

# 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

# Install and configure apps on a session host



# Introduction

- MSIX app attach
- How MSIX app attach works
- Set up a file share for MSIX app attach
- How MSIX app attach works
- Using the OneDrive sync app on virtual desktops
- Using Microsoft Teams on Azure Virtual desktop
- Publish built-in apps in Azure Virtual Desktop
- Troubleshoot application issues for Azure Virtual Desktop

AZ-140: Manage user environments and apps (20-25%)

Install and configure apps on a session host

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

# MSIX app attach



# MSIX app attach

The MSIX package format preserves the functionality of existing app packages and/or install files in addition to enabling new, modern packaging and deployment features to Win32, WPF, and Windows Forms apps.

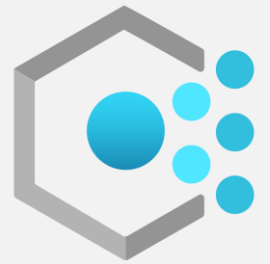
- MSIX app attach is a way to deliver MSIX applications to both physical and virtual machines.
- **MSIX app attach** is different from regular **MSIX** because it's made especially for Azure Virtual Desktop.

In an Azure Virtual Desktop deployment, MSIX app attach can:

- Create separation between user data, the OS, and apps by using MSIX containers.
- Remove the need for repackaging when delivering applications dynamically.
- Reduce the time it takes for a user to sign in.

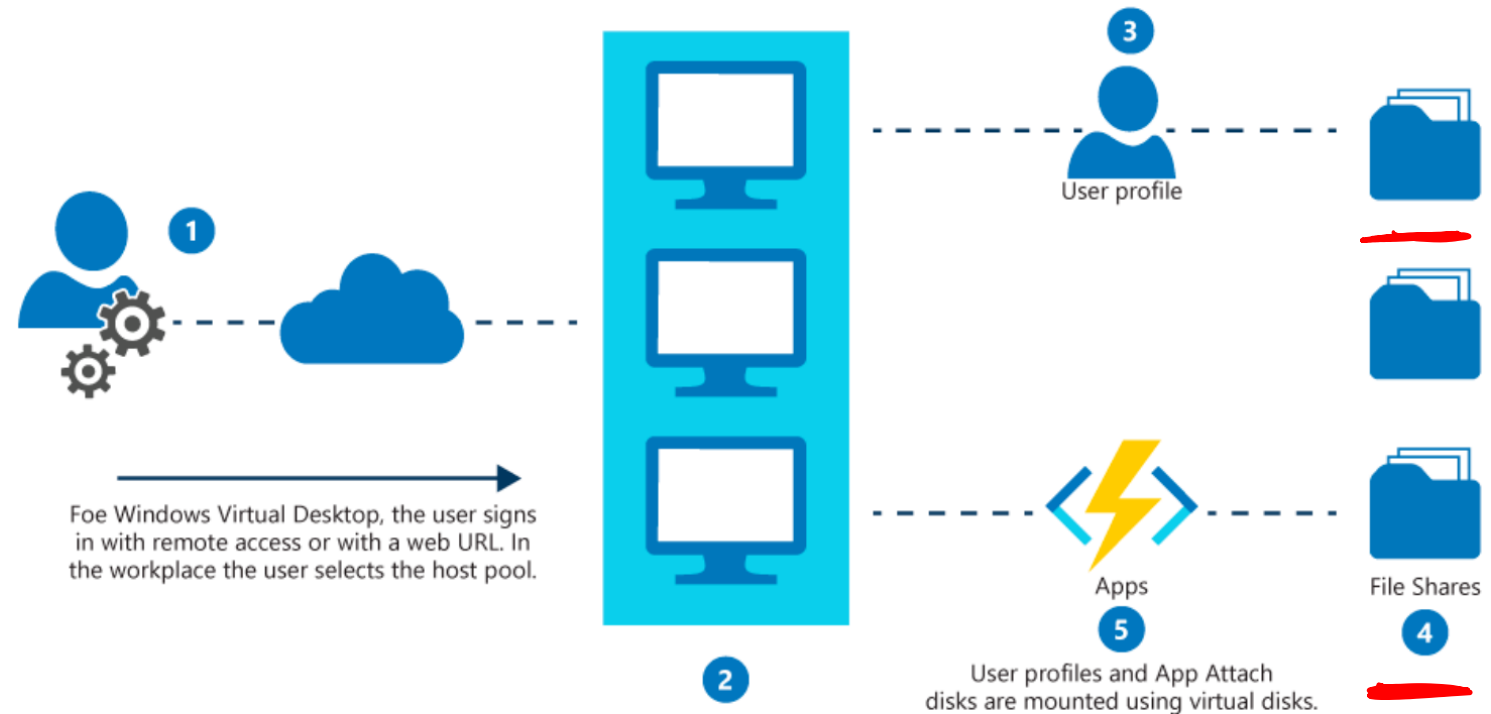


# How MSIX app attach works



# How MSIX app attach works

1. From the Azure Virtual Desktop client, you sign in and select the host pool for which you have access.
2. You're assigned a virtual machine within the host pool, on which a RemoteApp or Remote Desktop session is created.
3. If the user profile is configured, the FSLogix agent on the session host provides the user profile from the file share.
4. Applications that are assigned to you are read from Azure Virtual Desktop.
5. MSIX app attach applications are registered to the virtual machine for you, from the attached MSIX virtual disk.





# Set up a file share for MSIX app attach



# Set up a file share for MSIX app attach

To optimize MSIX app attach performance:

- The storage for MSIX app attach should be in the same datacenter location as the session hosts.
- To prevent bottlenecks, exclude the following VHD, VHDX, and CIM files from antivirus scans:
  - <MSIXAppAttachFileShare\>\\*.VHD
  - <MSIXAppAttachFileShare\>\\*.VHDX
  - \\storageaccount.file.core.windows.net\share\*.VHD
  - \\storageaccount.file.core.windows.net\share\*.VHDX
  - <MSIXAppAttachFileShare>.CIM
  - \\storageaccount.file.core.windows.net\share\*\*.CIM
- Separate the storage fabric for MSIX app attach from FSLogix profile containers.
- All VM system accounts and user accounts must have read-only permissions to the file share.
- Disaster recovery plans must include replicating the MSIX app attach file share in your secondary failover location.

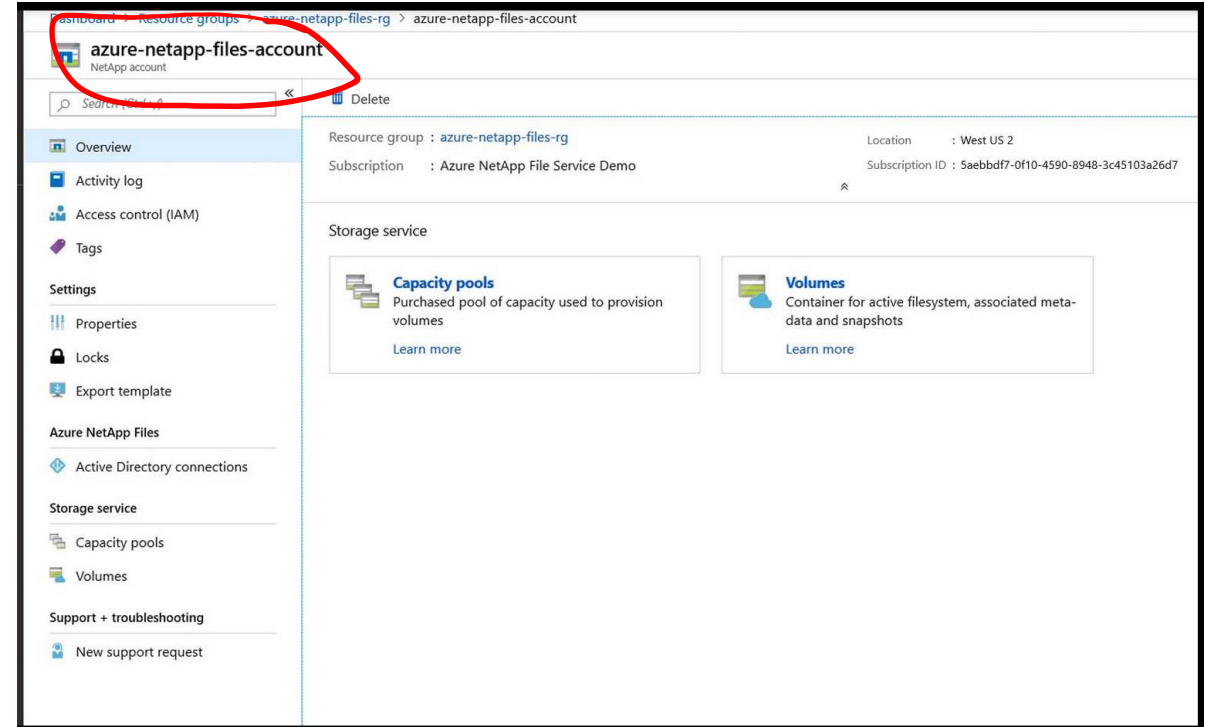
# Upload MSIX images to Azure NetApp Files in Azure Virtual Desktop



Before you can start uploading the images, you'll need to set up Azure NetApp Files.

To start using Azure NetApp Files:

1. Set up your Azure NetApp Files account.
2. Create a capacity pool.
3. Join an Azure Active Directory (Azure AD) connection.
4. Create a new volume.
5. Make sure your connection to the Azure NetApp Files share works.



# How to configure apps for users



# Configure apps for users

In this demonstration you see how to create a RemoteApp application group to share an application to a different user in the organization.

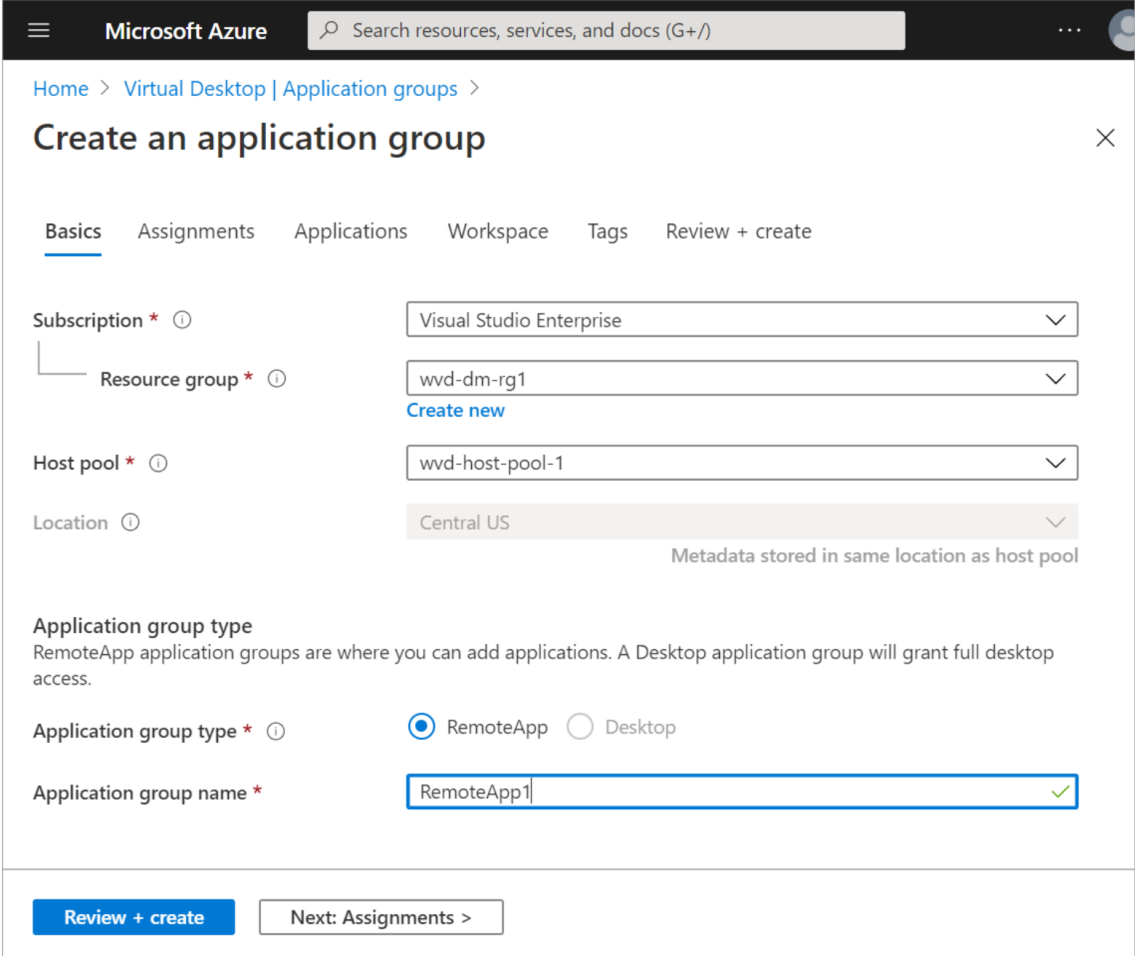
Step 1: Create a RemoteApp application group

Step 2: Add Azure AD users or user groups

Step 3: Add applications

Step 4: Register and create an application group

Step 5: Verify access to application



The screenshot shows the 'Create an application group' page in the Microsoft Azure portal. The page has a dark header with the 'Microsoft Azure' logo and a search bar. The breadcrumb trail is 'Home > Virtual Desktop | Application groups >'. The title 'Create an application group' is at the top right. Below the title are tabs: 'Basics' (selected), 'Assignments', 'Applications', 'Workspace', 'Tags', and 'Review + create'. The 'Basics' tab contains the following fields:

- Subscription \***: A dropdown menu showing 'Visual Studio Enterprise'.
- Resource group \***: A dropdown menu showing 'wvd-dm-rg1' with a 'Create new' link below it.
- Host pool \***: A dropdown menu showing 'wvd-host-pool-1'.
- Location**: A dropdown menu showing 'Central US' with a note 'Metadata stored in same location as host pool'.
- Application group type**: A section with the text 'RemoteApp application groups are where you can add applications. A Desktop application group will grant full desktop access.' and two radio buttons: 'RemoteApp' (selected) and 'Desktop'.
- Application group name \***: A text input field containing 'RemoteApp1' with a green checkmark on the right.

At the bottom of the page are two buttons: 'Review + create' (blue) and 'Next: Assignments >' (grey).

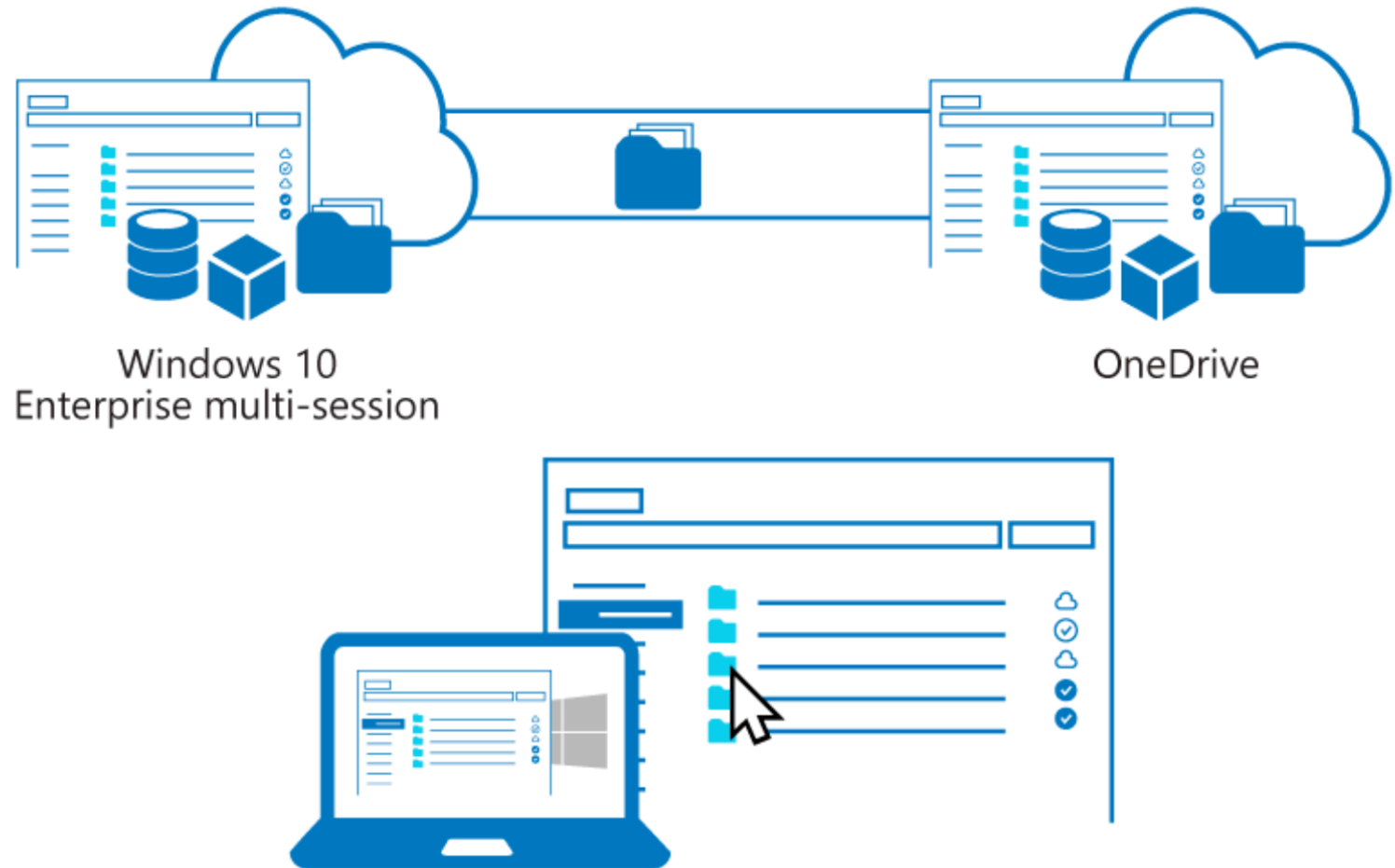
# Using the OneDrive sync app on virtual desktops



# Using the OneDrive sync app on virtual desktops

The OneDrive sync per machine app provides:

- Automatic transitioning from the previous OneDrive for Business sync app
- Automatic conversion from per-user to per-machine
- Automatic updates when a new version is available





# Using Microsoft Teams on Azure Virtual desktop



# Using Microsoft Teams on Azure Virtual desktop

Media optimization for Microsoft Teams is only available for the Windows Desktop client on Windows 10 machines.

- Microsoft Teams on Azure Virtual Desktop supports chat and collaboration.
- With media optimizations, it also supports calling and meeting functionality.
- With media optimization for Microsoft Teams, the Windows Desktop client handles audio and video locally for Teams calls and meetings.
- You can still use Microsoft Teams on Azure Virtual Desktop with other clients without optimized calling and meetings.
- Teams chat and collaboration features are supported on all platforms.



# Publish built-in apps in Azure Virtual Desktop



# Publish built-in apps in Azure Virtual Desktop

① Get-AzWvdNewAppItem

To publish a built-in app:

1. Connect to one of the virtual machines in your host pool.
2. Get the **PackageFamilyName** of the app you want to publish by following the instructions in [this article](#).
3. Run the following cmdlet with <PackageFamilyName> replaced by the **PackageFamilyName** you found in the previous step:

②.

```
New-AzWvdApplication -Name <applicationname> -ResourceGroupName <resourcegroupname> -  
ApplicationGroupName <appgroupname> -FilePath "shell:appsFolder\<PackageFamilyName>!App" -  
CommandLineSetting <Allow|Require|DoNotAllow> -IconIndex 0 -IconPath <iconpath> -ShowInPortal:$true
```

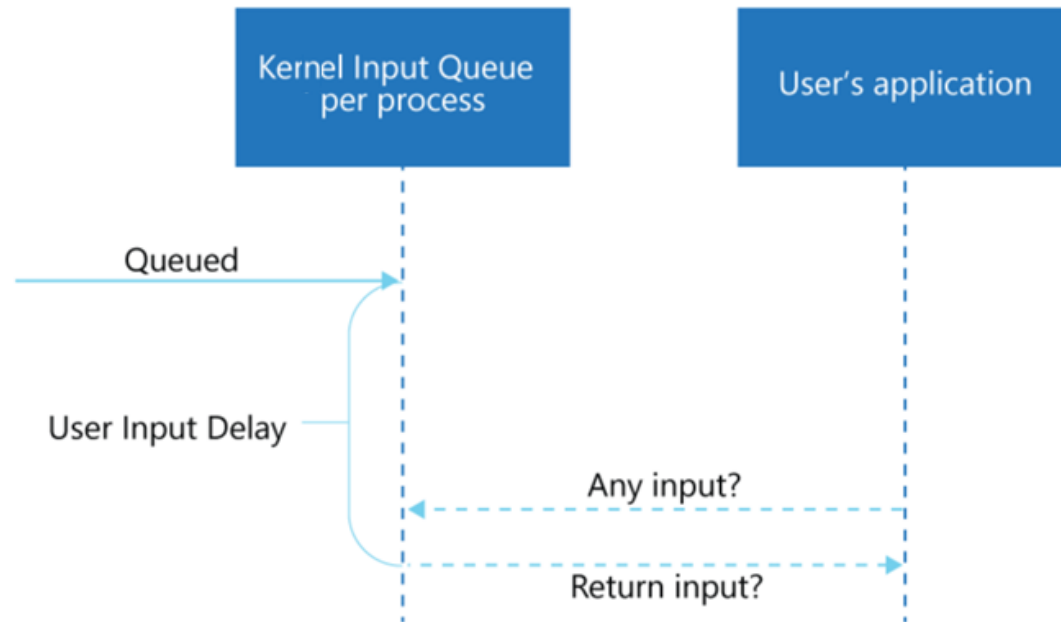
Azure Virtual Desktop only supports publishing apps with install locations that begin with *C:\Program Files\WindowsApps*.

# Troubleshoot application issues for Azure Virtual Desktop



## The User Input Delay counter can help identify the root cause for bad end user RDP experiences.

- The counter measures how long any user input remains in the queue before it is picked up by a process.
- The User Input Delay counter measures the max delta between the input being queued and when it's picked up by the app in a message loop.



# Knowledge check and Summary

## Check your knowledge



## What you learned:

- Describe MSIX app attach for Azure Virtual Desktop.
- Explain how MSIX app attach works.
- Set up a file share for MSIX app attach.
- Use the OneDrive sync app on Azure Virtual Desktops.
- Use Microsoft Teams on Azure Virtual Desktop.
- Publish built-in apps in Azure Virtual Desktop.

# End of presentation

