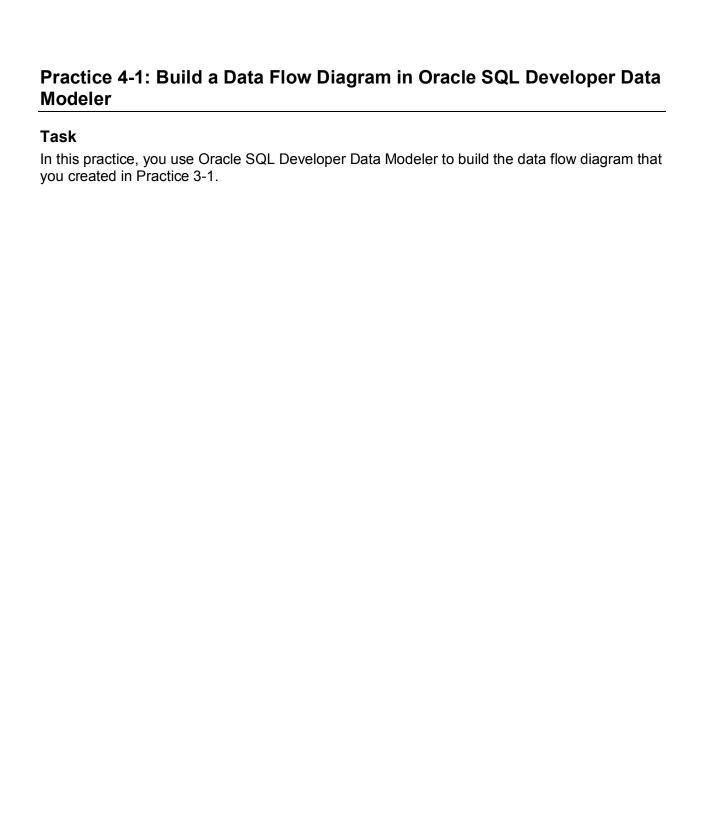
Practices for Lesson 4: Using Oracle SQL Developer Data Modeler to Create Your Data Flow Diagram

Chapter 4



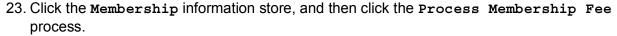
## Solution 4-1: Build a Data Flow Diagram in Oracle SQL Developer Data Modeler

To create and populate the DFD, perform the following steps:

- 1. Open Oracle SQL Developer Data Modeler.
- 2. Expand the **Process Model** node.
- 3. Right-click **Data Flow Diagrams**, and then select **New Data Flow Diagram** from the pop-up menu.
- 4. Click the **New Process** icon, and then click anywhere in the white space of the Data Flow Diagram.
- 5. Enter Gather Membership Information for the name, and then click **OK**.
- 6. Click in the white space of the Data Flow Diagram to create a second process.
- 7. Enter Produce Membership Card for the name, and then click **OK**.
- 8. Click one more time in the white space of the Data Flow Diagram.
- 9. Enter Process Membership Fee for the name, and then click **OK**.
- 10. Click the **New Information Store** icon, and then click in the white space of the Data Flow Diagram.
- 11. Enter Membership for the name, and then click **OK**.
- 12. Click the **New Agent** icon, and then click in the white space of the Data Flow Diagram.
- 13. Enter Customer for the name, and then click **OK**.
- 14. Click the **New Flow** icon.
- 15. Click the Customer external agent, and then click the Gather Membership Information process.

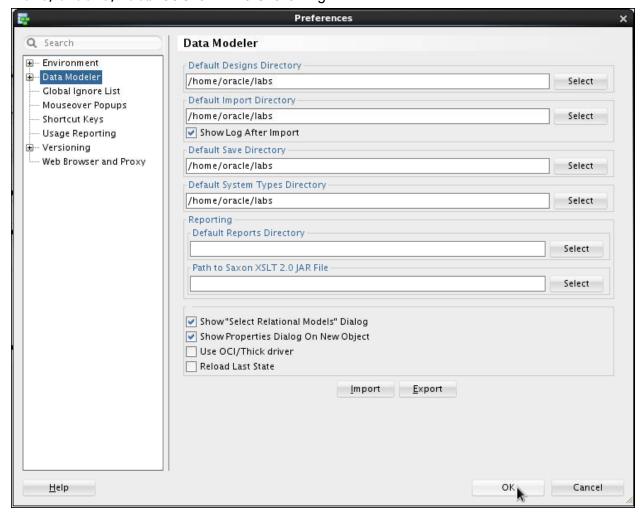
**Note:** If the pointer is still cross-hairs, click the Select icon at the top-left to change the pointer to an arrow.

- 16. Right-click the information flow that you just created, and then select **Properties** from the pop-up menu.
- 17. Enter Customer Information for the flow name, and then click **OK**. If the flow name does not appear, right-click **in the white space**, and then select **Show > Labels** from the pop-up menu.
- 18. Click the **New Flow** icon
- 19. Click the Gather Membership Information process, and then click the Membership information store.
- 20. Right-click the information flow that you created, and then select **Properties** from the popup menu.
- 21. Enter Membership Information for the flow name, and then click **OK**.
- 22. Click the **New Flow** icon



- 24. Right-click the information flow that you created, and then select **Properties** from the popup menu.
- 25. Enter Gold and Silver Membership Information for the flow name, and then click **OK**.
- 26. Click the **New Flow** icon.
- 27. Click the Process Membership Fee process, and then click the Membership information store.
- 28. Right-click the information flow that you created, and then select **Properties** from the popup menu.
- 29. Enter Membership Fee Confirmation for the flow name, and then click **OK**.
- 30. Click the **New Flow** icon.
- 31. Click the Membership information store, and then click the Produce Membership Card process.
- 32. Right-click the information flow that you created, and then select **Properties** from the popup menu.
- 33. Enter Membership Card Information for the flow name, and then click **OK**.
- 34. Click the **New Flow** icon.
- 35. Click the Produce Membership Card process, and then click the Customer external agent.
- 36. Right-click the information flow that you created, and then select **Properties** from the popup menu.
- 37. Enter Membership Card for the flow name, and then click **OK**.
- 38. You may want to move the objects around to maximize the room on your screen. See the steps in the slides to learn how to create straight lines and elbows.
  Note: First disable Auto Route by right-clicking the white space, and then deselecting Auto Route from the pop-up menu.
- 39. You also want to specify the event for each process. Right-click Gather Membership Information, and then select **Properties** from the pop-up menu.
- 40. In the **Process Properties** dialog box that appears, select the **Events** property in the navigator, and then click the **Add** icon.
- 41. In the **Add Event** dialog box, make sure that **New Event** is selected, enter Customer fills out Membership Form for the name, and then select **Person** for the Type. Next, click **OK** twice.
- 42. Right-click Produce Membership Card and then select **Properties** from the pop-up menu.
- 43. In the **Process** Properties dialog box that appears, select the **Events** property in the navigator, and then click the **Add** icon.
- 44. Make sure that **Available Event** is selected. Select Customer fills out Membership in the Events list. Next, click **OK** twice.

- 45. Right-click Process Membership Fee, and then select **Properties** from the pop-up menu.
- 46. In the **Process Properties** dialog box that appears, select the **Events** property in the navigator, and then click the **Add** icon.
- 47. Make sure that **New Event** is selected, enter **New Membership Information** for the name, and then select **Clock/Calendar** for the Type. Next, click **OK** twice.
- 48. Your data flow diagram is now complete for this practice.
- 49. Before you save your Data Flow Diagram, you must set the **Default Directory**. To do this, select **Tools > Preferences > Data Modeler**. This shows up a window with Default Directory where you can open or save your design. Set the default directory to /home/oracle/labs as shown in the following:



**Note:** If you receive a message asking you to confirm about overwriting files, click **No**.