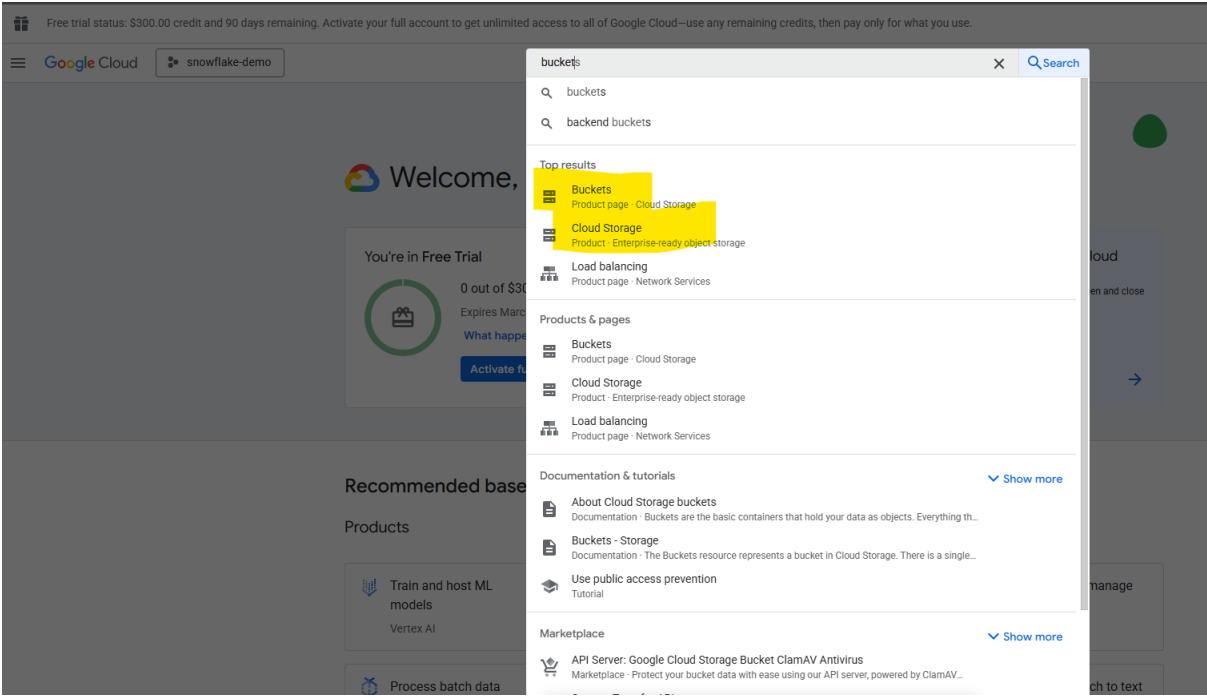


# Snowflake Demo GCP Integration

## GCP Integration and data load



## Create GCS bucket

Free trial status: \$300.00 credit and 90 days remaining. Activate your full account to get unlimited access to all of Google Cloud—use any remaining credits, then pay only for what you use.

Google Cloud snowflake-demo bucket

### Cloud Storage Create a bucket

Overview

Buckets

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Marketplace

Release Notes

**Get Started**

Name: snowflakebucket2025

**Choose where to store your data**

Location: us (multiple regions in United States)

Location type: Multi-region

**Choose how to store your data**

Default storage class: Standard

Hierarchical namespace: Disabled

Anywhere Cache: Disabled

**Choose how to control access to objects**

Public access prevention: On

Access control: Uniform

**Choose how to protect object data**

Your data is always protected with Cloud Storage but you can also choose from these additional data protection options to add extra layers of security.

**Data protection**

☐ Soft delete policy (For data recovery)

When enabled, this bucket and its objects will be kept for a specified period after they're deleted and can be restored during this time. [Learn more](#)

☐ Object versioning (For version control)

For restoring deleted or overwritten objects. To minimize the cost of storing versions, we recommend limiting the number of noncurrent versions per object and scheduling them to expire after a number of days. [Learn more](#)

☐ Retention (For compliance)

For preventing the deletion or modification of the bucket's objects for a specified period of time.

**Good to know**

**Location pricing**

Storage rates vary depending on the storage class of your data and location of your bucket. [Pricing details](#)

Current configuration: Multi-region / Standard

Item	Cost
us (multiple regions in United States)	\$0.026 per GB-month
With default replication	\$0.020 per GB written

[Estimate your monthly cost](#)

## Create Storage Integration Object.

Home Load\_ADLS\_Data Azure\_Integration GCP\_Integration.sql

My Workspace > GCP\_Integration.sql

ACCOUNTADMIN COMPUTE\_WH (X-Small) Choose database Share

```

1  -- create integration object that contains the access information
2  -- Write me a query that...
3  CREATE STORAGE INTEGRATION gcp_integration
4  TYPE = EXTERNAL_STAGE
5  STORAGE_PROVIDER = GCS
6  ENABLED = TRUE
7  STORAGE_ALLOWED_LOCATIONS = ('gcs://[redacted]/csv', 'gcs://[redacted]/2025/json');
8
9  -- Describe integration object to provide access
10 DESC STORAGE integration gcp_integration;
11

```

Results (just now)

Table Chart 7 rows 52ms

property	property_type	property_value	property_default
ENABLED	Boolean	true	false
STORAGE_PROVIDER	String	GCS	
STORAGE_ALLOWED_LOCATIONS	List	gcs://[redacted]025/csv,gcs://[redacted]2025/json	[]
STORAGE_BLOCKED_LOCATIONS	List		[]
USE_PRIVATELINK_ENDPOINT	Boolean	false	false
STORAGE_GCP_SERVICE_ACCOUNT	String	[redacted]@am.gservicesaccount.co	
COMMENT	String		

Copy Service Account and select both bucket - > click on permission

Google Cloud snowflake-demo bucket X Search

Cloud Storage 2 buckets selected Delete Permissions Tags Labels

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Filter Filter buckets

<input checked="" type="checkbox"/>	Name ↑	Created	Location type	Location	Default storage class ?	Last
<input checked="" type="checkbox"/>	snowflakebucket2025	Dec 7, 2025, 10:27:14 PM	Multi-region	us	Standard	Dec
<input checked="" type="checkbox"/>	snowflakebucketjson2025	Dec 7, 2025, 10:28:05 PM	Multi-region	us	Standard	Dec

## Grant access to 2 resources

Grant principals access to 2 resources and add roles to specify what actions the principals can take. Optionally, add conditions to grant access to principals only when a specific criteria is met. [Learn more about IAM conditions](#)

### Resources

Resource
 snowflakebucket2025
 snowflakebucketjson2025

### Add principals

Principals are users, groups, domains, or service accounts. [Learn more about principals in IAM](#)

New principals \*

X

?

### Assign roles

Roles are composed of sets of permissions and determine what the principal can do with these resources. [Learn more](#)

Role \*

Storage Admin

IAM condition (optional) ?

+ Add IAM condition

Grants full control of buckets and objects.

+ Add another role

Save

Cancel

My Workspace > GCS\_Load\_Data.sql

▶

⌵

⚙

ACCOUNTADMIN COMPUTE\_WH (X-Small) Choose database Share

```
-- create table format
2 create or replace file format MANAGE_DB.public.fileformat_gcp
3   TYPE = CSV
4   FIELD_DELIMITER = ','
5   SKIP_HEADER = 1;
6
7 -- create stage object
8 create or replace stage MANAGE_DB.public.stage_gcp
9   STORAGE_INTEGRATION = gcp_integration
10  URL = 'gcs://snowflakebucket2025'
11  FILE_FORMAT = MANAGE_DB.public.fileformat_gcp;
12
13 LIST @MANAGE_DB.public.stage_gcp;
14
15 Ctrl+I to generate
```

Results (14 minutes ago)

Table Chart

1 row 718ms

	name	size	md5	last_modified
1	gcs://snowflakebucket2025/world-happiness-report-2021.csv	21687	703cf5da0a3	Mon, 8 Dec 2025 06:28:57 GMT

Home Load\_ADLS\_Data Azure\_Integration GCP\_Integration.sql GCS\_Load\_Data.sql Untitled.sql

My Workspace > GCS\_Load\_Data.sql

ACCOUNTADMIN COMPUTE\_WH (X-Small) Choose database Share

```
38 perceptions_of_corruption number(4,3),
39 ladder_score_in_dystopia number(4,3),
40 explained_by_log_gdp_per_capita number(4,3),
41 explained_by_social_support number(4,3),
42 explained_by_healthy_life_expectancy number(4,3),
43 explained_by_freedom_to_make_life_choices number(4,3),
44 explained_by_generosity number(4,3),
45 explained_by_perceptions_of_corruption number(4,3),
46 dystopia_residual number(4,3);
47
48
49 COPY INTO MANAGE_DB.public.happiness_gcs
50 FROM @MANAGE_DB.public.stage_gcp;
51
52 | SELECT * FROM MANAGE_DB.public.happiness_gcs;
53
```

Results (just now)

Table Chart

149 rows 188ms

	COUNTRY_NAME	REGIONAL_INDICATOR	LADDER_SCORE	STANDARD_ERROR	UPPERWHISKER	LOWERWHISKER	LOGGED_GDP	SOCIAL_SUPPORT	HEALTHY_LIFE_EXPECTANCY	FREEDOM_TO_MAKE_LIFE_CHOICES
	Afghanistan	Sub-Saharan Afr...	24.2%							
	Albania	Western Europe	14.1%							
	+98 more	+8 more								
1	Finland	Western Europe	7.842	0.032	7.904	7.780	10.775	0.954	72.000	
2	Denmark	Western Europe	7.620	0.035	7.687	7.552	10.933	0.954	72.700	
3	Switzerland	Western Europe	7.571	0.036	7.643	7.500	11.117	0.942	74.400	
4	Iceland	Western Europe	7.554	0.059	7.670	7.438	10.878	0.983	73.000	
5	Netherlands	Western Europe	7.464	0.027	7.518	7.410	10.932	0.942	72.400	
6	Norway	Western Europe	7.392	0.035	7.462	7.323	11.053	0.954	73.300	
7	Sweden	Western Europe	7.363	0.036	7.433	7.293	10.867	0.934	72.700	
8	Luxembourg	Western Europe	7.324	0.037	7.396	7.252	11.647	0.908	72.600	
9	New Zealand	North America and ANZ	7.277	0.040	7.355	7.198	10.643	0.948	73.400	
10	Austria	Western Europe	7.268	0.038	7.337	7.198	10.906	0.934	73.300	
11	Australia	North America and ANZ	7.183	0.041	7.265	7.102	10.796	0.940	73.900	

Feedback