BetterSolutions.com

Tutorials and Add-ins for Microsoft Excel, Word and PowerPoint

May 2008 - Letter from the Editor

Welcome to the eighth edition of the BetterSolutions.com newsletter. There are plenty of books and blogs covering all the basic Microsoft Office functionality so in this newsletter we will be discussing some of the less talked about topics. It is very difficult to know exactly what level to pitch the content so if you feel the articles are a bit too advanced, then please let us know. We have got some interesting topics for you in this issue including an article on the Research Task Pane. We have also started to expand the website to include Outlook as well although it will be a long time before any of this content gets uploaded. With more and more users turning to Office 2007, the demand for professional Microsoft Office consultancy will only increase. The combination of .NET, SharePoint and Office 2007 has the potential to significantly increase productivity and we are determined to help you, not only with the transition but also to provide you with the solutions and the support you need.

Office 2007 Migration

For a lot of companies this migration will be slow but for us this migration has already started. Over the coming months you will start to notice the website screen shots being replaced with Office 2007 screen shots as well as more of the blank pages being populated with content. Although most of the core functionality has not changed the ribbon definitely makes the large number of commands more accessible and easier to find.
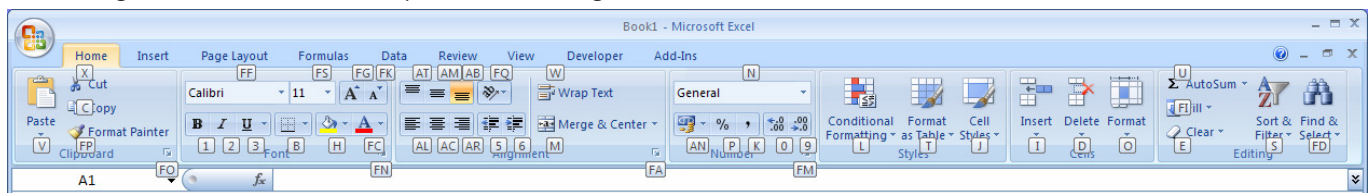
Pressing the Alt key displays the shortcut keys for all the tabs and the Quick Access toolbar. Once a particular letter has been pressed the shortcut keys for all the groups and commands on that tab are displayed. This allows you to quickly identify each command.

Excel Utility Add-in

The development of our Excel utility add-in has been put on hold for the time being as all our resources are focused on Office 2007 and SharePoint integration. This general utility add-in when released will be the first add-in of its kind to be written entirely with .NET technology. Not only that but it will also be the first add-in that is truly integrated into Excel. If you would like to find out more or be involved with our beta testing, please get in touch.

support@bettersolutions.com

This email address is the one you should use when you have any problems or questions with Microsoft Office and you want some FREE help and advice. Sending us your questions will not only mean that you get a reply quickly but will also allow us to publish the answers in the next issue which will help other people as well. We spend a lot of time checking and testing the information to ensure that it is accurate but if you do spot any mistakes or anything that is wrong then please tell us. We are always looking for ways to improve our products and services and always welcome constructive criticism.

News and Related Information

Visual Studio Tools for Applications (VSTA)

VBA is the programming language behind the Microsoft Office applications and is currently being upgraded to bring it inline with .NET. This enhanced application will become part of the Visual Studio family and will be called Visual Studio Tools for Applications (VSTA). This development environment will provide a .NET platform for customising Microsoft Office applications and will almost certainly sit alongside Visual Basic for Applications (VBA) in the next version of Microsoft Office. VSTA will support both the Visual Basic and C# programming languages and will simplify the loading and unloading of add-ins into separate application domains. In Office 2007 the only application that has the new VSTA environment is InfoPath.

The most significant change is that any solution written in VSTA will be fully compatible with Visual Studio. This will enable professional developers to maintain and support applications that have been created by users on their desktops. In the last four versions of Microsoft Office macros have been easily accessible to all users giving them the ability to create complicated and sometimes unsupportable solutions. Although this has given the users an enormous amount of control it has often been frustrating for the IT departments. The removal of the macro recorder in PowerPoint 2007 is an indication that Microsoft thinks writing code is more a task for developers rather than end users. The macro recorder is still available in Excel and Word 2007.

Windows SharePoint Services (WSS)

The term SharePoint does not actually refer to any one particular application but more of an umbrella term that includes several products. For most people though when they talk about SharePoint they are referring to Windows SharePoint Services. WSS is a web based, team collaboration tool that is designed to increase productivity when using Microsoft Office. This product has been designed specifically to help teams share information and includes document libraries, workflow, knowledge bases, discussion boards, dashboards, announcements, team calendars and much more. You might also have heard people talking about MOSS or Microsoft Office SharePoint Server. MOSS can be thought of as the big brother to WSS and includes more enterprise functionality.

It is interesting to think that although Excel is the application that gets the most publicity it is really Outlook that should have all the lime light. If you were to ask users what is the first application they open in the morning, 99% of people would say Microsoft Outlook. Outlook has not only become the most important application on the desktop but managing emails is the most important task of the day. The typical workplace has an endless flow of emails and attachments and for most of us, sending as many emails as possible to as many people as possible is a way of symbolising how valuable we are. Whatever happened to that quick phone call or even popping round to the other person's desk? SharePoint provides a single workspace for teams to share information, coordinate schedules, organise documents, and participate in discussions both within the organisation and over the Internet. We believe SharePoint will go a long way to not only simplifying the workplace but also in reducing the number of unnecessary emails and attachments. For those of you interested in being more productive you can download a free trial of WSS from the Microsoft website. There are also lots of websites offering hosted WSS sites, most of them offering 30 day trials.

Your Questions and Problems

Excel – Why does my formula return #NAME?

There are lots of different errors that you can get when editing and updating formulas and #NAME? is one of them. The following is a list of the reasons why a formula might return a #NAME? error:

- Using an Analysis ToolPak function when the Analysis ToolPak add-in is not installed.
- Using a worksheet function that does not exist or has been spelt incorrectly.
- Referring to a named range that does not exist.
- Using an invalid cell reference.
- Referring to a worksheet that does not exist.
- Using text labels when labels are not allowed.
- Entering text that is not enclosed in speech marks.
- Entering values that start or contain unrecognised characters.

Excel – Is there an easy way to find missing parentheses in formulas?

If you enter a formula which has missing (or spare) parentheses at the end you will be prompted with the following message. Pressing yes will insert or remove the necessary parentheses from the end of the formula.
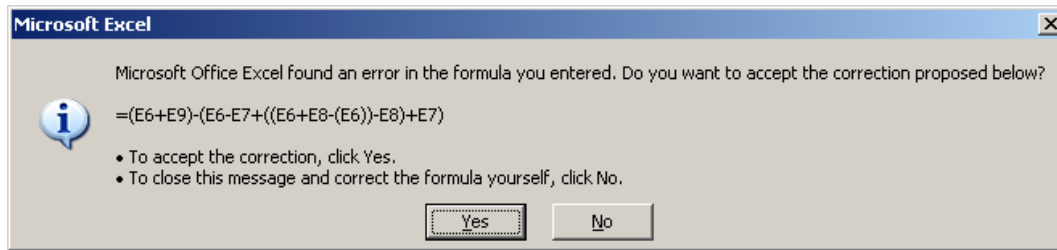
Most of the time though it will not be that easy and you will be prompted with a slightly different message either "Your formula is missing a parenthesis", "The formula you typed contains an error" or "You've entered too many arguments for this function".

If your formula is really long and contains several sets of parentheses, it can sometimes be difficult to identify which one is missing. The most effective way is to use the formula bar and use the arrow keys to move the cursor through the formula one character at a time. If your formula contains embedded parentheses then the opening and closing parentheses will be displayed in different colours. When the cursor moves over a parenthesis, the opening and closing parentheses are highlighted so they can be easily identified. The Evaluate Formula dialog box can also be used to help identify the different parts of a nested formula.

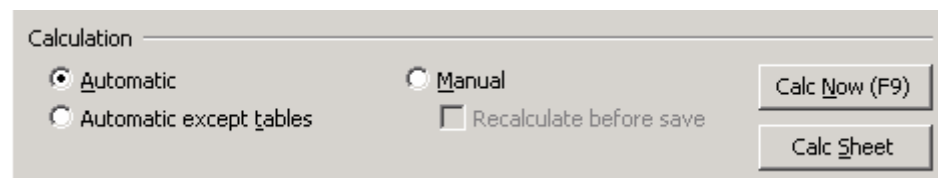## Excel – How can I transpose cells that contain formulas?

If you have cells that contain formulas and want to transpose those cells without changing the cell references you can quickly replace the "=" with a different character, for example "@", transpose the cells and then replace all the "@" characters with "=". This will leave your relative references intact.

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Calculation – Manual or Automatic

Regardless of whether you are a beginner or an advanced user it is important to understand how calculation works and how you can control it. This setting can be found on the (Tools > Options)(Calculation tab) and although it might look like an "application level" setting it is in fact more like a "workbook level" setting. If you change your setting to manual and close Excel there is no guarantee that when you next open Excel your calculation will be set to manual. Also if you change the calculation to automatic in a specific workbook and save the changes there is no guarantee that the next time you open that workbook that the calculation will be set to automatic. This is extremely confusing for most users and causes a lot of frustration. It is important to remember that changing the calculation setting in one workbook also changes the setting for that whole instance of Excel.

Why does my calculation setting keep changing?

There are a couple of things that can affect this setting. The first and probably the most important is how a workbook is opened. Is the workbook opened in an existing instance of Excel or does an instance of Excel need to be opened at the same time you open the workbook (for example when you double click an Excel file in Windows Explorer)? When you open an instance of Excel (on its own) the calculation setting is determined by the first workbook that is opened. It doesn't matter what settings have been saved in your individual workbooks, the setting for that instance is determined by the setting that is saved in the first workbook that is opened. For most of us when we open Excel a blank workbook is automatically opened for us. This blank workbook is extremely important as it will contain your default calculation setting. This is automatic by default however you can easily overwrite this setting if you want to change your default calculation to manual. To change your default setting to manual, create an Excel template called Book.xlt, change the calculation to manual and save it in your XLSTART directory.

You can also open a workbook by double clicking on an Excel file in Windows Explorer or opening it from an email attachment. If you have any instances of Excel already open this workbook will be opened in the instance that was last active. In this situation the calculation setting saved in that particular workbook is ignored since the default setting has already been set. However if Excel is not already open and you double click on a workbook (or open it from an attachment) this workbook will be the first workbook that is opened and therefore Excel will default to whatever calculation setting is saved in that workbook. It is impossible to know what calculation setting has been saved in a workbook before it is opened especially if you are opening workbooks that have been created by other people. There is no simple solution to this problem.

The third reason might be because you are opening workbooks (or add-ins) that contain VBA macros and the macros are changing your setting behind the scenes. It is very common for developers to switch the calculation to manual while manipulating data on a workbook and then forgetting to reset it once the macro has finished. It is possible to change the calculation setting when you open a workbook by using a few lines of VBA code:

```
Private Sub Workbook_Open()
   Application.Calculation = xlCalculation.xlCalculationAutomatic
End Sub
```

This approach works fine when you default calculation is set to manual and you want to switch to automatic. However this approach doesn't work when your default is set to automatic and you want to switch to manual. When your calculation is set to automatic Excel automatically recalculates every workbook as soon as it is opened and unfortunately the Workbook_Open event is fired after this.

Office 2007 Ribbon Recap

Ribbon – As you know the ribbon has replaced the toolbars and menus and is not customisable. You can quickly hide (or display) the ribbon at any time just by double clicking on the active tab.

Quick Access Toolbar – This is the toolbar that appears at the top of your application and is the only part of the interface that is customisable. By default this toolbar displays the Save, Undo and Redo commands.

Office Button – This is the large circular button in the top left corner of the application. This contains all the features that are used to create and manage files and was discussed in detail in the November 2007 issue. This is also the place where you can access your application options (previously (Tools > Options)).

Tab – The ribbon is divided into seven tabs and each tab contains the commands relating to a particular task. For example the Formulas tab contains all the commands that relate to working with formulas and functions.

Group – Each tab is further divided into groups that relate to specific items of functionality. For example the Alignment group on the Home tab contains all the commands that relate to cell alignment and positioning.

Commands – These are the individual controls found inside a group. These include buttons, checkboxes, combo boxes, drop-down boxes, edit boxes, galleries and toggle buttons.

Dialog Box Launcher – This is the small arrow symbol that sometimes appears in the bottom right corner of a group. Clicking this will display a dialog box or task pane that displays options relating to this specific command. Most of the dialog boxes are exactly the same as those in Excel 2003.

Contextual Tabs – These are tabs that only appear when a specific object is selected. This is to try and keep the screen uncluttered and only display the commands relevant to the current task. The three additional tabs under the heading Chart Tools show the contextual tabs when a chart is selected.

Command Tip Box – When you hover over any ribbon commands a large tip is displayed giving you more information on that command plus any corresponding shortcut key.

Mini Toolbar – This is the toolbar that is displayed just above the cursor when you press the opposite button on your mouse. This provides you with quick access to all those useful formatting commands without having to drag the mouse all the way to the top of the screen. This is in addition to the shortcut menu that also appears. This is a great addition but if you find this annoying it can be switched off from your (Office > Excel Options)(Popular tab).

Shortcut Menu – These are the shortcut menus which are exactly the same as those in Excel 2003.
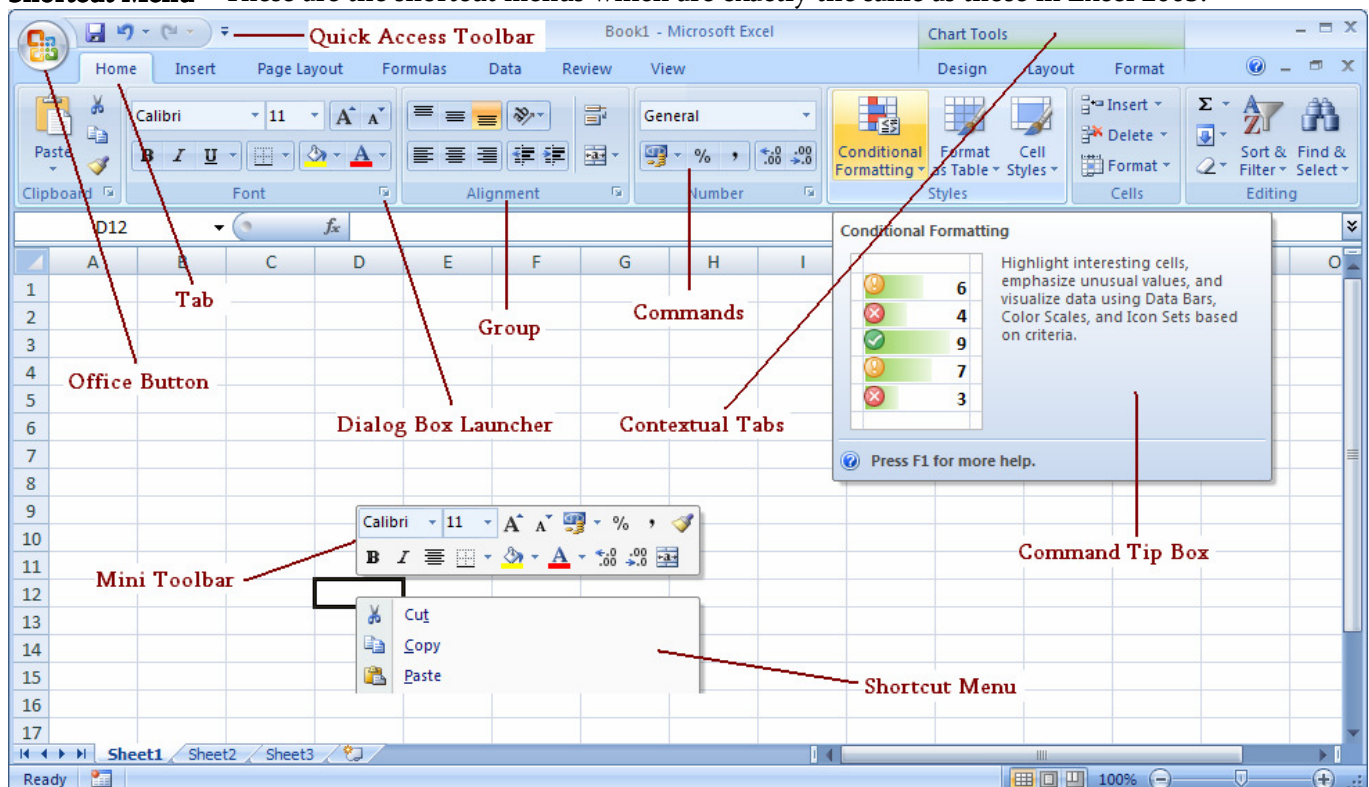
Function – AVERAGEIF

This function is only available in Excel 2007 but before we look at this new function lets just remind ourselves of the different formulas that could be used in Excel 2003 to calculate averages. The AVERAGE function will return the average value from a range of cells and will ignore both blank cells and cells which contain text. There is a problem with this function though, it will include cells that contain zero values. Including zero values can sometimes be misleading as the average will be lower than expected. If you don't want to include zero values then there are a few alternatives.

You can either use a combination of the SUM, COUNT and COUNTIF functions or a combination of the SUM, SUMPRODUCT and ISNUMBER functions. Both of these combinations will ignore blank cells, cells that contain text and cells which contain zero values. There are two more alternatives that include using the database function DAVERAGE or by using an array formula in conjunction with the AVERAGE and IF functions. Obviously using an array formula is the most complicated and also the most inefficient although there are scenarios when this is the only option. When you want to return the average based on multiple criteria this can only be achieved using an array formula.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Data										
3		5		15	=AVERAGE(B3:B8)						=60/4	
4		20										
5		some text		7.5	=AVERAGE(B3:B10)						=45/6	
6												
7		10		9	=SUM(B3:B10)/(COUNT(B3:B10)-COUNTIF(B3:B10,0))						=45/(6-1)	
8		25										
9		0		9	=SUM(B3:B10)/SUMPRODUCT((ISNUMBER(B3:B10)*(B3:B10<>0)*1))				=45/{1,1,0,0,1,1,0,1} = 45/5		
10		-15										
11				9	=DAVERAGE(B2:B10,1,B12:B13)						=9	
12		Data										
13		<>0		9	{=AVERAGE(IF(B3:B10<>0,B3:B10))}						=9	
14												

The new AVERAGEIF function simplifies all of this giving you an average function that behaves in an identical way to the COUNTIF and SUMIF functions. This new function makes it very easy to find the average value based on a given criteria and removes the need to use an array formula.

Function - IFERROR

This function is only available in Excel 2007 and lets you specify what value to return when a formula (or expression) evaluates to an error. This new function can be used to reduce the length of complicated formulas because there is no need to enter the expressions twice, once to check for an error and then again to generate the result if an error does not exist. One of the most common places where errors need to be trapped and handled is when using VLOOKUP functions.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		**Name**	**Age**									
3		Steve	28									
4		Mark	26									
5		John	23									
6		Barry	32									
7												
8		not in list	=IF(ISNA(VLOOKUP("Peter",B2:C6,2,FALSE)),"not in list",VLOOKUP("Peter",B2:C6,2,FALSE))									
9		not in list	=IFERROR(VLOOKUP("Peter",B2:C6,2,FALSE),"not in list")									
10												

Research Task Pane

There is very little information available about the Research Task Pane so here is a quick overview. This task pane was introduced in Office 2003 and is available in Excel, Word and PowerPoint. It lets you search local and remote data sources without having to leave the application and displays information from a wide range of different services. Some are free and some require subscription. A few of these are especially useful such as the dictionary and thesaurus. When you first open the task pane it will default to the All Reference Books search category. When you want to search for something you can either select an entire search category or an individual resource below each category. This task pane will store your last 10 searches. The exact list of categories and resources will depend on your location and whether you are working online or offline. There are three search categories:
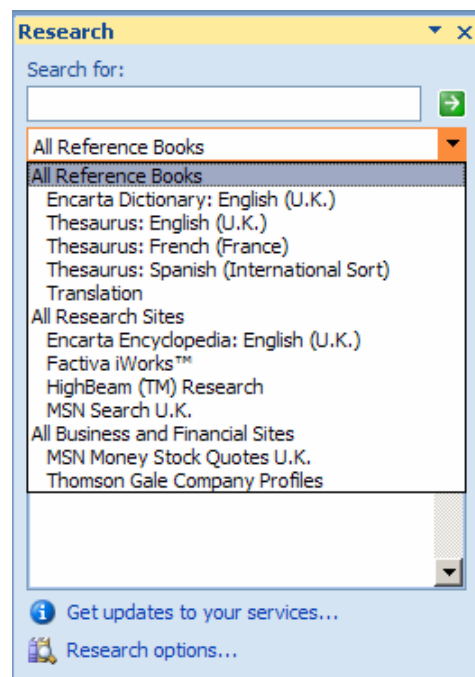
All Reference Books

The Dictionary lets you look up words or phrases in the Encarta dictionary. This contains over 400,000 entries and in addition to definitions, includes pronunciation keys, word histories, and word usage notes. The Thesaurus lets you look up synonyms while you work and insert them into your file directly. You can also click a result to look up additional words. The Translation lets you get translations quickly using bilingual dictionaries to translate single words or short phrases. If you want to search both the dictionary and the thesaurus at the same time, select the entire category. When you are working offline the dictionary and thesaurus features will use the functionality installed with the application.

All Research Sites

The Encyclopaedia lets you research your subject using the Encarta Encyclopaedia. This contains more than 42,000 articles allowing you to review the results or ask questions. Factiva iWorks and HighBeam Research both offer a collection of business content from a wide number of different sources. These sources include articles from newspapers (such as the Financial Times), magazines (such as The Economist) and newswires (such as Reuters). Both these services are subscription based. Information that is not free to access is indicated by a small money icon. The last category here is MSN Search which is exactly the same as using MSN Search from a browser. Clicking on one of these links will open up the necessary page in a browser. If you are using Internet Explorer then your task pane will also be displayed in your browser. If you are searching multiple categories then the results will be grouped by the different resources.
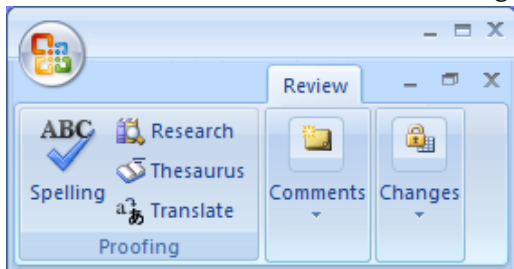
All Business and Financial Sites

MSN Money Stock Quotes lets you look up stock quotes and company information directly within Excel and lets you search using stock symbols and company names. This is a great feature although from our experience it is not very easy to use. The Thomson Gale Company Profiles lets you retrieve basic facts about companies such as company address, number of employees, website address etc. Not all languages support this particular search category. We will be discussing MSN Money Stock Quotes in more detail.

If your company has an intranet site, you can also add it to the Research Task Pane for easy access. Microsoft Office SharePoint sites are supported. To add a SharePoint site to the list of All Research Sites you can add the URL using the Add Services dialog box.
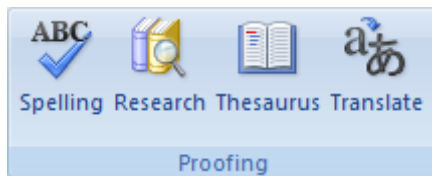
Excel 2007 – Review Tab

This tab contains all the controls relating to Spelling & Grammar, Comments, Track Changes and Protection. A lot of these commands were hard to find in Excel 2003 but are now very easily accessible. These commands have been taken from the Tools drop-down menu, the Reviewing toolbar and the Protection toolbar. This tab also exists in both Word and PowerPoint although the specific commands do vary. None of this functionality has changed in Office 2007. Having this tab in all the applications definitely makes it a lot easier to compare functionality.

Proofing

Three of these commands use functionality built-in to the Research Task Pane. The "Spelling" button is the old (Tools > Spelling) command and displays the Spelling dialog box. The "Research" button is the old (Tools > Research) command. This displays the Research Task Pane and also provides a quick toggle for showing or hiding this task pane. The "Thesaurus" button is the old (Tools > Research) command and displays the Research Task Pane with Thesaurus selected in the drop-down box. This allows you to look up different words with the same meaning (synonyms) or words with the opposite meaning (antonyms). The "Translate" button displays the Research Task Pane with Translation selected in the drop-down box. This gives you quick access to over 14 languages and lets you quickly translate single words or short phrases from one language to another. To translate a specific word, press Alt and click on the word. To translate a short phrase, hold down the Alt key and click on the selection.

Comments

Adding comments to your cells especially those that require data input or contain formula is extremely useful. All of these commands have been taken directly from the Reviewing toolbar. The "New Comment" button inserts a comment into the active cell and has been taken directly from the Cell shortcut menu. This button automatically changes to "Edit Comment" when you select a cell that already contains a comment. The "Delete Comment" button removes the comment from the active cell. The "Previous Comment" button goes to the previous comment in the active workbook. The "Next Comment" button moves to the next comment in the active workbook. The "Show / Hide Comment" button displays or hides the comment in the active cell. The "Show All Comments" button displays all the comments in the active workbook. The "Show Ink" button can be used to toggle the display of ink added with a tablet PC.

Changes
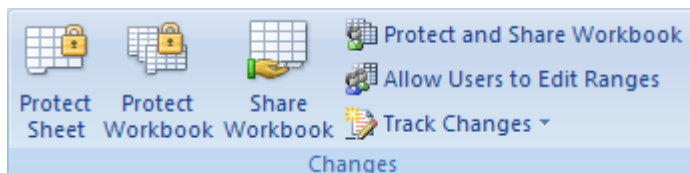
This group contains buttons that have been taken from the (Tools > Protection) sub menu and the Protection toolbar. The "Protect Sheet" button is the old (Tools > Protection > Protect Sheet) command. The "Protect Workbook" button is the old (Tools > Protection > Protect Workbook) command. The "Share Workbook" button is the old (Tools > Share Workbook) command. The "Protect and Share Workbook" button and the "Allow users to Edit Range" button are also from the (Tools > Protection) sub menu. The "Track Changes" drop-down list gives you access to the Highlight Changes and Accept Reject Changes commands.