

WBSC@Ignite: Best of Modern Workplace Tour

Wir starten pünktlich um 13.00 Uhr

 **WBSC**
Windows Business
Solutions Club

Mit freundlicher Unterstützung von

INCRAM MICRO



Microsoft

An dieser Stelle wurde auf der Veranstaltung ein kurzer Ausschnitt aus der Keynote von der Microsoft Ignite 2019 gezeigt. Die vollständige Aufzeichnung der Keynote finden Sie unter:

<https://www.microsoft.com/en-us/ignite>



WBSC@Ignite: Best of Modern Workplace Tour

Herzlich willkommen am 28.11.2019 in München!



Microsoft®
Most Valuable
Professional

Manfred Helber

Twitter: @ManfredHelber

www.manfredhelber.de

Manfred@manfredhelber.de

 **WBSC**
Windows Business
Solutions Club

Mit freundlicher Unterstützung von

INCRAM MICRO®



Microsoft



Jetzt gleich anmelden unter:
expertzone.microsoft.com



Und mit etwas Glück
heute ein **Surface Go** mit
Type Cover gewinnen.

A photograph of Satya Nadella, CEO of Microsoft, speaking on a stage. He is wearing a blue t-shirt and glasses, gesturing with his hands. The background is a solid blue color.

Agenda

- 13.15 Uhr **Teil 1: Ein allgemeiner Überblick**
Im ersten Teil geben wir Ihnen einen Überblick über die wichtigsten Neuerungen, die dieses Jahr auf der Microsoft Ignite kommuniziert wurden.
- 15.00 Uhr **Kaffee- und Kuchenpause und Device-Ausstellung**
- 15.45 Uhr **Teil 2: Die Infrastruktur**
Im zweiten Teil werden wir uns die Neuerungen in Bezug auf Infrastruktur-Lösungen wie Windows Server oder Microsoft Azure genauer ansehen. Management-Komponenten wie Intune oder Veränderungen im Security-Setup werden ebenfalls behandelt.
- 17.30 Uhr **Herzhafte Snacks und Device-Ausstellung**
- 18.45 Uhr **Teil 3: Die Anwendung**
Mit dem dritten und letzten Teil des Programms machen wir Sie mit den Ankündigungen rund um Windows Devices und Anwendungen vertraut. Hier spielen neue Geräteklassen, Änderungen rund um das Client Betriebssystem, Microsoft 365 und Teams eine große Rolle.
- 19.30 Uhr **Ende Schulung und Popcorn holen**
- 20.15 Uhr **Terminator – Dark Fate**

Secure Workplace Readiness Tour

„End of Support ist Gegenwart, wie sieht nun der moderne sichere Arbeitsplatz aus und wie wird er gemanagt?“

14. Januar
15. Januar
16. Januar
21. Januar
22. Januar
23. Januar

München
Stuttgart
Frankfurt
Düsseldorf
Hamburg
Berlin

Agenda

- 12.00 Uhr Welcome Reception und Drinks
- 13.00 Uhr Willkommen durch den Gastgeber und Einleitung zum Event (Sven)
- 13.30 Uhr Teil 1: Der Security Stack in Windows, Office 365 und Microsoft 365
Windows Defender – ein Blick unter die Haube dieser umfangreichen Sicherheitslösung
Durchgängige Gerätesicherheit auf modernen Devices mit Windows 10 Pro
Zusätzlicher Schutz durch Hello for Business und Multi-Faktor-Authentifizierung
Office 365 oder Microsoft 365? Die bessere Wahl für den modernen Arbeitsplatz!
- 15.00 Uhr Kaffee- und Kuchenpause und Device-Ausstellung
- 15.45 Uhr Teil 2: Windows, moderne Devices und Office für den modernen Arbeitsplatz
Neuerungen aus der Windows- und Device-Welt
Sichere Dateifreigaben mit Information Protection
Bereitstellungskonzepte für die moderne Device-Welt
- 17.20 Uhr Herzhafte Snacks und Device-Ausstellung
- 18.30 Uhr Teil 3: Verwalten einer modernen Arbeitsumgebung mit Microsoft Intune
Device Management mit Microsoft Intune – Konzept von gestern?
Welche zusätzlichen Möglichkeiten bietet Conditional Access?
Wie manage ich Android- und iOS-Devices mit Intune
- 19.45 Uhr Ende Schulung und Popcorn holen
- 20.15 Uhr aktueller Blockbuster

[Jetzt kostenfrei anmelden](#)



Sven Langenfeld



Manfred Helber



Dominique Côté

WBSC@Night

Go hybrid mit Azure Stack HCI

16.00 bis 20.30 Uhr

Datum	Ort
25. Februar	München
26. Februar	Stuttgart
27. Februar	Frankfurt
3. März	Düsseldorf
4. März	Hamburg
5. März	Berlin

 **WBSC**
Windows Business
Solutions Club

Mit freundlicher Unterstützung von

 **FUJITSU**

Die Agenda

Hier Location aussuchen und kostenlos anmelden!

16.00 Uhr *Einlass und Networking bei Snacks*

17.00 Uhr **Storage Spaces Direct auf Azure Stack HCI zertifizierter Hardware**

- Einstieg in das Thema hyperconvergente Infrastruktur mit Storage Spaces Direct
- Setup und Management mit Windows Admin Center
- Einsatzszenarien im SMB-Segment

18.30 Uhr *Drinks, Snacks und Networking*

19.15 Uhr **Hybride Einsatzszenarien mit Azure Stack HCI und Windows Admin Center**

- Einfache Integration von Azure-Diensten zur Optimierung und Erweiterung lokaler Installationen mit WAC
- Einsatzszenarien von hybriden Diensten für den SMB-Kunden (Best Practices)
- Lizenzierungs-Basics für HCI und Hybrid

20.30 Uhr *Feierabend*



Durch die Schulung führt unser erfahrener Club-Trainer und MVP (Most Valuable Professional) Manfred Helber.





WBSC # TALK



Live und on-demand

WBSC@Night: Modern Workplace Licensing - Tour (20WK09)

Lizenzierungswissen rund um den modernen Arbeitsplatz schützt nicht nur Partner, sondern auch Kunden vor Unter- oder Überlizenzierung. 50% der Supportanfragen an Manfred Helber oder Sven Langenfeld beziehen sich auf Lizenzierung. Höchste Zeit, dass wir eine WBSC@Ignite-Tour diesem wichtigen Thema widmen.

[Stuttgart](#)

[München](#)

[Frankfurt](#)

[Düsseldorf](#)

[Hamburg](#)

[Berlin](#)



WBSC # TALK



Live und on-demand



Überblick über das aktuelle Schulungsangebot des Windows Business Solutions Clubs

Der Windows Business Solutions Club ist eine Community für Microsoft Partner, die sich für professionelle Infrastruktur- und Anwendungs-Lösungen von Microsoft interessieren. Wir bieten hochkarätige Schulungen mit großem Live-Demo-Anteil mit dem Ziel, dass Sie die Technologien erleben, verstehen und erfolgreich beim Kunden platzieren können. Dabei orientieren wir uns sowohl in Richtung Cloud als auch on-premises.

<https://aka.ms/WBSCEvents>

WBSC #TALK

SPRECHSTUNDE

www.youtube.com/svenlangenfeldWBSC



Sven
Langenfeld



Manfred
Helber

 WBSC
Windows Business
Solutions Club

Wir hören uns über LinkedIn



The screenshot shows a LinkedIn profile for Sven Langenfeld geb. Pawlowski-Hegermann. The background image of the profile is a Microsoft building with the company logo. The profile picture is a circular headshot of the same man. The text on the profile includes his name, title 'Senior Commercial Category Lead bei Microsoft', and location 'München, Bayern, Deutschland'. There are two buttons: 'Profilbereich hinzufügen' with a dropdown arrow and 'Mehr ...'. To the right, there are three icons with text: a company icon for 'Microsoft', a contact icon for 'Kontaktdaten anzeigen', and a people icon for 'Kontakte zeigen (500+)'. A small LinkedIn logo with an edit icon is also visible.

Sven Langenfeld geb. Pawlowski-Hegermann
Senior Commercial Category Lead bei Microsoft
München, Bayern, Deutschland

Profilbereich hinzufügen ▼ Mehr ...

Microsoft
Kontaktdaten anzeigen
Kontakte zeigen (500+)

Bitte Bild klicken und verknüpfen.





WBSC@Ignite: Best of Modern Workplace Tour

Teil 1: Ein allgemeiner Überblick

13.15 bis 15.00 Uhr



Microsoft



Microsoft
Ignite

This Level
Attendee Check-in
& Ticket
Scanning

Registration Meeting
University & Institution
Mingle
Project Rooms
Quiet Room
Question
Time

Security
Technology
Keynote

OCCC West Hall

Find your way - OCCC West

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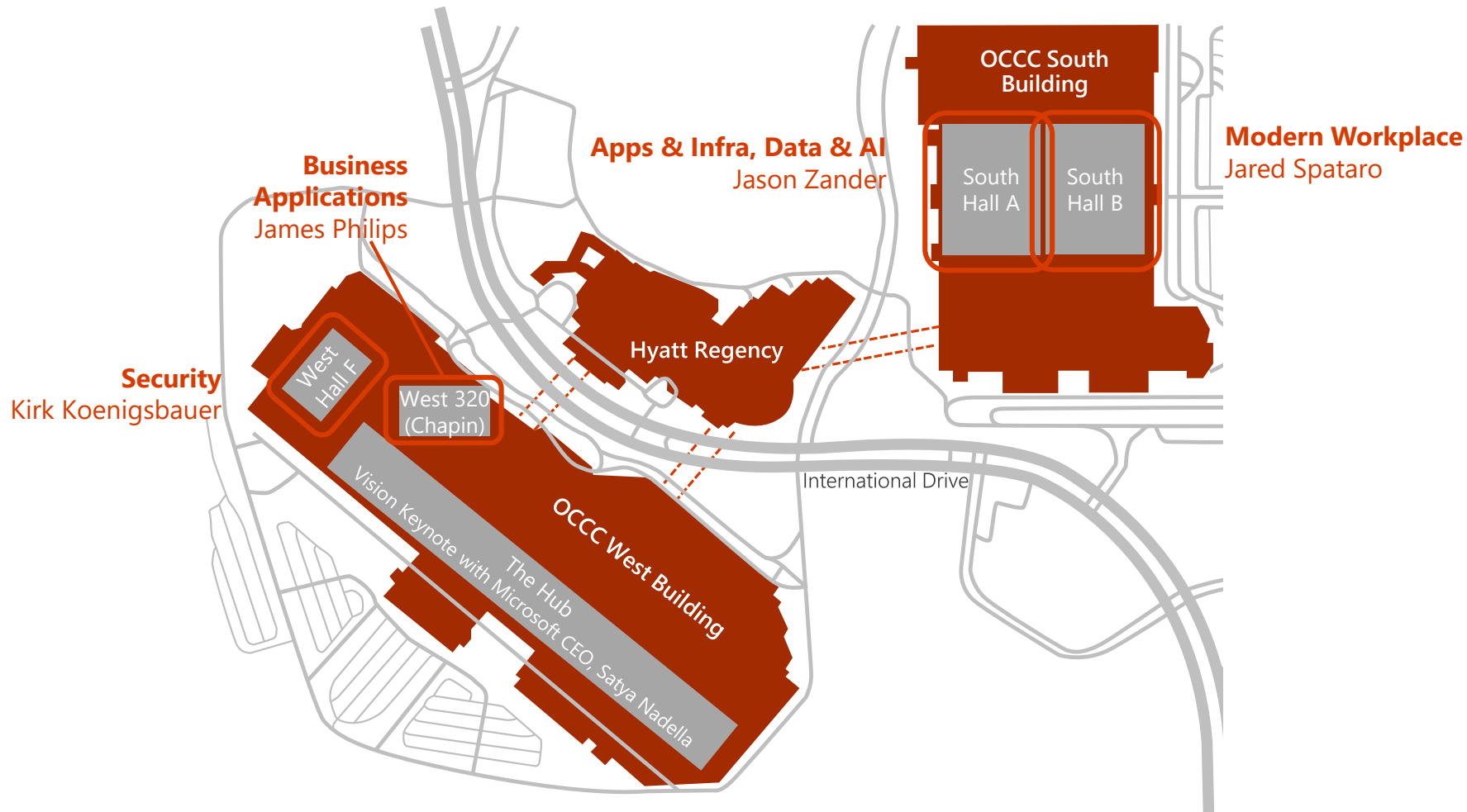
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Level -92
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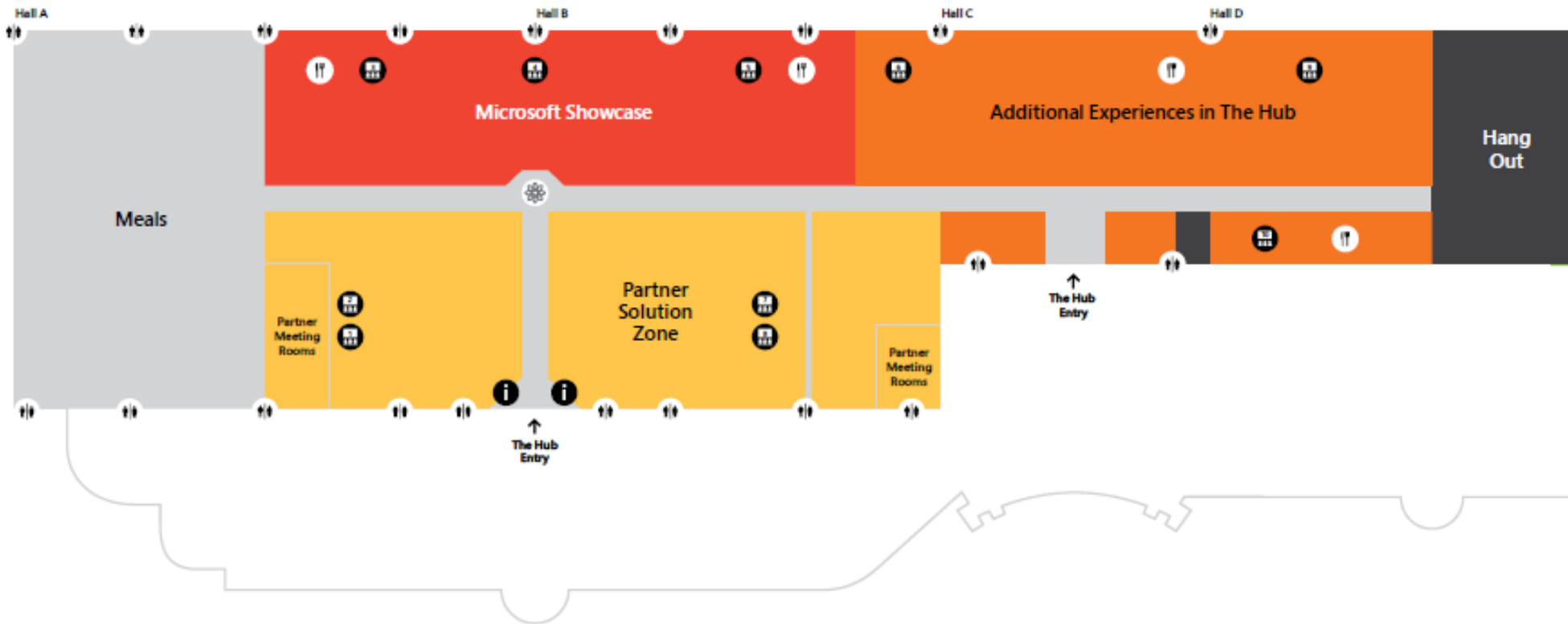
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Microsoft Ignite 2019 - Keynote locations

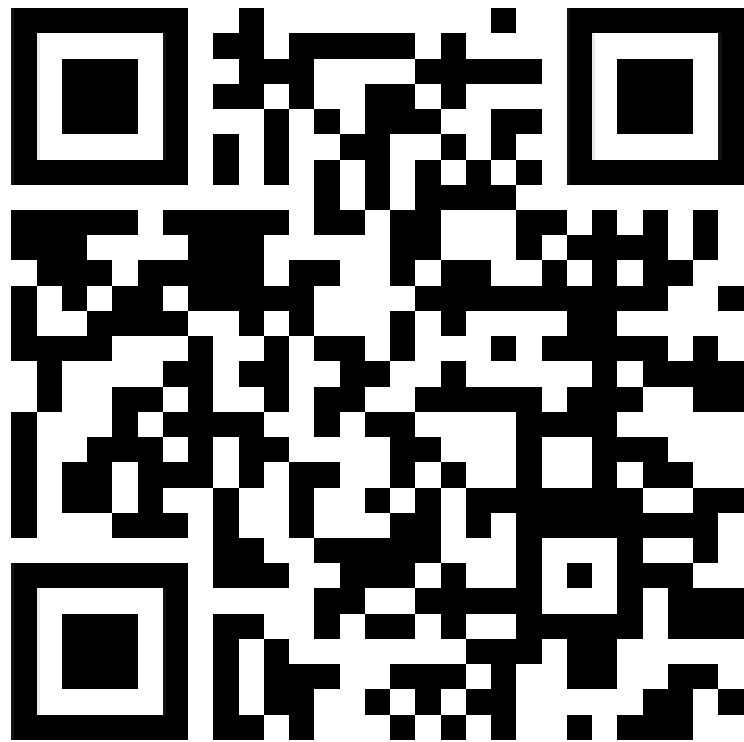


Microsoft Ignite 2019 - The Hub Overview





<https://www.youtube.com/SvenLangenfeldWBSC>



<https://www.youtube.com/manfredhelber>



BOOK OF NEWS

Microsoft Ignite 2019

Orlando, November 4 – 8, 2019



<https://news.microsoft.com/wp-content/uploads/prod/sites/563/2019/11/Ignite-2019-Book-of-News.pdf>

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Azure Stack Family

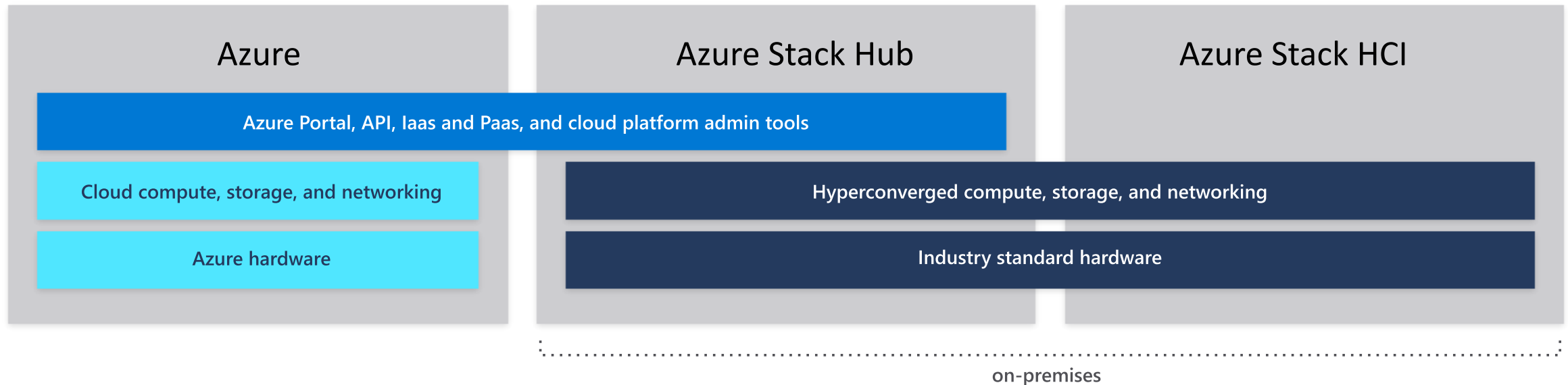


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Microsoft Azure, Azure Stack Hub and Azure Stack HCI



Azure - Use public cloud services

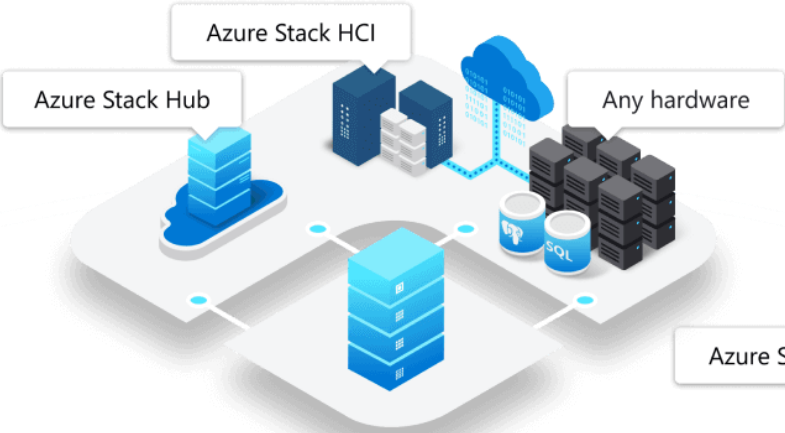
Azure Stack Hub - Operate cloud services on-premises

Azure Stack HCI - Run virtualized apps on-premises, with optional connections to Azure

<https://Microsoft.com/HCI>



Multi-cloud



On-premises



Edge





Azure Stack HCI

Hyperconverged solution

Scalable virtualization and storage

Remote branch office

High-performance workloads



Azure Stack Edge

Cloud-managed appliance

Machine learning at the edge

Edge compute and IoT solutions

Network data transfer to [cloud](#)



Azure Stack Hub

Cloud-native integrated system

Disconnected scenarios

Data sovereignty

Application modernization





GOJO Industries
Azure IoT, Azure Sphere

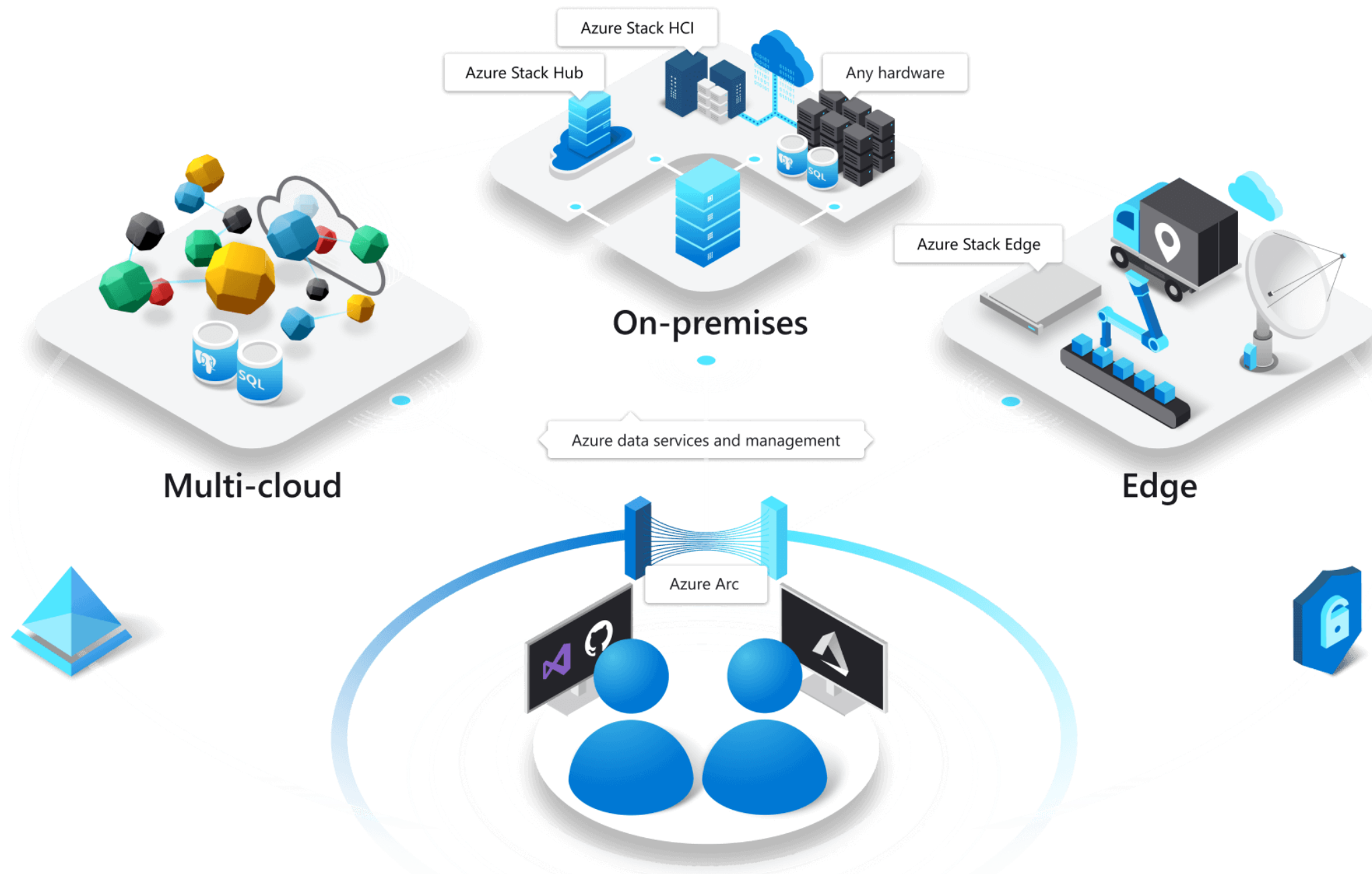


Johnson Controls
Azure IoT Edge

CODE	STOCK NAME	PRICE	CHANGE
2333	WESTERN PACIFIC	1.82	0.00
2338	SAC GROUP	0.12	0.00
2339	HC-BUCL REC1204	0.12	0.00
2340	CHINA TELECOM	4.78	0.00
2341	CST MINING	0.12	0.00
2342	HC-BUCL REC1201	0.12	0.00
2343	WASC HOLDINGS	0.12	0.00
2344	PRASA	38.10	0.00
2345	ROC HONG KONG	20.20	0.00
2346	ENVIRO ENERGY	0.12	0.00
2347	CITIC BANK	1.44	0.00
2348	SPARKLE ROLL	0.12	0.00

納斯達克綜合指數 NASDAQ

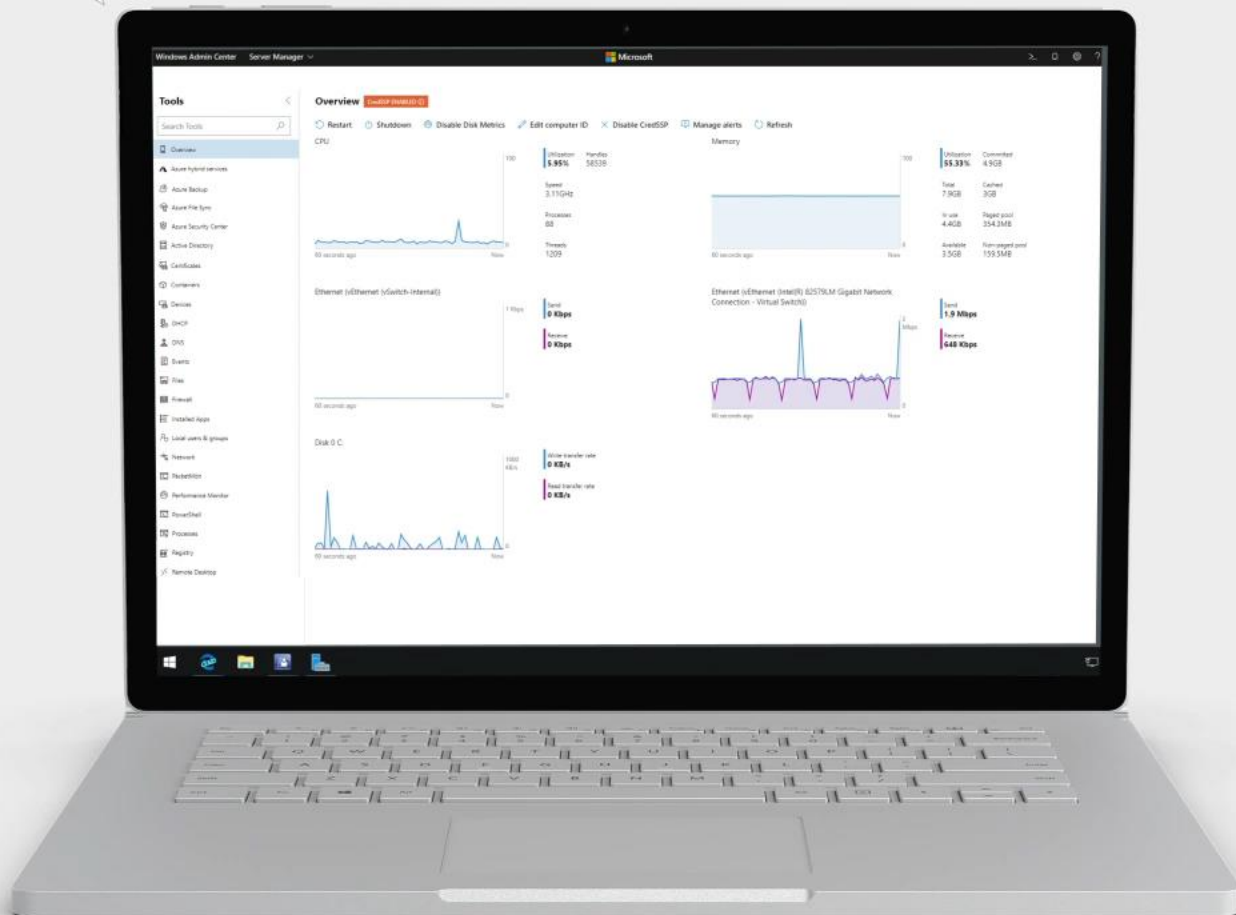
**Hong Kong Exchanges
and Clearing Limited**
Azure Stack



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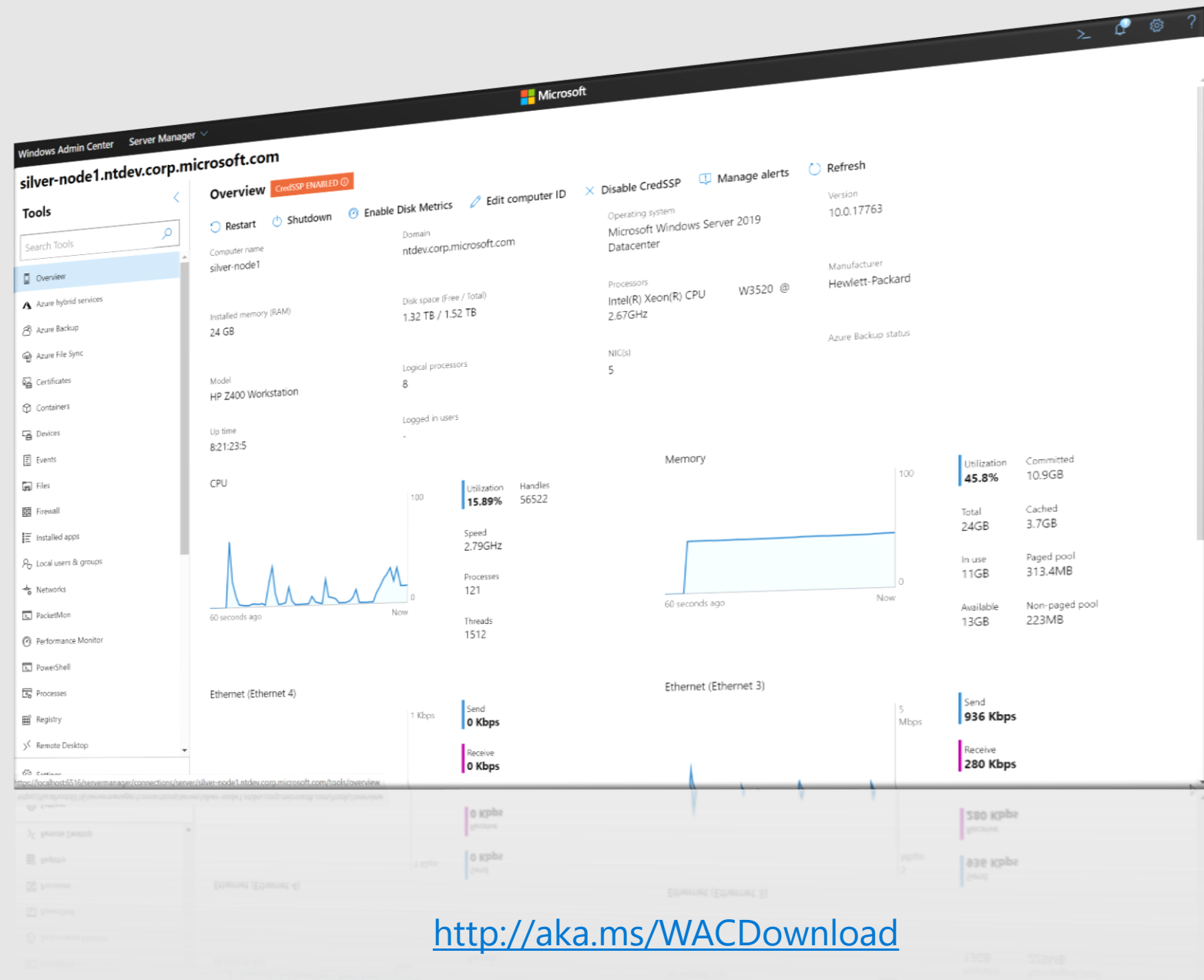




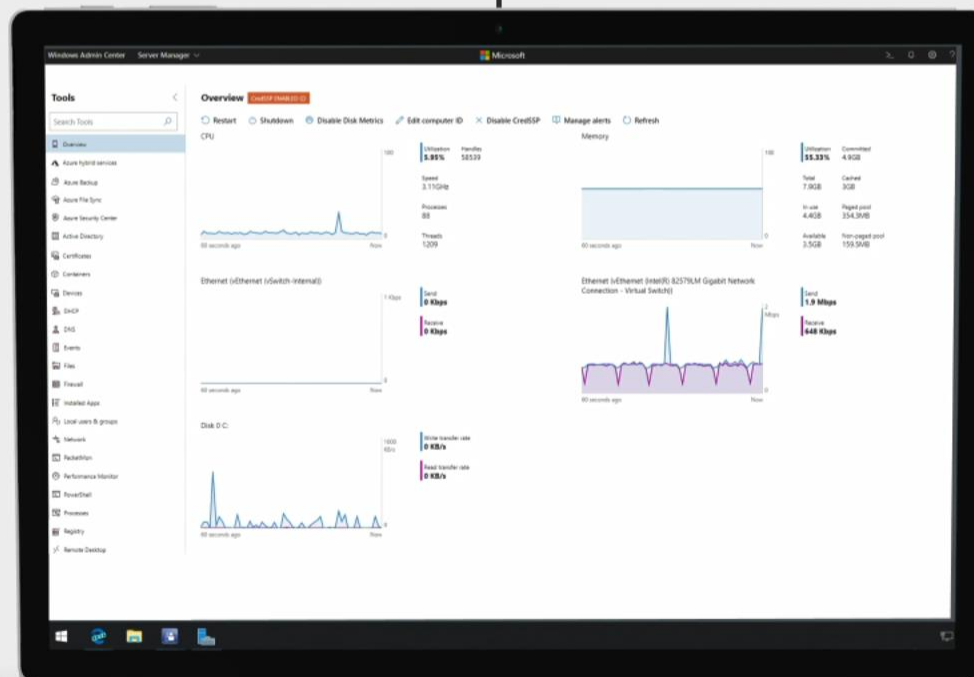
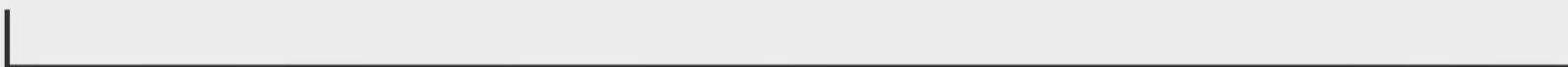
Windows Admin Center

Windows Admin Center

Now 3+ million servers under management



Windows Admin Center: Server Management Reimagined

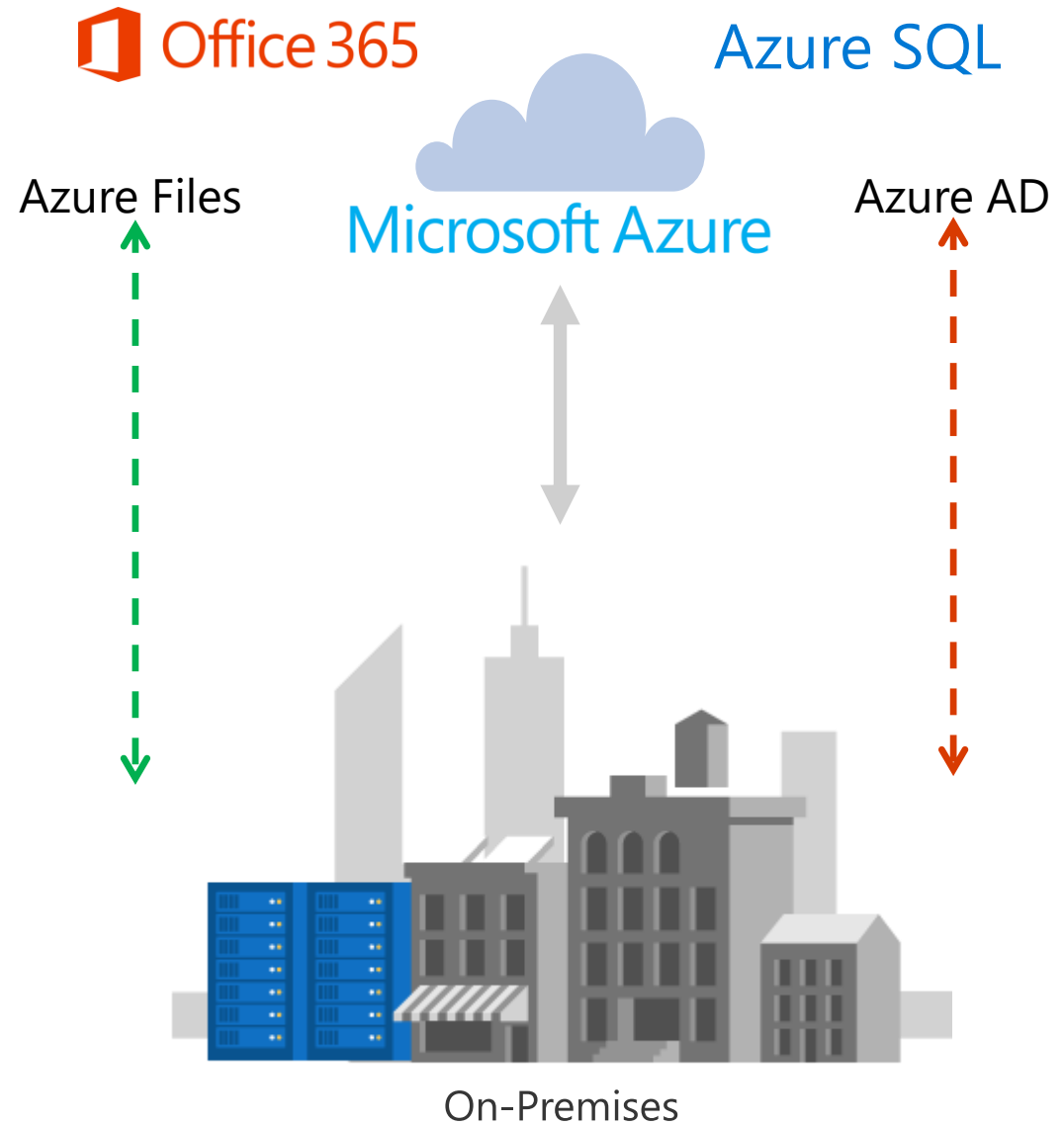


Streamline
everyday tasks

Connect to
Azure for hybrid

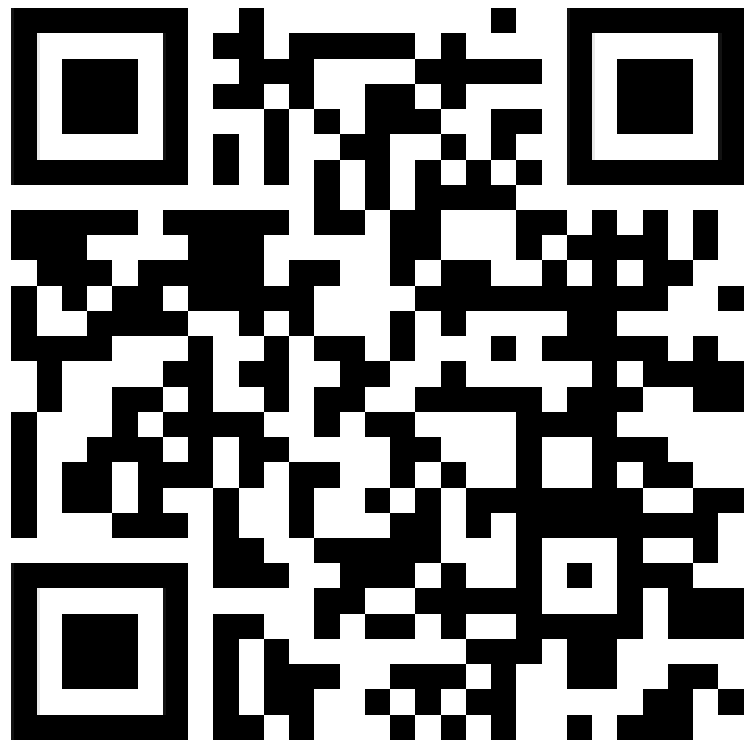
App Modernization

Exchange
SharePoint
SQL Server
Active Directory
Web Server
File Server
Print Server
Custom Apps





<https://www.youtube.com/SvenLangenfeldWBSC>



<https://www.youtube.com/manfredhelber>



BOOK OF NEWS

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Orlando, November 4 – 8, 2019



<https://news.microsoft.com/wp-content/uploads/prod/sites/563/2019/11/Ignite-2019-Book-of-News.pdf>



WBSC@Ignite: Best of Modern Workplace Tour

Kaffee- und Kuchenpause und Device-Ausstellung

15.00 bis 15.45 Uhr



Microsoft



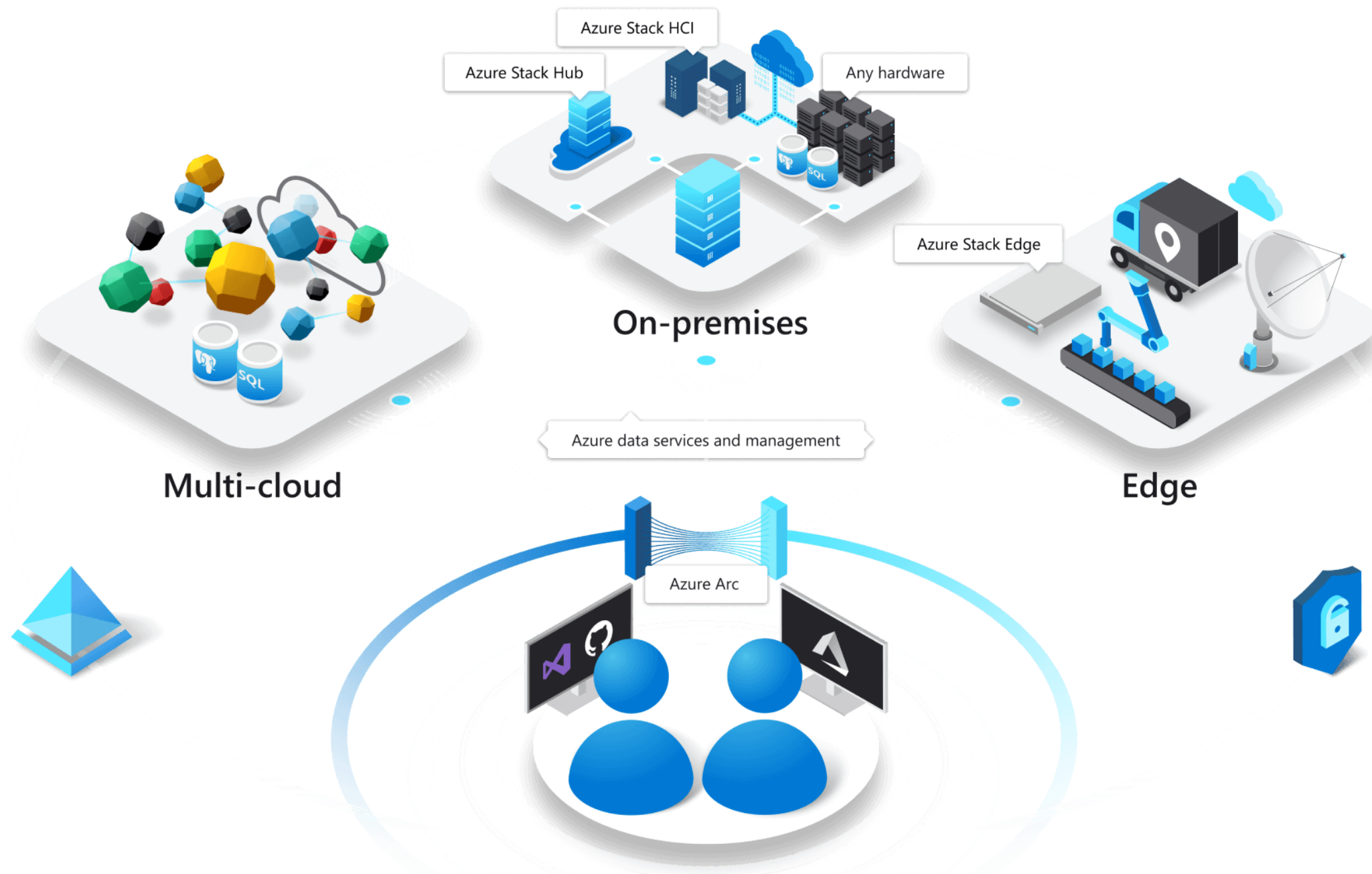
WBSC@Ignite: Best of Modern Workplace Tour

Teil 2: Die Infrastruktur

15.45 bis 17.30 Uhr



Microsoft

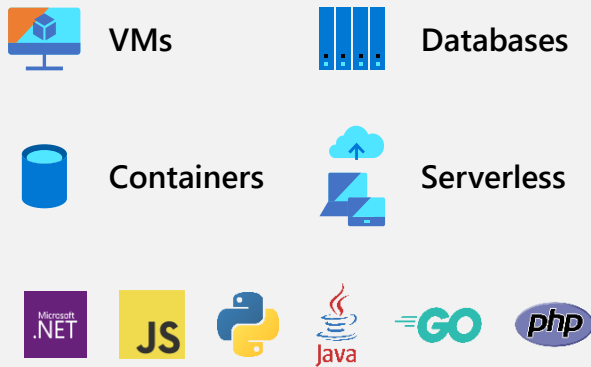


Azure Arc

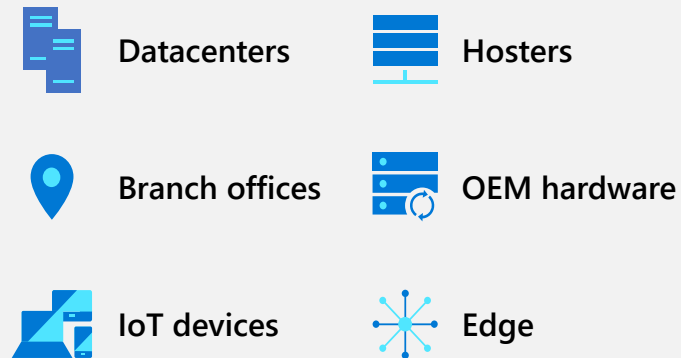


Customer environments are increasingly complex

10s - 1,000s of apps



Diverse infrastructure



Multi-cloud



Azure Arc

Bring Azure services and management to any infrastructure



Run Azure data
services anywhere



Extend Azure management
across your environments



Adopt cloud
practices on-premises

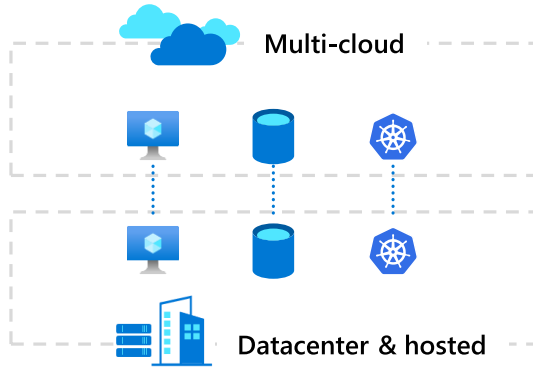


Implement Azure
security anywhere

Azure Arc is a set of technologies that extends Azure management and enables Azure services to run across on-premises, multi-cloud, and edge.

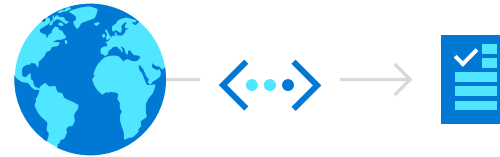
Azure Arc

Customer use cases



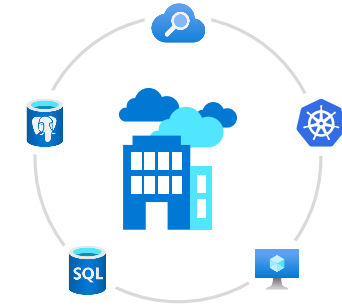
Organize and govern across environments

Get Kubernetes clusters and servers that are sprawling across clouds, datacenters and edge under control by centrally organizing and governing from a single place.



At-scale Kubernetes app management

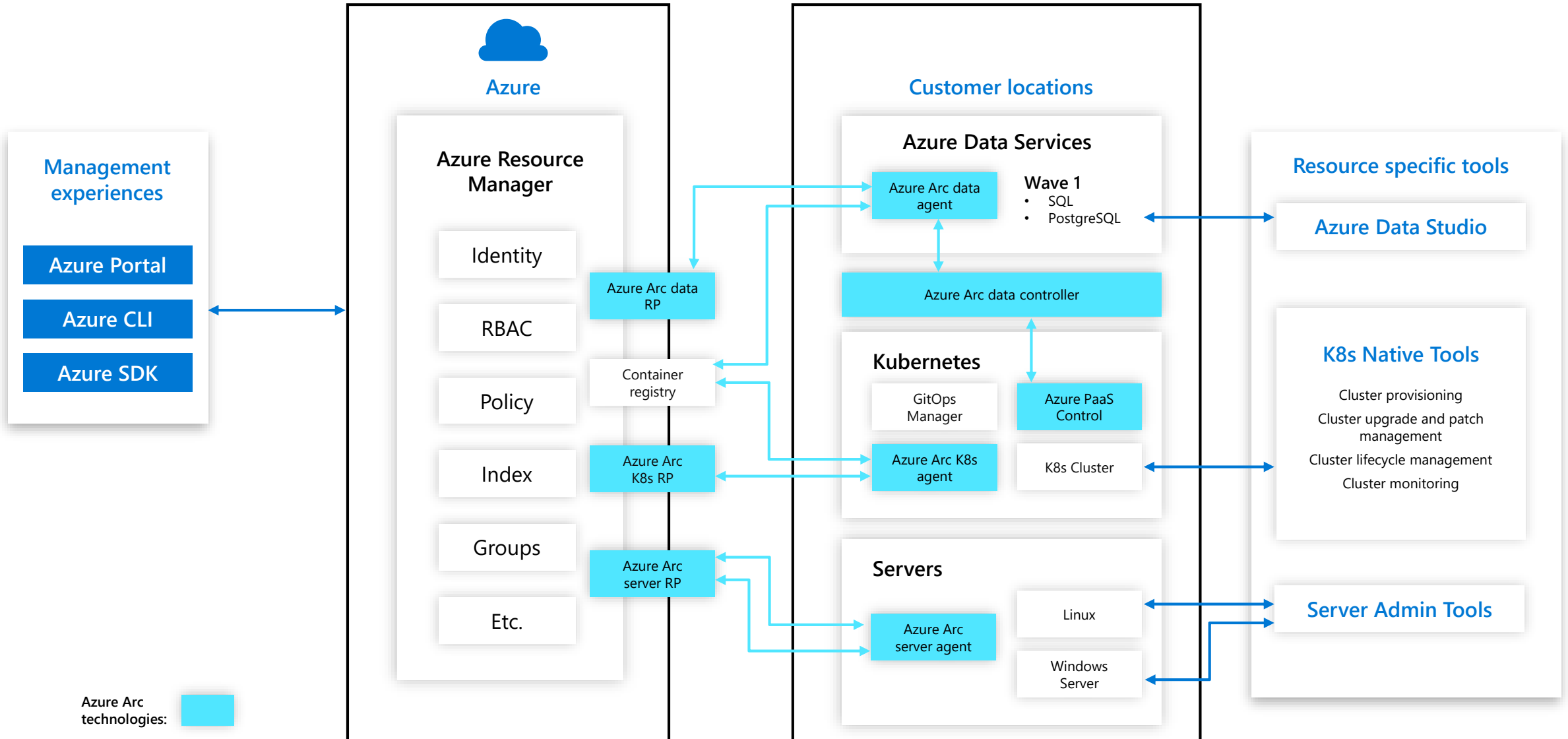
Deploy and manage Kubernetes applications at scale across environments using DevOps techniques. Ensure that applications are deployed and configured consistently from source control, at scale.



Run data services anywhere

Deploy and manage data services where you need it for latency or compliance reasons. Always use the most current technology and seamlessly manage and secure your data assets across on-premises, clouds and edge.

Azure Arc



Get started

Start managing servers today!

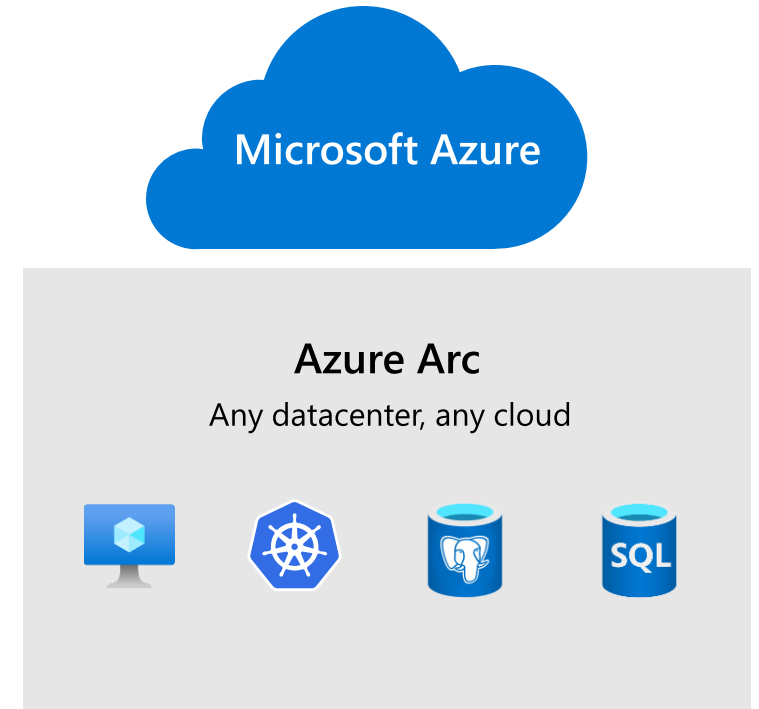
<https://Aka.ms/hybridmgmt>

Website: <https://aka.ms/Azure-Arc-Info>

Blog: <https://azure.microsoft.com/en-us/blog/azure-arc-extending-azure-management-to-any-infrastructure/>

Sign up to stay notified

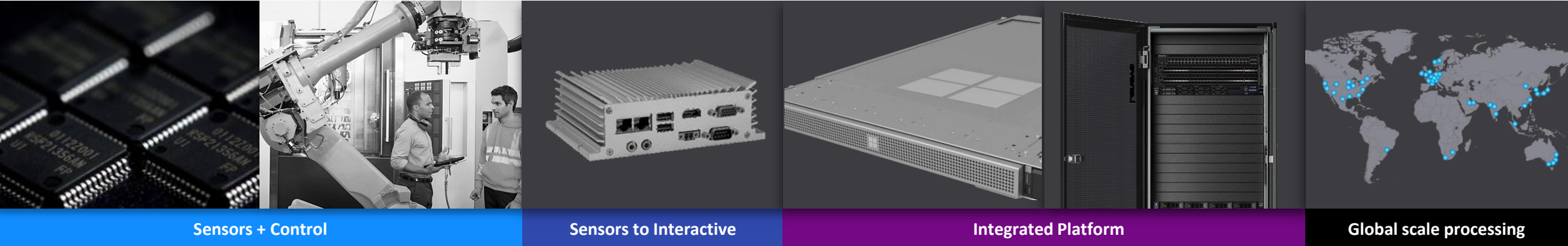
<https://aka.ms/Azure-Arc>



Azure Stack Edge



Azure Intelligent Edge + Cloud Taxonomy



Microcontroller

Azure Sphere

- Integrated Circuit designed to govern a specific operation in an embedded system
- Highly-secured, connected MCU
- Azure Sphere Linux OS for modern MCUs
- Included Azure IoT Device SDK

IoT Devices

Azure IoT Device SDK

- Endpoint devices such as appliances, vehicles, or factory machines that connect, interact and exchange data
- 1000+ devices
- 250+ partners
- All certified to work great with Azure IoT Hub

Edge Devices

Azure IoT Edge

- Devices that aggregate, process & provide gateway capabilities for IoT endpoints
- Deploy and manage Azure Services in containers on any IoT device
- AI, AzureML, Azure Stream Analytics and more

Edge Appliances

Azure Stack Edge

- Integrated appliances that provide a subset of cloud edge roles, such as ML-inferencing
- Stack Edge: AI-Enabled, Storage and compute Azure Edge appliance
- Data Box: Offline, ruggedized data transport, 100 TB – 1 PB

Edge Stack

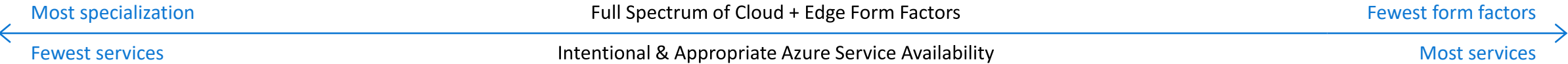
Azure Stack Hub

- Scalable solutions that provide a full cloud stack, including IaaS and PaaS capabilities
- Edge and Disconnected Scenarios
- Regulatory Requirements
- Cloud app model on-premises

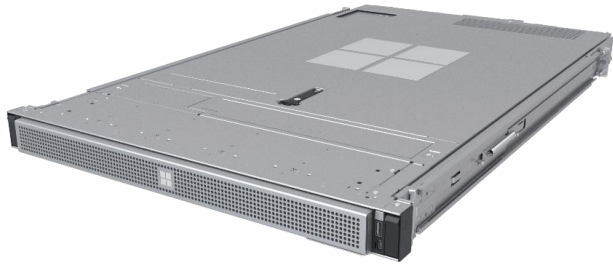
Hyperscale Cloud

Edge Regions

- First-party cloud regions
- Full Range Hyperscale Cloud Services
- Tiered Service availability: Heroes > Hubs > Satellites
- Open Source Based Services & Tools



Azure Stack Edge



An Azure-managed, edge appliance that brings the compute, storage, and intelligence of Azure right to where you need it



Hardware-accelerated machine learning

Accelerate ML inferencing using on-board GPU or FPGA to get results close to the data source



Edge compute

Run VMs, containers, and Azure services at the edge locations



Azure-managed appliance

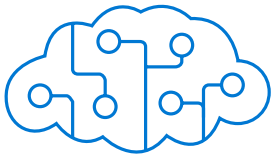
Order and manage your appliance and workloads through the Azure portal



Cloud storage gateway

Transfer data to Azure over the network while retaining local access to blobs and files

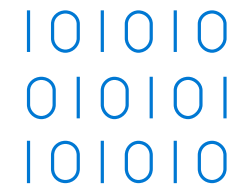
Azure Stack Edge - use cases



Machine learning
at the edge



Edge compute and
IoT solutions



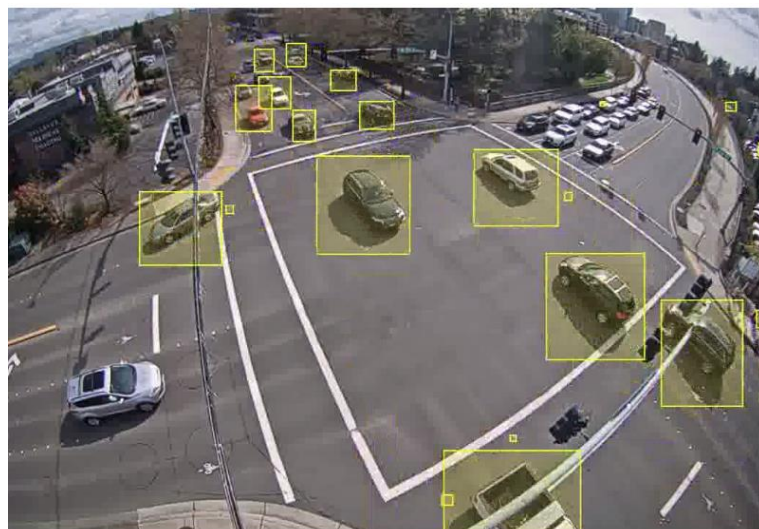
Network data transfer from
edge to cloud

Using ML at the Edge on Azure Stack Edge



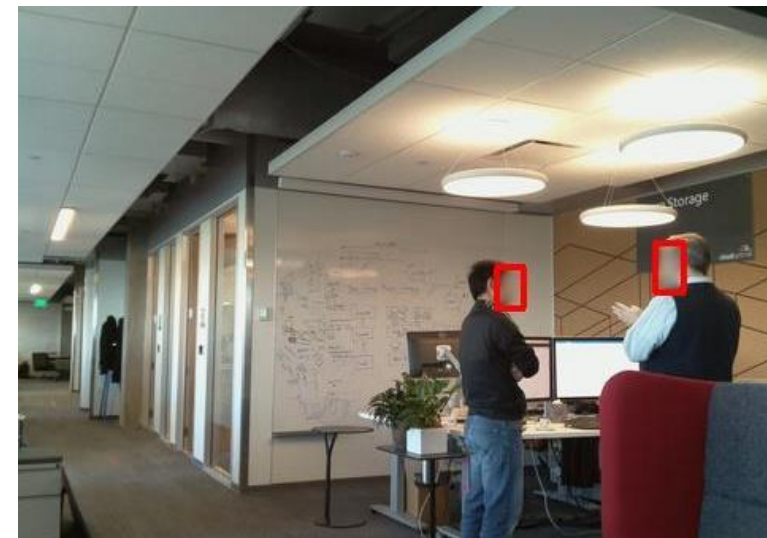
Process at Edge for immediate results

Process images and video as they are generated for immediate results. Drone video footage can be analyzed in the field, or quality control issues can be identified right at the factory before the product hits the market



Filter with AI analysis at Edge

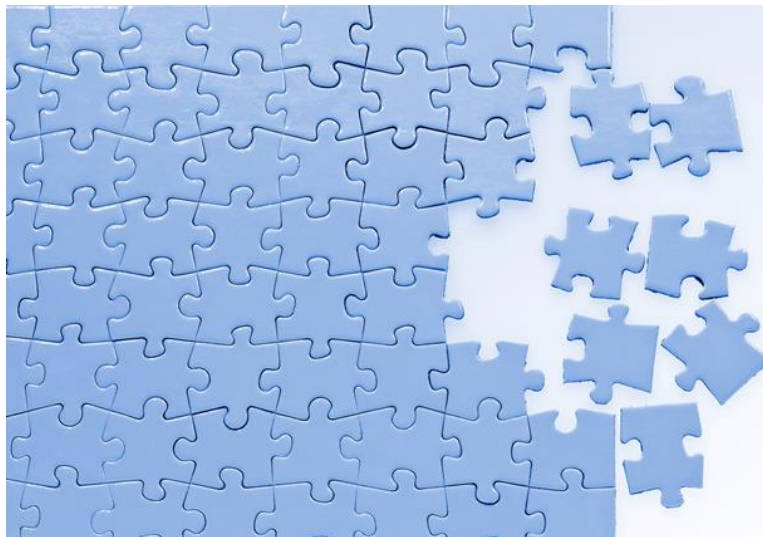
Constantly monitor traffic camera feeds to detect collisions or "near collisions" and store one minute of video around these events for human analysis and model training. Retrain in cloud and send updated model to edge



Remove sensitive data at Edge

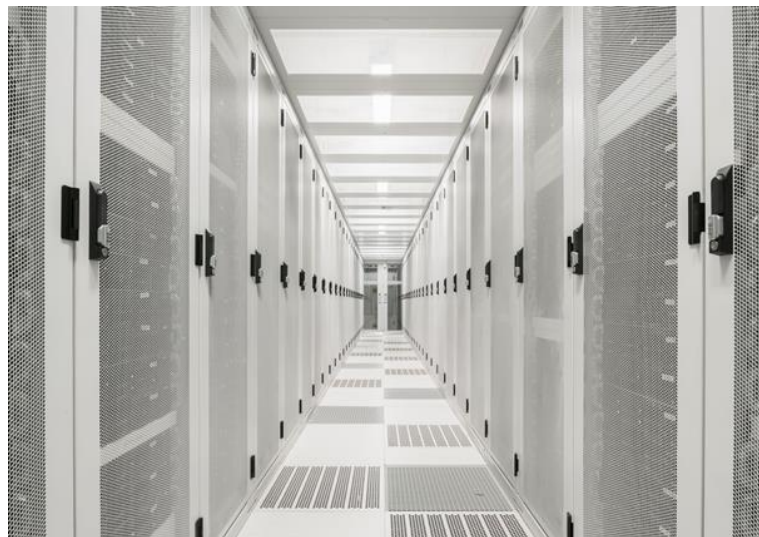
Automatically blur PII data, e.g., faces or license plates, from images and video before they are uploaded and archived in Azure, protecting against privacy issues if you have a legal requirement around storing PII in the cloud

Edge Compute use cases



Business applications at your facility

Run cloud managed business application at your facility. Deploy either via Kubernetes containers or Virtual Machines. Cloud management means you can maintain and update the systems from the cloud and don't need local IT. This lets you put your applications in more places, from offices, to retail stores, to remote facilities



Bridge between on-prem and cloud

Your legacy on-prem systems can't move to the cloud, but you want to integrate with new cloud systems. Cloud deploy edge compute that sits on site and can talk to both systems to build a bridge between them



Take applications into the field

Because Azure Stack Edge can be configured at home base then operate disconnected, you can take the power of cloud computing with you into the field, then sync back up when it comes back to base

Network data transfer to the cloud



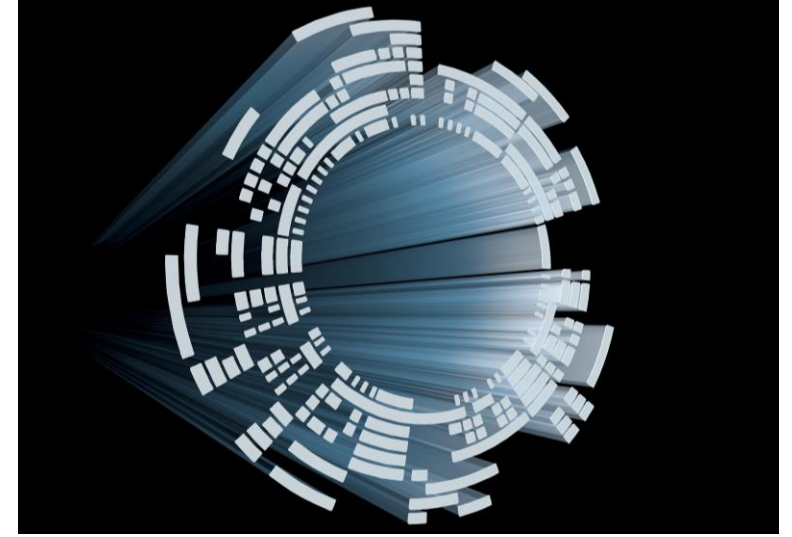
Ongoing data pipeline to the cloud

Move data to the cloud from systems that are constantly generating data just by having them copy that data straight to the Storage Gateway. If they need to access that data later, it's right there where they put it



Big data migrations

Storage Gateway can help you move large quantities of data to the cloud over your network. Takes the hassle out of bandwidth management and network interruptions



Managing bursts of data

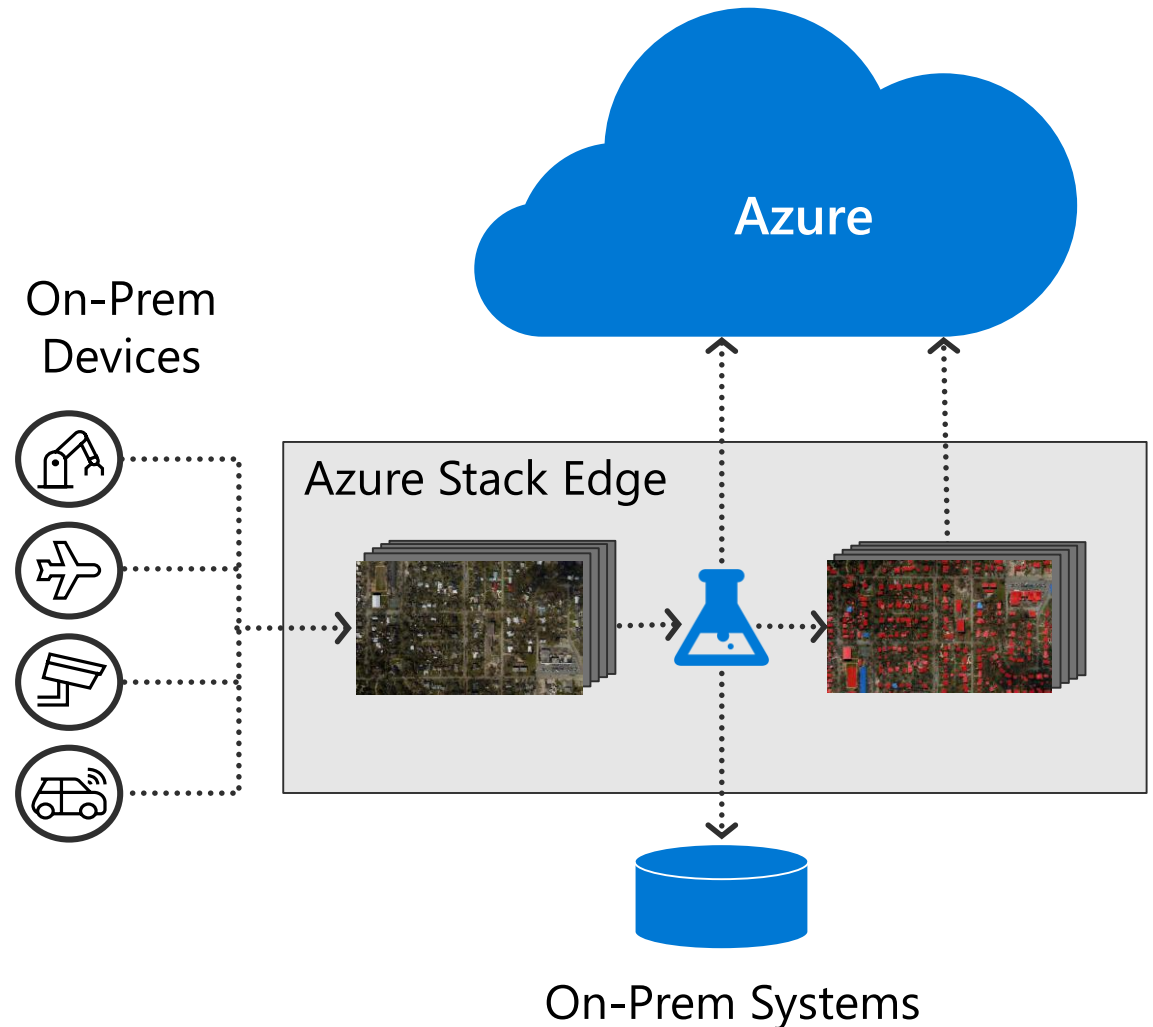
Manage big quantities of data that shows up all at once, like when an autonomous car pulls back into the garage or a gene sequencing machine finishes its analysis. Copy all that data to the Storage Gateway at fast local speeds then let Storage Gateway upload it as your network allows

Hardware Accelerated Machine Learning (ML)

Process data locally, where it is generated, for immediate results.

Use the results to take action in the cloud or on local systems. Transfer or keep only the processed data.

From the cloud, get visibility across operations on all your locations.



Hardware Acceleration Options



FGPA with Azure Machine Learning

- Use Azure Machine Learning's supported models and train with your data via transfer learning in the cloud.
- Automatically accelerated on the FPGA.



NVIDIA

Nvidia T4 GPU

- Supports full GPU ecosystem. Use Azure ML, ONNX, Nvidia EGX and Deepstream, tensorflow, and more.
- Preview coming soon

Compute on Azure Stack Edge

Cloud-managed edge compute with your choice of platform



IoT Edge

Deploy and manage containers from IoT Hub and integrate with your Azure IoT solution at the edge



Kubernetes

Scale compute across a cluster of appliances for more powerful workloads, and deploy and manage your workloads from cloud or edge

Coming Soon



VMs

Bring your workloads to the edge that aren't yet containerized – for Windows and Linux VMs

Coming Soon



Kubernetes on Azure Stack Edge

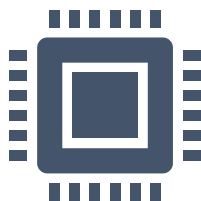
End-to-end first-party, cloud-managed, at-scale support for Kubernetes at the edge

Preview coming soon!



Create a cloud-managed Kubernetes cluster of Azure Stack Edge appliances in a few clicks

In under an hour, go from plugging in your Azure Stack Edge appliances to running applications in your Azure Stack Edge Kubernetes cluster.



Scale workloads for more powerful edge solutions

Scale compute: Leverage hardware acceleration (FPGA or GPU) across the cluster

Scale storage: Persistent storage volumes across the cluster

Improve resiliency: Build for high availability in a cluster of two or more appliances



Deploy and manage applications via cloud or edge

- Azure Arc for Kubernetes
- Azure IoT Edge
- Native Kubernetes tools (kubectl) over your local network

Preview coming soon!

Virtual Machines

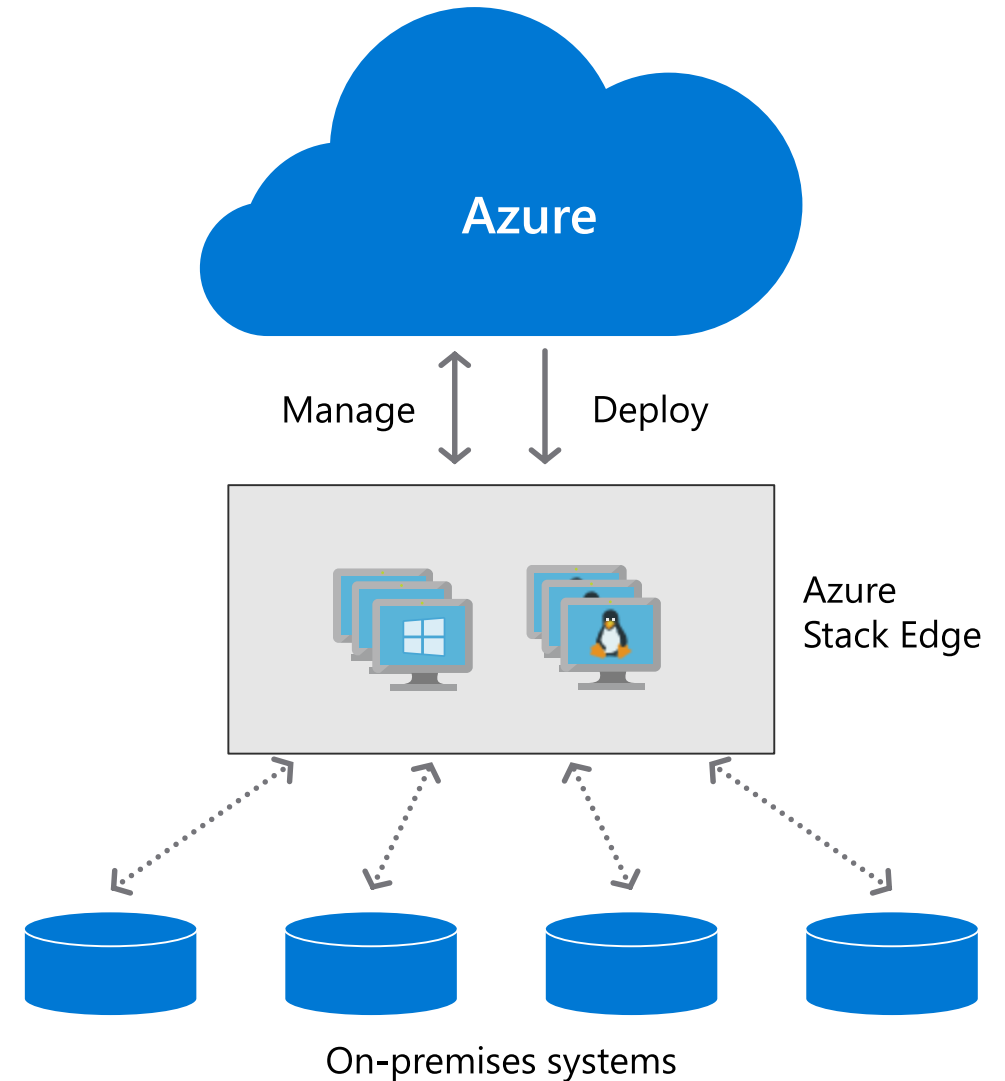
Run VMs at your location, deployed and managed from Azure

Great option for compute tasks that aren't in containers yet

Both Linux and Windows

Designed for basic configurations

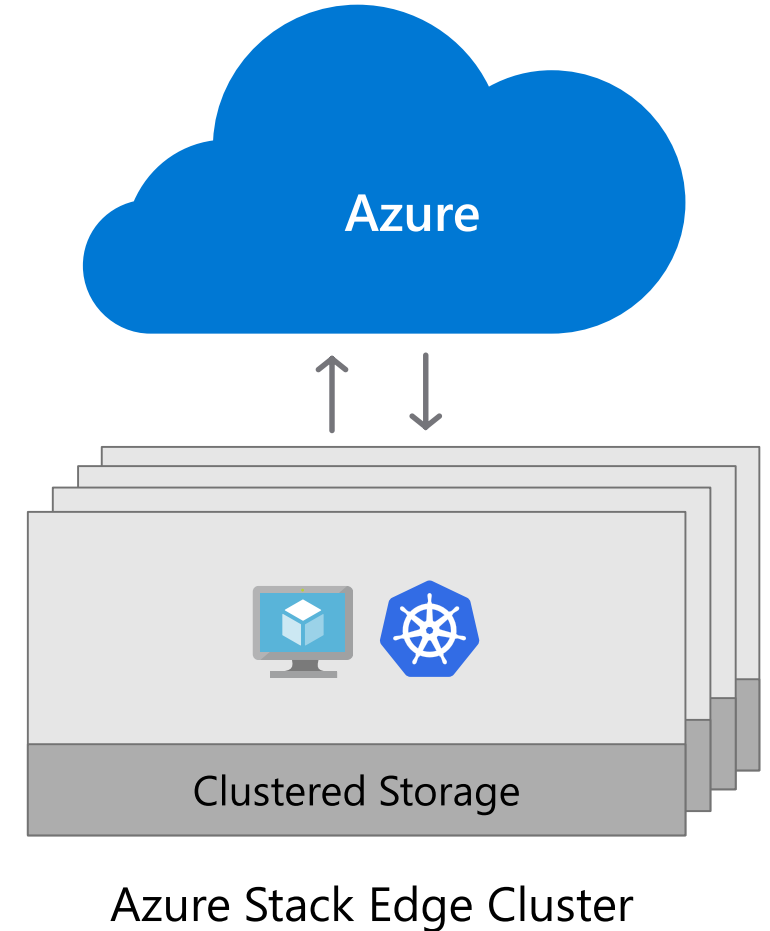
More details coming soon



Cluster Azure Stack Edge devices

Clustering helps your edge infrastructure stay reliable or scale up to workloads that require more than one appliance.

Clusters are easy to create and managed from the Azure cloud.



Cloud Management

Device and edge compute workloads are all managed from the Azure cloud



Easy ordering and fulfillment

Order from the Azure portal and pay as you go on your standard Azure bill, just like any other Azure service.

No minimum period and no hardware to purchase.



Manage device from the cloud

Control device configuration, access, and even what workloads run on the device from the cloud.

Need to update your device with a new appliance OS version? No problem, that's just a button in the portal.

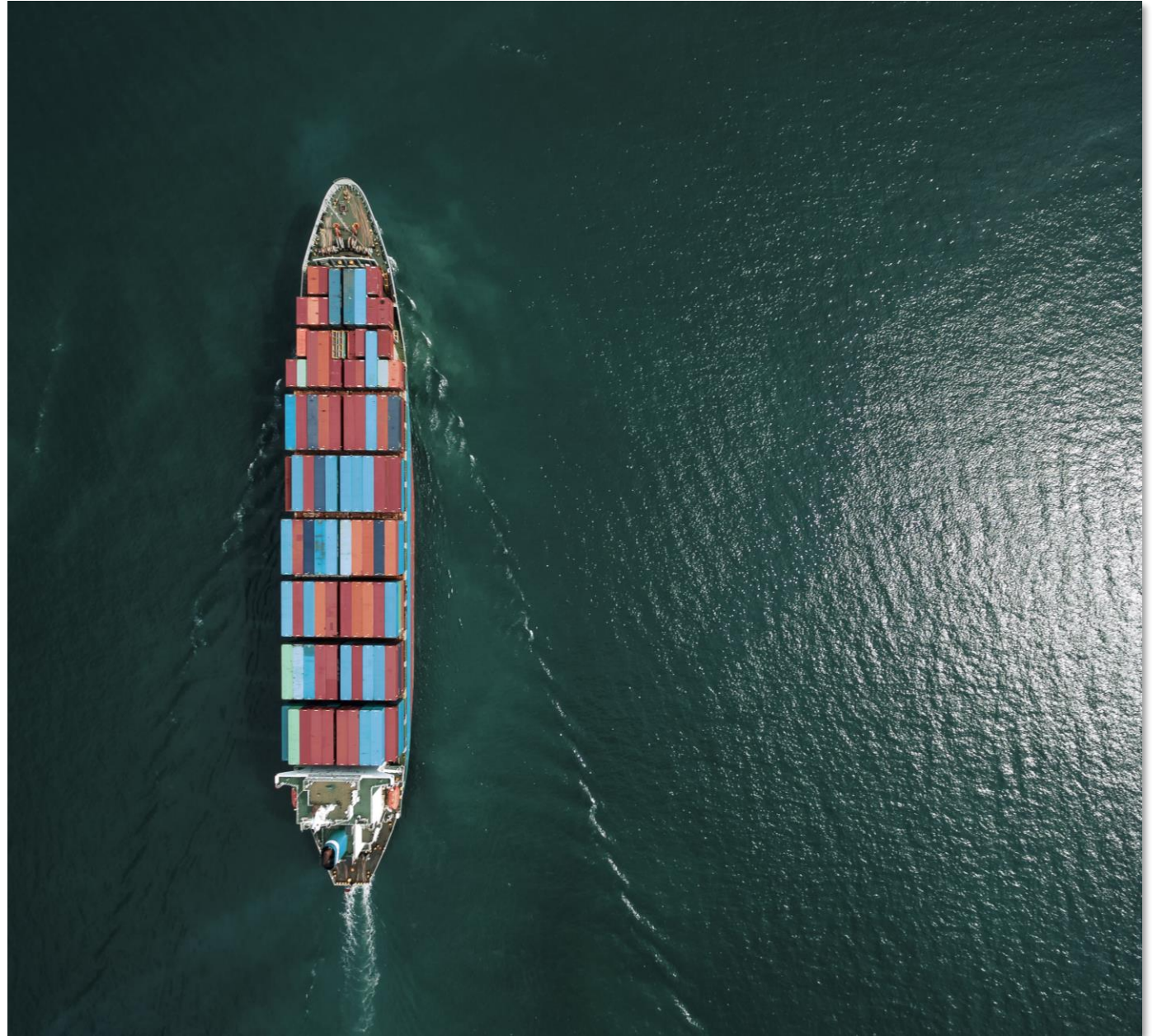


Standard Azure management tools

Azure Stack Edge is a resource in Azure that plugs into the standard Azure management tools and APIs.

Cloud deployments done through standard Azure tools for deploying workloads to the edge.

When Azure Stack Edge is offline
edge compute continues to run
and storage gateway will cache
any new data, then upload when
you're connected

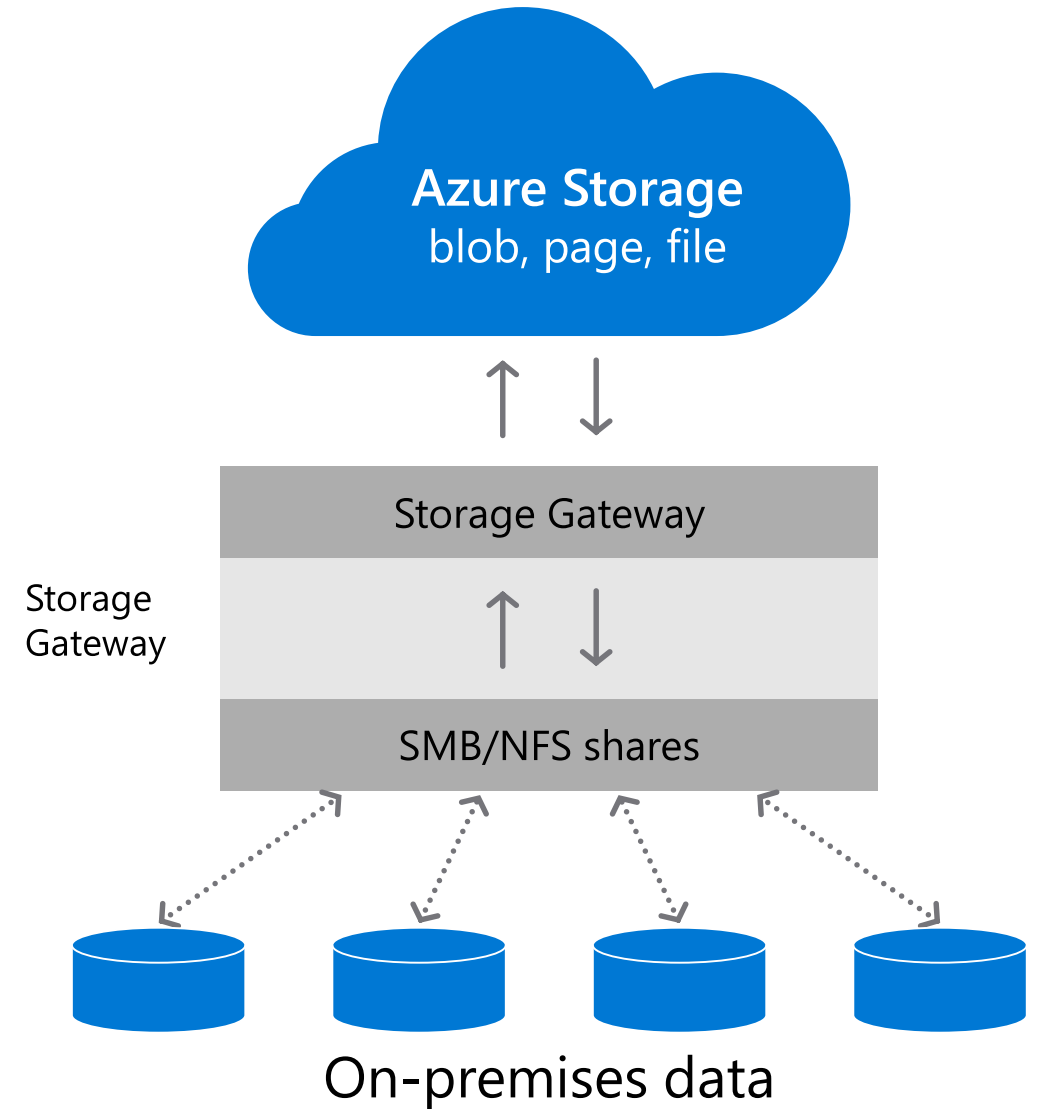


Storage Gateway extends Azure storage to Edge

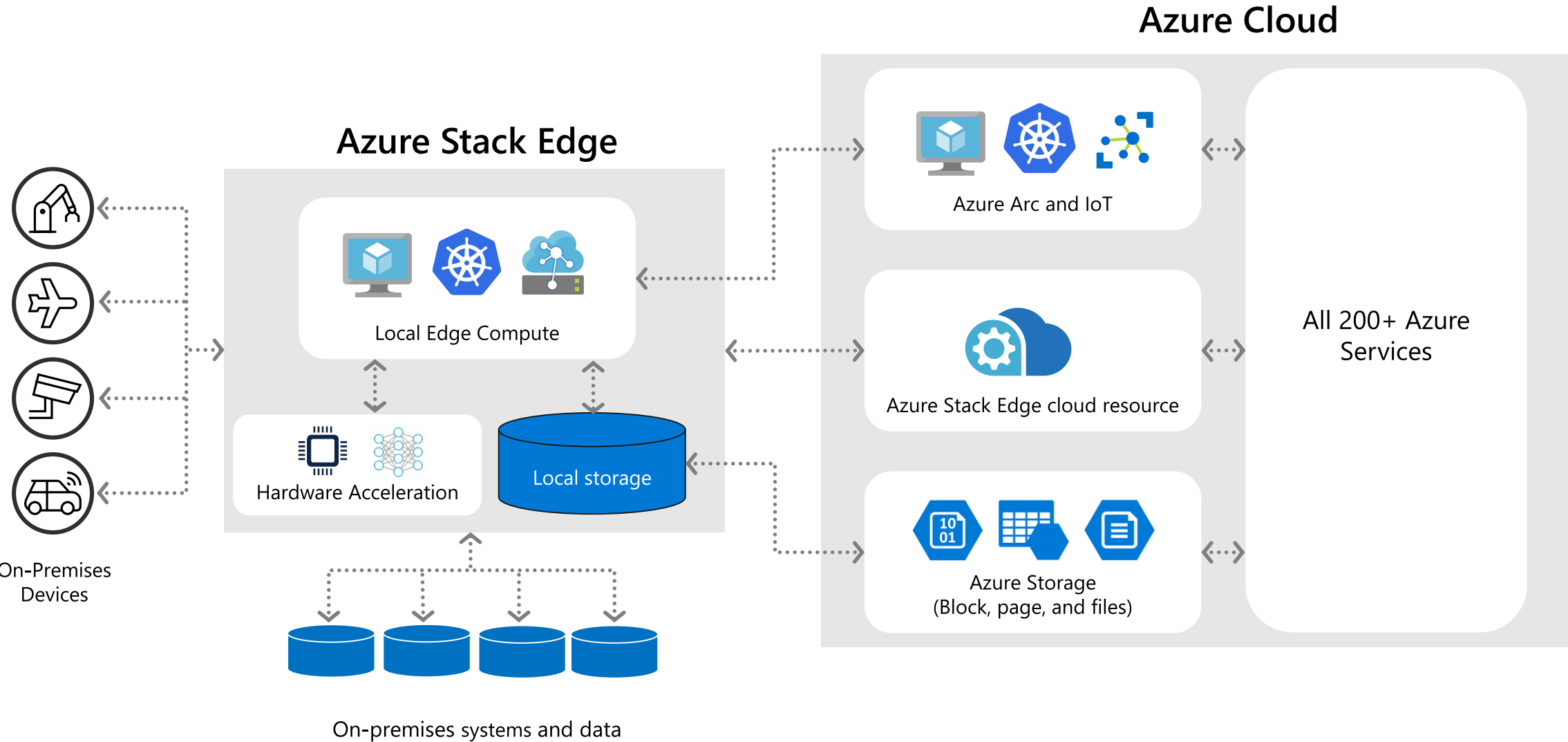
Exposes SMB and NFS shares on your local network, creating a gateway into your Azure Storage account

Keeps a local cache of your most recent files for fast local access

All you need to do is copy to a local file share and we upload



Azure Stack Edge solution architecture



Choose the appliance model best suited for the job

Commercial (C) series

Enterprise-ready form factors for use within a traditional business setting

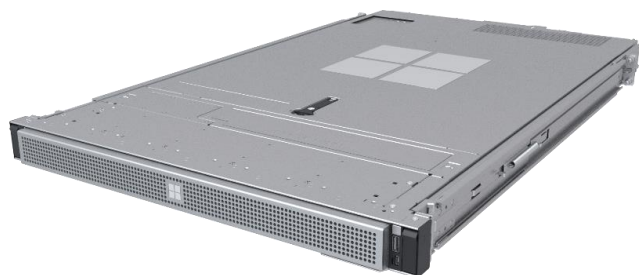


Rugged (R) series

Ruggedized, portable, battery-operated form-factors for harsh field conditions



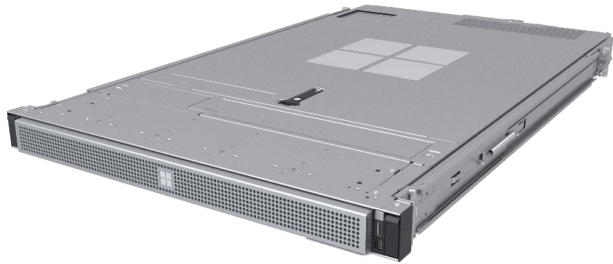
Azure Stack Edge commercial specifications



Specification	C-1100	C-1100G (GPU)*
CPU	2 x 10 Core Intel Xeon CPUs	
RAM	128 GB	
Local cache capacity	12 TB NVME flash storage	To be announced
Data protection/security	AES 256-bit encryption	
Form factor	1U rack mount server, 29.6" deep	
Network interface	4x25 GbE SFP+, 2x1 GbE	
Accelerated ML	Intel® Arria® 10 FPGA	two NVidia® T4 GPUs
Power	110/240 (50/60 Hz)	

* Specifications for C-1100G are subject to change

Azure Stack Edge



An Azure-managed, edge appliance that brings the compute, storage, and intelligence of Azure right to where you need it



Hardware-accelerated machine learning

Accelerate ML inferencing using on-board GPU or FPGA to get results close to the data source



Edge compute

Run VMs, containers, and Azure services at the edge locations



Azure-managed appliance

Order and manage your appliance and workloads through the Azure portal



Cloud storage gateway

Transfer data to Azure over the network while retaining local access to blobs and files

Join previews for new functionality!

- Previews coming soon for
 - GPU Acceleration
 - Virtual Machines
 - Kubernetes
 - Clustering

If you're interested in joining these previews, sign up here:

aka.ms/StackEdgePreviews

For more info about Azure Stack Edge:

aka.ms/AzureStackEdge



Azure Stack Hub



New: GPU

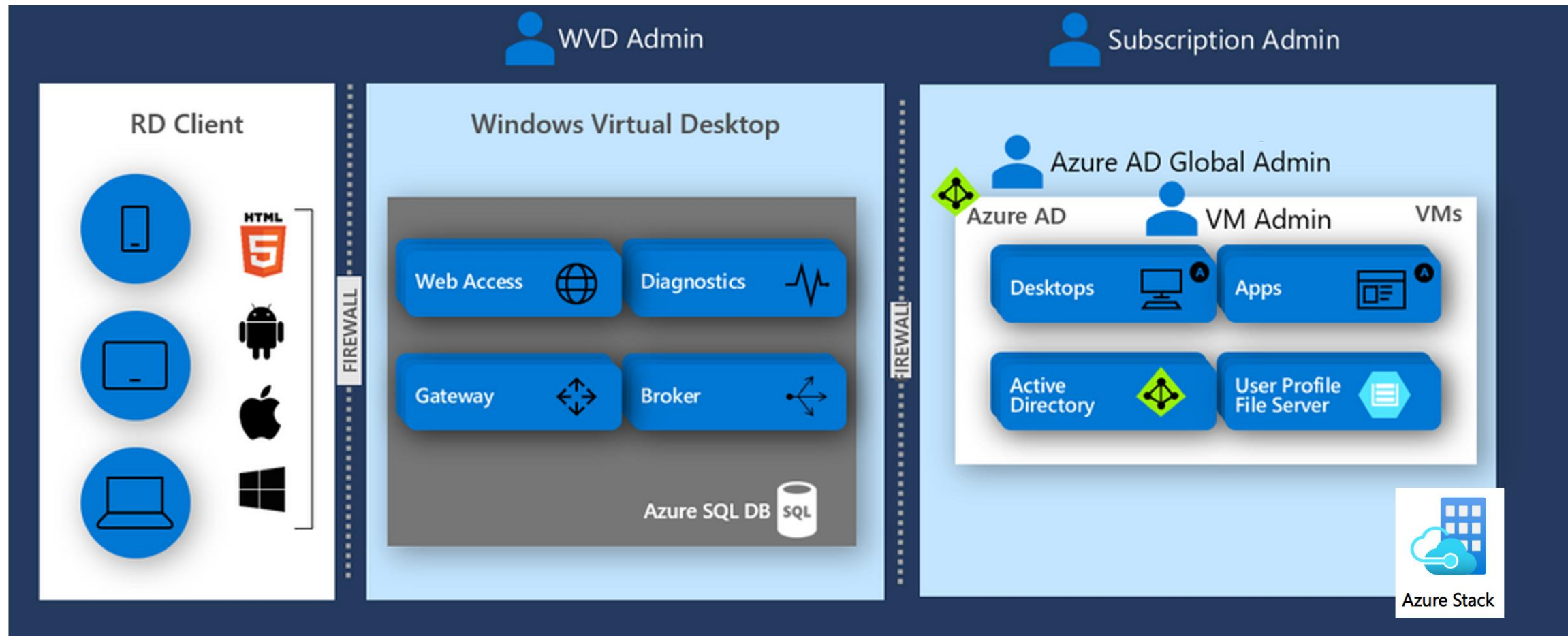
- GPU preview – Jan 2020
- Looking to support NCv3 (NVIDIA V100), NVv4 (AMD Mi25) and NVIDIA T4 Sku (TBD)



WVD (private preview)



Overview



Azure Stack HCI



Find solutions from your preferred vendor

ASUS

AXELLIO

bluechip

CISCO

dataon
DataON STORAGE

DELL EMC

FUJITSU

H3C

HITACHI
Inspire the Next

Hewlett Packard
Enterprise

Lenovo

Orchestrating a brighter world
NEC

primeLine
SOLUTIONS

QCT
Quanta CLOUD TECHNOLOGY

SecureGuard

Sugon

SUPERMICR

THOMAS
KRENN

WD Western
Digital

2STORE

154 solutions

20 partners



1+ Gbps uplink



**10+ Gbps
back-to-back**

(no high-speed switch)

Start small...

Minimal footprint

Just 2 servers minimum

(4 × SSD) or **(2 SSD + 4 HDD)** per server

No minimum processor and memory

1 × 10 Gbps network adapter

SATA, DOM, M.2

Made possible by

Lightweight quorum

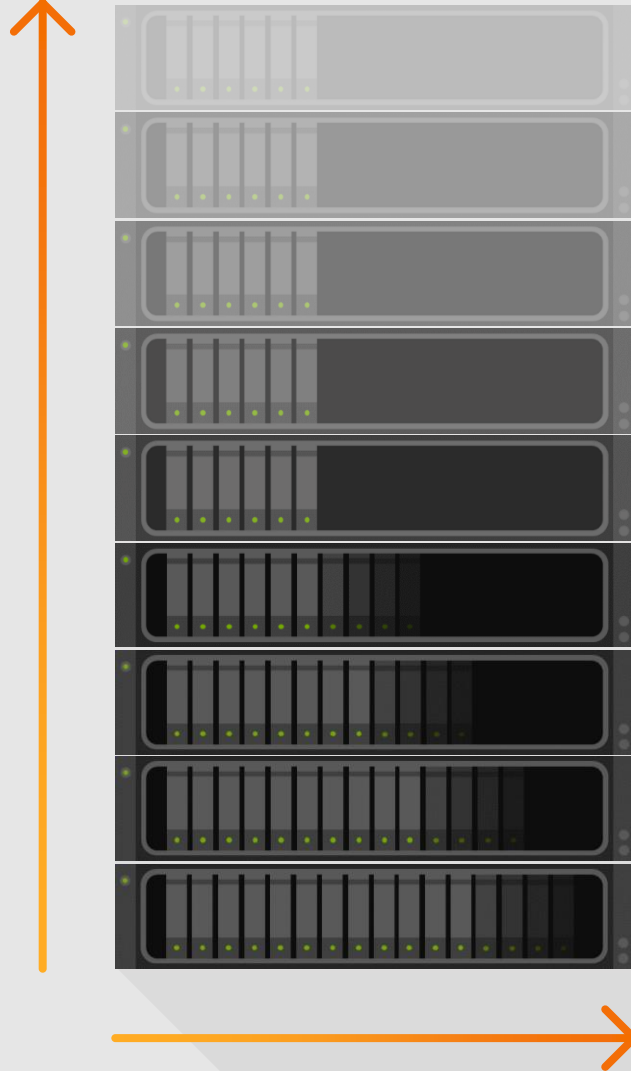
Cloud, file share, or USB key

No costly Witness VM Appliance

Nested resiliency

Withstand multiple failures

Add servers
to the cluster



Add drives
into existing servers

Scale with your needs

Scale up, scale out

Up to 16 servers per cluster

Limited by rack and switch ports

Up to 4,000 TB storage capacity per cluster

Store all of Wikipedia in every language 50 times

With no downtime

Automatic VM load balancing

Automatic storage rebalancing

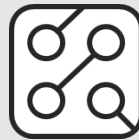
Everything in one familiar product and license



Hypervisor



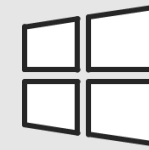
Software-defined
storage



Software-defined
networking



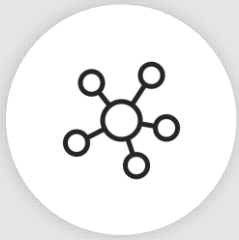
Management



Guest licenses

Windows Server 2019 Datacenter

When to use Azure Stack HCI



Branch office
and edge



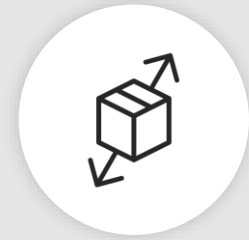
Virtual desktop
infrastructure



High-performance
SQL Server



Trusted enterprise
virtualization



Scale-out
storage

Find Azure Stack HCI solutions from your preferred hardware vendor

All results

High performance Microsoft SQL Server ✕

Hardware partners

Dell EMC

HPE

Lenovo

DataON

Fujitsu

QCT

Axellio

Supermicro

ASUS

bluechip

Cisco

Hitachi

NEC

Showing 1 to 9 of 65 results



DataON K2N-108-AFMP All Flash (Intel Optane Persistent Memory in SCM mode)

Scale:

- 2 to 4 nodes

Single Node Data:

- CPU: 16-56 cores (Intel)
- RAM: 256GB to 1.5TB
- Raw storage: 4TB to 64TB
- Storage type: NVMe
- Network speed: Up to 100Gb

[Learn more >](#)

bluechip SERVERline R72201i

Scale:

- 2 to 16 nodes

Single Node Data:

- CPU: 28-56 cores (Intel)
- RAM: 384GB to 1.5TB
- Raw storage: 12TB to 160TB
- Storage type: NVMe
- Network speed: Up to 10Gbps

[Learn more >](#)

Dell EMC Storage Spaces Direct Ready Node - R640 All-NVMe

Scale:

- 2 to 16 nodes

Single Node Data:

- CPU: 16-48 cores (Intel)
- RAM: 128GB to 1.5TB
- Raw storage: 6.4TB to 64TB
- Storage type: NVMe
- Network speed: Up to 100Gb

[Learn more >](#)



Azure Stack HCI

Overall, Microsoft's Azure Stack HCI solution proved to be both simple to deploy, easy to manage and exceptionally performant, all things you want. DataON, as a solution's partner, excelled in providing a turn-key build, offering built-to-spec hardware with clear instructions that is ultimately sold in a configuration that can be up and running in no time.

Deploying Azure Stack HCI



Scenarios

Hyperconverged + SDN

- ✓ Hyper-V
- ✓ Failover Clustering
- ✓ Storage Spaces Direct
- ✓ Software-Defined Networking

Hyperconverged

- ✓ Hyper-V
- ✓ Failover Clustering
- ✓ Storage Spaces Direct
- Software-Defined Networking

Storage Cluster

- Hyper-V
- ✓ Failover Clustering
- ✓ Storage Spaces Direct
- Software-Defined Networking

Compute Cluster

- ✓ Hyper-V
- ✓ Failover Clustering
- Storage Spaces Direct
- Software-Defined Networking

Compute Cluster + SDN

- ✓ Hyper-V
- ✓ Failover Clustering
- Storage Spaces Direct
- ✓ Software-Defined Networking

Classic Failover Cluster

- Hyper-V
- ✓ Failover Clustering
- Storage Spaces Direct
- Software-Defined Networking

Roadmap: 30 steps in 5 stages

Stage 1:

Get Started

- 1.1 Prerequisites
- 1.2 Add servers
- 1.3 Solution compliance
- 1.4 Install Windows features
- 1.5 Install Windows updates
- 1.6 Join domain
- 1.7 Restart

Stage 2:

Networking

- 2.1 Verify network adapters
- 2.2 Select management
- 2.3 Edit adapter properties
- 2.5 Create virtual switch
- 2.6 Enable RDMA

Stage 3:

Clustering

- 3.1 Validate cluster
- 3.2 Create cluster
- 3.3 Quorum witness
- 3.4 Specify sites
- 3.5 Cluster settings

Stage 4:

Storage

- 4.1 Verify drives
- 4.2 Clean drives
- 4.3 Validate storage
- 4.4 Storage Spaces Direct
- 4.5 Create file server

Stage 5:

SDN

- 5.1 Intro to SDN
- 5.2 SDN infrastructure VMs
- 5.3 SDN infrastructure network
- 5.4 Network Controller
- 5.5 Load Balancer
- 5.6 Gateway
- 2.7 Summary



Available today in Preview



On the roadmap

Cluster Creation - Windows Adm x

https://localhost:6516/cluster-creation

Windows Admin Center

Cluster Creation

Microsoft

Deploy hyperconverged infrastructure

PREVIEW

1 Get Started

2 Networking

3 Clustering

4 Storage

1.1 Prerequisites

1.2 Enter an account

1.3 Add servers

1.4 Install features

Check the prerequisites



Before you start:

✓ You need two or more servers with suitable hardware.

✓ Each server needs a network adapter that Windows Admin Center can reach for management.

✓ Each server must run the Datacenter Edition of Windows Server 2019, Windows Server 2016, or Windows Server Insider Preview.

✓ Each server must be joined to the same Active Directory domain as where Windows Admin Center is running.

✓ You need a domain account that's a member of the local Administrators group on each server.

When you're ready, select Next.

Back

Next

Exit

Cluster Creation - Windows Adm x

+

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https://localhost:6516/cluster-creation

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Windows Admin Center

Cluster Creation ▾

Microsoft

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Deploy hyperconverged infrastructure

PREVIEW ⓘ

1

Get Started

2

Networking

3

Clustering

4

Storage

1.1 Prerequisites

1.2 Enter an account

1.3 Add servers

1.4 Install features

Add servers

Add servers one at a time, entering the fully-qualified domain name of each server.

server.example.domain.com

Add

🔄 Refresh

Server name	Status	Operating system	Server model	
dl380-node1.redmond.corp.microsoft.com	✔️ Online	Windows Server 2019 Datacenter	HPE ProLiant DL380 Gen10	🗑️
dl380-node2.redmond.corp.microsoft.com	✔️ Online	Windows Server 2019 Datacenter	HPE ProLiant DL380 Gen10	🗑️

Back

Next

Exit

Cluster Creation - Windows Admin Center

https://localhost:6516/cluster-creation

Windows Admin Center

Cluster Creation

Microsoft

Deploy hyperconverged infrastructure

PREVIEW

Get Started

2 Networking

3 Clustering

4 Storage

2.1 Verify network adapters

2.2 Select management adapters

2.3 Edit adapter properties

2.4 Create virtual switch

Edit adapter properties

Use the tables below to assign each network adapter's IPv4 address, subnet mask and VLAN ID (if needed).

Select or hover your cursor over the table to make changes.

Server: dl380-node1.redmond.corp.microsoft.com

Description	Speed	Name	IP address	Subnet mask	VLAN ID	MAC address
Mellanox ConnectX-5 Adapter #2	100 Gbps	PCIe Slot 5 Port 1	192.168.2.1	24	0	EC-0D-9A-D9-05-0E
Mellanox ConnectX-5 Adapter	100 Gbps	PCIe Slot 5 Port 1	192.168.1.1	24	0	EC-0D-9A-D9-05-0F
HPE Ethernet 1Gb 4-port 331i Adapter #4	1 Gbps	Embedded LOM 1 ...	10.194.106.198	24	0	FC-15-B4-97-F6-68

Server: dl380-node2.redmond.corp.microsoft.com

Description	Speed	Name	IP address	Subnet mask	VLAN ID	MAC address
Mellanox ConnectX-5 Adapter	100 Gbps	PCIe Slot 5 Port 1	192.168.1.2	24	0	EC-0D-9A-D9-04-F6
Mellanox ConnectX-5 Adapter #2	100 Gbps	PCIe Slot 5 Port 1	192.168.2.2	24	0	EC-0D-9A-D9-04-F7
HPE Ethernet 1Gb 4-port 331i Adapter #3	1 Gbps	Embedded LOM 1 ...	10.194.106.66	24	0	FC-15-B4-97-F4-58

Advanced

Back

Next

Exit

 Get Started
 Networking
 Clustering
 Storage

3.2 Create Cluster

Cluster name * ⓘ

^ Advanced

☒ Use all networks (recommended)

☐ Specify one or more networks not to use

☒ Assign dynamically with DHCP (recommended)

☐ Specify one or more static addresses

Exit

Cluster Creation - Windows Admin Center

Cluster Creation

Microsoft

Windows Admin Center

Cluster Creation

Deploy hyperconverged infrastructure

PREVIEW

Get Started

Networking

3 Clustering

4 Storage

3.1 Validate cluster

3.2 Create Cluster

Create the cluster

The cluster was successfully created.

When you're ready, select Next.

Back

Next: Storage

Exit

Disable CredSSP

Completed the workflow to disable the CredSSP server.

localhost

2:25:01 AM

Created the cluster

Successfully created the new cluster: prolant-hci-1

[Go to Cluster Creation.](#)

dl380-node1.redmond.corp.microsoft.com

2:24:59 AM

Cluster Creation - Windows Admin x

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https://localhost:6516/cluster-creation

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Windows Admin Center

Cluster Creation ▾

Microsoft

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⚙️

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Deploy hyperconverged infrastructure

PREVIEW ⓘ

✔️ Get Started

✔️ Networking

✔️ Clustering

4 Storage

4.1 Verify drives

4.2 Clean drives

4.3 Enable Storage Spaces Direct

Enable Storage Spaces Direct

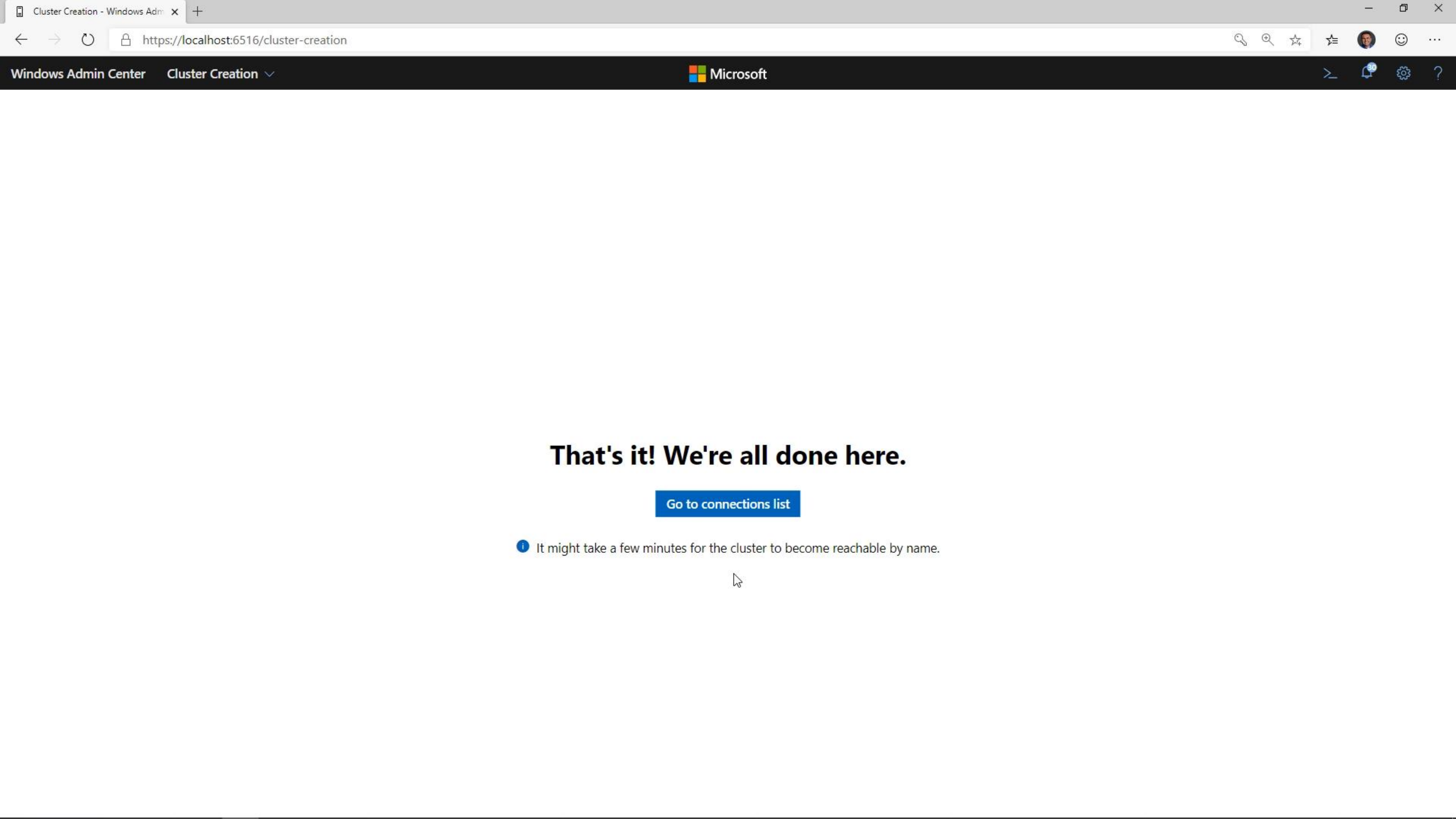
Storage Spaces Direct will provision the storage pool and default storage tier templates automatically.

Enable

Back

Finish

Exit



That's it! We're all done here.

[Go to connections list](#)

i It might take a few minutes for the cluster to become reachable by name.

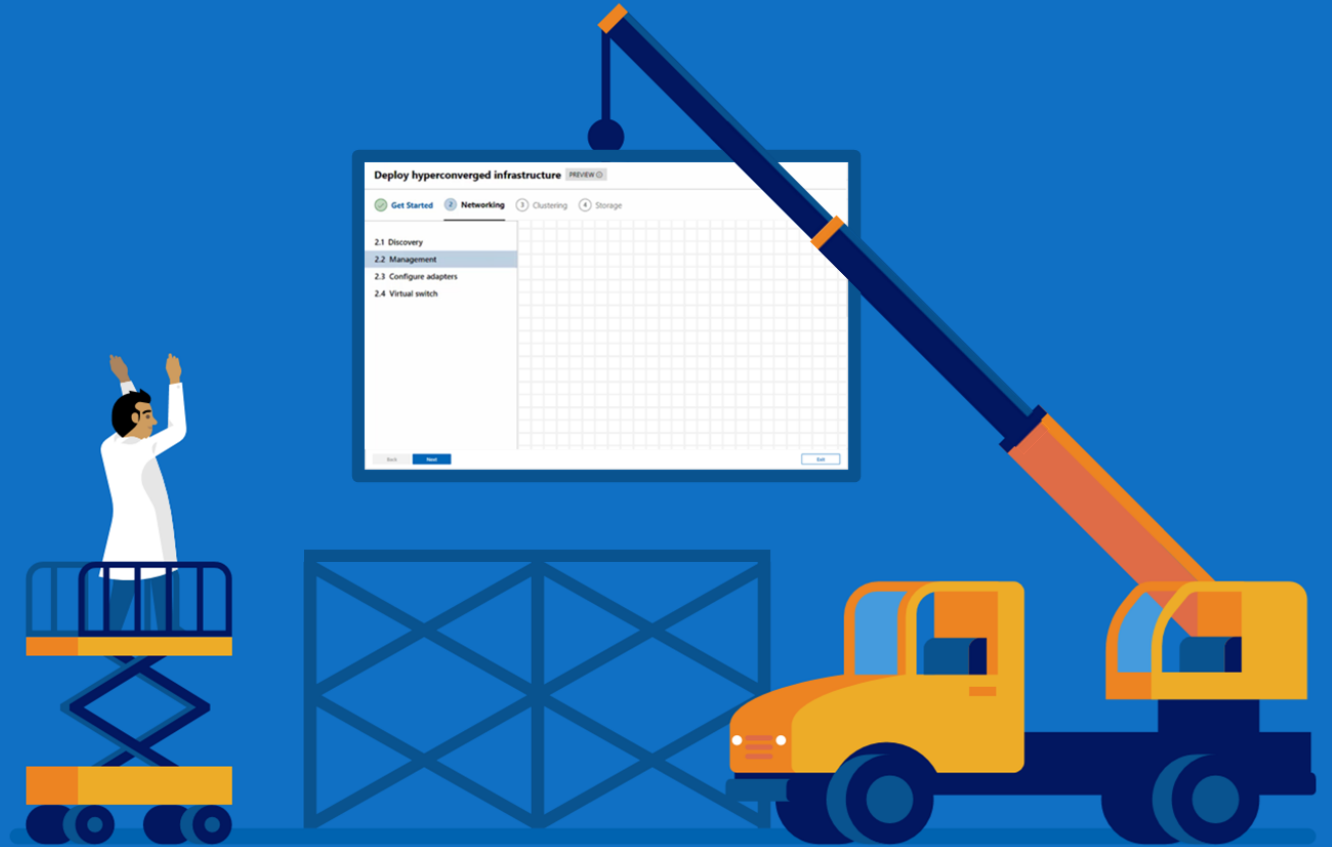


This workflow is under construction

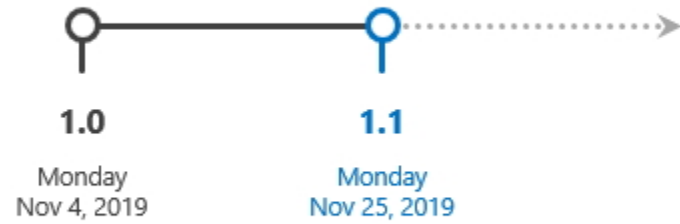
Try it early and share your feedback

aka.ms/deploy-hci

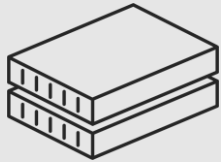
hci-deployment@microsoft.com



Deployment Wizard new Version

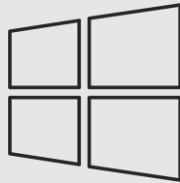


Get started with Azure Stack HCI



Find solutions from your preferred vendor

Microsoft.com/HCI



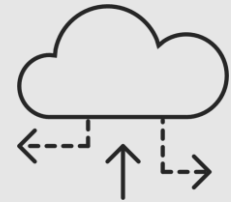
Install Windows Server 2019 if not pre-installed

aka.ms/WindowsServer



Deploy and manage with Windows Admin Center

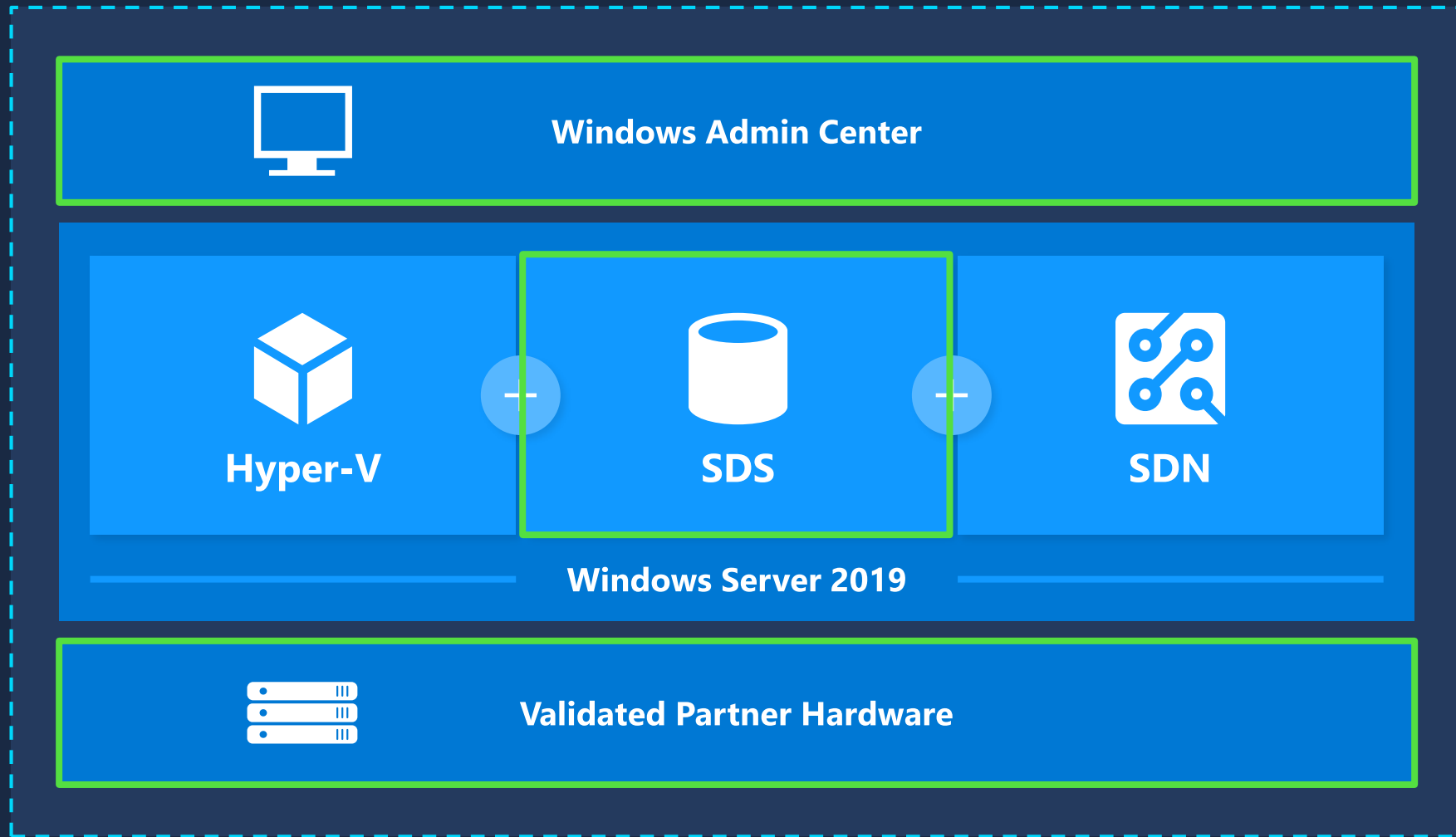
aka.ms/WindowsAdminCenter



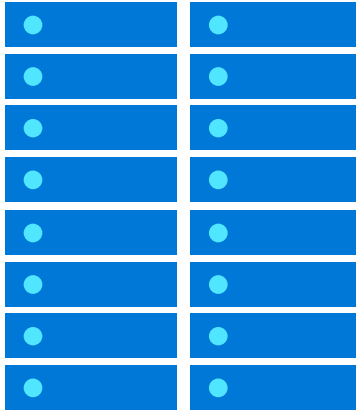
Connect to Azure Arc and hybrid services

Azure.com/Hybrid

Hyperconverged infrastructure from Microsoft



Microsoft.com/HCI



Box stores and retail

Ships and vehicles

Small businesses

Field sites and installations



Core datacenter

4 to 16 rackmount nodes
100s-1000s of VMs

Edge / ROBO

2 or 3 smaller nodes
Fewer VMs



DataON Kepler-47



HPE ProLiant ML350 Gen10



Thomas Krenn micro-cluster



Lenovo ThinkSystem SE350



SecureGUARD blazics 100



Supermicro SYS-1029U-TRT-HCI



Dell EMC PowerEdge R440

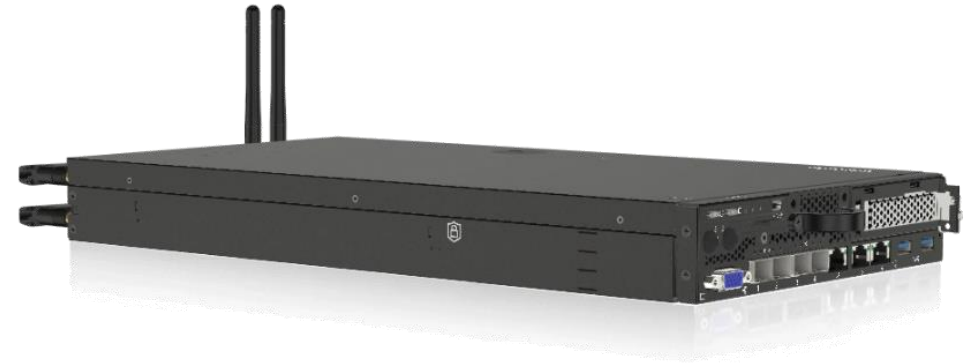


ThinkSystem SE350 Edge Server

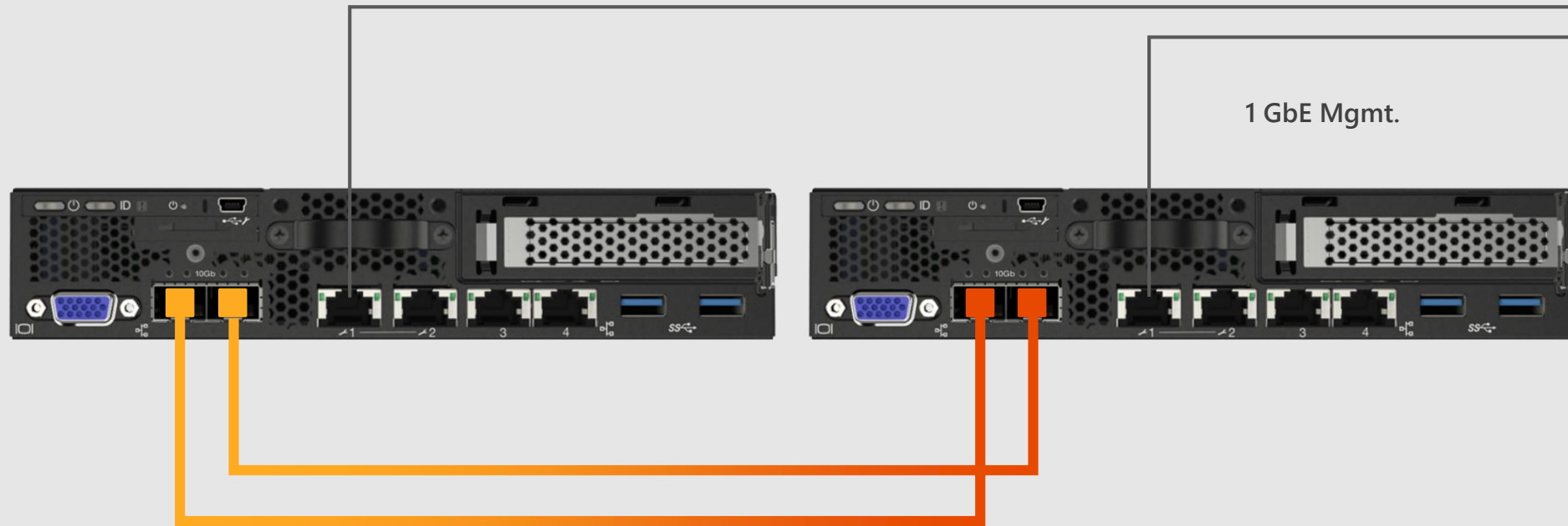
- **8-core Intel® Xeon® D** processor
- **64 GiB** (up to 256 GiB) TruDDR4 ECC memory
- **2 × 10 GbE** SFP+ iWARP RDMA
- **4 × 1 TB NVMe** SSD (up to 8 × 2 TB)
- **PCIe slot** for GPU
- TPM 2.0, UEFI
- XClarity Controller Advanced
- Locking bezel, intrusion detection, motion sensor...



Validated for Azure Stack HCI

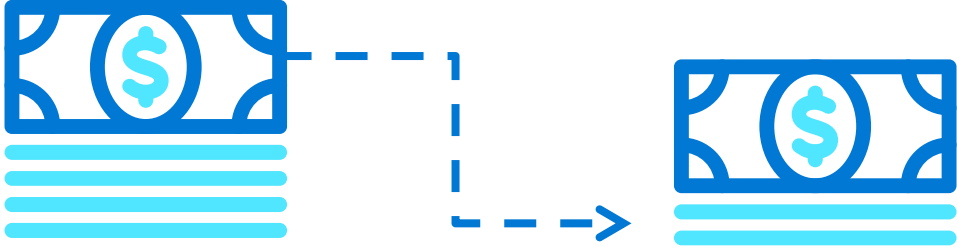


Minimum two servers, no switch required



10 GbE
iWARP RDMA





Lower cost

Consolidate with industry-standard hardware and enjoy the flexibility to buy what you need today and seamlessly scale out tomorrow. The only self contained 2-node hyperconverged solution in the industry.

Azure Stack HCI is all inclusive:

- Software Defined Compute (Hyper-V)
- Software Defined Storage (Storage Spaces Direct)
- Software Defined Networking

Azure Stack HCI provides:

- Unlimited Windows Server Guests OS Instances
- Unlimited Windows & Linux Containers



Simple operations

Manage your hyper-converged infrastructure with the browser-based Windows Admin Center app. Provision virtual machines and storage, configure networking, monitor health and performance, and install updates with just a few clicks.

Windows Admin Center:

- Elegant browser-based management
- Extensible, plug-ins for hardware & software
- Agentless, nothing to install in the guest OS
- Included with Windows license

Windows Admin Center provides:

- Hyper-Converged Management
- Server Management
- Cluster Management



Hybrid capabilities

Take advantage of the cloud and on-premises working together with the hyper-converged infrastructure platform from a leader in public cloud.

Windows Admin Center can manage Windows Server instances running anywhere:

On-premises: physical or virtual

Cloud: Azure IaaS and others

Windows Admin Center is the hub for hybrid scenarios such as:

Azure Cloud Witness

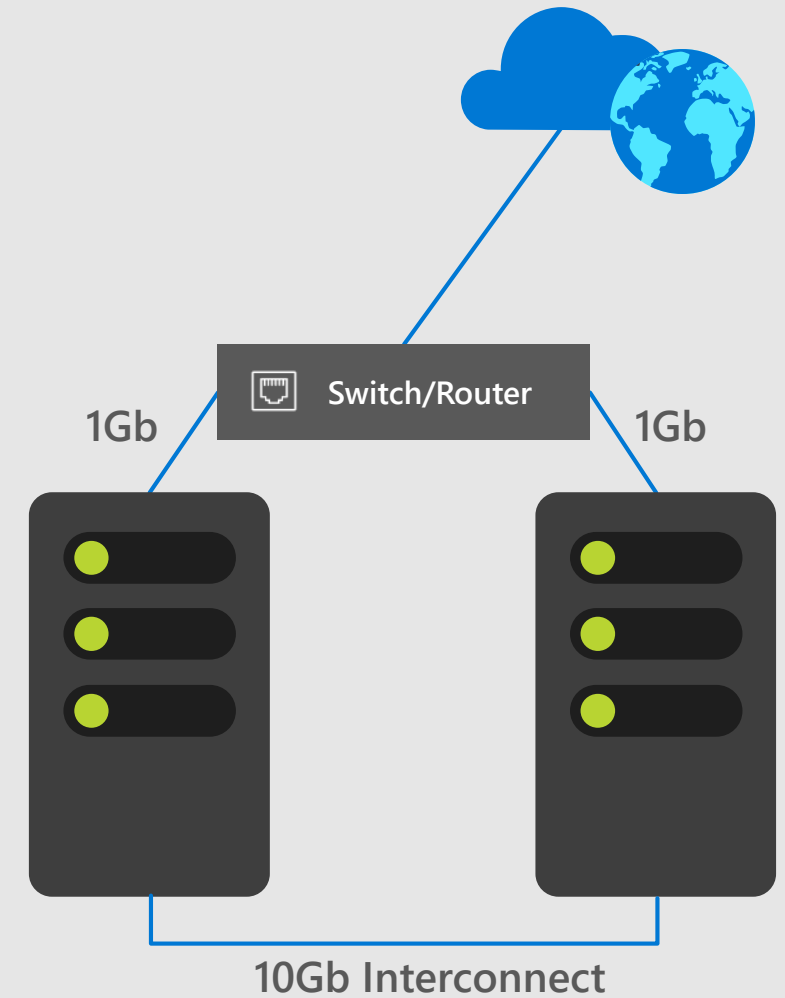
Azure Monitor

Azure Site Recovery

Direct Connected Interconnects

Minimum for small scale:

- 10 Gbps network interface
- Direct –connect supported
- Thunderbolt for simplicity

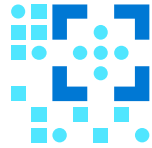


Benefits of switchless networking



Cost

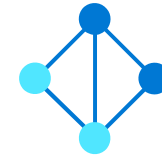
Reduced number of switches or switch ports



Resiliency

Switch configuration mistakes and switch resets

RDMA configuration simplicity (no data center bridging)



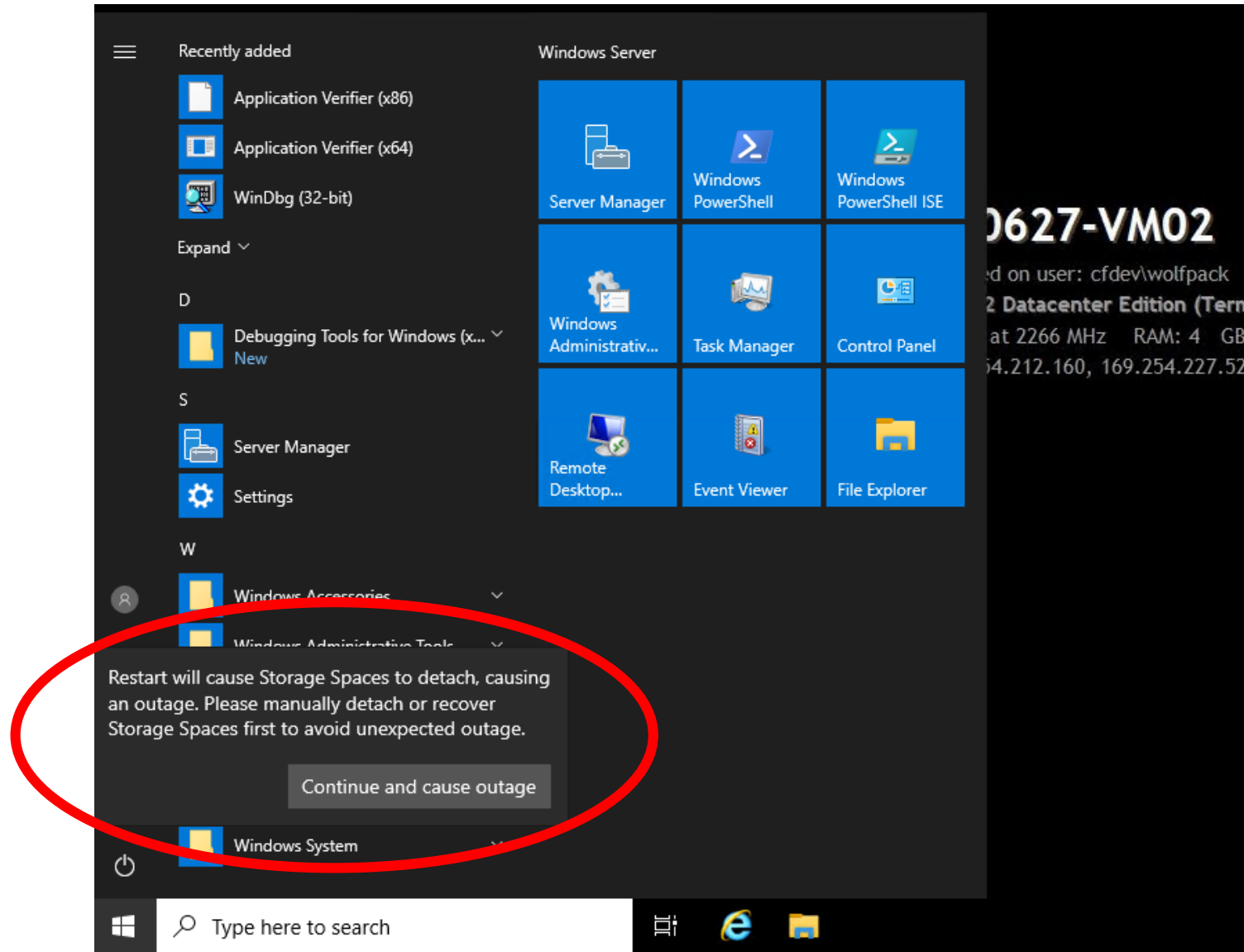
Remote office

No fast switch required

Color coded cables to reduce connection mistakes

Shutdown Safeguards

- Expanding total addressable market
- Checks of virtual disk health and prompts to help prevent downtime
- Building to enable IT generalists



Note: Not final string

Azure Stack HCI & hybrid via Windows Admin Center



Azure Monitor



Azure Site Recovery



Cloud Witness

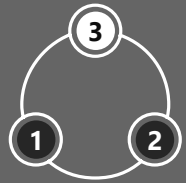
Centrally manage from Azure

- Visualize metrics across all your resources
- Query and analyze logs, including performance counters and events
- Proactively alert you of critical conditions

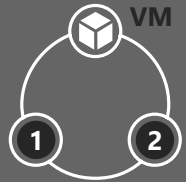
Extend on-premises into Azure

- Business continuity & disaster recovery
- Remove dependency on additional compute footprint to maintain cluster quorum
- Only pay for what you want/need

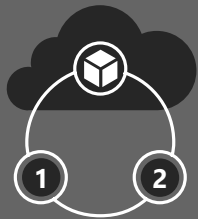
Achieving cluster quorum today



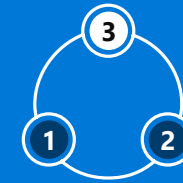
Full third server
Defeats the purpose



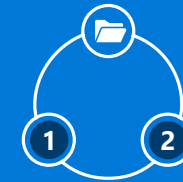
"Witness Appliance" VM
High storage and bandwidth requirements



VM in the cloud
High storage and bandwidth requirements



Full third server
Defeats the purpose



File share witness
Minimal storage or bandwidth needed

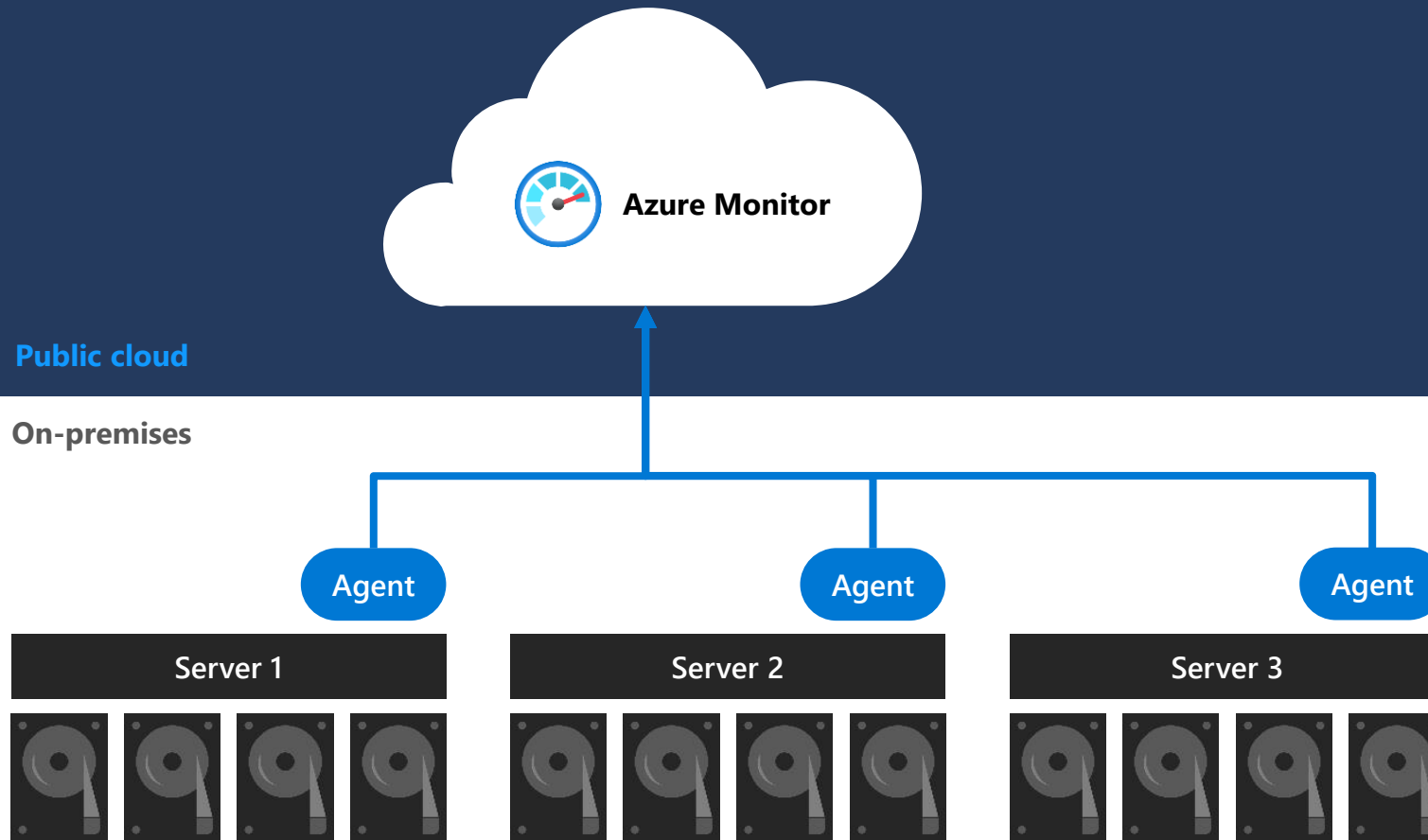


Cloud witness
*Minimal storage or bandwidth needed
(uses Azure blob storage)*

Azure Monitor



Get email/SMS notifications for HCI



Go to <https://aka.ms/configure-azure-monitor-hci> for detailed documentation



Windows Admin Center

nyc microsoft retail store - E

← → ↺ 🏠 🔒 https://localhost:6516/ 📖 ☆ ⚙️ 🔍

Windows Admin Center

Microsoft

> 🔔 ⚙️ ?

Windows Admin Center

All connections

+ Add

🔌 Connect

👤 Manage as

🗑️ Remove

✎ Edit Tags

23 items 🔍 Search

☐ Name ↑	Type	Last connected	Managing as	Tags
 3171r08-14.redmond.corp.microsoft.com (3171R08-14)	Windows Server	9/17/2019, 2:53:10 PM	REDMOND\adagashe	
 3171r08-16.redmond.corp.microsoft.com (3171R08-16)	Windows Server	9/10/2019, 9:30:29 PM	REDMOND\adagashe	
 adisurface2.redmond.corp.microsoft.com [localhost]	Windows 10 PC	Never	REDMOND\adagashe	
 cwaitddpjfem.cfdev.nttest.microsoft.com	Windows Server cluster	9/25/2019, 11:11:39 AM	REDMOND\adagashe	azure stack hci boston retail store branch office
 fractal-s2d.redmond.corp.microsoft.com	Windows Server cluster	9/17/2019, 2:52:31 PM	REDMOND\adagashe	azure stack hci branch office seattle retail store
fractal-s2d.redmond.corp.microsoft.com	Not Installed	9/17/2019, 2:52:31 PM	REDMOND\adagashe	
 gregmae-rdma5.cfdev.nttest.microsoft.com	Windows Server cluster	9/16/2019, 11:16:12 AM	REDMOND\adagashe	azure stack hci branch office nyc retail store nyc retail store - 5th ave
gregmae-rdma5.cfdev.nttest.microsoft.com	Not Installed	9/16/2019, 11:16:12 AM	REDMOND\adagashe	
 kepler191010clu.redmond.corp.microsoft.com	Windows Server cluster	10/28/2019, 5:52:54 PM	REDMOND\adagashe	azure stack hci branch office nyc retail store nyc retail store - times square
 kepler191010n1.redmond.corp.microsoft.com	Windows Server	10/22/2019, 11:42:36 AM	REDMOND\adagashe	
 kepler191010n2.redmond.corp.microsoft.com	Windows Server	10/22/2019, 12:14:00 PM	REDMOND\adagashe	
 rm44-13-01.cfdev.nttest.microsoft.com	Windows Server	9/4/2019, 5:29:10 PM	REDMOND\adagashe	
 rm44-13-03.cfdev.nttest.microsoft.com	Windows Server	9/5/2019, 1:58:03 PM	REDMOND\adagashe	
 rm44-13-05.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	
 rm44-13-07.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	
 rmn44-13-c.cfdev.nttest.microsoft.com	Windows Server cluster	9/5/2019, 2:02:16 PM	REDMOND\adagashe	azure stack hci branch office sf retail store
rmn44-13-c.cfdev.nttest.microsoft.com	Not Installed	9/5/2019, 2:02:16 PM	REDMOND\adagashe	
 tk5-3wp13r0311.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	
 tk5-3wp13r0315.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	
 tk5-3wp13r1129.cfdev.nttest.microsoft.com	Windows Server	9/4/2019, 4:02:21 PM	REDMOND\adagashe	
 tk5-3wp13r1131.cfdev.nttest.microsoft.com	Windows Server	8/8/2019, 3:03:06 PM	REDMOND\adagashe	
 tk5-3wp13r1133.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	
 tk5-3wp13r1135.cfdev.nttest.microsoft.com	Windows Server	Never	REDMOND\adagashe	

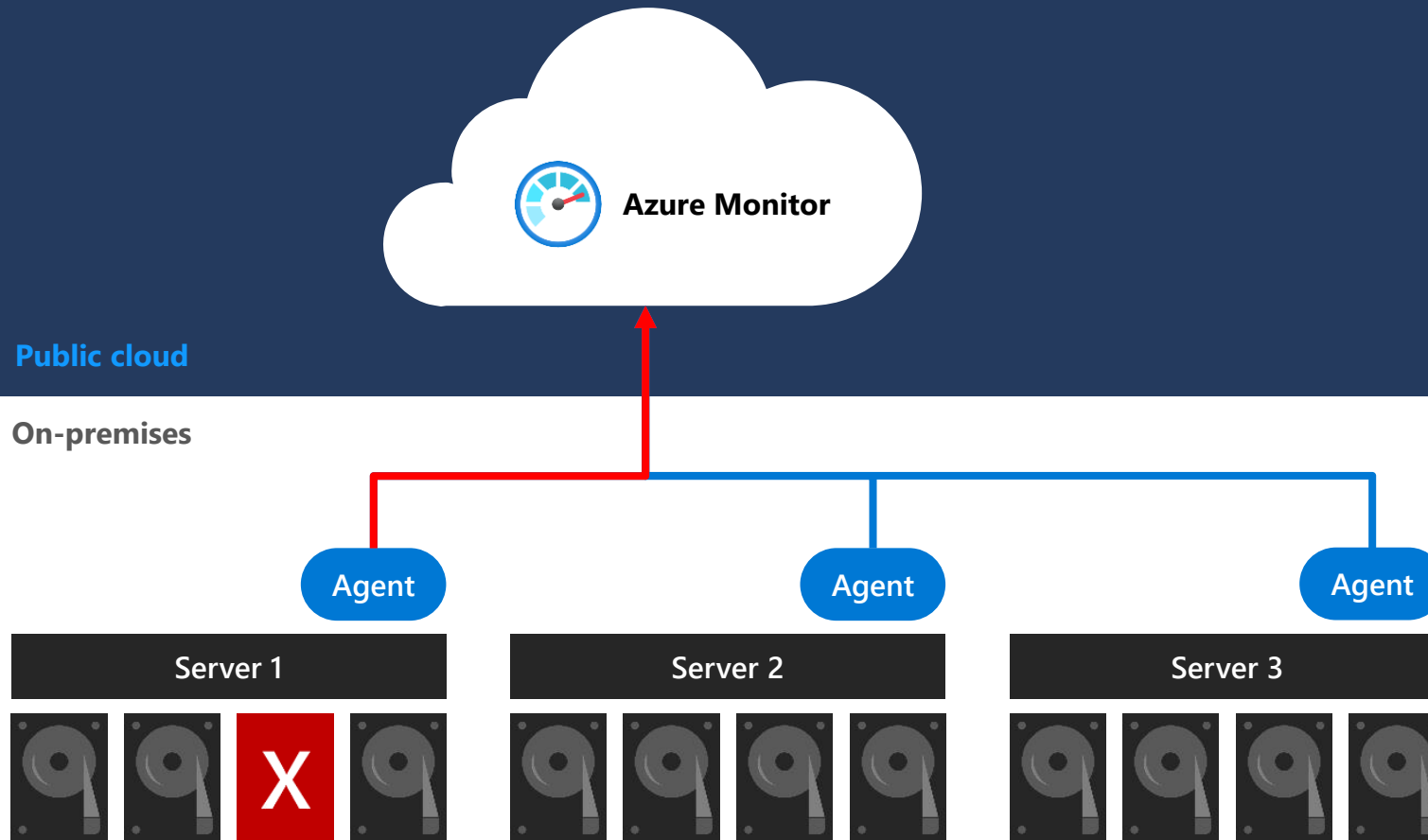
🏠 🔍

📖 🔍

🏠 🔍

📖 🔍

Get email/SMS notifications for HCI



Go to <https://aka.ms/configure-azure-monitor-hci> for detailed documentation



Windows Admin Center

Cluster Manager

Microsoft

kepler191010clu.redmond.corp.microsoft.com

Tools

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Dashboard

Compute

Virtual machines

Servers

Storage

Volumes

Drives

Networking

Virtual switches

Tools

Azure Monitor

Updates

Diagnostics

Performance Monitor

Settings

Monitoring and alerts with Azure Monitor

PREVIEW

2 of 2 nodes in the cluster are connected to ITAdminsNYC

Azure Monitor connection

Onboard cluster

2 items

Node	Onboarding status	Connected to workspace
kepler191010n2.redmond.corp.microsoft.com	Connected	ITAdminsNYC
kepler191010n1.redmond.corp.microsoft.com	Connected	ITAdminsNYC

How do I stop using Azure to monitor a server?

Alerts created in Windows Admin Center

To get notifications via email or text messages, or to automatically react to events and performance counters, create an alert in Azure Monitor.

0

Based on workspace

To view alerts including alerts created in Azure, visit the Azure portal.

Edit alert rule

0 items

Alert name	Resource type	Action group
No records found		

Analyze system health

Analyze the performance and health of the Windows and Linux servers in your workspace.
[Azure Monitor for VMs](#)

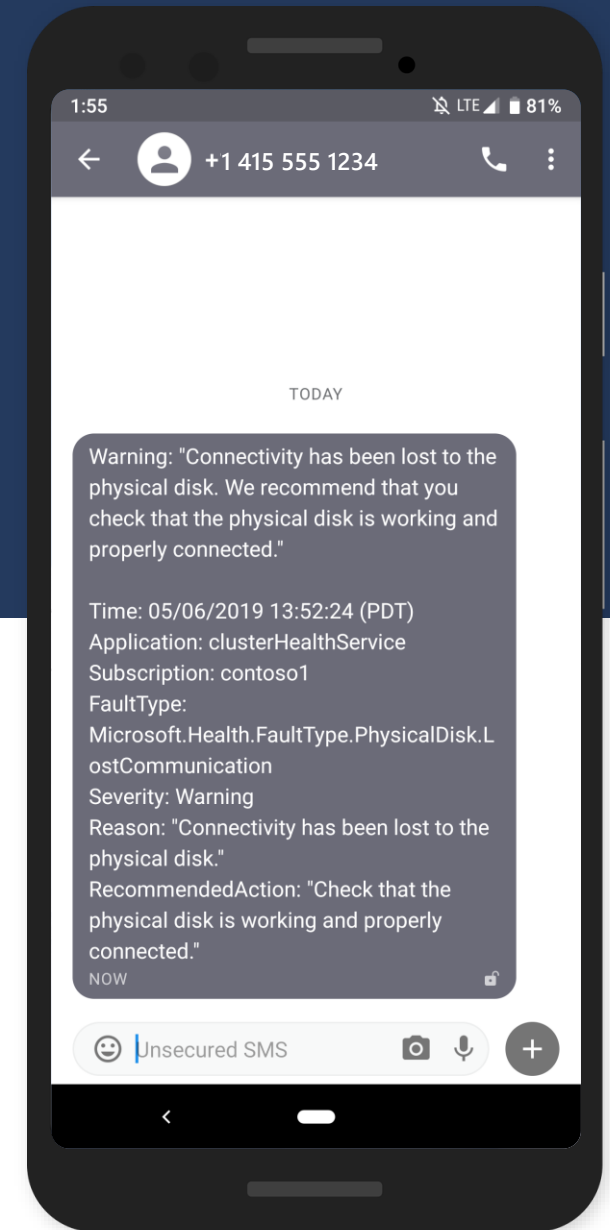
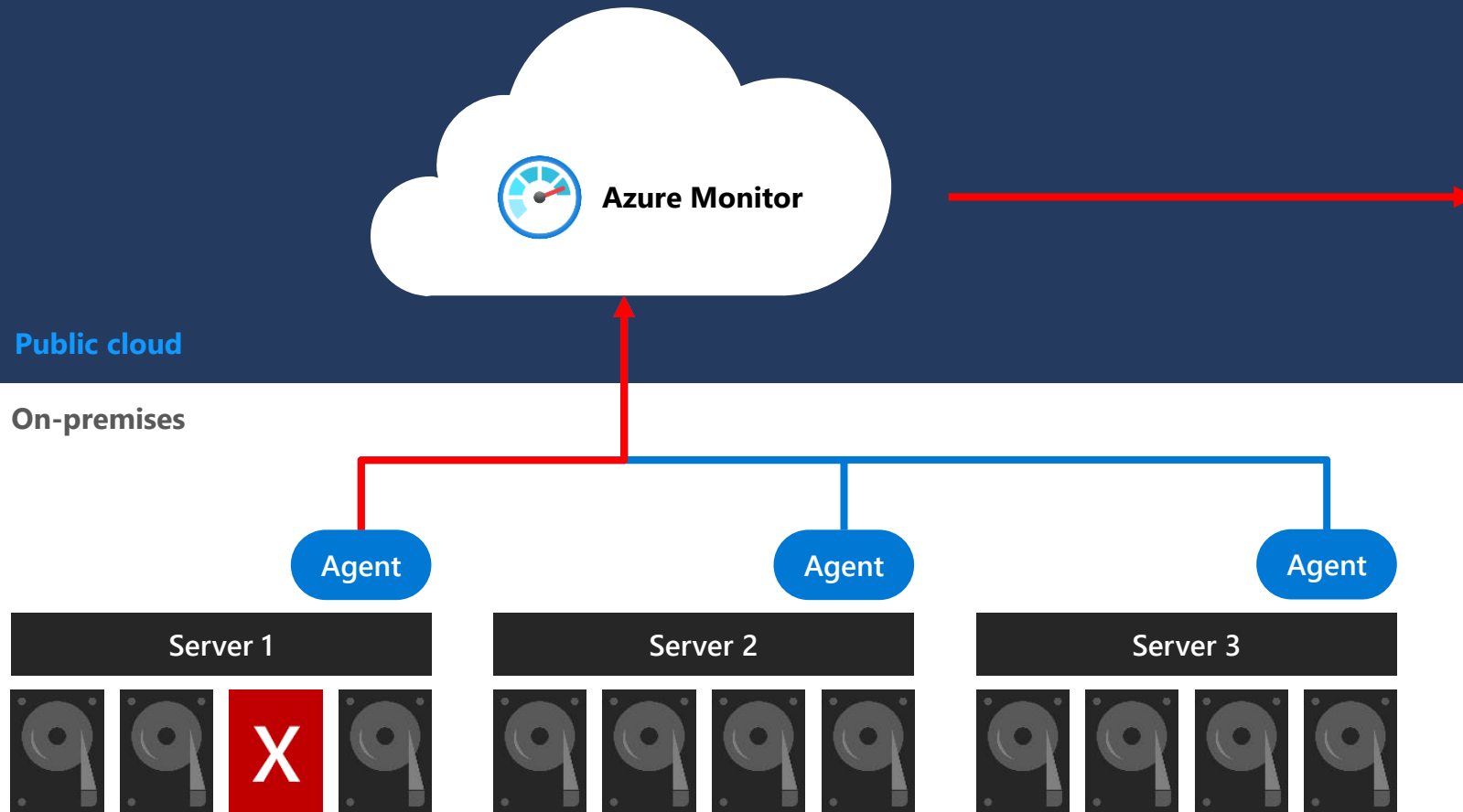
Query and analyze logs

Query and analyze event and performance logs across all the machines in your workspace.
[Log search](#)

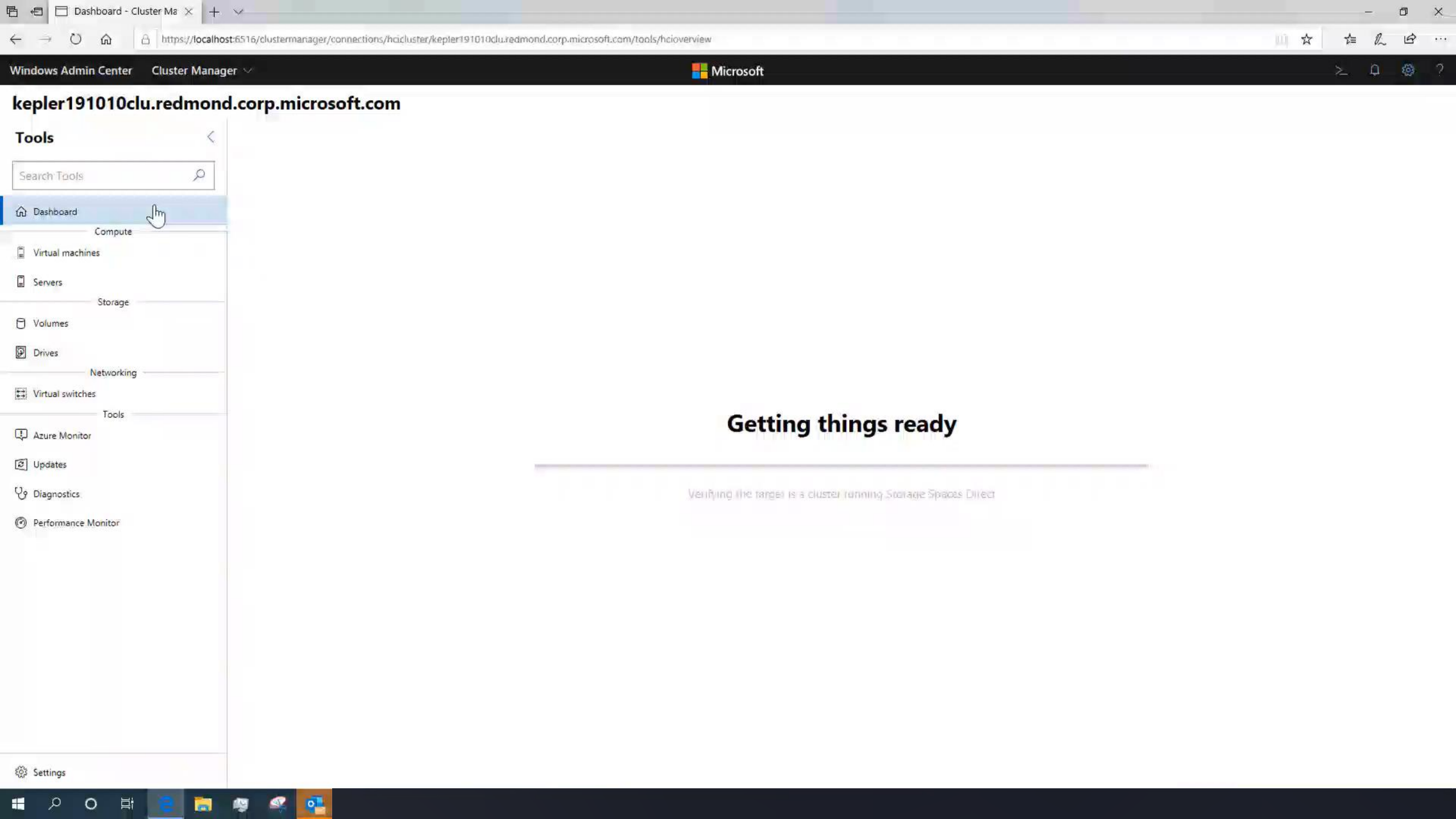
Alerts and actions

Get notified when important conditions are found in your data. Proactively identify and address issues before customer notice them.
[Alerts](#)

Get email/SMS notifications for HCI



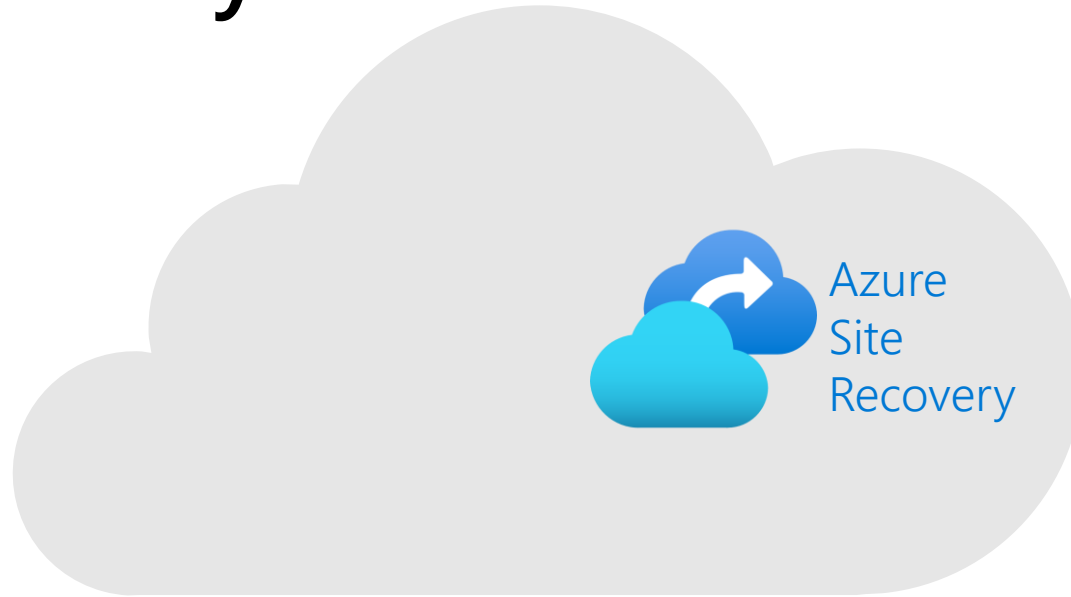
Go to <https://aka.ms/configure-azure-monitor-hci> for detailed documentation



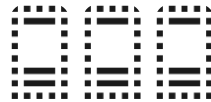
Azure Site Recovery

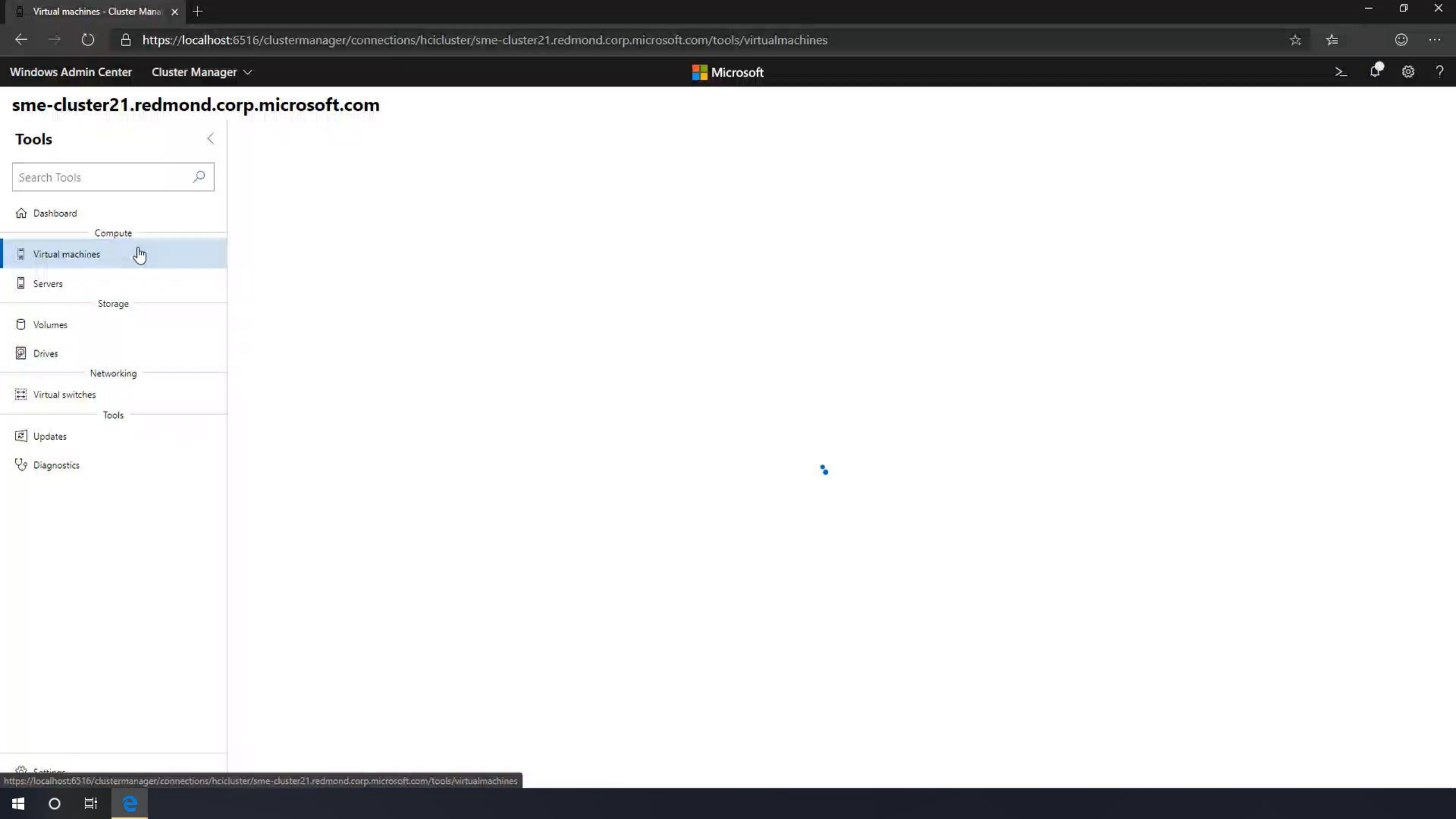


Protect your environment from disaster and ensure business continuity

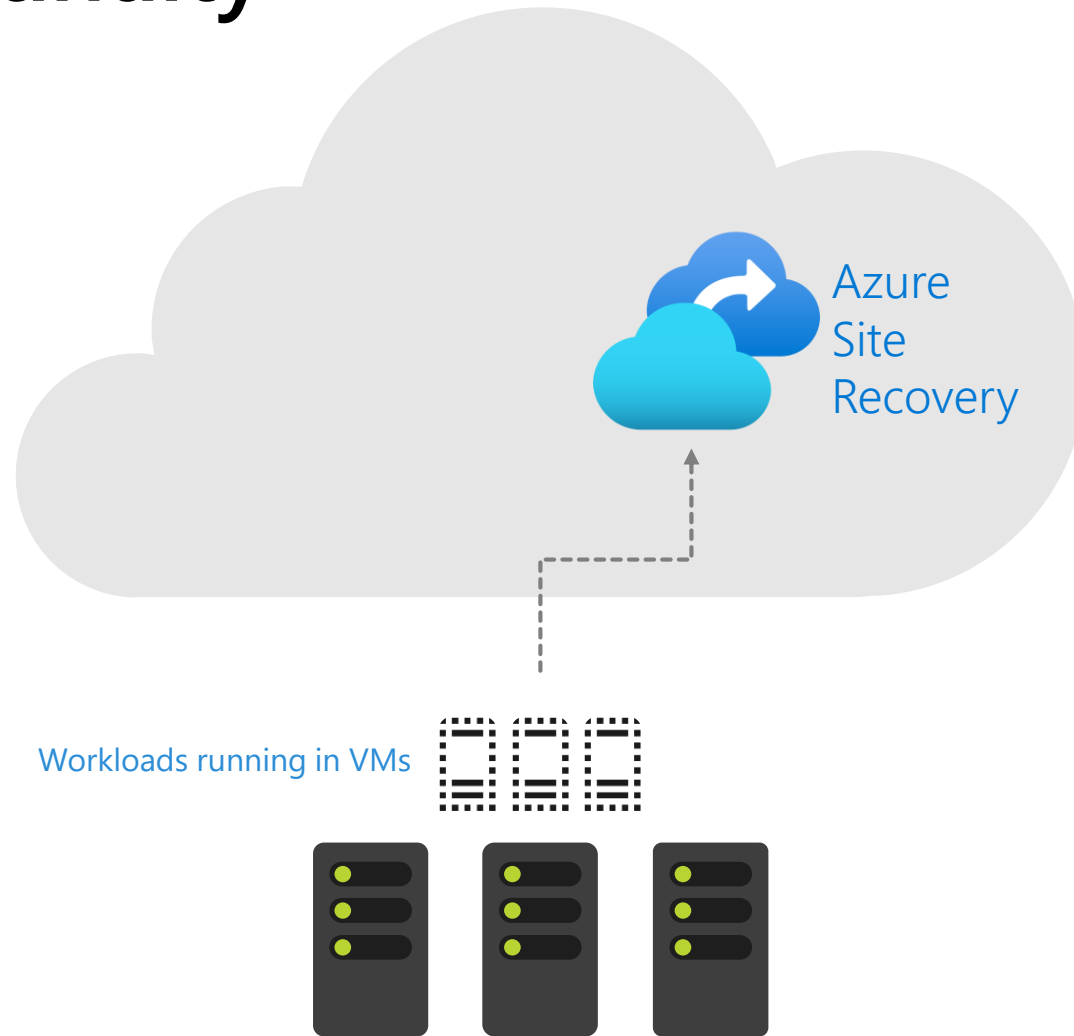


Workloads running in VMs





Protect your environment from disaster and ensure business continuity



Inventory - Virtual machines - Se x

VM-ASR - Backup items - Micro: x | +

←

→

↺

Not secure | https://localhost/servermanager/connections/server/silver-node4.redmond.corp.microsoft.com/tools/virtualmachines/inventory

☆

≡

👤

😊

⋮

Windows Admin Center

Server Manager

Microsoft

>

🔔

⚙️

?

silver-node4.redmond.corp.microsoft.com

Tools

Virtual machines

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📁 Files

🔥 Firewall

📋 Installed apps

👤 Local users & groups

🌐 Networks

📊 Performance Monitor

📄 PowerShell

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📁 Registry

🖥️ Remote Desktop

🛠️ Roles & features

📅 Scheduled tasks

🔧 Services

📁 Storage

📁 Storage Migration Service

📁 Storage Replica

📊 System Insights

🔄 Updates

🖥️ Virtual machines

🔌 Virtual switches

⚙️ Settings

▲

Help protect your VMs from disasters by using Azure Site Recovery. [Update now](#)

[Learn more](#)

✕

Summary

Inventory

+ New

< Connect

⚙️ Settings

▶ Start

🛑 Shut down

💾 Save

➡ Move

🕒 New checkpoint

More

7 items

🔄

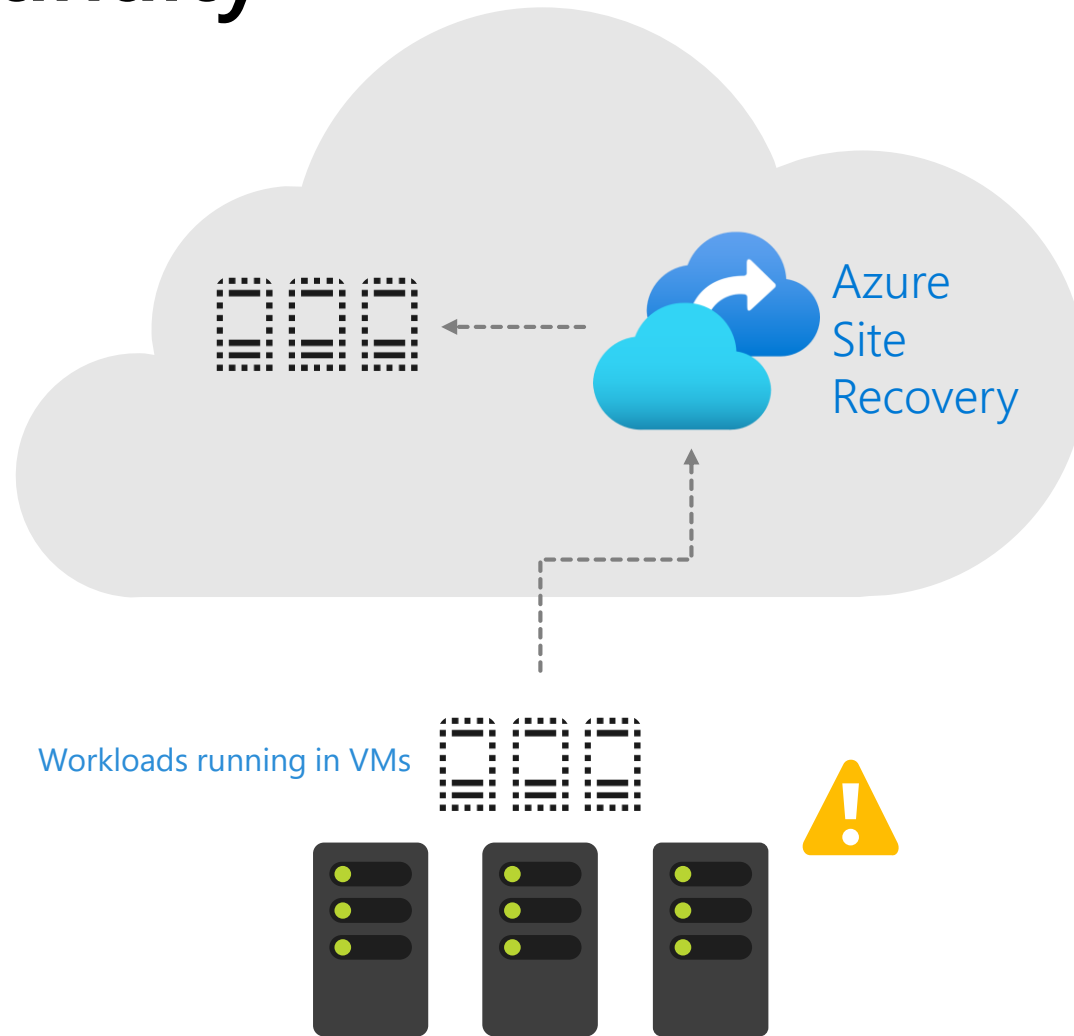
🔍

Search

🔍

☐	Name ↑	State	CPU usage	Memory pressure	Memory demand	Assigned memory	Uptime	Heartbeat	Disaster Recovery status	Tags
	File-Server-2008R2	Saved	-	-	-	-	-	Unknown	-	
	File-Server-2019c	Running	0 %	50 %	1.95 GB	3.91 GB	0:02:04:13	OK	-	ws2019
	LoB-2012R2	Running	0 %	52 %	1.04 GB	2 GB	0:02:05:30	OK	-	
	Plat-LOB-2019	Running	8 %	65 %	1.77 GB	2.72 GB	0:00:18:14	OK	-	ws2019
✓	SQL-Server-2016	Running	0 %	33 %	675 MB	2 GB	0:01:04:11	OK	-	
	Win-Server-2016c	Running	0 %	40 %	819 MB	2 GB	0:00:18:08	OK	-	
	Win-Server-2019c	Running	0 %	29 %	1.13 GB	3.91 GB	0:02:04:18	OK	-	ws2019

Protect your environment from disaster and ensure business continuity



Inventory - Virtual machines - Cl...

smeccluster21vault - Replicated it...

+

← → ↺

https://ms.portal.azure.com/#@72f988bf-86f1-41af-91ab-2d7cd011db47/resource/subscriptions/e8a3542c-be8a-448f-9adb-117413b6285b/resourceGroups/harowl-vms/providers/Microsoft.RecoveryServices/va... ☆ ☆ ☆ ? ☺

Microsoft Azure (Preview)

Report a bug

Search resources, services, and docs (G+)

🗨 📄 🔔 ⚙ ? ☺

«

Home > smeccluster21vault - Replicated items

×

+

Create a resource

🏠 Home

📊 Dashboard

☰ All services

★ FAVORITES

📁 All resources

📁 Resource groups

🖥 Virtual machines

📁 Azure Active Directory

📊 Log Analytics workspaces

🔗 Virtual networks

🔧 Recovery Services vaults

🛡 Security Center

🔑 Subscriptions

📁 Storage accounts

🖼 Images

🌐 App Services

🗄 SQL databases

🗄 SQL data warehouses

🌌 Azure Cosmos DB

⚖ Load balancers

📈 Monitor

🔧 Advisor

💰 Cost Management + Billing

👤 Help + support

«

smeccluster21vault - Replicated items

Recovery Services vault

🔍 Search (Ctrl+)

📄 Overview

📅 Activity log

👤 Access control (IAM)

🏷 Tags

🔧 Diagnose and solve problems

Settings

📋 Properties

🔒 Locks

📄 Export template

Getting started

📄 Backup

📄 Site Recovery

Protected items

📄 Backup items

Replicated items

Manage

📄 Backup policies

📄 Backup Infrastructure

📄 Site Recovery infrastructure

📄 Recovery Plans (Site Recovery)

📄 Backup Reports

Monitoring

📄 Alerts

📄 Diagnostic settings

▼

🔄 Refresh + Replicate 📄 Columns 📏 Filter

📘 You can run your machines on managed disks after a failover or migration from on-premises to Azure. Set the option to use managed disks in Replicated item -> Settings -> Compute and Network. ➔

Last refreshed at: 9/21/2019, 10:21:42 PM

📘 Finished loading data from service.

🔍 Filter items...

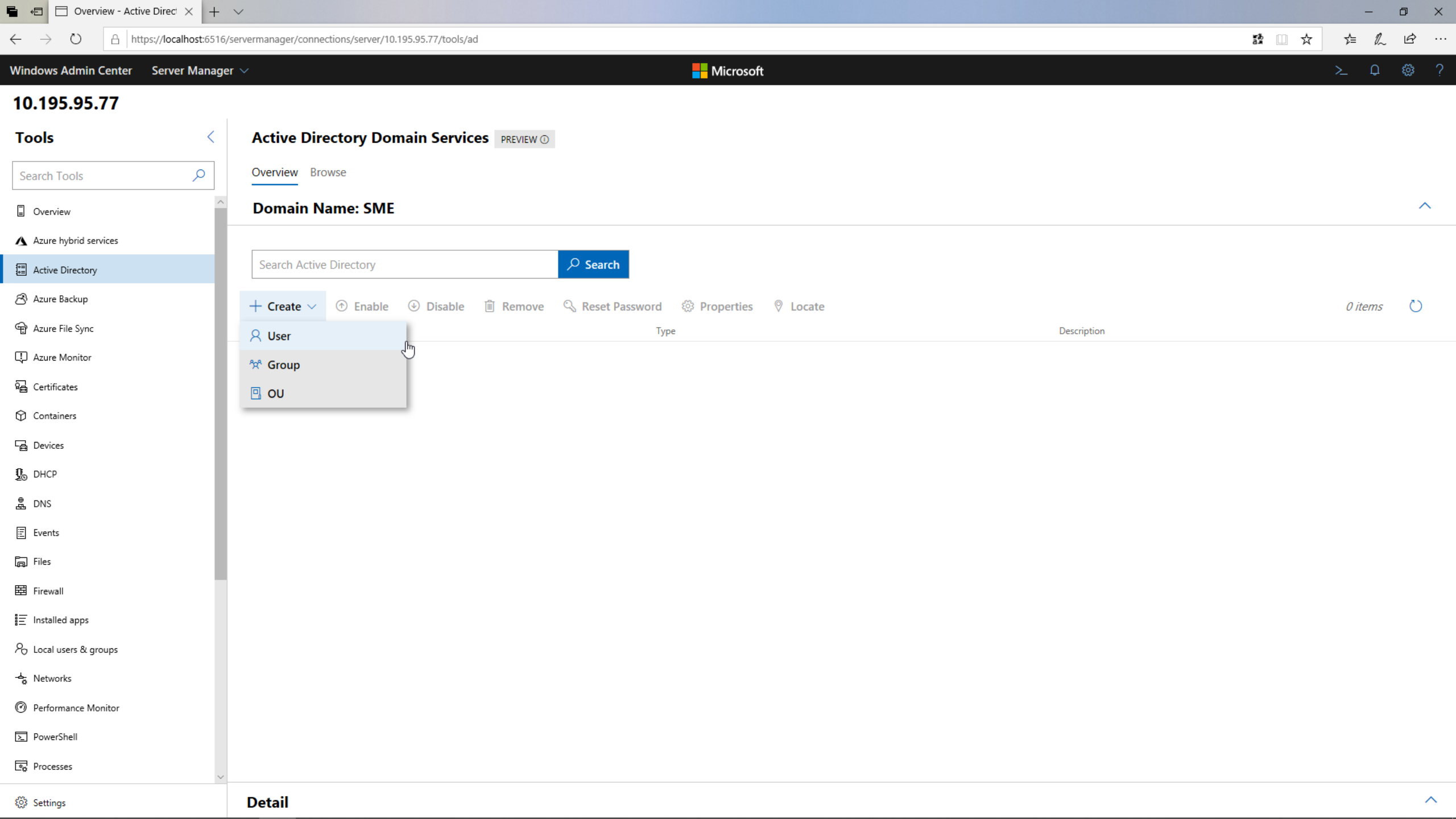
NAME	REPLICATION HEALTH	STATUS	ACTIVE LOCATION	
vm-ws2019-1	🟢 Healthy	0% Synchronized	smefabric	...

Windows Admin Center New Tools



Active Directory





Overview - Active Direct

https://localhost:6516/servermanager/connections/server/10.195.95.77/tools/ad

Windows Admin Center Server Manager

Microsoft

10.195.95.77

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Overview

Azure hybrid services

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Azure Backup

Azure File Sync

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Settings

Active Directory Domain Services

PREVIEW

Overview Browse

Domain Name: SME

Search Active Directory

Search

Create

Enable

Disable

Remove

Reset Password

Properties

Locate

0 items

Refresh

Type	Description
------	-------------

Detail

Overview - Active Direct

+

+

←

→

↺

https://localhost:6516/servermanager/connections/server/10.195.95.77/tools/ad

Windows Admin Center

Server Manager

Microsoft

>

🔔

⚙️

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10.195.95.77

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Active Directory Domain Services

PREVIEW ⓘ

Overview

Browse

Domain Name: SME

Search Active Directory

🔍 Search

+ Create

⬆️ Enable

⬇️ Disable

🗑️ Remove

🔍 Reset Password

⚙️ Properties

📍 Locate

Name

↑

Type

No records found

Add User

Name*

Cap

Sam Account Name

Password

••••••

Given Name

Steve

Surname

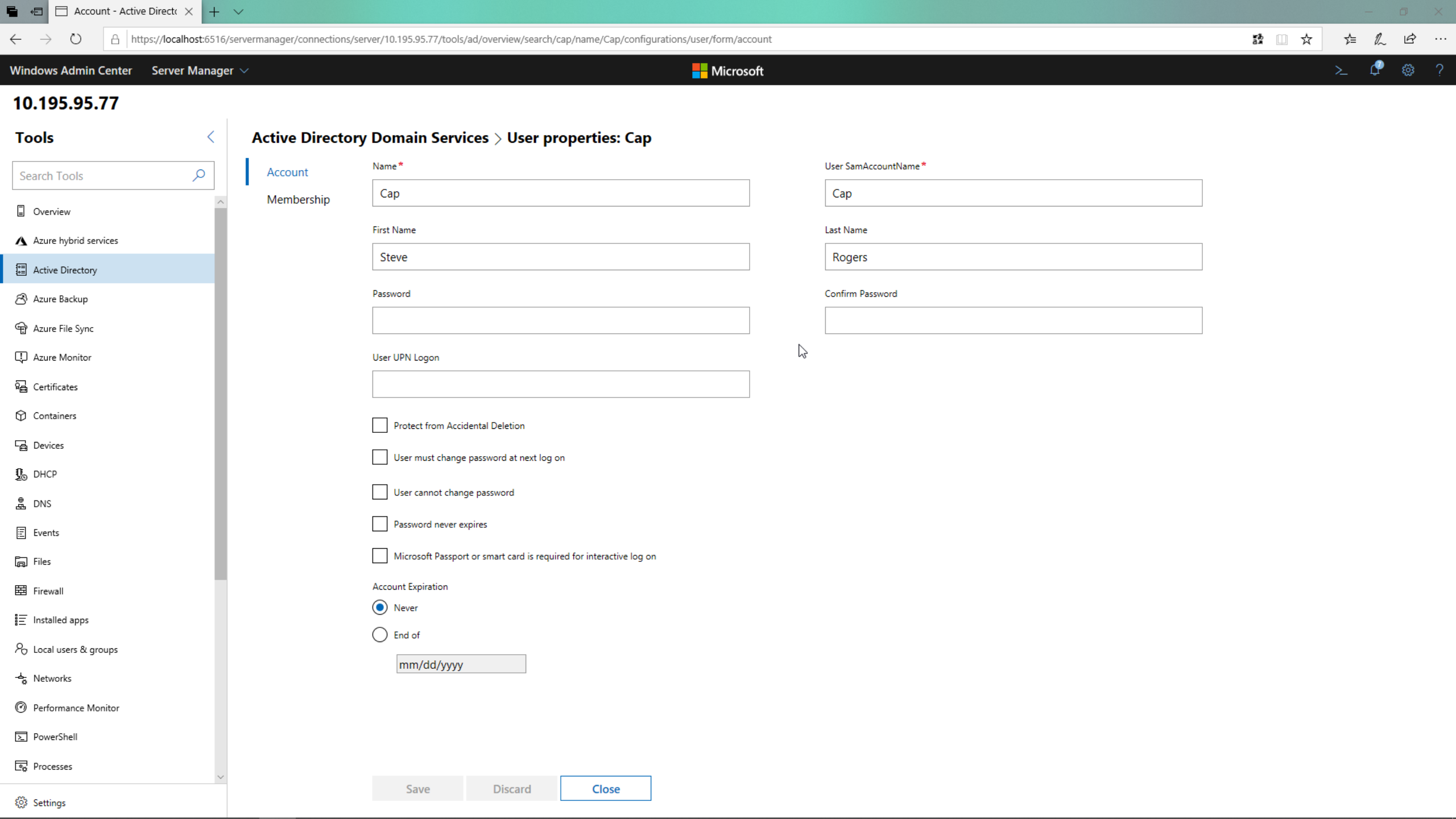
Rogers

Create in: DC=SME,DC=MSFT

Change...

Create

Close



Account - Active Direct...

https://localhost:6516/servermanager/connections/server/10.195.95.77/tools/ad/overview/search/cap/name/Cap/configurations/user/form/account

Windows Admin Center Server Manager

Microsoft

10.195.95.77

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Settings

Active Directory Domain Services > User properties: Cap

Account

Membership

Name *

Cap

First Name

Steve

Password

User UPN Logon

☐ Protect from Accidental Deletion

☐ User must change password at next log on

☐ User cannot change password

☐ Password never expires

☐ Microsoft Passport or smart card is required for interactive log on

Account Expiration

☒ Never

☐ End of

mm/dd/yyyy

User SamAccountName *

Cap

Last Name

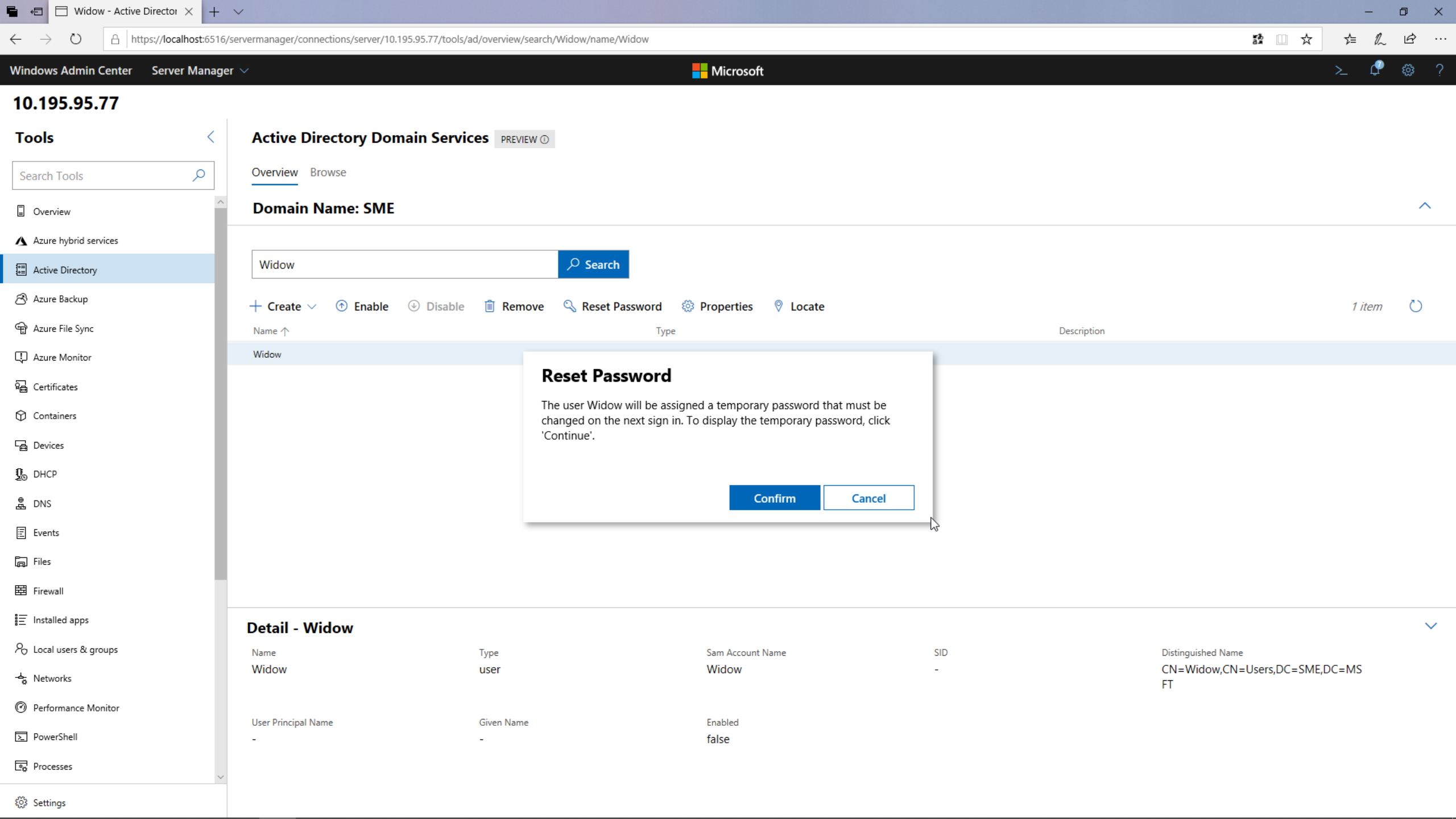
Rogers

Confirm Password

Save

Discard

Close



10.195.95.77

Tools

Search Tools

- Overview
- Azure hybrid services
- Active Directory
- Azure Backup
- Azure File Sync
- Azure Monitor
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- Settings

Active Directory Domain Services

Overview Browse

Domain Name: SME

Widow Search

+ Create Enable Disable Remove Reset Password Properties Locate

Name ↑ Type Description

Widow

Reset Password

The user Widow will be assigned a temporary password that must be changed on the next sign in. To display the temporary password, click 'Continue'.

Confirm Cancel

Detail - Widow

Name	Type	Sam Account Name	SID	Distinguished Name
Widow	user	Widow	-	CN=Widow,CN=Users,DC=SME,DC=MSFT
User Principal Name	Given Name	Enabled		
-	-	false		

DNS



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DNS PREVIEW ⓘ

Forward lookup zones Reverse lookup zones

[+ Create a new DNS zone](#) [✎ Edit](#) [🗑 Delete](#)

Name ↑	Type	Status
contoso.com	Primary	Running
SME.MSFT	Primary	Running
_msdcs.SME.MSFT	Primary	Running

Records - contoso.com

[+ Create a new DNS record](#) [✎ Edit](#) [🗑 Delete](#)

Name ↑	Type
int.contoso.com	Host (A)
int2.contoso.com	Host (A)

Create a new DNS zone

Zone type ⓘ

Primary

Zone name (for example, microsoft.com) *

woodgrove.com ×

Zone file

☒ Create a new file ☐ Use existing file

Zone file name* ⓘ

woodgrove.com.dns

☐ Store the zone in Active Directory (i)

Dynamic update ⓘ

☐ Allow both nonsecure and secure dynamic updates

☒ Do not allow dynamic updates

Create

Cancel

DHCP



10.195.95.77

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New scope

Edit

Delete

Name ↑	Protocol	Status	Description
NW Lab 1 [192.168.20.0]	IPv4	Active	
Test Scope 2 [192.168.15.0]	IPv4	Active	
Test Scope 3 [192.168.16.0]	IPv4	Active	
Test Scope [192.168.14.0]	IPv4	Active	

Create a new scope

Protocol

IPv4

Name *

NW Lab 2

DHCP

Starting IP address *

192.168.0.30

End IP address *

192.168.0.100

DHCP client subnet mask *

255.255.255.0

Router (default gateway)

+ Add

Lease duration for DHCP clients

Limited to

Days *

1

Hours *

0

Create

Cancel

Security



Summary - Security - Server ManagerRemote Desktop - Server Manager

https://localhost:6516/servermanager/connections/server/silver-node2.redmond.corp.microsoft.com/tools/security

Windows Admin CenterServer ManagerMicrosoft

silver-node2.redmond.corp.microsoft.com

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Security

Services

Storage

Storage Migration Service

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System Insights

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Settings

SecurityPREVIEW ⓘ

Virus & threat protection

SummaryProtection history

Overview

+ New scan

⚙ Schedule

🔄 Refresh

Latest scan

Quick scan, 10/27/2019, 2:02 AM

Latest threat detected

-

Next scheduled scan

Quick scan, Saturday 2:00 AM

Real-time protection

Locates and stops malware from installing or running on your device. You can turn off this setting for a short time before it turns back on automatically.

On

Extensions



Windows Admin Center

+

←→↺🔒https://localhost:6516🔍★🏠👤😊⋮

Windows Admin Center

Microsoft

⏏🔔⚙️?

Windows Admin Center

All connections

+ Add

🔌 Connect

👤 Manage as

🗑 Remove

✎ Edit Tags

21 items

🔍 Search

☐ Name ↑

	Type	Last connected	Managing as	Tags
📄 10.195.95.77 (silver-node1)	Windows Server	10/23/2019, 2:45:40 PM	NTDEV\jeffwoo	
📄 account-node1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 3:31:58 PM	NTDEV\jeffwoo	
📄 brown-node1.redmond.corp.microsoft.com	Windows Server	Never	NTDEV\jeffwoo	
📄 dataon-n1.redmond.corp.microsoft.com	Windows Server	10/28/2019, 10:17:30 PM	NTDEV\jeffwoo	
📄 dataon-n2.redmond.corp.microsoft.com	Windows Server	10/28/2019, 7:14:55 PM	NTDEV\jeffwoo	
☐ 📄 dl380-node1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 3:38:32 PM	NTDEV\jeffwoo	
🖱📄 jeffwoo-480.ntdev.corp.microsoft.com [localhost—elevated]	Windows 10 PC	10/25/2019, 5:14:27 PM	NTDEV\jeffwoo	
🖱📄 jeffwoo-535.ntdev.corp.microsoft.com	Windows 10 PC	6/5/2019, 3:54:53 PM	NTDEV\jeffwoo	
📄 lob-2012r2.redmond.corp.microsoft.com	Windows Server	10/28/2019, 7:56:57 AM	NTDEV\jeffwoo	
📄 plat-fs1.ntdev.corp.microsoft.com	Windows Server	10/29/2019, 3:27:32 PM	NTDEV\jeffwoo	
📄 plat-lob1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 10:53:48 AM	NTDEV\jeffwoo	
📄 plat-wac1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 10:54:19 AM	NTDEV\jeffwoo	
📄 plat-wac2.redmond.corp.microsoft.com	Windows Server	10/29/2019, 9:29:55 AM	NTDEV\jeffwoo	
📄 plat-web1.ntdev.corp.microsoft.com	Windows Server	10/25/2019, 10:25:38 PM	NTDEV\jeffwoo	
📄 silver-dns1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 9:32:20 AM	NTDEV\jeffwoo	
📄 silver-node1.redmond.corp.microsoft.com	Windows Server	10/29/2019, 3:06:24 PM	NTDEV\jeffwoo	hosts
📄 silver-node2.redmond.corp.microsoft.com	Windows Server	10/29/2019, 3:05:51 PM	NTDEV\jeffwoo	hosts
📄 silver-node3.redmond.corp.microsoft.com	Windows Server	10/28/2019, 7:01:14 AM	NTDEV\jeffwoo	hosts
📄 silver-node4.redmond.corp.microsoft.com	Windows Server	10/28/2019, 6:36:45 AM	NTDEV\jeffwoo	hosts
📄 win-4ofi1ma8qr5.redmond.corp.microsoft.com	Windows Server	Never	NTDEV\jeffwoo	
📄 WS-File-Server.redmond.corp.microsoft.com	Windows Server	Never	NTDEV\jeffwoo	

Hyper-V



Inventory - Virtual machines - Se

Inventory - Virtual machines - Se

+

←

→

↺

https://localhost:6516/servermanager/connections/server/silver-node4.ntdev.corp.microsoft.com/tools/virtualmachines/inventory

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🔍

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silver-node4.ntdev.corp.microsoft.com

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🔌 Virtual switches

⚙️ Settings

Virtual machines

🚨

Help protect your VMs from disasters by using Azure Site Recovery. [Update now](#)

[Learn more](#)

✕

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Status

Running

5

Off

4

Saved

0

Paused

0

Total

9

Events

📘

Microsoft-Windows-Hyper-V-Worker

58 seconds ago

'Win-Server-2019' was turned off. (Virtual machine ID 1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A)

⚠️

Microsoft-Windows-Hyper-V-Chipset

2 minutes ago

'Win-Server-2019' failed to boot an operating system. (Virtual machine ID 1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A)

📘

Microsoft-Windows-Hyper-V-Worker

3 minutes ago

'Win-Server-2019' started successfully. (Virtual machine ID 1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A)

📘

Microsoft-Windows-Hyper-V-SynthNic

3 minutes ago

'Win-Server-2019' Network Adapter (7EFA2F49-82FA-4615-8E68-A760B9F407B7) started successfully. (Virtual Machine ID 1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A)

📘

Microsoft-Windows-Hyper-V-SynthNic

3 minutes ago

'Win-Server-2019' Network Adapter (1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A--7EFA2F49-82FA-4615-8E68-A760B9F407B7) Connected to virtual network. (Virtual Machine ID 1C3F9A43-BC9E-43DC-BA70-D08FAD88D12A)

[View all events](#)

CPU

Host

0%

Guest

0%

0%

of total CPU

Top CPU usage

Name	CPU usage
Win-Server-2019c	0 %
Win-Server-2016c	0 %
LoB-2012R2	0 %
LOB-App	0 %

Memory

Host

11.9%

Guest

45.5%

57.4%

of 24 GB

Top assigned memory

Name	Assigned memory ↓
Win-Server-2019c	16.3 %
File-Server-2008R2	8.3 %
LoB-2012R2	8.3 %
Win-Server-2016c	8.3 %

Inventory - Virtual machines - Se x

Inventory - Virtual machines - Se x | +

← → ↺

https://localhost:6516/servermanager/connections/server/silver-node4.ntdev.corp.microsoft.com/tools/virtualmachines/inventory

🔍 🔍 ☆ ⚙️ 👤 😊 ...

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> 🗨️ ⚙️ ?

silver-node4.ntdev.corp.microsoft.com

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▶ Start

□ Shut down

💾 Save

→ Move

More ▾

☐ Name ↑	State	CPU usage	Memory pressure	Memory demand	Assigned memory
File-Server-2008R2	Running	0 %	33 %	675 MB	2 GB
File-Server-2019c	Stopped	-	-	-	-
LoB-2012R2	Running	0 %	23 %	471 MB	2 GB
✓ LoB-App	Running	0 %	16 %	163 MB	1 GB
Plat-LoB-2019	Stopped	-	-	-	-
SharePoint-Server-2019	Stopped	-	-	-	-
SQL-Server-2016	Stopped	-	-	-	-
Win-Server-2016c	Running	0 %	35 %	716 MB	2 GB
Win-Server-2019c	Running	0 %	21 %	840 MB	3.91 GB

Move Virtual Machine

The virtual machine will be moved using the 'best practice' available for its current hosting. Running virtual machines will operate normally during the move.

Move the virtual machine to a

☐ Failover Cluster

☒ Server

Select server: *

silver-node3.ntdev.corp.microsoft.com ▾

New path ⓘ

E:\VMs (Hyper-V Host Setting) ▾

E:\VMs (Hyper-V Host Setting)

C: (101 GB available)

D: (82.4 GB available)

E: (797 GB available)

F: (97.6 GB available)

Browse

are saved under

Move

Cancel

Hyper-V – GPU-P in Windows Server „vNext”





Recycle Bin



Windows Admin ...



Server Administra...



x64

Device Manager

File Action View Help



- ▼ dell1-amd-gpup
 - > Computer
 - > Disk drives
 - ▼ Display adapters
 - Microsoft Basic Display Adapter
 - Microsoft Remote Display Adapter
 - Radeon Instinct MI25
 - > IDE ATA/ATAPI controllers
 - > Keyboards
 - > Mice and other pointing devices
 - > Monitors
 - > Network adapters
 - > Ports (COM & LPT)
 - > Print queues
 - > Processors
 - > Software devices
 - > Storage controllers
 - > System devices
 - > Universal Serial Bus controllers

Hyper-V Manager

File Action View Help



Hyper-V Manager

DELL1-AMD-GPUP

Virtual Machines

Name	State	CPU Usage	Assigned Memory	Uptime	Status
gpup-vm1	Off				
gpup-vm2	Off				
gpup-vm3	Running	0%	16000 MB	00:33:55	
gpup-vm4	Running	0%	16000 MB	00:33:52	
gpup-vm5	Running	0%	16000 MB	00:33:50	
gpup-vm6	Running	0%	16000 MB	00:33:54	
gpup-vm7	Off				
gpup-vm8	Off				

Checkpoints

gpup-vm6

Adapter	Connection	IP Addresses	Status
Network Adapter (Dynamic MAC: 00:...	External	192.168.1.126, fe80:f448:a996:4f2...	OK (VMQ active)

Summary Memory Networking Replication

Actions

DELL1-AMD-GPUP

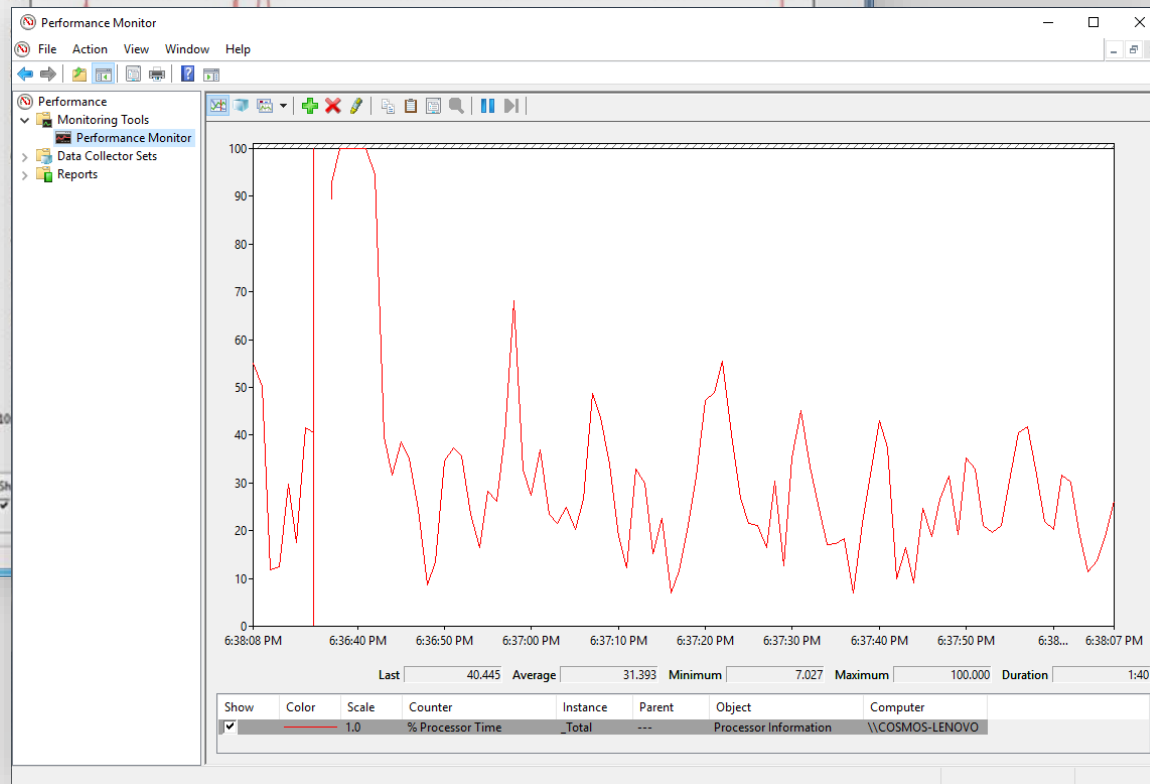
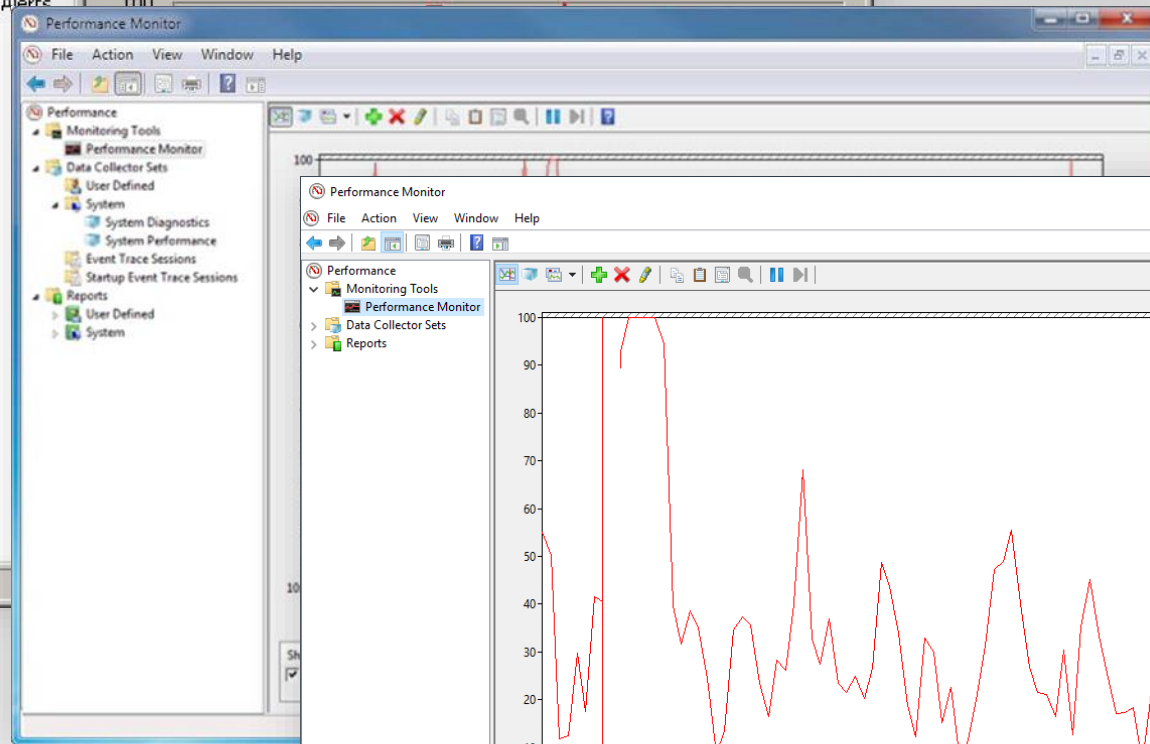
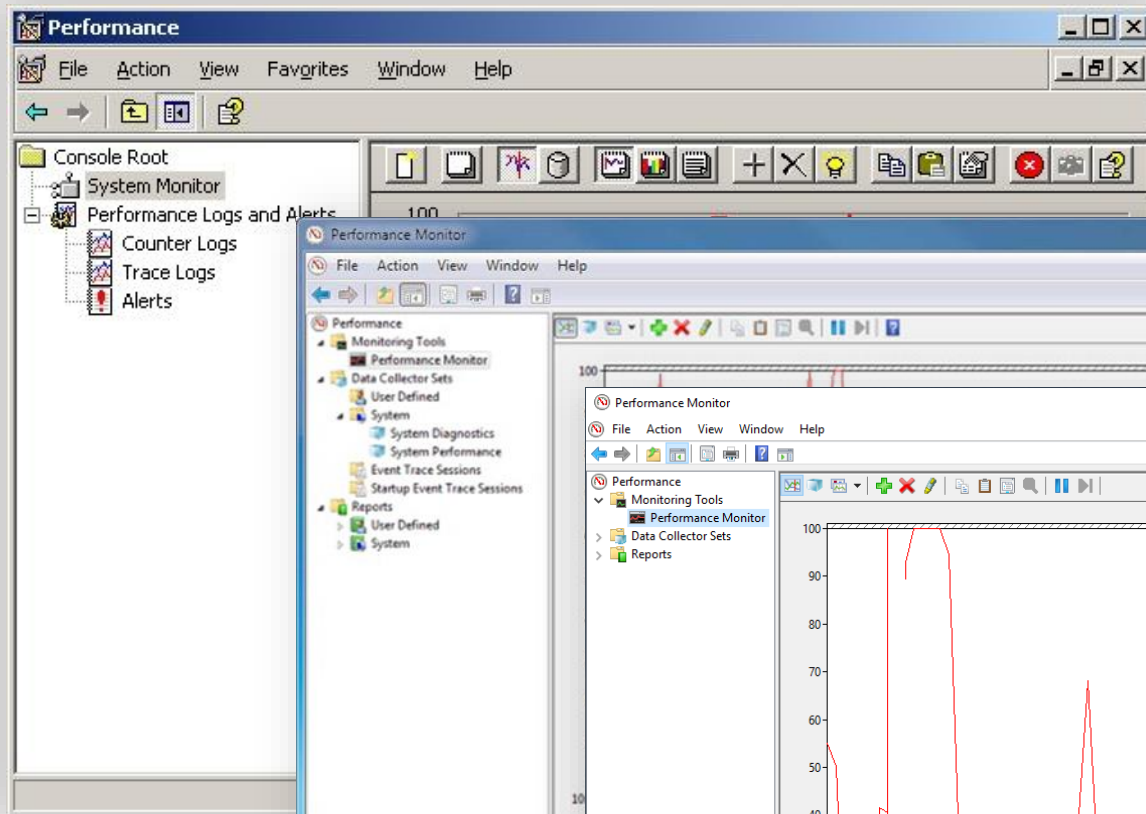
- New
- Import Virtual Machine...
- Hyper-V Settings...
- Virtual Switch Manager...
- Virtual SAN Manager...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

gpup-vm6

- Connect...
- Settings...
- Turn Off...
- Shut Down...
- Save
- Pause
- Reset
- Checkpoint
- Move...
- Export...
- Rename...
- Enable Replication...

Performance Monitor





Untitled workspace - Performance Monitor

← → ↺

https://localhost:6516/computerManagement/connections/computer/cosmos-lenovo.redmond.corp.microsoft.com/tools/monitor/wor...

🔍 ☆ ⚙️ 👤 😊 ⋮

Windows Admin CenterComputer ManagementMicrosoft

cosmos-lenovo.redmond.corp.microsoft.com

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Performance Monitor > Untitled workspace *PREVIEW

⏸ Pause ▶ Resume 💾 Save ⚙️ Settings

Add counter

Azure File Sync



Azure File Sync - Server Manager

+

https://localhost:6516/servermanager/connections/server/ws-file-server.redmond.corp.microsoft.com/tools/azurefilesync

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WS-File-Server.redmond.corp.microsoft.com

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Azure File Sync

Azure File Sync Overview

Watch later

Share

Azure

MUNICH

MEXICO CITY

SEATTLE

Sync your file server with Azure, caching frequently accessed files for speedy local access. With cloud-based backup and fast disaster recovery, managing your file server just became simpler.

Get an overview of Azure File Sync

How much will this cost?

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MUNICH

MEXICO CITY

Sync your file server with Azure, caching frequently accessed files for speedy local access. With recovery, managing your file server just became simpler.

[Get an overview of Azure File Sync](#)

How much will this cost?

Set up

Setting up Azure File Sync

✓ Registering Microsoft.StorageSync with your subscription

✓ Prepping the resource group

Name: ASR-Resource-Group

✓ Prepping the Storage Sync Service

Name: storage-sync-service

✓ Downloading the agent

✓ Installing the agent

⋮ Registering the server with Azure

Close

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0 items

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WS-File-Server.redmond.corp.microsoft.com

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Azure File Sync

PREVIEW

Settings

Sync a folder

Server agent

Installed agent version
7.2.0.0

Expiration
No expiration date set

Latest available agent version
7.2.0.0

Registered to
storage-sync-service

Network proxy

Sync-specific network proxy
No proxy has been set

Server endpoints

Path	Sync group	Cloud tiering	Preserve volume free space	Tier files older than
Server endpoints are locations on your server that are set up to sync. To get started click "Sync a folder" at the top of this page.				

Web links

Azure portal
Manage this registered server

Documentation
Plan for an Azure File Sync deployment

Deployment guide

Proxy and firewall settings guide

Troubleshooting guide

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Path	Sync group	Cloud tiering	Preserve volume free space
Server endpoints are locations on your server that are set up to sync. To get started click "Sync a folder" at the top of this page.			

Web links

Azure portal
Manage this registered server

Documentation
Plan for an Azure File Sync

Deployment guide

Proxy and firewall settings

Troubleshooting guide

Sync a folder

Sync with a file share in Azure as well as any servers that join the same sync group.

Storage Sync Service: storage-sync-service

Local folder name
E:\Marketing

Tier the least-accessed files to the cloud

Volume: E (Data)
38% used

Volume size: 127 GB

Minimum volume free space %:
20

25.4 GB

Sync group

Use existing

Create new

Type a name

Only select an existing sync group if you want to sync that namespace to this server—local folder and sync group namespaces will merge. Otherwise create a new sync group.

Azure file share to sync with

Use existing

Create new

as1jwx

Azure settings

Azure region: West US

Set up sync

Cancel

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WS-File-Server.redmond.corp.microsoft.com

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Server agent

Installed agent version
7.2.0.0

Expiration
No expiration date set

Latest available agent version
7.2.0.0

Registered to
[storage-sync-service](#)

Network proxy

Sync-specific network proxy
No proxy has been set

Server endpoints

Path	Sync group	Cloud tiering	Preserve volume free
Server endpoints are locations on your server that are set up to sync. To get started click "Sync a folder" at the top of this page.			

Web links

[Azure portal](#)
[Manage this registered service](#)

[Documentation](#)
[Plan for an Azure File Sync](#)

[Deployment guide](#)

[Proxy and firewall settings](#)

[Troubleshooting guide](#)

Sync a folder

Local folder name

E:\Marketing

Browse

☒ Tier the least-accessed files to the cloud

Volume: E (Data)

38% used

Volume size: 127 GB

Minimum volume free space %:

20

(25.4 GB)

Sync group

☐ Use existing

☒ Create new

afs-jw2x

Only select an existing sync group if you want to sync that namespace to this server—local folder and sync group namespaces will merge. Otherwise create a new sync group.

Azure file share to sync with

☒ Use existing

☐ Create new

as1jwx

Azure settings

Azure region:

Resource group:

Storage account:

Storage performance:

Data replication:

West US

ASR-Resource-Group

afsdemo1x

Standard

Geo-redundant storage (GRS)

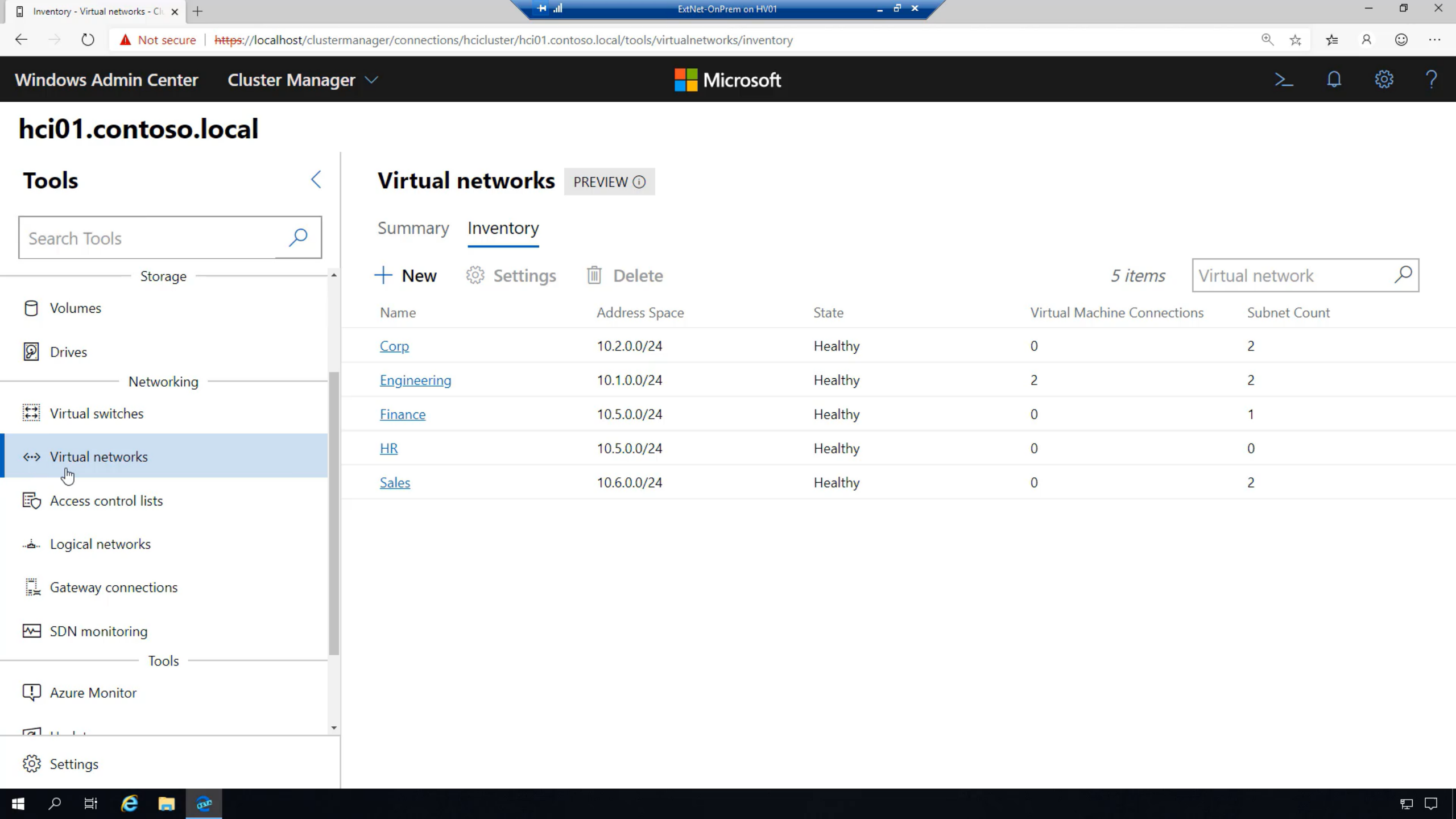
Edit

Set up sync

Cancel

SDN





hci01.contoso.local

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Delete

5 items

Virtual network

Name	Address Space	State	Virtual Machine Connections	Subnet Count
Corp	10.2.0.0/24	Healthy	0	2
Engineering	10.1.0.0/24	Healthy	2	2
Finance	10.5.0.0/24	Healthy	0	1
HR	10.5.0.0/24	Healthy	0	0
Sales	10.6.0.0/24	Healthy	0	2

hci01.contoso.local

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+ New S2S VPN to Azure

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Name	Connection Type	Destination IP
No records found		

Create New Gateway Connection

Name *

Virtual Network *

Corp

Connection Type *

IPSEC

IPSEC

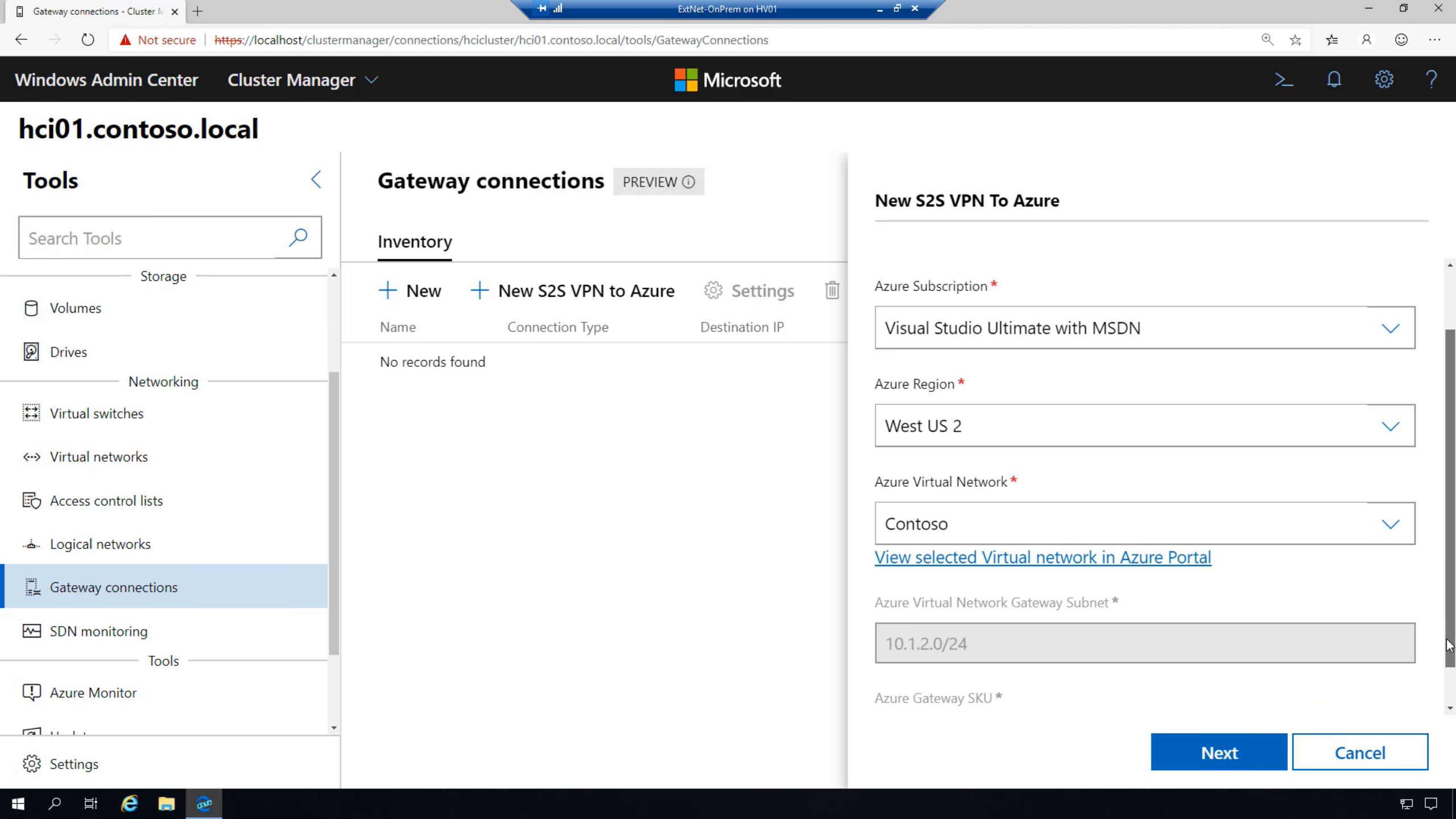
GRE

L3

apps

Create a subnet under Virtual network

Maximum allowed Inbound bandwidth (KBPS) *



sa18n22c.sa18.nttest.microsoft.com

Load balancers PREVIEW ⓘ

Inventory

[+ New](#) [Delete](#)

Name	Type	IP Address	Backend Pools	Inbound NAT Rules
testLB	Public Ip	DefaultAll	newbackend	1



New Load balancer

Name *

myLB

Type *

Internal

Configure Virtual Network *

FabrikamHQ

Virtual Network Subnet *

Apps - (10.0.0.0/25)

Private IP Address *

[Manage Subnet configuration](#)

Create

Cancel

sa18n22c.sa18.nttest.microsoft.com



Load balancers > testLB

Delete



Overview

Name	IP Address
testLB	DefaultAll



Front IP Configuration

[+ New](#) [Edit](#) [Delete](#)

Name	IP Address	Rule
frontip-testLB	10.127.132.1(DefaultAll)	0



Backend Pools

[+ New](#) [Edit](#) [Delete](#)

Name	Number of associations
newbackend	2

New Front IP Configuration

Name *

myVIP

Type *

IP Address

☒ Public VIP☐ Private VIP

Configured Logical Network *

PublicVIP

Logical Network Subnet *

10.127.132.0_29 - (10.127.132.0/29)

Public VIP *

10.127.132.3

[Manage Subnet configuration](#)

Create

Cancel

sa18n22c.sa18.nttest.microsoft.com

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- 🔍
- 📄
- 🗄️
- 🔧
- 🔗
- ↔️
- 🛡️
- 🏠
- 📊
- 📈
- 💬
- 📝
- 🔗
- 🔍
- ⚙️

Backend Pools

[+ New](#) [✎ Edit](#) [🗑 Delete](#)

Name	Number of associations
newbackend	2

Inbound NAT Rules

[+ New Rule](#) [✎ Edit Rule](#) [🗑 Delete](#)

Name	IP Address	Protocol
inboundNAT1	10.127.132.1(DefaultAll)	Tcp

Edit Backend Pool

Backend Pool Name
newbackend

Associated with Logical Network
HNVPA

Associated IP Configurations

[+ New](#)

Network Interface	IP Configuration	
sa18n22GW01.sa18.nttest.m...	FrontEnd - (10.10.182.8)	🗑
sa18n22GW02.sa18.nttest.m...	FrontEnd - (10.10.182.9)	🗑

sa18n22c.sa18.nttest.microsoft.com



Inbound NAT Rules

[+ New Rule](#) [Edit Rule](#) [Delete](#)

Name	IP Address	Protocol
inboundNAT1	10.127.132.1(DefaultAll)	Tcp

Outbound NAT Rules

[+ New Rule](#) [Edit Rule](#) [Delete](#)

Name	IP Address	Protocol	Provisioning State
No records found			

Load Balancing Rules

[+ New](#) [Edit](#) [Delete](#)

New Outbound NAT Rule

Name *

outboundrule

Front IP Configuration *

frontip-testLB(10.127.132.1)

Protocol *

TCP

Backend Pool *

newbackend

[Create](#)[Cancel](#)

sa18n22c.sa18.nttest.microsoft.com



Load Balancing Rules

[+ New](#) [Edit](#) [Delete](#)

Name	Load Balancing Rule	Backend Pool
No records found		

Health Probes

[+ New](#) [Edit](#) [Delete](#)

Name	Protocol	Port	Request Path URI
myHealthProbe	Tcp	8080	

New Load Balancing Rule

Name *

LBRule

Frontend IP Configuration *

frontip-testLB(10.127.132.1)

Protocol *

TCP

Frontend Port *

8080

Backend Port *

80

Backend Pool *

newbackend

Health Probe *

myHealthProbe

Session Persistence *

Default

sa18n22c.sa18.nttest.microsoft.com



Load Balancing Rules

[+ New](#) [Edit](#) [Delete](#)

Name	Load Balancing Rule	Backend Pool
No records found		

Health Probes

[+ New](#) [Edit](#) [Delete](#)

Name	Protocol	Port	Request Path URI
No records found			

New Health Probe

Name *

myHealthProbe

Protocol *

TCP

Port *

8080

Interval *

3

seconds

Unhealthy Threshold *

3

consecutive failures

Create

Cancel

sa18n22c.sa18.nttest.microsoft.com



Public IP address PREVIEW ⓘ



Inventory



[+ New](#) [Settings](#) [Delete](#)

1 item



Search



Name	IP Address	IP Address Type	Allocation Method
DefaultAll	10.127.132.1	IPv4	Dynamic



sa18n22c.sa18.nttest.microsoft.com



Public IP address

PREVIEW ⓘ



Inventory



+ New



Settings



Delete



Name	IP Address	IP Address Type
DefaultAll	10.127.132.1	IPv4



New Public IP Address

Name *

IP Address Version *

IP Address Allocation Method *

Public Logical Subnet

Public Logical IP Pool

IP Address

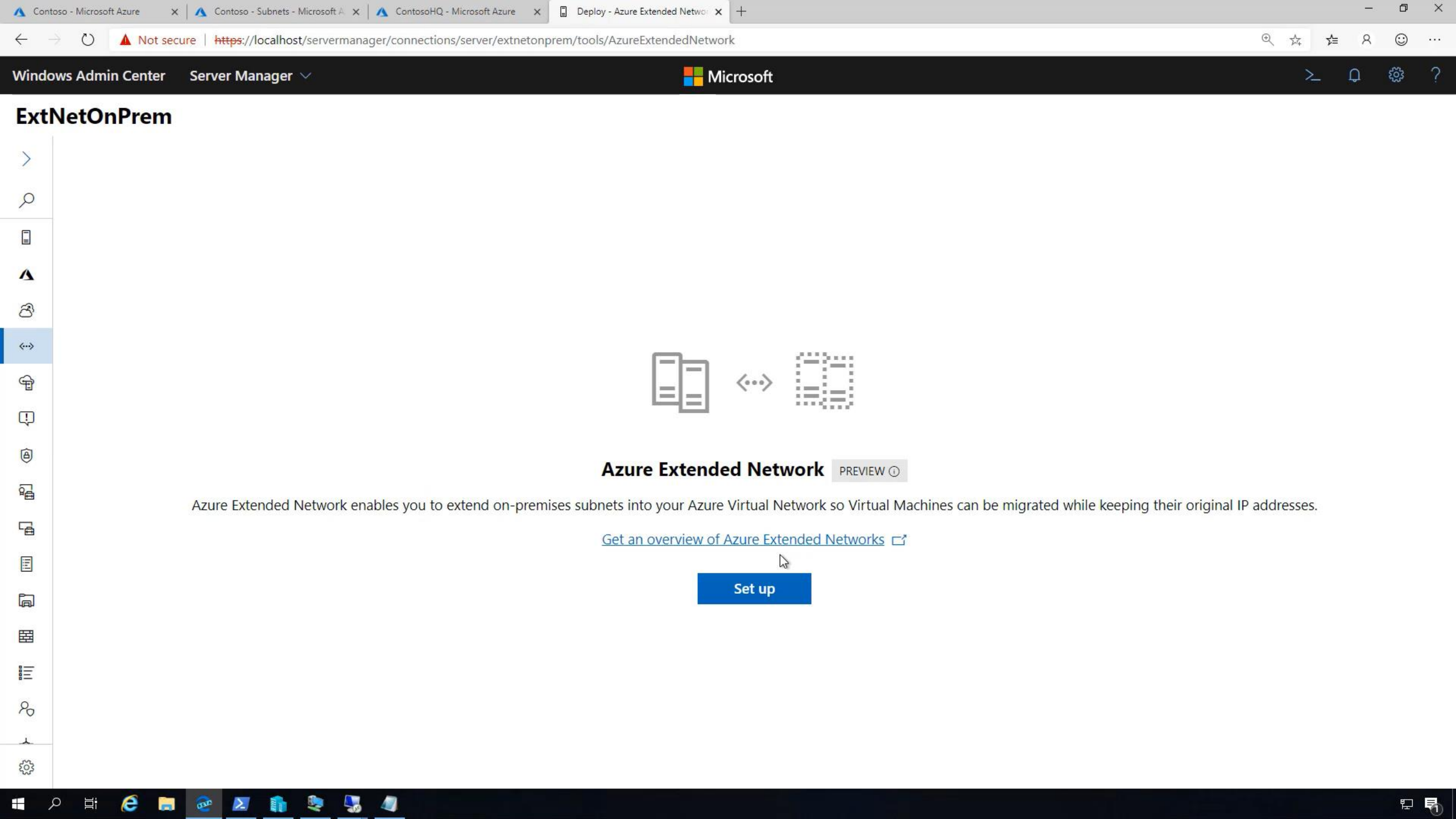
Idle Timeout In Minutes *

Submit

Discard

Extended Networking to Azure





Contoso - Microsoft AzureContoso - Subnets - Microsoft AzureContosoHQ - Microsoft AzureDeploy - Azure Extended Network

Not secure | https://localhost/servermanager/connections/server/extnetonprem/tools/AzureExtendedNetwork

Windows Admin CenterServer ManagerMicrosoft

ExtNetOnPrem

Azure Extended-NetworkPREVIEW

Create Azure Extended-Network

Getting Started2Extended-Network Setup3Extended-Network Gateway Setup4Deploy

2.1 On-Premises2.2 Azure

On-Premises Network

Please specify the On-Premises Network subnet to be extended to Azure.
The resources in the subnet will be able to communicate the resource in the same subnet in Azure.

Subnet CIDR *192.168.1.0/24

BackNextExit

Contoso - Microsoft AzureContoso - Subnets - Microsoft AzureContosoHQ - Microsoft AzureDeploy - Azure Extended Network

Not secure | https://localhost/servermanager/connections/server/extnetonprem/tools/AzureExtendedNetwork

Windows Admin CenterServer ManagerMicrosoft

ExtNetOnPrem

Azure Extended-NetworkPREVIEW

Create Azure Extended-Network

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2.1 On-Premises2.2 Azure

Azure Network

Sign in as:
gcusanza@hotmail.com

Resource Group*
Contoso

Azure Virtual Network*
Contoso

Create a new Azure Virtual Network

Subscription*
Visual Studio Ultimate with MSDN

Azure Location*
West US 2

Azure Subnet*
Extended(192.168.1.0/24)

Create a new Azure Virtual Network Subnet

BackNext: Extended-Network Gateway SetupExit

Contoso - Microsoft AzureContoso - Subnets - Microsoft AzureContosoHQ - Microsoft AzureDeploy - Azure Extended Network

Not secure | https://localhost/servermanager/connections/server/extnetonprem/tools/AzureExtendedNetwork

Windows Admin CenterServer ManagerMicrosoft

ExtNetOnPrem

Azure Extended-NetworkPREVIEW ⓘ

Create Azure Extended-Network

Getting StartedExtended-Network SetupExtended-Network Gateway SetupDeploy

3.1 On-Premises3.2 Azure

Azure Extended-Network Gateway

Please confirm the Azure Extended-Network Gateway information.

Azure Resource Group *Contoso

Extended-Network CIDR *192.168.1.0/24

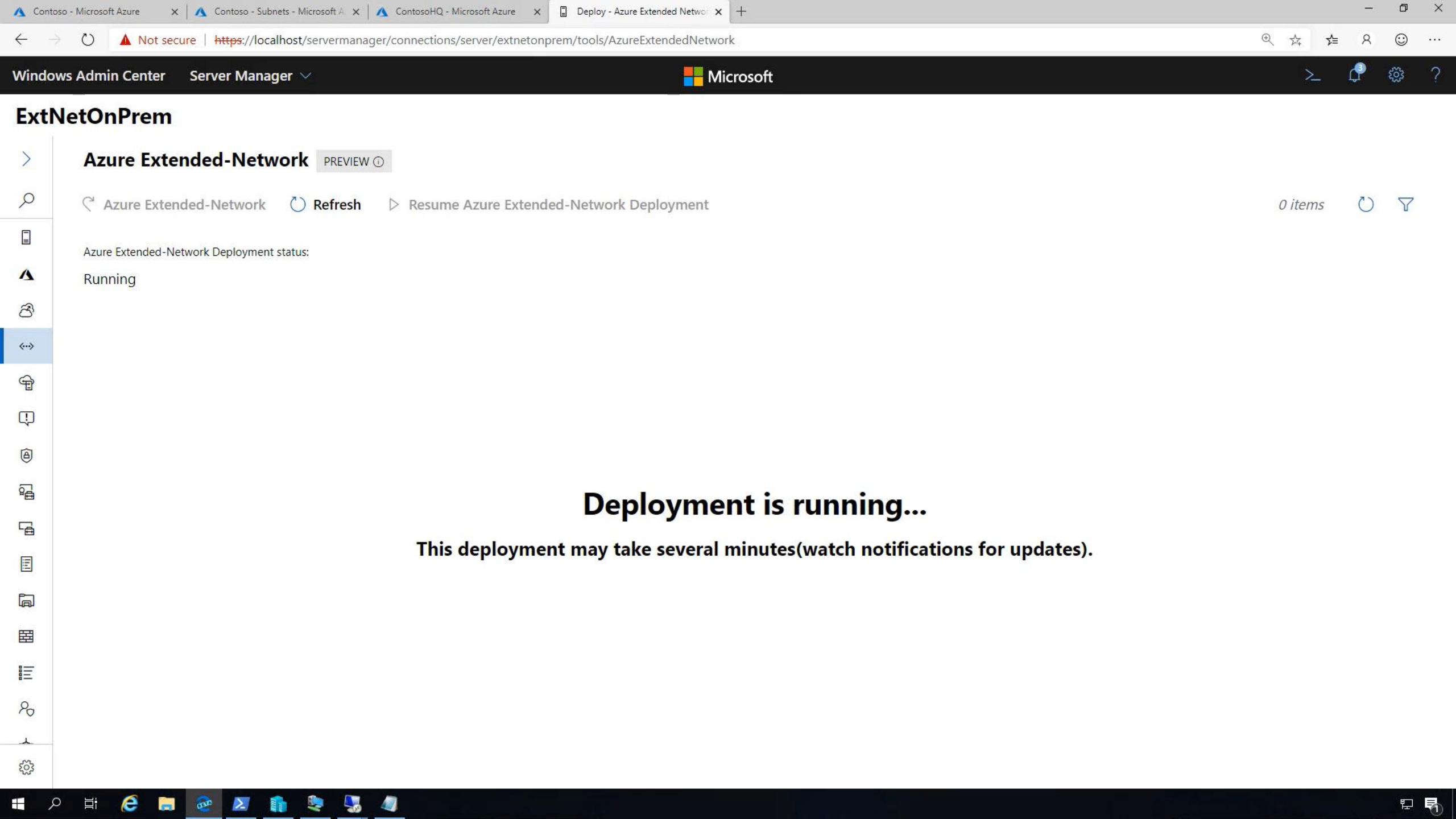
Azure Extended-Network Gateway Subnet CIDR *default(10.1.1.0/24)

Azure VM *ExtNetApp

IP Address in Extended-Network *192.168.1.56

IP Address in Azure Extended-Network Gateway Subnet *10.1.1.6

BackNext: DeployExit



Contoso - Microsoft Azure

Contoso - Subnets - Microsoft A

ContosoHQ - Microsoft Azure

Deploy - Azure Extended Netwo

← → ↺

Not secure | https://localhost/servermanager/connections/server/extnetonprem/tools/AzureExtendedNetwork

🔍 ☆ ⚙️ 👤 😊 ⋮

Windows Admin Center

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Microsoft

>

🔔 3

⚙️

?

>

Azure Extended-Network

PREVIEW ⓘ

↶ Azure Extended-Network

↺ Refresh

▶ Resume Azure Extended-Network Deployment

0 items

↺

🔍

Azure Extended-Network Deployment status:
Running

Deployment is running...

This deployment may take several minutes(watch notifications for updates).

📱

⚠️

☁️

↔️

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🛡️

🖨️

📄

📁

📊

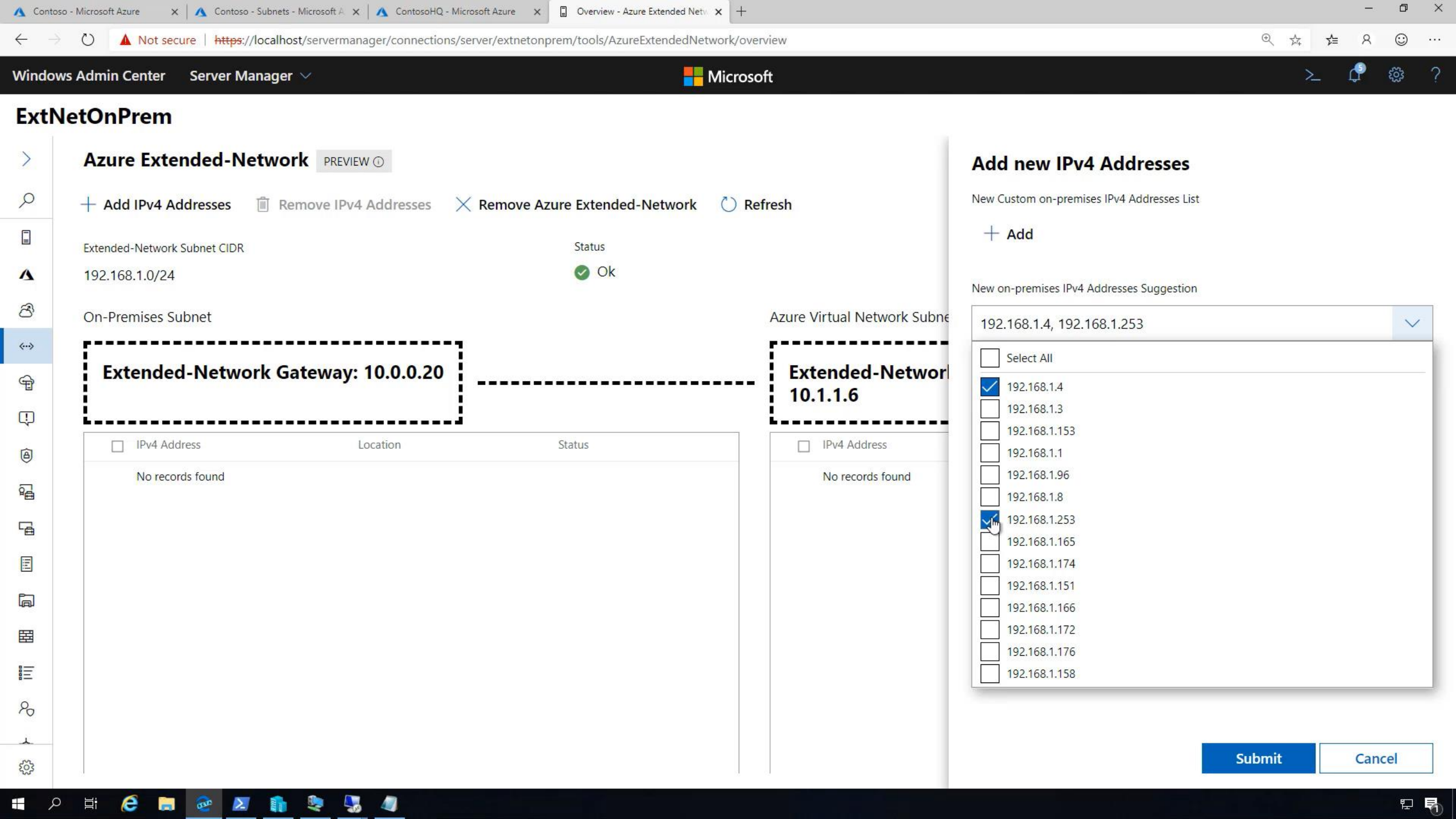
📋

👤

⚙️

🏠 🔍 🖨️ 🌐 📁 📄 📊 📋 📅 📆 📇 📈 📉 📊 📋 📅 📆 📇 📈 📉

🏠 🔍 🖨️ 🌐 📁 📄 📊 📋 📅 📆 📇 📈 📉



ExtNetOnPrem

Azure Extended-Network

PREVIEW ⓘ

+ Add IPv4 Addresses Remove IPv4 Addresses Remove Azure Extended-Network Refresh

Extended-Network Subnet CIDR

192.168.1.0/24

Status

✓ Ok

On-Premises Subnet

Extended-Network Gateway: 10.0.0.20

Azure Virtual Network Subnet

Extended-Network 10.1.1.6

IPv4 Address	Location	Status
No records found		

☐ IPv4 Address
No records found

Add new IPv4 Addresses

New Custom on-premises IPv4 Addresses List

+ Add

New on-premises IPv4 Addresses Suggestion

192.168.1.4, 192.168.1.253

☐ Select All

☒ 192.168.1.4

☐ 192.168.1.3

☐ 192.168.1.153

☐ 192.168.1.1

☐ 192.168.1.96

☐ 192.168.1.8

☒ 192.168.1.253

☐ 192.168.1.165

☐ 192.168.1.174

☐ 192.168.1.151

☐ 192.168.1.166

☐ 192.168.1.172

☐ 192.168.1.176

☐ 192.168.1.158

Submit Cancel

[+ Add IPv4 Addresses](#)
[🗑 Remove IPv4 Addresses](#)
[✕ Remove Azure Extended-Network](#)
[🔄 Refresh](#)

4 items

Extended-Network Subnet CIDR

192.168.1.0/24

Status

Ok

On-Premises Subnet

Extended-Network Gateway: 10.0.0.20

☐ IPv4 Address	Location	Status
192.168.1.254	On-Prem	Extended
192.168.1.4	On-Prem	Extended
192.168.1.253	On-Prem	Extended

Azure Virtual Network Subnet

Extended-Network Gateway: 10.1.1.6

[Manage Extended-Network Gateway in Azure](#) 

☐ IPv4 Address	Location	Status
192.168.1.250	Azure	Extended

Administrator: Windows PowerShell

Ethernet adapter Local Area Connection 2:

```
Connection-specific DNS Suffix . : xftuj5a5xddu1k1v25isjbpyfa.xx.internal.cloudapp.net
Description . . . . . : Microsoft Hyper-V Network Adapter #2
Physical Address. . . . . : 00-0D-3A-FD-86-D3
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::ad41:544a:f1c:64e%17(Preferred)
IPv4 Address. . . . . : 192.168.1.250(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Friday, November 01, 2019 7:29:53 PM
Lease Expires . . . . . : Tuesday, December 09, 2155 3:42:15 AM
Default Gateway . . . . . : 192.168.1.1
DHCP Server . . . . . : 168.63.129.16
DHCPv6 IAID . . . . . : 285216058
DHCPv6 Client DUID. . . . . : 00-01-00-01-25-4E-0B-A3-00-0D-3A-FD-9A-33
DNS Servers . . . . . : 168.63.129.16
NetBIOS over Tcpip. . . . . : Enabled
```

Tunnel adapter isatap.xftuj5a5xddu1k1v25isjbpyfa.xx.internal.cloudapp.net:

```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : xftuj5a5xddu1k1v25isjbpyfa.xx.internal.cloudapp.net
Description . . . . . : Microsoft ISATAP Adapter
Physical Address. . . . . : 00-00-00-00-00-00-E0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
```

Tunnel adapter Local Area Connection* 11:

```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft 6to4 Adapter
Physical Address. . . . . : 00-00-00-00-00-00-E0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
```

PS C:\Users\greg> ping 192.168.1.4

```
Pinging 192.168.1.4 with 32 bytes of data:
Reply from 192.168.1.4: bytes=32 time=18ms TTL=64
Reply from 192.168.1.4: bytes=32 time=16ms TTL=64
Reply from 192.168.1.4: bytes=32 time=16ms TTL=64
Reply from 192.168.1.4: bytes=32 time=16ms TTL=64
```

```
Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 16ms, Maximum = 18ms, Average = 16ms
```

PS C:\Users\greg>



Files

Not secure 192.168.1.4:8080/cgi-bin/

For quick access, place your favorites here on the favorites bar. [Import favorites now](#)

a5xddu1k1v25isjbpyfa.xx.internal.cloudapp.net
oft Hyper-V Network Adapter #2
3A-FD-86-D3

192.168.1.4

Network > 192.168.1.4

Search 192.168.1.4

Organize Network and Sharing Center View remote printers

Favorites

- Desktop
- Downloads
- Recent Places

Libraries

- Documents
- Music
- Pictures
- Videos

Computer

- Network

Network Shares

- Container Share
- Public Share
- home Share
- USB Disk 1 Share
- homes Share
- Web Share
- Media Share

7 items

ed)

M AM

-9A-33

nal.cloudapp.net

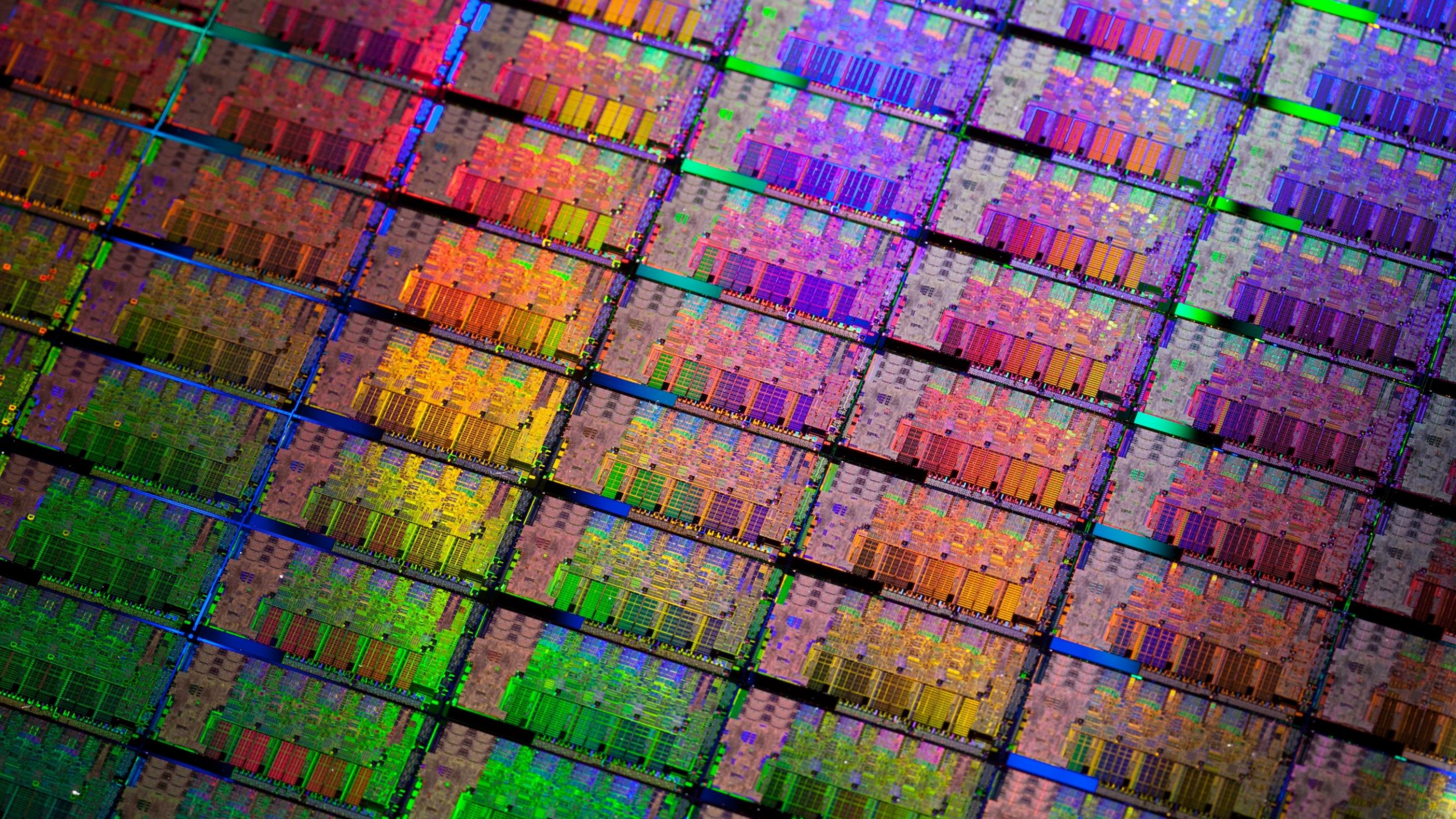
(0% loss),
:
: 16ms

QNAP QTS



Hardware innovation





PCI  **3.0**
EXPRESS[®]

2010 • 8 GT/s

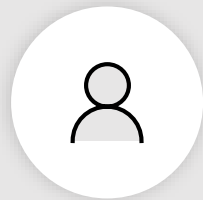
PCI  **EXPRESS® 3.0**

2010 • 8 GT/s

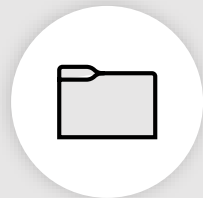
PCI  **EXPRESS® 4.0**

New! • 16 GT/s





Client



Server

SMB 3 File Share
//server/share



**1,000 GiB
transfer**



QCT™ D43K-1U Server

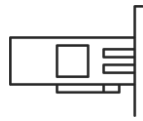
- **2 × AMD EPYC™ 7742** processor
- **512 GiB** (16 × 32 GiB) DDR4 memory
- **Intel® P3700 (400 GB)** for boot
- **4 × 2.5" SATA/SAS** SSD
- **8 × 2.5" U.2 NVMe** SSD
- **5 × PCIe** expansion slots

Windows Server 2019

- Build **17763.775**, Datacenter edition
- No Hyper-V, no Storage Spaces
- **FIO** version 3.16
- 100% sequential read

AMD
EPYC

Transfer 1,000 GiB...

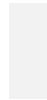


Broadcom NetXtreme-E P1100P 100 Gbps
Firmware 214.0.192, Driver 214.0.177

PCIe 3.0

96.9 seconds

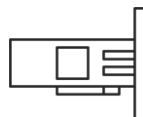
PCIe 4.0



Broadcom NetXtreme-E P2100G 200 Gbps
Firmware 216.0.172.0, Driver 216.0.99



...in half the time



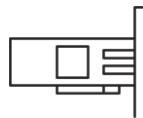
Broadcom NetXtreme-E P1100P 100 Gbps
Firmware 214.0.192, Driver 214.0.177

PCIe 3.0

96.9 seconds

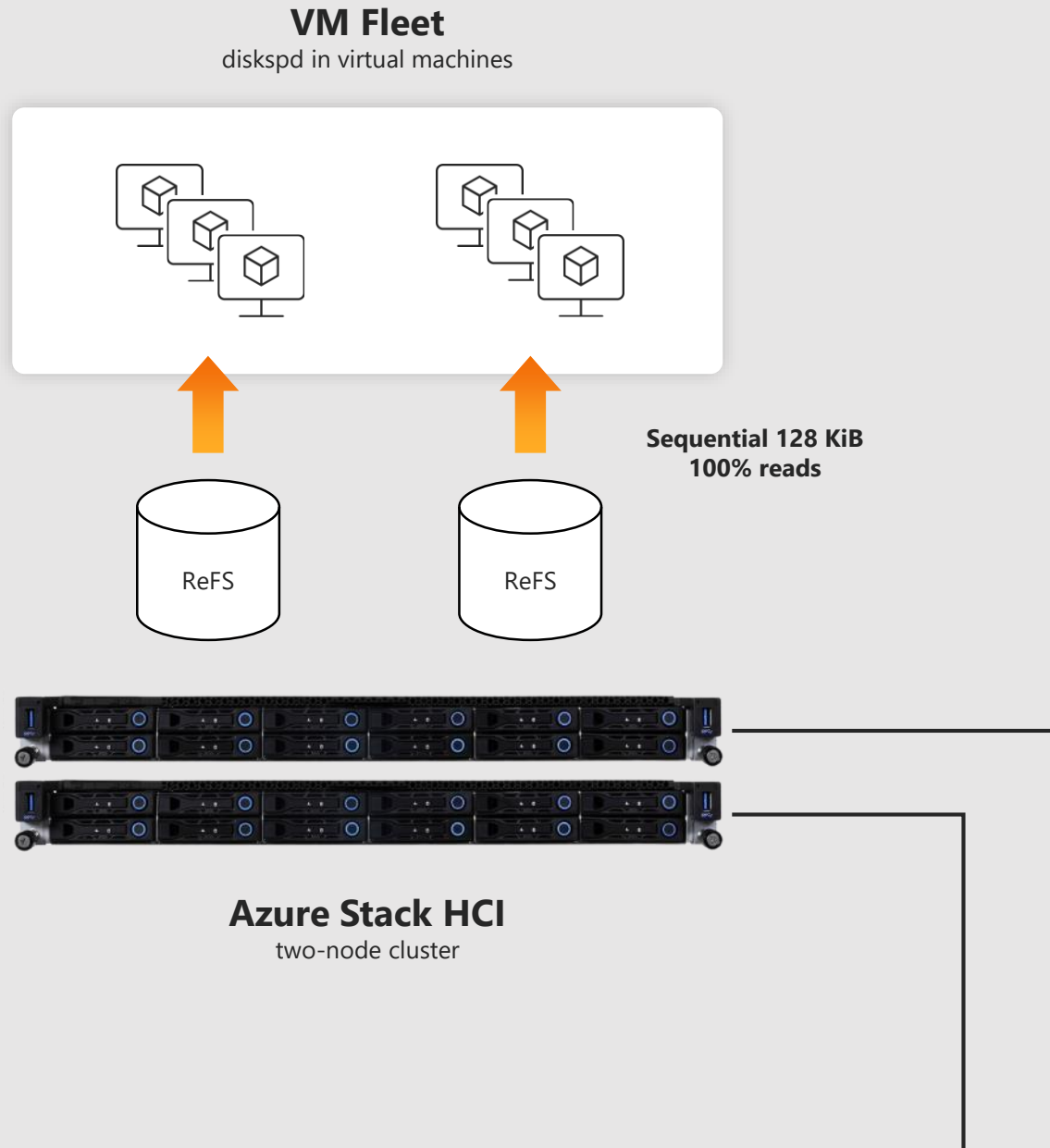
PCIe 4.0

49.5 seconds



Broadcom NetXtreme-E P2100G 200 Gbps
Firmware 216.0.172.0, Driver 216.0.99





QCT™ D43K-1U Server

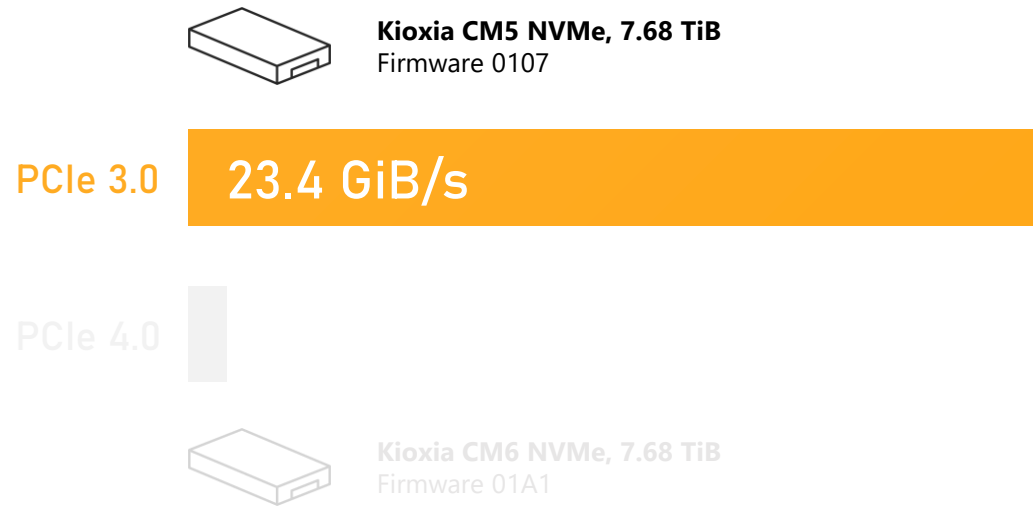
- 2 × **AMD EPYC™ 7742** processor
- **512 GiB** (16 × 32 GiB) DDR4 memory
- **Intel® P3700 (400 GB)** for boot
- 4 × **2.5" SATA/SAS** SSD
- 8 × **2.5" U.2 NVMe** SSD
- 5 × **PCIe** expansion slots

Windows Server 2019

- Build **17763.775**, Datacenter edition
- **Hyper-V** and **Storage Spaces Direct**
- **Two-way mirror** volumes
- **VM Fleet** with diskspd 2.0.21a

AMD
EPYC

Storage I/O for virtualized apps...



...2X higher throughput



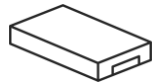
Kioxia CM5 NVMe, 7.68 TiB
Firmware 0107

PCIe 3.0

23.4 GiB/s

PCIe 4.0

52.1 GiB/s



Kioxia CM6 NVMe, 7.68 TiB
Firmware 01A3



KIOXIA



s5k-140.rdlab.qct

An update is available for this extension. [Update now](#)

Tools

- Overview
- Azure hybrid services
- Azure Backup
- Azure File Sync
- Certificates
- Devices
- Events
- Files
- Firewall
- Installed apps
- Local users & groups
- Networks
- PacketMon
- Performance Monitor**
- PowerShell
- Processes
- Registry
- Remote Desktop

Performance Monitor > Untitled workspace * PREVIEW

|| Pause ▶ Resume 📁 Save ⚙️ Settings

Object

PhysicalDisk

Instance

0 E:, 1 F:, 2 H:, 3 G:

Counter

Disk Read Bytes/sec

Graph type

Line

0 E: 7,328,488,960/sec 1 F: 7,329,392,128/sec 2 H: 7,299,710,464/sec 3 G: 7,303,452,672/sec

5 minutes ago

Now

Add counter<https://wac/servermanager/connections/server/s5k-140.rdlab.qct/tools/azure-hybrid-services>



Looking forward

INSIDERS



Every 2 weeks

SEMI-ANNUAL CHANNEL



Every 6 months

LONG-TERM SERVICING CHANNEL



GPU-P

Stretch Storage Spaces Direct

Bridge Tooling

Windows on AKS

Extended Networking

Windows Admin Center

Next steps

Download Windows Admin Center & try out hybrid!

Microsoft.com/WindowsAdminCenter

Adopt Windows Server 2019 & try it on Azure!

Microsoft.com/WindowsServer
Azure.com/WindowsServer

Check out Azure Stack HCI

Microsoft.com/HCI

Get ready for Windows Server 2008/R2 End of Support

Microsoft.com/2008-eos



WBSC@Ignite: Best of Modern Workplace Tour

Herzhafte Snacks und Device-Ausstellung

17.30 bis 18.45 Uhr



Microsoft



WBSC@Ignite: Best of Modern Workplace Tour

Teil 3: Die Anwendung

18.45 bis 19.30 Uhr



Microsoft

News in Microsoft 365



Vergleich von Microsoft 365 Business und Office 365 Business Premium

Funktionen (neue Funktionen in Blau hervorgehoben)		Office 365 Business Premium	Microsoft 365 Business
Unverbindliche Preisempfehlung (Nutzer/Monat)		€ 10,50	€ 16,90
Produktiver arbeiten + Besser zusammen-arbeiten	Werkzeuge für Zusammenarbeit E-Mail, Groups, Teams, Yammer	•	•
	Onlinebesprechungen und HD-Konferenzen Chat, Besprechungen, Audio- und Videokonferenzen	•	•
	Online-Dateispeicherung OneDrive for Business	•	•
	Erstellung von Inhalten Client Office-Anwendungen auf PC, Mac, Android und iOS	•	•
Prozesse ganzheitlich steuern	Kundenmanagement Einfache CRM-Funktionen	•	•
	Planung Bookings, Shifts	•	•
Daten zuverlässig schützen	Vereinfachte Einrichtung von Geräten Windows Autopilot, automatische Office-Installation		•
	Geräteverwaltung Intune MDM für Windows, MacOS, iOS und Android		•
	Windows-Verwaltung und umfassende Gerätesicherheit Vereinfachte Verwaltung von Windows 10 Pro, BitLocker-Verschlüsselung, Upgrade-Rechte auf Windows 10 Pro für 7/8.1 Pro-Lizenzen		•
	Datensicherheit und Richtlinien Selektives Löschen von Daten (Remote-Wipe), Azure Information Protection P1 , Intune App Protection		•
	Sicherheit für E-Mails und Dokumente Data Loss Prevention, Office 365 ATP, Exchange Online-Archivierung, Litigation Hold, eDiscovery		•

Vergleich von Microsoft 365 Business und Office 365 E3

Funktionen (neue Funktionen in Blau hervorgehoben)		Office 365 E3	Microsoft 365 Business
	Unverbindliche Preisempfehlung pro Nutzer und Monat in Euro (mit Jahresvertrag)	€ 19,70	€ 16,90
	Höchstanzahl der Benutzer	unbegrenzt	300
Office-Anwendungen	Installation von Office auf bis zu 5 PCs/Macs + 5 Tablets + 5 Smartphones pro Nutzer (Word, Excel, PowerPoint, OneNote, Access), Office Online	ProPlus	Business
E-Mail und Kalender	Outlook, Exchange Online	100 GB	50 GB
Chatbasierter Arbeitsbereich, Besprechungen	Microsoft Teams	●	●
Dateispeicherung	OneDrive for Business	unbegrenzt	1 TB
Social, Video, Sites	Stream, Yammer, Planner, SharePoint Online ¹ , Power Apps ¹ , Flow ¹	●	●
Geschäftsanwendungen	Scheduling Apps – Booking, StaffHub	●	●
	Business Apps – Outlook Customer Manager, MileIQ ¹ Business Center ² , Listings ² , Connections ² , Invoicing ²		●
Schutz vor Bedrohungen	Office 365 Advanced Threat Protection		●
	Windows Exploit Guard Enforcement		●
Identitäts- und Zugriffsverwaltung	Azure Active Directory – SSPR Cloud Identities, MFA, SSO >10 Apps		●
Geräte- und Anwendungsverwaltung	Office 365 MDM	●	●
	Microsoft Intune, Windows Autopilot, Windows Pro Management		●
	Upgrade-Rechte auf Windows 10 Pro für Windows 7/8/8.1 Pro-Lizenzen		●
Informationsschutz	100 GB Exchange Archiving, Office 365 Data Loss Prevention	●	●
	Azure Information Protection Plan 1, BitLocker Enforcement		●
On-Premises CAL-Rechte	ECAL Suite (Exchange, SharePoint)	●	
Compliance	Litigation Hold, eDiscovery, Compliance Manager, Data Subject Requests, Supervision	●	●

[1] Bedeutet, dass die Funktionalität in Office 365 mit Plan 2 und in Microsoft 365 Business mit Plan 1 enthalten ist.
[2] Verfügbar in den USA, Kanada, Großbritannien.

Detaillierter Vergleich der Pläne

Funktionen (neue Funktionen in Blau hervorgehoben)		Office 365 Business Premium	Microsoft 365 Business	Microsoft 365 E3	Microsoft 365 E5
	Unverbindliche Preisempfehlung pro Nutzer und Monat in Euro (mit Jahresvertrag)	€ 10,50	€ 16,90	n. a.*	n. a.*
	Höchstanzahl der Benutzer	300	300	unbegrenzt	unbegrenzt
Office-Anwendungen	Installation von Office auf bis zu 5 PCs/Macs + 5 Tablets + 5 Smartphones pro Nutzer (Word, Excel, PowerPoint, OneNote, Access), Office Online	Business	Business	ProPlus	ProPlus
E-Mail und Kalender	Outlook, Exchange Online	50 GB	50 GB	unbegrenzt	unbegrenzt
Chatbasierter Arbeitsbereich, Besprechungen	Microsoft Teams	●	●	●	●
Dateispeicherung	OneDrive for Business	1 TB	1 TB	unbegrenzt	unbegrenzt
Social, Video, Sites	Yammer, SharePoint Online, Planner	●	●	●	●
	Stream			●	●
Geschäftsanwendungen	Scheduling Apps – Booking, StaffHub	●	●	●	●
	Business Apps – Outlook Customer Manager, MileIQ ¹ , Invoicing	●	●		
Schutz vor Bedrohungen	Microsoft Advanced Threat Analytics, Device Guard, Credential Guard, App Locker, Enterprise Data Protection			●	●
	Office 365 Advanced Threat Protection		●		●
	Windows Defender Advanced Threat Protection				●
Identitäts- und Zugriffsverwaltung	Office 365 Threat Intelligence				●
	Azure Active Directory – SSPR Cloud Identities, MFA, SSO > 10 Apps		●	●	●
	Azure Active Directory – Conditional Access, SSPR Hybrid Identities, Cloud App Discovery, AAD Connect Health			●	●
	Credential Guard und Direct Access			●	●
Geräte- und Anwendungsverwaltung	Azure Active Directory Plan 2				●
	Microsoft Intune , Windows Autopilot		●	●	●
Informationsschutz	Microsoft Desktop Optimization Package, VDA			●	●
	Unbegrenzt: Exchange Archiving³, Office 365 Data Loss Prevention, Azure Information Protection Plan 1		●	●	●
	Azure Information Protection Plan 2, Microsoft Cloud App Security, O365 Cloud App Security				●
On-Premises CAL-Rechte	ECAL Suite (Exchange, SharePoint, Windows, SCCM, Win. Rights Management)			●	●
Compliance	Litigation Hold, eDiscovery, Compliance Manager, Data Subject Requests		●	●	●
	Advanced eDiscovery, Customer Lockbox, Advanced Data Governance				●
Analysen	Power BI Pro, MyAnalytics				●
Telefonie	PSTN Conferencing, Cloud PBX				●

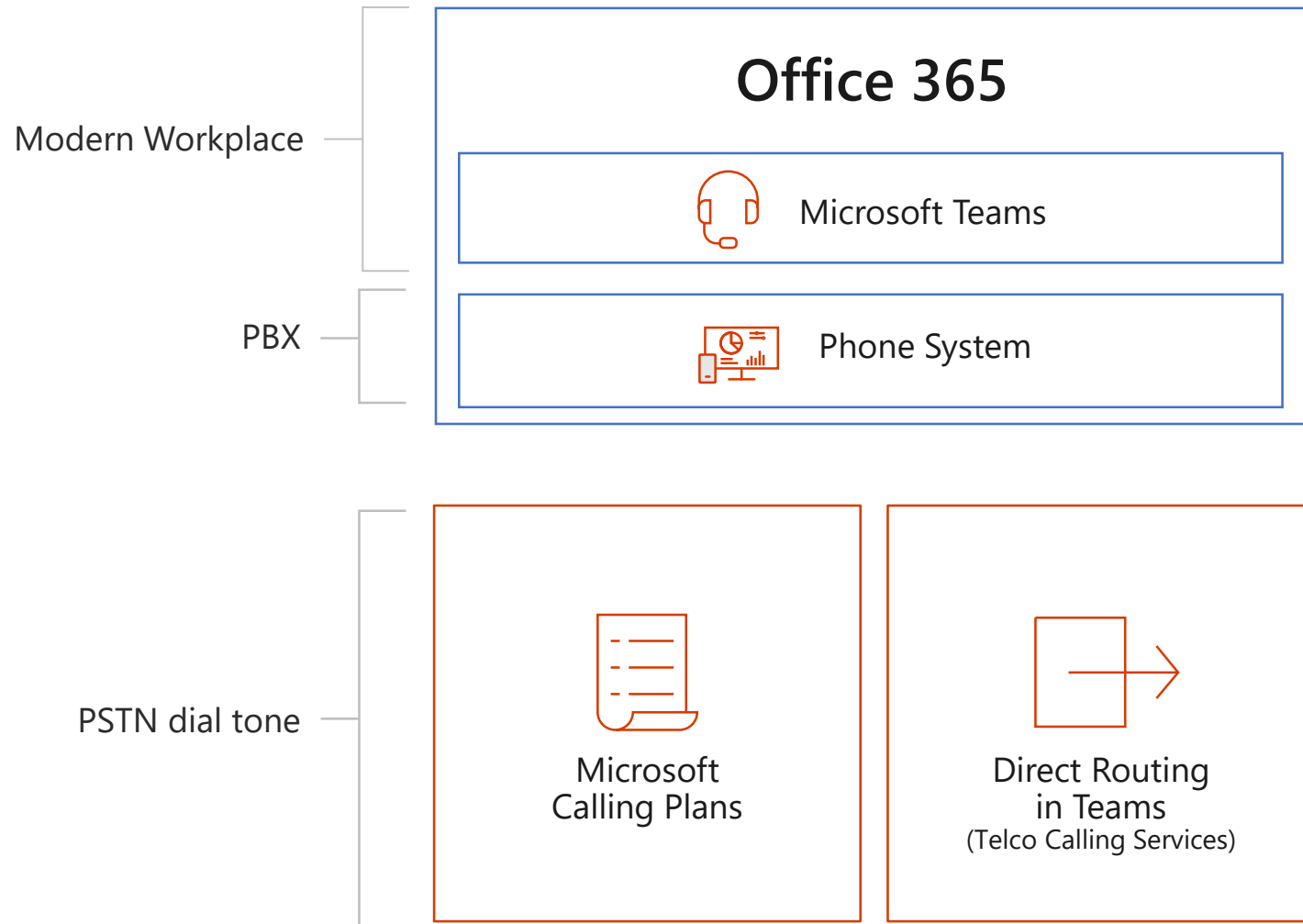
*Kein Direktkauf bei Microsoft möglich. Preise abhängig vom Microsoft-Partner.

[1] Verfügbar in den USA, Kanada, Großbritannien.

[2] Unter Public Preview in USA, Kanada, Großbritannien.

[3] Unbegrenzt, wenn die automatische Erweiterung aktiviert ist.

Phone System für Microsoft 365 Business





Microsoft 365

The world's productivity cloud

Best-in-class experiences

Service-level integration

Extensible platform

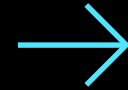
Microsoft Endpoint Manager



Paths to Modern Management

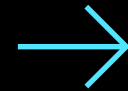
Cloud-only and Cloud-attached

Customers not using ConfigMgr



Directly to Cloud-Only (Intune)

Customers using Config Manager



Attach Config Manager and Intune

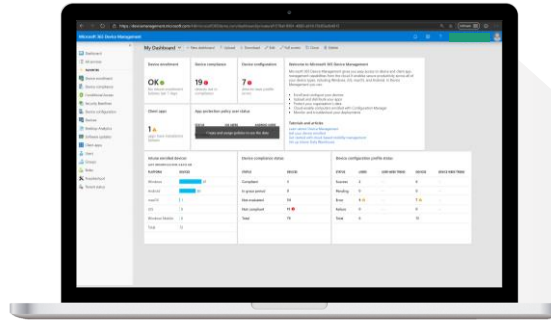
Customers using Config Manager



Cloud attach & provision new devices as Cloud-Only

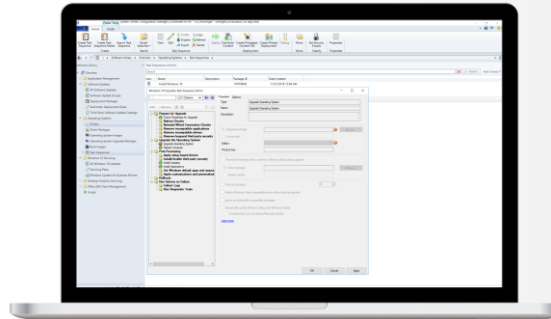
Deploy physical or virtual

Microsoft Intune



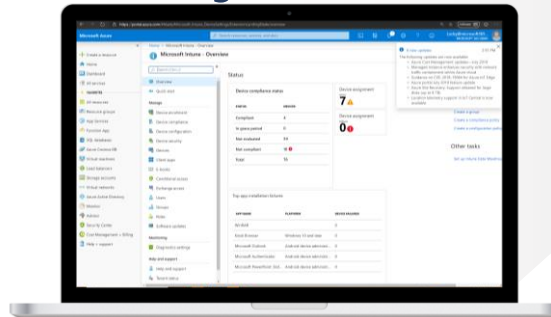
Cloud infrastructure
Mobility Management
PC management
Security Admin

Configuration Manager



Intelligent edge for cloud infra
On premises infrastructure
PC Management

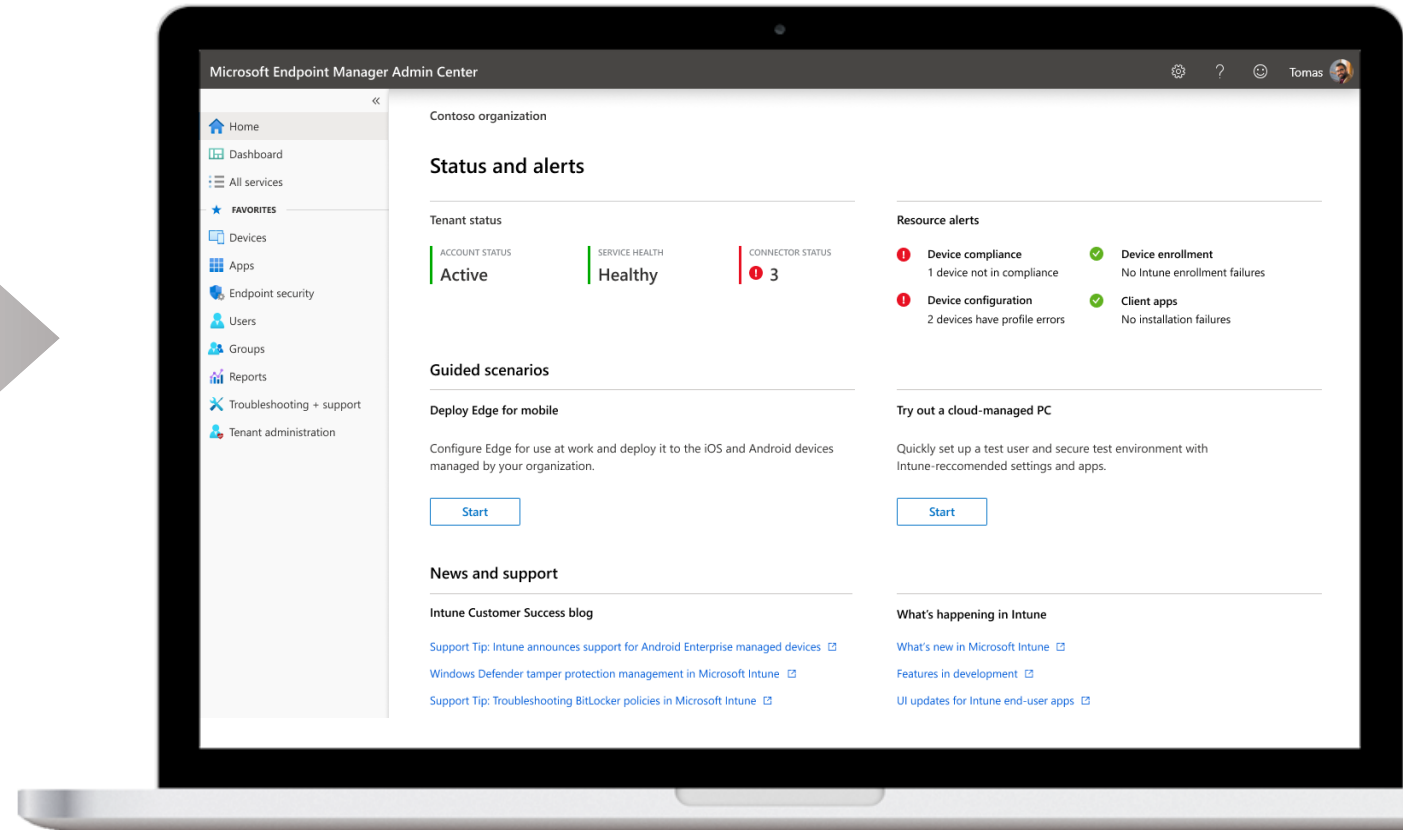
Other Endpoint Management Tools



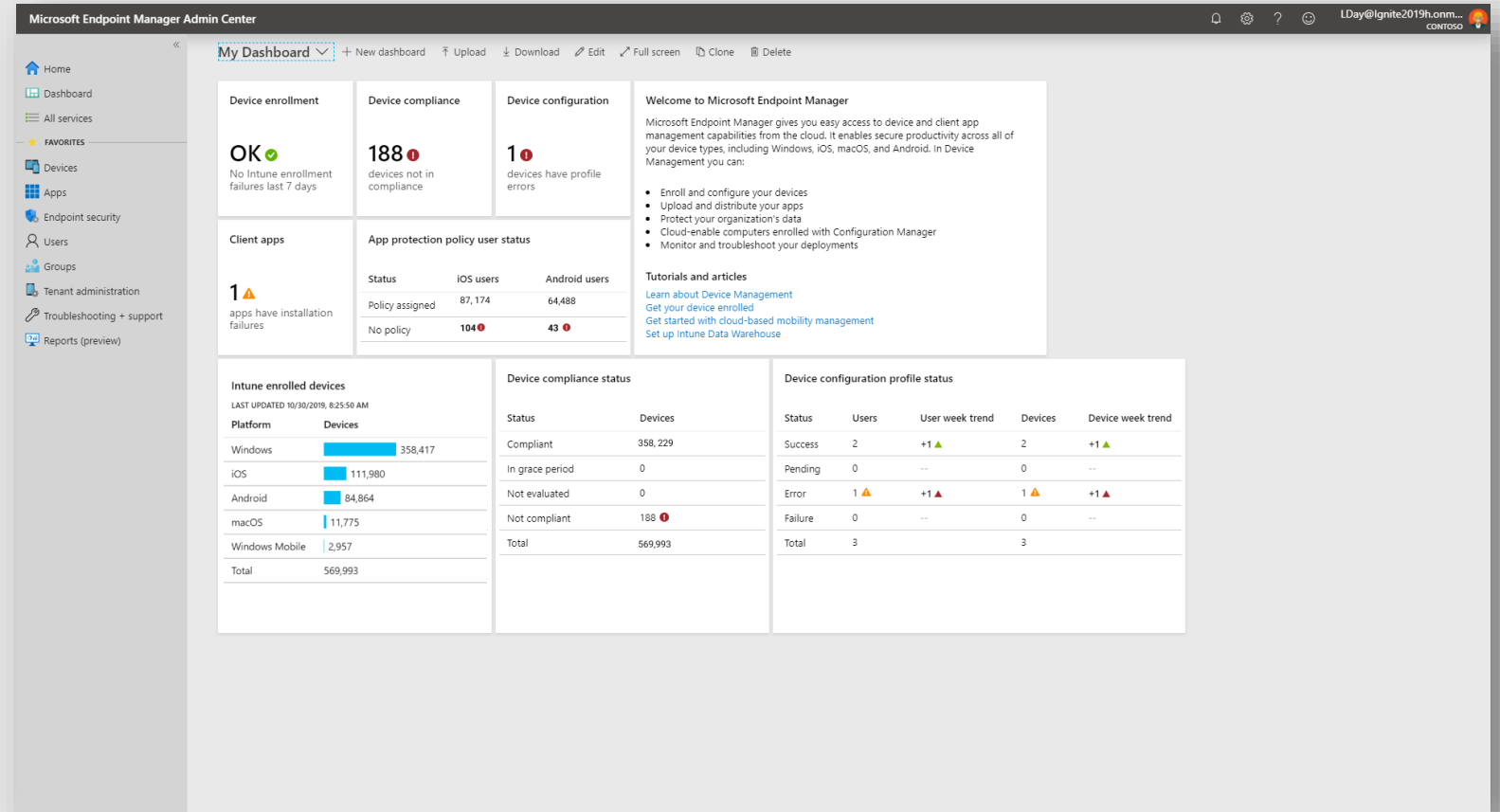
Desktop Analytics
Autopilot
and more

Integrated solution for IT admins to understand and take action across all endpoints in their estate

Microsoft Endpoint Manager

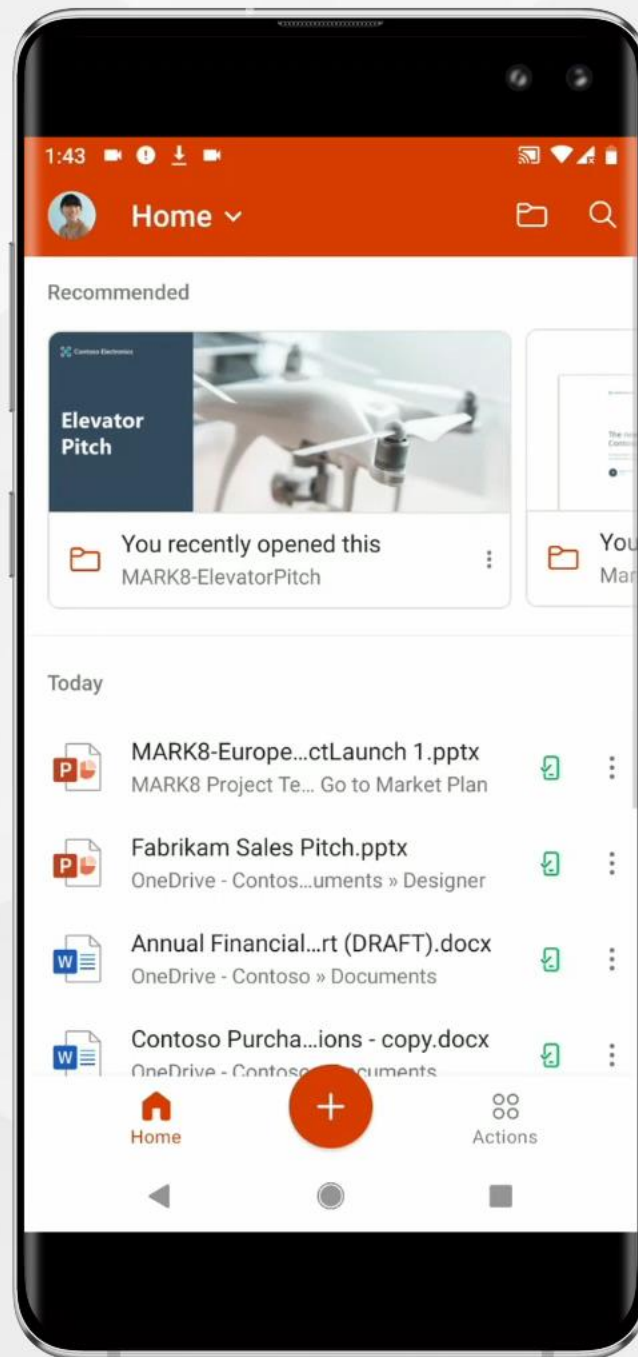


Trusted by IT and fully integrated



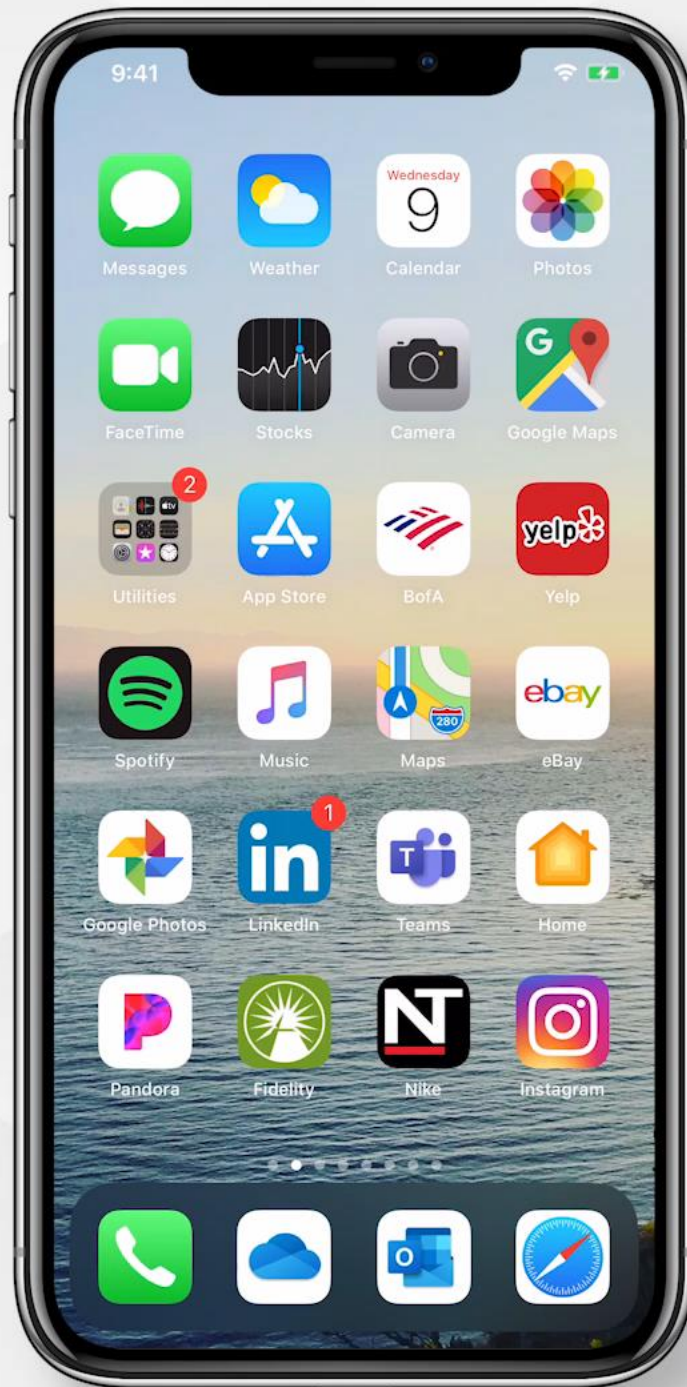
News in Office 365 Apps



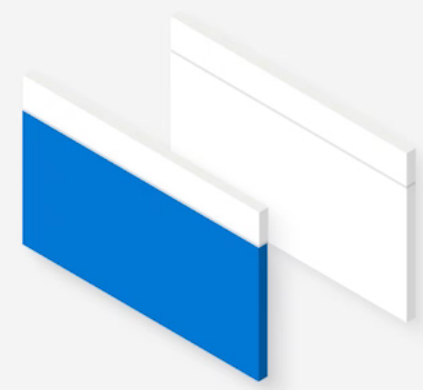


Introducing the new Office mobile app

New in OneDrive



Introducing Office scripts in Excel



Migrate your content to Microsoft 365

The Migration Manager (Preview) helps you bring your on-premises file share content to the cloud whether you are moving a small set of files or working on an enterprise scale migration.

To get started, download and install the setup file for each client. The client must be a Windows computer or virtual machine. [Learn more](#)

Download client setup file

Tasks Clients

 Add  Edit  Delete

SearchFilter

✓ Client name	Friendly client name	State	Last activity
\MC01	Migration Machine 01	 Ready	10/4/19 8:11 PM
\MC02	Migration Machine 02	 Ready	10/5/19 4:56 PM
\MC04	Migration Machine 04	 Ready	10/4/19 5:02 PM
\MC03	Migration Machine 03	 Ready	10/5/19 5:06 PM
\MC05	Migration Machine 05	 Ready	10/4/19 5:08 PM

Introducing the migration manager

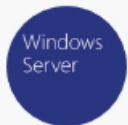
Office 365 kann auch auf Windows Server 2019 als RDS Host genutzt werden



Windows Server Blog

Windows Server 2019 adds support for Office 365 ProPlus

October 7, 2019



MICROSOFT WINDOWS SERVER TEAM

[Windows Server 2019](#), [Application Platform](#), [Updates](#)

Today we're introducing Office 365 ProPlus support for Windows Server 2019 customers with on-premises and Azure deployments. We've also enabled customers to immediately download and leverage [FSLogix](#) functionality, including the Office 365 Container, to enhance the speed and performance around user profile data in non-persistent virtualized environments. This continues our commitment to [enhance the Office experience in local and virtualized environments](#) and improves the end user experience in non-persistent virtualized environments.

Details unter: <https://cloudblogs.microsoft.com/windowsserver/2019/10/07/windows-server-2019-adds-support-for-office-365-proplus/>

Microsoft acquires Mover



+



Cloud storage migration
into Microsoft 365

Now a **free** service for
Microsoft 365 customers

Initially North American customers,
then worldwide

Works alongside SharePoint Migration
Tool, FastTrack, and third-party
migration partners



Collaboration & Meetings



Microsoft Teams

is the hub for teamwork in Microsoft 365



Chats



Meetings



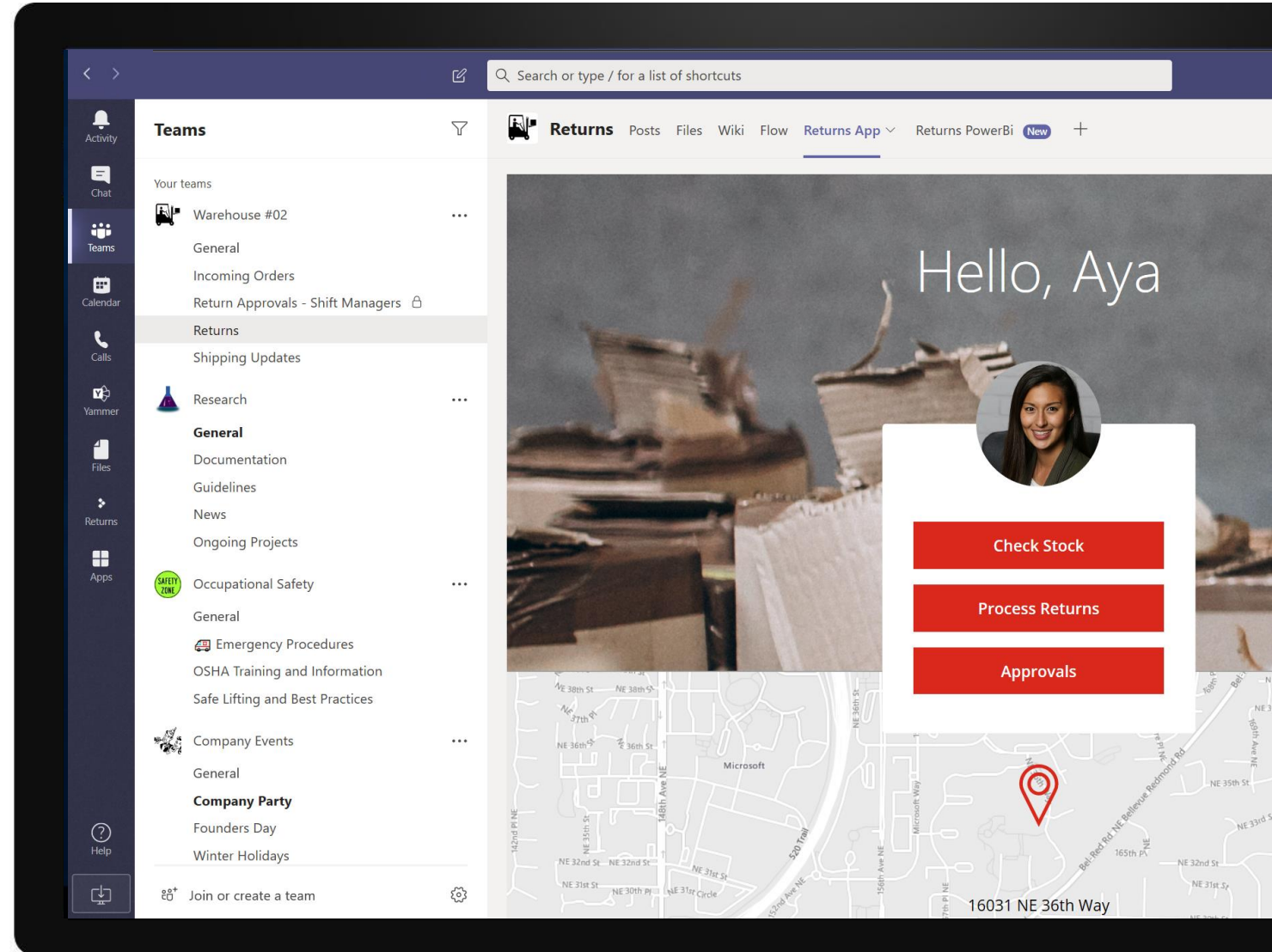
Calls



Files



Apps and workflows





> 90%
of Fortune 100 use
Microsoft Teams

Windows Sandbox



Available Features

Config files

4

Support for any
win32 app

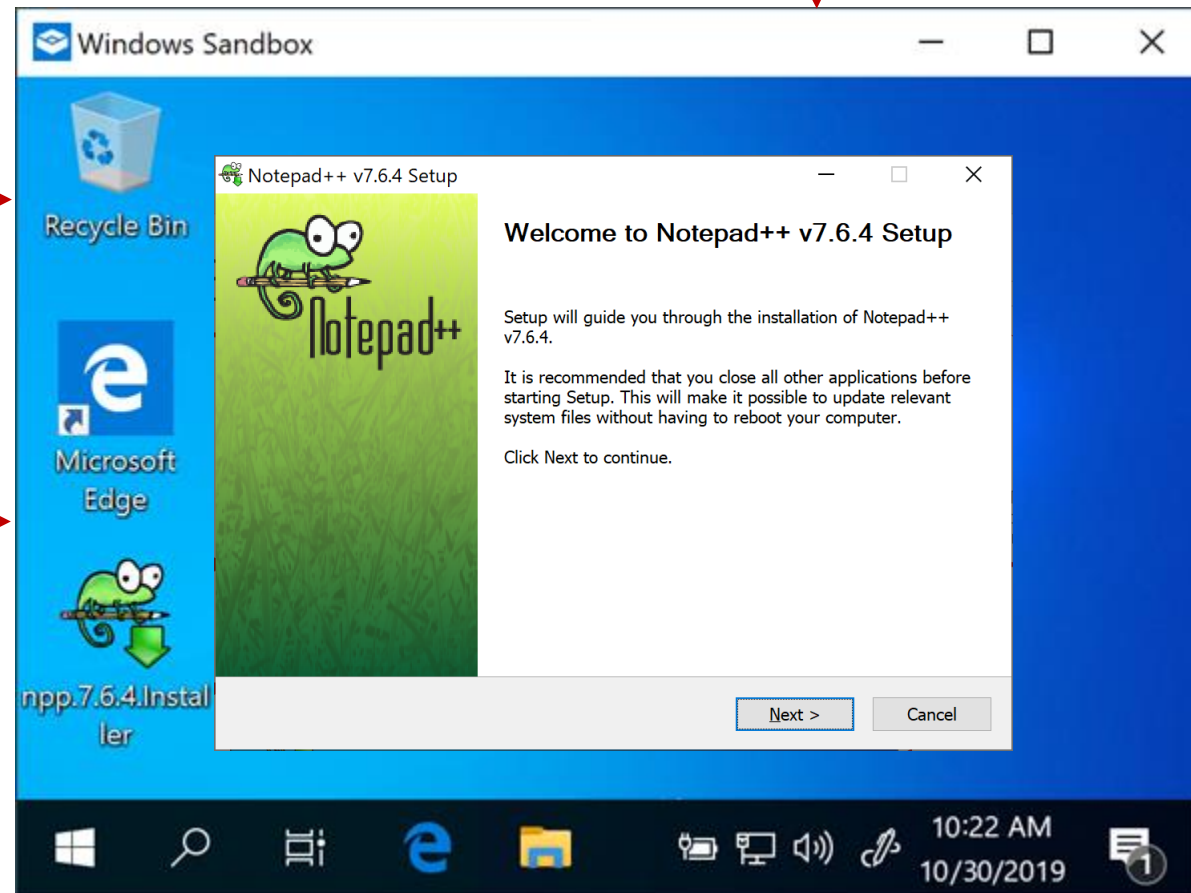
1

Clipboard support
for text and files

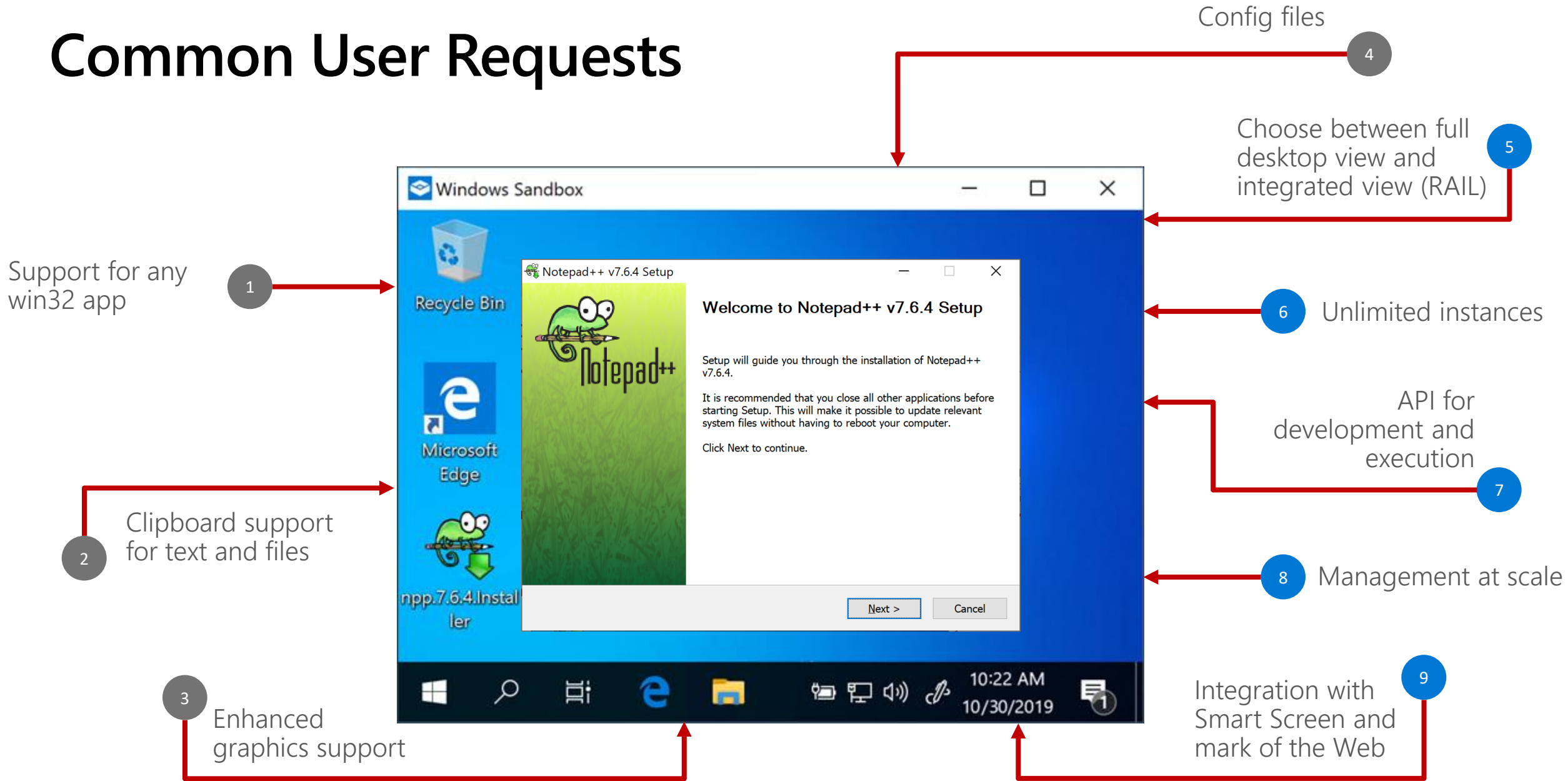
2

Enhanced
graphics support

3



Common User Requests

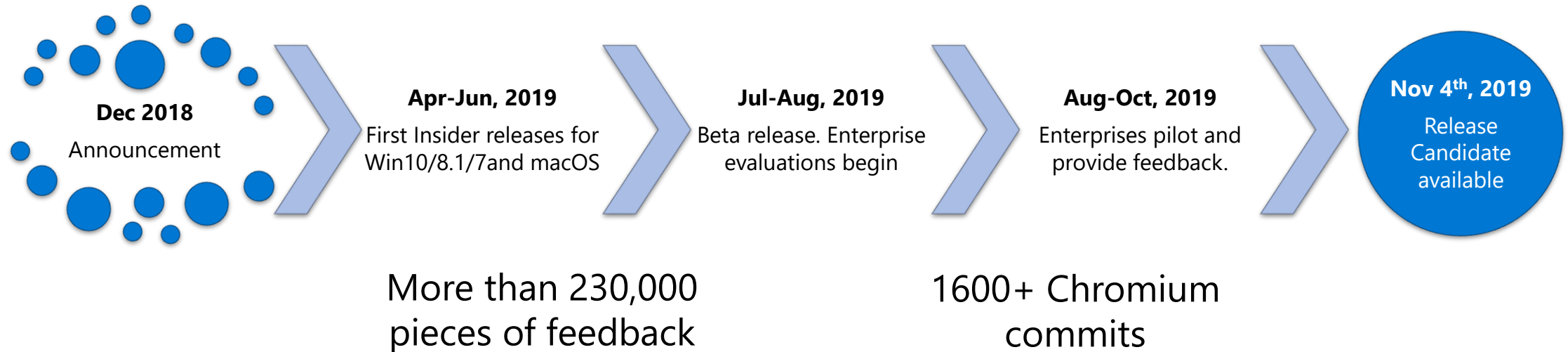




Microsoft Edge

The browser for business

Important moments



General Availability
January 15th 2020

Qualcomm® Snapdragon™ 5G PCs





Premium
performance



Multi-day
battery life



Lightning-fast
4G/5G speeds



Enterprise-grade
security



Qualcomm
snapdragon

Defining the
**Always On,
Always Connected**
PC Experience



Artificial
Intelligence



Connected standby /
Instant on



Thin, quiet,
and cool

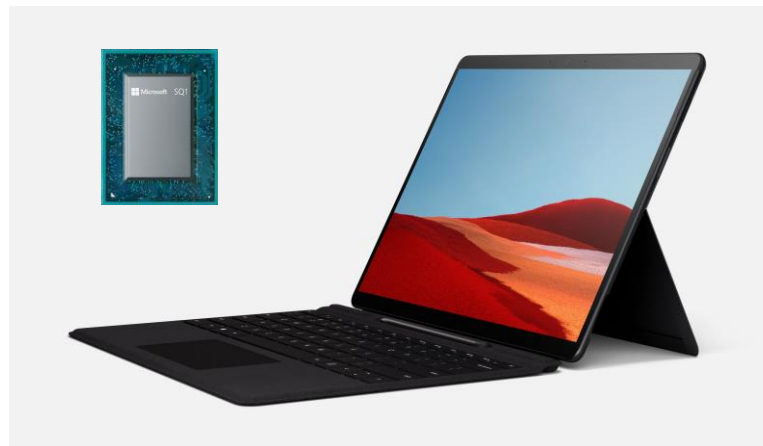


Windows 10



Samsung Galaxy Book S

Multi-day battery life*
(23+ hours continuous use)
Gigabit 4G LTE
< 12mm and < 1kg



Microsoft Surface Pro X

3X performance per watt
vs. Surface Pro 6
Gigabit 4G LTE
5mm thin



Lenovo Project Limitless

World's first 5G PC
Incredible performance
Incredible battery life

* Requires network connection. Battery life varies significantly with settings, usage, and other factors.

Always Connected PCs powered by Snapdragon

Snapdragon in Windows Secured-core PCs

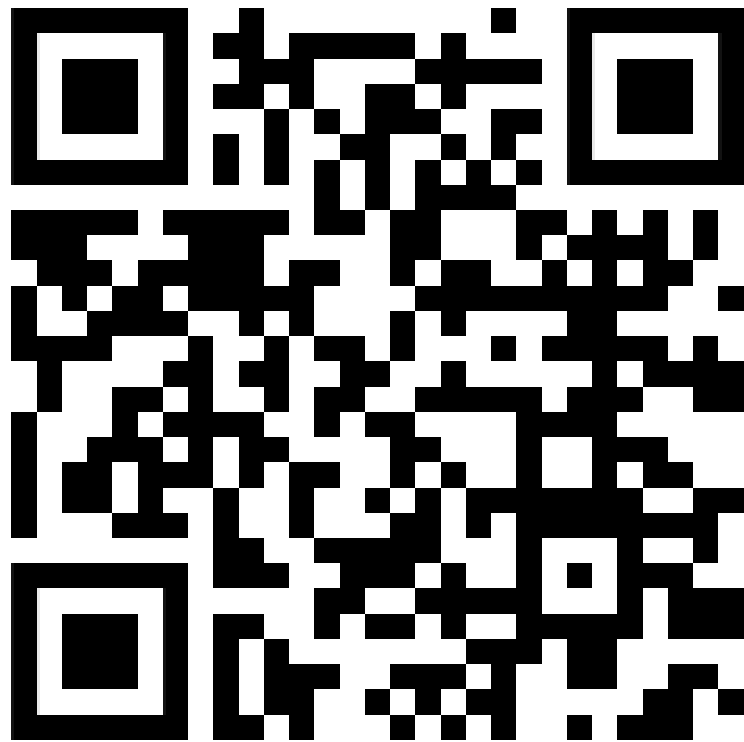
- Secure Boot uses hardware-based firmware validation to verify signed boot images
- Hardware rooted security provides firmware and OS software isolation to launch Hypervisor securely
- Integrated TPM enables core security scenarios in Windows
- Hardware access control to secure and prevent data leaks
- Device encryption offloaded to hardware to protect file storage



**Enabling the most secure
Windows 10 devices out-of-the-box**



<https://www.youtube.com/SvenLangenfeldWBSC>



<https://www.youtube.com/manfredhelber>



BOOK OF NEWS

Microsoft Ignite 2019

Orlando, November 4 – 8, 2019



<https://news.microsoft.com/wp-content/uploads/prod/sites/563/2019/11/Ignite-2019-Book-of-News.pdf>



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<https://www.microsoft.com/de-de/ignite-the-tour#cities>



WBSC@Ignite: Best of Modern Workplace Tour

Terminator – Dark Fate

Ab 20.15 Uhr



Microsoft