

# Microsoft Azure Government

**The cloud platform for digital transformation**



Trust



Open and  
Hybrid



Application  
Innovation



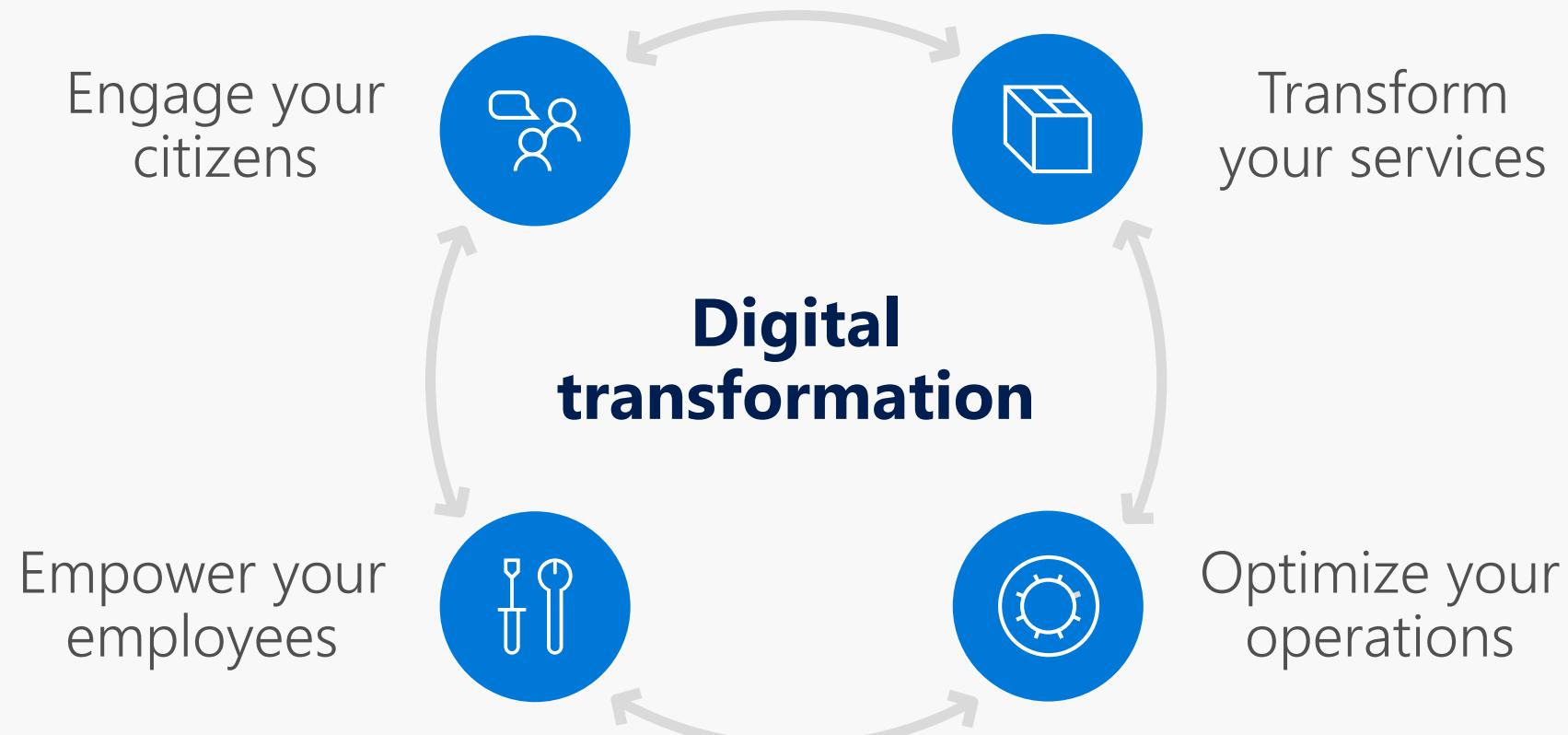
Data Driven  
Intelligence

Steve Read, Cloud Solution Architect,

[SRead@Microsoft.com](mailto:SRead@Microsoft.com)

Microsoft

Microsoft



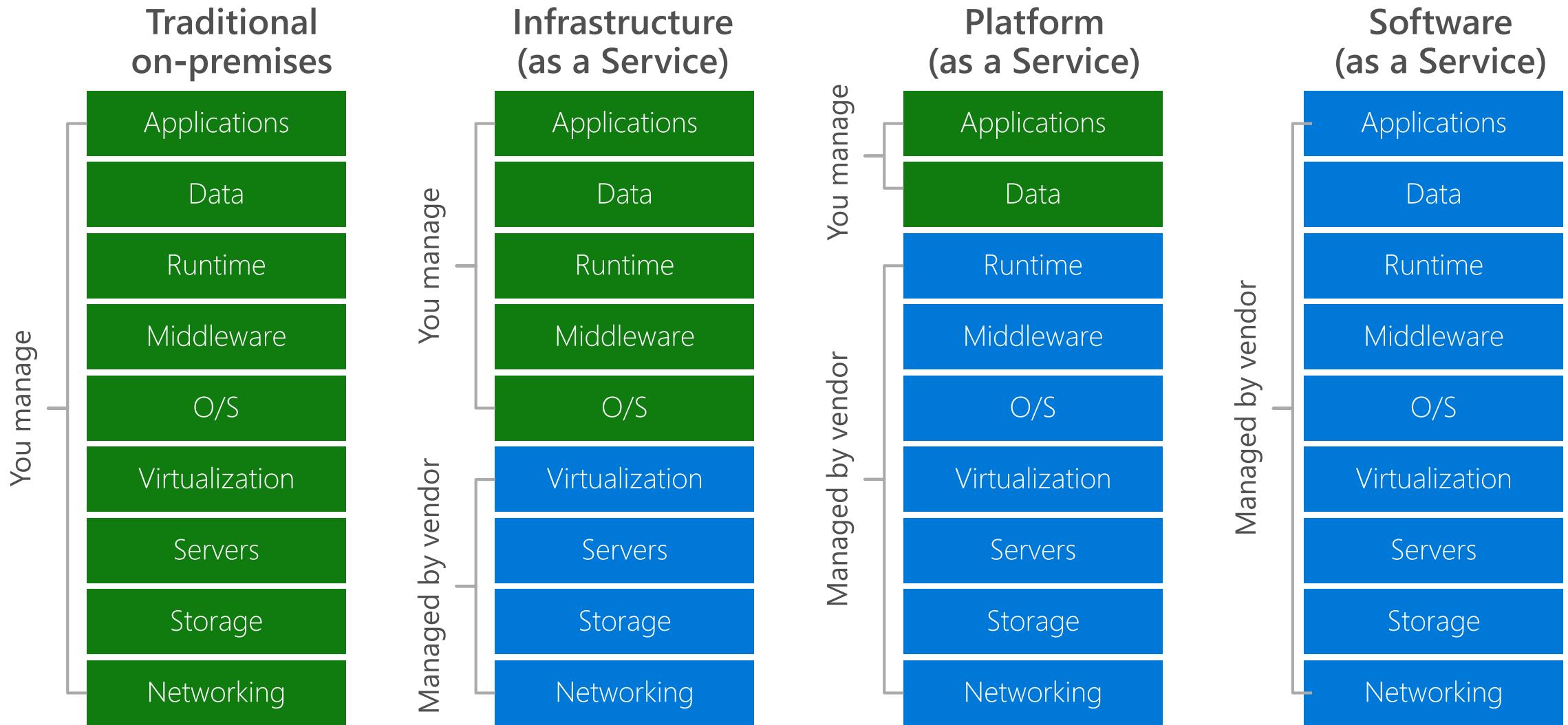
## Going Digital

1 million/hour  
new devices  
coming online  
by 2020

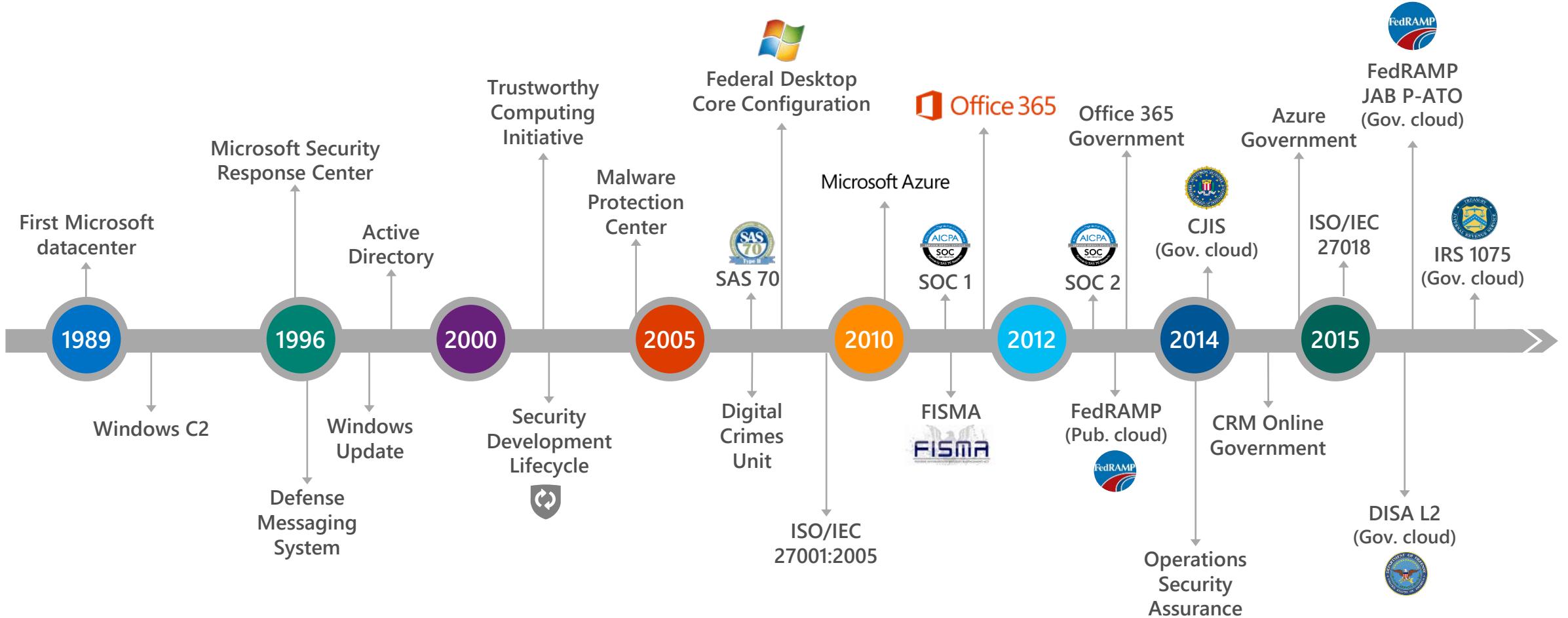
Nearly 50%  
of cloud investment  
will come from  
public sector by  
2018

60% computing  
in the public cloud  
by 2025

# Cloud service models



# Legacy of Trust





# Azure Government

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**Secure & compliant cloud** for US government only

Operated by screened US persons

Physically isolated instance of Microsoft Azure

---

Agencies can take advantage of **instant scalability**

Data sovereignty **stays in the US**



OUR COMMITMENT TO YOU

---

**Security**

---

**Privacy & control**

---

**Compliance**

---

**Transparency**

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**Reliability**

**2**

Existing  
regions

**2**

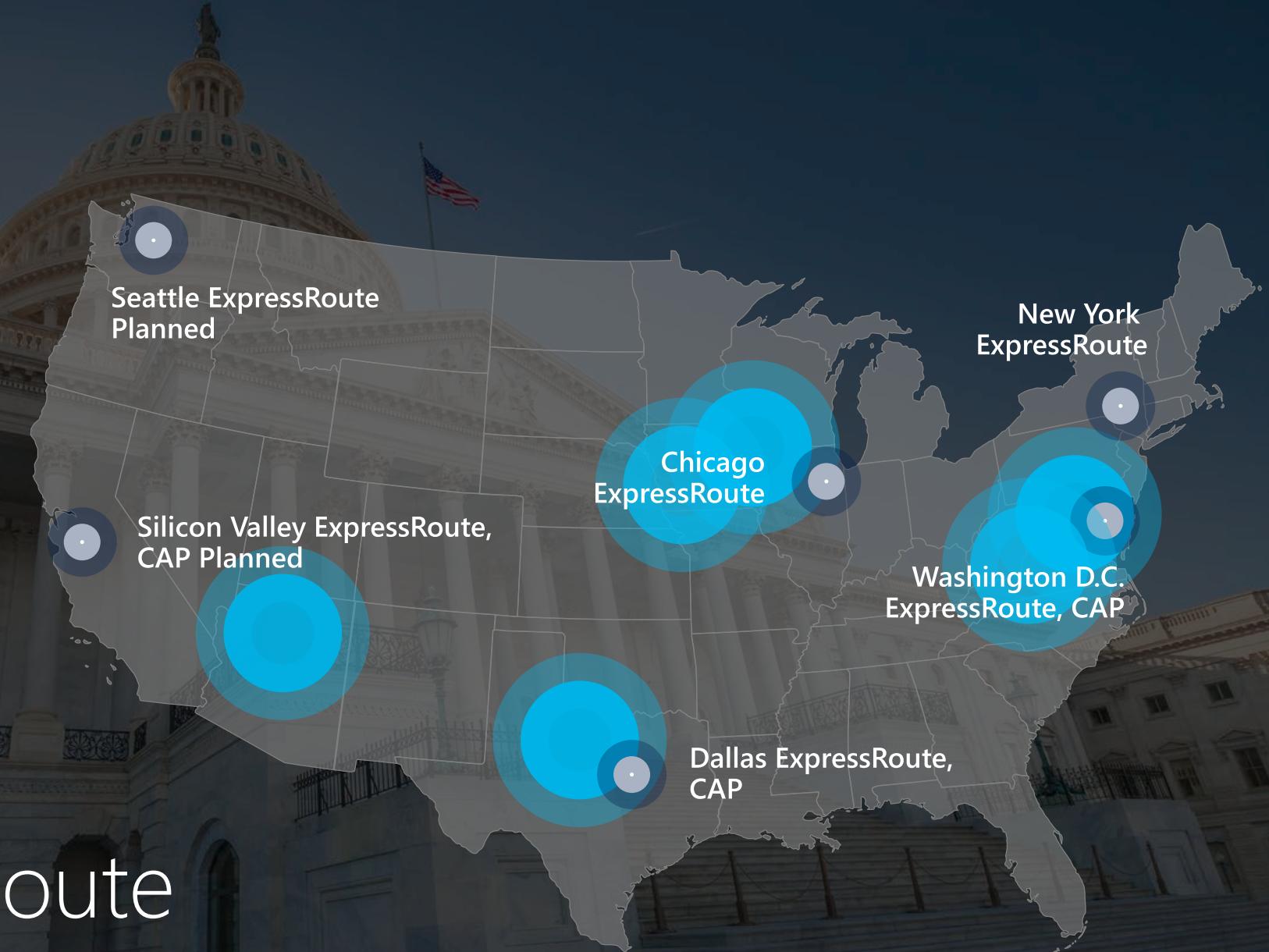
DoD  
regions

**2**

New  
regions

**6**

ExpressRoute  
Locations



# Microsoft Azure



## Trust

Protect your business



## Open and Hybrid

Build freely, deploy consistently in the cloud & on-prem



## Application innovation

Accelerate innovation with the cloud



## Data-Driven Intelligence

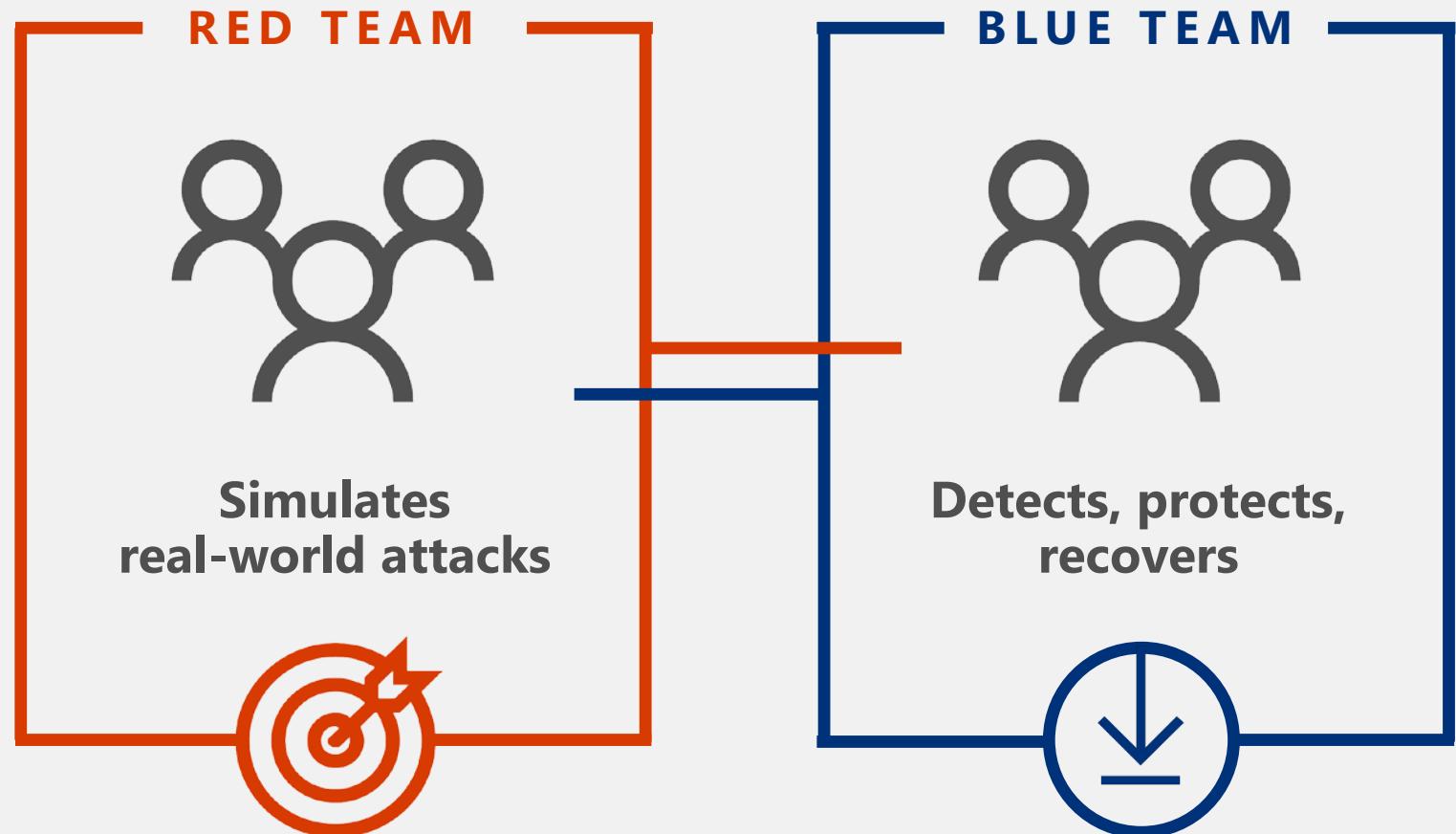
Power decisions & apps with insights

# Detect and mitigate threats



Trust

- Assume Breach
- Identify Attacks
- Restore Environment



# Detect and mitigate threats



Trust

Prevent

Detect

Respond

Microsoft Operations Management Suite

Overview ▶ Security And Audit

SECURITY DOMAINS

Security records over time

Count

100k  
80k  
60k  
40k  
20k

12:00 PM 6:00 PM 12:00 AM 6:00 AM

SecurityRecords

Antimalware Assessment Computers with Antimalware Assessment 15	Update Assessment Computers missing updates 3
Network Security Distinct IP addresses 389	Identity and Access Accounts attempted to log on 199
Computers Computers with security events 15	Threat Intelligence Malicious traffic events 6
Baseline Assessment Critical failed rules in the last day 111	Azure Security Center

NOTABLE ISSUES

Active issue types

CRITICAL  
1  
WARNING  
5  
INFO  
3

TOTAL  
9

NAME	COUNT	SEVERITY
Distinct malicious IP addresses accessed	1	!
Computers with insufficient protection	13	⚠
Low priority SQL assessment security r...	6	⚠
Computers missing critical updates	1	⚠
Logons with a clear text password	1	⚠
Members added To security-enabled g...	1	⚠
Accounts failed to log on	194	ℹ
Computers with failed ssh logons	2	ℹ
Security groups created or modified	1	ℹ

DETECTIONS (PREVIEW)

0 DETECTIONS OVER TIME

NAME	COUNT	SEVERITY
No issues were found for the time period		

2:29 PM 6:29 PM 10:29 PM 2:29 AM 6:29 AM 10:29 AM

< 1 of 1 >

< 1 of 1 >

# The most trusted and compliant cloud



Trust

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



FIEC



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

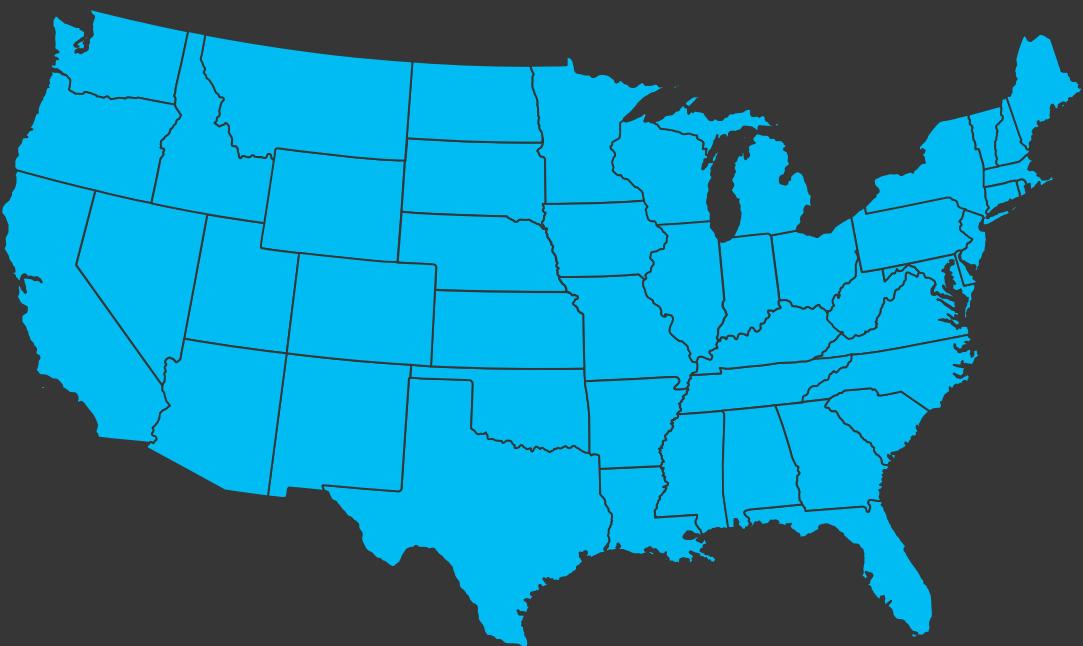


Canada  
Privacy  
Laws



Germany IT  
Grundschutz  
workbook

**All 50 US states** are Microsoft  
Cloud for Government customers



**Totaling 6 million users,  
across more than 7,000  
Federal, State and Local  
Governments**

# Microsoft has contractually committed to CJIS regulations in 60% of the United States!

Rate this article ★★★★☆



Rochelle M. Eichner August 23, 2017

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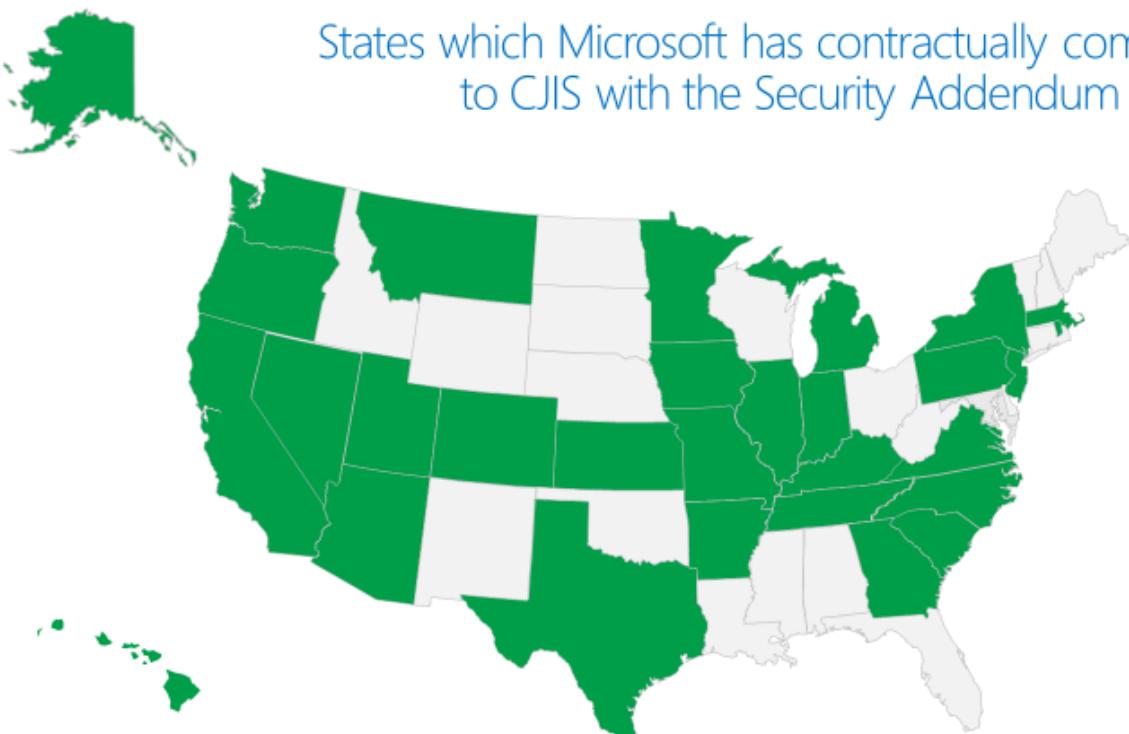


Trust

Nevada is the 30<sup>th</sup> state to background check Microsoft employees for CJIS

Joining states such as New York, California, Texas and many others, **Nevada** recently moved forward with a CJIS Information Agreement allowing the Nevada criminal justice community the opportunity to deploy mission critical justice and public safety solutions in Microsoft Government Cloud Services. From the words of **Julie Butler, Nevada CJIS Systems Officer** "The ability for law enforcement agencies to utilize criminal justice applications leveraging cloud-based solutions is critical for our criminal justice mission."

Below is a map of the states Microsoft has contractually committed to the applicable CJIS controls with a CJIS Information Agreement and CJIS Security Addendum:



# Microsoft and the State of Florida moving forward with a CJIS Lead Agency!



Trust

 Rochelle M. Eichner October 5, 2017

Rate this article ★★★★☆

 Share 0

 1

 124

 0

*City of Miami Police Department has committed to executing the CJIS Personnel Security Requirements for Microsoft*

Florida Department of Law Enforcement (FDLE), the State of Florida's CJIS Systems Agency, recently completed an audit of Microsoft controls applicable to the [CJIS Security Policy](#) (details [here](#)). The audit results are available for all law enforcement agencies in Florida to meet their CJIS regulatory requirements.

Another critical requirement of the CJIS Security Policy is the requirement for agencies to adjudicate internal and vendor employees with potential access to Criminal Justice Information (CJI). Through the Lead Agency process in Florida, the **City of Miami Police Department** will be verifying the identification and performing national fingerprint-based record checks for applicable Microsoft employees per section 5.12.1 of the Policy. *As the Lead Agency of Florida, other law enforcement agencies in Florida will be able to leverage the efforts of Miami Police Department for their CJIS compliance requirements.*

In addition, the City of Miami Police Department will be validating other security requirements such as signed CJIS Security Addendums, CJIS Security Training, and other important regulations in the Policy.

Once complete, the agreement with Florida brings the total number of states which Microsoft has contractually committed to the applicable CJIS controls and signed the CJIS Security Addendum to **33** - *representing 2/3 of the United States and over 80% of sworn officers in the country.*

The collaboration between the State of Florida CJIS Systems Agency, the City of Miami Police Department and Microsoft is critical for enabling law enforcement to leverage mission critical cloud solutions to meet their public safety mission. It has been an honor and privilege to work with FDLE and the other state CJIS Systems Agencies to address unique requirements of law enforcement.

For more information, refer to the [Microsoft Trust Center](#).

**Microsoft is committed to compliance. Don't settle for anything less!**

# Microsoft Azure



## Trust

Protect your business



## Open and Hybrid

Build freely, deploy consistently in the cloud & on-prem



## Application innovation

Accelerate innovation with the cloud



## Data and intelligence

Power decisions & apps with insights

# Build freely, deploy anywhere



**Open and Hybrid**



Build and run  
open source  
solutions



Extend  
on-premises  
identity, apps  
and data



Deploy  
the cloud  
on-premises

# Build and run open source solutions



Open and Hybrid

## Applications



## DevOps



## Frameworks



## Databases & middleware



## Containers



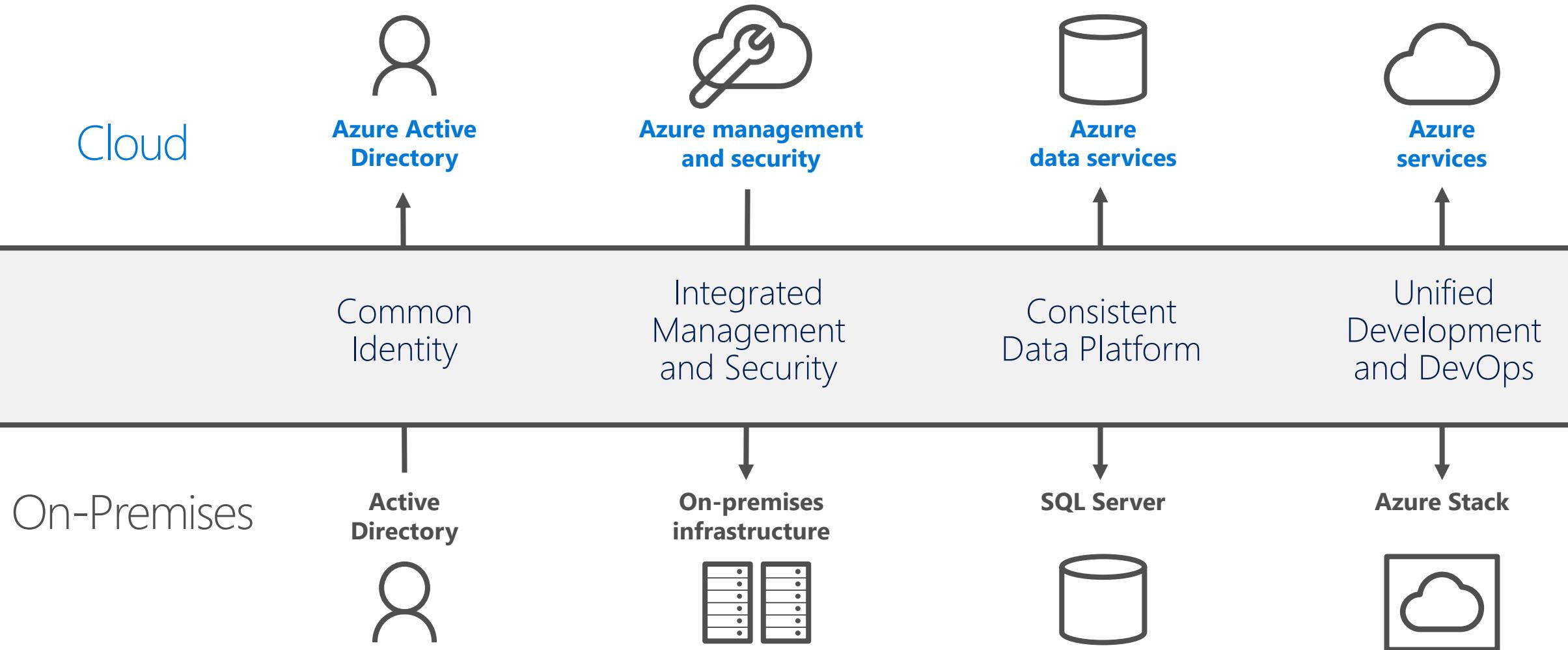
## Infrastructure



# Consistent identity, apps, data & management



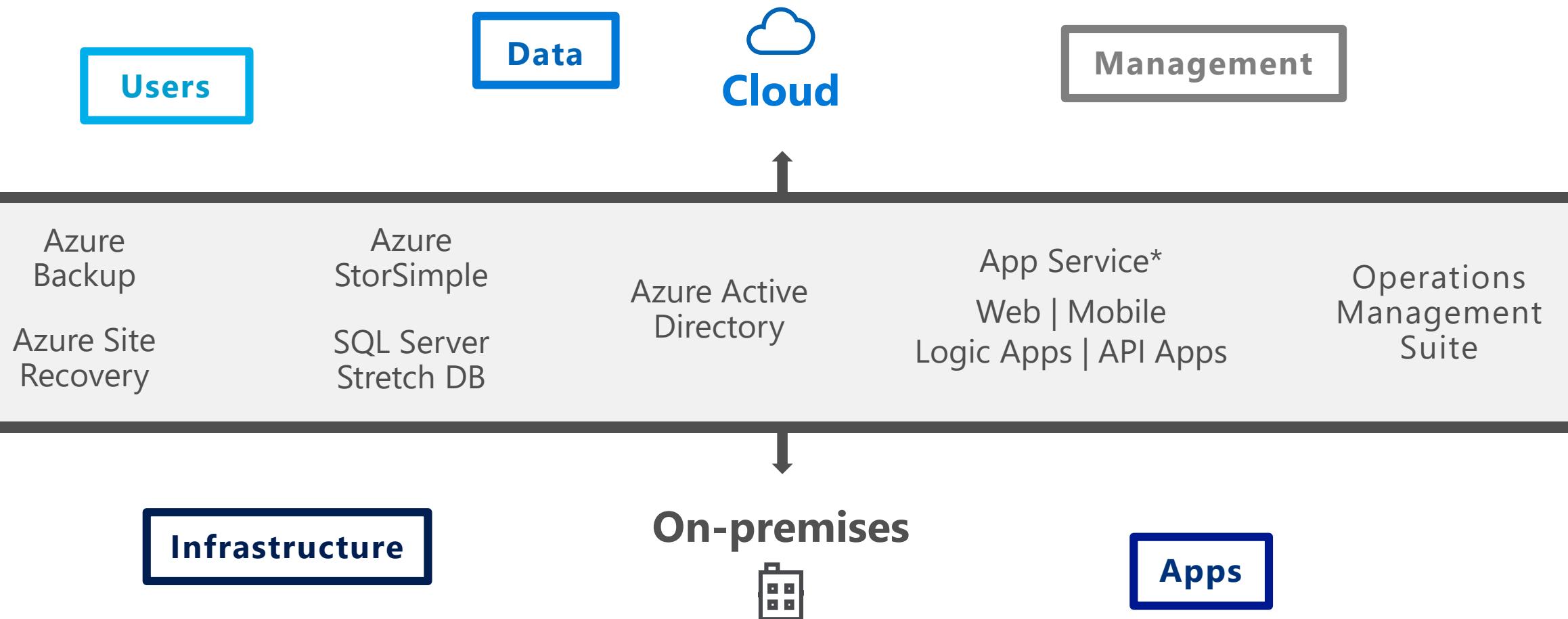
Open and Hybrid



# Deploy the cloud on-premises



Open and Hybrid



# Microsoft Azure



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Accelerate innovation with the cloud



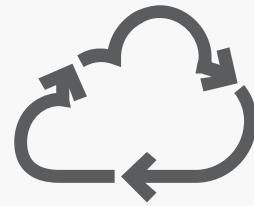
## Data-Driven Intelligence

Power decisions & apps with insights

# Accelerate innovation with the cloud



Application innovation



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Build apps  
faster and  
easier

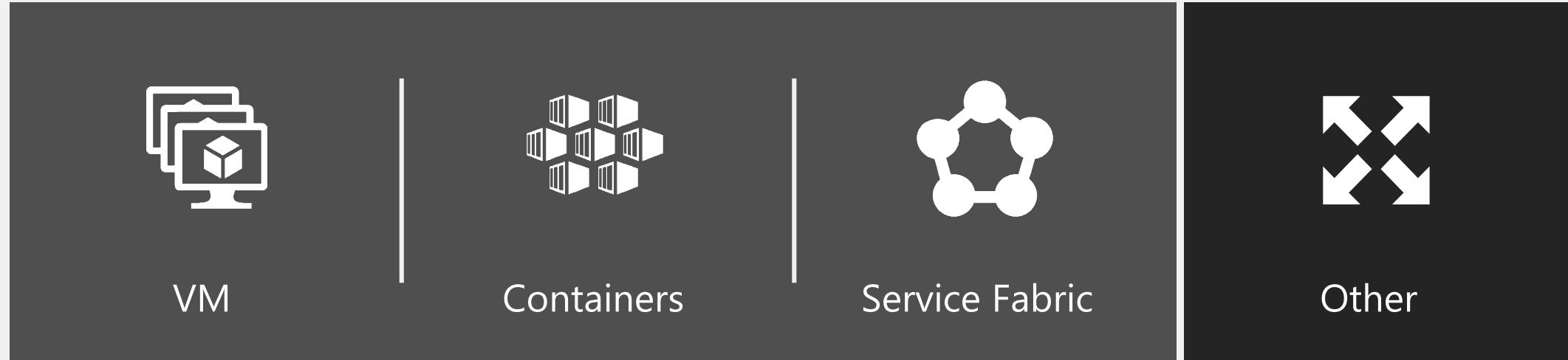
Manage  
applications  
proactively

Deliver native  
mobile apps  
seamlessly

# Build apps faster and easier - IaaS



Application innovation



Legacy applications,  
no change

Lift and shift

Efficiency and speed

Improved  
DevOps

Always-on, scalable,  
distributed  
applications

Hyperscale  
(e.g. IoT)

Cloud Foundry,  
OpenShift, Apprenda,  
Jetlastic, etc.

Third-party  
frameworks

# Build apps faster and easier - PaaS



Application innovation



App service

SQL PaaS

Logic apps

Azure  
Media Services

Web, mobile, and API  
apps

Highly available &  
scalable

Workflow &  
Integration

Upload, encode &  
package

---

Web and mobile

---

Easy provisioning and  
deployment

---

LOB integration and  
hybrid apps

---

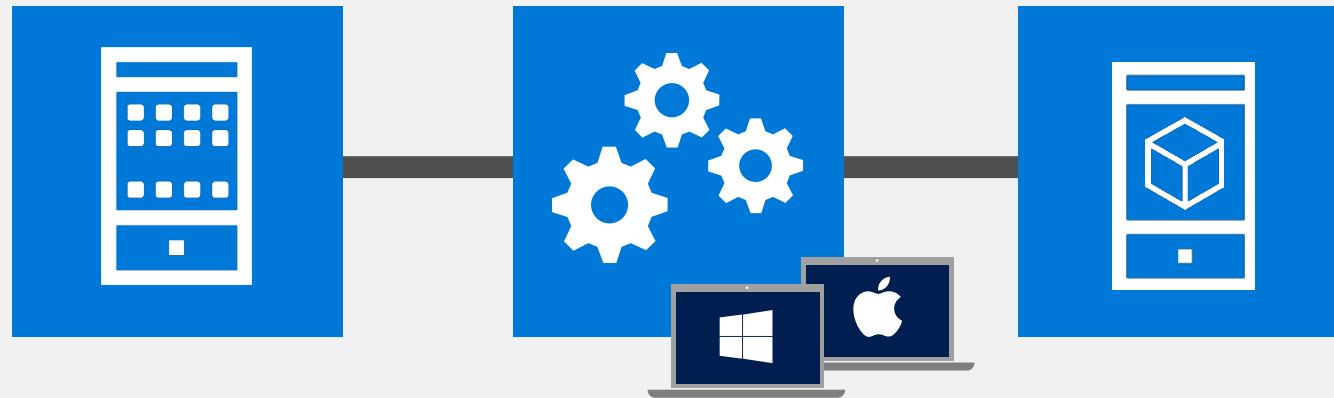
Scalable, cost effective

# Deliver native mobile apps seamlessly



Application innovation

## Mobile Applications



Mobile UI

Build + Deploy

Mobile services  
(API, Mobile apps)

## Mobile Back-end Services

Cloud and  
Offline Data

User  
Authentication

Push  
Notifications

# Microsoft Azure



## Trust

Protect your business



## Open and Hybrid

Build freely, deploy consistently in the cloud & on-prem



## Application innovation

Accelerate innovation with the cloud



## Data-Driven Intelligence

Power decisions & apps with insights

# Power decisions & apps with insights



Data and intelligence



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Support business  
strategy with  
any data

Predict and  
respond  
proactively

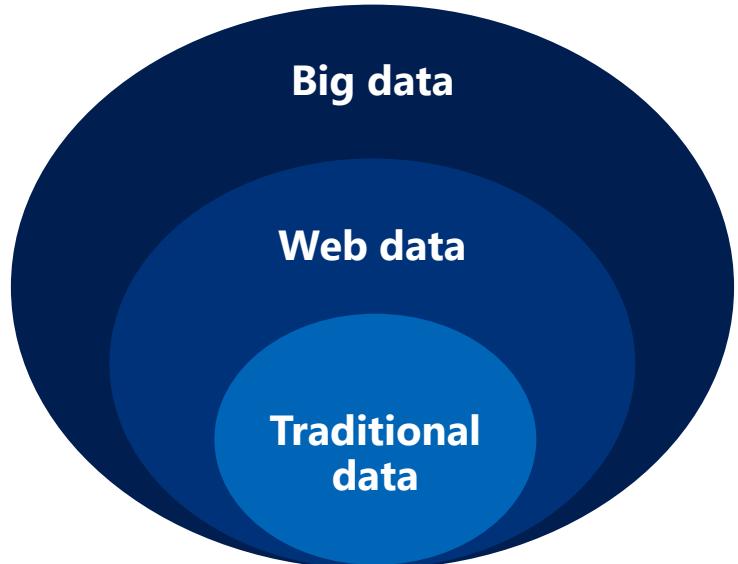
Learn and engage  
with artificial  
intelligence

# Support business strategy with any data



Data and intelligence

## Back-end power



## Front-end insights



# Predict and respond proactively



Data and intelligence

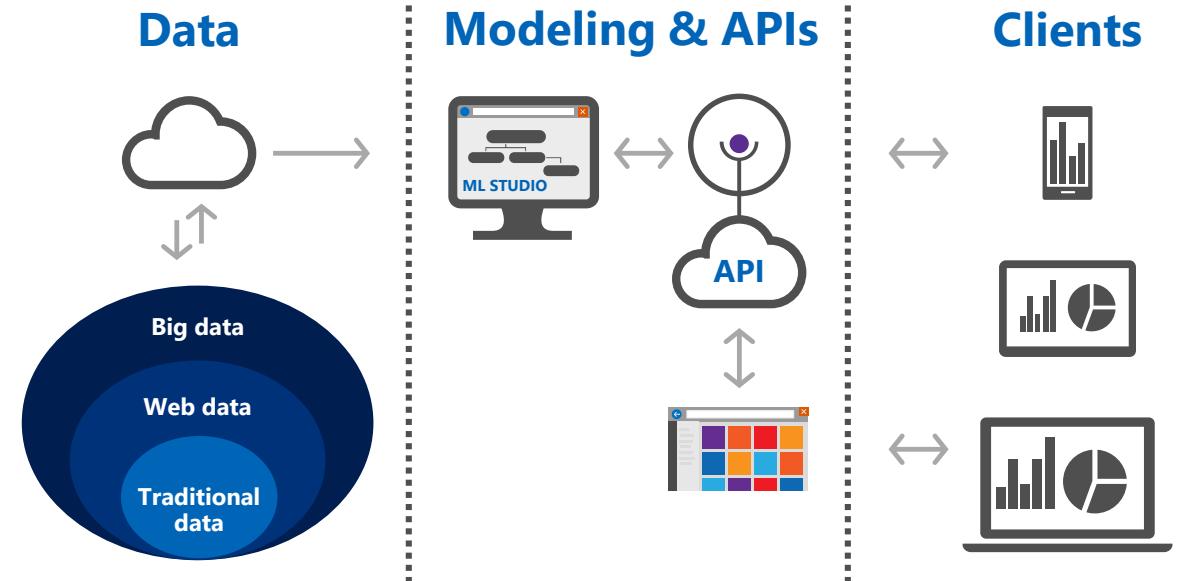
## Machine learning templates

Demand forecasting

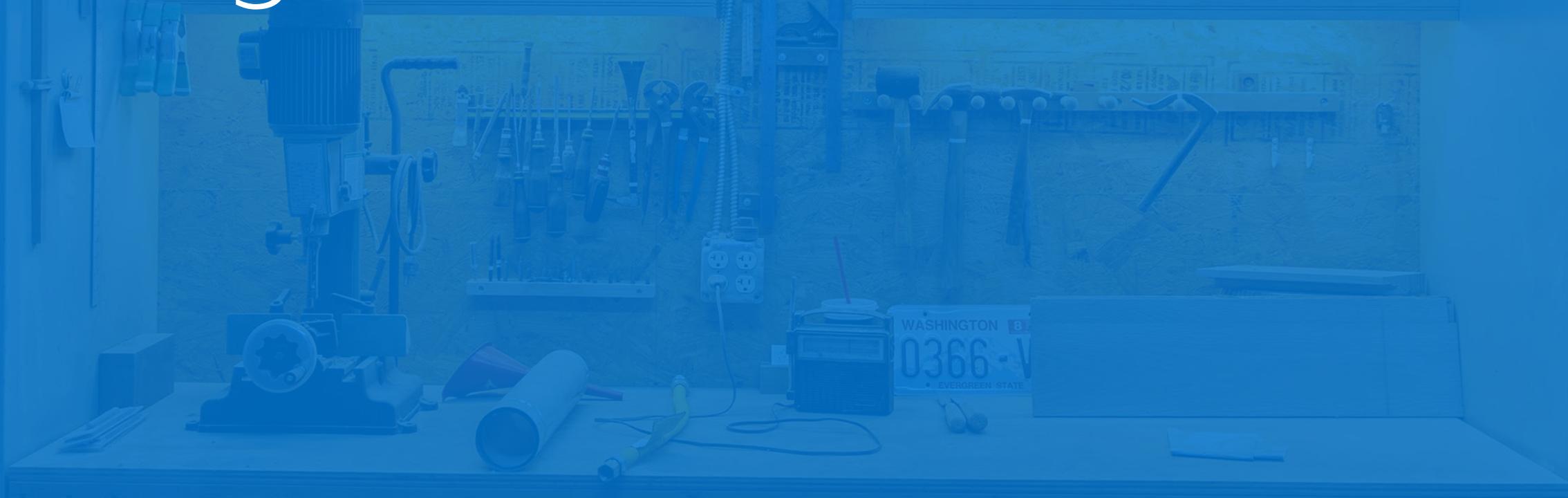
Predictive maintenance

Vehicle telemetry

## Machine learning service



# Moving to the Cloud



# Crawl

3 Cloud Commodities:  
Network, Storage, Compute

- 1. Cloud Roadmap (StratoZone™)
- 2. Azure Enrollments (MAC & MAG)
- 3. Azure Foundations

## Network

- 4. S2S VPN

## Storage

- 8. Backup
- 7. StorSimple
- 6. Log Analytics

## Compute

- 5. O365 Resilient Identity
- IaaS VMs
- Dev/Test
- Migrate Access DBs (PowerLine™)

# Walk

## Network

- Express Route

## Storage

- 9. BCDR / Site Recovery (ASR)

## Compute

- IaaS Lift & Shift
- Web Apps

## Data

- SQL Database
- SQL Data Warehouse
- Data Factory
- PowerBI

## DevOps

- VS Team Services
- Application Insights
- Xamarin
- HockeyApp

# Run

## Industry ISV Solutions

### Compute

- Containers
- Service Fabric
- Functions
- Mobile Apps

### Data

- DocumentDB

### Analytics & IoT

- Analysis Services
- Machine Learning
- HDInsight (Hadoop™ & Spark™)
- Data Lake (Store & Analytics)
- Data Catalog
- IoT Hub
- Stream Analytics

### Intelligence

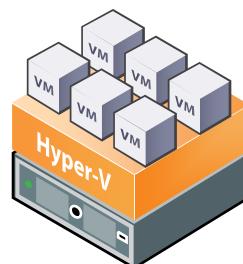
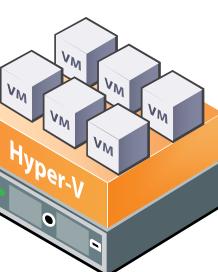
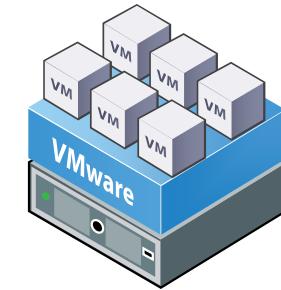
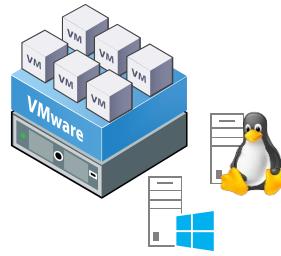
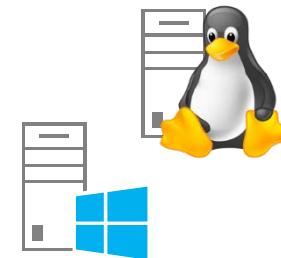
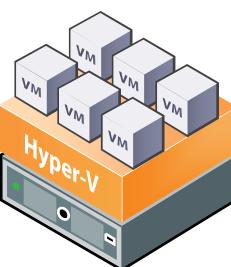
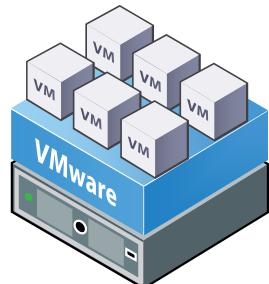
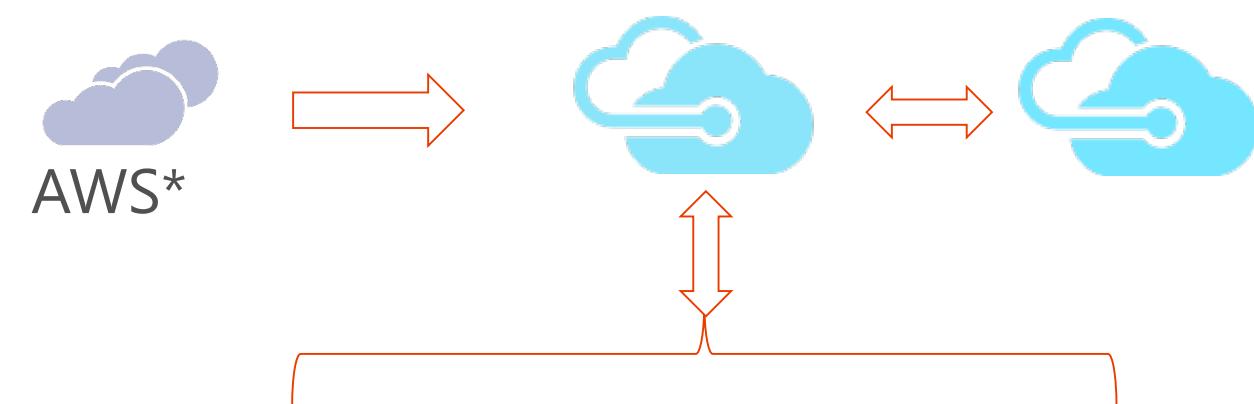
- Cognitive Services
- Bot Service

# Azure Site Recovery: The Complete Disaster Recovery Solution

## Site to Azure

## Any Cloud

## Site to Site



Windows

Any OS



Linux

# Thank You!



# Resources



Azure Government

<https://azure.microsoft.com/en-us/overview/clouds/government/>



Azure Government documentation

<https://docs.microsoft.com/en-us/azure/azure-government/>



Azure Government free trial

<https://docs.microsoft.com/trial/azuregovttrial>

# AWS GovCloud comparison



Amazon doesn't "yet" have an east coast datacenter



["The AWS GovCloud \(US\) Region is located in the Northwestern region of the United States..."](#)

Amazon's is not complaint in all the places you need it



[AWS has 20 services in scope for FedRAMP](#)

AWS has ~8 states covered by CJIS

Amazon doesn't specify that they have dedicated physical network



["The AWS GovCloud \(US\) region is physically isolated and has logical network isolation from all other regions."](#)

Not all "GovClouds" are defined the same



["GovCloud is not just for US Government Users span government, commercial entities, education and non-profits."](#)

Connectivity is key



[DirectConnect is not a covered service in AWS FedRAMP Moderate or FedRAMP High package](#)

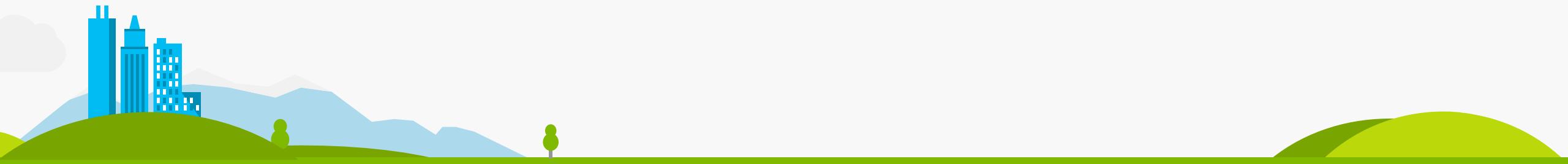
Azure Government has datacenter region locations and DoD specific regions, close to federal agencies.

Azure Government has 32 services in FedRAMP High  
Azure Government has 26 states covered by CJIS

Azure Government provides a physical instance of Microsoft Azure with a dedicated network and offers geo-replication between locations.

Azure Government requires a U.S. entity and direct Government affiliation or government controlled data requirements.

Azure Government build dedicate ExpressRoute sites for government and includes them in our DoD and FedRAMP compliance scope.



# Azure Gov Eligibility/Onboarding

A U.S. Government entity in its governmental capacity

A partner using Azure Government to provide a solution that, for example:

- Provides services and/or solutions to US Government customers
- Holds a direct or indirect Government contract through GSA and specific to the use of a partner solution

A commercial private entity with data that's subject to regulations.

Accepted government data types:

- International Traffic in Arms (ITAR)
- Controlled Unclassified Information (CUI)
- Department of Defense (DoD) Unclassified Controlled Nuclear Information (UCNI)
- Department of Energy (DoE) UCNI
- Criminal Justice Information (CJI)
- Department of Defense Impact Level Data

# Videos

Technical Content

Demos and Discussions

Channel 9/Azure.com

## Azure videos

SERVICES:	VIDEO SERIES:	TAGS	SORT BY
All	All	Azure Government	New



### Compliance on Azure Government

In this episode of the Azure Government video series, Z Government) about compliance in Azure Government. offered by Azure Government including FedRAMP High CJIS for federal law enforcement data, and more. They currently available today that are covered by these con streamline the certification process for the compliance Cybersecurity executive order and how Azure Governr comply.



### Cognitive Services on Azure Government

In this episode of the Azure Government video series, S Manager, Cognitive Services) about Cognitive Services how the technology works and how it enables develop in any programming language they choose. In this pres Services technologies that can greatly enhance the cap

filters

Recent<sup>X</sup>



Azure C  
Wha

Jul 13, 2  
by Steve

In this  
talks w  
Gover

<http://aka.ms/AzureGovVideos>

# Documentation

Get Started

Understand Differences

Contribute!!

Microsoft Azure

Why Azure Solutions Products Documentation Pricing Training Marketplace Partners Blog Res

Azure / Government

Filter

✓ Overview

What is Azure Government?  
ITAR  
Justice and Public Safety  
Department of Defense

✓ Get Started

Developer guide  
Log in to the Azure Government portal  
Provision a web app  
Connect with PowerShell  
Connect with CLI  
Set up Visual Studio for Azure Government  
Connect to Azure Government from Visual Studio Team Services  
Available services

› How To

✓ Reference

Images  
Marketplace  
Marketplace for partners

## Azure Government Doc

Microsoft Azure Government delivers a cloud platform for the public sector. Public Sector entities receive a physically isolated infrastructure and government for all systems and applications built on the Microsoft Azure platform.



Learn about Azure Government

## Reference

Images

Marketplace

Marketplace for partners

<http://aka.ms/AzureGovDocs>



Trust

# Achieve global scale, in local regions

# 38

Azure [regions](#)

## RECENTLY LAUNCHED:

US Regions: West US 2 and West Central  
Germany – Launched in Sep 2016  
United Kingdom – Launched in Sep 2016

## NEWLY ANNOUNCED:

France: France Central and France South  
Korea: Korea Central and Korea South  
DoD East and Central

# Momentum

**194 billion**

External Requests made  
to Azure App Service

**340 billion**

Azure SQL query  
requests processed/day

**750 million**

Azure Active  
Directory users

**188 billion**

Hits to websites run on  
Azure Web App Service

**>90%**

of Fortune 500 use  
Microsoft Cloud