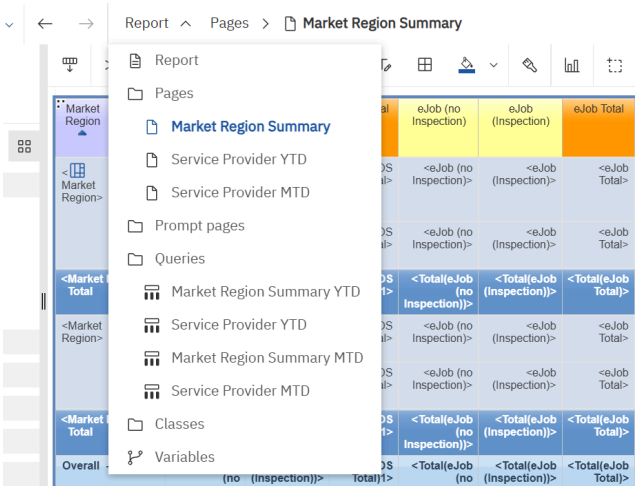
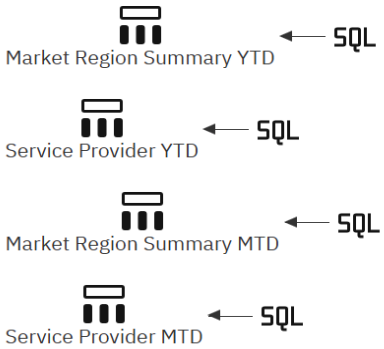
How To Make A DESQL Report

How To Check Whether You Need To Create A DESQL Report Or Not?

Open IBM Cognos, and check whether any of your report's queries include a SQL element. If they do, you'll need to create a DESQL report. To check this, open the “Report” dropdown and click on “Queries.”



Report Dropdown



Tables And Attached SQL Elements

Steps To Make a DESQL Report

- Open your report and identify which SQL element is linked to it. Be extra cautious if the report contains multiple SQL elements or tables. To find this, click the three dots at the top left of the table and check the “Query” option under the “Data” tab in the table properties.

Market Region	Service Provider Country	FOS (no Inspection)	FOS (Inspection)	FOS Total	eJob (no Inspection)	eJob (Inspection)	eJob
<Market Region>	<Service Provider Country>	<FOS (no Inspection)>	<FOS (Inspection)>	<FOS Total>	<eJob (no Inspection)>	<eJob (Inspection)>	
	<Service Provider Country>	<FOS (no Inspection)>	<FOS (Inspection)>	<FOS Total>	<eJob (no Inspection)>	<eJob (Inspection)>	
<Market Region> - Total		**<Total(FOS (no Inspection))>**	**<Total(FOS (Inspection))>**	**<Total(FOS Total)1>**	**<Total(eJob (no Inspection))>**	**<Total(eJob (Inspection))>**	**<Total**
<Market Region>	<Service Provider Country>	<FOS (no Inspection)>	<FOS (Inspection)>	<FOS Total>	<eJob (no Inspection)>	<eJob (Inspection)>	
	<Service Provider Country>	<FOS (no Inspection)>	<FOS (Inspection)>	<FOS Total>	<eJob (no Inspection)>	<eJob (Inspection)>	
<Market Region> - Total		**<Total(FOS (no Inspection))>**	**<Total(FOS (Inspection))>**	**<Total(FOS Total)1>**	**<Total(eJob (no Inspection))>**	**<Total(eJob (Inspection))>**	**<Total**
Overall - Total		**<Total(FOS**	**<Total(FOS**	**<Total(FOS**	**<Total(eJob**	**<Total(eJob**	**<Total**

Report Image

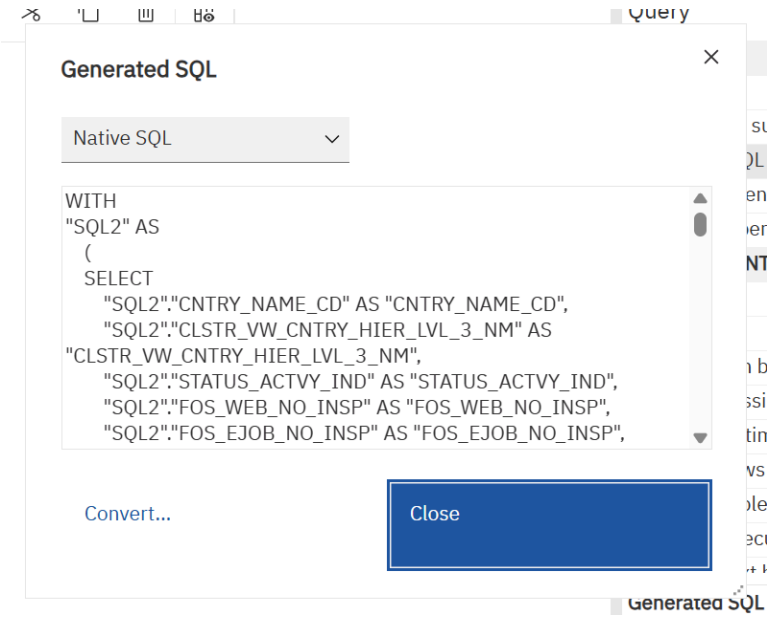
CONDITIONAL	
Conditional styles	
Style variable	
Render variable	
No data contents	No Data Available
DATA	
Grouping & sorting	(Defined)
Query	Market Region Summary YTD
Rows per page	
Master detail relationships	Unavailable
Suppression	
Properties	

The Report Is Attached To “Market Region Summary YTD” SQL Element

- From the “Report” dropdown, select “Queries.” Then click on the table element to open its query properties. Double-click “Generate SQL” and hit “OK” in the dialog box that appears.

DATA	
Data source	EU FOS
Auto group & summarize	
Generated SQL	
Override dimension info	
Define member sets	
QUERY HINTS	
Auto-sort	

Query Properties



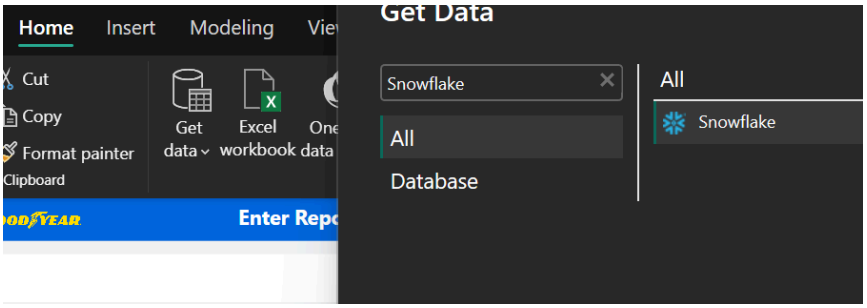
Report SQL

- Copy the entire SQL query that gets generated and paste it into Notepad.
- Check whether the SQL includes a static date filter. If it does, modify the SQL by replacing it with a dynamic date function based on the report's requirement.

```
--ORDER BY TOTAL  DESC
WHERE JOB.JOB_RECORDING_DT >= DATE_TRUNC('YEAR', CURRENT_DATE())
  AND JOB.JOB_RECORDING_DT < DATE_TRUNC('MONTH', CURRENT_DATE())
  WHERE JOB.JOB_RECORDING_DT BETWEEN CAST('2024-01-01' AS DATE)  AND  CAST('2024-12-31' AS DATE)
AND JOB.RESP_SERV_PROVIDER_ID IS NOT NULL
AND JOB.JOB_TYPE_CD IN ('ZR','ZB','ZI')
AND SP.CNTRY_NAME_CD <> 'CN'
AND SP.ORIG_SYS_ID = 6
AND D.STATUS_ACTVY_IND IS NULL
GROUP BY SP.CNTRY_NAME_CD,  V.CLSTR_VW_CNTRY_HIER_LVL_3_NM, D.STATUS_ACTVY_IND
        ) "SQL2"
    )
```

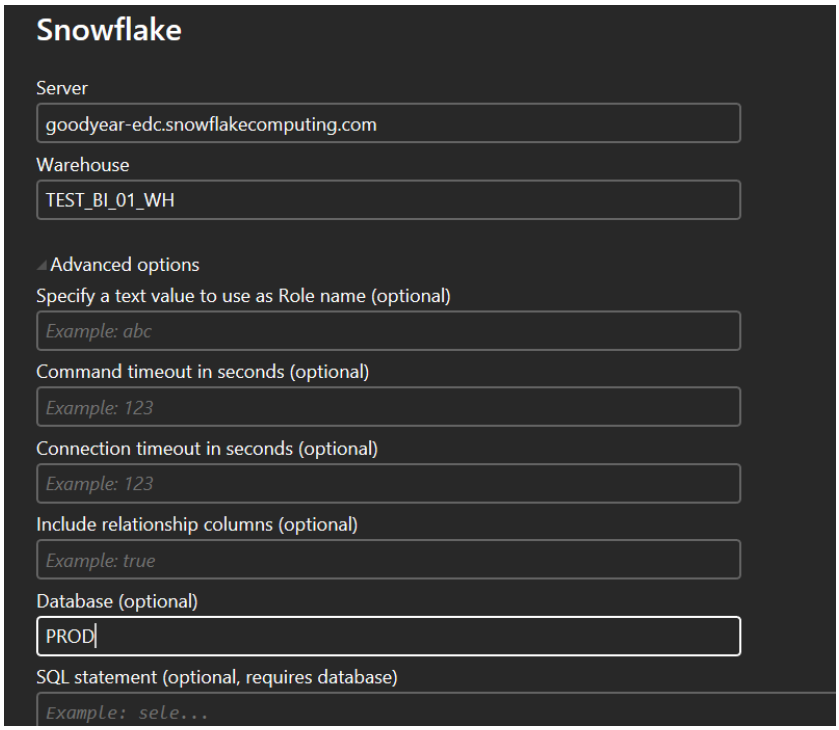
Static Date Filter In SQL

- Open Microsoft Power BI and click “Get Data” from the “Home” tab. Choose Snowflake as the data source.



Getting Data From Snowflake

- Enter the “Server,” “Warehouse,” and “Database” details using the information from the Internal Tracker. Then paste the SQL you generated earlier.

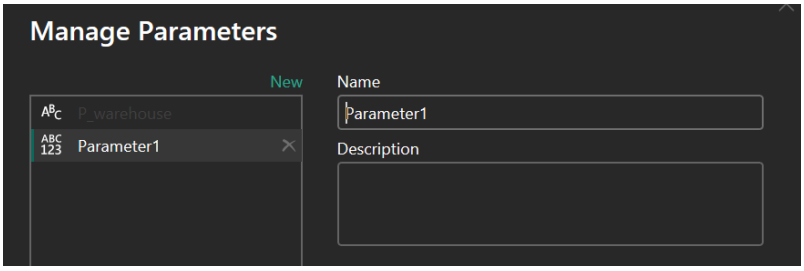


Loading Data From Snowflake

PBI < -- >Snowflake	
Server	goodyear-edc.snowflakecomputing.com
Warehouse	TEST_BI_01_WH
Database	PROD
User: LDBIUSR	
PWD: edcSFeJd7hbRWzGZ7oTipnDbFw8fA4	

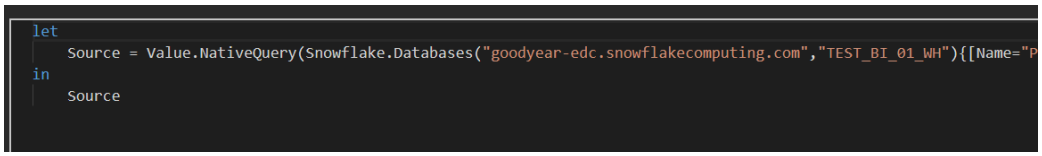
Snowflake Credentials To Be Used

- Once connected, go to the “Transform Data” section.
- Choose “Direct Query” as the data connectivity mode.
- In the “Home” tab, click on “Manage Parameters” and select “New Parameter.” Assign a name to your parameter and save it.



Saving The Parameter

- Open “Advanced Editor” from the “Home” tab. You’ll see a query script there. Update the warehouse name in the Source to match the one you created, ensuring it’s not inside double quotes.



Query In Advance Editor

- In the script, locate the SQL query section starting from “WITH” and ending before “null,” delete everything in that block and replace it with a variable. Then assign the variable to your SQL from Notepad, making sure all quotation marks are removed first using Find And Replace (Ctrl+F).

Original Query

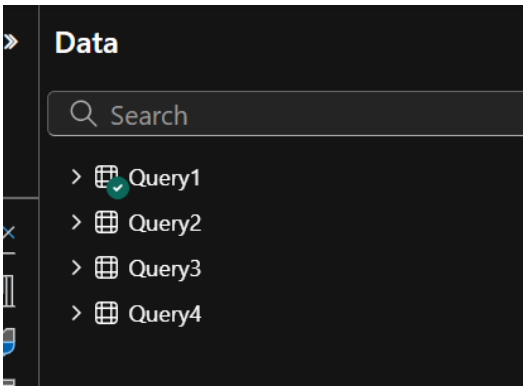
```
let
    Query1 = "WITH
SQL2 AS
    (
    SELECT
        SQL2.CNTRY_NAME_CD AS CNTRY_NAME_CD,
        SQL2.CLSTR_VW_CNTRY_HIER_LVL_3_NM AS CLSTR_VW_CNTRY_HIER_LVL_3_NM,
        SQL2.STATUS_ACTVY_IND AS STATUS_ACTVY_IND,
        SQL2.FOS_WEB_NO_INSP AS FOS_WEB_NO_INSP,
        SQL2.FOS_EJOB_NO_INSP AS FOS_EJOB_NO_INSP,
        SQL2.FOS_WEB_INSP AS FOS_WEB_INSP,
        SQL2.FOS_EJOB_INSP AS FOS_EJOB_INSP,
        SQL2.FOS_WEB_TOTAL AS FOS_WEB_TOTAL,
        SQL2.FOS_EJOB_TOTAL AS FOS_EJOB_TOTAL,
        SQL2.TOTAL AS TOTAL,
        SQL2.FOS_WEB_NO_INSP_PERCENT AS FOS_WEB_NO_INSP_PERCENT,
        SQL2.FOS_EJOB_NO_INSP_PERCENT AS FOS_EJOB_NO_INSP_PERCENT,
        SQL2.FOS_WEB_INSP_PERCENT AS FOS_WEB_INSP_PERCENT,
```

Writing The Query In Variable Query1

```
    SQL2.FOS_WEB_PERCENT,
    SQL2.FOS_EJOB_PERCENT",
    Source = Value.NativeQuery(Snowflake.Databases("goodyear-edc.snowflakecomputing.com","TEST_BI_01_WH"){[Name="PROD"]}[Data], Query1,
        null, [EnableFolding=true])
in
    Source
```

Adding The Variable To The Source

- Click “Close And Apply” to load the data into Microsoft Power BI.
- Once loaded, go to the “Data” tab to view the imported data.



Data Tab After Query Is Successfully Run

- Check the lineage for each column by looking at the alias names in the SQL and match them to the columns in your Microsoft Power BI table.