

MONITOR DATA IN REAL TIME

BY NITIN



OBJECTIVE

- I understood how to monitor data in real-time.
- I learned to use the performance analyzer to examine report element performance.



Instance ID:6789523 [DP-500T00-A-CEP-MOD-14] Monitor data in real-time with Power BI

Select Language: English

18% Completed

Lab Time Left: 01:54:39

4. Module: Implement advanced data visualization techniques by using Power BI

Set up the database:

✓

In this task, you will use SQL Server Management Studio (SSMS) to setup the database by running two scripts.

✓

1. To open SSMS, on the taskbar, select the **SSMS** shortcut.

✓

2. In the **Connect to Server** window, ensure that the **Server name** dropdown list is set to **localhost**, and that the Authentication dropdown list is set to **Windows Authentication**.

3. Select **Connect**.

4. To open a script file, on the **File** menu, select **Open > File**.

5. In the **Open File** window, go to the **D:\DP500\Allfiles\14\Assets** folder.

6. Select the **1-Setup.sql** file.

7. Select **Open**.

Microsoft SQL Server Management Studio

File Edit View Tools Window Help

Object Explorer

localhost (SQL Server 15.0.2000.5 - BAS)

Databases Security Server Objects Replication PolyBase Always On High Availability Management Integration Services Catalogs SQL Server Agent (Agent XPs disabl) XEvent Profiler

Ready

On VM: LON-CL1

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3:25 PM 12/17/2024

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Lab Time Left: 01:50:42

Quick Launch (Ctrl+Q)    

Object Explorer

2-InsertOrders.sql -...nt (51)) Executing...  

```
USE [AdventureWorksDW2022-DP500];
GO

SET NOCOUNT ON;

--Determine the next order number to insert
DECLARE @OrderNumber INT = 51175;
DECLARE @DelaySeconds NCHAR(8);

--Insert new orders using the delay
WHILE (1 = 1)
BEGIN
    INSERT
        [dbo].[FactInternetSalesRealTime]
```

Results Messages

2-InsertOrders.sql - localhost.master (BASE22C)\Student

1. [Download the source code](#)

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54% Completed Lab Time Left: 01:47:26

Internet Sales - Monitor data in real time - Power BI Desktop

7. Module: Implement advanced data visualization techniques by using Power BI

Set up automatic page refresh:

☐ In this exercise, you will set up automatic page refresh and experiment by using the change detection feature.

Automatic page refresh requires at least one model table that's set to use DirectQuery storage mode.

Set up automatic page refresh

☐ In this task, you will set up automatic page refresh.

☐ 1. To select the report page, first select an empty area of the report page.

☐ 2. In the Visualizations pane, select the format icon (paint brush).

☐ 3. Switch the Page refresh setting (last in the list) to On.

Automatic page refresh is a page-level setting. You can enable it for specific pages in the report.

☐ 4. In the Performance analyzer pane, notice

Save Home Insert Modeling View Optimize Help

Themes

Performance analyzer

Visualizations

Data

26 Sales Orders

Bike Subcategory Sales

Road Bikes	\$20,600.17
Mountain Bikes	\$19,204.41
Touring Bikes	\$6,725.34

Performance analyzer

Name	Duration (ms)
Recording started (12/17/2024 2:32:34 PM)	-
Refreshed visual	-
Title text box	39
Order Count	191
Bike Subcategory Sales	242
Refreshed visual	-
Title text box	33
Order Count	118
Bike Subcategory Sales	149

Visualizations

Data

Page 1 of 1

Storage Mode: DirectQuery (click to change) 36%

Update available (click to download)

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75% Completed

Lab Time Left: 01:42:19

1. In the **Page refresh** settings, set the **Refresh type** dropdown list to **Change detection**.

2. To create a change detection measure, select the **Add change detection** link.

3. In the **Change detection** window, notice that the default set up is to create a new measure.

4. In the **Choose a calculation** dropdown list, select **Count (Distinct)**.

5. In the **Fields** pane (located at the right, inside the window), scroll down to locate the **Internet Sales** table.

6. Select the **Sales Order** field, and notice that the window added it to the **Choose a field to apply it to** box.

7. For the **Check for changes every** setting, set it to 5 seconds.

8. Select **Apply**.

9. In the **Data** pane, inside the **Internet Sales** table, notice the addition of a change

Internet Sales - Monitor data in real time

FileHomeInsertModeling

45

Sales Orders

Bike Subcategory Sales

Mountain Bikes

Road Bikes

Touring Bikes

\$12,281.46

Themes

Tip:... Learn more

Pause visu

Bike Subcategories Today

Page 1 of 1

Change detection

Improve performance by only refreshing your data if the result of this measure changes.

Measure type

Existing

New

Choose a calculation

Count (Distinct)

Choose a field to apply it to

Sales Order

Check for changes every

5

Seconds

Fields

Search

Country

Region

SalesTerritoryKey

Internet Sales

CustomerKey

Extended Amount

Order Quantity

OrderDateKey

Product Standard Cost

ProductKey

Sales Amount

Sales Order

Sales Order Line

SalesTerritoryKey

Total Product Cost

Unit Price

Apply

Cancel

Sign in

ons

Data

Search

Customer

Internet Sales

Order Date

Product

Sales Territory

On

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detection

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36%

Update available (click to download)

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<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-11] Improve query performance with dual storage mode</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Completed</div><div>Take Lab</div></div>	<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-12] Improve query performance using aggregations</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Completed</div><div>Take Lab</div></div>
<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-13] Use tools to optimize Power BI performance</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Not Initiated</div><div>Take Lab</div></div>	<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-14] Monitor data in real-time with Power BI</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Completed</div><div>Take Lab</div></div>
<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-15] Create a paginated report</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Not Initiated</div><div>Take Lab</div></div>	<div><div>📄</div><div>Lab Title: [DP-500T00-A-CEP-MOD-16] Create reusable Power BI assets</div><div>⌚</div><div>Duration: 120 minutes</div><div>✓</div><div>Status : Not Initiated</div><div>Take Lab</div></div>

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