

Power BI APP Registration - REST API

Pre-request:

- Azure AD setup should be complete.
- Save Tenant ID (Under Overview tab in Azure AD)

Step 1: App Registration

1. Sign into the Azure portal (portal.azure.com) using your Azure account.
2. Click on "Azure Active Directory" in the left-hand menu.
3. Select "App registrations" under the "Manage" section.
4. Click on the "New registration" button.
5. Provide a name for your app, such as "Tab2PBI".
6. Select the appropriate "Supported account types" based on your requirements (e.g., "Accounts in this organizational directory only" or "Accounts in any organizational directory").
7. In the "Redirect URI" section, select the appropriate URI based on your application's needs. For Power BI REST API calls, you can specify "Web" and provide a redirect URL.
8. Click on the "Register" button to create the app.
9. Once the registration is successful, you will be redirected to the app's overview page.
10. Note down the "Application (client) ID" value. This is your client ID that you will use to authenticate with the Power BI API.
11. Optionally, configure additional settings for your app, such as API permissions, authentication settings, etc.
12. To access the Power BI REST API, you will need to add the necessary API permissions to your app. Under the "API permissions" section, click on the "Add permission" button.
13. Select "Power BI Service" from the available APIs.
14. Choose the required permissions based on the actions you want to perform using the API (e.g., "Read all dashboards", "Read and write all datasets", etc.).
15. Click on the "Grant admin consent" button to grant the necessary permissions.
16. Your app is now registered, and you can use the client ID and necessary permissions to make REST API calls to the Power BI API.

Remember to securely store and manage your client ID and any other sensitive credentials associated with your app.

Step 2: Consent for the application to access the requested resource.

Note: Consent process should be completed by Azure AD tenant creator (Azure admin).

1. Get tenant_id:
 - a. Sign into the Azure portal (<https://portal.azure.com>) using your Power BI account credentials.
 - b. In the left-hand navigation pane, click on "Azure Active Directory".
 - c. In the Azure Active Directory blade, click on "Properties" under the "Manage" section.
 - d. On the Properties blade, you will find the "Directory ID" field, which represents the tenant ID for your Azure AD. Note: The tenant ID for Power BI REST API is the same as your Azure AD tenant ID.
2. Get client id:
 - a. Navigate to "App registrations" under the "Manage" section.
 - b. Select the Register application.
 - c. Copy client_id / application_id.
3. Get redirect URI:

- a. Navigate to "App registrations" under the "Manage" section.
 - b. Select the Register application.
 - c. Navigate to "Details" tab.
 - d. Scroll down to the "Web" section, where you will find the "Redirect URLs" field.
 - e. The value displayed in the "Redirect URLs" field is the redirect URI for your Power App.
4. Construct an authorization URL by replacing tenant_id, client_id and redirect_uri in below url:

`https://login.microsoftonline.com/{tenant_id}/oauth2/authorize?client_id={client_id}&response_type=code&redirect_uri={redirect_uri}&response_mode=query&resource=https://analysis.windows.net/powerbi/api&prompt=consent`

5. Copy paste URL in browser and proceed with Microsoft authentication proceed.
6. Validate Rest API access and approve the request.

Step 3: Create Client Secret and copy display name.

1. Navigate to "App registrations" under the "Manage" section.
2. Select the Register application.
3. Navigate to "Certificates & secrets" under the "Manage" section.
4. Click "New client secret" and enter a description.
5. Save the client secret.
6. Navigate to "Overview" under "Manage" section.
7. Save Display name.