



AWS European Sovereign Cloud

Cisco – 4th Sept 2024

A top priority for leaders

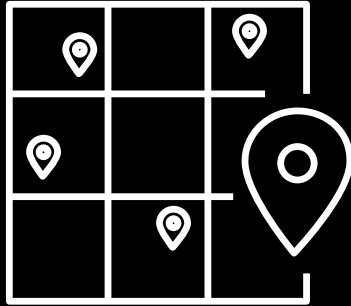


82%

of organizations across the world are either currently using, planning to use, or are considering sovereign cloud solutions in the next two years.

Source: IDC, [Is Sovereign Cloud Use Expected to Grow in the Foreseeable Future?](#) (Doc #EUR150386223, Feb 2023)

Customer sovereignty requirements



Data residency



**Operator access
restriction**




**Resiliency,
survivability, and
independence**

Data sovereignty

Operational sovereignty

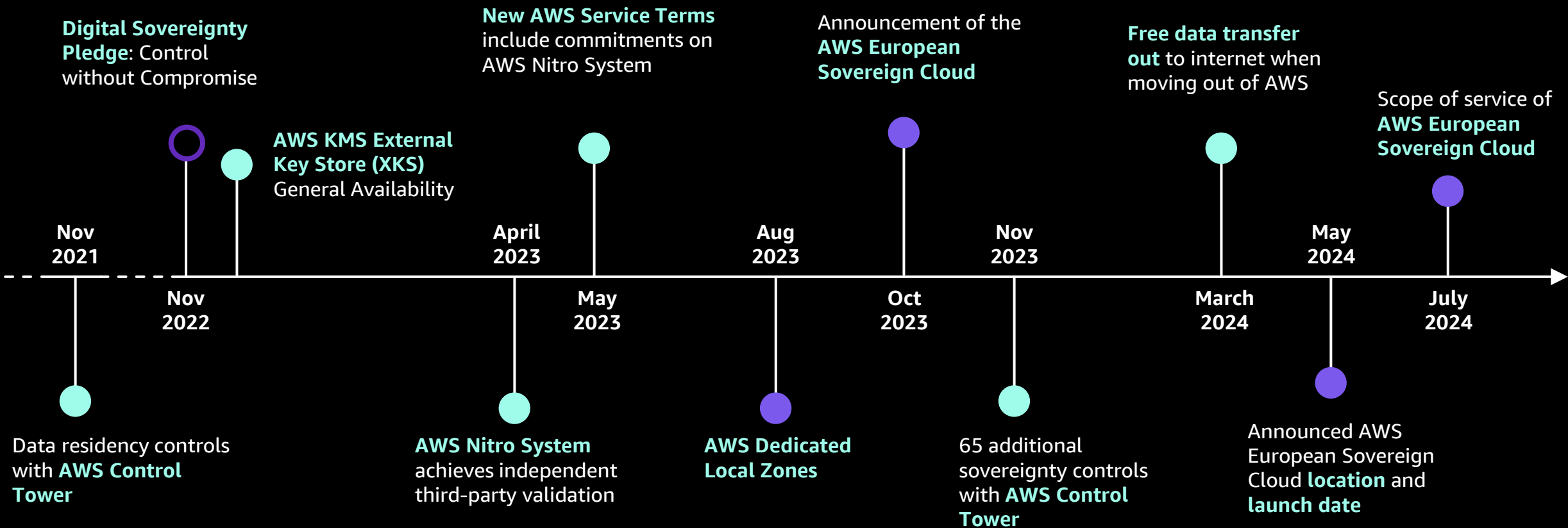
Digital sovereignty



**Helping organizations navigate the evolving
landscape to meet unique requirements while
driving continuous innovation**

The AWS Digital Sovereignty Pledge

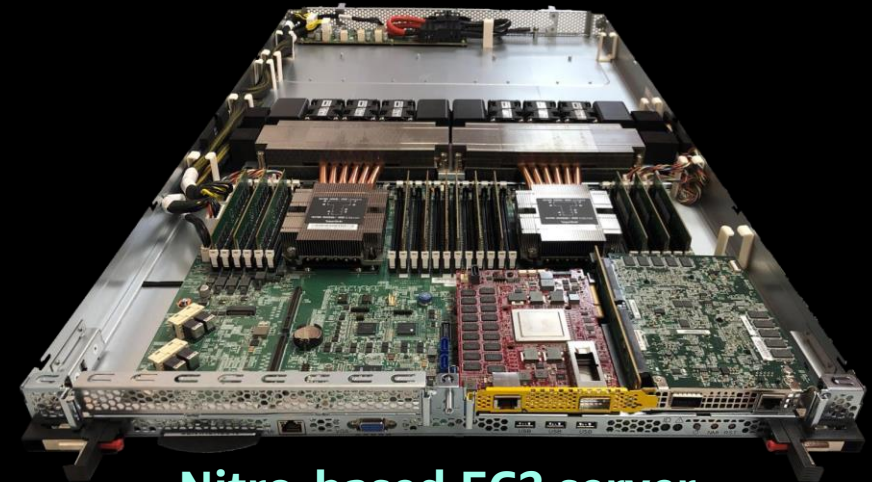
Our commitment to offering all AWS customers the most advanced set of sovereignty controls and features available in the cloud



Confidential Computing with AWS Nitro System

AWS Regions, AWS European Sovereign Cloud, and AWS Dedicated Local Zones are all powered by AWS Nitro System.

- The Nitro System is the foundation for AWS
- All EC2 instance types released since 2018 are powered by the Nitro System
- **There is no operator access mechanism in the Nitro System design**
- All Nitro operations are done via secure, authenticated, authorized, logged (& audited) administrative APIs



Nitro-based EC2 server

"There is no mechanism for a cloud service provider employee to log in to the underlying host." – NCC Group

Encryption everywhere



**AWS Key Management
Service (AWS KMS)**



AWS CloudHSM

Ability to encrypt all data, whether in transit, at rest, or in memory

All AWS services support encryption

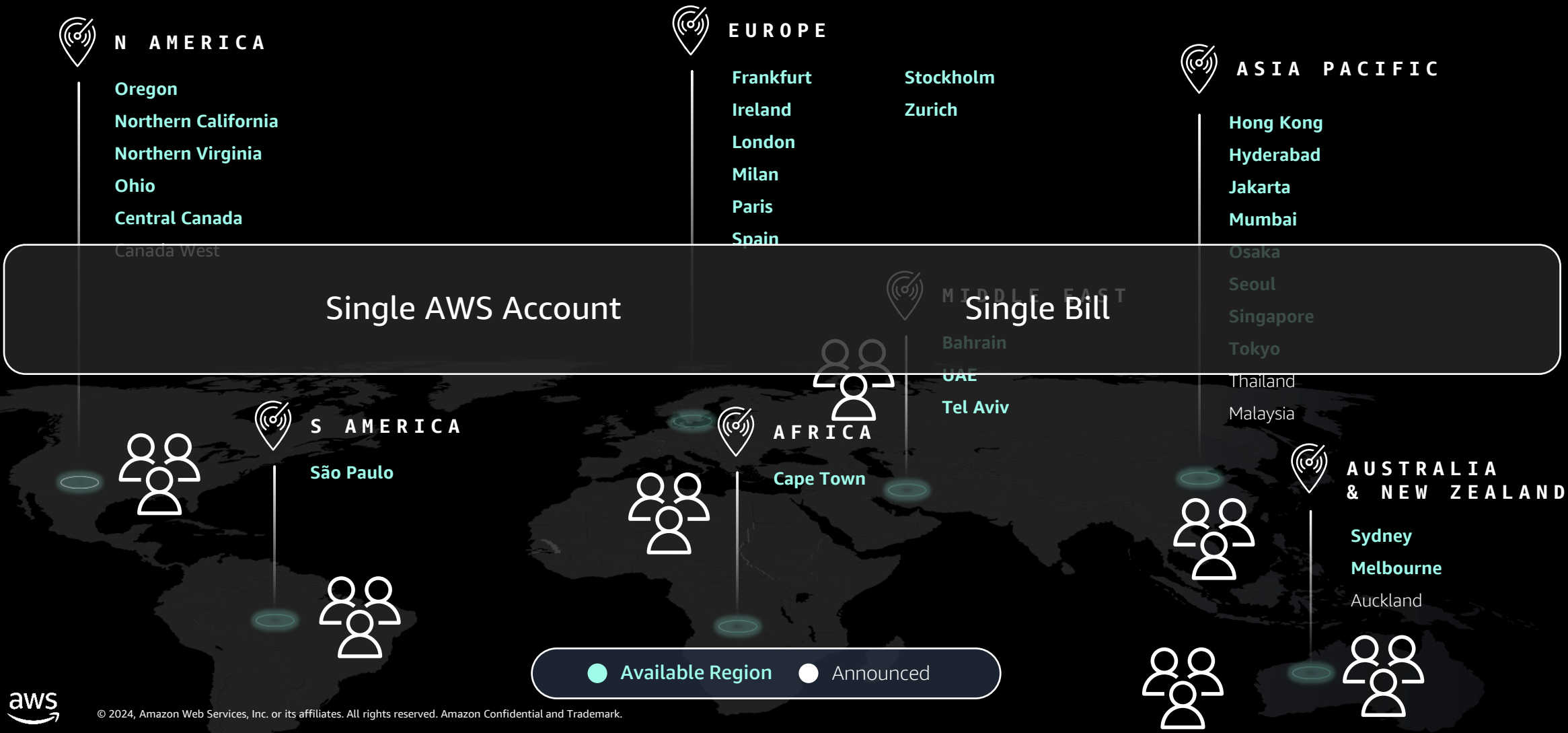
No single AWS employee can gain access to the key material

Data sovereignty, today, with existing AWS Regions

- Customer control of the location of their data – 8 AWS Regions available in Europe (incl. 6 Regions in the EU)
- No access by AWS to customer data on AWS Nitro System EC2 instance – Validated by a third-party independent cybersecurity firm
- AWS employees cannot access plaintext encryption keys – State of the art encryption, FIPS 140-2 Level 3 validated hardware security modules with AWS KMS or AWS CloudHSM. Option for encryption keys to be hosted and controlled outside of the AWS Cloud (External Key Store)

AWS global infrastructure

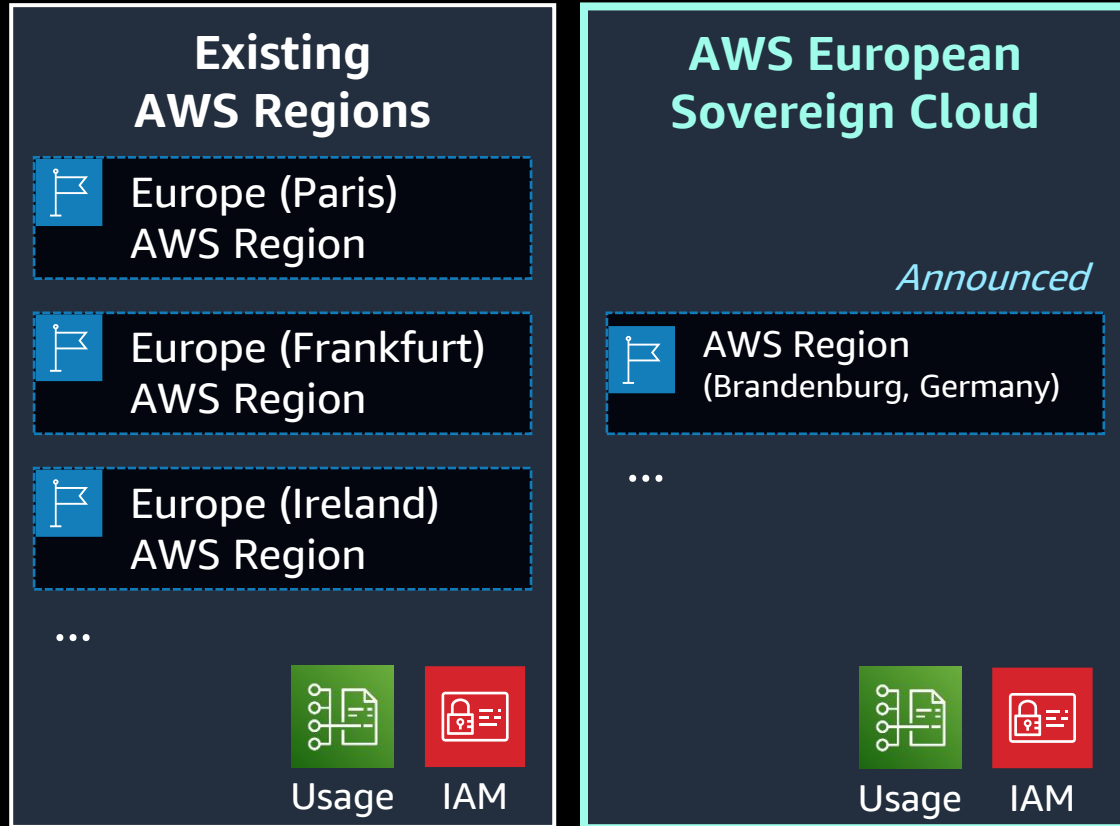
SOVEREIGN-BY-DESIGN



AWS European Sovereign Cloud set to launch **by the end of 2025**



AWS European Sovereign Cloud: a separated and independent fully featured AWS Cloud



- Same security, availability & performance our customers get in the existing AWS Regions today. Powered by Nitro
- **Physically separated and logically independent** from existing AWS Regions – Separate in-Region billing and usage metering systems
- Operated & supported by AWS employees, **EU resident & located in the EU**

Further choice for data residency in the EU

ALREADY AVAILABLE IN ALL AWS EXISTING REGIONS



Customer content stays within the AWS Region the customer selects

- Such as data that customer uploads to an S3 bucket, an RDS database etc.

ENHANCED DATA RESIDENCY WITH THE AWS EUROPEAN SOVEREIGN CLOUD



Customer-created metadata stays in the EU

Such as:

- Roles & permissions
- Resource labels
- Configurations

“The development of a European AWS cloud will make it much easier for many public sector organisations and companies with high data security and data protection requirements to use AWS services. We are aware of the **innovative power of modern cloud services**, and we want to help make them **securely available** for Germany and Europe.”

Claudia Plattner

President, German Federal Office for Information Security (BSI)

Why build on the AWS European Sovereign Cloud?



Address critical workloads in public sector and highly regulated industries



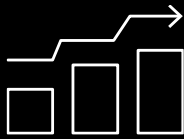
Government



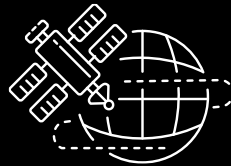
Healthcare



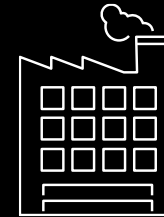
Defense & Space



Financial Services



Telecommunication



Energy



SaaS Providers

Customers welcome the AWS European Sovereign Cloud

"We welcome the commitment of AWS to expand its infrastructure with an independent European cloud. This will give businesses and public sector organizations more choice in meeting digital sovereignty requirements [...]"

Dr. Markus Richter, CIO of the German federal government

"AWS's announcement of an independent European cloud will provide organizations facing the most stringent regulations with more choice in their digital sovereignty strategy. In order to successfully provide human-centric and secure services to citizens and businesses, public sector agencies need to have cloud solutions that are compatible with data protection and other legislation."

Jarkko Levasma, Government CIO at the Ministry of Finance, Finland

"We welcome AWS European Sovereign Cloud as a new offering within AWS to address the most complex regulatory data residency and operational requirements needs across Europe."

Bernhard Wagensommer, VP of Prinect, Heidelberger Druckmaschinen AG

"[...] we welcome the announcement of the European Sovereign Cloud which will allow European customers to easily demonstrate compliance with evolving regulations while still benefitting from the scale, security, and full suite of AWS services."

Sebastiaan Kalshoven, Director IT/CTO at de Volksbank

"[...] the AWS European Sovereign Cloud underscores AWS's dedication to fostering the highest standards of digital sovereignty for financial services institutions. This additional robust framework empowers businesses like ours to thrive in a secure environment, where data is protected and being compliant with highest standards becomes more achievable than ever."

Andreas Schranzhofer, CTO at Scalable Capital

"AWS European Sovereign Cloud will set new industry benchmarks and ensure financial services institutions have even more options within AWS to meet the growing digital sovereignty requirements on data residency and operational autonomy in the EU."

Gerhard Koestler, chief information officer at Raisin

"The new AWS European Sovereign Cloud can be a game-changer for highly regulated business segments in the European Union. [...] I am convinced that this new infrastructure offering has the potential to boost cloud adaptation of European companies and accelerate the digital transformation of regulated industries across the EU."

Mallik Rao, Chief technology and information officer at O₂ Telefónica



Leverage the full power of AWS with the same expansive service portfolio

Analytics

- Amazon Athena
- Amazon Data Firehose
- Amazon EMR
- Amazon Kinesis Data Streams
- Amazon Managed Service for Apache Flink
- Amazon Managed Streaming for Apache Kafka (Amazon MSK)
- Amazon OpenSearch Service
- AWS Glue
- AWS Lake Formation

Application Integration

- Amazon EventBridge
- Amazon Simple Notification Service (Amazon SNS)
- Amazon Simple Queue Service (Amazon SQS)
- Amazon Simple Workflow Service (Amazon SWF)
- AWS Step Functions

Artificial Intelligence / Machine Learning

- Amazon Bedrock
- Amazon Q
- Amazon SageMaker

Business Applications

- Amazon Simple Email Service (Amazon SES)
- AWS Wickr

Developer Tools

- AWS CodeDeploy
- AWS X-Ray

Compute

- Amazon EC2 Auto Scaling
- Amazon Elastic Compute Cloud (Amazon EC2)
- AWS Batch
- AWS Lambda
- EC2 Image Builder

Containers

- Amazon Elastic Container Registry (Amazon ECR)
- Amazon Elastic Container Service (Amazon ECS)
- Amazon Elastic Kubernetes Service (Amazon EKS)
- AWS Fargate

Storage

- Amazon Elastic Block Store (Amazon EBS)
- Amazon Elastic File System (Amazon EFS)
- Amazon FSx for Lustre
- Amazon FSx for NetApp ONTAP
- Amazon FSx for OpenZFS
- Amazon FSx for Windows File Server
- Amazon Simple Storage Service (Amazon S3)
- AWS Backup
- AWS Storage Gateway

Database

- Amazon Aurora
- Amazon DynamoDB
- Amazon ElastiCache
- Amazon Neptune
- Amazon Redshift
- Amazon Relational Database Service (Amazon RDS)
- Amazon RDS for Oracle
- Amazon RDS for SQL Server

Networking & Content Delivery

- Amazon API Gateway
- Amazon Route 53
- Amazon Virtual Private Cloud (Amazon VPC)
- AWS Cloud Map
- AWS Direct Connect
- AWS Site-to-Site VPN
- AWS Transit Gateway
- Elastic Load Balancing (ELB)

Security, Identity & Compliance

- Amazon Cognito
- Amazon GuardDuty
- AWS Certificate Manager (ACM)
- AWS Directory Service
- AWS Firewall Manager
- AWS IAM Identity Center
- AWS Identity and Access Management (IAM)
- AWS Key Management Service (AWS KMS)
- AWS Private Certificate Authority
- AWS Resource Access Manager (AWS RAM)
- AWS Secrets Manager
- AWS Security Hub
- AWS Shield Advanced
- AWS WAF
- IAM Access Analyzer

Management & Governance

- Amazon CloudWatch
- AWS CloudFormation
- AWS CloudTrail
- AWS Config
- AWS Control Tower
- AWS Health Dashboard
- AWS License Manager
- AWS Management Console
- AWS Organizations
- AWS Systems Manager
- AWS Trusted Advisor

Cloud Financial Management

- AWS Budgets
- AWS Cost Explorer

Migration & Modernization

- AWS Database Migration Service (AWS DMS)
- AWS DataSync
- AWS Transfer Family

AWS Marketplace

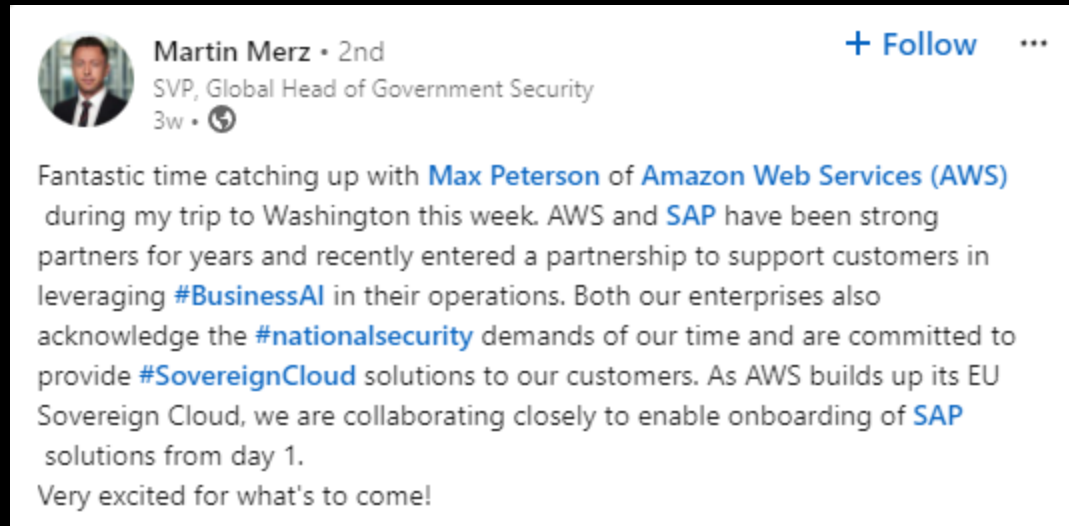
AWS Support



Software Vendors build on the AWS European Sovereign Cloud

"[...] The AWS European Sovereign Cloud provides further opportunities to strengthen our relationship in Europe by enabling us to expand the choices we offer to customers as they move to the cloud. We appreciate the ongoing partnership with AWS, and the new possibilities this investment can bring for our mutual customers across the region."

Peter Pluim, President, SAP Enterprise Cloud Services and SAP Sovereign Cloud Services



[Link](#)

"Delivery of the Genesys Cloud platform on the AWS European Sovereign Cloud will enable even more organizations across Europe to experiment, build, and deploy cutting-edge customer experience applications while adhering to stringent data sovereignty and regulatory requirements. [...] the AWS European Sovereign Cloud will offer a comprehensive suite of services to help businesses meet both data privacy and regulatory requirements. [...] Genesys and AWS remain committed to working together to help address the unique challenges faced by [...] highly regulated industries such as finance and healthcare."

Glenn Nethercutt, Chief Technology Officer, Genesys

"We are excited about the launch of the AWS European Sovereign Cloud and the opportunity it presents to align with Adobe's Single Sovereign Architecture for AEM offering. We look forward to being among the first to provide the AWS European Sovereign Cloud to Adobe customers."

Mitch Nelson, Senior Director, Worldwide Managed Services, Adobe



Software Vendors build on the AWS European Sovereign Cloud

Pega Collaborates with AWS to Deliver Pega EU Service Boundary

New offering to provide EU clients with further digital sovereignty controls

Reading, UK – August 7, 2024 – [Pegasystems Inc.](#) (NASDAQ: PEGA), the leading enterprise AI decisioning and workflow automation platform provider, today announced it is expanding its relationship with [Amazon Web Services](#) (AWS). Pega is among the initial companies to reveal it will leverage the recently announced [AWS European Sovereign Cloud](#) to deliver the Pega EU Service Boundary – a solution that will help customers meet their most stringent digital sovereignty goals within the European Union (EU). The Pega EU Service Boundary is set to launch alongside the AWS European Sovereign Cloud at the end of 2025.

The new offering will provide a commitment from Pega to store and process data within the EU, under the control of and supported by EU staff, to provide the flexibility of Pega Cloud, while addressing stringent digital sovereignty requirements from clients in public sector and highly regulated industries. By combining [Pega Cloud](#)'s already stringent approach to data isolation, access controls, and process with the AWS European Sovereign Cloud, Pega will provide further digital sovereignty assurances at all layers of the service, from Pega's platform and supporting technologies, all the way to the supporting infrastructure.

"Our combined solution, taking advantage of the AWS European Sovereign Cloud, will allow Pega to provide sovereignty assurances at all layers of the service, from Pega's platform and supporting technologies all the way to the enabling infrastructure. This solution combines Pega Cloud's already stringent approach to data isolation, people, and process with the new and innovative AWS European Sovereign Cloud to deliver flexibility for our public sector and highly regulated industry clients."

Frank Guerrero, chief technical systems officer at Pegasystems



Additional opportunities to get **net new customers** & move more critical workloads to **SaaS**



Learn more

Amazon Web Services to Launch AWS European Sovereign Cloud ([Press release](#))

AWS Digital Sovereignty Pledge: Announcing a new, independent sovereign cloud in Europe ([AWS Security blog](#))

In the Works – AWS European Sovereign Cloud ([AWS News blog](#))

AWS to invest €7.8B into the AWS European Sovereign Cloud, set to launch by the end of 2025 ([AWS Security blog](#))

Announcing initial services available in the AWS European Sovereign Cloud ([AWS Security blog](#))

Digital sovereignty at AWS ([AWS European Digital Sovereignty](#))

Digital sovereignty FAQs ([Digital Sovereignty FAQs](#))





Thank you!