


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

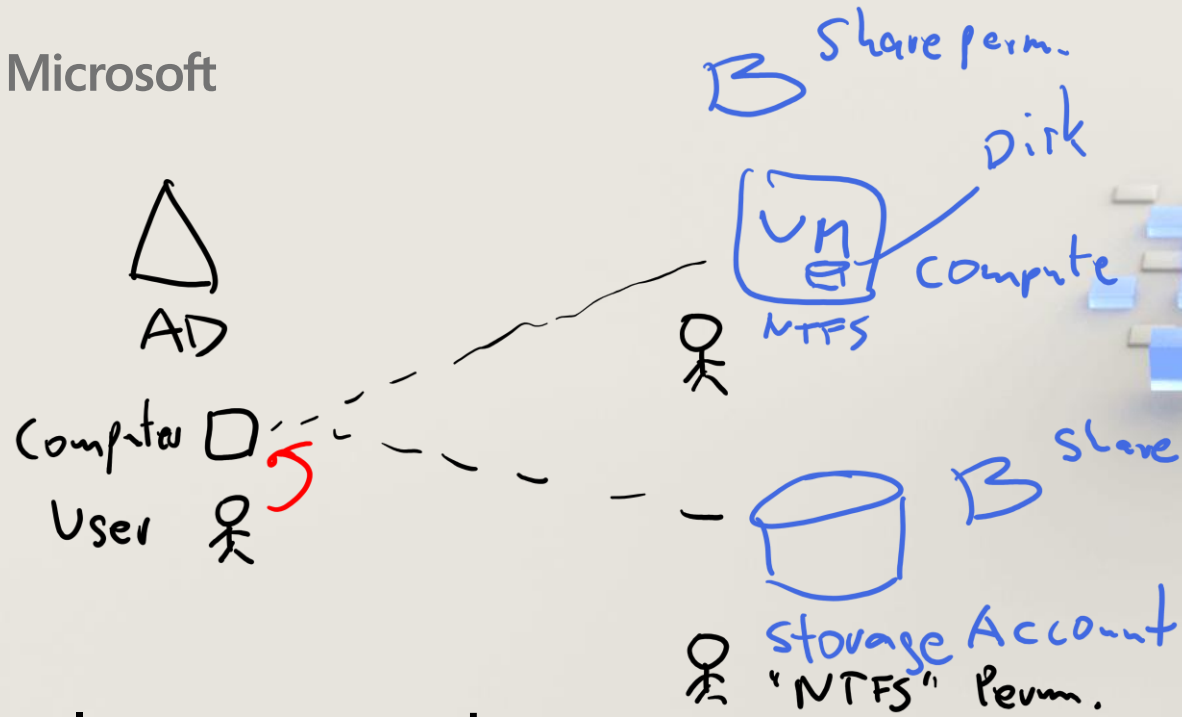
8. Manage access for AVD
9. Manage security for AVD

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. Monitor and manage performance and health
14. Plan and implement updates, backups, and disaster recovery



Implement and manage storage
for Azure Virtual Desktop

Introduction

After completing this module, you'll be able to:

- Plan storage for Azure Virtual Desktop user data
- Understand Azure storage management
- Configure Azure Files tiers
- Configure Azure NetApp Files tiers
- Implement storage accounts for Azure Virtual Desktop

Storage options for FSLogix profile containers in Azure Virtual Desktop



Plan storage for Azure Virtual Desktop user data

- Azure Virtual Desktop offers FSLogix profile containers as the recommended user profile solution.
- FSLogix is designed to roam profiles in remote computing environments, such as Azure Virtual Desktop.
- At sign-in, this container is dynamically attached to the computing environment using a natively supported Virtual Hard Disk (VHD) and a Hyper-V Virtual Hard Disk (VHDX).
- The user profile is immediately available and appears in the system exactly like a native user profile.

Azure storage management



Management features for Azure Files, Azure NetApp Files, and Storage Spaces Direct.

SHB 

Features	Azure Files	Azure NetApp Files	Storage Spaces Direct
Access	Cloud, on-premises and hybrid (Azure file sync)	Cloud, on-premises	Cloud, on-premises
Backup	Azure backup snapshot integration	Azure NetApp Files snapshots Azure NetApp Files backup	Azure backup snapshot integration
Security and compliance	All Azure supported certificates	Azure supported certificates	All Azure supported certificates
Microsoft Entra integration	Native Active Directory and Microsoft Entra Domain Services	Microsoft Entra Domain Services and Native Active Directory	Native Active Directory or Microsoft Entra Domain Services support only

Azure Stack

Azure Stack
HCI

Azure Files tiers



Azure Files offers two different tiers of storage: **premium** and **standard**. These tiers let you tailor the performance and cost of your file shares to meet your scenario's requirements.

- **Premium file shares** are backed by solid-state drives (SSDs) and are deployed in the FileStorage storage account type. Premium file shares provide consistent high performance and low latency for input and output (IO) intensive workloads.
- **Standard file shares** are backed by hard disk drives (HDDs) and are deployed in the general purpose version 2 (GPv2) storage account type. Standard file shares provide reliable performance for IO workloads that are less sensitive to performance variability.

Workload type	Recommended file tier
Light (fewer than 200 users)	Standard file shares
Light (more than 200 users)	Premium file shares or standard with multiple file shares
Medium	Premium file shares
Heavy	Premium file shares
Power	Premium file shares

Hot*
Cool
Cold

Archive

Azure NetApp Files tiers



- Azure NetApp Files volumes are organized in capacity pools. Volume performance is defined by the service level of the hosting capacity pool. Three performance levels are offered, ultra, premium and standard.
- Azure NetApp Files performance is a function of tier times capacity. More provisioned capacity leads to higher performance budget, which likely results in a lower tier requirement, providing a more optimal TCO.

Workload	Example Users	Azure NetApp Files
Light	Users doing basic data entry tasks	Standard tier
Medium	Consultants and market researchers	Premium tier: small-medium user count Standard tier: large user count
Heavy	Software engineers, content creators	Premium tier: small-medium user count Standard tier: large user count
Power	Graphic designers, 3D model makers, machines learning researchers	Ultra tier: small user count Premium tier: medium user count Standard tier: large user count

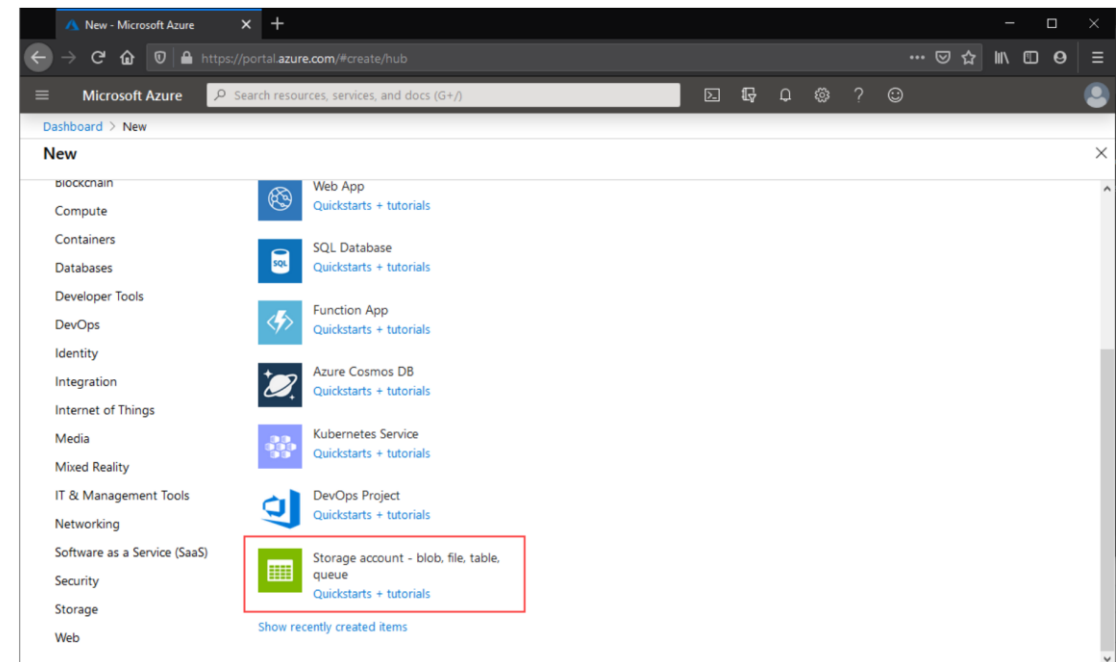
Implement storage accounts for Azure Virtual Desktop



Azure supports multiple types of storage accounts for different storage scenarios customers might have, but there are two main types of storage accounts for Azure Files.

Which storage account type you need to create depends on whether you want to create a standard file share or a premium file share:

- **General purpose version 2 (GPv2) storage accounts:** Standard GPv2 storage accounts allow you to deploy Azure file shares on standard/hard disk-based (HDD-based) hardware. In addition to storing Azure file shares, GPv2 storage accounts can store other storage resources such as blobs, queues, or tables. File shares can be deployed into the transaction optimized (default), hot, or cool tiers.
- **FileStorage storage accounts:** FileStorage storage accounts allow you to deploy Azure file shares on premium/solid-state disk-based (SSD-based) hardware. FileStorage accounts can only be used to store Azure file shares; no other storage resources (blobs, queues, tables, etc.) can be deployed in a FileStorage account.



Bicep

Terraform
Hashicorp → IBM
TOFU

Knowledge check

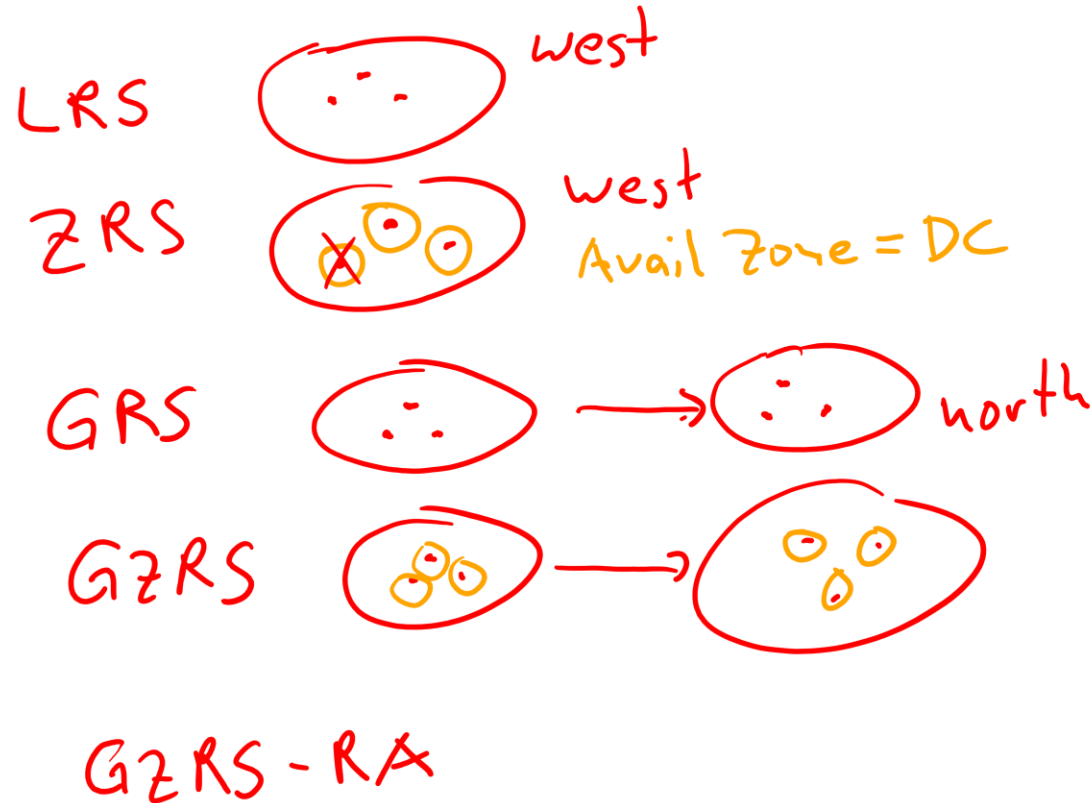


Knowledge check

A team is setting up a new Azure storage account. They want to configure the soft delete policy for Azure file shares in their storage account. What section should they navigate to?

Choices:

1. Geo redundancy section
2. Networking section
3. Data protection section
4. File Shares

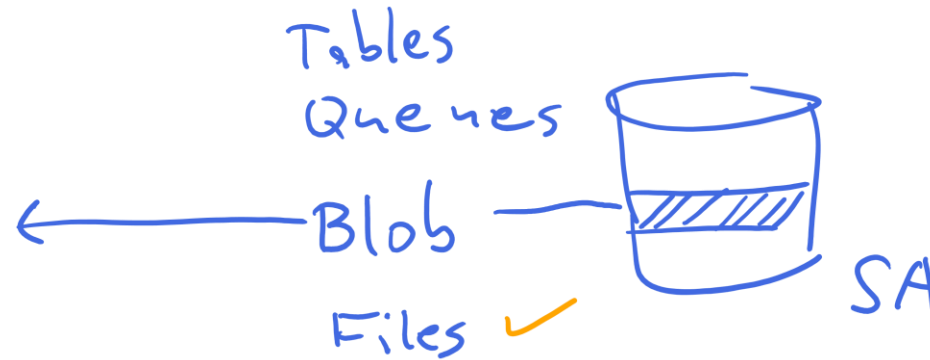


Knowledge check

A team is working on a project that requires a secure and stable application hosting platform. They are considering automating the creation and teardown of environments. Which solution enables this?

Choices:

1. Azure Disk Storage
2. Azure Data Lake Storage
3. Azure Virtual Desktop



Knowledge check

A team is planning to use Azure Virtual Desktop for their remote computing environment. They need to choose a storage solution for FSLogix profile containers. Which Azure storage solution would be most recommended for this scenario?

Choices:

1. Storage Spaces Direct
2. Azure NetApp Files
3. Azure Files

Knowledge check

A team of software engineers and content creators are working on a heavy workload. They have a small to medium user count. Which performance tier should they use for Azure NetApp Files?
Standard tier

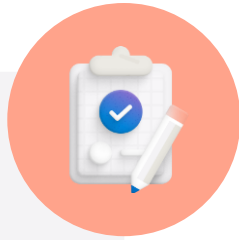
Choices:

1. Standard tier
2. Ultra tier
3. Premium tier

Summary



Summary



What you learned:

- Plan storage for Azure Virtual Desktop user data
- Plan for Azure storage management
- Configure Azure Files tiers ✓
- Configure Azure NetApp Files tiers ✓
- Implement storage accounts for Azure Virtual Desktop