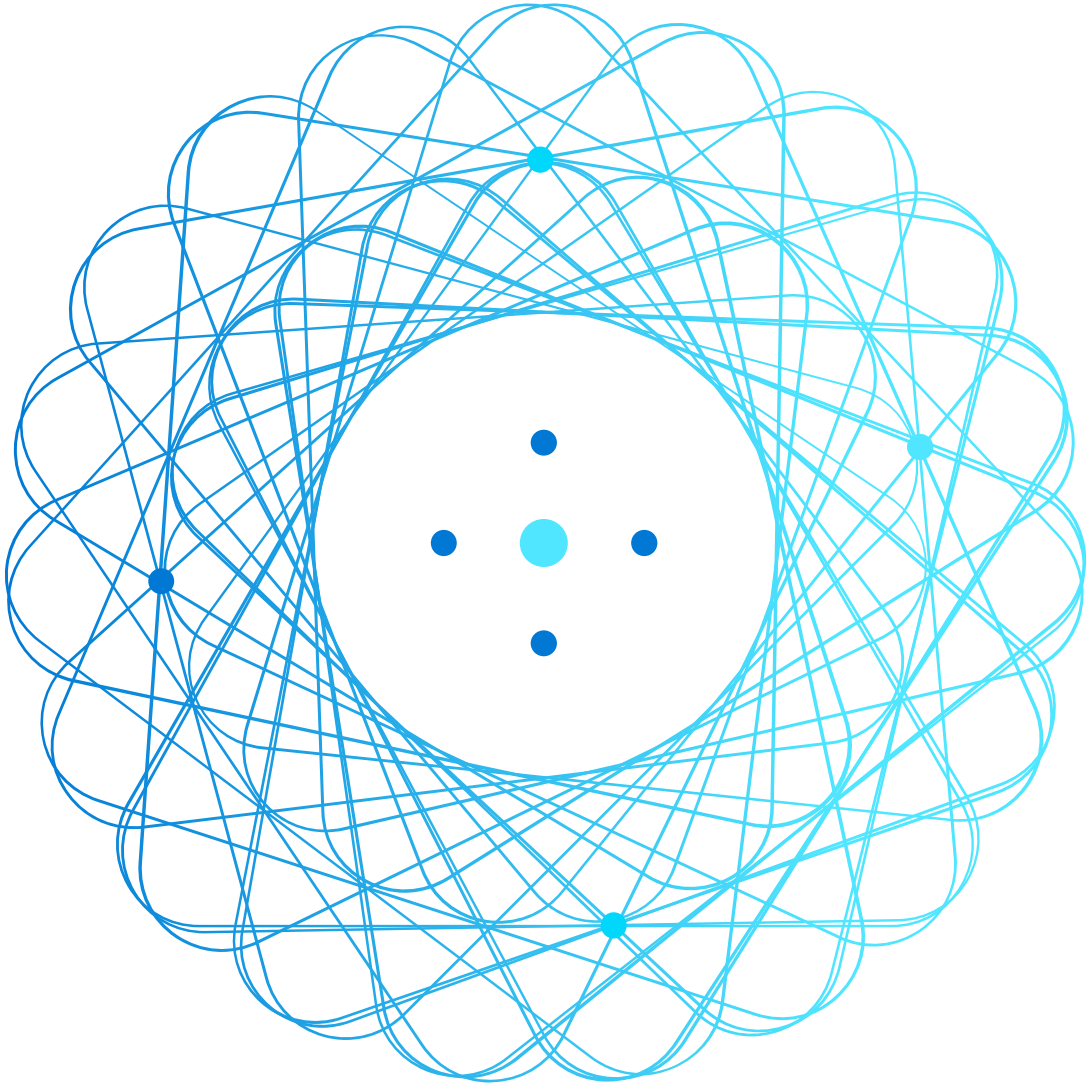
Microsoft Azure

AZ-140

Configuring and Operating Azure Virtual Desktop



AZ-140 Agenda

Learning Path 1

1. Azure Virtual Desktop Architecture
2. Design the Azure Virtual Desktop architecture
3. Design for user identities and profiles

Learning Path 2

4. Implement and manage networking for AVD
5. Implement and manage storage for AVD
6. Create and configure host pools and session hosts for AVD
7. Create and manage session host image for AVD

Learning Path 3

8. Manage access for AVD
9. Manage security for AVD

Learning Path 4

10. Implement and manage FSLogix
11. Configure user experience settings
12. Install and configure apps on a session host

Learning Path 5

13. Plan for disaster recovery
14. Automate Azure Virtual Desktop management tasks
15. Monitor and manage performance and health

07

Create and manage session host images

Introduction

- Create a managed VM image
- Modify a session host image
- Plan for image update and management
- Create and use a Shared Image Gallery (SIG) using the portal
- Install language packs in Azure Virtual Desktop

AZ-140: Implement an Azure Virtual Desktop infrastructure (25-30%)

Create and manage session host images

- Conceptual knowledge of Azure compute solutions.
- Working experience with virtual machines, virtual networks, and app service.

Create a managed VM image

You can use an image from the Azure Image Gallery.

Windows 10 Enterprise multi-session is available in the Azure Image Gallery.

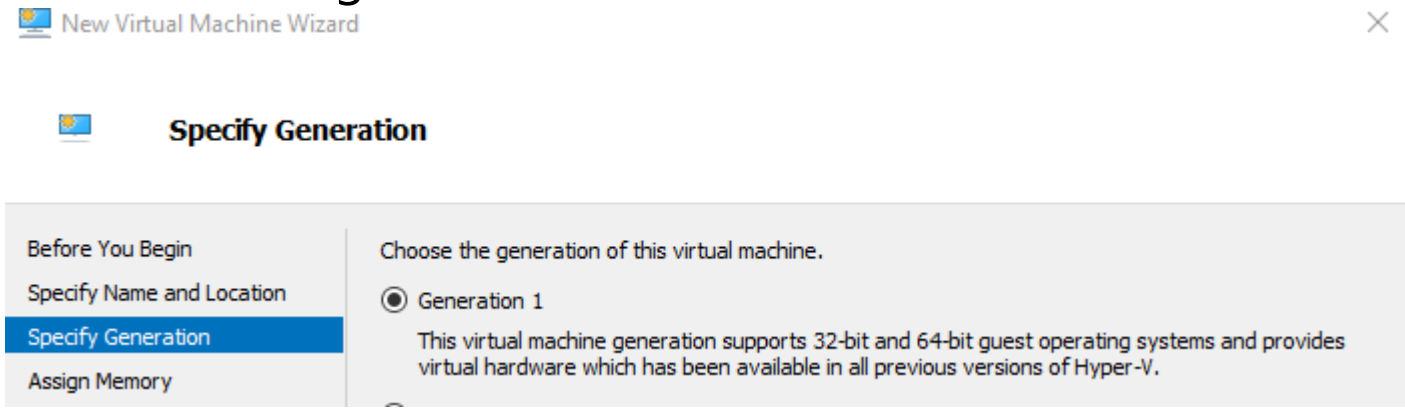
There are two options for customizing the image:

- The first option is to provision a virtual machine (VM) in Azure
- The second option is to create the image locally by downloading the image, provisioning a Hyper-V VM, and customizing it to suit your needs

Local image creation

Once you've downloaded the image to a local location, open **Hyper-V Manager** to create a VM with the VHD you copied. To create a VM with the copied VHD:

1. Open the **New Virtual Machine Wizard**.
2. On the Specify Generation page, select **Generation 1**.
3. Under **Checkpoint Type**, disable checkpoints by unchecking the check box.



Modify a session host image

To disable Automatic Updates via local Group Policy, run:

```
reg add "HKLM\SOFTWARE\Policies\Microsoft\Windows\WindowsUpdate\AU" /v NoAutoUpdate /t REG_DWORD /d 1 /f
```

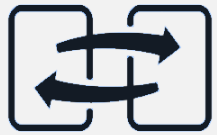
Run this command to specify a Start layout for Windows 10 PCs, run:

```
reg add "HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Explorer" /v SpecialRoamingOverrideAllowed /t REG_DWORD /d 1 /f
```

To redirect time zones, run this command on the master image:

```
reg add "HKLM\SOFTWARE\Policies\Microsoft\Windows NT\Terminal Services" /v fEnableTimeZoneRedirection /t REG_DWORD /d 1 /f
```

Plan for image update and management



Plan for image update and management

If you have many images that you need to maintain and would like to make them available throughout your company, you can use a Shared Image Gallery as a repository.

The Shared Image Gallery feature has multiple resource types:

Resource	Description
Image source	This is a resource that can be used to create an image version in an image gallery. An image source can be an existing Azure VM that is either generalized or specialized, a managed image, a snapshot, a VHD or an image version in another image gallery.
Image gallery	Like the Azure Marketplace, an image gallery is a repository for managing and sharing images, but you control who has access.
Image definition	Image definitions are created within a gallery and carry information about the image and requirements for using it internally. This includes whether the image is Windows or Linux, release notes, and minimum and maximum memory requirements. It is a definition of a type of image.
Image version	An image version is what you use to create a VM when using a gallery. You can have multiple versions of an image as needed for your environment. Like a managed image, when you use an image version to create a VM, the image version is used to create new disks for the VM. Image versions can be used multiple times.

Create and use an Azure Compute Gallery using the Azure portal

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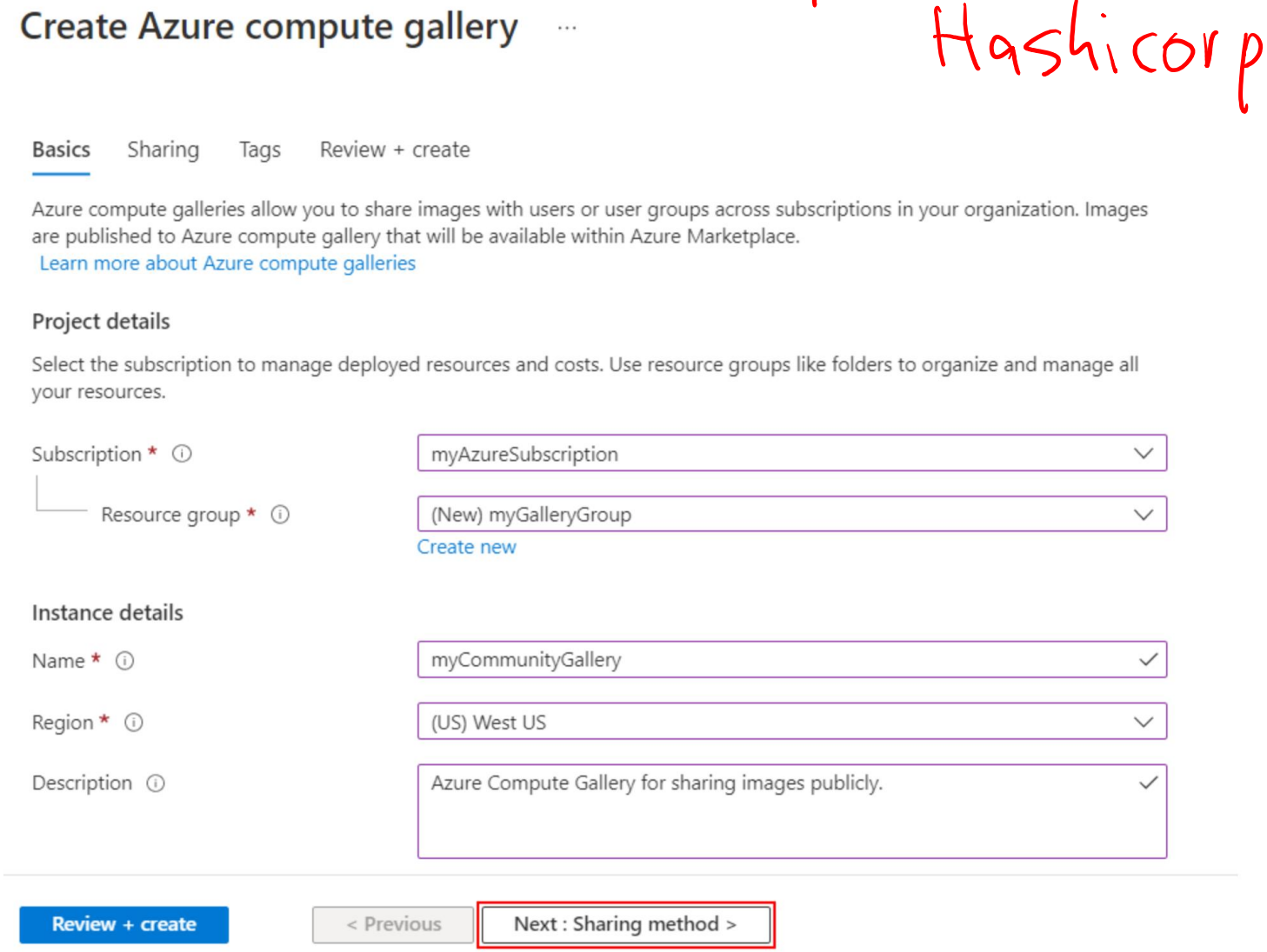
packer
Hashicorp

- An Azure Compute Gallery simplifies sharing resources, like images and application packages, across your organization.
- The Azure Compute Gallery lets you share custom VM images and application packages with others in your organization.
- Choose what you want to share, which regions you want to make them available in, and who you want to share them with.
- You can create multiple galleries so that you can logically group resources.



Create an Azure Virtual Desktop image by using VM Image Builder

You can distribute the image to an Azure Compute Gallery, where you can replicate it to other regions, control the scale, and share the image within and beyond your organization.

You can create an Azure Virtual Desktop image with these customizations:

- FSLogix setup
- Azure Virtual Desktop optimization
- Microsoft Teams installation
- Windows Restart customizer
- Windows Update customizer

To build the image, run the scripts below.

```
Start-AzImageBuilderTemplate -ResourceGroupName
$imageResourceGroup -Name $imageTemplateName -NoWait
```

Install Microsoft 365 Apps on a master Virtual Hard Disk image

You can install Microsoft 365 Apps for enterprise, OneDrive, and other common applications on a master virtual hard disk (VHD) image for upload to Azure.

Shared computer activation allows deployment of Microsoft 365 Apps for enterprise to a computer that is accessed by multiple users.

Use the Office Deployment Tool to install Office.

Windows 10 Enterprise multi-session only supports the following versions of Office:

- Microsoft 365 Apps for enterprise
- Microsoft 365 Apps for business that comes with a Microsoft 365 Business Premium subscription

Install language packs in Azure Virtual Desktop

You need the following to customize a Windows 10 Enterprise multi-session images for adding multiple languages:

- An Azure virtual machine (VM) with Windows 10 Enterprise multi-session.
- The Language ISO, Feature on Demand (FOD) Disk 1, and Inbox Apps ISO of the OS version the image uses.
- An Azure Files Share or a file share on a Windows File Server Virtual Machine

To create a custom Windows 10 Enterprise multi-session image manually:

1. Deploy an Azure VM, then go to the Azure Gallery and select the current version of Windows 10 Enterprise multi-session you're using.
2. After you've deployed the VM, connect to it using RDP as a local admin.
3. Make sure your VM has all the latest Windows Updates.
4. Connect to the language package, FOD, and Inbox Apps file share repository and mount it to a letter drive (for example, drive E).

Knowledge check and Summary

Check your knowledge

What you learned:

- Create a managed VM image for an Azure Virtual Desktop-specific configuration.
- Modify a session host image.
- Plan for image update and management.
- Create and use a Shared Image Gallery (SIG) for Azure Virtual Desktop.
- Install language packs in Azure Virtual Desktop.

End of presentation