

Consolidating data in Excel involves combining data from multiple sources or ranges into a single summary table. Here's how to consolidate data using Excel's built-in features:

1. Prepare Your Data:
 - Ensure that all the data ranges you want to consolidate have the same layout and structure, with similar data types in corresponding columns or rows.
2. Select a Destination Cell:
 - Choose a cell in your worksheet where you want the consolidated data to start. This could be in a new worksheet or within an existing one.
3. Use the Consolidate Tool:
 - Go to the "Data" tab on the ribbon.
 - In the "Data Tools" group, click on "Consolidate."
4. Specify the Consolidation Function:
 - In the "Consolidate" dialog box, choose the function you want to use to consolidate the data. Common options include SUM, AVERAGE, COUNT, MAX, and MIN.
 - Select the appropriate function from the "Function" dropdown menu.
5. Select Data Ranges:
 - Click on the "Reference" button next to the "All references" box.
 - In the "Reference" box, select the range of cells from each data source you want to consolidate. You can select multiple ranges by holding down the Ctrl key while selecting.
6. Choose How to Consolidate:
 - Decide whether you want to consolidate data by position or by category.
 - If you choose "Top row" and "Left column," Excel will consolidate data from each range based on the position of data (e.g., the first cell in each range will be combined, then the second cell, and so on).
 - If you choose "By category," Excel will consolidate data based on matching labels in the top row and left column of each range.
7. Complete the Consolidation:
 - Click "OK" in the "Consolidate" dialog box to apply the consolidation.
 - Excel will consolidate the data according to your settings and place the result in the destination cell you selected.
8. Review and Adjust:
 - Review the consolidated data to ensure it's accurate and meets your requirements.
 - If necessary, adjust the consolidation settings or data ranges and re-consolidate as needed.
9. Update Consolidated Data:
 - If your source data changes over time, you can update the consolidated data by selecting the cell containing the consolidated data and clicking on "Data" > "Refresh All" on the ribbon. Excel will refresh the consolidation based on the latest data in the source ranges.
10. Additional Consolidation Options:
 - Excel provides additional options for consolidating data, such as creating pivot tables or using formulas like SUMIFS or PivotTable data sources.

- Explore these options based on your specific data consolidation needs and preferences.

By following these steps, you can consolidate data from multiple sources or ranges into a single summary table in Excel efficiently.