Linking cells, worksheets, and workbooks

Microsoft Excel allows you to link cells dynamically, worksheets and workbooks (files) to consolidate data from several worksheets and workbooks. When data is linked, the linked data immediately reflects any changes you make to the original data.

Linking is useful when creating summary sheets or pulling required information from different locations without re-typing and re-calculating everything once again. Linking also helps to ensure data accuracy by utilising Excel’s automatic updating and recalculation features.

All cases, i.e. linking cells, worksheets and workbooks, are done the very same way. Only the source value is different.

**Linking cells**

1. Click the cell into which you wish to pull the value
   
   ![Cell A1 value 30](image)

2. Press the “=” (equal sign) key
   
   ![Equal sign](image)

3. Click the cell where the source is. (running marquee appears - blinking lines)
   
   ![Cell A1 value 30](image)

4. Press ENTER key
   
   ![Enter key](image)

5. Done!
   
   ![Linking Cells Example](image)
   
   Notice: The name box displays C1 which is the active cell. Also, check the formula bar. It indicates “=A1” for the active cell C1. These two cells are linked.

**Linking worksheets**

1. Click the cell into which you wish to pull the value

2. Press the “=” (equal sign) key

3. Click the worksheet that contains the source information

4. Click the cell that contains the source information

![Linking Worksheets Example](image)
5. Press **ENTER** key

6. Done!

**Linking workbooks**

**Tip: Arranging windows to view all related workbooks**

Before you start, you may wish to arrange your workbooks, i.e. both source and dependent workbooks. Then you can view all worksheets at the same time. This will make it easier to link them.

1. **Open all workbooks**
2. **View > Arrange All**
3. Choose Tiled and then drag the windows to suit.
4. Choose Vertical, Horizontal or Cascade to automatically arrange all Excel windows.

However, you still have to be careful with which workbook you are on. Check the title bar to see what the workbook name is.

Otherwise, switch between files by clicking on Excel on the taskbar at the bottom of the screen and select the workbook you require.

**Worksheets currently open**

1. Open all related workbooks (.xls)
2. Select the cell into which you wish to pull the value (dependent workbook)

3. Press “=” (equal sign) key

4. Go to the workbook that contains the source information (source workbook) > select the cell that you want to show on the dependent worksheet

5. Press ENTER key

It is a good idea to check how the cell linking is done in the formula bar. Click the cell that has a link to another workbook and look at the formula bar.

=’[Auckland.xls]Budget Summary 2007’!$E$10

Source workbook name  Source worksheet name  Source cell address

It is important to know that when linking different worksheets from within the same workbook the link will be made without absolute cell referencing and when linking different workbooks the link will be made with absolute cell referencing.

Updating links automatically

When you open the linked workbook, the following warning message might appear.

If you wish to update links automatically without the warning message:

1. Open the linked workbook
2. Data tab > Edit Links
3. Click Startup Prompt
4. Click Don’t display the alert and update links > Click OK and Close to return to your workbook

If you wish to update links manually, and without seeing the message every time you open the workbook, choose the middle option.

**Updating links manually**

1. Open a linked workbook
2. Edit > Links
3. Select the source workbook > Click Update Values
If you see OK for the status, it has updated successfully. However, if the source workbook has been deleted, moved to a different location, or renamed, links will not be updated.

Finding what kinds of linking the worksheet has
1. Open your linked worksheet
2. Edit > Links
3. Click Close to return to the dependent worksheet/workbook

Editing the Source
If you change the source file directory, you should update the link on the dependent workbook. Then it will not fail updating values.
1. Open your dependent workbooks

2. **Edit > Links**

3. Select the source workbook > Click **Change Source**

4. Select the new location of the source workbook > Click **OK** until you return to the dependent workbook

**Note:**
If you made any changes to the value in any of the supporting workbooks, that will be reflected in the workbook that contains linked data.