

Day 5

Monday, 4 September 2023

09:29

Redundancy options while creating a storage account in Azure

Locally-redundant storage (LRS):

Lowest-cost option with basic protection against server rack and drive failures.
Recommended for non-critical scenarios.

Geo-redundant storage (GRS):

Intermediate option with failover capabilities in a secondary region.
Recommended for backup scenarios.

Zone-redundant storage (ZRS):

Intermediate option with protection against data center-level failures.
Recommended for high availability scenarios.

Geo-zone-redundant storage (GZRS):

Optimal data protection solution that includes the offerings of both GRS and ZRS.
Recommended for critical data scenarios.

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Zone-redundant storage (ZRS):

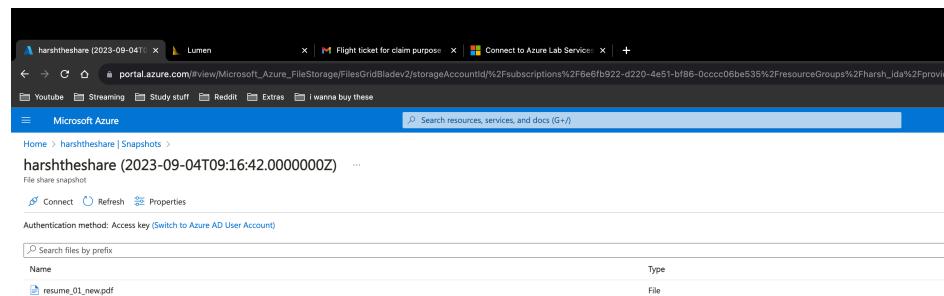
Intermediate option with protection against datacenter-level failures.
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Geo-zone-redundant storage (GZRS):

Optimal data protection solution that includes the offerings of both GRS and ZRS.
Recommended for critical data scenarios.

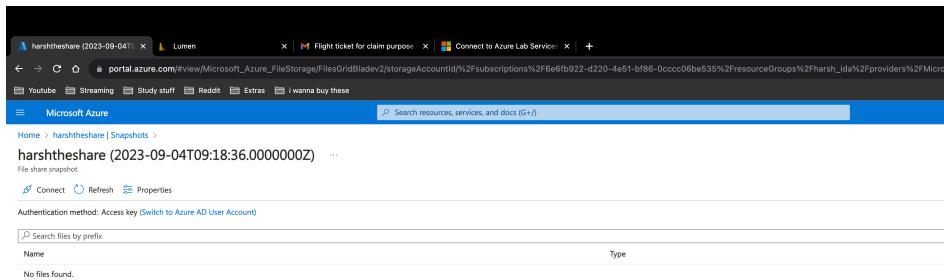
Azure file share:

Original file:

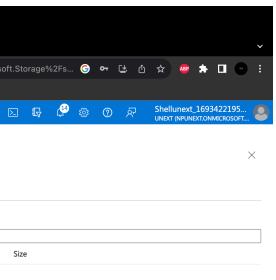
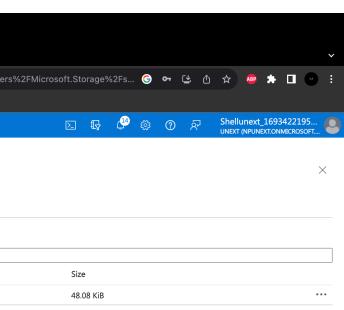


The screenshot shows a Microsoft Azure portal window. The address bar indicates the URL is https://portal.azure.com/#view/Microsoft_Azure_FileStorage/FilesGridBladev2/storageAccountName%2Fsubscriptions%2F6e6fb922-d220-4e51-bf86-0ccc06be535%2FresourceGroups%2Fharsh_ids%2FproviderName%2FshareName%2FshareId%2FshareSnapshotId. The main content area displays a file share snapshot titled "harshtheshare (2023-09-04T09:16:42.0000000Z)". A single file, "resume_01_new.pdf", is listed. The file has a blue download icon and is identified as a "File". The Azure search bar at the top contains the text "Search resources, services, and docs (G+/r)".

Deleted file:



This screenshot shows the same Azure portal window as the previous one, but the file list is now empty. The message "No files found." is displayed at the bottom of the list area. The rest of the interface, including the header, search bar, and navigation links, remains identical to the first screenshot.



Azure data lake storage: Gen 1

portal.azure.com/#@npunext.onmicrosoft.com/resource/subscriptions/6e6fb922-d220-4e51-bf86-0ccc06be535/resourceGroups/harsh_ida/providers/Microsoft.Storage/storageAccounts/harshidashell/overview

Microsoft Azure

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Storage Mover

Data storage

Containers

File shares

Queues

Tables

Security + networking

Networking

Front Door and CDN

Access keys

Shared access signature

Encryption

Microsoft Defender for Cloud

Data management

Redundancy

Data protection

Object replication

Blob inventory

Static website

Lifecycle management

Azure search

Settings

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

Resource group (move) : harsh_ida

Location : East US

Subscription (move) : npunext-1680261200689

Subscription ID : 6e6fb922-d220-4e51-bf86-0ccc06be535

Disk state : Available

Tags (edit) : shellftw : 1

Performance : Standard

Replication : Locally-redundant storage (LRS)

Account kind : StorageV2 (general purpose v2)

Provisioning state : Succeeded

Created : 04/09/2023, 11:28:40

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
NFS v3	Disabled
Allow cross-tenant replication	Disabled

File service

Large file share	Disabled
Active Directory	Not configured
Default share-level permissions	Disabled
Soft delete	Enabled (7 days)
Share capacity	5 TiB

Queue service

CMK support	Disabled
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Table service

CMK support	Disabled
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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
Number of private endpoint connections	0
Network routing	Microsoft network routing
Access for trusted Microsoft services	Yes
Endpoint type	Standard

Azure data lake storage: Gen 2

portal.azure.com/#@npunext.onmicrosoft.com/resource/subscriptions/6e6fb922-d220-4e51-bf86-0ccc06be535/resourceGroups/harsh_ida/providers/Microsoft.Storage/storageAccounts/harshstoragegen2/overview

Microsoft Azure

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

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

Resource group (move) : harsh_ida

Location : East US

Primary/Secondary Location : Primary: East US, Secondary: West US

Subscription (move) : npunext-1680261200689

Subscription ID : 6e6fb922-d220-4e51-bf86-0ccc06be535

Disk state : Primary: Available, Secondary: Available

Tags (edit) : shellftw : 2

Performance : Standard

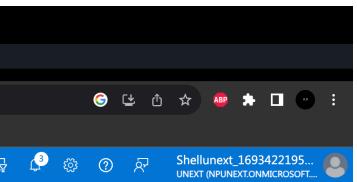
Replication : Read-access geo-redundant storage (RA-GRS)

Account kind : StorageV2 (general purpose v2)

Provisioning state : Succeeded

Created : 04/09/2023, 12:03:05

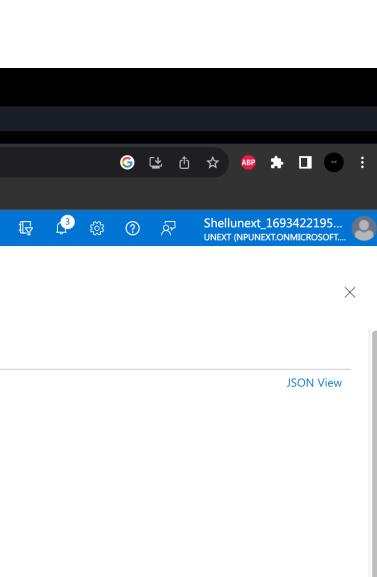
Properties Monitoring Capabilities (7) Recommendations (0) Tutorials Tools + SDKs



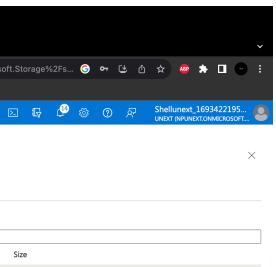
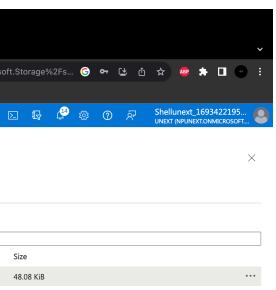
JSON View

Restoring file:

The screenshot shows a Microsoft Azure portal window with a file restoration dialog. The dialog box is titled "Restore resume_01_new.pdf". It contains the following text:
The snapshot file will be restored to the same directory as the original file share. A new directory will be created if the original one no longer exists.
 Restore as a copy and rename Overwrite original file
Restored file name *
At the bottom of the dialog are two buttons: "OK" and "Cancel".



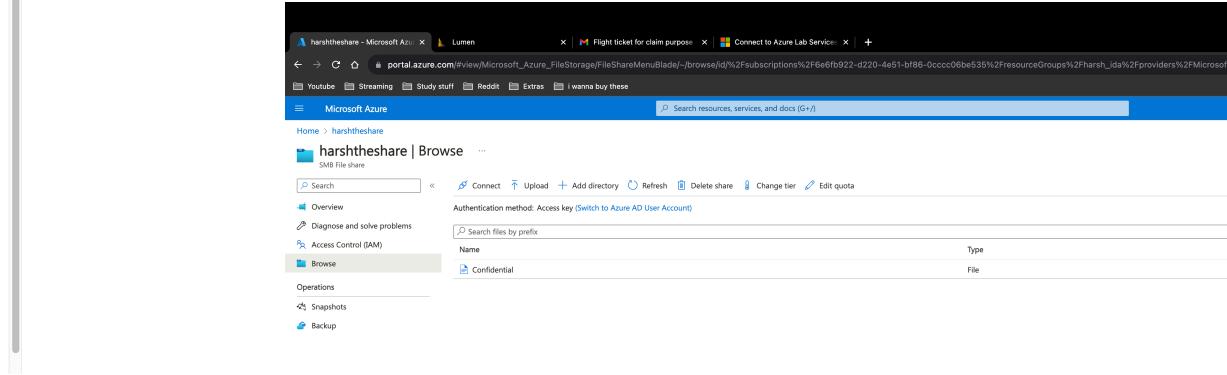
JSON View



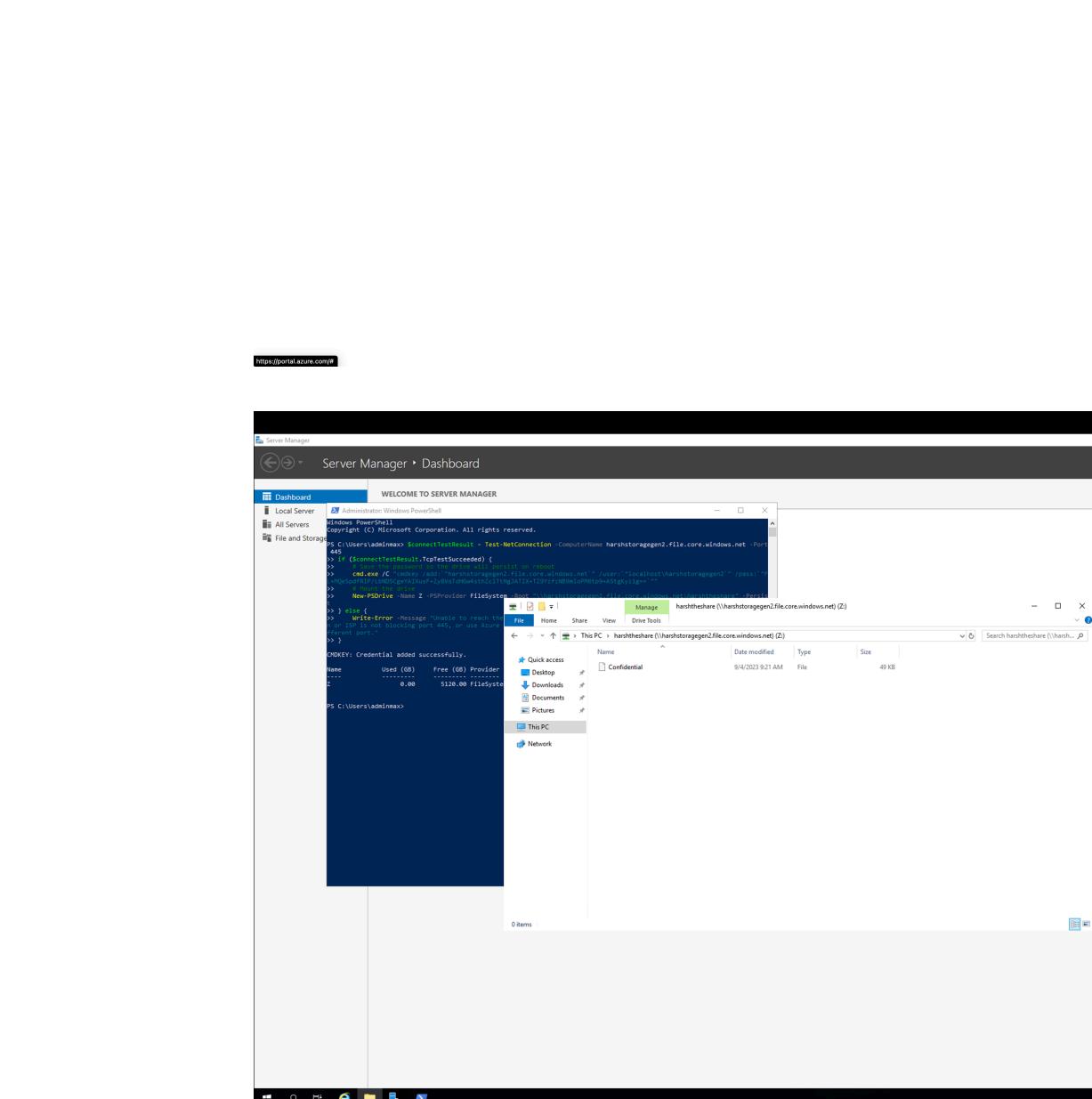
Data storage
Containers
File shares
Queues
Tables
Security + networking
Networking
Access keys
Shared access signature
Encryption
Microsoft Defender for Cloud
Data management
Redundancy
Data protection
Blob inventory
Static website
Lifecycle management
Settings
Configuration
Resource sharing (CORS)
SFTP
Advisor recommendations

Properties	Monitoring	Capabilities (5)	Recommendations (0)	Tutorials	Tools + SDKs
Data Lake Storage					
Hierarchical namespace	Enabled				
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				
NFS v3	Disabled				
SFTP	Disabled				
File service					
Large file share	Disabled				
Active Directory	Not configured				
Default share-level permissions	Disabled				
Soft delete	Enabled (7 days)				
Share capacity	5 TiB				
Queue service					
CMK support	Disabled				
Table service					
CMK support	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				
Number of private endpoint connections	0				
Network routing	Microsoft network routing				
Access for trusted Microsoft services	Yes				
Endpoint type	Standard				

Restored documents:



The screenshot shows the Microsoft Azure portal interface. The user is navigating through the 'File Share' section under 'Storage Accounts'. A specific file named 'Confidential' is listed in the 'Browse' view. The portal includes standard navigation bars at the top and left, and a search bar at the top right.



The screenshot shows the Windows Server Manager 'Dashboard'. On the left, there's a PowerShell window running a command to test connectivity to an Azure storage account. On the right, a file explorer window is open, showing a folder structure for 'hashtheshare' on the local machine ('This PC'). Inside the folder, there is a single file named 'Confidential' with a size of 49 KB and a modified date of 9/4/2023 9:21 AM.

