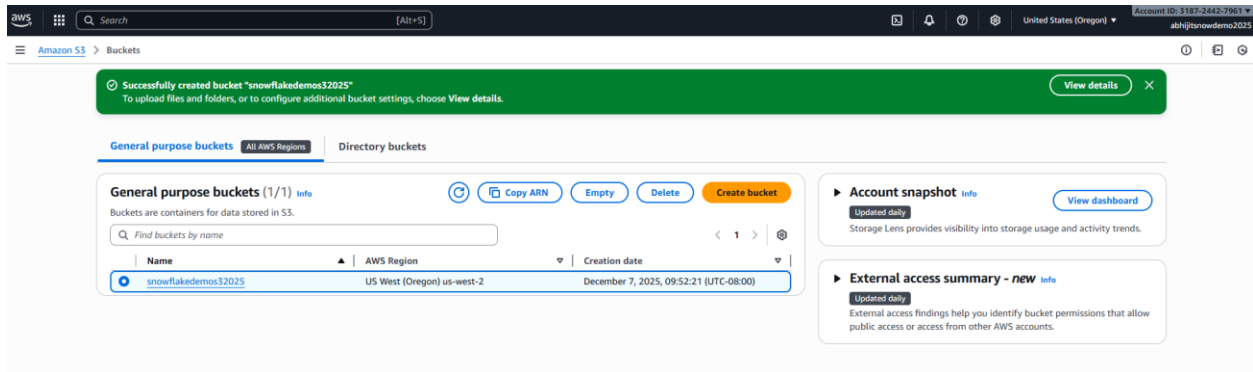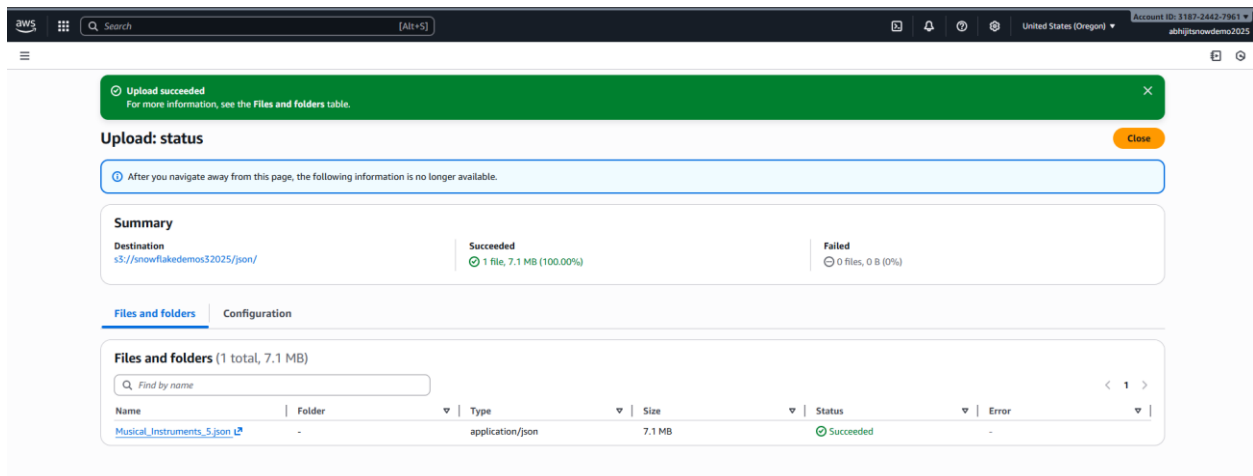# Snowflake Demo AWS Integration

AWS Connection Setup:
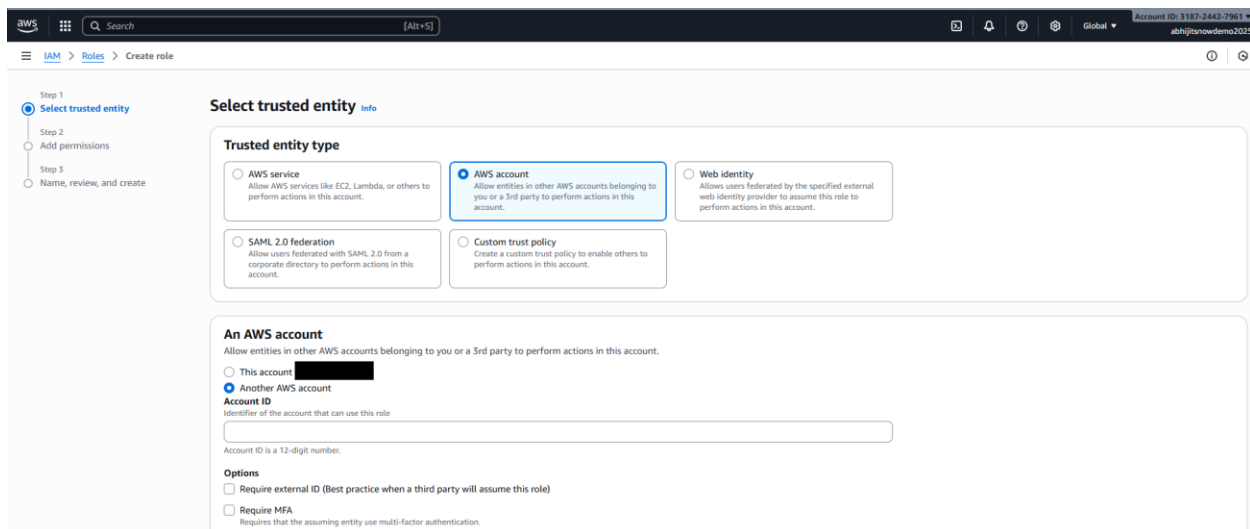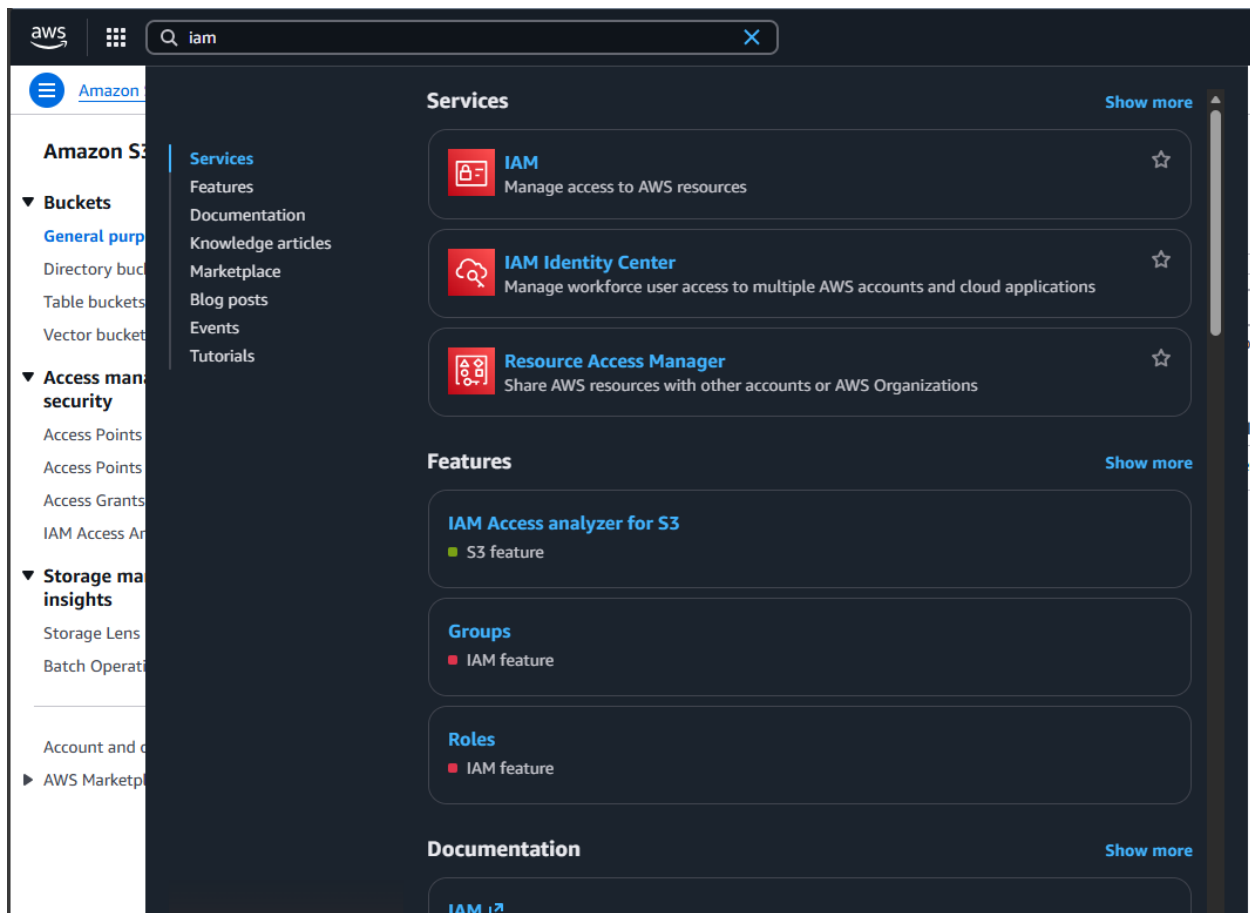
Create AWS Account - > Create AWS S3 Bucket

Upload files

Create policies to load data from S3 to Snowflake

Services

Services
Features
Documentation
Knowledge articles
Marketplace
Blog posts
Events
Tutorials

IAM
Manage access to AWS resources

IAM Identity Center
Manage workforce user access to multiple AWS accounts and cloud applications

Resource Access Manager
Share AWS resources with other accounts or AWS Organizations

Features

Show more

IAM Access analyzer for S3
■ S3 feature

Groups
■ IAM feature

Roles
■ IAM feature

Documentation

Show more

IAM ↗

Search   [Alt+S]   Global ▼   Account ID: 3187-2442-7961 ▼
                                                        abhijitsnowdemo2025

IAM > Roles > Create role

Step 1
Select trusted entity

Step 2
Add permissions

Step 3
Name, review, and create

Select trusted entity Info

Trusted entity type

AWS service
Allow AWS services like EC2, Lambda, or others to perform actions in this account.

AWS account
Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

Web identity
Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

SAML 2.0 federation
Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

Custom trust policy
Create a custom trust policy to enable others to perform actions in this account.

An AWS account
Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

○ This account
● Another AWS account

Account ID
Identifier of the account that can use this role

Account ID is a 12-digit number.

Options

☐ Require external ID (Best practice when a third party will assume this role)

☐ Require MFA
Requires that the assuming entity use multi-factor authentication.

Trusted entity type

- **AWS service** — Allow AWS services like EC2, Lambda, or others to perform actions in this account.
- ● **AWS account** — Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.
- **Web identity** — Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.
- **SAML 2.0 federation** — Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.
- **Custom trust policy** — Create a custom trust policy to enable others to perform actions in this account.

An AWS account

Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

- This account (████████████)
- ● Another AWS account

Account ID
Identifier of the account that can use this role

[████████]

Account ID is a 12-digit number.

Options

☑ Require external ID (Best practice when a third party will assume this role)
You can increase the security of your role by requiring an optional external identifier, which prevents "confused deputy" attacks. This is recommended if you do not own or have administrative access to the account that can assume this role. The external ID can include any characters that you choose. To assume this role, users must be in the trusted account and provide this exact external ID. Learn more

External ID

[00000]

ⓘ **Important:** The console does not support using an external ID with the Switch Role feature. If you select this option, entities in the trusted account must use the API, CLI, or a custom federation proxy to make cross-account iam:AssumeRole calls. Learn more

☐ Require MFA
Requires that the assuming entity use multi-factor authentication.

Step 1 — Select trusted entity
Step 2 — Add permissions
Step 3 — Name, review, and create

Add permissions Info

Permissions policies (1/1105) Info
Choose one or more policies to attach to your new role.

Filter by Type

🔍 s3 ✕ | All types ▼ | 14 matches

☐	Policy name	Type	Description
☐	AmazonDMSRedshiftS3Role	AWS managed	Provides access to manage S3 settings…
☑	AmazonS3FullAccess	AWS managed	Provides full access to all buckets via t…

```
// Create storage integration object

create or replace storage integration s3_int
  TYPE = EXTERNAL_STAGE
  STORAGE_PROVIDER = S3
  ENABLED = TRUE
  STORAGE_AWS_ROLE_ARN = 'arn:aws:iam::            role/snowflake-access-role'
  STORAGE_ALLOWED_LOCATIONS = ('s3://snowflakedemos32025/csv/', 's3://snowflakedemos32025/json/')
   COMMENT = 'This an optional comment' ;

// See storage integration properties to fetch external_id so we can update it in S3
DESC integration s3_int;
```

Get the user-id and external-id from Snowflake Integration Object (STORAGE_AWS_IAM_USER_ARN and Storage_AWS_External_ID)

```
11
12    // See storage integration properties to fetch external_id so we can update it in S3
13    DESC integration s3_int;
```

↳ **Results**   ～ **Chart**

	A property	A property_type	A property_value	A property_default
1	ENABLED	Boolean	true	false
2	STORAGE_PROVIDER	String	S3	
3	STORAGE_ALLOWED_LOCATIONS	List	s3://snowflakedemos32025/csv/,s3://snowflakeder	[]
4	STORAGE_BLOCKED_LOCATIONS	List		[]
5	STORAGE_AWS_IAM_USER_ARN	String	arn:aws:iam:: ⬛⬛⬛ ser/externalstages/c	
6	STORAGE_AWS_ROLE_ARN	String	arn:aws:iam ⬛⬛⬛ ole/snowflake-acces	
7	STORAGE_AWS_EXTERNAL_ID	String	⬛⬛⬛ nvni	
8	USE_PRIVATELINK_ENDPOINT	Boolean	false	false
9	COMMENT	String	This an optional comment	

```
    // Use Copy command
    COPY INTO RETAILDB.PUBLIC.movie_titles
        FROM @MANAGE_DB.external_stages.csv_folder



    // Create file format object
    CREATE OR REPLACE file format MANAGE_DB.file_formats.csv_fileformat
        type = csv
        field delimiter = ' '
```

Results   ～ **Chart**

⚠️

Number of columns in file (26) does not match that of the corresponding table (12), use file format option error_on_column_count_mismatch=false to ignore this error

```
    File 'csv/netflix_titles.csv', line 3, character 1
    Row 1 starts at line 2, column "MOVIE_TITLES"[26]
    If you would like to continue loading when an error is encountered, use other values such as 'SKIP_FILE' or 'CONTINUE' for
    the ON_ERROR option. For more information on loading options, please run 'info loading_data' in a SQL client.
```

```
57    COPY INTO RETAILDB.PUBLIC.movie_titles
58        FROM @MANAGE_DB.external_stages.csv_folder
59
60
```

↳ **Results**   ～ **Chart**

	A file	A status	# rows_parsed	# rows_loaded	# error_limit	# errors_seen	A first_error	# first_error_line	# first_e
1	s3://snowflakedemos3	LOADED	7787	7787	1	0	null	null	

```
60
61    SELECT * FROM RETAILDB.PUBLIC.movie_titles
62
63
```

↳ **Results**   ～ **Chart**

	A SHOW_ID	A TYPE	A TITLE	A DIRECTOR	A CAST	A COUNTRY	A DATE_ADDED	A RELEASE_YEAR	A
1	s1	TV Show	3%	null	João Miguel, Bianca Comparato, Michel Gomes, Rodolfo Val	Brazil	August 14, 2020	2020	TV-I
2	s2	Movie	7:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, Azalia Ortiz, C	Mexico	December 23, 2016	2016	TV-I
3	s3	Movie	23:59	Gilbert Chan	Tedd Chan, Stella Chung, Henley Hii, Lawrence Koh, Tommy	Singapore	December 20, 2018	2011	R
4	s4	Movie	9	Shane Acker	Elijah Wood, John C. Reilly, Jennifer Connelly, Christopher P	United States	November 16, 2017	2009	PG-
5	s5	Movie	21	Robert Luketic	Jim Sturgess, Kevin Spacey, Kate Bosworth, Aaron Yoo, Liza	United States	January 1, 2020	2008	PG-
6	s6	TV Show	46	Serdar Akar	Erdal Beşikçioğlu, Yasemin Allen, Melis Birkan, Saygin Soysa	Turkey	July 1, 2017	2016	TV-I
7	s7	Movie	122	Yasir Al Yasiri	Amina Khalil, Ahmed Dawood, Tarek Lotfy, Ahmed El Fishaw	Egypt	June 1, 2020	2019	TV-I
8	s8	Movie	187	Kevin Reynolds	Samuel L. Jackson, John Heard, Kelly Rowan, Clifton Collins	United States	November 1, 2019	1997	R

Query Details   ⋯

Query duration   394ms

Rows   7.8K

Query ID   01c0e57d-0107-7898-0...

Show more ⌄

SHOW_ID   A

100% filled

```
     Execute
  1  SELECT
  2    $1:asin,
  3    $1:helpful,
  4    $1:overall,
  5    $1:reviewText,
  6    $1:reviewTime,
  7    $1:reviewerID,
  8    $1:reviewTime,
  9    $1:reviewerName,
 10    $1:summary,
 11    $1:unixReviewTime
 12  FROM @MANAGE_DB.external_stages.json_folder;
```

PROBLEMS 4   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   SNOWFLAKE   SNOWFLAKE   COMMENTS

⚠ Displaying 10,000 of 10,261 rows

	$1:ASIN	$1:HELPFUL	$1:OVERALL	$1:REVIEWTEXT	$1:REVIEWTIME	$1:REVIEWERID	$1:REVIEWTIME_2	$1:RE
1	1384719342	[0,0]	5	Not much to write about	02 28, 2014	A2IBPI20UZIR0U	02 28, 2014	cassa
2	1384719342	[13,14]	5	The product does exactly	03 16, 2013	A14VAT5EAX3D9S	03 16, 2013	Jake
3	1384719342	[1,1]	5	The primary job of this d	08 28, 2013	A195EZSQDW3E21	08 28, 2013	Rick
4	1384719342	[0,0]	5	Nice windscreen protects	02 14, 2014	A2C00NNG1ZQQG2	02 14, 2014	Rusty
5	1384719342	[0,0]	5	This pop filter is great. It	02 21, 2014	A94QU4C90B1AX	02 21, 2014	SEAN
6	B00004Y2UT	[0,0]	5	So good that I bought an	12 21, 2012	A2A039TZMZHH9Y	12 21, 2012	Bill L
7	B00004Y2UT	[0,0]	5	I have used monster cabl	01 19, 2014	A1UPZM995ZAH90	01 19, 2014	Brian

Query Details

01c0e5d0-0107-7898-0003-87da000207a6

Query Duration	5s
Rows	10,261
End time	Sun Dec 07 2025
Scanned	7.1MB (100%)
Role	ACCOUNTADMIN
Warehouse	COMPUTE_WH