

Data Sheet

Connecting Amazon S3 to Snowflake through Fivetran

Step-By-Step Guide

5201 GREAT AMERICAN PARKWAY, SUITE 320 SANTA CLARA, CA 95054 Tel: (855) 695-8636 E-mail: info@lumendata.com Website: www.lumendata.com **Fivetran** offers various connectors to load flat files from the local device to the destination. In this document, we will upload CSV files to our Snowflake account (destination) from our local system using an AmazonS3 (bucket) connection.

To perform this action, we need the following:

- Fivetran Account
- AWS account
- Snowflake Account

Fivetran Account

Create a Fivetran Sandbox account to get all the Fivetran features. Provide the necessary information to sign up.

Move data with us	
Start a 14-day free trial to:	G Sign up with Google
Instantly access hundreds of your most powerful data sources & databases	FIRST NAME LAST NAME
Easily bring high volumes of data into a destination of your choice	COMPANY PHONE
Accelerate your analytics with prebuilt data models	COMPANY EMAIL
Get a customized usage and pricing estimate	
	Select V Select V
	Sign up

• After providing all the relevant information, we will receive an email to reset our password and log in again.

Connectors 22 Active - 14 Incomplete - 4 Paused * Last refresh	ned a few seconds ago	C	Try new connectors for 14	days for free		Add connector
Q Search by name	T All sour	ces 🝷	All destination	is 🔻	▼ All sto	ituses 👻
Name 🗧 Source	÷ 8	Destination 🕀 i	3	Status 🕀	8	Clear filte
public.sample_fivetran_ta 関 An	nazon S3	* Amrit_Snov	vflake	Active		3 minutes ago
fivetaran_test.supplier 🛛 📫 An	nazon S3	* Ashok_Snov	wflake	Active	0	5 minutes ago
apoorvaemployee.custom 📫 An	nazon S3	* Apoorvarar	nesh_SNOWFLA	Active		19 minutes ago



- In Fivetran, navigate to Connectors, create a new connector, and configure the source as the Amazon S3 database and the destination as your Snowflake database.
- Select the destination and click on "Select".

27 destinations	Sort by: Default 🔻
* ANIKET_SNOWFLAKE	
* Apoorvaramesh_SNOWFLAKE	

• Choose the Amazon S3 connector.

	New connectors get 14 days of free usage. Learn more.	
Apoorvaramesn_SNOWPLAKE	Connect your CRM for customer analysis	See connectors X
∃ All sources	318 sources	Sort by: Default
🖈 Most popular >	Salesforce	
A Newly released NEW		
() Upcoming	Shopify	
	Amazon S3	
✓ More categories		
	C SQL Server	

• Mention the name of the Snowflake schema that matches your destination and specify the Snowflake table name then select "Access Key and Secret" in the Access approach dropdown list.

Destination

Apoorvaramesh_SNOWFLAKE

Destination schema

xyz

Appears in your destination as **x** and **cannot be changed** after you test the connector or save the form for later.

Destination table

abc

Appears in your destination as **abc** and **cannot be changed** after you test the connector or save the form for later.

Bucket

my-s3-bucket

Your S3 bucket name. The name shouldn't include any prefix or folder path characters.

Access approach (optional)

Access Key and Secret

• Provide your Amazon S3 bucket name and for the Access approach, select "Access Key ID" and "Secret"





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Click on "Save and Test". Once your connection has been successfully tested, initiate the data synchronization.



Connection tests:

- Validating Bucket Name
- Connecting to bucket
- Validating ExternalID
- Validating file pattern regex
- Validating archive pattern
- Validating escapeChar
 - All connection tests passed!

Here are some files we found matching the regex specified: Supplier_Phone.csv

Snowflake Account

- Provide your account name or account URL <u>https://signup.snowflake.com/</u>.
- If you've previously signed in to Snow site, you might see an account name that you can select.
- Sign in using your Snowflake account credentials.
- Once you log in to the Snowflake account, you have to create the database and schema.

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clicking the button below you understand that owflake will process your personal information contance with its <u>Privacy Nacios</u> . I may withdo ment through <u>unsubscribe links</u> at any time.	t ja pa my



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	ACCOUNTADMIN			
		✓ S APOORVAEMPLOYEE	🖯 Database 😩 ACCOUNTADMIN 🕒 6 days ago	1 Local
		✓ Tables		
0	Worksheets		Database Details Schemas	
00	Dashboards	FIVETRAN_AUDIT		
5	Streamlit	> 🗟 CUSTOMER		
~		> 🗟 FIVETRAN_LIEGE_DINE_STAGING	Privileges	Group by Role 🗸 🔶 + Privilege
60	Apps	> C INFORMATION_SCHEMA		
٥	Data	> 😌 PUBLIC	ACCO (Current Role) Q. OWNERSHIP	
	Databases	> 🚫 SNOWFLAKE		
	Private Sharing	> 🖯 SNOWFLAKE_SAMPLE_DATA		
	Provider Studio			
	Governance			

AWS Account

- Type the URL <u>https://signin.aws.amazon.com/</u> in the search bar and log in to the AWS account.
- After logging into your AWS account, you will get a home page. Select S3 from the list.





• Click on the "Create bucket"

Account snapshot				View Storage Le	ns
Storage lens provides visibility	/ into storage usag	e and activity tre	nds. <u>Learn more</u> 🔀		
uckets (8) Info					
uckets (8) Info	ored in S3. <u>Learn n</u>	nore 🔼			
uckets (8) Info uckets are containers for data sto C C C COPY ARN	ered in S3. <u>Learn n</u> Empty	Delete	Create bucket		

• Now, fill up the required information in all the sections of the wizard.

aws	Services Q	Search	[Alt+S]
📉 Lambd	a 🕅 API Gateway		T S3
=	Amazon S3 > B	uckets >	Create bucket
	Create bu	icket	Info
	Buckets are contai	ners for da	ata stored in S3. Learn more 🔀
	General cor	nfigurat	ion
	Bucket name		
	Bucketsname		
	Bucket name mus	t be unique	within the global namespace and follow the bucket naming rules. See rules for bucket naming 🗹
	AWS Region		
	Asia Pacific (M	1umbai) ap	o-south-1

• Click on the "Upload" button present on the right-hand side of the screen. You will be directed to a page for uploading object/files in the bucket.

C D Copy S3 UR	I 🗇 Copy URL	☑ Download	Open 🔀	Delete	Actions v	
Create folder	Upload					
						~
Q Find objects by prefix						
, , , , ,						6
] Name	▲ Туре	▼ Last modified	⊽ Size	2	✓ Storage class	Q
] Name	▲ Туре	▼ Last modified October 25, 2	▼ Size	2	▼ Storage Class	eg.

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• In the search bar, type "IAM" and click on "Create Policy"

Policies (1140) Info		C	Actions v	,	Delete	C	reate po	olicy
policy is an object in AWS that defines permissions.								
	Filter by Type							

• Select the "JSON" option.

Step 1 Specify permissions	Specify permissions Info Add permissions by selecting services, actions, resources, and conditions. Build	permission statements using the JSON editor.
Step 2		
Review and create Policy editor		Visual JSON Actions V
	1▼{ 2 "Version": "2012-10-17", 3▼ "Statement": [Edit statement Remov
	4▼ (Add actions
	5 "Sid": "Statement1",	Choose a service
	Q 7 "Action": [],	Q. Filter services

```
{
          "Version": "2012-10-17",
          "Statement": [
               {
                    "Effect": "Allow",
                    "Action": [
                         "s3:GetBucketLocation",
                         "s3:GetObject",
                         "s3:ListBucket"
                   ],
                   "Resource": [
                         "arn:aws:s3:::{apoorvafivetran}/*",
                         "arn:aws:s3:::{apoorvafivetran}"
                   ]
               }
           ]
     }
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```

• Fill up the policy details, and then click the "Create Policy" button.

ep 1 pecify permissions	Review and create Info Review the permissions, specify details, and tags.	
ep 2 eview and create	Policy details	
	Policy name Enter a meaningful name to identify this policy.	
	Maximum 128 characters. Use alphanumeric and '++, ()-, ' characters. Description - optionol Add a short explanation for this policy.	

• In the search bar type "IAM" clickon "Users" in the left panel and proceed to create a new user by providing the necessary details.

aws Services Q	Search		[Alt+S]	D	\$ Ø	() G	lobal 🔻 🛛 Bł	haradwaja-sn
💹 Lambda 🛛 🔯 API Gateway	MAI 🔝	🖸 S3						
Identity and Access Management (IAM)	×	*	IAM > Users					
Q Search IAM			Users (7) Info An IAM user is an identity with long-term credentials that is used to int	eract with AWS in an accou	nt. C	Delete	Create	user
			Q Search				< 1 >	0

• Enter the user details, and then click on "Next".

Specify user details	Specify user details
Step 2 Set permissions	User details
Step 3	User name
Review and create	Nameofuser
	The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ (hyphen)
	Provide user access to the AWS Management Console - optional If you're providing console access to a person, it's a best practice 2 to manage their access in IAM Identity Center.
	If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommi or Amazon Keyspaces, you can generate them after you create this IAM user. Learn more 2
	or Amazon Keyspaces, you can generate them after you create this IAM user. Learn more

• Select the "Attach policies directly"





• Add policy, Amazon S3 full access, and select the policy that we created.

Permissions summary				$\langle 1 \rangle$
Name 🖸	Туре	v	Used as	Ŷ
AmazonS3FullAccess	AWS managed		Permissions policy	

• Click on the username and navigate to the "Security Credentials" section.

Permissions	Groups Tags (1)	Security credentials Access Advisor			
Permissions Permissions are defi	policies (1) ined by policies attached to the user	directly or through groups.		C Remove	Add permissions 🔻
		Filter by Type			
O Course		All types	-		(1)

• Select the "Access Key" section, then click on "Create an access key." Check the "Third-party service".



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Management (IAM)	Assign MFA device			
Q Search IAM	Access keys (0) Use access keys to send programmatic calls to AWS from the AWS CLI, AWS Tools for PowerShell, AWS SDKs, or direct AWS API calls. You can have a maximum of two access keys (active or inactive) at a time. Learn more C Create access key			
ser groups sers bles	No access keys. As a best practice, avoid using long-term credentials like access keys. Instead, use tools which provide short term credentials. Learn more 🔀			
dentity providers	SSH public keys for AWS CodeCommit (0)			
O Application You plan to Amazon EC2	n running on an AWS compute service use this access key to enable application code running on an AWS compute service like , Amazon ECS, or AWS Lambda to access your AWS account.			
• Third-part You plan to monitors or	y service use this access key to enable access for a third-party application or service that manages your AWS resources.			
O Application	n running outside AWS			

• An Access key and secret key will be generated.

Retrieve access keys Info

Access key If you lose or forget your secret acc	ess key, you cannot retrieve it. Instead, create a new access key and
make the old key inactive.	
Access key	Secret access key
-	

Loading data from Amazon s3 to Snowflake using Fivetran

Step 1: Upload the data files to the new Amazon S3 bucket.

Objects (2) Objects are the fundamental entities explicitly grant them permissions. Let	stored in Amazon S3. You	ı can use <u>Amazon S3 inv</u>	entory. 🔀 to get a lis	t of all objects in	your bucket. For other	rs to access your objects	, you'll need to
C Copy S3 URI	Copy URL	🕑 Download	Open [Delete	Actions v	Create folder]
Q Find objects by prefix						<	1 > ©
Name	▲ Туре	▼	Last modified	▽	Size	⊽ Stora	ge class 🛛 🗢
Category.csv	csv		October 25, 2023 12:27:18 (UTC+05	, 5:30)		142.0 B Stand	ard

Step 2: Choose the name of the data folder.

Step 3: Choose Start Upload.

Upload info	$\leftarrow \rightarrow \checkmark \uparrow$ > This PC > Downloads \checkmark \heartsuit Search Downloads						
Add the files and folders you want to upload to S S3 REST API. Learn more	Organize • New folder Selected • Today (1)						
Drag and drop files and folders	Category Category Microsoft Excel Comma Separate 3 This PC 3 3D Objects Category Microsoft Excel Comma Separate Category Microsoft Excel Comma Sepa						
Files and folders (0) All files and folders in this table will be uploaded.	 Desktop Documents Downloads Music Amazon S3 to Snowflake via Fivetran_v1 Microsoft Word Document Last week (4)						
Q. Find by name Name ▼ Folder	Pictures Videos Videos Sos (C:) Fivetran Technical Deep Dive Part 2						
You have n	File name: All files Cancel						

Step 4: Once everything is ready, start the sync to load all the tables. Verify the destination to ensure that all the tables are loaded.

AR	Apoorva Ramesh ACCOUNTADMIN Worksheets	APOORVAEMPLOYEE S APOORVAEMPLOYEE Tables CUSTOMER	Table	APOORVAE	DMIN (5 days	APOORVAEMPLO ago ≡ 20 ₪ 5.5KB Copy History	••• / Load Data	
000	Dashboards	FIVETRAN_AUDIT CUSTOMER	COMPUTE_WH 20 Rows • Updated just now					
0	Streamint	> 😪 FIVETRAN_LIEGE_DINE_STAGING		FILE	LINE	MODIFIED	CUSTOMER ID	
0	Apps		1	customer.csv	0	2023-10-20 10:39:24		
0	Data	> 🕫 PUBLIC	2	customer.csv	1	2023-10-20 10:39:24		
	Databases	> \Lambda SNOWFLAKE	3	customer.csv	2	2023-10-20 10:39:24		
	Private Sharing	> 🖯 SNOWFLAKE_SAMPLE_DATA	4	customer.csv	3	2023-10-20 10:39:24		
	Provider Studio	•	5	customer.csv	4	2023-10-20 10:39:24		
	Governance		6	customer.csv	5	2023-10-20 10:39:24		

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About LumenData

LumenData is a leading provider of Enterprise Data Management, Cloud & Analytics solutions. We help businesses navigate their data visualization and analytics anxieties and enable them to accelerate their innovation journeys.

Founded in 2008, with locations in multiple countries, LumenData is privileged to serve over 100 leading companies. LumenData is **SOC2 certified** and has instituted extensive controls to protect client data, including adherence to GDPR and CCPA regulations.



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