VMUG usercon

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Bringing VMware VMs & vCenter into Azure Arc with PowerCLI and Cloud Shell



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Mike Nelson

- Wisconsin VMUG Co-Leader
- 35+ years in tech
- Technical Evangelist @ Pure Storage
- Experience from Helpdesk to Architect
- Scripter, not a coder
- Passion for community, teaching, learning
- Beer, BBQ, & Gadgets

















Hey ChatGPT! "Why would I want to host my VMware vCenter server in Microsoft Azure Arc?"

Hosting your VMware vCenter serve

1. Simplified Management: Azure Ar from a single pane of glass.

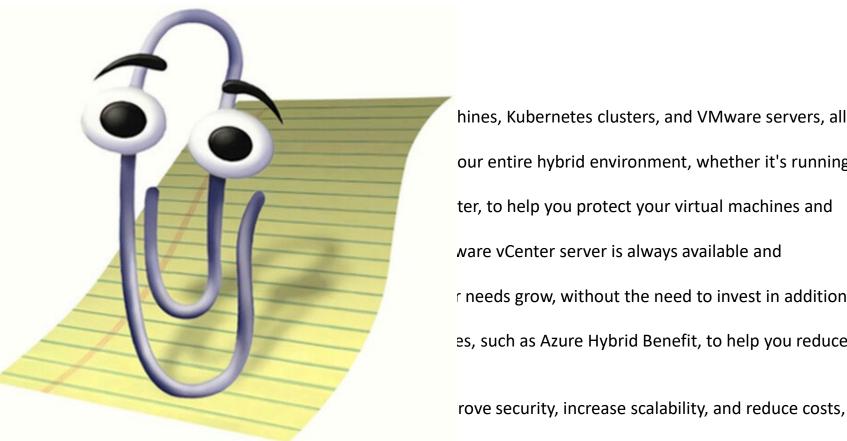
2. Consistent Operations: With Azur in Azure, on-premises, or in other cl 3. Improved Security: Azure Arc prov VMware servers against threats.

4. High Availability: Azure Arc provid responsive.

5. Scalability: Azure Arc enables you hardware or infrastructure.

6.Cost Optimization: Azure Arc allov the cost of running your VMware v(

Overall, hosting your VMware vCen all while maintaining the flexibility a



hines, Kubernetes clusters, and VMware servers, all our entire hybrid environment, whether it's running ter, to help you protect your virtual machines and ware vCenter server is always available and r needs grow, without the need to invest in additional es, such as Azure Hybrid Benefit, to help you reduce

Azure Arc-enabled VMware vSphere

Provision and Manage VMware VMs from Azure using Azure Arc

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

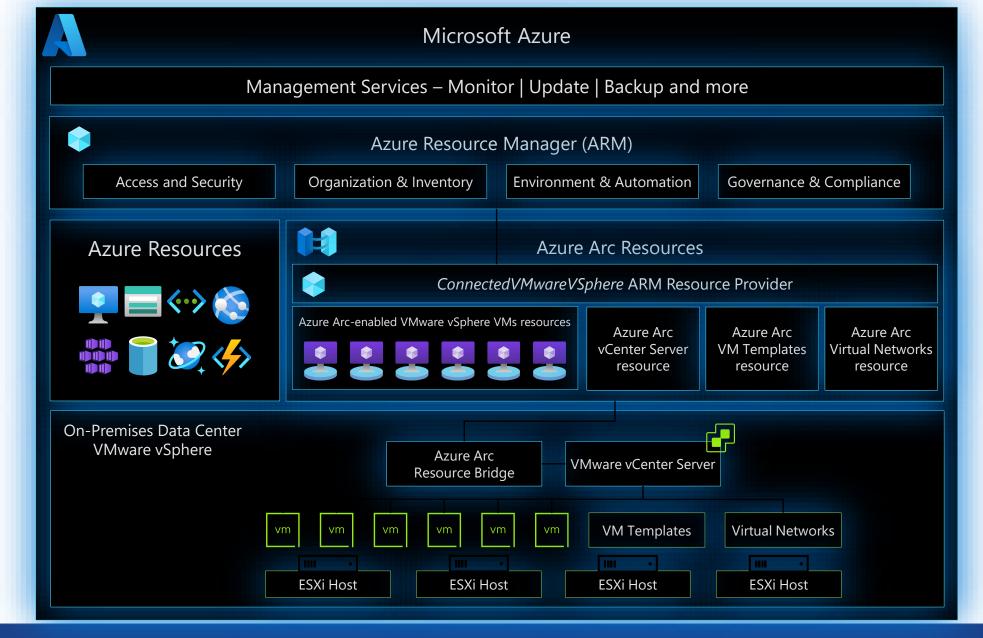


VMware vSphere environments hosted in your datacenter or on Azure VMware Solutions

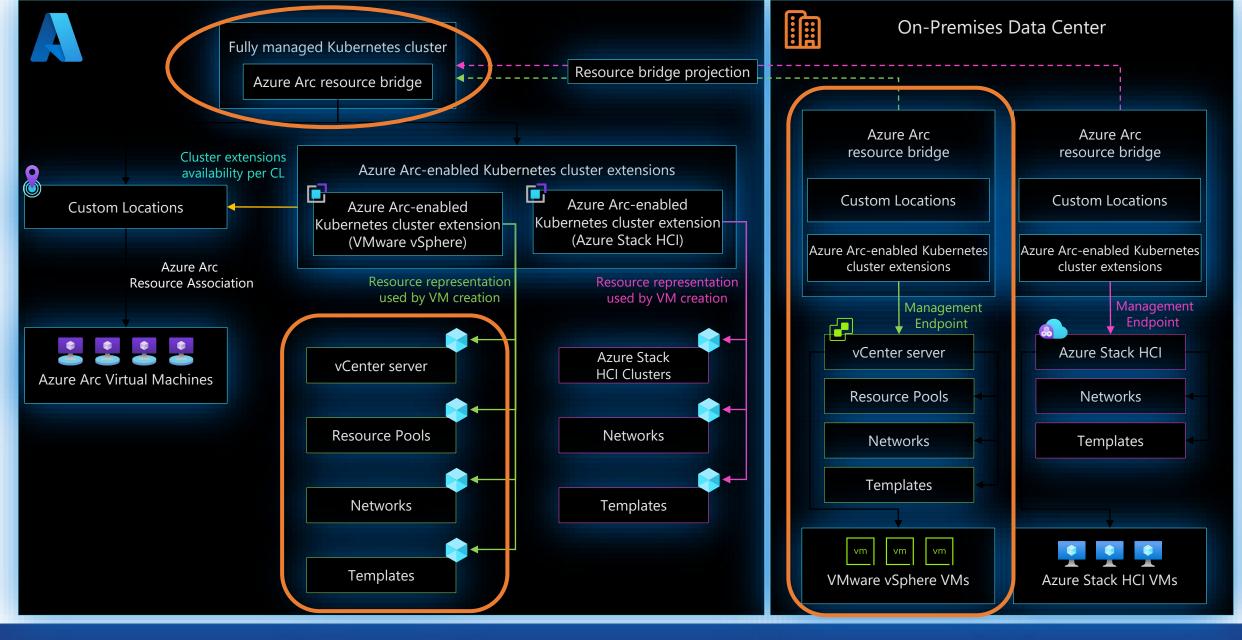














Azure Arc-enabled services On-premises and multicloud integration



Azure Arc Jumpstart

- Founded in 2020
 <u>Provide a automated "zero to hero" scenarios</u> environments and deployment types.
- Create a "supermarket" experience by being able to take "off the shelf" scenarios and deploy it.
- Meeting Azure Arc customers and partners where they are!
- Open source, community-driven
- Agile, "startup-like" team.

<u>Jumpstart ArcBox</u> is a sandbox environment that allows users to explore all the major capabilities of Azure

<u>Jumpstart HCIBox</u> is a sandbox environment that allows users to explore all the major capabilities of Azure Stack HCI in a click of a button.

Ready to go technical demos on YouTube.

Open-Source diagrams

<u>Jumpstart Lighting</u> is a show where people come to share their Azure Arc and Hybrid Cloud stories (1K + subscribers).











Requirements & Pre-requisites

VMware

Azure

Resource Bridge

- User with Read All Inventory, Deploy, & Update VMs permissions

 Azure subscription with Microsoft.AVS preview enabled

 Service Principal with "Contributor" role (could be more restrictive if needed). Will "normal" AAD ID work?
- A Linux or Windows VM (small footprint = OK) Cluster Resource pool with 16GB memory & 4 vCPUs(?) & external switch internet access HTTPS w/TLS via 443/tcp & (almost) all outbound Proxy use requires whitelisted Azure URLs IPv4 addresses – 1 not in DHCP range + 3 if static



PowerShell, PowerCLI, and the UI?

PowerCLI is just used to setup the vCenter Resource Group. Not much else besides what it is usually is used for (ie. creating VMs, datastores, etc.)

Everything that can be done in Azure can be done via PowerShell and/or the Az CLI. 98% of what needs to be done has to be done in PowerShell/Az CLI and/or the Portal.

The Portal is the easiest?? Depends on who you're talking to.

Azure AZ CLI & PowerCLI Commands

Thank you!













