😊 SHARED ACCESS SIGNATURE BLOB LEVEL

In Microsoft Azure, shared access keys are a set of security credentials that are used to authenticate and authorize access to Azure resources. These keys are associated with an Azure storage account, and they provide a way to securely access and manage the resources within that account. Shared access keys consist of two components: the storage account name and the key itself.

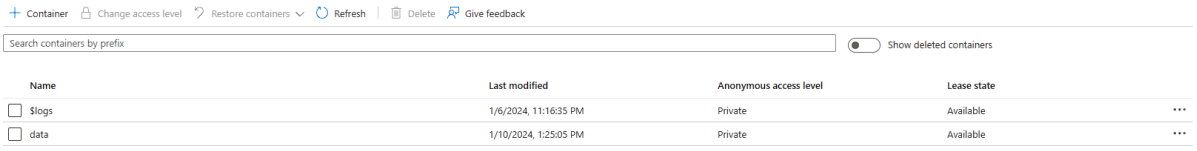
Here's a brief overview of how shared access keys work in Azure:

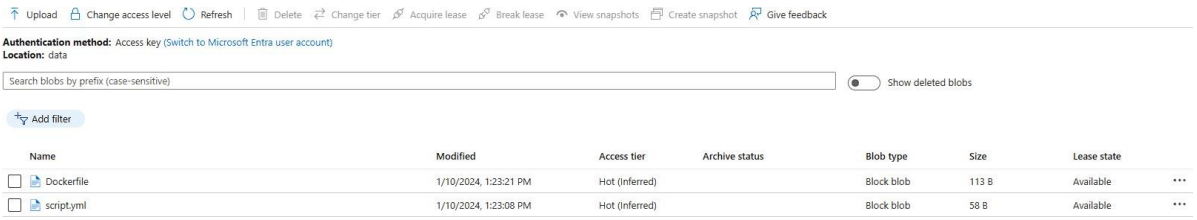
1. **Storage Account:** A storage account in Azure is a logical container for storing and managing data objects, such as blobs, queues, tables, and files.
2. **Shared Access Keys:** Each Azure storage account has two primary keys, known as the primary key and the secondary key. Both keys provide the same level of access and can be used interchangeably. The use of primary and secondary keys allows for seamless key rotation without disrupting access to resources.
3. **Access Control:** To access resources within an Azure storage account, you must include the shared access key as part of the request. This key is used for authentication and authorization purposes. By sharing the key with trusted entities, you grant them the necessary permissions to perform specific operations on the storage account.
4. **Key Management:** It's crucial to manage shared access keys securely. Azure provides the option to regenerate keys when needed. Regenerating keys helps in scenarios such as a compromised key or routine key rotation for security best practices.
5. **Limited Access Periods:** Shared access signatures (SAS) provide a more secure way to grant limited access to resources without exposing the actual keys. SAS tokens can be generated with specific permissions and validity periods, reducing the risk associated with using shared access keys directly.

In this tutorial, we're demonstrating how to generate a Shared Access Signature (SAS) for an Azure Storage blob and access it using the generated SAS URL. The end goal is to provide controlled and temporary access to the blob, allowing users to share it securely without compromising the primary access keys of the Azure Storage account. By generating a SAS with specific permissions, validity periods, IP restrictions, and protocol options, users can ensure that only authorized individuals or applications can access the blob for a limited duration and under defined conditions. This enhances security and control over access to Azure Storage resources.

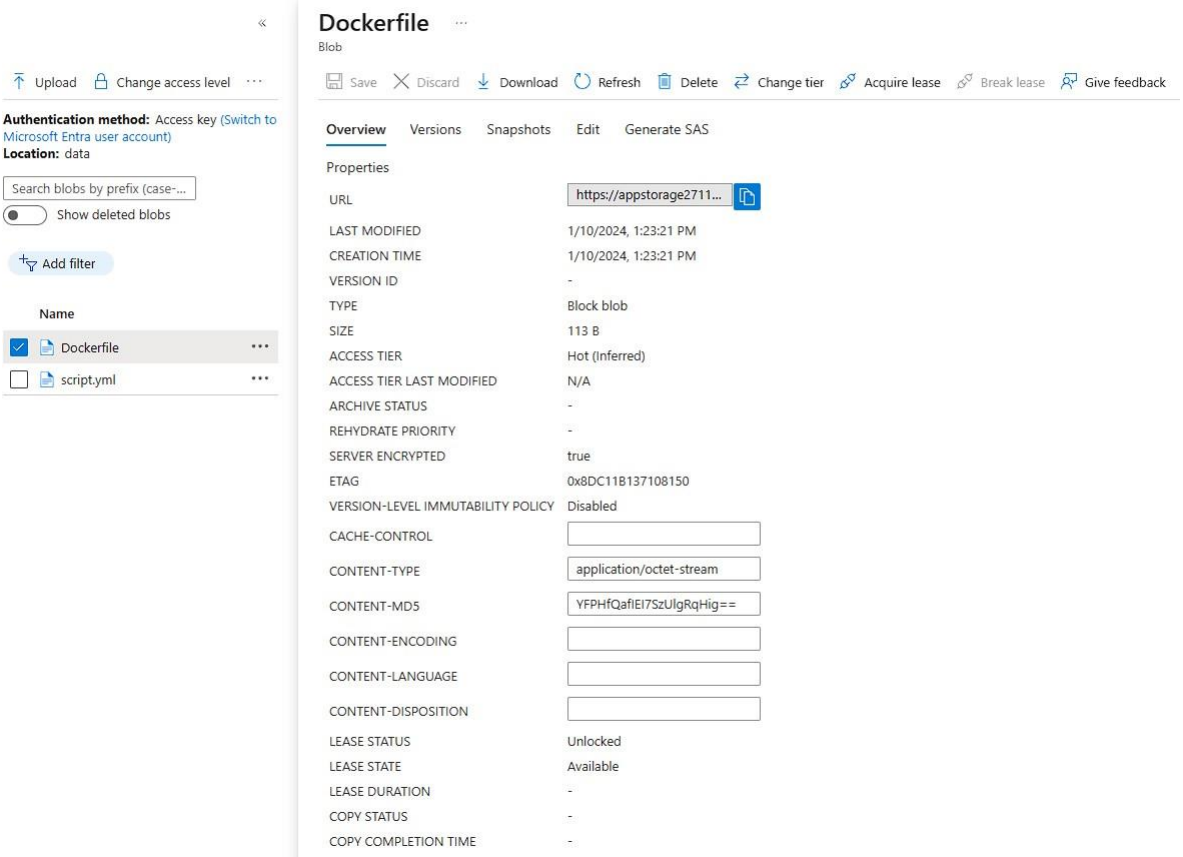
😄 TO BEGIN WITH LAB:

1. Log in to azure portal. Navigate to your storage account.
2. Then go to your container.

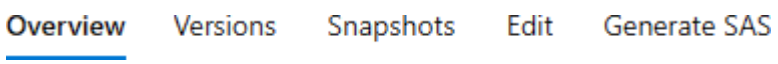




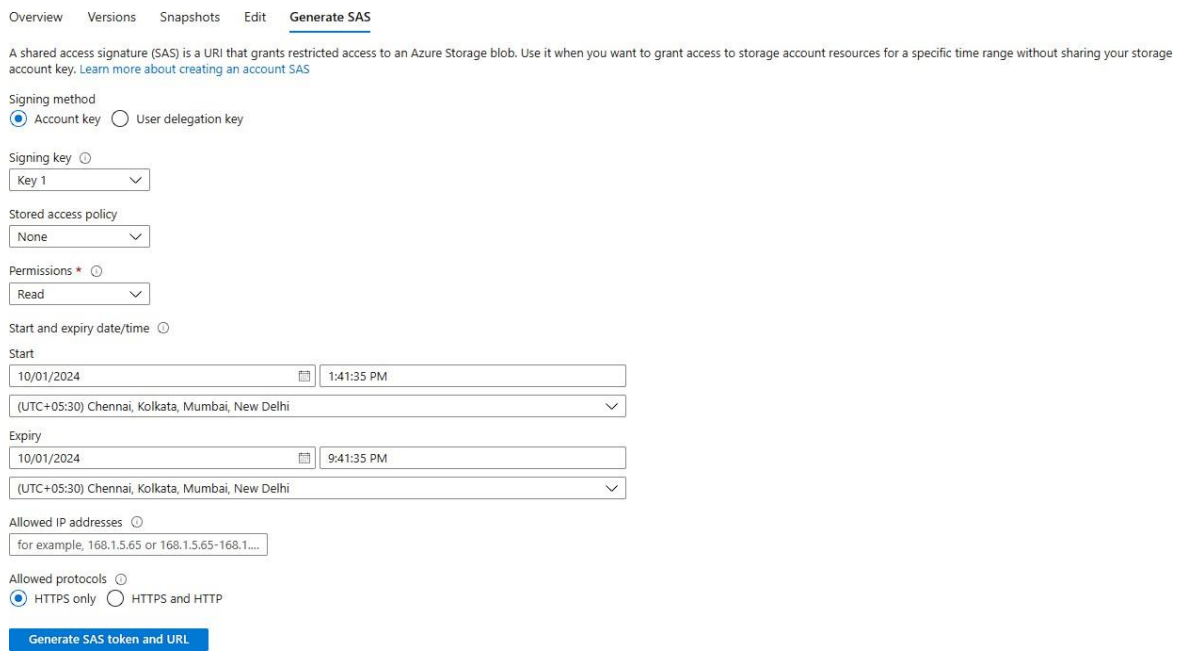
3. Now open one of your files. And you will see a bunch of options to choose from.



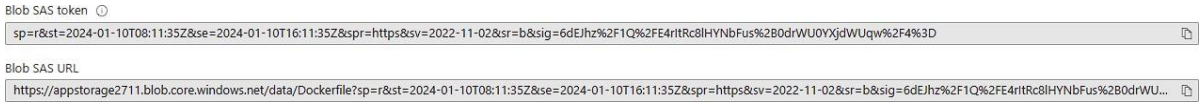
4. If you will click on generate SAS (Shared Access Signature)



5. Here you can see that you have so many options to generate SAS.
6. Like you can set permission to read, add, create, write etc.
7. You can set a start and expiry date for it.
8. Then you can allow only a certain set of IP addresses.
9. You can also allow certain level of protocols.
10. So, if you will just click on Generate SAS token and URL.



11. You can see that you have two different things, one is token and other is URL.



12. Now you have to copy Blob SAS URL, and paste it in a new tab.

13. You can see that it is asking you to save to some place which the SAS URL is working properly.