

Practice Level 2: Joining Data from Three Tables

In this practice, you use the Query Builder to create a table whose data results from a join of three tables.

1. If you haven't already, complete the **Level 1: Joining Data from Two Tables** practice.
2. Add the **country_lookup** SAS table to the Practices process flow in the **Lesson4** project.
 - Select **File > Open** and navigate to the course data location.
 - Select **country_lookup > Open**. The data appears on a new tab in the work area.
Note: Be care to select the **country_lookup** SAS table and **NOT** the Excel workbook.
3. Modify the **Payroll Location Join Query** task. Manually join **country_lookup** and **employee_addresses** by the common column.

Note: The common column might be named differently in the two tables.

- Right-click **Payroll Location Join Query** in the process flow and select **Modify**.
 - In the Query Builder, click **Add Tables**.
 - Select the **country_lookup** table and select **Open**.
 - A message appears and indicates that Enterprise Guide cannot automatically join the tables by common columns. Click **OK**.
 - In the Tables and Joins window, select **Country** in the **employee_addresses** table.
 - Select **Country** a second time and drag the cursor to connect with **Country_Key** in the **country_lookup** table.
 - The Join Properties window appears automatically. Verify that the join condition is **t2.Country = t3.Country_Key**.
Note: The table alias name **employee_addresses** table (**t2**) might differ depending on the order in which the table was initially added to the query.
 - Click **OK > Close**.
4. Remove the **Country** column on the Select Data tab and replace it with the column representing the full country name found in the **country_lookup** table.
 - Select **Country** on the Select Data tab and click the **Delete** icon.
 - Double-click **Country_Name** from the **country_lookup** table to add it to the query.
 - Select **Country_Name** on the Select Data tab and click the up arrow (**Move Up**) icon to move it after the **State** column.
 5. Run the query. In what city and country does John Hornsey live?

Click **Run** to execute the query. A new tab appears in the work area displaying the results. John Hornsey lives in *Sydney, Australia*.

6. Close all tabs except for the process flow, and save the **Lesson4** project.