Getting Up and Running in Your Power BI Environment

Setup Time: 30-40 minutes

Lab Folder: C:\Student\Modules\01_Introduction\Lab

Overview: This lab covers how to get up and running with Power BI by creating a new Office 365 trial tenant which includes free 30-day trial subscriptions for Office 365 and Power BI Pro. The act of creating and configuring this new Office 365 tenant will yield a development environment for working on projects with the Power BI service and using Microsoft's latest self-service BI tools such as Power BI Desktop and Microsoft Excel 2016. One valuable aspect of creating a new Office 365 trial tenant is that you will have tenant-level administrative permissions allowing you to configure the tenant with multiple user accounts for testing your projects in isolation from any existing Office 365 tenancy.

Do You Really Need to Create a New Office 365 Trial Account? We strongly encourage you to create a new Office 365 trial account to work through all the lab exercises in this course. If you do not create a new Office 365 trial account, you will still be able to complete the lab exercises for the first day of this course as long as you have a Power BI Pro license and you have a SharePoint Online site in which you have permissions to create new lists and document libraries. However, you will need to create the Office 365 trial account to complete the lab exercises on the second and third day.

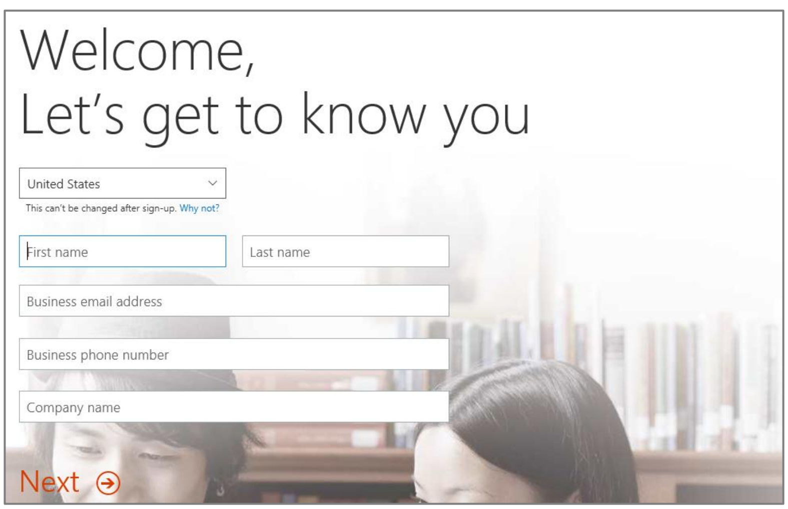
Exercise 1: Create a new Office 365 Trial Tenant

In this exercise, you will create a new Office 365 tenant which allows you to create up to 25 user accounts with Enterprise E5 trial licenses. Note that the Enterprise E5 trial license provides the benefits of the Power BI Pro license. Being able to create multiple Office 365 user accounts in your Power BI testing environment will be important so that you can test the effects of sharing Power BI dashboards between users.

1. Navigate to the following URL:

   https://go.microsoft.com/fwlink/p/?LinkID=698279&culture=en-US&country=US

2. Fill out the form with your personal information and click **Next**.

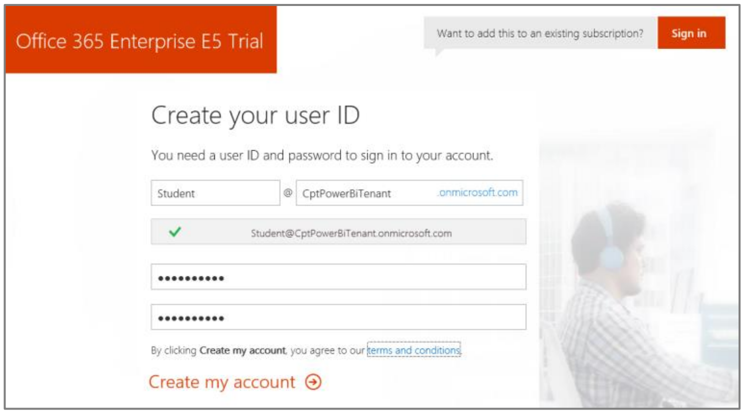


The information you provide here will be used throughout your tenant so if you do not wish to use your actual company name then provide humorous and fictitious company name. The name you use for company name will turn out to be the name of the trial Office 365 tenant that you are creating.

3. On the next page, you are prompted to provide a user ID, company name and password.

Note that the company name you enter on this page will be used to create the domain name for your new Office 365 trial tenant. For example, if you were to enter a company name of **CptPowerBiTenant**, it would result in the creation of a new Office 365 tenant within a domain of **CptPowerBiTenant.onMicrosoft.com**. The user name you enter will be used to create the first user account which will be given administrative rights within the trial tenant. If you enter a user name of **Student**, then the email address as well as user principal name for this account will be **Student@CptPowerBiTenant.onMicrosoft.com**.

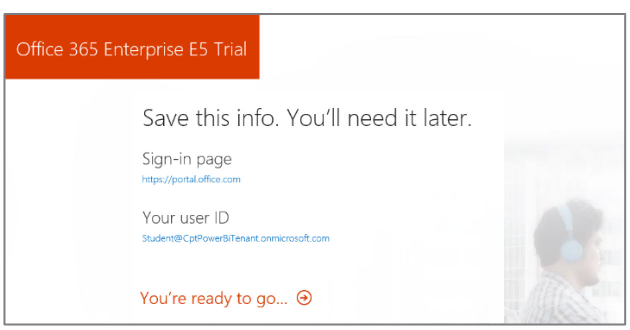
4. Enter a user name and a company name for your new Office 365 trial tenant. For the company name, you may wish to simply use your first and/or last name with a number which you can increment each time you have to create a new trial account (e.g. EricClapton1.onmicrosoft.com).



Don't use your actual company name as that may cause some conflict when your company decides to create their own official tenant. Throughout the remainder of this guide you will see a company domain name of **CptPowerBiTenant** which you should replace with the value specified for your company name.

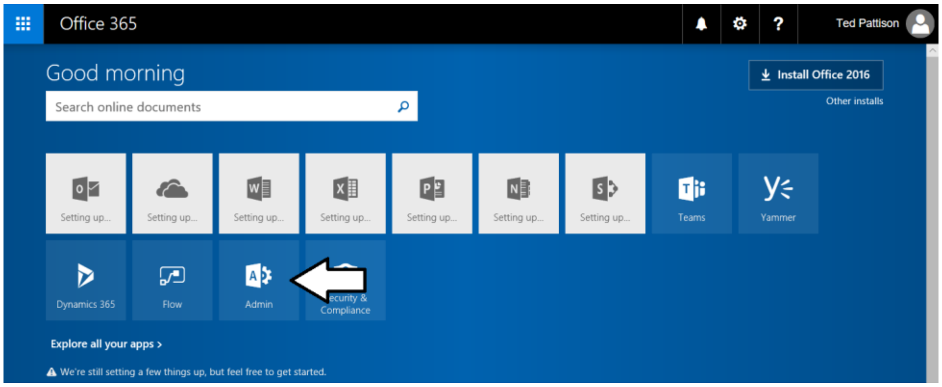
5. Click **Next** to continue to step 3.
6. Complete the validation form in step 3 by proving you are not a robot.
   a) Select the **Text me** option and provide the number of your mobile phone.
   b) When you go through this process, a Microsoft service will send you a text message that contains an access code.
   c) You retrieve the access code form your mobile device and use it to complete the validation process.

7. Once you have completed the validation process, click the **You're ready to go…** link to navigate to the portal welcome page for your new Office 365 trial tenant. Note that you should already be logged on using the user account that was created during the sign up process.

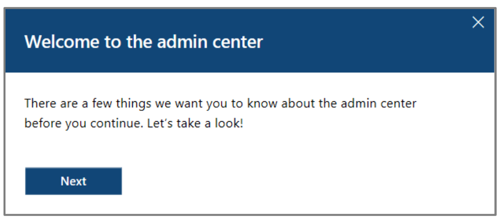


At this point, you have already created your new Office 365 tenant which can support creating up to 25 user accounts with Office 365 Enterprise E5 trial licenses. Note that some Office 365 services within your new Office 365 tenant such as the Office 365 admin center can be accessed immediately. Other services within your Office 365 tenant such as SharePoint Online are not ready immediately and will take some time to provision.

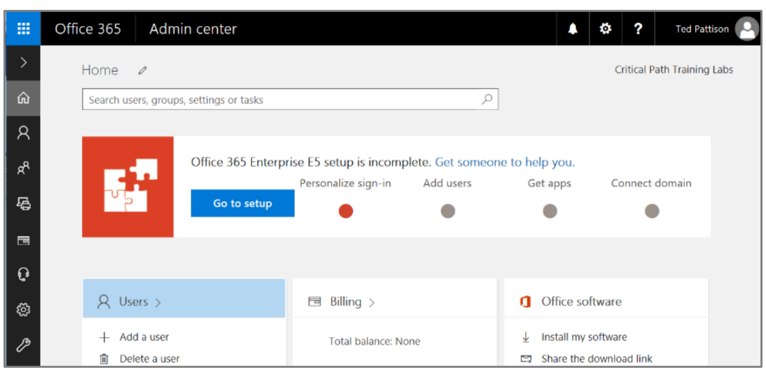
8. At this point, you should be located on the portal welcome page of Office 365. You will notice that this page shows the progress of the Office 365 environment in setting up each of the individual services that make up your new Office 365 tenant. Click the **Admin** tile to proceed to the Office **365 admin center**.



9. If you are presented with the Office 365 admin center welcome dialog, close it by clicking the **X** menu in the upper right corner.

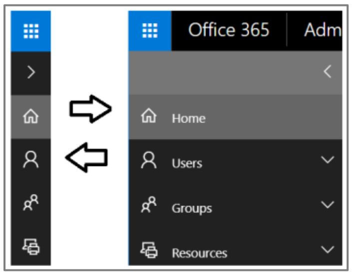


10. Verify that you are able to access the home page of the **Office 365 admin center**.
    a) The following screenshot shows the Office 365 Admin home page.



    b) Locate the top **Menu** button for the left navigation menu. It's the second button from the top with the arrow icon which sits just beneath the Office 365 App Launcher menu button.

c) Click the top **Menu** button several times and see how it toggles the left navigation between a collapsed and expanded mode.



If you are interested in getting more familiar with the **Office 365 admin center**, take a minute to explore the administrative pages behind the left navigation menu in the Office 365 admin center.

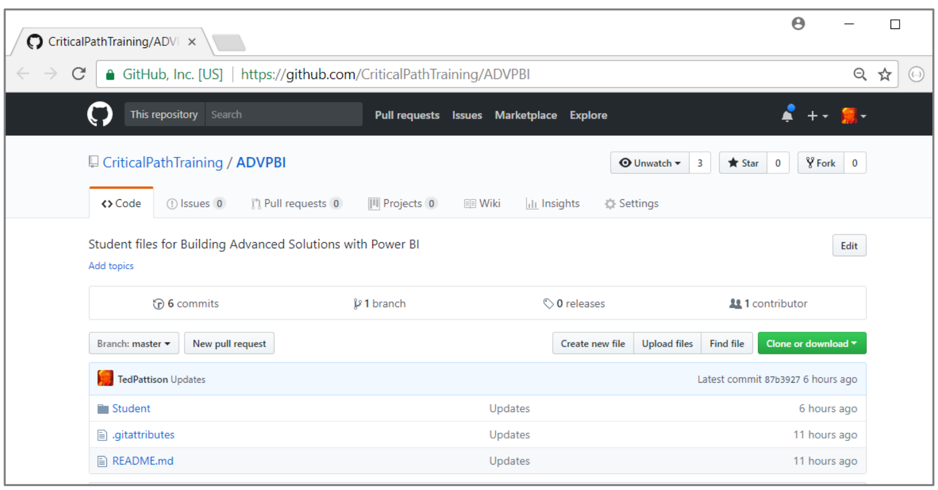
Exercise 2: Download a Local Copy of the Student Lab Files

In this exercise, you will download a local copy of the student files for this course which has a course code of **ADVPBI**.

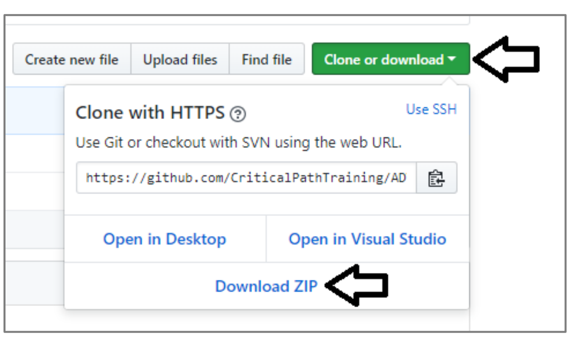
1. Launch a browser and navigate to the GitHub repository for this course at the following URL.

```
https://github.com/CriticalPathTraining/ADVPBI
```

2. You should see the home page for the repository as shown in the following screenshot.

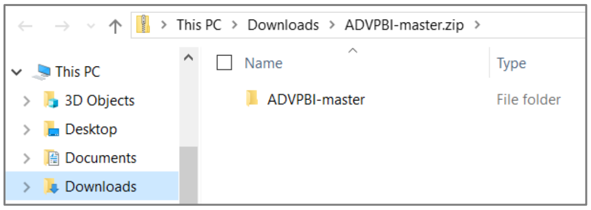


3. Download the student files as a ZIP archive.
   a) On the home page of the **ADVPBI** repository, click the green **Clone or download** dropdown menu.
   b) Click the **Download ZIP** button to download the entire repository as a ZIP archive named **ADVPBI-master.zip**.



c) When the **ADVPBI-master.zip** has been downloaded, open it using Windows Explorer.

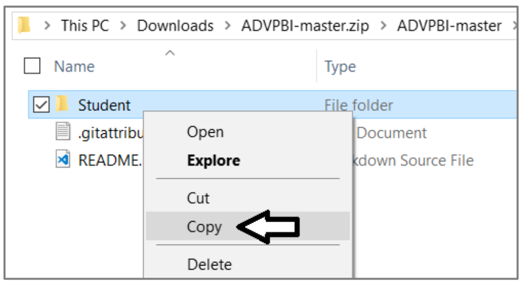
d) You should see that the ZIP archive contains a top-level folder named **ADVPBI-master**.



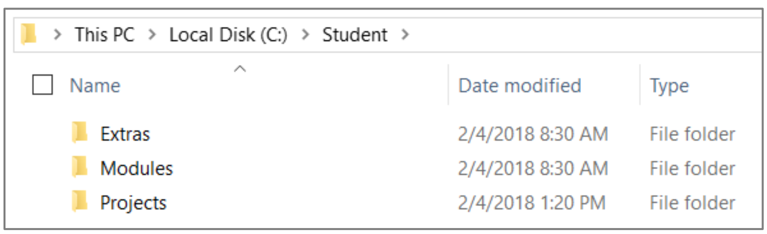
e) Click on the folder named **ADVPBI-master** to view its contents.

f) You should see the **ADVPBI-master** folder contains a child folder named **Student**.

g) Right-click on the **Student** folder and select the **Copy** command.



h) Paste the **Student** folder to the root of your local **C:** drive.



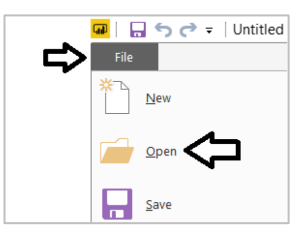
You can copy to the **Student** folder on any location on a local drive. Just keep in mind the lab manual will assume the **Student** folder is located at the root of the **C:** drive when display file paths.

Exercise 3: Getting Up and Running with Power BI Desktop

In this exercise, you will get started with Power BI Desktop by opening a PBIX project file and publishing it to the Power BI service. Note that to complete this lab exercise and those that follow, you must already have Power BI Desktop installed.

1. Open the Power BI Desktop project file named **Lab01.pbix**.

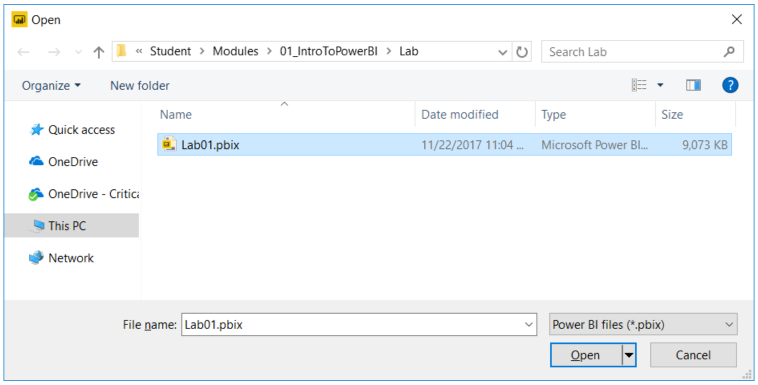
a) Select he **File > Open** command from within Power BI Desktop.



b) Locate the PBIX file located at the following path.

```
C:\Student\Modules\01_Introduction\Lab\Lab01.pbix
```

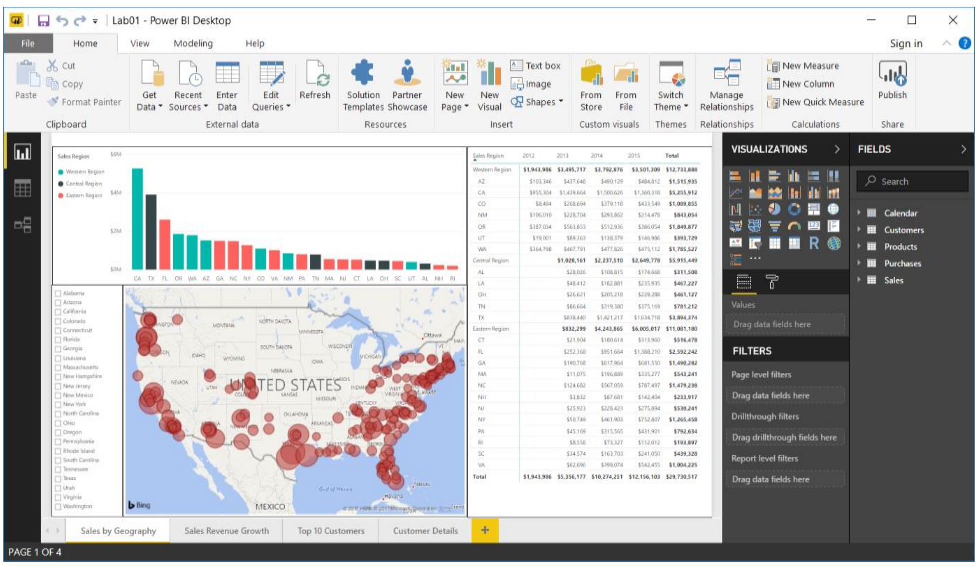
c) Open **Lab01.pbix** to load this project into Power BI Desktop.



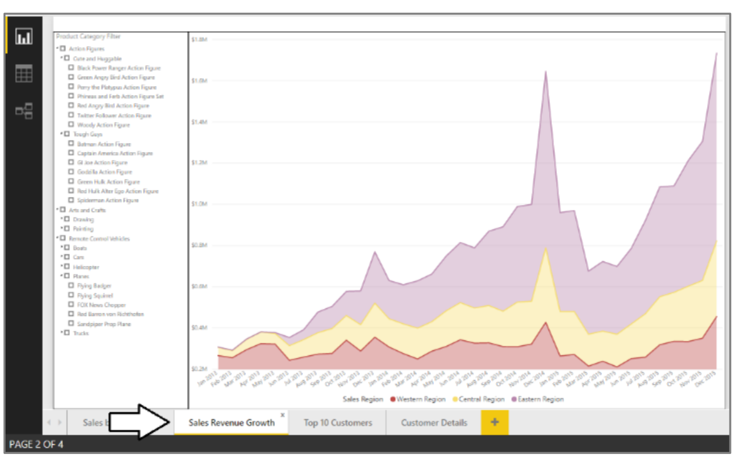
The project should now be open in Power BI desktop.

2. Inspect the contents of the Power BI Desktop project named **Lab01.pbix**.

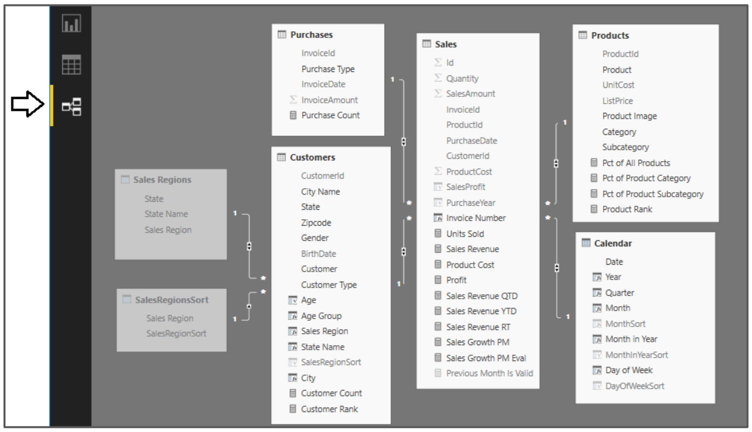
a) Inspect the report that has been created inside this project. You should see if provides four pages.



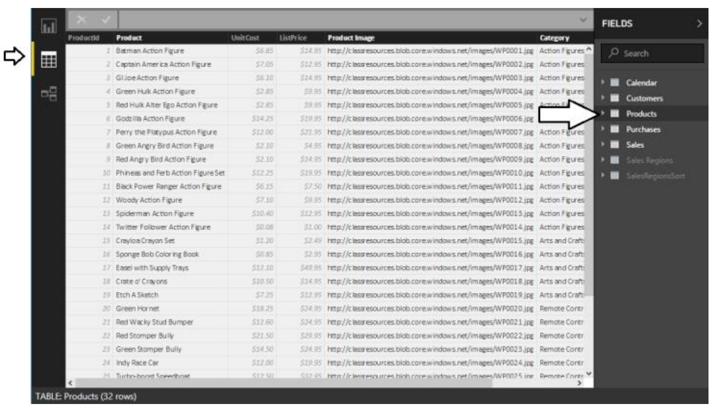
b) Using the navigation tabs at the bottom of the report, move from page to page to inspect each page in the report.



c) Click on the Relationship view button in the left navigation to see the tables included in data model and their relationships.



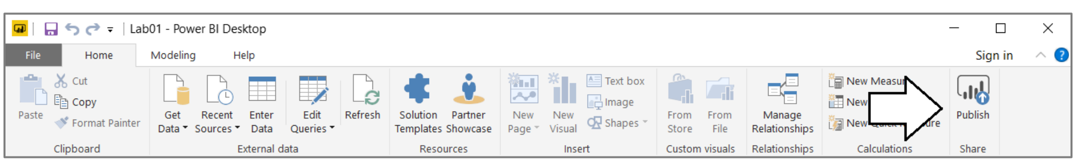
d) Click on the Data view button in the left navigation to see a tabular view of the data inside the project's data model. Note that you can select a table in the FIELDS list on the right to see the data in that table.



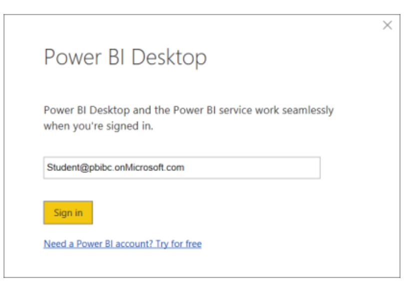
You do not need to make any changes to the Power BI Desktop project named **Lab01.pbix**. The purpose of this lab is for you to open an existing project that has already been completed and then to publish it to your personal workspace.

3. Publish the **Lab01.pbix** project to the Power BI Service.

a) Navigate to the **Home** tab in the ribbon and click the **Publish** button on the far right-hand side.

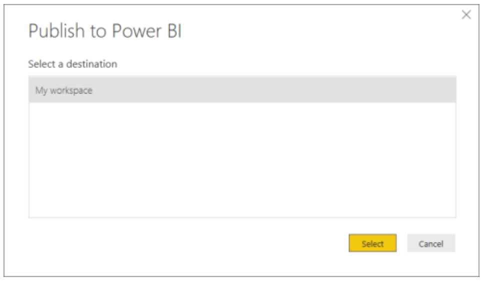


b) When promoted with the **Sign in to Power BI** dialog, click the **Sign In** button

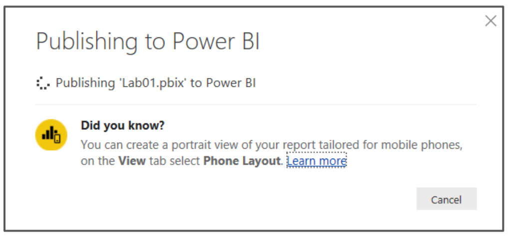


c) When prompted for your password, sign into the Power BI service.

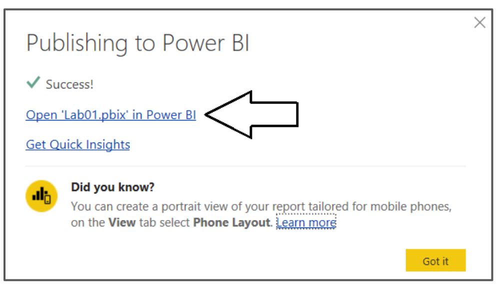
d) When Power BI Desktop prompts you with the **Publish to Power BI** dialog, select **My workspace** and then click **Select**.



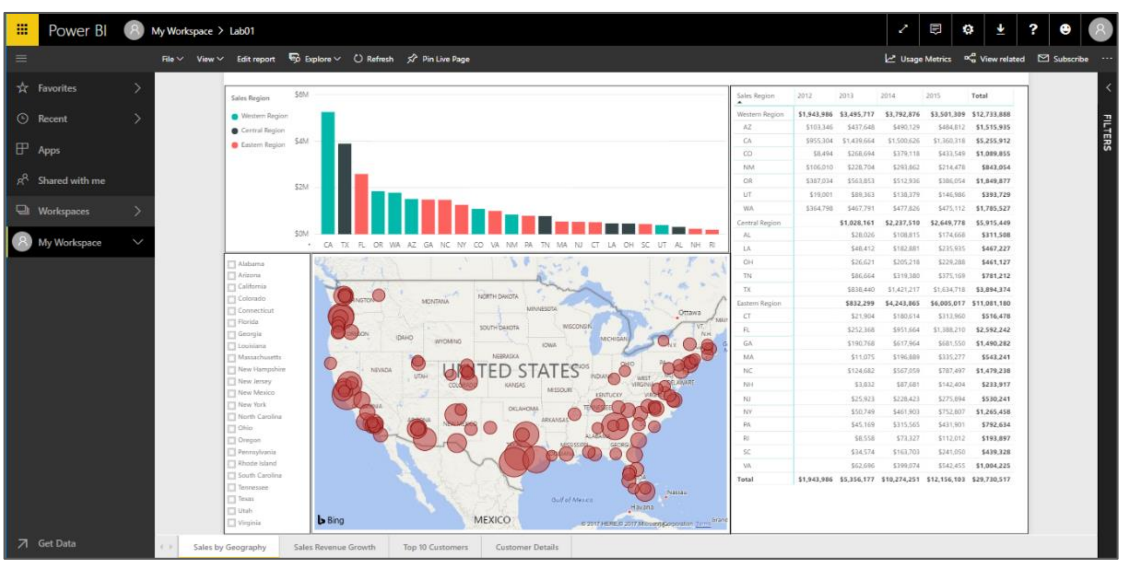
e) Power BI Desktop will display the **Publishing to Power BI** dialog as the publishing process begins.



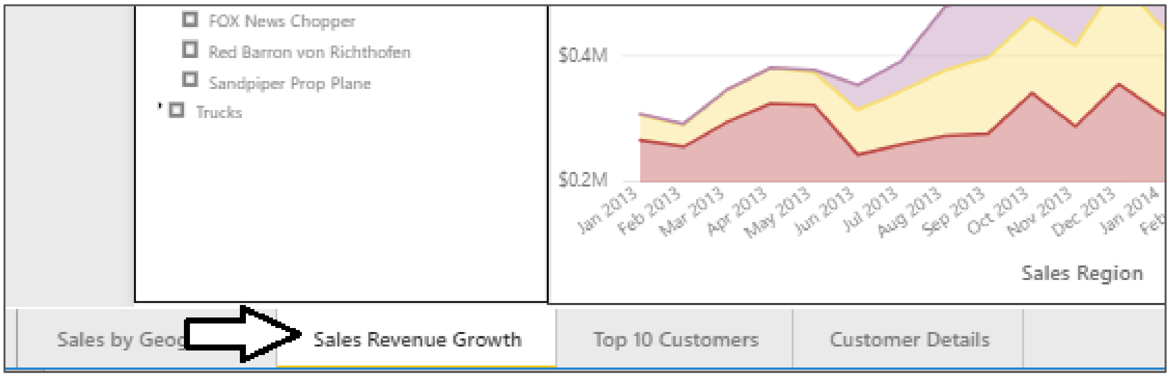
f) Once the publishing process has completed, the **Publishing to Power BI** dialog will display a success message and provide you with a link to **Open Lab01.pbix in Power BI**. Click on that link to navigate to the Power BI service using the browser.



g) You should now be able to see the **Sales by Month** page of the report you just created.

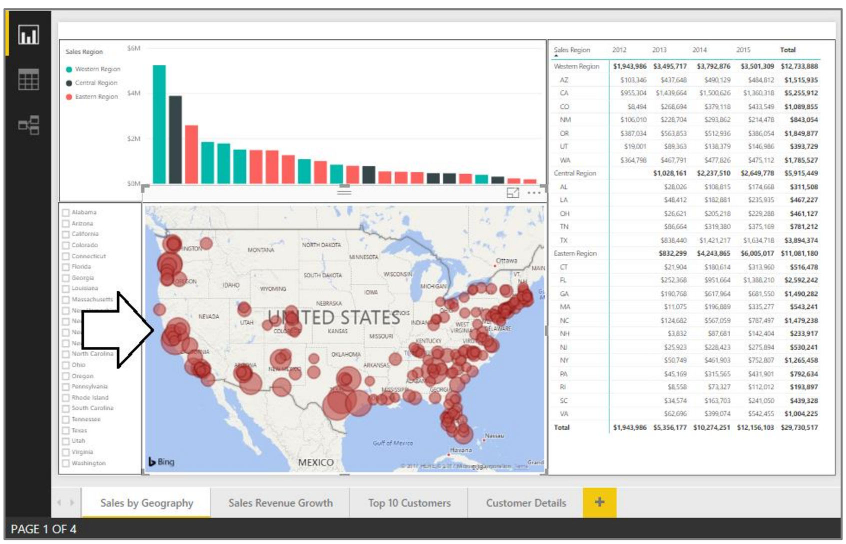


h) Click on the **Sales by State** link at the bottom of the screen to see the second page of the report.

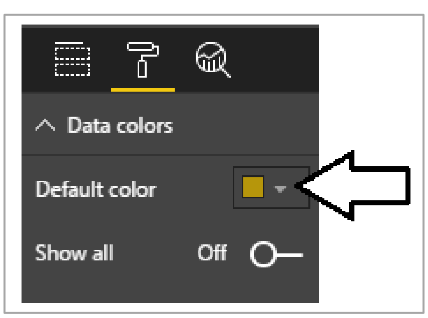


You have now successfully published a PBIX project using Power BI Desktop. But what happens when you want to make a change to a report after it has been published? It's very easy because you can make changes to your Power BI Desktop project and republish it on top a previous version of the same project that has already been published.

4. Change the type of the visual that displays sales revenue by month and purchase type.
   a) Return back to Power BI Desktop and make sure you are in report view for the project named **Lab01.pbix**.
   b) Return to the **Sales by Geography** page.
   c) Select the **Map** visual.



   d) Update the **Default color** property in the **Data colors** section in the **Format pane** to change the color of the bubbles from red to a different color such as yellow or purple.



e) Verify that the bubbles in the Map visual are now a different color than red.

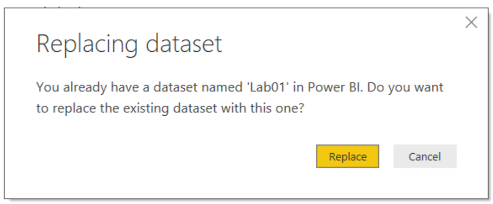
f) Save your changes to **Lab01.pbix**.

5. Republish the project to the Power BI service.

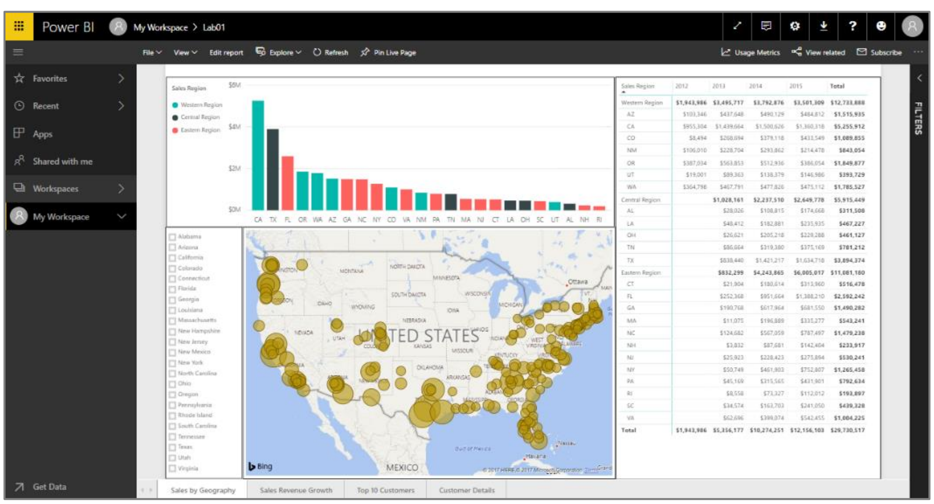
a) Click the **Publish** button on the far right-hand side of the **Home** tab in the ribbon.

b) When Power BI Desktop prompts you with the **Publish to Power BI** dialog, select **My workspace** and then click **Select**.

c) When prompted with the **Replacing dataset** dialog, click Replace to begin the publishing process.



d) Once the publishing process has completed, inspect the published report in the Power BI service using the browser. Verify that the bubble color within the Map visual has been updated.



Congratulations, you have now finished this lab. If you finish early before other student and you still have extra time, experiment by clicking the **Edit report** button in the browser and seeing how you can continue to modify the pages of the report after the report has been published to the Power BI service. Note that any changes you make to the report through the browser will be overwritten if you republish the report with Power BI Desktop.