Azure Integration for Snowpipe Ingestion

Assumption:

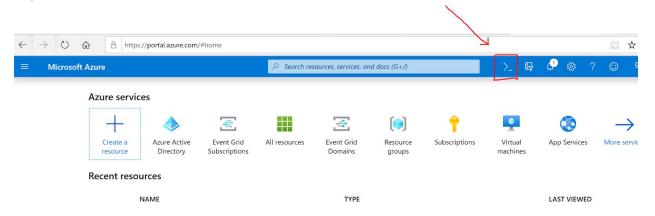
- 1) User have an Azure [Microsoft/Skype] account with any valid subscription [e.g. **Free Trial** or **Pay as you go** etc.]
- 2) Following Steps are for Windows OS [COMMAND LINE utility will be used].

Step 1:

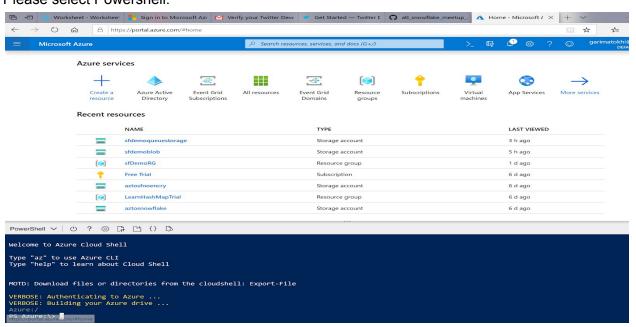
Login to your Microsoft [Azure] account .

https://azure.microsoft.com/en-us/account/

Step 2: Log into the Azure CLI.



Please select Powershell.



1) To create Resource group

az group create --name <resource_group_name> --location <location>

Where:

resource_group_name is the name of the new resource group. **location** is the location, or region in Snowflake terminology, of your Azure Storage account.

2) Enabling the Event Grid Resource Provider

Execute the following command to register the Event Grid resource provider. **Note** that this step is only required if you have not previously used Event Grid with your Azure account:

az provider register --namespace Microsoft.EventGrid az provider show --namespace Microsoft.EventGrid --query "registrationState"

3) Creating a Storage Account for Data Files

Execute the following command to create a storage account to store your data files. This account must be either a Blob storage (i.e. BlobStorage kind) or GPv2 (i.e. StorageV2 kind) account, because only these two account types support event messages.

az storage account create --resource-group <resource_group_name> --name <storage_account_name> --sku Standard_LRS --location <location> --kind BlobStorage --access-tier Hot

Where:

resource_group_name is the name of the resource group you created in Creating a Resource Group.

storage_account_name is the name of the new storage account. **location** is the location of your Azure Storage account.

4) Creating a Storage Account for the Storage Queue

Execute the following command to create a storage account to host your storage queue. This account must be a GPv2 account, because only this kind of account supports event messages to a storage queue.

az storage account create --resource-group <resource_group_name> --name <storage_account_name> --sku Standard_LRS --location <location> --kind StorageV2

Where:

resource_group_name is the name of the resource group you created in Creating a Resource Group.

storage_account_name is the name of the new storage account. **location** is the location of your Azure Storage account.

5) Creating a Storage Queue

A single storage queue can collect the event messages for many Event Grid subscriptions.

az storage queue create --name <storage_queue_name> --account-name
<storage_account_name>

Where:

storage_queue_name is the name of the new storage queue. **storage_account_name** is the name of the storage account you created in Creating a Storage Account for the Storage Queue.

6) Exporting the Storage Account and Queue IDs for Reference

set storageid=\$(az storage account show --name<data_storage_account_name> --resource-group <resource_group_name> --query id --output tsv)

set queuestorageid=\$(az storage account show --name <queue_storage_account_name> --resource-group <resource_group_name> --query id --output tsv)

set queueid=

"%queuestorageid%/queueservices/default/queues/<storage_queue_name>"

Where:

data_storage_account_name is the name of the storage account you created in Creating a Storage Account for Data Files.

queue_storage_account_name is the name of the storage account you created in Creating a Storage Account for the Storage Queue.

resource_group_name is the name of the resource group you created in Creating a Resource Group.

storage_queue_name is the name of the storage queue you created in Creating a Storage Queue.

7) Installing the Event Grid Extension

az extension add --name eventgrid

8) Creating the Event Grid Subscription

az eventgrid event-subscription create \

- --source-resource-id %storageid% \
- --name <subscription_name> --endpoint-type storagequeue \
- --endpoint %queueid%

Where:

storageid and **queueid** are the storage account and queue ID environment variables you set in Exporting the Storage Account and Queue IDs for Reference. **subscription_name** is the name of the new Event Grid subscription.

Step 4: Create an Integration in Snowflake

Retrieving the Storage Queue URL and Tenant ID

- 1) Log into the Microsoft Azure portal.
- 2) Navigate to Storage account » Queue service » Queues. Record the URL for the queue you created in Creating a Storage Queue for reference later.

The URL has the following format:

https://<storage_account_name>.queue.core.windows.net/<storage_queue_name>

3) Navigate to Azure Active Directory » Properties. Record the Directory ID value for reference later. The directory ID, or tenant ID, is needed to generate the consent URL that grants Snowflake access to the Event Grid subscription.