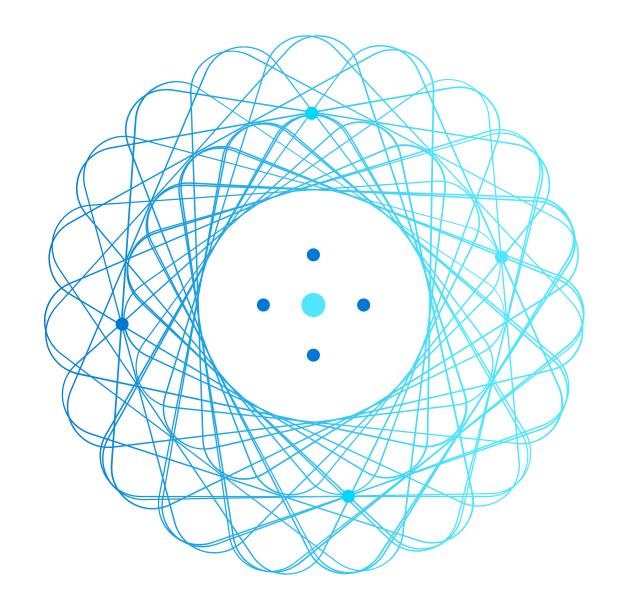
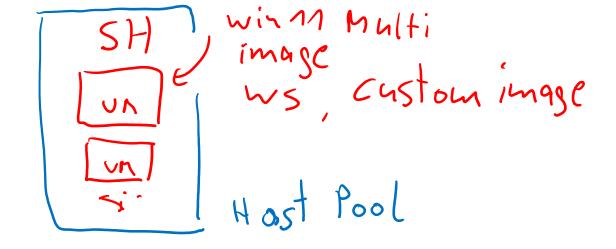


**AZ-140** 

# Configuring and Operating Azure Virtual Desktop





### 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'
```

### Configure host pool assignment type



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="roperty1>;cproperty2>;cproperty3>"
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



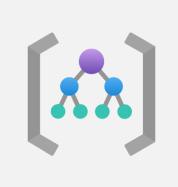
Azure Virtual Desktop licensing allows you to apply a license to any Windows or Windows Server virtual machine that is registered as a session host in a host pool and receives user connections.

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

