

Die Azure Arc Show



Alexander Ortha



Manfred Helber

22. Mai 2023 # 16 Uhr

Azure Arc & VMware



Willkommen



News Ecke

Registration and Arc extension improvements in Azure Stack HCI

Subscribe

By  Arpita Duppala

Published May 08 2023 01:31 PM

Home > hardeepClust1

hardeepClust1 | Extensions 

Azure Stack HCI | Directory: Microsoft

We are happy to let you know that we have

 Search

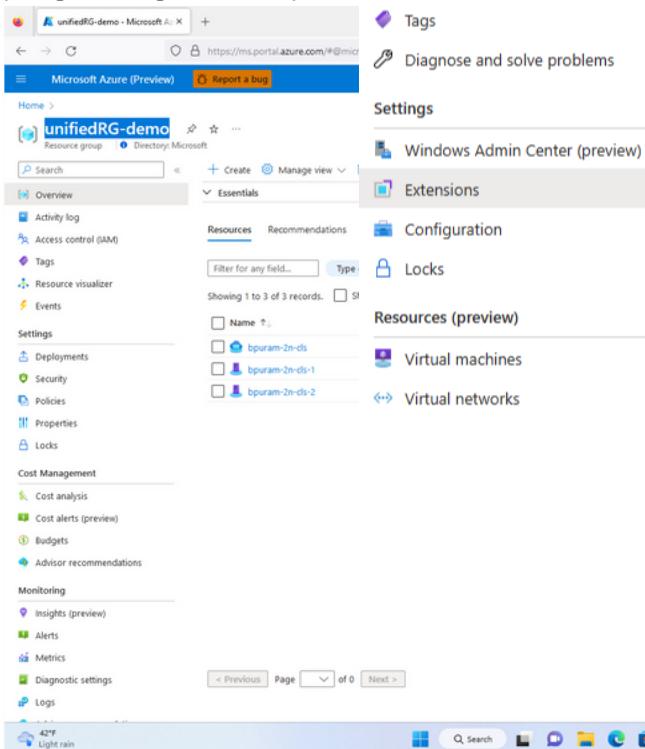
<

 Refresh  Enable automatic upgrade  Disable automatic upgrade  Uninstall  Settings

 Search to filter items

Register cluster and associated Arc for se

Previously, Azure Stack HCI registration req
passing the existing Resource Group inform



The screenshot shows the Azure portal interface for a resource group named 'unifiedRG-demo'. The left sidebar navigation includes 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Resource visualizer', 'Events', 'Settings', 'Deployments', 'Security', 'Policies', 'Properties', 'Cost Management', 'Monitoring', and 'Logs'. The main content area displays the 'Extensions' section under the 'Essentials' category. It lists three extensions: 'MicrosoftMonitoringAgent' (version 1.0.18067.0, status Succeeded), 'AdminCenter' (version 0.0.0.313, status Succeeded), and 'TelemetryAndDiagnostics (Azure-managed)' (version 0.1.16.0, status Succeeded). A search bar at the top of the extensions list is visible.

Name	Type	Version	Status	New version available	Automatic upgrade
MicrosoftMonitoringAgent	MicrosoftMonitoringAgent	1.0.18067.0	 Succeeded	No	Not supported
MicrosoftMonitoringAgent/...	MicrosoftMonitoringAgent	1.0.18067.0	 Succeeded	No	Not supported
<input checked="" type="checkbox"/> AdminCenter	AdminCenter	0.0.0.313	 Succeeded	No	Disabled
AdminCenter/hds1	AdminCenter	0.0.0.313	 Succeeded	No	Disabled
AdminCenter/hds2	AdminCenter	0.0.0.313	 Succeeded	No	Enabled (Azure-managed)
<input type="checkbox"/> TelemetryAndDiagnostics (Azure-managed)	TelemetryAndDiagnostics	0.1.16.0	 Succeeded	No	Enabled (Azure-managed)
TelemetryAndDiagnostics/h...	TelemetryAndDiagnostics	0.1.16.0	 Succeeded	No	Enabled (Azure-managed)

Extensions that will be GAing in coming months:

- Azure Monitor Agent extension
- Azure Site Recovery Agent
- Windows Admin Center
- Telemetry and diagnostics [Azure-managed mandatory extension]
- Life cycle manager [Azure-managed mandatory extension]
- Remote Support [Azure-managed mandatory extension]

Announcing the General Availability of Azure Monitor HCI Insights

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...

By  Saniya Islam

Published May 16 2023 10:27 AM

492 Views

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Introduction

Earlier in May 2022, we launched Azure Monitor HCI Insights for public preview. Based on customer feedback during the preview, we improved the performance of the workbooks and supported the new Azure Monitor Agent and are excited to announce General Availability (GA) of Azure Monitor HCI Insights.

What is HCI Insights?

Azure Stack HCI Insights is an interactive, fully integrated service which provides health, performance, and usage insights about Azure Stack HCI clusters that are connected to Azure and are enrolled in Azure Monitor. In Microsoft Azure, you can see all your resources in Azure portal and monitor them with Azure Stack HCI Insights.

There are some key benefits of using Azure Stack HCI Insights:

- It's **managed by Azure** and accessed from Azure portal, so it's always up to date, and there's no database or special software setup required.
- Azure Monitor Agent uses **managed identity** to interact with Log analytics workspace which ensures **secure communication**.
- It's **highly scalable**, which means it is capable of loading more than 250 cluster information sets across multiple subscriptions at a time, with no boundary limitations on cluster, domain, or physical location.
- It's highly **customizable**. The user experience is built on top of Azure Monitor workbook templates, where you can easily add/remove/edit visualizations and queries.
- HCI Insights follows **Pay-as-you-go model** which means you pay only for the logs that are collected and they can be removed/edited as per user need.

Pre-requisites:

- May `23 cumulative update
- Most current PSH Modules for AsHCI
- Re-run Registration

[Announcing the General Availability of Azure Monitor HCI Insights - Microsoft Community Hub](#)
[Enhanced management of Azure Stack HCI from Azure. - Azure Stack HCI | Microsoft Learn](#)

Microsoft Azure

Home > AD03H09-C2 >

AD03H09-C2

Azure Stack HCI

Search Workbooks Customize Auto refresh: Off

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Time range: Last hour

Servers Virtual machines Storage

View health and usage info for the servers in the cluster.

Settings

Windows Admin Center (preview)

Extensions Configuration Locks

Resources (preview)

Virtual machines

Virtual networks Disks VM images

Disaster recovery (preview)

Monitoring Insights Logs Workbooks

Automation Tasks (preview)

Support + troubleshooting New Support Request

Time range for chart: Last 4 hours Servers: All

CPU and memory usage

CPU usage

Memory usage

Server	Last updated	Status	CPU usage	Memory usage	Logical processors	CPUs	Uptime	Site
AD03H09-VM02	3/3/2023, 12:21:06 PM	Critical	20.51%	53.15%	4	2	16.501 days	Site1
AD03H09-VM03	3/3/2023, 12:21:06 PM	Healthy	4.96%	43.29%	4	2	1.954 days	Site1
AD03H09-VM04	3/3/2023, 12:21:06 PM	Healthy	4.2%	42.08%	4	2	16.5 days	Site2
AD03H09-VM05	3/3/2023, 12:21:06 PM	Healthy	3.82%	29.92%	4	2	16.501 days	Site2

[Announcing the General Availability of Azure Monitor HCI Insights - Microsoft Community Hub](#)
[Enhanced management of Azure Stack HCI from Azure. - Azure Stack HCI | Microsoft Learn](#)

Azure CLI & Extensions

Learn / Azure / Azure CLI /

Azure Command-Line Interface (CLI) documentation

The Azure command-line interface (Azure CLI) is a set of commands used to create and manage Azure resources. The Azure CLI is available across Azure services and is designed to get you working quickly with Azure, with an emphasis on automation.

Install the Azure CLI

- [DOWNLOAD](#)
- Installation overview
- Install for Windows
- Install for macOS
- Install on Linux
- Run in Docker
- Run in Azure Cloud Shell

Azure CLI extensions

- [OVERVIEW](#)
- About CLI extensions

REFERENCE

- Available extensions

Become familiar with Azure CLI features

- [GET STARTED](#)
- Get started with the Azure CLI
- Choose the right Azure command-line tool
- Sign-in methods
- Services the Azure CLI can manage

HOW-TO GUIDE

- How to use Azure CLI effectively
- Learn to use Bash with the Azure CLI
- Manage Azure subscriptions with the Azure CLI
- Query CLI command results

Azure CLI reference

- [REFERENCE](#)
- Full command reference
- Output formats

Use the Azure CLI to manage cloud resources

- [QUICKSTART](#)
- Deploy an Azure Kubernetes Service cluster
- Create an Azure SQL Database single database
- Deploy a web application from GitHub
- Create a PHP web app in Azure App Service

TRAINING

- Create Azure resources with Azure CLI
- Control Azure services with Azure CLI
- Manage virtual machines with Azure CLI
- Connect an application to Azure Storage
- Run parallel tasks in Azure Batch with Azure CLI

TUTORIAL

- Create virtual machines on the same subnet with the Azure CLI
- Create an Azure Active Directory principal

```
az version
<#{
    "azure-cli": "2.25.0",
    "azure-cli-core": "2.25.0",
    "azure-cli-telemetry": "1.0.6",
    "extensions": {
        "connectedk8s": "1.1.5",
        "customlocation": "0.1.2",
        "k8s-configuration": "1.0.0",
        "k8s-extension": "0.4.3"
    }
}
#>
```

```
az extension add --upgrade --name arcappliance
az extension add --upgrade --name connectedk8s
az extension add --upgrade --name k8s-configuration
az extension add --upgrade --name k8s-extension
az extension add --upgrade --name customlocation
az extension add --upgrade --name azurestackhci
az extension add --upgrade --name account
az extension add --upgrade --name arCDATA
az extension add --upgrade --name connectedvmware
az extension add --upgrade --name arcappliance
az extension add --upgrade --name hybridaks
```

Always update to the
latest version of CLI itself
&
Update the extension



```
PS C:\Users\labadmin> az upgrade
This command is in preview and under development. Reference and support levels: https://aka.ms/CLI_refstatus
Your current Azure CLI version is 2.44.1. Latest version available is 2.48.1.
Please check the release notes first: https://docs.microsoft.com/cli/azure/release-notes-azure-cli
Do you want to continue? (Y/n): n
PS C:\Users\labadmin>
```

main ▾ 1 branch 0 tags

Go to file Add file ▾ Code ▾

alexor-ms Add script "Create Arc RB.ps1" d08e54b 1 minute ago 3 commits

Scripts Add script "Create Arc RB.ps1" 1 minute ago

SlideShare Add slides 5 minutes ago

LICENSE Initial commit 13 minutes ago

README.md Initial commit 13 minutes ago

README.md

AzureArcShow

Materials, Presentations, Scripts from the Azure Arc Show with Manfred Helber

About Materials, Presentations, Scripts from the Azure Arc Show with Manfred Helber

Readme GPL-3.0 license

0 stars 1 watching 0 forks

Releases No releases published Create a new release

Packages No packages published Publish your first package

[alexor-ms/AzureArcShow: Materials, Presentations, Scripts from the Azure Arc Show with Manfred Helber \(github.com\)](https://github.com/alexor-ms/AzureArcShow)



Lernkurve rund um Azure Arc

Azure
Arc

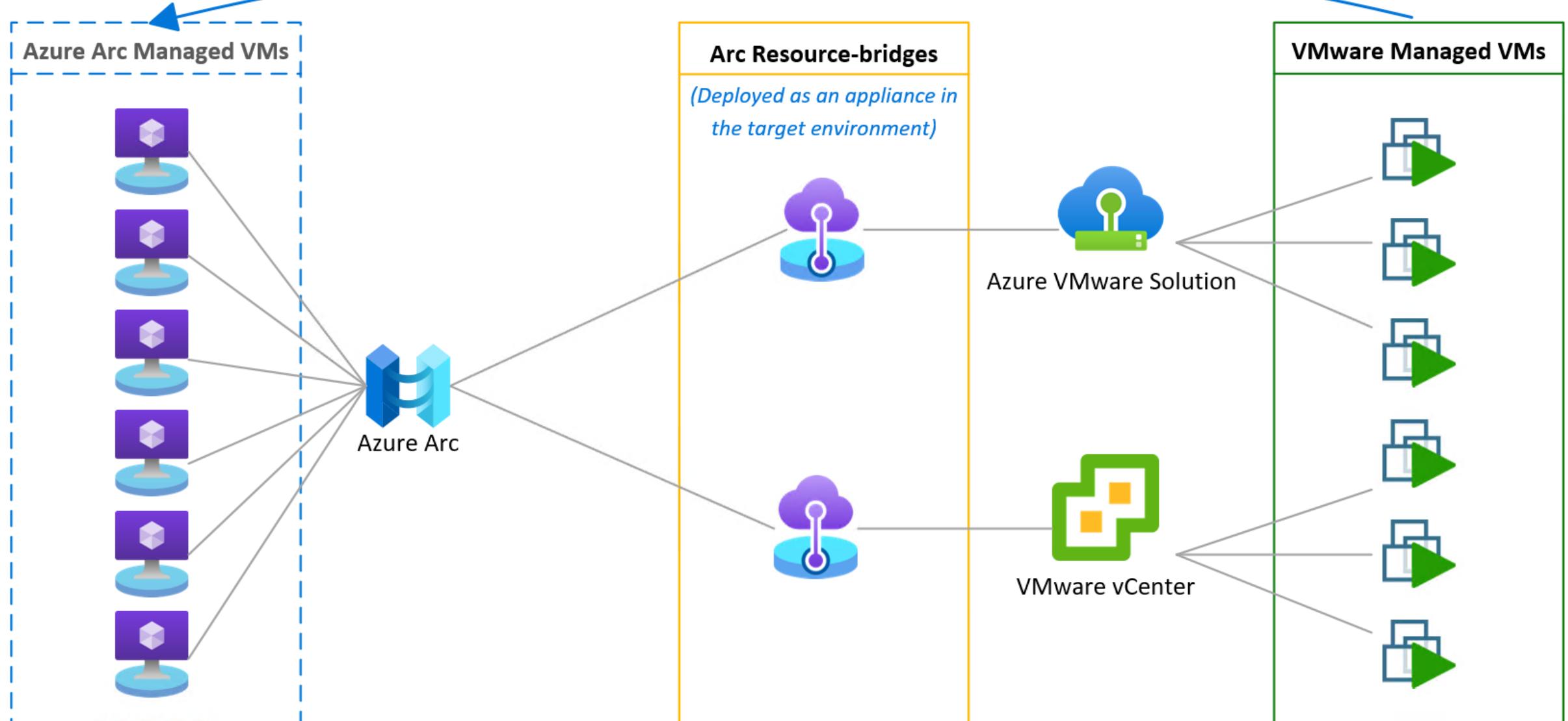


Azure VMware
Solution (AVS)

VMware
vSphere



*Logical view of the same
virtual machines on Azure*



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Azure Arc for VMware Admins

By  Seif Bassem

Published May 24 2022 08:00 AM

4,741 Views

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Enterprises nowadays manage a very diverse and complex IT infrastructure that expands from on-premises to edge and multi-cloud. Navigating these distributed hybrid and multi-cloud scenarios becomes a challenge when managing business-critical applications and building cloud-native software.

In these types of environments, it is very important to have a consistent approach to operations and select the proper tools that allows you to have greater cross-visibility and work at scale. That is why customers have taken advantage of Azure to enable the flexibility and agility IT professionals and developers are seeking. With [Azure Arc](#), customers can now extend the rich Azure management and services offerings to any infrastructure, including their VMware deployments on-premises or in the cloud.

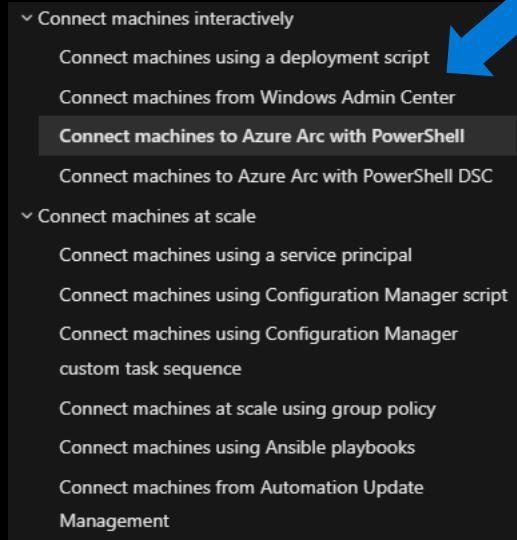
Whether you are migrating your VMware virtual machine workloads to Azure or building a hybrid architecture, there is an Azure Arc solution that allows you to leverage your existing investments in VMware-based infrastructure and continue to innovate and enhance your experience in Azure.

[Azure Arc for VMware Admins \(microsoft.com\)](#)

Arc enabled Server with VMware VMs

Step by Step

Onboarding VMware VMs to Azure Arc enabled Server



```
Install-Module -Name Az.Connect -Force  
Connect-AzAccount  
$sessions = New-PSSession -ComputerName 10.101.0.204 #or Hostname  
Connect-AzConnectedMachine -ResourceGroupName ArcVMware-rg -Location westeurope -PSSession $sessions
```

Use VMware PowerCLI to scale onboarding VMware vSphere Windows Server virtual machines to Azure Arc

Article • 12/01/2022 • 3 contributors

Feedback

This article provides guidance for using the provided [VMware PowerCLI](#) script so you can perform an automated scaled deployment of the Azure Arc-connected machine agent in multiple VMware vSphere virtual machines and as a result, onboarding these VMs as an Azure Arc-enabled servers.

This guide assumes you already have an existing inventory of VMware virtual machines and will use the PowerCLI PowerShell module to automate the onboarding process of the VMs to Azure Arc.

[Use VMware PowerCLI to scale onboarding VMware vSphere Windows Server virtual machines to Azure Arc - Cloud Adoption Framework | Microsoft Learn](#)

ArcVMWDemoVM01

Server - Azure Arc



Search



Delete

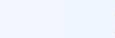


Refresh



Feedback

(i) Advisor (1 of 6): Machines should be configured to periodically check for missing system updates



Essentials

Resource group ([move](#)) : ArcVMware-rg

Computer name : ArcVMWDemoVM01

Status : Connected

FQDN : ArcVMWDemoVM01.ahlazshci.local

Location ([move](#)) : West Europe

Operating system : Windows Server 2019 Standard

Subscription ([move](#)) : Microsoft Azure Sponsorship 2

Operating system version : 10.0.17763.4252

Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4

Cloud provider : N/A

Agent version : 1.30.02313.988

Manufacturer : VMware, Inc.

Model : VMware7,1

Tags ([edit](#)) : Click here to add tags

JSON View

Capabilities

Recommendations

Tutorials



Updates

Customize updates for your Arc-enabled server.



Logs

Enable additional monitoring capabilities.



Monitoring insights

Enable additional monitoring capabilities.

```
PS C:\Users\labadmin> Connect-AzAccount

Account                               SubscriptionName          TenantId           Environment
-----                               -----
--- alexor@hybridmsftalexor.onmicrosoft.com Microsoft Azure Sponsorship 2 8eba9bd3-35fb-418d-ab86-fe070cb755fe Azure
Cloud

PS C:\Users\labadmin> $sessions = New-PSSession -ComputerName ArcVMWDemoVM05
PS C:\Users\labadmin> Connect-AzConnectedMachine -ResourceGroupName ArcVMware-rg -Location westeurope -PSSession $sessions
time="2023-05-22T16:34:20+02:00" level=info msg="Connecting machine to Azure... This might take a few minutes."
time="2023-05-22T16:34:24+02:00" level=info msg="Local machine time is: 2023-05-22 16:34:24.3595123 +0200 CEST m=+3.64
8979901"
time="2023-05-22T16:34:24+02:00" level=info msg="HIS time is: 2023-05-22 14:34:17 +0000 UTC"
time="2023-05-22T16:34:24+02:00" level=info msg="Difference in time between HIS clock and local clock: 0.122659 minute
"
20% [==>] 
```

```
PS C:\Users\labadmin\GitHub\hybrid-scripts-1\VMware\ScaleArcOnboarding> .\scale_deploy.ps1
```

Scope	ProxyPolicy	DefaultVI ServerMode	InvalidCertificateAction	DisplayDeprecationWarnings	WebOperationTimeoutSeconds
Session	UseSystemProxy	Single	Ignore	True	300
User		Single	Ignore		
AllUsers					

```
IsConnected : True
Id          : /VI Server=vsphere.local\administrator@vcenter01.ahlazshci.local:443/
ServiceUri   : https://vcenter01.ahlazshci.local/sdk
SessionSecret : "e9c0f39b3e30a45f796e2286c54e0359a4be508c"
Name        : VCENTER01.ahlazshci.local
Port        : 443
SessionId    : "e9c0f39b3e30a45f796e2286c54e0359a4be508c"
User        : VSPHERE.LOCAL\Administrator
Uid          : /VI Server=vsphere.local\administrator@vcenter01.ahlazshci.local:443/
Version      : 7.0.3
Build        : 21477706
ProductLine   : vpx
InstanceUuid  : 153c0881-8d27-4bb3-9bf1-1841c29d4882
RefCount     : 3
ExtensionData : VMware.Vim.ServiceInstance
```

```
Hold tight, I am onboarded ArcVMWDemoVM06 Virtual Machine to Azure Arc...
```

```
ArcVMWDemoVM06 is now successfully onboarded to Azure Arc
```

```
Hold tight, I am onboarded ArcVMWDemoVM04 Virtual Machine to Azure Arc...
```

```
ArcVMWDemoVM04 is now successfully onboarded to Azure Arc
```

```
PS C:\Users\labadmin\GitHub\hybrid-scripts-1\VMware\ScaleArcOnboarding>
```

Arc enabled VMware

Step by Step

Azure Arc-enabled infrastructure

Manage private infrastructure from Azure



Azure Arc-enabled Azure Stack HCI

Full VM lifecycle management on Azure Stack HCI
Use Azure RBAC for self-service
Inventory, organize, and tag consistently
Use Azure management services for consistent governance

PREVIEW



Azure Arc-enabled VMware vSphere

Full VM lifecycle management on VMWare
Use Azure RBAC for self-service
Inventory, organize, and tag consistently
Use Azure management services for consistent governance

PREVIEW



Azure Arc-enabled System Center VMM

Full VM lifecycle management on SCVMM
Use Azure RBAC for self-service
Inventory, organize, and tag consistently
Use Azure management services for consistent governance

PREVIEW

Azure Arc-enabled VMware vSphere

Provision and Manage VMware VMs from Azure using Azure Arc

PUBLIC
PREVIEW



Virtual Machine Lifecycle

Perform full lifecycle management such as create, resize, and delete on VMware VMs from Azure



Self-Serve Operations

Use Azure RBAC to enable teams and workload owners to provision and manage VMs on demand



Single Pane View

- Browse your VMware VMs from your data centers and AVS along with your Azure VMs
- Discover and onboard existing VMware VMs to Azure



Azure Management services

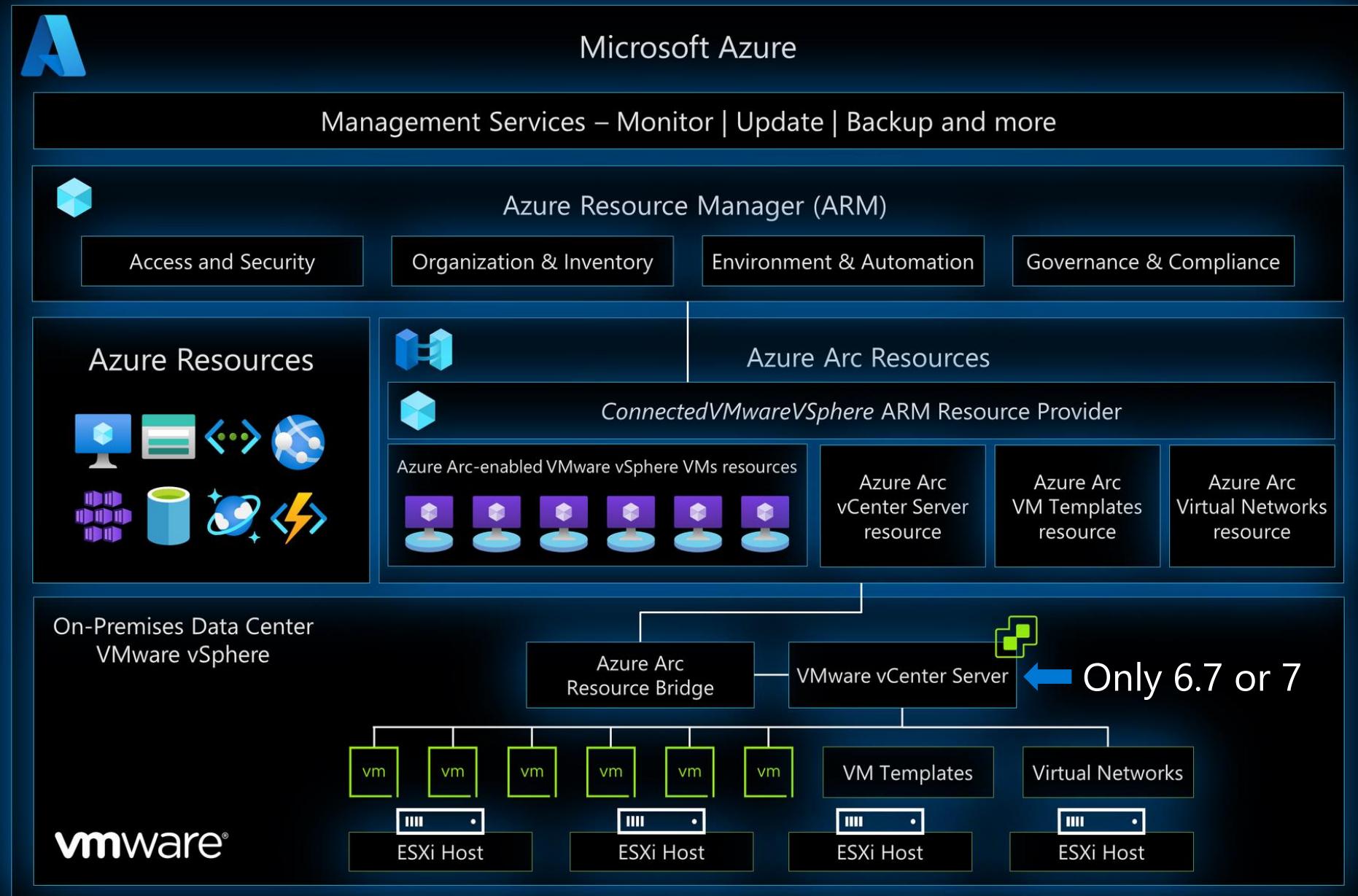
Perform governance, monitoring, update management, security at scale using rich Azure management services like Azure Monitor, Security Center and others



VMware vSphere environments hosted in your datacenter or on Azure VMware Solutions



Azure Arc-enabled VMware vSphere Architecture



Azure Arc | VMware vCenters (preview)

Microsoft | PREVIEW



Search

+ Add

Manage view

Refresh

Export to CSV

Open query

Assign tags

Filter for any field...

Subscription equals all

Resource group equals all

Location equals all

+ Add filter

No grouping



List view



Showing 0 to 0 of 0 records.

Name ↑↓

Status ↑↓

Version ↑↓

Resource bridge ↑↓

Custom location ↑↓

Tags



No VMware vCenters match your filters

Try changing or clearing your filters.

Clear filters

Learn more about VMware vCenter ↗

Give feedback

Overview

All Azure Arc resources

Management

Custom locations

Data controllers

Resource bridges (preview)

Service principals

Private link scopes

Infrastructure

Azure Arc virtual machines (preview)

Azure Stack HCI

Kubernetes clusters

Servers

SQL Servers

VMware vCenters (preview)

SCVMM management servers (preview)

Connect vCenter to Azure

Create a new resource bridge

Get started

Basics

Tags

Download and run script

Manage your VMware vCenter through an Azure Arc resource bridge

An Azure Arc resource bridge is an on-premises virtual machine that connects Azure to your vCenter. Once the bridge is deployed, you can use Azure Arc to manage your VMware infrastructure and deploy Azure services. To start, create a new resource bridge or select an existing one. [Learn more about Azure Arc resource bridge](#)



Create a new resource bridge

Generate a script that deploys a new resource bridge on-premises in the vCenter.



Use an existing resource bridge

If you already have a resource bridge that has network connectivity to your vCenter, select this option.

< Previous

Next : Basics >

Connect vCenter to Azure

...



Create a new resource bridge

[Get started](#) [Basics](#) [Tags](#) [Download and run script](#)

The information you enter below will be used to generate a script, which will connect your vCenter to Azure and create resources in Azure that represent your vCenter, custom location, and resource bridge.

Resource bridge

An Azure Arc resource bridge is a virtual machine that will be used to connect your vCenter to Azure. It'll run on-premises, but it'll be fully managed by Microsoft, including updates. Select the Azure region closest to your datacenter. This is where the Azure metadata for your VMware resources will be stored. [Learn more about resource bridge](#)

Name *	<input type="text" value="ahlvcsa7u3-arcbridge"/>
Subscription *	<input type="text" value="Microsoft Azure Sponsorship 2"/>
Resource group *	<input type="text" value="ArcVMwareRB-rg"/>
Region *	<input type="text" value="West Europe"/>
<p> The same region will be used for the custom location </p>	

Custom location

A custom location is an Azure resource that represents your vCenter deployment location. As part of the resource bridge creation process, we'll create a custom location that contains your vCenter resources. [Learn more about custom locations](#)

[< Previous](#) [Next : Tags >](#)

Custom location

A custom location is an Azure resource that represents your vCenter deployment location. As part of the resource bridge creation process, we'll create a custom location that contains your vCenter resources. [Learn more about custom locations](#)

Name *

Use the same subscription and resource group as your resource bridge

vCenter

An Azure resource will represent your vCenter in Azure.

vCenter name in Azure *

Use the same subscription and resource group as your resource bridge

[< Previous](#)[Next : Tags >](#)

Connect vCenter to Azure



Create a new resource bridge

Get started Basics **Tags** Download and run script

When the script deploys, three resources will be created in Azure: the resource bridge, custom location, and a resource to represent your vCenter. Assign Azure tags to these resources to manage and create custom views. [Learn more about tags](#)

Physical location tags

Start with these options for physical location types, change them to suit your needs, or create your own. If you have the value field blank for these three options, the tags won't be created.

Name ⓘ	Value ⓘ	Resource	
Datacenter	: AzureHybridLab	All resources	
City	: FRA	All resources	
StateOrDistrict	: HES	All resources	
CountryOrRegion	: GERMANY	All resources	
Platform	: VMware	All resources	
<input type="text"/>	<input type="text"/>	3 selected	

Custom tags

< Previous

Next : Download and run script >

Connect vCenter to Azure

Create a new resource bridge

Get started Basics Tags Download and run script

1. Register your subscription(s)

Register your subscription(s) before connecting your vCenter to Azure. You will need permissions to register a resource provider for the subscription. Click the register button or follow the link for the registration commands. [Learn more about registering a resource provider](#)

Register

Home >

Connect vCenter to Azure

Create a new resource bridge

Get started Basics Tags Download and run script

1. Register your subscription(s)

Register your subscription(s) before connecting your vCenter to Azure. You will need permissions to register a resource provider for the subscription. Click the register button or follow the link for the registration commands. [Learn more about registering a resource provider](#)

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Connect vCenter to Azure

Create a new resource bridge

Get started Basics Tags Download and run script

1. Register your subscription(s)

Register your subscription(s) before connecting your vCenter to Azure. You will need permissions to register a resource provider for the subscription. Click the register button or follow the link for the registration commands. [Learn more about registering a resource provider](#)

Register

✓ Successfully registered your subscription(s)

< Previous Close

Download script

2. Run the onboarding script

Open PowerShell on a local machine that has access to both vCenter and Azure, then enter the script below. As the script runs, you'll be asked for your Azure and vCenter credentials in addition to other onboarding details. [Learn more about connecting to Arc](#)

Windows Linux

```
[CmdletBinding()]
Param(
    [switch] $Force
)
# Start Region: Set user inputs
```

< Previous Close

Microsoft Azure Sponsorship 2 | Resource providers

Subscription

Search

Re-register Unregister Refresh Feedback

Partner information

Settings

Programmatic deployment

Resource groups

Resources

Preview features

Usage + quotas

Policies

Management certificates

My permissions

Resource providers

Deployments

Properties

Resource locks

Support + troubleshooting

New Support Request

Provider	Status
Microsoft.ResourceConnector	Registered
Microsoft.ChangeAnalysis	Registered
Microsoft.HybridConnectivity	Registered
Microsoft.EdgeOrder	Registered
Microsoft.App	Registered
Microsoft.ConnectedVMwareSphere	Registered
Dynatrace.Observability	Not Registered
GitHub.Network	Not Registered
Informatica.DataManagement	Not Registered
Microsoft.AAD	Not Registered
Microsoft.AadCustomSecurityAttributesDiagnosticSetting	Not Registered

Resource Provider Details

Microsoft.ConnectedVMwareSphere

Resource Types

Locations

Default API Version: None

API Versions

2023-03-01-preview

2022-07-15-preview

2022-01-10-preview

2020-10-01-preview

API Profiles

Capabilities

Locations

JSON

Registration to Arc for Azure VMware Solution feature set

The following **Register features** are for provider registration using Azure CLI.

Azure CLI

Copy

```
az provider register --namespace Microsoft.ConnectedVMwareSphere
az provider register --namespace Microsoft.ExtendedLocation
az provider register --namespace Microsoft.KubernetesConfiguration
az provider register --namespace Microsoft.ResourceConnector
az provider register --namespace Microsoft.AVS
```

Alternately, users can sign into their Subscription, navigate to the **Resource providers** tab, and register themselves on the resource providers mentioned previously.

[Deploy Arc for Azure VMware Solution \(Preview\) - Azure VMware Solution | Microsoft Learn](#)

Prepare for Arc Resource Bridge for VMware

- Prep/collect all information
- Min. 3x IP addresses
- Create VM Template with VMware tools
- Create VM Folders, for more structure
- Dedicated VM Folder for Arc VMs

A screenshot of the vSphere Client interface. The left sidebar shows navigation categories like Home, Inventory, Policies and Profiles, Auto Deploy, Hybrid Cloud Services, Developer Center, Administration, Tasks, Events, Tags & Custom Attributes, Lifecycle Manager, and Cloud Provider Services. The main pane shows the 'Datastores' tab for the 'ArcVMW-DC' datacenter. The 'Datastore Folders' tab is active, showing a list of existing folders: 'New Folder', 'Distributed Switch', and 'Storage'. A context menu is open over the 'Storage' folder, listing options: 'New Host and Cluster Folder...', 'New Network Folder...', 'New Storage Folder...', and 'New VM and Template Folder...'. The top navigation bar includes Summary, Monitor, Configure, Permissions, Hosts & Clusters, VMs, Datastores, Networks, and Updates.

Inputs for the script

A typical onboarding that uses the script takes 30 to 60 minutes. During the process, you're prompted for the following details:

Requirement	Details
Azure login	When you're prompted, go to the device sign-in page , enter the authorization code shown in the terminal, and sign in to Azure.
vCenter FQDN/Address	Enter the fully qualified domain name for the vCenter Server instance (or an IP address). For example: 10.160.0.1 or nyc-vcenter.contoso.com.
vCenter Username	Enter the username for the vSphere account. The required permissions for the account are listed in the prerequisites .
vCenter password	Enter the password for the vSphere account.
Data center selection	Select the name of the datacenter (as shown in the vSphere client) where the Azure Arc resource bridge VM should be deployed.
Network selection	Select the name of the virtual network or segment to which the Azure Arc resource bridge VM must be connected. This network should allow the appliance to communicate with vCenter Server and the Azure endpoints (or internet).
Static IP / DHCP	For deploying Azure Arc resource bridge, the preferred configuration is to use Static IP. Enter n to select static IP configuration. While not recommended, if you have DHCP server in your network and want to use it instead, enter y . If you are using a DHCP server, reserve the IP address assigned to the Azure Arc Resource Bridge VM (Appliance VM IP). If you use DHCP, the cluster configuration IP address still needs to be a static IP address. When you choose a static IP configuration, you're asked for the following information: <ol style="list-style-type: none">Static IP address prefix: Network address in CIDR notation. For example: 192.168.0.0/24.Static gateway: Gateway address. For example: 192.168.0.0.DNS servers: IP address(es) of DNS server(s) used by Azure Arc resource bridge VM for DNS resolution. Azure Arc resource bridge VM must be able to resolve external sites, like mcr.microsoft.com and the vCenter server.Start range IP: Minimum size of two available IP addresses is required. One IP address is for the Azure Arc resource bridge VM, and the other is reserved for upgrade scenarios. Provide the starting IP address of that range. Ensure the Start range IP has internet access.End range IP: Last IP address of the IP range requested in the previous field. Ensure the End range IP has internet access. 6. VLAN ID (optional)
Resource pool	Select the name of the resource pool to which the Azure Arc resource bridge VM will be deployed.
Data store	Select the name of the datastore to be used for the Azure Arc resource bridge VM.
Folder	Select the name of the vSphere VM and the template folder where the Azure Arc resource bridge's VM will be deployed.
VM template Name	Provide a name for the VM template that will be created in your vCenter Server instance based on the downloaded OVA file. For example: arc-appliance-template.
Control Plane IP address	Provide a static IP address that is outside the DHCP scope for virtual machines but in the same subnet. Ensure that this IP address isn't assigned to any other machine on the network. Azure Arc resource bridge (preview) runs a Kubernetes cluster, and its control plane requires a static IP address. Control Plane IP must have internet access.
Appliance proxy settings	Enter y if there's a proxy in your appliance network. Otherwise, enter n . You need to populate the following boxes when you have a proxy set up: <ol style="list-style-type: none">Http: Address of the HTTP proxy server.Https: Address of the HTTPS proxy server.NoProxy: Addresses to be excluded from the proxy. 4. CertificateFilePath: For SSL-based proxies, the path to the certificate to be used.

100

```
Create Config
Starting createconfig
cli.azure_arcappliance.telemetry_helpers: Custom telemetry: {'context.default.azurecli.applianceDeploymentId': '/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourcegroups/ArcVMware-rg/providers/microsoft.resourceconnector/appliances/ahlvcsa7u3-arcbridge-f28ee2c7-71cf-44e8-b0c0-b698064365a3', 'context.default.azurecli.provider': 'vmware', 'context.default.azurecli.portaltraceid': '00000000-0000-0000-0000-000000000000', 'context.default.azurecli.applianceTraceId': 'f28ee2c7-71cf-44e8-b0c0-b698064365a3', 'context.default.azurecli.applianceCommand': 'ArcApplianceOnCreateConfig', 'context.default.azurecli.currentdatetime': '2023-05-15T11:25:05Z', 'context.default.azurecli.userAzureSubscriptionId': 'b3bf1377-93c2-49be-a5cc-d09f00a519a4'}
Please enter vCenter FQDN/Address: VCENTER01.ahlazhci.local
Please enter vCenter username: administrator@VSPHERE.LOCAL
Please enter vCenter password:
Initializing chart values for provider: vsphere 2023-05-15T13:25:37+02:00      INFO     Client Created with vcenter url: VCENTER01.ahlazhci.local
2023-05-15T13:25:37+02:00      INFO     vsphereProvider: createConfigHelper

Please select datacenter:
1) /ArcVMW-Witness
2) /ArcVMW-DC
Enter number: 2
You Selected: /ArcVMW-DC

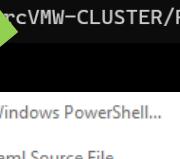
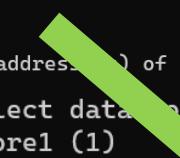
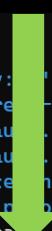
Please select network:
1) VM Network
2) StoragePorts
Enter number: 1
You Selected: VM Network
Do you want to configure Appliance for DHCP or Static IP deployment? Please select Y for DHCP and N for Static IP (y/n)?n
Please enter Static IP address prefix in CIDR format (ex: 192.168.7.1/24): 10.101.0.0/24
Please enter Static gateway: 10.101.0.254
Arc Resource Bridge must have DNS resolution for external sites and physical host. Please enter IP addresses ( ) of DNS server(s) to configure the DNS settings for Arc Resource Bridge as a comma separated list (ex: 127.0.0.1)
The virtual machine hosting Appliance requires an IP range (minimum size of 2 addresses) needed for Appliance upgrade). Please specify the start range IP:10.101.0.17
Please specify the end range IP:10.101.0.18

Please select resourcepool:
1) ArcVMW-CLUSTER/Resources (Complete path - /ArcVMW-DC/host/ArcVMW-CLUSTER/Resources)
2) ArcVMW-RB (Complete path - /ArcVMW-DC/host/ArcVMW-CLUSTER/Resources/ArcVMW-RB)
Enter number: 2
You Selected: ArcVMW-RB (Complete path - /ArcVMW-DC/host/ArcVMW-CLUSTER/Resources/ArcVMW-RB)

Please select datastore:
1) datastore1 (1)
2) datastore1 (2)
3) vsanDatastore
Enter number: 3
You Selected: vsanDatastore

Please select folder:
1) ahlvcsa7u3-arcbridge (Complete path - /ArcVMW-DC/vm/ahlvcsa7u3-arcbridge)
2) vCLS (Complete path - /ArcVMW-DC/vm/vCLS)
3) Discovered virtual machine (Complete path - /ArcVMW-DC/vm/Discovered virtual machine)
Enter number: 1
You Selected: ahlvcsa7u3-arcbridge (Complete path - /ArcVMW-DC/vm/ahlvcsa7u3-arcbridge)

Please provide Appliance cluster configuration
Please enter Appliance control plane IP: 10.101.0.16
Do you want to configure Appliance proxy settings? (y/n) n
```



Validating the appliance configuration...

Appliance configuration validation was successful

Validate

Creating the appliance

Preparing the appliance configuration...

```
{"file":"/mnt/vss/_work/1/s/pkg/appliance/client.go:268","func":"prepForKVA","level":"info": "ArcAppliancePrepare","time":"2023-05-15T13:28:39+02:00"}  
Initializing chart values for provider: vsphere 2023-05-15T13:28:39+02:00 INFO 0  
1.ahlazshci.local  
2023-05-15T13:28:39+02:00 INFO Performing provider validations  
2023-05-15T13:28:39+02:00 INFO vsphereProvider: Validate  
2023-05-15T13:28:39+02:00 INFO Testing vCenter compatibility  
2023-05-15T13:28:39+02:00 INFO Testing existence of vCenter entities and paths  
2023-05-15T13:28:39+02:00 INFO Testing requested network configuration  
2023-05-15T13:28:39+02:00 INFO Testing permissions and entity privileges  
2023-05-15T13:28:39+02:00 INFO Testing proxy settings  
2023-05-15T13:28:39+02:00 INFO Testing content delivery network connectivity
```

Prepare

2023-05-15T13:28:41+02:00	INFO	The discovered kubernetes version is v1.22.11	2023-05-15T13:36:43+02:00
2023-05-15T13:28:41+02:00	INFO	vSphereProvider: Image Client: Checking if a template	2023-05-15T13:36:43+02:00
2023-05-15T13:28:41+02:00	INFO	ProvisionImage: Discovering image download information	2023-05-15T13:36:43+02:00

2023-05-15T13:28:42+02:00 INFO ProvisionImage: Downloading and validating image

2023-05-15T13:37:16+02:00

2023-05-15T13:37:16+02:00

-v69701240.ova basename Linux-K8s-1.22.11-v69701240.ova 2023-05-15T13:38:13+02:00

2023-05-15T13:38:13+02:00

2023-05-15T13:29:59+02:00 INFO File: C:\Users\labadmin\AppData\Local\Temp\kva1056609(ed...

9(ed. . .

-v69701240.ova-companion.rpm basename Linux-K8s-1.22.11-v69701240.ova-companion.rpm 2023-05-15T13:38:13+02:00

2023-05-15T13:38:13+02:00

2023-05-15T13:30:14+02:00 INFO vsphereProvider: Image Client Provision: Deploying thrunning state...

running state... 2023-05-15T13:38:13+02:00

2023-05-15T13:32:48+02:00 INFO ImageProvision: vsphere: template Deployed. Creating | 2023-05-15T13:38:13+02:00 2023-05-15T13:38:13+02:00

2023-05-15T13:38:13+02:00

2023-05-15T13:32:49+02:00 INFO ImageProvision: VSphere: Image Provision is successful 2023-05-15T13:38:13+02:00

2023-05-15T13:38:13+02:00

Appliance configuration was prepared successfully 2023-05-15T13:39:26+02:00

2023-05-15T13:39:26+02:00

2023-05-15T13:39:26+02:00

2023-05-15T13:39:26+02:00

2023-05-15T13:39:26+02:00

Appliance creation was successful

Appliance creation was su

```
Appliance Status: Running
cli.azext_arcappliance.telemetry_helpers: Custom telemetry: {'context.default.azurecli.applianceDeploymentId': '/subscriptions/bf1377-93c2-49be-a5cc-d09f00a519a4/resourcegroups/ArcVMwareRB-rg/providers/microsoft.resourceconnector/appliances/ahlvcsa7u3-arnridge-f28ee2c7-71cf-44e8-b0c0-b698064365a3', 'context.default.azurecli.provider': 'vmware', 'context.default.azurecli.portalUrl': '00000000-0000-0000-000000000000', 'context.default.azurecli.applianceTraceId': 'f28ee2c7-71cf-44e8-b0c0-b698064365a3', 'context.default.azurecli.applianceCommand': 'ArcApplianceRunning', 'context.default.azurecli.currentTime': '2023-05-15T11:5:43Z', 'context.default.azurecli.userAzureSubscriptionId': 'b3bf1377-93c2-49be-a5cc-d09f00a519a4', 'context.default.azurecli.applianceMetadata': '{"proxyConfig": "noproxy", "networkType": "static", "applianceVM": {"numCpus": "4", "memoryMib": "16384", "diskSizeGib": "25"}}}'
cli.azext_arcappliance.custom: TraceId in infraData is: f28ee2c7-71cf-44e8-b0c0-b698064365a3
cli.knack.cli: Event: CommandInvoker.OnTransformResult [<function _resource_group_transform at 0x00000209A6661DC0>, <function _09_from_base64_to_hex_transform at 0x00000209A6661E50>]
cli.knack.cli: Event: CommandInvoker.OnFilterResult []
cli.knack.cli: Event: Cli.SuccessfulExecute []
cli.knack.cli: Event: Cli.PostExecute [<function AzCliLogging.deinit_cmd_metadata_logging at 0x00000209A6629F70>]
az_command_data_logger: exit code: 0
cli.__main__: Command ran in 1252.355 seconds (init: 0.397, invoke: 1251.958)
telemetry.main: Begin splitting cli events and extra events, total events: 1
telemetry.client: Accumulated 0 events. Flush the clients.
telemetry.main: Finish splitting cli events and extra events, cli events: 1
telemetry.save: Save telemetry record of length 11721 in cache
telemetry.check: Returns Positive.
telemetry.main: Begin creating telemetry upload process.
telemetry.process: Creating upload process: "C:\Users\labadmin\Documents\.temp\.env\Scripts\python.exe C:\Users\labadmin\Documents\.temp\.env\Lib\site-packages\azure\cli\telemetry\__init__.py C:\Users\labadmin\.azure"
telemetry.process: Return from creating process
telemetry.main: Finish creating telemetry upload process.
Waiting for the appliance to be ready...
```

Step 2/5: Arc resource bridge is up and running

0-0 Home > Azure Arc | Resource bridges (preview)

 ahlvcsa7u3-arcbridge ⚡ ☆ ...

Resource bridge | PREVIEW

Search Refresh Delete

Overview Activity log Access control (IAM) Tags

Settings Properties Locks

Management Custom locations

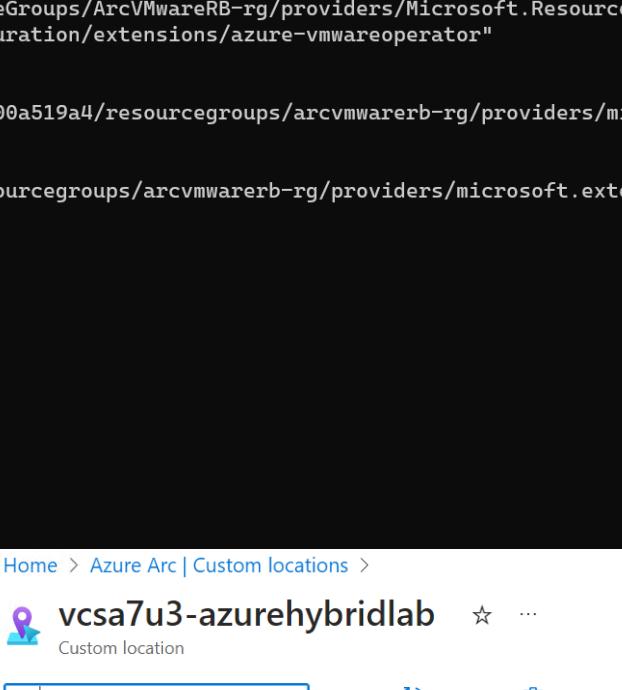
Essentials

Resource group ([move](#)) : [arcvmwarerb-rg](#) Name : ahlvcsa7u3-arcbridge
Location : West Europe Status : Running
Subscription ([move](#)) : [Microsoft Azure Sponsorship_2](#) Operating system : Linux
Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4 Version : 1.0.12
Host environment : VMWare

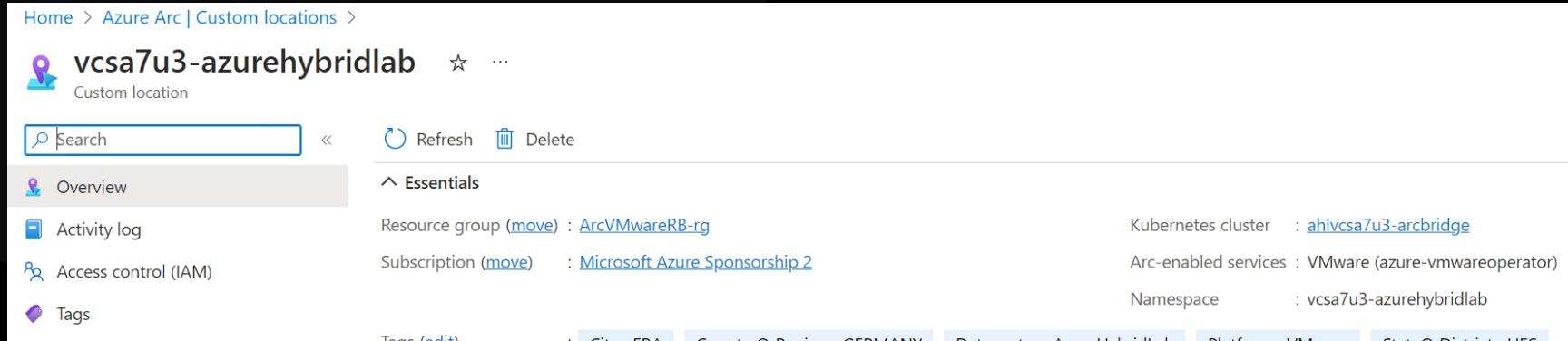
Tags ([edit](#)) : City : FRA CountryOrRegion : GERMANY Datacenter : AzureHybridLab Platform : VMWare StateOrDistrict : HES

Step 3/5: Cluster extension installed successfully

```
{ "authentication": { "type": null, "value": null }, "clusterExtensionIds": [ "/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/ArcVMwareRB-rg/providers/Microsoft.ResourceConnector/ap iances/ahlvcsa7u3-arcbridge/providers/Microsoft.KubernetesConfiguration/extensions/azure-vmwareoperator" ], "displayName": "vcsa7u3-azurehybridlab", "hostResourceId": "/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourcegroups/arcvmwarerb-rg/providers/microsoft.reso ceconnector/appliances/ahlvcsa7u3-arcbridge", "hostType": "Kubernetes", "id": "/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourcegroups/arcvmwarerb-rg/providers/microsoft.extendedlocation ustomlocations/vcsa7u3-azurehybridlab", "identity": null, "location": "westeurope", "name": "vcsa7u3-azurehybridlab", "namespace": "vcsa7u3-azurehybridlab", "provisioningState": "Succeeded", "resourceGroup": "arcvmwarerb-rg", "systemData": { "createdAt": "2023-05-15T11:48:48.367575+00:00", "createdBy": "alexor@hybridmsftalexor.onmicrosoft.com", "createdByType": "User", "lastModifiedAt": "2023-05-15T11:48:48.367575+00:00", "lastModifiedBy": "alexor@hybridmsftalexor.onmicrosoft.com", "lastModifiedByType": "User" }, "tags": { "City": "FRA", "CountryOrRegion": "GERMANY", "Datacenter": "AzureHybridLab", "Platform": "VMware", "StateOrDistrict": "HES" }, "type": "Microsoft.ExtendedLocation/customLocations" }
```



The screenshot shows the Azure Arc Custom Locations blade. At the top, there's a breadcrumb navigation: Home > Azure Arc | Custom locations. Below it, a card displays the details for the custom location 'vcsa7u3-azurehybridlab'. The card includes a location pin icon, the location name, and a 'Custom location' label. To the right of the card are three buttons: 'Search' (with a magnifying glass icon), 'Refresh' (with a circular arrow icon), and 'Delete' (with a trash bin icon). Below the card, there are two tabs: 'Overview' (which is currently selected) and 'Activity log'. At the bottom right, there's a note: 'Resource group (move) : ArcVMwareRB-rg'.





Azure Arc | VMware vCenters (preview)

Microsoft | PREVIEW

[Add](#)[Manage view](#)[Refresh](#)[Export to CSV](#)[Open query](#)[Assign tags](#)[Filter for any field...](#)

Subscription equals all

Resource group equals all

Location equals all

[Add filter](#)

No grouping

[List view](#)

Showing 1 to 1 of 1 records.

[Name ↑↓](#)[Status ↑↓](#)[Version ↑↓](#)[Resource bridge ↑↓](#)[Custom location ↑↓](#)[Tags](#)

Connected

7.0.3

ahlvcsa7u3-arcbridge

vcsa7u3-azurehybridlab

CountryOrRegion: GER...

[Home > Azure Arc | VMware vCenters \(preview\) >](#)

VMware vCenter

[Refresh](#)[Remove from Azure](#)[X](#)[JSON View](#)[Overview](#)[Activity log](#)[Access control \(IAM\)](#)[Tags](#)[Settings](#)[Properties](#)[Locks](#)[vCenter inventory](#)[Virtual machines](#)[Resource pools/clusters/hosts](#)[Templates](#)[Networks](#)[Datastores](#)[Automation](#)[Tasks \(preview\)](#)[Refresh](#)[Remove from Azure](#)[Essentials](#)Resource group ([move](#)) : ArcVMwareRB-rg

vCenter name : ahlvcsa7u3

Status : Connected

vCenter FQDN : VCENTER01.ahlazhci.local

Location ([move](#)) : West Europe

vSphere version : 7.0.3

Subscription ([move](#)) : Microsoft Azure Sponsorship 2

Custom location : vcsa7u3-azurehybridlab

Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4

Azure Arc Resource bridge : ahlvcsa7u3-arcbridge

Tags ([edit](#))[Datacenter : AzureHybridLab](#)[City : FRA](#)[StateOrDistrict : HES](#)[CountryOrRegion : GERMANY](#)[Platform : VMware](#)

Manage your VMware vCenter

You can now see your vCenter resources in Azure. When you enable them to Azure and assign permissions, you can use them for creating new VMware virtual machines. [Learn more about managing your VMware vCenter](#)



1. Enable vCenter inventory in Azure

Select the virtual machines and other resources you want to enable in Azure.

[Learn more](#)[View vCenter VMs](#)

2. View all virtual machines

After you have enabled your vCenter VMs, they will show up as a resource in Azure.

[Learn more](#)[View all VMs](#)

ahlvcsa7u3 | Virtual machines

VMware vCenter



Search

«



Add



Refresh



Enable in Azure



Remove from Azure



Enable guest management

Overview

Activity log

Access control (IAM)

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Properties

Locks

vCenter inventory

Virtual machines

Resource pools/clusters/hosts

Templates

Networks

Datastores

Automation

Before you can set permissions for these resources, you will need to enable them in Azure. You can see the resources that we discovered on-prem that have not been enabled yet. [Learn more](#)



Search



Add filter

Showing 1 to 8 of 8 records.

Items per page

10

<input type="checkbox"/>	Name ↑	Azure enabled ↑	Guest management enabled ↑	Status ↑	VMware tools ↑	IP address	Host ↑
<input type="checkbox"/>	vcsa-7U3	No	No	poweredOn	Running, Version...	10.101.0.14	
<input type="checkbox"/>	vCLS-086ec1cf-db8e-4c...	No	No	poweredOn	Running, Version...		
<input type="checkbox"/>	vSAN-Witness01	No	No	poweredOn	Running, Version...	10.101.0.15, fe80:...	
<input type="checkbox"/>	vCLS-fff93c2f-c049-4db...	No	No	poweredOn	Running, Version...		
<input type="checkbox"/>	WS2022-Template	No	No	poweredOff	Not running, Ver...		
<input type="checkbox"/>	ArcVMWDemoVM01	No	No	poweredOn	Running, Version...	fe80::1b08:72b3:...	
<input type="checkbox"/>	ArcVMWDemoVM02	No	No	poweredOn	Running, Version...	fe80::6015:4e13:f...	
<input type="checkbox"/>	1847ed14faac6ac91a86...	No	No	poweredOn	Running, Version...	10.101.0.17, 10.1...	

ahlvcsa7u3 | Resource pools/clusters/hosts



...

VMware vCenter



Search



Refresh



Enable in Azure



Remove from Azure



Overview



Activity log



Access control (IAM)



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Properties



Locks

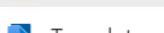
vCenter inventory



Virtual machines



Resource pools/clusters/hosts



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Networks



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Automation



Tasks (preview)



Before you can set permissions for these resources, you will need to enable them in Azure. You can see the resources that we discovered on-prem that have not been enabled yet. [Learn more ↗](#)



Search



Add filter

Showing 1 to 10 of 10 records.

Items per page

100

<input type="checkbox"/>	Name ↑	Type ↑	Azure enabled ↑	Parent ↑	Resource group ↑
<input type="checkbox"/>	ArcVMW-CLUSTER	Cluster	No		
<input type="checkbox"/>	ahlvmwhost03.ahlazshci.local	Host	No		
<input type="checkbox"/>	ahlvmwhost01.ahlazshci.local	Host	No	ArcVMW-CLUSTER	
<input type="checkbox"/>	ahlvmwhost02.ahlazshci.local	Host	No	ArcVMW-CLUSTER	
<input type="checkbox"/>	vsan-witness01.ahlazshci.local	Host	No		
<input type="checkbox"/>	Resources	ResourcePool	No	ArcVMW-CLUSTER	
<input type="checkbox"/>	Resources	ResourcePool	No	vsan-witness01.ahlazshci.l...	
<input type="checkbox"/>	ArcVMW-RB	ResourcePool	No	Resources	
<input type="checkbox"/>	ArcVMW-VMs	ResourcePool	No	Resources	
<input type="checkbox"/>	Resources	ResourcePool	No	ahlvmwhost03.ahlazshci.lo...	

ahlvcsa7u3 | Templates

VMware vCenter



Refresh

Enable in Azure



Remove from Azure

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Before you can set permissions for these resources, you will need to enable them in Azure. You can see the resources that we discovered on-prem that have not been enabled yet. [Learn more](#)

Add filter

Showing 1 to 3 of 3 records.

Items per page 100

<input type="checkbox"/>	Name ↑↓	Azure enabled ↑↓	VMware tools ↑↓	OS type ↑↓	Image ↑↓	RAM (MB) ↑↓	Resource group
<input type="checkbox"/>	WS2019-Template	No	Version: 12...	Windows	Microsoft Windo...	8192	
<input type="checkbox"/>	WS2022-Template-ArcVMW	No	Version: 12...	Windows	Microsoft Windo...	8192	
<input type="checkbox"/>	template-appliance-0.1.17.10315-v1.22.11	No	Not installed	Linux	Other 4.x or later...	16384	

ahlvcsa7u3 | Networks

VMware vCenter



Search



Refresh



Enable in Azure



Remove from Azure



Overview



Activity log



Access control (IAM)



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Properties



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Templates



Networks

Before you can set permissions for these resources, you will need to enable them in Azure. You can see the resources that we discovered on-prem that have not been enabled yet. [Learn more](#)



Search



Add filter

Showing 1 to 4 of 4 records.

Items per page

100

<input type="checkbox"/> Name ↑	Azure enabled ↑	Resource group ↑
<input type="checkbox"/> StoragePorts	No	
<input type="checkbox"/> VM Network	No	
<input type="checkbox"/> VM Network	No	
<input type="checkbox"/> StoragePorts	No	

ahlvcsa7u3 | Datastores

VMware vCenter



Search



Refresh

Enable in Azure



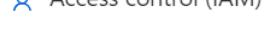
Remove from Azure



Overview



Activity log



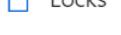
Access control (IAM)



Settings



Properties



Locks

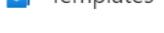
vCenter inventory



Virtual machines



Resource pools/clusters/hosts



Templates



Networks



Datastores

Before you can set permissions for these resources, you will need to enable them in Azure. You can see the resources that we discovered on-prem that have not been enabled yet. [Learn more](#)



Search



Add filter

Showing 1 to 4 of 4 records.

Items per page

100

<input type="checkbox"/>	Name ↑	Azure enabled ↑	Resource group ↑
<input type="checkbox"/>	datastore1 (1)	No	
<input type="checkbox"/>	datastore1 (2)	No	
<input type="checkbox"/>	vsanDatastore	No	
<input type="checkbox"/>	datastore1	No	

Create an Azure Arc virtual machine

Basics Disks Networking Tags [Review + create](#)

Basics

Subscription	Microsoft Azure Sponsorship 2
Resource group	ArcVMware-rg
Virtual machine name	demogbb
Custom location	vcsa7u3-azurehybridlab (West Europe)
Virtual machine kind	VMware
Resource pool/cluster/host	ArcVMW-VMs
Datastore	vsanDatastore
Guest management	Enabled
Username	Administrator
Operating system	Windows Microsoft Windows Server 2016 or later (64-bit)

Template details

Template	WS2022-Template-ArcVMW
CPU cores	2
Memory	8.192 MB

Disks

Disk count	1
------------	---

Networking

Network interface count	1
-------------------------	---

Tags

[Create](#)

< Previous

[Download a template for automation](#)

```
PS C:\Users\alexor> azcmagent show
Resource Name : demovm01rbhci
Resource Group Name : RG-ArcServers
Resource Namespace : Microsoft.HybridCompute
Resource Id : /subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/RG-ArcServers/providers/Microsoft.HybridCompute/machines/demovm01rbhci
Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4
Tenant ID : 8eba9bd3-35fb-418d-ab86-fe070cb755fe
VM ID : 94558a8c-291a-4034-b1c5-f3b60db9eef8
Correlation ID : df9d9c0c-2649-4be3-a3eb-f86ddefc2006
VM UUID : F951BD45-F039-4AAF-9618-3025E04FC1A7
Location : westeurope
Cloud : AzureCloud
Agent Version : 1.29.02286.915
Agent Logfile : C:\ProgramData\AzureConnectedMachineAgent\Log\himds.log
Agent Status : Connected
Agent Last Heartbeat : 2023-05-05T19:56:45Z
Agent Error Code :
Agent Error Details :
Agent Error Timestamp :
Using HTTPS Proxy :
Proxy Bypass List :
Cloud Provider : N/A
Cloud Metadata :
Manufacturer : Microsoft Corporation
Model : Virtual Machine
MSSQL Server Detected : false
Dependent Service Status
  GC Service (gcarservice) : running
  Extension Service (extensionservice) : running
  Agent Service (himds) : running
Portal Page : https://portal.azure.com/#@8eba9bd3-35fb-418d-ab86-fe070cb755fe/resource/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/RG-ArcServers/providers/Microsoft.HybridCompute/machines/demovm01rbhci/overview
PS C:\Users\alexor>
```

Azure Arc enabled Server

```
PS C:\Users\alexor> azcmagent show
Resource Name : demovm04rbhci-42201c2c-d9da-4625-ad69-614e4975b8d5
Resource Group Name : RG-ArcBridge
Resource Namespace : Microsoft.AzureStackHCI
Resource Id : /subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/RG-ArcBridge/providers/Microsoft.AzureStackHCI/virtualMachines/demovm04rbhci-42201c2c-d9da-4625-ad69-614e4975b8d5
Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4
Tenant ID : 8eba9bd3-35fb-418d-ab86-fe070cb755fe
VM ID : 495b4ec2-eb7a-11ed-b422-026700bc56b6
Correlation ID : eaf7d597-274e-4dfc-9f48-00a218037acb
VM UUID : A20DA724-A59F-4634-9477-26956673ACF5
Location : westeurope
Cloud : AzureCloud
Agent Version : 1.29.02286.915
Agent Logfile : C:\ProgramData\AzureConnectedMachineAgent\Log\himds.log
Agent Status : Connected
Agent Last Heartbeat : 2023-05-05T19:32:03Z
Agent Error Code :
Agent Error Details :
Agent Error Timestamp :
Using HTTPS Proxy :
Proxy Bypass List :
Cloud Provider : N/A
Cloud Metadata :
Manufacturer : Microsoft Corporation
Model : Virtual Machine
MSSQL Server Detected : false
Dependent Service Status
  GC Service (gcarcservice) : running
  Extension Service (extensionservice) : running
  Agent Service (himds) : running
Portal Page : https://portal.azure.com/#@8eba9bd3-35fb-418d-ab86-fe070cb755fe/resource/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/RG-ArcBridge/providers/Microsoft.HybridCompute/machines/demovm04rbhci-42201c2c-d9da-4625-ad69-614e4975b8d5/overview
```

Azure Arc enabled VM
for ASHCI

```
PS C:\Users\Administrator> azcmagent show
Resource Name : ArcVMWDemoVM03
Resource Group Name : ArcVMware-rg
Resource Namespace : Microsoft.ConnectedVMwarevSphere
Resource Id : /subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/ArcVMware-rg/providers/Microsoft.ConnectedVMwarevSphere/virtualMachines/ArcVMWDemoVM03
Subscription ID : b3bf1377-93c2-49be-a5cc-d09f00a519a4
Tenant ID : 8eba9bd3-35fb-418d-ab86-fe070cb755fe
VM ID : 9e6ff1d1-9e01-4b0e-a399-c8bf11a5f3c9
Correlation ID : 553e7a72-8b65-4869-98a7-a69a1468f31d
VM UUID : 4B6A2242-64E1-C69B-B56B-9A83E25FBF4C
Location : westeurope
Cloud : azurecloud
Agent Version : 1.30.02313.988
Agent Logfile : C:\ProgramData\AzureConnectedMachineAgent\Log\himds.log
Agent Status : Connected
Agent Last Heartbeat : 2023-05-15T17:26:22+02:00
Agent Error Code :
Agent Error Details :
Agent Error Timestamp :
Using HTTPS Proxy :
Proxy Bypass List :
Cloud Provider :
Cloud Metadata :
Manufacturer : VMware, Inc.
Model : VMware7,1
MSSQL Server Detected : false
Dependent Service Status :
  GC Service (gcarservice) : running
  Extension Service (extensionservice) : running
  Agent Service (himds) : running
Portal Page : https://portal.azure.com/#@8eba9bd3-35fb-418d-ab86-fe070cb755fe/resource/subscriptions/b3bf1377-93c2-49be-a5cc-d09f00a519a4/resourceGroups/ArcVMware-rg/providers/Microsoft.HybridCompute/machines/ArcVMWDemoVM03/overview
PS C:\Users\Administrator>
```

Azure Arc enabled VM
for VMware

az connectedvmware

Reference

[Feedback](#)

ⓘ Note

This reference is part of the **connectedvmware** extension for the Azure CLI (version 2.0.67 or higher). The extension will automatically install the first time you run an **az connectedvmware** command. [Learn more about extensions.](#)

Commands to manage Connected VMware.

Commands

az connectedvmware cluster	Cluster resource.
az connectedvmware cluster create	Create a cluster resource.
az connectedvmware cluster delete	Delete cluster resource.
az connectedvmware cluster list	Retrieve a list of cluster of given resource group.
az connectedvmware cluster show	Get details of a cluster by id, resource-group, cluster name, or subscription.
az connectedvmware datastore	Datastore resource.
az connectedvmware datastore create	Create a datastore resource.
az connectedvmware datastore delete	Delete datastore resource.
az connectedvmware datastore list	Retrieve a list of datastore of given resource group.
az connectedvmware datastore show	Get details of a datastore by id, resource-group, datastore name, or subscription.
az connectedvmware host	Host resource.
az connectedvmware host create	Create a host resource.
az connectedvmware host delete	Delete host resource.
az connectedvmware host list	Retrieve a list of host of given resource group.
az connectedvmware host show	Get details of a host by id, resource-group, host name, or subscription.
az connectedvmware resource-pool	Resource pool resource.

[az connectedvmware | Microsoft Learn](#)

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Microsoft.ConnectedVMwarevSphere clusters

Article • 04/10/2023 • 1 contributor

Feedback

Choose a deployment language

Bicep **ARM template** Terraform

API Versions: **Latest** ▾

ARM template resource definition

The clusters resource type can be deployed with operations that target:

- **Resource groups** - See [resource group deployment commands](#)

For a list of changed properties in each API version, see [change log](#).

Resource format

To create a Microsoft.ConnectedVMwarevSphere/clusters resource, add the following JSON to your template.

JSON

Copy

```
{  
  "type": "Microsoft.ConnectedVMwarevSphere/clusters",  
  "apiVersion": "2022-07-15-preview",  
  "name": "string",  
  "location": "string",  
  "tags": {  
    "tagName1": "tagValue1",  
    "tagName2": "tagValue2"  
  }  
}
```

[Microsoft.ConnectedVMwarevSphere/clusters - Bicep, ARM template & Terraform AzAPI reference | Microsoft Learn](#)

[Manage access to VMware resources through Azure Role-Based Access Control - Azure Arc | Microsoft Learn](#)

Manage access to VMware resources through Azure Role-Based Access Control

Article • 05/06/2023 • 4 contributors

Feedback

In this article

- [Arc-enabled VMware vSphere built-in roles](#)
- [Assigning the roles to users/groups](#)
- [Next steps](#)

Once your VMware vCenter resources have been enabled in Azure, the final step in setting up a self-service experience for your teams is to provide them access. This article describes how to use built-in roles to manage granular access to VMware resources through Azure and allow your teams to deploy and manage VMs.

Arc-enabled VMware vSphere built-in roles

There are three built-in roles to meet your access control requirements. You can apply these roles to a whole subscription, resource group, or a single resource.

- [Azure Arc VMware Administrator role](#) - used by administrators
- [Azure Arc VMware Private Cloud User role](#) - used by anyone who needs to deploy and manage VMs
- [Azure Arc VMware VM Contributor role](#) - used by anyone who needs to deploy and manage VMs

Azure Arc VMware Administrator role

The **Azure Arc VMware Administrator** role is a built-in role that provides permissions to perform all possible operations for the `Microsoft.ConnectedVmwarevSphere` resource provider. Assign this role to users or groups that are administrators managing Azure Arc-enabled VMware vSphere deployment.

Azure Arc VMware Private Cloud User role

The **Azure Arc VMware Private Cloud User** role is a built-in role that provides permissions to use the VMware vSphere resources made accessible through Azure. Assign this role to any users or groups that need to deploy, update, or delete VMs.

We recommend assigning this role at the individual resource pool (or host or cluster), virtual network, or template with which you want the user to deploy VMs.

Azure Arc VMware VM Contributor



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Azure Stack HCI
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Hybrid Show



Nächster Termin am 26.05.2023 um 14:00 Uhr

Hybrid Workshop

Dreitägiger technischer Live-Demo Workshop

13.06.2023 – 15.06.2023

Zweck:

Der Weg in die Cloud ist nicht schwarz-weiß. Nicht alle Workloads passen in die Public Cloud, aber einige Workloads ergeben in einer On-Premises Landschaft keinen Sinn. Daher läuft es in vielen Umgebungen auf eine hybride Infrastruktur hinaus. Doch wie fängt man eine solche Implementierung eigentlich an? Welche Voraussetzungen gilt es zu klären? Wie funktioniert das alles? Ziel dieses Workshops ist es, diese Fragen zu klären und darüber hinaus am praktischen Beispiel die Konfiguration live zu zeigen.

Zielgruppe:

Dieser Workshop richtet sich an alle, die den Weg in die Hybrid Cloud wagen und vom umfangreichen Know-How von Manfred Helber und Eric Berg profitieren wollen.

Durchführung:

Der Workshop wird von den beiden Hybrid Cloud Experten und Microsoft Most Valuable Professionals (MVP) Manfred Helber und Eric Berg durchgeführt – Remote und in deutscher Sprache, inkl. vieler Live-Demos



Ergebnis:

Ziel des Workshops ist es, den Teilnehmenden den Einstieg in die Hybrid Cloud zu ermöglichen. Konzepte sollen verstanden, Services richtig eingeplant werden, unterstützt durch die vielen Live-Demos und umfangreichen Praxistipps der beiden Referenten.

Voraussetzung:

Teilnehmende sollten fundierte Grundkenntnisse im Bereich des Infrastrukturmangements und ein Grundverständnis von Cloud Computing mitbringen.

Wir informieren Sie gerne: anfrage@manfredhelber.de

Manfred Helber

Eric Berg



<https://www.manfredhelber.de/hybrid-workshop/>



Vielen Dank!

Die Azure Arc Show



Manfred Helber



Alexander Ortha



Nächster Termin:

05.06.2023 um 15:00 Uhr



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