How to copy from AWS S3 bucket to Azure Blob Storage



When we mention public cloud and DevOps, we often think of Amazon Web Services, Microsoft’s Azure or Google Cloud Platform. As AWS becomes dominant public cloud leader through the years, many corporations and startups started to migrate their on-premises infrastructure to the cloud, especially AWS. This often leads to public cloud vendor lock-in. But, if someday you decide to migrate to Azure, you might face up many challenges. For example, if you want to migrate your S3 bucket to Azure Storage, you will have to write your own custom scripts or even come up with your own custom tools. This adds to complexity.

So, in today’s blog, we are going to talk about how to migrate/copy AWS S3 buckets to Azure Blob Storage using a tool called **azcopy** that will help you move your AWS S3 buckets to the Azure storage service.

## **What is AzCopy**

**AzCopy** is a command-line utility that can copy data to or from an Azure storage accounts. At the time of writing, the current version is AzCopy v10.2.1

## Prerequisites

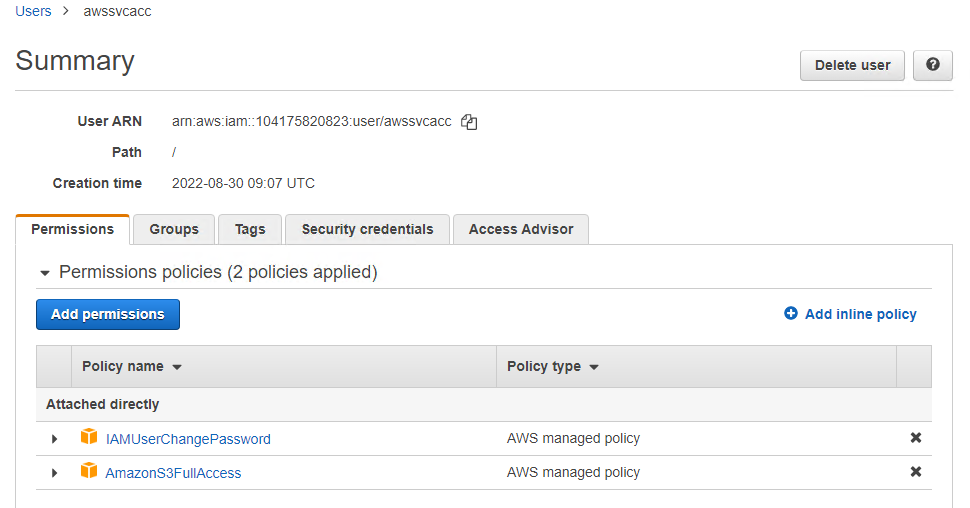
* Azure subscription
* Azure storage account
* AWS account
* AWS S3 bucket

First, you will need to [install AzCopy](https://www.thomasmaurer.ch/2019/05/how-to-install-azcopy-for-azure-storage/) to your machine. After that, you will need to authorize AzCopy with Microsoft Azure and AWS. To authorize with AWS S3, you have to use an AWS access key and a secret access key.

AWS access key and secret access key, and then set these environment variables:

| **OS** | **Command** |
| --- | --- |
| Windows | set AWS\_ACCESS\_KEY\_ID= |
|  | set AWS\_SECRET\_ACCESS\_KEY= |
| Linux | export AWS\_ACCESS\_KEY\_ID= |
|  | export AWS\_SECRET\_ACCESS\_KEY= |
| macOS | export AWS\_ACCESS\_KEY\_ID= |
|  | export AWS\_SECRET\_ACCESS\_KEY= |

With permission [AmazonS3FullAccess](https://us-east-1.console.aws.amazon.com/iam/home#/policies/arn%3Aaws%3Aiam%3A%3Aaws%3Apolicy%2FAmazonS3FullAccess) of that



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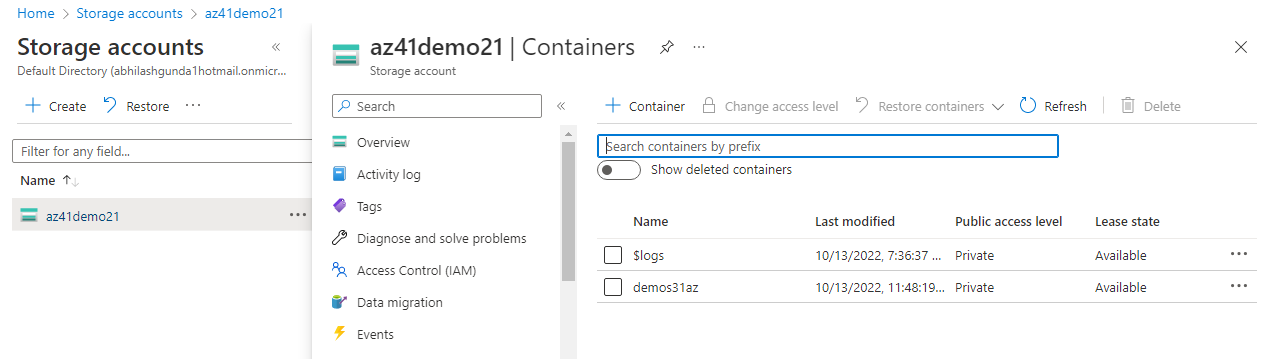
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Login into azure portal

Create a storage account



Using Script:

Connect-AzAccount

Get-AzSubscription

$subscriptionId = "yourSubscriptionId"

$storageAccountRG = "demo-azcopy-rg"

$storageAccountName = "tomsaccount"

$storageContainerName = "images"

$localPath = "C:\temp\images"

Select-AzSubscription -SubscriptionId $SubscriptionId

$storageAccountKey = (Get-AzStorageAccountKey -ResourceGroupName $storageAccountRG -AccountName $storageAccountName).Value[0]

$destinationContext = New-AzStorageContext -StorageAccountName $storageAccountName -StorageAccountKey $storageAccountKey

$containerSASURI = New-AzStorageContainerSASToken -Context $destinationContext -ExpiryTime(**get-date**).AddSeconds(3600) -FullUri *-Name* $storageContainerName -Permission rw

azcopy **copy** $localPath $containerSASURI –recursive

Generate A SAS token

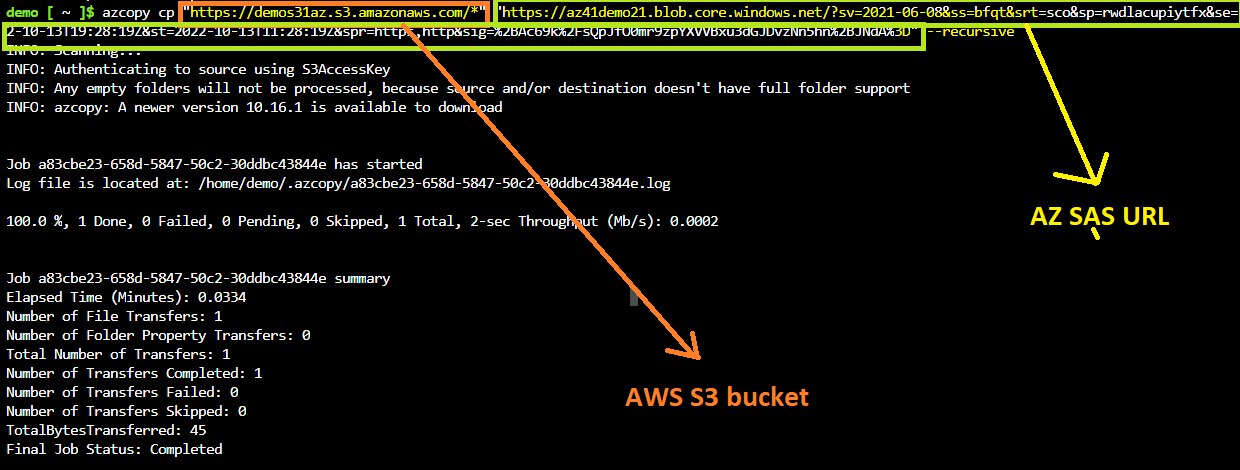


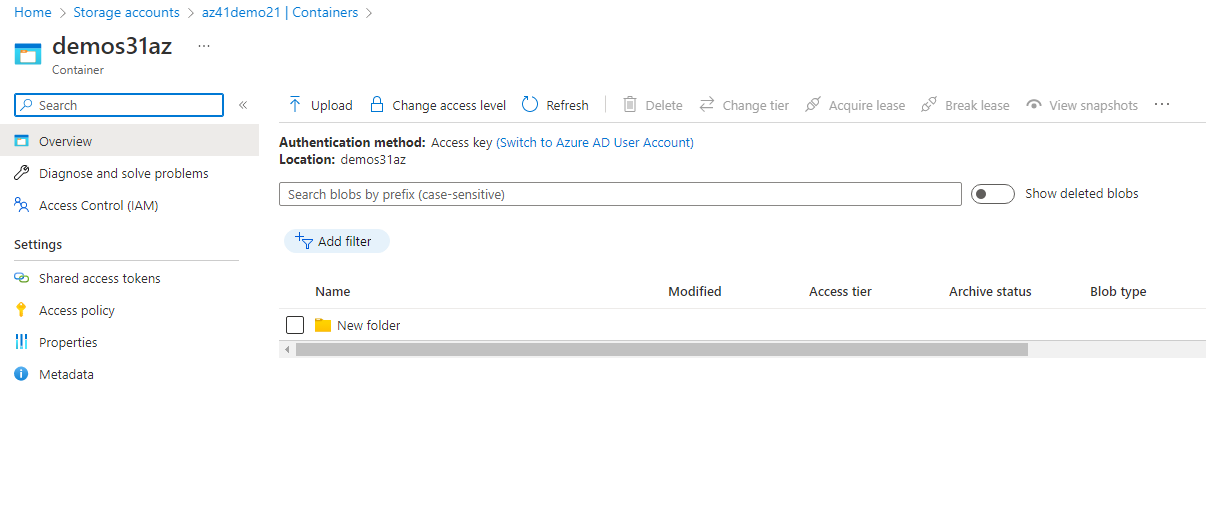
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Go to Azure shell or if you are running from local machine

azcopy cp "https://demos31az.s3.amazonaws.com/\*" "https://az41demo21.blob.core.windows.net/?sv=2021-06-08&ss=bfqt&srt=sco&sp=rwdlacupiytfx&se=2022-10-13T19:28:19Z&st=2022-10-13T11:28:19Z&spr=https,http&sig=%2BAc69k%2FsQpJfO0mr9zpYXVVBxu3dGJDvzNn5hn%2BJNdA%3D" --recursive





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