

# **Prerequisites – Technical**

#### **Software Requirements**

- **Power BI Desktop** (Free) Power Query is built into Power BI for data transformation.
- Windows OS (Windows 10 or later recommended) Power Query in Power BI is optimized for Windows.

#### **Required:**

• Power BI Service (Pro or Premium Per User License) – If publishing reports online, you'll need a Power BI account and your users will need a Power BI Pro license.

# **Prerequisites – Technical**

#### **Computer Capabilities & Performance Considerations**

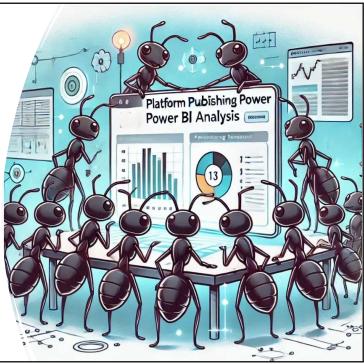
Power BI Service will handle the processing load of your Power BI report once you upload to the cloud.

- Internet Speed If working with cloud data, a stable internet connection is necessary.
- RAM 8GB minimum; 16GB+ recommended for handling large datasets.
- **Processor** Intel i5/i7 or AMD Ryzen 5/7 or higher for better performance.
- Storage (SSD Recommended) Faster SSD drives improve data processing speed compared to HDD.

User Group	How Power BI Benefits Them
Power BI Report Developers	Anyone developing building Power BI dashboards and publishing them.
Self-Service BI User	Will use the online Power BI Service and Workspace.
 Power BI Consumers	Will utilize the online apps and subscriptions.



- Introduction & Prerequisites
- Publishing to Power BI Service
- Power BI Workspace
- Managing Published Content
- Power BI Apps & Dashboards
- Power BI Subscriptions & Embedding
- Best Practices & QA
- Further Resources



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Understanding	Workspaces	Add people > Credit Department		
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A	Deployment pipelines	⊘ Viewer		

# Understanding Workspaces

### Workspace Roles & Permissions

Roles help manage access and permissions within a workspace:

- Admin Full control, including adding/removing members and modifying permissions.
- Member Can edit content but cannot change workspace settings or manage access.
- **Contributor** Can create and edit content but cannot publish an app.
- Viewer Read-only access to reports and dashboards.

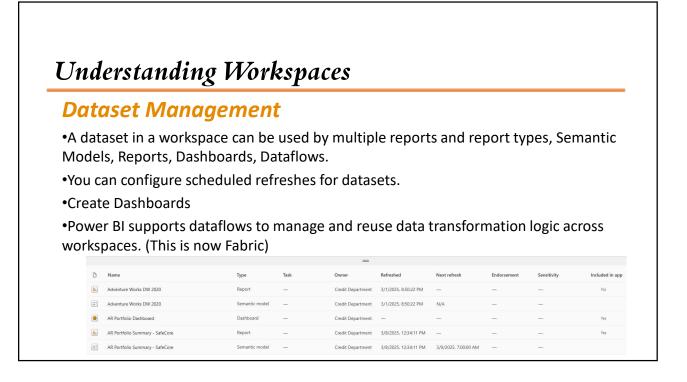
# Understanding Workspaces

#### Workspace vs Apps

•Workspaces serve as a <u>collaborative</u> development area where reports, dashboards, and datasets are built and managed.

•Apps are <u>published versions</u> of workspace content that can be shared with end-users in a controlled way.

We will talk more about the benefit of publishing to an App later.



#### Understanding Workspaces **Power BI Service Published Report Options** Explore this data (preview) Analyze in Excel **Access Control** Delete **Explore & Analyze Data** • Quick insights Quick insights Save a copy View Usage & Metrics Report Settings View usage metrics report • View workspace or item lineage View workspace lineage **Create Dashboards** • View item lineage Create Paginated Reports • Create paginated report (preview) Manage permissions Sensitivity labels can be applied to data to ensure • Move to compliance with security policies.



### Understanding Workspaces

#### Licensing Considerations

- A Power BI Pro license is required for users to collaborate in Workspaces
- Free users can only access shared content if it is hosted on Microsoft Fabric capacity or Power BI Premium Per User (PPU).
- Workspaces operate on Power BI service capacity, which can be either **Pro (shared capacity)** or Premium **(dedicated capacity)**.
- Power BI Premium Per User (PPU) or Premium Capacity enables advanced capabilities like larger datasets, Dataflows and AI features.
- Power BI Premium Per Capacity (P-SKU) is being phased out in favor of Microsoft Fabric capacities:

# Understanding Workspaces

## Monitoring & Governance

- Audit logs and Usage Metrics help track report performance and user activity.
- Deployment Pipelines (for Premium users) enable a Dev-Test-Prod workflow for publishing content.
- Data lineage in Power BI shows how reports and datasets are connected.

# Power BI Apps

### What is a Power BI App?

A Power BI App is a packaged collection of Power BI reports and dashboards that can be shared with users in an organization.

• Apps help in organizing and managing content more efficiently than sharing individual reports or dashboards.

## Why Use Power BI Apps?

- Better Distribution Control You can share reports and dashboards with specific groups or users.
- **Read-Only Access** Users can interact with reports but cannot edit them, ensuring data integrity.
- Version Management Updates to reports can be made in the background and only published when ready.
- **Simplified User Experience** Users access the content in one place rather than managing multiple shared links.

## Power BI Apps

#### How to Create a Power BI App

- Apps are created from a Power BI workspace (not My Workspace).
- You need to be a Power BI Pro or Premium Per User (PPU) license holder to publish an app.
- Steps to create an App:
  - 1. Develop reports and dashboards within a Power BI workspace.
  - 2. Click Create App from the workspace.
  - 3. Configure Navigation, Permissions, and Branding.
  - 4. Publish the app and share the link with users.

### How to Create a Power BI App

- You can organize both reports and dashboards within sections, making it easier for users to navigate.
- Apps can include multiple content tabs, weblinks, links to other reports, helping users access related reports in a structured way.
- You can customize the app with a logo, colors, and descriptions to match corporate branding.

# Power BI Apps

#### Access & Permissions

- Users: Apps are shared via direct assignments or security groups.
- Permissions:
  - View-only (default).
  - Users cannot modify or save changes to the app but can export data if allowed.
  - Admins can grant dataset access for deeper analysis in Excel or Power BI Desktop.
- License Requirements:
  - Power BI Pro users can access shared apps.
  - Power BI Premium allows free users to access apps hosted in a Premium workspace.

### Updating & Managing an App

- Updates to the app do <u>not</u> affect users until changes are republished.
- You can add new reports or dashboards without impacting existing ones.
- Users do not need to be re-invited after updates; they always see the latest version.

# Power BI Apps

### App Deployment in Large Organizations

•Multiple Workspaces, One App: You can publish an app that includes reports from different workspaces.

•App Audiences: Different sections of the app can be shown to different user groups, ensuring relevant content distribution.

•Cross-Tenant Sharing: Power BI Apps cannot be shared outside the organization unless using Azure B2B guest accounts.

## Limitations of Power BI Apps

• No Real-Time Auto-Updates – Users must refresh or reopen the app to see new changes.

**No Direct Report Editing** – Users can only interact with reports but cannot edit them.

- Dataset Access Control Users don't automatically get access to the underlying dataset unless explicitly granted.
- Embed in SharePoint For more visibility and easy access, embed your reports in your department SharePoint page.

# Power BI Apps

#### Alternatives to Power BI Apps

•Sharing Reports Individually – If you have only one report, direct sharing might be simpler.

•Power BI Service Workspaces – For collaborative editing, workspaces might be a better option.

•Embedding Power BI in SharePoint or Teams – If users frequently work in Microsoft Teams, embedding reports might be preferable.

### A Few Best Practices for Power BI Apps

•Use Security Groups instead of adding users one by one.

•Keep navigation simple to ensure users can easily find reports.

•Regularly update content to keep reports relevant.

•Communicate changes when updating the app so users are aware of new features or reports.

# Power BI Dashboards

#### Dashboards vs Reports?

**Dashboards** are <u>single-page canvases</u> that aggregate visuals from **multiple reports and datasets.** 

**Reports** are <u>multi-page</u> and come from a **single dataset.** 

Dashboards provide a high-level overview, while reports offer deeper, interactive analysis.

# Power BI Dashboards

#### **Key Components of Dashboards**

- **Tiles:** Individual visual elements pinned from reports, datasets, or Excel files.
- Live Tiles: Dynamic, real-time visuals pinned directly from reports.
- KPIs & Cards: Simple metric displays showing key business figures.
- **Custom Web Content:** Tiles can embed web pages, videos, and images.
- **Q&A (Natural Language Queries):** Allows users to ask questions in plain English to generate insights.
- Alerts Alerts on metrics can be emailed if a threshold is met or not met.

## Power BI Dashboards

#### **Real-Time Data & Refreshing**

- Dashboards can support real-time streaming data tiles from IT or external sources.
- Data refresh depends on dataset configuration, scheduled or automatic refreshes.
- DirectQuery and Live Connection visuals update dynamically.

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## Power BI Dashboards

#### **Sharing & Collaboration**

- Share with users within your organization in Workspace
- Publish your Dashboards to include with a Power BI App for controlled distribution.
- Embed in SharePoint, Teams, or Websites using Power BI Web embedding.
- Create Alerts for threshold-based monitoring on specific metrics.

Attend a Free 1 Day Event Workshop: Microsoft Dashboard in a Day	Dashboard in a Day - UB Technology Innovations, Inc United States	Dashboard in a Day - 📮 OmniData Insights - United States	Hands-On, Practical Learning Experience Rapid Skill Acquisition
	@ 09/25/2024   10:00 - 18:00 (CDT)	<ul> <li>09/26/2024   08:00 - 16:00 (CDT)</li> <li>Digital</li> </ul>	Guided Instruction from Experts
DASHBOARD	<ul> <li>English (United</li> <li>Training</li> </ul>	<ul> <li>English (United</li> <li>Training</li> </ul>	Structured Learning Agenda
IN A DAY Free Training Course			Real-World Application of Skills
	Registration and details	Registration and details	Access to Workshop Materials & Resources
	) Dashboard in a Day -	Dashboard in a Day -	Networking Opportunities
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	09/27/2024   08:00 - 16:00 (CDT) Digital	10/01/2024   08:00 - 16:00 (CDT) Digital	Boosts Confidence with Power BI
	lta English (United ) English (United	<ul> <li>English (United</li> <li>Training</li> </ul>	Preparation for Advanced Learning
			Cost-Effective Training Option
	Registration and details	Registration and details	Immediate Insight into Power BI's Capabilities
Pragmatic Works DAX Cheat Sheet for E	Beginners		Exposure to Power BI Service Features

