10 Use Cases of OCI Data Integration with Example Steps

1. Load CSV from Object Storage to Oracle ADW

1. Create data assets for Object Storage (source) and ADW (target).

2. Create a data flow:

   - Source: CSV file from Object Storage

   - Target: ADW table

   - Add transformations if needed

3. Map columns and run the flow or pipeline.

2. Export Data from Oracle ADW to CSV in Object Storage

1. Source data asset: Oracle ADW

2. Target data asset: Object Storage (CSV file format)

3. Use a SQL query or table from ADW as source.

4. Set CSV file name and bucket in target.

5. Create and run data flow.

3. Daily Sales Data Load to ADW

1. Create a pipeline that runs every day (scheduler).

2. Fetch data from MySQL (on-prem or cloud).

3. Filter today's records using a parameter.

4. Load into ADW sales partition table.

4. Transform and Cleanse Customer Data

1. Source: CSV or DB with raw customer data.

2. Apply transformations:

   - Trim strings

   - Normalize names

   - Filter out invalid emails

3. Load cleaned data into ADW or Object Storage.

5. Join Two Tables from Different Sources

1. Source 1: Oracle DB (e.g., CUSTOMERS)

2. Source 2: MySQL DB (e.g., ORDERS)

3. Join them using a transformation step.

4. Load result into ADW or Object Storage.

6. Load Data from Oracle DB to Snowflake

1. Source: Oracle DB

2. Target: Snowflake (use built-in connector)

3. Map columns and convert data types if needed.

4. Use pipeline to run on demand or scheduled.

7. Event-Triggered ETL on File Upload

1. Use OCI Events to trigger a function when a new CSV is uploaded to Object Storage.

2. The function calls an OCI DI pipeline.

3. Pipeline processes the file and loads it into ADW.

8. Migrate On-Prem Oracle Data to ADW

1. Set up Oracle on-prem data asset via Agent.

2. Target: ADW

3. Use data flow to extract data (e.g., batch migration).

4. Optionally schedule the pipeline for cut-over.

9. Lookup and Enrich Product Data

1. Source: Sales file with product IDs

2. Lookup table: Product master in ADW

3. Use Lookup transformation to enrich records.

4. Output final dataset to Object Storage or ADW.

10. Incremental Load Using Date Filter

1. Parameterize the data flow to accept LAST_UPDATED_DATE.

2. Filter source records using this parameter.

3. Schedule the pipeline to pass current date or last run time.

4. Load only changed/new records into target.