Microsoft Cloud for Sovereignty

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Transformation helps governments perform better and drive growth

Harnessing digital technologies enables governments to:

- Engage and support constituents
- Increase productivity
- Foster innovation
- Realize cost savings

Digital transformation at scale and at pace requires the right policies
Hyperscale cloud is key to digital transformation

Cloud offers benefits beyond Cost Savings, Redundancy, Resilience and Scalability.

- **Agility** – Reduce the cost of failure
- **Innovation** – New technologies now come **first** to the cloud and soon will come **only** to the cloud
- **Cybersecurity** – Hyperscale threats require Hyperscale protection
- **Compliance** – Software-defined constraints, monitoring and auditing, adaptability to new compliance requirements
With digital transformation, there are more concerns

Organizations want to safely leverage the benefits of the cloud, AI, and IoT, but...

- Governments want control over their data
- Demand for privacy is increasing
- New regulations on technology
- Ethical implications of AI are being studied
Cloud Value vs Control Burden

Hyperscale Cloud

Hybrid Cloud (connected)

Hybrid Cloud (disconnected)

On-premise

LEGEND

CLOUD VALUE
(Scalability, Innovation, Cybersecurity, Reliability, Compliance, Cost Savings, Agility, Managed, Redundancy, Economic Benefit)

CONTROL BURDEN
(Sovereignty, Autarky, Residency, Operations)
Help ensure compliance with future regulatory changes using sovereign guardrails and controls in your cloud environment.

Apply your sovereign controls and guardrails quickly and easily to all Azure workloads, no manual configuration required.

Provide public sector customers with a future-proof solution that helps reduce the risk perception associated with cloud adoption.
Sovereign Control Portfolio
Protect workloads from outside access using advanced sovereignty and encryption controls such as confidential computing and cloud HSMs.

Sovereign Guardrails & Guidance
Get access to codified architectures, workload templates, and tooling to assist in creating compliant architectures and answer sovereign questions.

Compliance & Transparency
Ensure local compliance with policy packs for your region and increased transparency over—and into—your environment's operations.

Public Cloud Capabilities
Get the innovation, scale, and security of the public cloud, with capabilities significantly beyond private or on-prem datacenters.

Data Residency
60+ Azure regions for local data residency, + EU data boundary
Sovereign Control Portfolio
- Azure Confidential Computing
- Managed HSMs
- SQL Always Encrypted
- Azure Policy
- Azure Monitor

Sovereign Guardrails & Guidance
- Reference Architectures
- Sovereign Landing Zones
- Policy Initiatives

Orchestrating deployment, configuration, monitoring and management

Compliance & Transparency
- Operator Logs
- Government Security Program
- Right to audit

Public Cloud Capabilities
- 60+ Azure Regions
- Azure Services

Provides Local Data Residency and the resiliency and connectivity of a hyperscale cloud
## Data protection through encryption

### Existing Encryption

<table>
<thead>
<tr>
<th>Data at rest</th>
<th>Data in transit</th>
<th>Data in use</th>
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<tbody>
<tr>
<td>Encrypt inactive data when stored in blob storage, database, etc.</td>
<td>Encrypt data that is flowing between untrusted public or private networks</td>
<td>Protect data that is in use, while in RAM, and during computation</td>
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### Confidential Computing

- In Azure, confidential computing means...
  - A hardware root-of-trust, customer verifiable remote attestation, and memory encryption

### Protect Against

- **Malicious**
  - privileged admins or insiders

- **Hackers**
  - exploiting bugs in the Hypervisor/OS

- **Third parties**
  - accessing data without customer consent
Microsoft Cloud for Sovereignty became generally available in December 2023 with key components of the offering vision, including:

- The **Sovereign Landing Zone** (SLZ), provides opinionated, easy to deploy, repeatable infrastructure-as-code to help meet sovereignty and regulatory compliance requirements for the public sector and government agencies.
- **Sovereignty Baseline policy** is a special set of built-in Azure Policy initiatives meant to supplement the environments with sovereignty controls, like data residency, key management and customer managed keys, and confidential computing.
- Policy for **Italy's ACN requirements**, **Netherlands BIO regulation**, and **CSA Cloud Controls Matrix (CSA CCM v4)** which help customers more easily monitor, guard and report on their compliance in Azure.
- **Transparency Logs** provide customers with visibility into instances when Microsoft engineers temporarily access their subscriptions for customer support or service reliability issues.
- **Automated workload templates** for Azure Confidential Computing and Azure Lighthouse as examples for building workloads using these technologies for sovereign environments to speed learning and adoption.
- Technical documentation and guidance on **Microsoft Learn**, integrated with WAF, CAF, and guidance around workload migration to address sovereign needs.
- Additional Azure services in the GSP program, including Azure Fabric Controller and Azure Virtual Desktop.
Questions?
Thank You!