**AZ copy process (Upload/Download)**

**How to download backup from storage to local and restore in server**

**(if you also want to join the database to AG after refresh)**

• At first, we need to check for the latest full backup and following log backups by using below script.

SELECT DISTINCT b.database\_name,b.type,b.backup\_start\_date,b.backup\_finish\_date,f.physical\_device\_name from msdb..backupset b join msdb..backupmediafamily f on b.media\_set\_id=f.media\_set\_id and b.type IN ('D') and b.database\_name='IBV\_GCN' ORDER BY 3 DESC

GO

• After getting backup details need to check for the storage account and backup path in physical device name from the results.  
Example: <https://abcdsq1storage.blob.core.windows.net/full-bkup-block/IV_ACN_ND_20220410_203000_abcdSQ1_0.BAK>

• For log backups use below script.

SELECT DISTINCT b.database\_name,b.type,b.backup\_start\_date,b.backup\_finish\_date,f.physical\_device\_name from msdb..backupset b join msdb..backupmediafamily f on b.media\_set\_id=f.media\_set\_id and b.type IN ('L') and b.database\_name='IBV\_GCN' ORDER BY 3 DESC

GO

• Check the physical device name in above result for storage account and backup name.

Example: https:// abcdsq1storage.sqbkpsto.blob.core.windows.net/tlog-bkup-block/IV\_ACN\_PD\_tlog\_20220410\_221500abcdSQ1\_0.trn

If there is a JIT system  
• Need to take JIT access for storage account to get the access key from Azure portal.

AZcopy  
• Open command prompt with run as administrator and change CMD to Azcopy by using below command.

(assume you put the azcopy file in a directory c:\programfile86..as below)

cd C:\Program Files (x86)\Microsoft SDKs\Azure\AzCopy

![A screenshot of a computer

Description automatically generated]()

• After changing CMD to AZ copy we need to execute below command to start download the backup file from storage account to server.

AzCopy /Source:<https://abcdsq1storage.blob.core.windows.net/full-bkup-block> /Dest:I:\HADRSync /SourceKey:J6K3GR6U1Rg1QeFRklDokbJaqJvS0u6cdWgWsvKk77EEsSzuO/kDz6rN2pqhq+22ubuO2GDmctNMcSJsnq4clw== /Pattern:"DBAdmin\_20220305\_203000\_abcdSQ1" /Y /S /V:I:\HADRSync\Azcopy.log

![A computer screen with text on it

Description automatically generated]()

A computer screen with text

Description automatically generated

How to upload backup file from local to storage

• Open command prompt with run as administrator and change CMD to Azcopy by using below command. Same as above.

cd C:\Program Files (x86)\Microsoft SDKs\Azure\AzCopy

• After changing CMD to AZ copy we need to execute below command to start upload the backup file from server to storage.

AzCopy /Source:I:\Newfolder /Dest:https:// abcdsq1storage.blob.core.windows.net/tlog-bkup-block /DestKey:R8K4GR5U1Rg1QeFRklDokbJaqJvS0u6cdWgWsvKk77EEsSzuO/kDz6rN2pqhq+22ubuO2GDmctNMcSJsnq4clw== /S

• After uploading process completed, we can see backup file in storage.

**Uploading backup file from on-** **Prem to azure blob (or blob to on-prem)**

1. **Download** AzCopy and **put** it in C:\Program Files (x86)\Microsoft SDKs\Azure\AzCopy (or anywhere in C or other drive)
2. **Open CMD and change the directory to AZcopy’s path** as below

cd C:\Program Files (x86)\Microsoft SDKs\Azure\AzCopy

1. Have the blob storage path and SAS Token ready (detail below)
2. Use AzCopy commands to upload/download command.

**Copy files from local drive to Blob**

azcopy copy “<local-directory-path>” “https://<storage-account-name>.file.core.windows.net/<file-share-or-directory-name><SAS-token>” --include-pattern <semicolon-separated-file-list-with-wildcard-characters>

Example:

azcopy copy "D:\SQLBKPData\Full\\*" "https://abcbilduked1sqbkpsto.file.core.windows.net/file-full-bkup?sv=2019-02-02&sig=1qA%2Fj9wK52%2BUm3zOt6tOp567ssyGY%2FseHXFkXtBZlbo%3D&se=2120-03-23T16%3A02%3A06Z&srt=sco&ss=f&sp=racupwdl" --include-pattern "Billing\_\*.trn"

**Download files with wildcard from File Share to local drive**

Syntax:

azcopy copy 'https://<storage-account-name>.file.core.windows.net/<file-share-or-directory-name><SAS-token>' '<local-directory-path>' --include-path <semicolon-separated-file-list>

Example:

azcopy copy "https://abcbghk1sqbkpsto.file.core.windows.net/file-full-bkup/\*?sv=2019-02-02&sig=1yC%2Fj9wK52%2BUm3zOt6tOp567sddGY%2FseHXFkXtBZlbo%3D&se=2120-03-23T16%3A02%3A06Z&srt=sco&ss=f&sp=abuspwdl" "I:\SQL\_SysDbBKP\Full" --include-pattern "Billing\_20230323\_103512\_ABCBILSQ1\*.BAK"

1. Make sure \* is present between file share name and **?**
2. If CMD is used to run AzCopy, double quotes must be used for Source URL, target local folder and file pattern
3. If Windows PowerShell ISE is used to run AzCopy, single copy must be used for Source URL, target local folder and file pattern
4. Make sure to have at least 1 space between source, destination, and option sections

**Blob storage path and SAS Token (detail below)**