



Security & Surveillance

Power BI Deployment - Version 1.1.0

May 2018



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1. About this Guide

This guide is an admin guide for Security & Surveillance solution provided by Mobiliya. This will walk the user through usage instructions required for deploying Power BI report.

2. Intended Audience

This guide is intended for admin responsible for deploying Power BI.

3. Pre-requisites

- i. Credentials for signing in to <https://app.powerbi.com>
- ii. Power BI Desktop (May 2018 Version)
- iii. Power BI Template files.

4. Setup

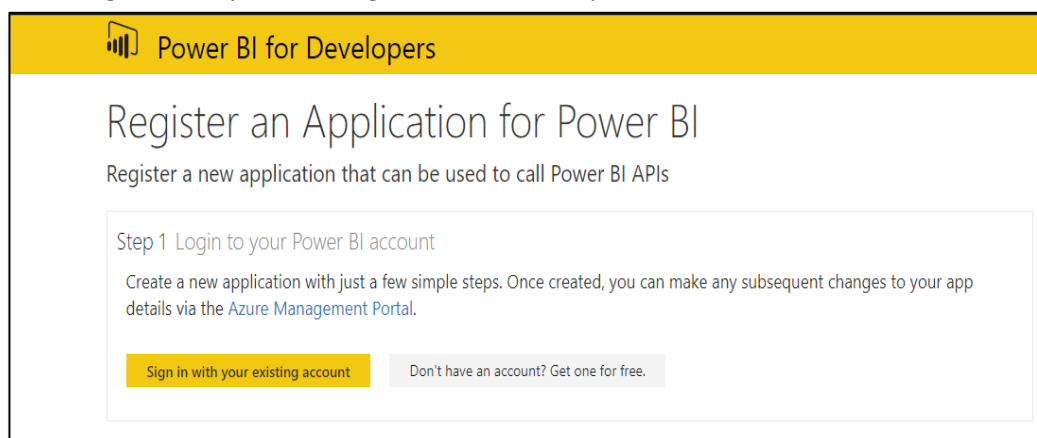
a. Software Setup

1. Power BI Desktop should be installed.

5. Register with the Power BI App Registration Tool

You need to register your web application in Azure Active Directory to establish an identity for your application and specify permissions to Power BI REST resources. Following are the steps to register the application:

- a. Go to <https://dev.powerbi.com/apps>
- b. Select Sign in with your existing account and use your Power BI Credentials



- c. Provide an App Name

Step 2 Tell us about your app

Let's start with some basic details.

App Name:

- d. Choose app type as Server-side Web app

App Type:

Specify the type of app. Use 'Server-side Web app' for web apps

- e. Enter Redirect URL. Example: <http://localhost:13526/>

Redirect URL:

A URL within your web application

- f. Enter HomePage URL. Example: <https://powerbiapp.contoso.com>

Home Page URL:

The URL for the home page of your application.

- g. Choose all the APIs and select Register App

Step 3 Choose APIs to access

Select the APIs and the level of access your app needs.

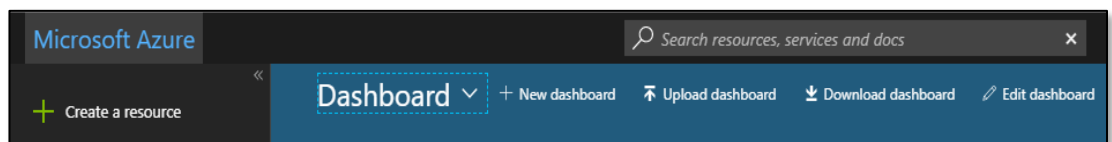
Dataset APIs	Report and Dashboard APIs	Other APIs
<input checked="" type="checkbox"/> Read All Datasets	<input checked="" type="checkbox"/> Read All Dashboards	<input checked="" type="checkbox"/> Read All Groups
<input checked="" type="checkbox"/> Read and Write All Datasets	<input checked="" type="checkbox"/> Read All Reports	<input checked="" type="checkbox"/> Create Content
	<input checked="" type="checkbox"/> Read and Write All Reports	

- h. Keep the generated Client ID and Client Secret safe as it is required in further steps.

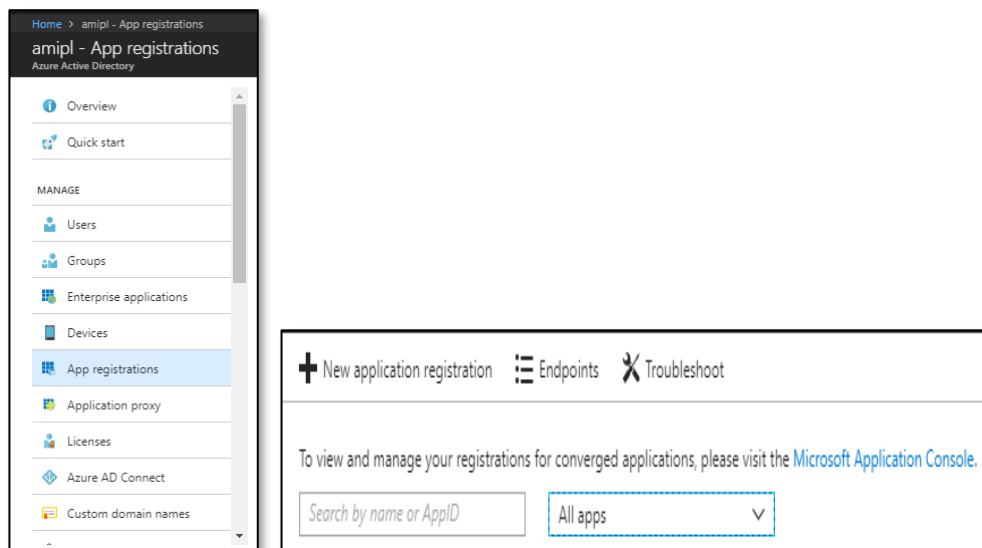
Client ID:
469875f6-e410-4181-8fcd-77bb1f261783
Client Secret:
vnGJT9lr4c0JkExLKssUbpPWXIoJyxi1souZxW5B0sM=

6. Apply Permissions to your application within Azure AD

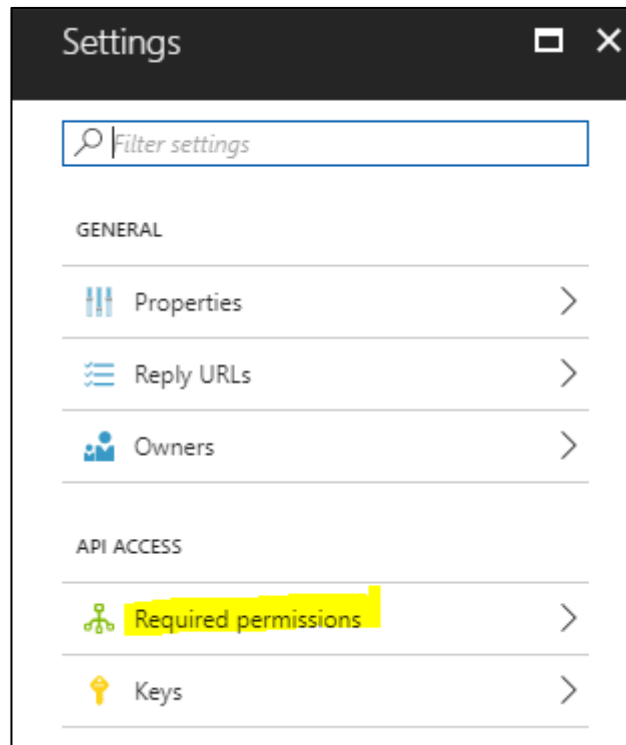
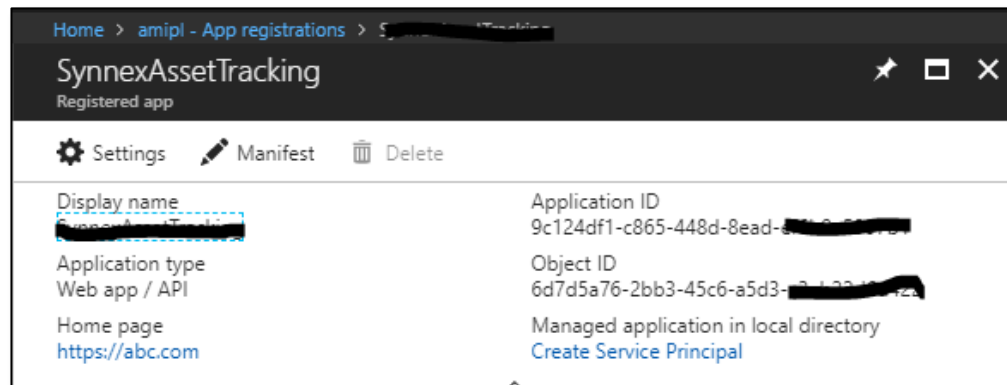
- a. Go to <https://portal.azure.com> and sign in with same credentials used to register the web app in previous step.



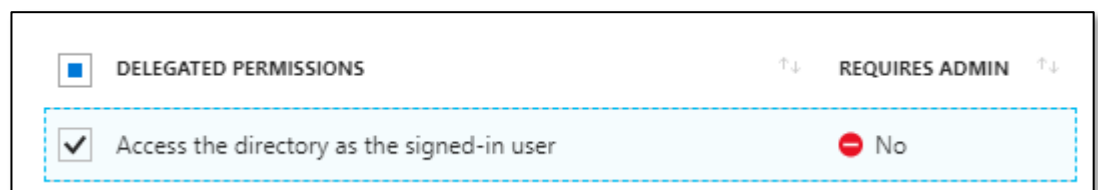
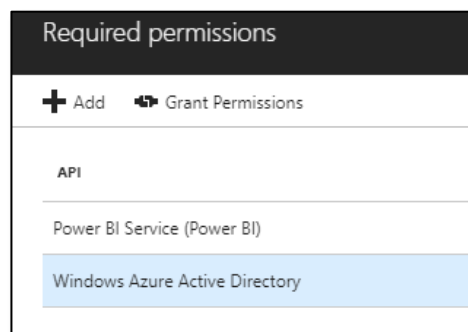
- b. On the left side panel, scroll down and look for **Azure Active Directory**
- c. Click to open it and browse to **App registrations**, choose **All Apps** and search for the app created in Step 5.



- d. Select the App, click on **Settings** and click on **Required Permissions** under **API Access**.



- e. Select **Windows Azure Active Directory** and then make sure **Access the directory as the signed-in user** is selected. Select **Save**.



- f. Within **Required permissions**, select **Power BI Service (Power BI)**.

Required permissions

+ Add
Grant Permissions

API

Power BI Service (Power BI)

- g. Select all permissions under **Delegated Permissions**. Select **Save** when done.

<input checked="" type="checkbox"/>	DELEGATED PERMISSIONS	↑↓	REQUIRES ADMIN	↑↓
<input checked="" type="checkbox"/>	View all datapools		<input type="radio"/> No	
<input checked="" type="checkbox"/>	Read and write all datapools		<input type="radio"/> No	
<input checked="" type="checkbox"/>	Read and Write all Reports		<input type="radio"/> No	
<input checked="" type="checkbox"/>	View users Groups		<input type="radio"/> No	
<input checked="" type="checkbox"/>	View all Groups		<input type="radio"/> No	
<input checked="" type="checkbox"/>	View all Reports (preview)		<input type="radio"/> No	
<input checked="" type="checkbox"/>	Create content (preview)		<input type="radio"/> No	
<input checked="" type="checkbox"/>	View content properties (preview)		<input type="radio"/> No	

- h. Within **Required permissions**, select **Grant Permissions**.

Required permissions

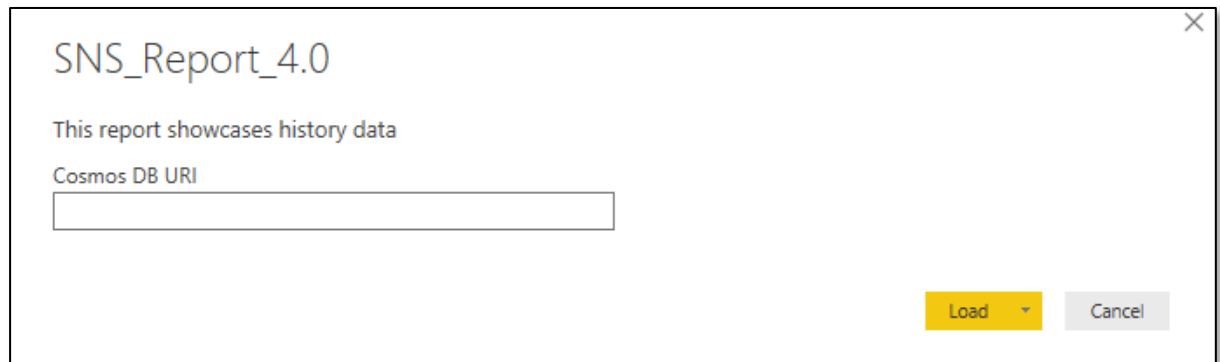
+ Add
Grant Permissions

7. Publish Power BI Reports

- a. Download and open the Power BI template files from the GIT repository and follow all the steps below for each template file.

<https://github.com/MobiliyaTechnologies/SnSPowerBI/blob/master/Templates/>

- b. Enter Cosmos DB URI to connect back-end with the report.



SNS_Report_4.0

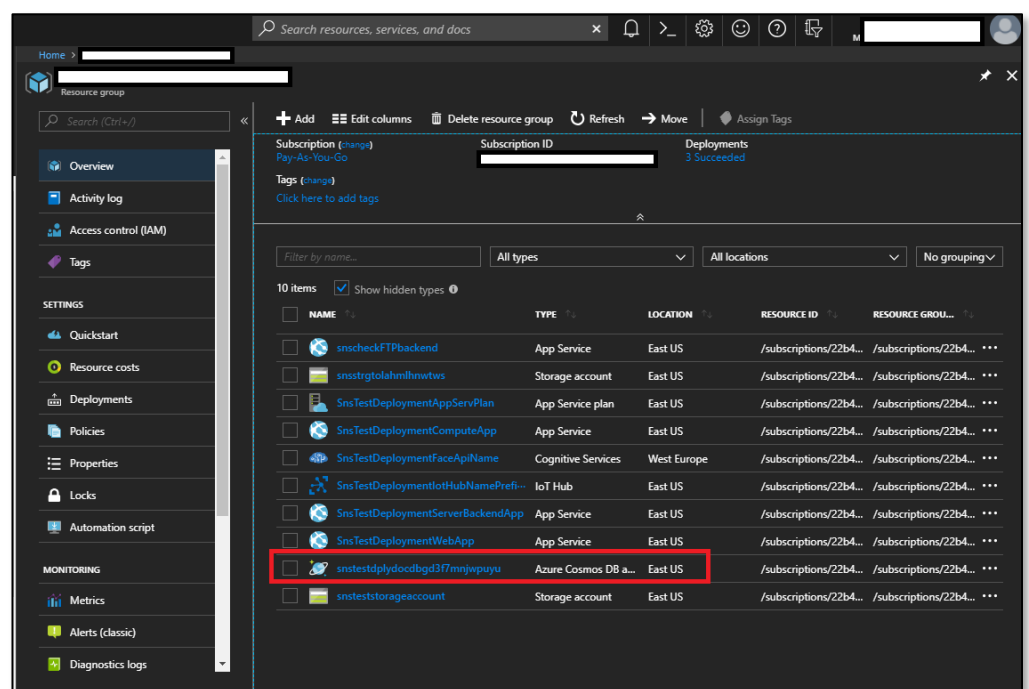
This report showcases history data

Cosmos DB URI

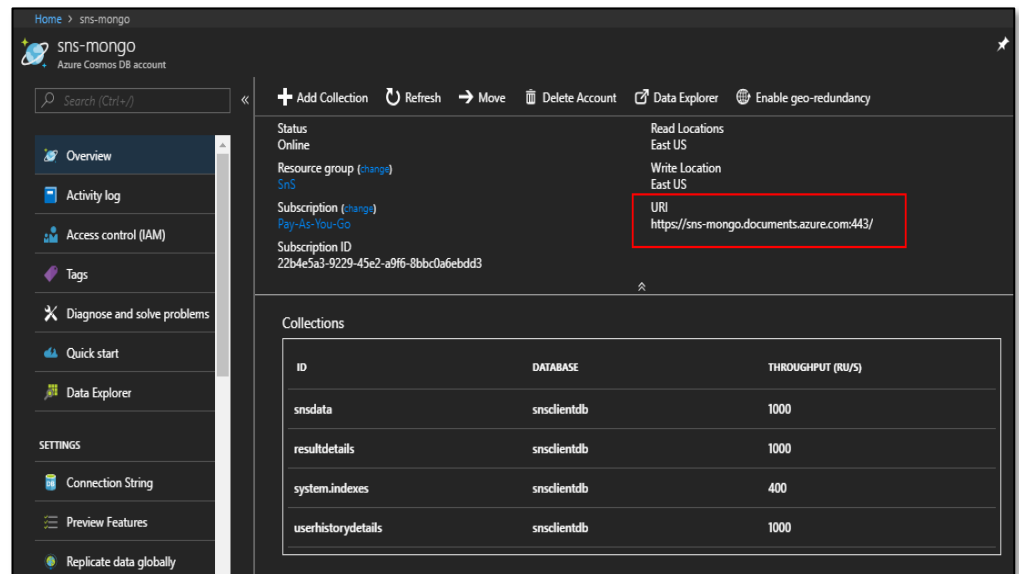
Load Cancel

- c. To get the above details, login to <https://portal.azure.com> and follow below steps:

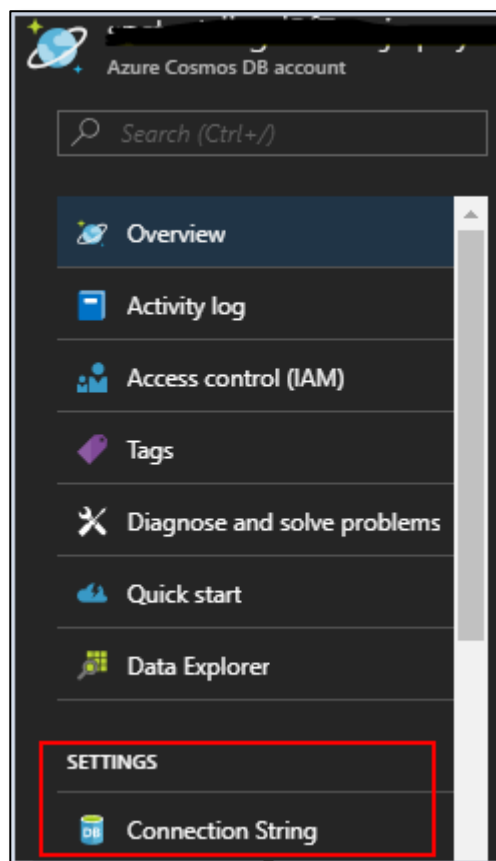
- i. Select your Resource group.
- ii. Select the Cosmos DB created during backend deployment.



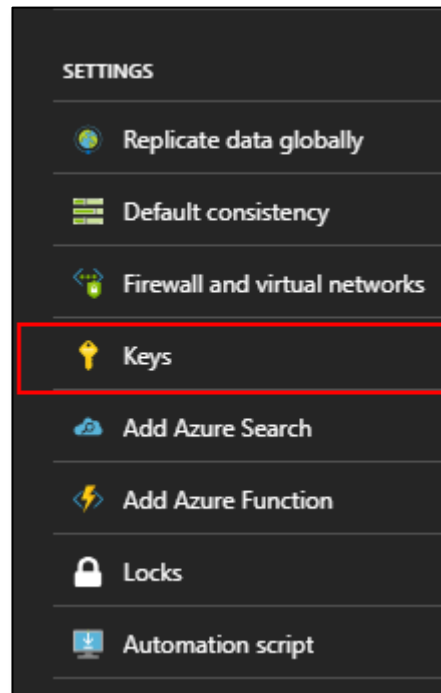
- iii. Locate the URI as highlighted below and paste the same in the Power BI Template file.



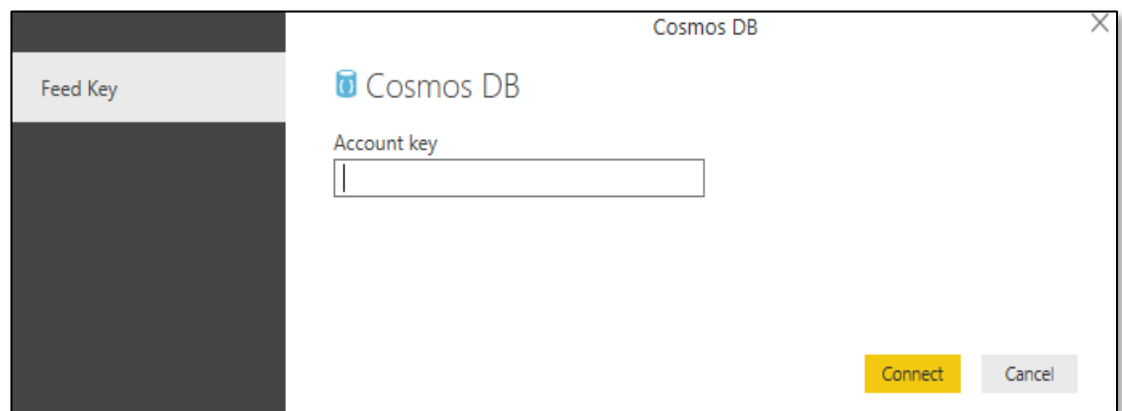
- d. Go back to the browser window and under Settings, click on **Connection String** and note down the **Primary Password**.



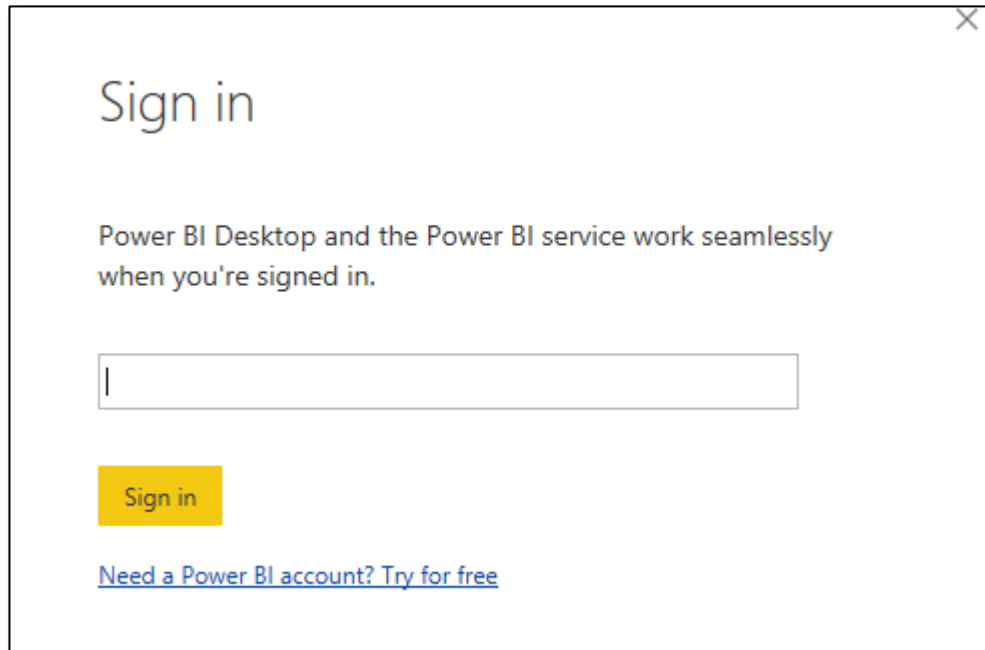
- e. If the above option is not found then click on **Keys** and note down the **Primary Key**



- f. Go to Power BI Desktop screen and Click on **Load** and You will be prompted for **Account Key** of **Cosmos DB**, enter the key noted down in the last step and click on **Connect**.



- g. After the data has loaded successfully, click on File > Save and give any name to the file.
- h. Now click on **Publish**. You will be prompted to enter the Power BI account credentials. Enter the same and choose a workspace where you want the report to be. Default is **My Workspace** if you have not created any.



8. Retrieve Report ID of the published report

- Go to <https://app.powerbi.com> and sign in using your credentials.
- Click on My Workspace and go to Reports section and open the report which was published in Step 7.
- If you have published report in some other workspace then click on Workspaces > "Your Workspace Name" > Reports and then open the report.
- Note down the Report ID shown in the browser URL window. Report ID starts after **../reports/** and before **/ReportSection**

<https://app.powerbi.com/groups/me/reports/19fea1c9-a304-4ba9-9491-8acff5097794/ReportSection>

- If you have published report in some other workspace, then Note down the Group ID also as shown below. Group ID starts after **../groups/** and before **/reports**

<https://app.powerbi.com/groups/bbd866ae-025c-4259-b797-b9bae52b1b27/reports/143207a3-8fb0-4cd7-86d1-d4e5c2655d21/ReportSection>

- f. Final URL which is used to **embed** the report has the following structure:

If report is in My Workspace:

<https://app.powerbi.com/reportEmbed?reportId=<Your Report ID>>

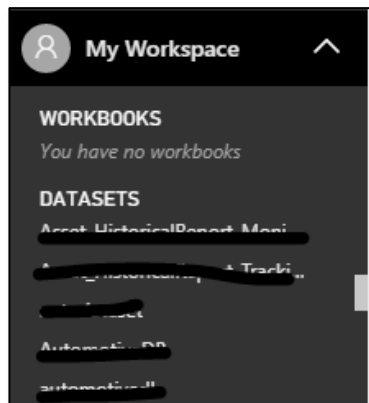
If report is in other workspace:

<https://app.powerbi.com/reportEmbed?reportId=<Your Report ID>&groupId=<Your Group ID>>

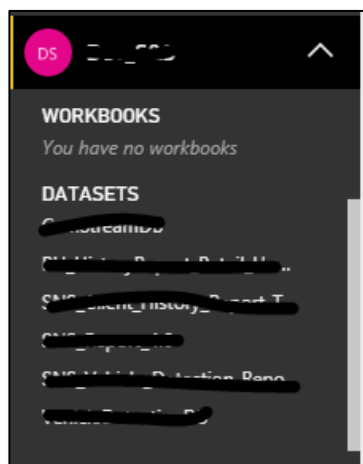
9. Schedule Refresh

To get to the schedule refresh screen, you can do the following.

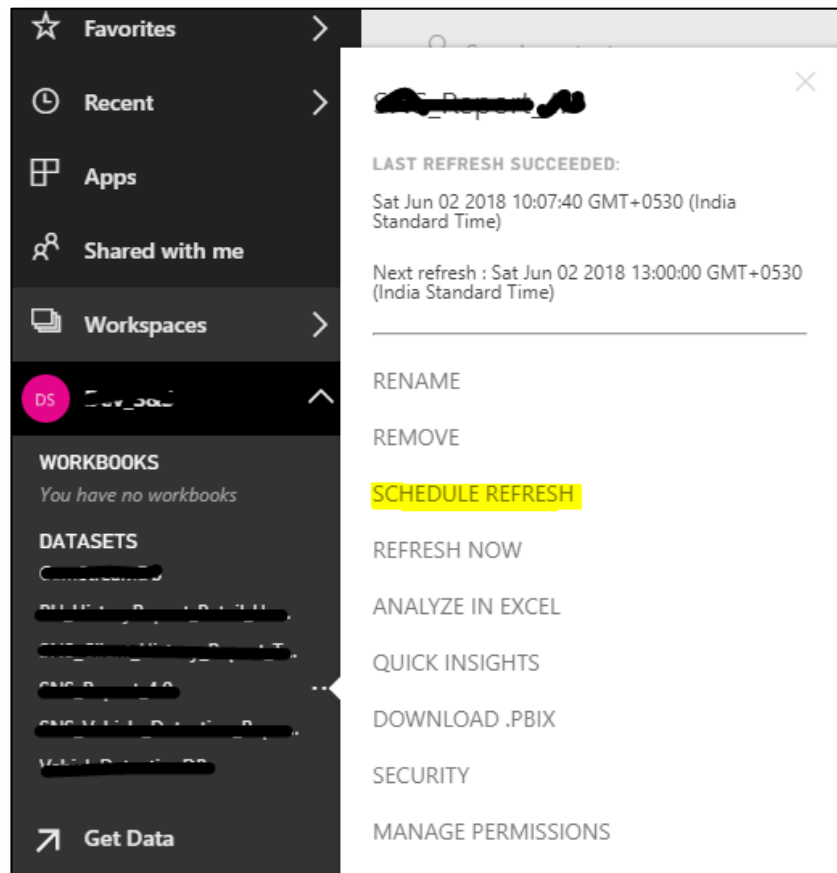
- Log in to <https://app.powerbi.com>
- On the left side panel Click on My Workspace drop-down and scroll down to find your report name under Datasets.



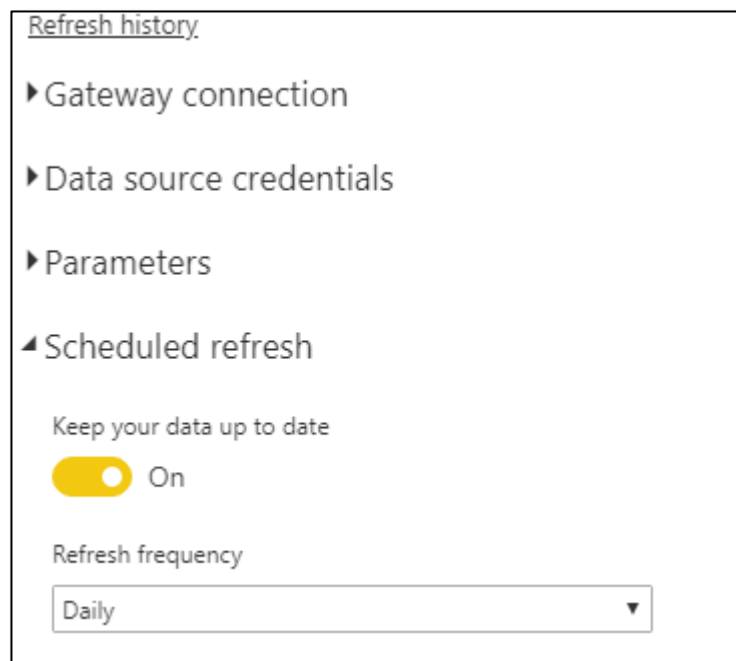
- If you have published report in some other workspace then click on Workspaces > "Your Workspace Name" > drop-down and scroll down to find your report name under Datasets.



- d. Select the ellipsis (...) next to a dataset listed under **DATASETS**.
- e. Select Schedule Refresh.



- f. Click on Scheduled Refresh and turn it on.



- g. Choose the schedule as per the requirement. You can click on **Add Another Time** to specify at what time you want the refresh to trigger.
- h. Click on **Apply** when you have set the refresh time or schedule.

Note: Only 8 refreshes are allowed for Power BI Pro License.