Supercharge Glue - With AWS Wrangler

Connecting to Glue using AWS Wrangler & Boto3

Made By

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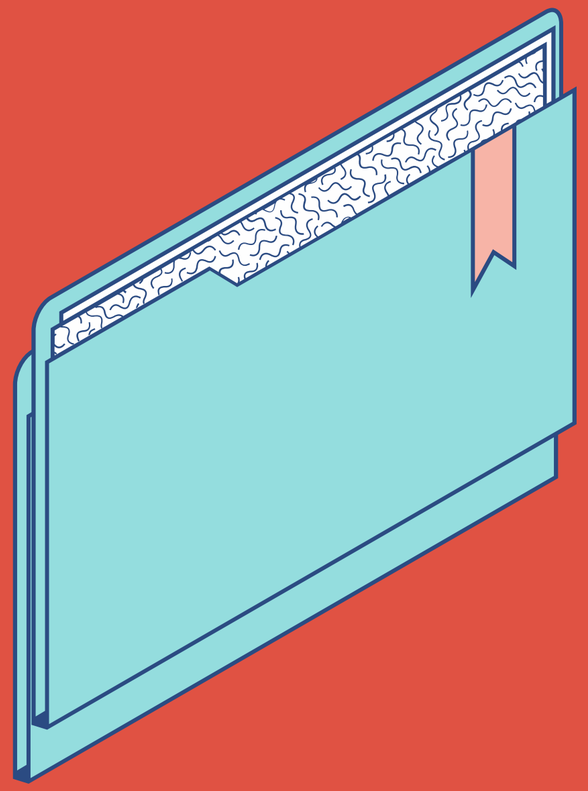
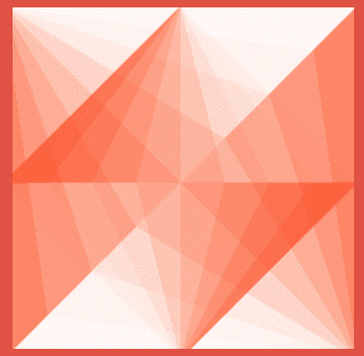
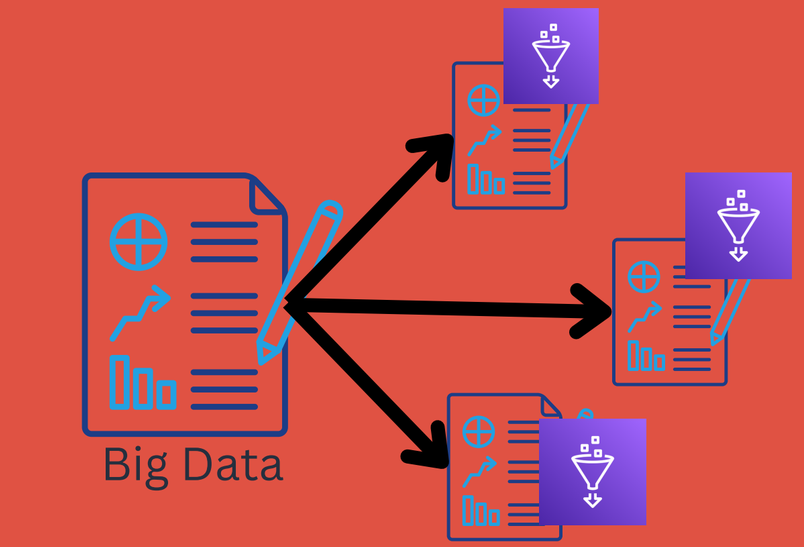


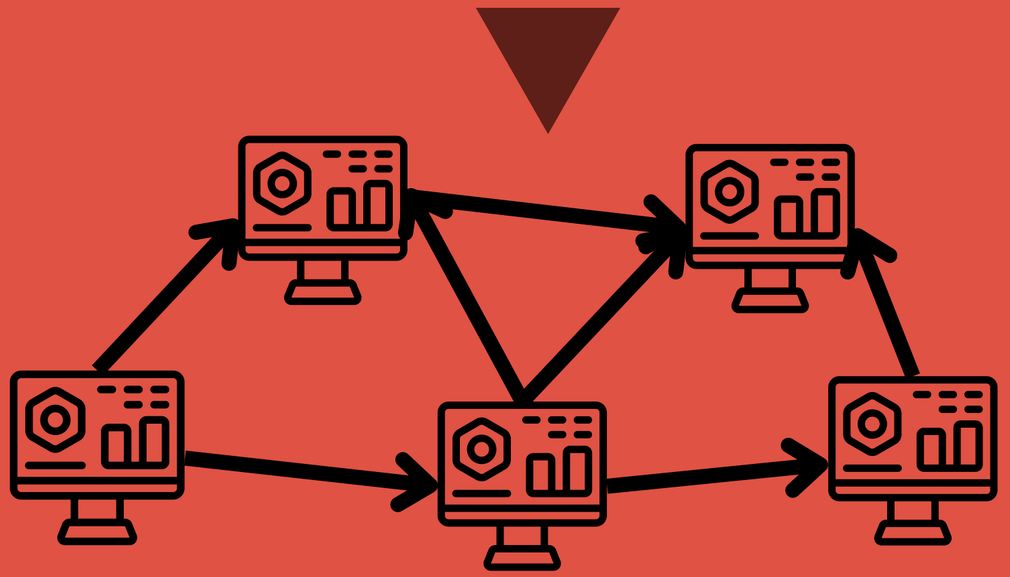
Pre-Requisites

- Active AWS Credentials to create Boto3 sessions in Python.
- Example Files that will be used for explanation.
- Willingness to Learn the Basics



What is Big Data

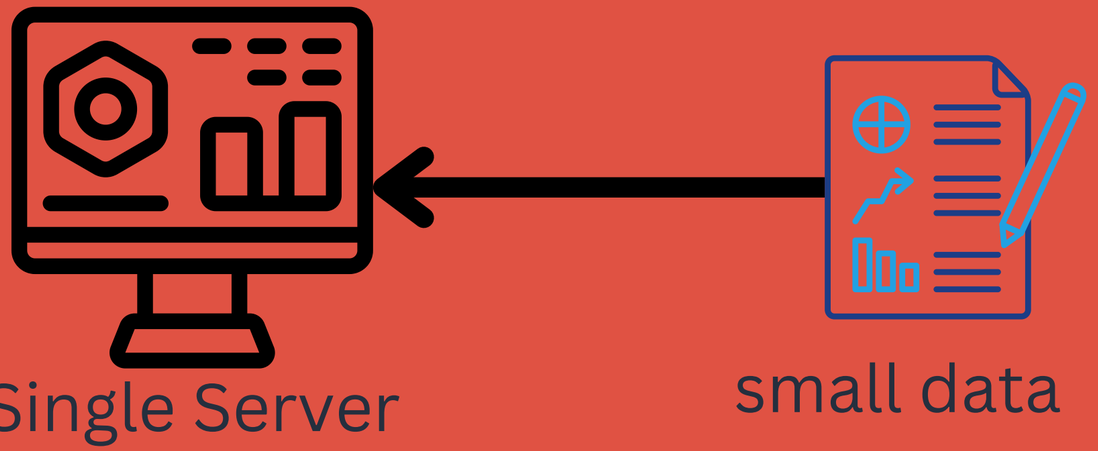




A Lay man Definition

A file or Data that cannot be contained inside a RAM of one system

File that is bigger than the RAM will crash the program, when reading the data.



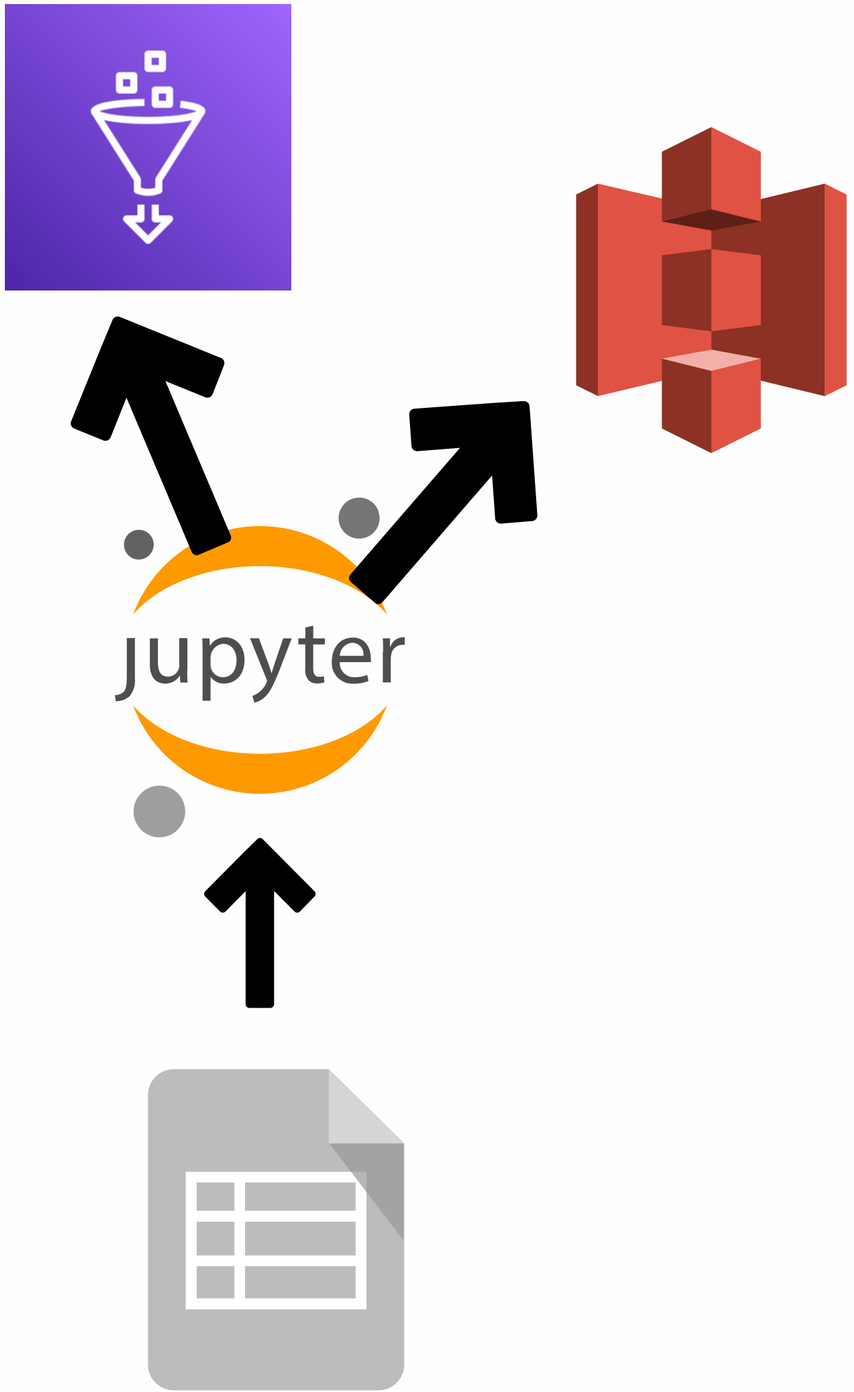
Firing up the Glue Catalog

Working with Glue Catalog

1. What is Glue Catalog?
2. Reading the tables in Glue Catalog
3. Writing the files to S3, and to creating tables in the Catalog

Glue Catalog is a :

1. Is a database of tables having location of Data.
2. It also stores the schema of the data
3. It enables the ETL tools like Athena / Spark to query data



Glue Catalog Methods

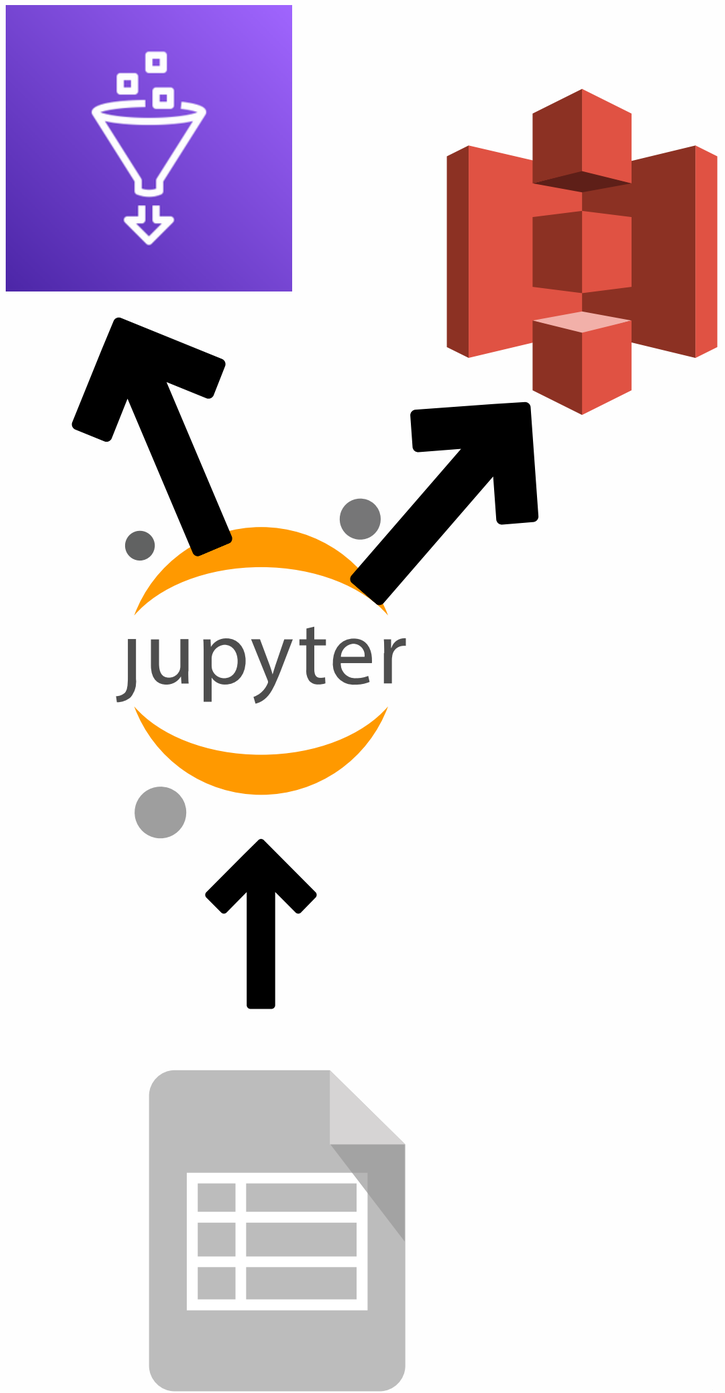
0 - Creating and connecting to AWS Session

1 - wr.catalog.databases(boto3_session=your_session)

2 - wr.catalog.tables(database='name', boto3_session=your_session)

3 - Using wr.catalog.create_database(name='db_name')

These methods are used for setting up the database inside the Glue Catalog



File/Data Write Method - With Glue

The same write method, with addition of database, dataset, and table name

1 - Writing csv file using wr.s3.to_csv(df, path=s3_destination/csv, dataset=True, database='db_name',table='table_name')

2 - Writing parquent file using wr.s3.to_parquet(df, path=s3_destination/parquet, dataset=True, database='db_name',table='table_name')

3 - WritingJson file using wr.s3.to_json(df, path=s3_destination/json dataset=True, database='db_name',table='table_name')

Note: There is no method to write to excel file or text file with the dataset, database and table parameters

Whats Next

GLUE CATALOG & ATHENA

Working with Athena

1. What is Athena, for Data Engineers?
2. Querying Athena from AWS Wrangler session
3. Executing table joins from AWS Wrangler