How to run a SQL query in Oracle Fusion Cloud

You can run a SQL query in Oracle Fusion Cloud by using the built-in Reports and Analytics tools, so you don't need a third-party database tool. This guide shows you how to create a SQL Query data set in a Data Model, select a data source, extract journal header data, and preview the results. It also shows you how to view the output in Tree View and Table View.

Prerequisites

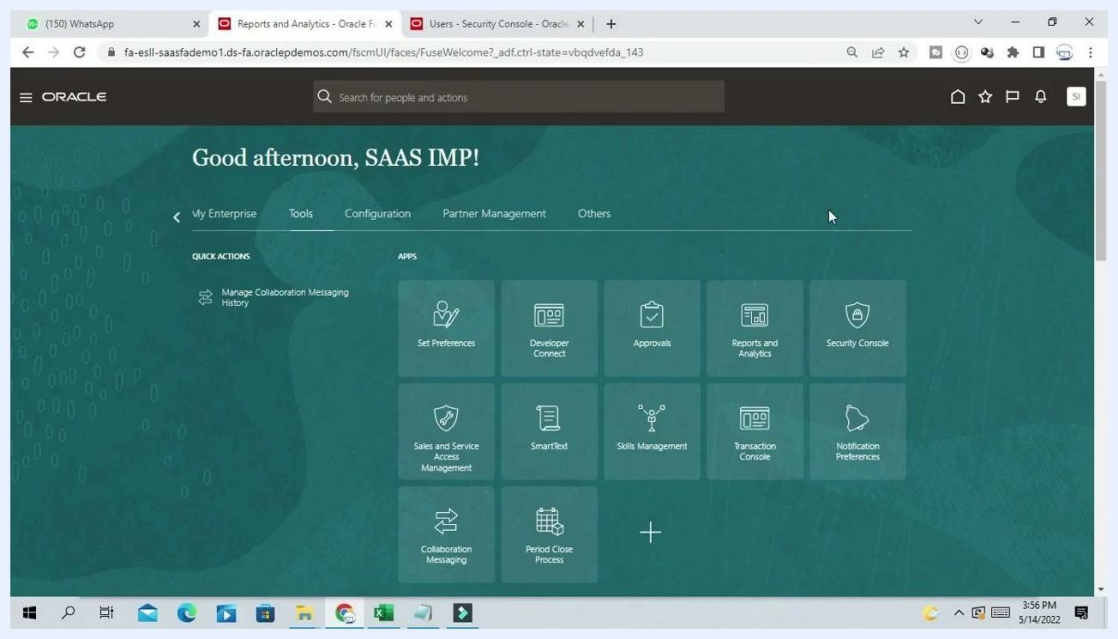
Before you begin, make sure you have:

- Access to Oracle Fusion Cloud (SaaS) and the credentials to log in.
- The exact backend table and column names for the data you want to extract, for example for the GL, AP, or Procurement modules. You need them to build an accurate, working query.

Steps

1. Log in to Oracle Fusion Cloud

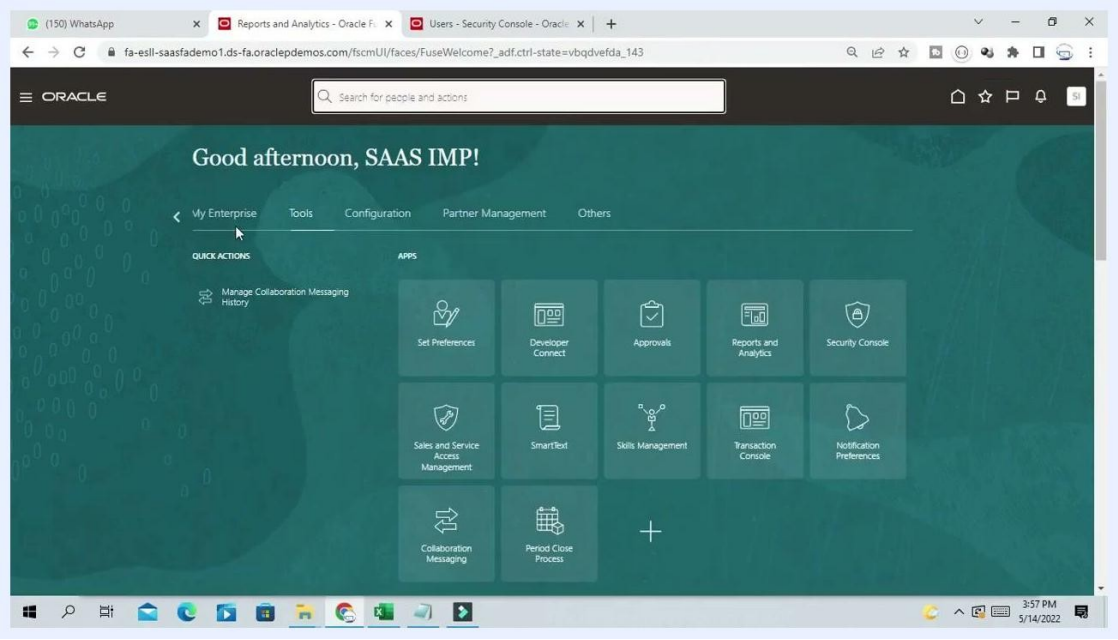
Log in and confirm that you are on the main dashboard. The screen shows a welcome message, such as "Good afternoon, SAAS IMP!", and a set of application tiles.



Oracle Fusion dashboard with application tiles such as Set Preferences, Developer Connect, Approvals, Reports and Analytics, and Security Console

2. Open Reports and Analytics from the Tools tab

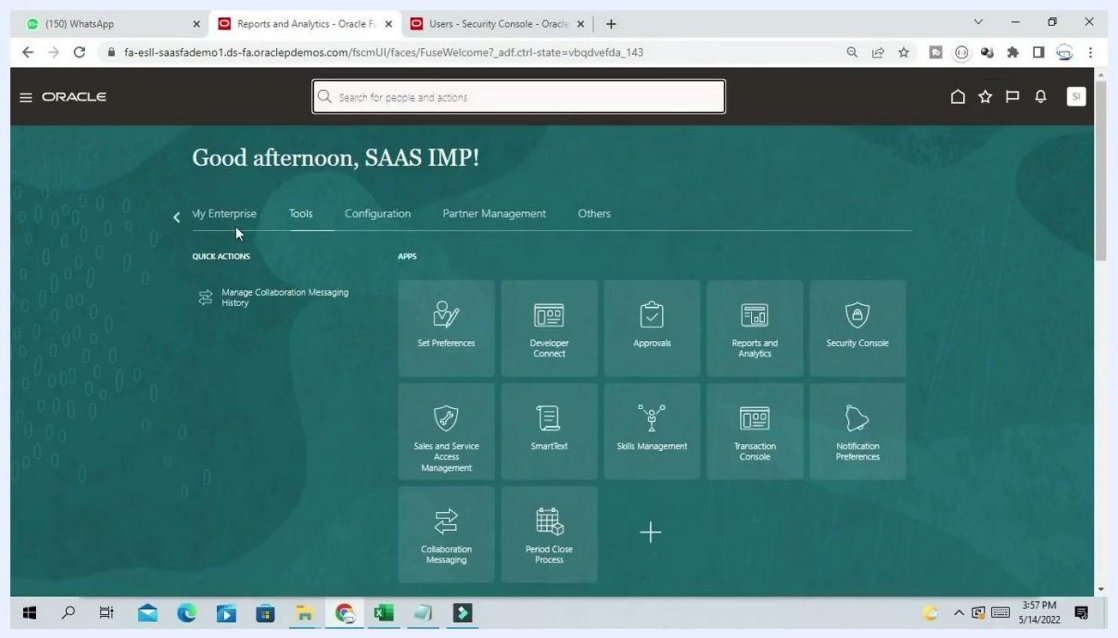
At the top of the dashboard, click the **Tools** tab. The application tiles appear under the "APPS" section. Find the **Reports and Analytics** tile and click it.



Tools tab selected with the Reports and Analytics tile visible among the application tiles

3. Start creating a new report

In the Reports and Analytics window, click the **Create** button on the left side of the screen. A dropdown menu shows two options: **Report** and **Analysis**. Click **Report**.

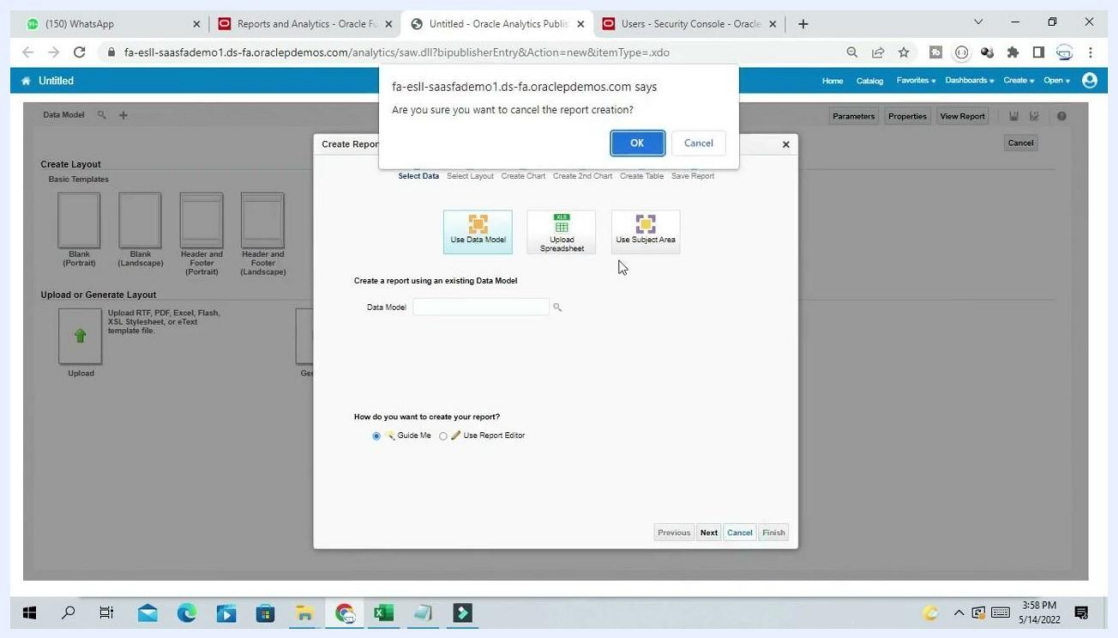


Create dropdown menu open with the Report and Analysis options, and the cursor on Report

After you select **Report**, a new window opens and displays the Data Model screen. If you don't want to create a data model at this time, you can cancel the operation.

4. Cancel the default report creation

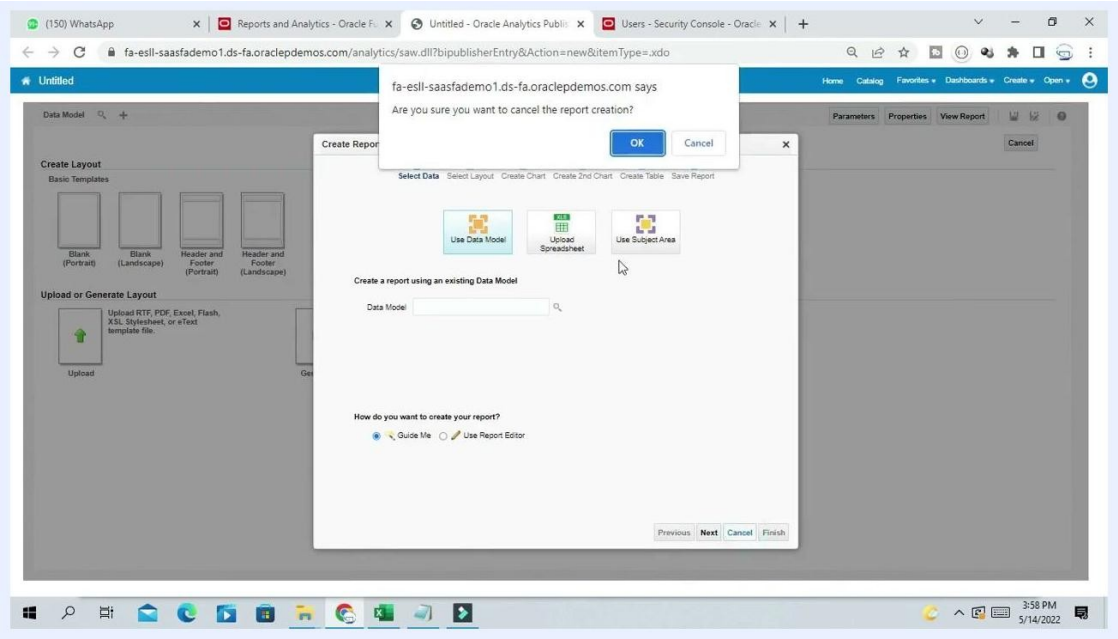
To continue with a custom Data Model, cancel the default report creation. When the system asks "Are you sure you want to cancel the report creation?", click **OK**.



Confirmation dialog for canceling report creation with OK and Cancel buttons, over the Data Model, Spreadsheet, and Subject Area options

5. Add a new data set on the Data Model screen

After you cancel, the Data Model screen opens. It shows layout options (Blank Portrait, Blank Landscape, Header and Footer) and options to upload or generate a layout. Locate the **Data Model** section at the top left and click the **plus (+) button** next to "Data Model".



Data Model screen with layout options and the plus button next to Data Model highlighted

A "Processing" dialog with "Loading" appears briefly while the system loads the Data Model properties. Wait until it disappears before you interact with the screen.

6. Add a SQL Query data set

Make sure the **Diagram** tab is selected. In the left pane, click the **plus (+) button** under "Data Sets", and then select **SQL Query** from the dropdown menu.

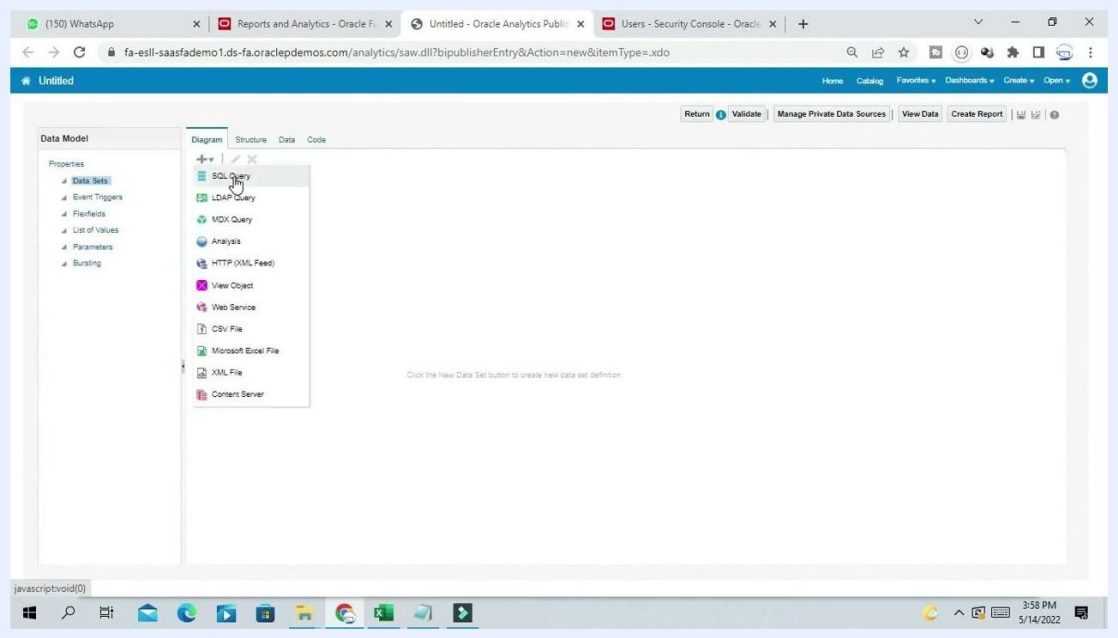


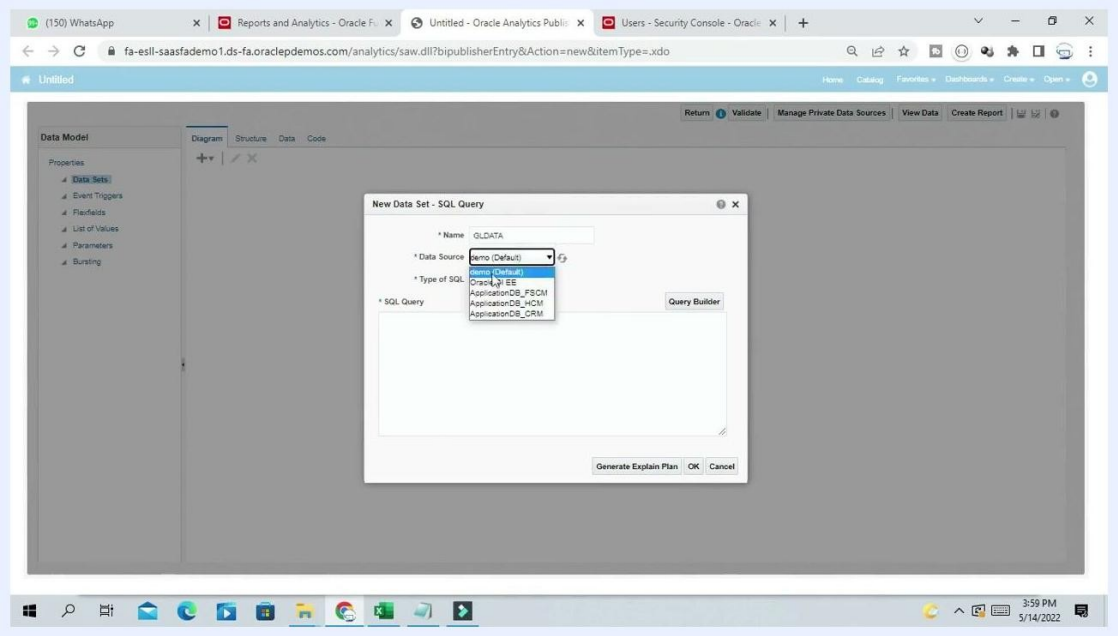
Diagram tab selected with the Data Sets plus button clicked and a dropdown listing SQL Query and other data set types

7. Name the data set and set the SQL type

In the "New Data Set - SQL Query" dialog, enter the following details:

- **Name:** Enter a descriptive name. For example, type GLDATA if you are extracting General Ledger data.
- **Data Source:** Select the data source that matches your module (see the next step).
- **Type of SQL:** Leave it as Standard SQL unless you need something else.

- **SQL Query:** Leave this field blank for now. You enter the query in a later step.



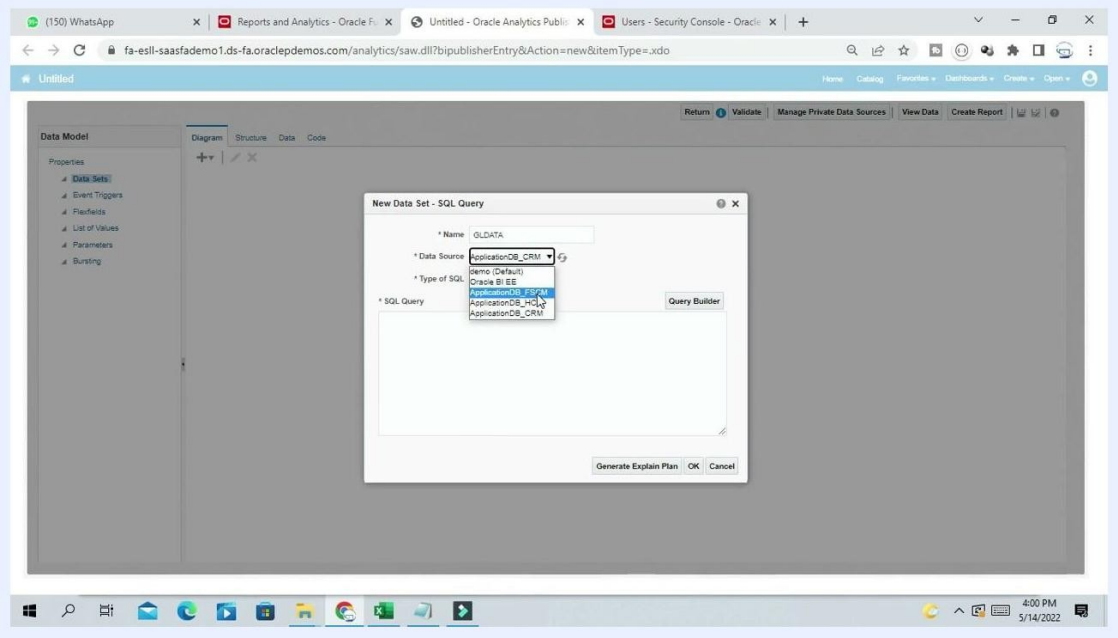
New Data Set - SQL Query dialog with Name set to GLDATA, the Data Source dropdown open, and an empty SQL Query field

8. Select the data source for your module

Open the **Data Source** dropdown and review the available options:

- demo (Default)
- Oracle BI EE
- ApplicationDB_FSCM (Finance/GL modules)
- ApplicationDB_HCM (Human Capital Management)
- ApplicationDB_CRM (Customer Relationship Management)

To extract data from Finance GL modules, select **ApplicationDB_FSCM**.



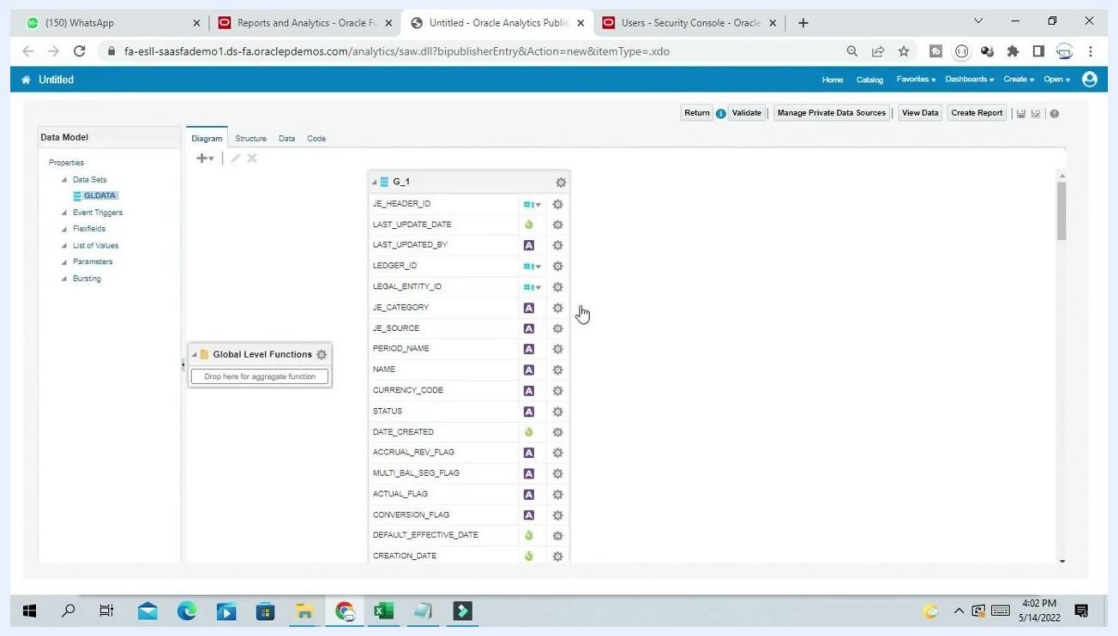
Data Source dropdown open with ApplicationDB_FSCM highlighted for Finance and GL modules

9. Enter the SQL query

In the **SQL Query** field, enter your SQL statement. For example, to extract all journal information from the journal header table, type:

```
SELECT * FROM GL_JE_HEADERS
```

Make sure the query references the correct table and columns for your reporting needs.



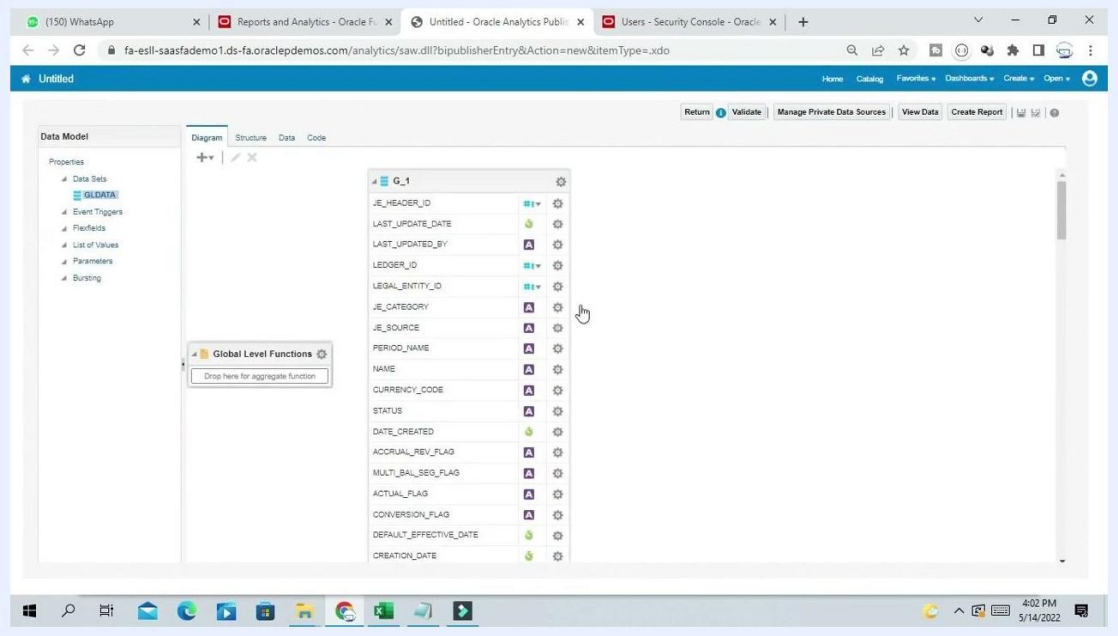
SQL Query field containing SELECT * FROM GL_JE_HEADERS in the New Data Set dialog

10. Review the available columns

After you enter and confirm the query, the Diagram tab lists all columns from the GL_JE_HEADERS table in the GLDATA data set. They include:

- JE_HEADER_ID
- LAST_UPDATE_DATE
- LEDGER_ID
- LEGAL_ENTITY_ID
- JE_CATEGORY
- JE_SOURCE
- PERIOD_NAME
- NAME
- CURRENCY_CODE
- STATUS
- DATE_CREATED

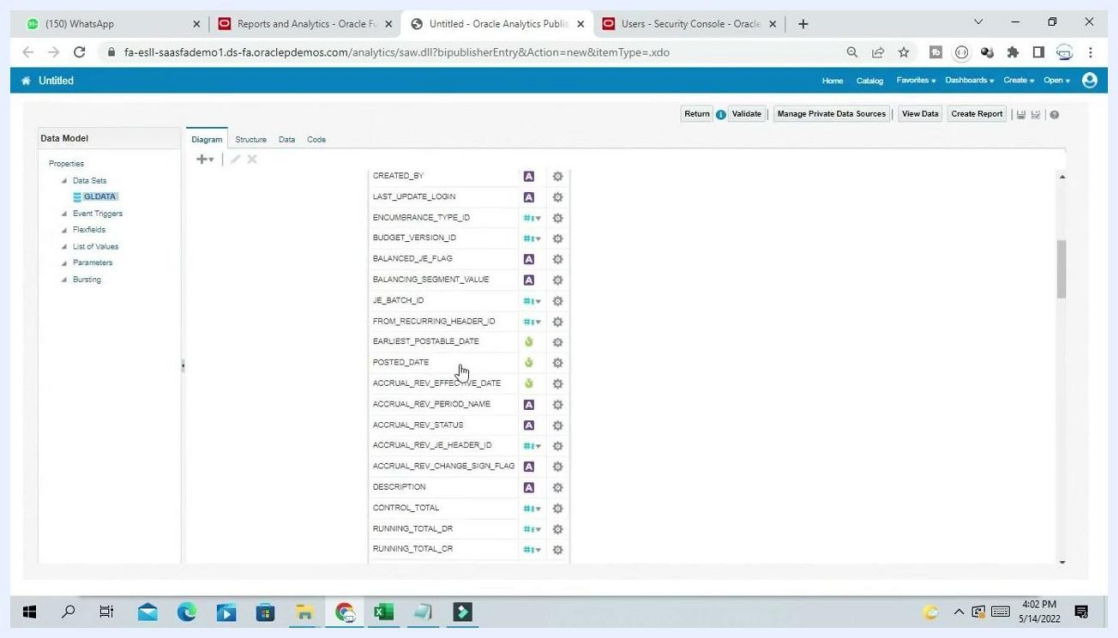
More columns appear in the diagram.



Data Model screen showing the GLDATA data set with the GL_JE_HEADERS columns listed in the Diagram tab

11. Scroll to see additional columns

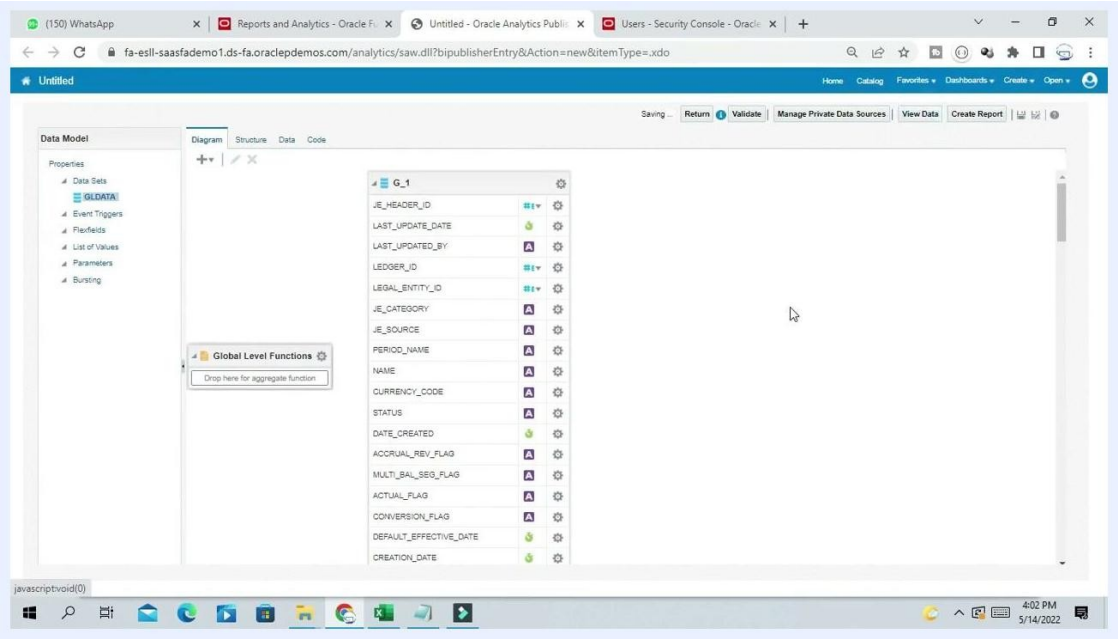
Use the scroll bar to review every column in the data set. Make sure you identify all the fields that are relevant to your report.



Additional GL_JE_HEADERS columns visible, including CREATED_BY, LAST_UPDATE_LOGIN, ENCUMBRANCE_TYPE_ID, and BUDGET_VERSION_ID

12. Run the SQL query and preview the data with View Data

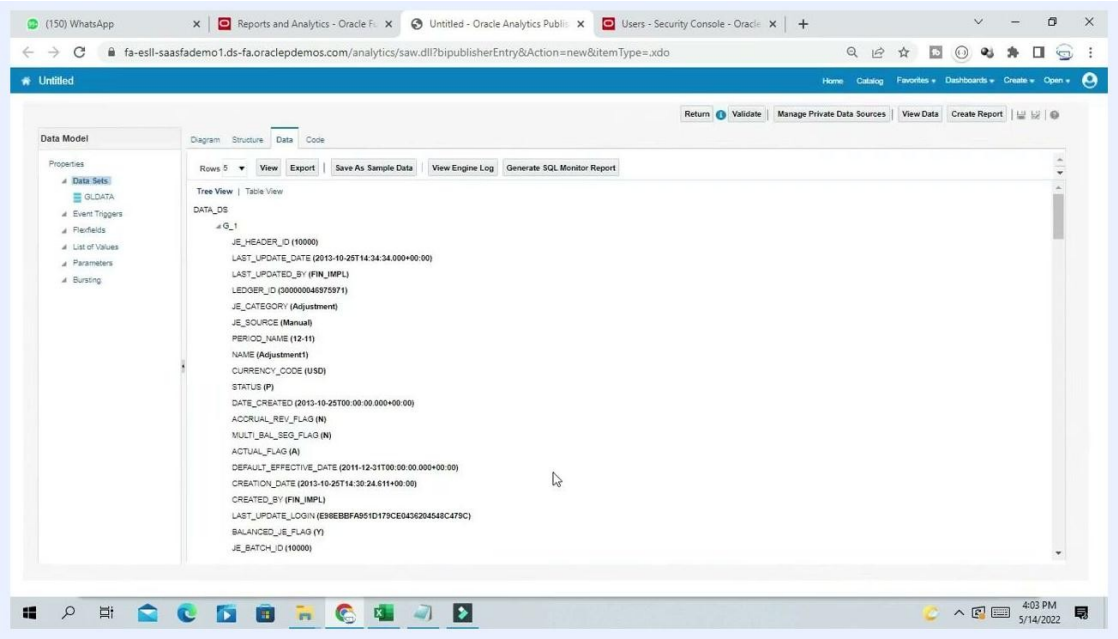
Click the **View Data** button at the top right of the Data Model screen to preview the results of your SQL query. Use the preview to verify that the correct data is extracted before you move on to a report layout or further configuration.



Data Model screen with the View Data button highlighted

13. Open the Data tab

Go to the **Data** tab. The "Data Model" panel is on the left, with "Data Sets" expanded to show "GLDATA". The main area offers **Rows**, **View**, **Export**, **Save As Sample Data**, **View Engine Log**, and **Generate SQL Monitor Report**. The default view is "Tree View", and "Table View" is also available.



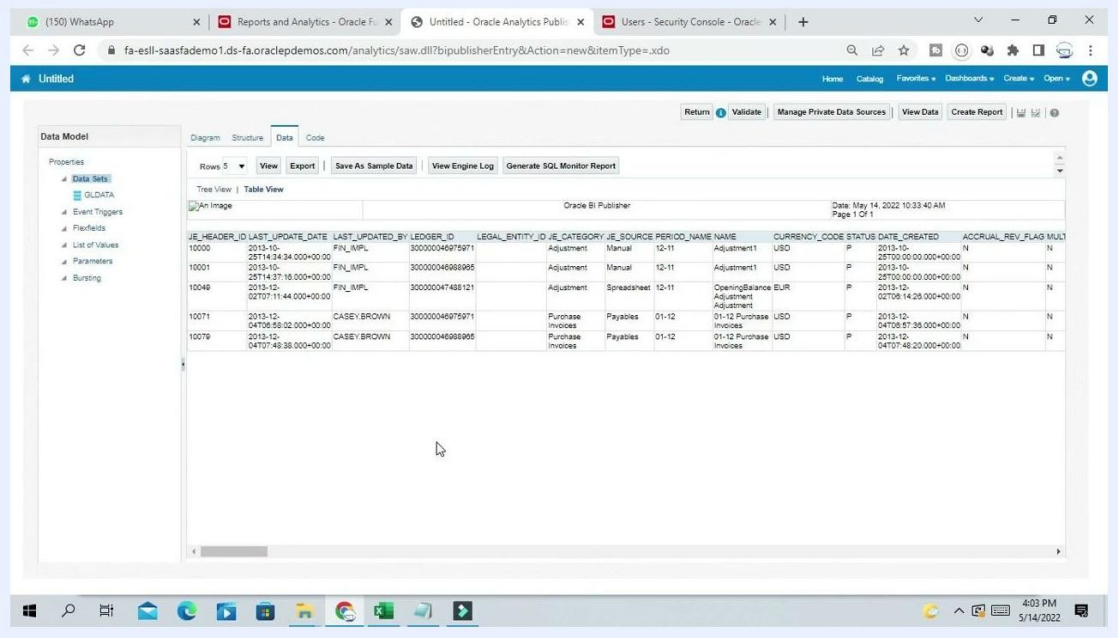
Data tab with the Data Model panel and Data Sets expanded, and no data loaded yet

14. Read the results in Tree View

The query results load in a hierarchical structure under "DATA_DS". For example, the first record shows these fields and values:

- JE_HEADER_ID (10000)
- LAST_UPDATE_DATE (2013-10-25T14:34:34.000+00:00)
- LAST_UPDATED_BY (FIN_IMPL)
- LEDGER_ID (300000004675971)
- JE_CATEGORY (Adjustment)
- JE_SOURCE (Manual)
- PERIOD_NAME (12-11)
- NAME (Adjustment1)
- CURRENCY_CODE (USD)
- STATUS (P)
- DATE_CREATED (2013-10-25T00:00:00.000+00:00)

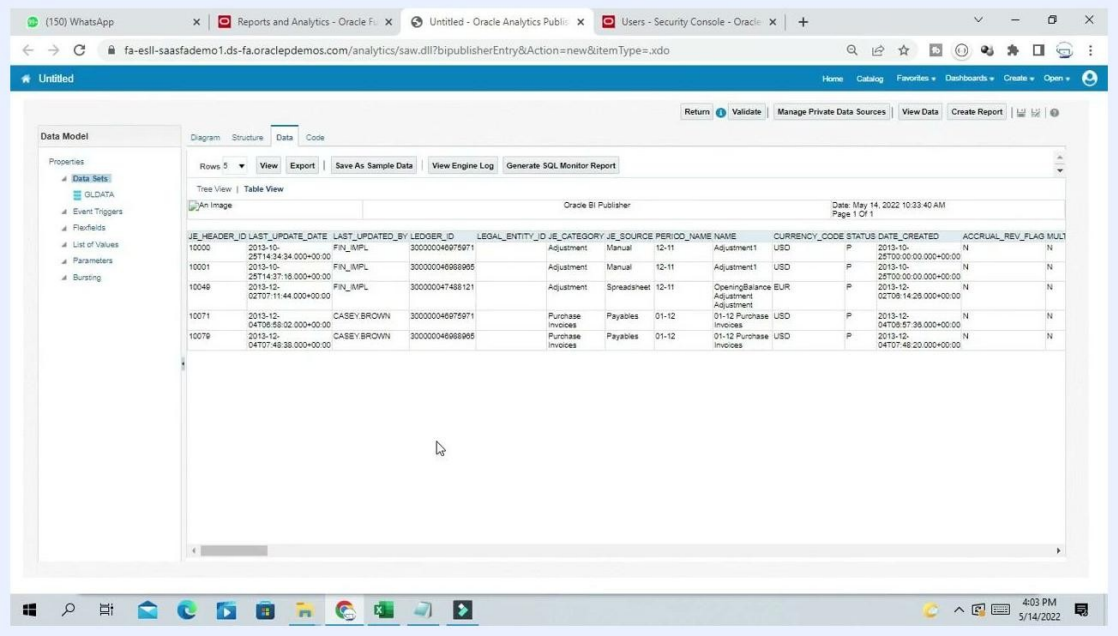
More fields and values are visible in the tree.



Tree View showing the hierarchical structure of fields and values under DATA_DS

15. Switch to Table View

Click the **Table View** link next to "Tree View" to see the results in a table.



Tree View and Table View options with the cursor near Table View and the data still in hierarchical format

The table shows these columns:

- JE_HEADER_ID
- LAST_UPDATE_DATE
- LAST_UPDATED_BY
- LEDGER_ID
- LEGAL_ENTITY_ID
- JE_CATEGORY
- JE_SOURCE
- PERIOD_NAME
- NAME
- CURRENCY_CODE
- STATUS
- DATE_CREATED
- ACCRUAL_REV_FLAG
- MULTI_BAL_SEG_FLAG

Each row is a record from the journal header table. Sample rows look like this:

- 10000, 2013-10-25T14:34:34.000+00:00, FIN_IMPL, 300000004675971, Adjustment, Manual, 12-11, Adjustment1, USD, P, 2013-10-25T00:00:00.000+00:00, N, N
- 10001, 2013-10-25T14:37:16.000+00:00, FIN_IMPL, 300000004689865, Adjustment, Manual, 12-11, Adjustment1, USD, P, 2013-10-25T00:00:00.000+00:00, N, N
- 10046, 2012-11-14T14:00:00.000+00:00, FIN_IMPL, 300000004748121, Adjustment, Spreadsheet, 12-11, OpeningBalance Adjustment, EUR, P, 2013-10-25T00:00:00.000+00:00, N, N
- 10071, 2013-12-04T06:58:02.000+00:00, CASEY.BROWN, 300000004675971, Purchase Invoices, Payables, 01-12, 01-12 Purchase Invoices, USD, P, 2013-12-04T07:48:20.000+00:00, N, N
- 10070, 2013-12-04T07:48:33.000+00:00, CASEY.BROWN, 300000004689865, Purchase Invoices, Payables, 01-12, 01-12 Purchase Invoices, USD, P, 2013-12-04T07:48:20.000+00:00, N, N

16. Show more records

To see more data, open the **Rows** dropdown and choose a higher number. The default is **Rows 5**, and you can increase it as needed.

17. Export the data

To export the data, click the **Export** button above the data table. This area also offers **Save As Sample Data**, **View Engine Log**, and **Generate SQL Monitor Report**.

18. Return or validate the data model

When you are finished, use the **Return** or **Validate** buttons at the top to go back to the main menu or to validate your data model.

Summary

You now know how to run a SQL query in Oracle Fusion Cloud. You created a SQL Query data set, selected the **ApplicationDB_FSCM** data source, extracted journal header data with `SELECT * FROM GL_JE_HEADERS`, reviewed the columns, and previewed the results in Tree View and Table View.

What's next

You can refine your data set, or continue to report layout creation, using the same Data Model.