**PowerBI Service**

Part 1 – Service Intro and Uploading a report

1. What is PowerBI Service / Need of PowerBI Service
2. How to Access or open PowerBI Service
3. Activation required for PowerBI Service
4. Licensing of Account and other settings
5. Creating a workspace in PowerBI service
6. Upload a report to PowerBI service
7. Way to upload a report in PowerBI service

Here are the 4 major ways to upload a report to Power BI Service:

* **Publish from Power BI Desktop**: Use the "Publish" button in Power BI Desktop to upload directly to Power BI Service.
* **Upload a .PBIX File**: Manually upload a .pbix report file via the Power BI Service interface.
* **Import from Cloud Storage**: Import reports from OneDrive or SharePoint through the "Get Data" option in Power BI Service.
* **Deploy via Pipelines or Apps**: Use deployment pipelines or app workspaces for enterprise-level report publishing.

1. Understand the concept of reports and Dataset in Service

app.powerbi.com

powerbi.com

**Website to access** – Work or School Account

Organization Account will not work like:

Gmail, Yahoo, Hotmail, Rediff mail

We get – 60 days trail

PowerBI desktop version is free of charge

To share the report, we have pay – after 60 days trail

**Version of PowerBI**

* Paid Version – Pro account – PowerBI Pro – Approx 10$ - Per user per month

**Premium account – 2 categories**

* **Premium Per User** – To get all the premium features for a single user – 20$ (Approx)
* **Premium Per Capacity** - 4995$- There is no specific limit on the number of users who can access the Power BI Premium Per Capacity plan. It allows for unlimited distribution of content to users, including those with free Power BI licenses

Publishing Reports/Dashboards: To publish reports or dashboards created in Power BI Desktop, you need to have a workspace in the Power BI service. This workspace acts as a container for your reports, datasets, and dashboards.

Power BI does not allow the creation of workspaces with duplicate names. Each workspace must have a unique name within the Power BI service.

**Difference Between Reports and Dashboards**

**Power BI Reports:**

* Detailed Analysis: Reports provide in-depth, interactive analysis across multiple pages.
* Multiple Visuals: They can contain a variety of visuals like charts, graphs, tables, and maps.
* Interactivity: Users can interact with the data through features like drill-through, filtering, and highlighting.
* Multiple Pages: Reports can span multiple pages, allowing for comprehensive data exploration.
* Data Exploration: Ideal for detailed data analysis and answering complex business questions.

**Power BI Dashboards:**

* High-Level Overview: Dashboards provide a consolidated view of key metrics on a single page.
* Real-Time Monitoring: They are designed for real-time or near-real-time data monitoring.
* Single Page: Dashboards are limited to a single page, making it easy to get a quick overview.
* Limited Interactivity: Dashboards have limited interactivity compared to reports, focusing on simplicity.
* Key Metrics: Best for tracking key performance indicators (KPIs) and getting quick insights.
* In summary, reports are for detailed, interactive data analysis, while dashboards are for high-level, real-time monitoring and quick insights

**Power BI Desktop**, you need to log in with the same email address that you use for **Power BI Service** to ensure consistency across the platforms. This allows you to:

* Publish reports created in Power BI Desktop to the Power BI Service.
* Access datasets, reports, and dashboards stored in the Power BI Service.
* Sync any data refreshes or scheduled updates between Power BI Desktop and Power BI Service.

We needed to logged in to PowerBI service to get enable the Publish button at PowerBI desktop Home ribbon.

When you **publish a report from Power BI Desktop**, the **report data model** (also called the **semantic model**) is published along with the report itself. Here’s what this entails:

**Report Data Model / Semantic Model:**

The data model in Power BI refers to the structured way in which data is organized and connected within your report. This includes:

1. **Tables and Columns**: The structured data you've imported into Power BI from various data sources.
2. **Relationships**: The connections between different tables (e.g., primary key/foreign key relationships).
3. **Calculated Columns & Measures**: Any new columns, measures, or metrics you’ve created using DAX (Data Analysis Expressions) formulas.
4. **Aggregations**: Pre-defined aggregations like sum, average, min, max, etc.
5. **Data Transformations**: All the transformations applied in Power Query Editor before loading data into the report (such as cleaning, merging tables, changing data types, etc.).

**Why It's Important:**

* **Central Data Source**: Once published, this data model acts as a **semantic layer** for end users or other Power BI reports. Instead of directly interacting with raw data, users can access this curated, structured model for analysis.
* **Consistency**: Publishing the model ensures that any future reports can access the same, centralized data model, ensuring data consistency across reports.
* **Performance**: A well-optimized data model can significantly improve performance for queries and visualizations, as it reduces the need to reprocess large datasets each time.
* **Reusability**: The same data model can be reused for different reports in the Power BI Service, promoting efficiency and a single source of truth for your data.

**Key Components Published:**

* **The report layout**: Visuals, charts, and filters.
* **The data model**: Including relationships, measures, and DAX expressions.
* **Data connections**: Your connections to external data sources (though the data refresh settings will depend on configuration in Power BI Service).