

The Under Armour transformation: Secure and scale your business with AWS for SAP

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Las Vegas

2024

SAPinsider

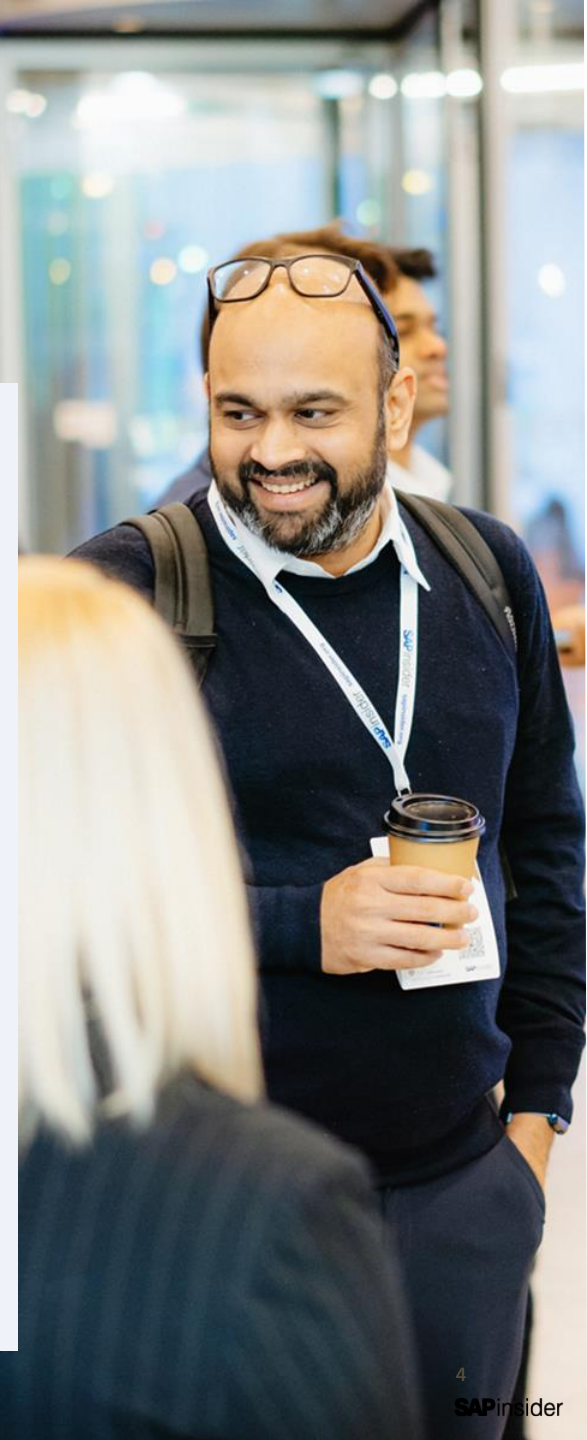


In This Session

- Discover how Under Armour modernized and secured their extensive SAP environment in the cloud while minimizing disruption to their rapidly growing business.
- Dive deep into Under Armour's uncompromising approach to securing their SAP environment in the cloud, leveraging and proven cybersecurity best practices and access to 143 security protocols from AWS.
- Get applicable lessons to speed your migration, secure your SAP environment, and scale your business today.

What We'll Cover

- About Under Armour
- Under Armour's journey to SAP in the cloud
- Five security principles for securing SAP in the cloud
- Innovating faster with AWS and SAP
- Benefits and lessons learned
- Wrap-Up



About Under Armour

Under Armour's vision is to inspire
you with
performance solutions you never
knew you
needed and can't imagine living
without



About Under Armour

About the company:

- \$5.6B revenue in FY23
- 17,500 employees
- Founded in 1996
- Focus on athletes, equality, sustainability, and teamwork
- SAP on AWS supports processes across design, merchandising, planning, manufacturing, supply chain, and sales distribution channels.
- Running SAP on AWS since 2021



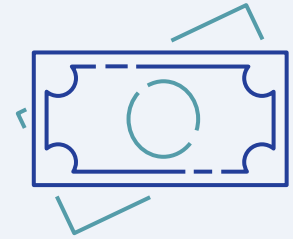
Under Armour's SAP landscape and goals



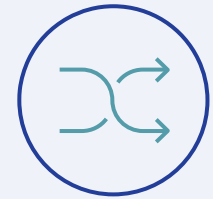
**Maximizing
availability and
resilience**



**Bolstering
security**



**Moving from
capex to opex**



**Future-proofing
SAP landscape**

Under Armour's SAP modernization journey



Migrate



Secure



Innovate

Under Armour's move to SAP in the cloud



Thousands of SAP customers trust AWS

HEALTHCARE & LIFE SCIENCES	ENERGY & NATURAL RESOURCES	RETAIL & CONSUMER GOODS	MEDIA & ENTERTAINMENT	PUBLIC SECTOR & DEFENSE
        	         	           	     	     
AUTOMOTIVE & TRANSPORTATION	MANUFACTURING & INDUSTRIAL	AGRICULTURE, CPG, & FOOD/BEV	PROFESSIONAL/ FINANCIAL SERVICES	TECHNOLOGY
         	         	            	         	         

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

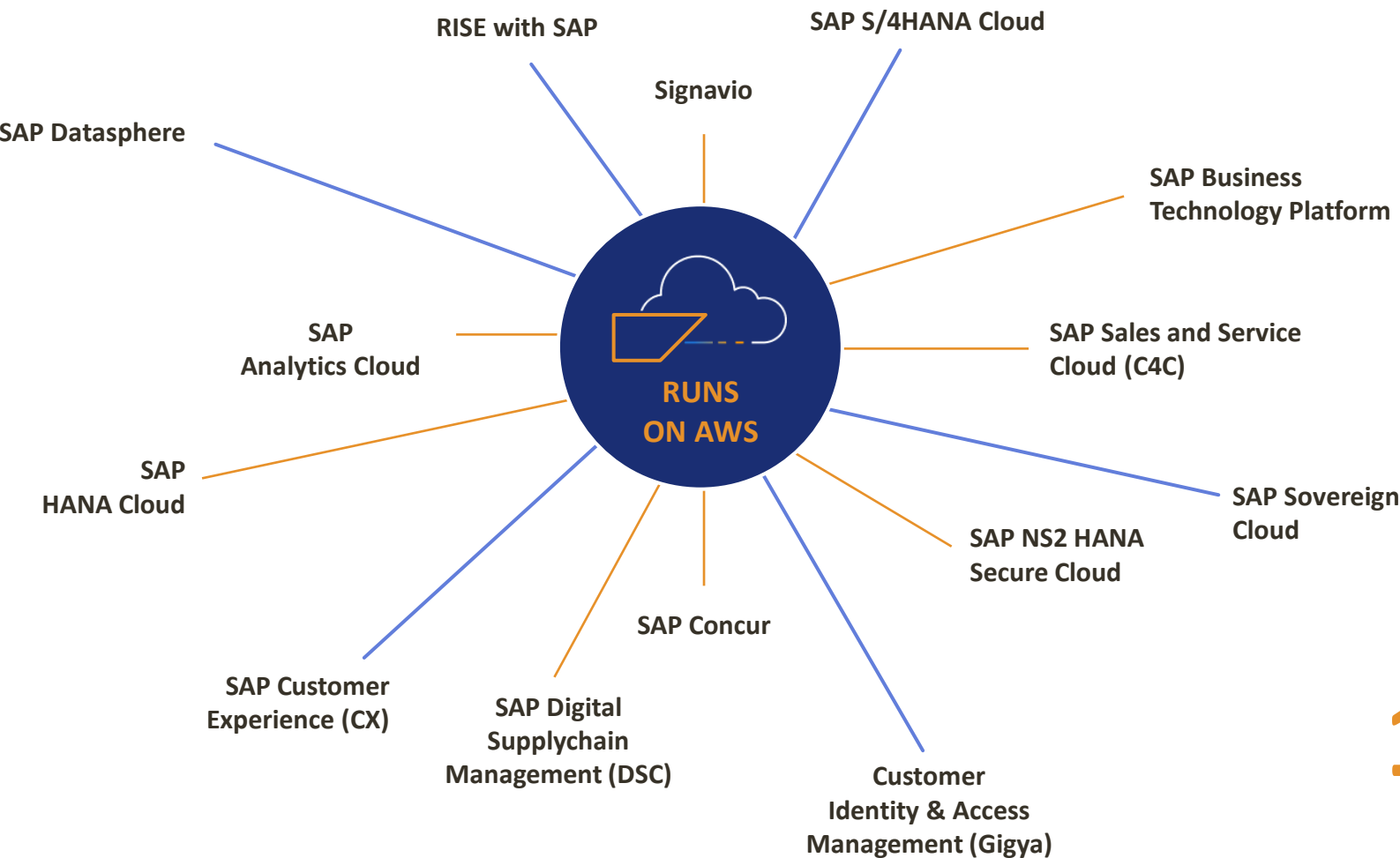
2. https://www.youtube.com/watch?v=9W0j__k5afg

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

4. <https://aws.amazon.com/sustainability/resources/>

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

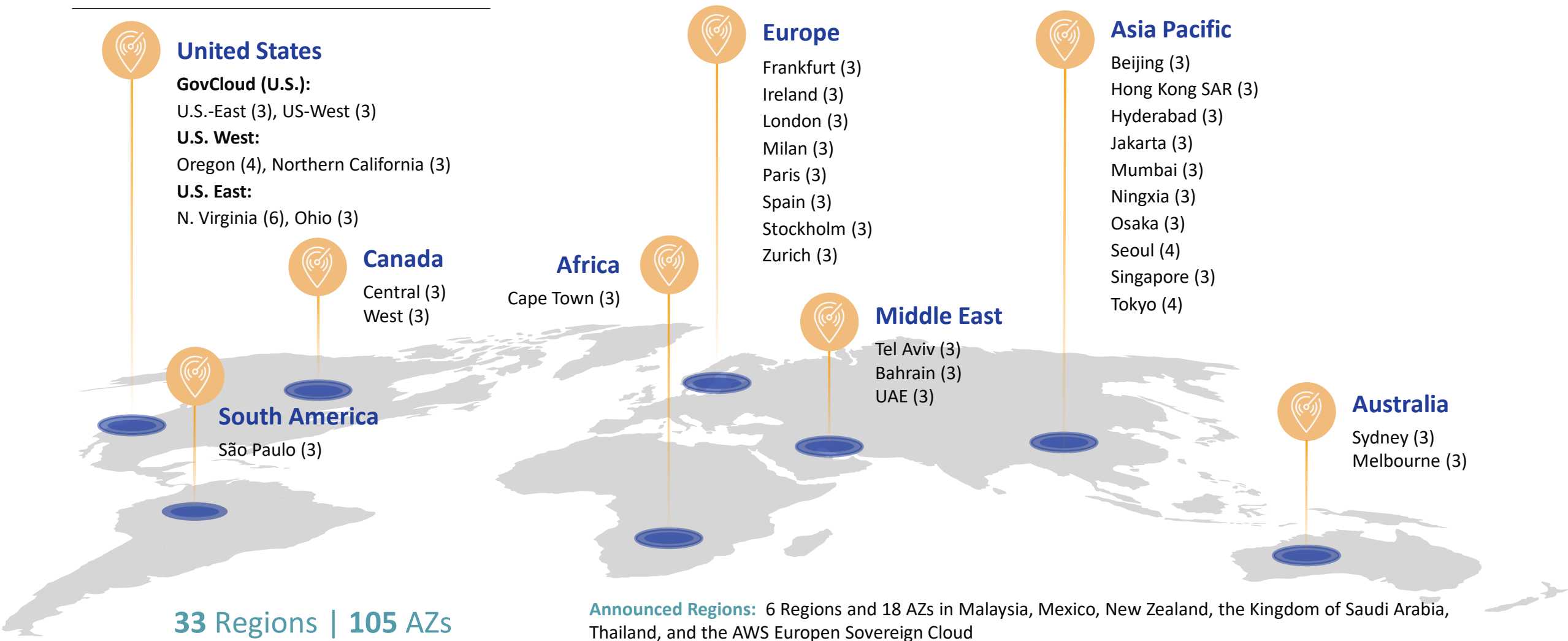
9

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

100%

Signavio services run on AWS¹

AWS Global infrastructure



Source: As of March 2024 <https://aws.amazon.com/about-aws/global-infrastructure/>

ISG Provider Lens

“AWS offers **the highest configurations of virtual machines (VM) and cloud service options** for hosting SAP workloads.”

“AWS also has a rigorous program for its SAP partners that reflects AWS' commitment to **delivering top-tier solutions and support.**”



Per ISG 2023 Provider Lens Quadrant Report for SAP HANA Infrastructure Services

Under Armour's SAP migration initiative

- Under Armour moved to AWS:
 - enterprise resource planning (ERP)
 - supply network collaboration
 - global trade services
 - enterprise reporting (BI, BOBJ)
 - integration (PI/PO, data services)
 - SAP Fiori
 - solution manager workloads
- 6 month project duration
- Partnered with AWS Professional Services
- Security was an integral component



Under Armour's SAP modernization journey

Step 1

- Discovery

Step 3

- Project planning and scope definition
- Assess what is and is not moving
- Align stakeholders
- Network

Step 5

- Testing
- Security

Step 2

- Cloud Provider Assessment
- Partner Assessment

Step 4

- Team upskilling (BASIS and Security in the cloud)

Step 6

- Ongoing Support (Knowledge Transfer, Hypercare)

Maximizing reliability with CloudEndure Disaster Recovery

- Cost-effective business continuity
- Maintain optimum system performance
- Minimize downtime and data loss
- Cross-region disaster recovery solution

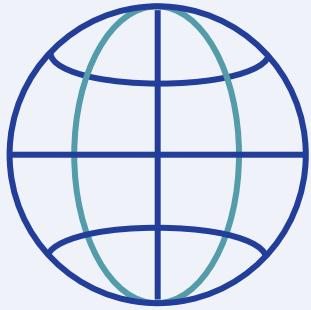
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**Servers replicating from
one AWS Region to
another**

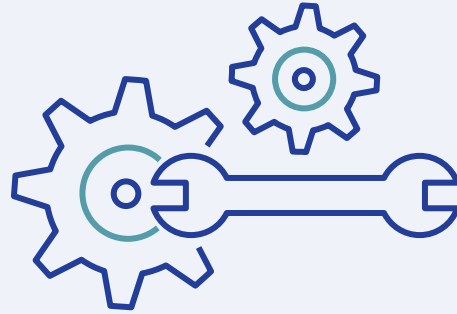
Essential security principles for securing SAP in the cloud



Proven security to accelerate innovation from AWS



The most secure infrastructure

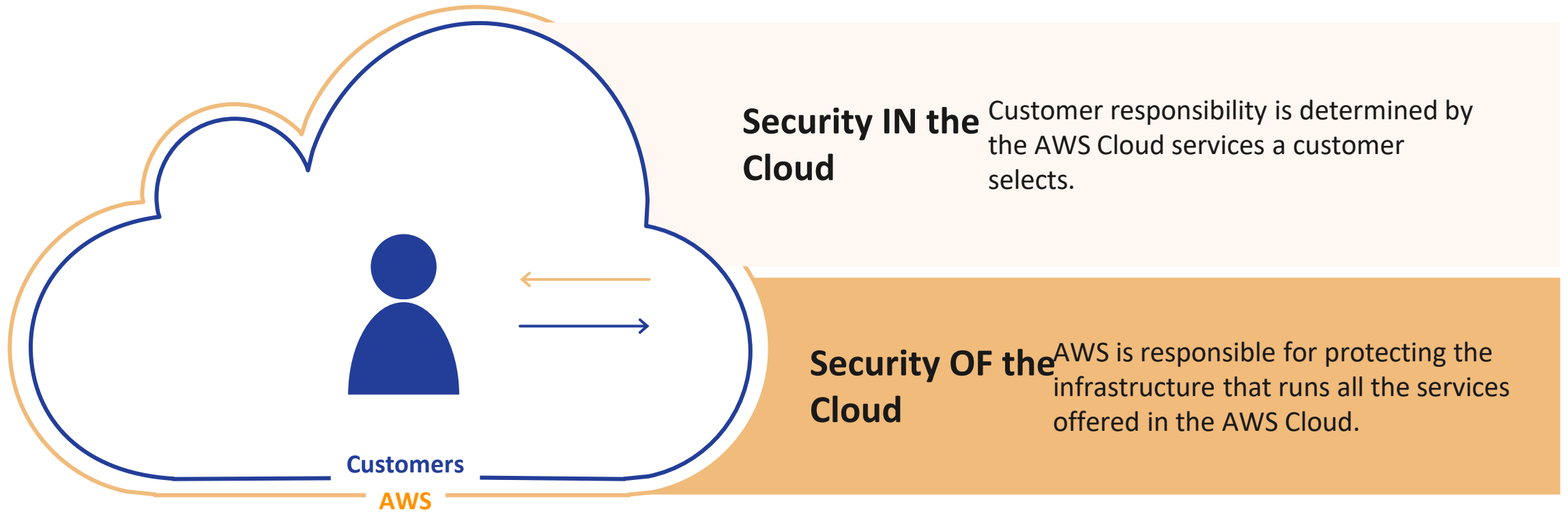


Security automation that drives speed and agility



End-to-end security and guidance

Shared responsibility model



Comprehensive AWS security services



Identity and access management

AWS Identity and Access
Management (IAM)

AWS IAM Identity Center

AWS Organizations

AWS Directory Service

Amazon Cognito

AWS Resource Access
Manager

Amazon Verified
Permissions



Detection and response

AWS Security Hub

Amazon GuardDuty

Amazon Security Lake

Amazon Inspector

Amazon Macie

Amazon Detective

Amazon CloudWatch

AWS Config

AWS CloudTrail



Network and app protection

AWS Firewall
Manager

AWS Network
Firewall

AWS Shield

AWS WAF

Amazon VPC

AWS PrivateLink

AWS Systems
Manager

AWS Verified
Access



Data protection

Amazon Macie

AWS Key
Management
Service (KMS)

AWS CloudHSM

AWS Certificate
Manager

AWS Private CA

AWS Secrets Manager

AWS Payment
Cryptography

Server-Side
Encryption



Compliance

AWS Artifact

AWS Audit Manager

Inherit global security and compliance controls on AWS



Principle #1: Adopt a GRC mentality

Aligning IT and business goals, while managing risks and meeting regulations, is possible with a defined Governance, Risk, and Compliance strategy.

Key actions:

- Unify your organization's governance and risk management with its technological innovation and adoption
- Use an enterprise risk management program to predict potential problems and minimize losses
- Take an SAP-based approach (i.e. User Access Review, Segregation of Duties, etc.)



Principle #2: Use benchmarks and tools

Applying and monitoring proven benchmarks across all systems helps build a secure environment.

Key actions:

- Employ Center for Internet Security (CIS) benchmarks, best practices to help security practitioners implement and manage cybersecurity defenses
- Automate AWS security checks and centralize security alerts with AWS Security Hub
- Follow your organization's cloud security policy and standards



Principle #3: Identity is the new perimeter

Controlling access is the first line of defense for any secure system. Utilize IAM, MFA, SSO, and automation to your advantage.

Key actions:

- Minimize privileges using Identity Access Management (IAM) and Role Based Access Control (RBAC)
- Employ Single Sign On (SSO) and Multi-factor Authentication (MFA)
- Use Identity Federation and temporary credentials
- Remember...Identity is New Perimeter!



Principle #4: Establish controls process

Set up and govern a secure, multi-account AWS environment with intentional controls process.

Key actions:

- Employ robust AWS account strategy and management process (e.g. Separate Prod AWS Account vs Non-Prod)
- Use AWS Control Tower and Organizations, implementing Service control policies (SCPs) and other controls to ensure accounts stay within access control guidelines

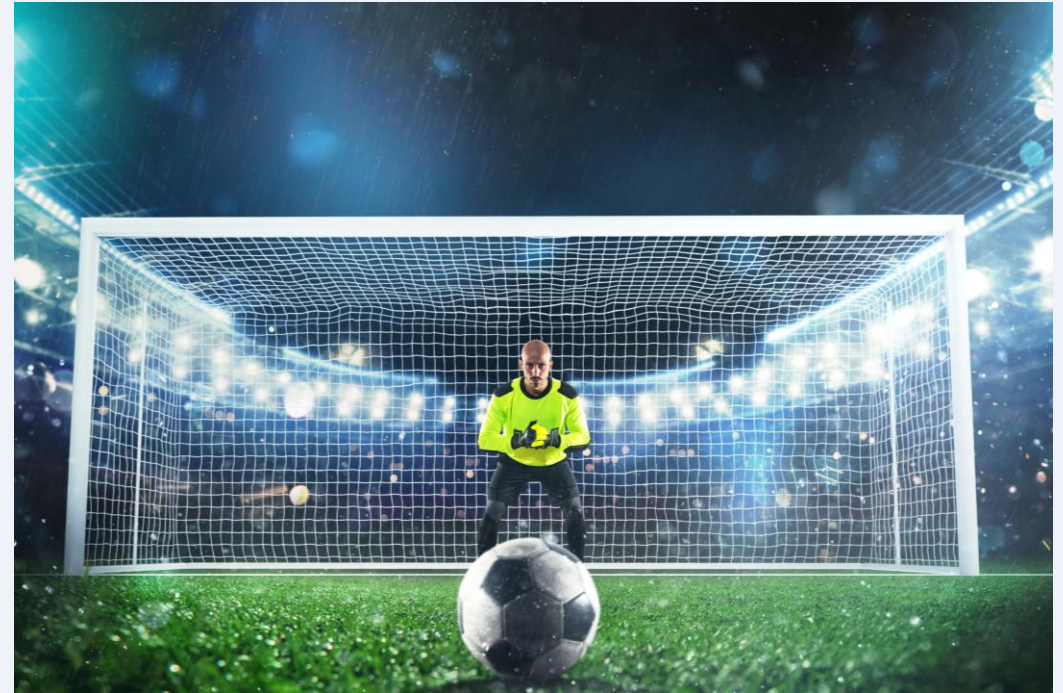


Principle #5: Actively monitor threats

Monitoring for threats is essential to ensure ongoing security, especially for mission-critical systems like SAP.

Key actions:

- Actively monitor using Amazon GuardDuty and take direct actions on anomalies
- Send Amazon GuardDuty logs to broader security IT team, providing holistic view of any/all threats
- “Build a squad” to tackle SAP security from a holistic approach



Innovating faster with AWS and SAP

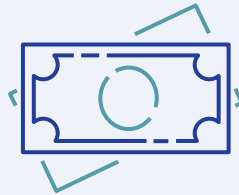


The road ahead

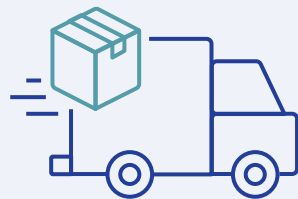
“ AWS is a critical element of our digital transformation, and we look forward to **harnessing its industry-leading cloud capabilities as we enter our next stage of growth**...With SAP in the cloud, we can now apply deep analytics and machine learning capabilities to drive greater efficiency across our business. ”

Danny Miles
Chief Technology Officer, Under Armour

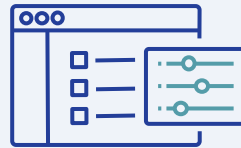
Popular innovation areas



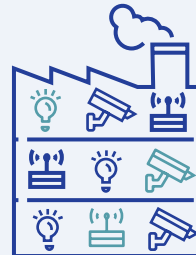
Create **new revenue sources**, differentiated business models



Optimize **supply chain** and logistics, reduce inventory



Improve intelligence with **real-time monitoring** and data-driven decision making



Increase **production**, reduce defects, downtime, and waste



Increase **productivity** with process automation and generative AI



Delight **customers** with personalized recommendations and support

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

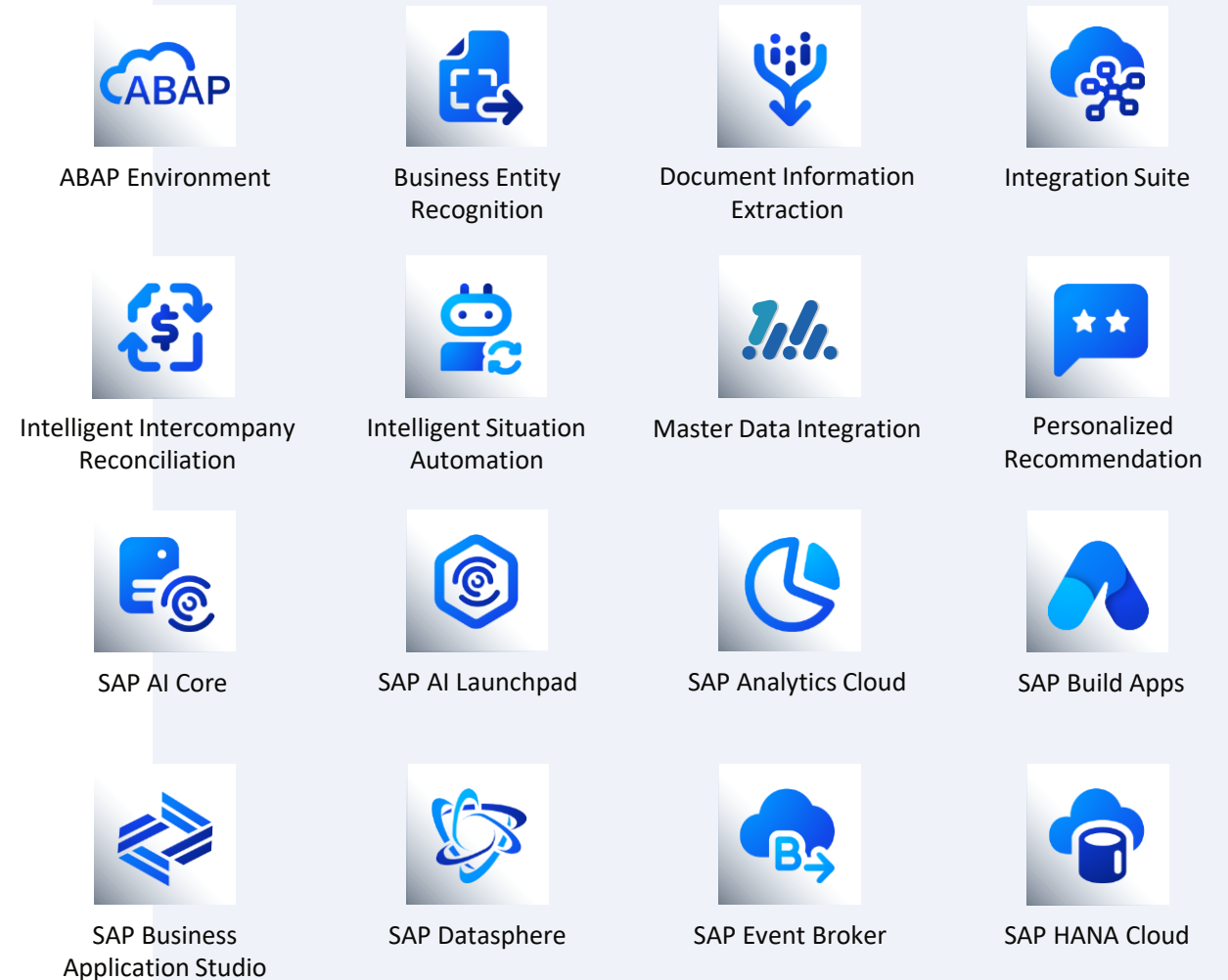
1. As of November 2023: <https://discovery-center.cloud.sap/viewServices>

Transform processes with SAP BTP running on AWS

81

SAP BTP services run on AWS¹

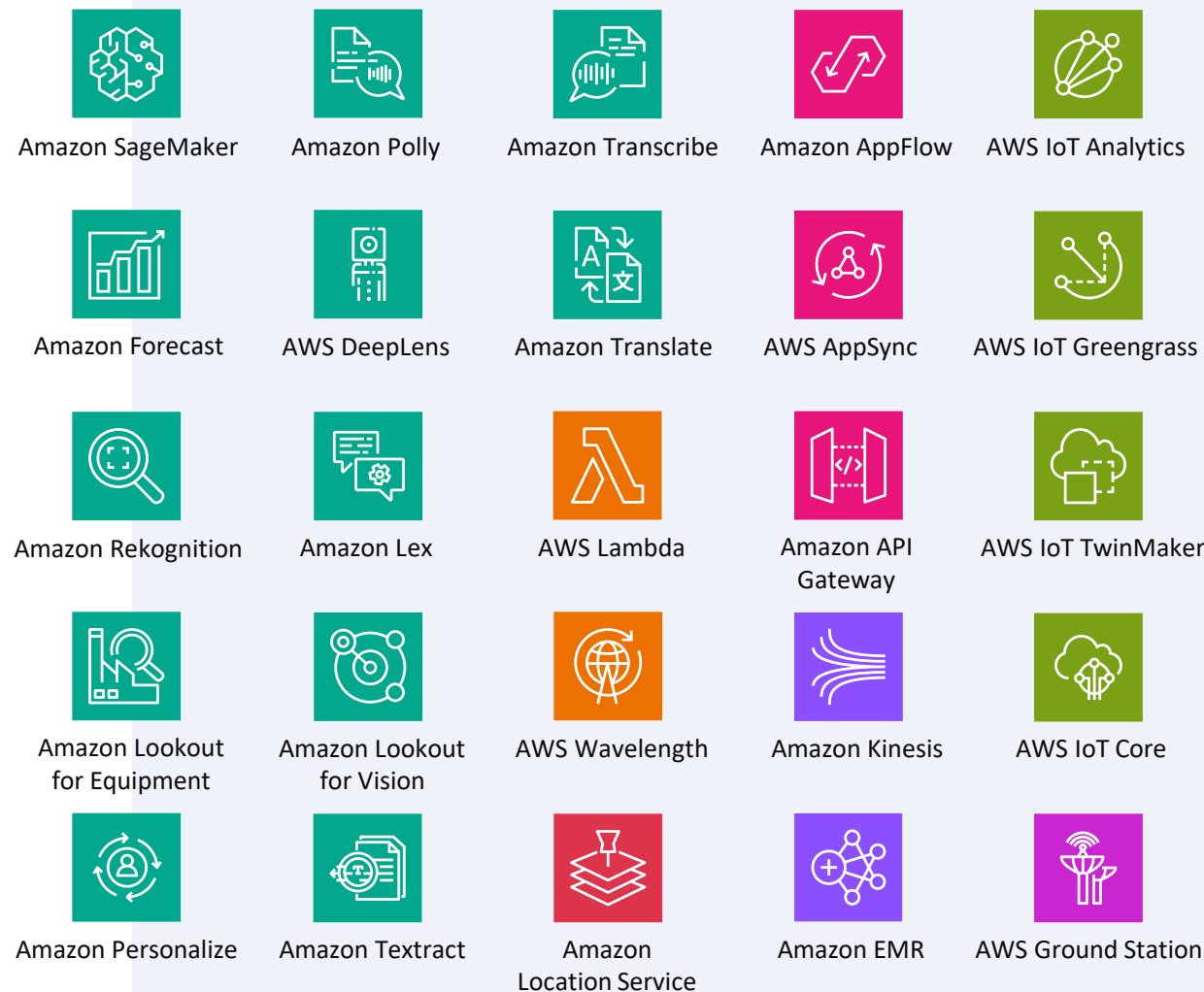
1. As of November 2023: <https://discovery-center.cloud.sap/viewServices>



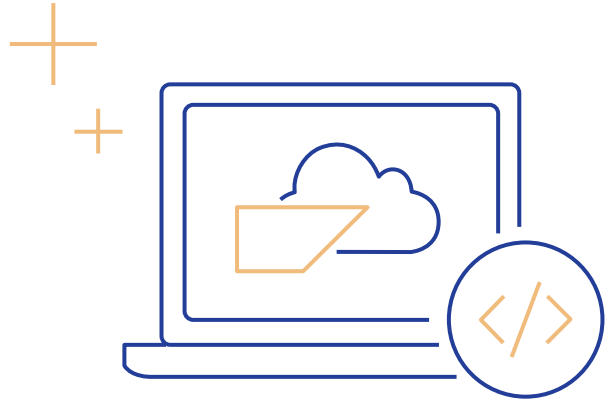
Innovate with the world's broadest and deepest set of cloud services

200+

**AWS services in analytics, IoT,
AI/ML, and more drive new
innovation and
business value**



Reimagine your business processes with AWS SDK for SAP ABAP

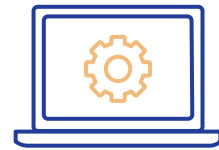


Makes it easy for ABAP developers to extend and transform SAP-based business processes by harnessing the power of AWS services natively using the SAP ABAP language.



Accelerate business process innovation

by giving ABAP developers access to all 200+ AWS services



Reduce architectural complexity

by eliminating the need to manually create complex integrations between SAP and AWS services, in both **self-managed** and **RISE with SAP** deployments



Maintain a strong security posture

by encrypting all payloads with HTTPS and enforcing SAP-level permissions



Upskill ABAP development teams

by making it easy to for them to build cloud-based solutions

Wrap Up

- Under Armour has enhanced their SAP **reliability, performance, and security** with AWS.
- AWS has the most **extensive global cloud infrastructure**. No other cloud provider offers as many Regions with three or more Availability Zones.
- AWS offers comprehensive security services and supports **143 security standards** and compliance certifications
- **AWS Professional Services** helps speed up and safeguard mission-critical migrations.

Where to Find More Information

www.underarmour.com

- Learn more about our mission at Under Armour

aws.amazon.com/sap/

aws.amazon.com/sap/rise/

- Learn why AWS is the proven cloud to innovation for any SAP workload, including RISE with SAP

pages.awscloud.com/global-ln-gc-500-sap-10-reasons-sap-ebook-learn.html

- Top 10 reasons to run SAP on AWS eBook



Key Points to Take Home

- Modernizing SAP on AWS is a proven way to enhance **reliability, performance, and security**.
- **Keep security “Job 0”** for SAP and integrate into migration process.
- Establish and maintain security with these **5 principles**:
 - Adopt a GRC mentality
 - Use benchmarks and tools
 - Identity is the new perimeter
 - Establish controls process
 - Actively monitor threats

Additional sessions

Visit AWS booth : #640

Additional Sessions



Date	Time	Session Type	Content Title	Room
March 19th	10:30AM-12:10PM	Sponsored	Best practices to save millions of dollars from business disruption on AWS	Da Vinci 4
March 19th	2:10-2:50PM	Customer	The Under Armour transformation: Secure and scale your business with AWS for SAP	Da Vinci 4
March 20th	10:30-11:10AM	Sponsored	Accelerate the move to SAP S/4HANA while protecting existing investments	Da Vinci 3
March 20th	10:30AM-12:30PM	Workshop	Modernize your SAP Accounts Payable reporting with an AWS Data Lake and AI/ML services	Cezanne 1
March 20th	11:30-11:50AM	Impact20	SAP Journey to Open Hybrid Cloud with Red Hat and AWS	Theater 1
March 20th	1:10-1:50PM	Customer	Love's Travel Stops' road to SAP modernization with AWS	Da Vinci 4
March 20th	2:10-2:50PM	Customer	Molson Coors' Journey to S/4HANA and AWS with Basis Technologies	Ballroom 3
March 20th	2:30-4:30PM	Workshop	Transform your SAP Accounts Payable processes with AWS and generative AI	Cezanne 1

Thank you! Any Questions?

Gaurav Singh

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your session evaluation.



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