

Power BI Interview Questions

Question 1: What is Incremental Refresh, how to configure it and limitations of it?

Answer: Incremental Refresh in Power BI is a feature that allows you to refresh only the data that has changed since the last refresh, rather than refreshing all data every time. This can significantly reduce the time and resources required for data refreshes, especially for large datasets.

To configure Incremental Refresh in Power BI, you typically follow these steps:

Define a date/time column: You need to have a column in your dataset that represents the last updated or modified timestamp for each row of data. This column will be used to determine which rows have changed since the last refresh.

Set up Incremental Refresh in Power BI Service or Power BI Desktop:

In Power BI Desktop, you can configure Incremental Refresh by going to the query editor, selecting the table you want to apply Incremental Refresh to, and then setting the appropriate options in the Incremental Refresh settings.

In Power BI Service, after publishing your report, you can configure Incremental Refresh by going to the dataset settings and enabling Incremental Refresh. Here you specify the date/time column and other settings related to refresh policy.

Configure Incremental Refresh settings: Specify the time period for which you want to keep historical data. For example, you might want to keep only the data from the last 12 months, and refresh only the data that falls outside of this window.

Schedule Refresh: Set up a refresh schedule for your dataset in Power BI Service so that it automatically refreshes at regular intervals.

Limitations of Incremental Refresh in Power BI include:

Premium Feature: Incremental Refresh is available only for Power BI Premium, Power BI Premium Per User, and Power BI Pro with a dedicated capacity.

Date/Time column requirement: You need a date or timestamp column in your dataset to identify which rows have changed since the last refresh.

DirectQuery: Incremental Refresh is not supported for DirectQuery connections. It works only with Import mode.

Initial Full Load: When you first set up Incremental Refresh, you typically need to perform a full refresh to populate the initial dataset.

Question 2: Can you tell me what are latest update in Power BI? You can tell me one or Two?

Answer: This question often ask to get the idea if a candidate is updated or not.

Question 3: Why do we use field parameter? How to configure it?

Answer: Field parameters allow users to dynamically change the measures or dimensions being analyzed within a report. This feature can help your report readers explore and customize the analysis of the report by selecting the different measures or dimensions they're interested in.

To configure a field parameter in Power BI Desktop:

1. Open your Power BI Desktop file.
2. Go to the "Modeling" tab in the ribbon.
3. Click on "New Parameter" in the "Modeling" tab and click on "Fields" to create a new parameter.
4. Define the parameter properties such as Name, add relevant fields and order according to the need.
5. Click on create.
6. Add the parameter in slicer and in your visual.
7. Test and validate parameter behavior.

Questions 4: What are gateways? Types of gateways?

Answers: Power BI Gateway is software you require to access data in an on-premises network. It acts as a gatekeeper for the on-premises data sources. They provide highly secure connections between the on-premises and single/multiple data sources.

1. On-premises Data Gateway (recommended/standard)
2. On-premises Data Gateway (personal mode)

Question 5: In a Data model I don't have Date Dim table? How can I create date table with the help of dax?

Answer: We can use CALENDAR and CALENDARAUTO dax function.

Question 6: Difference between Calendar and Calendar Auto dax function?

Answer: CALENDAR: We need to provide StartDate and EndDate and it will returns a table with one column of all dates between.

CALENDARAUTO: I will take StartDate and EndDate automatically from model and it will also returns a table with one column of dates.

Question 7: Once the date table is created I need a new column which will have give me Day name, can you tell me the dax?

Answer: `FORMAT('Date'[Date], "dddd")`

Question 8: Difference between All, AllExcept and AllSelected?

Answer: ALL() - Unleashes the entire table or column, waving away any applied filters.

ALLEXCEPT() - Selectively retains context filters on specified columns.

ALLSELECTED() - Simply discards filters originating from the inner query, however keeps the slicer and report filters

Question 9: What is Filter Context and Row Context?

Answer: Row Context:

Imagine each row in your data table as an individual actor on a stage. Row context is all about what's happening on that specific row. When you create a calculated column or a measure, row context focuses on the values of that particular row, kind of like a spotlight highlighting the star performer.

Example: Calculating a running total for each row or creating a column that depends on values within the same row involves row context.

Filter Context:

Now, shift your perspective to the entire theater. Filter context considers the overall environment and the filters applied to your data. It's like the atmosphere of the entire performance space, influencing how the actors (rows) are perceived based on the broader context.

Example: Aggregations, like calculating the sum of a column, involve filter context as it considers the filters applied to the visual or report.

Question 10: I have a requirement where I have to use Inactive relationship, how can use it?

Answer: We can use Userrelationship dax function

Question 11: How many active and inactive relationship I can have between two tables?

Answer: You can only have one active relationship between two tables. You can however create as many inactive relationships as possible.

Question 12: What is Crossfilter direction? And how many types of cross filter direction available in Power BI?

Answer: Crossfilter direction refers to the way in which filters applied on one table affect the data displayed in related tables within a Power BI report.

1. Single Directional
2. Both Directional

Question 13: What is Object Level Security? How to configure it?

Answer: Object-level security (OLS) enables model authors to secure specific tables or columns from report viewers. For example, a column that includes personal data can be restricted so that only certain viewers can see and interact with it. In addition, you can also restrict object names and metadata.

Steps to apply Object level security on Sales amount column present in Sales table:

1. In Power BI Desktop go to modelling tab
2. Click on manage roles
3. Name the role and select the table
4. Click on Save
5. Go to Tabular Editor and connect to your dataset
6. Go to your and then your column
7. At the right side of your tabular editor go to object level security and click on none
8. To test it, go to desktop and preview your role
9. Publish it to service
10. Assign user to a role

Question 14: What is the difference between functions Username vs. UserPrincipalName?

Answer:

Username: This is your login name, often in the format DOMAIN\username.

UserPrincipalName (UPN): This is your unique identifier, often resembling an email address like username@domain.com.

Question 15: What are deployment pipelines in Power BI? Have you used it? How you change the connection in each environment?

Answer: Yes I have used it. The deployment process lets you clone content from one stage in the deployment pipeline to another, typically from development to test, and from test to production.

During deployment, power bi copies the content from the current stage, into the target one. The connections between the copied items are kept during the copy process.

How you change the connection in each environment –

We can change the environment only in QUA and Prod, We can change the connection simply through deployment rules.

There is a setting button at the top left of deployment pipeline we need click there.

You can define the rules by two ways, First one will be "Data set rules" and Second one will Parameter Rules"

So whenever you move your report from dev to qua and qua to prod the deployment rules will automatically change the connection.

Question 16: What is difference between contributor and member?

Answer:

Contributor Role:

- a. All viewer role access

- b. Ideal for developers.
- c. Publish, Create, edit, and delete content, such as reports, in the workspace.
- d. Create report in other workspace based on semantic model in this workspace
- e. Copy a report
- f. Create metrics that's based on a semantic model in the workspace
- g. Schedule data refreshes via the on-premises gateway
- h. Modify gateway connection settings
- i. Subscribe others to reports

Member Role:

- a. All contributor role access
- b. Add members or others with lower permissions
- c. Publish, unpublish, and change permissions for an app.
- d. Update an app
- e. Share items in apps, including semantic models
- f. Allow others to reshare items
- g. Manage semantic model permissions

Question 17: If I want to provide access for report not for entire workspace can I do it and if yes then how can I do it?

Answer: We can go to power bi report in power bi workspace, click on share and provide the user email Id.

