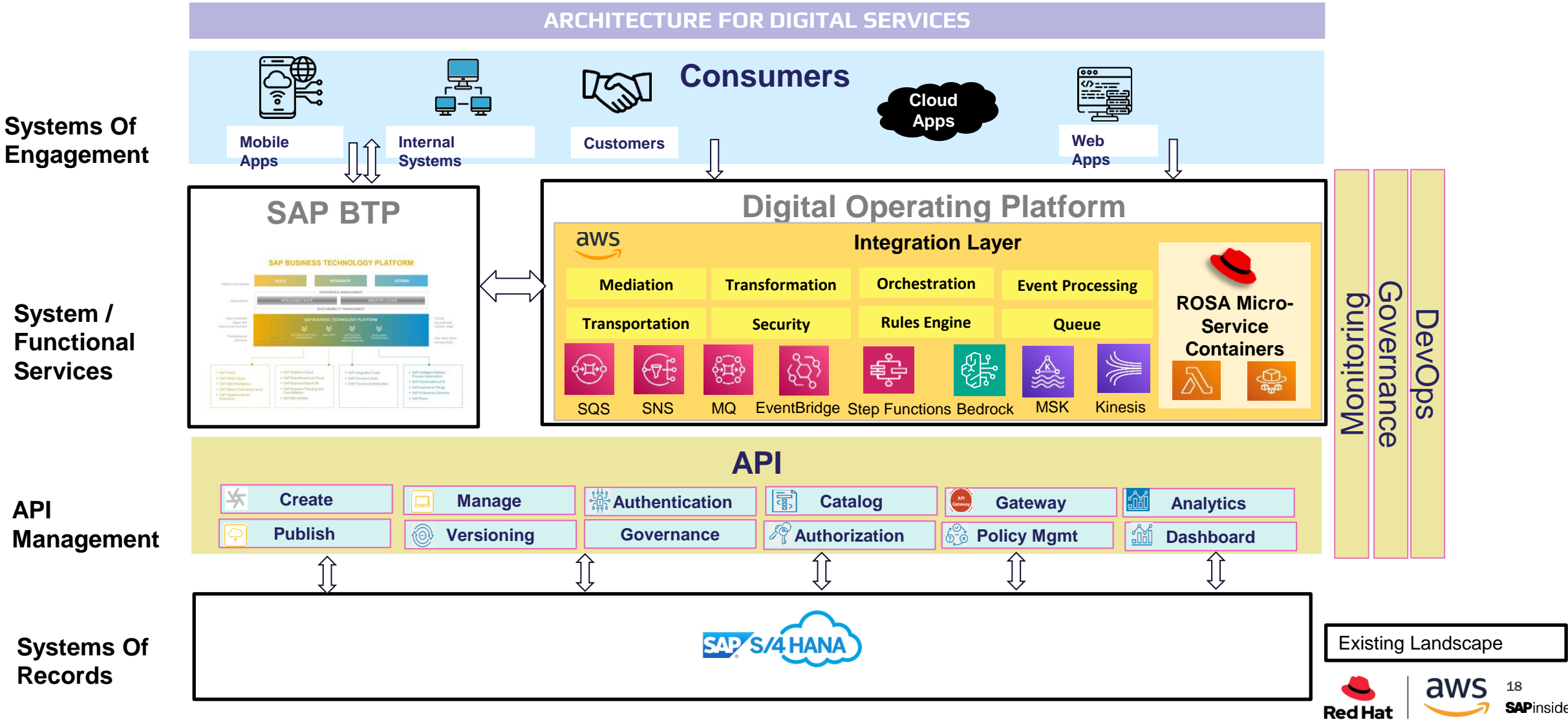
with Amazon Lookout for Vision and SAP Quality Management

Predictive maintenance

with Amazon Monitron and SAP BTP

1. As of November 2023: <https://discovery-center.cloud.sap/viewServices>

Reference Architecture for Digital Services



The AWS innovation advantage

**Accessible services from
your familiar SAP
environment**

200+

AWS services accessible
via AWS SDK for SAP ABAP

**Broadest set of
cloud services**

60%

more services
than any CSP

**Ready-to-deploy
solutions**

1400+

vetted solutions in
AWS Solutions Library

**Enterprise-grade
generative AI**

>10K

Amazon Bedrock
Customers¹

**Unlocking insights with
data and analytics**

>700K

data lakes run
on AWS

**Unparalleled support
for SAP BTP services**

81

SAP BTP services
run on AWS²

1. As of October 2023

2. As of February 2024: <https://discovery-center.cloud.sap/viewServices>

Thank you! Any Questions?

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Please remember to
complete your session
evaluation.

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growing SAP
membership group
with more than
800,000 members
worldwide.**
