

# PROJECT DEVELOPMENT PHASE

## Delivery of Sprint-2

Team ID	PNT2022TMID08923
Project Name	Global Sales Data Analytics

### Fetching the dataset in the DB2:

The screenshot displays the IBM Cognos Analytics with Watson user interface. The top navigation bar includes the product name, a search bar, and user profile icons. A maintenance notification banner is visible below the header. The left-hand navigation menu is expanded, showing several categories: People, Data server connections (highlighted), Customization, Collaboration, Storage, and Secure Gateways. The 'Data server connections' item is selected, and a tooltip is visible over it. The main content area features a large hero image with the text 'Cognos Analytics with' and a 'Product tour' button. Below the hero image, there are three cards: 'Prepare data', 'Exploration', and 'Present data', each with a brief description of its functionality.

**IBM Cognos Analytics with Watson**

**Maintenance:** Scheduled maintenance completed. Click More Info for details and to subscribe to future events

**People**  
Create and manage accounts and contacts

**Data server connections**  
Create and manage connections

**Customization**  
Manage themes and extensions

**Collaboration**  
Manage collaboration settings

**Storage**  
Connect to a cloud object storage environment

**Secure Gateways**  
Create and manage Secure Gateways

**Cognos Analytics with**

**Product tour**

**Prepare data**  
Use data modules to clean and connect data from multiple resources.

**Exploration**  
Quickly find unbiased answers by identifying trends in your data with data explor...

**Present data**  
Create sophisticated, multi-page, multi-query dashboards, reports, or stori...

< Data server connections

🔍 + analytics with

Name	Modified
Weather Company	3/31/2022 10:38 PM
<a href="#">sales_csv</a>	11/13/2022 3:33 AM

sales\_csv



data

modules to clean  
t data from  
sources.

Exploration

Quickly find unbiased  
answers by identifying trends  
in your data with data explor...

Present data

Create sophisticated,  
multi-page, multi-query  
dashboards, reports, or stori...



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[Dismiss](#)[More info](#)

## < Data server connections



Name	Modified
<a href="#">Weather Company</a>	3/31/2022 10:38 PM
<a href="#">sales_csv</a>	11/13/2022 3:33 AM

### sales\_csv



Owner  
KAVIS ... 92a7e7)

Created: 11/13/2022, 3:33 AM  
Modified: 11/13/2022, 3:33 AM  
Type: Data Server

General **Connections** Permissions

Name	Modified
<a href="#">sales_csv</a>	11/13/2022 3:34 AM

sales\_csv



## Present data

Create sophisticated, multi-page, multi-query dashboards, reports, or stories.

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explor...

📄 sales\_csv

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Owner  
KAVIS ... 92a7e7)

Created: 11/13/2022, 3:33 AM  
Modified: 11/13/2022, 3:34 AM  
Type: Connection

General Settings Schemas Permissions

Connection details Edit >

Authentication method

- ☒ Connect anonymously
- ☐ Prompt for the user ID and password
- ☐ Use an external namespace
- ☐ Use the following signon:

▶ Test Not tested

Save

Edit IBM Db2 connection

JDBC URL:

jdbc:db2://ba99a9e6-d59e-4883-8fc0-d6a8c9f7a08f.c1ogj3sd0tgu0lqde00.databases.appdomain.cloud:31321/bludb:user=abcdefgh;password=ijklmnop;sslConnection=true;

Driver class name:

com.ibm.db2.jcc.DB2Driver

Restore

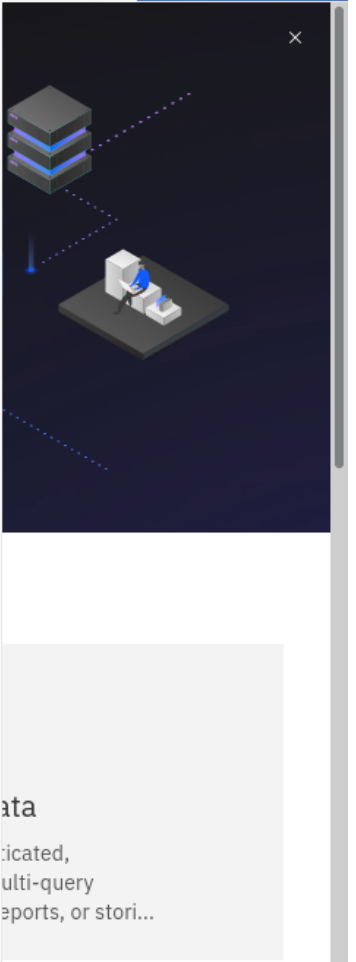
▼ Example URL

Connection properties: ?

▼ Cloud certificate details ?

▼ Secure Gateway destination ?

Close



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sales\_csv



Owner  
KAVIS ... 92a7e7)

Created: 11/13/2022, 3:33 AM  
Modified: 11/13/2022, 3:34 AM  
Type: Connection

General Settings Schemas Permissions

Connection details

[Edit >](#)

### Authentication method

- ☒ Connect anonymously
- ☐ Prompt for the user ID and password
- ☐ Use an external namespace
- ☐ Use the following signon:

 [Test](#)

 Success

 [i >](#)

Save



sales\_csv



Owner  
KAVIS ... 92a7e7)

Created: 11/13/2022, 3:33 AM  
Modified: 11/13/2022, 3:33 AM  
Type: Data Server

General

Connections

Permissions

Name



Modified



sales\_csv

11/13/2022  
3:34 AM



sales\_csv



Owner  
KAVIS ... 92a7

General

Settings

Status

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Preparing the Data:

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Exploration

Present

Dashboard

Report

Story

Watson.

tour and Getting

Exploration

Quickly find unbiased answers by identifying trends in your data with data exploration.

Present data

Create sophisticated, multi-page, multi-query dashboards, reports, or stories.

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Data servers

🔍 Type any text to filter items in this folder

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Sales Data Analytics

11/13/2022, 7:06 AM

📄

Weather Company

3/31/2022, 8:44 PM

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Data servers and schemas

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← Data servers / Sales Data Analytics

🔍 Type any text to filter items in this folder

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[Reset filters](#)

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Add tables

Specify how to add tables to your data module.



**Select tables**

Select the tables that you want to include in your data module, and create the data module manually.



**Discover related tables**


Engage the system to recommend related tables for your data module and create the data module for you.

Cancel


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

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\* New data module

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Properties

Data module

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New data module

Navigation paths

Sal

# Row Id

abc Order Id

Order Date

Ship Date

abc Ship Mode

abc Customer Id

abc Customer Name

abc Segment

City

State

Country

Postal Code

abc Market

Region

abc Product Id

Grid

Relationships

Custom tables

Row Id	Order Id	Order Date	Ship Date	Ship Mode	Customer Id	Customer Name
32298	CA-2012-124891	31-07-2012	31-07-2012	Same Day	RH-19495	Rick Hansen
26341	IN-2013-77878	05-02-2013	07-02-2013	Second Class	JR-16210	Justin Ritter
25330	IN-2013-71249	17-10-2013	18-10-2013	First Class	CR-12730	Craig Reiter
13524	ES-2013-1579342	28-01-2013	30-01-2013	First Class	KM-16375	Katherine Murra
47221	SG-2013-4320	05-11-2013	06-11-2013	Same Day	RH-9495	Rick Hansen
22732	IN-2013-42360	28-06-2013	01-07-2013	Second Class	JM-15655	Jim Mitchum
30570	IN-2011-81826	07-11-2011	09-11-2011	First Class	TS-21340	Toby Swindell
31192	IN-2012-86369	14-04-2012	18-04-2012	Standard Class	MB-18085	Mick Brown
40155	CA-2014-135909	14-10-2014	21-10-2014	Standard Class	JW-15220	Jane Waco
40936	CA-2012-116638	28-01-2012	31-01-2012	Second Class	JH-15985	Joseph Holt

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Search

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Creating Relationship among data and Data Calculation:

**Data module** + ↻

Grid Relationships Custom tables

Search

- New data module
- Navigation paths +
- Sal
  - # Row Id
  - abc Order Id
  - abc Order Date
  - abc Ship Date
  - abc Ship Mode
  - abc Customer Id
  - abc Customer Name
  - abc Segment
  - City
  - State
  - Country
  - Postal Code
  - Market
  - Region
  - Product Id

Sal

New

- Calculation...
- Filter...
- Table...
- Rename
- Show query information...
- Hide from users
- Remove
- Manage filters
- Auto-arrange
- Properties

**Diagram settings**

- ☒ Cardinality
- ☐ Focus mode
- Degrees of separation: 1
- 1  ∞

Search ↻ Search

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### Create calculation

Name: Calculation name

Components

Search

- Sal
  - # Row Id
  - abc Order Id
  - Order Date
  - Ship Date
  - abc Ship Mode
  - abc Customer Id
  - abc Custo... Name
  - abc Segment
  - City
  - State

Expression

1

=

Information

☐ Calculate after aggregation

Cancel OK

## Custom Table Creation:

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=2504632671\_7784e26d420f4485a32554d73f40b406\_sessionTemp&objRef=&tid=2504632671\_7784e26d420f4485a32554d73f...

IBM Cognos Analytics with Watson

### Create table

Create a custom table in the data module. This table is not added to your data source.

Selected tables +

Find

- Sal
  - Row Id
  - Order Id
  - Order Date
  - Ship Date
  - Ship Mode
  - Customer Id
  - Customer Name
  - Segment
  - City
  - State
  - Country
  - Postal Code
  - Market
  - Region

☒ View of tables  
To create a view of a table, select one or more package tables, or select one or more non-package tables.

☐ Shortcut to a table  
To create a shortcut table, select one non-package table.

☐ Alias of a table  
To create an alias table, select one non-package table.

☐ Copy of a table  
To create a copy of a table, select one non-package table.

☐ Joined view  
To create a join table, select one or two non-package tables.

☐ Union of tables  
To create a union table, select two or more non-package tables that have the same number of columns with compatible data types.

☐ Intersect of tables  
To create an intersect table, select two non-package tables that have the same number of columns with compatible data types.

☐ Except of tables  
To create an except table, select two non-package tables that have the same number of columns with compatible data types.

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## Creating Navigation Paths:



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New data module

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Search

Properties

Data module

Search

New data module

Navigation paths

Sal

Row Id

Order Id

Order Date

Ship Date

Ship Mode

Customer Id

Customer Name

Segment

City

State

Country

Postal Code

Market

Region

Product Id

Create navigation path

Search

New data module

Sal

Name

Select and order the columns to use in the navigation path.

Please select items

Cancel

OK

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Visual Studio Code

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\* New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

Sal

# Row Id

abc Order Id

Order Date

Ship Date

abc Ship Mode

abc Customer Id

abc Customer Name

abc Segment

City

State

Country

Postal Code

Market

Region

Product Id

Create navigation path

Name Row Id - Postal Code

Select and order the columns to use in the navigation path.

# Row Id

Sal

abc Order Id

Sal

Order Date

Sal

Ship Date

Sal

abc Ship Mode

Sal

abc Customer Id

Sal

Cancel OK

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Search

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## Data Cleaning:

Sources

Search

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The screenshot displays the IBM Cognos Analytics web application. The main view shows a data table with columns: Row Id, Order Id, Order Date, Ship Date, Ship Mode, and Customer Id. A dialog box titled 'Clean - Row Id' is open, allowing for NULL value management. The dialog has two sections: 'Replace this value with NULL' and 'Replace NULL values with', both with input fields set to '0'. The 'Clean' button is highlighted.

Row Id	Order Id	Order Date	Ship Date	Ship Mode	Customer Id
42336	MZ-2013-3690	18-12-2013	18-12-2013	Same Day	DG-3300
			31-05-2012	First Class	SG-20470
			20-03-2012	First Class	FH-14365
			28-05-2012	Second Class	GP-14740
			06-08-2014	First Class	MW-18220
			27-08-2014	Second Class	PO-18850
			13-03-2014	Second Class	CS-12460
			08-11-2012	Same Day	KD-16495
10522	ES-2014-4673578	11-08-2014	16-08-2014	Second Class	MS-17980
10549	IT-2013-3376681	31-08-2013	03-09-2013	First Class	KC-16675
25314	IN-2014-66615	18-01-2014	23-01-2014	Standard Class	DB-13405
39977	CA-2013-143805	02-12-2013	04-12-2013	Second Class	JD-15895

**In the Sprint 2 we have completed the following tasks:**

- 1. Fetching the dataset from the database.**
- 2. Data preprocessing.**
- 3. Creating relationship among tables.**
- 4. Creating Navigation Paths.**
- 5. Data cleaning.**
- 6. Data Preparation has been done.**