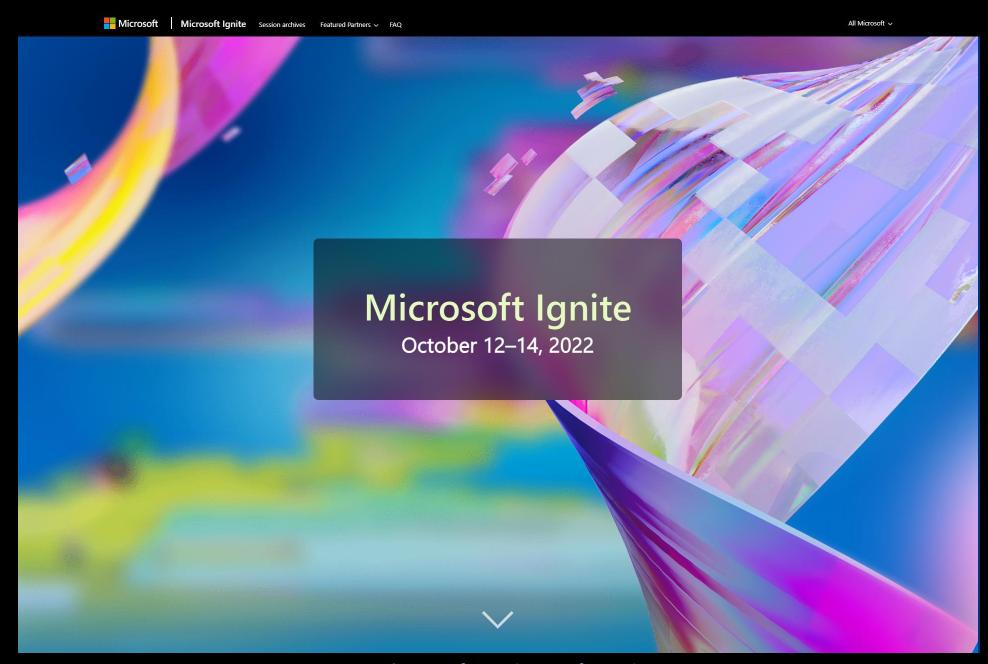
Die Azure Arc Show



Manfred Helber











Hybrid and multicloud - Microsoft Cloud Adoption Framework for Azure

Overview

Strategic impact

Technical planning

Prepare your environment

Azure landing zones

Introduction to Azure Arc landing zone accelerator for hybrid and multicloud

- > Azure Arc-enabled servers
- > Azure Arc-enabled Kubernetes
- > Azure Arc-enabled SQL Managed Instance
- > Implementation options

Migrate to the cloud

Govern your portfolio

Manage your portfolio

- > Well-architected for hybrid workloads
- > Hybrid architectures
- > Best practices
- > Azure product documentation
- > Build skills on Learn

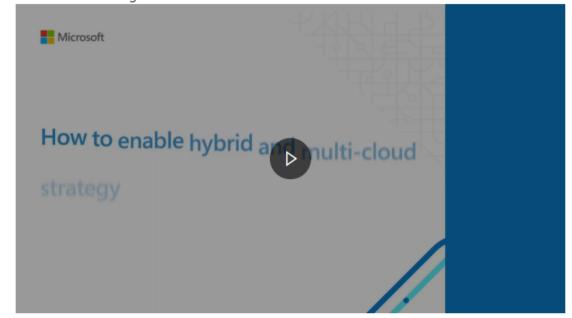
Introduction to hybrid and multicloud

Article • 11/04/2021 • 6 minutes to read • 3 contributors



Microsoft Azure provides all of the products and features required to help you build and operate your technology solutions in the cloud. We also understand that there are sound business reasons that may drive the necessity of using multiple private and public clouds. As a first step in your hybrid and multicloud journey, this article outlines and expands on Microsoft's unique perspective on important cloud computing terms.

Watch the following video to learn more.



Microsoft launches landing zone accelerator for Azure Arc-enabled servers | Azure Blog and Updates | Microsoft Azure

Microsoft launches landing zone accelerator for Azure Arc-enabled servers

Posted on January 27, 2022





Vijay Kumar, Director, Windows Server and Azure Product Marketing

We continue to innovate and add new capabilities to Azure Arc to enable new scenarios in hybrid and multicloud. We also want to provide our customers with the right guidance and best practices to adopt hybrid and multicloud technologies to meet their business needs. Today we're launching the <u>Azure Arc-enabled servers landing zone</u> accelerator within the Azure <u>Cloud Adoption Framework</u>. The landing zone accelerator provides best practices, guidance, and automated reference implementations so that customers can get started with their deployments quickly and easily.

Azure Arc-enabled servers landing zone accelerator makes it easier for customers to increase security, governance, and compliance posture on servers that are deployed outside of Azure. Along with Azure Arc, services such as Microsoft Defender for Cloud, Azure Sentinel, Azure Monitor, Azure Log Analytics, Azure Policy, and many others are included in the reference implementations that can then be extended to production environments.

Design areas within the landing zone accelerator

The Azure Arc-enabled servers landing zone accelerator enables customers' cloud adoption journey with considerations, recommendations, and architecture patterns most important to customers. For deploying Azure Arc-enabled servers in the most recommended way, we created a set of seven critical design areas. Each of these specific areas, walks customers through a set of design considerations, recommendations, architectures, and next steps:

- Identity and access management
- Network topology and connectivity
- Resource organization
- · Governance and security disciplines
- Management disciplines
- Cost governance
- · Automation disciplines

Announcing Landing Zone Accelerator for Azure Arc-enabled SQL Managed Instance



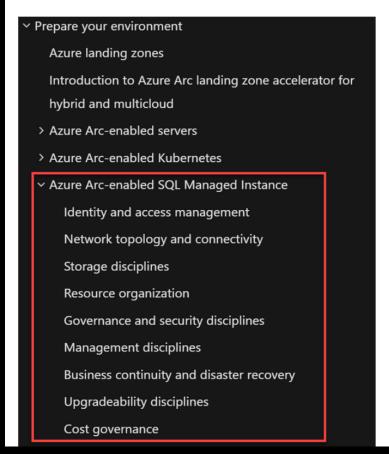
Published Oct 12 2022 08:01 AM

924 Views

With both Azure Arc-enabled servers and Kubernetes Landing Zone Accelerators already generally available, today we're launching the <u>Azure Arc-enabled SQL Managed Instance landing zone accelerator</u> within the Azure <u>Cloud Adoption</u>

Framework.

The new solution provides hybrid and Multicloud scenarios within the Azure Cloud Adoption Framework, a proven set of guidance designed by subject matter experts across Microsoft to help customers create and implement the business and technology strategies necessary to succeed in the cloud as well as a way to automate a fully deployed Azure Arc-enabled SQL Managed Instance environment, making implementation faster.



<u>Announcing Landing Zone Accelerator for Azure Arc-enabled</u> <u>SQL Managed Instance - Microsoft Community Hub</u>

Announcing Jumpstart ArcBox for DataOps



Lior Kamrat

Published Oct 12 2022 07:58 AM

With the Azure Arc portfolio keeping on growing and reaching so many customers, and with Azure Arc-enabled data services being such an important piece in the Azure Hybrid puzzle, today, we are announcing ArcBox for DataOps.

What we've been hearing from customers and partners is that the Azure Arc Jumpstart is such an instrumental part of their Azure Arc learning journey and with the combination of the <u>newly announced Azure Arc-enabled SQL Managed Instance</u> <u>landing zone accelerator</u>, ArcBox for DataOps, is our road-tested automation providing our customers a way to get hands-on with the Azure Arc-enabled SQL Managed Instance set of capabilities and features.

Introducing ArcBox for DataOps

With ArcBox for DataOps, we're bringing the same proven core design principles of the Azure Arc Jumpstart to this new offering. Providing a painless, fully automated deployment for all things Azure Arc is the founding principle of our ArcBox offerings.

We wanted to provide a way for our customers to experience Azure Arc-enabled SQL Managed to its fullest right away, so we baked in multiple Jumpstart scenarios.

ArcBox for DataOps provides users with a rich, fully automated Azure Arc-enabled SQL Managed Instance so they can experience and simulate capabilities like disaster recovery, SQL Backup and Restore, Active Directory integration, and more, all while also having a comprehensive unified operation and management layer that can then be expanded to serve production workload.

The entire solution is automatically deployed and includes all required Azure integrations, as well as three Kubernetes clusters and the supported Azure infrastructure alongside a sample application so users will have everything they need to get hands-on with the tech.

To complete the experience, ArcBox has additional built-in integrations for a richer experience with Azure Monitor, Policy, Log Analytics, and Grafana. We also support all deployment types so you can pick whatever method suits your needs and skillset - Bicep, ARM Templates, and Terraform are all included.



Announcing Jumpstart ArcBox for DataOps - Microsoft Community Hub

In preview: SSH access to Azure Arc-enabled servers

By Danny Maertens

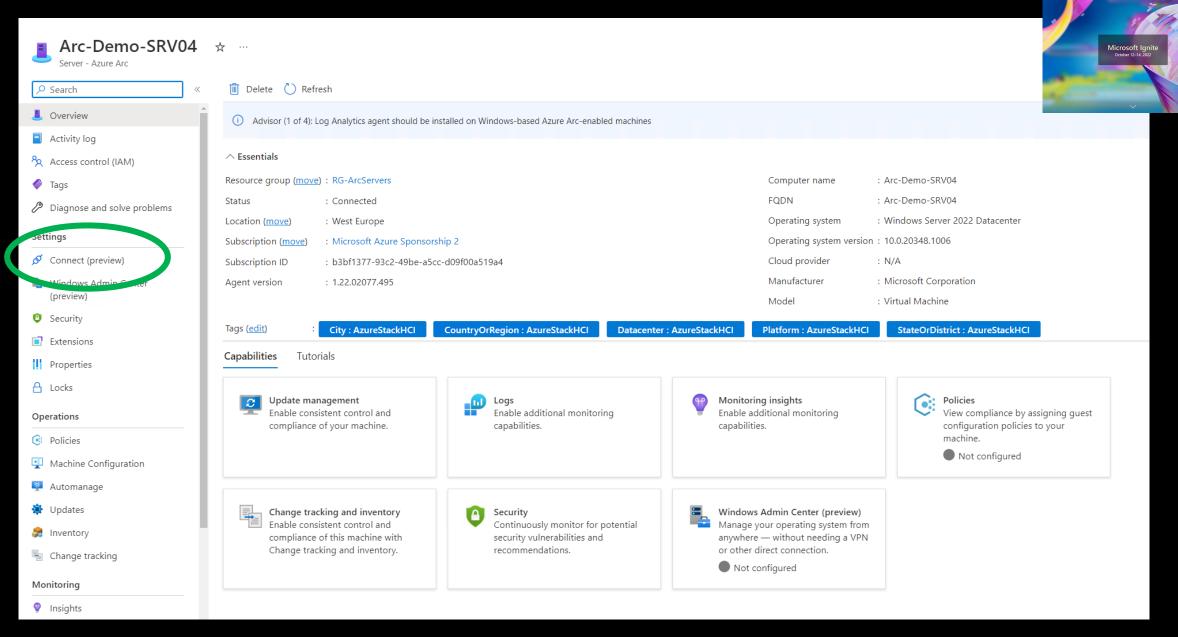
Remote server management is a critical tool for server administrators. Whether you are running automation or using interactively, SSH based remoting is to connect to your remote server. Starting today, you can now securely <u>SSH into your Arc enabled servers</u> without a public IP address or additional inbound ports!

SSH access to Arc enabled servers allows you to SSH into your Arc onboarded servers with a simple Azure CLI command (Azure PowerShell coming soon)! Leverage your existing local SSH keys, username/passwords to connect to either <u>Windows</u> or Linux servers. Additionally, you can SSH using your <u>Azure AD credentials</u> (currently available on Linux-only).

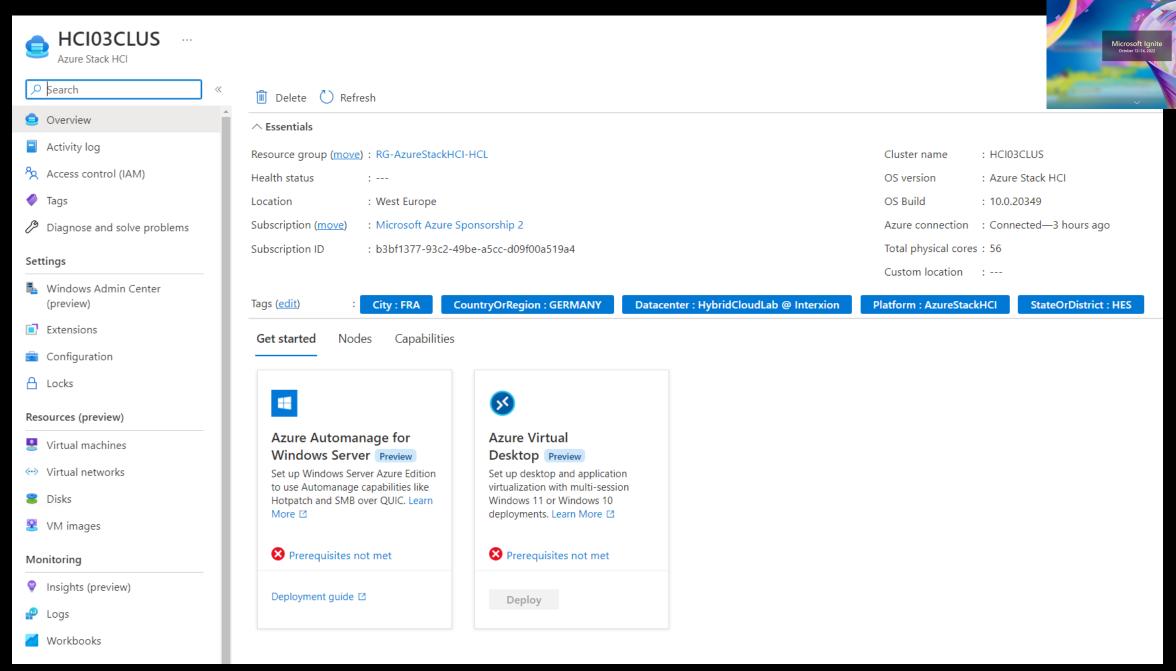
Using Arc enabled servers and SSH access you can now access any of your machines, in any network, with one command without exposing a public IP address or opening additional inbound firewall ports. SSH traffic is sent over the existing connection between the Azure Arc agent and Azure, no extra configuration is required. Additionally, we are committed to providing a secure and consistent experience across operating systems, Arc servers & Azure VMs, and authentication types. This means that the same command, 'az ssh vm', can be used to access any of your machines. Providing a consistent, easy to understand, automatable solution for accessing your machines with SSH.

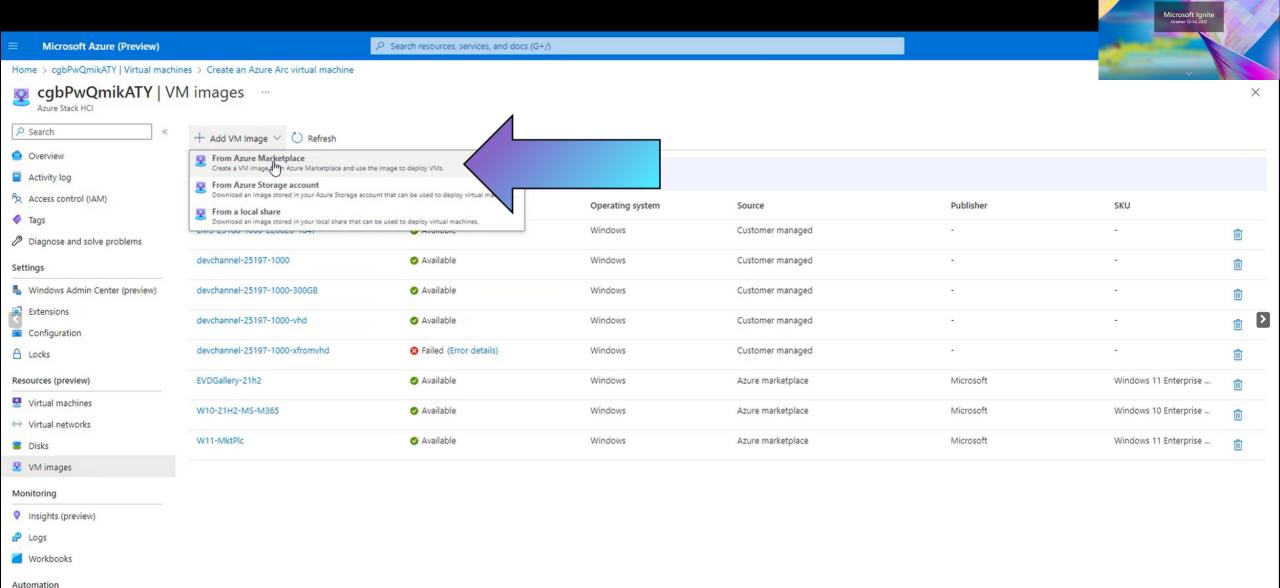
```
VM name
                                                                          --local-user
                  > az ssh vm --resource-group Resource --name
             's password:
lelcome to Ubuntu 20.04 LTS (GNU/Linux 5.4.0-26-generic x86 64)
 Documentation: https://help.ubuntu.com
                  https://landscape.canonical.com
 Management:
 Support:
                  https://ubuntu.com/advantage
 Super-optimized for small spaces - read how we shrank the memory
  footprint of MicroK8s to make it the smallest full K8s around.
  https://ubuntu.com/blog/microk8s-memory-optimisation
336 updates can be installed immediately.
of these updates are security updates.
To see these additional updates run: apt list --upgradable
Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***
Last login: Fri Apr 15 11:00:22 2022 from 127.0.0.1
user @ VM name :~$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
       inet 172.27.112.106 netmask 255.255.240.0 broadcast 172.27.127.255
       inet6 fe80::1533:ff22:5465:eb5f prefixlen 64 scopeid 0x20<link>
       ether 00:15:5d:7b:11:04 txqueuelen 1000 (Ethernet)
       RX packets 1353925 bytes 2020296849 (2.0 GB)
       RX errors 0 dropped 1 overruns 0 frame 0
```

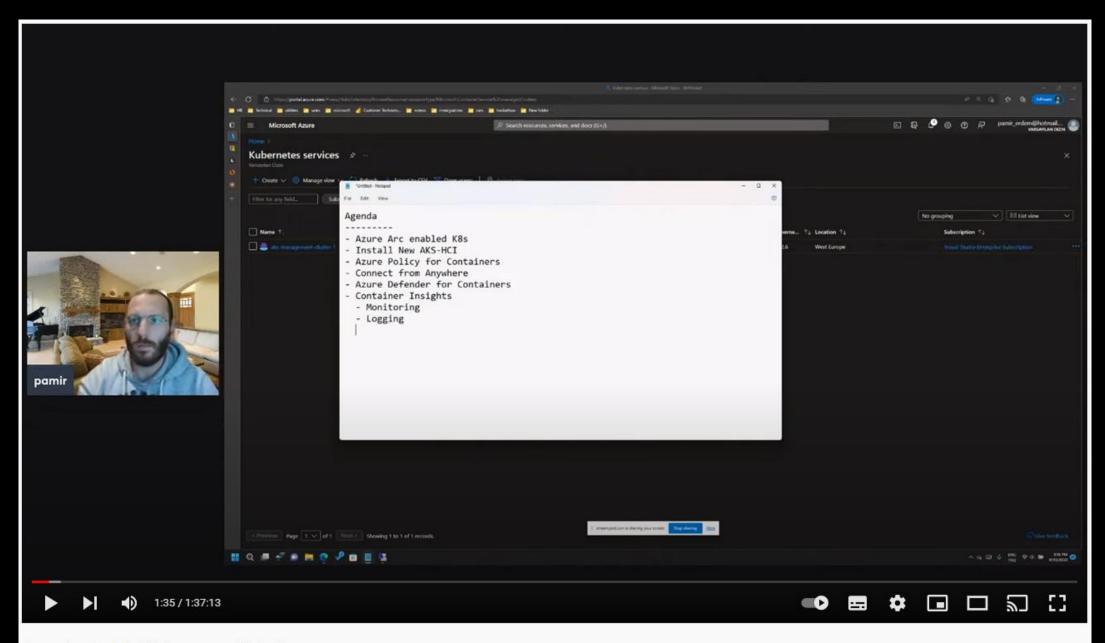
(Preview) SSH access to Azure Arc-enabled servers - Azure Arc | Microsoft Learn In preview: SSH access to Azure Arc-enabled servers - Microsoft Tech Community



Generally available: Azure Automanage for Azure Virtual Machines and Arc-enabled servers | Azure updates | Microsoft Azure







Azure Arc Enabled Kubernetes - Workshop

What's new with Azure Arc-enabled servers agent - Azure Arc | Microsoft Learn

- v1.22 Highlight is "Added support for Ubuntu 22.04"
- ➤ v1.23 Highlight is "Added support for Rocky Linux 8 and Debian 11"

What's new with Azure Arc-enabled servers agent

Article • 10/12/2022 • 4 minutes to read • 8 contributors



The Azure Connected Machine agent receives improvements on an ongoing basis. To stay up to date with the most recent developments, this article provides you with information about:

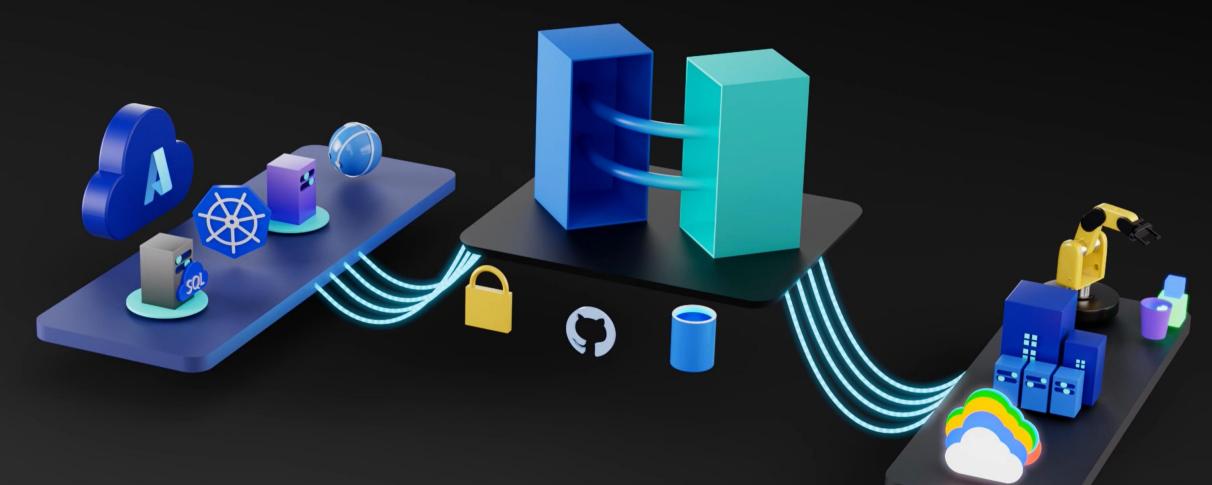
- · The latest releases
- Known issues
- Bug fixes

This page is updated monthly, so revisit it regularly. If you're looking for items older than six months, you can find them in archive for What's new with Azure Arc-enabled servers agent.

Version 1.23 - October 2022

New features

- The minimum PowerShell version required on Windows Server has been reduced to PowerShell 4.0
- The Windows agent installer is now compatible with systems that enforce a Microsoft publisher-based Windows
 Defender Application Control policy.
- Added support for Rocky Linux 8 and Debian 11.



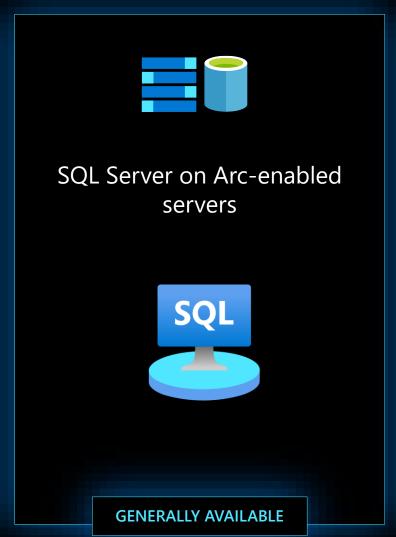
Lernkurve rund um Azure Arc

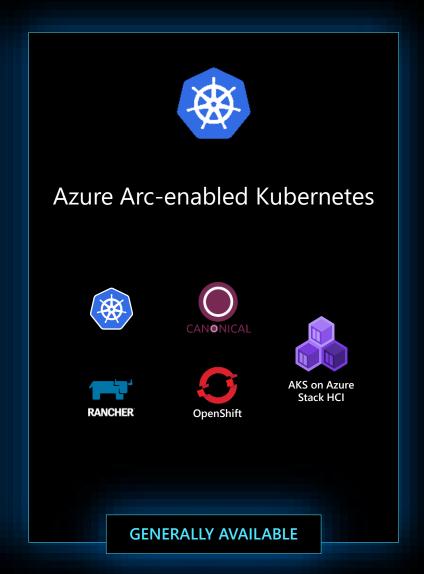
Thema: Arc enabled Servers – Log Analytics & Monitoring

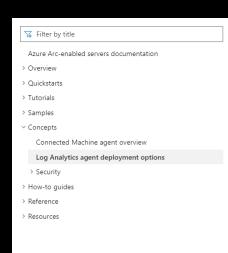
Azure Arc-enabled infrastructure

Bring on-premises and multi-cloud infrastructure to Azure









Learn / Azure / Azure Arc / Arc-enabled servers /

Understand deployment options for the Azure Monitor agent on Azure Arc-enabled servers

Article • 09/15/2022 • 3 minutes to read • 5 contributors



Azure Monitor supports multiple methods to install the Azure Monitor agent and connect your machine or server registered with Azure Arc-enabled servers to the service. Azure Arc-enabled servers support the Azure VM extension framework, which provides post-deployment configuration and automation tasks, enabling you to simplify management of your hybrid machines like you can with Azure VMs.

The Azure Monitor agent is required if you want to:

- . Monitor the operating system and any workloads running on the machine or server using VM insights.
- · Analyze and alert using Azure Monitor.
- · Perform security monitoring in Azure by using Microsoft Defender for Cloud or Microsoft Sentinel.
- Collect inventory and track changes by using Azure Automation Change Tracking and Inventory.

This article reviews the deployment methods for the Azure Monitor agent VM extension, across multiple production physical servers or virtual machines in your environment, to help you determine which works best for your organization. If you are interested in the new Azure Monitor agent and want to see a detailed comparison, see Azure Monitor agents

Installation options

Review the different methods to install the VM extension using one method or a combination and determine which one works best for your scenario.

<u>Deploy Azure Monitor agent on Arc-enabled</u> <u>servers - Azure Arc | Microsoft Learn</u>

		Azure Monitor Agent	Log Analytics Agent	Diagnostics extension (WAD)
Environments support	ed			
	Azure	Х	Х	Х
	Other cloud (Azure Arc)	Х	Х	
	On-premises (Azure Arc)	Х	Х	
	Windows Client OS	X (Public preview)		

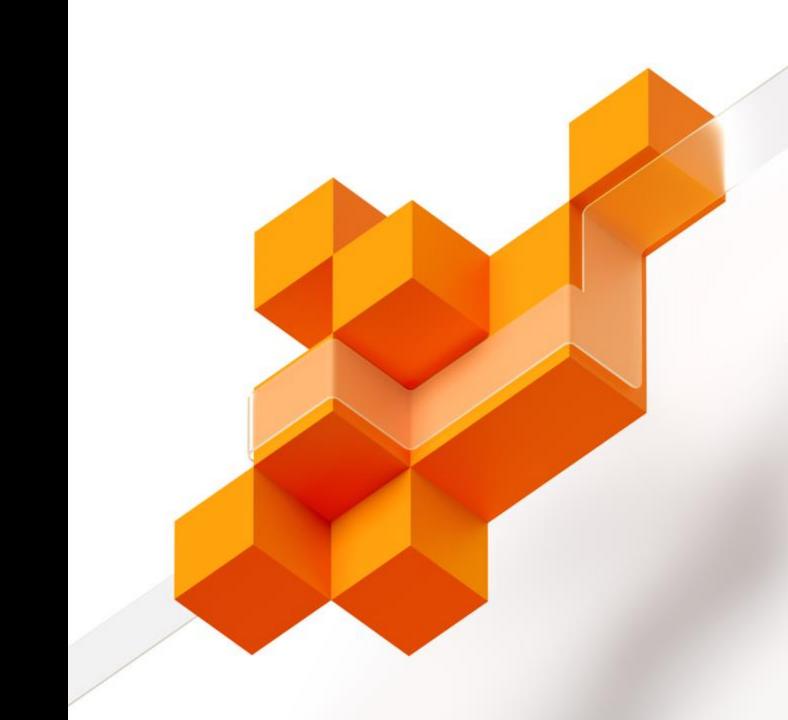


How to Add the Microsoft Monitoring Agent to Azure Arc Servers - Thomas Maurer



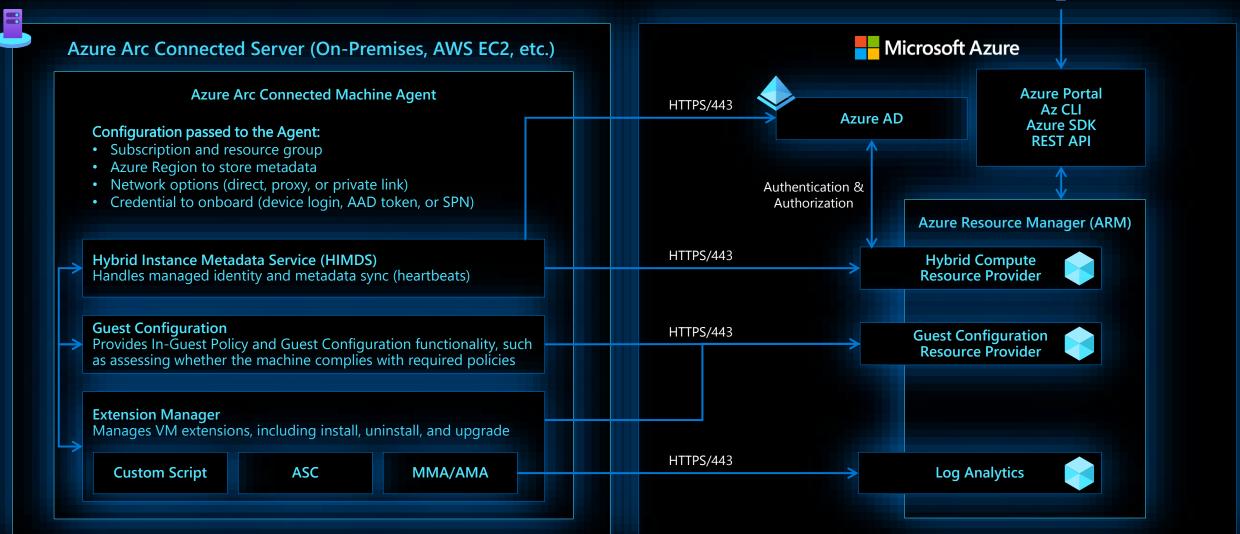
DEMO

Log Analytics & Monitoring



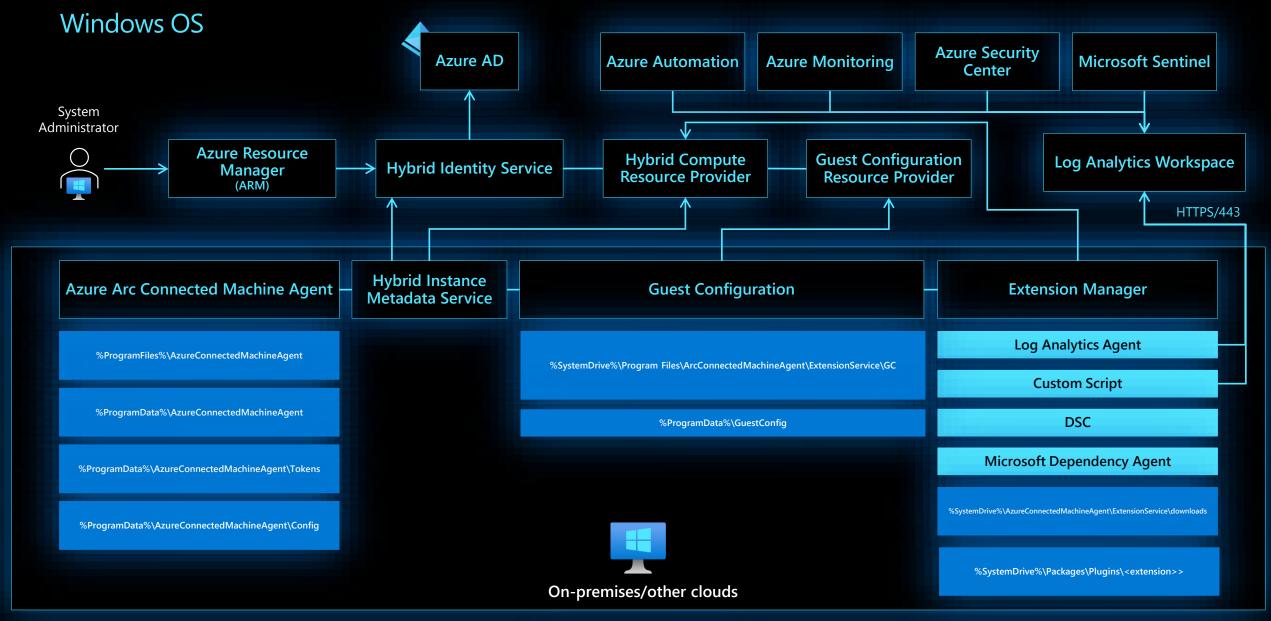
Azure Arc-enabled servers

Connected Machine Agent

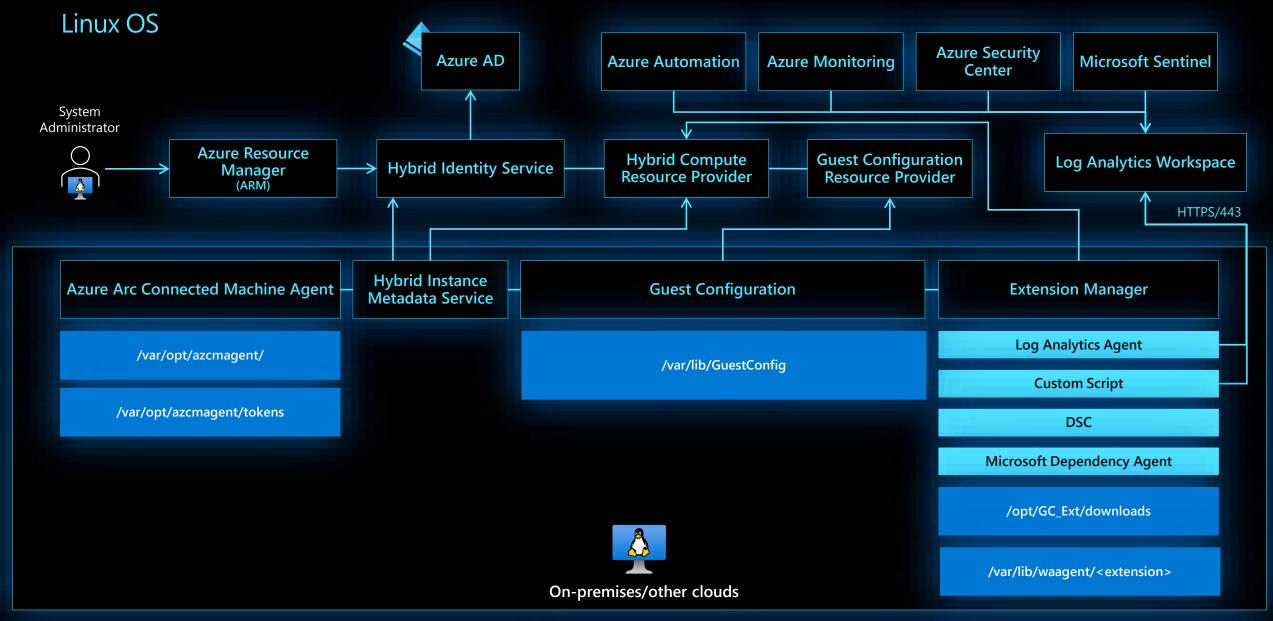


Azure Admin

Azure Arc-enabled servers architecture

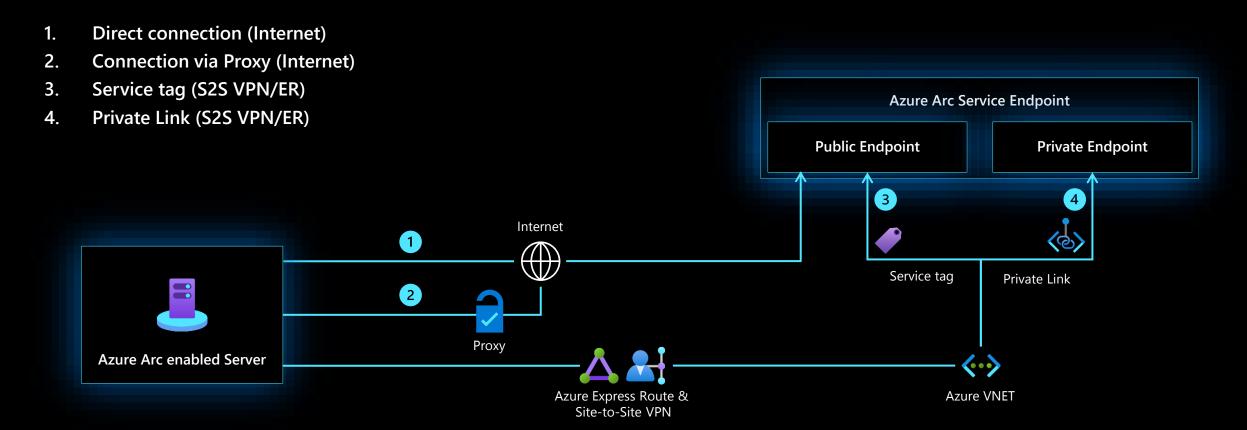


Azure Arc-enabled servers architecture

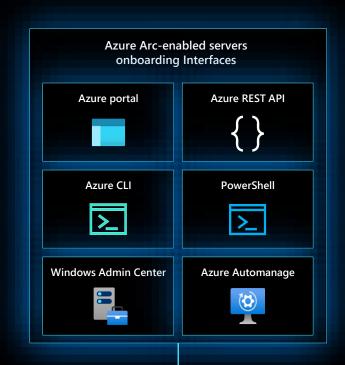


Azure Arc enabled servers

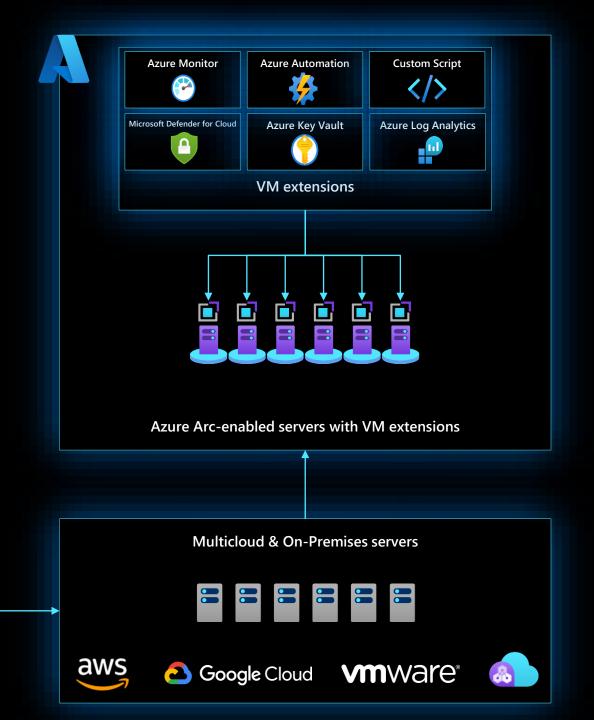
Connectivity Options



Azure Arc-enabled servers VM extension integration

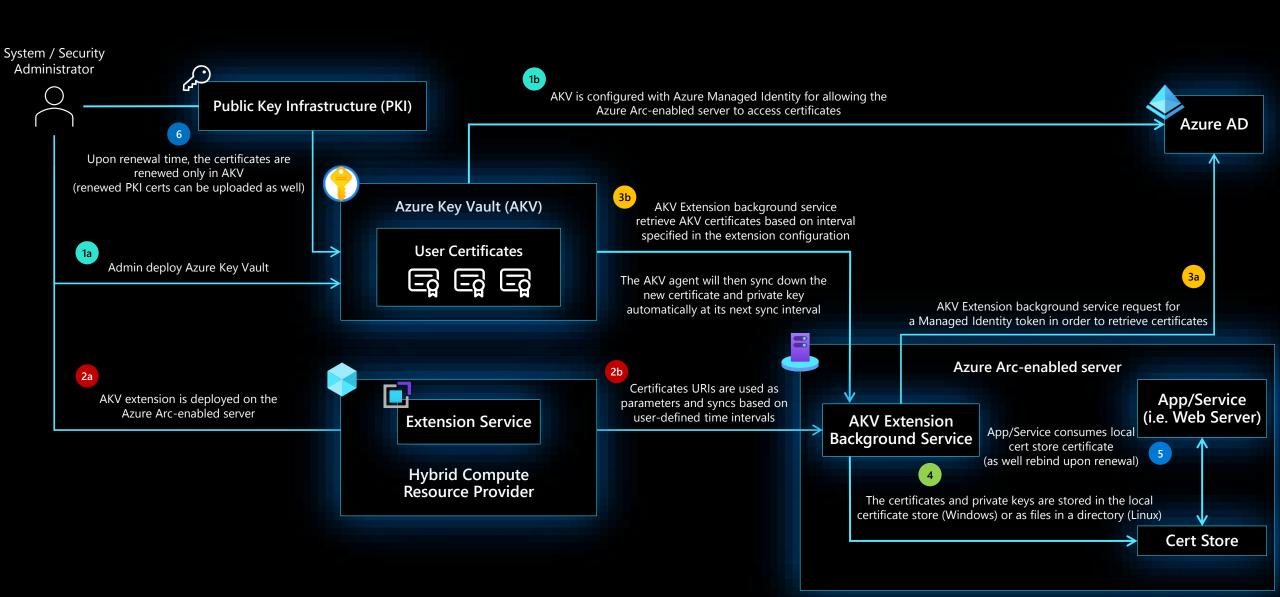


Azure Arc-enabled servers onboarding



Azure Arc-enabled servers

Azure Key Vault Integration



Azure Arc Servers VM Extensions

- Microsoft Defender for Cloud
- Microsoft Antimalware extension
- Custom Script extension
- Log Analytics agent
- Azure Monitor for VMs (insights)
- Azure Key Vault Certificate Sync
- Azure Monitor Agent
- Azure Extension for SQL Server
- Azure Automation Hybrid Runbook Worker extension (preview)
- Windows Admin Center (preview)



Fragen aus der Community

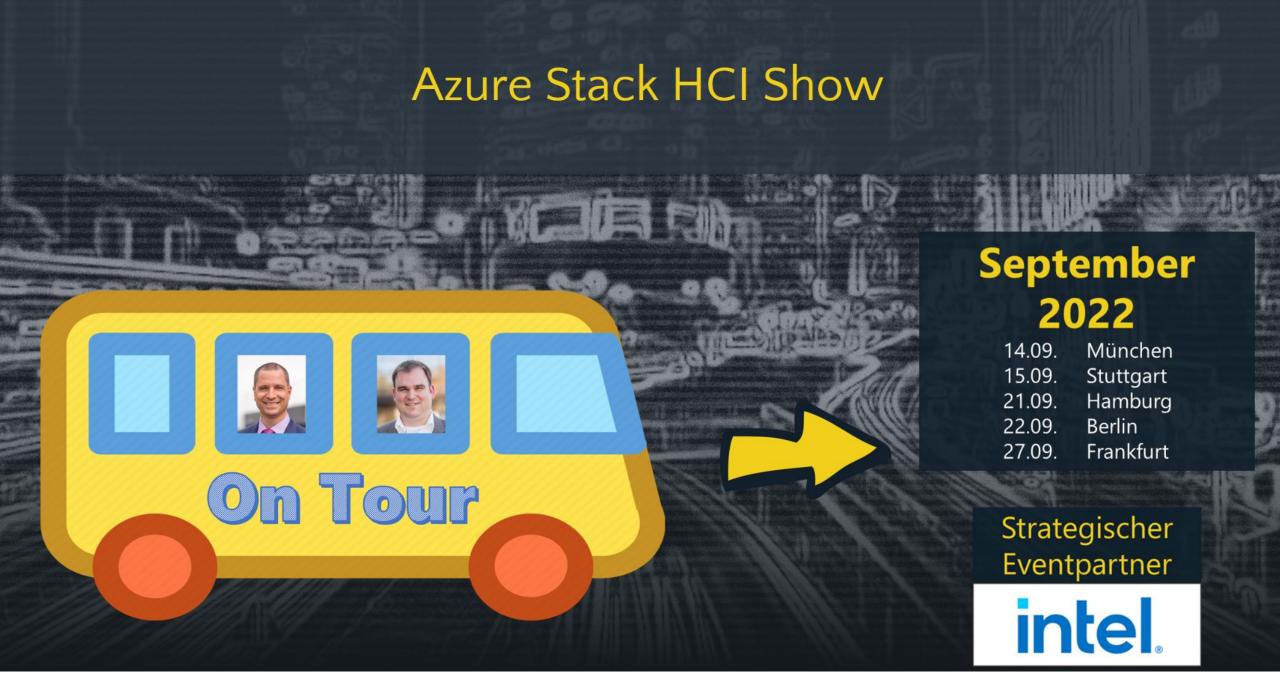


Upcomming events

Azure Architects Connect Serie zum Thema "Hybrid- / Multi Cloud & Security", Sept. 2022, Recording & Slides are available at <u>Azure Architects Connect</u> Groups | <u>LinkedIn</u>

Microsoft Ignite, ww/Seattle 12.-14.10. + local in Munich, 13.-14.10.

Azure Hybrid Cloud Insights Series, Nov. 04th., registration here



WBSC # SKILLS

September 2022: Azure Arc

5. September 2022, 10.00 Uhr Grundlagen zu Azure Arc

12. September 2022, 10.00 Uhr
Azure Arc im Zusammenspiel mit Windows Server

19. September 2022, 10.00 Uhr Azure Arc und Azure Stack HCl

26. September 2022, 10.00 Uhr
Weitere Möglichkeiten mit Azure Arc

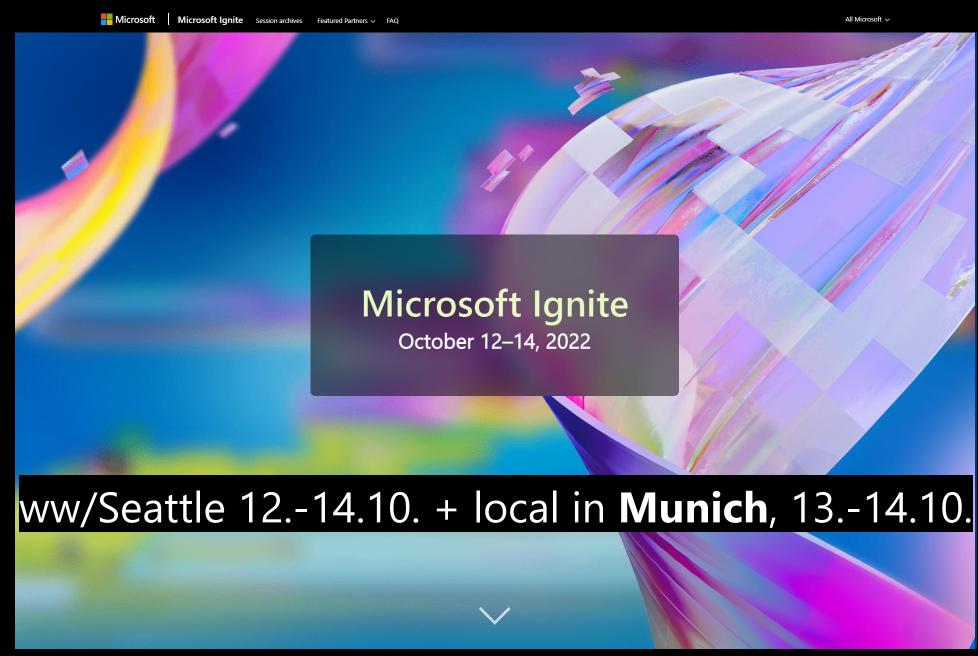
Diese Schulungs-Webcasts werden unterstützt von











Azure Stack HCI Tour

WBSC Skills

Next Azure Arc Show + call to actions



Die Azure Arc Show



Manfred Helber