Microsoft

Azure Government Amendment

Microsoft Services

Agenda

- Overview of the US Government Cloud
- Commercial / US Government Comparison
- Selecting a Cloud and the Trust Center
- Azure Blueprints
- Connecting to the US Government Cloud
- Marketplace Considerations
- Azure Active Directory Considerations
- About the Feature Roadmap
- Useful Links

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Overview of the US Government Cloud

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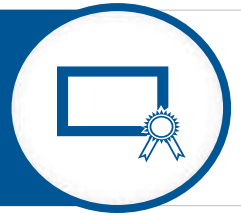
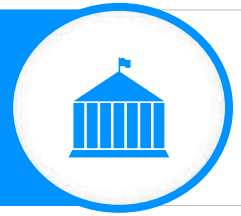
What is the US Government Cloud?

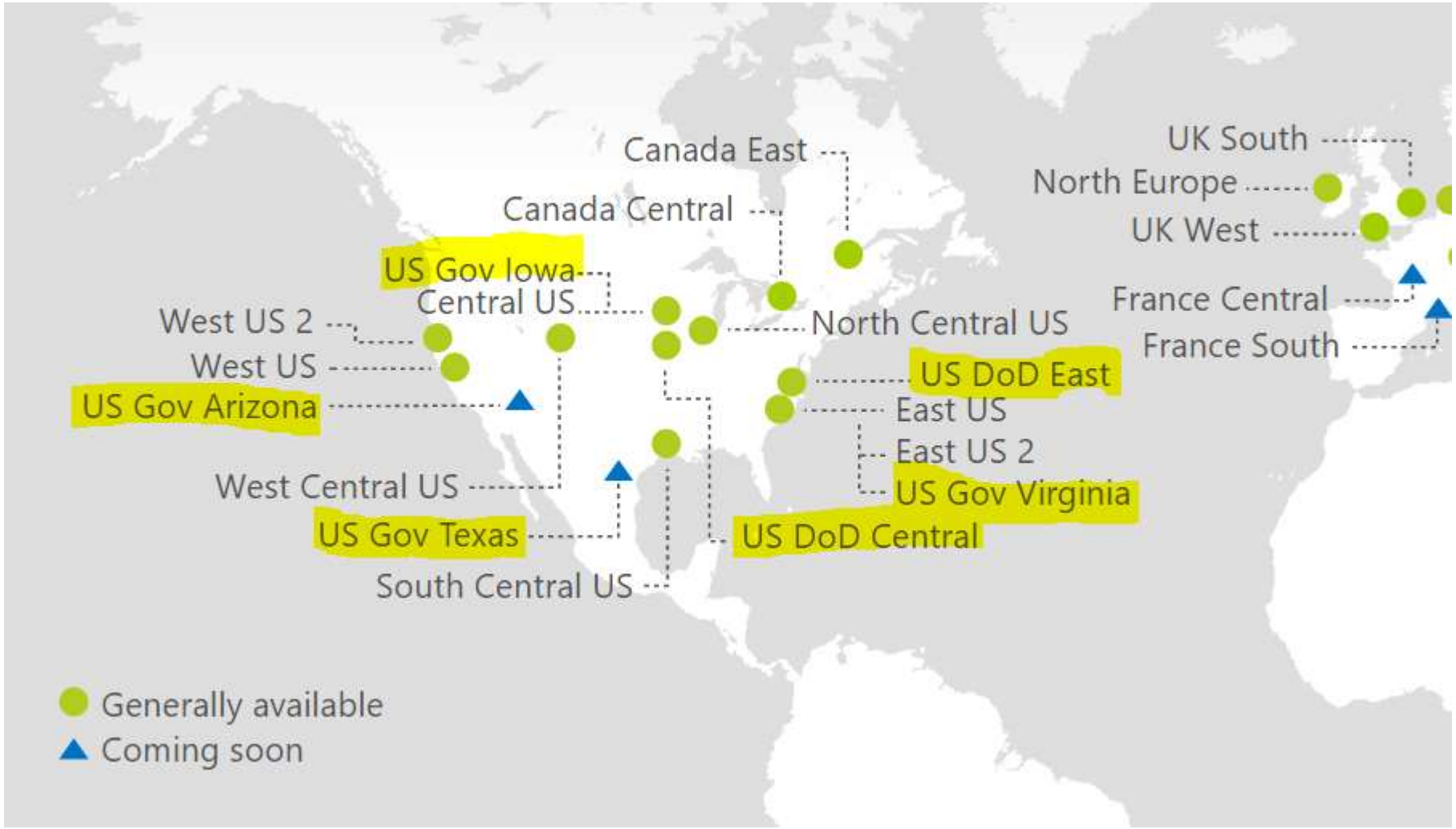
"A government-community cloud you can trust, with world-class security and compliance, enabling U.S. government and their partners to transform their mission-critical workloads to the cloud."

Hybrid flexibility 	Engineered for flexibility and consistency across public, private, and hosted clouds
Comprehensive compliance 	The most certifications of any cloud provider to simplify critical government compliance requirements
Superior protection 	Hardened US datacenters, including East coast, with 500-mile geo-redundancy, operated by screened US persons
Government only 	Unique cloud instance, exclusively for government customers and their solution providers

Unique Properties of the US Government Cloud

- Physically isolated instance of Microsoft Azure
- Employs world-class security and compliance services critical to U.S. government for all systems and applications built on its architecture
  - FedRAMP and DoD compliance certifications
  - CJIS state-level attestations
  - Ability to issue HIPAA Business Associate Agreements
  - Support for IRS 1075
- Operated by screened U.S. citizens

Azure DoD/Government Regions



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Commercial / US Government Comparison

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Commercial vs. US Government Clouds

Comparison Point	Microsoft Azure Commercial (MAC)	Microsoft Azure Government (MAG)
Operational staff	Microsoft screening	Screened US citizens
Physical security	Biometrics, isolation, fencing, etc.	Same as MAC
Scope of offering	All Azure features	Features limited by certification
Portal (Classic)	https://manage.windowsazure.com	https://manage.windowsazure.us
Portal (ARM)	https://portal.azure.com	https://portal.azure.us
Pricing concerns	Base pricing, minus EA/commitment discount (if any)	Base pricing, plus MAG premium, minus EA/commitment discount (if any)
Availability	Anyone, on demand	Requires approval from Microsoft
Identity (Azure AD)	Integrates Office 365 & 3rd party SaaS	Isolated, no integration

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Selecting a Cloud and the Trust Center

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Selecting a Cloud: Why the Government Cloud?

"I'm a Government Entity so obviously, MAG is the way to go!"

- This is inappropriate thinking
- Microsoft Azure Government…
  - Is more expensive due to extra certification requirements and overhead
  - Is slower to gain features due to certification timelines
- Microsoft Azure Commercial…
  - Meets FedRAMP Moderate and many other certifications
  - Has same physical security
- Very common for Government customers to have both MAG and MAC subscriptions
- To compare services available, see https://azure.microsoft.com/en-us/regions/services/

Azure covers 54 compliance offerings

Azure has the deepest and most comprehensive compliance coverage in the industry

Global


ISO 27001


ISO 27018


ISO 27017


ISO 22301


ISO 9001


SOC 1 Type 2


SOC 2 Type 2


SOC 3


CSA STAR Self-Assessment


CSA STAR Certification


CSA STAR Attestation

US Gov


Moderate JAB P-ATO


High JAB P-ATO


DoD DISA SRG Level 2


DoD DISA SRG Level 4


DoD DISA SRG Level 5


SP 800-171


FIPS 140-2


Section 508 VPAT


ITAR


CJIS


IRS 1075

Industry


PCI DSS Level 1


CDSA


MPAA


FACT UK


Shared Assessments


FISC Japan


HIPAA / HITECH Act


HITRUST


GxP 21 CFR Part 11


MARS-E


IG Toolkit UK


FERPA


GLBA


FFIEC

Regional


Argentina PDPA


EU Model Clauses


UK G-Cloud


China DJCP

China GB 18030

China TRUCS

Singapore MTCS

Australia IRAP/CCSL

New Zealand GCIO

Japan My Number Act

ENISA IAF

Japan CS Mark Gold

Spain ENS

Spain DPA

India MeitY

Canada Privacy Laws

Privacy Shield

Germany IT Grundschutz workbook

Commercial vs. US Government Clouds – Compliance Offerings

Comparison Point	Microsoft Azure Commercial (MAC)	Microsoft Azure Government (MAG)
FedRAMP	Moderate	High
US Department of Defense	Level 2 (specific services)	Level 4 (specific services) Level 5 (specific services in DoD regions)
CJIS	N/A	Attestation by State
FIPS 140-2	✔	✔
ITAR	N/A	✔
NIST 800-171	✔	✔
IRS 1075	N/A	✔
HIPAA / HITECH	✔	✔
MARS-E	✔	✔
Section 508	✔	✔
HITRUST	✔	N/A
FERPA	✔	N/A
FDA CFR Title 21 Part 11	✔	N/A
PCI DSS 3.2 SP L1	✔	N/A

The Microsoft Trust Center

The Microsoft Trust Center offers detailed security, privacy, and compliance information for all Microsoft cloud services.

Obtain targeted information based on your role in the organization

- Review by job role
- Review by product/service
- Review by cloud

https://www.microsoft.com/en-us/trustcenter

The Microsoft Trust Center

Risk and compliance assessor

Perform a risk assessment and assess the compliance of Microsoft cloud services >

Security officer

Better protect your data by using Microsoft cloud services >

Governance and privacy officer

Review Microsoft cloud governance and privacy practices >

Business decision maker

Evaluate Microsoft business cloud services >

We build our Trusted Cloud on four foundational principles

Security

We build our services from the ground up to help safeguard your data >

Privacy

Our policies and processes help keep your data private and in your control >

Compliance

We provide industry-verified conformity with global standards >

Transparency

We make our policies and practices clear and accessible to everyone >

The Microsoft Trust Center

Scope & filter Microsoft's compliance offerings based on Region, Country, Industry, and Product/Service

Easily determine which Cloud service is best suited for a particular workload

https://www.microsoft.com/en-us/trustcenter/compliance/complianceofferings

The Microsoft Trust Center

The Microsoft Trust Center

Dive deeper into a compliance offering to see its audit, in-scope services, and how Microsoft ensures ongoing compliance

(CJIS Example)

Attestation

The FBI does not offer certification of Microsoft compliance with CJIS requirements. Instead, a Microsoft attestation is included in agreements between Microsoft and a state's CJIS authority, and between Microsoft and its customers.

Microsoft CJIS cloud requirements

Microsoft in-scope cloud services

Expand all

Services subject to CJIS Security Policy commitments include:

— Azure Government

App Service: Web Apps, Application Gateway, Automation, Azure Active Directory*, Azure Government Portal, Azure Resource Manager, Backup, Batch, Cloud Services, Compute Resource Manager, Event Hubs, ExpressRoute, Key Vault, Load Balancer, Log Analytics, Media Services, Network Resource Provider, Notification Hubs, Power BI, Redis Cache, Scheduler, Service Bus, Site Recovery, SQL Database, Storage, Storage Resource Provider, StorSimple, Traffic Manager, Virtual Machines, Virtual Network, and VPN Gateway

**Note: The use of Azure Active Directory within Azure Government requires the use of components that are deployed outside of Azure Government on the Azure public cloud.*

Frequently asked questions

Expand all

+ Where can I request compliance information?
+ How does Microsoft demonstrate that its cloud services enable compliance with my state's requirements?
+ Where do I start with my agency's compliance effort?

CJIS status in the United States

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Azure Blueprints

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Azure Blueprints

- Purpose
  - Facilitate the secure and compliant use of Azure for government
  - Leverage Azure's FedRAMP JAB Provisional Authority to Operate (P-ATO) or DoD Provisional Authorization (PA)
  - Reduce the scope of customer-responsibility security controls in Azure-based systems
- Customer Responsibilities Matrix (CRM)
  - Lists all NIST SP 800-53 security control requirements for FedRAMP and DISA baselines
- System Security Plan (SSP)
  - Documents both customer security control implementations as well as controls inherited from Azure

Azure Blueprints – Customer Responsibilities Matrix (CRM)

- Lists all NIST SP 800-53 security control requirements for FedRAMP and DISA baselines

(example of FedRamp Moderate for IaaS)

Customer Responsibility	Controls Reference
The customer will be responsible for establishing usage restrictions and implementation guidance for the use of VoIP technologies within the customer application. A successful control response will need to address whether and how VoIP technologies are used and outline the conditions under which that usage is appropriate.	SC-19 a
The customer will be responsible for authorizing, monitoring, and controlling the use of VoIP within the system.	SC-19 b
The customer will be responsible for guarding against, for example, man in the middle or session hijacking attacks for connections to the customer application, for example via the use of TLS. A successful control response will address the various types of attacks against session authenticity and the mechanisms used to protect against those attacks.	SC-23
The customer will be responsible for controlling access to their Azure Storage Account Keys. In addition, customers may choose to encrypt data prior to saving it in their Azure Storage accounts. A successful control response will need to address these and any other means by which the customer protects information at rest.	SC-28

Azure Blueprints - System Security Plan (SSP)

- Documents both customer security control implementations as well as controls inherited from Azure

(example of FedRamp Moderate)

14.14.4.4. Control Enhancement RA-5 (5)

The organization includes privileged access authorization to [*FedRAMP Assignment: operating systems, databases, web applications*] for selected [*Assignment: all scans*].

RA-5 (5)	Control Enhancement Summary Information
Responsible Role: <*Customer defined*>	
Parameter RA-5(5)-1: <*FedRAMP requirement: operating systems, databases, web applications*>	
Parameter RA-5(5)-2: <*FedRAMP requirement: all scans*>	
Implementation Status (check all that apply): ☒ Implemented ☐ Partially implemented ☐ Planned ☐ Alternative implementation ☐ Not applicable	

RA-5 (5)	Control Enhancement Summary Information
Control Origination (check all that apply): ☐ Service Provider Corporate ☒ Service Provider System Specific ☐ Service Provider Hybrid (Corporate and System Specific) ☐ Configured by Customer (Customer System Specific) ☐ Provided by Customer (Customer System Specific) ☐ Shared (Service Provider and Customer Responsibility) ☐ Inherited from pre-existing Provisional Authority to Operate (P-ATO) for Microsoft Azure	

RA-5 (5) What is the solution and how is it implemented?
Customer Responsibility Customers are responsible for implementing this control. See section 13.14.4.4.

Azure Blueprints

- High-level discussion: https://docs.microsoft.com/en-us/azure/azure-government/documentation-government-plan-compliance
- Request the blueprints - AzureBlueprint@microsoft.com

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Connecting to the US Government Cloud

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Portal Addresses

Portal	MAC URL	MAG URL
Classic Management	https://manage.windowsazure.com	https://manage.windowsazure.us
ARM Management	https://portal.azure.com	https://portal.azure.us
Enterprise Agreement (EA)	https://ea.azure.com	
Account Management	https://account.windowsazure.com	https://account.windowsazure.us
Operations Management Suite (OMS)	https://mms.microsoft.com	https://oms.microsoft.us

See https://docs.microsoft.com/en-us/azure/azure-government/documentation-government-services

Connecting with Command Line Interfaces

Service	Command
Azure ARM	Add-AzureRmAccount -EnvironmentName AzureUSGovernment
Azure ASM	Add-AzureAccount -Environment AzureUSGovernment
AzureAD ARM	Connect-AzureAD -AzureEnvironmentName AzureUSGovernment
AzureAD ASM	Connect-MsolService -AzureEnvironment UsGovernment
Azure CLI	azure login -environment "AzureUSGovernment"

Connecting with Visual Studio 2015

- Hardcode the Azure Government endpoints with a registry key
  - Visual Studio can only be used for Azure Government deployments from then on
- Reset the registry key to return connectivity to Commercial endpoints
  - Visual Studio can only be used for Azure Commercial deployments from then on
- https://docs.microsoft.com/en-us/azure/azure-government/documentation-government-get-started-connect-with-vs#visual-studio-2015

Connecting with Visual Studio 2017

- Hardcode the Azure Government endpoints with a configuration file located in a specific folder
  - Visual Studio can only be used for Azure Government deployments from then on
- Rename or delete the folder to return connectivity to Commercial endpoints
  - Visual Studio can only be used for Azure Commercial deployments from then on
- https://docs.microsoft.com/en-us/azure/azure-government/documentation-government-get-started-connect-with-vs#visual-studio-2017

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Marketplace Considerations

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Marketplace Considerations

- Similar experience to public Azure portal
- Only BYOL images available (cannot bill through the Marketplace)
- Only a subset of images are available
- If in an Enterprise Agreement, Marketplace must be enabled in the EA Portal

Bringing Commercial to MAG

How quickly do you need it?

- Immediate need
  - Deploy into an Azure Commercial subscription with same environment setup as intended Government environment (i.e. Network)
  - Copy the VHDs to Azure Government subscription and re-deploy
  - Warning: Offerings not certified for Azure Government may not work or be supported
  - The vendor can also privately grant access to the solution through alternate means
- Wait and Certify
  - Ask the vendor to follow the publishing guidelines for Azure Government Marketplace
  - This ensures the offering meets the standards for the Marketplace. (Support, Compatibility, etc)

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Azure Active Directory Considerations

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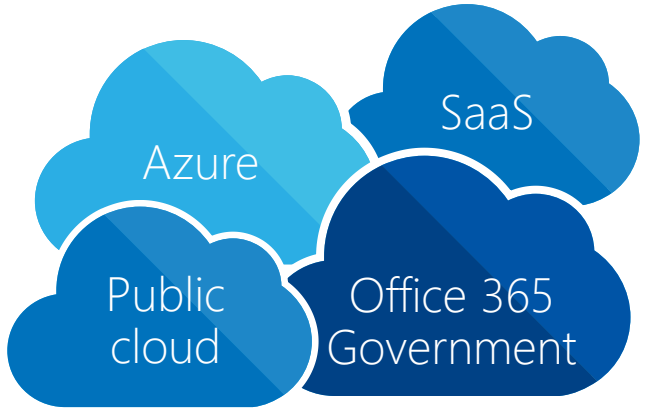
Office 365 Government vs Azure Government

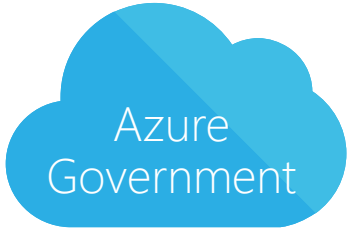
Azure AD Commercial



Microsoft Azure Active Directory

Cloud

Azure AD Government



Microsoft Azure Active Directory

Cloud

Azure AD Commercial vs Azure AD Government

- Completely independent instances of the Azure AD (AAD) service
- An on-premises identity can only be synced to 1 AAD tenant (i.e. John@contoso.com)
  - It is unsupported to sync the same identity to more than 1 AAD tenant
  - Workaround: Create a new on-premises identity for the other AAD tenant
- AAD Commercial works with O365 Commercial/Government, 3rd party SaaS, and identity enhancement services
  - Enterprise Mobility and Security (EMS), AAD Premium, Identity Protection, Privileged Identity Management
- AAD Government only integrates with AAD Application Proxy (publishing on-premises web/thick solutions)
  - AAD Premium (est. June 2017)

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About the Feature Roadmap

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Roadmap Concepts

- The Azure Government team has a product roadmap
- Generally updated monthly
- Includes what's live and what's coming
- Includes anticipated timeframes
- Includes compliance offering expectations (e. g. CJIS state-by-state information)
- Often issued in PowerPoint and Word forms
- Covered under the NDA between the customer and Microsoft

How to Get It

- Available via your Microsoft account team

Microsoft

Useful Links

Microsoft Services

References

- Azure Government Blog – https://blogs.msdn.microsoft.com/azuregov/
  - Announces new feature releases and blogs specific to working with MAG
- Azure Government Documentation - https://docs.microsoft.com/en-us/azure/azure-government/
  - Includes feature availability and details on difference between MAC and MAG versions of the offering
- Features Available Region - https://azure.microsoft.com/en-us/regions/services/
  - "Get-AzureRMLocation" in Powershell to see a real-time listing of VM sizes, storage, etc. available in each region