**Current Data calls made from UI side**

We make below 3 data calls in sequence, which are dependent on each other

**1. Notify that we are exporting to powerBI**

**Api call -** `https://api.powerbi.com/v1.0/myorg/groups/${this.props.groupId}/reports/${reportId}/ExportTo`,

**Method** – POST

**Headers** - {

'Content-type': 'application/json',

Authorization: Access\_token

},

**payload** : {

format: “PDF” / “PPT”

powerBIReportConfiguration: {

settings: {

includeHiddenPages: true

}

},

Retry:false

}

**Response received :**

{

@odata.context: "http://wabi-us-north-central-f-primary- redirect.analysis.windows.net/v1.0/myorg/groups/18dae83f-a44c-4166-bd62-18262c08797c/$metadata#exports/$entity"

createdDateTime: "2021-05-10T04:44:00.9394621Z"

expirationTime: "0001-01-01T00:00:00Z"

id: "MS9CbG9iSWRWMi03ZjVhMzlhZC1lYjY2LTRiM2MtOGJjMS1kMWFhMGQwOWEyMjktTDBhRWN1WXRNMlVVdi5EMmNYMkpsbkNmOW1lenJpZ2R5U3RoT0N5Lg=="

lastActionDateTime: "2021-05-10T04:44:00.9394621Z"

percentComplete: 0

reportId: "8001691e-d400-43f0-86ac-1e5c9f6dc9d7"

status: "NotStarted"

}

**Use the "id" value in above response as "exportId" in below data call**

**2. To get download percentage or download tracker**

**Api call -** `https://api.powerbi.com/v1.0/myorg/groups/${groupId}/reports/${reportId}/exports/${exportId}`,

**Headers** {

'Content-type': 'application/json',

Authorization: Access\_token

},

**Method** - GET

**Response received** : {

@odata.context: "http://wabi-us-north-central-f-primary-redirect.analysis.windows.net/v1.0/myorg/groups/18dae83f-a44c-4166-bd62-18262c08797c/$metadata#exports/$entity"

createdDateTime: "2021-05-10T04:44:00.9394621Z"

expirationTime: "0001-01-01T00:00:00Z"

id: "MS9CbG9iSWRWMi03ZjVhMzlhZC1lYjY2LTRiM2MtOGJjMS1kMWFhMGQwOWEyMjktTDBhRWN1WXRNMlVVdi5EMmNYMkpsbkNmOW1lenJpZ2R5U3RoT0N5Lg=="

lastActionDateTime: "2021-05-10T04:44:01.1968235Z"

percentComplete: 0

reportId: "8001691e-d400-43f0-86ac-1e5c9f6dc9d7"

reportName: "ROI & Free Cash Flow V2.0"

status: "Running"

}

* **The above call is made recursively for every 30 seconds until ,the status in above response changes to "Succeeded" and percentageComplete is 100.**
* **Use the reportName from above data call for 3rd data call mentioned below**
* **Also Use the "id" value from the response of export data call(1st data call) as "exportId" in below data call**

**3. fetch the PowerBi report**

**Api call -** `https://api.powerbi.com/v1.0/myorg/groups/${groupId}/reports/${reportId}/exports/${exportId}/file`,

**Headers** {

'Content-type': 'application/json',

Authorization: Access\_token

},

**Method** - GET

responseType: 'blob',

**Response received - information will be in blob type, which will be converted to file format (either PDF or PPT) at client side.**

**Design** : Use Scheduler Service to update cache periodically with all reports and Expose API endpoint to get the reports from cache



1.Run a scheduler service periodically which will do below set of actions

* Get all reports from DB (from view irpc.vw\_report\_details)
* From each report, get the reportId , groupId . Using this 2 data information, fire the 3 powerBI sequential requests .
* Copy the PowerBI report response from above PowerBI data call, and update the cache for the corresponding report.
* Now Reports response can be directly downloaded from the prefetched cache instead of firing 3 PowerBI data calls everytime from UI

2. Expose an Rest Endpoint , when fired from UI or PostMan, will directly fetch the powerBI response for the corresponding report and copy the response into requested format file (PDF/PPT) and download the same.

**Cache Structure .**

Cache will be having 3 columns

ReportId - Unique ReportId of the each report acting as primary key

PDF\_Response – PDF response for the report

PPT\_Response – PPT response for the report

**Constraints/Limitations on PowerBI**

1. After downloading 3 or 4 reports , then I am getting error from PowerBI like

{"error":{"code":"ActivityLimitReached","message":"You have too many pending requests to make another right now. Please wait."}}

We are also getting other errors from PowerBi sometimes like, mentioned below

1. InvalidRequest, Report requested for export is not on dedicated capacity
2. {"Message":"An error has occurred."} // Unknown
3. {"error":{"code":"InvalidRequest","message":"Export report requires effective identity to be provided for the report's dataset"}} -> Resolvable

**Open Questions**

1. Are there any security constraints if we store reportId in cache?