Module 3: Power BI Data

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Note: Lab Solution is present in `D:\Labfiles\Lab03\Solution` folder:

Lab: Importing Data into Power BI

Exercise 1: Importing Excel Files into Power BI

Task 1: Prepare the Lab Environment

1. Ensure that the **MT17B-WS2016-NAT**, **20778C-MIA-DC**, **20778C-MIA-SQL**, and **20778C-MIA-CLI** virtual machines are running, and then log on to **20778C-MIA-CLI** as **Student** with the password **Pa55w.rd**.

2. If you do not already have a Power BI login, in Internet Explorer, browse to **https://powerbi.microsoft.com/en-us/documentation/powerbi-admin-signing-up-for-power-bi-with-a-new-office-365-trial**, and then follow the steps to create an account.

Task 2: Reduce the Size of Excel Files

1. In File Explorer, in the **D:\Labfiles\Lab03\Starter\Project** folder, double-click **Adventure Works Sales.xlsx** to open the file.

2. If the **PROTECTED VIEW** message appears, click **Enable Editing**.

3. On the **Product Category** worksheet, click the **ProductCategoryID** column header, and then change the name to **Product Category ID** in the formula bar.

4. Click the **Name** column header, and then change the name to **Product Category** in the formula bar.

5. Select all rows and columns to highlight cells **A1** to **B5**, in the **Cell Styles** list, click **Normal**. The cells lose their color.

6. Select all rows and columns to highlight cells **A1** to **B5**, and then on the **Insert** tab, click **Table**.

7. In the **Create Table** dialog box, ensure that **My table has headers** is selected, and then click **OK**. The cells are transformed into a table.

8. On the **Design** tab, in the **Properties** group, change the name of the table to **ProductCategory**.

9. Click the **Product Subcategory** worksheet.

10. Click the **ProductSubcategoryID** column header, and then change the name to **Product Subcategory ID** in the formula bar.

11. Click the **ProductCategoryID** column header, and then change the name to **Product Category ID** in the formula bar.

12. Click the **Name** column header, and then change the name to **Product Subcategory** in the formula bar.
13. Select all rows and columns to highlight cells **A1** to **C38**, in the **Cell Styles** list, and then click **Normal**. The cells lose their color.
14. Select all rows and columns to highlight cells **A1** to **C38**, and then on the **Insert** tab, click **Table**.
15. In the **Create Table** dialog box, ensure that **My table has headers** is selected, and then click **OK**. The cells are transformed into a table.
16. On the **Design** tab, in the **Properties** group, change the name of the table to **ProductSubcategory**.
17. Click the **Products** worksheet.
18. Click the **ProductID** column header, and then change the name to **Product ID** in the formula bar.
19. Click the **Name** column header, and then change the name to **Product Name** in the formula bar.
20. Click the **ProductNumber** column header, and then change the name to **Product Number** in the formula bar.
21. Click the **StandardCost** column header, and then change the name to **Standard Cost** in the formula bar.
22. Click the **ListPrice** column header, and then change the name to **List Price** in the formula bar.
23. Click the **ProductSubcategoryID** column header, and then change the name to **Product Subcategory ID** in the formula bar.
24. Click the **ProductModelID** column header, and then change the name to **Product Model ID** in the formula bar.
25. Select all rows and columns to highlight cells **A1** to **H505**, in the **Cell Styles** list, and then click **Normal**. The cells lose their color.
26. Select all rows and columns to highlight cells **A1** to **H505**, and then on the **Insert** tab, click **Table**.
27. In the **Create Table** dialog box, ensure that **My table has headers** is selected, and then click **OK**. The cells are transformed into a table.
28. On the **Design** tab, in the **Properties** group, change the name of the table to **Products**.
29. Click the **Sales** worksheet.
30. Click the **SalesOrderID** column header, and then change the name to **Sales Order ID** in the formula bar.
31. Click the **SalesPerson** column header, and then change the name to **Sales Person** in the formula bar.
32. Click the **ProductCategory** column header, and then change the name to **Product Category** in the formula bar.
33. Click the **ProductSubcategory** column header, and then change the name to **Product Subcategory** in the formula bar.
34. Click the **ProductName** column header, and then change the name to **Product Name** in the formula bar.
35. Click the **OrderQty** column header, and then change the name to **Order Qty** in the formula bar.
36. Click the **OrderDate** column header, and then change the name to **Order Date** in the formula bar.
37. Click the **UnitPrice** column header, and then change the name to **Unit Price** in the formula bar.

38. Click the **UnitPriceDiscount** column header, and then change the name to **Unit Price Discount** in the formula bar.

39. Click the **LineTotal** column header, and then change the name to **Line Total** in the formula bar.

40. Click the **TotalDue** column header, and then change the name to **Total Due** in the formula bar.

41. Select all rows and columns to highlight cells **A1** to **M60920**, in the **Cell Styles** list, and then click **Normal**. The cells lose their color.

42. Click the **Order Date** (I) column to select all of the cells, right-click the highlighted cells, and then click **Format Cells**.

43. In the **Format Cells** dialog box, click **Date**, in the **Type** list, click ***Wednesday, March 14, 2012**, and then click **OK**.

44. Click to highlight and select all cells in columns **J** through **M**, right-click the highlighted cells, and then click **Format Cells**.

45. In the **Format Cells** dialog box, click **Currency**, in the **Symbol** list, click **$ English (United States)**, and then click **OK**.

46. Select all rows and columns to highlight cells **A1** to **M60920**, and then on the **Insert** tab, click **Table**.

47. In the **Create Table** dialog box, ensure that **My table has headers** is selected, and then click **OK**. The cells are transformed into a table.

48. On the **Design** tab, in the **Properties** group, change the name of the table to **Sales**.

49. On the **File** menu, click **Save**.

50. Close Excel 2016.

Task 3: Import Excel Files

1. In Internet Explorer, go to **https://powerbi.microsoft.com**, and sign in to your Power BI account.

2. If the **Welcome to Power BI** page displays, under **Files**, click **Get**, and then click **Local File**.

3. If the main Power BI page displays, in the navigation pane, click **Get Data**, and then under **Files**, click **Get**, and then click **Local File**.

4. In the **Choose File to Upload** dialog box, navigate to the **D:\Labfiles\Lab03\Starter\Project** folder, click **Adventure Works Sales.xlsx**, and then click **Open**.

5. Click **Import** to import the Excel data into Power BI. The importing dialog box appears. This might take a minute or so to load.

6. After loading has completed, expand **My Workspace**, and then under **DATASETS**, click **Adventure Works Sales**.

7. In the **FIELDS** pane, notice that each of the tabs from Excel have been imported and converted into a table. Expand each of the tables to view the list of columns. These match the names of the columns in Excel.

8. Leave Internet Explorer open and remain signed in to Power BI for the next exercise.

Exercise 2: Viewing Reports from Excel Files

Task 1: View Excel Power View Sheets as Power BI Reports

1. In File Explorer, in the **D:\Labfiles\Lab03\Starter\Project** folder, double-click the **Adventure Works Power View.xlsx** file to open it.

2. If the **PROTECTED VIEW** message appears, click **Enable Editing**.

3. Click the **Power View Sales** worksheet.

4. If the **INACTIVE ADD-INS** message appears, click **Enable**.

5. If the **Power View requires a current version of Silverlight** message appears, click **Install Silverlight**, and complete the following:

    1. In Microsoft Edge, click the **Install for Windows** link.
    2. In the message box, click **Save**.
    3. In the message box, click **Run**.
    4. In the **User Account Control** dialog box, in the **Password** box, type **Pa55w.rd**, and then click **Yes**.
    5. In the **Install Silverlight** dialog box, clear all check boxes, and then click **Install now**.
    6. On the **Enable Microsoft Update** page, click **Next**.
    7. On the **Installation successful** page, click **Close**.
    8. Close Microsoft Edge.
    9. In Excel, click **Reload**.

6. In the Power View report, notice the visuals on the report and the **Sales Person** filter, and then close the file.

7. In Internet Explorer, on the Power BI page, in the **My Workspace** pane, click **Get Data**.

8. Under **Files**, click **Get**, and then click **Local File**.

9. In the **Choose File to Upload** dialog box, navigate to the **D:\Labfiles\Lab03\Starter\Project** folder, click **Adventure Works Power View.xlsx**, and then click **Open**.

10. Click **Import** to import the Excel data into Power BI. The importing dialog box appears. This might take a minute or so to load.

11. After loading has completed, in **My Workspace**, under **REPORTS**, click **Adventure Works Power View**.

12. At the bottom of the screen, click the **Power View Sales** tab to open the report. The **Adventure Works Sales** report loads.

13. Expand **Filters**, and then click the **Sales Person is (All)** arrow icon. The list of salespeople appears.

14. Test the report by clicking some of the salespeople, and then check the data changes in the report.

15. Close Internet Explorer.