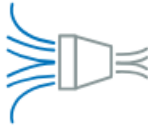


Tutorial for Create a Firehose stream in this Project

Official AWS Documentation: https://docs.aws.amazon.com/pt_br/firehose/latest/dev/basic-create.html

▼ Amazon Data Firehose: How it works



Ingest

Select a source for your data stream, such as a topic in Amazon Managed Streaming for Kafka, a stream in Kinesis Data Streams, or using Firehose Direct PUT API.




Transform - optional

Specify how you want to transform your data stream, such as selecting an option to convert the data to Parquet/ORC or invoking an AWS Lambda function to transform streamed records.



Deliver

Specify a destination for your stream, such as Amazon S3, Amazon OpenSearch Service, Amazon Redshift, Splunk, Snowflake, or a custom HTTP endpoint.

For more information about Amazon Data Firehose, see [Amazon Data Firehose: How it works](#) 

Choose source and destination

Specify the source and the destination for your Firehose stream. You cannot change the source and destination of your Firehose stream once it has been created.

Source [Info](#)

Direct PUT



Destination [Info](#)

Amazon S3



Firehose stream name

Firehose stream name

fh-brisa-general

Acceptable characters are uppercase and lowercase letters, numbers, underscores, hyphens, and periods.

Transform and convert records - *optional*

Configure Amazon Data Firehose to transform and convert your record data.

Transform source records with AWS Lambda | [Info](#)

Amazon Data Firehose can invoke an AWS Lambda function to transform, filter, decompress, convert and process your source data records. The specified AWS Lambda function can also be used to provide data partitioning keys for the incoming source data before its delivery to the specified destination.

☐ Turn on data transformation

Convert record format | [Info](#)

Data in Apache Parquet or Apache ORC format is typically more efficient to query than JSON. Amazon Data Firehose can convert your JSON-formatted source records using a schema from a table defined in [AWS Glue](#). For records that aren't in JSON format, create a Lambda function that converts them to JSON in the Transform source records with AWS Lambda section above.

☐ Enable record format conversion

Decompress source records from Amazon CloudWatch Logs - *new* | [Info](#)

When this feature is turned on, Amazon Data Firehose decompresses Amazon CloudWatch Logs and delivers them to the destination. There will be additional fees for this functionality. For more information, see [Amazon Data Firehose pricing](#). After enabling decompression, you have the option to turn on message extraction to deliver only the content inside the message fields. [Learn more](#).

☐ Turn on decompression

Destination settings | [Info](#)

Specify the destination settings for your Firehose stream.

S3 bucket

s3://fiap-brisa-general

[Browse](#)

[Create](#)

Format: s3://bucket

New line delimiter

You can configure your Firehose stream to add a new line delimiter between records in objects that are delivered to Amazon S3.

☒ Not enabled

☐ Enabled

Dynamic partitioning | [Info](#)

Dynamic partitioning enables you to create targeted data sets by partitioning streaming S3 data based on partitioning keys. You can partition your source data with inline parsing and/or the specified AWS Lambda function. You can enable dynamic partitioning only when you create a new Firehose stream. You cannot enable dynamic partitioning for an existing Firehose stream. Enabling dynamic partitioning incurs additional costs per GiB of partitioned data. For more information, see [Amazon Data Firehose pricing](#).

☒ Not enabled

☐ Enabled

S3 bucket prefix - *optional*

By default, Amazon Data Firehose appends the prefix "YYYY/MM/dd/HH" (in UTC) to the data it delivers to Amazon S3. You can override this default by specifying a custom prefix that includes expressions that are evaluated at runtime.

raw/firehose/currencyquote/

You can repeat the same keys in your S3 bucket prefix. Maximum S3 bucket prefix characters: 1024.

S3 bucket error output prefix - *optional*

You can specify an S3 bucket error output prefix to be used in error conditions. This prefix can include expressions for Amazon Data Firehose to evaluate at runtime.

error/firehose/currencyquote/

S3 bucket and S3 error output prefix time zone | [Info](#)

Choose a time zone that you want to use for date and time in S3 prefixes

America/Sao_Paulo

▼ Buffer hints, compression, file extension and encryption

The fields below are pre-populated with the recommended default values for S3. Pricing may vary depending on storage and request costs.

S3 buffer hints

Amazon Data Firehose buffers incoming records before delivering them to your S3 bucket. Record delivery is triggered once the value of either of the specified buffering hints is reached.

Buffer size

The higher buffer size may be lower in cost with higher latency. The lower buffer size will be faster in delivery with higher cost and less latency.

5 MiB

Minimum: 1 MiB, maximum: 128 MiB. Recommended: 5 MiB.

Buffer interval

The higher interval allows more time to collect data and the size of data may be bigger. The lower interval sends the data more frequently and may be more advantageous when looking at shorter cycles of data activity.

0 seconds

Minimum: 0 seconds, maximum: 900 seconds. Recommended: 300 seconds.

Compression for data records

Amazon Data Firehose can compress records before delivering them to your S3 bucket.

- ☒ Not enabled
- ☐ GZIP
- ☐ Snappy
- ☐ Zip
- ☐ Hadoop-Compatible Snappy

File extension format - *optional*

Enter the full extension format. If you want to add 'gzip file extension' for your 'json' files, enter '.json.gz'

.json

File extension must start with a period and may only contain allowed characters: 0-9a-z!-_"'(). File extension cannot exceed 128 characters.

⚠ If you specify a file extension, it will override the default file extension that Amazon Data Firehose adds when data format conversion or compression is enabled.

Encryption for data records

Record gets encrypted in the S3 bucket using an AWS Key Management Service (KMS) key.

- ☒ Use the encryption setting of the S3 bucket
- Default encryption for S3 bucket is server-side encryption with Amazon S3 managed keys (SSE-S3). See [S3: Protecting data with server-side encryption](#) [🔗](#) for other encryption options.
- ☐ Use SSE-KMS
- Server-side encryption with AWS Key Management Service (KMS) keys.

▼ Advanced settings

Server-side encryption not enabled; error logging enabled; IAM role LabRole; one tag.

Server-side encryption [Info](#)

You can use AWS Key Management Service (KMS) to create and manage keys and to control the use of encryption across a wide range of AWS services in your applications.

☐ Enable server-side encryption for source records in Firehose stream

Amazon CloudWatch error logging [Info](#)

Choose Enabled if you want Amazon Data Firehose to log record delivery errors to CloudWatch Logs.

☐ Not enabled

☒ Enabled

Service access [Info](#)

Amazon Data Firehose uses this IAM role for all the permissions that the Firehose stream needs. To specify different roles for the different permissions, use the API or the CLI.

☐ Create or update IAM role **KinesisFirehoseServiceRole-fh-brisa-gene-us-east-1-1721918650432**

Creates a new role or updates an existing one and adds the required policy to it, and enables Amazon Data Firehose to assume it.

☒ Choose existing IAM role

The role that you choose must have policies that include the permissions that Amazon Data Firehose needs.

i If you choose an existing IAM role for Amazon Data Firehose, make sure the chosen IAM role has a proper trust policy and permissions required for your source and destination. For more information, see [Controlling Access with Amazon Data Firehose](#).

Existing IAM roles

Only IAM roles with the required trust policy [are](#) available for selection.

LabRole

View [LabRole](#) in the IAM console.

Tags [Info](#)

You can add tags to organize your AWS resources, track costs, and control access.

Key

Q firehose X

Value - optional

Q currencyquote X

Remove

Add new tag

You can add up to 49 more tags.

Cancel

Create Firehose stream