

Load Data from Snowflake to ADLS Gen2 using Blob Staging





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Check your inbox!

An email to activate your account has been sent to **sakthivelmaddy97@gmail.com**. It may take a few minutes to arrive.

Meanwhile, here are a few resources to check out:



Get started with [Snowflake documentation](#)



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WHAT IS  snowflake?
8 MINUTE DEMO





[Databases](#) [Worksheets](#)

🔍 Search objects

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> PUBLIC

SALES

▼ Tables

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>  SNOWFLAKE

> SNOWFLAKE_SAMPLE_DATA

DEMO.SALES ▾

Settings ▾

[illegible]

Results

 Chart

	CID	CNAME	CLOCATION
1	1	Sakthi	Bangalore
2	2	Senthil	Chennai
3	3	Balu	Hyderabad
4	4	Raj	Madurai

Query Details

Query duration	134ms
----------------	-------

Rows	4
------	---

Query ID	<u>01b9f3c4-0001-3c4f-0...</u>
----------	--------------------------------

Show more ▾

CID	#
1	4

SK



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abssakthi

Shared access signature

☆

...

Storage account

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Monitoring (classic)

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A shared access signature (SAS) is a URI that grants restricted access rights to Azure Storage resources. You can provide a shared access signature to clients who should not be trusted with your storage account key but whom you wish to delegate access to certain storage account resources. By distributing a shared access signature URI to these clients, you grant them access to a resource for a specified period of time.

An account-level SAS can delegate access to multiple storage services (i.e. blob, file, queue, table). Note that stored access policies are currently not supported for an account-level SAS.

[Learn more about creating an account SAS](#)

Allowed services ⓘ

☒ Blob ☒ File ☒ Queue ☒ Table

Allowed resource types ⓘ

☒ Service ☒ Container ☒ Object

Allowed permissions ⓘ

☒ Read ☒ Write ☒ Delete ☒ List ☒ Add ☒ Create ☒ Update ☒ Process ☒ Immutable storage ☒ Permanent delete

Blob versioning permissions ⓘ

☒ Enables deletion of versions

Allowed blob index permissions ⓘ

☒ Read/Write ☒ Filter

Start and expiry date/time ⓘ

Start

End

Allowed IP addresses ⓘ

Allowed protocols ⓘ

☒ HTTPS only ☐ HTTPS and HTTP

Home > abssakthi

abssakthi | Shared access signature

☆

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Storage account

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Security + networking

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Allowed protocols ⓘ

☒ HTTPS only ☐ HTTPS and HTTP

Preferred routing tier ⓘ

☒ Basic (default) ☐ Microsoft network routing ☐ Internet routing

Some routing options are disabled because the endpoints are not published.

Signing key ⓘ

key1

Generate SAS and connection string

Connection string

BlobEndpoint=https://abssakthi.blob.core.windows.net;/QueueEndpoint=https://abssakthi.queue.core.windows.net;/FileEndpoint=https://abssakthi.file.core.windows.net;/TableEndpoint=https://abssakthi...

SAS token ⓘ

sv=2022-11-02&ss=bfqt&srt=sco&sp=rwldacupiytfx&se=2025-01-26T02:03:59Z&st=2025-01-25T18:03:59Z&spr=https&sig=v17Js0RTimc4M3FibEpsoZYSWq7Hd8XVKEp%2FyoBiaus%3D

Copied

Blob service SAS URL

https://abssakthi.blob.core.windows.net/?sv=2022-11-02&ss=bfqt&srt=sco&sp=rwldacupiytfx&se=2025-01-26T02:03:59Z&st=2025-01-25T18:03:59Z&spr=https&sig=v17Js0RTimc4M3FibEpsoZYSWq7H...

File service SAS URL

https://abssakthi.file.core.windows.net/?sv=2022-11-02&ss=bfqt&srt=sco&sp=rwldacupiytfx&se=2025-01-26T02:03:59Z&st=2025-01-25T18:03:59Z&spr=https&sig=v17Js0RTimc4M3FibEpsoZYSWq7H...

Queue service SAS URL

https://abssakthi.queue.core.windows.net/?sv=2022-11-02&ss=bfqt&srt=sco&sp=rwldacupiytfx&se=2025-01-26T02:03:59Z&st=2025-01-25T18:03:59Z&spr=https&sig=v17Js0RTimc4M3FibEpsoZYSWq7H...

Table service SAS URL

https://abssakthi.table.core.windows.net/?sv=2022-11-02&ss=bfqt&srt=sco&sp=rwldacupiytfx&se=2025-01-26T02:03:59Z&st=2025-01-25T18:03:59Z&spr=https&sig=v17Js0RTimc4M3FibEpsoZYSWq7H...

Home > RG > akvsakthi

🔑

akvsakthi | Secrets

☆

⋮

Key vault

🔍 Search

⬅

⬅

+ Generate/Import

🔄 Refresh

⬆ Restore Backup

</> View sample code

🔗 Manage deleted secrets

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- 🔒 Locks
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- > Help

📘 The secret 'snowflake' has been successfully created.

Name	Type	Status	Expiration date
snowflake		✓ Enabled	
abs-SAS-url		✓ Enabled	
adls-key		✓ Enabled	

Microsoft Azure | Data Factory > adf-sakthi

Search factory and documentation

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sakthi.97@outlook.com
DEFAULT DIRECTORY

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Data Factory > Validate all > Publish all 1

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Apache Airflow

Linked services

Linked service defines the connection information to a data store or compute. [Learn more](#)

+ New

Filter by name

Annotations : Any

Showing 1 - 4 of 4 items

Name	Type
ls_abs	Azure Blob Storage
ls_adls	Azure Data Lake Storage
ls_akv	Azure Key Vault
ls_asdb	Azure SQL Database

Edit linked service

Azure Blob Storage [Learn more](#)

Name *

ls_abs

Description

Connect via integration runtime * ⓘ

AutoResolveIntegrationRuntime

Authentication type

SAS URI

SAS URI Azure Key Vault

AKV linked service * ⓘ

ls_akv

Secret name *

abs-SAS-url

Edit

Secret version ⓘ

Latest version

Edit

Test connection ⓘ

To linked service To file path

Annotations

+ New

Save

Cancel

Connection successful

Test connection

Home > RG > akvsakthi

🔒

akvsakthi | Secrets

☆

⋮

Key vault



🔍 Search

⬅️

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+ Generate/Import

🔄 Refresh

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📘 The secret 'snowflake-pwd' has been successfully created.

Name	Type	Status	Expiration date
snowflake-pwd		✓ Enabled	
snowflake		✓ Enabled	
abs-SAS-url		✓ Enabled	
adls-key		✓ Enabled	

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Linked service defines the connection information to a data store or compute. [Learn more](#)

+ New

Filter by name Annotations : Any

Showing 1 - 4 of 4 items

Name ↑↓	Type ↑↓
ls_abs	Azure Blob Storage
ls_adls	Azure Data Lake Storage
ls_akv	Azure Key Vault
ls_asdb	Azure SQL Database

New linked service

Snowflake [Learn more](#)

Name *
ls_snowflake

Description

Connect via integration runtime * ⓘ
✓ AutoResolveIntegrationRuntime

Account name * ⓘ
exydola-vx06763

Database * ⓘ
Demo

Warehouse * ⓘ
COMPUTE_WH

Authentication type * ⓘ
Basic

User name * ⓘ
SAKTHIVEL

Password Azure Key Vault

AKV linked service * ⓘ
ls_akv

Secret name * ⓘ
snowflake-pwd

✓ Connection successful

Create Back Test connection Cancel

Microsoft Azure

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+ New

Filter by name

Annotations : Any

Showing 1 - 5 of 5 items

Name ↑↓	Type ↑↓	Related ↑↓	Annotations ↑↓
ls_abs	Azure Blob Storage	0	
ls_adls	Azure Data Lake Storage Gen2	0	
ls_akv	Azure Key Vault	2	
ls_asdb	Azure SQL Database	0	
ls_snowflake	Snowflake	0	

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Filter resources by name

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- ds_adls
- ds_Snowflake

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ds_abs

ds_Snowflake

Snowflake
ds_Snowflake

Connection

Schema

Parameters

Linked service *

- Is_snowflake

Test connection

Connection successful

Table

- SALES.CUST

Enter manually

Refresh

Preview data

Edit

New

Learn more

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Data Factory

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Sink dataset *

ds_adls

Open

New

Learn more

Copy behavior ⓘ

Select...

Max concurrent connections ⓘ

Block size (MB) ⓘ

Metadata ⓘ

New

Quote all text

File extension ⓘ

.txt

Max rows per file ⓘ

Pipeline validation output

Copy data activity

Direct copying data from Snowflake is only supported when copying into Azure Blob Storage with DelimitedText, Parquet or JSON format, for other scenarios, please enable staging.

Close

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Maximum data integration unit ① Auto

- Use custom value

Degree of copy parallelism ① Auto

Fault tolerance ①

Enable logging ①

Enable staging ①

Staging settings

Staging account linked service * ① ls_abs

- Test connection
- Edit
- New
- Connection successful

Linked service properties ①

Name	Value	Type
lp_BlobAccName	abssakthi	string

Storage path ① storageBrowse

Enable compression ①

Micr

>>

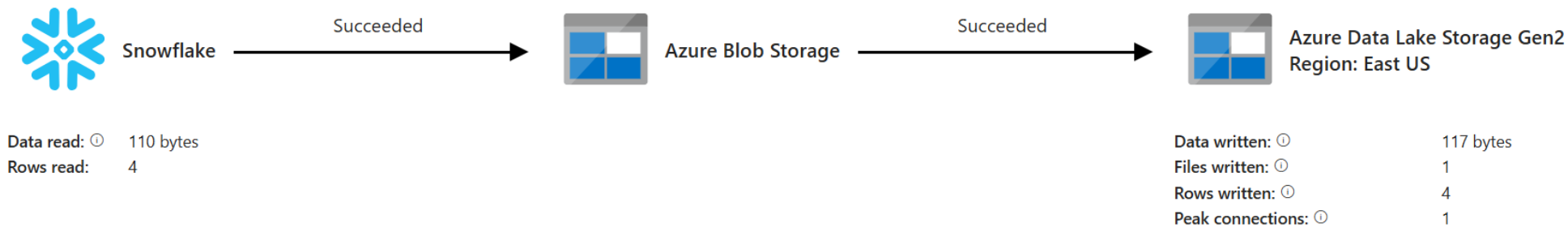
Details

Refresh



[Learn more on copy performance details from here.](#)

Activity run id: 113ce419-5c77-4521-a577-de27bc4309c3



Copy duration	00:01:15
Throughput: ⓘ	10 bytes/s
✓ Snowflake → Azure Blob Storage	
Start time	1/26/2025, 12:09:27 AM
Used DIUs ⓘ	4
Used parallel copies ⓘ	1
> Duration	00:00:18
✓ Azure Blob Storage → Azure Data Lake Storage Gen2	
Start time	1/26/2025, 12:09:46 AM
Used DIUs ⓘ	4
Used parallel copies ⓘ	1
> Duration	00:00:57
Data consistency verification ⓘ	Unsupported

How satisfied or dissatisfied are you with the performance of this copy activity?

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Pipeline run ID: af6898fd-18a1-4908-a1a0-196d59a9d04a

Pipeline status Succeeded

View debug run consumption

Monitor in Azure Metrics

Export to CSV

Showing 1 - 1 of 1 items

Activity name	Activity st...	Activit...	Run start	Duration	Integration runtime
Copy data activity	Succeeded	Copy data	1/26/2025, 12:09:26 AM	1m 27s	AutoResolveIntegrationRuntime (East US

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output

Container

Search

×

«

- Upload
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- Refresh
- Rename
- Delete
- Change tier
- Acquire lease
- Break lease
- Give feedback

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Access Control (IAM)

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Access policy

Properties


Metadata

Authentication method: Access key (Switch to Microsoft Entra user account)

Location: output

Search blobs by prefix (case-sensitive)

Show deleted objects

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state	
<input type="checkbox"/>  data_0_0_0.csv	26/1/2025, 12:10:43 ...	Hot (Inferred)		Block blob	117 B	Available	...

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Pipeline run ID: 1fc21566-16ae-4ec7-8990-dbef8c036604

Pipeline status In progress

Monitor in Azure Metrics

Export to CSV

Showing 1 - 1 of 1 items

Activity name	Activity st...	Activit...	Run start	Duration	Integration runtime
Copy data ac...	Succeeded	Copy data	1/26/2025, 12:26:08 AM	47s	AutoResolveIntegrationRuntime (East US

Micro

»

Details

Refresh

[Learn more on copy performance details from here.](#)

Activity run id: 9cb05d2f-bfa1-4a34-ad9c-d1efbe270d39

Azure Data Lake Storage Gen2
Region: East US

Succeeded

Azure Blob Storage

Succeeded

Snowflake

Data read: ⓘ120 bytes

Files read: ⓘ1

Rows read: 4

Peak connections: ⓘ1

Copy duration00:00:29

Throughput: ⓘ10 bytes/s

▼ Azure Data Lake Storage Gen2 → Azure Blob Storage

Start time1/26/2025, 12:26:10 AM

Used DIUs ⓘ4

Used parallel copies ⓘ1

> Duration00:00:10

▼ Azure Blob Storage → Snowflake

Start time1/26/2025, 12:26:21 AM

Used DIUs ⓘ4

Used parallel copies ⓘ1

> Duration00:00:18

Data consistency verification ⓘ

Unsupported

How satisfied or dissatisfied are you with the performance of this copy activity?

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User properties

You will be charged # of used DIUs * copy duration * \$0.25/DIU-hour. Local currency and separate discounting may apply per subscription type. [Learn more](#)

Maximum data integration unit ⓘ

Auto

Use custom value

Degree of copy parallelism ⓘ

Auto

Fault tolerance ⓘ

Enable logging ⓘ

Enable staging ⓘ

Pipeline validation output

Copy data activity

Direct copying data from Snowflake is only supported when sink dataset "Row delimiter" is set as single character or \r\n. Please fix "Row delimiter" or enable staging.

Close

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absakthi

string

File path *

storage

Directory

File name

Browse

Preview data

Compression type

No compression

Column delimiter

Comma (,)

Row delimiter

Line feed (\n)

Encoding

Default(UTF-8)

Quote character

Double quote (")

Escape character

Backslash (\)

First row as header

Null value

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Pipeline status Succeeded

View debug run consumption

Monitor in Azure Metrics

Export to CSV

Activity name	Activity st...	Activit...	Run start	Duration	Integration runtime
Copy data activity	Succeeded	Copy data	1/26/2025, 12:35:09 AM	21s	AutoResolveIntegrationRuntime (East US)

Micr

>>

Details Refresh



[Learn more on copy performance details from here.](#)

Activity run id: e2223ef2-3b94-4b52-b7c2-f83f0cd7b2b0



Snowflake

Succeeded



Azure Blob Storage

Data read: ⓘ 197 bytes
Rows read: 8

Data written: ⓘ 197 bytes
Rows written: ⓘ 8

Copy duration 00:00:16
Throughput: ⓘ 18 bytes/s

✓ Snowflake → Azure Blob Storage

Start time 1/26/2025, 12:35:13 AM
Used DIUs ⓘ 4
Used parallel copies ⓘ 1

✓ Duration 00:00:16

Details	Working duration	Total duration
✓ Queue ⓘ		00:00:03
✓ Transfer ⓘ		00:00:11

Data consistency verification ⓘ Unsupported



How satisfied or dissatisfied are you with the performance of this copy activity?

