

Writing to and reading from AWS Lake Formation using Amazon S3 V2 and Amazon Athena connectors

Abstract

This article describes how you can write to and read from AWS Lake Formation using Amazon S3 V2 and Amazon Athena connectors.

Supported Versions

- Informatica® Cloud Data Integration Amazon Athena Connector
- Informatica® Cloud Data Integration Amazon S3 V2 Connector
- Informatica® Cloud Data Integration

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Overview

The AWS Lake Formation is a service that you can use to set up a secure data lake easily. You only need to specify the data sources, the data access, and security policies that you want to apply to easily create a data lake with Lake Formation.

You can use Amazon S3 V2 Connector to write data to Lake Formation and use Amazon Athena Connector to read data from Lake Formation when Lake Formation is configured with specific permissions.

Lake Formation users can have specific permissions such as write access to Lake Formation, read with full access to external tables and columns, read with restricted access to external tables, and read with tag-based access to external tables.

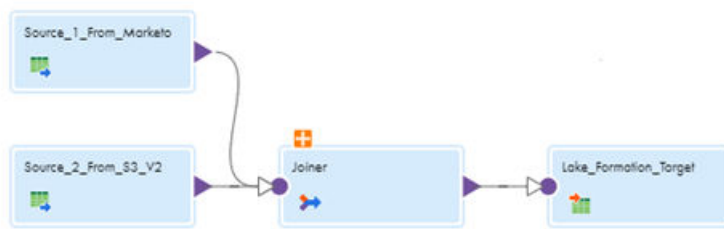
Case 1. Write to Lake Formation and create external tables

You can write to the data lake and create an external table in Amazon S3.

When you have write access to Lake Formation, you can write data to Lake Formation using Amazon S3 V2 Connector. You can read from multiple data sources, apply transformations, and write to Lake Formation.

After you write to Lake Formation, use a crawler to populate the AWS Glue data catalog with external tables. The crawler crawls multiple data stores in a single run and creates or updates one or more external tables in the Glue data catalog. For more information, see the AWS documentation.

The following image shows the Joiner transformation that you can use to combine data from Marketo and Amazon S3 sources and create a Lake Formation target:



Case 2. Read from Lake Formation with full access to external tables

You can read from Lake Formation when you have full access to external tables.

To read data from an external table, you can use Amazon Athena Connector. You can read tables from Lake Formation, apply transformations, and write to a target.

The following image shows a sample mapping that you can use to read from Lake Formation using Amazon Athena Connector and write to a flat file target:



Case 3. Read from Lake Formation with restricted access to external tables

You can read from Lake Formation when you have restricted access to external tables.

To read data from an external table with restricted access to Personal Identifiable Information (PII) columns, you can use Amazon Athena Connector. You can read from Lake Formation, apply transformations, and write to a target.

Case 4. Read from Lake Formation with tag-based access to external tables

You can read from Lake Formation when you have tag-based access to external tables.

To read data from an external table with tag-based access to external tables, you can use Amazon Athena Connector. You can read from Lake Formation, apply transformations, and write to a target.

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