

# BIG DATA ANALYSIS USING IBM CLOUD

## PHASE 3: DEVELOPMENT PHASE 1

### 1. Create an IBM Cloud Account:

If you haven't already, sign up for an IBM Cloud account at IBM Cloud.

### 2. Choose the Appropriate Database Service:

IBM Cloud offers various database services, including Db2, MongoDB, and others. Choose the one that best fits your project requirements. For this example, let's assume you choose Db2.

### 3. Set Up a Database Instance:

Log in to your IBM Cloud account.

Navigate to the IBM Cloud Databases service.

Create a new Db2 instance by providing necessary details like instance name, region, and plan (e.g., Lite, Standard, Enterprise). Follow the prompts to set up your instance.

### 4. Connect to the Database:

Once your database instance is set up, obtain the connection details, including hostname, port, database name, username, and password.

### 5. Develop Queries or Scripts:

Use your preferred programming language or database management tool to connect to the Db2 instance.

Write SQL queries or scripts to explore and analyze your dataset.

-- Select all records from a table

```
SELECT * FROM your_table;
```

-- Perform basic aggregation

```
SELECT column_name, COUNT(*) FROM your_table GROUP BY  
column_name;
```

-- Perform data filtering

```
SELECT * FROM your_table WHERE column_name = 'value';
```

-- Update records

```
UPDATE your_table SET column_name = 'new_value' WHERE  
condition;
```

-- Insert new records

```
INSERT INTO your_table (column1, column2) VALUES ('value1',  
'value2');
```

## **6. Perform Basic Data Cleaning and Transformation:**

Clean the data by handling missing values, removing duplicates, and correcting inconsistencies.

Transform the data as needed, such as converting data types, aggregating information, or creating new features.

## **7. Execute and Monitor:**

Execute your queries or scripts to perform the desired data analysis.

Monitor the execution and analyze the results.

Iterate on your queries and transformations as necessary to derive meaningful insights from the data.

# PHASE 3

IBM Cloud

Search resources and products...

Q

Catalog

Manage

Ellammal M A's Account

?

Resource list /

Db2-or

Active

Add tags

Details

Actions...

Manage

Getting started

Service credentials

Connections

Getting started

Where can I find my credentials?  
Get your username and password by clicking the "Service Credentials" link to the left and selecting "New Credentials". Don't see this menu on the left? Click on "Manage in IBM Cloud" to open the IBM Cloud dashboard.

Go to UI

Getting started docs

Need help?

Submit a IBM Cloud Support Case to our team.

Support case

IBM Cloud

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Service credentials

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Service credentials

You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. [Learn more](#)

Q Search credentials...

New credential +

<input type="checkbox"/>	Key name	Date created	
<input type="checkbox"/>	Service credentials-1	2023-11-01 11:18 PM	<div></div>

```
"-u",
  "dbm63932",
  "-p",
  "W3KPfJv9swuf699o",
  "--ssl",
  "--sslCAFile",
  "1dd14d0c-1b52-4f63-a606-53ecba28771d",
  "--authenticationDatabase",
  "admin",
  "--host",
```

## IBM Db2 on Cloud



Overview

In-flight executions

Connections

Table performance



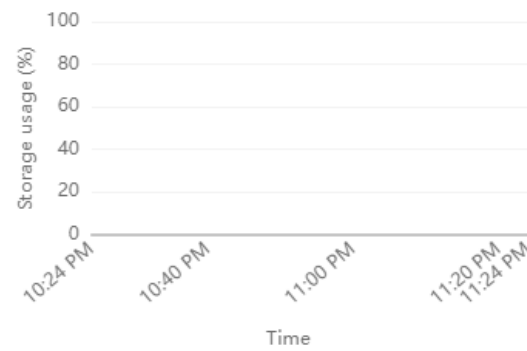
SQL



### Resource usage

Last 1 hour

Storage (0M / 0M)  
current value



## IBM Db2 on Cloud



Load Data

Load History

Tables

Views

Indexes

Aliases

MQTs

Sequences

Application objects



SQL



Source Target Define Finalize

You are loading the file

My Computer

A single delimited text file (CSV) without header row.

Amazon S3

Cloud Object Storage

### File selection




Next

## File selection



## Selected file

customer\_summary.csv 

IBM Db2 on Cloud

Load Data Load History Tables Views Indexes Aliases MQTs Sequences Application objects

SQL

Source Target Define Finalize

You are loading the file **customer\_summary.csv**

### Select a load target

Schema

Find schemas

DBM63932

Refresh

Back Next

IBM Db2 on Cloud

Load Data Load History Tables Views Indexes Aliases MQTs Sequences Application objects

SQL

Source Target Define Finalize

You are loading the file **customer\_summary.csv** into **DBM63932.CUSTOMER\_SUMMARY**

Code page (character encoding): 1208 (UTF-8) Separator: , Header in first row: ☒ Time & date format:

COL1 CHARACTER							
1	0	1757.13	0.0	0.0	3	1000	0.0
2	0	1757.13	0.0	0.0	5	1000	0.0
3	0	1757.13	0.0	0.0	5	1000	0.0
4	0	1757.13	0.0	0.0	2	1000	0.0
5	0	1757.13	0.0	0.0	2	1000	0.0
6	0	1757.13	0.0	0.0	3	1000	0.0
7	0	1757.13	0.0	0.0	3	1000	0.0

Back Next

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

SQL

Review settings

Source

Target

Define

Finalize

You are loading the file **customer\_summary.csv** into **DBM63932.CUSTOMER\_SUMMARY**

Summary

Code page:1208 (Default)

Separator:,

Time format:HH:MM:SS (Default)

Date format:YYYY-MM-DD (Default)

Timestamp format:YYYY-MM-DD HH:MM:SS (Default)

Option

Maximum number of warnings

1000

Back

Begin Load

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

Load details

UPLOADING

My computerTarget

customer\_summary.csvDBM63932.CUSTOMER\_SUMMARY

View TableLoad More Data

StatusSettings

Uploading

75% completed.

Do not sign out of the console until the upload completes.

Did you know?

From the web console dashboard, you can view the history of all of the database loads.

1Upload

2Load data

3Complete

Errors0Warnings0

Available after load is finished

IBM Db2 on Cloud

1

Load Data

Load History

Tables

Views

Indexes

Aliases

MQTs

Sequences

Application objects

Load details

COMPLETE

My computer

customer\_summary.csv

Target

DBM63932.CUSTOMER\_SUMMARY

View Table

Load More Data

Status

Settings

Errors 0

Warnings 0

19,251

19,251

0

Rows read

Rows loaded

Rows rejected

Start time

11/01/2023 11:39:04 PM

End time

11/01/2023 11:39:09 PM

The data load job succeeded.

You can now work with your data.

No errors