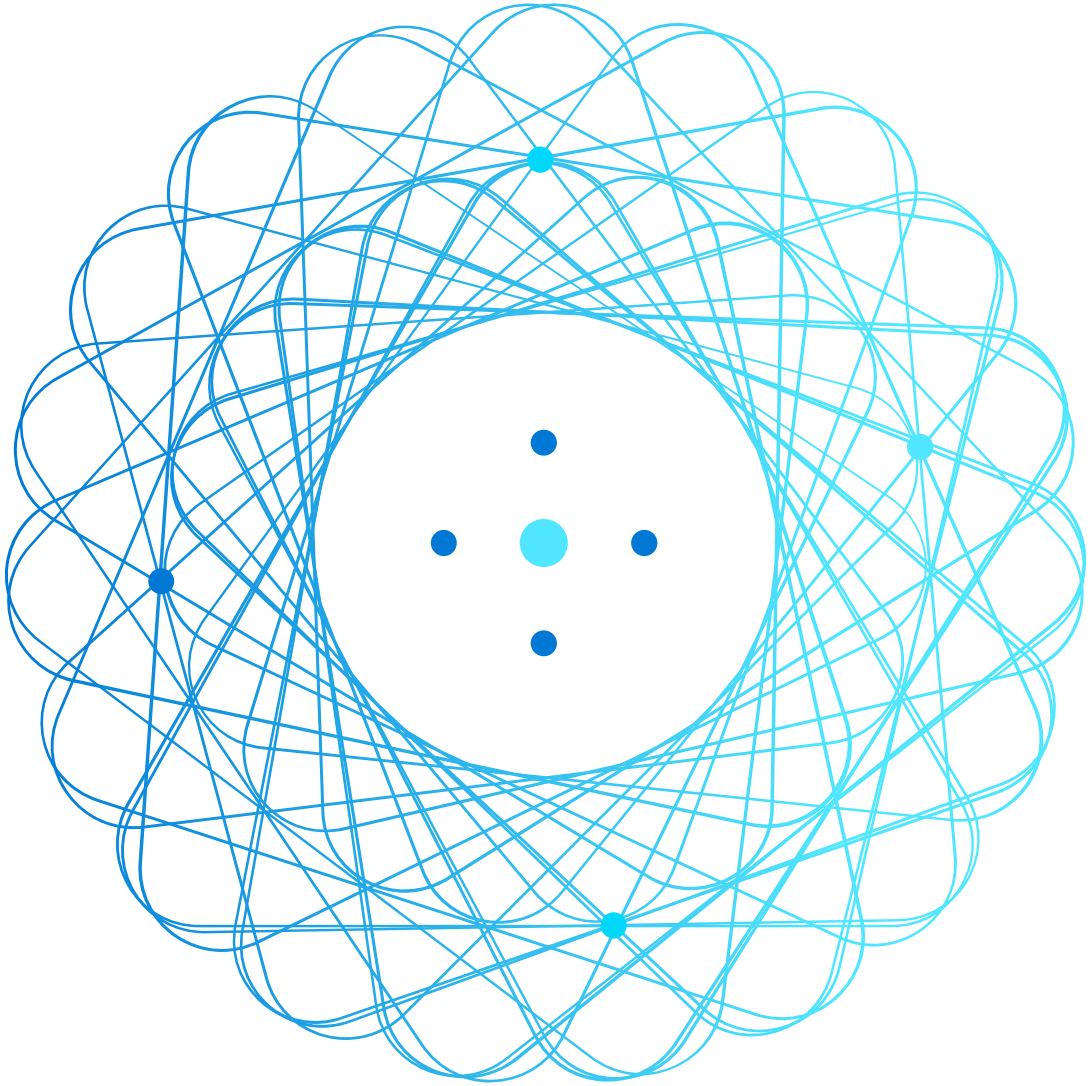
Microsoft Azure

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

Create and configure host pools and session hosts

Introduction

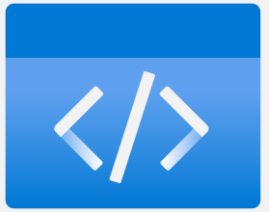
- Configure host pool assignment type
- Automate creation of an Azure Virtual Desktop host pool using PowerShell
- Customize Remote Desktop Protocol (RDP) properties for a host pool
- Manage licensing for session hosts that run Windows client
- Azure AD-joined VMs in Azure Virtual Desktop

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

Create and configure host pools and session hosts

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

Automate creation of an Azure Virtual Desktop host pool using PowerShell



To create the host pool, workspace, desktop app group, and register the desktop app group to the workspace, run:

```
New-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> -WorkspaceName <workspacename> -HostPoolType
<Pooled|Personal> -LoadBalancerType <BreadthFirst|DepthFirst|Persistent> -Location <region> -DesktopAppGroupName
<appgroupname>
```

To create a registration token to authorize a session host to join the host pool and save it to a new file on your local computer, run:

```
New-AzWVDRegistrationInfo -ResourceGroupName <resourcegroupname> -HostPoolName <hostpoolname> -ExpirationTime $((get-
date).ToUniversalTime().AddDays(1).ToString('yyyy-MM-ddTHH:mm:ss.fffffffZ'))
```

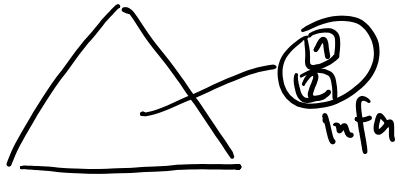
To add Azure Active Directory users to the default desktop app group for the host pool, run:

```
New-AzRoleAssignment -SignInName <userupn> -RoleDefinitionName "Desktop Virtualization User" -ResourceName
<hostpoolname+"-DAG"> -ResourceGroupName <resourcegroupname> -ResourceType
'Microsoft.DesktopVirtualization/applicationGroups'
```

To add Azure Active Directory user groups to the default desktop app group for the host pool, run:

```
New-AzRoleAssignment -ObjectId <usergroupobjectid> -RoleDefinitionName "Desktop Virtualization User" -ResourceName
<hostpoolname+"-DAG"> -ResourceGroupName <resourcegroupname> -ResourceType
'Microsoft.DesktopVirtualization/applicationGroups'
```

AD-DS
On Prem



Host Pool 1

1 2
Session Hosts

Default App Group

Workspace
(Startmenü)

Configure host pool assignment type

Azure AD-DS

To configure a host pool to automatically assign users to VMs, run the following PowerShell cmdlet:

```
Update-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> -PersonalDesktopAssignmentType Automatic
```

To assign a user to the personal desktop host pool, run the following PowerShell cmdlet:

```
New-AzRoleAssignment -SignInName <userupn> -RoleDefinitionName "Desktop Virtualization User" -
ResourceName <appgroupname> -ResourceGroupName <resourcegroupname> -
ResourceType 'Microsoft.DesktopVirtualization/applicationGroups'
```

To configure a host pool to require direct assignment of users to session hosts, run this PowerShell cmdlet:

```
Update-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> -PersonalDesktopAssignmentType Direct
```

To assign a user to a specific session host, run the following PowerShell cmdlet:

```
Update-AzWvdSessionHost -HostPoolName <hostpoolname> -Name <sessionhostname> -ResourceGroupName <resourcegroupname> -
AssignedUser <userupn>
```

Customize Remote Desktop Protocol (RDP) properties for a host pool

To add or edit a single custom RDP property, run:

```
Update-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> -CustomRdpProperty <property>
```

To add or edit multiple custom RDP properties, run the following by providing the custom RDP properties as a semicolon-separated string:

```
$properties="<property1>;<property2>;<property3>"
Update-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> -CustomRdpProperty $properties
```

You can check to make sure the RDP property was added by running:

```
Get-AzWVDHostPool -ResourceGroupName <resourcegroupname> -Name <hostpoolname> | format-list Name, CustomRdpProperty

Name               : <hostpoolname>
CustomRdpProperty : <customRDPpropertystring>
```

Manage licensing for session hosts that run Windows client

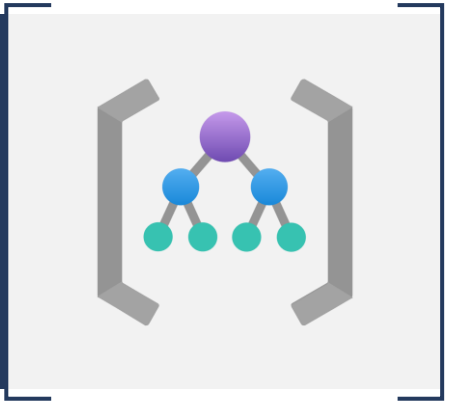
Azure Virtual Desktop licensing allows you to apply a license to any Windows or Windows Server virtual machine that is registered as a session host in a host pool and receives user connections.

Create	You can create a host pool and its session host virtual machines using the Azure Marketplace offering . •Virtual machines created this way automatically have the license applied.
Create	You can create a host pool and its session host virtual machines using the GitHub Azure Resource Manager template . •Virtual machines created this way automatically have the license applied.
Apply	You can apply a license to an existing session host virtual machine.

Apply a Windows license to a session host VM, run:

```
$vm = Get-AzVM -ResourceGroup <resourceGroupName> -Name <vmName>
$vm.LicenseType = "Windows_Client"
Update-AzVM -ResourceGroupName <resourceGroupName> -VM $vm
```

Deploying Azure AD-joined virtual machines in Azure Virtual Desktop



Azure AD-joined VMs eliminate line-of-sight from the VM to an on-premises Active Directory Domain Controller (DC) or deploying Azure AD Domain services (Azure AD DS).

The configurations supported with Azure AD-joined VMs:

- Personal desktops with local user profiles.
- Pooled desktops used as a jump box. In this configuration, users first access the Azure Virtual Desktop VM before connecting to a different PC on the network. Users shouldn't save data on the VM.
- Pooled desktops or apps where users don't need to save data on the VM.

Access to on-premises or Active Directory domain-joined resources and should be considered when deciding whether Azure AD-joined VMs suits your environment.

Microsoft recommends Azure AD-joined VMs when users only need access to cloud-based resources or Azure AD-based authentication.

Knowledge check and Summary

Check your knowledge

What you learned:

- Configure host pool assignment type.
- Automate creation of an Azure Virtual Desktop host pool using PowerShell.
- Customize Remote Desktop Protocol (RDP) properties for a host pool.
- Manage licensing for session hosts that run Windows client.
- When to choose Azure AD-joined VMs in Azure Virtual Desktop.

End of presentation