**Viewing Relationships in Power BI**

**Demonstration Steps**

1. On the desktop, double-click **Power BI Desktop**.
2. In the **Get Data** dialog box, click **Get Data**. Ensure **Excel** is selected, and click **Connect**.
3. In the **Open** dialog box, navigate to **D:\Demofiles\Mod05\Demo**, click **Adventure Works Sales Data.xlsx**, and then click **Open**.
4. In the **Navigator** dialog box, select **DimCurrency**, **DimCustomer**, **DimDate**, **DimProduct**, **DimPromotion**, **DimSalesTerritory**, and **FactInternetSales**.
5. Click **Load**.
6. In the views pane on the left-hand side, click **Relationships**.
7. Point out that Power BI has created the relationships automatically. The layout represents a star schema.
8. Maximize the tables in the relationship diagram to display all columns.
9. Point out that Power BI has not created a relationship to **DimDate** from **FactInternetSales**.
10. On the **Home** tab, click **Manage Relationships**.
11. In the **Manage Relationships** dialog box, click **New**.
12. In the **Create Relationships** dialog box, in the top table list, click **FactInternetSales**. When the table preview appears below, click the **OrderDateKey** column.
13. In the bottom table list, click **DimDate**. When the table preview appears below, click the **DateKey** column.
14. Check that the **Cardinality** is set to **Many to One (\*:1)**, the **Cross filter direction** is **Single**, and **Make this relationship active** is selected, and then click **OK**.
15. In the **Manage Relationships** dialog box, click **Close**.
16. In the diagram, in the **FactInternetSales** table, click the **DueDateKey** column. Drag the **DueDateKey** column to the **DateKey** column in the **DimDate** table. Point out the dotted line to show that the relationship is inactive. This is because there is more than one related column in the two tables.
17. In the diagram, in the **FactInternetSales** table, click the **ShipDateKey** column. Drag the **ShipDateKey** column to the **DateKey** column of the **DimDate** table. Point out the dotted line to show that the relationship is inactive.
18. Point out that the relationships from **FactInternetSales** to **DimCurrency**, **DimProduct**, **DimPromotion**, and **DimSalesTerritory**, have a cross filter direction of Both, indicated by the double arrow icon. These are lookup tables, so should be Single.
19. On the **Home** tab, click **Manage Relationships**.
20. In the **Manage Relationships** dialog box, double-click the **FactInternetSales (CurrencyKey)** relationship.
21. In the **Edit Relationships** dialog box, in the **Cross filter direction** list, ensure **Single** is selected, and then click **OK**.
22. In the **Manage Relationships** dialog box, double-click the **FactInternetSales (ProductKey)** relationship.
23. In the **Edit Relationships** dialog box, in the **Cross filter direction** list, ensure **Single** is selected, and then click **OK**.
24. In the **Manage Relationships** dialog box, double-click the **FactInternetSales (PromotionKey)** relationship.
25. In the **Edit Relationships** dialog box, in the **Cross filter direction** list, ensure **Single** is selected, and then click **OK**.
26. In the **Manage Relationships** dialog box, double-click the **FactInternetSales (SalesTerritoryKey)** relationship.
27. In the **Edit Relationships** dialog box, in the **Cross filter direction** list, ensure **Single** is selected, and then click **OK**.
28. In the **Manage Relationships** dialog box, click **Close**.
29. Click the relationship line between **FactInternetSales** and **DimCustomer**. Point out that this is a One to One relationship because the FactInternetSales table only contains an extract. Normally this would be Many to One. This must be changed so it is ready for the remainder of the data to be loaded later.
30. Click the relationship line between **FactInternetSales** and **DimCustomer** and press **Delete**.
31. In the **Delete Relationship** dialog box, click **Delete**.
32. On the **Home** tab, click **Manage Relationships**.
33. In the **Manage Relationships** dialog box, click **New**.
34. In the **Create Relationships** dialog box, in the top table list, click **FactInternetSales** and in the data preview, click the **CustomerKey** column.
35. In the bottom table list, click **DimCustomer**, and in the data preview, click **CustomerKey**.
36. In the **Cardinality** list, click **Many to One (\*:1)**, and then click **OK**.
37. In the **Manage Relationships** dialog box, click **Close**.
38. In the diagram, point out that the 1 icon next to **FactInternetSales** is now a star icon.
39. Click **Save**, and save the file to the **D:\Demofiles\Mod05\Demo** folder as **Adventure Work Sales.pbix**.
40. Leave Power BI Desktop open for the next demonstration.