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# Connection details

**Data Sharing Overview: Salesforce Cloud ↔ Snowflake for Contact and Opportunity Management**

1. **Salesforce Cloud as Data Share Target to Snowflake (Zero-Copy/ETL):**
   * **Purpose:** Enable data sharing for Contact and Opportunity records.
   * **Setup:** Salesforce Cloud acts as the data share target for Snowflake in the US-West-1 region.
   * **Snowflake Endpoint:** <https://vub74827.us-west-2.snowflakecomputing.com>.
2. **Snowflake to Salesforce Cloud: Data Federation with Stream Object (Zero-Copy/ETL):**
   * **Purpose:** Provide enriched and aggregated data from Snowflake to Salesforce Cloud, supporting real-time updates and segmentation.
   * **Setup:** Snowflake uses a Stream Object as a data federation mechanism, configured as an external connector for the ap-south-1 region.
   * **Enriched Data Sources:** Contacts, Opportunities (Data Cloud) combined with Sales Cloud (API) for Purchase History and Website Activity.
   * **Snowflake Endpoint:** <https://ty39098.ap-south-1.aws.snowflakecomputing.com>.
3. **Cross-Region Data Sharing: Snowflake US-West-1 to AP-South-1 for Salesforce Cloud Segmentation:**
   * **Purpose:** Share enriched data across regions to support Salesforce Cloud segmentation and targeted activations for personalized marketing campaigns.
   * **Setup:** Data is shared from Snowflake’s US-West-1 region to AP-South-1, enabling seamless access to enriched, segmentation-ready data for personalized marketing initiatives.

# Snowflake to Data cloud (**Data Federation)**

## Step-1 – Snowflake to Data cloud

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# Step-2– Snowflake to Data cloud

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# Step-3

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Connection Name : Any name

Connection API Name: Any name

Example

Connection Name : Salesforce\_to\_Snowflake\_Connection

Connection API Name : My\_Snowflake\_Integration

snowflake :MOHDSADIQ

<https://ty39098.ap-south-1.aws.snowflakecomputing.com>

# \*\*\* Step-4

1. ***ssh-keygen -t rsa -b 2048 -m pkcs8 -C "Snowflake\_Demo" -f id\_rsa\_snowflake\_demo***
2. ***ssh-keygen -e -f id\_rsa\_snowflake\_demo.pub -m pkcs8***

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1. ***ALTER USER MOHDSADIQ4 SET RSA\_PUBLIC\_KEY='MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA0GZGp/Yzt8G9vOWvKZmS***

***n4NApt1lkMA5HkNrNU06z0gyar/2VWusW3VBNXSwwv0ItrGzjitBi2isVnoAl+d0***

***Fy8q8CHyLlQeYCAJ+oA9nbf3EZSxWp5FLEvNapN3KmXiU3shPgeTS7mJzLpeGoGm***

***Ek0aQvf0hzm7litvl1IIMD0SeqnbF+dGzab23QKPvwv1uFf8LaafCyOjZDrQGbSG***

***nM/Sfg6jEJYt9HFmPJdRcIWRInE3dzlcaUVOA6iioXPlky0c3f0FjBBLOg4zfDMy***

***gV4qOHY24WXgfDc98hJrFOHEJNv1rPOb9QBPPO06TtExHzsoTSuGZYUezQlBqkOf***

***LwIDAQAB'***

***cat id\_rsa\_snowflake\_demo***

***cat id\_rsa\_snowflake\_demo.pub***

***https://interworks.com/blog/2021/09/28/zero-to-snowflake-key-pair-authentication-with-windows-openssh-client/***

***Note:***

***Windows : type id\_rsa\_snowflake\_demo.pub***

***copy & paste private key without***

-----BEGIN PRIVATE KEY----- & -----END PRIVATE KEY-----

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# Step-5

*Show users*

*Describe user MOHDSADIQ*

***ALTER******USER*** *MOHDSADIQ* ***SET******RSA\_PUBLIC\_KEY=’ ’***

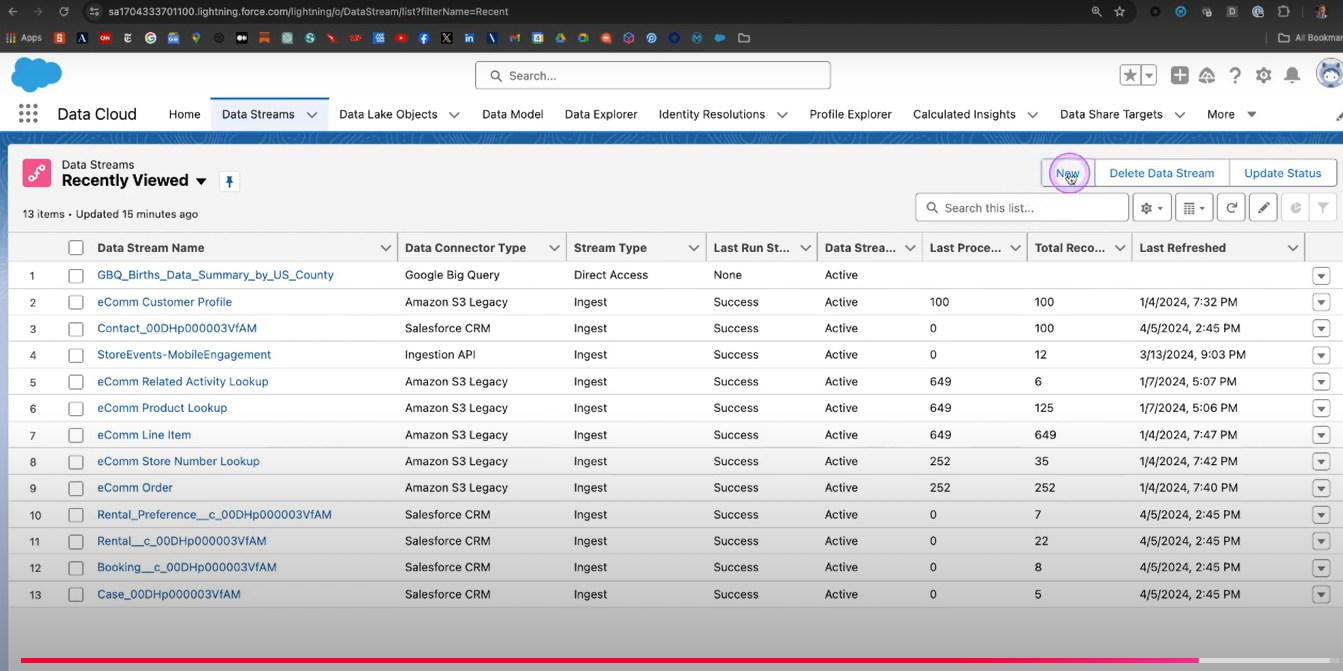
GRANT USAGE ON DATABASE CUSTOMER\_TRANSACTION TO SHARE cust\_transaction\_share;

GRANT USAGE ON SCHEMA CUSTOMER\_TRANSACTION. CUSTOMER\_DATA TO SHARE cust\_transaction\_share;

GRANT SELECT ON ALL TABLES IN SCHEMA CUSTOMER\_TRANSACTION. CUSTOMER\_DATA TO SHARE cust\_transaction\_share;

SHOW GRANTS TO SHARE cust\_transaction\_share;

# Step-6, Create Stream To check the snowflake data in the data cloud



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Urls: https://www.youtube.com/watch?v=ya7lgkUc1Ms

https://www.youtube.com/watch?v=OPH95cvHj1Y

<https://dataworker.medium.com/snowflake-key-pair-authentication-from-salesforce-snowflake-output-connector-406f50948a4c>

<https://docs.snowflake.com/en/user-guide/key-pair-auth>

Note: us-west-1 and ap-South

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# Data cloud to Snowflake (Connecting and sharing Data Cloud data to Snowflake)

Login into “marketingcloud” with valid credentials, trial account doesn’t have the required features.

Note ref: <https://developer.salesforce.com/blogs/2024/08/share-your-data-from-salesforce-data-cloud-to-snowflake>

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## Step 1: Create the integration user

Start by creating a worksheet in Snowflake by navigating to Projects > Worksheets, and click the + icon to create a new SQL worksheet.

Syntax

CREATE OR REPLACE USER <Data Cloud Admin or Data Aware Specialist>

PASSWORD = <string>

LOGIN\_NAME = <string>

DISPLAY\_NAME = <string>

FIRST\_NAME = <string>

MIDDLE\_NAME = <string>

LAST\_NAME = <string>

EMAIL = <string>

DEFAULT\_ROLE = PUBLIC;

Example:

CREATE OR REPLACE USER dataclouddatashare

PASSWORD = 'Kdr@515591'

LOGIN\_NAME = 'dataclouddatasharelogin'

DISPLAY\_NAME = 'dataclouddatasharelogin'

FIRST\_NAME = 'v2soltuions'

MIDDLE\_NAME = 'v2'

LAST\_NAME = 'soltuions'

EMAIL = 'mail@v2solutions.com'

DEFAULT\_ROLE = PUBLIC;

Example

CREATE OR REPLACE USER dataclouddatashare

PASSWORD = 'password'

LOGIN\_NAME = 'dataclouddatasharelogin'

DISPLAY\_NAME = 'dataclouddatasharelogin'

FIRST\_NAME = 'v2soltuions'

MIDDLE\_NAME = 'v2'

LAST\_NAME = 'solutions'

EMAIL = 'mail@v2solutions.com'

DEFAULT\_ROLE = PUBLIC;

Note: By default, Account Admin, Org Admin, and Security Admin roles are blocked for new security integrations. To use one, contact Snowflake support or choose a different role. You can also create a custom role. This demo uses the Public role

## Step 2: Set up OAuth and grant access to the PUBLIC role

create a second SQL worksheet and paste the code block below into your worksheet

* syntax:

CREATE OR REPLACE SECURITY INTEGRATION share\_cloud

TYPE = OAUTH

ENABLED = TRUE

OAUTH\_CLIENT = CUSTOM

OAUTH\_CLIENT\_TYPE = 'CONFIDENTIAL'

// Update the oauth URI callback

OAUTH\_REDIRECT\_URI = 'https://login.salesforce.com/services/cdpSnowflakeOAuthCallback'

OAUTH\_ISSUE\_REFRESH\_TOKENS = TRUE

OAUTH\_REFRESH\_TOKEN\_VALIDITY = 7776000;

**Note:**

Keep the URI as below, don’t make any changes

OAUTH\_REDIRECT\_URI = 'https://login.salesforce.com/services/cdpSnowflakeOAuthCallback'

* Other commands

// Get the client ID and secrets

select system$show\_oauth\_client\_secrets(' share\_cloud ');

// Use the describe command to get the oauth authorization endpoint

DESC SECURITY INTEGRATION share\_cloud;

// Grant usage on the default role of the user being used in share\_cloud

GRANT USAGE ON INTEGRATION share\_cloud TO ROLE PUBLIC;

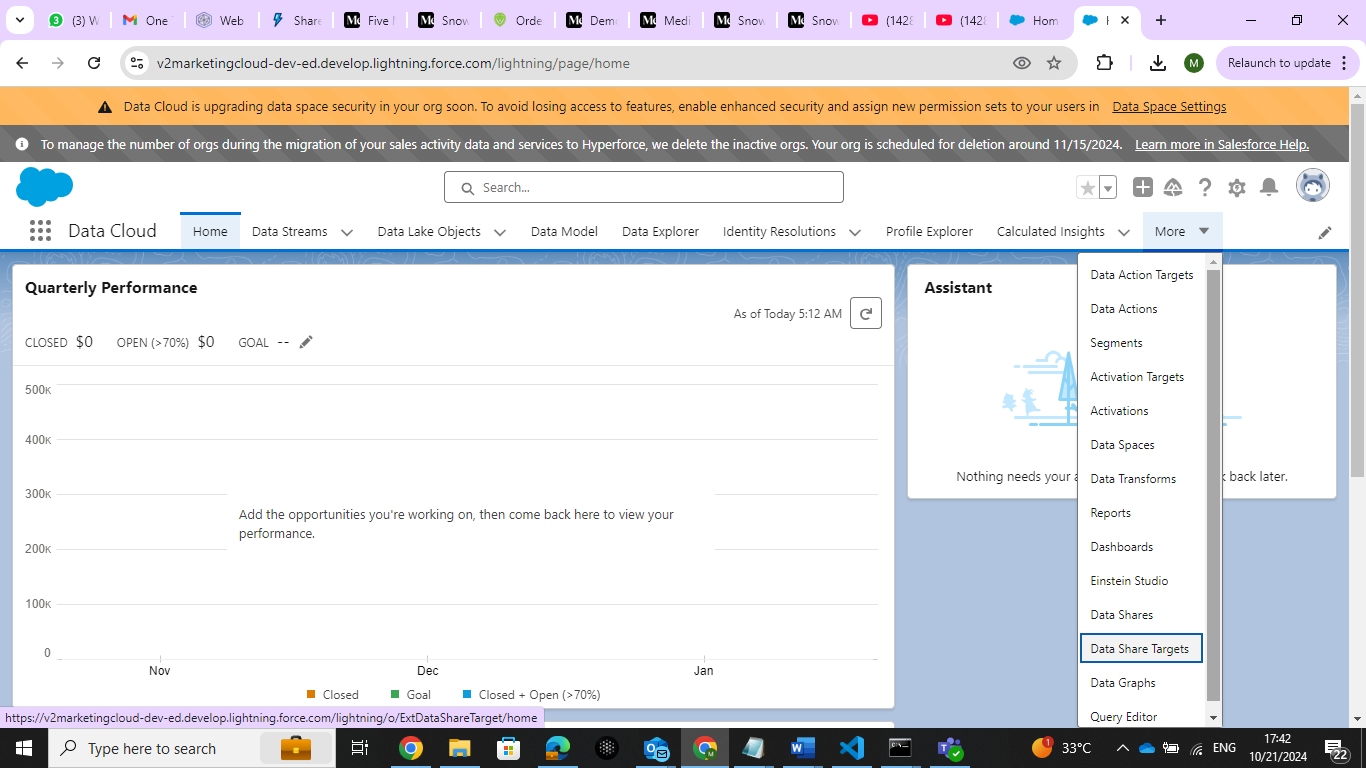
// To get the default role of the user

DESC USER dataclouddatashare;

## Step 3: Create the data share target

In Salesforce Data Cloud, navigate to Data Share Targets and click New. Then select the Snowflake tile.

Page flow as below, after login into



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Note:

From snowflake worksheet collect the, OAUTH\_CLIENT\_ID & OAUTH\_CLIENT\_SECRET

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redirected to a login page to enter a username and password.

Use Client\_ID(OAUTH\_CLIENT\_ID) and CLIENT\_SECRETE(OAUTH\_CLIENT\_SECRET) values

from the OAuthClient secrets

{

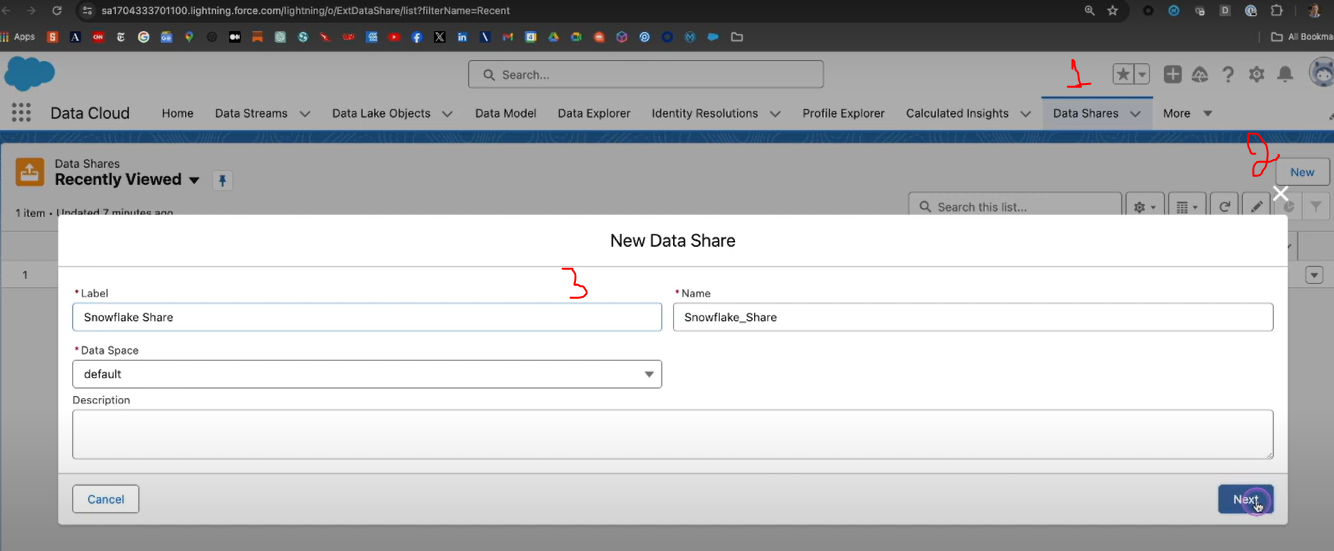
"OAUTH\_CLIENT\_SECRET\_2": "RKj1ugs9b/aG58ExX7Eou+pqu8FwDbT+rJ7nODcauBY=",

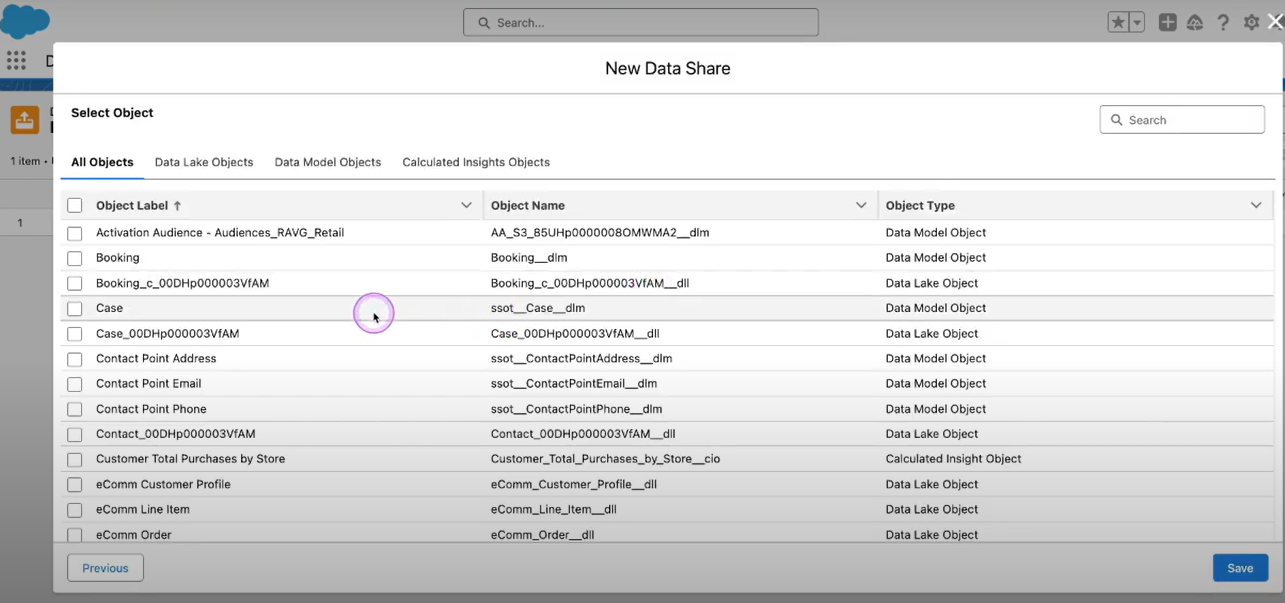
"OAUTH\_CLIENT\_SECRET": "qNiIWY1IPbED5HewTJbgpDIwC6mfK+LaLml9as5kgGg=",

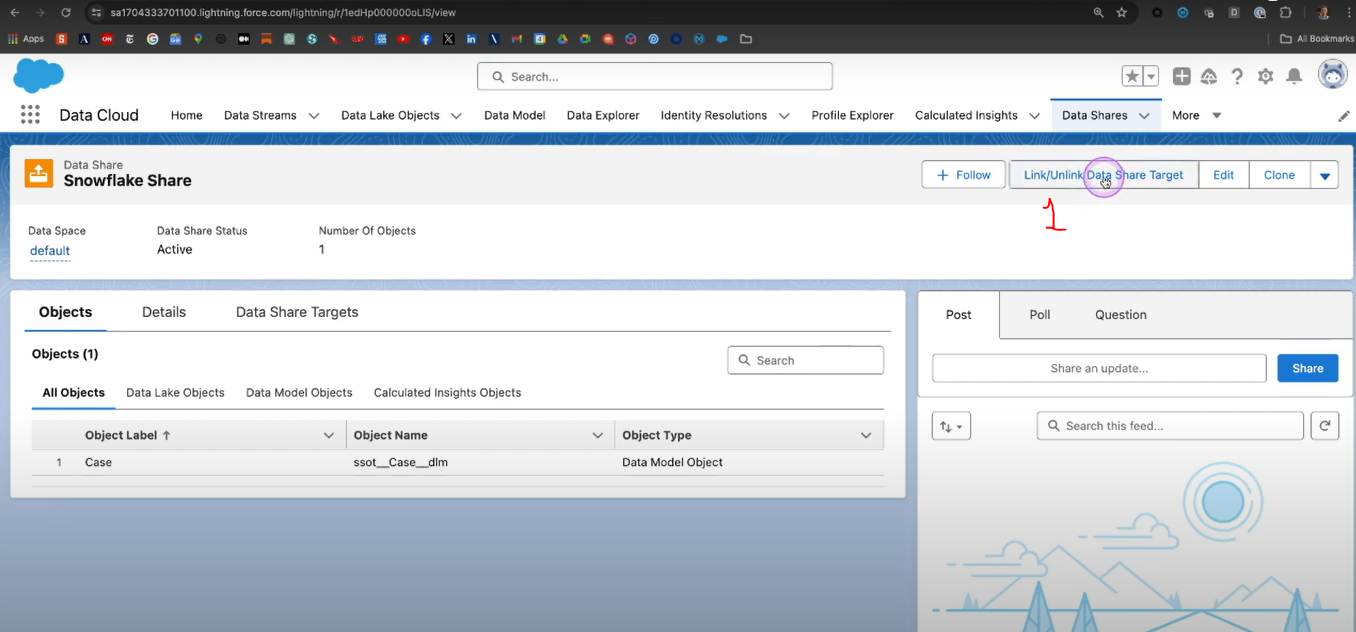
"OAUTH\_CLIENT\_ID": "3Kivn2gRC8kNYEOIkVKef3y6SDo="

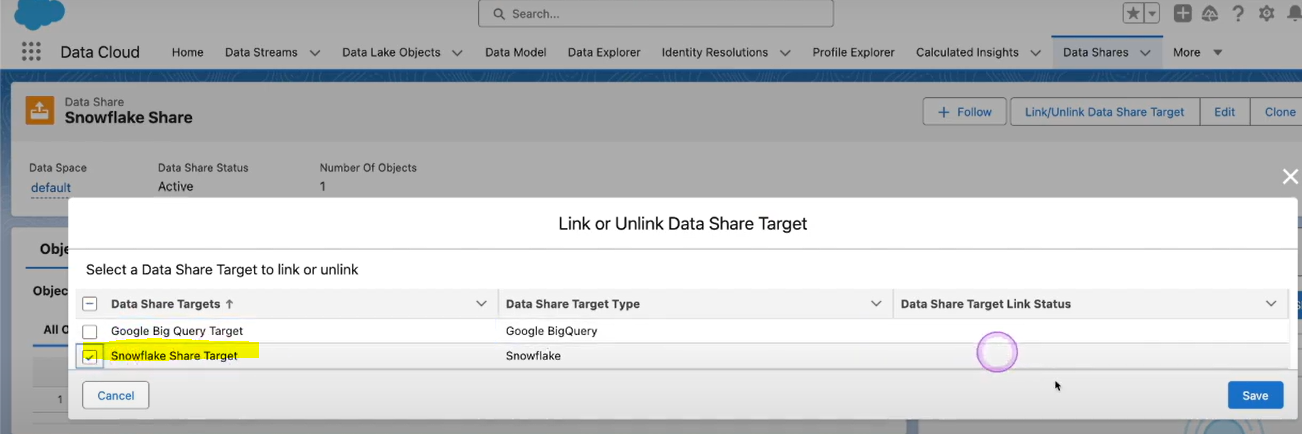
}

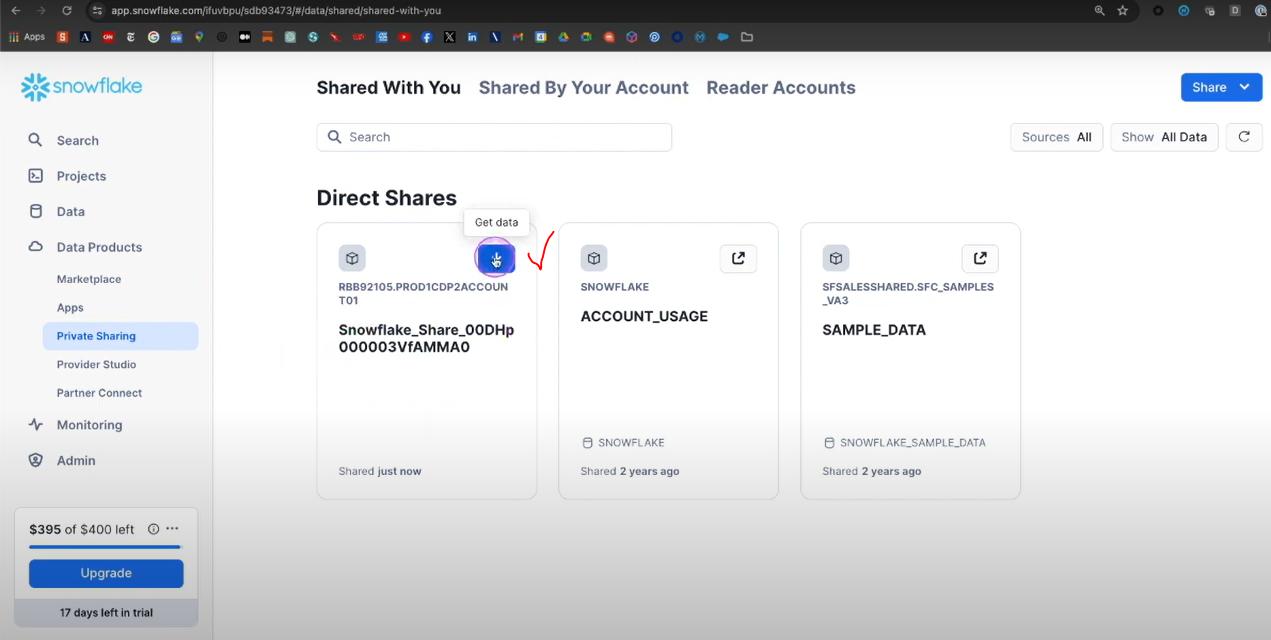
**Data share**











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