

## Practical No: 5

# Create Storage Account / File Share & integrate with DC Using PowerShell

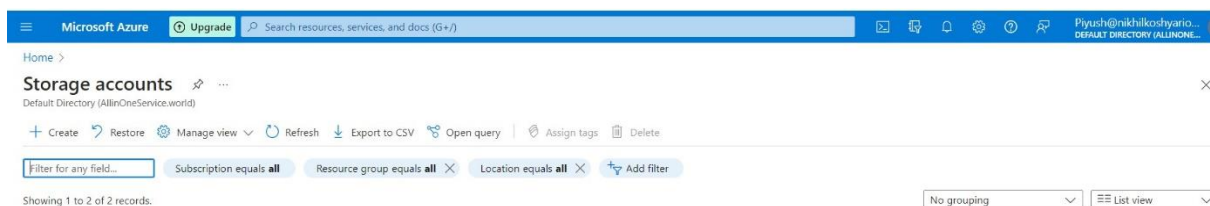
### Agenda:

#### Section 4:

1. Create Storage Account
2. File share & integrate with DC
3. Reference: - [https://www.youtube.com/watch?v=UKHxz\\_Bqy4U&list=PL-7q6zBuziYE9ZMWhigjU6VXI0v1mLnpL&index=4](https://www.youtube.com/watch?v=UKHxz_Bqy4U&list=PL-7q6zBuziYE9ZMWhigjU6VXI0v1mLnpL&index=4)

### 1. Create Storage Account:

- After establishment of DC in VM, we need storage to store data
- In Azure portal, Search Storage Account
- Click to Create Storage account



- Create a new Resource group
- Storage account name = avdstorage2002
- Keep same region, we created Vm East US 2

## Section 4: Implementing Fslogix on AVD

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, an 'Upgrade' button, a search bar, and user information for 'Piyush@nikhilkoshyar'. The main content area displays the 'Overview' page for a deployment named 'avdstorage2002\_1707810244288'. A green checkmark indicates 'Your deployment is complete'. The deployment details show a successful deployment of three resources: 'avdstorage2002/default' (Microsoft.Storage/storageAccount), 'avdstorage2002/default' (Microsoft.Storage/storageAccount), and 'avdstorage2002' (Microsoft.Storage/storageAccount). The 'Next steps' section includes a 'Go to resource' button. The right sidebar contains links to 'Cost Management', 'Microsoft Defender for Cloud', 'Free Microsoft tutorials', and 'Work with an expert'.

Home > **avdstorage2002\_1707810244288** | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

**Your deployment is complete**

Deployment name: avdstorage2002\_1707810244288  
Subscription: Free Trial  
Resource group: GBStorage

Start time: 13/02/2024, 13:14:15  
Correlation ID: df5203c2-e126-4802-b981-c522b1d449f8

**Deployment details**

Resource	Type	Status	Operation details
avdstorage2002/default	Microsoft.Storage/storageAccount...	OK	<a href="#">Operation details</a>
avdstorage2002/default	Microsoft.Storage/storageAccount...	OK	<a href="#">Operation details</a>
avdstorage2002	Microsoft.Storage/storageAccount...	OK	<a href="#">Operation details</a>

**Next steps**

[Go to resource](#)

Give feedback  
Tell us about your experience with deployment

**Cost Management**  
Get notified to stay within your budget  
prevent unexpected charges on your b  
Set up cost alerts >

**Microsoft Defender for Cloud**  
Secure your apps and infrastructure  
Go to Microsoft Defender for Cloud >

**Free Microsoft tutorials**  
Start learning today >

**Work with an expert**  
Azure experts are service provider part  
who can help manage your assets on /  
and be your first line of support.  
Find an Azure expert >

- Click to file shares

The screenshot shows the Microsoft Azure portal interface for the 'avdstorage2002' storage account. The left sidebar contains navigation links for 'Data migration', 'Events', 'Storage browser', 'Storage Mover', 'Data storage', 'Containers', 'File shares' (highlighted with a red box and arrow), 'Queues', 'Tables', 'Security + networking', 'Networking', 'Front Door and CDN', 'Access keys', 'Shared access signature', and 'Encryption'. The main content area displays the 'Essentials' section for the storage account, showing details such as 'Resource group: GBStorage', 'Location: eastus2', 'Subscription: Free Trial', 'Subscription ID: 388c354a-444c-43d2-876d-2e1c79b4308f', 'Disk state: Available', and 'Created: 2/13/2024, 1:14:22 PM'. The 'Properties' section is expanded, showing 'Blob service' and 'Security' settings. The 'Blob service' settings include 'Hierarchical namespace: Disabled', 'Default access tier: Hot', 'Blob anonymous access: Disabled', 'Blob soft delete: Enabled (7 days)', 'Container soft delete: Enabled (7 days)', 'Versioning: Disabled', and 'Change feed: Disabled'. The 'Security' settings include 'Require secure transfer for REST API operations: Enabled', 'Storage account key access: Enabled', 'Minimum TLS version: Version 1.2', and 'Infrastructure encryption: Disabled'. The 'Networking' section shows 'Allow access from: All networks'.

Home > avdstorage2002\_1707810244288 | Overview

**avdstorage2002**  
Storage account

Search

Upload Open in Explorer Delete Move Refresh Open in mobile CLI / PS Feedback

**Essentials**

Resource group (move): GBStorage

Location: eastus2

Subscription (move): Free Trial

Subscription ID: 388c354a-444c-43d2-876d-2e1c79b4308f

Disk state: Available

Created: 2/13/2024, 1:14:22 PM

Tags (edit): Add tags

**Properties** Monitoring Capabilities (7) Recommendations (0) Tutorials Tools + SDKs

**Blob service**

Hierarchical namespace	Disabled
Default access tier	Hot
Blob anonymous access	Disabled
Blob soft delete	Enabled (7 days)
Container soft delete	Enabled (7 days)
Versioning	Disabled
Change feed	Disabled

**Security**

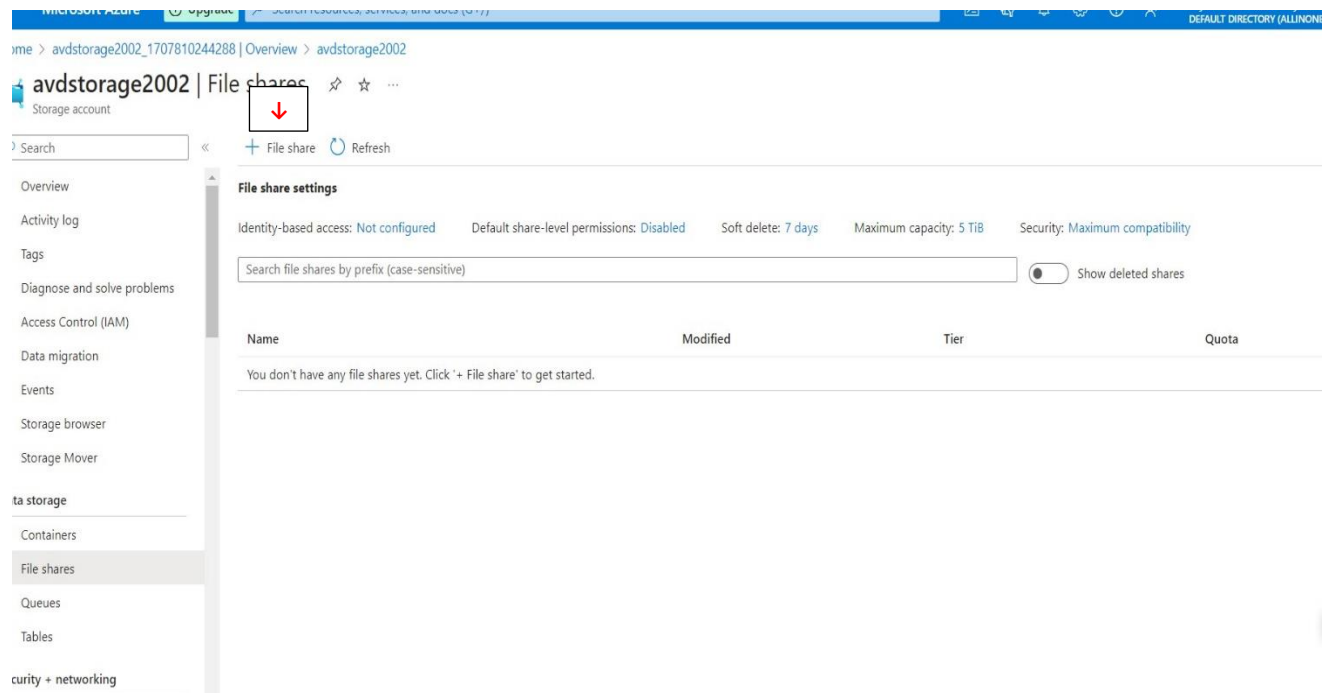
Require secure transfer for REST API operations	Enabled
Storage account key access	Enabled
Minimum TLS version	Version 1.2
Infrastructure encryption	Disabled

**Networking**

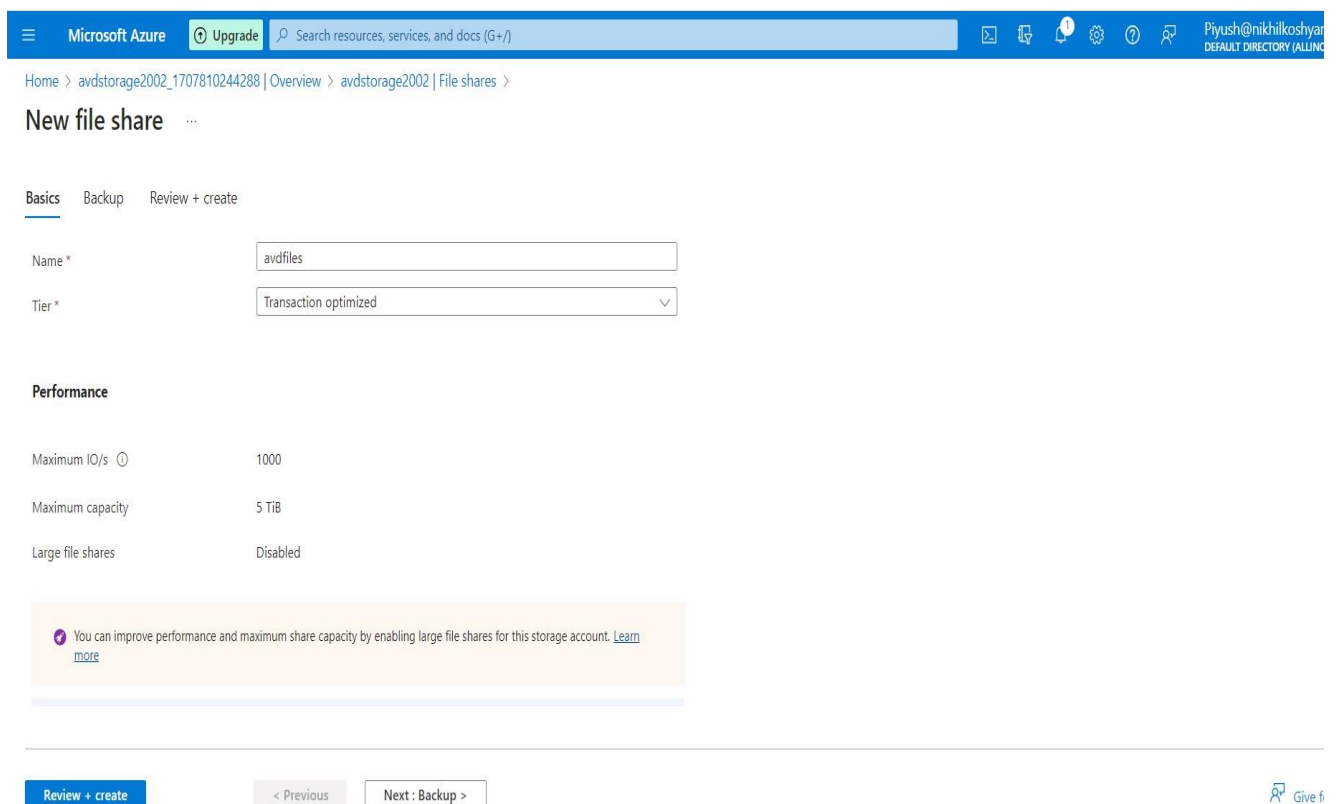
Allow access from	All networks
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## Section 4: Implementing Fslogix on AVD

- Click to add file share



- Give any name



## Section 4: Implementing Fslogix on AVD

Microsoft Azure

Upgrade

Search resources, services, and docs (G+)

Piyush@nikhilkoshyar  
DEFAULT DIRECTORY (ALLI...

Home > avdstorage2002\_1707810244288 | Overview > avdstorage2002 | File shares >

### New file share

BasicsBackupReview + create

Capabilities [Learn more](#)

Enable backup ☒

Recovery Services Vault \*

☐ Create new

☐ Select existing

Vault name \*

Resource group \*

Backup policy \*

[Edit this policy](#)

Policy details

**Backup frequency**  
Daily at 7:30 PM UTC

**Retention of daily backup point**  
Retain backup taken every day at 7:30 PM for 30 Day(s)

Review + create

< Previous

Next : Review >

Give feedback

- Click to Create

Microsoft Azure

Upgrade

Search resources, services, and docs (G+)

Piyush@nikhilkoshyar  
DEFAULT DIRECTORY (ALLI...

Home > avdstorage2002\_1707810244288 | Overview > avdstorage2002 | File shares > New file share >

**avdfiles**

SMB File share

Connect Upload Refresh Add directory Delete share Change tier Edit quota Give feedback

Overview

Diagnose and solve problems

Access Control (IAM)

Browse

Operations

Snapshots

Backup

Enable Backup for file share "avdfiles" to protect your data. [Learn more](#)

**Essentials**

Storage account : [avdstorage2002](#)

Resource group [\(move\)](#) : [GBstorage](#)

Location : East US 2

Subscription [\(move\)](#) : [Free Trial](#)

Subscription ID : 388c354a-444c-43d2-876d-2e1c79b4308f

Share URL : <https://avdstorage2002.file.core.windows.net/avdfiles>

Redundancy : Locally-redundant storage (LRS)

Configuration modified : 2/13/2024, 1:19:14 PM

JSON

**Properties**

Capabilities (2)

Tutorials

**Size**

Maximum capacity : 5 TiB

Used capacity : 0 B

Tier : Transaction optimized

**Performance**

Maximum IO/s : 1000

Ingress rate : 60 MiB / s

**Feature status**

Soft delete : 7 days

Large file shares : Disabled

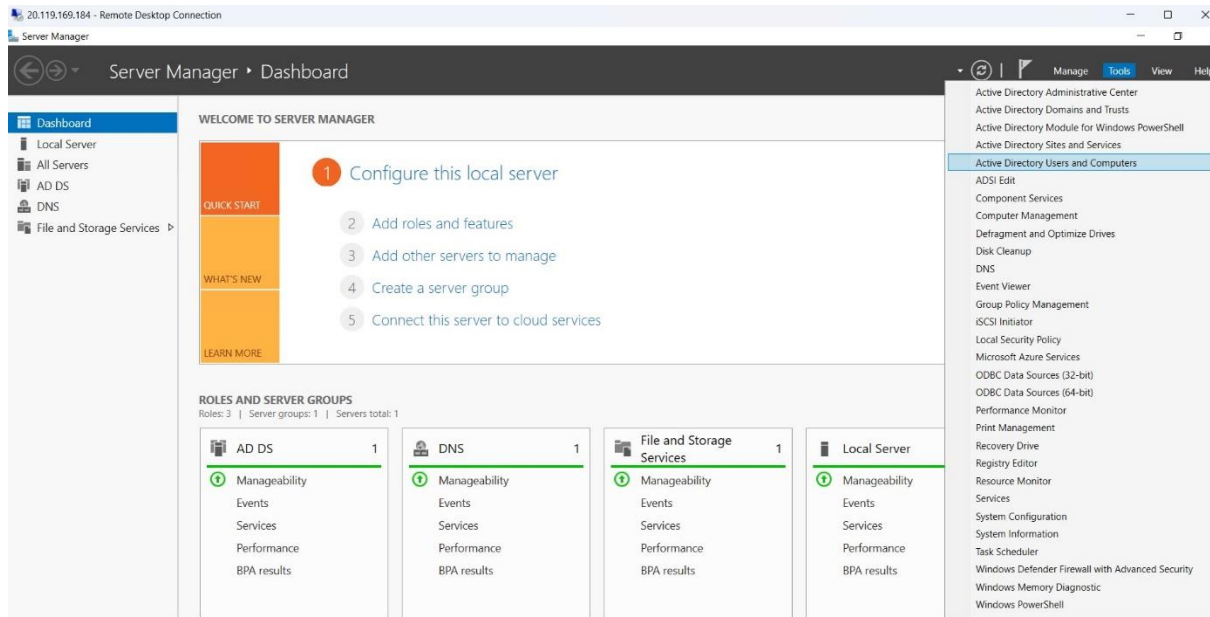
**Identity-based access**

Directory service : Not configured

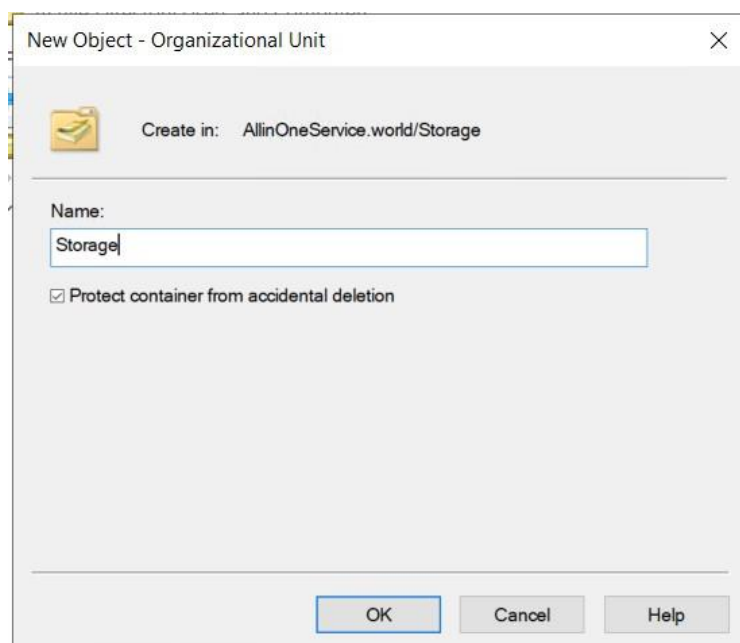
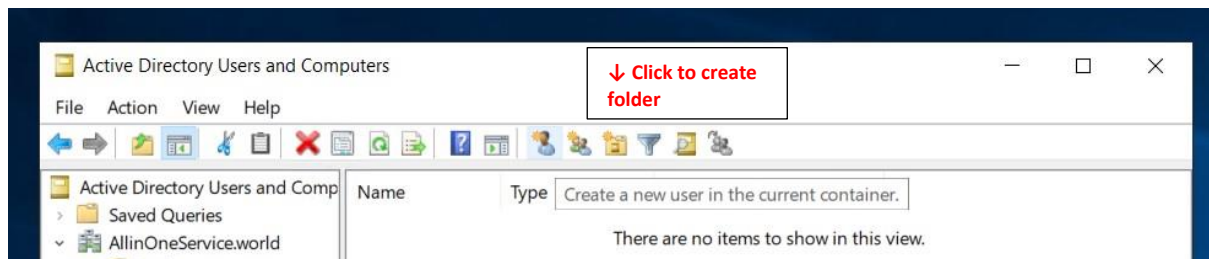
Domain : -

## Section 4: Implementing Fslogix on AVD

- Now go to owner, Vm created DC
- In server Manager→ Click to Tools→ Active Directory users and Computers

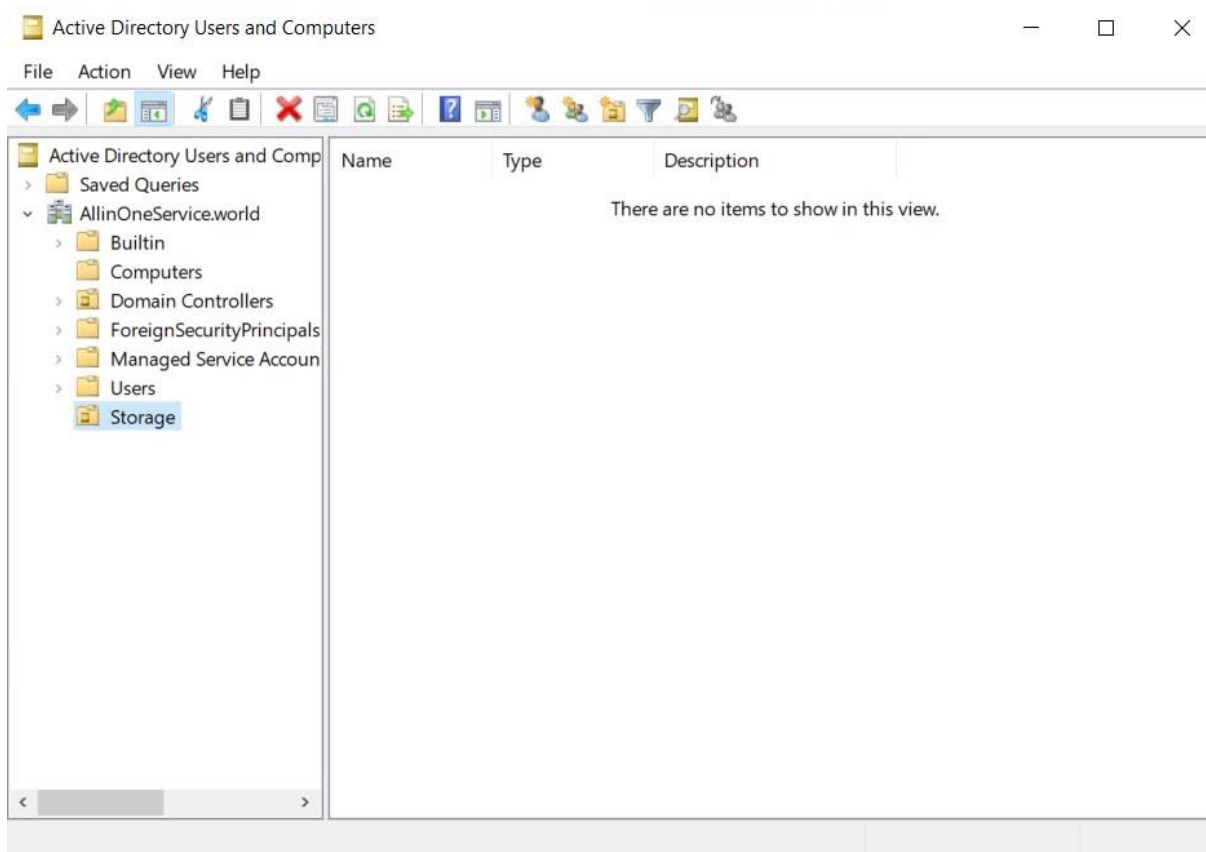


- Crated a new folder Storage, because we need to link storage account to DC



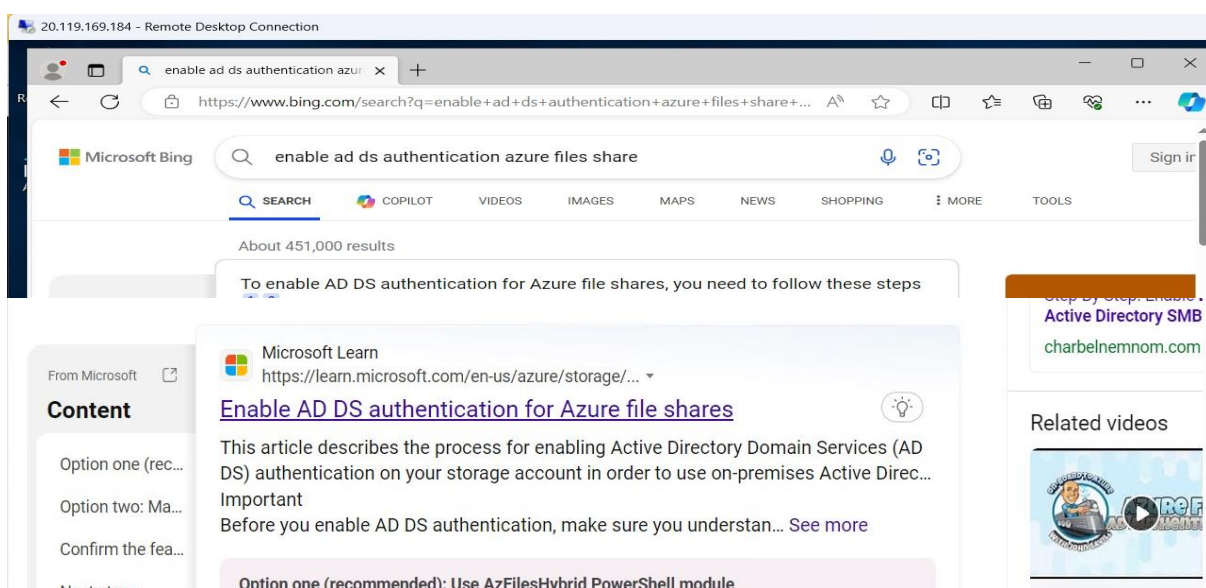
## Section 4: Implementing Fslogix on AVD

- Storage Folder is Created



### 2. File share & integrate with DC:

- Now go to Browser, Search Enable ADDS authentication azure file share





## Section 4: Implementing Fslogix on AVD

- Open that link :- <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-identity-ad-ds-enable>
- Click to Download and unzip the latest version of the Azfileshybrid module

The screenshot shows a web browser window with the URL <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-identity-ad-ds-enable>. The page has a left sidebar with a search filter 'Filter by title' and a list of topics. The main content area is titled 'Prerequisites' and lists three requirements: .NET Framework 4.7.2 or higher, Azure PowerShell (Az module) and Az.Storage, and the Active Directory PowerShell module. Below this is a section titled 'Download AzFilesHybrid module' with a link 'Download and unzip the latest version of the AzFilesHybrid module' which is highlighted with a red box and a red arrow. The next section is 'Run Join-AzStorageAccount', which explains the cmdlet's function and provides instructions on account creation and password management.

### Prerequisites

- If you don't have [.NET Framework 4.7.2 or higher](#) installed, install it now. It's required for the AzFilesHybrid module to import successfully.
- Make sure you have [Azure PowerShell](#) (Az module) and [Az.Storage](#) installed. You must have at least Az.PowerShell 2.8.0+ and Az.Storage 4.3.0+ to use AzFilesHybrid.
- Install the [Active Directory PowerShell](#) module.

### Download AzFilesHybrid module

[Download and unzip the latest version of the AzFilesHybrid module](#).

### Run Join-AzStorageAccount

The `Join-AzStorageAccount` cmdlet performs the equivalent of an offline domain join on behalf of the specified storage account. The script below uses this cmdlet to create a [computer account](#) in your AD domain. If for whatever reason you can't use a computer account, you can alter the script to create a [service logon account](#) instead. Using AES-256 encryption with service logon accounts is supported beginning with AzFilesHybrid version 0.2.5.

The AD DS account created by the cmdlet represents the storage account. If the AD DS account is created under an organizational unit (OU) that enforces password expiration, you must update the password before the maximum password age. Failing to update the

## Download that Azfileshybrid.zip

The screenshot shows the GitHub repository page for `Azure-Samples/azure-files-samples`. The page displays the latest release, **v0.2.9**, which is marked as 'Latest'. The release notes list three changes: a new Debug cmdlet, a fix for Kerberos key rotation, and the removal of an unused parameter. Below the release notes, there is a section for 'Assets' which contains three items: `AzFilesHybrid.zip` (76.5 KB, last month), `Source code (zip)` (last month), and `Source code (tar.gz)` (last month). The `AzFilesHybrid.zip` asset is highlighted with a red box and a red arrow. The page also shows a 'Compare' button for the v0.2.9 release and a '1 person reacted' notification.

last month  
hxin-ms  
v0.2.9  
0758c31

Compare

### v0.2.9

Latest

Release v0.2.9:

1. A new Debug cmdlet that checks if the AAD Kerb registration key is enabled for AD DS which could cause Kerberos issues.
2. A fix for a bug where Kerberos key rotation is not forced, now ensuring that key rotation occurs as intended.
3. Removal of an unused parameter in the Join cmdlet, no longer needed because we are using AES256 as the default encryption type.

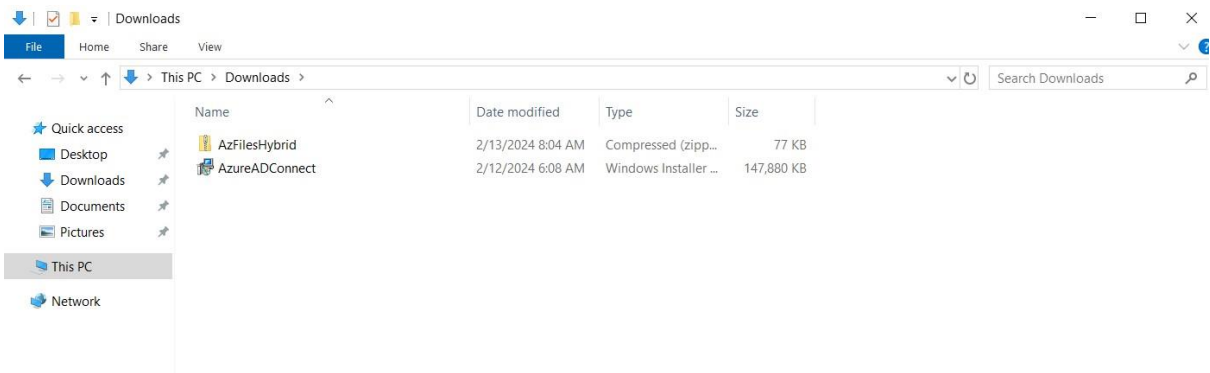
#### Assets

Asset	Size	Released
<a href="#">AzFilesHybrid.zip</a>	76.5 KB	last month
<a href="#">Source code (zip)</a>		last month
<a href="#">Source code (tar.gz)</a>		last month

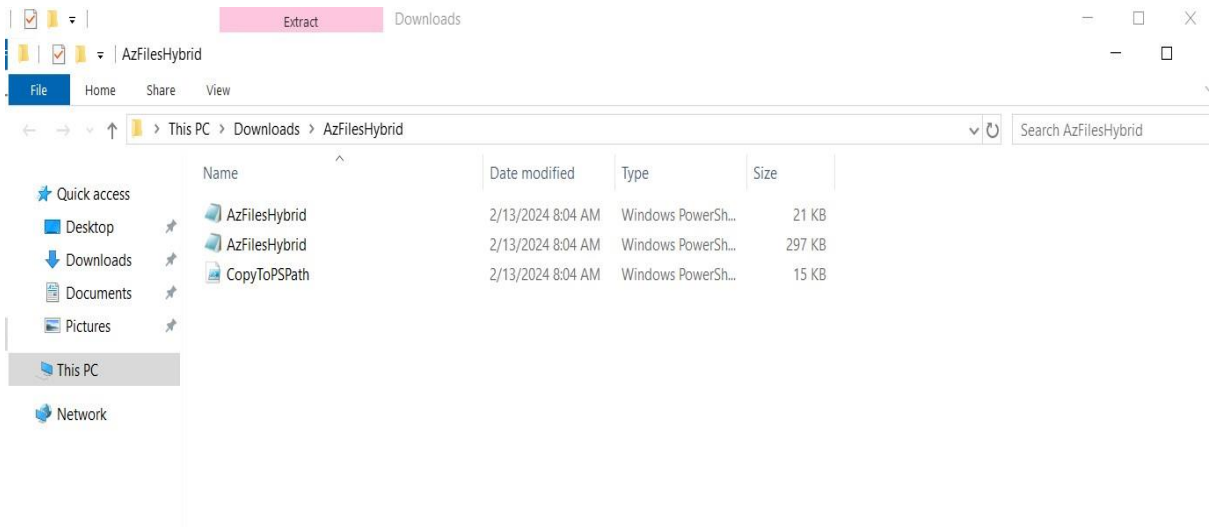
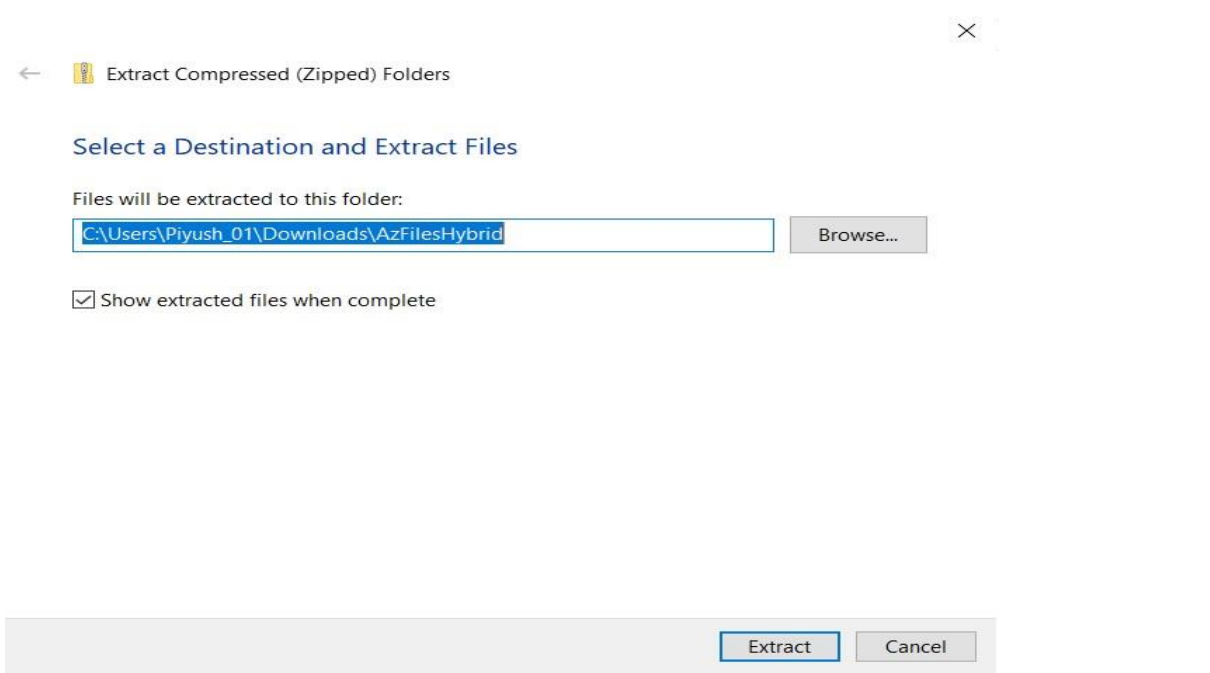
1 person reacted

Section 4: Implementing Fslogix on AVD

- Go to Downloads



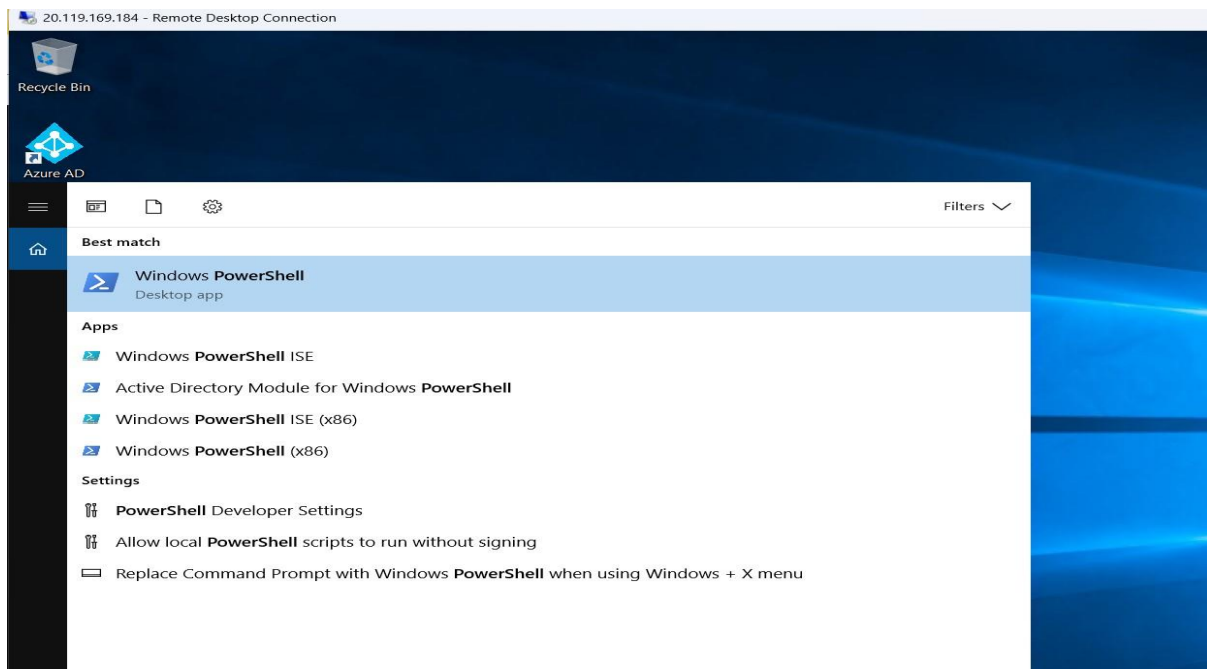
- Extract that file





## Section 4: Implementing Fslogix on AVD

- Now in Windows Search menu → Search Windows PowerShell ISE
- Run as administrator



- Open that link :- <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-identity-ads-enable>
- All PowerShell commands available in this link
- follow the steps to Connect Azure storage account to DC
  - 1) cd
  - 2) cd Downloads
  - 3) cd AzFilesHybrid
  - 4) # Change the execution policy to unblock importing AzFilesHybrid.psm1 module
  - 5) Set-ExecutionPolicy -ExecutionPolicy Unrestricted -Scope CurrentUser
  - 6) # Navigate to where AzFilesHybrid is unzipped and stored and run to copy the files into your path.\CopyToPSPPath.ps1
  - 7) # Import AzFilesHybrid module Import-Module -Name AzFilesHybrid
  - 8) Install-Module -Name Az -AllowClobber -Scope CurrentUser
  - 9) Install-Module -Name Az -Force -AllowClobber
  - 10) Import-Module Az
  - 11) Connect-AzAccount
  - 12) Join-AzstorageAccount -ResourceGroupName GBstorage -StorageAccountName avdstorage2002 -DomainAccountType "ComputerAccount" -OrganizationUnitName "Storage" -Domain AllinOneService.world

## Section 4: Implementing Fslogix on AVD

The screenshot shows the Windows PowerShell ISE interface. The main console displays the following commands and output:

```
PS C:\Users\Piyush_01> cd
PS C:\Users\Piyush_01> cd Downloads
PS C:\Users\Piyush_01\Downloads> cd AzFilesHybrid
PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> # Change the execution policy to unblock importing AzFilesHybrid.psm1 module
Set-ExecutionPolicy -ExecutionPolicy Unrestricted -Scope CurrentUser
PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> # Navigate to where AzFilesHybrid is unzipped and stored and run to copy the files into y
.\copyToPSPath.ps1
PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> # Import AzFilesHybrid module
Import-Module -Name AzFilesHybrid

Request-PowerShellGetModule : PowerShellGet was successfully installed, however you must close all open PowerShell sessions to use
the new version. The next import of this module will be able to use PowerShellGet.
At C:\Program Files\Microsoft Azure AD Connect Health Agent\Modules\AzFilesHybrid\0.2.9.0\AzFilesHybrid.psm1:7077 char:5
+ Request-PowerShellGetModule
+ ~~~~~
+ CategoryInfo          : NotSpecified: (:) [Write-Error], WriteErrorException
+ FullyQualifiedErrorId : Microsoft.PowerShell.Commands.WriteErrorException,Request-PowerShellGetModule

Import-Module : The module to process 'AzFilesHybrid.psm1', listed in field 'ModuleToProcess/RootModule' of module manifest
'C:\Program Files\Microsoft Azure AD Connect Health Agent\Modules\AzFilesHybrid\0.2.9.0\AzFilesHybrid.psd1' was not processed
because no valid module was found in any module directory.
At line:2 char:1
+ Import-Module -Name AzFilesHybrid
+ ~~~~~
+ CategoryInfo          : ResourceUnavailable: (AzFilesHybrid:String) [Import-Module], PSInvalidOperationException
+ FullyQualifiedErrorId : Modules_ModuleFileNotFound,Microsoft.PowerShell.Commands.ImportModuleCommand

PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> Install-Module -Name Az -AllowClobber -Scope CurrentUser
PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> Install-Module -Name Az -Force -AllowClobber
PS C:\Users\Piyush_01\Downloads\AzFilesHybrid> Connect-AzAccount
```

The right-hand pane shows a list of modules available for import, including:

- Add-ADCentralAccessPolicyMember
- Add-ADComputerServiceAccount
- Add-ADDomainControllerPasswordReplicationPolicy
- Add-ADDSReadOnlyDomainControllerAccount
- Add-ADFineGrainedPasswordPolicySubject
- Add-ADGroupMember
- Add-ADPrincipalGroupMembership
- Add-ADResourcePropertyListMember
- Add-ADSyncAADServiceAccount
- Add-ADSyncADSSyncConnectorAccount
- Add-ADSyncAttributeFlowMapping
- Add-ADSyncConnector
- Add-ADSyncConnectorAnchorConstructionSettings
- Add-ADSyncConnectorAttributeInclusion
- Add-ADSyncConnectorHierarchyProvisioningMapping
- Add-ADSyncConnectorObjectInclusion
- Add-ADSyncGlobalSettingsParameter
- Add-ADSyncJoinConditionGroup
- Add-ADSyncRule
- Add-ADSyncRunProfile
- Add-ADSyncRunStep
- Add-ADSyncScopeConditionGroup
- Add-ADSyncToResourceGroup

The bottom screenshot shows the output of the `Connect-AzAccount` command:

```
PS C:\Users\Piyush_01> Connect-AzAccount
WARNING: Port 8400 is taken with exception 'An attempt was made to access a socket in a way forbidden by its access permission' to connect to the next port.
```

Account	SubscriptionName	TenantId	Environment
Piyush@nikhilkoshiarioutlook.onmicrosoft.com	Free Trial	76c6590b-2e49-4faa-8fbc-0682ca153970	AzureCloud

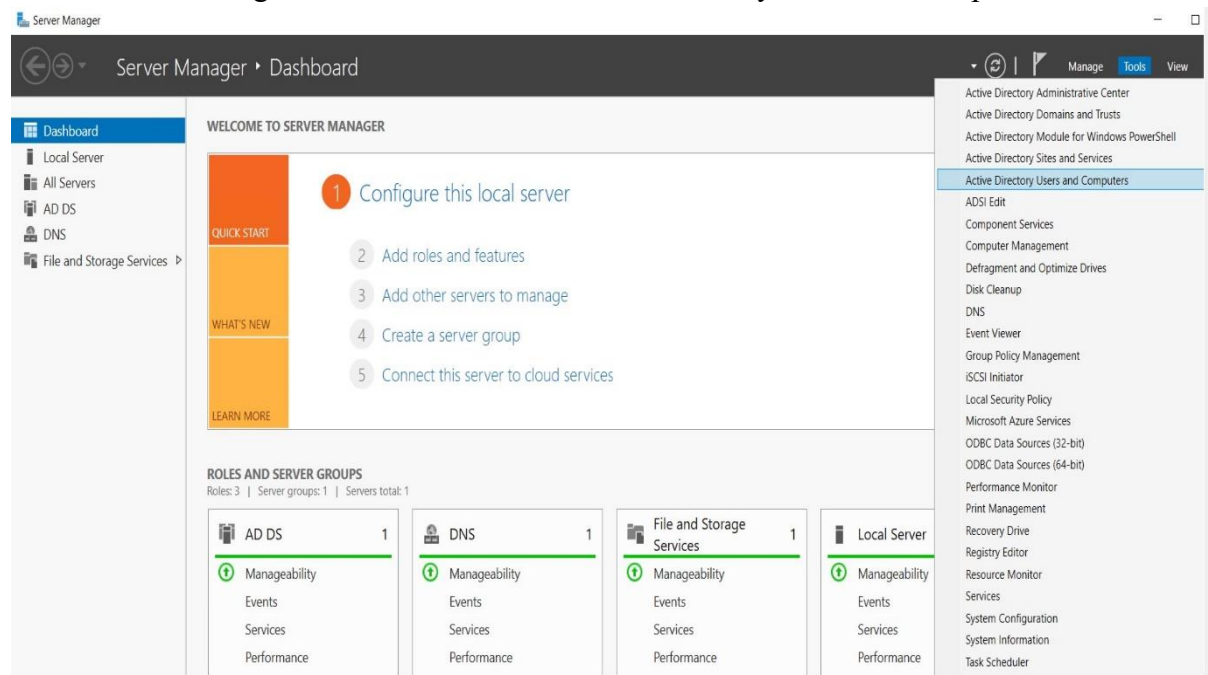
The bottom screenshot shows the output of the `Join-AzStorageAccount` command:

```
PS C:\Users\Piyush_01> Join-AzStorageAccount -ResourceGroupName GBStorage -StorageAccountName avdstorage2002 -DomainAccountTy
WARNING: The names of some imported commands from the module 'Microsoft.Azure.PowerShell.Cmdlets.Network' include unapproved
t might make them less discoverable. To find the commands with unapproved verbs, run the Import-Module command again with the
parameter. For a list of approved verbs, type Get-Verb.
WARNING: The names of some imported commands from the module 'Az.Network' include unapproved verbs that might make them less
ble. To find the commands with unapproved verbs, run the Import-Module command again with the Verbose parameter. For a list o
d verbs, type Get-Verb.
```

StorageAccountName	ResourceGroupName	PrimaryLocation	SkuName	Kind	AccessTier	CreationTime	ProvisioningState
avdstorage2002	GBStorage	eastus2	Standard_LRS	Storagev2	Hot	2/13/2024 7:44:22 AM	Succeeded

## Section 4: Implementing Fslogix on AVD

- Now go to owner, Vm created DC
- In server Manager→ Click to Tools→ Active Directory users and Computers



- Now we, can see storage account we created in Azure now link to DC

