

Deploying Solutions using Apps and Template Apps

Lab Time: 40 minutes

Lab Folder: C:\Student\Modules\06_AppWorkspaces\Lab

Lab Overview: In this lab you will continue to work with the report and dataset that you created in the Power BI Desktop project named **Wingtip Sales Analysis.pbix**. You will focus on the techniques required to create and deploy dashboards to an audience of business users in an Office 365 environment.

Lab Dependency: This lab assumes you have completed the lab titled **Designing Interactive Reports in Power BI Desktop** in which you created a multipage report in the **Wingtip Sales Analysis.pbix** project and then published this report and its underlying dataset to the Power BI Service. If you would like to begin work on this lab without completing the earlier lab, copy the lab solution file named **Wingtip Sales Analysis.pbix** which is located in the student folder at **C:\Student\Modules\04_Reports\Lab\Solution** into the folder at **C:\Student\Projects** using the Windows Explorer.

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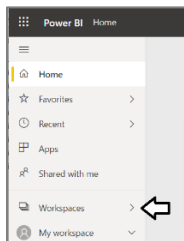
Lab Folder: C:\Student\Modules\03_TemplateApps\Lab

Lab Overview: In the first exercise, you will create and populate the **Wingtip Sales** app workspace by import a report and dataset from **Wingtip Sales Analysis.pbix**. If you already created the **Wingtip Sales** app workspace in an earlier lab and populated it with content in an earlier lab, you can skip Exercise 1 and begin with Exercise 2 where you will public the Wingtip Sales app workspace as an organization app. In Exercise 3, you will work through the process of creating and testing a Power BI template app.

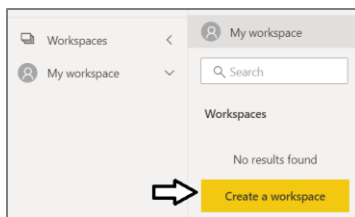
Exercise 1: Create an App Workspaces and Add Content

In this exercise, you will create a new app workspace named **Wingtip Sales** and then you will import a new dataset and report from **Wingtip Sales Analysis.pbix**. If you already created and populated the **Wingtip Sales** app workspace in an earlier lab, you can skip this exercise and skip ahead to Exercise 2.

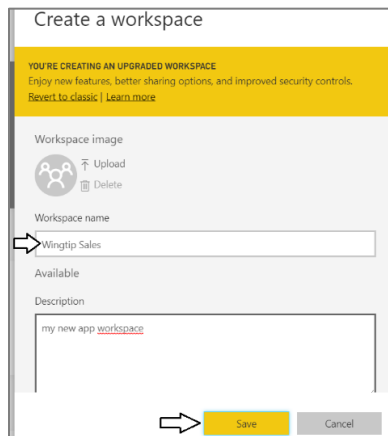
1. Log into the Power BI Service with your new organizational account.
 - a) Navigate the Power BI portal at <https://app.powerbi.com> and if prompted, log in using your new organizational account.
2. Create a new app workspace named **Wingtip Sales**.
 - a) Click the **Workspace** flyout menu in the left navigation.



- b) Click the **Create app workspace** button to display the **Create an app workspace** dialog.



- c) In the **Create an app workspace** pane, enter a workspace name of **Wingtip Sales**.
- d) Click the **Save** button to create the new app workspace named **Wingtip Sales**.

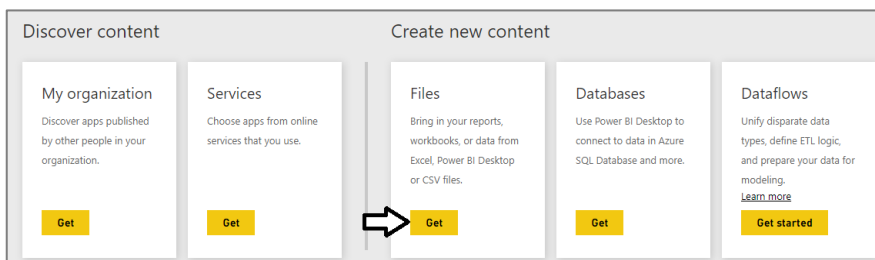


- e) When you click **Save**, the Power BI service should create the new app workspace and then switch your current Power BI session to be running within the context of this new app workspace.

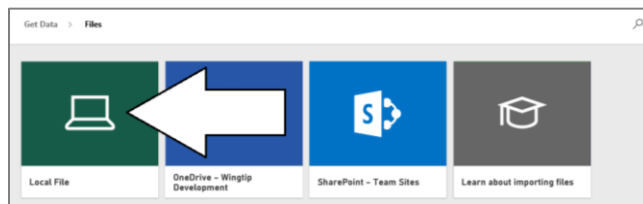


You have now created an app workspace which will provide the foundation for publishing and managing the Power BI datasets, reports and dashboards used by a custom solution.

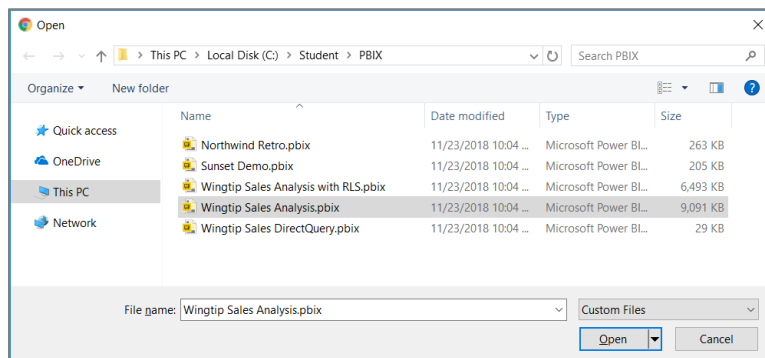
3. Navigate to the **Wingtip Sales** app workspace that you created in the previous exercise. This workspace should currently display the standard Welcome page because it does not yet contain any datasets, reports or dashboards.



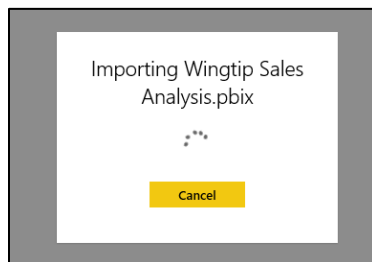
4. Import the **Wingtip Sales Analysis.pbix** project into the **Wingtip Sales** app workspace.
- On the Welcome page, click the **Get** button in the **Files** section.
 - On the **Get Data > Files** page, click the **Local File** button to display the Windows **Open** file dialog.



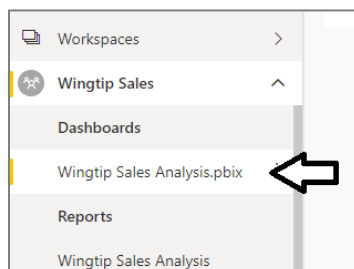
- c) In the Windows **Open** file dialog, select the project file at **c:\Student\PBIX\Wingtip Sales Analysis.pbix** and click **Open**.



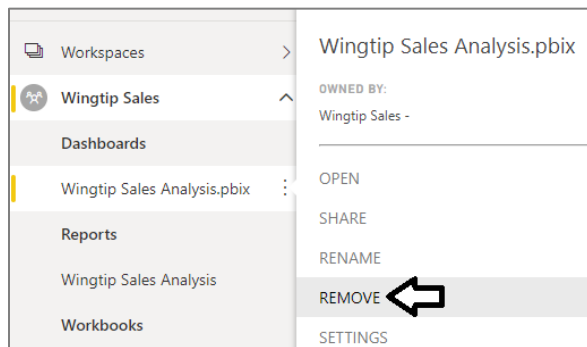
- d) Wait while the Power BI service uploads the PBIX files and imports its assets into the **Wingtip Sales** app workspace



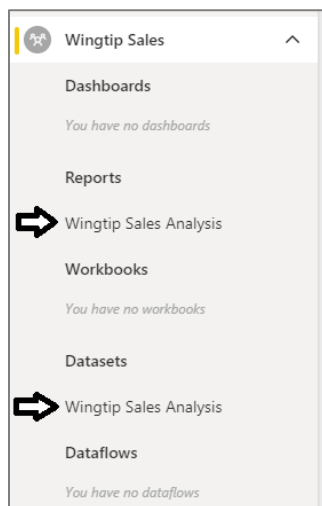
- e) Check to see if the PBIX upload process has created a new dashboard named **Wingtip Sales Analysis.pbix**.



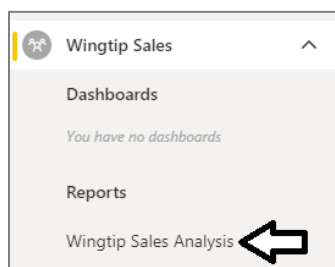
- f) If it exists, delete the dashboard named **Wingtip Sales Analysis.pbix**.



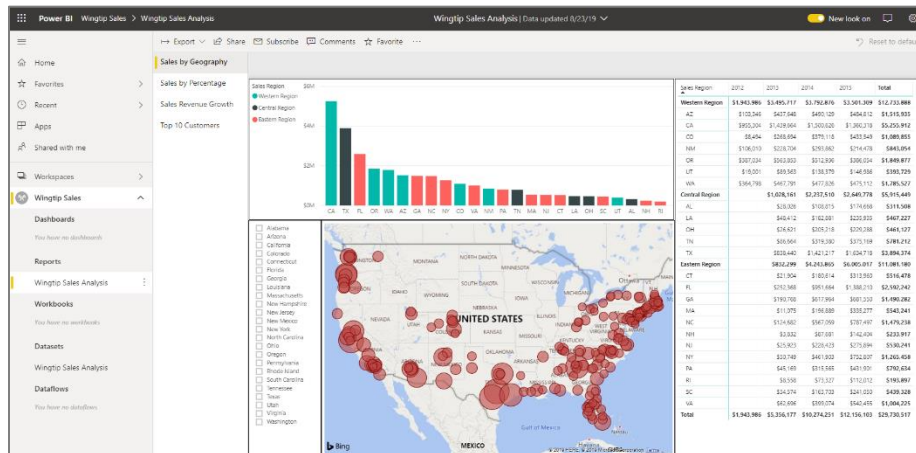
- g) Now, you should only see a dataset and report in the left nav menu which are both named **Wingtip Sales Analysis**.



- h) Click on the report named **Wingtip Sales Analysis** in the **Reports** section.



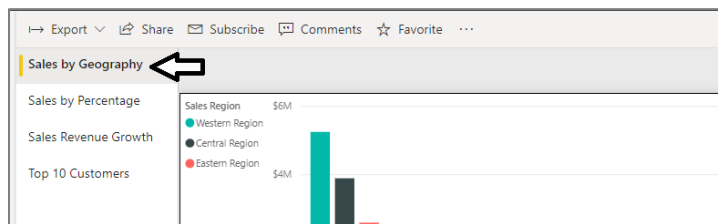
5. Examine the report named **Wingtip Sales Analysis**.
a) Locate the page tabs on the report.



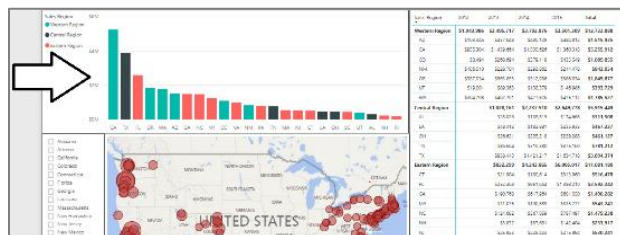
Note that the new look in the Power BI Service brings a significant new change with the layout of the page tabs for a report. While the old look displays page tabs horizontally at the bottom of a report, the new look moves page tabs to the top left in a vertical layout.

6. Create a new dashboard named **Wingtip Sales Analysis**.

- Navigate to the **Reports** tab and open the report named **Wingtip Sales Analysis**.
- Navigate to the **Sales by Geography** page of the **Wingtip Sales Analysis** report.



- Hover the mouse over the column chart visual which displays a sales revenue breakdown across sales regions and states.

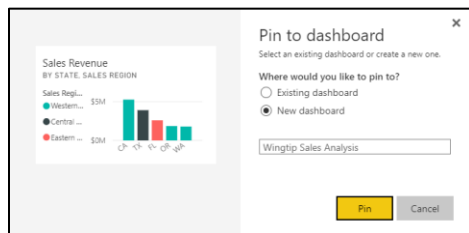


- Locate and click the button with the thumbtack icon to pin this report visual to a new dashboard.

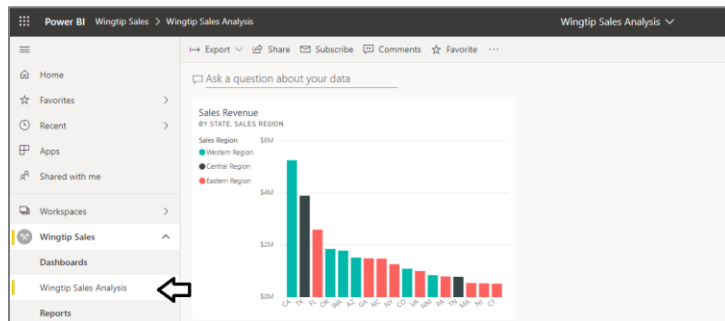


When you click the thumbtack button, you'll be prompted with the **Pin to dashboard** dialog which prompts you to select a dashboard.

- Select **New Dashboard**, give it a name of **Wingtip Sales Analysis** and click the **Pin** button.

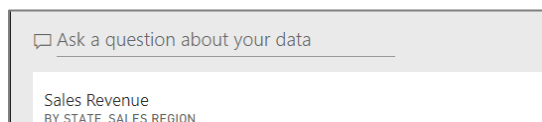


- f) Click the **Wingtip Sales Analysis** link in the **Dashboards** section of the left navigation to display the new dashboard.

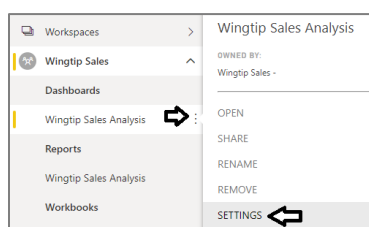


If you haven't previously worked with a Power BI dashboard, take a moment to experiment with resizing and moving the dashboard tile. Unlike a report, the changes you make to a dashboard tile are automatically saved without an explicit save action.

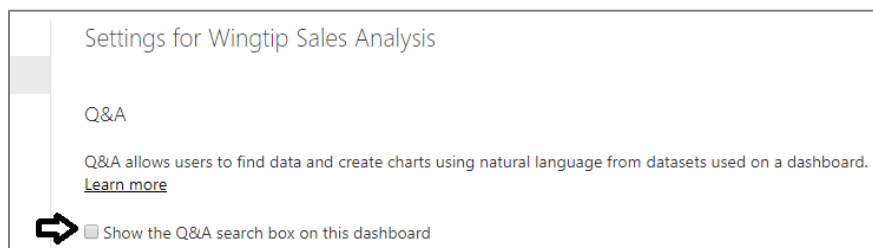
7. Remove the Q&A search box from the **Wingtip Sales Analysis** dashboard.
- a) You can see that the new dashboard is initially displayed with the Q&A search box in the upper left corner.



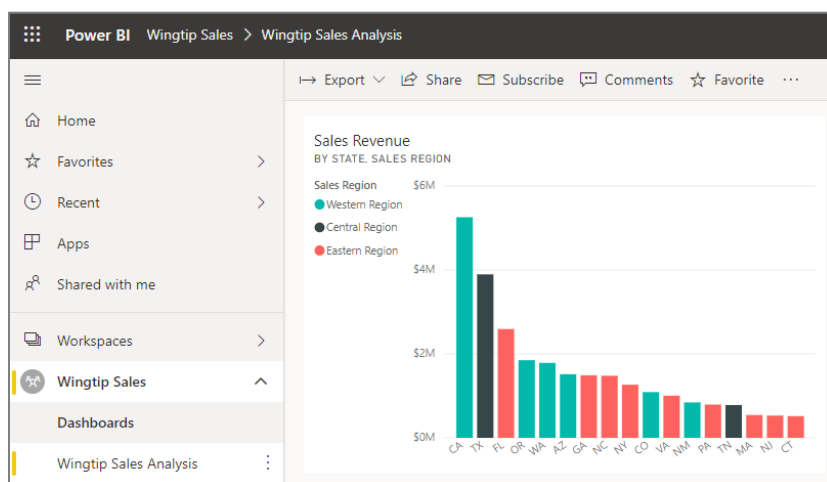
- b) Click **Dashboards > SETTINGS** in the left navigation to display the **Settings for Wingtip Sales Analysis** pane.



- c) In the **Settings for Wingtip Sales Analysis** pane, uncheck the **Show the Q&A search box on this dashboard** checkbox.



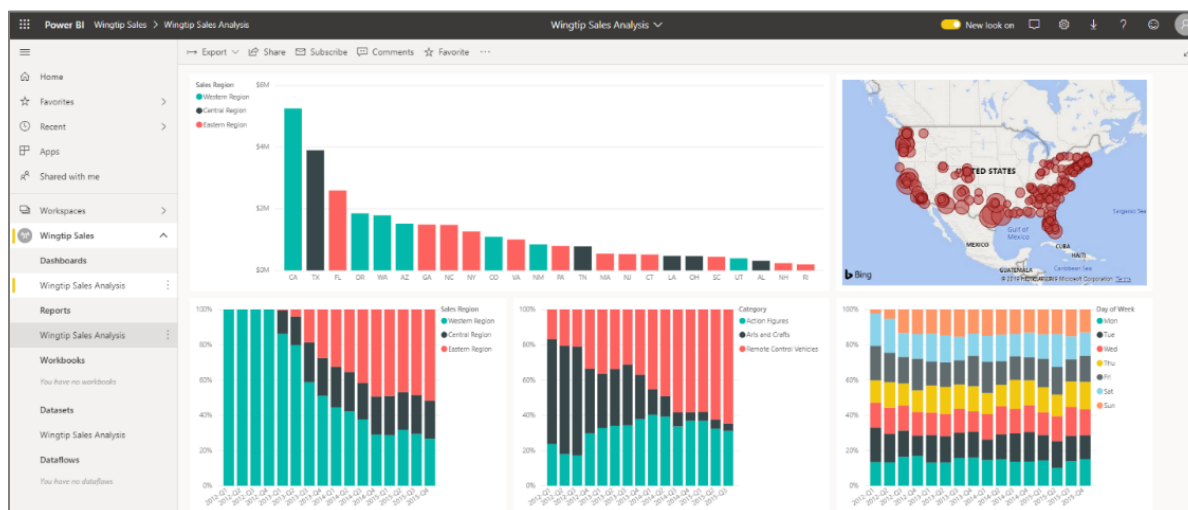
- d) Click **Apply** below in the **Settings for Wingtip Sales Analysis** pane and confirm the Q&A search box is no longer showing.



8. Add several more tiles to the dashboard by pinning visuals from the **Wingtip Sales Analysis** report.
 - a) Repeat the process you used in step 1 to create the first dashboard tile to add additional tiles to the dashboard.

Choose whatever visuals you'd like from the **Wingtip Sales Analysis** report. However, you should make sure that your dashboard contains several tiles. Be creative and design a dashboard that looks better than the dashboards of the other students around you.

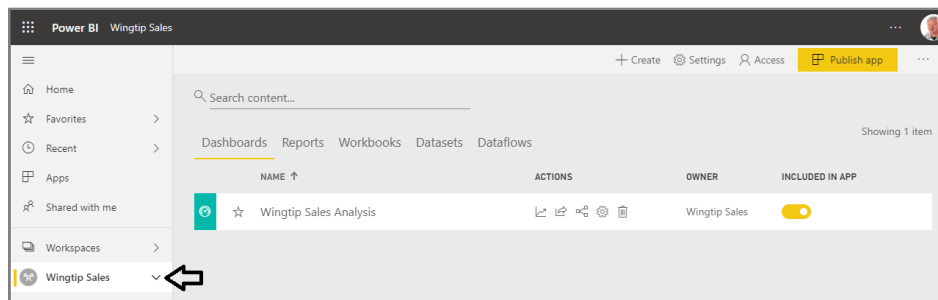
- b) When you're done, your dashboard should look something like the dashboard shown in following screenshot.



Exercise 2: Publish an App Workspace as a Power BI App

In this exercise you will publish the **Wingtip Sales** app workspace as a Power BI app.

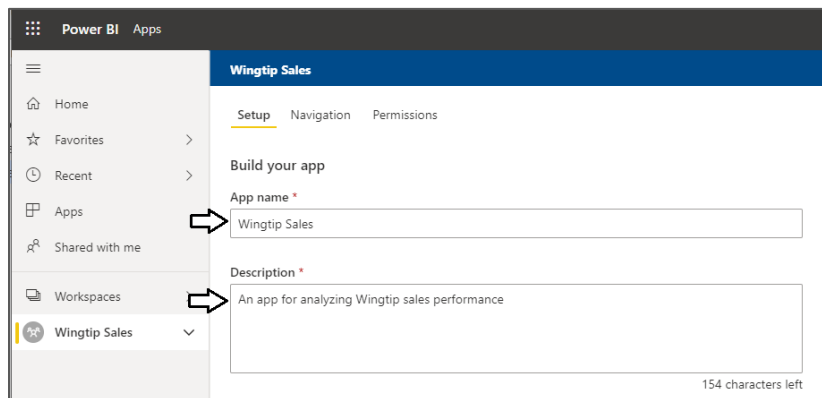
9. Publish the **Wingtip Sales** workspace as a Power BI app.
 - a) Navigate to the **Wingtip Sales** app workspace.
 - b) Click the **Wingtip Sales** link in the left navigation page for the **Wingtip Sales** app workspace.



c) Click the **Publish app** button.

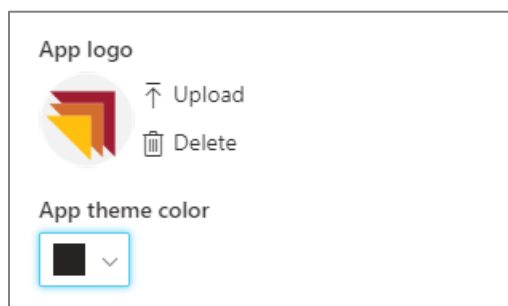


d) On the **Setup** tab, enter an **App name** of **Wingtip Sales** and a short **Description**.

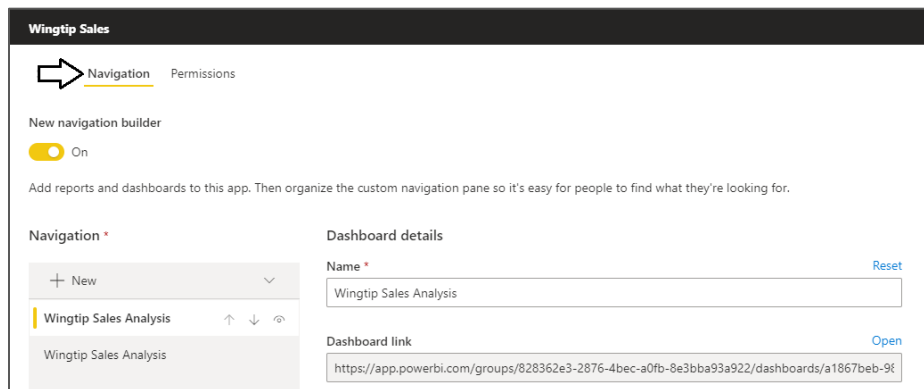


e) Upload an **App logo** from **C:\Student\Extras\Images\Applcon.png**.

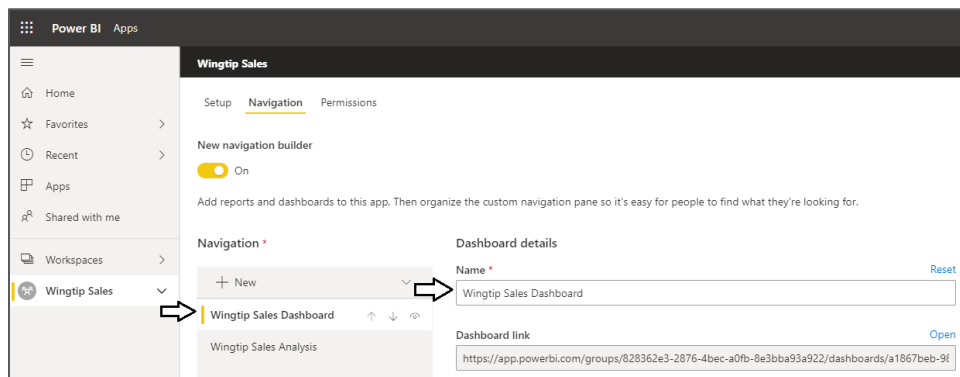
f) Select a **App theme color** of black.



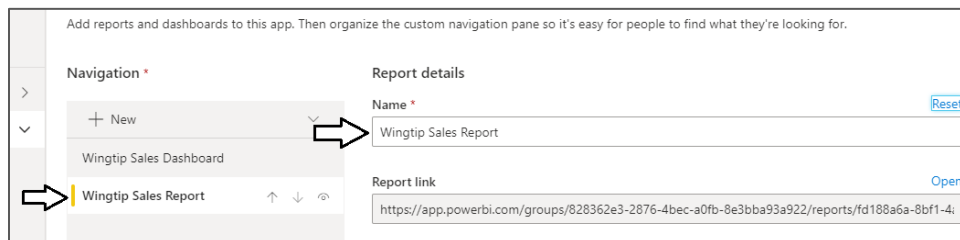
g) Click on the **Navigation** tab and **Set New navigation builder to On..**



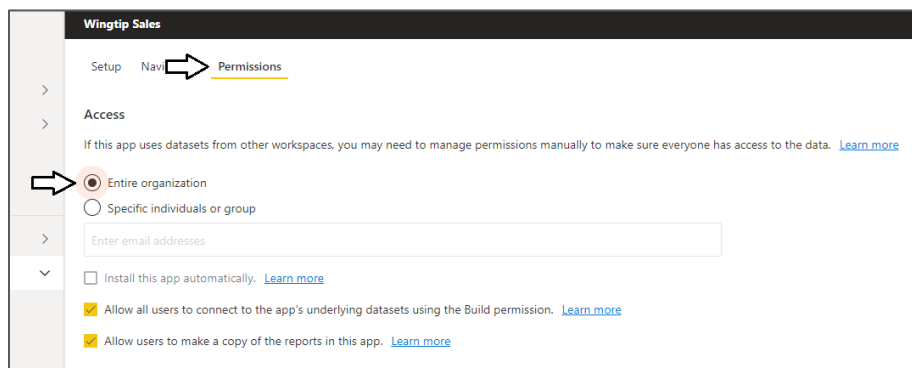
- h) Select **Wingtip Sales Dashboard** in the left **Navigation** list and examine the **Name** listed on the right in **Dashboard Details**.



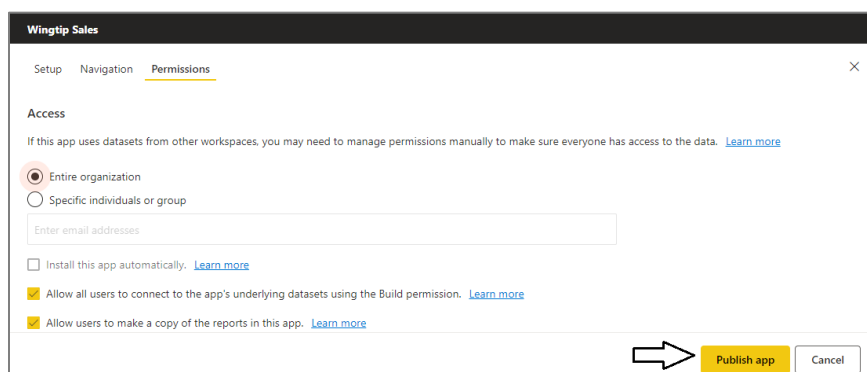
- i) Select **Wingtip Sales Analysis** in the left **Navigation** list and change the **Name** in **Report Details** to **Wingtip Sales Report**.



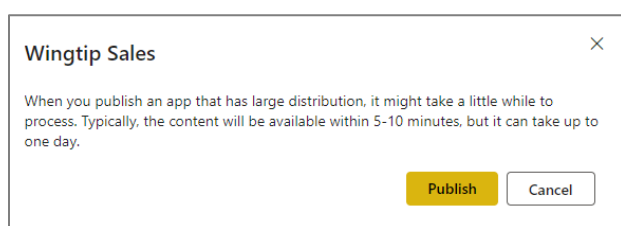
- j) On the **Permissions** tab under **Access**, select **Entire organization**



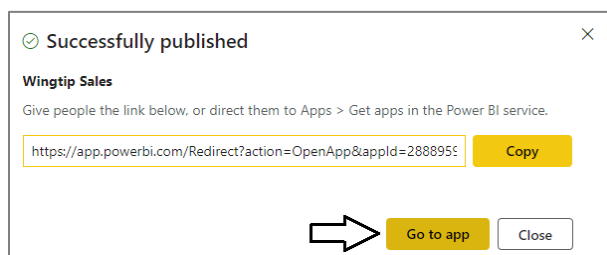
- k) Click the **Publish app** button on the right to complete the publication process.



- l) When prompted by the **Wingtip Sales** dialog, click **Publish**.

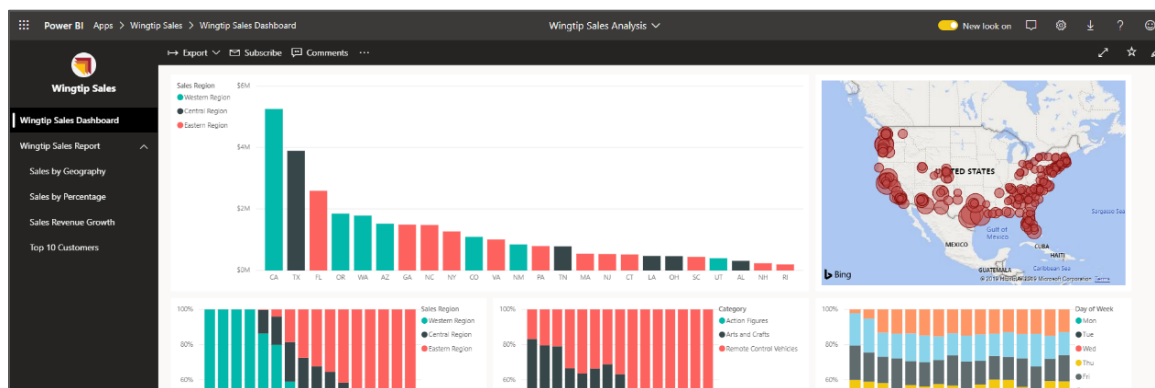


- m) When you see the **Successfully Published** dialog, click the **Go to app** button.



The Wingtip Sales app is now being installed for your organization account,

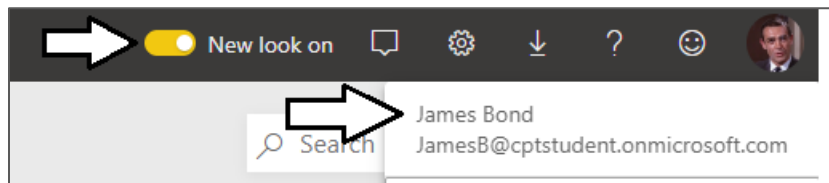
- n) You should now be redirected into the Wingtip Sales app.



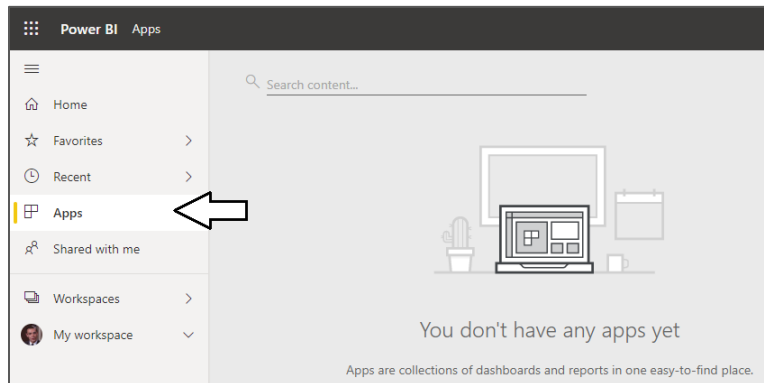
In the next step, you will logon as a different user. If you use a different browser (e.g. Chrome, Edge, Internet Explorer) for the secondary user, you can be logged on with two different users at the same time.

10. Install the app as a secondary user,

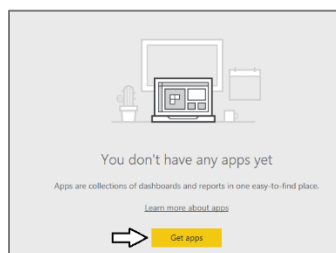
- a) Log into <https://app.powerbi.com> using the secondary user account.



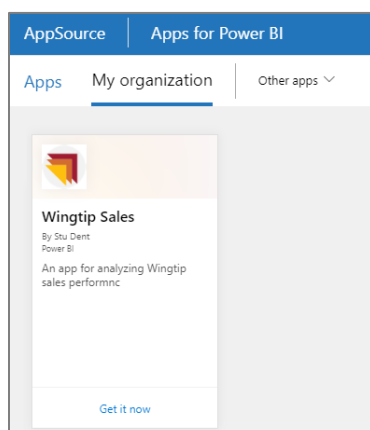
- b) Click the **Apps** button in the left navigation menu.



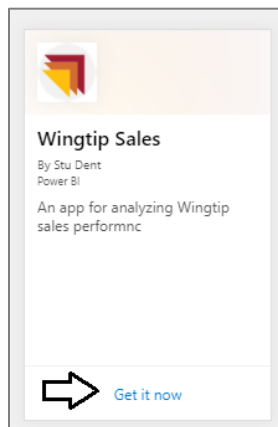
- c) You should see there are no apps currently installed for the current user..
d) Click the **Get apps** button.



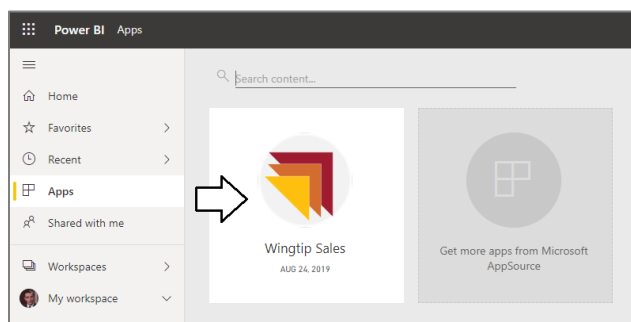
- e) You should see the **AppSource** dialog showing you what apps are available for installation. The **Wingtip Sales** app should be displayed as an app available for installation.



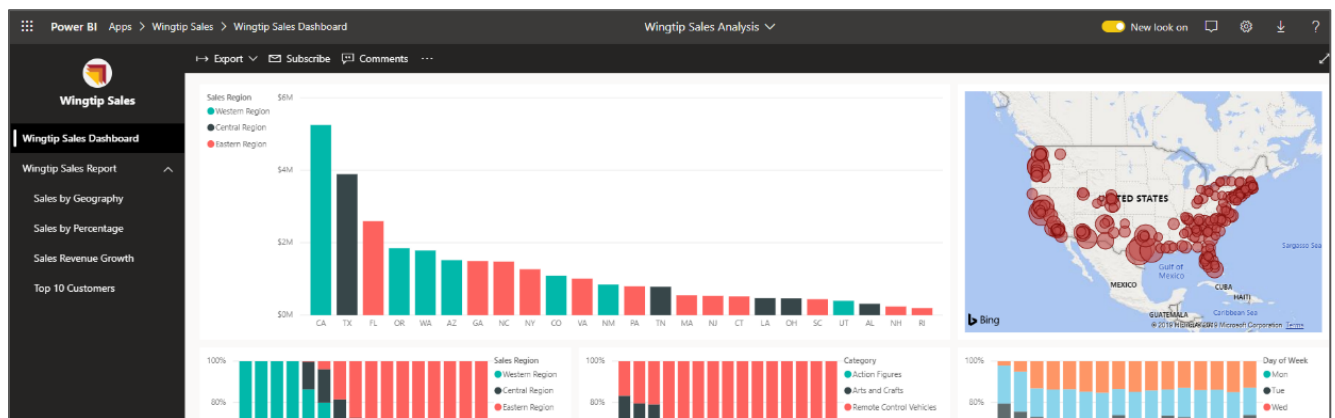
- f) Click the **Get it now** link.



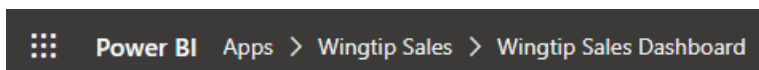
- g) The app should install and then be displayed as shown in the following screenshot.
h) Click on the tile for the **Wingtip Sales** app to launch it,



- i) When the app is launched, it should display the **Wingtip Sales Analysis** dashboard



- j) Note the breadcrumb at the top shows a path with the app and the dashboard inside the app.



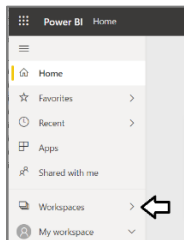
You have now installed and tested an app from the perspective of an ordinary user who does not an administrator..

Exercise 3: Create and Test a Power BI Template App

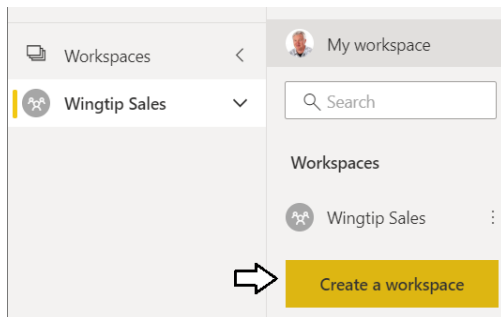
In this exercise you will create an app workspace named **State Sales** and build it out as a Power BI template app..

11. Create a new app workspace named **State Sales**.

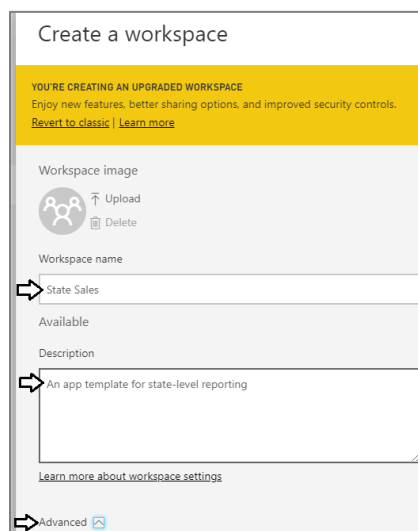
a) Click the **Workspace** flyout menu in the left navigation.



b) Click the **Create app workspace** button to display the **Create an app workspace** dialog.



c) In the **Create an app workspace** pane, enter a workspace name of **State Sales**.



Advanced ^

Contact list

☒ Workspace admins

☐ Specific users and groups

Enter users and groups

Workspace OneDrive

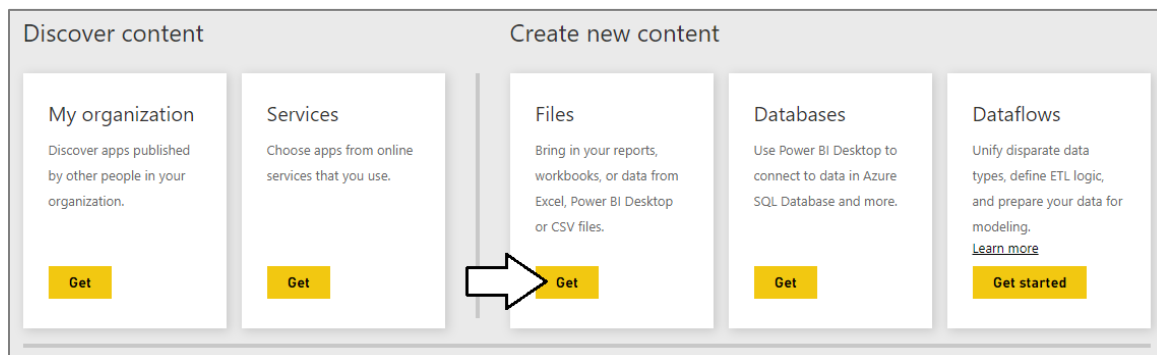
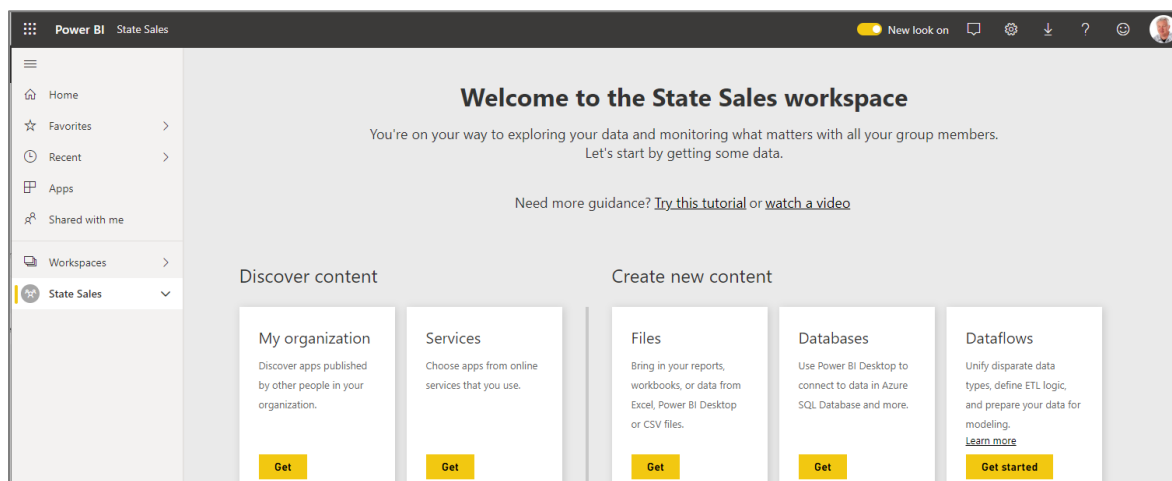
(Optional)

Dedicated capacity ⓘ

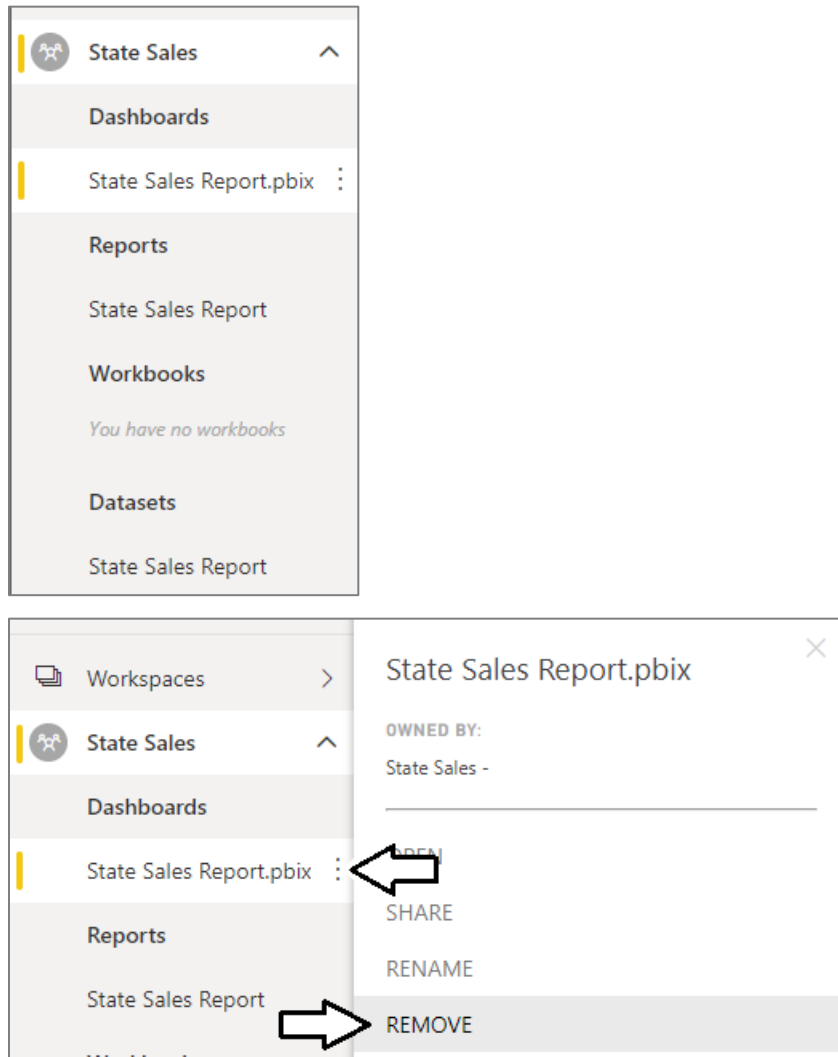
☐ Off

☒ Develop a template app

d) Click the **Save** button to create the new app workspace named **Wingtip Sales**.

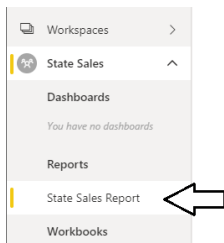


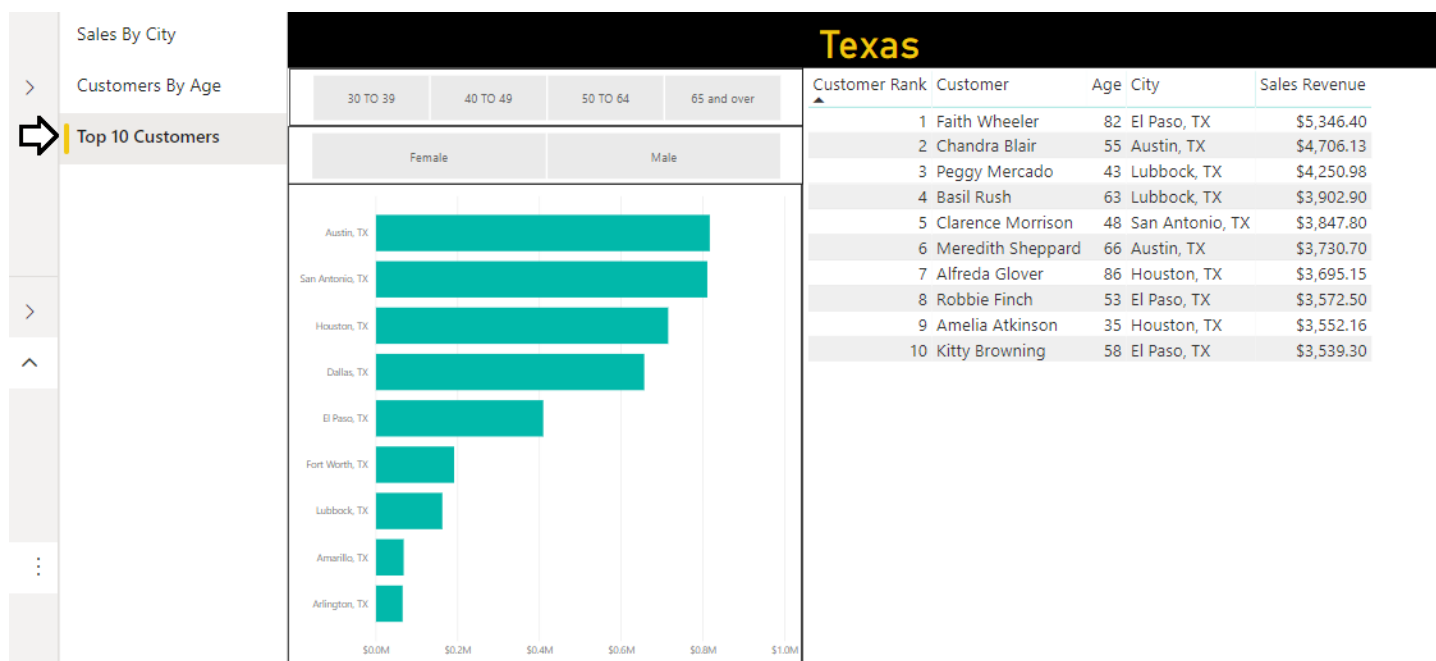
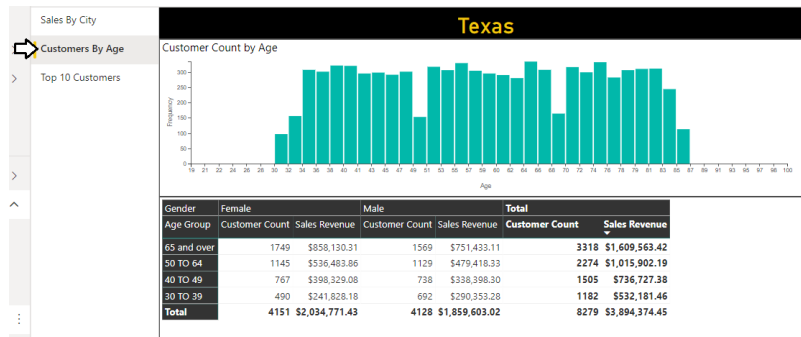
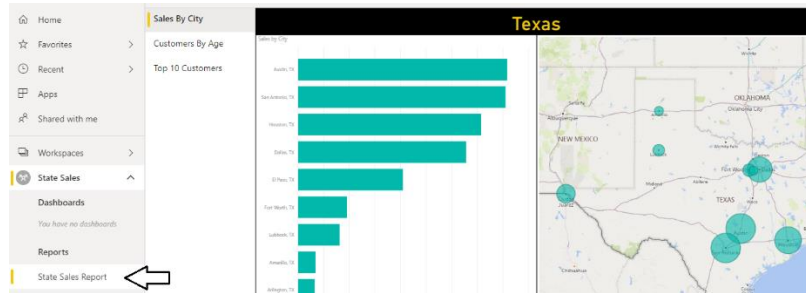
C:\Student\Modules\03_TemplateApps\Lab\State Sales Report.pbix



12. View report

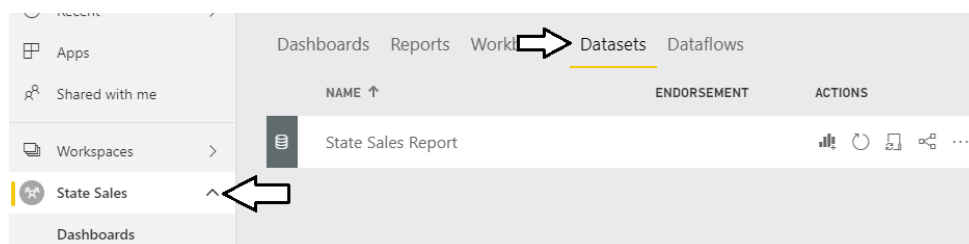
a) ssds

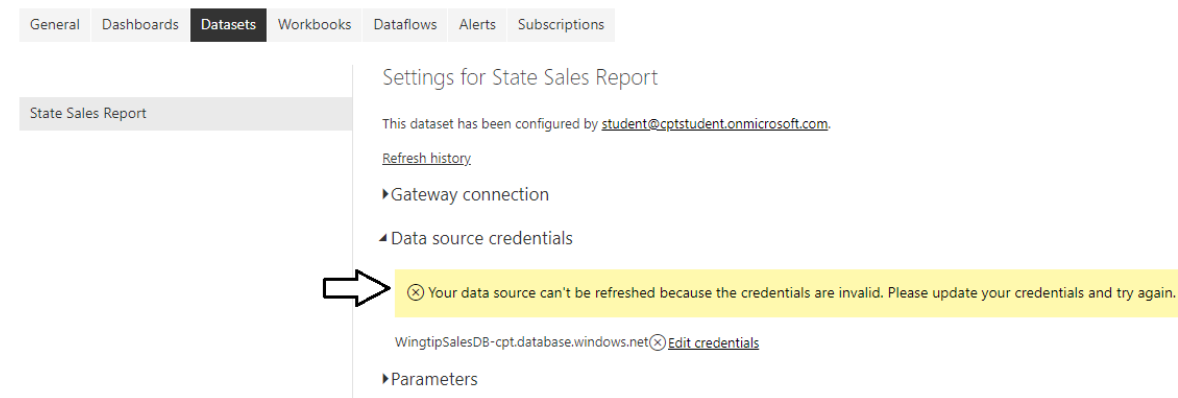
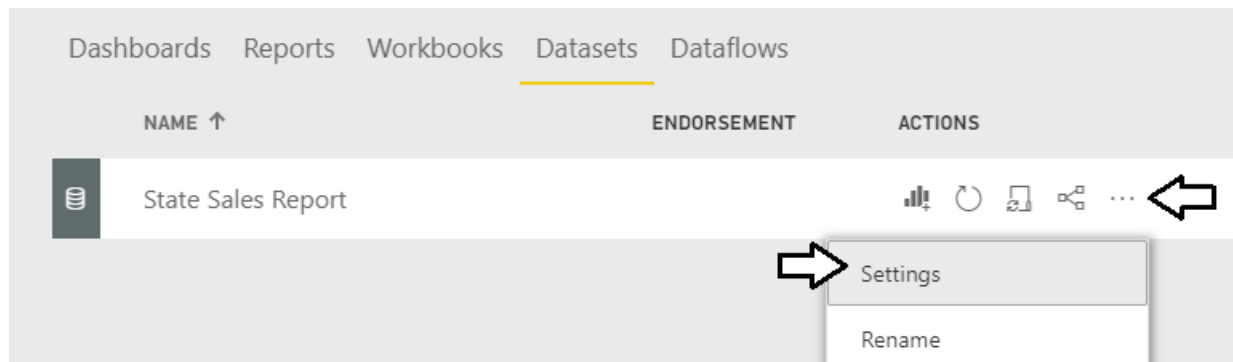




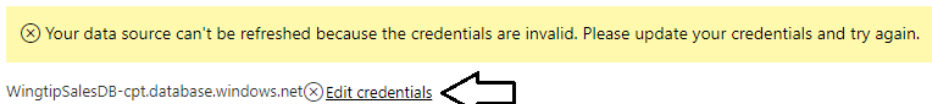
13. Add data source credentials..

a) ss





Data source credentials



Configure State Sales Report

server
cpt.database.windows.net

database
WingtipSalesDB

Authentication method
Basic

User name
CptStudent

Password

Privacy level setting for this data source
Organizational

☐ End users use their own OAuth2 credentials when accessing this data source via DirectQuery. [Learn more](#)

Sign in Cancel

14. ssss
a) sss

The screenshot shows the 'Settings for State Sales Report' in the Power BI Datasets pane. The 'Parameters' section is expanded, showing fields for 'DatabaseName' (WingtipSalesDB), 'DatabaseServer' (cpt.database.windows.net), and 'StateFilter' (TX). An arrow points to the 'Parameters' section header.

Below the settings, there is a 'Parameters' section with the same fields. An arrow points to the 'StateFilter' field, which contains 'CA'. Another arrow points to the 'Apply' button.

The top navigation bar shows 'Dashboards', 'Reports', 'Workbooks', 'Datasets' (selected), and 'Dataflows'. An arrow points to the 'Datasets' tab.

The 'State Sales Report' dataset is listed in the table below. An arrow points to the 'Actions' column, specifically to the refresh icon.

NAME ↑	ENDORSEMENT	ACTIONS
State Sales Report		Refresh, Download, Share, ...

A 'Preparing for refresh' dialog box is shown.

The bottom navigation bar shows 'Dashboards', 'Reports', 'Workbooks', 'Datasets' (selected), and 'Dataflows'. An arrow points to the 'Datasets' tab.

NAME ↑	ENDORSEMENT	ACTIONS	REFRESHED
State Sales Report		Refresh, Download, Share, ...	8/25/2019, 11:36:03 PM

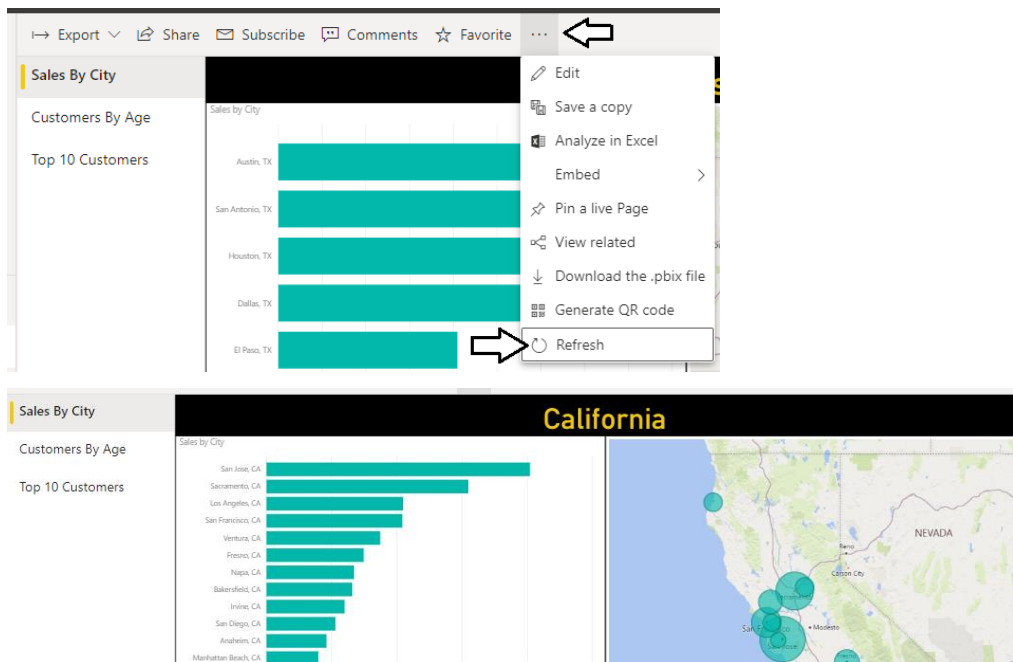
The 'Sales By City' dashboard is shown, featuring a bar chart and a map of Texas.

Sales By City

City	Sales
Austin, TX	High
San Antonio, TX	High
Houston, TX	Medium-High
Dallas, TX	Medium
El Paso, TX	Low-Medium
Fort Worth, TX	Low

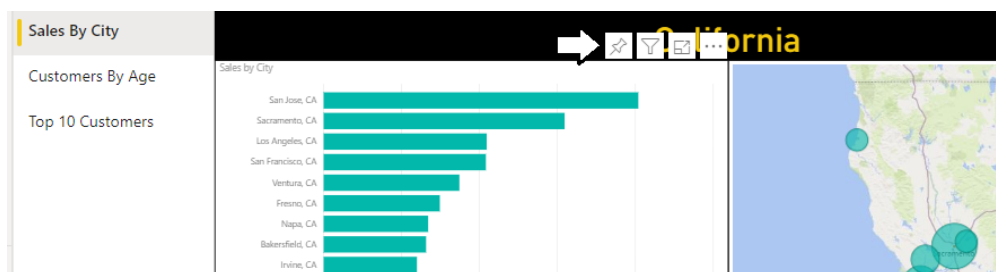
Texas

The map shows the state of Texas with major cities marked. The map is titled 'Texas'.

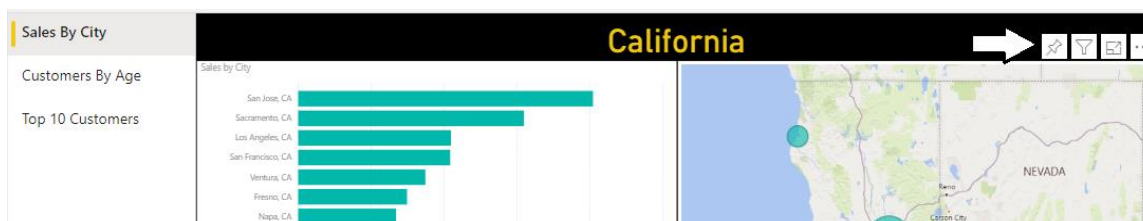


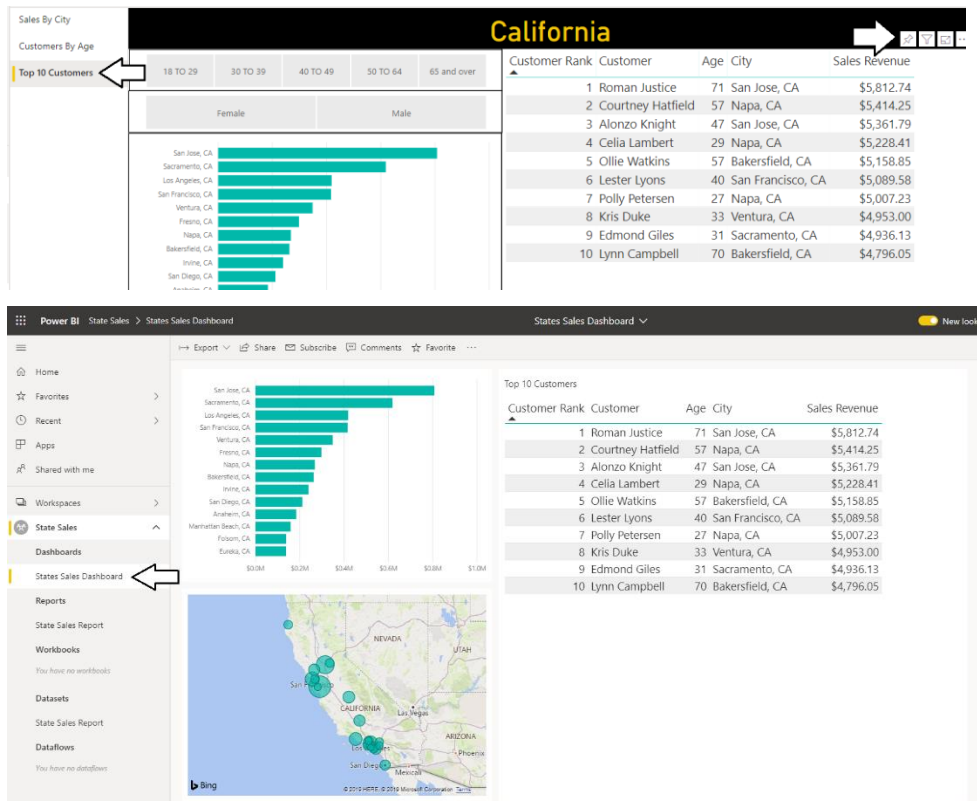
15. Create dashboard **Wingtip Sales** workspace as a Power BI app.

a) sss



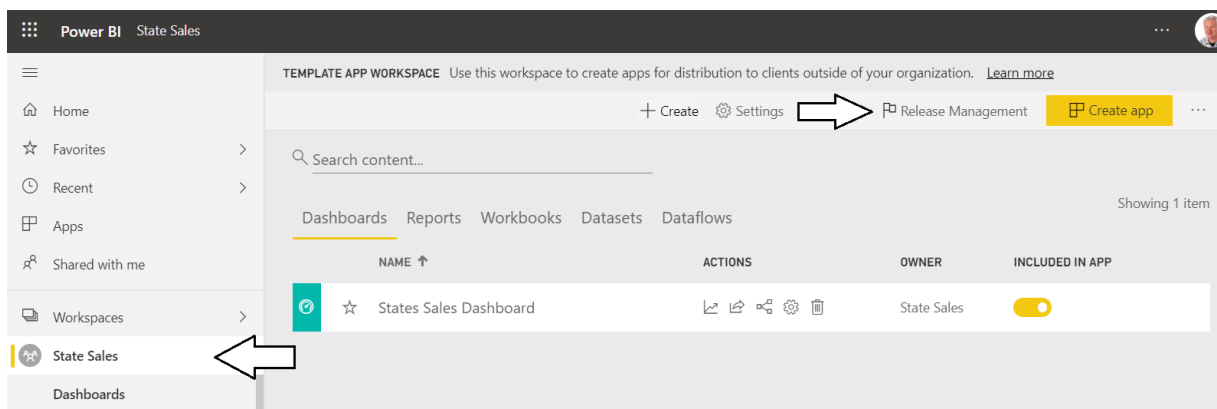
The 'Pin to dashboard' dialog box is shown. It includes a preview of the 'Sales BY CITY' bar chart. The 'Where would you like to pin to?' section has 'Existing dashboard' and 'New dashboard' options, with 'New dashboard' selected. The 'Dashboard name' field contains 'States Sales Dashboard'. The 'Pin' button is highlighted in yellow.





16. Release Management work

a) xsss



Release Management

Track the progress of your template app development lifecycle, and prepare it for release outside your organization. [Learn more](#)

Workspace **State Sales**
Created on: 8/25/2019, 11:06 PM
Use the workspace to build or edit your app. When you're ready, create the app for testing.

Testing

Pre-production

State Sales A template app for state-level reporting

Branding Navigation Control Parameters Access

>

> **Build your app**

App name *

State Sales

Description *

A template app for state-level reporting

160 characters left

Support site

Share where your users can find help

Support site

Share where your users can find help

App logo

Upload

Delete

App theme color

State Sales A template app for state-level reporting

Branding Navigation  Control Parameters Access

If the app contains sensitive intellectual property, you may want to control the actions users installing it can perform in Power BI. [Learn more](#)


To allow an action, select its checkbox. To block an action, clear its checkbox. A filled checkbox means the action is partially allowed.

☒ View or edit a dataset model definition

- ☒ Connect to datasets using external model authoring tools

☒ Export or externally connect to data

- ☒ Connect to datasets from Power BI Desktop or Excel or other data tools
- ☒ Export summarized report data, shown in visuals
- ☒ Export underlying raw data

 Exporting datasets to .pbix is always blocked for users installing the app

State Sales A template app for state-level reporting

Branding Navigation  Parameters Access

Manage Parameters

These are the dataset parameters installed with this template app.

Locking a value ensures it won't be visible or edited when the app's installed. You can also require anyone installing the app to provide their own value for a parameter.

StateFilter

Value *

CA



StateFilter

Value *
CA

☐ Required




DatabaseServer

Value *
cpt.database.windows.net

☐ Required

DatabaseName

Value *
WingtipSalesDB


  


✓ Your app is ready for testing

State Sales Version 1


Test your app and share this link with everyone you've given access to in your organization. [Learn more](#)

This same link will be used throughout the release management process including when it's available publicly or submitted to AppSource.


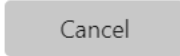
<https://app.powerbi.com/Redirect?action=InstallApp&appId=4c0739a3-d787-42fa-9016-20466e7725ce&pac> 




Install this Power BI app?

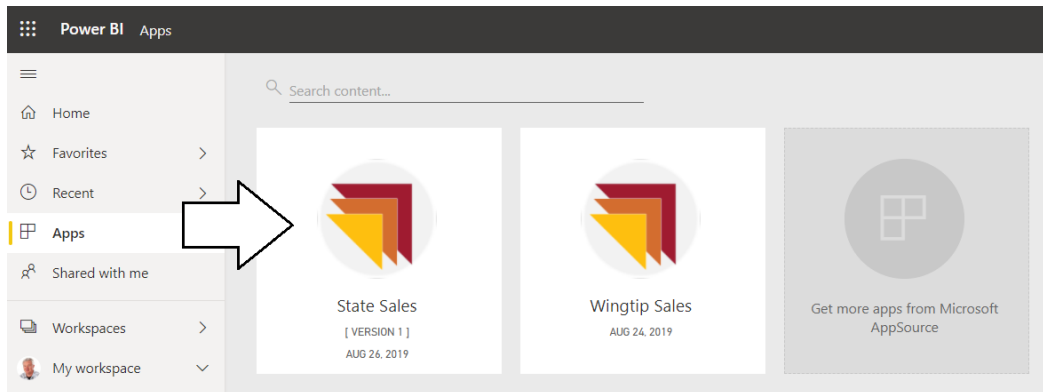
 This app hasn't been listed on AppSource.

Apps may contain security or privacy risks. Only install apps from trusted authors and sources. [Learn more](#)

 **Installing an app**

This could take a little while.




Get started with your new app

Explore your app with sample data, go to the workspace to customize as needed and share with your organization, or connect your data to get up and running.

Connect your data


Connect to a data source to view your new app with your own data.



Connect

Explore with sample data


Open your new app to start exploring with sample data.



Explore app

Customize and share

Your app comes with a workspace, so you can customize and share it, just like an app you built yourself.





Edit workspace


[Don't show this again](#)

Connect your data

Connect to a data source to view your new app with your own data.




 **Connect**

 **Connect to State Sales** ×


StateFilter


CA


Next Cancel

 **Connect to State Sales** ×

StateFilter

 WA

 Next Cancel



Connect to State Sales

✕

server

cpt.database.windows.net

database

WingtipSalesDB

Authentication method

Basic

User name

CptStudent

Password

.....

Privacy level setting for this data source

Organizational

Sign in

Cancel