

Demonstration on Viewing Relationships in Power BI

In this demonstration, you will see how to:

- Import a data extract into Power BI.
- View and edit the relationships created automatically.
- Add new relationships.

Demonstration Steps:

1. Run D:\Demofiles\Mod05\Setup.cmd as an Administrator, and, in the User Account Control dialog box, click Yes.
2. When prompted press Y, press Enter, and when the script completes, press any key to close the window.
3. On the desktop, double-click Power BI Desktop.
4. In the Get Data dialog box, click Get Data. Ensure Excel is selected and click Connect.
5. In the Open dialog box, navigate to D:\Demofiles\Mod05\Demo, click
6. Adventure Works Sales Data.xlsx, and then click Open.
7. In the Navigator dialog box, select DimCurrency, DimCustomer, DimDate, DimProduct, DimPromotion, DimSalesTerritory, and FactInternetSales.
8. Click Load.
9. In the views pane on the left-hand side, click Relationships.
10. Point out that Power BI has created the relationships automatically. The layout represents a star schema.
11. Maximize the tables in the relationship diagram to display all columns.
12. Point out that Power BI has not created a relationship to DimDate from FactInternetSales.
13. On the Home tab, click Manage Relationships.
14. In the Manage Relationships dialog box, click New.
15. In the Create Relationships dialog box, in the top table list, click FactInternetSales. When the table preview appears below, click the OrderDateKey column.
16. In the bottom table list, click DimDate. When the table preview appears below, click the DateKey column.
17. Check that the Cardinality is set Many to One (*:1), the Cross-filter direction is Single, and Make this relationship active is selected, and then click OK.
18. In the Manage Relationships dialog box, click Close.
19. 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.
20. 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.

21. 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.
22. On the Home tab, click Manage Relationships.
23. In the Manage Relationships dialog box, double-click the FactInternetSales(CurrencyKey) relationship.
24. In the Edit Relationships dialog box, in the Cross-filter direction list, click Single, and then click OK.
25. In the Manage Relationships dialog box, double-click the FactInternetSales (ProductKey) relationship.
26. In the Edit Relationships dialog box, in the Cross-filter direction list, click Single, and then click OK.
27. In the Manage Relationships dialog box, double-click the FactInternetSales (PromotionKey) relationship.
28. In the Edit Relationships dialog box, in the Cross-filter direction list, click Single, and then click OK.
29. In the Manage Relationships dialog box, double-click the FactInternetSales (SalesTerritoryKey) relationship.
30. In the Edit Relationships dialog box, in the Cross-filter direction list, click Single, and then click OK.
31. In the Manage Relationships dialog box, click Close.
32. 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.
33. Click the relationship line between FactInternetSales and DimCustomer and press Delete.
34. In the Delete Relationship dialog box, click Delete.
35. On the Home tab, click Manage Relationships.
36. In the Manage Relationships dialog box, click New.
37. In the Create Relationships dialog box, in the top table list, click FactInternetSales and in the data preview, click the CustomerKey column.
38. In the bottom table list, click DimCustomer, and in the data preview, click CustomerKey.
39. In the Cardinality list, click Many to One (*:1), and then click OK.
40. In the Manage Relationships dialog box, click Close.
41. In the diagram, point out that the 1 icon next to FactInternetSales is now a star icon.
42. Click Save and save the file to the D:\Demofiles\Mod05\Demo folder as Adventure Works Sales.pbix.
43. Leave Power BI Desktop open for the next demonstration.