Snow flake integration with cloud storage

Wednesday, June 21, 2023   10:35 AM

Step 1:

 Create the Integration storage in snow flake

```
create or replace storage integration gcs_int
   type = external_stage
   storage_provider = 'GCS'
   enabled = true
   storage_allowed_locations =('gcs://snowflake_forex/');
```

2: grant the permission to access the storage bucket
        2.1 - To grant Permission
        ----
        i)Go to IAM Service
        II) Go to roles in IAM Service
        iii)create a role
                Give title,description,id
                Add the Permission
                To just load & unload data from gcp to snowflake andviceversa
                (like get,create,delete,object get,object list)

        2.2 Assign the Role to Cloud storage Account
        ----
        i)go to cloud Storage
        Ii)Select the Bucket and click on Permission
        Iii)click on Add Principle-select storage account that created in snow flake
        Iv)Select the role that has created previously.
Step 3:

Create a external stage and grant the permission

    i)   Create a role
    j)   Grant create stage on schema to the role
    k)   Grant usgae on integration to role

--***** creating and grant the role**************
create or replace role my_role;

grant create stage on schema public to role my_role;
grant usage on integration gcs_int to role my_role;

Step 4:

Create the schema and use it

create or replace schema tutorial1.landing_zone;

use schema tutorial1.landing_zone;

Step 5:

Create the file format that exist in cloud storage

create or replace file format my_csv_format
type='csv'
compression='auto'
field_delimiter=','
record_delimiter='\n'
skip_header=1
null_if=('\\N');

Step 6:

Create the stage with the properties:
    i)   url='bucket link'
    j)   Storageintegration=above created in step 1
    k)   File_format= above created in step5
To alter stage use "alter stage stage name"

create or replace stage my_gcs_stage
url='gcs://snowflake_forex/'
storage_integration=gcs_int
file_format=my_csv_format;

Step 7:

Check the ware house is in suspend or resume
If suspended Resume it
To Resume the ware house use
"alter warehouse warehouse_name Resume"

alter warehouse compute_wh Resume;

Step8:

Check the stage whether its pointed to cloud bucket
By list @stagename

list @my_gcs_stage;

Step9:

```
create or replace  table forex(
time varchar,
openn varchar,
high varchar,
low varchar,
closee varchar
)comment='this is forex table with landing_schema';

show tables;
select * from forex limit 100;
```

Step 10:

Load the data from Cloud storage to table:
By using
copy into table_name
From @stage
File_format=file_format_name
On error=continue

```
COPY into forex
from @my_gcs_stage
file_format=my_csv_format
on_error=continue;
```

Check the data is loaded succesfully by using
Select * from table_name

```
select * from forex limit 100;
```