**POC on how to showcase already created dashboards in power bi on UI page:**

1. **Tools required :**

-Power Bi Embedded service

-Power Bi Api

1. **Ways to publish:**

* **First way:**

- Publish dashboard from power bi desktop to power bi service.

- After than on going to dashboard we can share the dashboards on email and provide the access.

- Shareable links and embed codes can also be generated for embedding dashboards in website and application.

* **Second way:**

**- Dashboards can be directly embedded into website and application using power bi embedded or power bi api:**

- **Power bi embedded :** This service allows us to integrate power bi reports and dashboards into custom applications (need to use power bi embedded API and embedded codes to dynamically load and display dashboards.

- **Power bi API :** This pro grammatically create and manage dashboard and datasets within your application.

- **Custom UI with APIs :** We can use power bi rest APIs to create custom UI that interacts with power bi content.

**Steps to use Power BI Embedded to showcase dashboards in custom UI :**

1. **Azure Subscription is required to manage resources and costs .**
2. **Create an application in azure :**

Need to create an azure ad application in azure portal to serve as bridge between your application and power bi:

->go to azure portal

->create a new azure ad application in azure active directory section.

->application id (client id) and generate client secret in order to authenticate application with power bi service.

1. **Setup workspace and publish reports :**

Create or publish dashboards in order to showcase using power bi embedded (need power bi pro license to publish reports to power bi service).

1. **Create power bi workspace collection:**

In azure portal create power bi workspace collection (container for power bi assets(reports,dashboards,datasets) that needs to be embedded.

1. **Embedding power bi content:**

->Need power bi embedded API to embed the power bi content in your custom UI.

->Several libraries and SDKs available for different programming language - JavaScript or .net sdk.

1. **Authentication and embed token:**

When embedding power bi content you will need generate embed token for each user in order to authenticate users and provide access to specific content(for token need to use azure ad application’s credentials to acquire these tokens ).

Once the embedding code setup integrate in custom UI where you want to showcase power bi dashboards .

**Another methods:**

**Using power bi rest API(provide service endpoints for embedding, administration, governance and user resources.)**

**Get dashboard API:** Return the specific dashboard from my workspace.

GET <https://api.powerbi.com/v1.0/myorg/dashboards/{dashboardId}>

<https://learn.microsoft.com/en-us/rest/api/power-bi/dashboards/get-dashboard-in-group>

This will include dashboard id which we can get by publishing the report on power bi service.

In order to use power bi rest API we need to register an azure active directory application in azure .The azure AD app establishes permission for power bi rest resources and allow access to power bi rest api’s.

In order to showcase the dashboards on UI api’s that can be used are:

1. Power BI java script API
2. Power BI REST API

**Power bi publish to web:**

* Open dashboard
* Click on file menu in desktop application.
* Choose publish to web option
* Power bi generate embed code for dashboard , copy that embed code to your clipboard.
* Paste the embedded code into HTML of your UI in <i frame>

**Embedded dashboard:**

<https://learn.microsoft.com/en-us/javascript/api/overview/powerbi/embed-dashboard>

<https://learn.microsoft.com/en-us/power-bi/developer/embedded/embed-sample-for-your-organization?tabs=react>

**Get dashboard power bi rest api:**

<https://learn.microsoft.com/en-us/rest/api/power-bi/dashboards/get-dashboard#code-try-0>

<https://learn.microsoft.com/en-us/rest/api/power-bi/>

**Embed dashboard in react application:**

<https://community.fabric.microsoft.com/t5/Desktop/how-to-display-individual-tile-visual-from-Power-BI-into-a-react/td-p/3125119>