

Azure File Shares

Azure File Shares is a part of the Microsoft Azure platform and is designed to provide a scalable and highly available file storage solution in the cloud. With Azure File Shares, you can store files of any size and type, including documents, images, videos, and audio files. You can also share files with others, either by granting them access to your file share or by sending them a link to the file.

Azure File Shares uses the Server Message Block (SMB) protocol to allow users to access files in the cloud. SMB is a standard protocol used for sharing files and printers on a local network. When a user accesses a file share, Azure File Shares uses SMB to connect the user to the file share and allow them to access the files.

What is the SMB protocol?

The SMB protocol (the Server Message Block) is a network protocol that enables users to communicate with remote computers and servers (e.g., to share resources or files). It's also referred to as the server/client protocol because the server has a resource that it can share with the client.

How the SMB protocol works

First, the client (e.g., a user's computer, mobile device, or printer) sends an SMB request to the server to initiate a connection.

The server receives this request and sends an SMB response back to the client.

When this response is received, it establishes a communication channel.

The device (e.g., a user's computer) can then interact with the server to request access to shared resources or perform specific actions.

Benefits of Azure File Shares

Scalability: Azure File Shares can scale to meet the needs of any organization, whether it's a small business or a large enterprise.

Accessibility: Azure File Shares allows users to access files from anywhere, at any

time, as long as they have an internet connection.

Collaboration: Azure File Shares makes it easy for multiple users to share files and collaborate on projects.

Security: Azure File Shares uses industry-standard security measures to protect files and keep them safe from unauthorized access.

How to create file share

Click on the “Create a resource” button in the Azure portal.

Select “Storage” from the list of available resources.

Choose “Storage account” as the type of storage account you want to create.

Fill in the required information, such as the name of your storage account, the subscription you want to use, and the resource group you want to use.

Click the “Create” button to create your storage account.

Navigate to your storage account in the Azure portal.

Click on the “File shares” option in the left-side menu.

Click the “Add” button to create a new file share.

Fill in the required information, such as the name of your file share and the quota for the file share.

Click the “Create” button to create your file share.

Limitations of Azure File Shares.

Maximum file size: The maximum size for a single file in an Azure File Share is 1 TB.

Maximum file share size: The maximum size for an Azure File Share is 5 TiB (5,120 GB).

Maximum IOPS per share: A single Azure File Share can support up to 1000 IOPS

(input/output operations per second).

Maximum throughput per share: A single Azure File Share can support up to 60 MB/s (megabytes per second) of throughput.

Maximum number of files: The maximum number of files that can be stored in an Azure File Share is not limited by Azure. However, the performance of the file share may be impacted by a large number of small files.

Limitations on filenames and path length: Azure File Shares have restrictions on the length of filenames and paths. Filenames must be between 1 and 255 characters in length, and the total length of the path to the file (including the share name, directories, and filename) must be less than 4096 characters.

Limitations on naming conventions: Azure File Shares have restrictions on naming conventions for files and directories. Names cannot contain certain special characters and names must be unique within a directory.