

22. – 24.
september
2025



NT30
KONF



When/how can Azure Arc be free?

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Architect, Consultant, Trainer



WE APPRECIATE **YOUR FEEDBACK**,
AND IT MAKES US BETTER EACH YEAR.

YOU CAN COLLECT ADDITIONAL **NT COINS**
BY FILLING OUT THE QUESTOINNAIRES.

THEN VISIT **GEEK BOUTIQUE** AND
SPEND NT COINS ON COOL GIVEAWAYS.





Intro

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Agenda

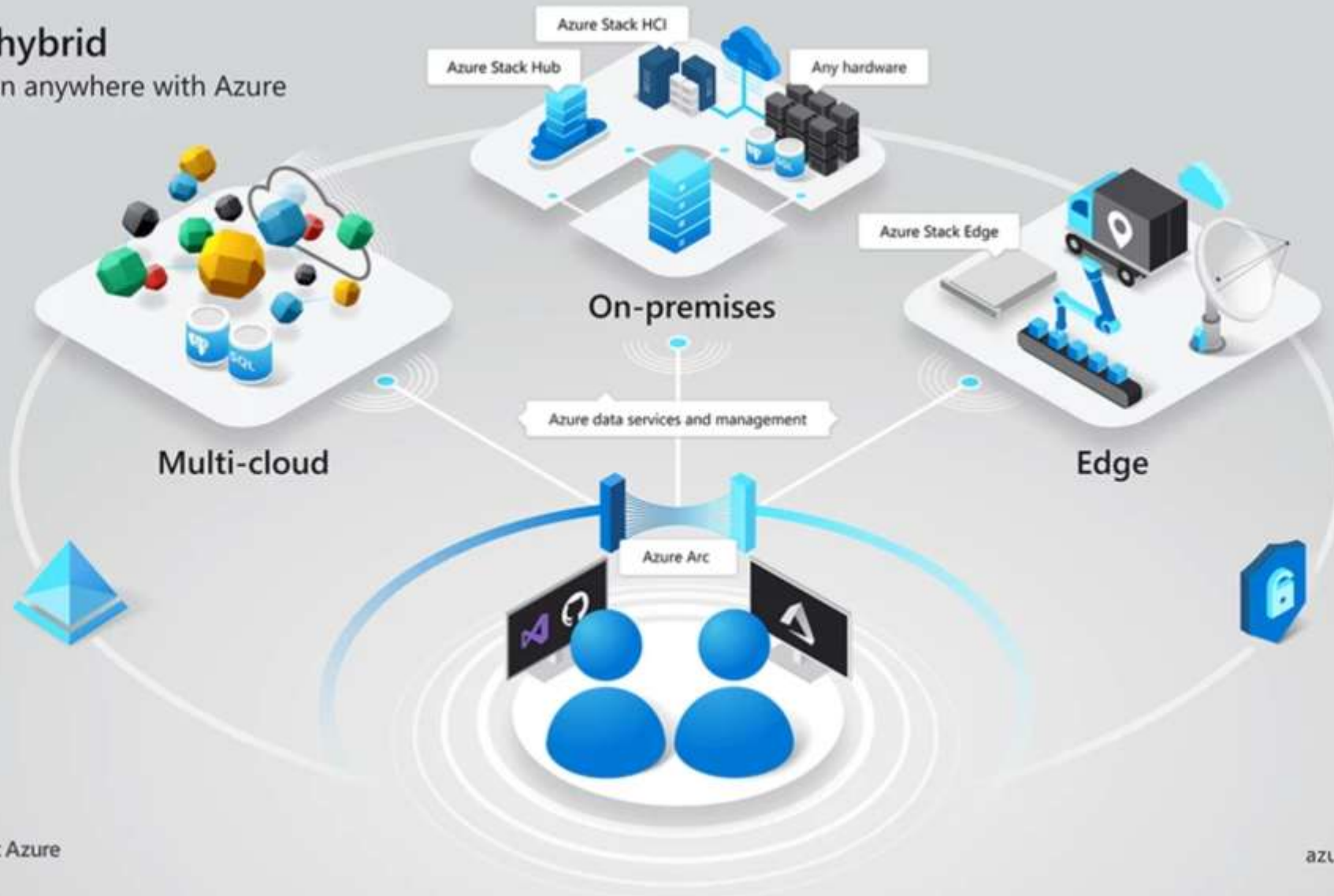
- Hybrid Cloud Management
- Introduction to Azure Arc
- Security and Compliance with Azure Arc
- Deployment and configuration
- Demo
- ArcBox



Hybrid Environments

Azure hybrid

Innovation anywhere with Azure



What & Why



Key Features and Capabilities



- Resource Management
 - Azure Arc enables efficient resource management across diverse environments, simplifying operations and maximizing efficiency.
- Policy Enforcement
 - With Azure Arc, organizations can enforce policies consistently across all their resources, ensuring compliance and security.
- Security Management
 - Azure Arc provides robust security management features, allowing organizations to protect their resources effectively across all environments.
- Deploy Azure Services Anywhere
 - Users can deploy Azure services across any environment, whether on-premises or in the cloud, enhancing flexibility.

How...



Azure Arc



- Prerequisites
- Pricing
 - Always free
 - Inventory
 - Manage using SSH Arc, Run Command, and Custom Script Extension
 - PowerShell remoting over SSH
 - RDP remoting over SSH
 - VM Self-service
- Available with Microsoft Defender for Cloud Plan 2
 - Azure Policy guest configuration
 - Azure Update Manager

Azure Arc – free for...



- Windows Server with active Software Assurance or Windows Server subscription licenses
 - Azure Update Manager
 - Change Tracking & Inventory
 - Azure Machine Configuration
 - Windows Admin Center in Azure for Arc-enabled servers
 - Best Practices Assessment
 - Azure Site Recovery configuration
 - Advanced networking
 - Remote Support

Azure Arc - pay-as-you-go & ESU

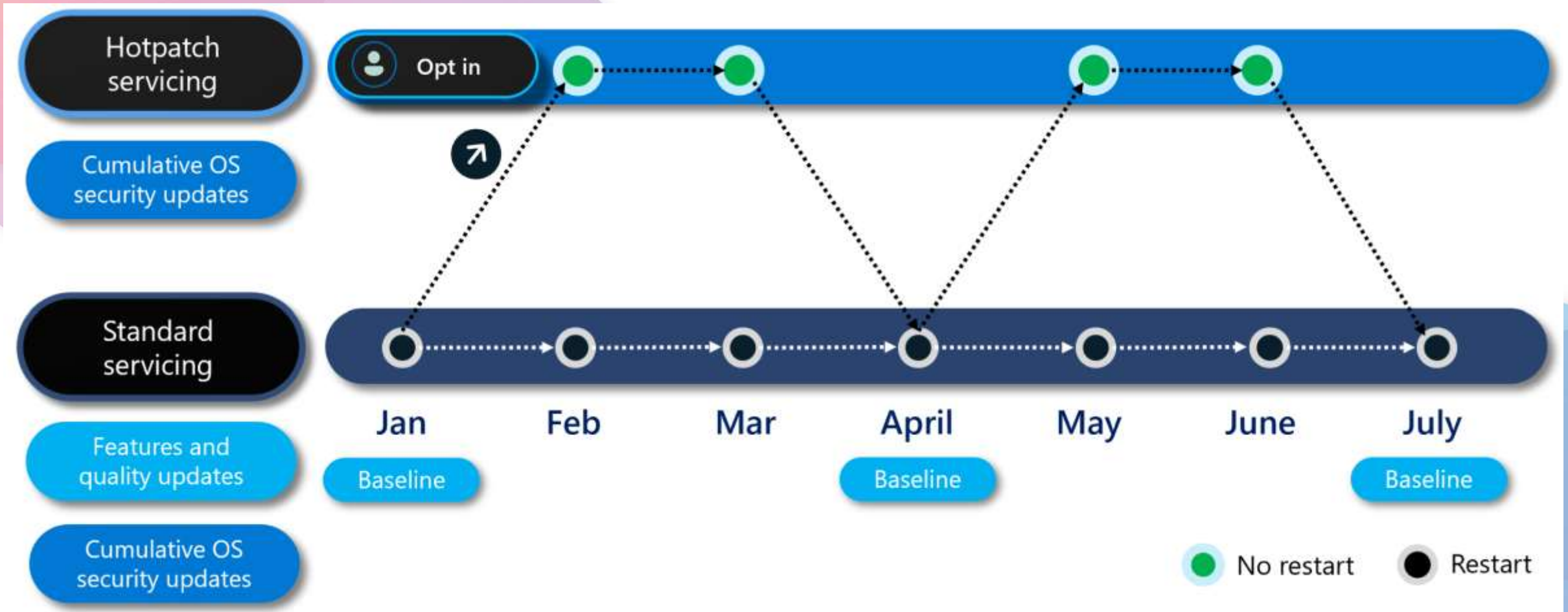


- Windows Server pay-as-you-go enabled by Azure Arc
 - Windows Server 2025 (Standard & Datacenter)
- SQL Server pay-as-you-go enabled by Azure Arc (Standard & Enterprise Edition)
 - versions 2012 and up
- Extended Security Updates (ESU) enabled by Azure Arc
 - Windows Server 2012 / R2 (Standard & Datacenter)
 - SQL Server 2012 / 2014 (Standard & Enterprise)
 - [limited-support-operating-systems](#) (MSI)

What else...



Hotpatch for Windows Server



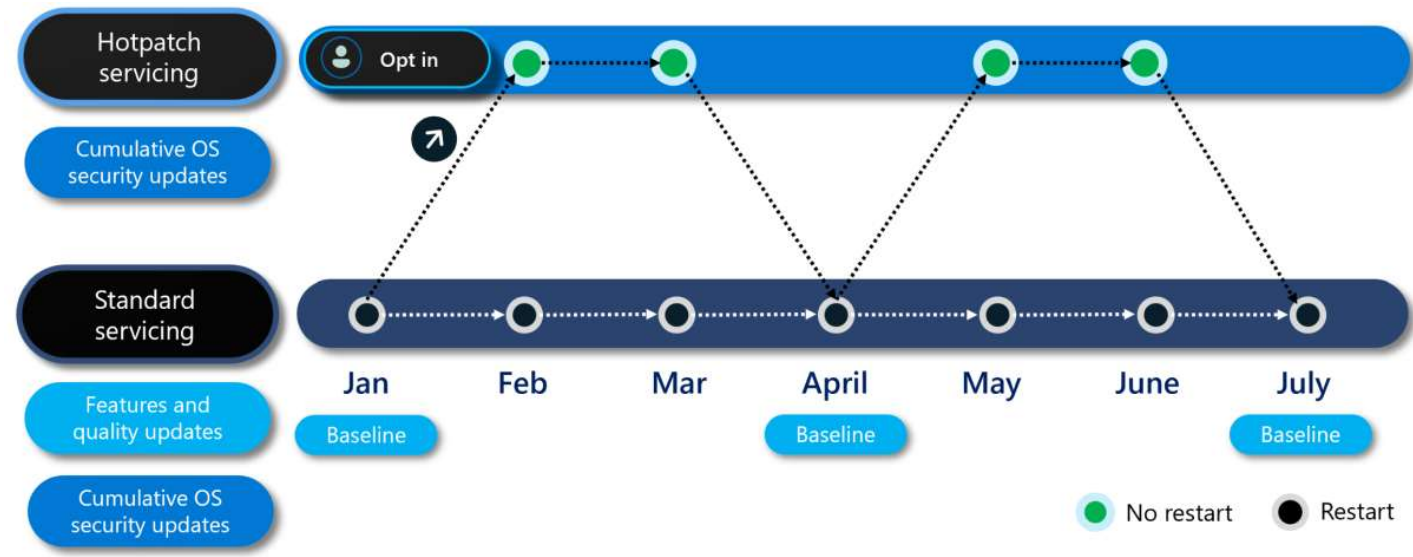
Hotpatch for Windows Server - requirements



- Windows Server 2022 on Azure (Datacenter)
- Windows Server 2025 on Azure (Datacenter)

Azure Arc-connected Windows Server:

- Windows Server 2025 Datacenter Edition
- Windows Server 2025 Standard Edition
- Virtualization-based security (VBS)



Sign in to Arc-enabled Windows Server using Microsoft Entra ID (no external accounts!)



- Use Microsoft Entra ID as a core authentication platform with Remote Desktop Protocol (RDP)
 - Azure role-based access control (RBAC) and Conditional Access policies
- Arc-enabled machine will be Microsoft Entra joined
- Supports:
 - Windows 11 24H2 or later
 - Windows Server 2025 or later with Desktop Experience

Installation and/or configuration



Windows Server 2022



Computer name FS3
Domain corp.contoso.com

Microsoft Defender Firewall Domain: On
Remote management Enabled
Remote Desktop Enabled
NIC Teaming Disabled
Ethernet 10.0.0.23, IPv6 enabled

Server Manager

Try managing servers with Windows Admin Center

Windows Admin Center brings together new and familiar features in one browser-based app. It runs on a server or a PC, and there's no additional cost beyond your Windows licenses.

[Get more info at aka.ms/WindowsAdminCenter](https://aka.ms/WindowsAdminCenter)

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About Windows

Windows Server® 2022

Microsoft Windows Server
Version 21H2 (OS Build 20348.587)
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The Windows Server 2022 Standard Evaluation operating system and its user interface are protected by trademark and other pending or existing intellectual property rights in the United States and other countries/regions.

Administrator: Windows PowerShell

```
PS C:\> Get-WindowsFeature -Name AzureArcSetup
PS C:\> Get-WindowsCapability -Online -Name AzureArcSetup*
PS C:\>
```

Windows Server 2022



Computer name: FS1
Domain: corp.contoso.com

Microsoft Defender Firewall: Domain: On
Remote management: Enabled
Remote Desktop: Enabled
NIC Teaming: Disabled
Ethernet: 10.0.0.21, IPv6 enabled
Azure Arc Management: Enabled

Server Manager

Try Windows Admin Center and Azure Arc today

Instead of Server Manager, you can use Azure Arc and the new Windows Admin Center built into the Azure portal to manage individual servers and clusters—on-premises and in Azure.

With Azure Arc you can secure and govern Windows Server at scale—on-premises and across clouds.

Get more info at aka.ms/ManageWindowsServer
Or try Azure Arc: [Launch Setup](#)

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Administrator: Windows PowerShell

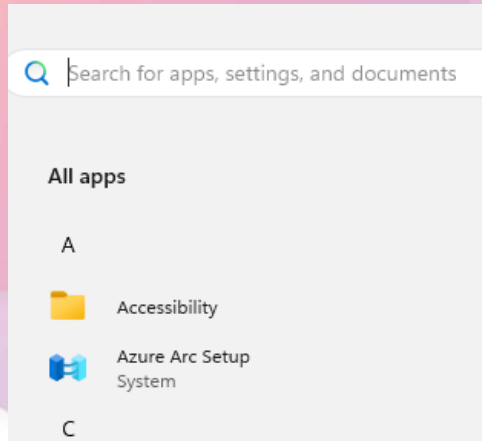
```
PS C:\> Get-WindowsFeature -Name AzureArcSetup
```

Display Name	Name	Install State
[X] Azure Arc Setup	AzureArcSetup	Installed

Windows Server 2022

Microsoft Windows Server
Version 21H2 (OS Build 20348.3692)
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Windows Server 2025



Computer name	FS4
Domain	corp.contoso.com
Microsoft Defender Firewall	Domain: On
Remote management	Enabled
Remote Desktop	Enabled
NIC Teaming	Disabled
Ethernet	10.0.0.24, IPv6 enabled
Azure Arc Management	Disabled
Remote SSH Access	Disabled

About Windows

Windows Server®

Microsoft Windows Server
Version 24H2 (OS Build 26100.1742)
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The Windows Server 2025 Datacenter operating system and its user interface are protected by trademark and other pending or existing intellectual property rights in the United States and other countries/regions.

This product is licensed under the [Microsoft Software License Terms](#) to:

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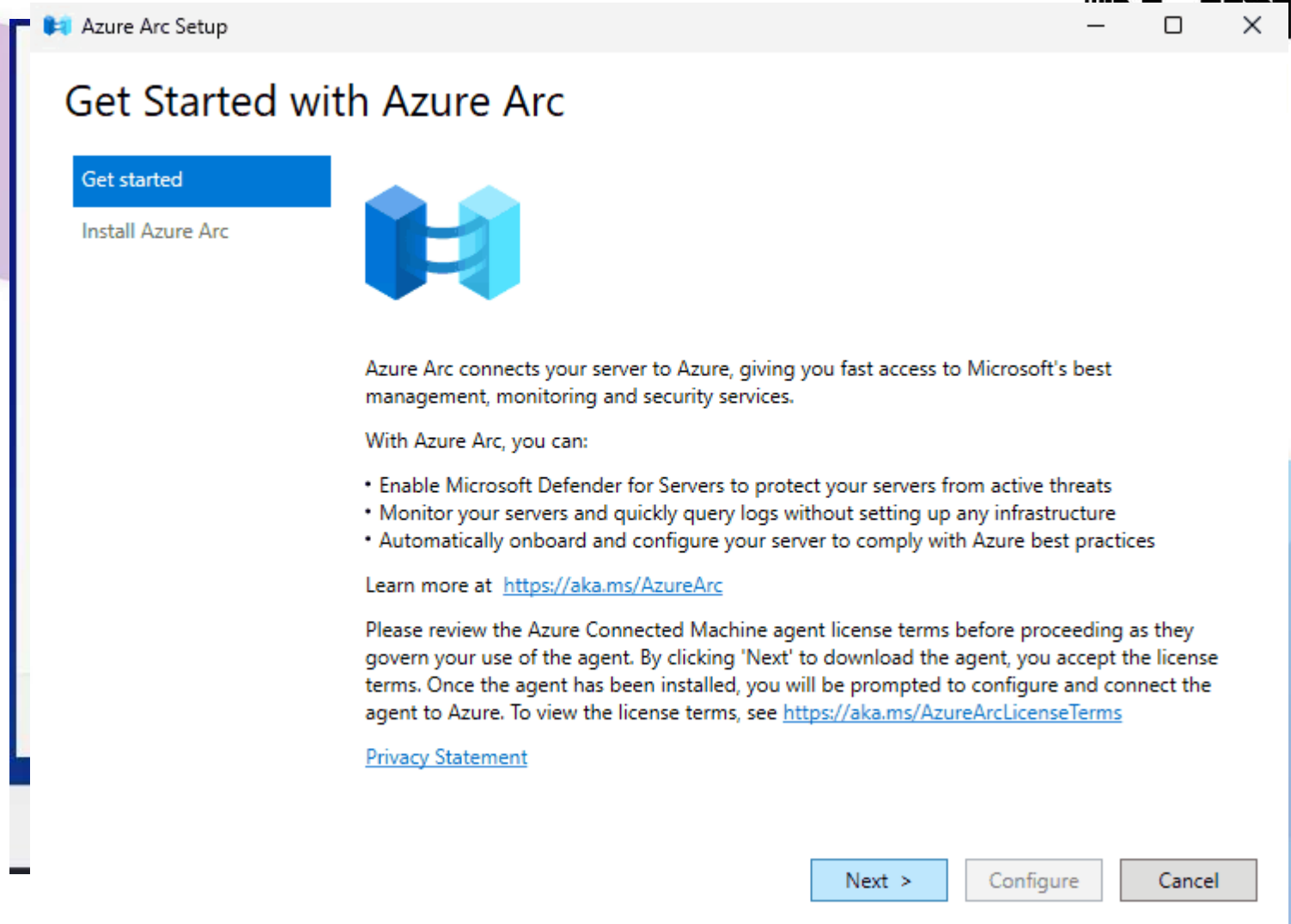
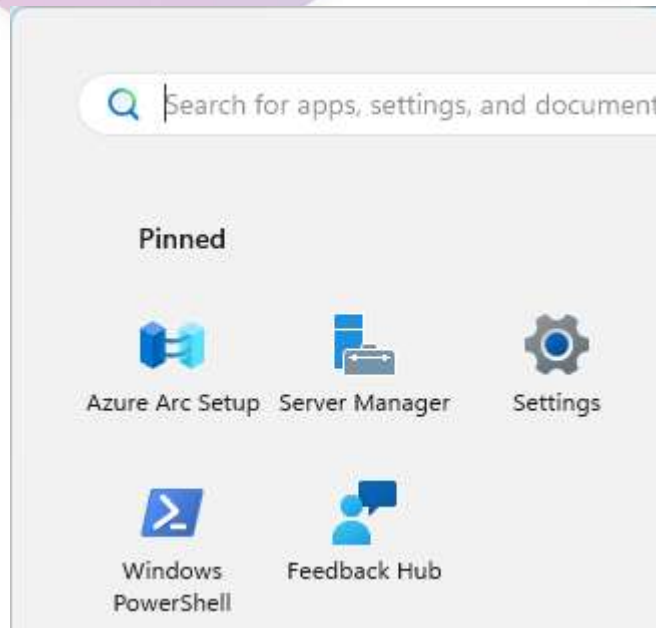
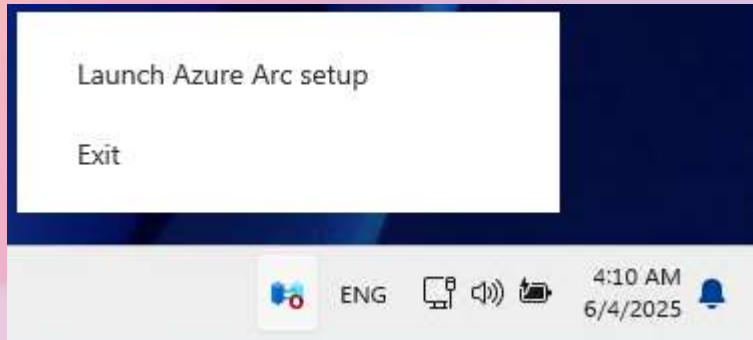
Administrator: Windows PowerShell

```
PS C:\> Get-WindowsCapability -Online -Name AzureArcSetup*

Name       : AzureArcSetup~~~~~
State      : Installed
DisplayName : AzureArcSetup
Description : Provides the services that are needed to onboard
             server to Azure Arc.
DownloadSize : 0
InstallSize  : 0

PS C:\> Get-WindowsFeature -Name AzureArcSetup
PS C:\>
```

Azure Connected Machine agent deployment




```
PS C:\Users\labadmin> cd 'C:\Program Files\AzureConnectedMachineAgent\'
PS C:\Program Files\AzureConnectedMachineAgent> .\azcmagent.exe show
Resource Name                : CLIENT2
Resource Group Name          : ARC
Resource Namespace           : Microsoft.HybridCompute
Resource Id                  : /subscriptions/dd7b6e40-7646-482b-8134-447af34a9419/resourceGroups/ARC/providers/Microsoft.HybridCompute/machines/CLIENT2
Subscription ID              : dd7b6e40-7646-482b-8134-447af34a9419
Tenant ID                    : c696a9c1-c0c0-414a-b341-62f226689e1a
VM ID                        : 4c8d00ff-5977-47d9-83d8-67a88f469ffc
Correlation ID               : 71fb5eeb-608f-46d4-8b13-83bae65a6430
VM UUID                      : 5FF1BB90-C3EC-4486-B23D-38C2D8E5FF43
Location                     : northeurope
Cloud                        : AzureCloud
Agent Version                 : 1.51.03008.2167
Agent Logfile                 : C:\ProgramData\AzureConnectedMachineAgent\Log\himds.log
Agent Status                  : Connected
Agent Last Heartbeat         : 2025-06-04T16:19:05+04:00
Agent Error Code              :
Agent Error Details           :
Agent Error Timestamp         :
Using HTTPS Proxy             :
Proxy Bypass List             :
Upstream Proxy                :
Gateway URL                   :
Cloud Provider                : N/A
Cloud Metadata                :
Manufacturer                  : Microsoft Corporation
Model                        : Virtual Machine
MSSQL Server Detected         : false
MySQL Server Detected         : false
PGSQL Server Detected         : false
Dependent Service Status
  Agent Service (himds)       : running
  Azure Arc Proxy (arcproxy)  : running
  Extension Service (extensionservice) : running
  GC Service (gcarcservice)   : running
  SMS Agent Host (CcmExec)    : running
Portal Page                   : https://portal.azure.com/#@c696a9c1-c0c0-414a-b341-62f226689e1a/resource/subscriptions/dd7b6e40-7646-482b-8134-447af34a9419
                              /resourceGroups/ARC/providers/Microsoft.HybridCompute/machines/CLIENT2/overview
Disabled Features              :
Agent Auto Upgrade Task Status : enabled, id: {1B077AE4-92A7-4264-9CCD-5A26CDA4B1B4}

PS C:\Program Files\AzureConnectedMachineAgent> |
```

DEMO

**When Organizations don't
Prioritize Training**



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#ntk25



ArcBox

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ArcBox (<https://jumpstart.azure.com>)



- Sandbox environment for getting hands-on with Azure Arc technologies
- Accelerator for Proof-of-concepts or pilots
- Training tool for Azure Arc skills development
- Demo environment for customer presentations or events
- Rapid integration testing platform
- Infrastructure-as-code and automation template library for building hybrid cloud management solutions

ArcBox for IT Pros



Deployed via ARM Template or Bicep



ArcBox resource group

ArcBox Workbook

Azure Monitor



Azure Policy



Azure Log Analytics



Microsoft Defender
for Cloud (Servers and SQL)



Microsoft Sentinel



Azure Update Manager



Migration assessment



Best practices
assessment



ArcBox-SQL
Arc-enabled server and SQL server



ArcBox-Win2K22
Arc-enabled server



ArcBox-Win2K25
Arc-enabled server



ArcBox-Ubuntu-01
Arc-enabled server



ArcBox-Ubuntu-02
Arc-enabled server



ArcBox-SQL
Nested Hyper-V VM



ArcBox-Win2K22
Nested Hyper-V VM



ArcBox-Win2K25
Nested Hyper-V VM



ArcBox-Ubuntu-01
Nested Hyper-V VM



ArcBox-Ubuntu-02
Nested Hyper-V VM



ArcBox-Client

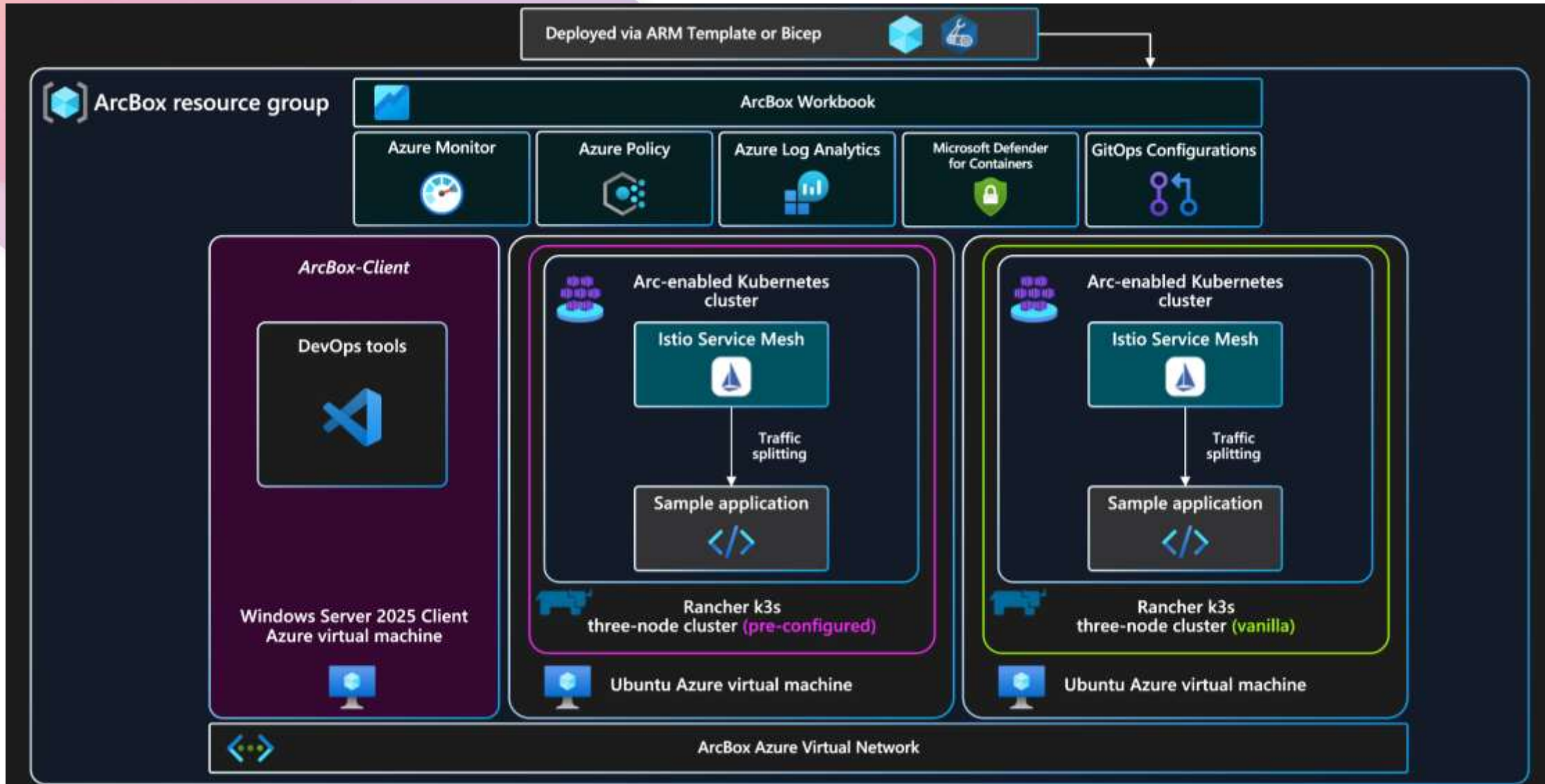


Windows Server 2025 Client VM (deployed in Azure, nested virtualization enabled)

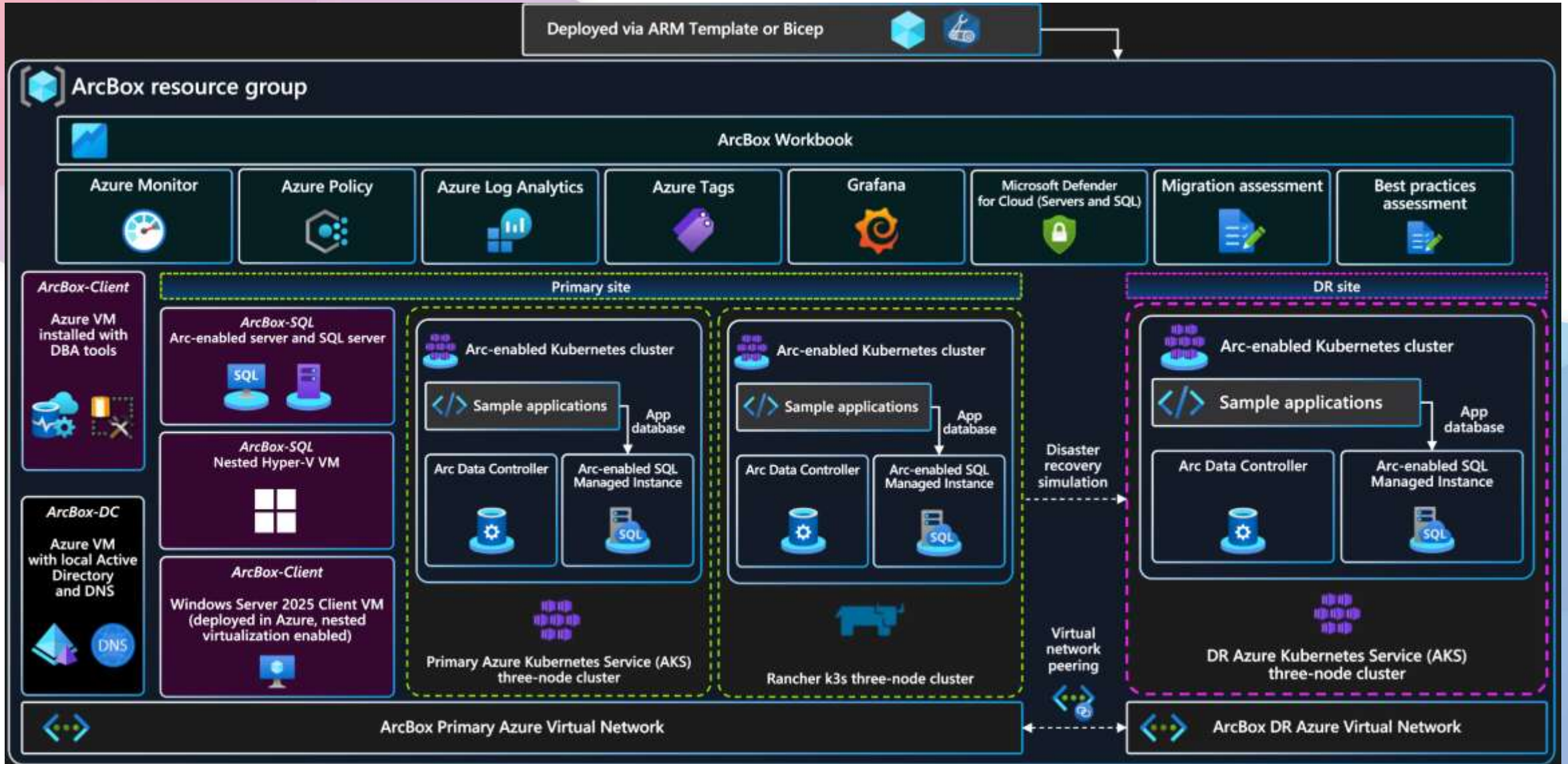
ArcBox Azure Virtual Network



ArcBox for DevOps



ArcBox for DataOps



Kompas Xnet – Azure izobraževanja



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Thank You!



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