4. Power BI guidelines

2.1. Names conventions

2.1.1 Workspace

To simplify workspace management in Power BI, we recommend using a **single workspace** for each product/area. This approach minimizes complexity by keeping everything within one workspace, enabling your team to focus on content creation and collaboration without needing to manage multiple workspaces for different environments.

In Solvay we recommend to use Development (DEV), Test (TEST), Pre-production (PREPROD) and Production (PROD)

We name each workspace in this simple format [ProductName] | [Environment]

Example:

- Finantial | DEV
- Finantial | TEST
- Finantial | PREPROD
- Finantial (does not appear PROD because is the final stage and is ready to be consumed)

2.1.2 Report, App and Dashboard

Establishing consistent naming conventions for Power BI assets ensures clarity, traceability, and efficient collaboration among team members. By adopting a standardized naming format, stakeholders can quickly identify the purpose, stage, and environment of each item in the Power BI ecosystem.

The recommended naming format is [ProductName]_[PipelineItem]

Components of the Naming Convention

- **ProductName**:
  This is a short identifier for the product, project, or business domain the asset serves.
  - Examples:
    - `Sales` for Sales-related reports and dashboards.
    - `HR` for Human Resources content.
    - `Finance` for financial reporting.
- **PilelineItem**:
  Indicates the type or purpose of the Power BI item. Use the following terms to specify the pipeline stage:
  - **Report (RPT)**: Refers to Power BI reports that include visualizations and insights from data models.
  - **App (APP)**: Refers to Power BI apps, which are collections of reports and dashboards shared with users.
  - **Dashboard (DSH)**: Refers to dashboards built for high-level summaries or key performance indicators (KPIs).
- **Environment**:
  Specifies the deployment environment to differentiate between development, testing, and production stages. Use the following abbreviations:
  - **DEV**: Development environment, where initial work and iteration happen.
  - **TEST**: Testing environment, where the content is validated by stakeholders.
  - **PROD**: Production environment, where the finalized content is published for end-users.

Naming Conventions for Each Power BI Component

Reports

Reports are detailed and interactive data visualizations designed for analysis. They should be named as:
`[ProductName]_Report_[Environment]`

- Examples:
  - `Sales_Report_DEV`: A sales report in the development environment.
  - `Inventory_Report_TEST`: An inventory report being tested.
  - `HR_Report`: A finalized HR report published for end-users.

Apps

Apps in Power BI are collections of reports and dashboards shared with a wider audience. They should be named as:
`[ProductName]_App_[Environment]`

- Examples:
  - `Sales_App_DEV`: A Sales app in development.
  - `Inventory_App_TEST`: An Inventory app in the testing phase.
  - `Finance_App`: A Finance app ready for production.

Dashboards

Dashboards are high-level summaries designed for monitoring KPIs and other critical metrics. They should be named as:
`[ProductName]_Dashboard_[Environment]`

- Examples:
  - `Sales_Dashboard_DEV`: A dashboard summarizing sales metrics in development.
  - `HR_Dashboard_TEST`: An HR dashboard in the testing phase.
  - `Finance_Dashboard`: A final Finance dashboard for executive reporting.

Best Practices for Naming Conventions

- **Consistency Across Teams**:
  Ensure all team members follow the same naming format to avoid confusion and improve collaboration. Document this standard in your organization's guidelines.
- **Abbreviation Standards**:
  Use short and meaningful abbreviations for ProductName to keep names concise but informative. For example:
  - `MKT` for Marketing.
  - `OPS` for Operations.
- **Avoid Special Characters**:
  Stick to alphanumeric characters and underscores (_) for compatibility and clarity.
- **Versioning (Optional)**:
  For iterative development, consider appending version numbers to distinguish between iterations:
  - Example: `Sales_Report_DEV_v1`, `Sales_Report_DEV_v2`.
- **Use Descriptive Product Names (if necessary)**:
  For larger projects with subdomains, add more context to the ProductName:
  - Example: `Sales_Europe_Report_DEV` for a regional Sales report.

2.2. Access and Permissions

In Power BI, access and permissions are managed at three levels—**Semantic Model**, **App/Report**, and **Workspace**. Each level represents a different layer of access control and functionality within Power BI.

Level	Scope	Examples of Access
Semantic Model	Dataset and data structure	View dataset, build reports, RLS enforcement
App/Report	Individual reports or dashboards	View/Interact with specific content, use in apps
Workspace	Collection of datasets, reports, and dashboards	Collaborate, manage content and permissions

2.3.1. Semantic Model (Data Model or Dataset Access)

The **semantic model** represents the underlying dataset in Power BI that defines the data structure, relationships, calculations (e.g., DAX measures), and data security.

Access Considerations:

- **Dataset Access Permissions**: Users can be given direct access to the dataset, which allows them to:
  - Build their own reports using the dataset;
  - View data as defined by the roles in Row-Level Security (RLS), if applied.
- **Access Levels**:
  - **Viewer**: Can connect to and view the dataset but cannot modify it.
  - **Contributor/Builder**: Can create reports or dashboards using the dataset.
  - **Owner**: Full control over the dataset, including the ability to share or modify it.

2.3.2. App/Report (Content Layer Access)

This level controls access to the **specific reports and dashboards** created from datasets. The content is typically shared with end-users via apps or direct links.

Access Considerations:

- **Report/Dashboard Access**: Access can be granted for specific reports or dashboards. Users may have:
  - **View-Only Access**: Can interact with the report or dashboard but cannot edit.
  - **Edit Access**: Can modify the report if permission is granted.
- **App Access**: Reports and dashboards can be bundled into a Power BI App for easier distribution.

- Apps allow centralized access control for multiple reports and dashboards.
- Access to the app does not inherently grant access to the underlying dataset unless explicitly shared.

2.3.3. Workspace (Collaboration Level Access)

Workspaces are the collaboration environments where datasets, reports, dashboards, and other content are created, shared, and managed. Access to a workspace governs overall permissions to its content.

Access Considerations:

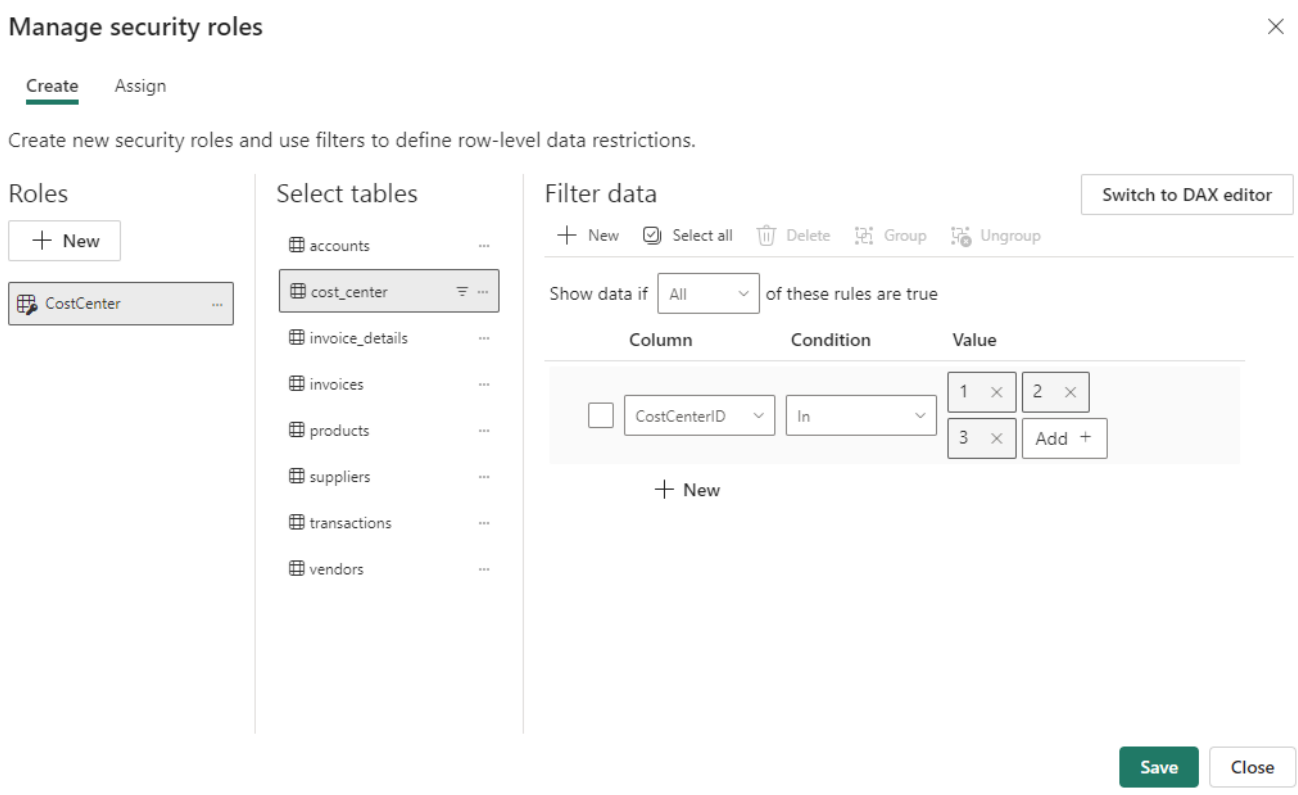
- **Roles in Workspace**:
  - **Admin**: Full access to all workspace content and settings. Can manage members, settings, and permissions.
  - **Member**: Can create, edit, and delete content but cannot manage workspace settings or membership.
  - **Contributor**: Can create and edit content but cannot delete or manage workspace permissions.
  - **Viewer**: Can view content but cannot create or edit anything.
- Access at the workspace level provides access to **all content** in that workspace unless specific restrictions (e.g., RLS) are applied.

2.4. Row-Level Security (RLS)

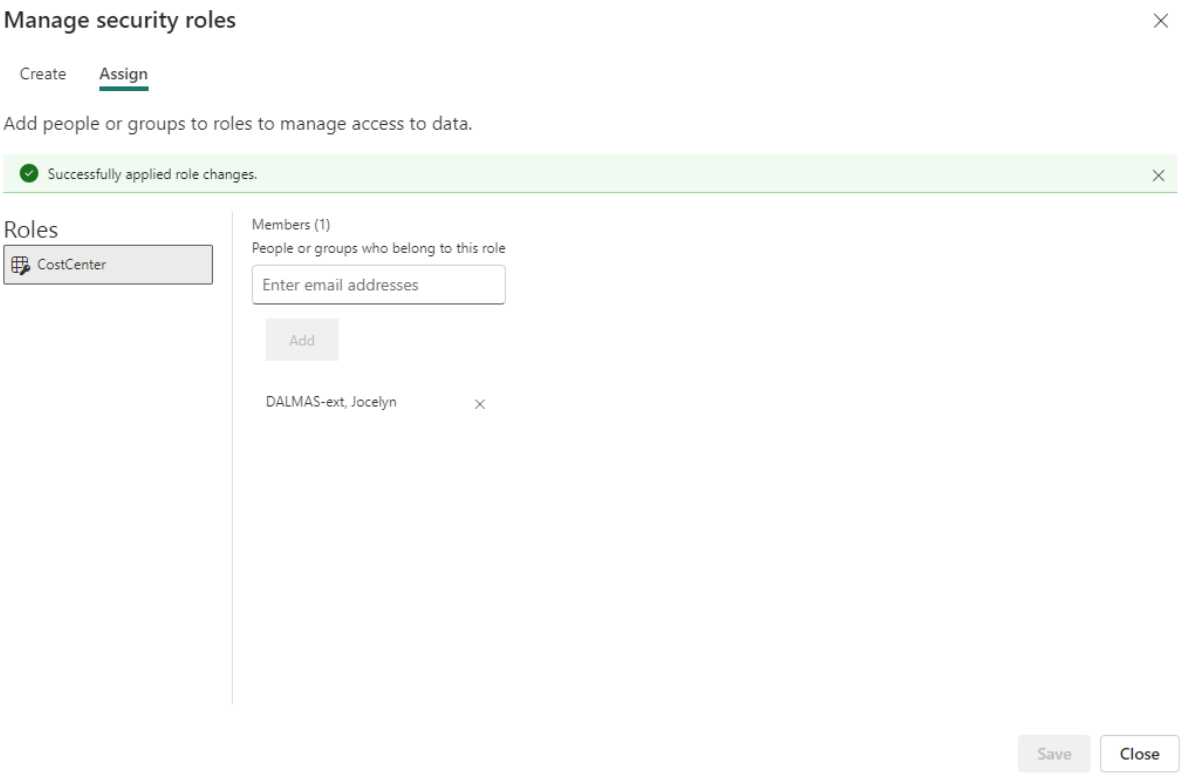
Row-level security (RLS) controls access to specific rows in a database based on group membership or execution context, ensuring users only see data relevant to their role or department. It is commonly used in scenarios like restricting employees to their department's data or limiting customers to their own data in a multitenant setup.

RLS is enforced at the database level, applying restrictions every time data is accessed, ensuring security across all platforms, including Power BI. It simplifies security management and applies to queries on a Warehouse.

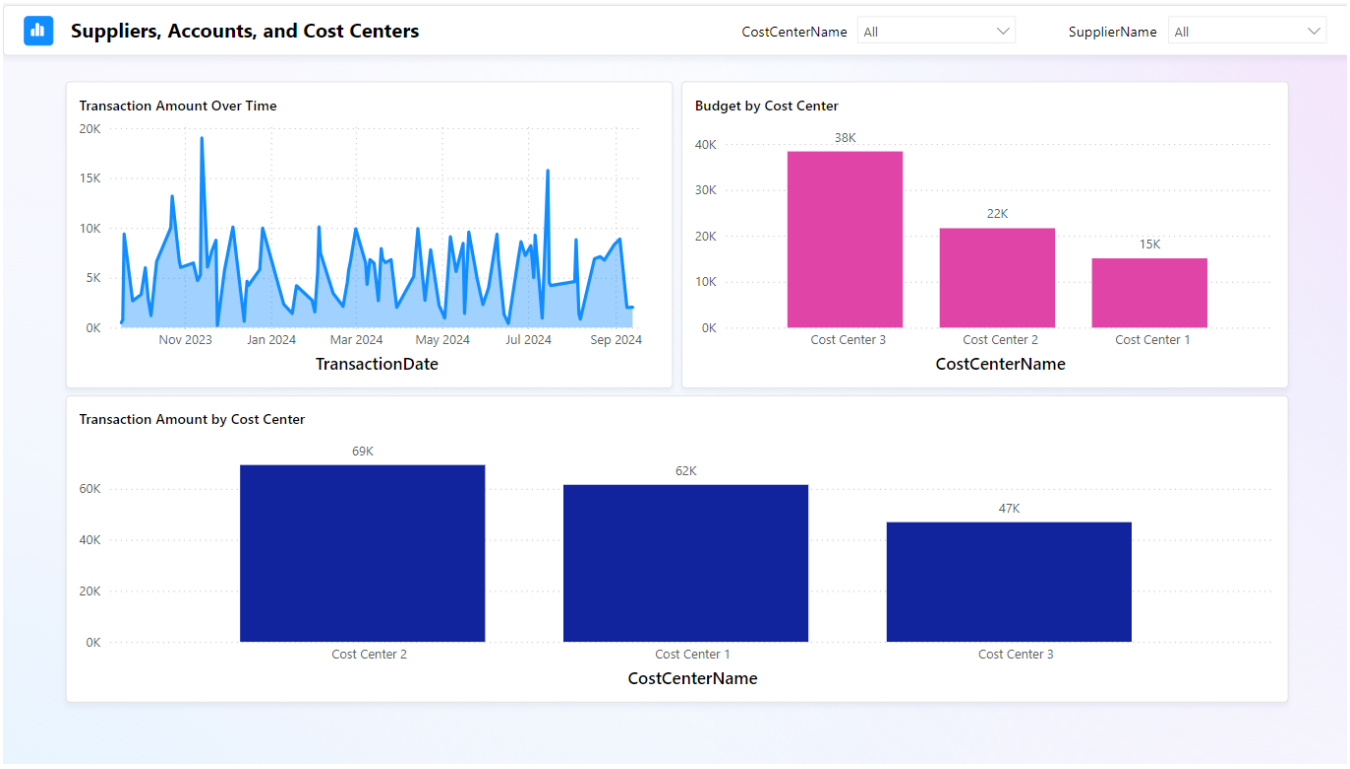
Implement & Manage Security Roles



Assign Security Roles



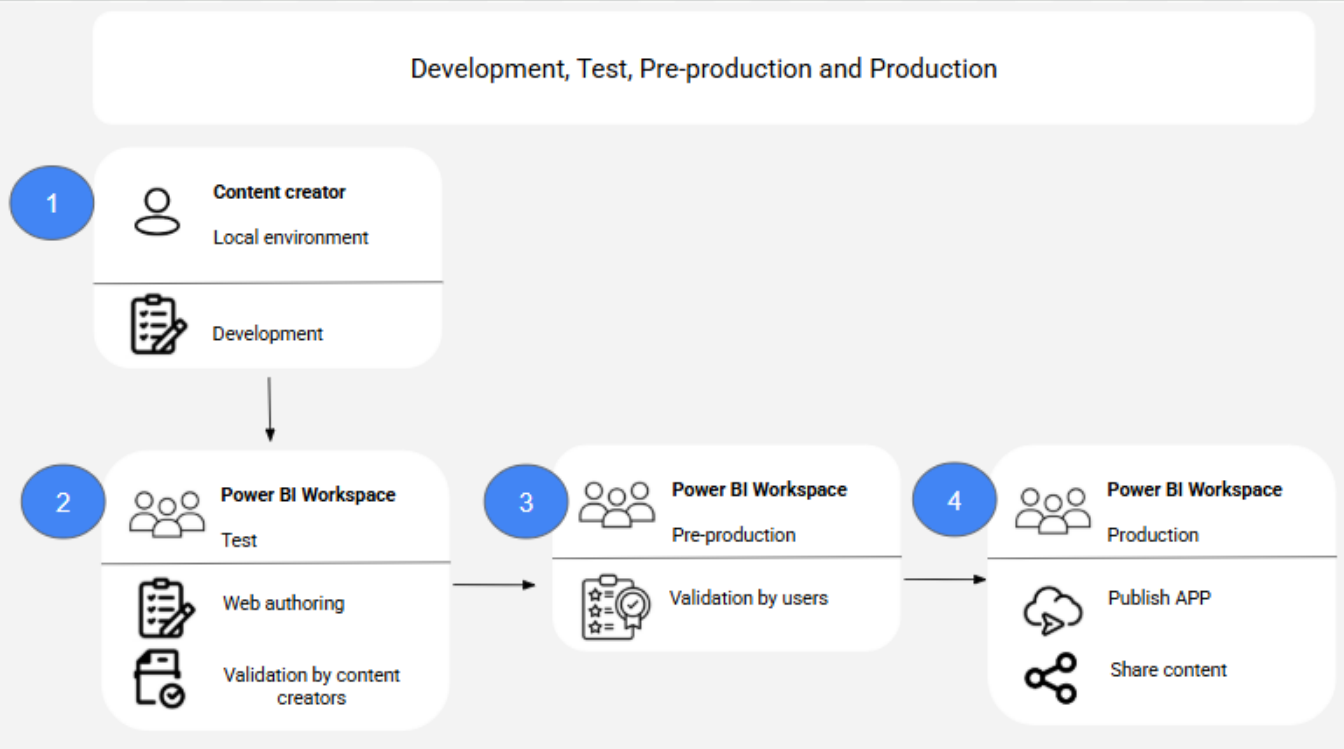
Reporting with security roles



2.5. Environment

In this scenario, content creators often collaborate in an additional, development workspace that contains the latest version of the solution.

The following diagram depicts a high-level example of how you might use separate environments with a development, test, and production workspace.

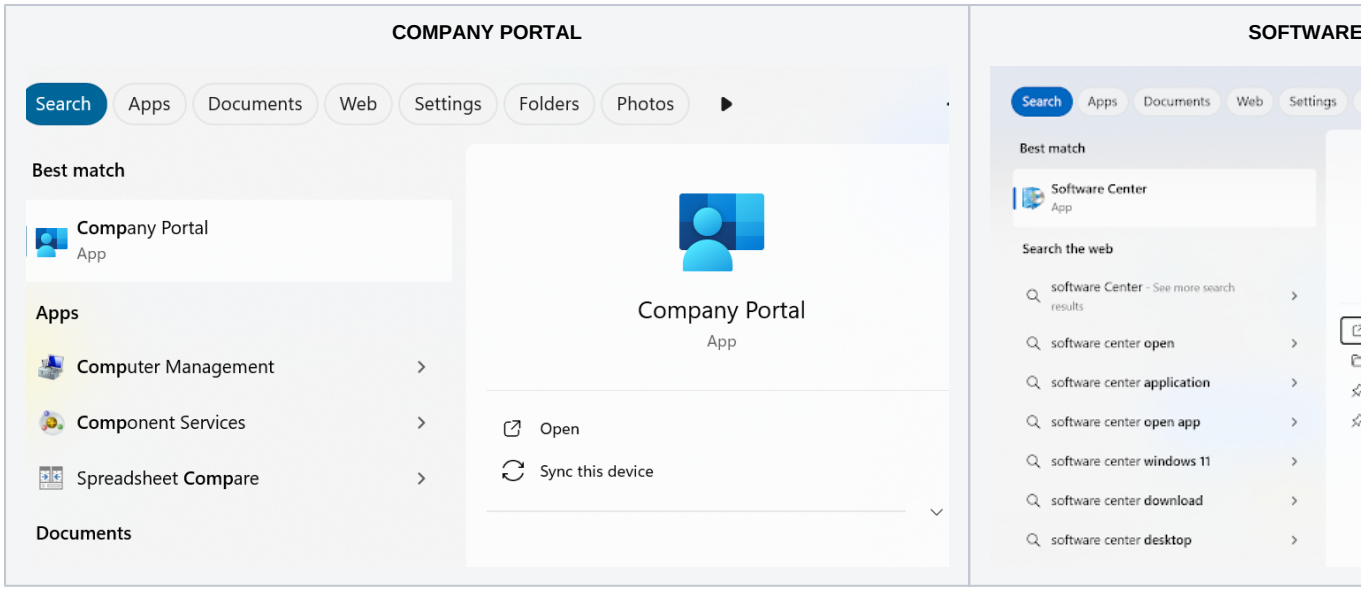


Item	Description
1	Content creators develop content in their local environment.
2	When ready, content creators publish content to a Test workspace. In this workspace, content creators can develop content that can only be produced with web authoring. Content creators can also validate content.
3	When ready, content creators deploy content to a Pre-production workspace. In this workspace, users validate content, either in the workspace or an app.
4	When ready, content creators deploy content to a Production workspace. In this workspace, content creators distribute content by publishing a Power BI app or sharing content from the workspace.

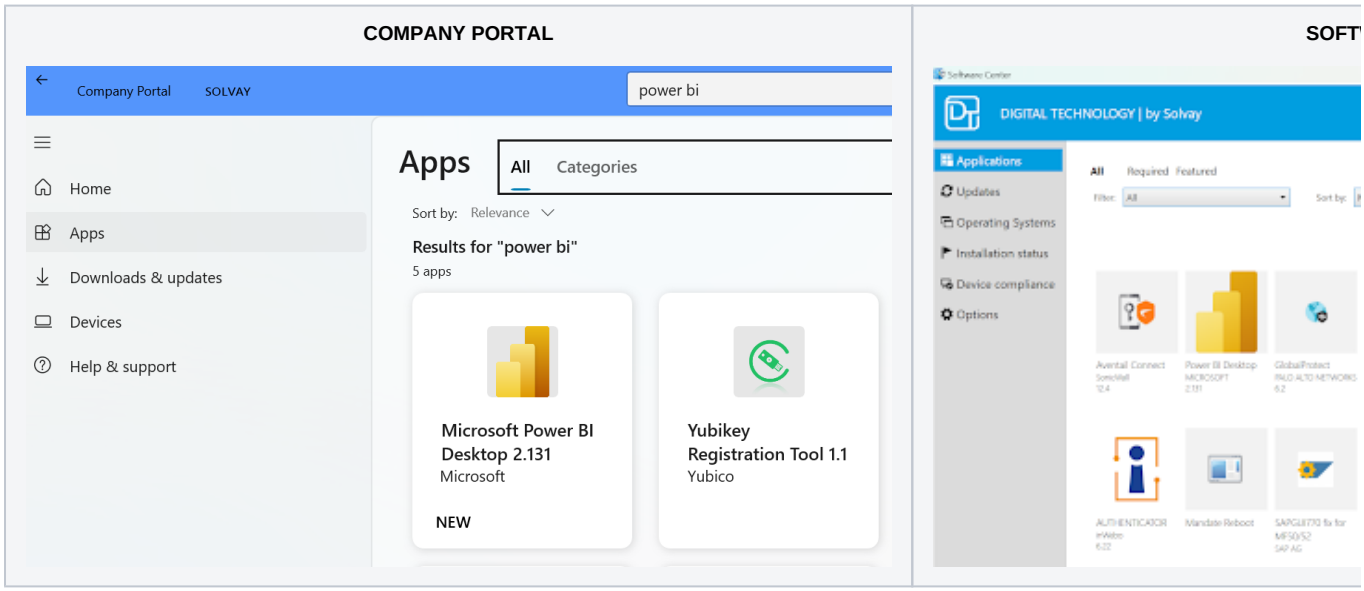
2.6. Power BI desktop installation

At now users will either have **Power BI** already installed on their desktops or will need to follow the instructions below to install it. First it depends if you have **Company Portal** or **Software Center** (starting June of 2025 users we will just have Company Portal).

- Go to search bar and write:



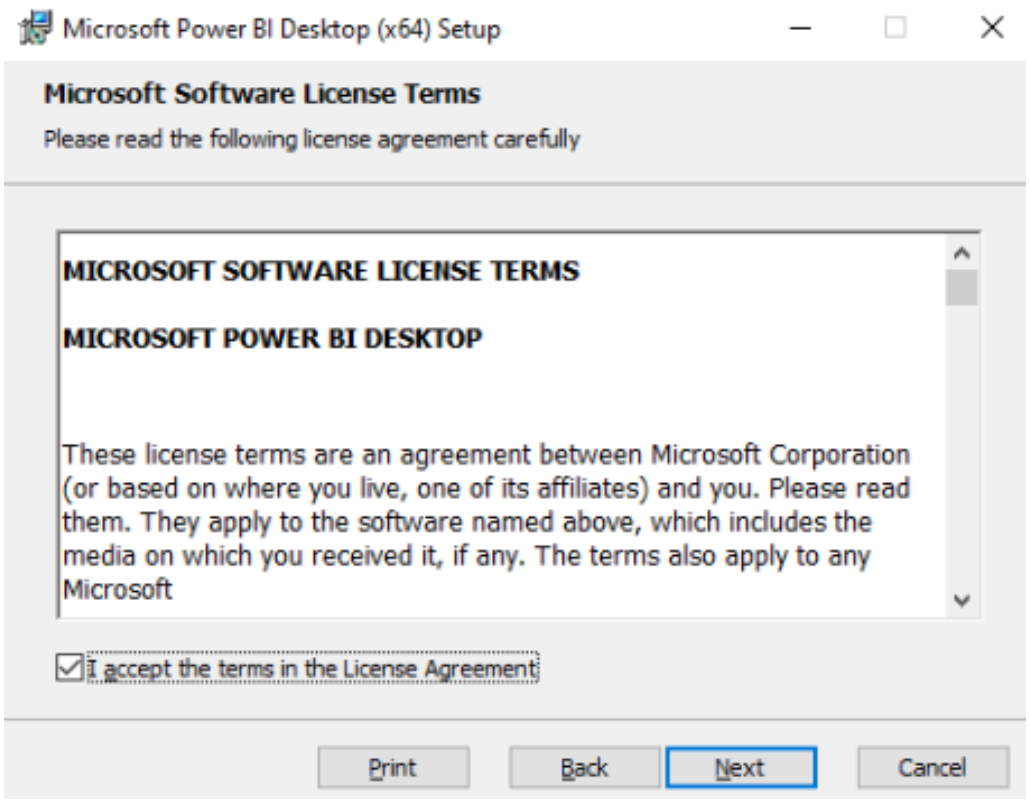
- Inside the **Company Portal/Software Center** search for **Power BI** and click to install.



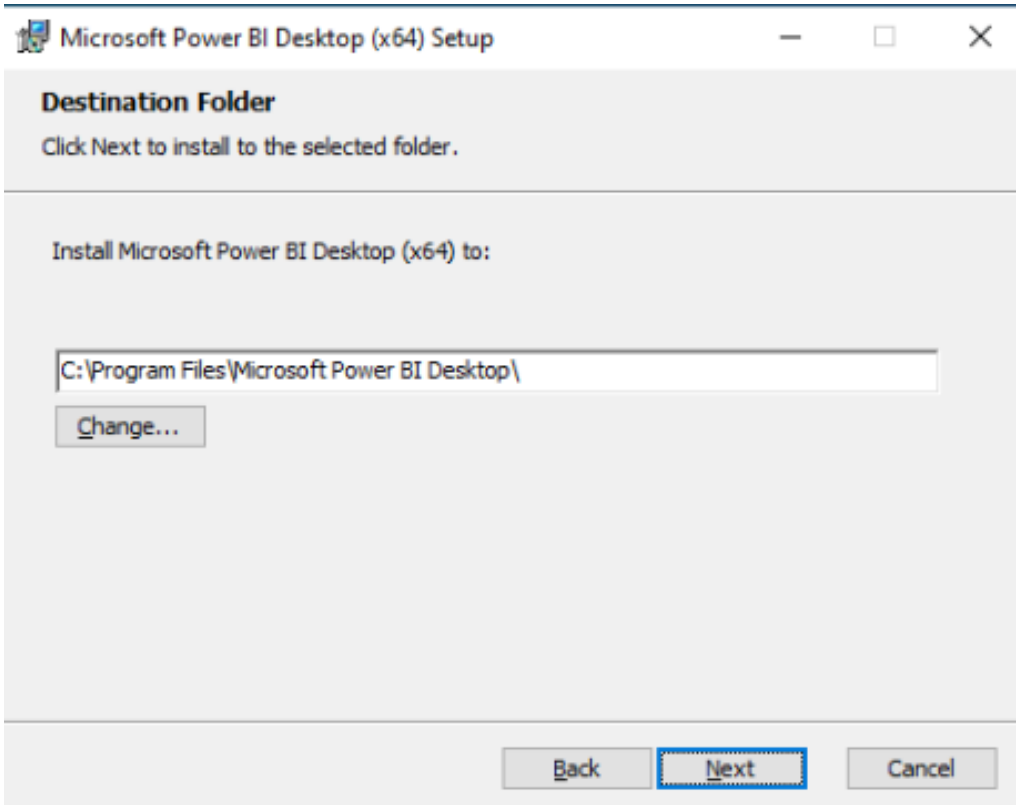
- Choose language and click **Next**

- Click **Next**

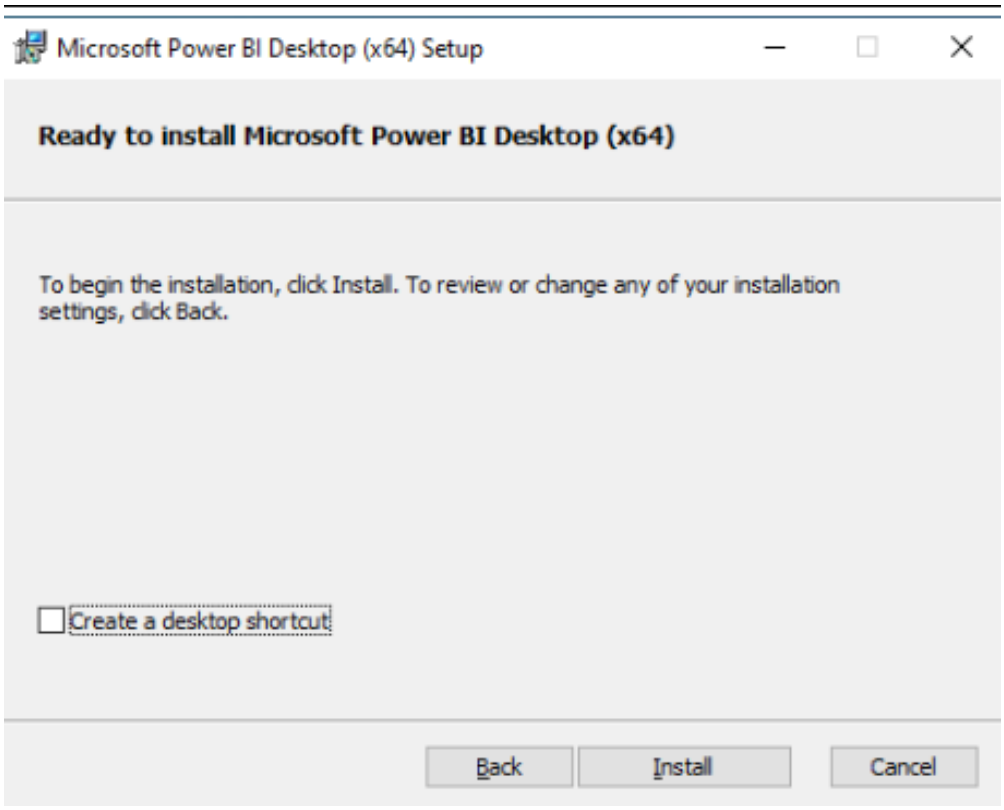
- Tick **I accept the terms in the License Agreement and** click **Next**



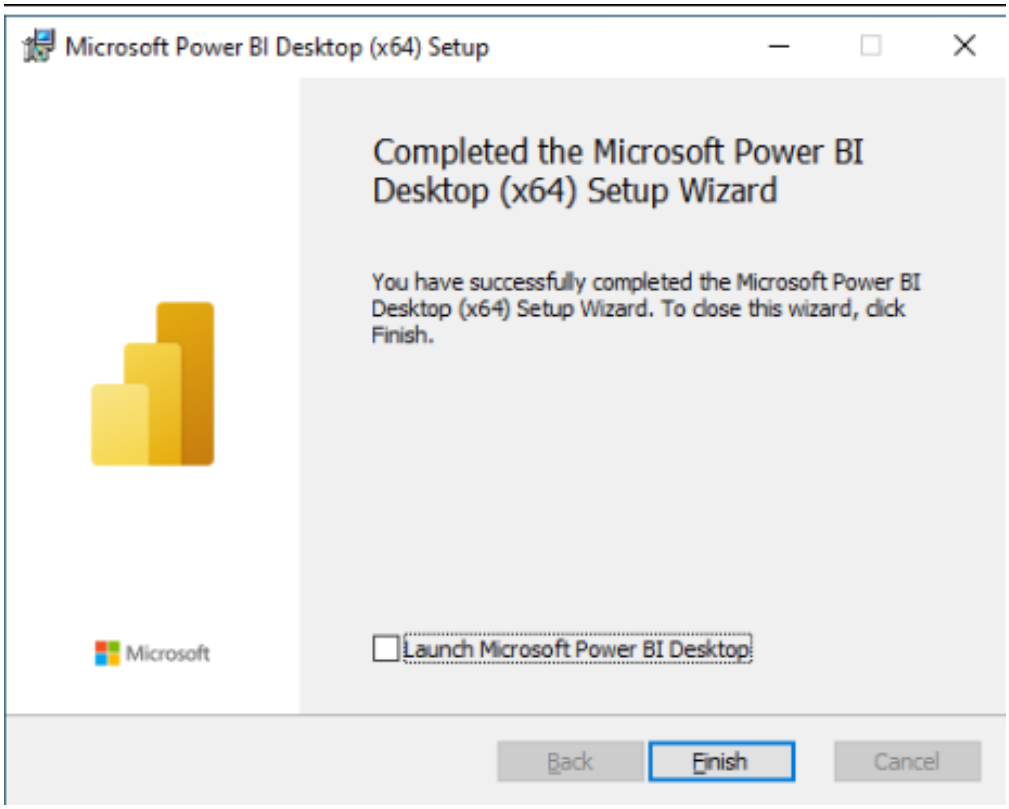
- Click **Next**



- Untick **Create a desktop shortcut and c**lick **Install**



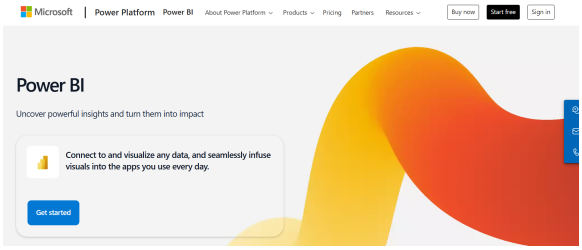
- Untick **Launch Microsoft Power BI Desktop and c**lick **Finish**



2.7. License request (Content Creator and Report Viewers)

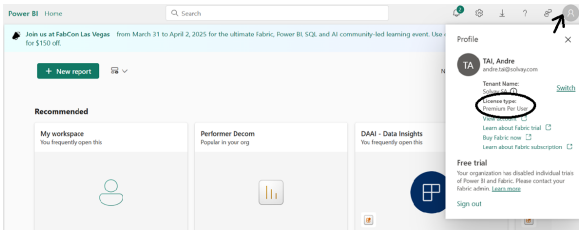
Before submitting a ticket for a Power BI license, please verify if you already have one.
To check:

- Visit Power BI's website.
- Click **Sign In**.
- Log in using your **SOLVAY credentials**.



If you select your profile after signing in, you can view the license type.

- If it says **Premium Per User**, then you already have a license.
- If not, you will need to submit a ticket



License request

If you require a Power BI license, please follow these steps to request one:

1. **Submit a Ticket**: Start by creating a ticket through Service One portal. Provide all necessary details, including your business need for the license.
2. **Data Visualization Team Review**: Once the ticket is submitted, it will be routed to Data Visualization (Data Viz) team. They will evaluate the need for the license based on the business context and confirm alignment with organizational standards.
3. **License Assignment**: Upon approval from the Data Viz team, the ticket will be forwarded to the **Entra ID/Office Automation Team**, who will assign the Power BI license to your account.

> **Recommendation**: We highly recommend Power BI training before using the tool to maximize your proficiency and effectiveness in creating impactful visualizations and reports. Training resources link are available here and can help you get started quickly and effectively.

2.8. New Workspace request

If you require a new Power BI workspace, please follow these steps to request one:

1. **Submit a Ticket**: Start by creating a ticket through Service One portal. Provide all necessary details, including your business need for theworkspace.
2. **Data Visualization Team Review**: Once the ticket is submitted, it will be routed to Data Visualization (Data Viz) team. They will evaluate the need for the new workspace based on the business context and confirm alignment with organizational standards.