

EXCEL DATA LIST MANAGEMENT

OFFICE 97

Excel Data List Management

Data List Management is a workshop for those wanting to learn to use Microsoft Excel database features and those preparing/reviewing for the Microsoft Excel proficient and/or expert certification. Excel's data management features will assist in creating form letters, managing lists, and keeping track of large amounts of data.

Gathering Database Info

In entering data into Excel, it is best to use the columnar approach, where the fields are stacked in columns, as below. This will be the easiest for you to work with as we continue.

Name	State	City
John Hancock	Virginia	Charleston
Button Gwinnett	Massachusetts	Boston

This layout is the most flexible in terms of being able to use it to do a variety of searches, as well as the least amount of moving around on the screen.

Manipulating Lists

Once your data list is complete, you can use the sort tool to help you arrange it in a particular order. When you have several columns, to sort on the contents of one:

- 1 Click a cell in the column you would like to sort by.
- 2 Click Sort Ascending or Sort Descending.

This will sort the records based on the contents of the cell you were in. If you need to sort by multiple criteria, such as State, then City within the state, you will need to use the menu command:

1. Select Tools/Sort
2. In the resulting dialog box:



AutoFilter

Click each down arrow to select your primary, secondary, and other sorts. Place your primary sort (State, in this example) in the top box, and your secondary sort (City) in the next box.

3. Click OK

Your list will be sorted, with the appropriate records grouped together.

AutoFilter is a way for you to very quickly search for occurrence(s) of values in a field, and the related records. It is easy to then search on multiple criteria, and also to show some popular responses, or frequent values.

Note: You can apply filters to only one list on a worksheet at a time.

- 1 Click a cell in the list you want to filter.
- 2 On the Data menu, point to Filter, and then click AutoFilter.
- 3 To display only the rows that contain a specific value, click the arrow in the column that contains the data you want to display.
- 4 Click the value.
- 5 To apply an additional condition based on a value in another column, repeat steps 3 and 4 in the other column.

To filter the list by two values in the same column, or to apply comparison operators other than Equals, click the arrow in the column, and then click Custom. Custom brings up the following dialog box:



This allows you to use two criteria, and the AND or OR operators, to find records that match either multiple criteria, or match either value.

Note: When you apply a filter to a column, the only filters available for other columns are the values visible in the filtered list. You can apply up to two conditions to a column with AutoFilter. If you need to apply three or more conditions to a column, use calculated values as your criteria, or copy records to another location, you can use advanced filters.

Advanced Filters

You can use a more advanced filter to filter lists with multiple criteria. Doing so is an involved process, but can create excellent results. To use the advanced filter:

Note: Your worksheet should have at least three blank rows that can be used as a criteria range above the list. The list must have column labels.

- 1 Copy the column labels from the list for the columns that contain the values you want to filter.
- 2 Paste the column labels in the first blank row of the criteria range.
- 3 In the rows below the criteria labels, type the criteria you want to match. Make sure there is at least one blank row between the criteria values and the list.
- 4 Click a cell in the list.
- 5 On the Data menu, point to Filter, and then click Advanced Filter.
- 6 To filter the list by hiding rows that don't match your criteria, click Filter the list, in-place.

To filter the list by copying rows that match your criteria to another area of the worksheet, click **Copy to another location**, click in the **Copy to** box, and then click the upper-left corner of the paste area.

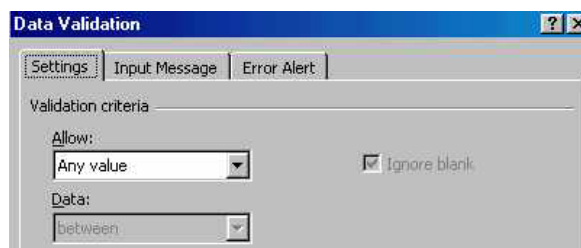
- 7 In the Criteria range box, enter the reference for the criteria range, including the criteria labels.

To move the Advanced Filter dialog box out of the way temporarily while you select the criteria range, click **Collapse Dialog**.

Validating Data

When you want to make sure that correct data is entered on a worksheet, you can specify what data is valid for individual cells or cell ranges. You can restrict the data to a particular type, such as whole numbers, decimal numbers, or text, and set limits on the valid entries. You can specify a list of the valid entries or limit the number of characters in entries.

- 1 Select the cells that you want to restrict.
- 2 On the Data menu, click Validation, and then click the Settings tab.



- 3 In the Allow box, click the type of data.

To specify only numbers, click Whole Number or Decimal. To specify only dates or times, click Date or Time.

- 4 Click the comparison you want in the Data box, and then specify the upper or lower limit for the data, or both limits, depending on the selection you make. You can enter values, cell references, or formulas for the limits.

Note: If you want to allow the cell that you're restricting to be blank, or you set limits that use a cell reference or formula that depends on cells that are initially blank, make sure Ignore blank is selected. To enforce the restrictions you set for blank cells, treating these cells as if they contain zeros, clear the Ignore blank check box.

- 5 To display messages to prompt for entries and to explain or prevent incorrect entries, specify the types of messages you want on the Input Message and Error Alert tabs.

To omit display of messages, clear the Show input message when cell is selected check box on the Input Message tab, and clear the Show error alert after invalid data is entered check box on the Error Alert tab.

Conditional Formatting

To highlight formula results or other cell values that you want to monitor, you can identify the cells by applying conditional formats. For example, suppose a cell contains a formula that calculates the difference between forecast sales and actual sales. Excel can apply green shading to the cell if the sales exceed forecast and red shading if sales fall short. If the value of the cell changes and no longer meets the specified condition, Excel temporarily suppresses the formats highlighting that condition.

To apply Conditional Formatting

- 1 Select the cells you want to format.
- 2 On the Format menu, click Conditional Formatting.
- 3 To use values in the selected cells as the formatting criteria, click Cell Value Is, select the comparison phrase and then type a value in the appropriate box. You can enter a constant value or a formula; you must include an equal sign (=) before the formula.

To evaluate data or a condition other than the values in the selected cells, use a formula as the formatting criteria. Click Formula Is in the box on the left, and then enter the formula in the box on the right. The formula must evaluate to a logical value of TRUE or FALSE.

- 4 Click Format.
- 5 Select the font style, font color, underlining, borders, shading, or patterns you want to apply.

Excel applies the selected formats only if the cell value meets the condition or if the formula returns a value of TRUE.

- 6 To add another condition, click Add, and then repeat steps 3-5.