



Windows Admin Center Server Manager ▾ Microsoft

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> **Azure File Sync** PREVIEW ⓘ

⚙ Settings 📁 Sync a folder

📱

⬆

👤

📄

❗

🛡

Server agent

Installed agent version
8.0.0.0

Expiration
No expiration date set

Latest available agent version
8.0.0.0

Web links

Azure portal
[Manage this registered server](#) ↗

Documentation
[Plan for an Azure File Sync deployment](#) ↗

[Deployment guide](#) ↗

Manage Azure File Sync with Windows Admin Center

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Azure File Sync - Agenda

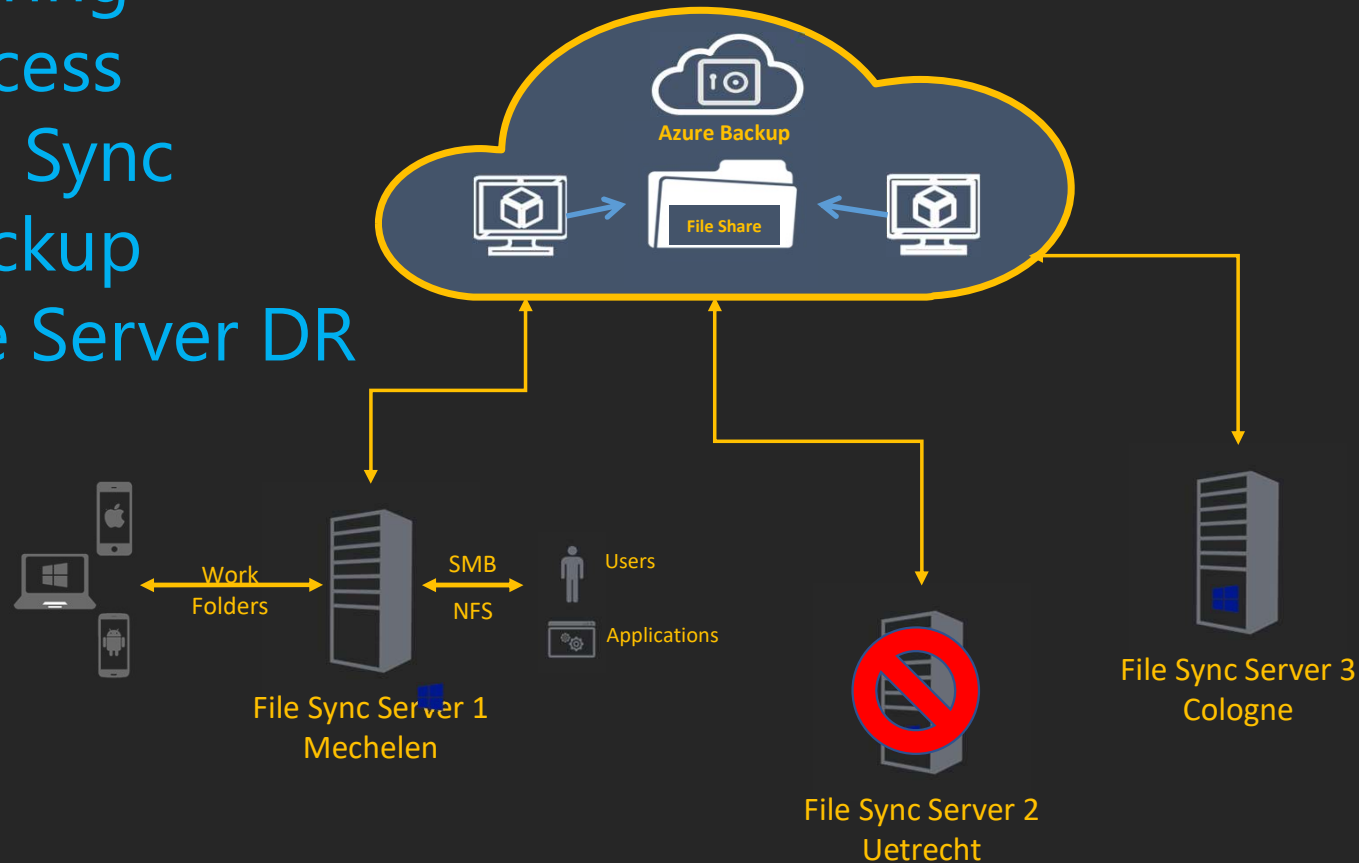
- General
- Functions about Azure Files & Azure File Sync
- Demo & Configuration via WAC
- Migration & Backup
- Conclusion
- Links



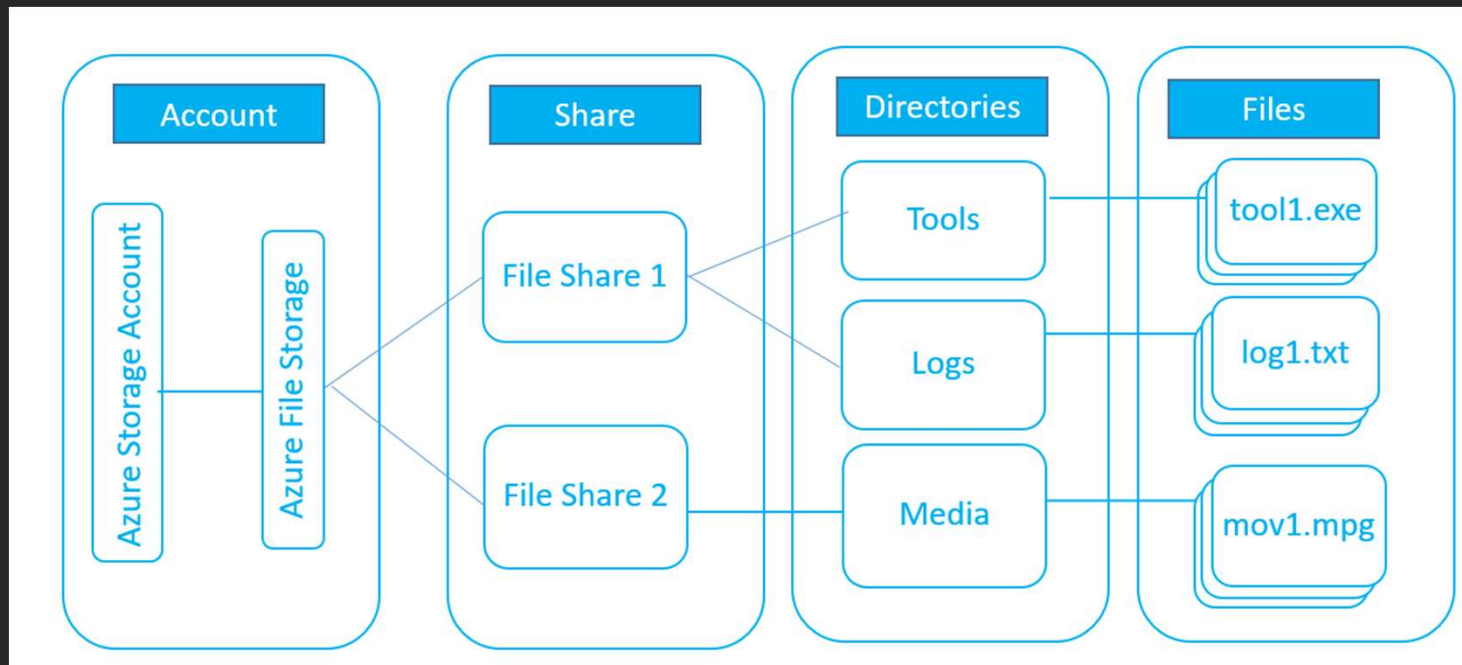
General

- AzureFileSync = AFS
- Synchronize Fileserver between Company Boundaries
- General Availability since July 2018
- Fileserver need Agent for syncing
 - Agent registered Fileserver in Azure
 - Monitoring and Syncing
 - Transparent for User
- Files will be synced to an Azure Fileshare

- Cloud Tiering
- Cloud Access
- Multi-site Sync
- Cloud Backup
- Rapid File Server DR



Azure Files Introduction



<https://docs.microsoft.com/de-de/azure/storage/files/media/storage-files-introduction/files-concepts.png>

First some basically Introduction into Azure Files



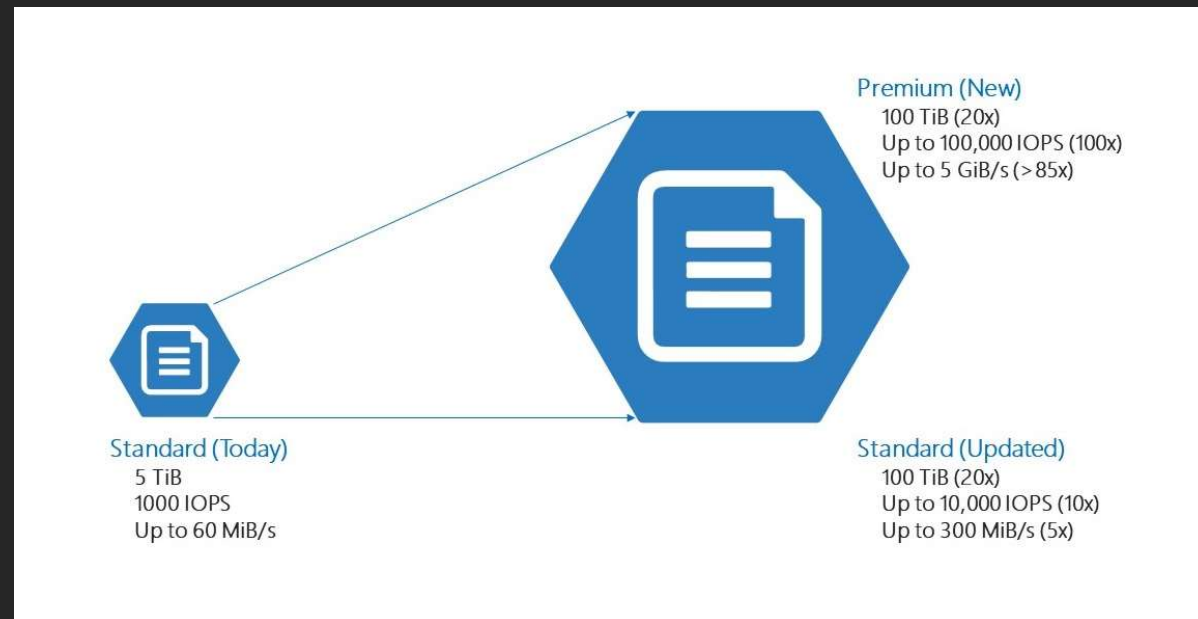
Azure Files

- Hosted SMB 3.1 Share for you on Azure
- PaaS solution
- You don't need to spin up and manage VM's
- No Volume layout
- Unique namespace, based on Azure Storage
- globalazure.blob.core.windows.net -> Storageaccount Name
- globalazure.file.core.windows.net -> Fileshare Name

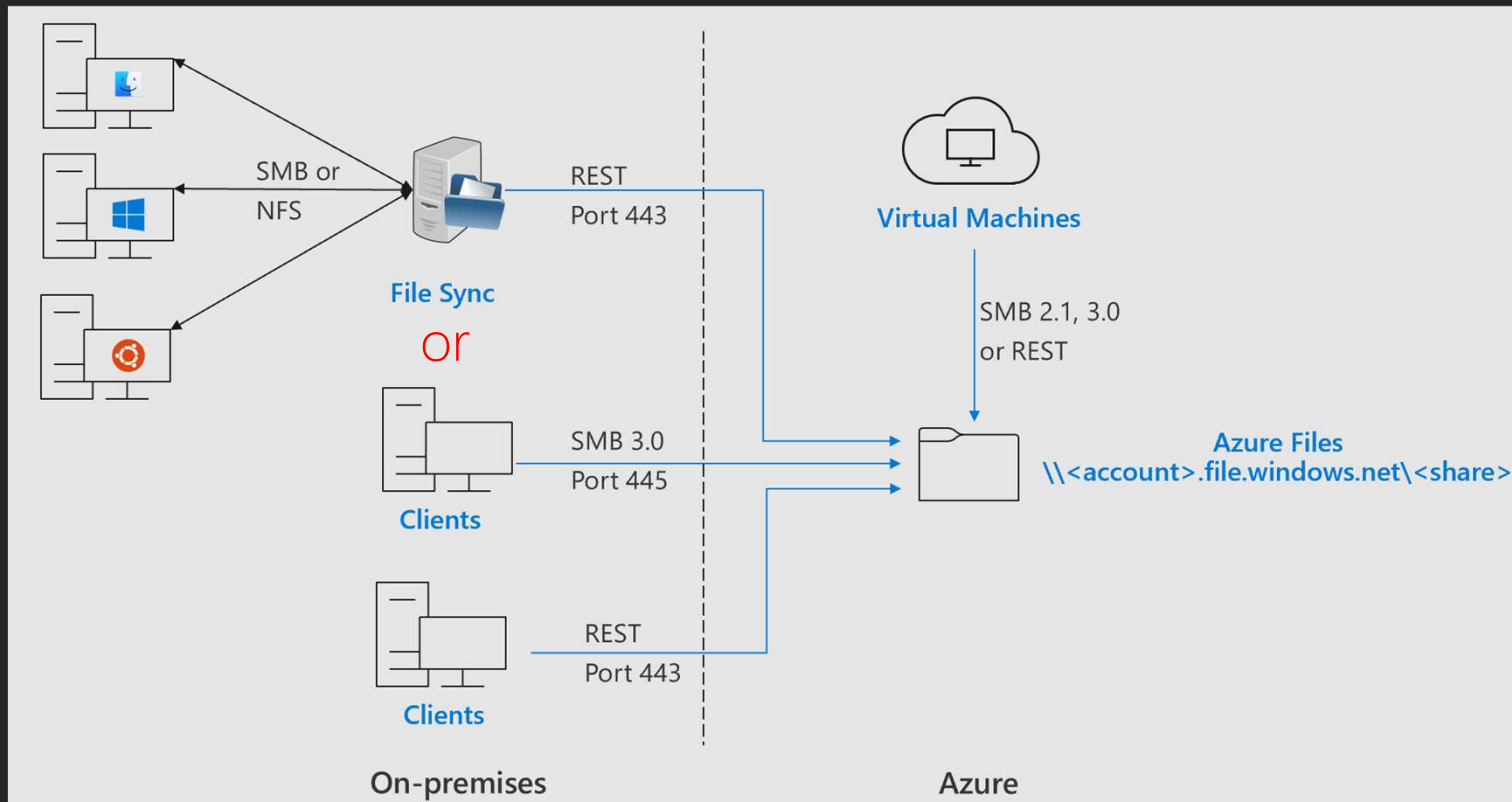


Azure Files News

- Active Directory File Integration for Azure Fileshares
- Standard
 - 5TB -> 100TB Fileshare
 - 1000 -> up to 10000 IOPS
 - 60MB/sec -> up to 300MB/sec
- Premium (new)
 - Up to 100,000 IOPS*
 - Up to 5GB/sec*
 - Based on the fileshare size



Azure Files – How it works





AFS – Requirements

- WS2012R2 GUI + PowerShell 5.1
- WS2016 GUI + Core
- WS2019 GUI + Core
- Internet Connection
- Dedicated Storage account (Recommended)
- Azure Fileshare
- Fileserver needed Powershell Module Az
- Agent Installation



Pre-requisites are missing

Retry server registration after performing the following actions:

Install the latest AzureRM PowerShell module by following the documentation: <https://go.microsoft.com/fwlink/?linkid=856959>.

Setting up Azure File Sync

- ✓ Registering Microsoft.StorageSync with your subscription
- ✓ Prepping the resource group
Name: globalazure_rg
- ✓ Prepping the Storage Sync Service
Creating new...
- ✓ Downloading the agent
- ✓ Installing the agent
- ✓ Registering the server with Azure

You're all set!

Next, click "Sync a folder" to finish setting up Azure File Sync.

AFS - Components

Storage Sync Service

Sync Group

Registered Server

- Associate with Sync Group (1:1)

Cloud Endpoint

- Azure Fileshare

Server Endpoint

- Serverpath

Azure File Sync Service Agent



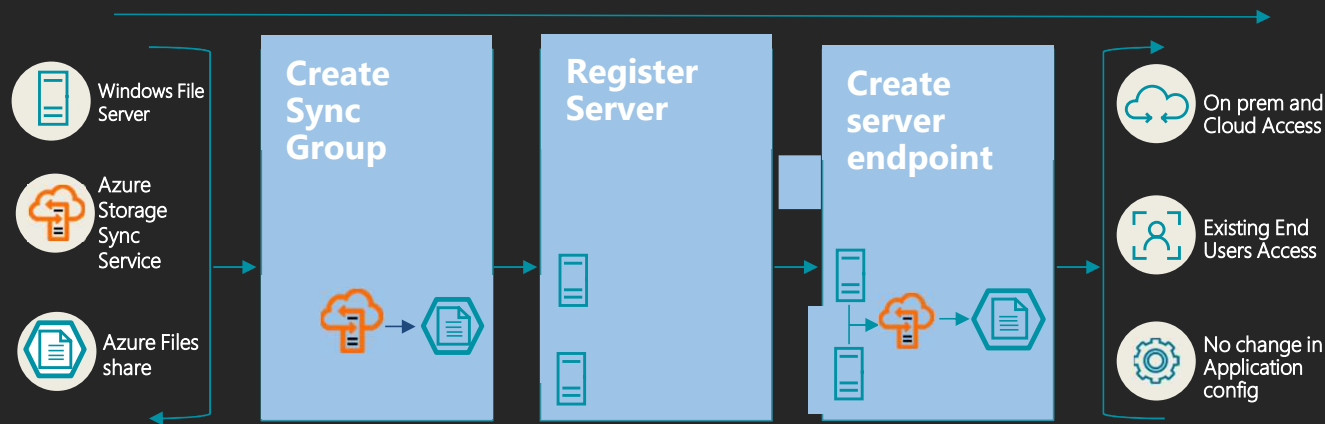


AFS – Cloud Tiering

- Bring your Fileserver in caching mode
- Sync agent build a heatmap of local files
- Hottest data will be stored locally
- Cold data only available in the Cloud
- Transparent for the User
- Local file have an pointer to the cloud file



Configure steps for Azure File Sync



Azure File Sync can help you move your data into cloud while keeping your frequently accessed data near you



Windows Admin Center

- Managing via Azure Portal
- Or use Windows Admin Center integration
- No managing options on the local Server
- Next Generation Servermanager
- Webbased on HTML 5
- Central surface for all server
- Easy installation - (MSI Paket) On-Premise or Cloud VM
- All Functions from the Servermanagers + many more included
- Import of existing Server easy via Textfile
- Serveranalysis agentless – WMI and PS



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You're all set!

Next, click "Sync a folder" to finish setting up Azure File Sync.

Demo Time



Manage AFS with WAC 😊

- Easy deployment of Azure File Sync on the servers
- Doesn't need logon on the Server
- Central view blade for Azure File Sync
- Easy to go to Azure Portal blade for additional configuration



AFS - Limitations

- Max. Size of Azure Fileshare 100TB
- Using more than one Fileshare possible (max. 500TB)
- Servers can only registered in one AFS group
- Filesystem only NTFS – No ReFS is supported
- Data duplication possible -> without Cloud Tiering

Replication ⓘ
Locally-redundant

Provides file share support up to a maximum of 100 TiB. Large file share storage accounts do not have the ability to convert to Geo-redundant storage offerings and upgrade is permanent. [Learn more](#)

Large file shares ⓘ
☐ Disabled ☒ Enabled



Centralize Backup for On-Prem Fileservers

- Enable Azure File Sync on the Server (it can be a single server)
- Create a Backup Vault
- Create a Backup Policy for Fileshares
- Integrate the Azure File Sync Fileshare into the Backup Vault
- That`s it – Now you have a full backup for your Server to the Cloud



AFS – Need to know

- Self-service restore is now possible (Cloud Tiering supports now VSS)
- File collision today -> saving two files with same name, the 2nd file get the servername appended
- Don't remove Server Endpoint and add them new – can cause data lost
 - Cloudtiering enabled - then first disable it via Powershell
- Bandwidth - It depends on fileshare size
 - Import-Module "C:\Program Files\Azure\StorageSyncAgent\StorageSync.Management.ServerCmdlets.dll"
 - New-StorageSyncNetworkLimit -Day Monday, Wednesday, Friday -StartHour 9 -EndHour 17 -LimitKbps 10000



AFS - Conclusion

- Fast installing and stable synchronizing 😊
- Costs: 1 Server Free, 5\$ each additional server 😊
- DRaaS for Fileservers 😊
- Supporting for DFS-R and SOFS 😊
- Easily migrate Backup 😊
- Fileshare Limit 100TB since MSIgnite 😊
- Can not change sync frequency 😊
- ~~No~~ support for ACLs in Azure Files (~~will be coming~~) 😊
- 1:1 binding between Server and Sync Group 😞



AFS - Links

- [Planning for an Azure File Sync deployment](#)
- [Manage registered servers with Azure File Sync](#)
- [Release notes for the Azure File Sync agent](#)
- [Introducing backup for Azure file shares](#)
- [Feedback for AzureFiles Product Group](#)
- [MS Ignite 2019 – Migrate SMB and NFS to Azure File Sync BRK3241](#)
- [MS Ignite 2019 – Windows Admin Center – Unlock Azure Hybrid value - BRK2379](#)
- [MS Ignite 2018 – Azure Files & Azure File Sync technical foundation THR2253](#)
- [Azure File Sync DSC from Jan Egil Ring](#)
- [Azure File Sync Blog entries on Reimling.eu \(German\)](#)
- [Azure Pricing Calculator](#)

Q&A



Thank you



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