DIAD Power BI Service Demo Instructions

Prerequisites

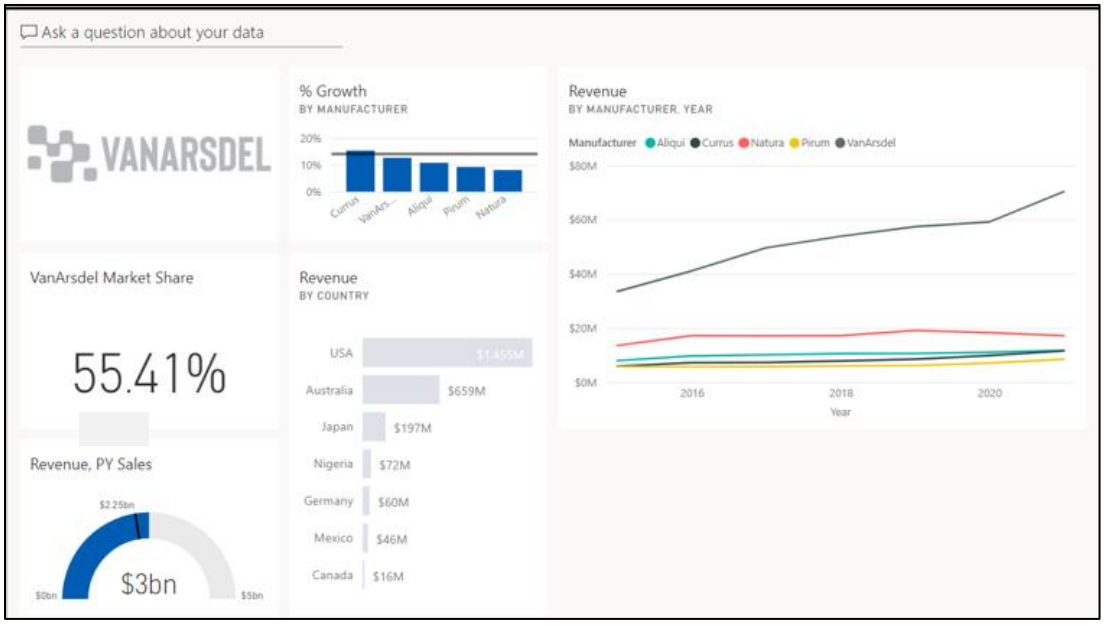
The following prerequisites and setup must be done for successful completion of this demonstration:

- You must be connected to the internet.
- Download a copy of the demonstration assets to your local computer.
- Sign up for https://app.powerbi.com.
- Create the **DIAD** workspace.
- Follow lab instructions to create **VanArsdel** dashboard in **DIAD** workspace.
- Publish the **DIAD Final Report with RLS.pbix**. This will be used to demonstrate row-level security.
- Install the data gateway.
- Install Microsoft Teams

Power BI Service

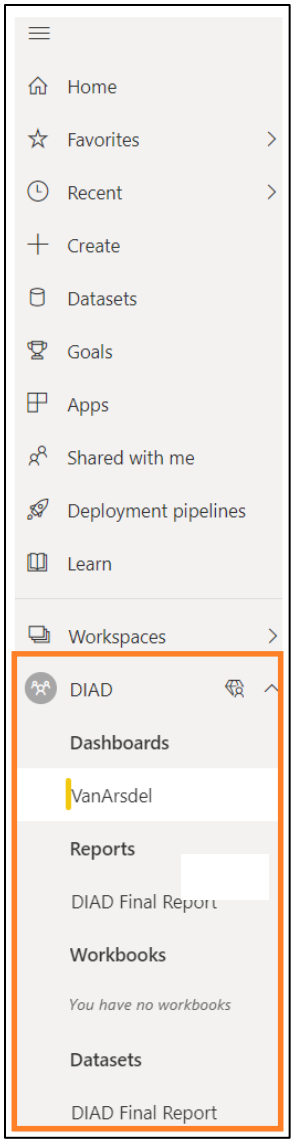
First, you can walk through the Power BI Service layout. Your Power BI service workspace is made up of the following components:

1. Navigation pane (left nav)
2. Office 365 app launcher
3. Power BI home button
4. Icon buttons, including settings, help, and feedback
5. Search box
6. Tiles from a favorite dashboard
7. Favorite and frequent dashboards and reports



Talk about the ability to publish the report to Power BI Service.

1. Navigate the https://app.powerbi.com site in your browser.
2. Talk about the three main sections of Power BI Service.
   - Dashboards
   - Reports
   - Datasets

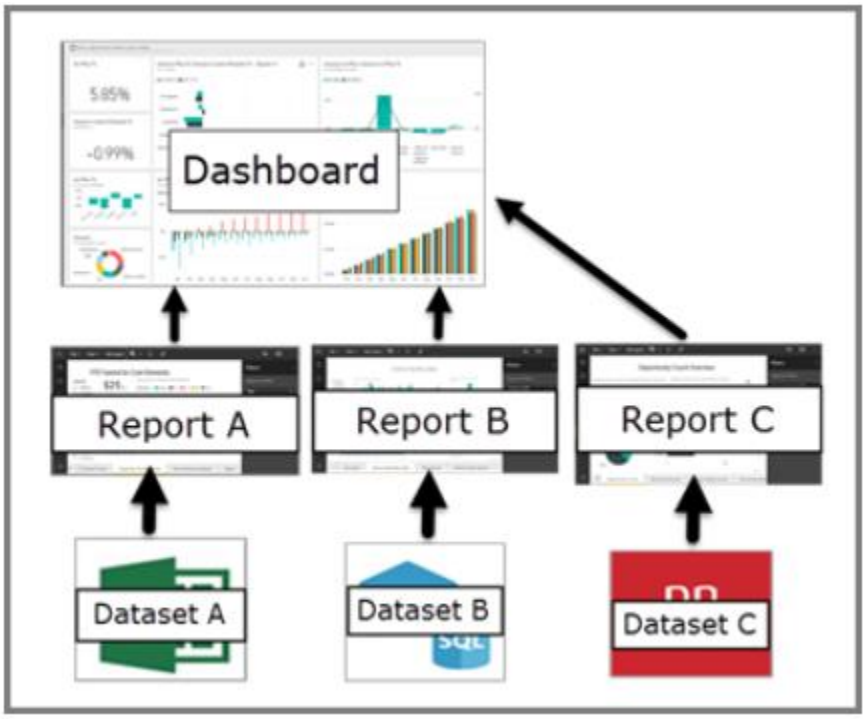


Power BI Service – Dashboards

Now, talk about dashboards and cover the following points:

- Dashboards provide information that is most important to the business.
- In the **navigation** pane, your dashboards are listed under the Dashboards heading.
- Each listed dashboard represents a customized view of a subset of the underlying datasets.
- A Dashboard is a collection of tiles that are pinned from **Reports** by hovering your mouse over the desired chart and clicking the **Push Pin** icon.
- Each tile displays a single visualization that is created from the data in one of the underlying datasets.
- To permanently pin a tile to a dashboard, the user must be the report owner.
- Dashboards are not interactive in the same way the reports are, they cannot be filtered.
- When you click a tile, it links back to the report page where the chart resides.
- Each tile in a dashboard can link to a different report. Each report connects to a specific dataset. Hence, a dashboard can be a collection of tiles from multiple datasets.

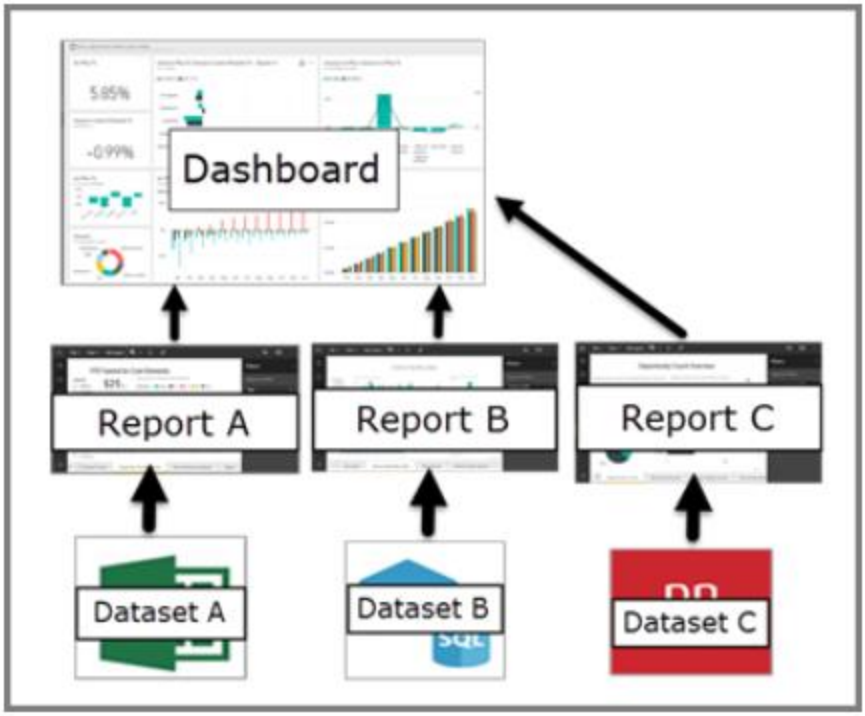
- Tiles in a dashboard can be resized and rearranged



Power BI Service – Reports

Discuss Power BI Service Reports as follows:

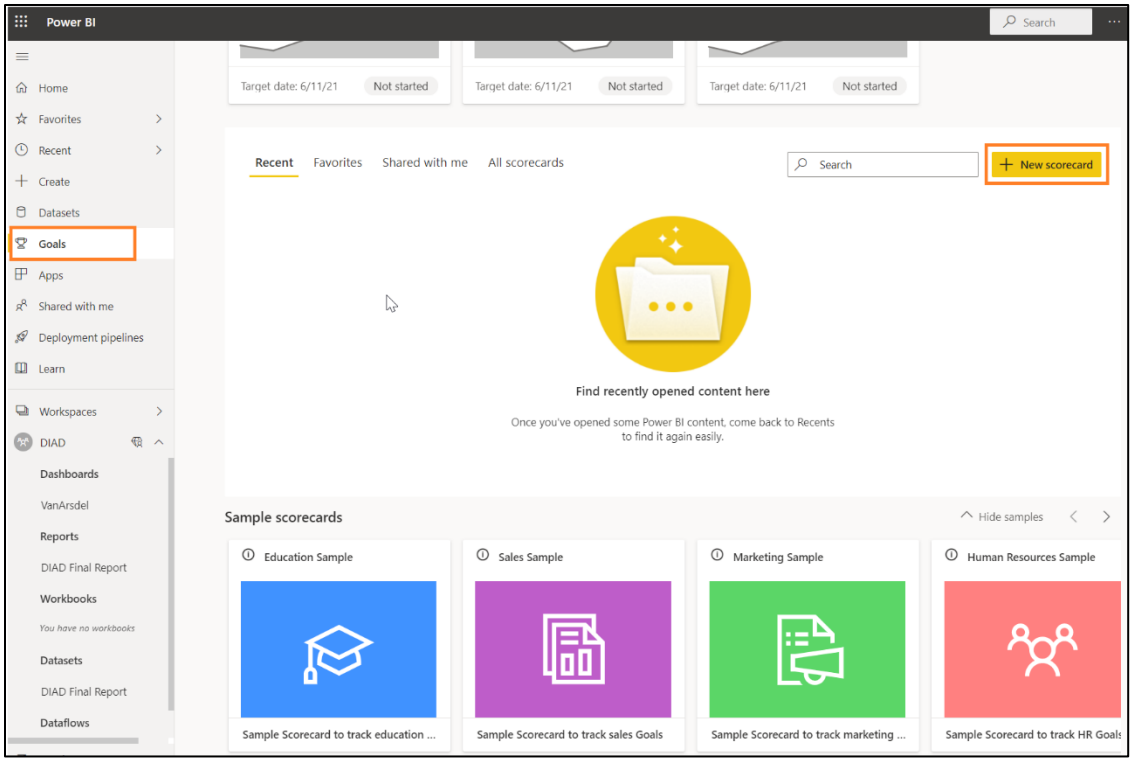
- Navigate to **DIAD Final Report** and talk about **Report** features.
- Reports are a collection of charts.
- A report can have multiple pages.
- A page consists of a canvas that is used to view or edit charts and a filter.
- Reports can be created from scratch within Power BI or they can be imported with datasets and with shared dashboards.
- There are two ways to view and interact with reports: **Reading** view and **Editing** view. Only the report creator can open the **Editing** view for a report.
- Reports are interactive, for example when an element of a chart is clicked, the rest of the report will update to reflect the relative contribution of the element that has been selected.
- Each report connects to a specific dataset.
- Page-level filters can be applied to a report. These filters apply to all the chart elements in the page.
- Each chart can have filters that apply only to the chart.
- Each chart has configuration options like Data Labels, Title, Data Colors, and more.



Power BI Service – Goals

Now, talk about Goals and cover the following points:

- Data-driven, collaborative, and adaptable way to measure key business metrics and goals built directly on top of Power BI
- Goals enables teams to easily curate business metrics that matter most and aggregate them in a unified view.
- Teams can measure progress against their goals, proactively share updates with their teammates, and dive deeper into their data when something needs further analysis.
- Users can easily monitor the health of their business, bringing in data across multiple Power BI workspaces and create gorgeous scorecards to drive impact.
- Goals is only available in Power BI Premium

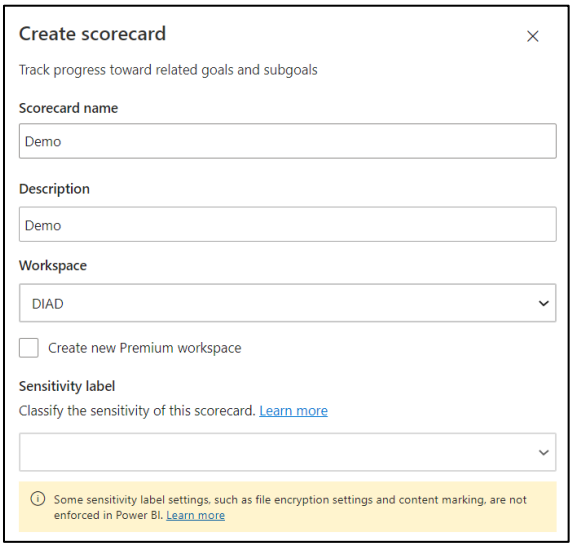


Explore the Goals hub

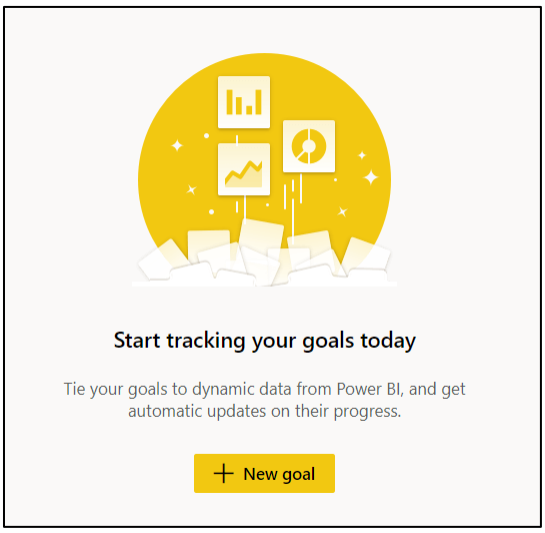
- Goals and activity section
- Recent, Favorites and Shared with me sections
- Sample scorecards
- How to create a scorecard

IF YOU ARE WORKING WITH POWER BI PREMIUM CAPACITY YOU CAN DEMO THE NEXT STEPS

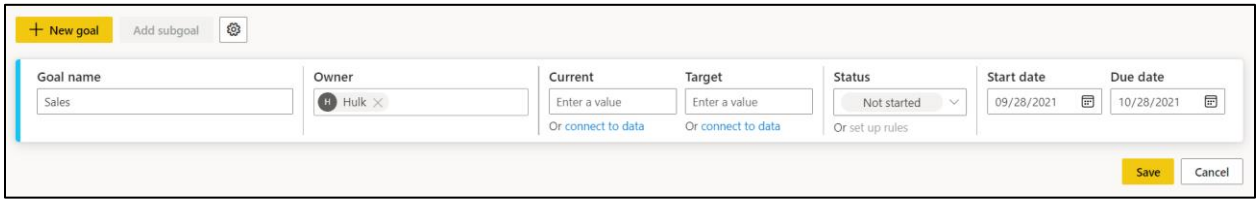
Create a new scorecard – name the scorecard Demo and connect to the DIAD workspace



Next demonstrate how to add a goal to the scorecard



Add a new goal, explain how you can hard code the values for the goal or you can connect to a dataset



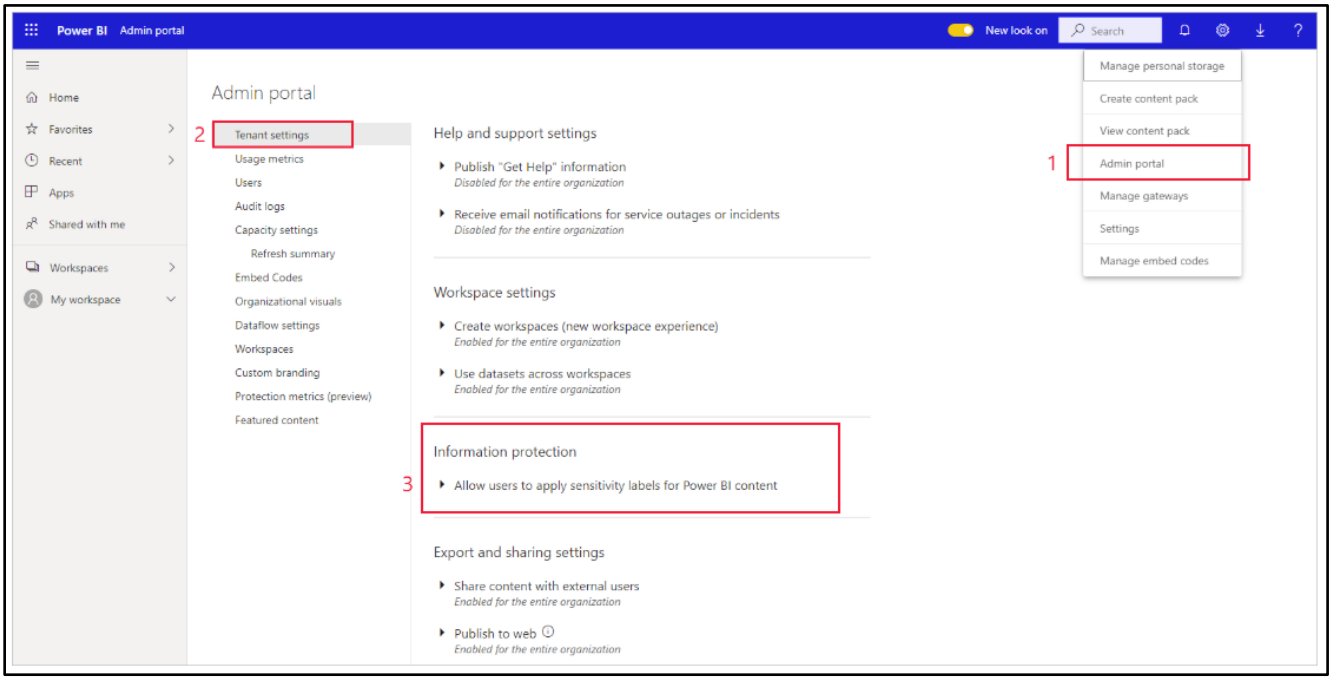
Optional: spend some time talking further about accessing Goals through a mobile device

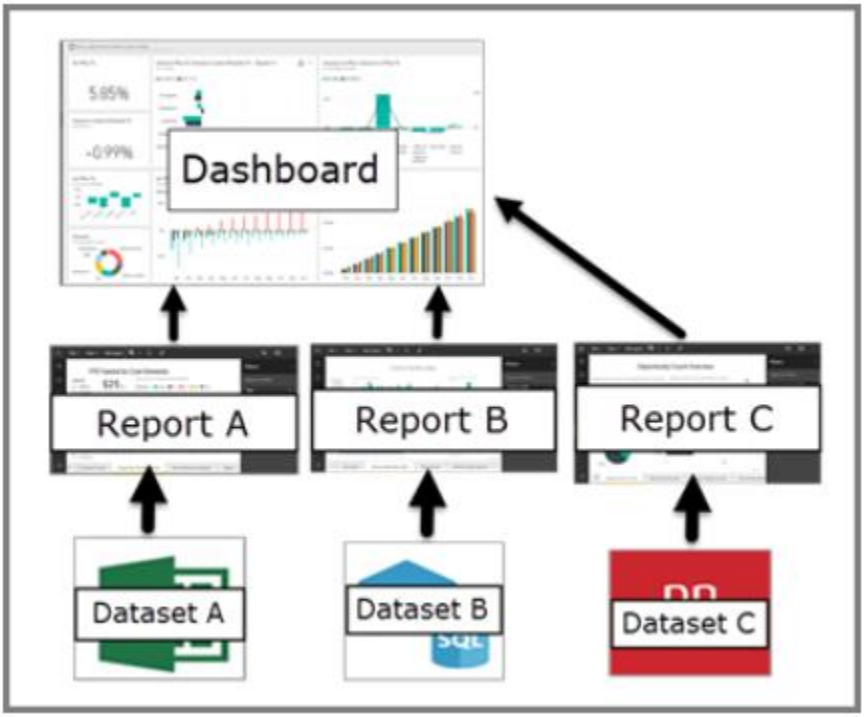
Power BI Service – Datasets

Discuss Power BI Service Reports by navigating to **Datasets** and showing the following features:

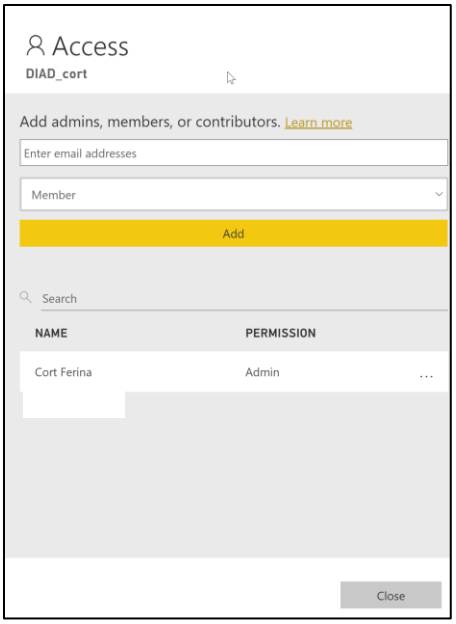
- A dataset is a model published to the Power BI service. A dataset is created when **Get Data** is used to connect to the data source.
- In the **navigation** pane, the datasets you've connected to are listed under the **Datasets** heading.
- Datasets can be refreshed on-demand.
- Datasets can also be set up on a scheduled refresh.
- Datasets can be scheduled to refresh daily or weekly.
- Multiple refreshes in a day or week can be scheduled.
- You can add sensitivity labels to workbooks, datasets and dashboards
  1. Go to the Power BI **Admin portal**,
  2. Open the **Tenant settings** pane
  3. Open the **Information protection** section.
  4. Open **Allow users to apply sensitivity labels for Power BI content**.
  5. Enable the toggle.
  6. Define who can apply and change sensitivity labels in Power BI assets

7. Click Apply
8. Similarly, you can enable sensitivity label inheritance. Expand **Automatically apply sensitivity labels to downstream content** and enable the feature.



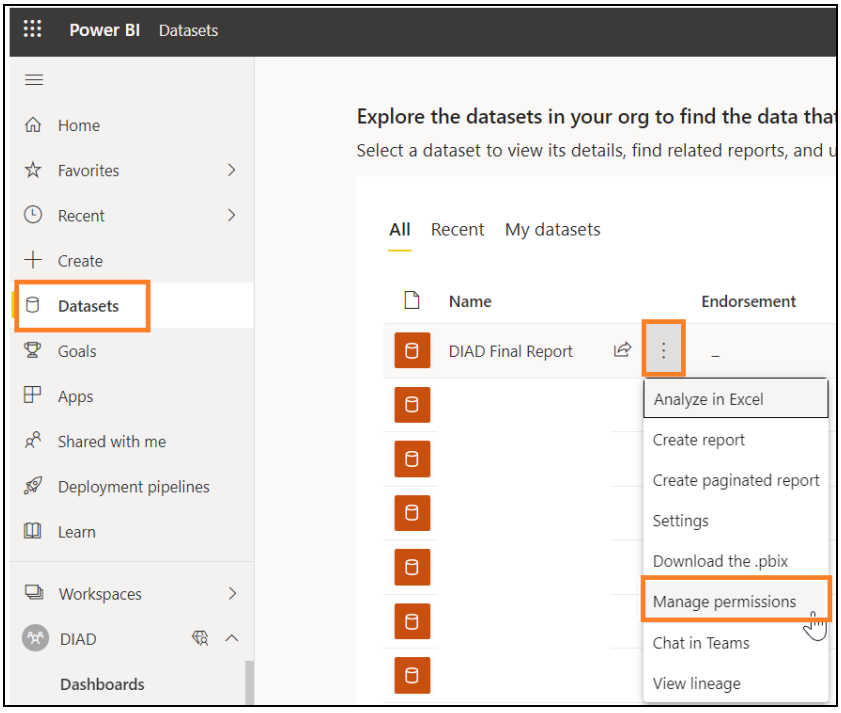


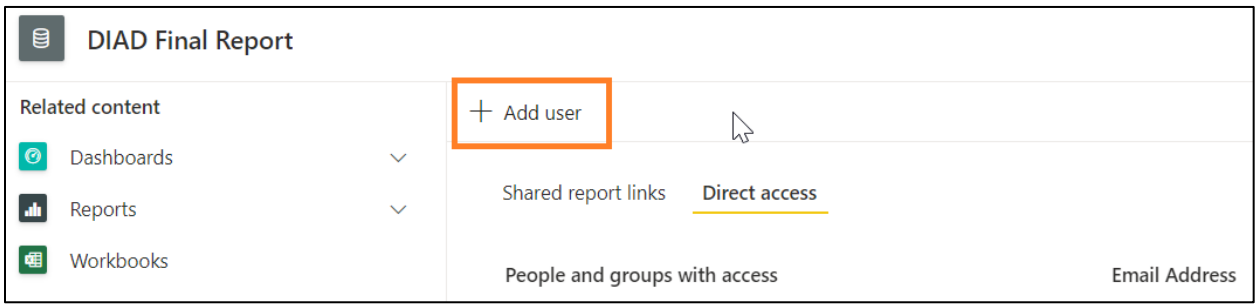
- Discuss the ability to share datasets with other people
  Can give users access to the entire workspace with Manage Permissions

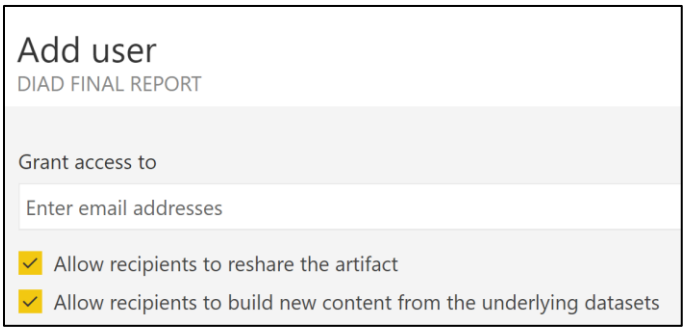


- Explain how you can give users access to individual datasets using Manage Permissions.

  Talk about the option for added users to reshare the dataset and create new content from the shared dataset



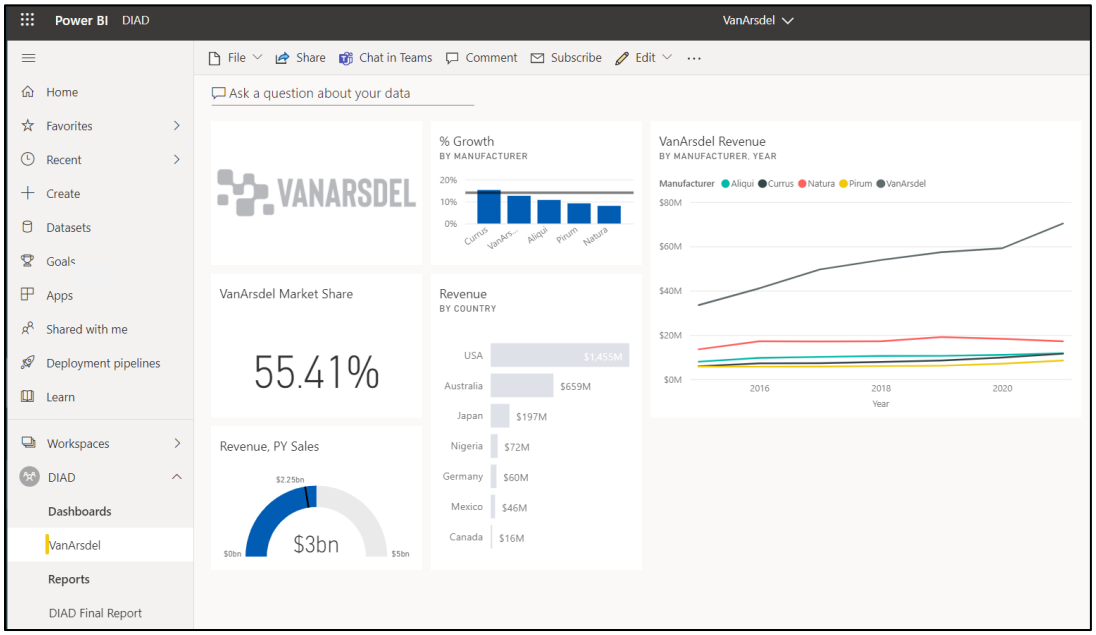




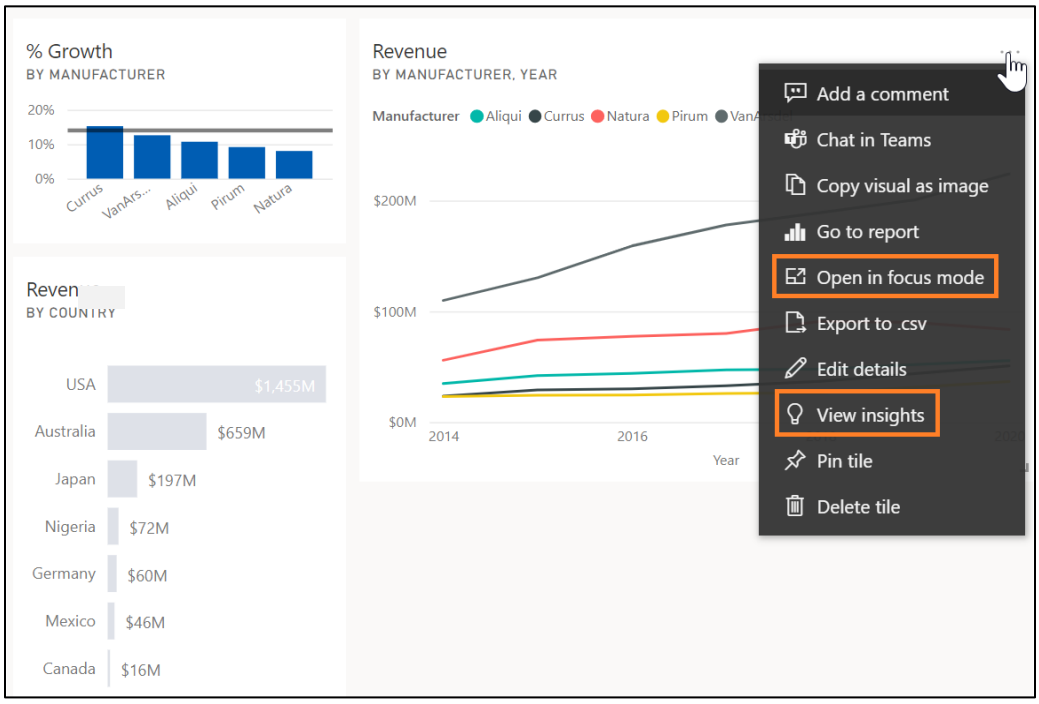
Power BI Service

Discuss the Power BI Service by navigating to the **VanArsdel** dashboard.

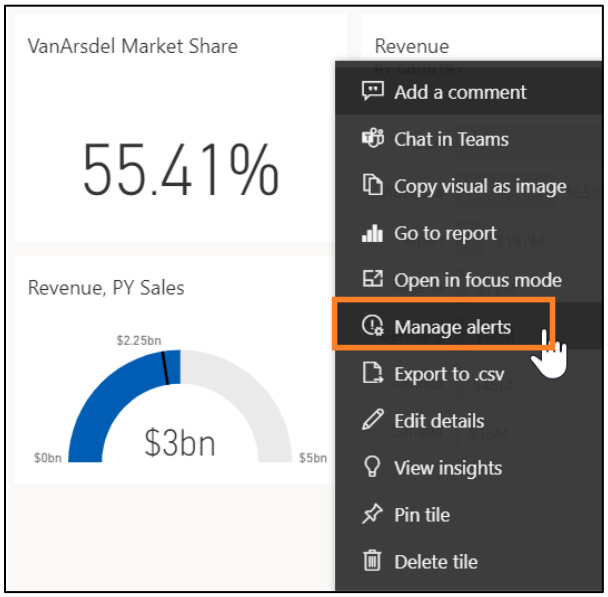
1. Using the VanArsdel dashboard, two reports, **DIAD Final Report** and **Social**, and the two datasets, **DIAD Final Report** and **Social** explain the relationship between the Dashboard, Reports and Datasets.



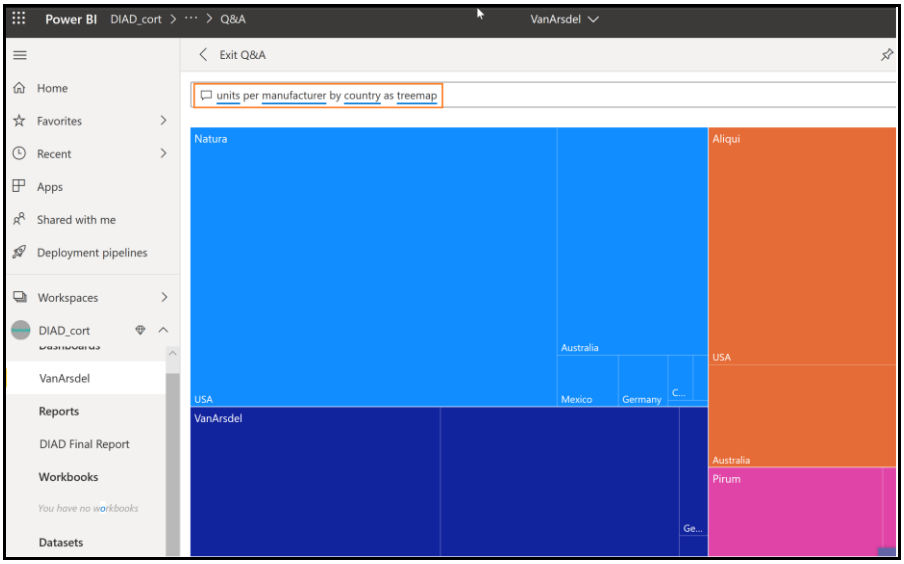
2. Talk about how the tiles have been created from the reports. And then discuss how clicking on dashboard tile navigates to the respective report page. Using the **by Year, Manufacturer** line chart talks about In **Focus mode** and **Quick Insights**.



3. Using the **VanArsdel Market Share** tile, talk about the ability to **Create and Manage alerts**.
4. Talk about the ability to **Subscribe** to Reports and Dashboards.
5. Talk about the **Comments** and **Usage Metrics** features.

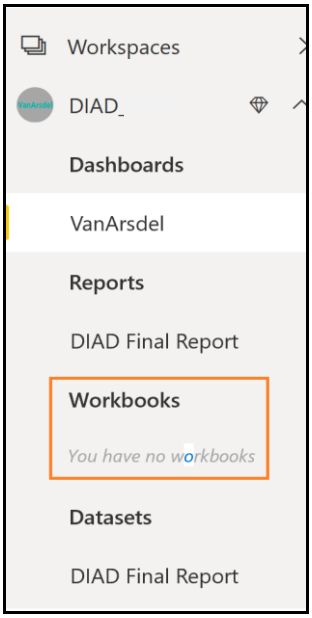


6. Talk about **Q&A**. **Q&A** now has the ability to do basic arithmetic.
7. Enter **Units**, and then talk about the **card** visual.
8. Enter **Units per manufacturer**, and then talk about the **bar** chart.
9. Select **Units per manufacturer by country** as a **treemap**.
10. Talk about the ability to format the pin the **Q&A** visual to the dashboard.



Power BI Service – Excel Workbooks

Navigate to the **Workbooks** section and talk about the ability to publish Excel workbooks.

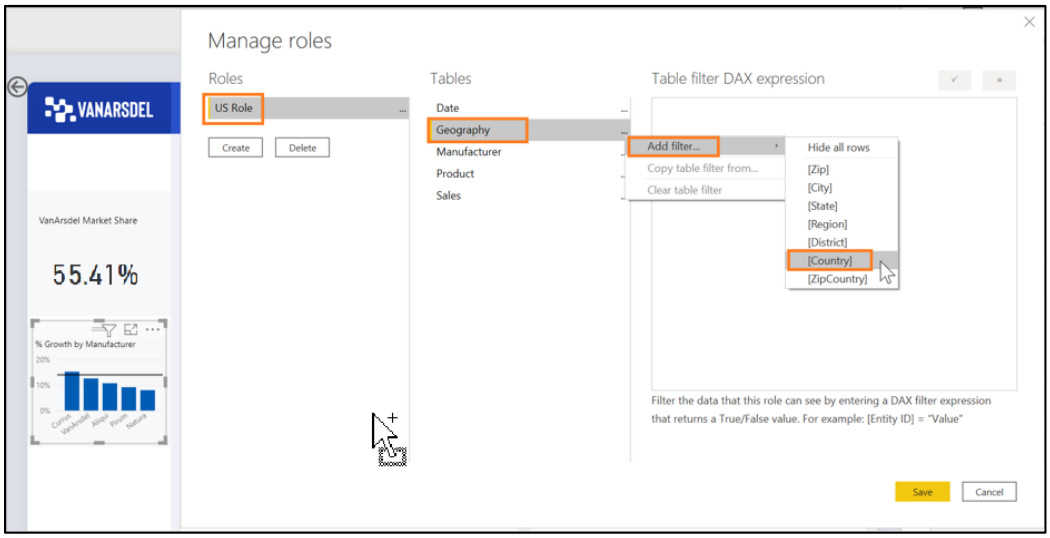


Note: Excel files will inherit the sensitivity labels that are set in Power BI Service

Demo - Security

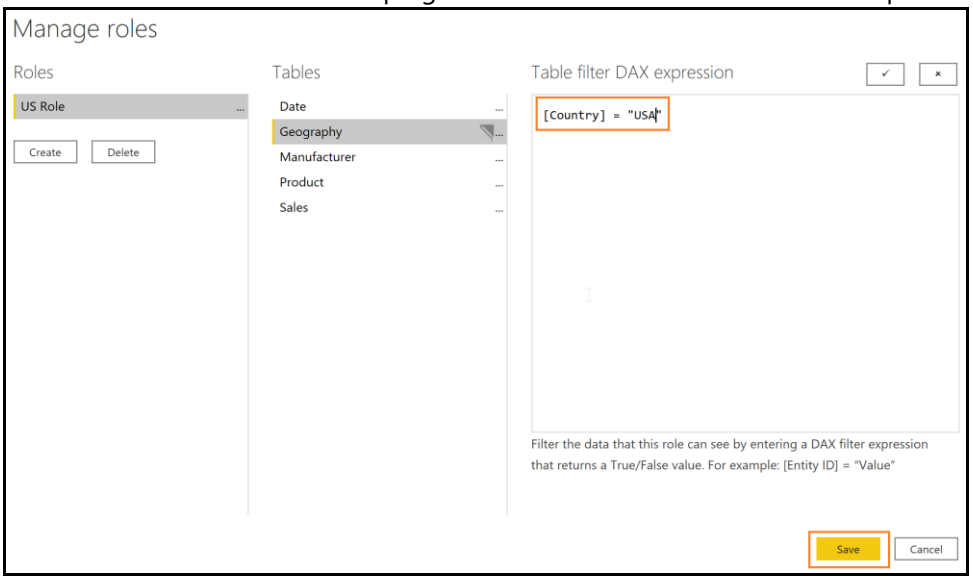
Now that we have the model and report ready, we want to add security so that individuals from the USA view only USA data and individuals from Mexico view only Mexico data and so on. Open the **DIAD Final Report with RLS.pbix** file and follow these steps.

1. From the ribbon click **Modeling** and then click **Manage Roles**.
2. The **Manage roles** dialog opens, click the **Create** button.
3. Name the role **US Role.**
4. Click the **ellipsis** next to **Geography**, click **Add Filter**, and then click **[Country]**.



Notice a DAX Expression appears in the text area.

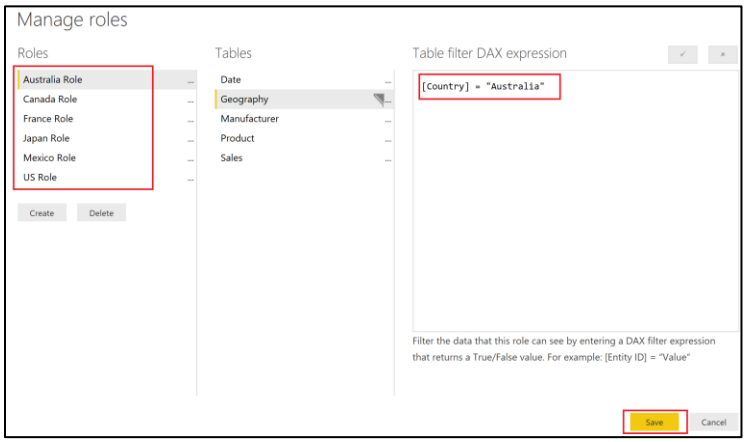
5. Edit the DAX Expression and set **[Country] = "USA"**.
6. Click the checkmark on the top right corner. This will validate the DAX expression.



7. Add roles for **Australia**, **Canada**, **France**, **Japan**, and **Mexico** using the following DAX Expressions.

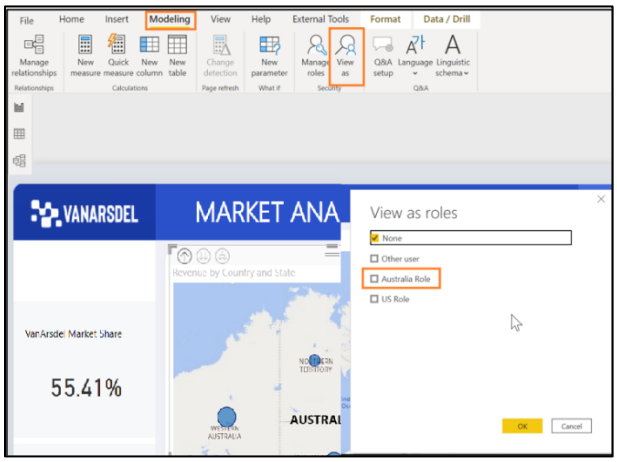
Australia Role	**[Country] = "Australia"**
Canada Role	**[Country] = "Canada"**
Japan Role	**[Country] = "Japan"**
Mexico Role	**[Country] = "Mexico"**
Nigeria Role	**[Country] = "Nigeria"**

8. Once you add all the roles, click the **Save** button.



Power BI Desktop provides the capability to validate the roles you have created. This helps us view the reports as a different role and make sure it's formatted correctly for that role.

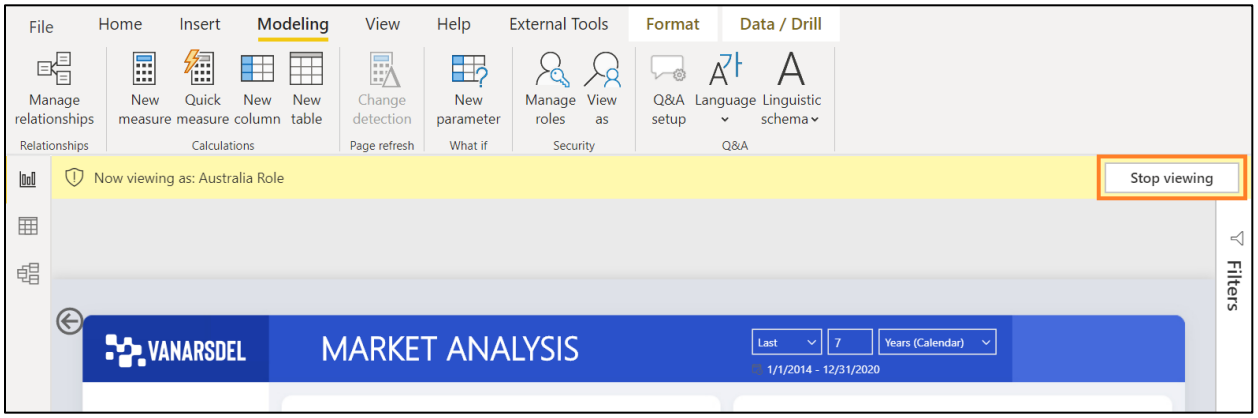
9. From the ribbon, click **Modeling** and then click **View as Roles**.
10. The **View as roles** dialog appears. Select the **Australia** role and then click **OK**.



Notice how you are viewing what a person assigned the Mexico role would view.

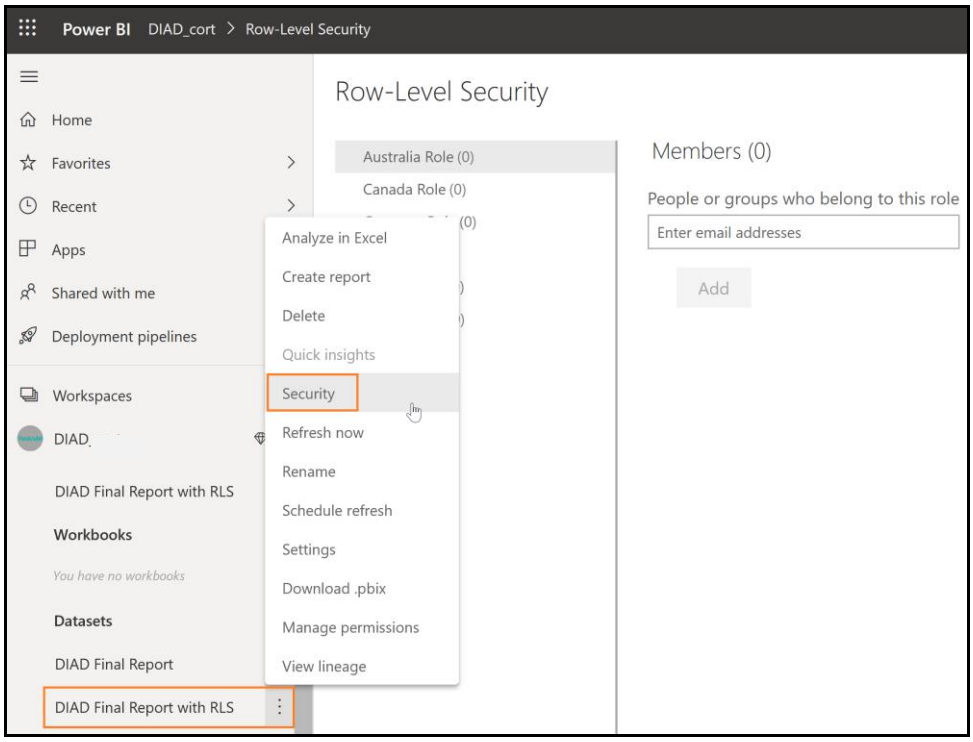
11. Click on **Stop** viewing to exit the **Australia Role** view.

We will add users to these roles in the service.



As a pre-demo step, you should have already published the **DIAD Final Report with RLS.pbix** to the service.

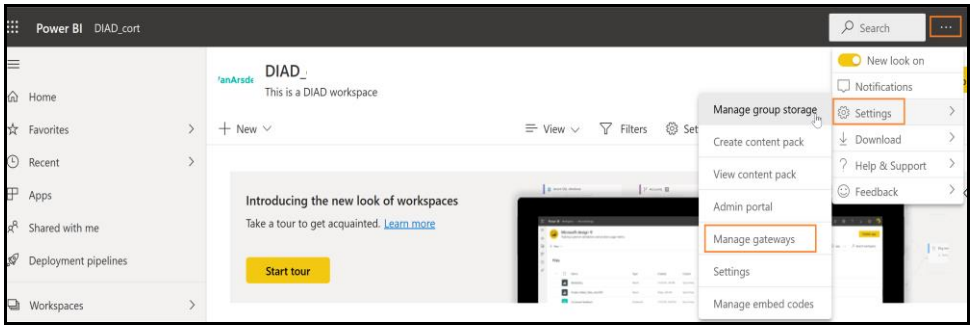
12. Navigate to **DIAD Final Report with RLS dataset** and select the **ellipsis**.
13. Select **Security**.
14. Notice the roles we created in the pbix file are visible. This is where users are assigned to roles.
15. When a user assigned to a role logs into the service, their experience will be like what we saw in **View Roles** feature.



Demo – Scheduled Refresh

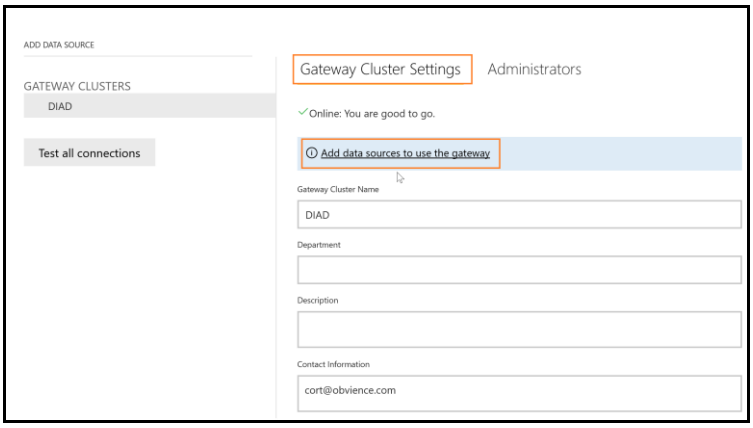
The on-premises data gateway acts as a bridge, providing quick and secure data transfer between on-premises data (data that is not in the cloud) and Power BI, Microsoft Flow, Logic Apps, and PowerApps services. Sign in to the https://app.powerbi.com site and talk about configuring the gateway:

1. From the menu on the top right, click on the gear and select **Manage** gateways.
2. The **Gateways** screen displays. Notice the gateway you added is available.
3. On the right panel of the screen, you can add more information regarding the gateway using the **Gateway Settings** dialog.
4. On the right panel of the screen, there is an option to add **Administrators** for the gateway.



Let's add the data sources that are used in our model so that we can set up a refresh schedule.

5. Click the ellipsis next to the gateway name and select **Add data sources to use the gateway**.



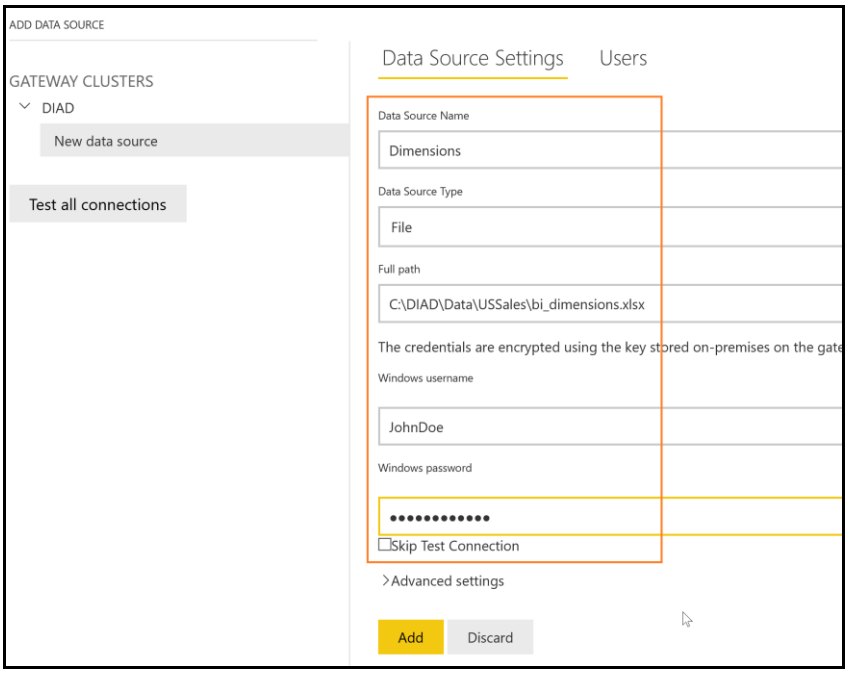
We need to configure three data sources to use in the model.

6. In the **Data Source Settings** page, name the data source **Dimensions.**
7. From the **Data Source Type** drop-down select **File**.
8. Enter the following path for the **Full Path** (if your file is in a different location change the path accordingly):

   C:\DIAD\Data\USSales\bi_dimensions.xlsx

9. Enter the Windows username and password (this is typically the username and password you use to login to your machine).
10. Click **Add**.

Once the data source is added, notice you can add users who can access this data source.

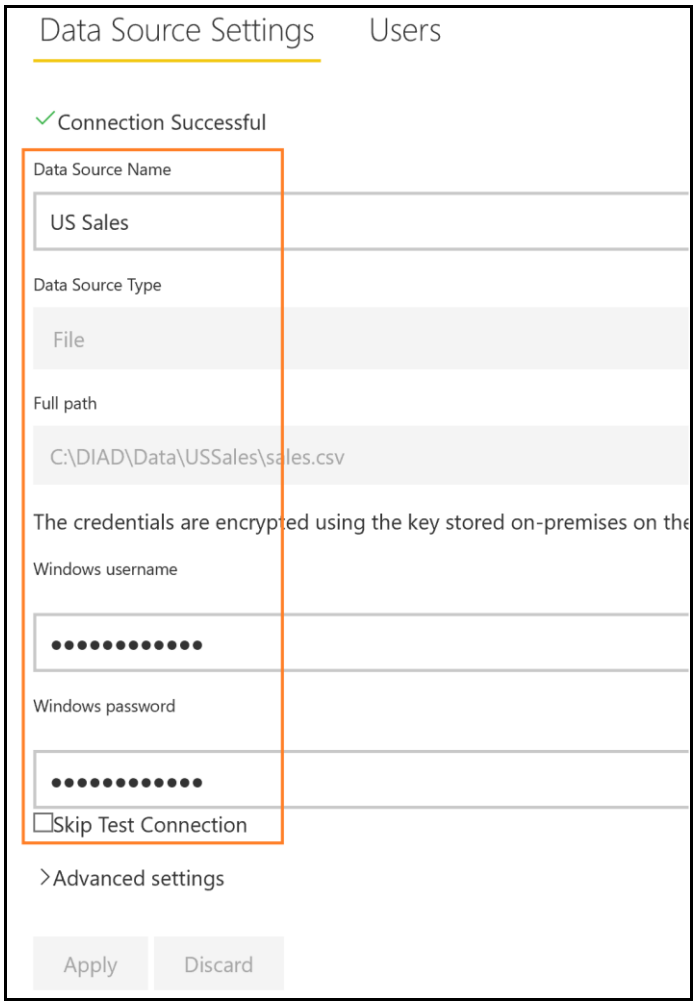


Let's add the **US Sales** CSV data source file.

11. Click the ellipsis next to the gateway name and then click **Add Data Source**.
12. In the **Data Source Settings**, name the data source **US Sales.**
13. From the **Data Source Type** drop-down select **File**.
14. Enter following for the **Full Path** (if your file is in a different location change the path accordingly):

    C:\DIAD\Data\USSales\sales.csv

15. Enter the Windows username and password (this is typically the username and password you use to login to the computer).
16. Click **Add**.

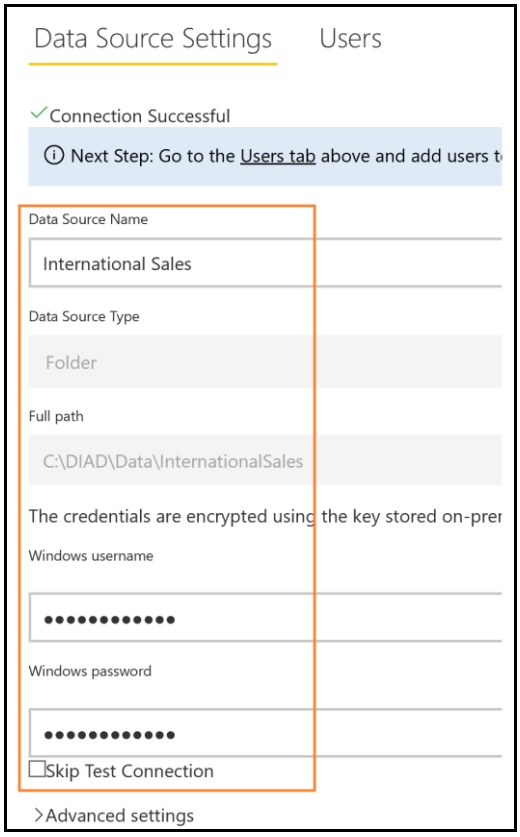


Let's add the **International Sales** folder data source.

17. Click on the ellipsis next to the gateway name and then click **Add Data Source**.
18. In the **Data Source Settings** page, name the data source **International Sales.**
19. From the **Data Source Type** drop-down select **Folder**.
20. Enter following for the **Full Path** (if your file is in a different location change the path accordingly):

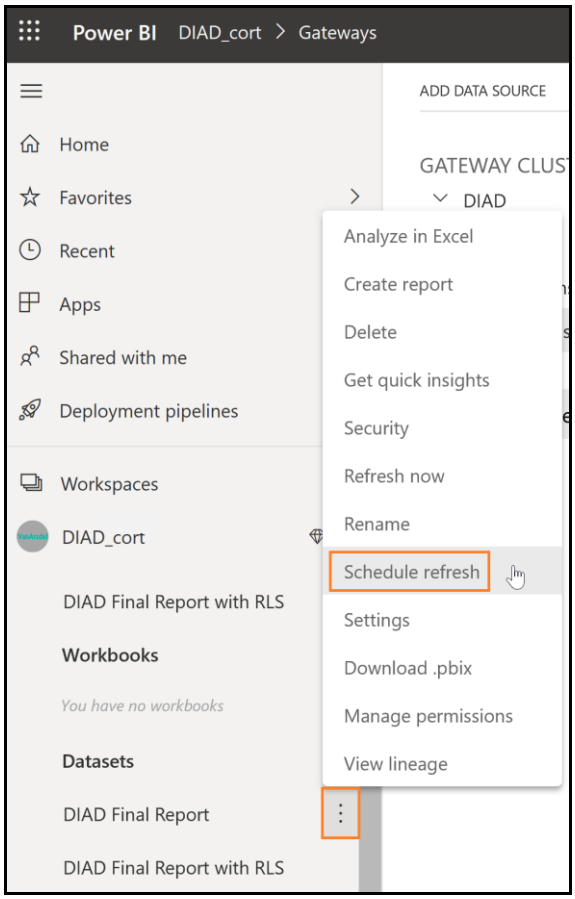
C:\DIAD\Data\InternationalSales

21. Enter the Windows username and password (this is typically the username and password you use to login to your machine).
22. Click **Add**.



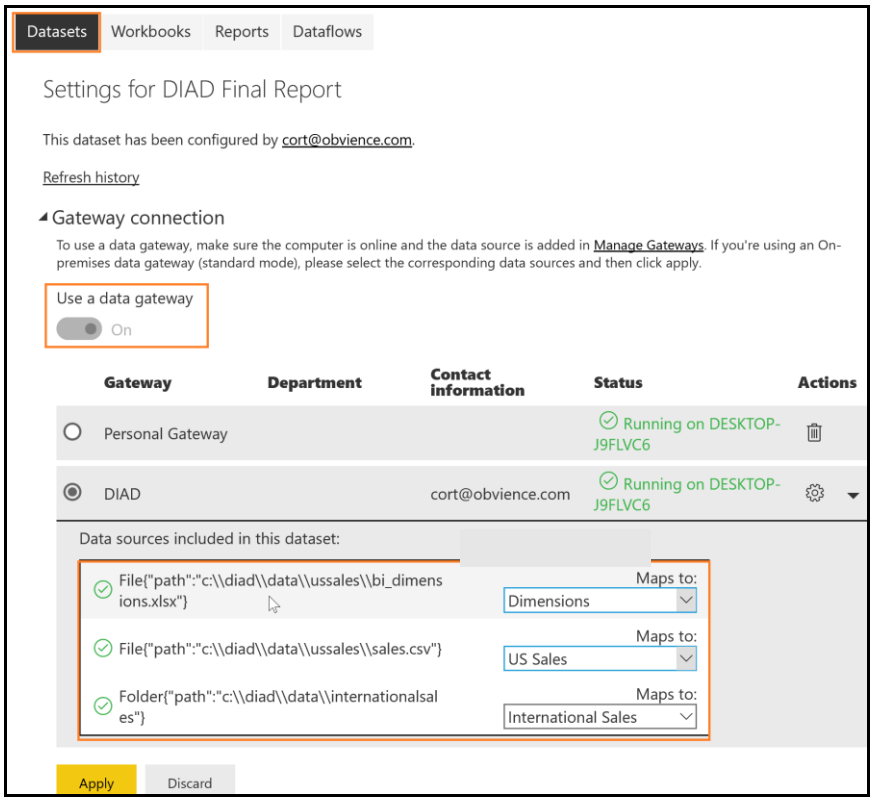
Now let's look at how refresh is going to work.

23. If the left panel is collapsed, expand it by clicking on the three bars below PowerBI.
24. Navigate to **Datasets** section on the left panel and locate the dataset called **DIAD Final Report**.
25. Click the ellipses and then click **Schedule Refresh** as shown in the screenshot.



In the **Settings** page, you will see that the **Datasets** section is selected.

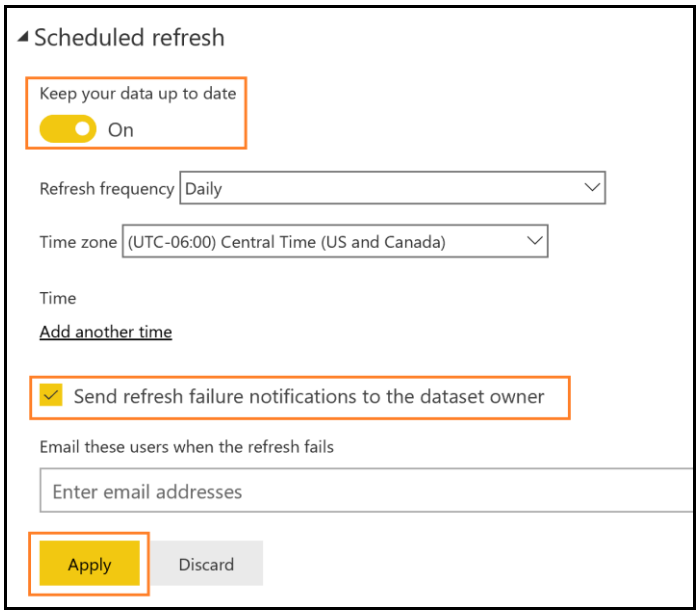
26. The Power BI service has detected that you have set up a Gateway. Expand the **Gateway** connection.
27. Select **Use a data gateway** and click **Apply.** A dialog appears confirming the gateway for **DIAD-Report Final** has been updated.



Now let's schedule a data refresh. Notice that you do not have to re-enter the credentials for each data source again because it is set up at the gateway level.

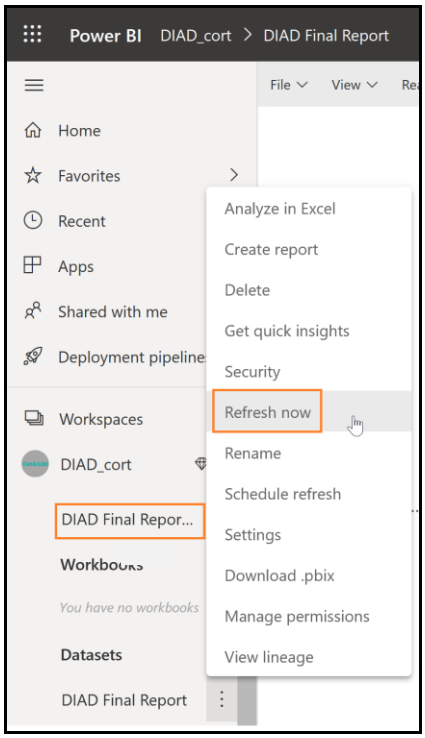
28. Expand **Schedule Refresh** section.
29. Enable data refresh by moving the slider below **Keep your data up to date**.
30. There are two options for **Refresh Frequency**, daily and weekly. Select **Daily**.
31. Click the **Time Zone** drop-down to modify the time zone as needed.
32. Click **Add another time** to select the refresh time.

    Data refresh can be scheduled on the hour or every 30 minutes.

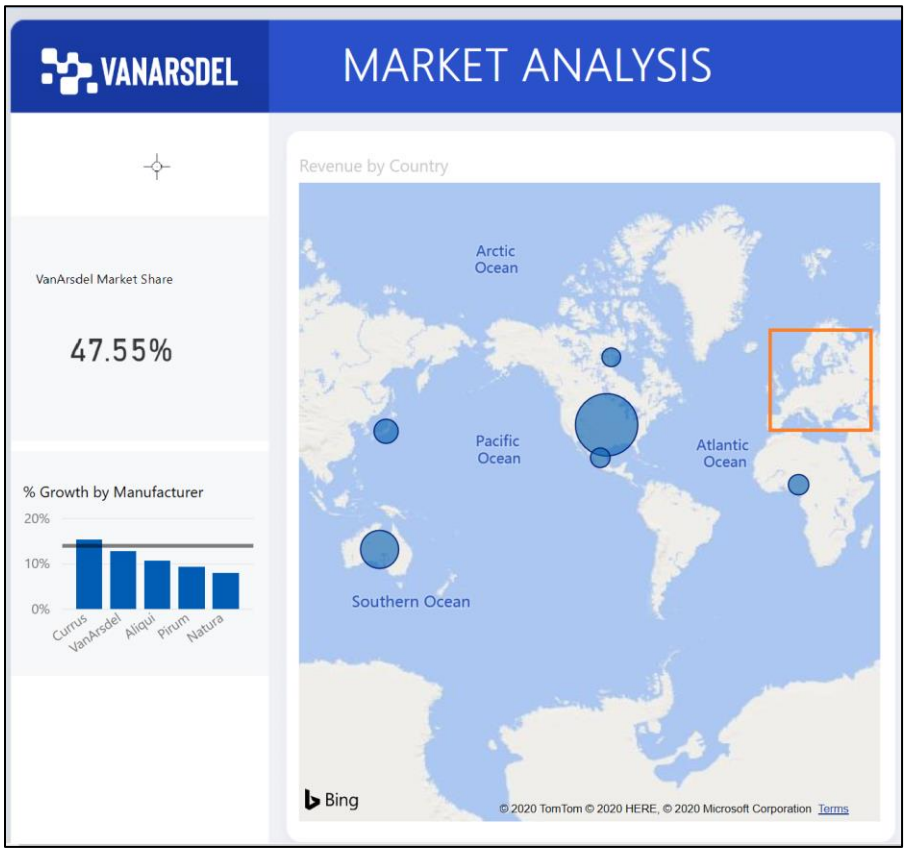


The company has sold off Germany operations. Let's remove the **Germany** file from the **International Sales** folder.

33. Delete the **Germany.xlsx** file from the **\DIAD\Data\InternationalSales** folder.
34. Navigate to the **Datasets** section on the left panel and locate the dataset called **DIAD Final Report**.
35. Click the ellipses and the click **Refresh now** as shown in the screenshot.



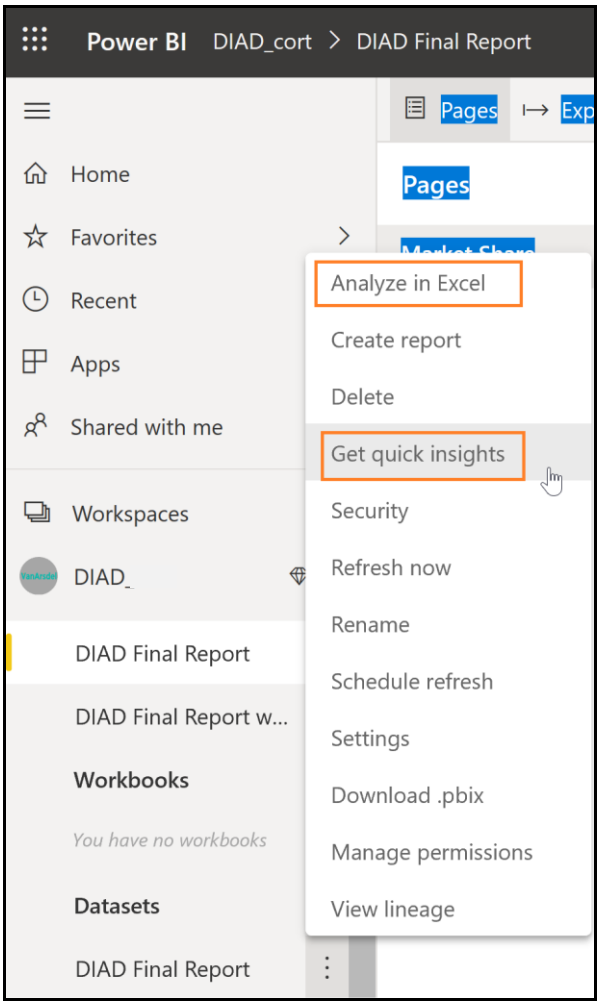
36. Once the data is refreshed, navigate back to the **VanArsdel Final Report**.
37. Notice in the map visual, sales for **Germany** are not included.



More Power BI Service

Power BI Service – Dataset Operations

Discuss **Data Set Operations** by clicking on the ellipsis next to Datasets. Then click the **DIAD- Final Report** to talk about the ability to get **Quick Insights** and **Analyze in Excel.**



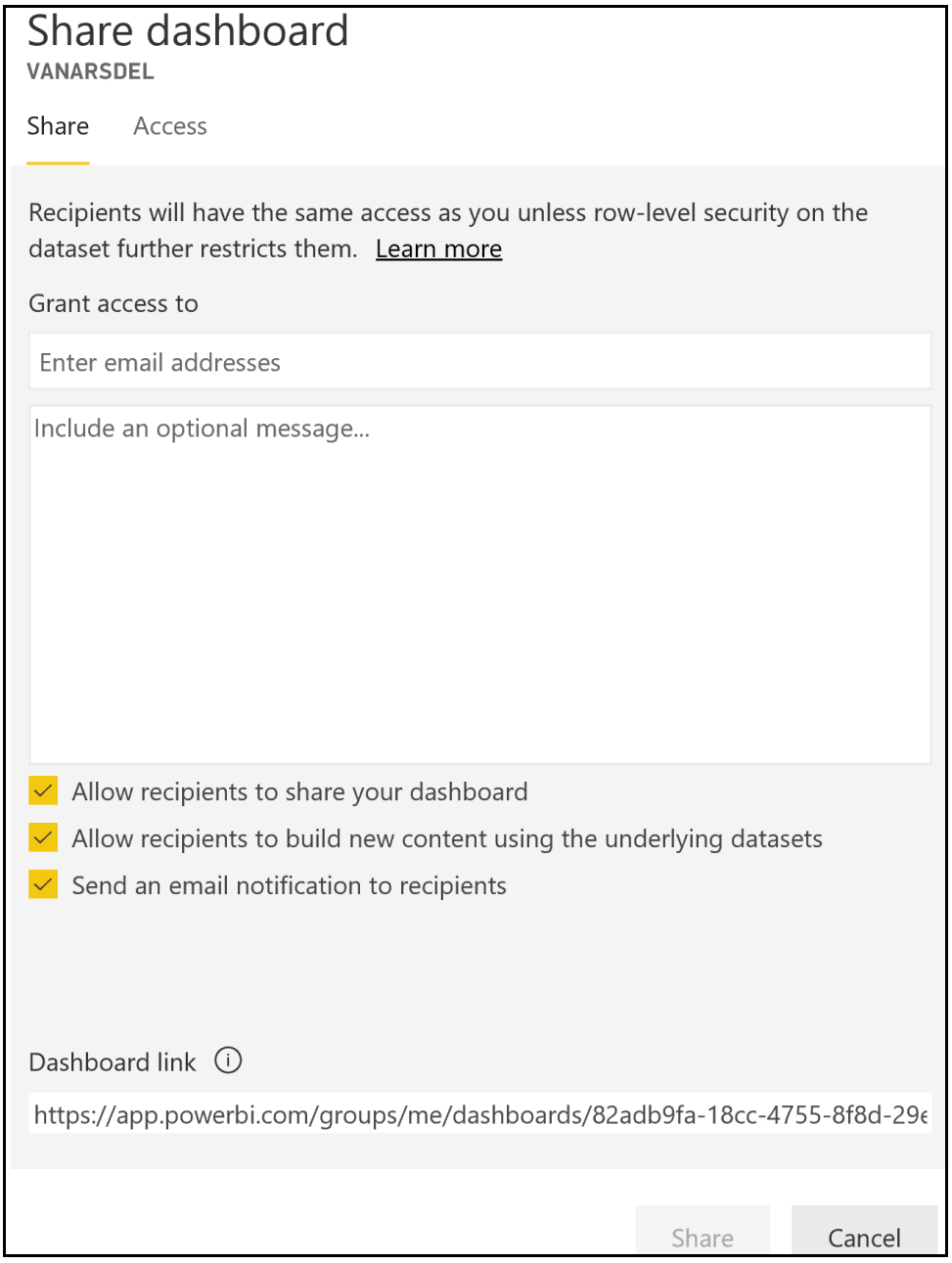
Power BI Service – Share Dashboards and Reports

Discuss how to share dashboards and reports by navigating to the **Share Dashboard** screen. You and those you share the dashboard with require a Power BI Pro license to share and view the content. Alternatively, the content needs to be in a workspace in **Premium Capacity**. When you share a dashboard or report, recipients can view it and interact with it, but can't edit it. They see the same data that you see in the dashboard and reports unless row-level security (RLS) is applied to the underlying dataset. The coworkers you share it with can share with their coworkers if you allow them to perform this action.

You can share with people outside your organization, too. Those you share it with can view and interact with the dashboard or report, but they can't share it with others. Users accessing a shared dashboard do not have edit permissions.

After the dashboard has been shared, an option is provided to send an email to the recipients with a link for them to accept the share.

If a shared dashboard has reports, you will NOT see the report listed in the navigation pane. To open the report, from the shared dashboard, click one of the tiles. If the report owner created the tile from a report, the report opens. If the report owner created the tile from Q&A, the Q&A page opens



Power BI Service – Collaboration and Distribution using Apps

Discuss collaboration and distribution using apps by navigating to the **Create App Workspace** screen.

First, talk about collaboration. Collaboration in Power BI is done by creating apps.

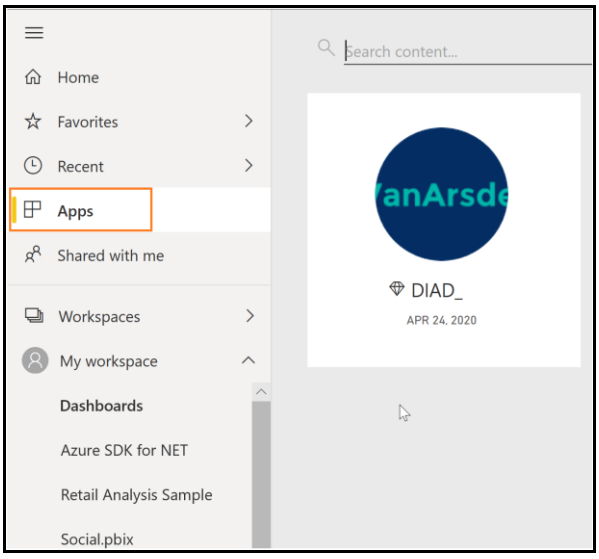
The default group is My Workspace. This group is the user's personal workspace, it cannot be used for collaboration

Members of the app belong to one of the following roles:

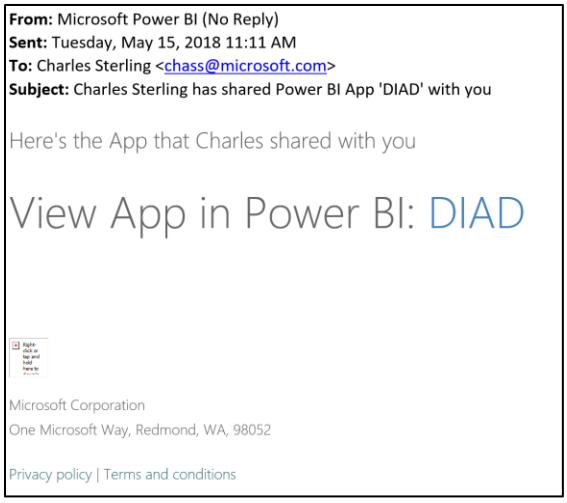
Contributor	Add/edit/delete content within workspace.
Member	Everything a Contributor can do.
	Re-share. Publish & update Apps.
Admin	Everything a member can do.
	Can change/delete workspace.
	Can add Admins.
Viewer	View/Interact with data
	Read data stored in workspace data flows

A user can be a member of multiple apps.

Talk about the ability to distribute and install apps



Apps can be shared across organizations. The screenshot shows a sample email B2B invite.



Power BI Service – Mobile

Discuss access to Power BI Dashboards, Goals, Apps and Workspaces through Power BI Mobile app

- Apps for different mobile devices – iPhones, iPads, Android phones, Android tablets and Windows 10

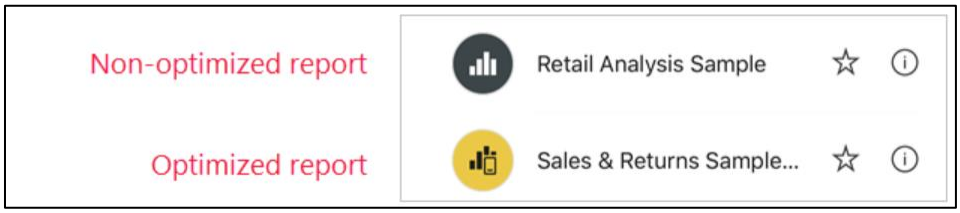
Discuss different ways of interacting with reports in Power BI Mobile app

[Explore reports in the Power BI mobile apps - Power BI | Microsoft Docs]

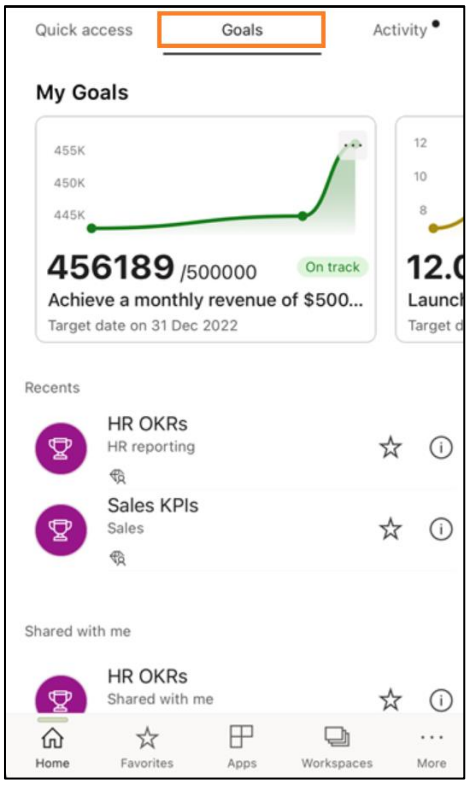
- Zoom in on the data
- Interact with reports and slicers
- Tooltips and drill actions

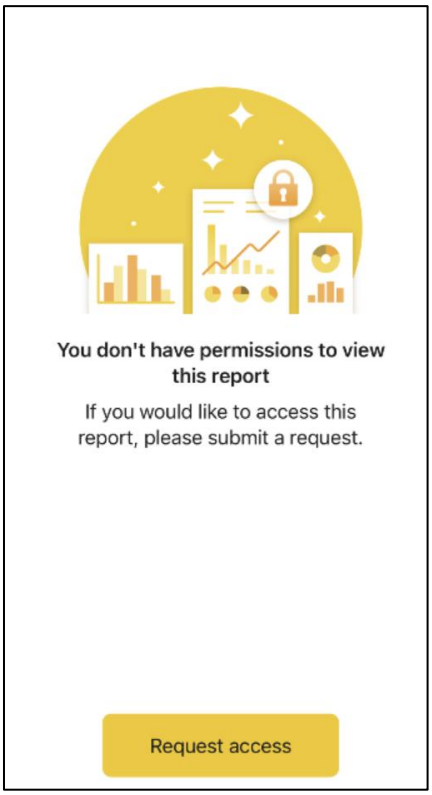
- Using actions
- Bookmarks
- Investigate anomalies
- Refresh data

- Power BI reports can be viewed in landscape orientation or users can create a mobile portrait view optimized for mobile devices, using Power BI Desktop or Power BI Service
  - In Power BI Mobile app optimized reports are indicated by a certain button



- Access to Goals is now available through the Power BI Mobile app
  - Users can request access to Goals through their mobile app.





Power BI Service – Collaboration using Microsoft Teams

Discuss collaboration and Power BI access in Teams

- Add a Power BI Tab to your channel and group chats
- View and work with Power BI content in Teams
- Find and open Power BI content
- Chat in Teams to quickly find and share Power BI content
- Send links to channels and chats, including specific filters and views