



MS-OFFICE 2016 - EXCEL

English version

Creating tables

Introduction to functionalities such as charts, sort & filter, protection

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2016 ENVIRONMENT

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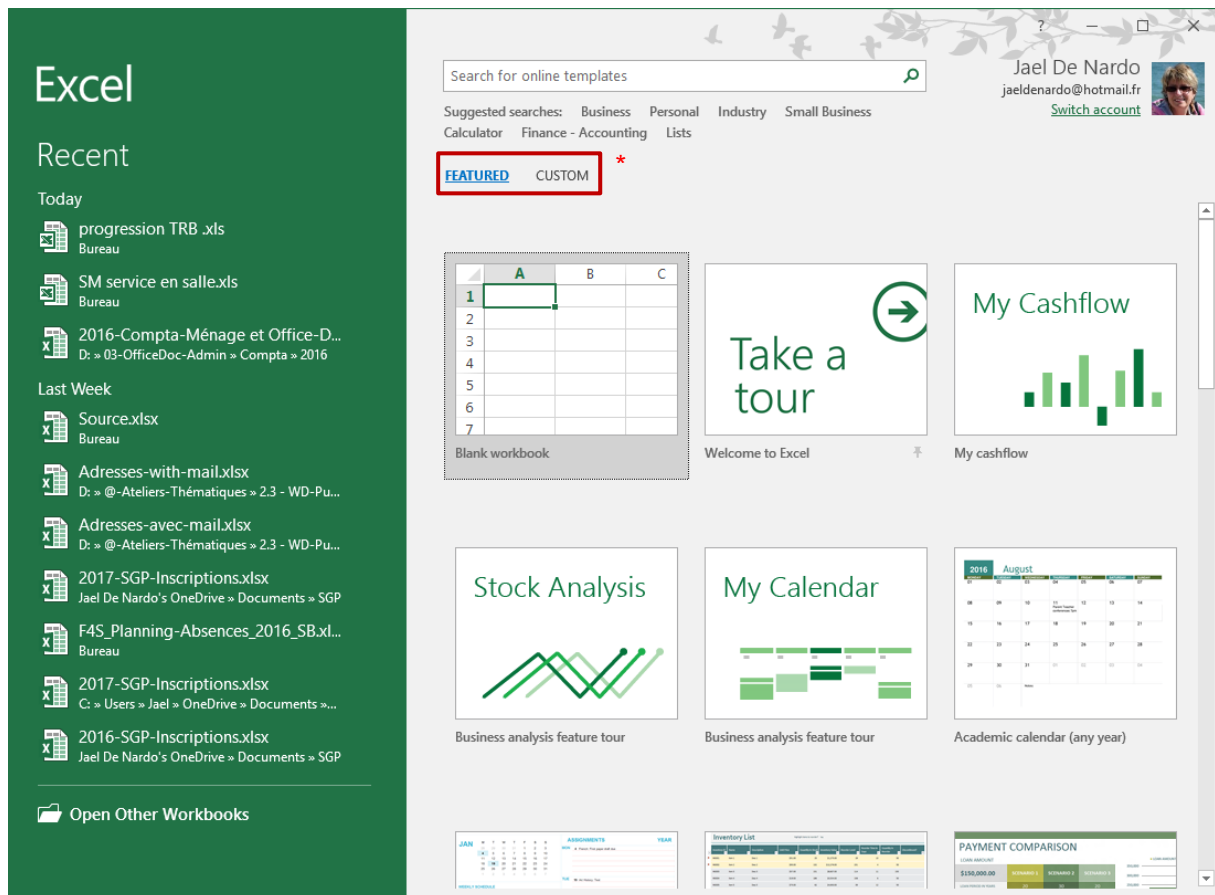
DEFAULT OPTIONS

-

HELP

1 Choices for getting started

Here below the default suggestions when you run Excel :



*** These two options are for templates (custom or corporate).** They are displayed only if one template at least is saved in the corresponding folder (see documentation about this topic)

Left pane

Recent documents (pinned or not)
At the bottom of the pane : an OPEN button ...

Right section

Templates to choose from (after a while this will be the list of recently used templates)

You may search templates on the Microsoft website (free). Type the required text or select the required theme.



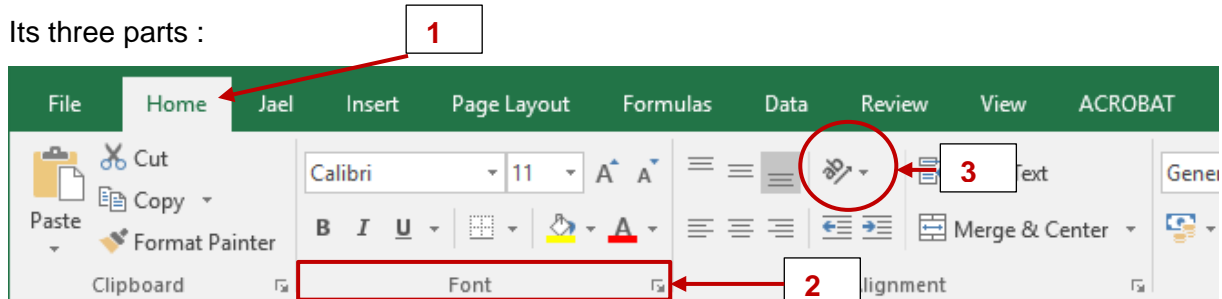
Blank file ?

A blank document, workbook ... is always the first suggestion
Press the ESC key

2 The 2016 environment

2.1 The Ribbon

Its three parts :



1. Tabs

Each one of them represents an activity area. If you point the ribbon and at the same time scroll with your mouse, you automatically switch from one tab to the other.

A special tab : FILE. It does not really belong to the Ribbon but displays the commands linked to files managing, help and default options. You exit the FILE menu by pressing the ESC key or simply clicking onto another tab on the Ribbon.

2. Groups

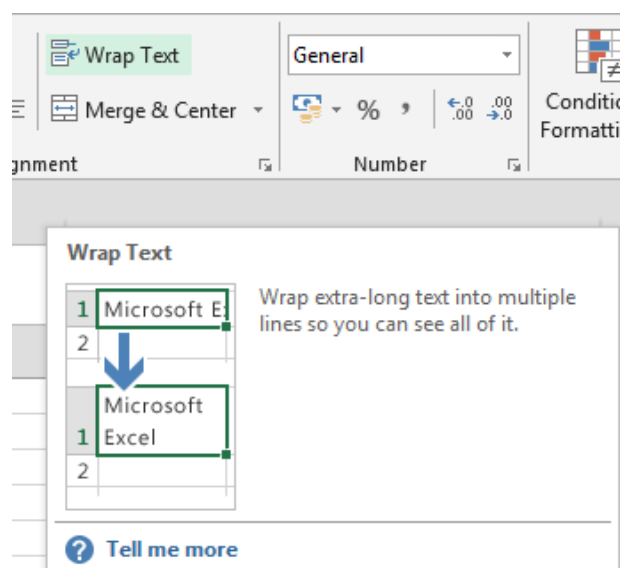
Each tab has several groups that show related items together (buttons, tear-off and so on). If you reduce the size of the Word window and there is not enough place to display each button, one only button will show the various commands such as in the following printscreen :

3. Commands

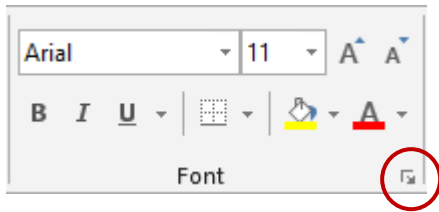
A command is a button, a box to enter information or a menu

2.2 Help on a button

Simply point the required button : some explanations sometimes with a visual sample will be automatically displayed :



2.3 Dialog box launcher

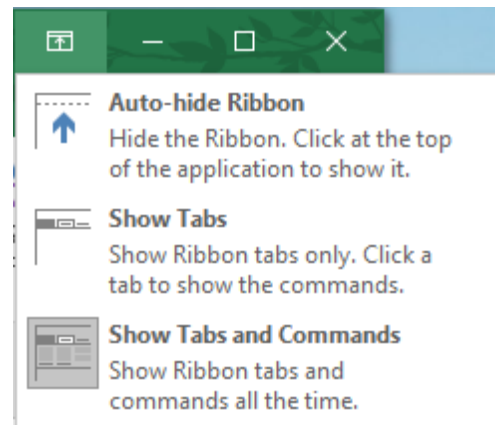


The diagonal arrow in the lower-right corner is called a dialog box launcher. Click and additional options related to that group will be displayed. Those options will often appear in the form of a dialog box that you may recognize from a previous version or they may appear in a familiar-looking task pane.

The above dialog box launcher displays the FORMAT – CELLS – FONT dialog box.

2.4 Managing the Ribbon

At the right end of the program's window :



Minimize the ribbon

Click on the minimize arrow at its right end.

Also : double-click on any tab on the ribbon or right click on the ribbon and select option COLLAPSE THE RIBBON

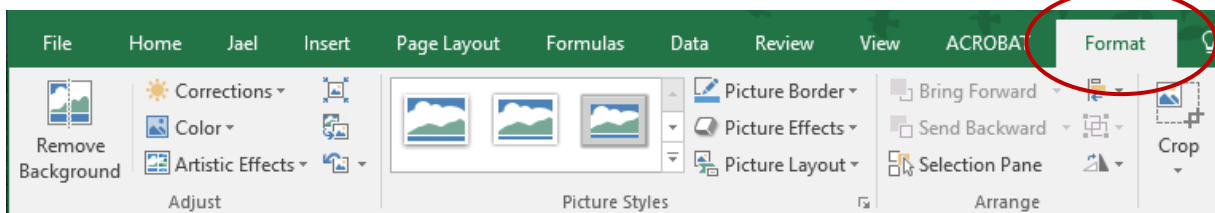


Aim : to make the workspace bigger. Important for small laptops. .

Each time you click on one of the ribbon tabs, the related buttons are displayed but when you click back in the document, they will be hidden.

Double-click a tab again, right click, click on the pin ... to dock it again.

2.5 Additional tabs



Additional tabs will automatically appear when you are working with specific items such as a picture, a table, an autoshape, a diagram or a chart and so on.

Click on the item (sometimes double-click) and the tab will be automatically displayed

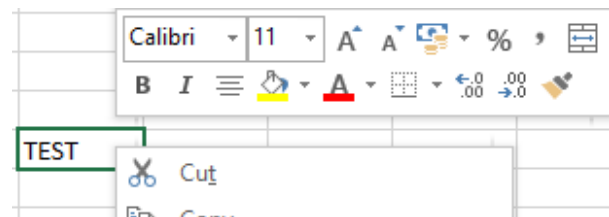
The Ribbon can show two of those program tabs together (because two tabs are needed for a given functionality ...)

When you click outside the item, the additional tab disappears.

2.6 The Mini toolbar

Right click a cell or a range of cells

Advantage : you can format a cell while working into another field of activities



Characteristics :

- Cannot be customized (adding buttons for instance)
- Can be turned off (FILE – OPTIONS – GENERAL Category – First option)
- Always displayed when right clicking (this cannot be turned off)

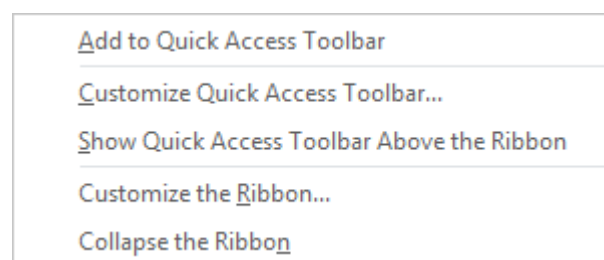
2.7 The Quick Access toolbar

The Quick Access Toolbar is the small area to the upper left of the Ribbon.
By default it contains only 3 buttons : **Save, Undo and Repeat**

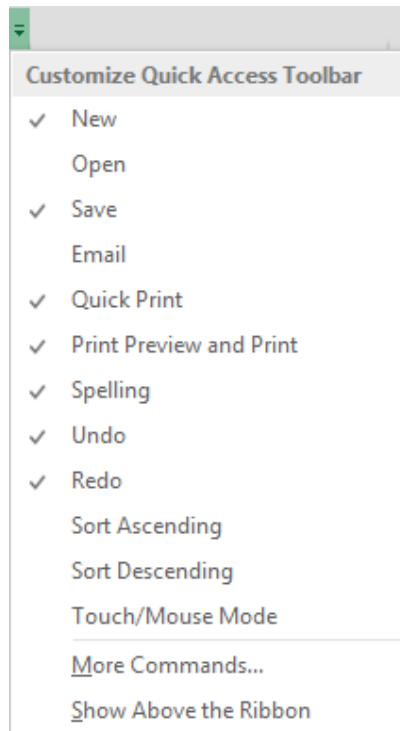
You may add your favorite commands so that they are available no matter which tab is active.

2.7.1 Add a button

Right click a button on the ribbon :



Or click on the chevron at the right end of the bar :



The FILE menu options.

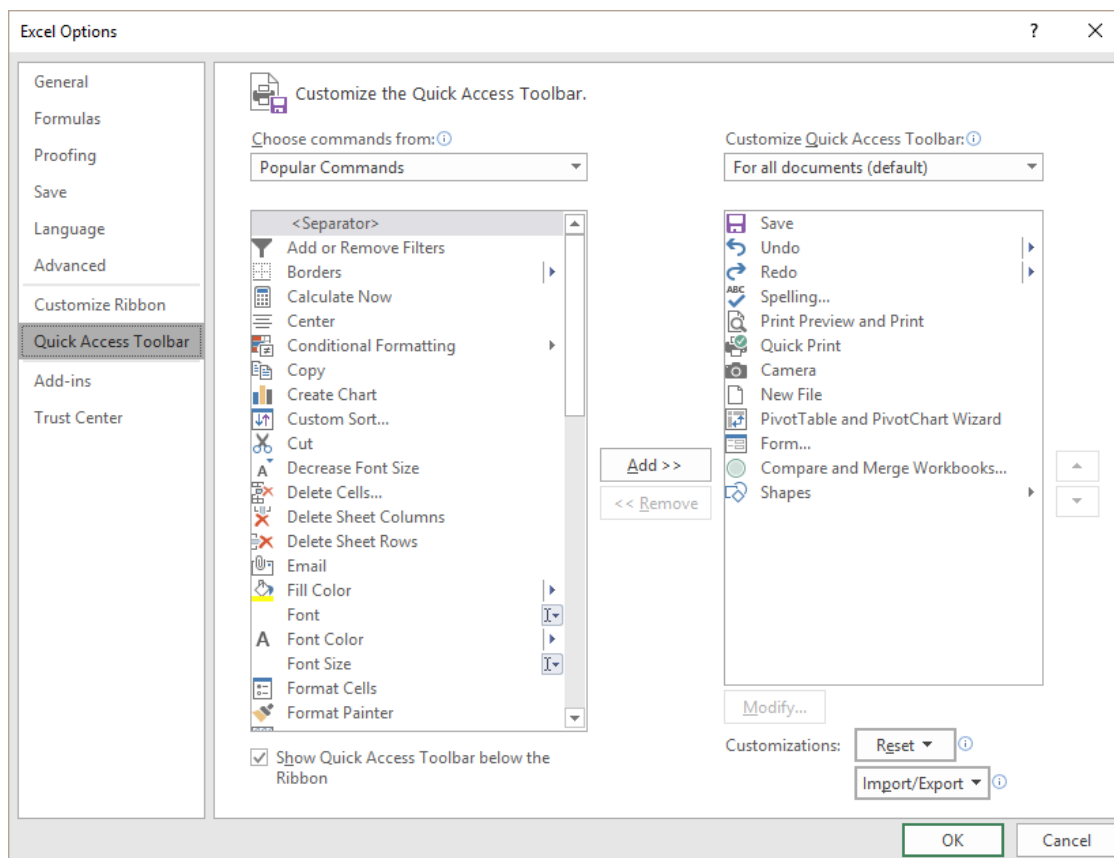
More commands : customizing

2.7.2 [Remove a button](#)

Right click on any button and the previous command turns into REMOVE FROM QUICK ACCESS TOOLBAR

2.7.3 [Manage the buttons](#)

The above CUSTOMIZE QUICK ACCESS TOOLBAR option or the MORE COMMANDS option.



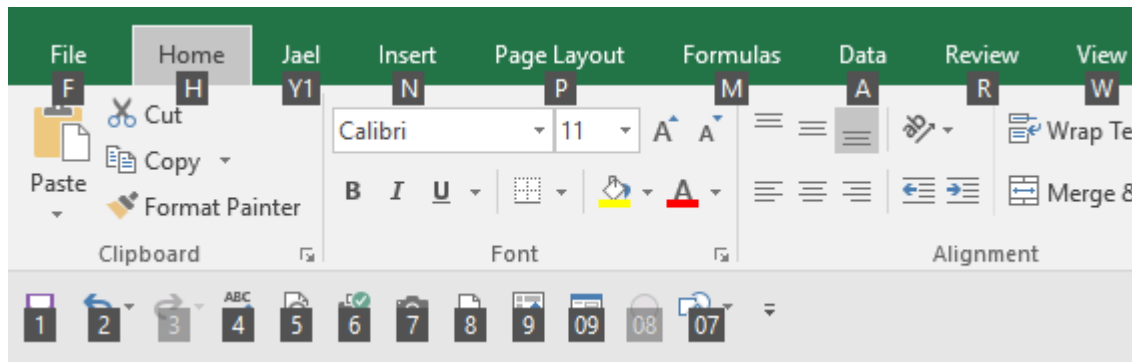
The dialog box options are quite clear : scroll down the various commands to add those you need and add them through the ADD button. Remove any button using the REMOVE button. Also set the buttons order using the up and down arrows. (*no drag and drop with the mouse*)

- ✎ This toolbar is not shared by Excel or PowerPoint. You will have to set the buttons you need for each program.
- ✎ You cannot change the button image unless it is a macro command (the MODIFY button then becomes available). You may not display the button **and** the text (the text will be displayed when you *point* the button).

2.8 Using the Key Tips

When the mouse suddenly no longer works, what can you do to save and exit the file ? which shortcut should you use ? All the Ribbon buttons can be accessed with the keyboard. Press the ALT key for one good second and all buttons will show **badges**.

Relates to the QUICK ACCESS bar buttons and the ribbon tabs.



ALT then press the keyboard key that corresponds to the required command.

Remove the badges ? Press the ESC key.

2.9 Customizing the status bar

You might be surprised but the status bar shows few information (by default in Excel : *zoom percentage, average of selected cells ...*).

It is up to you to add whatever information you need.

Right click the status bar :

Customize Status Bar	
✓ Cell Mode	Ready
✓ Flash Fill Blank Cells	
✓ Flash Fill Changed Cells	
✓ Signatures	Off
✓ Information Management Policy	Off
✓ Permissions	Off
Caps Lock	On
Num Lock	On
✓ Scroll Lock	Off
✓ Fixed Decimal	Off
Overtyping Mode	
✓ End Mode	
✓ Macro Recording	Not Recording
✓ Selection Mode	
✓ Page Number	
✓ Average	

2.10 Right clicking and double-clicking

Right clicking : important

If an option seems to be absent from the Ribbon, the solution is often to right click the element and select the required option from the shortcut menu.

Double-clicking a picture, an autoshape ...

The related tools are automatically displayed in the Ribbon

3 Themes

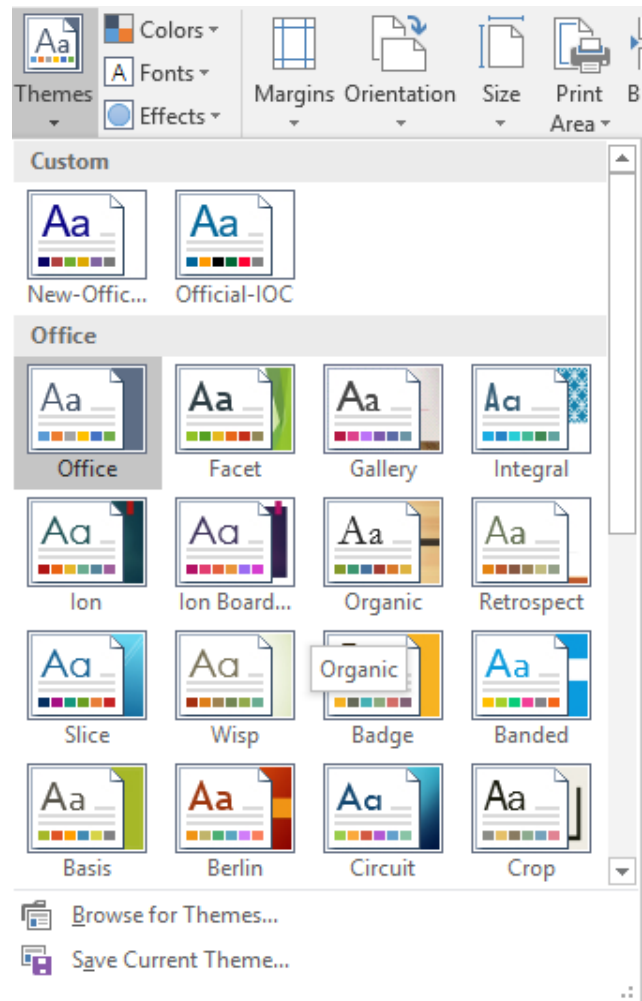
3.1 What is a theme ?

Quoted from the Microsoft online help : *'in the past it took time to format Microsoft Office documents to match because you had to choose color or style options for your tables, charts, shapes and diagrams separately. The Office themes simplify the process of creating matching, professional-looking documents not only within one program but across multiple programs. Use themes to give all of your organization's communications a branded look'.*

Indeed, themes are identical across all Office programs and any theme you have created will be available in Word, Excel, PowerPoint ... The themes colors, fonts and effects are applied to Office elements such as a table, a chart ...

Applying the theme :

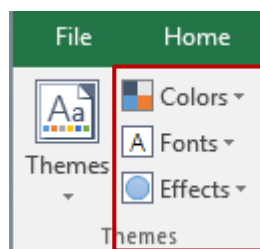
PAGE LAYOUT tab – THEMES group



The default theme is OFFICE.

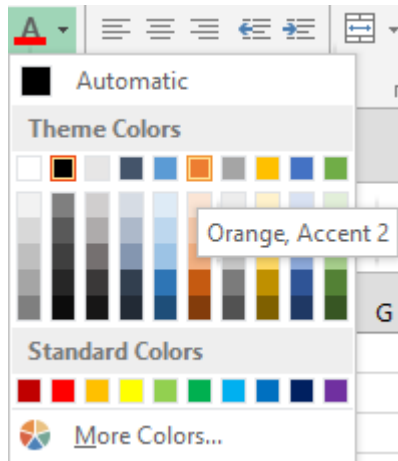
If your workbook contains items affected by a theme, you will notice that they will be automatically formatted by pointing a theme in the gallery.

A theme is made of 3 parts :



- **A color scheme.** It has 12 colors that will be automatically chosen according to the item (the series of a chart for instance)
- **A font scheme.** 2 fonts, one for titles and the other for the body text. Professional document designers recommend to only use 2 different fonts in a document.
- **An effects scheme.** Automatically applied to drawn shapes for instance. Made of a « matrix » in three parts : lines, fills and effects.

3.2 Implications when applying one of the theme colors or a standard color



Theme Colors

These colors are “automatic” as they are controlled by the active theme. If you apply another theme to the workbook, it will be replaced by its counterpart from the new theme.

Why ? Because you don't select a color, you select a *number (called Accent)*.

Standard Colors and More Colors

The color is independent from the theme and will not change if you apply another theme to the workbook

3.3 Custom theme

This belongs to advanced functions but it is important for end-users to have an idea about it as most companies will use their own theme rather than a Microsoft preset one.

The user responsible for the company theme.

This person will create a *colors and fonts scheme*. An .xml file will be created for each scheme. The whole set (colors-fonts-effects) will be saved as a theme (a .thmx file). **All of this should be done from PowerPoint** because the theme will include many items from the Master.

All these files will be stored on the user's local hard drive. Then the theme will be applied to all the Office company's templates (Word, Excel, etc ...).

Finally, the theme will be either *installed* on each user's workstation or *sent* to each user with instructions on how to install the theme and make it available to any Office file.

The other users or « end-users »

The theme has been saved onto the local hard drive

It is displayed in the themes gallery and is available to any Office file.

No theme file on the hard drive

The theme is not displayed in the themes gallery and is not available to any Office file.

How to retrieve the theme ? If you receive a file from the outside but containing the theme, it will be present when you edit the file. If your company has a PowerPoint template, the theme has certainly been applied to it. *Indeed the theme is incorporated into the file – but this is invisible. To check it : create an item using an automatic sequence of colors – you will see that the theme colors have been applied automatically.*

Open the file that contains the theme (preferably the PowerPoint one)

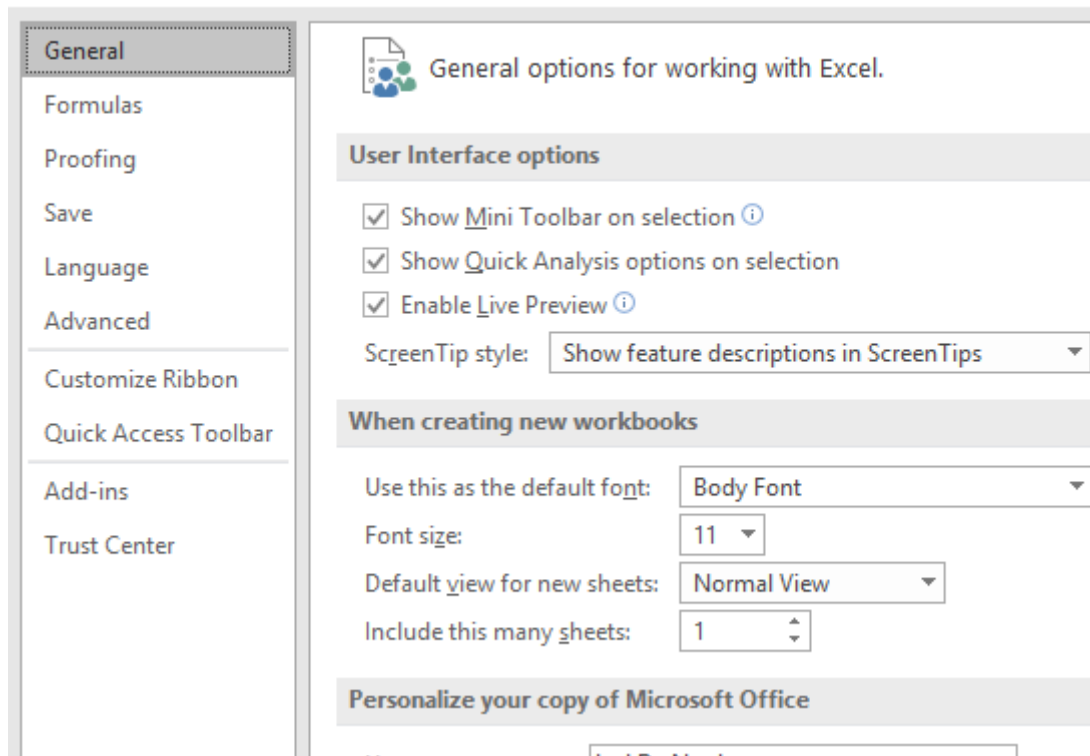
Save the current theme onto the hard disk (option at the bottom of the themes gallery).

4 Excel default options

Why cover this chapter before more important topics such as typing and formatting data ? To help you to use Excel with no "passive" behavior" but rather active, choosing which settings will make your daily work comfortable and pleasant.

- FILE - OPTIONS

Excel Options



The options found in the various categories will answer questions such as :

- Office environment : background color and customization of the title bar ?

Office Background: Underwater
Office Theme: Colorful

Graphics at the top of the window' Title bar (right end)

Background color of Title Bar and Excel window (365 subscribers : additional **Black** option)

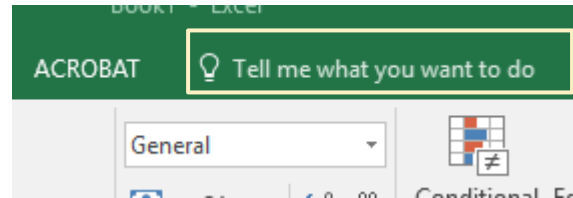
- How many sheets per workbook (by default) ?
- What will be the default folder when you open or save workbooks ?
- Why kind of macro security ? (Trust Center) ?

Etc. ...

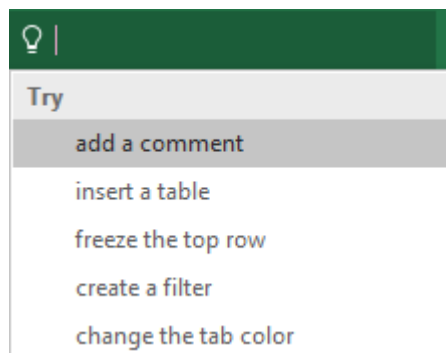
5 Help

5.1 Quick access to a command : the bulb of Tell me what you want to do

- Click on the blue « question mark » button located at the top right side of the Word window :

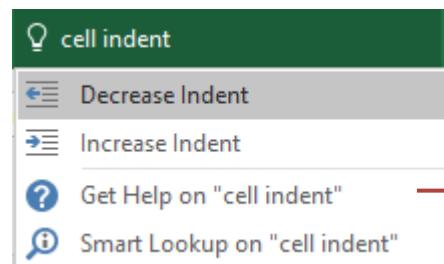


Some suggestions



Type the required command

Caution : the displayed options are not *suggestions* but a direct access to the given command ...



Get Help : access to *explanations* on the functionality

Configure or turn off automatic text formatting ...

Indent the whole paragraph by putting the cursor before any line in the paragraph (except the first line), and then pressin...

Guidelines for organizing and formatting data on a ...

Instead of typing spaces to indent data, you can use the Increase Indent command within the cell. For more inf...

Rotate or align cell data in Excel 2016 for Windows

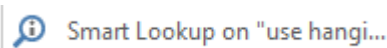
To move data closer to the left cell border, click Decrease Indent . To move data further away from the left cell borde...

[All Help and Support](#)

Smart Lookup : next topic

5.2 Smart Lookup

The above option



*Or the same one accessed by right clicking a selection
Or select and then REVIEW Tab – INSIGHTS Group*

A pane will be displayed on the right of the Word window with a list of related web sites (the sites are searched by Bing, the Microsoft search program). You cannot add your own manual search to the Bing result ...

GENERALITIES

-

VIEWING

-

TYPING

-

NAVIGATION AND SELECTION

1 Generalities

1.1 Excel new limits since the 2007 release

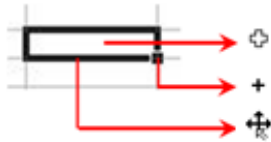
Excel has some very interesting new limits (total number of rows, columns, characters inside a cell etc ...) as shown in the table here after :

Limit	Excel 2003	Excel 2007
Number of columns in a worksheet	256	16'384
Number of rows in a worksheet	65'536	1'048'576
Different colors inside a workbook	56	4.3 billion
Number of conditional formats inside a cell	3	According to available memory
Number of sorting levels	3	64
Number of items displayed in a auto-filter list	1'024	32'768
Number of characters inside a cell	1'024	32'768
Number of printable characters inside a cell	1'024	32'768
Number of cell styles in a workbook	4'000	65'536
Number of characters used in a formula	1'024	8'192
Number of nested functions	7	64
Number of arguments for a function	30	255
Number of characters for a cell formatted as text	255	32'768
Number of columns in a pivot table	255	16'384
Number of fields in the Field List of a pivot table	255	16'384

 Number of columns : until column XFD
First empty cell after the last filled cell : CTRL + down arrow = bottom of worksheet / CTRL + right arrow = column XFD.

1.2 3 pointers and how to use them

It's *the beginner's challenge* ! Make sure to check the pointer's shape because it is important for the command you are about to perform :



Pointer to select

Autofill handle (to increment / to recopy data)

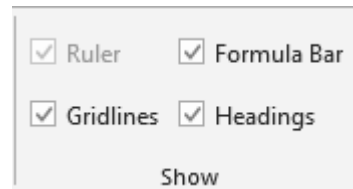
Pointer to move/copy (point the cell border)

Click + drag will produce a different result for each pointer.

2 Viewing

2.1 Viewing the Formula Bar, the Gridlines, the Headings

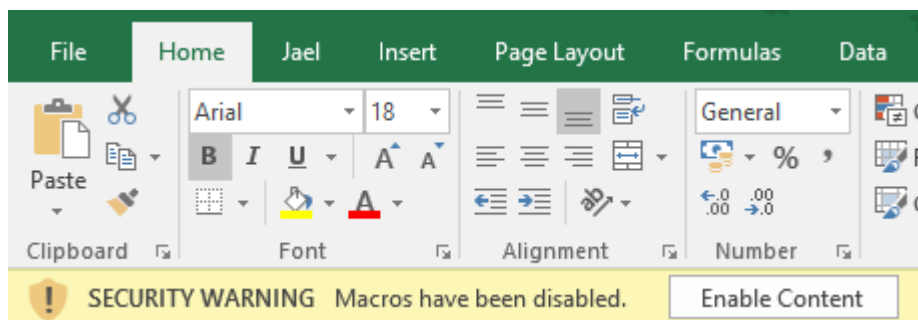
- VIEW Tab – SHOW Group



Ruler is only available in Print Layout view

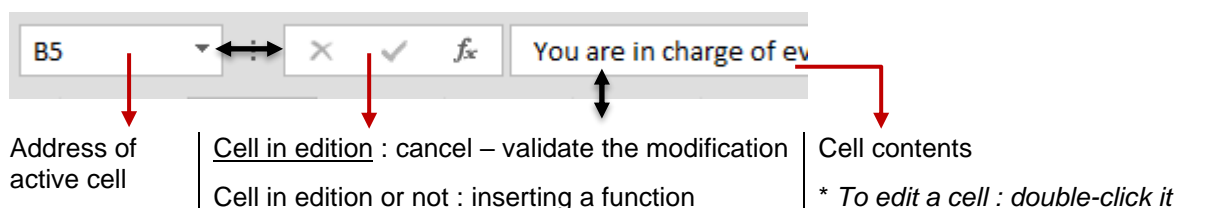
Headings means the « heads » of rows and columns

Message Bar displays security alerts when there is potentially unsafe, active content in the document you open. For example, the document might contain an unsigned macro or a signed macro with an invalid signature. In such cases, the Message Bar appears by default to alert you about the problem :



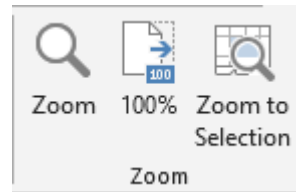
2.2 Formula Bar

Please note that it consists in two parts that the user can freely size to its needs.



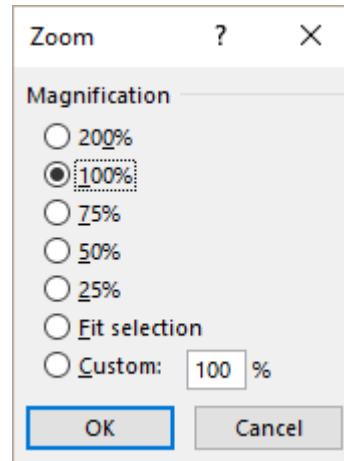
2.3 Zoom

- VIEW Tab – ZOOM Group



Zoom

Choice of predefined percentages. You can also manually type the required percentage.



100%

Shortcut

Zoom To Selection

The *selected* range of cells is widened out to occupy the whole available space of the Excel window.

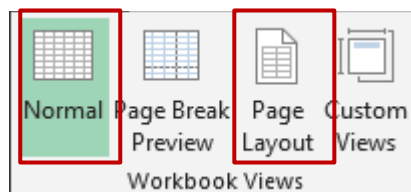
Very handy to zoom in or out using the zoom slider – at the bottom right of the Excel window :



Drag the slider or click on the buttons or

2.4 Normal and Print Layout view modes

- VIEW Tab – WORKGROUP VIEWS Group



NORMAL

Normal is the default view mode.
The usual mode to type data and work on them.

PRINTLAYOUT

Excel displays the worksheet as it will be printed : you see the top of two pages (even though there might be few data on the sheet), a horizontal and vertical ruler are displayed and you can insert codes in the header/footer (or type any text manually).

Add header

Table of contents							
PREPARING A LARGE SHEET FOR A NEAT PRINTOUT							
Budget	printed on: 08.01.2017						
Salaries and expenses	31.01.16	29.02.16	31.03.16	30.04.16	31.05.16	30.06.16	31.07.16
Monthly salary / fixed	4'000	4'000	4'000	4'000	4'000	4'000	4'000
Monthly salary / percentage	2'830	3'150	3'025	2'960	2'900	3'280	2'500
Family allowance	400	400	400	400	400	400	400
Bonus						2'000	
13 th salary							
Total	7'230	7'550	7'425	7'360	6'400	9'680	6'900

Add footer

Salaries and expenses	31.01.13	28.02.13	31.03.13	30.04.13	31.05.13	30.06.13	31.07.13
Rent	2'500	2'500	2'500	2'500	2'500	2'500	2'500
Tax	850	850	850	850	850	850	850
Health insurance	800	800	800	800	800	800	800
Fixed annual expenses							
(car, house, ...)	1'000	1'000	1'000	1'000	1'000	1'000	1'000
Food	1'200	1'200	1'200	1'200	1'200	1'200	1'200
Holidays	500	500	500	500	500	500	500
Miscellaneous 1	10	11	12	13	14	15	16
Miscellaneous 2	10	11	12	13	14	15	16
Miscellaneous 3	10	11	12	13	14	15	16
Miscellaneous 4	10	11	12	13	14	15	16
Miscellaneous 5	10	11	12	13	14	15	16
Miscellaneous 6	10	11	12	13	14	15	16
Miscellaneous 7	10	11	12	13	14	15	16
Miscellaneous 8	10	11	12	13	14	15	16
Miscellaneous 9	10	11	12	13	14	15	16
Miscellaneous 10	10	11	12	13	14	15	16
Miscellaneous 11	10	11	12	13	14	15	16
Miscellaneous 12	10	11	12	13	14	15	16
Miscellaneous 13	10	11	12	13	14	15	16
Total	7'930	7'114	7'138	7'162	7'186	7'210	7'234
Net	200	436	287	198	-786	2'470	-334

Add header

Miscellaneous 14	10	11	12	13	14	15	16
Miscellaneous 15	10	11	12	13	14	15	16
Miscellaneous 16	10	11	12	13	14	15	16
Miscellaneous 17	10	11	12	13	14	15	16
Miscellaneous 18	10	11	12	13	14	15	16
Miscellaneous 19	10	11	12	13	14	15	16
Miscellaneous 20	10	11	12	13	14	15	16
Miscellaneous 21	10	11	12	13	14	15	16
Miscellaneous 22	10	11	12	13	14	15	16
Miscellaneous 23	10	11	12	13	14	15	16
Miscellaneous 24	10	11	12	13	14	15	16
Total	7'930	7'114	7'138	7'162	7'186	7'210	7'234
Net	200	436	287	198	-786	2'470	-334

3 Moving

- Arrows** In the chosen direction
- HOME** Beginning or current row
- END + ENTER / Right arrow** Last filled column of table, on current row
- PgDn/PgUp** Goes up or down one *screen* (about 18 rows)
- CTRL + HOME** Top of sheet
- CTRL + END** Cell at intersection between last filled line and last filled column of sheet or sometimes : last cell where data has been typed or a format applied even though now empty

Moving without loosing the active cell :

Use the scroll bars. Click on the arrow if you need to move up or down one row at a time (same principle for columns) and drag the slider for a more important navigation.

Going to a specific cell

- HOME Tab – EDITING Group – Drop-down list of the FIND & SELECT Button- GO TO Option (or F5 and same dialog box).
- Type the cell reference (Z567 for instance).

4 Selection

☛ Using the mouse : always use the *selection pointer* (cf page 24).

4.1 A range of cells

- Click on the first cell and drag over the others. Or
- SHIFT + any moving key (arrows, HOME, END etc...). Or
- Click on the first cell and then SHIFT + click on the last one (ideal to select a table).

4.2 A row/column - Several rows/columns

Click on the column "head" (letter) Pointer : ↓ Keyboard : CTRL + Spacebar

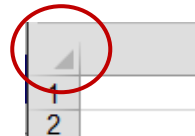
Click on the row "head" (number) Pointer : → Keyboard : SHIFT + Spacebar

Several rows/columns : do as for one row or column and drag the mouse.

4.3 The whole worksheet

Global selection button.

Seldom used



4.4 Multiple selections

First selection as usual

Next selections : same but keep the CTRL key pressed while selecting

4.5 A table

The active cell must be inside the table et there must be no empty row/column : CTRL + * or CTRL + A

5 Rules for entering data and validating

5.1 Typing and validating

Click on the required cell

Type the content

Text (or label)

automatically left aligned.

Digits, numbers

automatically right aligned.

Enter a number as a label start the data with an apostrophe.

Validate

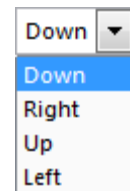
Click on



The active cell remains the same one

ENTER

Cell below, above ... according to the choice made in the Excel options : FILE - OPTIONS – ADVANCED Category – EDITING OPTIONS Topic –AFTER PRESSING ENTER, MOVE SELECTION Option :



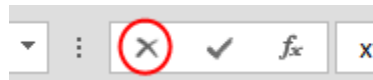
Same cell if the above option is off

Arrows, TAB ...

The active cell is moved according to the chosen direction

Cancel before validating

Click on



Caution : no UNDO ...

Press the ESC key

 Provided your cursor is inside the cell – in editing mode – a lot of commands are obviously unavailable.

5.2 Automatic column width

If the number entered is larger than the current cell, Excel will automatically re-adjust the column width, provided the user has not yet defined the width manually.

In standard format (without thousand separators), the column is enlarged up to 11 digits, then it is shown in scientific notation (exponential formula). In number format (with thousand separators) or other, the column is enlarged up to 30 digits.

If you enter text, the column width remains the same but

If the next cell is empty : the text overlaps on the next contiguous cells but the text belongs to the original cell.

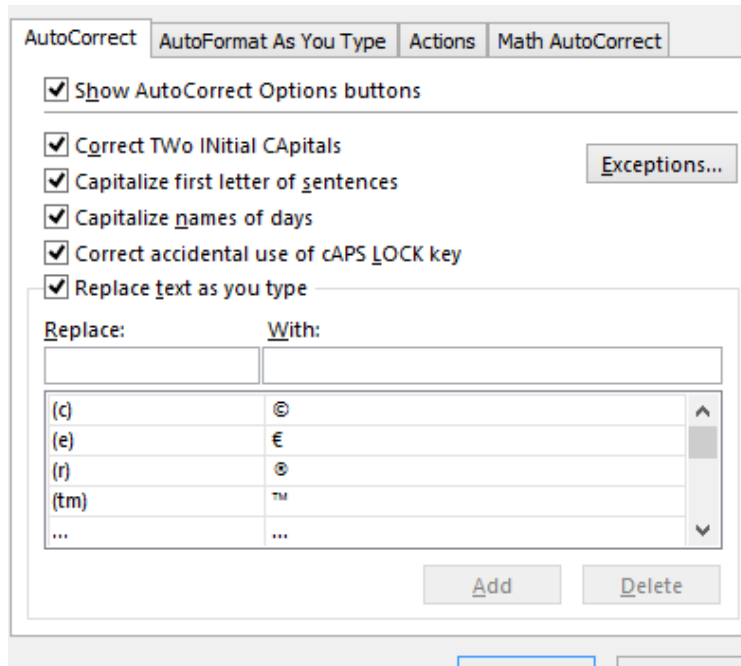
If the next cell contains data : what cannot be shown is omitted and you will have to enlarge the column width or ask the text to be *wrapped* or manually insert a line break.

5.3 When typing text : autocorrect features

Is the first letter of days automatically capitalized ?
Are some spelling mistakes automatically corrected ?


These are the Word autocorrect entries


To manage them : FILE - OPTIONS – PROOFING Category – AUTOCORRECT OPTIONS Button :



How to undo an automatic correction ?

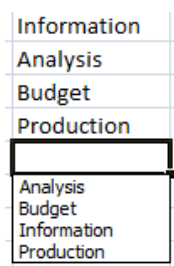
Advice : do not turn off its corresponding option. There will surely be many other occasions where this automatic correction will suit your needs.

You should rather click on the UNDO button  as soon as Excel has applied the automatic correction.

 If you type some label into a given cell and if the next cell starts with the same characters, the previous text will be automatically displayed. Accept by pressing ENTER or carry on typing.

5.4 Automatic list typing

If you are typing a list of labels, Excel memorizes the individual item and you can retrieve this list later on. This could save time. Example :



- Start typing the first letters
- Excel automatically suggest the remaining letters Or
- Click in the cell but do not type anything
- ALT + down arrow Or
- Right click the cell into which you want to type
- Option PICK FROM DROP-DOWN LIST (screen capture)

 Condition to display the list of entries : no empty cell above the one you are about to type into

This feature is automatically on but only if the following option has not been turned off : FILE - OPTIONS – ADVANCED Category – EDITING OPTIONS Topic – ENABLE AUTOCOMPLETE FOR CELL VALUES Option.

5.5 Entering data into a selected range of cells

- Select the range of cells to be filled and type data in the first cell
- You can press 4 keys

ENTER : next active cell is the one below.

SHIFT + ENTER : next active cell is the one above.

TAB : next active cell is the one to the right.

SHIFT + TAB: next active cell is the one to the left.

5.6 Filling a range of cells with the same data

- Select the range of cells to be filled
- CTRL + ENTER.

 The operation is also valid on a multiple selection

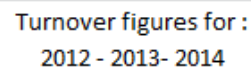
5.7 Inserting special characters (as in Word)

Choose from the following gallery : INSERT Tab – TEXT Group – Last SYMBOL button. A dialog box will display the various fonts and their characters. For symbols : the *wingdings* font.

5.8 Inserting a line break into the cell / wrapping text inside the cell

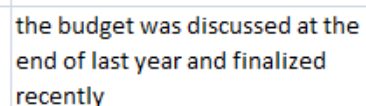
There are two tools - that can be combined

- 1 Type the text and at the required position : ALT + ENTER




Turnover figures for :
2012 - 2013- 2014

- 2 First type the whole text and validate. Then click on the cell and HOME Tab - ALIGNMENT Group – WRAP TEXT Button. Excel wraps the text inside the cell on as many lines as necessary (according to the column width of course)



the budget was discussed at the
end of last year and finalized
recently

The row height is automatically adjusted

 Wrap text : if you delete text later on, there will be no automatic height autofit. It will have to be done manually.

5.9 Points to remember when typing numbers

5.9.1 Positive and negative numbers - Percentage

+ 12 is positive - the + sign does not appear.

- 12 is negative - the - sign appears.

(12) is negative - the parenthesis are not shown and replaced with the – sign.

5% is accepted as such. (but Excel memorizes 0.05 of course))

5.9.2 Decimal and thousand separators

Usually numbers are typed without separators. They are added afterwards. But if you need to type a number with the separators, the signs to use will be , ' according to what has been set in Windows.

- the number is typed with the wrong separators : it will be aligned on the left, as text.
- the number is typed with the correct separators : it will be accepted as a number and left as such.

5.9.3 Fraction

3/12 will be understood as a date. You need to enter +3/12 or =3/12 (that is 3 *divided by* 12). Unless you format it, it is automatically displayed in its decimal form. (23/34=0,6764).

To retrieve the fraction format : HOME Tab – NUMBER Group – Drop-down list of the GENERAL button.

A tip found into a book some years ago : type 0[space]3/12 – 12[space]1/8 etc ...

5.10 Typing dates

Excel works with an internal calendar that goes from 1-1-1900 to a quite far distant future ! But if Excel displays a date (for you), in reality Excel works with a serial number (1=1.1.1900, 2=2.1.1900 and so on). Because dates are in fact numbers, you can use them into formulas or functions. If Excel does not "understand" your date (it does not convert your typing into the corresponding serial number), it will be taken as label and aligned left. But Excel accepts quite a few ways ***always according to the Windows country settings*** :

5.10.1 Shortcuts for the current data and time

CTRL [plus] ; the date is inserted in the active cell (it is not automatically updated).

CTRL [plus] : the time is inserted in the active cell (it is not automatically updated).

 Date that will be automatically updated : insert the function =TODAY()

5.10.2 The dates of the third millennium

The perfect date for Excel is the one typed with 4 digits. But if you sometimes use only 2 digits for the year or if you retrieve a date from an old version, Excel's interpretation may vary. By default :

From 00 to 29 2000 to 2029
From 30 to 99 1930 to 1999

In any case, the formula bar displays 4 digits but you can change the default date format, so that the year will be automatically display in 4 digits. You can also modify the default setting directly in the REGIONAL SETTINGS of the Windows Control Panel. (See *next Topic*).

5.11 Modifying the windows settings for numbers, dates ...

Run the CONTROL PANEL and double-click on the REGIONAL AND LANGUAGE OPTIONS icon (the icon can have a different name according to your Windows version) : change as required (for instance add yy to the date format in order to always display 4 digits).

6 The autofill handle

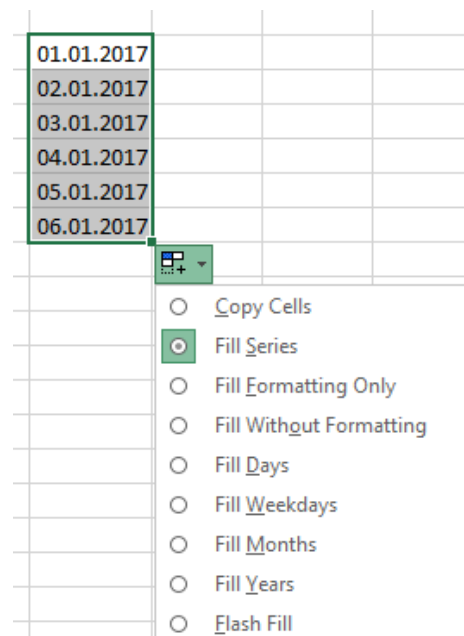
The auto fill handle is used either to recopy a text or a formula generating no incrementation or to create a list of incremented items starting from the typed data.

6.1 Simple

- Type the first data ex *January 2014 - Monday - Qtr 1 - Zone 22 - 04--101* (code for a good)
- It is not necessary to validate.
- Click on the *auto fill handle* (see figure page 24).
- Drag over the required range of cells **going forward, backward, by line or by column**.

The AUTO FILL OPTIONS button is automatically displayed.

You can click on this button or ignore it. The available options will vary according to the type of list.



 Press the CTRL key while dragging the autofill handle : it will invert the autofill command, forcing the incrementation or on the contrary preventing it.

6.2 Autofill with an interval (other than than the preset ones)

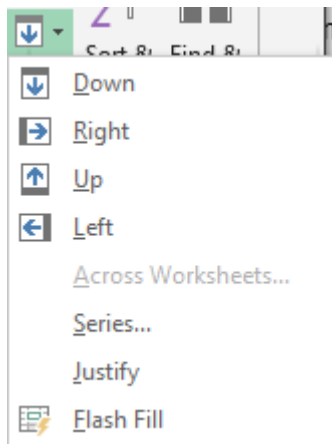
- Type first and second data.
- Select both cells and click on the auto fill handle.
- Drag over the required range of cells **going forward, backward, by line or by column**
Excel analyses the "gap" and applies the corresponding incrementation.

Other possibilities

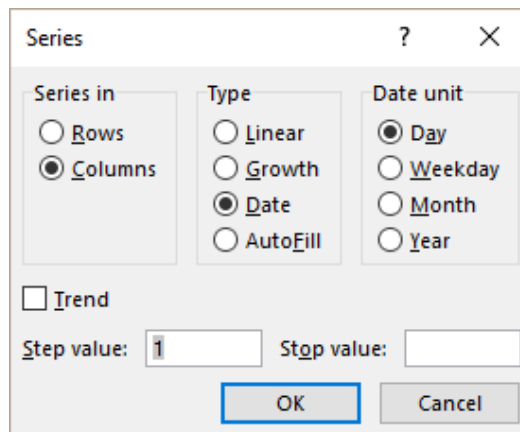
- Drag the autofill handle but *with the mouse right button*. The shortcut menu offers the same options (by month, by year for instance)

Or through the *SERIES* dialog box (but using the mouse is far more comfortable)

- Select cell containing required data + the cells to be filled.
- HOME Tab – EDITING Group –
« arrow » buttons :

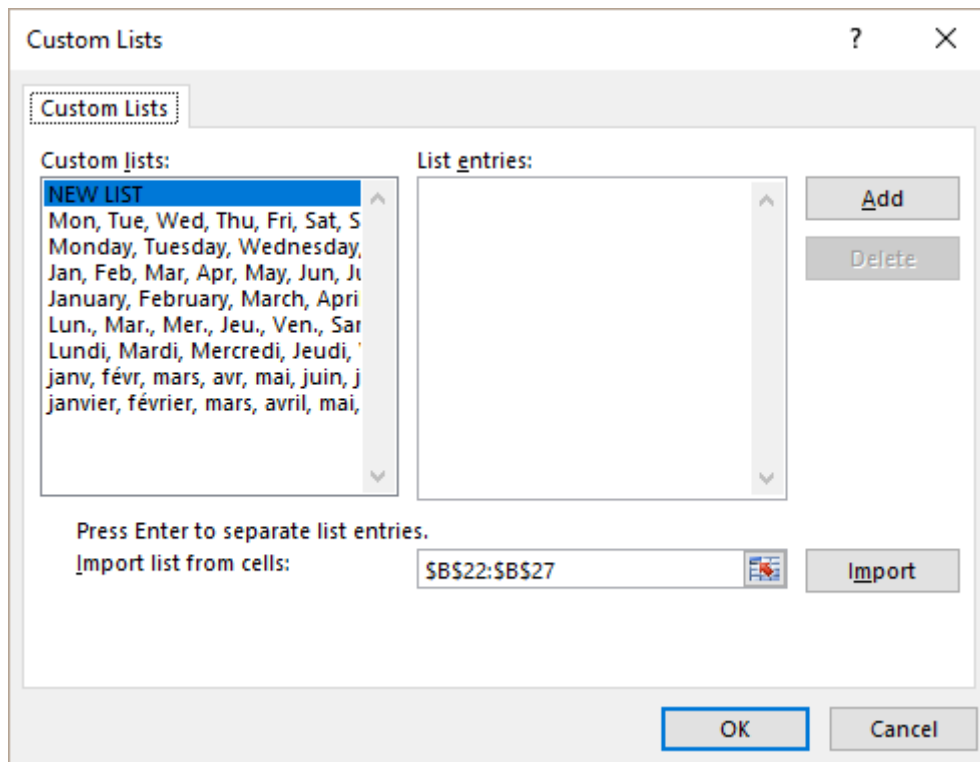


Indicate the type, the unit ...



6.3 Customized lists

- FILE - OPTIONS – ADVANCED Category – GENERAL Section (near the bottom) - EDIT CUSTOM LISTS Button



List entries

Type each item.

One item per line or each item separated with a comma.

Click on the ADD button.

Import list form cells

To import an existing list.

Click on the following icon : 

Select the range of cells containing the list.

Click on the IMPORT button

 The lists you create are used for sorting, filling and are available in all other Excel workbooks.

7 Editing the cell contents

- Retype from the beginning and validate.

Or

- Click on the formula bar or F2. The insertion point is located respectively inside the bar or inside the cell, after the last character.

Or

- Double-click on the cell : edit directly in cell.

Available only if this option is active : FILE - OPTIONS –ADVANCED Category – EDITING OPTIONS Topic – ALLOW EDITING DIRECTLY IN CELLS Option.

8 Clearing the cell contents

🔗 It is important to distinguish *the contents* (the data) from *the format* (date, percentage).

- BACKSPACE key or DEL key.
🔗 **This does not clear the format.**

Or

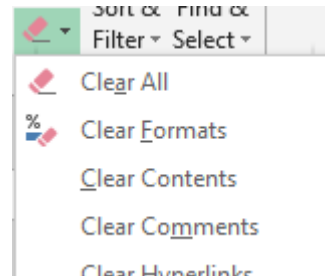
- Shortcut menu : option CLEAR CONTENTS.

Or

- Auto-fill handle - drag inside the cell or inside the selected range of cells.
🔗 **This does not clear the format.**

Or for a full choice, including deleting values + formats :

HOME Tab – EDITING Group – Eraser button:



Clear All = contents + format.

Clear Formats = formats only.

Clear Contents = values only

Clear Comments (the comment is the small red dot at the right top of cell).

9 Undoing / Repeating the last operation

9.1 Undoing operations / retrieving undone operations

QUICK
ACCESS bar :



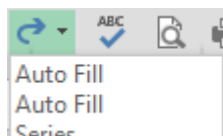
Undoes the last operation

Goes back one operation for each click.



Retrieves the last undone operation

Retrieves one operation for each click



Drop-down list of undone operations

The list is not reset when you save the file but when you close it..

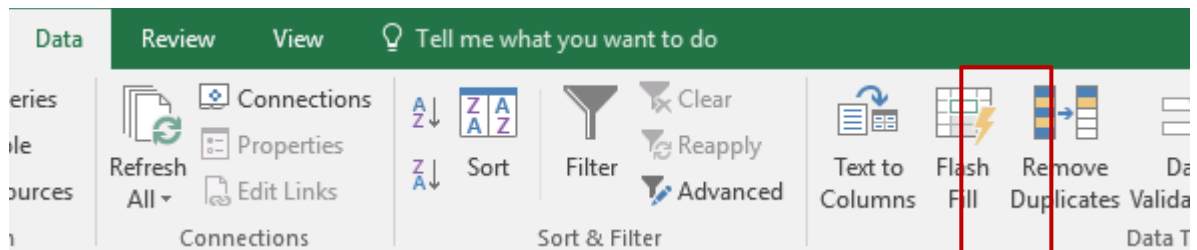
9.2 Repeating the last operation

CTRL + Y or F4.

10 The Flash Fill feature

This feature works like an assistant. Show Excel what you want to do and click on the button ! Excel analyzes your data and fills in the rest !

- DATA



Here below the *sample* Excel can analyze :
(first row)

Name		
John Smith	Smith John	J. S.
Kevin Evans		
Judith O'Neil		
Laurent De Nardo		
Mark Tolbius		
Amina Serpo		

Click on the FLASH FILL button

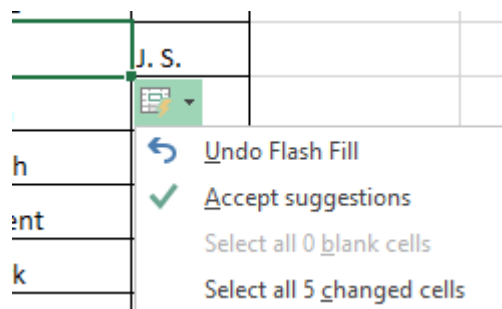
Name	Inverted	Initials
John Smith	Smith John	J. S.
Kevin Evans	Evans Kevin	K. E.
Judith O'Neil	O'Neil Judith	J. N.
Laurent De Nardo	Nardo Laurent	L. N.
Mark Tolbius	Tolbius Mark	M. T.
Amina Serpo	Serpo Amina	A. S.

Or what a CONCATENATE function usually produces :

	A	B	C
1	FirstName	LastName	Name
2	John	Evans	John Evans
3	Peter	O'Neil	
4	Luke	Smith	
5	Mark	Greenaway	

	A	B	C
1	FirstName	LastName	Name
2	John	Evans	John Evans
3	Peter	O'Neil	Peter O'Neil
4	Luke	Smith	Luke Smith
5	Mark	Greenaway	Mark Greenaway

When it is done, a tag will be displayed with some managing commands



Those who tried to get the same result in previous versions remember the horrible long functions they had to set up and will applaud at this new feature ...

**WORKING ON THE TABLE
STRUCTURE**

1 Width and height of rows/columns


1.1 Column width – Row height

⇒ **It is not included in the copy.**

⇒ **You can modify the column width of several sheets if they have been pre-selected.**

1.1.1 Using the mouse

One column

- Point the head of column over the right separation (pointer = )
To enlarge column A, point separation between A and B.
- Click and drag

Autofit

- Point the separation and double-click.

The column will be enlarged so that the largest data can be shown.

Several columns

- Select the columns.
- Do the same as for one column (any one) : all will be enlarged or reduced accordingly.

One row

- Point the "inferior" separation on the head of row (the number).
- Click and drag mouse down to enlarge and up to reduce the row height.

To enlarge row 1, point separation between 1 and 2

Autofit

- Point the separation and double-click.
The height is adjusted to the highest data.

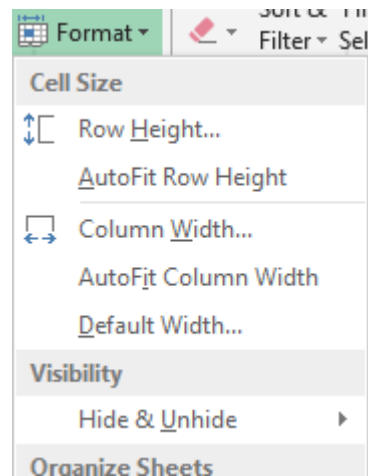
Several columns

- Select the rows.
- Modify one row (any one) : all will be modified accordingly

1.1.2 Using a dialog box

Select at least one cell of each required row/column

HOME Tab – CELLS Group – FORMAT Button – Beginning of the drop-down list



Row Height

Indicate the *number of points or pixels* (1 point = 1/72 inch = 0.03 mm).

AutoFit Row Height

The height is adjusted to the highest contents

Column Width

Indicate a *number of characters*

AutoFit Column Width

The width is adjusted to the largest contents

Default Width

Usually 10.71. You can change this setting to apply a different width to the whole worksheet. *Caution : columns that have been manually modified will not be affected.*

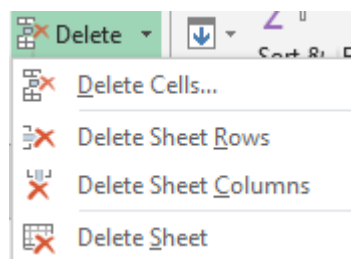
2 Deleting and inserting rows/columns

2.1 Deleting rows/columns

Reminder : pressing the DEL key only removes the cell contents

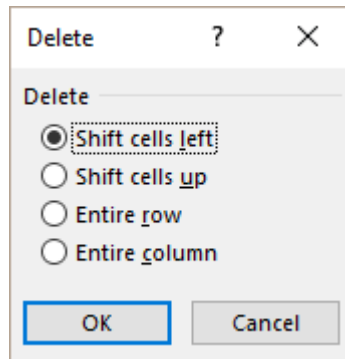
Select the required rows/columns.

- HOME Tab – CELLS Group – Drop-down list of the DELETE Button :



Delete Cells

The following dialog box will be displayed :



If you choose *shift ...*, the selected cells are removed and the contiguous cells are moved accordingly
Is this really what you wanted to do ?

Entire row / column : selecting cells was an error and you wanted to delete full rows/columns.

Delete Sheet Rows / Columns

The required rows/columns are deleted even though you may have selected only a range of cells.

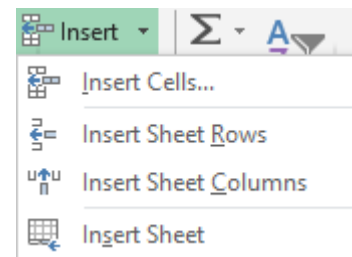
 You may also right click the selected rows/columns and choose from the [shortcut menu](#) : fast and comfortable.

You may also select the row/column and use the following [keyboard shortcut](#) : CTRL [plus] -

2.2 Inserting rows/columns

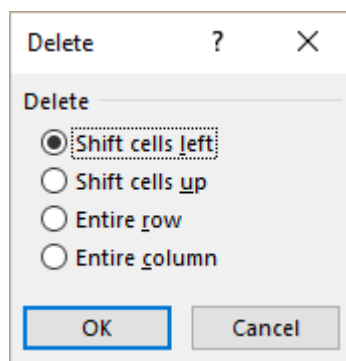
Inserting will be done *in front of the select column* and *above the selected row*.

- Select the row/column and – if necessary : *extend the select to the number of rows/column you need to insert.*
- HOME Tab – CELLS Group – Drop-down list of the INSERT Button :



Insert Cells

The following dialog box will be displayed :




If you choose *shift ...*, the number of selected cells is inserted and the contiguous cells are moved accordingly. Is this really what you wanted to do ?

Entire row / column : selecting cells was an error and you wanted to insert full rows/columns

Insert Sheet Rows / Columns

The required rows/columns are inserted even though you may have selected only a range of cells



 You may also right click the selected rows/columns and choose from the [shortcut menu](#) : fast and comfortable. You may also select the row/column and use the following [keyboard shortcut](#) : CTRL [plus] +

3 Hiding a row / a column

Hide Right click the row or the column (its head) and choose the HIDE option
Unhide Select one row / column before and after the hidden one*, right click the selection and choose the UNHIDE option.

Or corresponding option from the drop-down men of FORMAT (HOME Tab).

* When it is impossible to select a row/column "before" (in case of row 1 or column A), it is possible to go to a specific cell by typing its address in the formula bar (left end). Then you can *Unhide through HOME Tab – CELLS Group – Drop-down list of the FORMAT button – HIDE & UNHIDE Options*.

Mouse tip : if the column is hidden, the separation pointer is different. :  and  .
Click and drag or double-click.

Important : You will want to *hide* when you want to make the row / column « disappear » from the worksheet. If you would rather want to hide / unhide in turn, please use the GROUP option from the Outline mode (see corresponding doc)

FORMATS

-

CUT – COPY – PASTE

-

FIND-REPLACE

1 Formats

1.1 Font

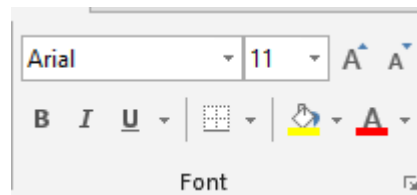
Default font : the new CALIBRI font – 11 pts.

If you need to change the default font, you can do so in the Excel options : FILE - OPTIONS – POPULAR Category – WHEN CREATING NEW WORKBOOKS Topic - USE THIS FONT and FONT SIZE Option

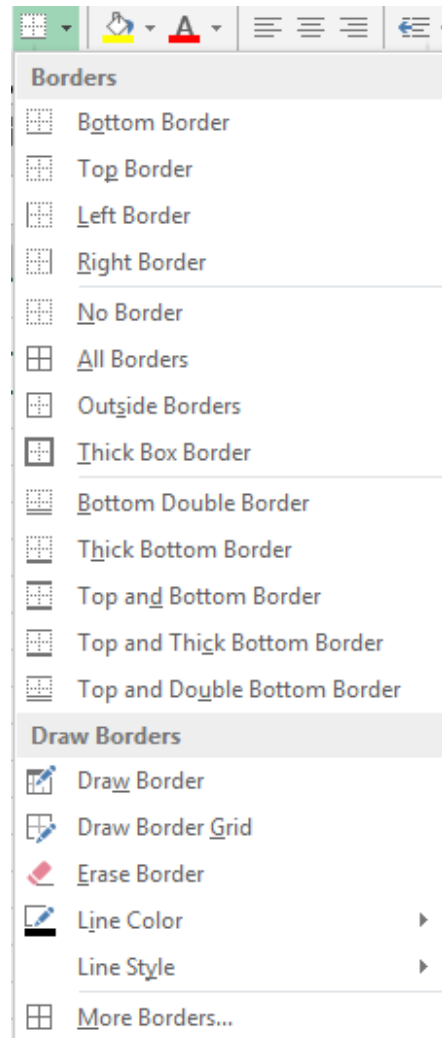
In general :

- HOME Tab – FONT Group

The usual font attributes ...



Interesting : the drop-down list of the border button :



Instead of selecting cells to which a full or partial border should be applied, you can click on *Draw Border* and *Draw Border Grid* : the mouse pointer will change and you can click and drag over cells to automatically apply a border.

Line color : the colors come from the current theme.

More Borders : dialog box. An interesting additional option : draw a diagonal border inside the cell.

Dialog box launcher

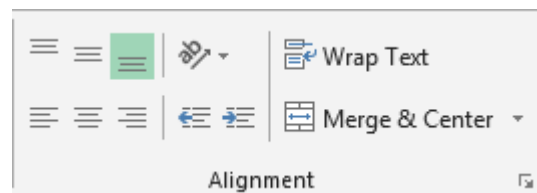
The general format (text or number) dialog box (Font Tab). Some interesting additional options such as *strikethrough*, *superscript* and *subscript* for text attributes and an option called *normal font* : if you choose another font, the option is automatically turned off. To retrieve the default font : check the option again.

1.2 Formatting characters inside a cell

- Edit the cell (by double-clicking or any other method).
- Select the required characters (only text)
- Apply the chosen format

1.3 Aligning data

- HOME Tab – ALIGNMENT Group



Again, usual attributes. The WRAP TEXT option has been explained in a previous chapter (page 30)

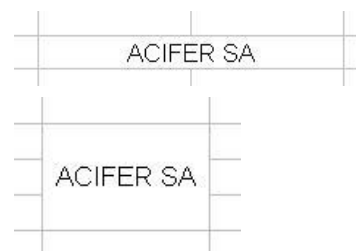
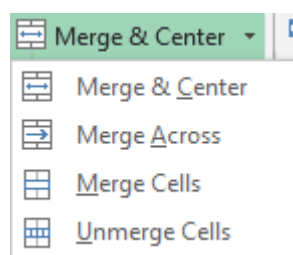
Some interesting options :

The AB button To change the text orientation in the cell (from diagonal to vertical)

The two indent buttons Never type *spaces* to indent a text ! Rather use one of those two buttons

Merge & Center Select the cells :

Examples :



Merge & Center

Center : only horizontal

Merge Across

Merge : only horizontal or vertical.
Alignment : by default

Merge Cells

Merge : horizontal & vertical.
Alignment : by default

Unmerge Cells

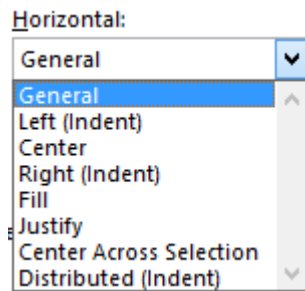
Cancel only the merge and not the centering

🔍 This command has no effect on the *vertical* alignment

Dialog box launcher

The general format (text or number) dialog box (Alignment Tab)

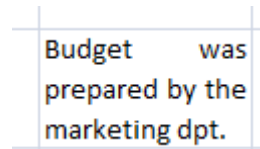
Quite a few additional options :



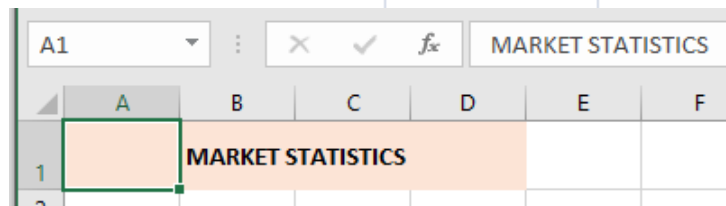
Fill Fills the cell with the given character
The character must be typed and validated first.



Justify Distributes the data between the left and right margin of the cell.



Center Across Selection



Type the data in the first cell, then select the cells on which centering is needed. The cells can then be selected individually.

The MERGE & CENTER button seems to generate the same result but not really because the cells are *merged + centered*

Why then choose this option ? Usually with the Print Titles option (see corresponding topic)

Distributed (Indent) Allows to indent *left* or *right* (set how many characters in the indent box on the right).

Shrink to fit

From :

To :

Adjusting is automatic according to the column width. Therefore make sure to allow a proper width or the characters will be reduced by far too much.

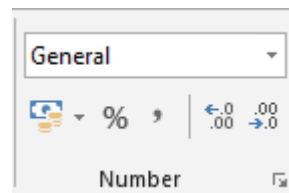
1.4 The preset formats

When you type numbers, Excel tries to automatically recognize them and will apply the corresponding Windows settings. If Excel does not succeed, then the entry is understood as text and left aligned. In this latter case, the "number" cannot be used in a formula.

If you need to apply a special format to numbers, you may either :

- ❶ Choose one of the preset formats
- ❷ Create a custom format (not explained here)

- Select the required cells.
- HOME Tab – NUMBER Group



The GENERAL drop-down list

A list of preset formats
Click to apply to the selection

The *Currency* and *Accounting* formats look similar but caution they are different :

Currency :

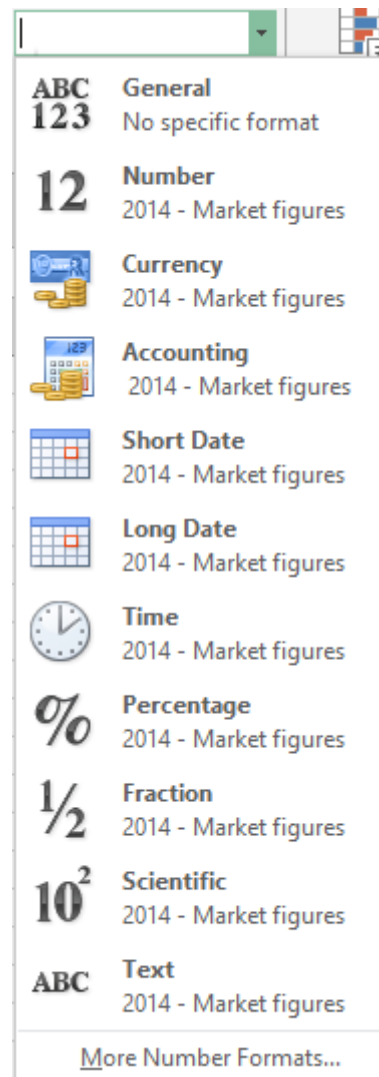
fr. 100.00
-fr. 1'000.00
fr. 0.00

Accounting :

fr. 100.00
fr. -1'000.00
fr. -

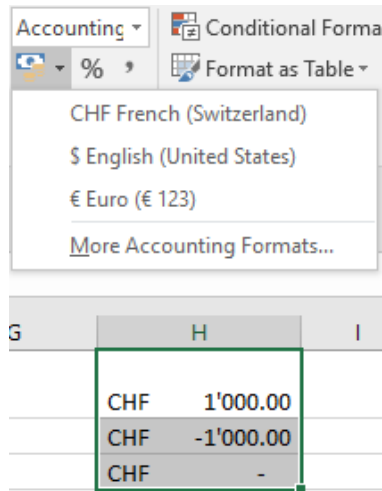
Text : to display a number as a label – left aligned

More Number Formats = dialog box for all number formats (explained at the end of this topic)



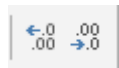
The other buttons

Accounting



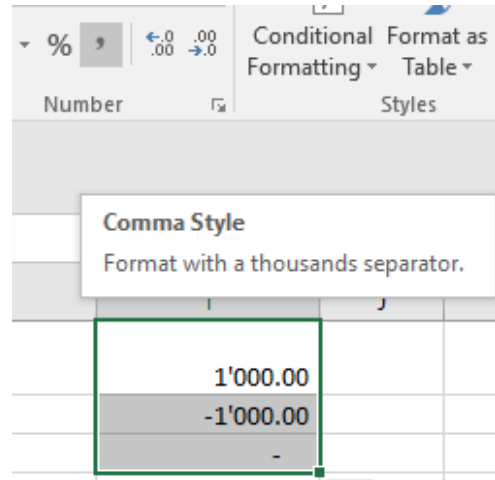
Characteristics of the accounting format : thousand separator, 2 decimals, a dash for a zero value, the currency symbol aligned left whatever the length of the number, one space indent at the right of the number.

More Accounting Formats: other currencies and number of decimals

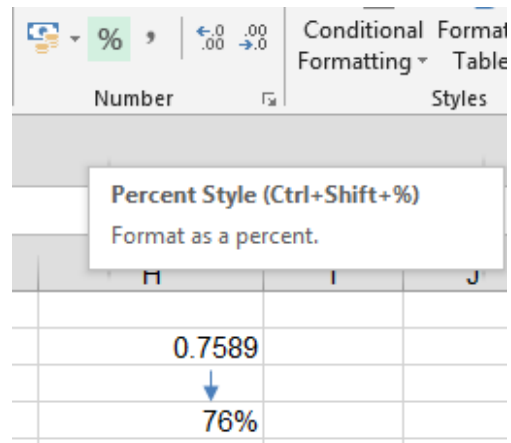


Whatever the format, the number of decimals is reduced or enlarged.

Comma Style



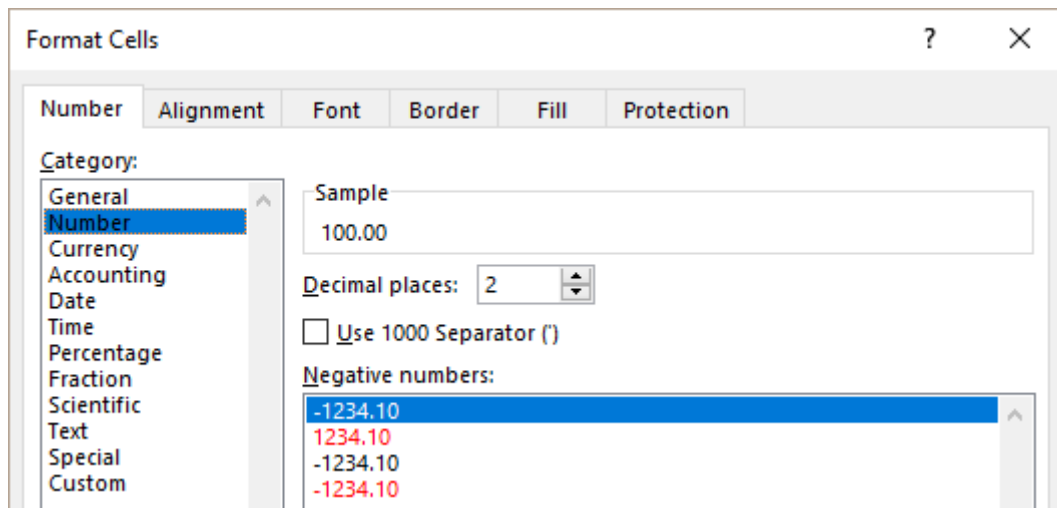
The currency symbol is removed but as the tooltip mentions, it is still an *accounting* format.



Caution : this format performs 3 operations:
- multiplication by 100
- add the % symbol
- rounds up/down to the unit

The dialog box launcher (at the right of the group)

It is the general format dialog box for texts and numbers. It gives access to preset formats but also to custom formats. Here below the dialog box :



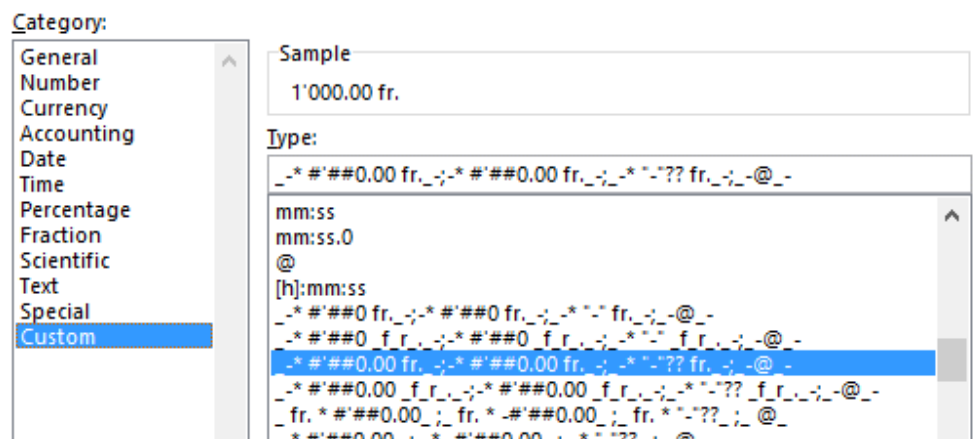
✎ For number formats, it is not possible to change the thousand separator. It comes from the language/country set in Windows.

Navigate in the categories. You will be asked to activate various options in order to "build" the required format. But sometimes additional settings will be automatically added (out of your own control). Example : the *accounting* format settings do not mention that the currency symbol will be left aligned, that an indent of one space will be added at the right of the number and that zero values will be replaced by a dash.

But really behind the formats that **we** build through turning on/off options, there are codes. To prove this and modify the format, you may :

- Make sure that the cell shows the format you wish to modify
- Choose the category CUSTOM

The *accounting* format :



The above codes will be explained in another training session.

Here after 2 very common codes :

0 et # : how should digits be managed. Difference with 2 custom formats

<i>you type</i>	<i>format 000,00</i>	<i>format ###,##</i>
123,45	123,45	123,45
36,87	036,87	36,87
56	056,00	56,

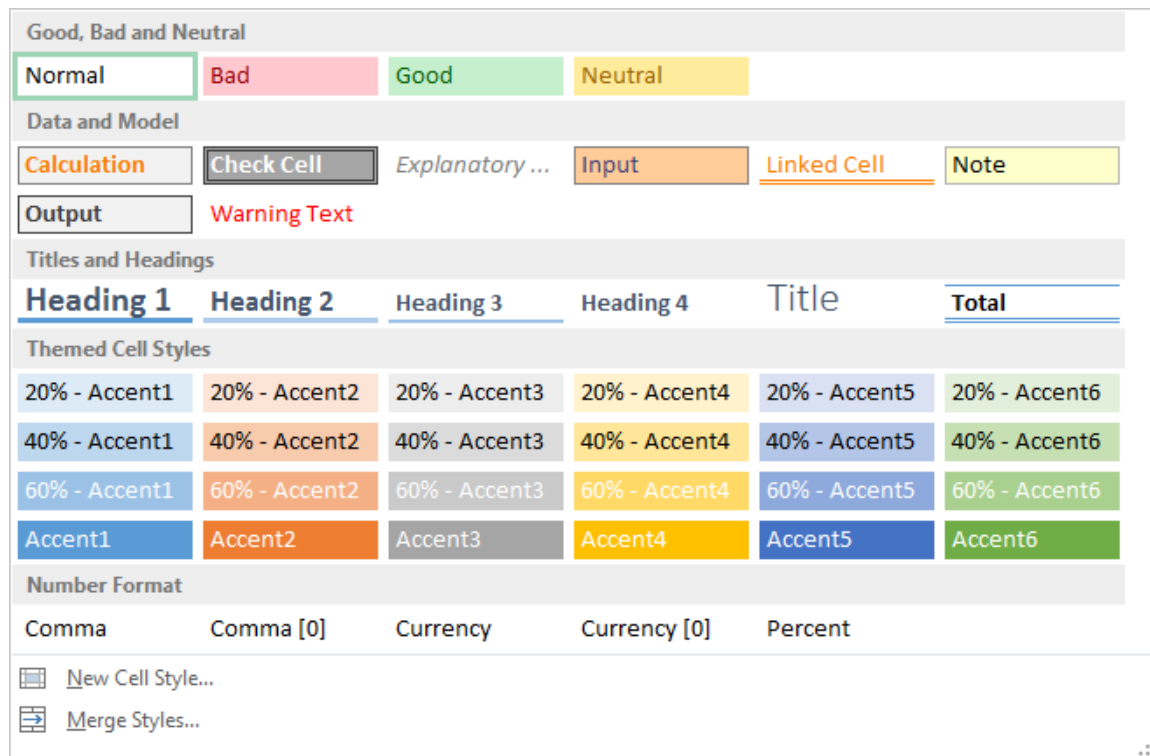
Codes for dates : (read dd.mm.yyyy)

jj.mm.aaaa	<i>meaning of the letters :</i>	Same rule for the month and year but "y"
jj.mm.aaaa	j	is automatically converted into "yy" as
jj.mmm.aa	jj	you obviously need a minimum of two
jj.mmm	jjj	positions to show a correct year number.
mmm.aa	jjjj	

1.5 Preset cell formats

Excel comes up with various cell formats, including attributes such as border, fill ... that you can apply through clicking

- HOME Tab – STYLES Group – CELL STYLES Option

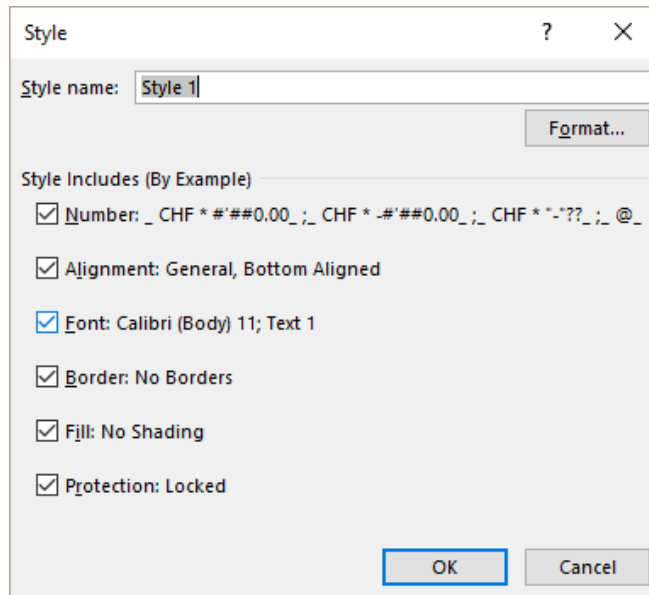


The formats of the *Good*, *Bad* and *Neutral* categories as well as *Data and Model* do not follow the current theme. But the formats of *Titles and Headings* do follow the current theme. The *NORMAL* style will let you reset the cell to a standard format (no bold, italic, fill, border etc ...). The number formats are preset "styles", similar to Word styles.

Manage : right click and a shortcut menu will let you *modify* the style or *delete* it. But you will not be able to *rename* it.

New Cell Style

...



Give a name to the style then click on the Format button and set the required attributes.

The new style will be displayed at the top of the gallery, in a category called *Custom*.

Merge Styles

...

To retrieve the styles from another workbook. This workbook must be open. All custom styles are imported in the active workbook.

2 Cut-copy-paste

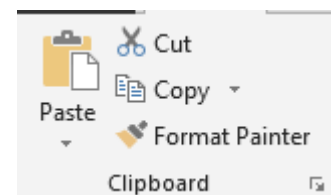
Reminder : what is the Clipboard ?

It is a temporary memory belonging to Windows. It is the tool used to move or copy any text, graphic, table etc....

Important points

- ◆ You need not *run* the Clipboard as it is automatically active when you run Windows.
- ◆ The Clipboard is reset (emptied) when you exit Windows
- ◆ Any new entry overwrites the previous one
- ◆ You can paste its contents as many times as you need.

All buttons related to the Clipboard are in the CLIPBOARD Group, on the HOME Tab.



2.1 Standard Cut-Copy-Paste

- Select the cells to cut or copy
- Click on the CUT or COPY button
or right click the select and same options
or CTRL + X / CTRL + C
- Activate the destination cell

- Click on the PASTE button
or right click it and same option
or CTRL + V




If the destination cell(s) contains data, it will be overwritten with no warning message.

2.2 Drag & Drop

CUT (MOVE)

- Select the text to cut.
- Click and drag the selection border (anywhere else than on the autofill handle)
- At required destination : release the mouse button – the cells are moved. If the destination cell(s) contains data, a warning message will be displayed : *do you want to replace the contents of the destination cells ?*

COPY

- Same as CUT but keep the **CTRL** key pressed.
If the destination cell(s) contains data, it will be overwritten with no warning message.
-  The drag & drop works only if the following option remains activated : FILE - OPTIONS – ADVANCED Category – EDITING OPTIONS Topic - ENABLE FILL HANDLE AND DRAG AND DROP Option.
-  Shortcut menu
Select the cells
Right click the selection border and drag
The shortcut menu offers to move or copy
No message
-  Move / Copy to another worksheet (inside the same workbook)
Move : ALT + drag the selection onto the required tab and then release onto destination cell.
Copy : CTRL + ALT + drag the selection ...

Standard paste : important comments

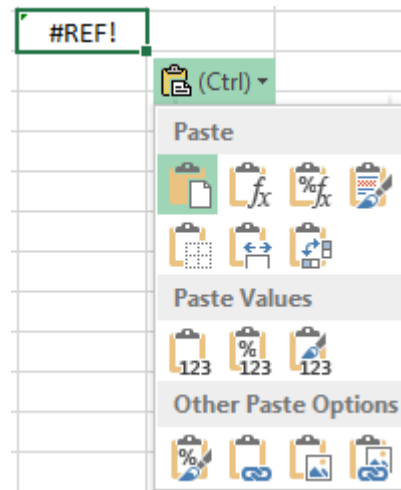
1. Unlike Word, practically no other commands are allowed between cutting/copying and pasting (except INSERT – SHEET for instance). If you perform any other operation, the Clipboard is emptied.
2. You can also paste data using ENTER key but caution this empties the Clipboard.
3. The contents can be pasted *n times* when you copy but not when you cut. Moreover, after cutting, the data remains in place (with a grey animated dotted line around it) until you paste it.
4. If you did not prepare enough empty rows to paste your data, you can paste and shift cells (inserting the required number of rows if necessary). Click with the mouse right button on the first cell "to push" and choose the option INSERT COPIED CELLS (*or easier : press the SHIFT key while dragging the range of cells*).

- The source range of cells displays a gray animated dotted line around it until the next operation (typing or any other command). If you find this annoying, simply press the ESC key.

2.3 Paste Options and Paste Special

After pasting the contents of the Clipboard, the *Paste Options* tag will be automatically displayed at the right of the pasted data :

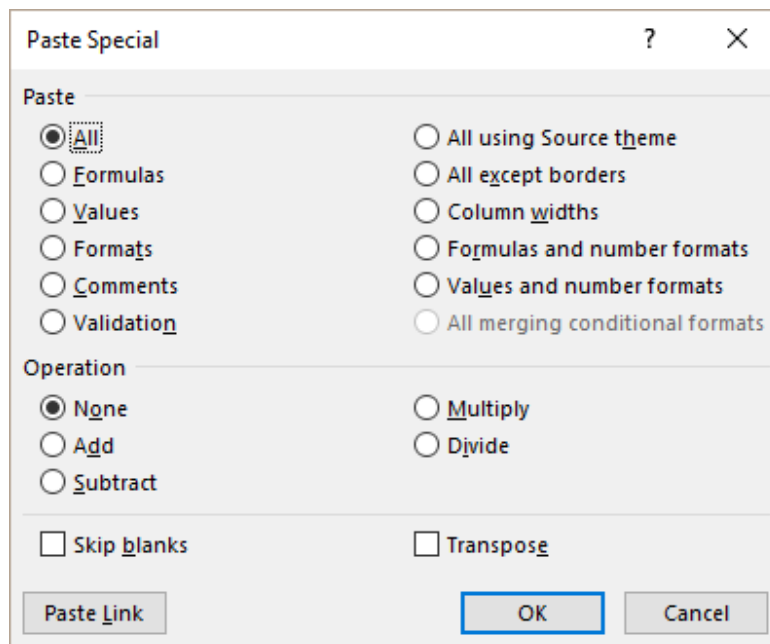
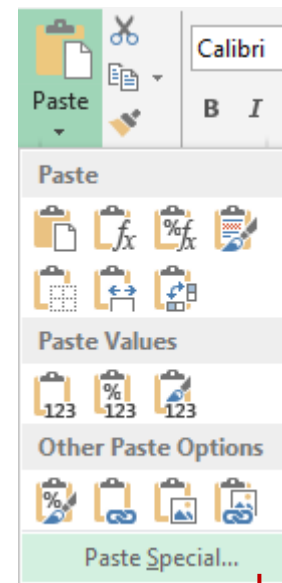
(the list of options can slightly vary according to the nature of the copied data – text or number or formula)



You may also use the options from the PASTE button :

- Click on the top section = PASTE or CTRL + V

Click on the lower section = the following drop-down list of options :



The options are clear enough but please note the following important comment :

Whatever the method, you will often be forced to use the paste special options more than once. The following two examples to illustrate this :

A total (therefore a formula) with formats and a special column width

- You copy-paste
Values and Source Formatting will omit the column width.
- *Keep Source Column Widths* cannot be added to the previous choice. It performs a new operation that will omit the values and source formatting.
- *Link Cells* will omit the format and the column width

Consequently you need to apply the main command, then display the PASTE SPECIAL dialog box and add what has been omitted.

Less common options (but interesting)

Adding an operation to the pasting (Operation)

You may copy a constant value, select a range of cells and paste the constant along with the operation *Multiply*. If two ranges of cells have the same size, you may paste the second range over the first one with any operation (add, multiply ...).

Transpose - example

	JAN	FEB
PROD. A		
PROD B		

 →

	PROD. A	PROD B
JAN		
FEB		

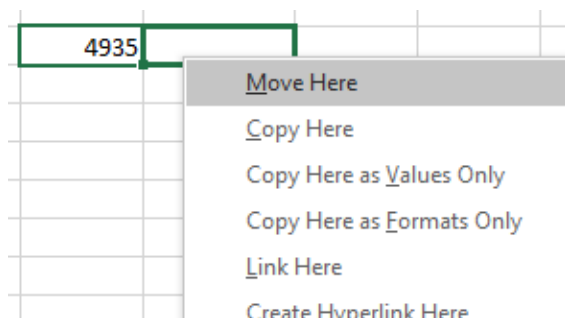
Formulas are not affected.

The Paste Link button

There will be a link between the client cells – the destination or *receiving* cells – and the source range of cells – the range *giving* the copied data. Any change done to the source cells and the client or destination cells will be instantly updated. *First copy the source data and paste choosing PASTE LINK. Then you can add the format, the column width ...*

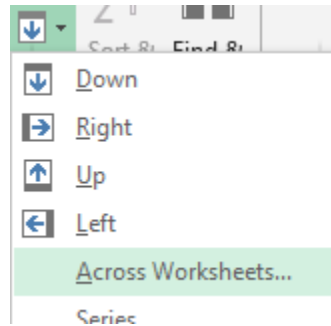
Some of the Paste Special options can be accessed by right clicking :

*Right click the border of the selected range of cells and drag it
The menu will display various options such as values, formats etc ...*

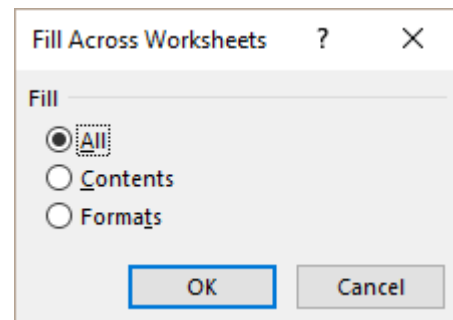


2.4 Recopying data across worksheets

- Select the worksheet containing the data to recopy and also the other destination worksheets.
- Select the range of cells to recopy



- You can choose what you need to fill



2.5 Moving / copying rows/columns with no overwriting

- Select the row(s) / column(s)
- Click the border of the selection and drag while pressing

The SHIFT key to move / CTRL + SHIFT keys to copy

- Release the mouse between two rows or columns

2.6 Copying a format using the FORMAT PAINTER

It can be any format (fill, color, border ... or date, number, fraction ...or a custom format.

- Select the cell(s) with the required source format

- Click on  Format Painter

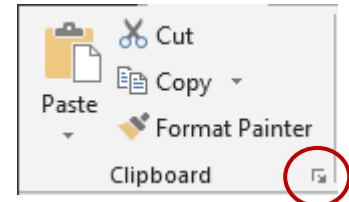
- Select the destination cell(s).

1. You can "paint" several times the same format if you double-click the button.
2. You can "paint" cells located in other sheets.
3. You can copy the formatting of a table. Select it and "paint" the destination cells.

2.7 The Office Clipboard

The OFFICE Clipboard is a very nice alternative to the usual Windows Clipboard. Instead of memorizing just one entry, this Clipboard can contain up to 24 entries maximum that you can paste whenever and wherever you need. *Caution : entries remain active provided you do not exit OFFICE.*

Click on the following dialog box launcher to display the Office Clipboard Pane

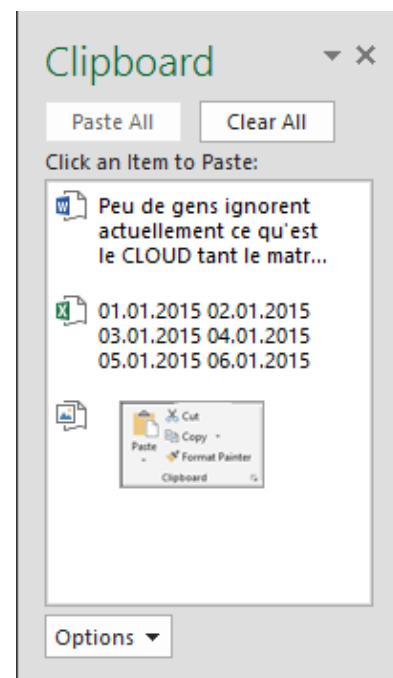


Provided the Office Clipboard is displayed, it is active.

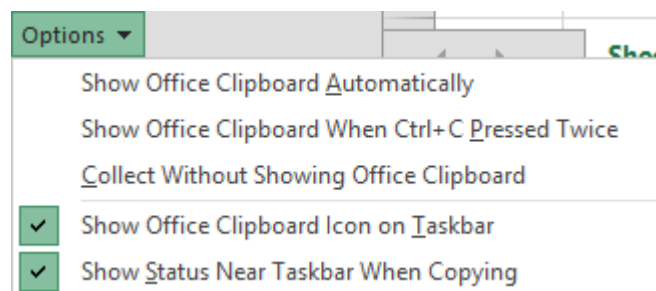
As you can notice from the screen capture, the memorized items can be collected (by CUT or COPY) in all OFFICE applications – *here they come from Excel and Word.*

Manage :

- | | |
|-------------------------------|---|
| To paste an entry | <i>Click on the element.</i> |
| To delete an entry | <i>Click on the little black triangle located at the right of the entry and choose the DELETE option.</i> |
| To paste or clear all entries | <i>Click on the corresponding buttons.</i> |



Some additional options are available through the OPTIONS button



(default activated options) :

Show Office Clipboard Automatically

When you cut or copy twice without pasting, the Task Pane showing the CLIPBOARD options is automatically displayed

Show Office Clipboard Automatically When CTRL + C Pressed Twice

To activate and display the Clipboard when you copy using keyboards shortcuts.

Collect Without Showing Office Clipboard

The entries are collected but the Office Clipboard is not activated and visible on the screen. In this case, it could therefore be a good idea to turn on the option SHOW OFFICE CLIPBOARD ICON ON TASKBAR

Show Office Clipboard Icon On Taskbar

An icon representing the Clipboard is displayed at the right end of the Task Bar. It indicates that the Office Clipboard is active. Double-click on it to view the Task Pane.

Show Status Near Taskbar When Copying

A ToolTip shows the number of entries you have just created through cutting or copying.

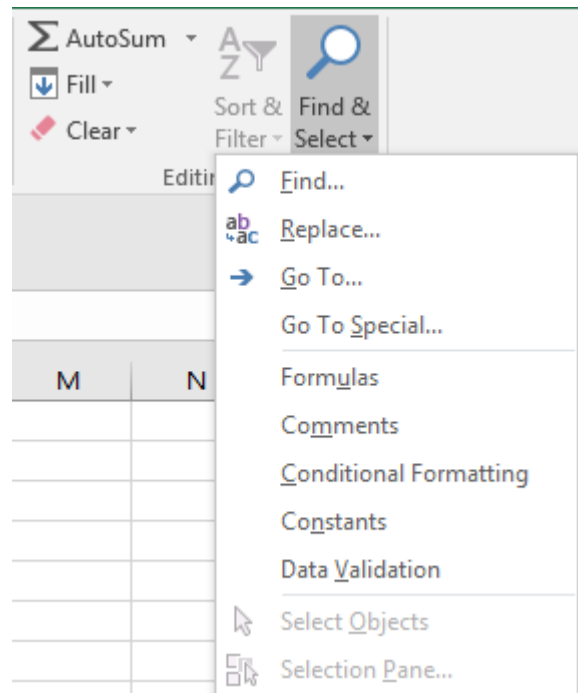
What happens when you get to 24 ?

Nothing. The oldest entry is removed and the new entry will bear the number 24.

When you don't activate the Office Clipboard, you use the traditional Windows Clipboard. As soon as you activate the Office Clipboard, it will show the Windows Clipboard contents as its first entry.

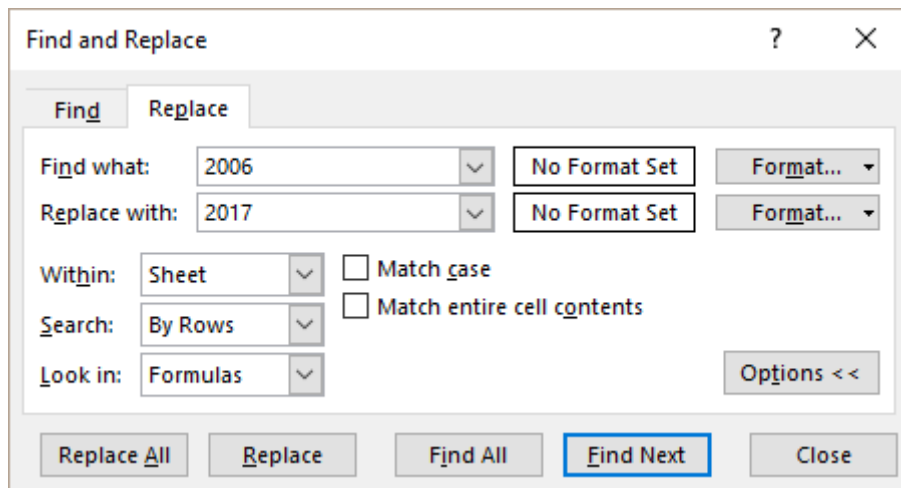
3 Find & Replace

Here after the corresponding group, on the HOME Tab :



The find and replace options are as usual : you can *replace a text with another one*. But it is interesting to note that you can find/replace *formats*.

- Option FIND or REPLACE
- Click on the OPTIONS button that will add the FORMAT buttons

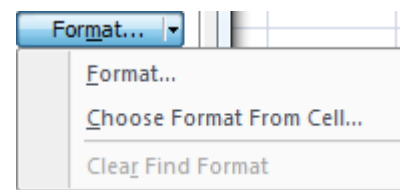


Interesting :

FORMAT button

Choose Format From Cell :

You can click directly onto a given cell on the current worksheet.



Every time you click on the FIND NEXT button, the next matching cell is highlighted. If you click on the FIND ALL button, a pane will be displayed at the bottom of the dialog box listing all matching cells.

Book	Sheet	Name	Cell	Value	Formula
Book1	Sheet1		\$G\$9	02.01.2006	
Book1	Sheet1		\$G\$10	03.01.2006	
Book1	Sheet1		\$G\$11	04.01.2006	

22 cell(s) found

Running the same search after the find & replace dialog box has been closed :


SHIFT + F4 (correspond to FIND NEXT)

FORMULAS

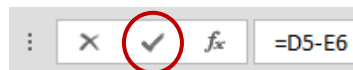
A formula is series of references linked with mathematical operators. It always starts with the "=" sign. The formula can be viewed in the formula bar. You build the formula from the result cell. When you validate, the formula is calculated and the cell shows the result. The cells the formula refers to are called "precedents" and in case of modification, the update is automatic.

1 Building a formula


- Activate the result cell
- Type =
- Collect the references (constant values or cell addresses) and the operators (+ * / etc ...)

 *No need to type manually the cell address* You can click on the reference needed or select the cell using the arrows.

- Validate the formula by clicking on :



Or ENTER

 *Never click anywhere to end a formula. You will modify the last collected reference.*

2 Modifying the formula

Activate the cell containing the formula and edit it (double-click, F2, click in the formula bar etc..). The linked references are shown with a colored border and an auto fill handle. Click and drag the border to change a reference or use the auto fill address to include additional references.

3 Operators priority

: space ; - % ^ * / + - & = < > <= >=

Example where these priorities are important and can change the result : $F5 + (B3 * B4)$ is not identical to $(F5 + B3) * B4$.

4 Recopying the formula

Select the cell containing the formula
Use the autofill handle to recopy over the required number of cells

Tip for a column recopy : double-click on the autofill handle and the formula will be copied until the next empty cell on the left or right

5 Zero values

FILE - OPTIONS – ADVANCED Category – DISPLAY OPTIONS FOR THIS WORKSHEET
Topic – SHOW A ZERO IN CELLS THAT HAVE ZERO VALUE Option.
(affects only **this** worksheet)

6 Showing formulas instead of results

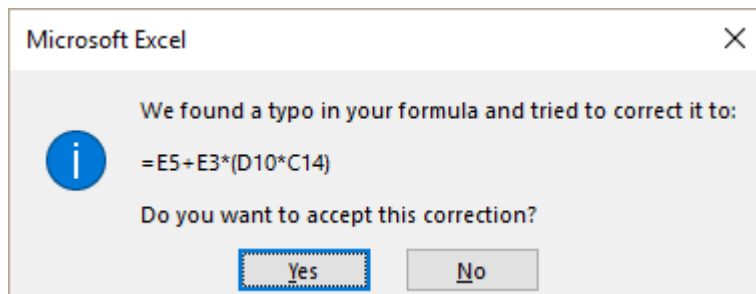
FILE - OPTIONS – ADVANCED Category – DISPLAY OPTIONS FOR THIS WORKSHEET
Topic – SHOW FORMULAS IN CELLS INSTEAD OF THEIR CALCULATED RESULTS
Option.

7 Changing one or a range of formulas to their values

Select the range of cells and copy to the Clipboard
The destination cell(s) can be the same or others
Paste but *values only* (with or without the source format)

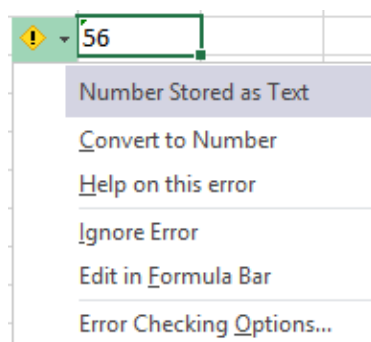
8 Automatic correction

Errors are sometimes detected by Excel. Either the program automatically suggests a correction or simply warns you that there is a problem : (here below a missing parenthesis)



9 Error checking

Excel automatically checks your formulas or functions. Here below an example :




A classical error : data has been exported from a database into an Excel worksheet. For some unknown reason, numbers have not been understood correctly.

Excel has a list of errors to check : FILE - OPTIONS – FORMULAS Category (or option *ERROR CHECKING OPTIONS* in the previous drop-down list) :

Error Checking

Enable background error checking

Indicate errors using this color:  Reset Ignored Errors

Error checking rules

- Cells containing formulas that result in an error ⓘ
- Inconsistent calculated column formula in tables ⓘ
- Cells containing years represented as 2 digits ⓘ
- Numbers formatted as text or preceded by an apostrophe ⓘ
- Formulas inconsistent with other formulas in the region ⓘ
- Formulas which omit cells in a region ⓘ
- Unlocked cells containing formulas ⓘ
- Formulas referring to empty cells ⓘ
- Data entered in a table is invalid ⓘ

This option generates an error if a date happens to be contiguous to a range of cells used for a SUM function. Although the SUM function automatically omits the date cell when you build it. *Advice* : turn off

10 Examples of formulas

4	VAT (TVA)		8.0%			
5						
6	Price/unit	Quantity	Basic Price (No tax)	VAT (TVA)	Total Price (with all taxes)	
7	150	5	750	60	810	
8						
9			=A7*B7	=C7*B4	=D7+C7	
10						

2		Purchase price	Retail price	Profit / unit	Qty	Profit
3	Pin's	5.00	10.00	5.00	2'564.00	12'820.00
4	Lighters	10.00	20.00	10.00	345.00	3'450.00
5	Keyrings	12.50	24.80	12.30	679.00	8'351.70
6	Pens	4.65	8.50	3.85	6'574.00	25'309.90
7	Medals	30.00	57.00	27.00	390.00	10'530.00
8	Cups	42.75	75.60	32.85	125.00	4'106.25
9	Total					64'567.85
10						
11				=C3-B3		=E3*D3
12						

	AB	C	D	E	F	G
2	INVOICE					
4						
5						
6		Qty	Description	Price / unit	TOTAL	
7		2	Multimedia HP workstations	1990.00	3980.00	=E7*C7
8		2	Flat SONY screens	499.00	998.00	
9		2	HP Printers	599.00	1198.00	
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24			Subtotal		6176.00	=SUM(F7:F23)
25			Transport		100.00	
26			8.00%		502.08	=(F24+F25)*E26
27			Total	SFr.	6'778.08	=SUM(F24:F26)
28						
29						
30			Total in euros	€	5'601.72	=F27/F31
31			rate		1.21	

- * **Important note** : when you start using Excel and create your first calculations, you will certainly use the SUM button Σ a lot. Relevant comment : this button is a shortcut to create a SUM function. Don't get into the habit of systematically clicking this button every time you start a calculation ! It is only dedicated to SUMS....

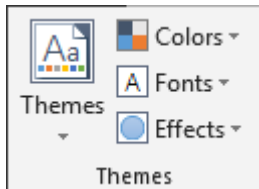
**PAGE SETUP AND PRINTOUT OF A
STANDARD TABLE**

1 Global setup

Display the PAGE LAYOUT Tab

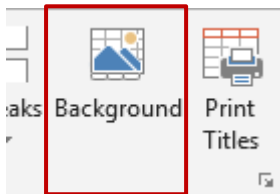
1.1 General viewing options : themes, background, gridlines, headings

Some have been explained in the chapter about viewing options.



To apply a theme to the current workbook (and not only to the current worksheet)

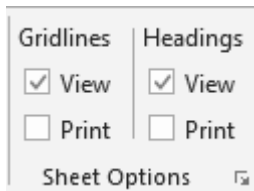
You have the feeling that your workbook is not affected by the concept of themes because there are not special item such as a chart, a SmartArt ... But please note that font colors are also related to themes. If you have selected a font color from *theme colors* then changing the theme will affect the colors.



Choose which picture file will be used as background **for the active worksheet** (the picture is duplicated and tiled to fill the whole worksheet)

Caution : background has to do with viewing and not with printing.

Remove : the button changes to DELETE BACKGROUND. Click.

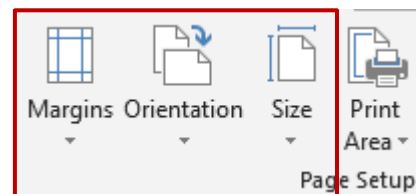


Gridlines = choose whether to view or print

Headings : caution, this means « heads of rows and columns ».

1.2 Margins, orientation and size

The first three button of the PAGE LAYOUT group

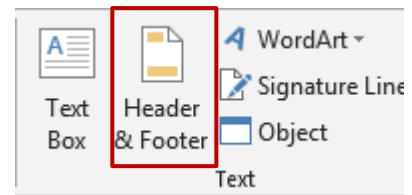


Click on the required button to display the corresponding gallery.

At the bottom of the MARGINS and SIZE gallery, an option to run the PAGE LAYOUT dialog box (but you can also use the group dialog box launcher) *(the dialog box is explained later on)*

1.3 Preparing a header or a footer

- INSERT Tab – TEXT Group



- The PAGE LAYOUT view mode is automatically displayed, where header and footer are directly accessible :

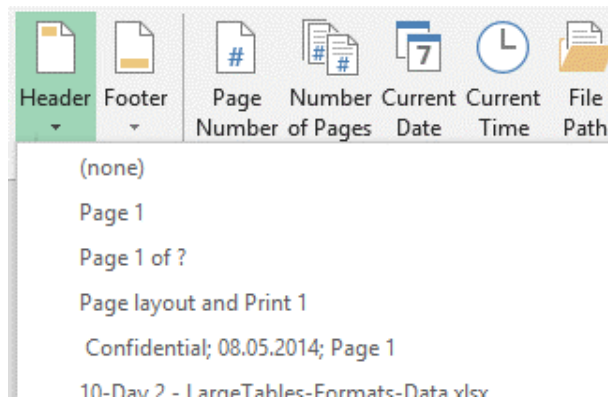
RESULTS			
Expenses		16'676.90	Gross turnover 48'989.25
Rent	4'929.10		
General expenses	596.80		
Private tel	555.10		
Professional Mobile	747.25		
Internet	158.05		
Car	1'052.70		
Office	2'247.90		
Depreciation	3'590.00		
Restaurants ...	2'800.00		
Net turnover		32'312.35	
		48'989.25	48'989.25

PAGE LAYOUT and NORMAL : *the two buttons are in the VIEW Tab.*

You can click into a cell to type data as this mode is not a Print Preview.

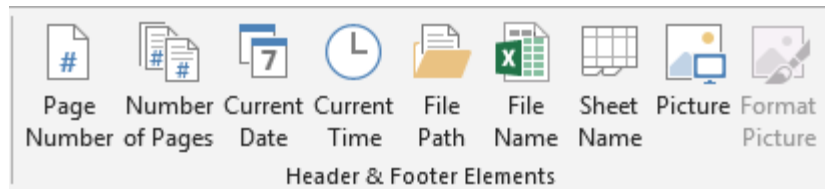
You can type text into each section of the header/footer or insert preset codes such as the date, time, page number etc ... (HEADER & FOOTER TOOLS – DESIGN Tab) :

HEADER & FOOTER Group



One content will be automatically inserted in the center section

HEADER & FOOTER ELEMENTS Group



Each button generates a code such as the following (for *Page Number* and *Number of Pages*) :

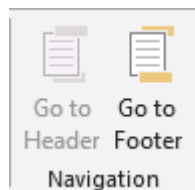
&[Page] / &[Pages]

As soon as you click outside the section, the codes are replaced with their real result :

1 / 2

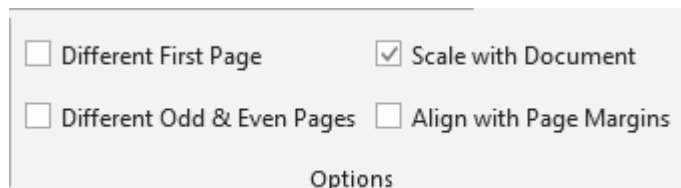
- ⚠ Caution with the PICTURE button. The picture is inserted whatever its size. If too large or too small, click on the *Format Picture* button and change its size. If you do not modify the size, the picture will overlap onto the worksheet, a little bit like a Word watermark.
- ✍ If the text includes the & sign, you need to type it twice.
For example : Smith && Sons

NAVIGATION Group



Alternative to scrolling down/up

OPTIONS Group



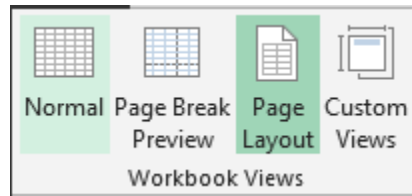
The DIFFERENT FIRST PAGE, DIFFERENT ODD & EVEN PAGES commands have the same effect as in Word.

SCALE WITH DOCUMENT : this option affect large tables that have to be reduced or adjusted so that they can fit on the printed paper. Not explained in this training session.

ALIGN WITH PAGE MARGINS : the width of the header/footer is set by default and does not change even if you change the margins. Unless you turn this option on.

1.4 Revert to « NORMAL »

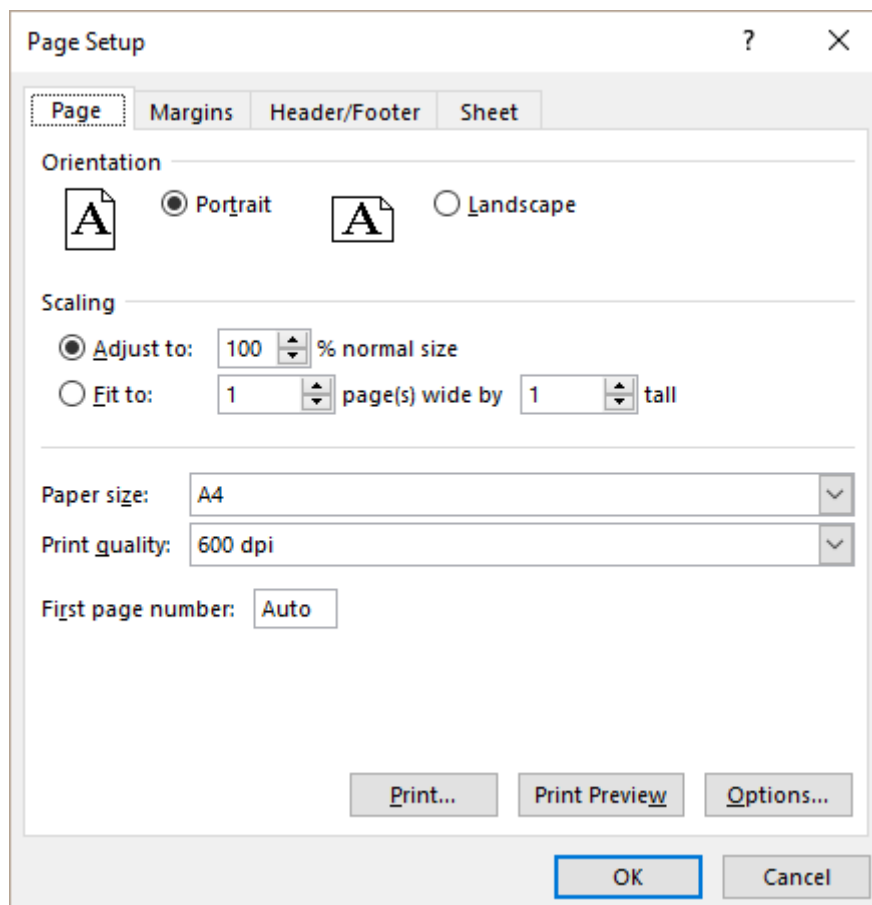
- VIEW Tab – WORKBOOK VIEWS Group



1.5 The PAGE LAYOUT dialog box

The PAGE LAYOUT Tab offers multiple access to this dialog box : the *Custom Margins* at the bottom of the margins gallery, *dialog box launcher* at the bottom right of the PAGE LAYOUT, SCALE TO FIT ... groups.

This dialog box provides the same options as explained before (such as *margins, orientation, size, header and footer (presentation slightly different)* but also some additional options. Example : *vertical and horizontal centering on the MARGINS Tab*). But most of these additional options are related to printing large tables (fit, page order, print titles ..) but this is not explained in this documentation.



2 Print and print preview

Office combines print and print preview (it looks a bit like Acrobat)

- FILE – PRINT

Print

Copies: 1

Print

Printer

HPF743F1 (HP Officejet Pro...)
Ready

Printer Properties

Settings

Print Active Sheets
Only print the active sheets

Pages: 1,2,3 to 1,2,3

Print One Sided
Only print on one side of th...

Collated
1,2,3 1,2,3 1,2,3

Landscape Orientation

A4
21 cm x 29.7 cm

Custom Margins

No Scaling
Print sheets at their actual size

Page Setup

Page layout and Print 1

RESULTS		
Expense	Amount	Balance
Rent	4929.10	4929.10
General expenses	266.80	5195.90
Phone	222.10	5418.00
Professional fee	1717.22	7135.22
Insurance	126.22	7261.44
Car	1022.70	8284.14
Office	2247.80	10531.94
Depreciation	2280.00	12811.94
Reservatio...	2800.00	15611.94
Netturnover	22210.25	38222.19
	4900.25	43122.44

1 of 1

PRINT Button

Send the file to the printer and choose the number of copies
Printer Properties : according to the type of printer : color ?
recto-verso ?

Printer and Settings

Choose the printer and set setting such as which pages to print, orientation, paper size etc ...

PAGE SETUP Option

The PAGE SETUP dialog box is run (briefly explained in a previous topic)



ZOOM

Zoom in / out



SHOW MARGINS

The sheet displays dotted lines corresponding to margins and columns (you can drag them) :

① Header

② Top margin

③ Column (the symbol will be displayed only if the column has at least one cell filled)

Office Doc	
Chiffres d'affaires de SOS Compt	
Entrées	

Esc or click another tab

Revert to the active workbook

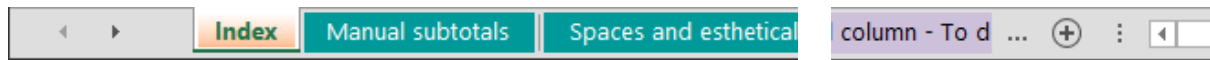
MANAGING THE SHEETS

-

MANAGING THE FILES

1 The concept of a worksheet

- The number of *sheets* per new workbook can be set by the user
By default : 3. To modify : FILE - OPTIONS – POPULAR Category – WHEN CREATING NEW WORKBOOKS Topic – INCLUDE THIS MANY SHEETS Option (by default 3 and maximum 255)
- Each sheet can be renamed, moved, copied ...
- Each sheet can contain data, charts ...



Scrolling the tabs

From left to right

First sheet
Previous sheet
Next sheet
Last sheet

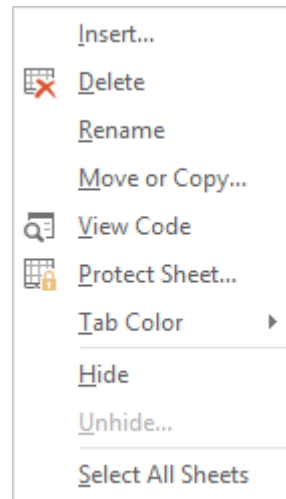
Right click :

List of the workbook sheets



Tab

Right click a tab



2 Selecting sheets

One sheet	Click on its tab.
Several non contiguous sheets	Click on the first one, then CTRL + click on all other required sheets.
A group of contiguous sheets	Select the first one, then SHIFT + click on the last one.
Remove the selection of a sheet in a group	CTRL + click on its tab.
Select all sheets	Shortcut menu and option <i>SELECT ALL SHEETS</i> .
Remove the selection for all sheets	Shortcut menu and option <i>UNGROUP SHEETS</i> .

3 Managing sheets

Insert / Delete HOME Tab – CELLS Group – INSERT / DELETE Buttons – INSERT SHEET / DELETE SHEET Option (Or SHIFT + F11)

To insert a sheet at the end of the workbook

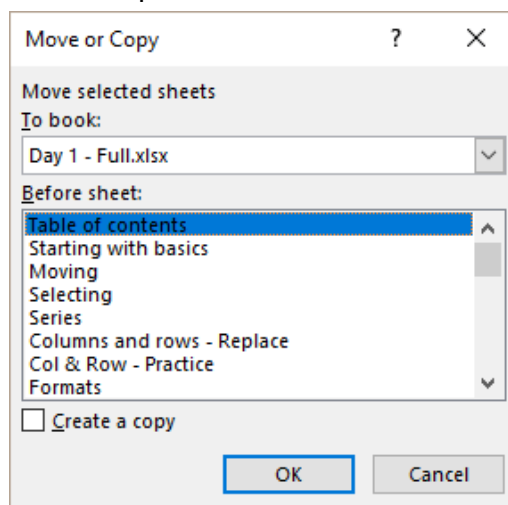
Click on :



Rename HOME Tab – CELLS Group – FORMAT Button – RENAME SHEET Option
Or double-click on the sheet tab and type the new name

Spaces, dashes are accepted. The name can have more than 8 letters (maximum 31 letters). Forbidden characters : / * : ?

Move / Copy HOME Tab – CELLS Group – FORMAT Button – MOVE OR COPY SHEET Option ...



To book

Current workbook
Another open workbook
New workbook

Before sheet

Destination position of the sheet to move or copy

Create a copy

Do not forget to activate the box or it will be moved ...

Or with the mouse :

Move :

Click and drag the sheet to the required position

Copy : CTRL + click and drag to the required position

Assign a color to the sheet tab HOME Tab – CELLS Group – FORMAT Button – TAB COLOR Option – Choose the color from the tear-off.

 When the tab is active, only a line of the color will be displayed below the sheet name.

Hide & Unhide HOME Tab – CELLS Group – FORMAT Button – Hide & Unhide Option. Mainly used by developers.

Navigation – using the keyboard Very, very handy : CTRL + PageUp to navigate on the right and CTRL + PageDown to navigate on the left

 Most above commands can also be accessed by right clicking the sheet tab. To mention : the *INSERT* command will display a dialog box. Choose *WORKSHEET* on the *GENERAL* Tab.

4 Saving : the new file format

Office 2007 (and consequently Office 2010 and 2013) has introduced a fully restructured new file format. This format is based on XML (Extensible Markup Language)

On one side the new format helps to improve the security, reduce the size, get the most out of new features specific to 2007 ... but on the other side previous versions can only open 2007 files under specific conditions. This topic goes into details.

4.1 Benefits of the new format

1. **New features specific to Office 2007-2010-2013**

For instance : SmartArt, equations, themes and content controls

2. **Files are more compact.** They are automatically compressed and can be up to 75 percent smaller in some cases. (zip type compression). When the file is opened, it is automatically unzipped and when you close it automatically zipped again.

3. **Improved damaged file recovery.** Files are structures in a modular fashion that keeps different data components in the file separate from each other. This allows files to be opened even if a component within the file (for example, a chart or table) is damaged or corrupted.

4. **Better privacy and more control over personal information.** Personally identifiable information and business-sensitive information, such as author names, comments, traced changes, and file paths can be easily identified and removed by using the Document Inspector.

5. **Easier detection of document that contain macros.** Macros and other scripts are saved separately from the text and the file extension indicates whether the file you are about to work on contains macros or not (see table below) :

Word – file extension	Usage
.docx	Standard Word document with no macro
.dotx	Word template with no macro
.docm	Word document that contains macros
.dotm	Word template that contains macros

Excel - file extension	Usage
.xlsx	Standard Excel workbook with no macro
.xltx	Excel template with no macro
.xlsm	Excel workbook that contains macros
.xltm	Excel template that contains macros

PowerPoint - file extension	Usage
.pptx	Standard PowerPoint presentation with no macro
.potx	PowerPoint template with no macro
.ppsx	Slideshow with no macro
.sldx	Slide with no macro (only with SharePoint)
.pptm	PowerPoint presentation with macros
.potm	PowerPoint template with macros
.ppsm	Slideshow with macros
.sldm	Slide with macros (only with SharePoint)

Other	Usage
.thmx	Office theme

4.2 Compatibility with 2007 – 2010

100%

4.3 2013 opens a 2003 workbook

4.3.1 Compatibility mode

Now that the 2003 format is an “old” one, things are getting sometimes a bit complicated. Normally, the file is opened in a special mode, the *Compatibility Mode*

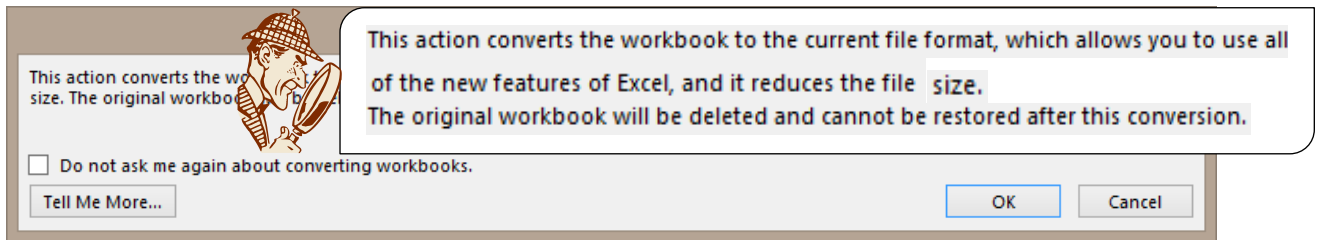


2003-XL-1.xls [Compatibility Mode] - Excel

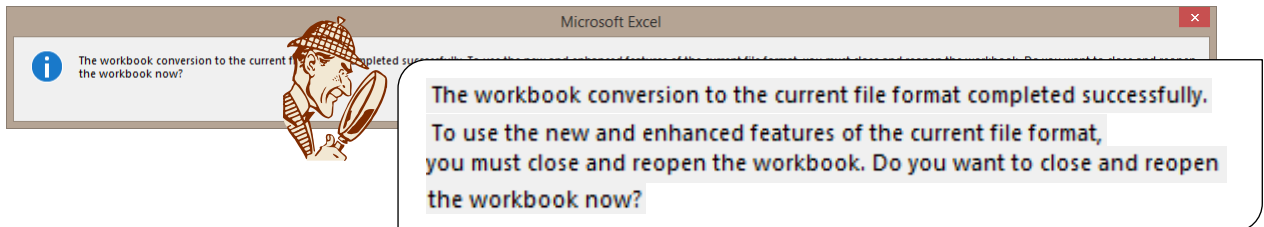
Sometimes Excel opens the file in a sort of 2010 version, also in Compatibility Mode. In this latter case, Excel might tell you that the file had to be *repaired*, that VBA projects could not be retrieved and so on. Generally, you will be able to work the file normally but the new functionalities will not be available (no suggestions tag when you select, no new diagrams etc ...). And some people on Internet complain that on some occasions they could not even open these old files.

4.3.2 Open then convert

- FILE - INFO – CONVERT
- A message will warn you about this action and its implications :



Caution : read well ... The source can no longer be restored to its original extension

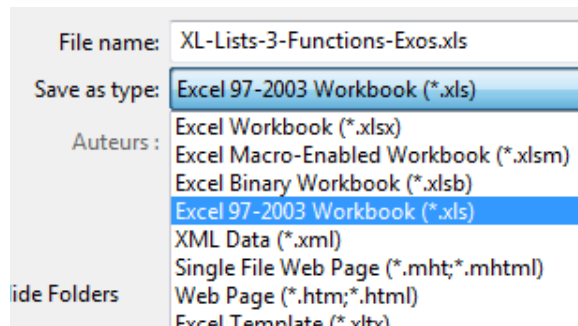


Caution : NO means that the file will not be re-opened and not that the conversion can be undone.

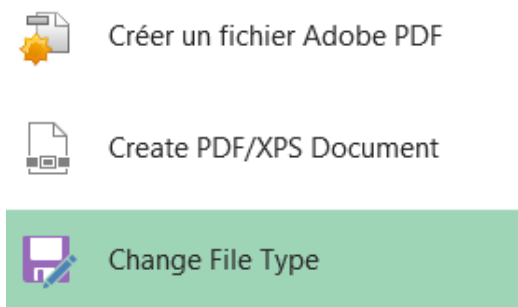
4.4 Backsaving to 2003

- ❶ **An « old » file** : if not converted, 2016 automatically saves using the source format.
- ❷ **A 2016 file** : you can choose to save a copy of the file in the previous format

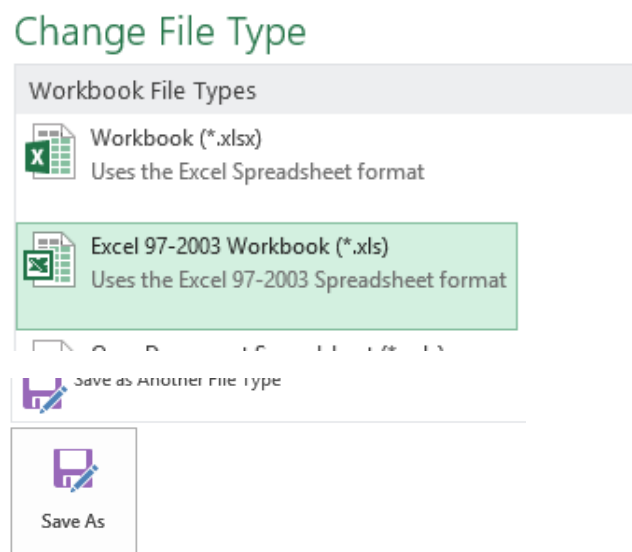
FILE – SAVE AS



Or FILE – EXPORT



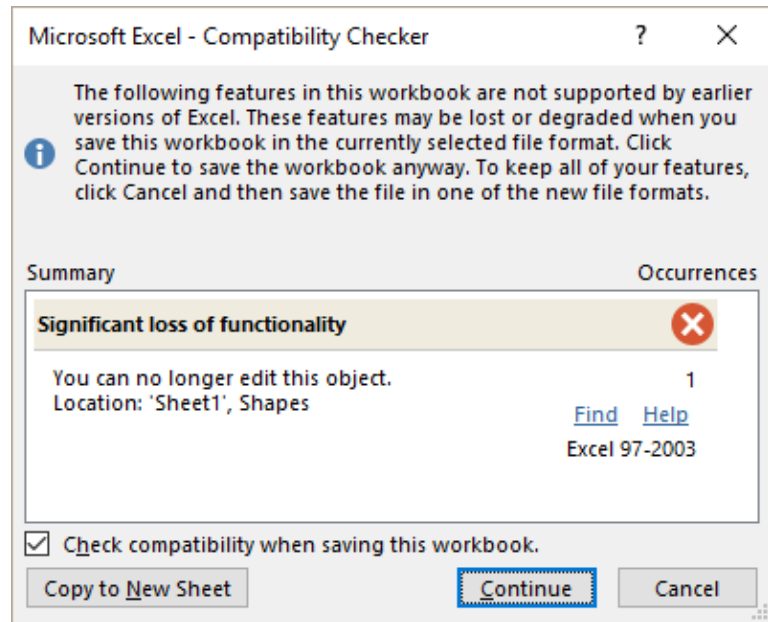
The following button at the bottom of the list :



If you have used functionalities specific to 2013, what will happen ?

You will be automatically warned :

Copy to New Sheet = a sheet name COMPATIBILITY REPORT is created in the workbook that lists the contents of this dialog box (handy to print).



The items not supported in earlier versions can be displayed / printed but not *modified*. And once re-opened in Office 2016 with a conversion, this will not change (one exception : equations in Word and SmartArt).

4.5 Can 2003 open a 2016 file ?

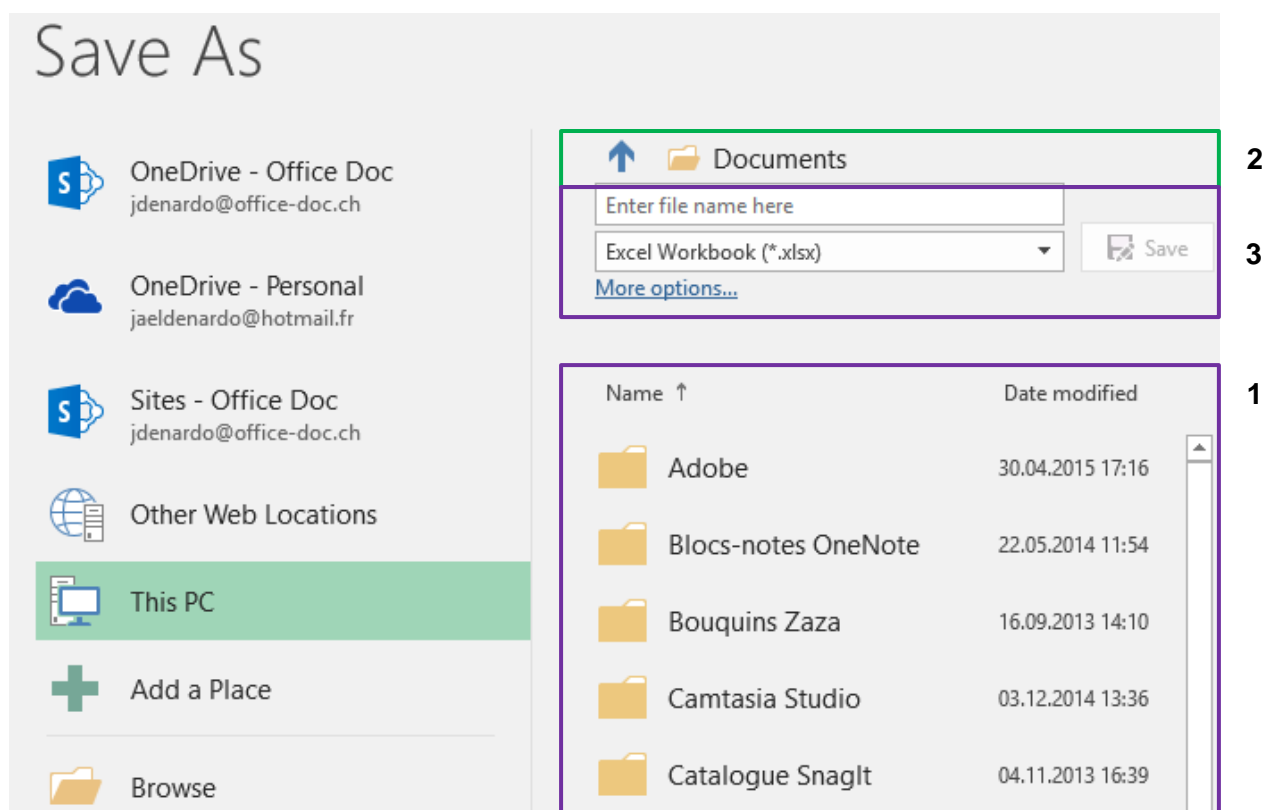
Microsoft informed in 2014 that 2003 would no longer be supported. It is possible to open a 2016 file in a previous version but it is necessary to install the MICROSOFT COMPATIBILITY PACK OFFICE (can be downloaded from the Internet).

5 Saving the workbook

5.1 Saving for the first time (or assigning a new name)

- FILE - SAVE AS

5.1.1 Destination possibilities



OneDrive (old SkyDrive)

Direct access to the Cloud

OneDrive is accessible provided you have created a Microsoft account. In the above screen capture, I have a private account (through Hotmail.fr) and a professional one (through office-doc.ch). If you do not have such an account, the option will still be displayed but will prompt you to subscribe one.

And if OneDrive does not appear at all, this means your company has decided not to authorize it.

Other Web Locations

Web sites for which you have access rights

This PC

Your various local or network drives

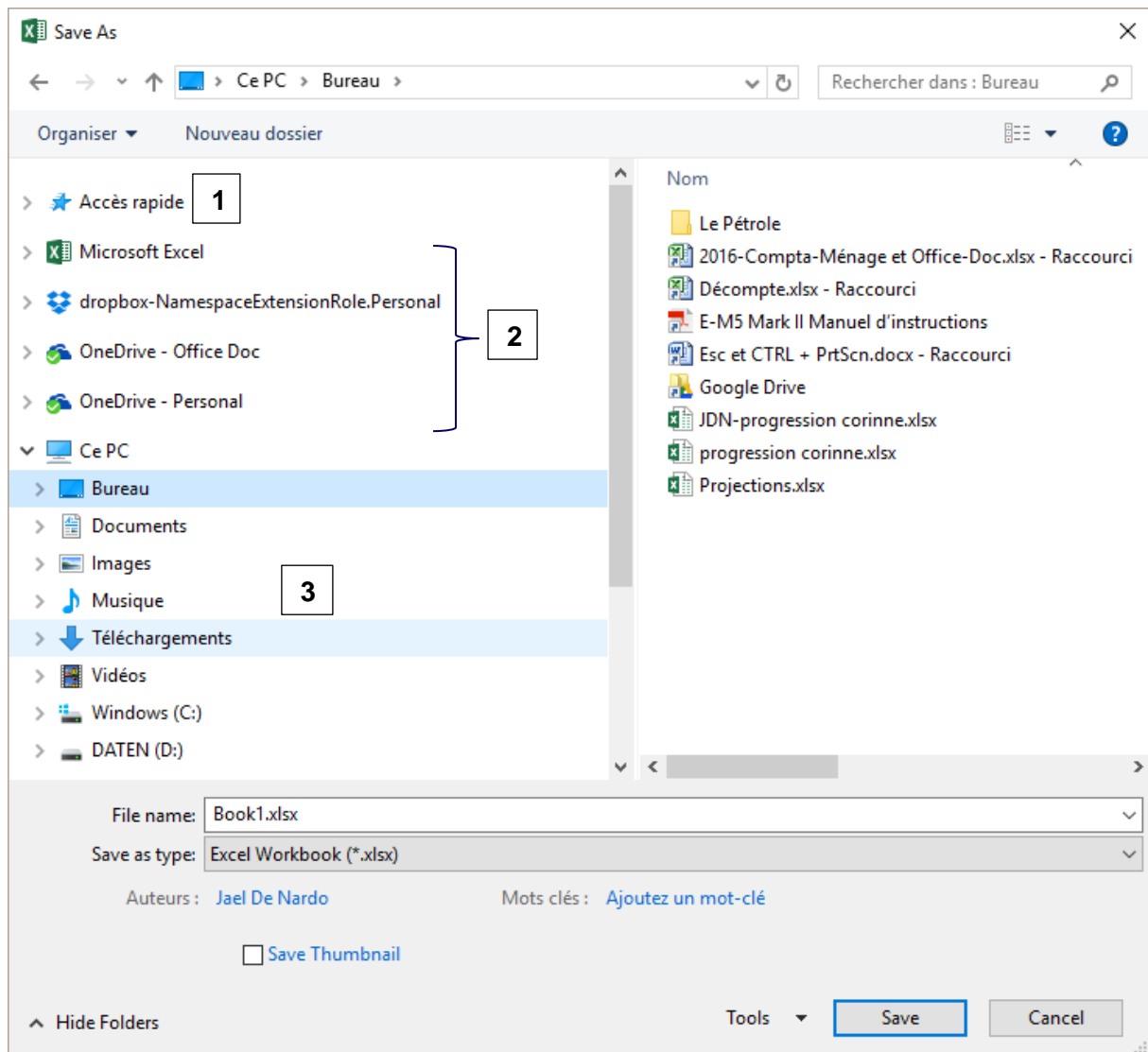
Add a Place

Add what Microsoft calls a « service », such as SharePoint or OneDrive

Selecting the destination folder – navigation

- 1 Simple click to open the folder
- 2 Blue arrow to display parent folders
Simple click on the displayed folder to open the SAVE AS box
- 3 Name and type of file. If you click directly on the SAVE button, no SAVE AS box

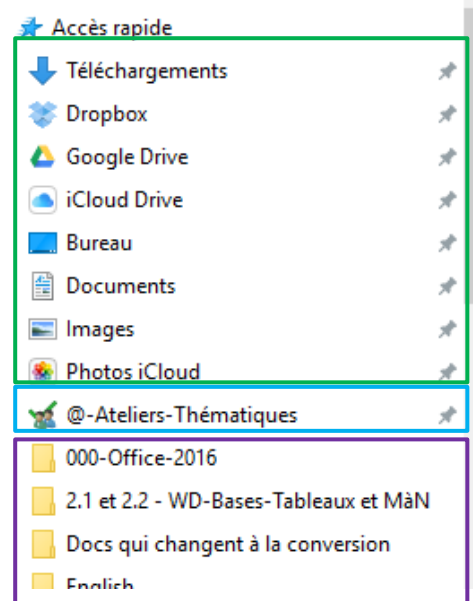
5.1.2 The SAVE AS dialog box (Windows 10)



1. Quick Access / Accès rapide

Includes three types of files

- **Green** : some Microsoft preset folders. They are *pinned*
- **Blue** : you can add any one of your folders. . *Add a personal folder* : display the folder in the Explorer section and drag it into the quick access section. It will be automatically pinned. *Remove it later* : right click and UNPIN ...
- **Violet** : recent folders. *Remove* : right click and DELETE ...




2. CLOUD access

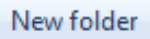
Note : this cloud tree of folders can also be accessed through the Windows Explorer
You can simply drag one of your local files into one of the OneDrive folders.

3. Computer

Your tree, showing the usual drives and folders.

-  The *Save Thumbnail* check box does not limit its effects to THIS document and it is an important setting : when you create a new document from an existing one, the box will display a preview of the document content.

Default folder Usually DOCUMENTS (or its equivalent folder in case of a network), created when you install Windows and default folder for all OFFICE programs. This can be modified through FILE - OPTIONS – SAVE Category – SAVE DOCUMENTS Topic - DEFAULT FILE LOCATION Option.

Create a new folder Click on 

File name Excel automatically suggests *Book1, 2, 3 ...*, simply type the required name and it will be overwritten. Give a name of maximum 255 characters (you are allowed to use a space, a point) The use of capital letters is only an "esthetical" choice as Windows ignores the case of letters.

Some characters cannot be used : / \ : * ? " < >
(The full path is part of the 255 characters).

Save as type Usually you do not bother about the extension as it is automatically added. You may just check that the appropriate extension (*.xlsx) has been set by default. If you require choosing another type (a template for instance), choose from the drop-down list

5.2 Updating an already saved workbook


- FILE – SAVE

Or this button on the Quick Access Toolbar



And if this was an error and the document has not yet been named, Excel will automatically display the SAVE AS dialog box

6 Closing the workbook

- Click on the top closing button
-  **Caution** : clicking the top closing button corresponds to CLOSING THE ACTIVE WORKBOOK and not to exiting Excel (unless there is only one workbook open)



or FILE - CLOSE

7 The workbook properties

It is the lower section of the saving dialog box when you save a workbook

Authors: [Apollon](#) Tags: [Add a tag](#) Title: [Add a title](#)

Any information displayed in blue characters can be modified.

If you wish to check the file properties from the inside of the workbook :

- FILE - INFO – PROPERTIES area to the right

Properties ▾

Size 22.4KB

Title Add a title

Tags Add a tag

Categories Add a category


Related Dates

Last Modified Today, 09:52


Created Yesterday, 14:40

Last Printed Yesterday, 20:59


Related People

Author  corinne

Add an author

Last Modified By  Jael De Nardo

Related Documents

 Open File Location

[Show All Properties](#)

 [Access to the file properties from an Open dialog box](#) :: right click the file and select the PROPERTIES option.

 [More details](#) :
Click on SHOW ALL PROPERTIES
Or drop-down list of the PROPERTIES option (at the top).

8 Opening a workbook

8.1 FILE - OPEN

First you should check if the workbook is in the *Recent Documents* list. If it is : simple click to open it. If not, select COMPUTER and browse to the required folder.

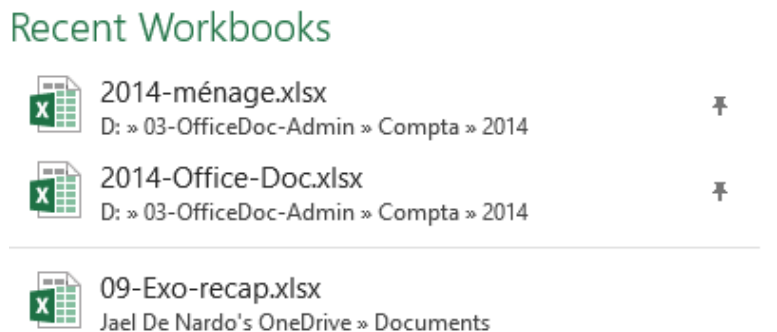
The list of recent documents shows 25 files (memorized and displayed).

8.2 Pinning

If you regularly open a given workbook, then you should think of pinning it (point the file and the pin icon will be displayed at its right end) so as to turn it into a favorite.

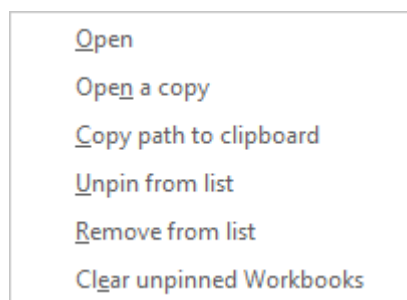
Pinned files are displayed at the top of the list, separated from the main list with a fine line :

Recent Workbooks



8.3 Managing the list of recent documents

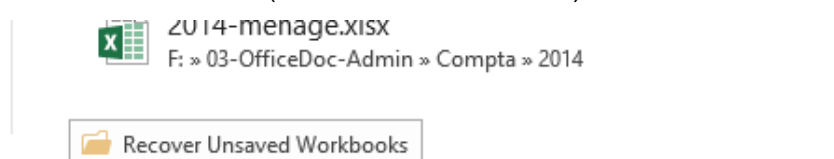
Right click a pinned workbook to display the shortcut menu








Clear unpinned Documents : this empties the list of recent documents, only the pinned documents are left. You are prompted to confirm.

8.4 You can retrieve unsaved files

Click on this button (at the bottom of the list) :



You are given the possibility to retrieve an unsaved file **during 4 days**.


<input type="checkbox"/> Nom	Modifié le	Type
 Book1((Unsaved-305556381018341651)).xlsb	13.11.2016 21:38	Microsoft Exce
 Book1((Unsaved-305559333456488074)).xlsb	15.11.2016 08:53	Microsoft Exce
 Book1((Unsaved-305559640022208641)).xlsb	15.11.2016 12:30	Microsoft Exce
 Classeur1((Unsaved-305559800996021363)).xlsb	15.11.2016 14:26	Microsoft Exce
 Classeur2((Unsaved-305559862912458622)).xlsb	15.11.2016 15:12	Microsoft Exce

Double-click the required file, which will be open in Excel. Then decide to save it or not.

8.5 Dialog box : selecting more than on file to open

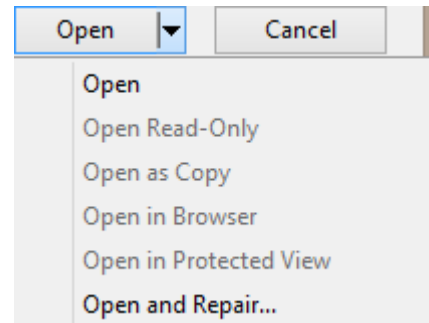
Use the usual Windows techniques :

1 file only	Click on the workbook.
non-contiguous files	Click on the first one, then CTRL + click on the others.
contiguous files	Click on the first one, then SHIFT + click on the last one. <i>You can also click and drag to include all required files.</i>

 If you have activated the new « Use check boxes to select items » option (Windows Vista and Windows 7), you can also simply check on the required files.

8.6 Opening a Read-Only, as Copy or Repair

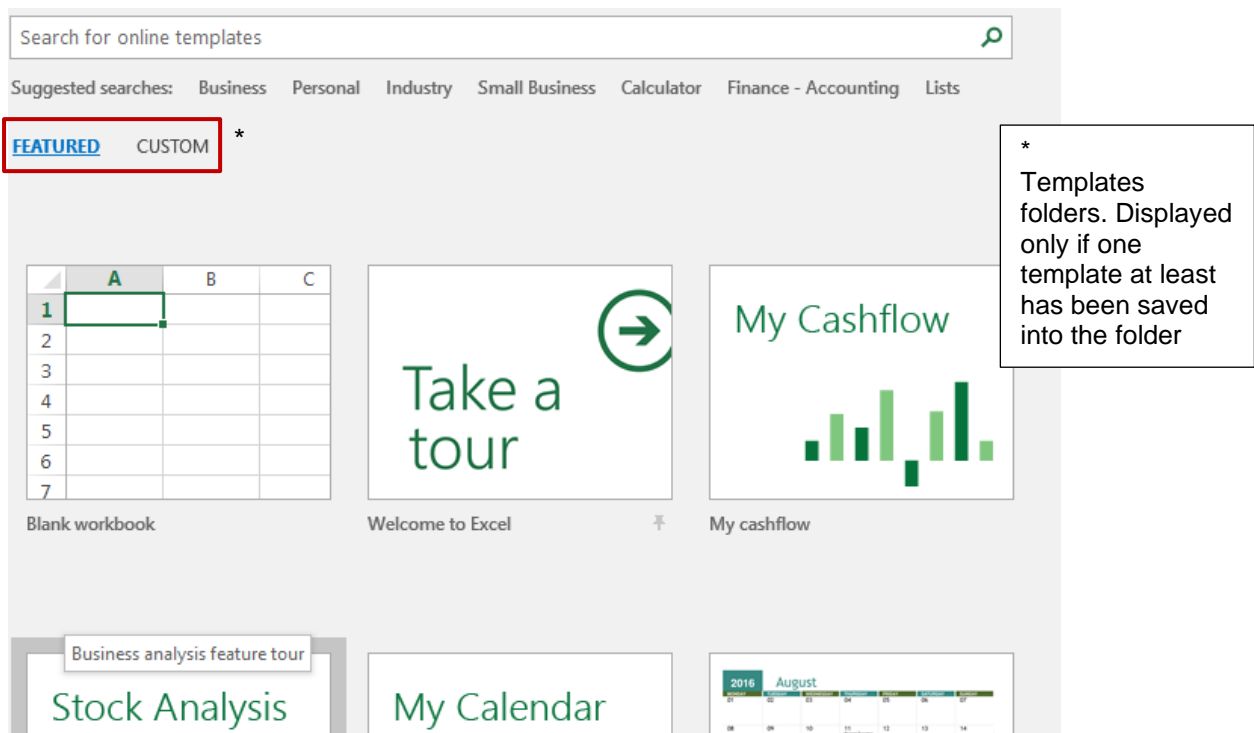
Click on the triangle located at the right of the OPEN button.



Open as Copy : a file named *Copy of ...is* automatically created in the same folder. It will be up to you to rename it or deleted it later on.

9 Creating a new workbook

- FILE - NEW displays the same suggestions (new document and various templates) as when you run Excel.




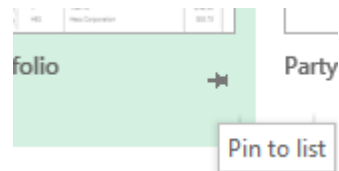
9.1 Blank document or from a template

Blank workbook ? Click the first suggestion

A specific need ? Choose from the suggested templates or search the online templates.

9.2 Pin a template you regularly use

Point the template thumbnail and click on the pin (it will change directions) 



Pinned templates are always displayed at the beginning of the tear-off.

9.3 Storage path for templates

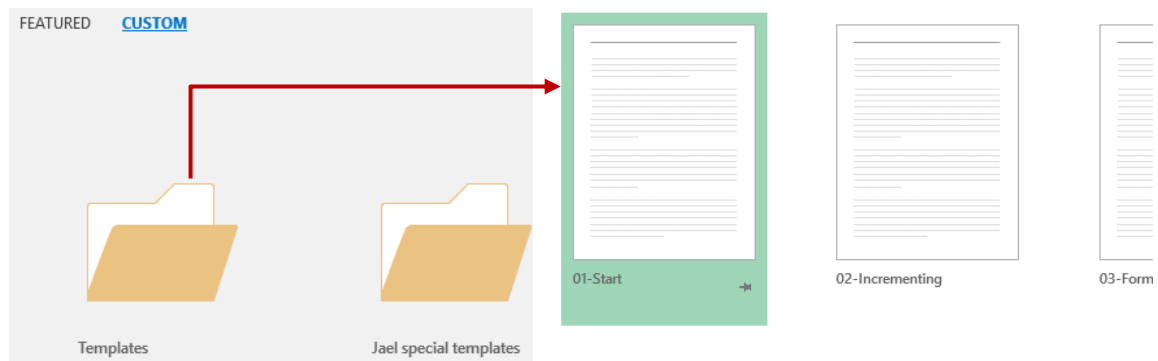
They are stored at this address : C:\Program Files (x86)\Microsoft Office\Templates\1033

9.4 How to access the company's templates (corporate templates) ?

The address is set **in Word** : FILE – OPTIONS – ADVANCED Category – Right at the bottom : GENERAL Section - FILE LOCATIONS Button - *Workgroup Templates* Row

In the screen capture below, a folder named TEMPLATES has been created by the company in one of their network drives :

- When Excel is run or through FILE - NEW



- Select the template
- A new blank workbook is created, with the template's content and settings.

Info : not so common but possible : the user can create his / her own personal templates (files with the .dotx - .dotm extension). Set such a folder in FILE – OPTIONS – SAVE Category – DEFAULT PERSONAL TEMPLATES LOCATION Option.

In the above screen capture it corresponds to the folder named JAEEL SPECIAL TEMPLATES.

10 Switching between workbooks

Each workbook – whether saved or not – has a reference button on the Windows Taskbar. You simply click on the button to bring the workbook into the foreground.

Other possibility : VIEW Tab – WINDOW Group – SWITCH WINDOWS Button.
And also the old Windows ALT + TAB combination.

11 Copying, moving, deleting ... from Excel

From an OPEN or SAVE AS dialog box :

- Managing files
Select the workbook and click on the ORGANIZE button : a wide choice of managing options are displayed (cut, copy, paste, rename ...)

Right click the file or the selected files and select from the options CUT / COPY / RENAME ...

- Managing folders
Check that the « parent folder » is selected and click on the NEW FOLDER button

Right click the folder and select from the options CUT/COPY/RENAME/NEW ...

Windows reminder : F2 is a handy keyboard shortcut to rename a file.

12 Sending the workbook over the mail

FILE – SAVE & SEND – SEND USING E-MAIL

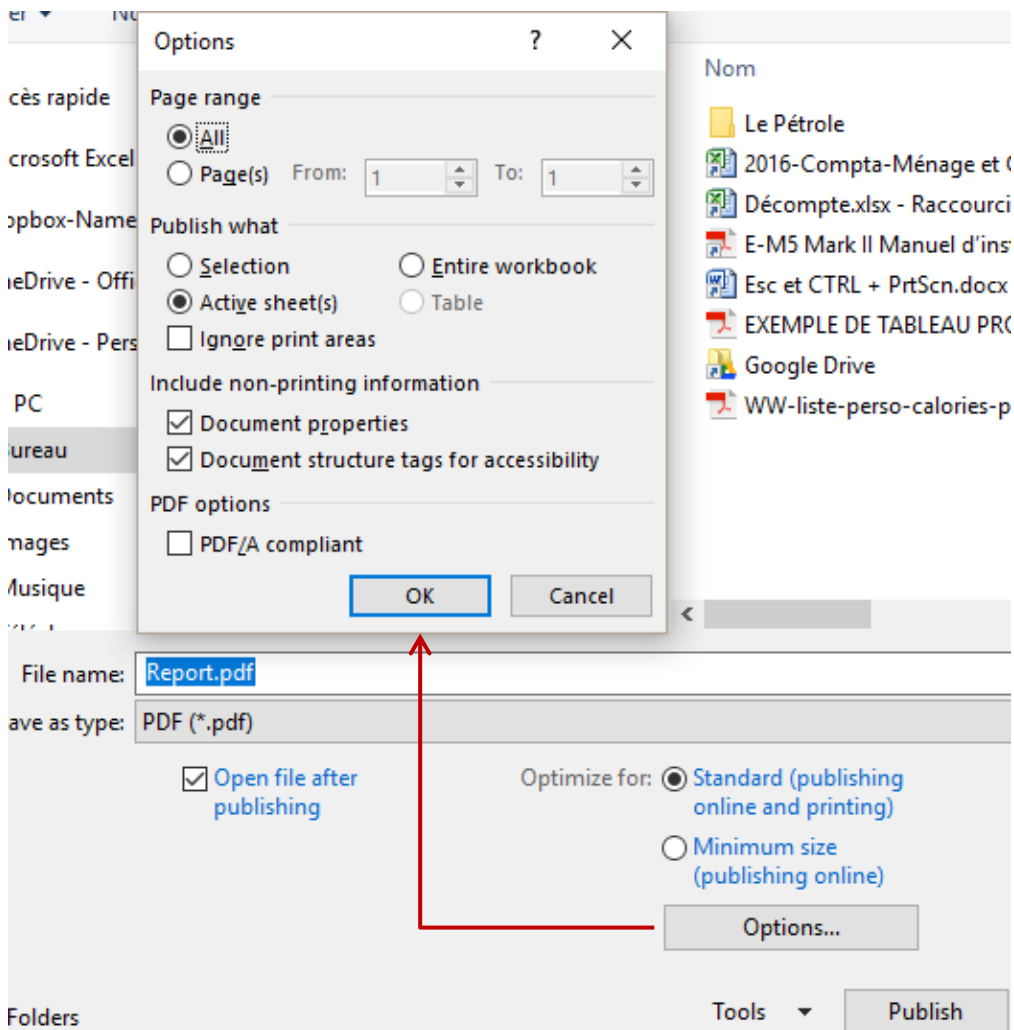
Various possibilities : *as an attachment, as a PDF file ...*

13 Exporting in the PDF format

- FILE – EXPORT – CREATE PDF/XPS DOCUMENT

PDF : the well-known ADOBE ACROBAT format

XPS : the same format but from MICROSOFT

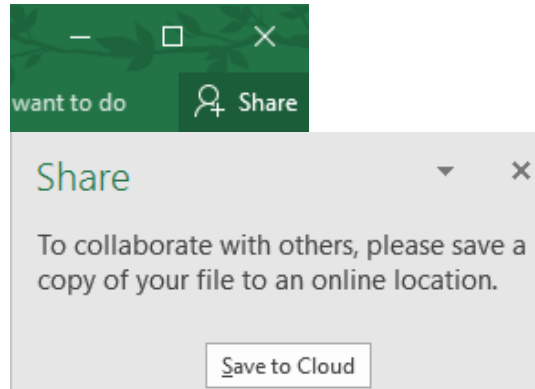


Adobe Reader (free) will be a perfect tool to open and read the file.

For touchup needs (small modifications), Adobe Standard or Pro (to be purchased) will be required.

14 Sharing a file through OneDrive

- In the given file, click on SHARE at the top right of the Word window
- A pane will be displayed on the right. You are prompted to save the file into the Cloud

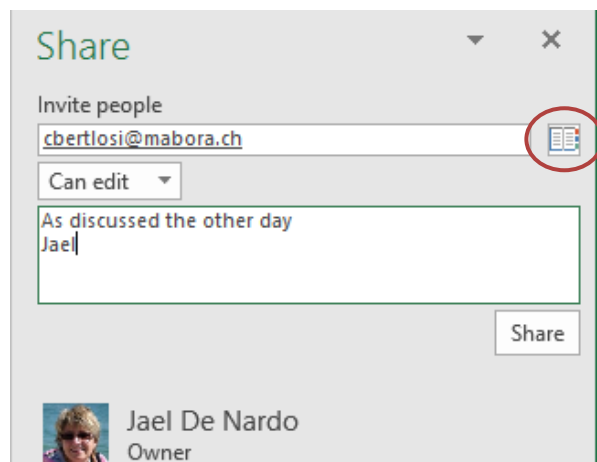


- Select the people you want to share the file with by clicking the *address book* button (with a red circle on the screen capture). It corresponds to the address book of your default mailer.

Set the user access right
CAN EDIT – CAN VIEW

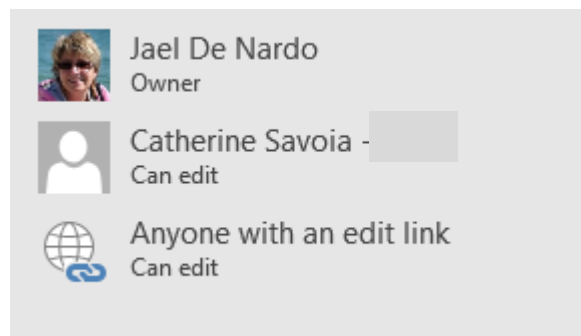
Add a message if you need

Click on the SHARE button



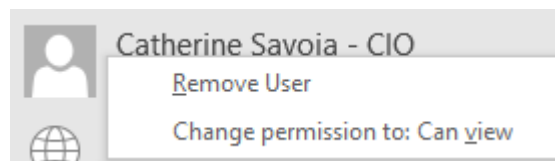
- The people you have shared the file with can read or edit the document according to the right you have set for them either in the free Word Online program or their own Word 2016. In the latter case, the sharing is a *real-time* one. It works just like the famous GoogleDocs, you see the modification !

If they only have Word 2010 – 2013 or Word for Mac 2011, they can still read or edit the file but there will be no *real-time* sharing. The modifications will be displayed only once the file is saved.



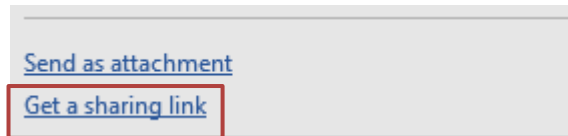
Managing the user rights

Right click the name



SHARING THROUGH A LINK

At the bottom of the pane :



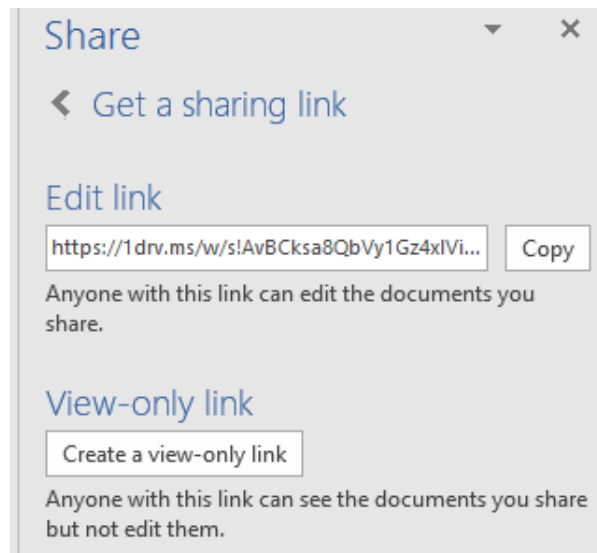
Paste the generated link in any mail message and send it to the required user, who need not necessarily have Word 2016.

Test with a Gmail user.

- The recipient was able to read / edit the document
- The recipient was not listed in the shared list
- When the file was saved, the modifications were added to the file (but no indication of *who when....* as in the Track Changes mode)

Note

All the above sharing commands can be done directly online from OneDrive.



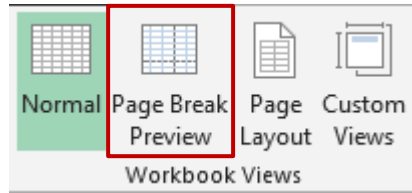
HANDY SHORTCUTS

ALT + ENTER	Line break inside a cell
F2	To edit cell content
CTRL [plus] *	To select a table, provided there is no full empty row/col
Point a border and double-click	To move to the next empty cell in the chosen direction
SHIFT + point a border and double-click	To select to the next empty cell in the chosen direction
CTRL [plus] +	On selected row/col : INSERT
CTRL [plus] -	On selected row/col : DELETE
CTRL [plus] ;	Today's date (not automatically updated)
CTRL [plus] :	Current time (not automatically updated)
F4	To repeat last operation
CTRL [plus] PgDn	Navigating from one sheet to the other : direction ==>
CTRL [plus] PgUp	Navigating from one sheet to the other : direction <==
SHIFT + drag a range of cells or better one or more rows / columns	To move the range of cells or the selected rows / column and INSERT at the destination location (without overwriting)
CTRL + SHIFT + drag a range of cells or better one or more rows / columns	To copy the range of cells or the selected rows / column and INSERT at the destination location (without overwriting)

**LARGE TABLES :
PAGE SETUP -
AND PRINTING**

1 Page Break Preview

- VIEW Tab – WORKBOOK VIEWS Group – PAGE BREAK PREVIEW Button

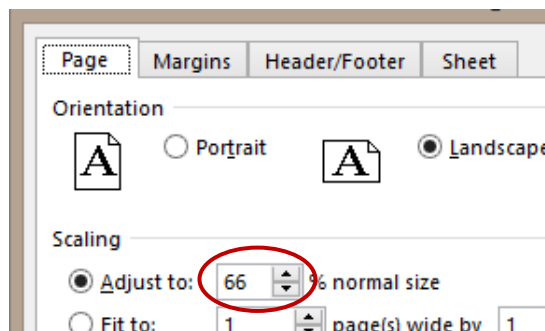


	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Table of contents	PREPARING A LARGE SHEET FOR A NEAT PRINTOUT											
2	Budget	printed on: 16.11.2016											
3													
4	Salaries and expenses	31.01.16	29.02.16	31.03.16	30.04.16	31.05.16	30.06.16	31.07.16	31.08.16	30.09.16	31.10.16	30.11.16	31.12.16
5	Monthly salary / fixed	4'000	4'000	4'000	4'000	4'000	4'000	4'000	4'000	4'000	4'000	4'000	4'000
6	Monthly salary / percentage	2'990	3'150	3'025	2'360	2'000	3'280	2'500	2'000	2'990	3'240	3'360	3'360
7	Family allowance	400	400	400	400	400	400	400	400	400	400	400	400
8	Bonus						2'000						
9	13 th salary												5'350
10	Total	7'290	7'550	7'425	7'360	6'400	9'680	6'900	6'400	7'330	7'640	8'360	14'310
11													
12	Salaries and expenses	31.01.13	28.02.13	31.03.13	30.04.13	31.05.13	30.06.13	31.07.13	31.08.13	30.09.13	31.10.13	30.11.13	31.12.13
13	Rent	2'500	2'500	2'500	2'500	2'500	2'500	2'500	2'500	2'500	2'500	2'500	2'500
14	Tax	850	850	850	850	850	850	850	850	850	850	850	850
15	Health insurance	800	800	800	800	800	800	800	800	800	800	800	800
16	Fixed annual expenses												
17	(car, house ...)	1'000	1'000	1'000	1'000	1'000	1'000	1'000	1'000	1'000	1'000	1'000	1'000
18	Food	1'200	1'200	1'200	1'200	1'200	1'200	1'200	1'200	1'200	1'200	1'200	1'200
19	Holidays	500	500	500	500	500	500	500	500	500	500	500	500
20	Miscellaneous 1	10	11	12	13	14	15	16	17	18	19	20	21
21	Miscellaneous 2	10	11	12	13	14	15	16	17	18	19	20	21
22	Miscellaneous 3	10	11	12	13	14	15	16	17	18	19	20	21
23	Miscellaneous 4	10	11	12	13	14	15	16	17	18	19	20	21
24	Miscellaneous 5	10	11	12	13	14	15	16	17	18	19	20	21
25	Miscellaneous 6	10	11	12	13	14	15	16	17	18	19	20	21
26	Miscellaneous 7	10	11	12	13	14	15	16	17	18	19	20	21
27	Miscellaneous 8	10	11	12	13	14	15	16	17	18	19	20	21
28	Miscellaneous 9	10	11	12	13	14	15	16	17	18	19	20	21
29	Miscellaneous 10	10	11	12	13	14	15	16	17	18	19	20	21
30	Miscellaneous 11	10	11	12	13	14	15	16	17	18	19	20	21
31	Miscellaneous 12	10	11	12	13	14	15	16	17	18	19	20	21
32	Miscellaneous 13	10	11	12	13	14	15	16	17	18	19	20	21
33	Miscellaneous 14	10	11	12	13	14	15	16	17	18	19	20	21
34	Miscellaneous 15	10	11	12	13	14	15	16	17	18	19	20	21
35	Miscellaneous 16	10	11	12	13	14	15	16	17	18	19	20	21
36	Miscellaneous 17	10	11	12	13	14	15	16	17	18	19	20	21
37	Miscellaneous 18	10	11	12	13	14	15	16	17	18	19	20	21
38	Miscellaneous 19	10	11	12	13	14	15	16	17	18	19	20	21
39	Miscellaneous 20	10	11	12	13	14	15	16	17	18	19	20	21
40	Miscellaneous 21	10	11	12	13	14	15	16	17	18	19	20	21
41	Miscellaneous 22	10	11	12	13	14	15	16	17	18	19	20	21
42	Miscellaneous 23	10	11	12	13	14	15	16	17	18	19	20	21
43	Miscellaneous 24	10	11	12	13	14	15	16	17	18	19	20	21
44	Total	7'090	7'114	7'138	7'162	7'186	7'210	7'234	7'258	7'282	7'306	7'330	7'354
45													
46	Net	200	436	287	196	-786	2'470	-334	-858	108	334	1'030	6'956
47													
48													

Automatic page breaks are displayed with a dotted line, while manual breaks are displayed with a continuous line.

If you drag a page break outside the printable area (only the white area), it will disappear and Excel will automatically apply the corresponding reduction percentage.

This percentage can be checked : PAGE LAYOUT Tab – PAGE SETUP Group – Dialog box launcher – PAGE Tab :



But caution, if you add data, the automatic printable area will get larger and an automatic page break will be created.

- Caution with the lines and what they relate to. They are all blue but ...

The inside lines (dotted or not) represent page breaks.

The outer line borders the range of cells to print. By default, this line borders includes the full content of the sheet. If you click and drag this line, you are going to set a new and user defined "print area" (a print area is a fixed range of cells to print - explained later on). In the above screen capture, the default range of cells to be printed goes from January to December. If you were to drag the border line inside, you would create a new print area covering fewer months.

Back to normal view

- VIEW Tab – WORKBOOK VIEWS Group – NORMAL Button

2 Page breaks

They can be managed in the Normal view but the Page Break Preview is very handy.

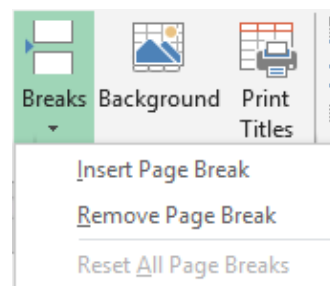
2.1 How page breaks are represented

Page Break Preview Automatic page breaks are displayed with a dotted line and manual page breaks are displayed with a continuous line.

Normal View Page breaks are not displayed until you have ordered a Page Break Preview or worked with the Page Setup dialog box. They are displayed the same, only the line is black.

2.2 Inserting a manual page break

- Select the row above which you need to insert a page break Or
Select the column before which you need to insert a page break.
- PAGE LAYOUT Tab – PAGE SETUP Group – Drop-down list of the BREAKS button :



You have selected a cell or a range of cells rather than a row or a column

If it is the first cell of the row or the column, it does not make any difference.

If the cell is somewhere else on the worksheet, Excel inserts two page breaks, one horizontal page break and one vertical page break.

The REMOVE PAGE BREAK option

Select one cell at least below the horizontal page break Or

Select one cell at least after the vertical page break.

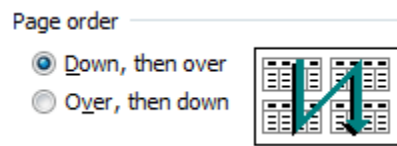
RESET ALL PAGE BREAKS

Removes all manual page breaks and resets all automatic page breaks.

3 Page order

If you take a close look at the screen capture on the Page Breaks Preview, you can notice that to print the table only, you would have to print page 1 and page 3. Not very handy. You can change the page order :

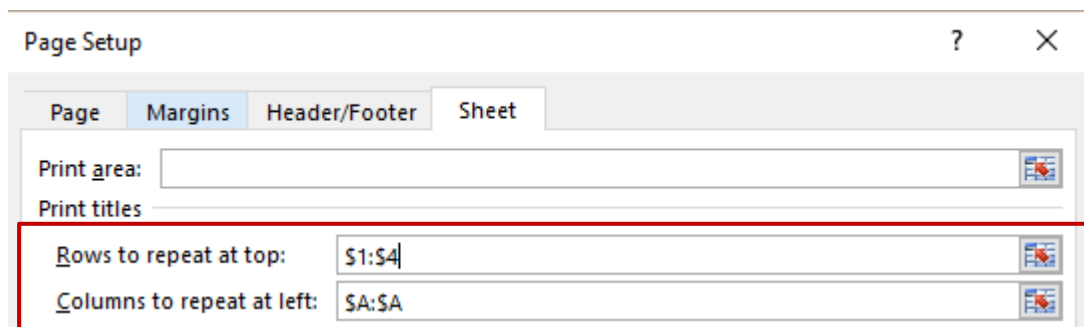
- PAGE LAYOUT Tab – PAGE SETUP Group – Dialog box launcher – SHEET Tab :



4 Print titles

Usual case : a very large table. If you print it the second page omits the labels (either horizontally or vertically).

- PAGE LAYOUT Tab – PAGE SETUP Group – PRINT TITLES Button
It is the page ssetup dialog box (SHEET Tab) :



No need to select the row or the column beforehand as Excel does not retrieve any prior selection.

Make sure to place the cursor in the print titles text box and click directly into the worksheet on the corresponding row or column. The row or the column is always fully selected, no range of cells is allowed.

But you may select more than one row/column. If the dialog box prevents you from clicking into the sheet, you may reduce it to the text box by clicking on the red arrow button (at the text box right end). *To restore the dialog box : press the ENTER key or click again on the red arrow button.*

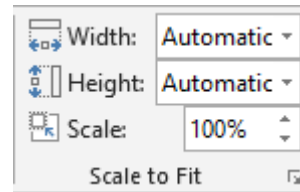
Remove print titles

- Display the above dialog box and delete or change the references.

5 Special page setup

5.1 Reduce/Enlarge/Scale

- PAGE LAYOUT Tab – SCALE TO FIT Group



Or

- PAGE LAYOUT Tab – PAGE SETUP Group – Dialog box launcher – PAGE Tab :

Scaling

Adjust to: 100 % normal size

Fit to: 1 page(s) wide by 1 tall

Paper size: A4

Print quality: 300 dpi

First page number: Auto

Adjust to

Works like when you reduce or enlarge a photocopy.
Type the required percentage

Fit to

To set the number of pages that you want to print regardless of the number of pages automatically suggested. Excel will calculate the reduction percentage. Often, this help to "shift" a few extra rows or columns into the previous page. Caution : if you later on insert a manual page break, it will be memorized but totally ignored. Moreover, this option is not reset automatically. It is the user's responsibility to turn it off by manually selecting a *100% Adjust*.

Fit 1 by 1 is the most common choice. If you set a fit 1 by 2, it is important to mention that inserting a manual page break will have no effect as it is Excel that manages the pagination.

Back to 100% normal :

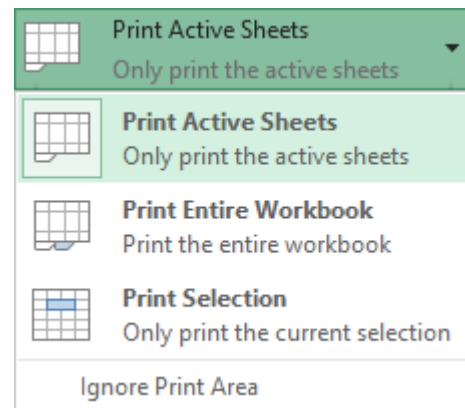
Ribbon : switch to *Automatic* then type manually 100% for *Scale*
In the dialog box : type 100% for *Adjust to*.

First page number

Change *Auto* with the number you need and it will be the printed number.

5.2 Printing a range of cells

- Select the required range of cells
- Print (OFFICE Button – PRINT Option ...)
- Make sure to select :



5.3 Setting a Print Area

This option should be rarely used. Why ? Because this option sets – not a special range of cells to print, as in this case printing a selection would be far better – but a fixed print area, that is a fixed range of cells to print, which should not be a frequent need

Cases where setting a print area is advisable :

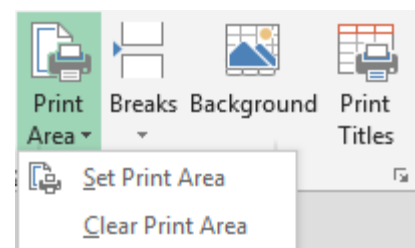
If the workbook was originally a Lotus1-2-3 file, the page setup might be a problem because it is usually lost during the conversion process. And Excel might be ready to print 78, 90 ... pages ! Setting a print area will be your "saving solution".

Forms : usually forms contain hidden columns that manage the choice made in the form fields. True this does not prevent the form to be printed correctly. But the form developer often adds an additional printing security by setting a print area for the form.

Printing a range of cells on a given sheet – always this range and never any data "around"

Setting the Print Area

- Select the required range of cells
- PAGE LAYOUT Tab – PAGE SETUP Group – Drop-down list of the PRINT AREA Button :



Printing more than one Print Area

- Set a print area for each range of cells (one by worksheet)
- Select the sheets to be printed
- PRINT (leave on default settings) : one print page for each Print Area.

Setting a Print Area but exceptionally ignore it

Use the IGNORE PRINT AREAS option in the PRINT dialog box

Comments

- This Print Area is really a named range of cells – automatically called Print_Area :

The name will be displayed in the name box :

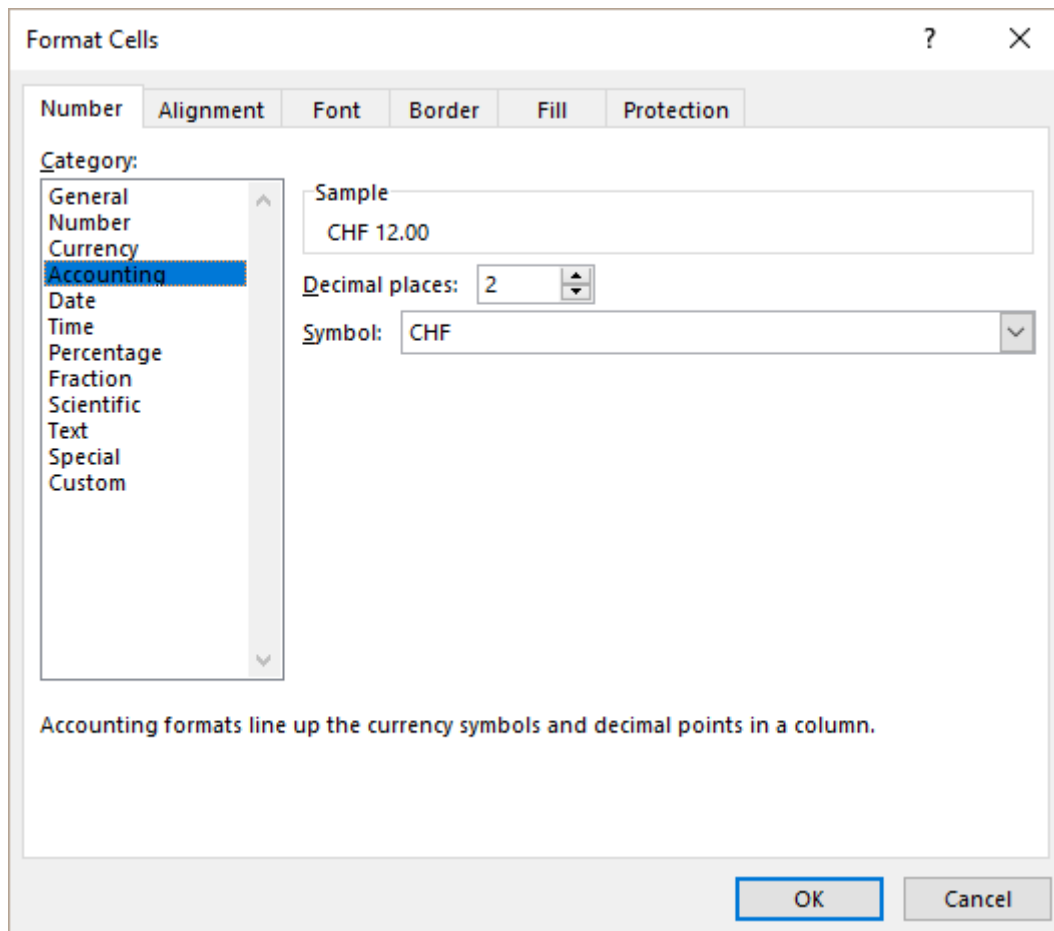


- Only one Print Area per worksheet
- It is not possible to globally set the same Print Area for a group of select sheets. You have to set it sheet by sheet.

FORMATS AND DATA

1 Custom number formats

HOME Tab – NUMBER Group – Dialog box launcher :



 For number formats, the thousand separator will be the one set in Windows (Control Panel – Regional Settings – Define the language/country)

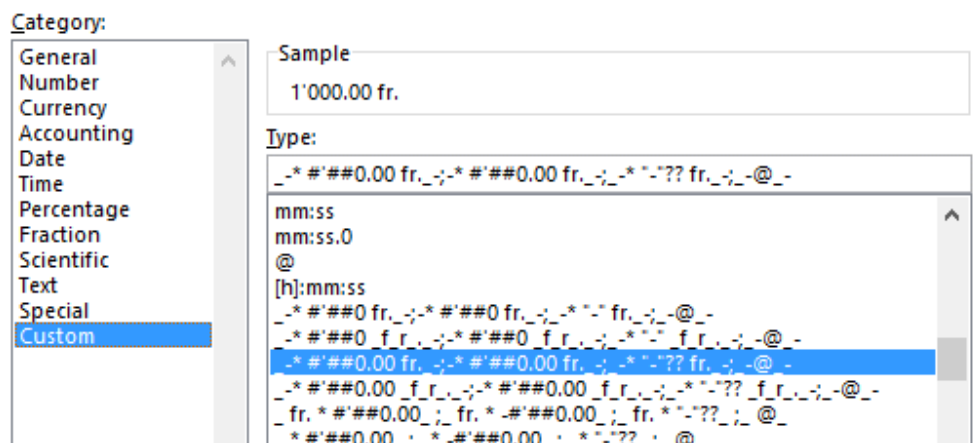
For most common formats, simply navigate in the various categories, check on/off the required options to "build" the format.

But it is important to mention that often, the options for common formats omit to list all the settings that will be applied. There might be additional options such as here for the *Accounting* format (above screen capture), the box options omit to tell the user that the currency symbol will be left aligned, a zero value replaced by a dash

Behind the format that **we** select are format codes :

- Make sure that the select cell displays the format you need to modify
- Select the CUSTOM category in the above dialog box

Here below the *Accounting* format for example :



Meaning of each code :

4 formats separated with a ; *positive;negative;0 value;text*

If you create a format, setting only the first one, Excel will automatically apply it to the next two number formats.

Example : ###0.00 "HT" will generate 1'000.00 HT, -1'000.00 HT and 0.00 HT. Text are not affected.

0 and # : how figures will be displayed :

You type	000,00 format	###,### format
123,45	123,45	123,45
36,87	036,87	36,87
56	056,00	56,

***[space]** The characters that follows the * (often a space) fills the cell (usually between the two parts of the code – currency on the left / spaces to fill the cell / the number)

_[space] To add a one space indent on the left or right of the number

[Red] To apply a color (here red).
Caution : all colors are not available (violet for instance isn't) but it is OK for *Blue, Green, Cyan*)

?? To omit decimals (used for 0 values)

@ For text (label)

Codes for dates : (caution with Windows in English : j=d (day) / a=y (year))

Type :	The letters should be understood as following :	
jj.mm.aaaa	j	3, 15
jj.mm.aaaa	jj	03, 15
jj.mmm.aa	jjj	Lun, Mar
jj.mmm	jjjj	Lundi, Mardi
mmm.aa		
h:mm AM/PM		

The above rule is also valid for months and years. But « a » will be automatically converted into « aa », which is quite logical ...

Do not forget quotes when they are necessary

If you are using standard codes such as a dash, a space ... (\$ - + / () : ! ^ & ~ { } < >) or accepted abbreviations for currencies such as USD, CHF ..., you don't need to use the quotes. For practically all other cases, use quotes.

Examples :

Year with 4 digits / Add text to a date

The options in the Regional Settings of Windows include one to set the year at 4 digit by default. But this does not cover all cases. Consequently choose the nearest format, click on the CUSTOM category and modify the format by adding 2 "y".

mmm-yyyy	mar-2011	avr-2011
"Current Date : "d-mmm-yyyy	Current Date : 3-mar-2011	

* Weakness : no possibility to show the first letter of the month in capital letter

Currency codes – some are preset : (Fr. fr. CHF EUR - see list ...) :

CHF ###0;CHF -###0	CHF 3'567	CHF – 3'567
--------------------	-----------	-------------

Special currency code

"Frs" ###0.00;[Red]"Frs" -###0.00	Frs 3'567.95	Frs -3'567.95
-----------------------------------	--------------	---------------

Format where the currency code is left aligned

fr.* ###0 ;fr.* ###0

[space/sign]* or *[space/sign]

The character that precedes/follows the * sign fills the cell

fr.	1'000
fr.	-1'000

Add one space indent at the left or right of the number

_ ###0 _ ; _ -###0 _

_[space]

In the screen capture : the first 78 : there is a one space indent at the left and at the right side of the number.
Second 78 : by default

78	Custom
78	Standard

0 values

When you need to replace a 0 value by a dash (such as in accounting format), it often required to solve a problem of alignment. Indeed, if other numbers are above or below, the dash will not be aligned on the unit position. Therefore this is the code that you can use to solve the problem : "-"?? (each ? corresponds to a decimal position)

	A	B
1	\$ 23.00	
2	\$ -	"-"??"
3		0 standard

Text format

@ "area"
###0 "cm"

fx	North
C	
North area	
South area	

 and

fx	33
C	
33 cm	
45 cm	

Format that "hides" a number by some text or nothing

Salary	Bonus %	Bonus
5000	2%	100
Salary	Bonus %	Bonus
SMITH		100

Typing data – No special format

Salary cell : custom format "SMITH".

Bonus % cell : custom format ;;;
(hides the cell contents – number or label).

Format where almost all special codes have been used

The following custom format :

1000	Frs.	1'000.00
-1000	Frs.	-1'000.00
0	Frs.	-
ree		free

"Frs." * ###0.00;"Frs." * -###0.00;"Frs." * "-"??;[Blue]@"

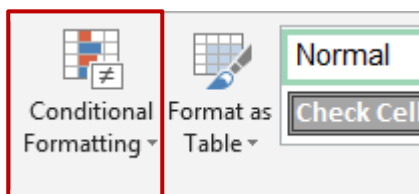
- If you are not satisfied with your format you can modify it. But caution, each modification means a *new format*. So when you are finally satisfied with the format, make sure to delete all previously created formats.

2 Conditional formats

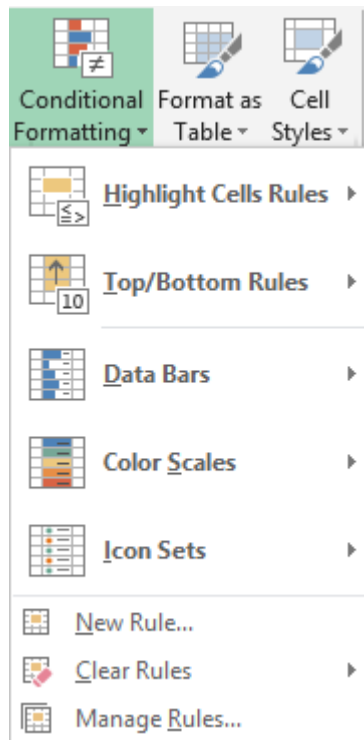
In the previous versions of Office, conditional formatting belonged to advanced functions. In Office 2007, Microsoft has placed this functionality on the HOME Tab and has consequently made it a functionality that every user should master (first level at least).

2.1 Creating a conditional format

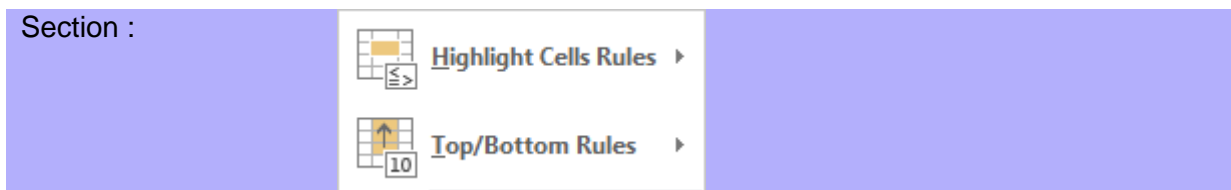
- HOME Tab – STYLES Group



Drop-down list of the **CONDITIONAL FORMATTING** button :



Some easy samples to help you understand how conditional formats work :



Excel source sheet :

	A	B	C	D	E	F	G
3	Turnover	31.12.2016	29.02.2016	31.03.2016	30.04.2016	31.05.2016	30.06.2016
4	Systems	150'000	10'000	115'000	90'000	98'000	114'000
5	Software	95'000	40'000	50'000	48'000	36'000	42'000
6	Hardware	25'000	10'000	7'500	9'800	10'000	11'000
7	Services	63'000	50'000	47'000	59'000	48'000	55'000
8	Total	333'000	110'000	219'500	206'800	192'000	222'000
9							
10							
11	Expenses	31.12.2016	29.02.2016	31.03.2016	30.04.2016	31.05.2016	30.06.2016
12	Salaries	109'000	98'000	93'000	95'000	83'000	96'000
13	Telephone	7'500	6'000	4'500	6'300	7'200	5'000
14	Rent	25'000	10'000	25'000	25'000	25'000	25'000
15	Total	141'500	114'000	122'500	126'300	115'200	126'000
16							
17	Profit	191'500	-4'000	97'000	80'500	76'800	96'000
18							
19	in % of Turnover	58%	-4%	44%	39%	40%	43%
20							
21	Average - 6 months	37%					

Highlight Cells Rules – Greater than

Select the required range of cells

Greater Than

Format cells that are GREATER THAN:

50% with Light Red Fill with Dark Red Text

OK Cancel

191'500	-4'000	97'000	80'500	76'800	96'000
58%	-4%	44%	39%	40%	43%

I typed 50% (you may type 0.5 but caution not 50)

Highlight Cells Rules – A date occurring ...

A Date Occurring

Format cells that contain a date occurring:

In the last 7 days with Light Red Fill with Dark Red Text

OK Cancel

Yesterday
Today
Tomorrow
In the last 7 days
Last week
This week
Next week
Last month
This Month
Next month

16.11.2016	8.03.2016	28.04.2016	28.05.2016
150'000	93'000	95'000	83'000
95'000	4'500	6'300	7'200
25'000			
63'000			
333'000			
16.11.2016			
109'000			
7'500			

Highlight Cells Rules – Duplicate values ...

Duplicate Values

Format cells that contain:

Duplicate values with Light Red Fill with Dark Red Text

OK Cancel

16.11.2016	28.02.2016	28.03.2016	28.04.2016	28.05.2016
150'000	98'000	93'000	95'000	83'000
95'000	6'000	4'500	6'300	7'200
25'000	10'000	25'000	25'000	25'000
63'000	114'000	122'500	126'300	115'200
333'000				
16.11.2016				
109'000				
7'500				
25'000				
141'500				

Top/Bottom Rules – Top 10 items ...

- ✎ MAX value : simply type 1
- MIN value : select Top/Bottom Rules – Bottom 10 Items and type 1

Top/Bottom Rules – Above average

Section :

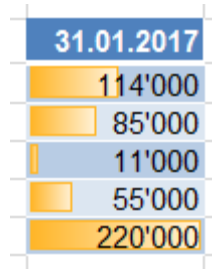
Data Bars help you see the value of a cell relative to other cells. The length of the data bar represents the value in the cell. A longer bar represents a higher value, and a shorter bar represents a lower value.

Color Scales are visual guides that help you understand data distribution and variation. A two-color or three-color scale helps you compare a range of cells by using a gradation of two or three colors. The shade of the color represents higher or lower values.

For example, in a green and red color scale, you can specify that higher value cells have a more green color and lower value cells have a more red color.

The three-color scale helps to set three categories : high values – intermediate values and low values.

Data Bars



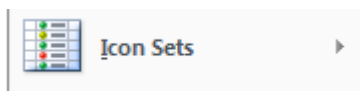
Color Scales

Caution, color scales go from the highest to the lowest value. Here Red-Yellow-Green :

HIV - Deaths evolution in Switzerland (source : Office Fédéral de la Statistique)										
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Men deaths	112	116	134	125	94	95	100	70	56	9
Women deaths	65	57	55	52	29	36	39	32	14	3

The color shading is applied according to the cell value. This helps to create « groups ».

Section



Icon Sets are used to annotate and classify data into three to five categories separated by a threshold value. Each icon represents a range of values.

Directional

↑ → ↓ ↑ → ↓
 ▲ — ▼ ↑ ↗ ↘ ↓
 ↑ ↗ ↘ ↓ ↑ ↗ → ↘ ↓
 ↑ ↗ ↘ ↘ ↓

Shapes

● ● ● ● ● ●
 ● ▲ ◆ ● ● ● ●
 ● ● ● ●

Indicators

✓ ⚠ ✖ ✓ ⚠ ✖
 🚩 🚩 🚩

Ratings

★ ★ ★ 📊 📊 📊 📊
 ● ◐ ◑ ◒ ◓ 📊 📊 📊 📊
 📊 📊 📊 📊

[More Rules...](#)

These sets are difficult to use, even though they look so attractive ...

- Colors are always applied from the top value to the lowest one.

●	4	●	1
●	3	●	2
●	2	●	3
●	1	●	4

- The number of icons is important.

Indeed, if you select a 4 icon set and apply it to 6 cells, Excel will re-use 2 of the 4 icons. This in turn might affect the set's readability.

●	4	●	5
●	3	●	4
●	2	●	3
●	1	●	2
		●	1

- Caution when using a set with arrows as the arrow direction does not necessarily mean that the values are going up or down.

Sometimes chart icons will be more appropriate :

↑	5	▒	5
↗	4	▒	4
→	3	▒	3
↘	2	▒	2
↓	1	▒	1

Example :

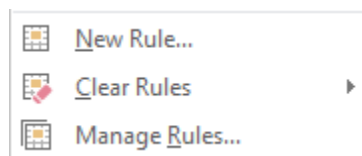
Salesman	Dept	Years in the company		Years in the company
BRUNO	EAO	0	✗	0
BRIAN	EAO	4	✗	4
JOHN	Office	8	✗	8
JULES	EAO	7	✗	7
PIERRE	Langues	1	✗	1
MARC	EAO	3	✗	3
SANDRA	Langues	24	✓	24
REBECCA	Langues	31	✓	31
LAURENT	EAO	12	!	12

Legend ✗ = below 10 / ! = between 10 and 20 / ✓ = above 20

Interest : it is so easy to sort or filter on icons ...

2.2 Managing the formats

The commands located at the bottom of the drop-down list of the CONDITIONAL FORMAT button :



New Rule

A dialog box will be displayed. It includes all the above rules but also other rules to create formats based on formulas and functions.

This is not covered in this documentation

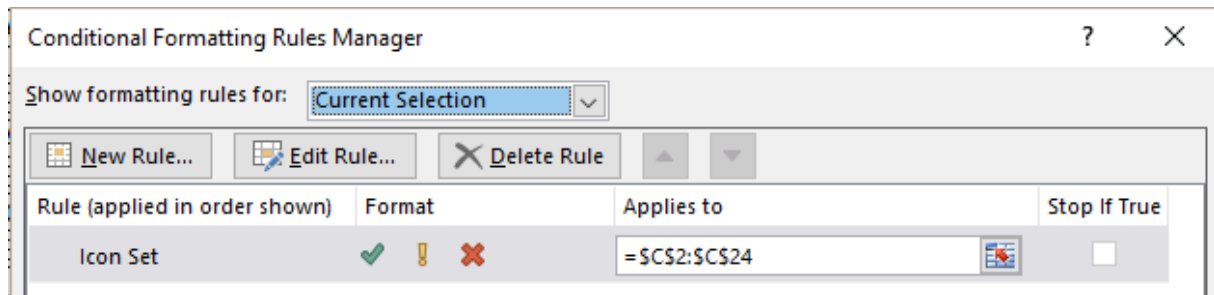
Clear Rules

You can remove a rule to :

- The selected cells*
- The whole sheet*
- A table (a list defined as a table)*
- A pivot table*

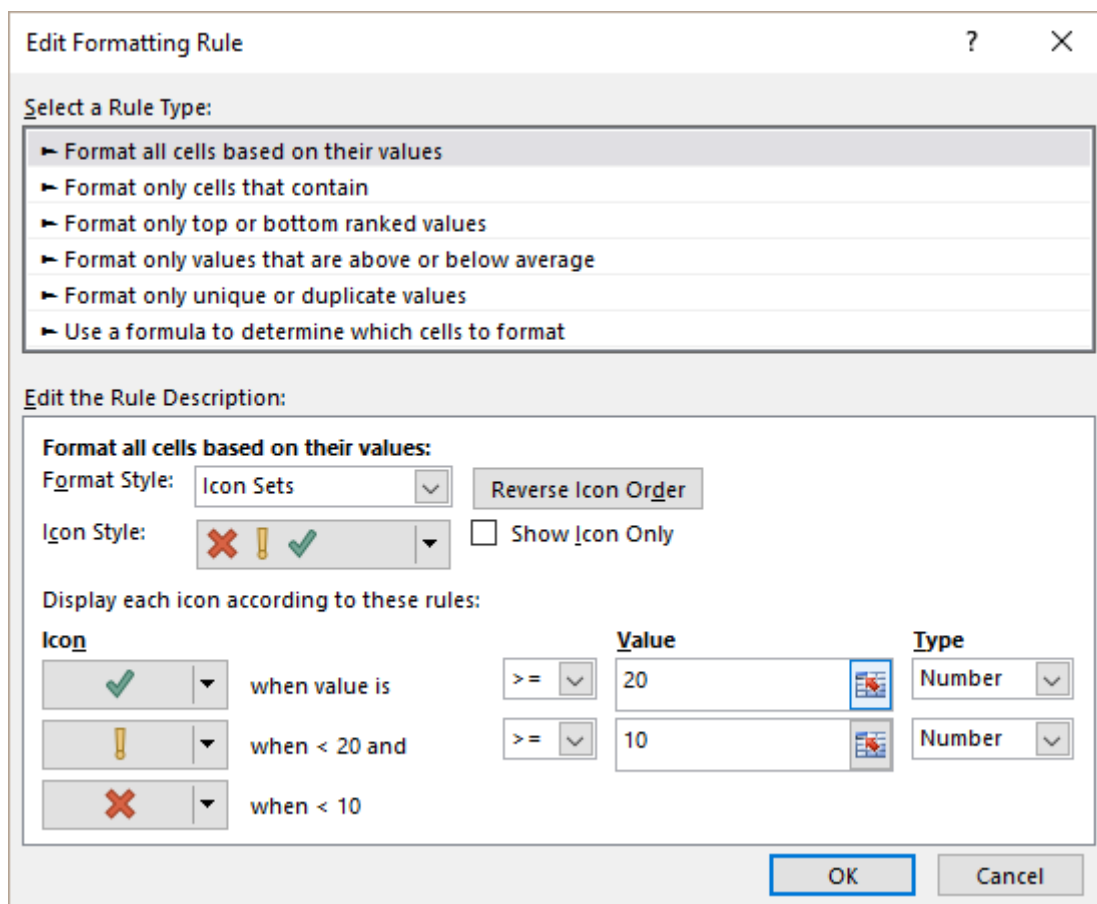
Manage Rules

A standard dialog box to create a new rule (the NEW RULE dialog box will be displayed), to modify an existing rule, to delete a rule :




You can work with rules *without having to first select the required range of cells*. You select from the SHOW FORMATTING RULES FOR pull-down menu.

And you can also *slightly modify an existing rule* :



You may change the reference values, revert the icon order, show the icons only ...

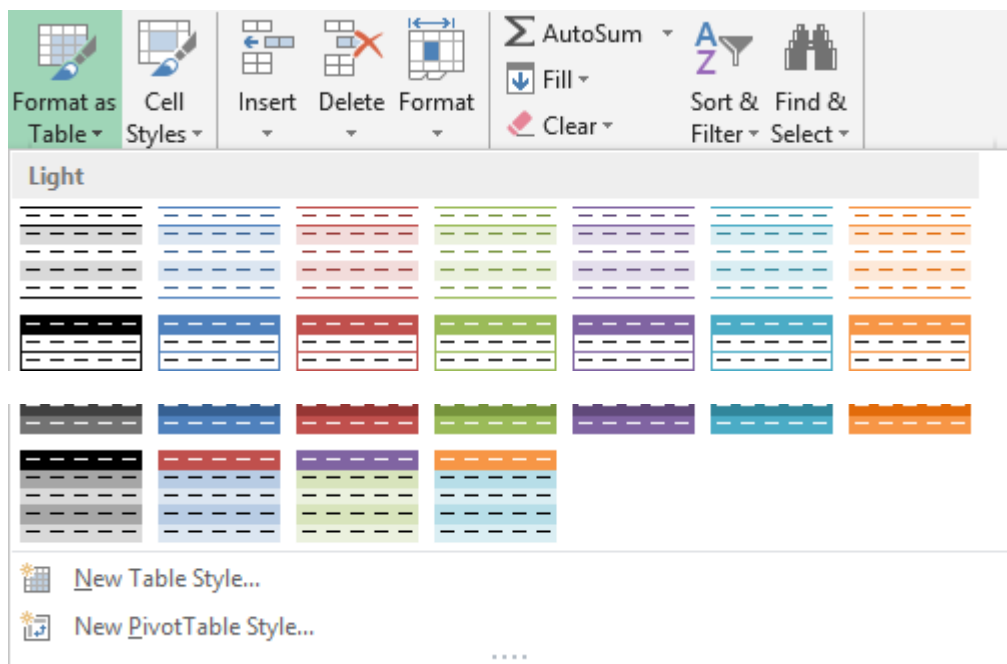
3 The « table » formats

 This functionality is also accessible through the quick analysis tag (bottom right of the selected range of cells). See chapter about it at the end of the documentation).

Caution, the gallery below relates to the concept of « tables » that previous versions called « lists ». An *Excel list or table* provides specific managing tools such as the autofilter – standard or advanced, subtotals, pivot tables ... This is not covered in this documentation.

But if you like one of those formats, you may perfectly apply it to your current table without creating a *list or table*.

- Click inside the table (no need to select it fully)



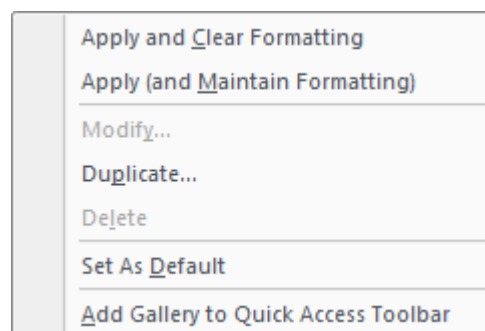
Colors

Where do the suggested colors come from ä ? From the active theme.

A simple click *maintains* the current format and applies the new format wherever it is possible.

If you do not wish to maintain the format, right click :

You may even set that one of those format be the *default* format.

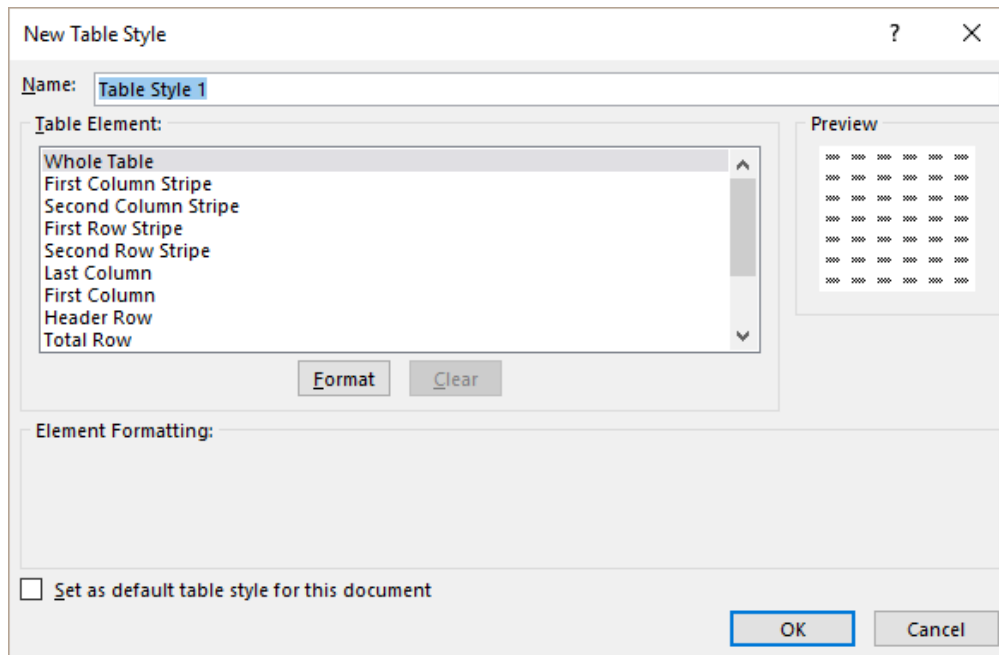


MODIFY and DELETE

The MODIFIY and DELETE options are available only for custom table formats.

NEW TABLE STYLE

To create a custom format



Name your style

Set the format attributes (font, borders, fill color ...) for the whole table or by row/column

The new style will be displayed at the top of the gallery, in the *Custom* section.

NEW PIVOTTABLE STYLE

Not covered in this documentation

- You are prompted to confirm the range of cells : validate or change if necessary

Important : when the format has been applied, the DESIGN Tab will be displayed on the Ribbon. It provides all the tools to manage the *list or table*. Click on the CONVERT TO RANGE button to *remove the table definition but keep the table format*.

4 Inserting comments

When a table is large and complex, it is often interesting to comment a few cells.

Two methods rather equivalent :

- 1 REVIEW Tab – COMMENTS Group

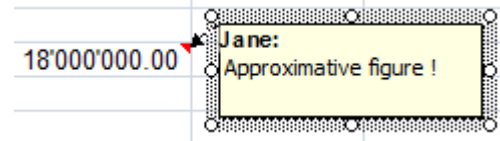


- 2 Right click the cell

4.1 Creating and managing comments

Insert

NEW COMMENT Button
Right click : INSERT COMMENT
Type the comment in the text box



Show

Simply *point* the cell and the comment will be displayed

Navigation

PREVIOUS / NEXT Button

Edit

EDIT COMMENT Button (previously New)
Right click : EDIT COMMENT

Delete

DELETE Button
Display the comment and click on its border – Then press the DEL key
Right click : DELETE COMMENT

4.2 Showing comments

All comments

SHOW ALL COMMENTST Button

One specific comment

SHOW/HIDE COMMENT Button
Right click : SHOW/HIDE COMMENTS

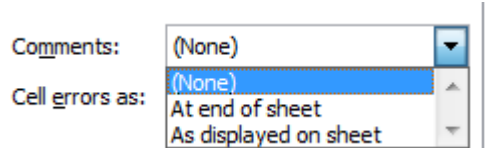
 It is possible to set how comments should be displayed in the Excel options : OFFICE Button – OPTIONS EXCEL Button – Category ADVANCED – DISPLAY Topic.

4.3 Printing comments

- PAGE LAYOUT Tab – PAGE SETUP Group – Dialog box launcher – SHEET Tab

At end of sheet

The comments are printed on a separate page at the end of the printing process :



Cell: D19
Comment: Jane:
This average figure exclude the following

Cell: A30
Comment: Jane:
Approximative figure !

Cell: F30
Comment: Jane:
French VAT rate

As displayed on sheet



Excel only prints comments that are displayed on the sheet.

5 Copy-paste with a link

definitions

Source range or workbook	Range (or workbook) that "exports" the data (value or formula)
Client range or workbook	Range (or workbook) that "receives" the copied data (value or formula). The destination workbook.

5.1 Using a link to retrieve the content of a cell

- Activate the result cell in the client or destination workbook
- Type the = sign
- Activate the required cell in the source workbook
- No other navigation : press the ENTER key to validate

The reference or source address (path) is automatically mentioned :
The file has been opened : =[Planning-2014.xlsx]November!\$D\$19.
The file is closed : the formula bar shows the full path : ='D:\Planning\[Planning-2014.xlsx]November!\$D\$19.

 Any change done to the source file will be automatically reflected into the destination file.

5.2 Copy-paste with link a range of cells (inside the current workbook)

5.2.1 Setting up the link

- Select the range of cells in the source worksheet
- Copy to the clipboard
- Activate the first destination cell in the client worksheet
- Paste with a link

This link option is one of the suggested commands of the PASTE OPTIONS tag located at the bottom right of the pasted cells.




You can also select the command in the drop-down list of the PASTE button (option PASTE LINK or PASTE SPECIAL).

 Pasting – with or without a link – always omits the source format, column width ... You will need to add them by showing the PASTE SPECIAL dialog box again.

5.2.2 Modifications

Any change done to a source cell – even its precedents in the case of a formula – will be automatically reflected in the client linked cell or range of cells.

-  The linked cells can be freely modified but the link will be consequently broken (no warning message).

5.2.3 Zero values are added when the range of cells is pasted

When you paste, any *empty* source cell is displayed with a zero. You may delete them or hide them : OFFICE Button – EXCEL OPTIONS Button – ADVANCED Category – DISPLAY OPTIONS FOR THIS WORKSHEET Topic – SHOW A ZERO IN CELLS THAT HAVE ZERO VALUES Option.

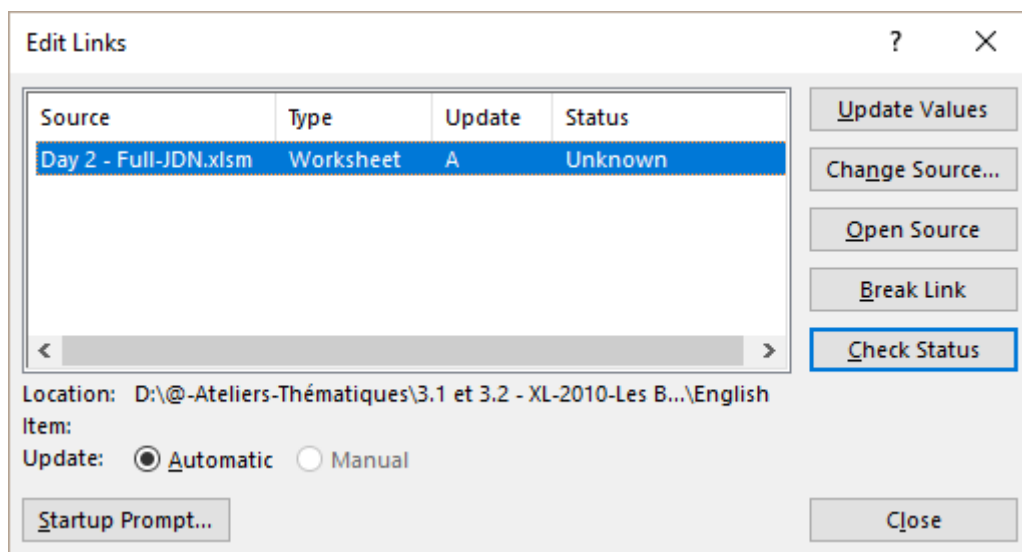
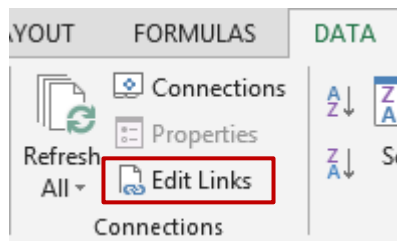
5.3 Copy-paste with a link between two workbooks : DDE link

Copy-paste works just the same.

Any change done to the source workbook will be automatically reflected in the client workbook. If one of the files is closed, no problem, when you will open the client file, Excel will prompt you to confirm the update.

Whatever your choice, links can be managed independently through :

- DATA Tab – CONNECTIONS Group – EDIT LINKS Button



Update Values To update manually (handy when the auto update has failed)

Change Source ... When the source file has been moved or renamed

Open Source The source file is opened

Break Link As a message will warn you : no undo ...

Check Status Checks that there is a link and that it is active. If there is a problem, you could read : *Unknown* or *Error : source not found*

Update

Automatic

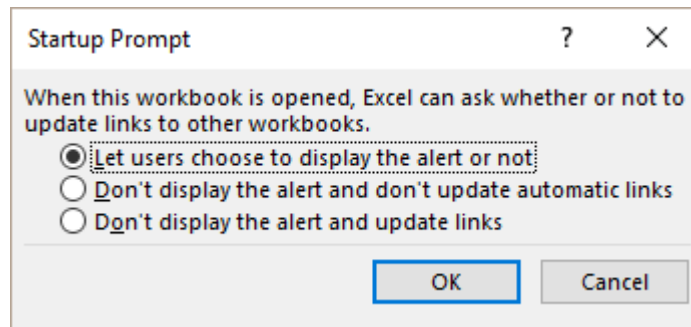
The only choice when Excel files are linked

Manual

For links involving other programs

Startup Prompt

Should Excel update the data automatically and prompt you about it when you open the client file ?

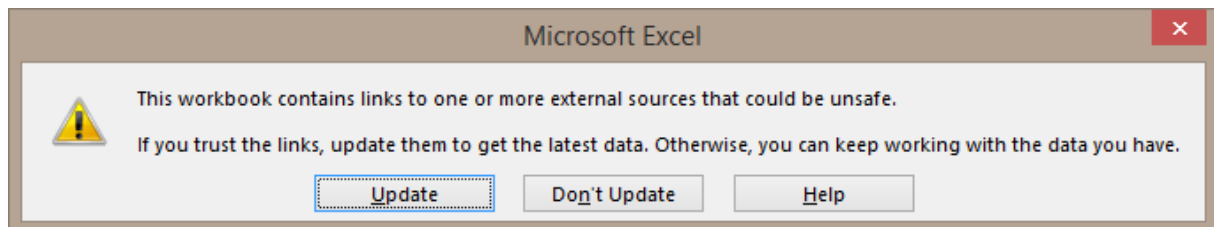


Updating links (in general and not necessarily for THIS workbook) in the EXCEL options :

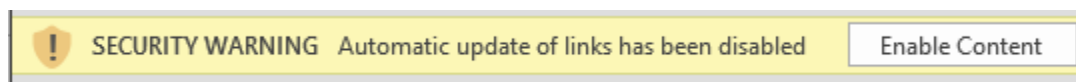
OFFICE Button – EXCEL OPTIONS Button – ADVANCED Category – GENERAL Topic – ASK TO UPDATE AUTOMATIC LINKS Option (activated by default)

Alert :

It can be displayed in the following dialog box :



Or as a warning message in the workbook message bar :

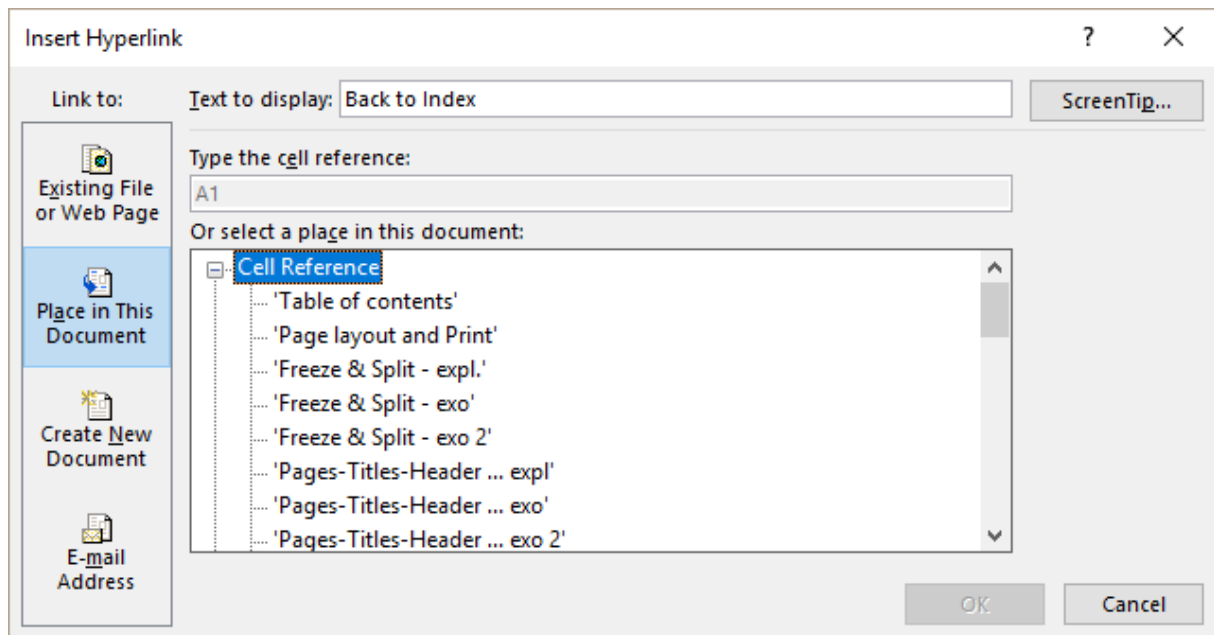


Enable this content → the link is updated.

Note : DDE links are becoming less common now. Indeed, the link path is easily broken when you move the linked files. Resetting the link is fast and easy but 99% of users ignore how to do so

5.4 A special link : the hyperlink

- INSERT Tab – LINKS Group – HYPERLINK Button or right click the cell and same option.



Text to display

The linked text : type the required text but it is good to know that if you have selected the cell, its text is automatically displayed in the text box.

ScreenTip

A tooltip is automatically displayed when you point a hyperlink. The content is in two parts :

1. The web address, the name of the linked file ...
2. The information : *click once to follow. Click and hold to select this cell.*

You can type an alternative text to replace information 1

Existing File or Web Page

You can browse the current folder, recently browsed web pages, recently opened files, run I.E. to find an address ...

BOOKMARK button : a bookmark corresponds to a worksheet or a named cell to which the hyperlink can relate.

You can also type manually any web address.

Place in This Document

Excel lists all the worksheets and also the named cells

E-mail Address

When you start typing the address, the information *mailto* : will be displayed in front of it. Leave as such.

You can then type the text for subject of the message that will be created.

For web addresses and mail addresses, please note that you can also type directly into the cell. They will be automatically converted into hyperlinks when you validate.

FUNCTIONS

1 Relative and absolute references

As long as a formula is not copied there is not abs/rel problem. But as soon as the formula is copied a problem may occur. When Excel reads a reference, it does not read A1 or B5 but rather *the contents of the cell located two cells left of result cell*. Therefore when you copy a formula, in reality you copy the "path". If the cell's address changes but the "path" still falls on the correct cell, no problem. The cell reference is **relative**. But if you work with the contents of a cell *located at a specific place*, then inevitably the "path" will be wrong when you copy the formula because it will point to the wrong cell. Therefore you must tell Excel to *absolutely* use this cell. Hence the name **absolute** reference.

Two classical situations :

- ① When you copy a formula/function DOWN, the ROW NUMBER automatically adapts. It is the case in the screen capture below :

	A	B	C	D	E
1	Adding a tax				
2					
3	VAT (TVA)	8.0%			
4					
			Basic Price		Total Price
5	Price/unit	Quantity	(No tax)	VAT (TVA)	(with all taxes)
6	150	5	750	60	810
7	200	10	2'000	160	2'160
8	250	12	3'000	240	3'240
9	360	20	7'200	576	7'776
10					
11			=A6*B6	=C6*\$B\$3	=D6+C6
12					

- ② When you copy a formula/function TO THE RIGHT, the COLUMN NUMBER automatically adapts. It is the case in the screen capture below :

18	Gross Profit	81'000	88'500	97'000	80'500
19	Estimated Tax	16'200	17'700	19'400	16'100
20	Estimated Net	64'800	70'800	77'600	64'400
21					
22		=B18*\$B\$24			
23					
24	Average tax rate - according to previous years				20%

Example 1 : B3 is an absolute reference

Example 2 : B24 is an absolute reference

How to add the \$ signs ?

When you create the formula/function and you have clicked on the reference to *block* : F4 as many times as necessary to make sure the \$ sign is correctly placed.

Afterwards : edit the formula (double-click, F2 ...), place the cursor inside the reference to *block* and do the same (F4)

True to say, most of the time a formula/function is not copied *down and to the right*. This implies that usually one \$ has no real purpose. But users do not care and leave the \$ sign as it makes no real difference.

But caution, sometimes, blocking **must** be precise, especially when the formula/function is copied down and to the right. Examples :

B4 : ✕ ✓ fx = \$A4*B\$3

	A	B	C	D	E	F	G	H	I	J	K
1	Back to primary school !										
2											
3		1	2	3	4	5	6	7	8	9	10
4	1	1	2	3	4	5	6	7	8	9	10
5	2	2	4	6	8	10	12	14	16	18	20
6	3	3	6	9	12	15	18	21	24	27	30
7	4	4	8	12	16	20	24	28	32	36	40
8	5	5	10	15	20	25	30	35	40	45	50
9	6	6	12	18	24	30	36	42	48	54	60
10	7	7	14	21	28	35	42	49	56	63	70
11	8	8	16	24	32	40	48	56	64	72	80
12	9	9	18	27	36	45	54	63	72	81	90
13	10	10	20	30	40	50	60	70	80	90	100

B8 : ✕ ✓ fx = \$A8*\$B\$4*\$B\$7

	A	B	C	D	E	F
1	Renting houses, apartments We consider that the rental corresponds					
2	to a percentage of the market value.					
3						
4	Annuity		8%			
5						
6		Number of years				
7	Market value	1	3	6	9	12
8	200'000	16'000	48'000	96'000	144'000	192'000
9	300'000	24'000	72'000	144'000	216'000	288'000
10	400'000	32'000	96'000	192'000	288'000	384'000
11	500'000	40'000	120'000	240'000	360'000	480'000

2 Functions

The difference between a function and a formula

Both are used to calculate a mathematical result. For a formula **you** are the mathematician. You choose the cells to be added, multiplied etc... With a function, **Excel** is the mathematician. All you need is to select the right function to solve your problem and indicate the "arguments" or the elements needed by the function to work correctly. The order of the elements is set by Excel.

2.1 Name and arguments

A function starts with =
Is followed by its name
Then an open parenthesis (
Then the arguments arguments * no space but separated with a comma
Ended with a closing parenthesis)

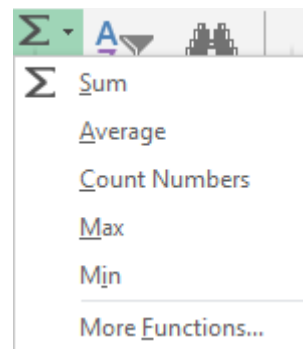
- ✎ If the last parenthesis is omitted, Excel often adds it automatically.
If the function needs no arguments, the parenthesis are simply empty (=TODAY()) for instance).
Capitalized letters makes no difference.
Arguments are usually cell references but you may use named cells, other functions and so on.

2.2 Common functions such as SUM, AVERAGE, MIN, MAX ... TODAY, NOW

- Activate the result cell
- HOME Tab – EDITING Group – SUM Button :
- Click on the SUM button for a standard addition and on the triangle at its right for other functions such AVERAGE, MIN, MAX, COUNT ...

- ✎ The COUNT function (labeled COUNT NUMBERS) counts the number of NON-EMPTY cells containing numbers (omit cells containing text).

- The function is created (you do not have to type the codes). Excel analyses the surrounding cells to find the most appropriate range of cells to add. Click on the SUM button to validate or press the ENTER key.

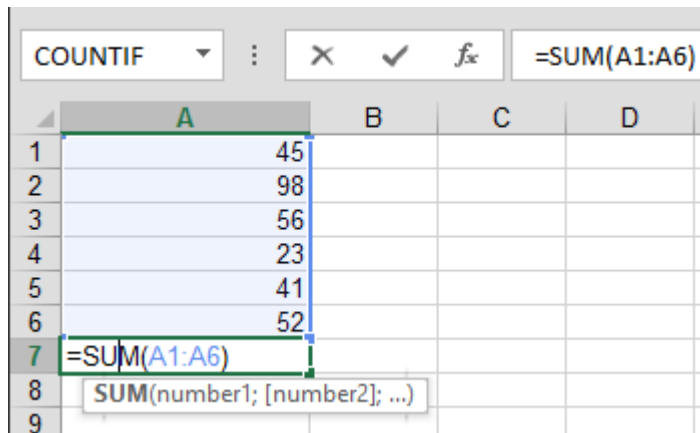


	A	B	C
1	45		
2	98		
3	56		
4	23		
5	41		
6	52		
7	=SUM(A1:A6)		
8			

	A	B
1	16.11.2016	=TODAY()
2	16.11.2016 12:59	=NOW()
3		

2.3 Editing the function to modify it

Edit the cell contents (double-click, F2 ...)

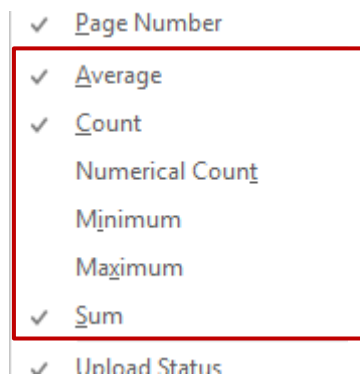


The references used in the function are circled, each one with a different color. You can click and drag the border to change cells. You can also click and drag the auto-fill handle to include additional cells

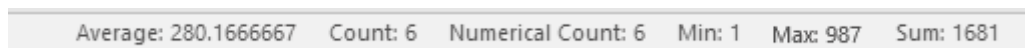
2.4 Functions and Status Bar

First check which functions are activated (right click the Status Bar).

By default when installing Office : AVERAGE, COUNT and SUM

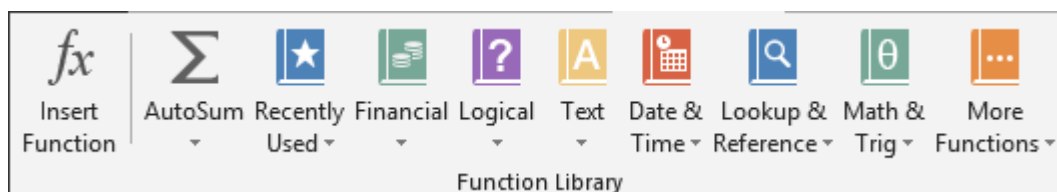


Select the required range of cells and the Status Bar will display the result (caution, it is only an information – no copy-paste)



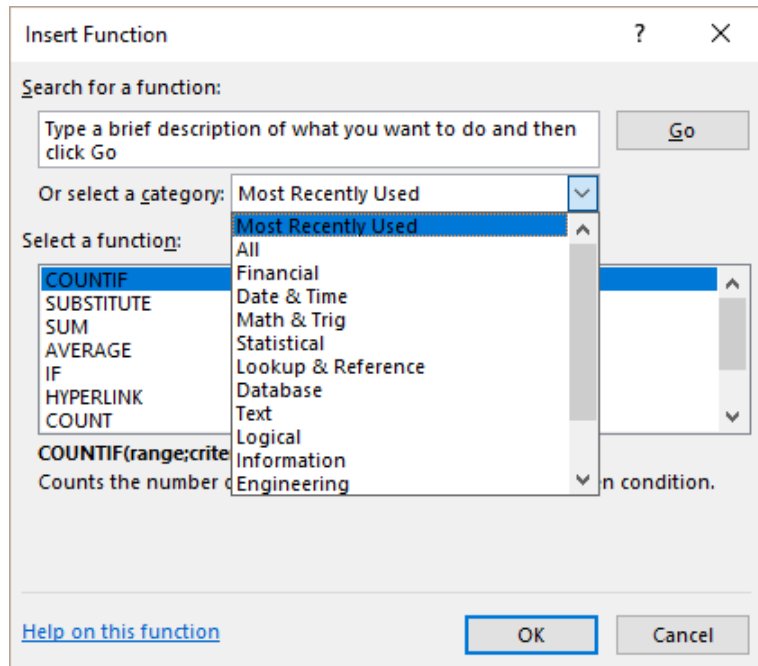
2.5 Building the function using a dialog box

- FORMULAS Tab – FUNCTIONS LIBRARY Group



- INSERT A FUNCTION Button :

Other access to this dialog box : the MORE FUNCTIONS option at the bottom of the drop-down list of the SUM button (HOME Tab)



Do not hesitate to click on the blue information *Help on this function*. The online help will automatically display help on this function. Handy and useful as there are lots of explanations, details and samples.

Here below an example of « statistical » functions – the COUNTIF function – that counts the number of cells matching the given criteria :

	A	B	C	D
1	Questions	John	Jack	
2	Is your interest on current or historical information ?	Yes	No	
3	How long would you expect the MKC to hold items of interest (in months) ?			
4	How many newspapers do you read per week ?	1	3	
5	How many radio channels do you regularly listen to ?	1	2	
6	Are you a member of any professional organization ?	Yes	No	
7	Could it be used to get publications at reduced prices ?	No	No	
8				
9	Number of questions	6		
10				
11		John	Jack	All
12	How many answers	5		
13	Questions not answered	=COUNTIF(B2:B7;"No")		

Function Arguments

COUNTIF

Range: B2:B7 = {"Yes";0;1;1;"Yes";"No"}

Criteria: "No" = "No"

= 1

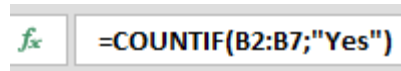
Counts the number of cells within a range that meet the given condition.

Criteria is the condition in the form of a number, expression, or text that defines which cells will be counted.

Formula result = 1

[Help on this function](#) OK Cancel

Back into this box : activate the cell containing the function and click on the Fx indication in the formula bar

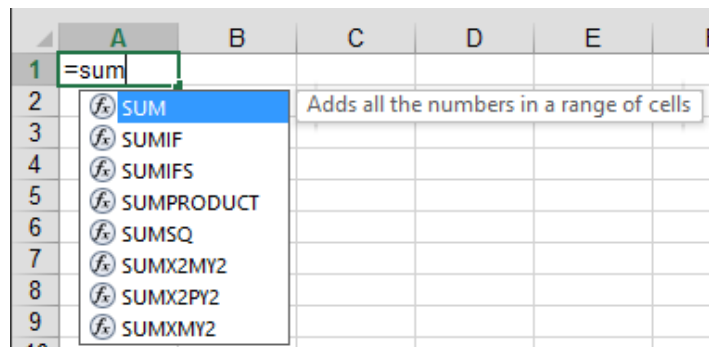


- *If the cell is empty* : clicking on the Fx indication opens the functions general dialog box to let you select the required one. *If the cell already contains a function* : back into the function dialog box.

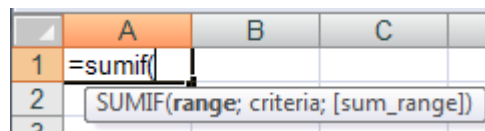
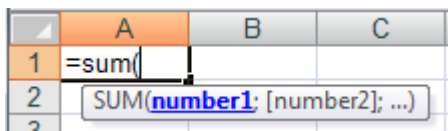
2.6 Building the function manually, using the semi-auto list

A handy method, especially when you know the function because you have used it before but you are not sure about the order of the arguments, the argument spelling and so on.

- Activate the result cell and start typing the function name
- As soon as you start typing, Excel displays a list of functions starting with the typed characters :



- Select the required function and double-click (or press the TAB key if it is the first one) : (made a mistake ? BACKSPACE to revert to the list). If the function does not get displayed in the list, continue typing, it should appear when you type the first parenthesis :



Excel displays the required arguments, the first one in bold characters.

Select the appropriate cell reference for each argument. Each argument must be separated with the Windows « list separator » : semi-colon sign for a French Windows and comma for an English Windows. As soon as you type the separator, the next argument is selected.

Arguments in brackets are optional (do not type the brackets).

Example : the previous COUNTIF function

5	How many radio channels do you regularly listen to ?	1	2
6	Are you a member of any professional organization ?	Yes	No
7	Could it be used to get publications at reduced prices ?	No	No
8			
9	Number of questions	6	
10			
11		John	Jack
12	How many answers	5	
13	Questions not answered	1	
14	How many Yes	=COUNTIF(B2:B7;)	
15	How many No	COUNTIF(range; criteria)	
16			

2.7 Some error codes and their meaning

#DIV/0!	The function tries to divide using a 0 value or an empty cell.
#N/A	The function has no value for the given argument.
#NOM?	The function is not valid or the named reference does not exist.
#REF!	The function contains an invalid reference.
#VALUE!	The function contains an argument of the wrong type.

2.8 3D references

They are used to build a function such as SUM, PRODUCT ... over multiple sheets, provided that the required cells are all located at the same address on each sheet :

- Click on the result cell
- Click on the SUM button or create the PRODUCT function ...
- Click on the first sheet on the first required cell
- SHIFT + click on the last sheet of the group (impossible to use the CTRL key)
- Press the ENTER key to validate (caution : no navigation)

Most of the time you may simply copy the result formula across a table.

Caution : if this "consolidation" works on tables of different size, with a different location ... you should rather choose the DATA – CONSOLIDATE command.

3 Using names

Use

Quick navigation to a specific cell or range of cells

Fast indeed as one click and the named cell can be access from anywhere in the workbook.

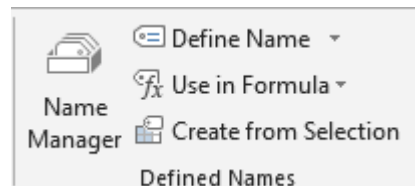
Replacing the reference to a cell or range of cells while building a formula

As for instance : = B23*(C12-F34) fare clearer if = Tax*(Total-Discount).

By default, a name refers to an absolute cell or a range of cells

Names are linked to formulas/functions.

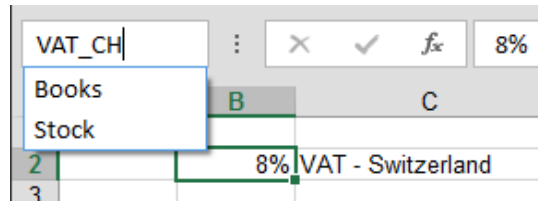
FORMULAS Tab - DEFINED NAMES Group


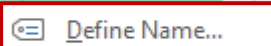
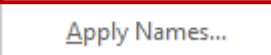


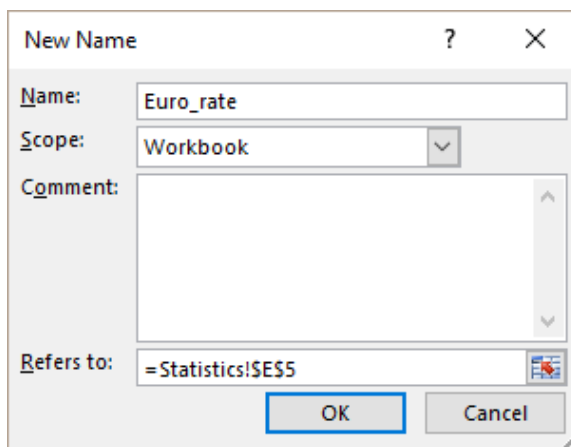
3.1 Assigning a name to a cell or a range of cells

- Select the required cell(s).

- 1 Click in the *Name Box* and type directly the required name.
Press ENTER to validate





- 2   



Type the name : *space and dash* are not accepted.
The name can include numbers but should not *start* with a number.

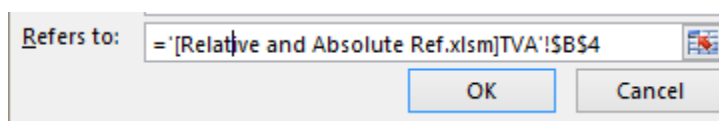
Click on the ADD button

 You can click on  to select the cell directly in the worksheet. Then click again on the same button or press ENTER to retrieve the box.

 When copying a cell, the name is also copied.

The reference can be external to the sheet : another sheet or even another workbook.

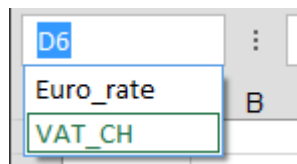
- Drop-down list of the DEFINE NAME button
- At topic « Refers to : » : delete the reference.
- Type the = sign
- Activate the destination sheet or workbook.
 - The box will show the reference full path :



3.2 Navigation : accessing a named cell or range of cells

1

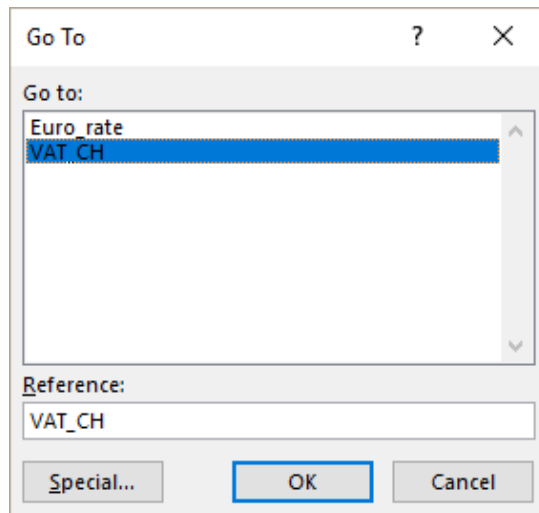
Fast and easy : select the required name from the drop-down list of the *Name Box*



2

HOME Tab – EDITING Group – Drop-down list of the FIND & SELECT Button – GO TO Option or faster: F5

Names are listed first.
Double-click

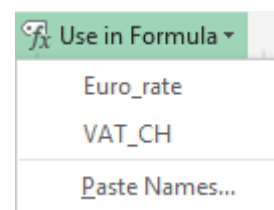


3.3 Using a name in a formula or function : paste a name

- 1 Type the = sign and type the name
Carry on building the formula or function as usual
- 2 Click into a result cell - *no need to type the = sign.*
You cannot display the drop-down list of names of the Name Box, because once the = sign has been typed, Excel works in the « math mode » and the drop-down list now displays Excel functions.

Consequently click on the USE IN FORMULA button (FORMULAS Tab – DEFINED NAMES Group) :

Select the required name :

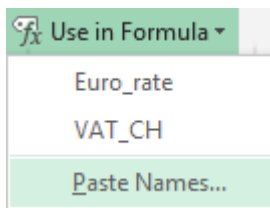


Excel inserts the name into the formula or the function you are building :



- 3 When building a formula or a function, click on the required reference. If it happens to be a named cell, Excel automatically uses the name rather than the address. Handy.

3.4 Pasting all the workbook names into the current worksheet



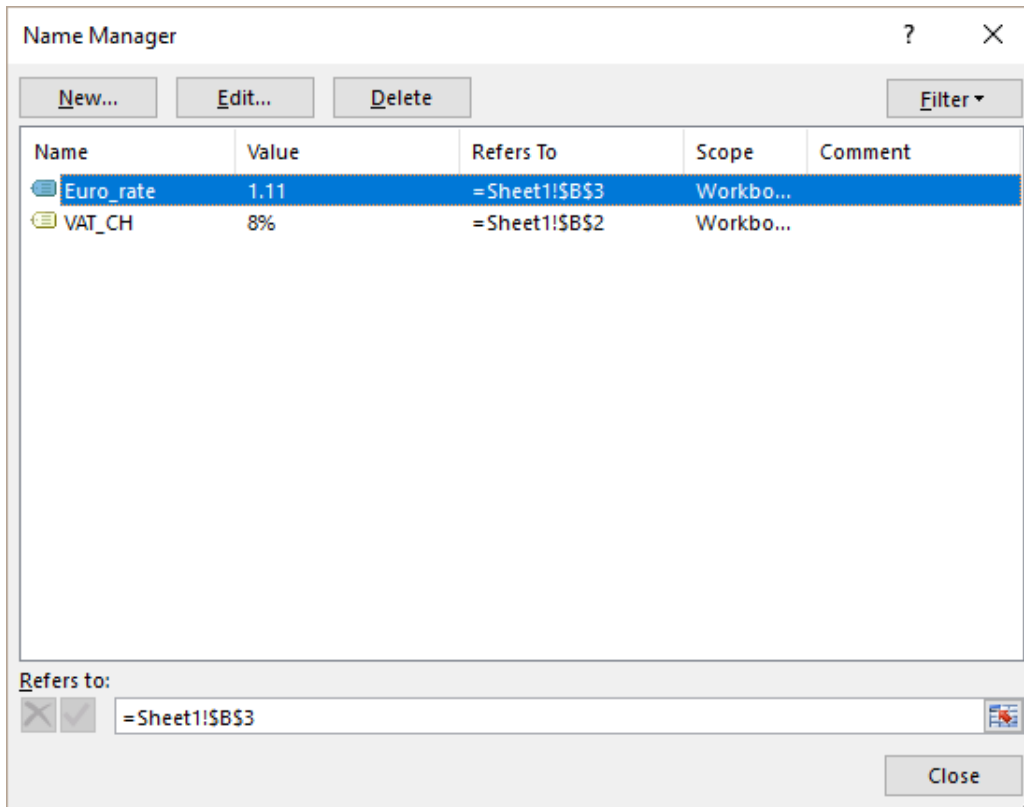
Click on the PASTE NAMES options and then on the PASTE LIST button

The list of names and their references is pasted into the current worksheet, starting at the position of the active cell :

7	CH_VAT_Rate	=Sheet2!\$D\$3
8	Euro_rate	=Sheet2!\$D\$2

3.5 Managing names

- NAME MANAGER Button



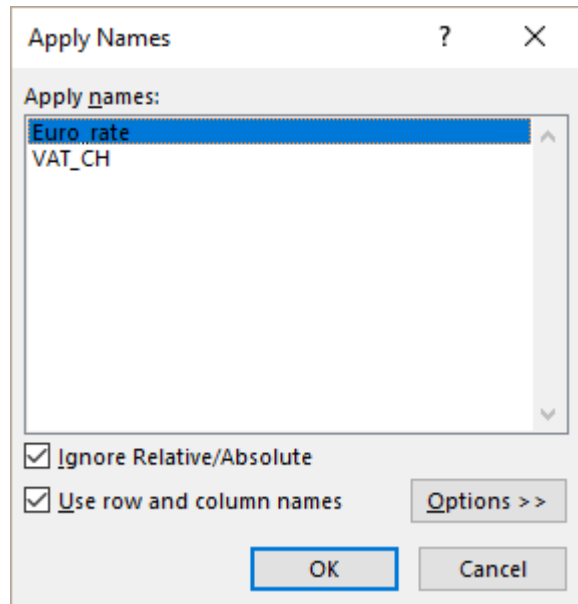
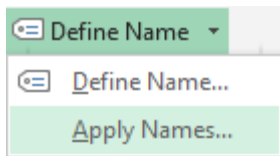
The buttons are clear : select the required name and you can edit it, delete it ...

3.6 The cell has been used several times before you named it

You'll want to **APPLY A NAME**. This will replace the references with their names ("amount" instead of A3).

No selection
A selected range of cells

The operation is performed for the whole worksheet
The operation is applied to the range
formulas/functions



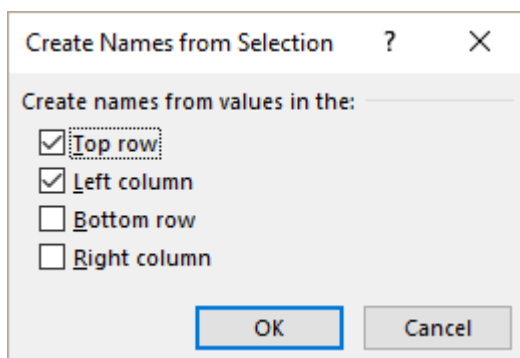
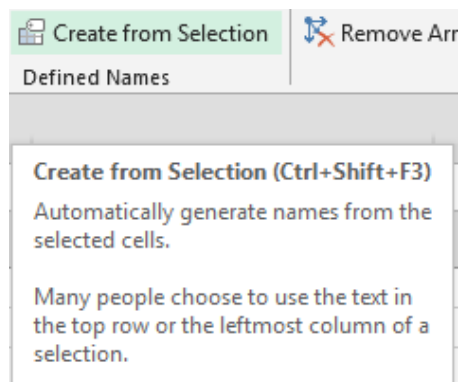
Multiple selection is possible (click on all required names)

3.7 Special and less common : naming the rows and columns of a table

An Excel worksheet often contains labels describing the data. They are usually located at the top and at the right of a table. As in the table here below :

	A	B	C	D
1	<i>Sales</i>	<i>Hardware</i>	<i>Software</i>	<i>Services</i>
2	<i>HP</i>	100	200	300
3	<i>Compaq</i>	200	250	200
4	<i>Dell</i>	300	150	350

- Select the whole table – including the label row and column



The ranges of cells are automatically named. Go to the name "Software" and *Compaq, Hp and Digital* sales will be automatically selected :

Software				
	A	B	C	D
1	<i>Sales</i>	<i>Hardware</i>	<i>Software</i>	<i>Services</i>
2	<i>HP</i>	100	200	300
3	<i>Compaq</i>	200	250	200
4	<i>Dell</i>	300	150	350

You can then enter named range in a formula : such as `=SUM(Compaq)` or `=SUM(hardware)`.

You can refer to a specific cell in the table by simply indicating the corresponding row and column label, separated with a space. This space is called *the intersection operator*. While you are typing, the referred named cells are colored :

	A	B	C	D	E
1	<i>Sales</i>	<i>Hardware</i>	<i>Software</i>	<i>Services</i>	
2	<i>HP</i>	100	200	300	
3	<i>Compaq</i>	200	250	200	
4	<i>Dell</i>	300	150	350	
5					
6	<i>Compaq sales for Software are :</i>			<code>=Compaq Software</code>	
7				<code>Software</code>	

The result when you validate : 250

NAVIGUATE

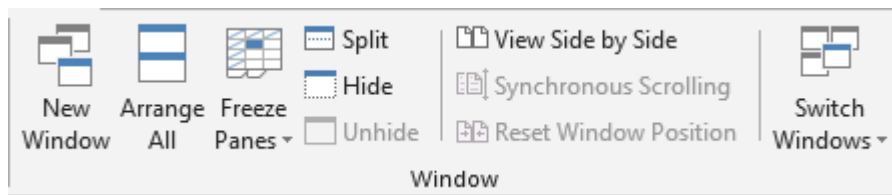
-

ARRANGE

-

COMPARE

The button of the WINDOW Group (VIEW Tab)



1 Freezing / Splitting to help navigation and data typing

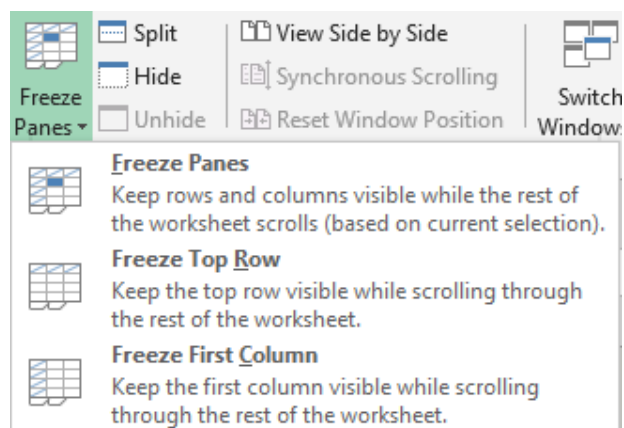
To see simultaneously the beginning and the end of a long table as shown in the screen capture below :

	A	M	N	O	P
3					
4	Salaries and expenses	31.12.16	31.01.17	28.02.17	31.03.
5	Monthly salary / fixed	4'000	4'000	4'000	4'00
6	Monthly salary / pourcentage	3'960	3'960	3'960	3'96
7	Family allowance	400	400	400	40
8	Bonus				
9	13 th salary	5'950		5'951	
10	Total	14'310	8'360	14'311	8'36
11					
12					
13	Salaries and expenses	31.12.16	31.01.17	28.02.17	31.03.
14	Rent	2'500	2'500	2'500	2'50
15	Tax	850	850	850	85
16	Health insurance	800	800	800	80
17	Fixed annual expenses (car, house ...)	1'000	1'000	1'000	1'00
18	Food	1'200	1'200	1'200	1'20

1.1 Freezing (active sheet only)

To freeze one or more columns / rows at the left / top of th sheet (so that labels are always visible).

- VIEW Tab – WINDOW Group - FREEZE PANES Button



Freeze Panes

The command freezes directly at the position of the active cell. Consequently you must be “under” and “at the right” of the crossing

Freeze Top Row The freezing is applied to row 1 only.

Freeze First Column The freezing is applied to column A only.

1.2 Splitting (active sheet only)

- VIEW Tab – WINDOW Group – SPLIT Button.


Caution : the position of your active cell or your selection is most important

Crossing Active cell at the crossing (it must be located « below » / at the « right » of the crossing)

2 panes Select the row/column or activate the first cell of row/column.

Main characteristics : navigation is free in each pane. That is the reason why you may scroll separately in the split panes and end up showing twice the A column. But caution, though you may navigate independently, there is really only one worksheet. *Splitting is rarely used for 1-2 rows/columns but rather when you need to split right in the middle.*

Splitting is rarely used for just one or two columns / rows. Splitting is really handy when you need a « middle » split.

 Shortcuts ? Up to the 2010 release, it was possible to drag a vertical or a horizontal splitting cursor, which was handy as it avoided going through a menu. Office 2013 is has been designed for tactile monitors and these cursors have been removed.

To modify Drag the splitting cursor.

Crossing : drag the crossing.

2 panes : drag the separation line.

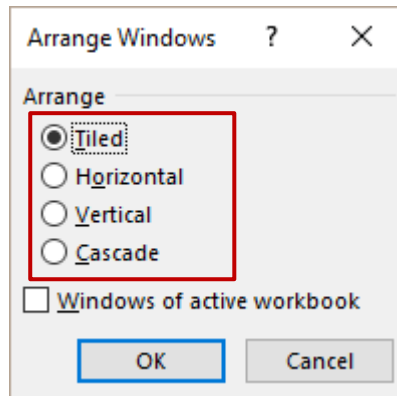
To remove Double-click the splitting line or click again on the SPLIT button.

 **Freezing / Splitting is only a SCREEN TOOL and has nothing to do with printing titles, that is explained in the chapter *Print titles* at page 103.**

2 Arranging active workbooks on the screen to help data input

Aim : work on several workbooks by viewing all of them at one glance ...

- Close unnecessary workbooks or minimize them if you do not want to close them
- VIEW Tab – WINDOW Group – ARRANGE ALL Button
- Select the type (tiled, horizontal ...) :

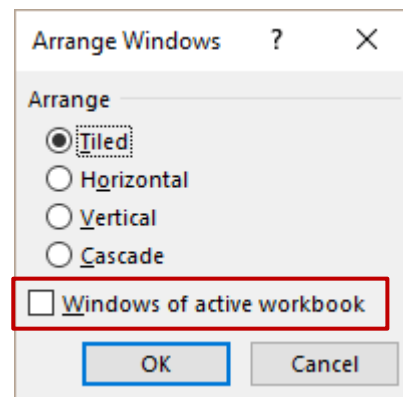


3 Arranging the workbook active sheets to help data input

- First you'll want to create a *new window for each sheet you wish to display* : VIEW Tab – WINDOW Group – NEW WINDOW Button (you need to display 4 sheets, do it 3 times).

Each new window displays the following indication in the title bar : : xxx :2, xxx :3 ...

- VIEW Tab – WINDOW Group –ARRANGE ALL Button
- Select the type (tiled, horizontal ...) and do not forget to turn on the *Windows of active workbook* option.



Then activate the required sheet in each *window*.

Back to a « normal » view : close every additional window.

4 Hiding a sheet

You may need to hide a worksheet because you want to avoid people consulting personal comments, intermediate calculations etc ...

Hide


- Right click the tab of the required sheet
- HIDE

Unhide

- Right click the tab of any sheet
- UNHIDE ...
- A dialog box lists all the hidden sheets. Select the required sheet and OK

 Or : HOME Tab – CELLS Group – FORMAT Button – HIDE & UNHIDE Option ...

Please note there is no **security** linked to this command. No password to unhide a hidden sheet for instance. You could decide to hide all tabs (this can be set in the EXCEL OPTIONS – ADVANCED Category) but you will need to set another method to navigate from sheet to sheet.

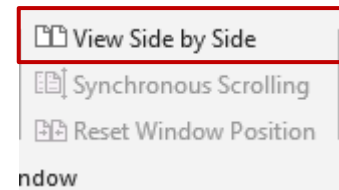
-  Caution with the HIDE button on the VIEW Tab – WINDOW Group. It is NOT AT ALL EQUIVALENT. This button *hides the workbook*. The UNHIDE button below will unhide let you retrieve it.

Use ? rarely used by standard users but rather by developers whose macro sometimes needs to run commands on active but hidden workbooks.

5 Comparing two workbooks side by side

- Open both workbooks
- Activate the workbook you wish to display on the left
- VIEW Tab – WINDOW Group – VIEW SIDE BY SIDE Button :

If more than two workbooks are open, a dialog box will list all active files.



- Both workbooks are arranged on the screen, each one occupying half of the screen. They are usually arranged *horizontally*. If you prefer a *vertical* arrange, click on the ARRANGE ALL button in the same group to change.
- There is a synchronous scrolling and this is what makes this command so interesting.



Synchronous Scrolling : to turn on or off momentarily



Reset Window Position : back to a horizontal arrange

6 Creating a *workgroup* to help data input and formatting

6.1 Creating a workgroup

First you need to select the sheets to be grouped :

- | | |
|---|--|
| Several non contiguous sheets | CTRL + click on all required sheets. |
| A group of contiguous sheets | Select the first one then SHIFT + click on the last one. |
| Remove the selection of a sheet inside a group | CTRL + click on the sheet tab. |
| Select all sheets in the workbook | Pop-up menu and option SELECT ALL SHEETS. |

The title bar indicates that a workgroup has been created.

Type data, formulas, create functions, modify the width of some columns, apply various formats ... **every single command will be applied to all sheets.**

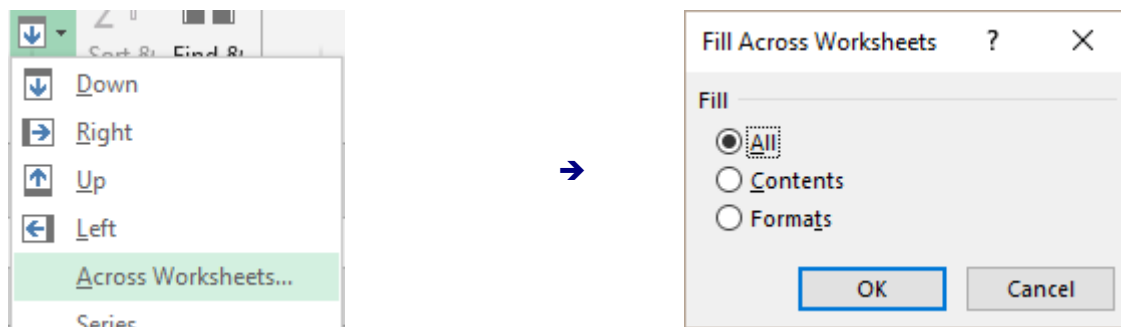
6.2 Removing the workgroup

The workgroup is **not** made up of all sheets


- Click on a sheet out of the workgroup Or
- Click with the mouse right button on any selected sheet tab and choose the option UNGROUP SHEETS.

The workgroup is made up of **all** sheets

- Click on any sheet Or
 - Right click any sheet tab, then choose the option UNGROUP SHEETS.
- 💡 When you close a workbook, any existing workgroup is saved along with the file. Avoid this so that you do not open the file later on and end up with an unwanted workgroup. You might then work on the active sheet and later notice that your input has been applied to other sheets.
- ✎ If you need to retrieve data with or without its format onto other sheets (because you have forgotten to create a workgroup) : select the required sheets (the one containing the data and the others) and HOME Tab – EDITING Group

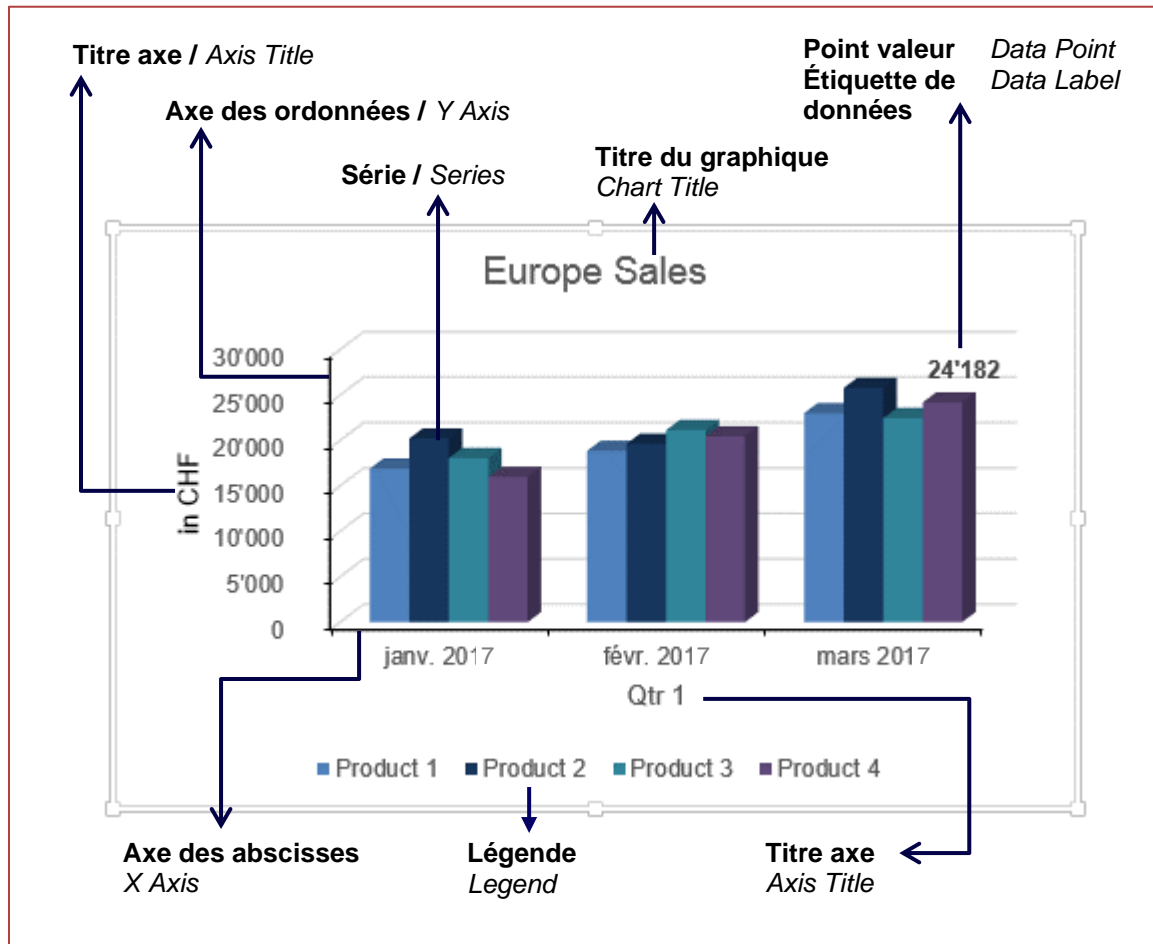


CHARTS (SIMPLE)

 This functionality is also accessible through the quick analysis tag (bottom right of the selected range of cells). See chapter about it at the end of the documentation).

1 Generalities

1.1 Words specific to charts



The Y axis displays the series *values* (*figures*)

The X axis displays the *categories* (« *the analysis ratio* » - *timely or other*)
(exception : bar, XY(scatter) and bubble charts)

1.2 What should you select to create a chart ?

Select :

- What will become the X axis (horizontal) categories
- What will become the Y axis (vertical) and the series (the figures)
- The figures labels that will generate the legend

Excel will try to build the chart using your selection. To determine the future X and Y axis, Excel expects to find dates. They will be automatically considered as a timely analysis and will become the X axis of categories.

But caution, if it is easy for Excel to recognize a *Jan-14* it is impossible for Excel to understand *Qtr 1, Zone 1* etc. In this latter case, Excel will proceed according to the number of rows and columns. The highest number is systematically understood as the future X axis.

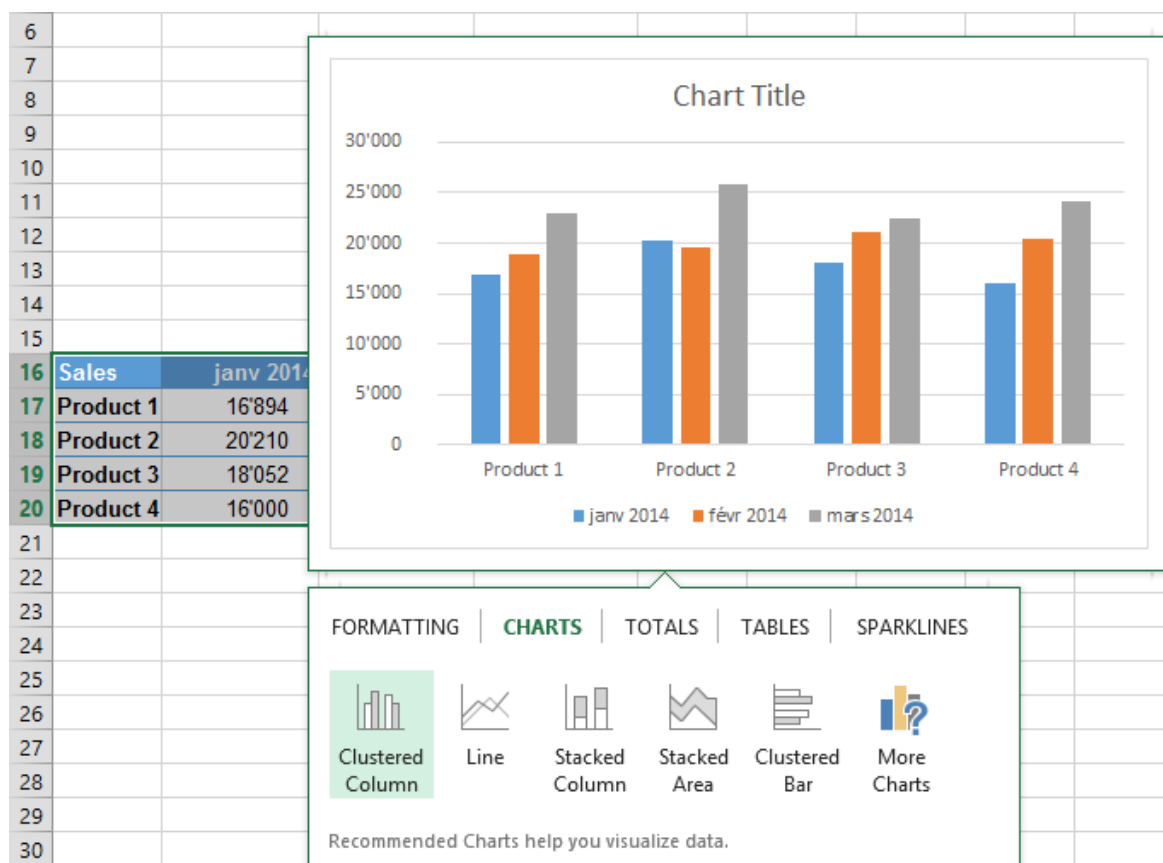
If what Excel automatic creates is not what you expect and need, the commands related to charts include a *Switch Row/Column* option.

2 Creating the chart and choosing its type

2.1 Get some help to create the chart

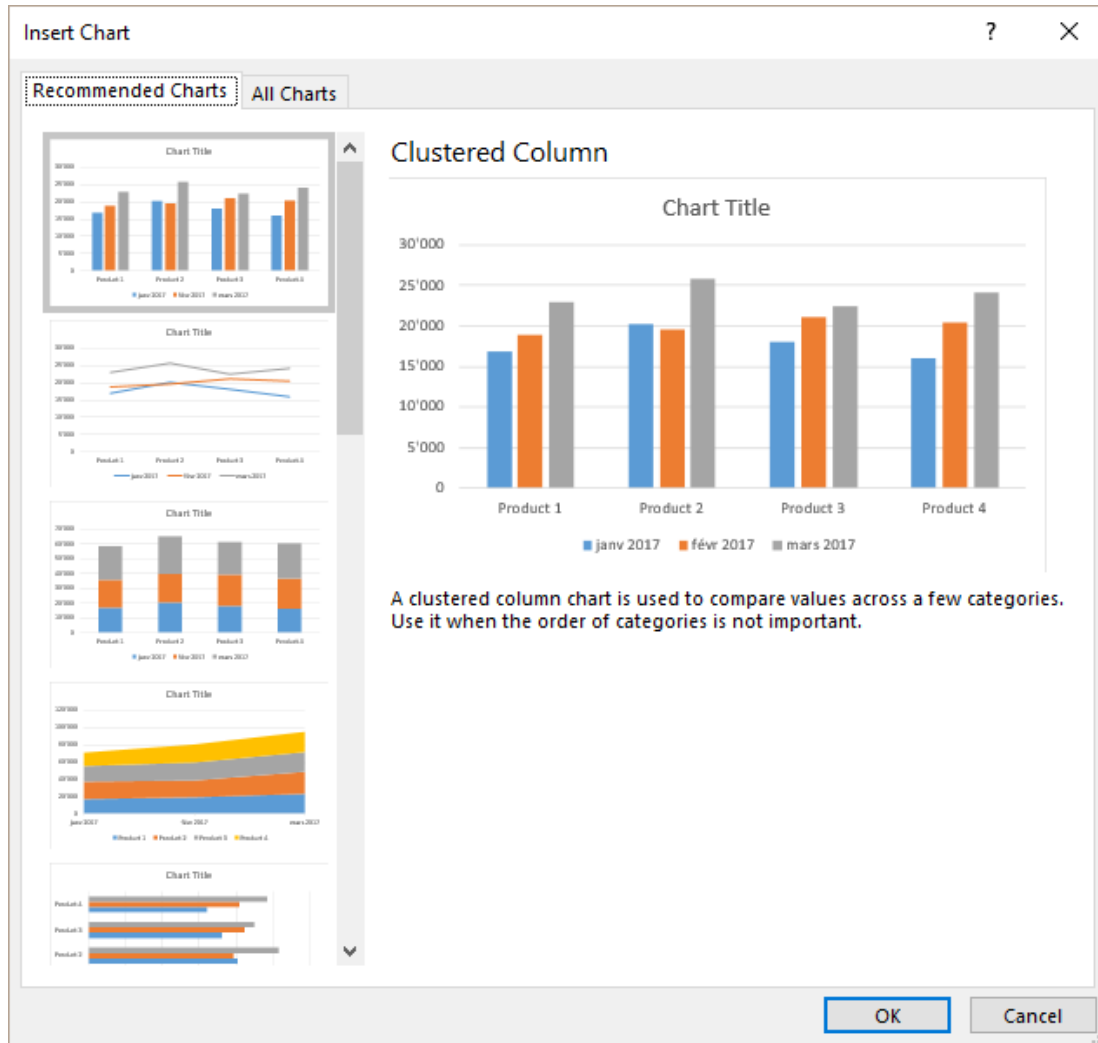
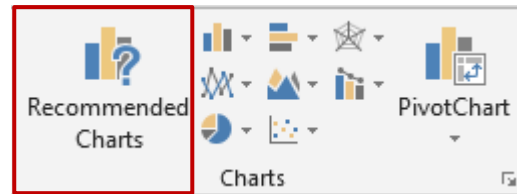
- Select the source data
- The quick analysis tag will be displayed at the bottom right of your selection :
- Click at the CHARTS section and **point** the required chart. Excel will display the chart.
- Click to validate the suggestion : the chart is inserted onto the worksheet.

mars 2017
23'000
25'784
22'458
24'182



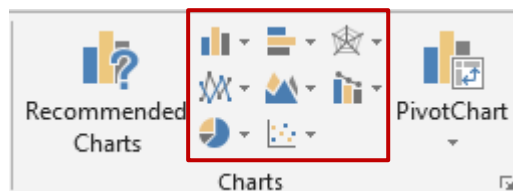
2.2 Using RECOMMENDED CHARTS to create the chart

- Select the source data
- INSERT Tab – CHARTS Group



2.3 Making a personal choice to create the chart

- Select the source data
- Select the type of chart : INSERT Tab – CHARTS Group



The default colors for charts are chosen according to your active theme.

The chart is always linked to its source data. Any change in the source data and the chart will be automatically updated accordingly.

The Ribbon displays two additional tabs : DESIGN and FORMAT.

Use the commands of the *DESIGN* tab to work globally on the chart (select the source data, change the chart type and so on)

Use the *FORMAT* tab to add drawn shapes and format them

Three buttons are displayed at the top right side of the chart


Use the *plus* button to add elements to the chart

Use the *brush* button to work on the chart format

(you can also use the corresponding buttons on the Ribbon – the possibilities are the same)

Use the *funnel* button to filter data



 Keyboard shortcuts to create a chart : select the data and **ALT + F1** for an **embedded chart** (on the same sheet containing the source data) and **F11** for a **chart in full page** (a new chart sheet is created). By default : the previous shortcuts create a column chart.

2.4 Location, size and deletion

The chart is an *object*, you may manage it as any standard drawn shape, picture and so on.

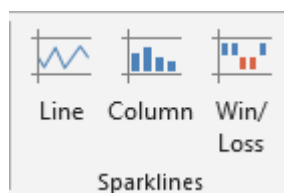
Location : click and drag the chart as required, but make sure not to drag a sizing handle or an inside element. (if you right click and drag the chart, a shortcut menu will be displayed and will offer the choice between *moving* or *copying*. If you click and drag the chart while pressing the ALT key, you will follow the underlying cells).

Size : click and drag a sizing handle. These handle are the three little dots located at each corner of the chart and also in the middle of each side. There is no problem of proportionality as with pictures.

Delete : click anywhere else than onto an inside element (border, white area ...) and press the DELETE key.

3 Sparkline charts

- INSERT Tab:



3.1 What is it ?

A sparkline chart is a sort of « mini-chart » inside a cell. Indeed you could type text inside the cell showing a sparkline even though it might not be the best idea (bad readability).

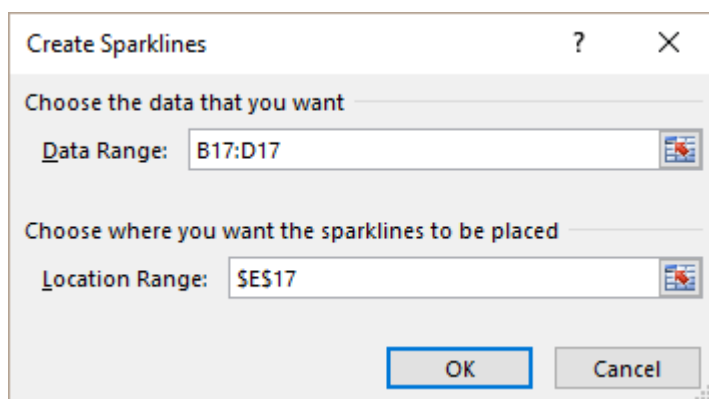
The sparkline charts are handy especially because they take up very little space ...

2	<i>Additional seasonal workers</i>			
3		Business	Agriculture	Tourism
4	January	2%	1%	1%
5	February	2%	1%	1%
6	March	2%	1%	1%
7	April	2%	1%	1%
8	May	2%	10%	5%
9	June	2%	12%	8%
10	July	4%	15%	15%
11	August	4%	20%	15%
12	September	2%	15%	8%
13	October	2%	10%	1%
14	November	8%	1%	1%
15	December	10%	1%	10%
16	Sparkline			
17				

3.2 Creating

It is not necessary to select the data as you would for a traditional chart.

- Select the select into which you need to insert a chart
- INSERT Tab – SPARKLINE Group
- Select the type of chart. You can choose from LINE – COLUMN and WIN/LOSS
- Here below the dialog box



As for functions and other calculations, the range of cells can be relative references (this will let you create contiguous charts with a simple click-and-drag operation) or they can be absolute references.

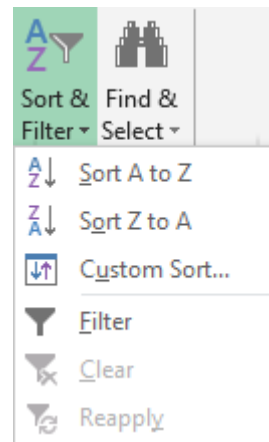
Check if necessary the destination cell

A tab dedicated to sparkline is automatically displayed on the Ribbon

SORT AND FILTER (Simple)

1 Sorting

HOME Tab- EDITING Group - SORT & FILTER Button
(right end)



The label depends on the nature of the data in the column

Sort A to Z → Text

Sort Smallest to Largest → Numbers

Sort Oldest to Newest → Dates

The rest of the functionality commands as well as others related to it, are located on the DATA Tab, the SORT & FILTER / DATA TOOLS / OUTLINE groups.

1.1 Important rules about sorting

Sorting is impossible

Sorting is not possible if the table contains merged cells. But it is a little bit tricky as Excel allows you to set custom sorting keys but when you perform the sort, a warning message will be displayed telling you it is not possible.

If the active cell is not inside the cell, the following warning message will be displayed : *the command could not be completed by using the range specified. ...*

Header row or not ?

Usually tables have header rows but it is not compulsory. However, sorting is more difficult as Excel will display the column fields as *Column A*, *Column B*, *Column C* instead of *LastName*, *FirstName*, *Address* for instance.

Default sorting order

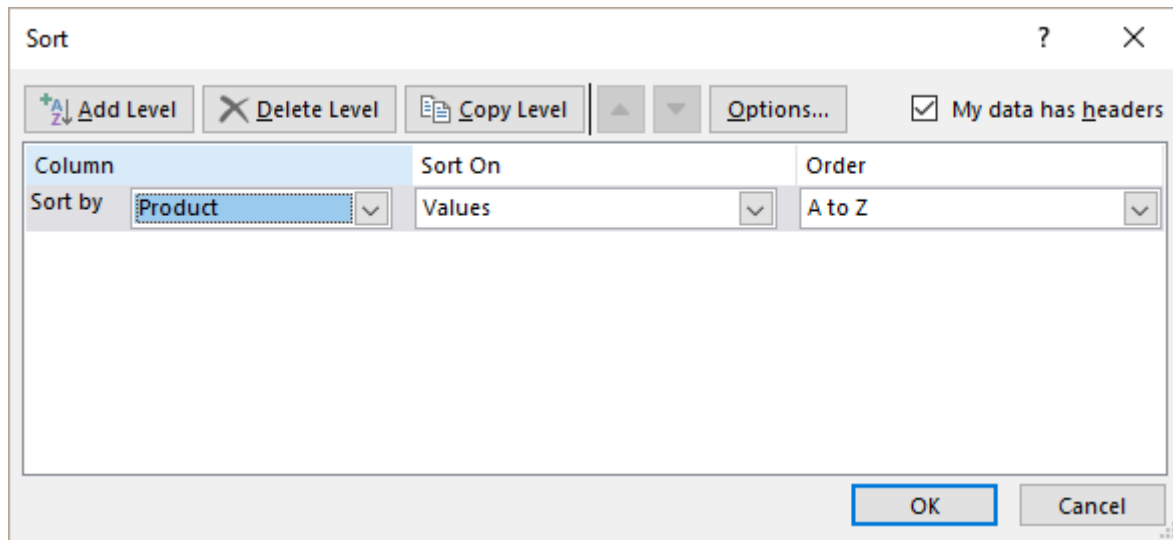
Numbers – punctuation signs – text (no difference between small letters and caps) – logical values – error values – empty cells.

1.2 Standard sorting

The  and  commands from the drop-down menu of the SORT & FILTER button.

1.3 Custom sorting

- CUSTOM SORT



* *Sort On - Values* : the word *Values* means *data* as opposed to *cell color*, *icon*. It does not refer to *numbers*.

Multi-level sort

- You can add up to a maximum of 64 keys

Multi-level sort will give you the possibility to sort first by *Number of years in the company*, then by *Department*, then by *Name* ...

Selecting a level

Click between two levels. It will be more comfortable

ADD LEVEL Button

An empty key is added *after the selected level*

DELETE LEVEL Button


The selected level is deleted. No confirmation message

COPY LEVEL Button

The selected level is copied after the current one

Arrows

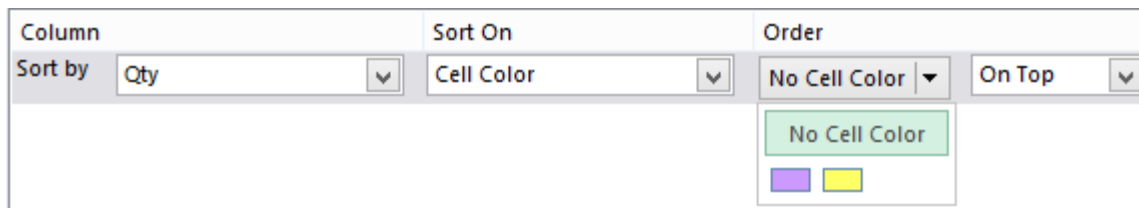
To change the keys order

 Performing a multi-level sorting does not force you to work with the custom sort dialog box. You may also perform simple sorts, in sequence by using the AZ / ZA commands or buttons but remember to *go from the lowest level to the highest level*.

 Sorting keys remain active in the above dialog box, provided you do not add a new record at the end of the list (in the middle : it is OK).

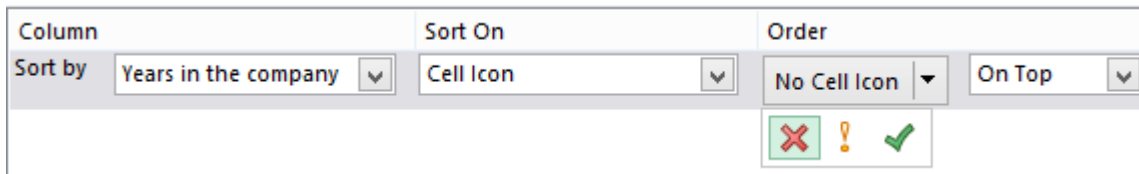
Special criteria: cell color and icon

- You can sort on the cell fill or font. Here after an example of sorting on fill color:



When working with colors (fill or font), order does not mean that you can sort *first* on a color, *then* on another one ... In this latter case, simply apply successive sorts.

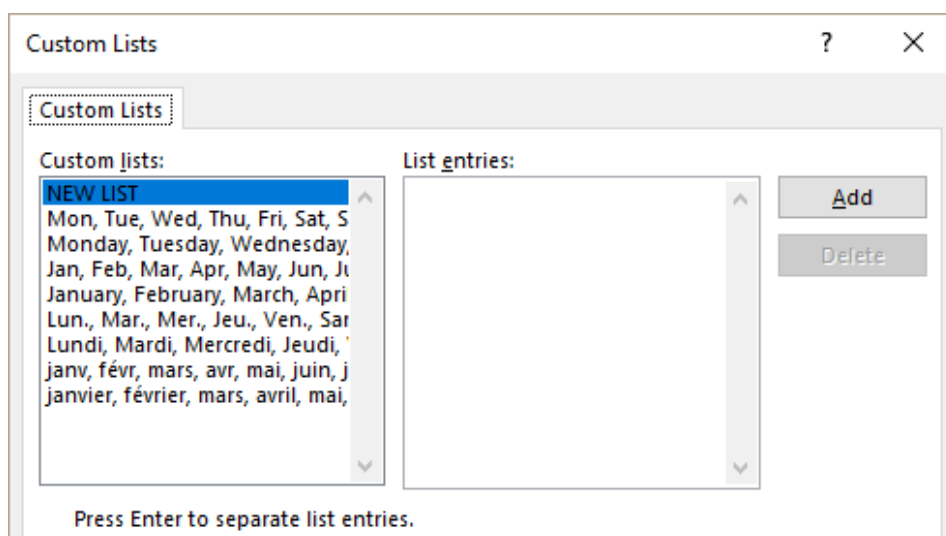
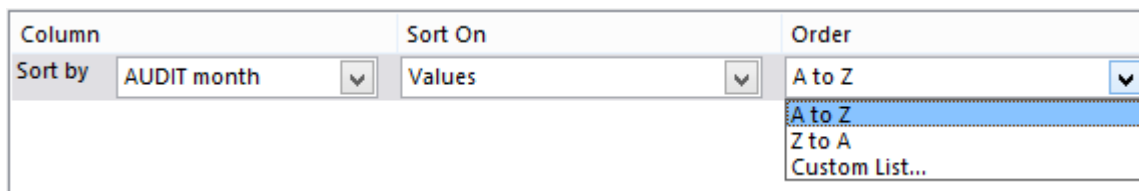
You can sort on the cell icon – coming from a conditional format applied to the column :



Click on the **OPTIONS** button for additional settings : CASE SENSITIVE and ORIENTATION (sort direction).

Sorting on custom lists

What to do when you need to sort on a column containing *text dates* (months typed as standard text for instance) ? By default Excel will apply an A to Z sort and the result will be : *April, August, December, February* ... Here below the solution :



Select the list that corresponds to the characters used in the column (Caution : Excel does not understand abbreviations).

These lists are the standard Excel custom lists that you certainly regularly use to create series : (from one given element : click and drag using the autofill handle and Excel automatically creates the corresponding series).

These lists can also be checked, modified, created ... through : FILE – OPTIONS – GENERAL Category – (nearly at the bottom) - EDIT CUSTOM LISTS Button.

2 Standard filtering

2.1 Turning on the autofilter mode

Three methods :

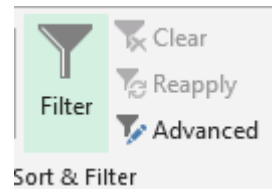
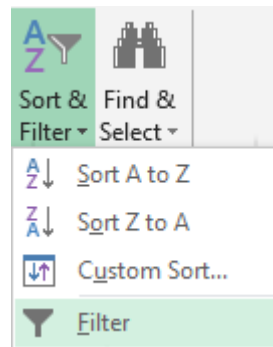
Note : sorting options are also in the list - handy

Data table

HOME Tab – ÉDIT Group – SORT & FILTER Button – FILTER

DATA Tab – SORT & FILTER Button – FILTER Button

Automatically on

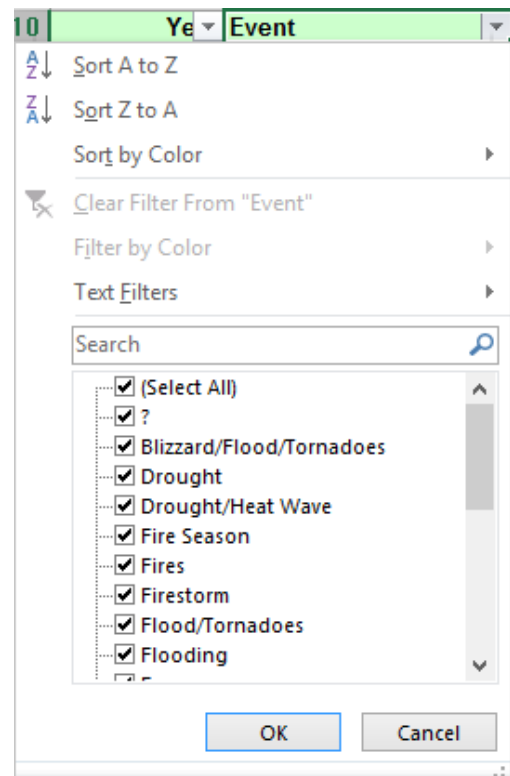


Turn on the autofilter mode and the filtering triangles will be displayed at the right of every column field, with the following drop-down list of options :

The list retrieves all the column entries – appearing at least once. Maximum entries that can be displayed : 10'000 (Microsoft help file). Search zone : handy with a great number of entries.

If there is at least one empty cell in the column, the list of entries will end by *Blanks*

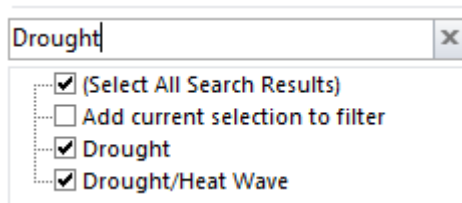
*The first section relates to sorting (previous chapter)
The second section relates to filtering criteria*



2.2 Simple filter : by value, format or special criteria

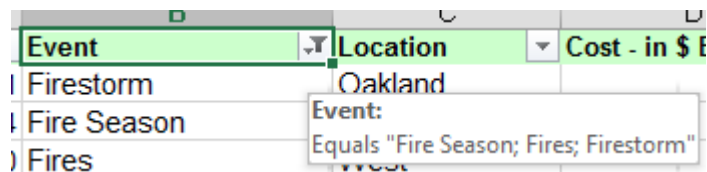
2.2.1 *Filtering by value – 1, 2, 3 ... criteria*

- Check/Uncheck the criteria in the drop-down list
- If you wish to check on just a selection of specific criteria, first turn off all of them (*Select All*) and then turn on the required criteria.
- *New 2010 : the SEARCH box can help you search a specific criteria:*

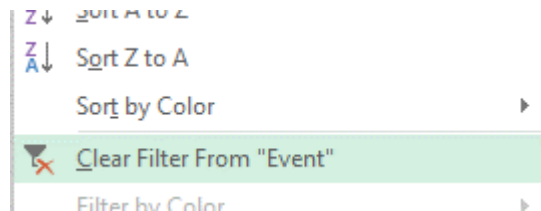


The list is automatically filtered while you are typing. Finally you simply click on the OK button.

When a criteria has been set, the color and the drawing on the triangle change. When you point the triangle a tooltip displays the criteria :



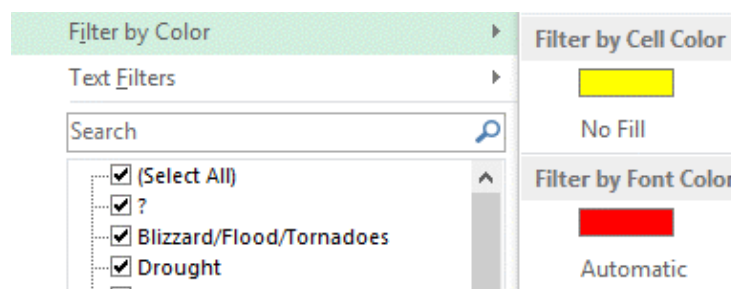
Clear the filter : click on the triangle



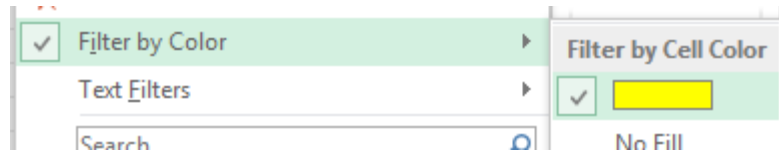
2.2.2 *Filtering by fill color, font or icon*

When the column contains filling colors, special font colors or icon from conditional formats, the filter drop-down list includes the corresponding options.

For example : our department has applied a yellow filling to the natural disasters we have managed, we can now filter « our » disasters :



Clear the filter : tick off the filter by cell color



 It is not possible to *combine* formats filters

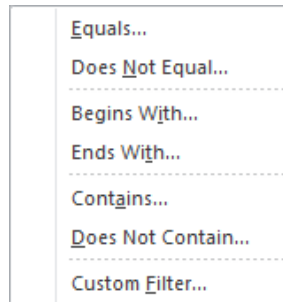
2.2.3 Number or text or date filters

The option is automatically labeled according to the data in the column

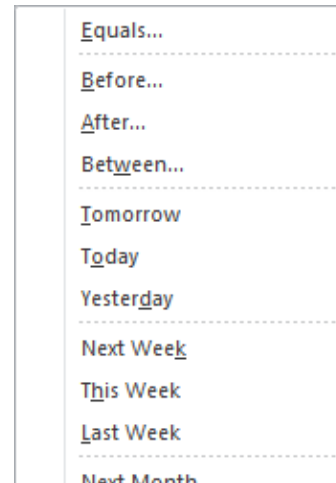
Number filters



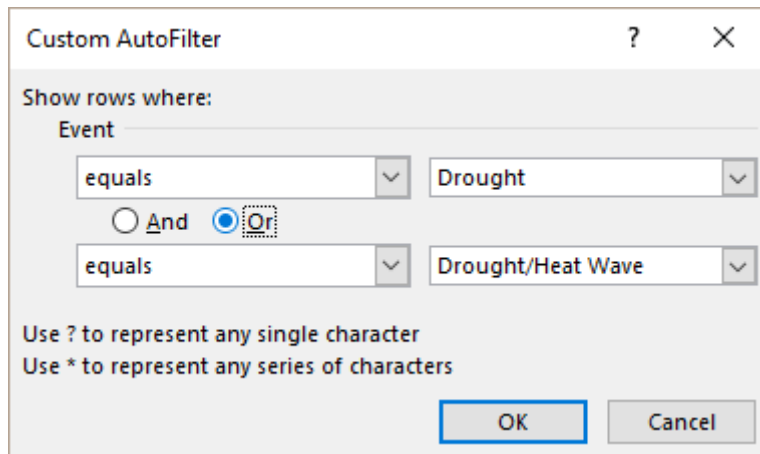
Text filters




Date filters



Make your choice. If necessary a dialog box will be displayed to type the criteria. Options linked to dates often provide a date navigator. The dialog box is the one displayed by the CUSTOM FILTER option :



 Caution with the "spoken" logic and the pure mathematical logic !

If you are asked to filter disasters of the following types : *Drought* and *Drought/Heat Wave*, **verbally** the person will say AND but the real logical link is OR !

Clear the filter : as for a standard filter (CLEAR FILTER FROM ...)

2.2.4 Filter criteria working on more than one column

Caution, filter criteria are *added*. Each new criteria is added to the current one, which consequently reduces the filtered result.

Example about the impact this can produce :

- You filter the sales of BRUNO and JOHN - then you filter sales amounts above Frs 1000.--. This is applied both to Bruno and John's sales.

Impossible to show all BRUNO sales but only JOHN's sales only above Frs 1000.-. To obtain this you will have to work with the *advanced filter*.

2.2.5 Updating the filter

You have manually modified data in the criteria column and you now need to update the filter : click on the SORT & FILTER button (HOME Tab) and choose the REAPPLY command or the same button on the DATA Tab.

2.2.6 Clearing ALL criteria

The active cell can be located anywhere : click on the SORT & FILTER button (HOME Tab) and choose the CLEAR command or the same button on the DATA Tab.

2.2.7 Turning off the autofilter mode

Click on the FILTER button (DATA Tab) / option FILTER (HOME Tab). It works like a switch.

2.2.8 Copying-pasting-printing the filtered result

No problem. Select and *only the filtered rows* will be copied-pasted-printed.

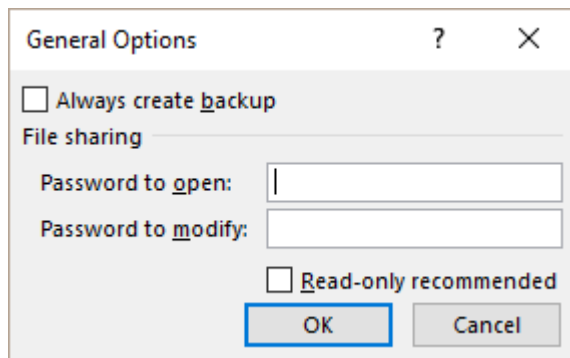
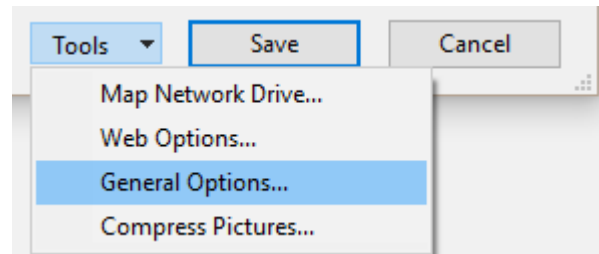
Caution : the autofilter mode is the only functionality where copying-pasting ... is automatically restricted to the filtered rows and is consequently "secured". It is not the case with manually hidden rows, with an outline view mode and so on.

PROTECTION – WORKBOOK & CELLS (SIMPLE)

1 Protecting the access to a workbook

This is set when you save the workbook :

Click on the TOOLS button, located at the bottom of the saving dialog box :



Password to open

Only the user who knows the password can open and work into the workbook

Password to modify

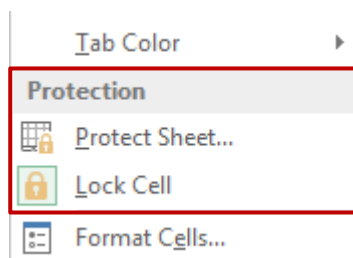
Only the user who knows the password can work into the workbook but anyone can create a copy of the workbook that will be renamed and saved as required

Read-only recommended

Nothing more than a simple advice given to the user. No real protection.

2 Internal protection : worksheets, workbook

The options are located in the HOME Tab – CELLS Group – Drop-down list of the FORMAT Button :



Make a difference between the cell status and the active protection !

You protect cells to prevent accidental change or deletion ...

1. The cell status.

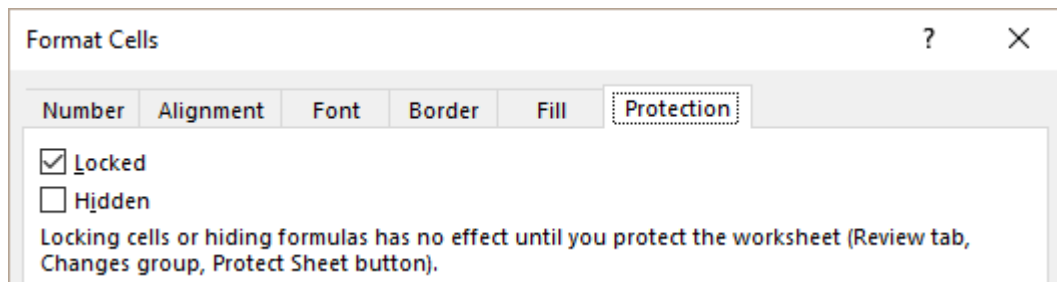
When you protect the sheet you simply validate the cell status. By default the status is *locked*. As long as there is no *active* protection, you or anyone else can freely work on the sheet.

2. The active protection

The protection validates the prepared status.

Steps

- Select the required cells if they are to be unlocked. Or select the whole sheet, unlock all cells and then select the required cells to be locked.
- Option FORMAT CELLS



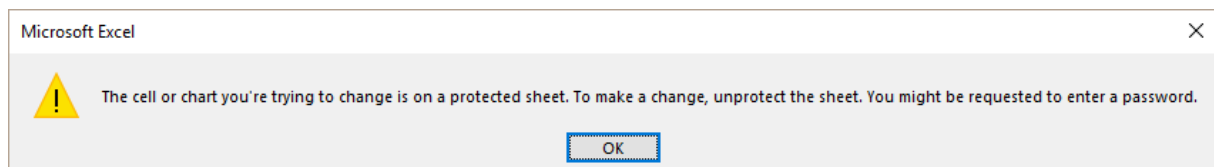
Hidden : caution, this only hides what is displayed in the formula bar

- Option PROTECT SHEET – With or without a password – Validate without changing the other default settings.

Navigation

Access to free cells through the TAB key

Here below the warning message that will be displayed if you attempt to modify a protected cell :



Remove the protection

The option turns into UNPROTECT SHEET. (password if necessary)

Week points

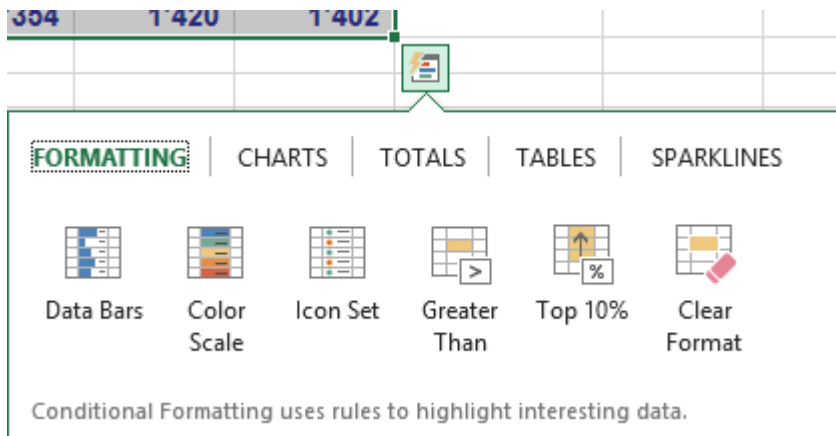
No visual indication of which cell is locked and which is unlocked.

No command to print a list of locked cells

The protection functionality provides far more commands ... (see corresponding documentation).

**THE QUICK ANALYSIS TAG (ON A
SELECTED RANGE OF CELLS)**

When you select data, a tag will be displayed at the bottom right of it to suggest various tools such as conditional formatting, creating a chart ...



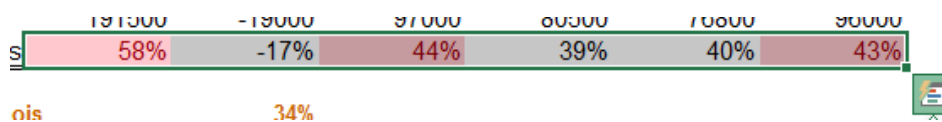
Point = sample / Click = applying the suggestion

Important : it is obvious that these suggestions are only *shortcuts* and that there are additional possibilities. Nevertheless it makes a nice start before working more deeply into the corresponding function.

1 Conditional formats



Mise en forme GREATER THAN (choix 40%)



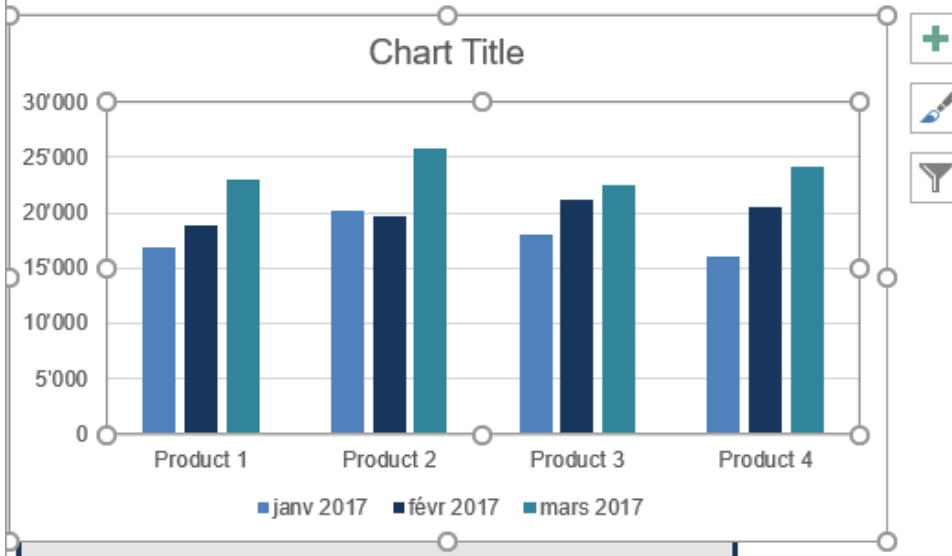
2 Charts



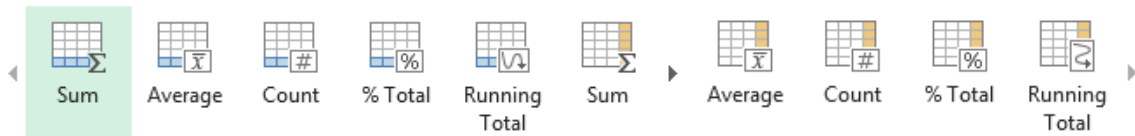
* MORE CHARTS : a dialog box will list more types

CLUSTERED COLUMN on the selection below

Sales	janv 2017	févr 2017	mars 2017
Product 1	16'894	18'854	23'000
Product 2	20'210	19'632	25'784
Product 3	18'052	21'135	22'458
Product 4	16'000	20'456	24'182



3 Totals



The colored bar on the button indicates where the result will be inserted.

A small example to illustrate :

Sales	Qtr 1	Qtr2	Qtr3
Product 1	82	48	62
Product 2	71	57	84
Product 3	29	56	48
Product 4	85	32	26
Product 5	47	25	35
Product 6	12	55	24
Product 7	36	44	31
Product 8	95	88	56
Product 9	15	95	93

SUM (first button) :

Product 9	15	95	93
	472	500	459

COUNT (counts the number of non empty cells)

Product 8	95	88	56
Product 9	15	95	93
	9	9	9

SUM (6th button)

r 1	Qtr2	Qtr3	
82	48	62	192
71	57	84	212
29	56	48	133
85	32	26	143
47	25	35	107
12	55	24	91
36	44	31	111
95	88	56	239
15	95	93	203

% TOTAL (the last but one)

tr 1	Qtr2	Qtr3	
82	48	62	13.42%
71	57	84	14.81%
29	56	48	9.29%
85	32	26	9.99%
47	25	35	7.48%
12	55	24	6.36%
36	44	31	7.76%
95	88	56	16.70%
15	95	93	14.19%

* 2007/2010 versions : pivot tables users may recognize a *calculated field*

If the list has been defined as a TABLE, the functions buttons automatically add the *total row* (an option users often ignore). Consequently the SUM button shows a result but a closer look reveals that it is in fact the SUBTOTAL function.

100	Wartian Herkku	3	Oulu	Finland	29.07.2011	10266	Queso Manchego La Pastora	1732.80 F
101	Frankenversand	4	München	Germany	30.07.2011	10267	Lakkalikööri	918.00 F
102	Frankenversand	4	München	Germany	31.07.2011	10267	Boston Crab Meat	3'675.00 F
103	Sum	467	0	0		1017168	0	227'628.52 F

4 Tableaux

The suggestions includes a *Table* (button 1) various pivot tables (buttons with a ?)



* MORE : a dialog box will display more types of pivot tables

Example :

A long list of food items. One pivot suggestion is to group by country. If you accept, the pivot table is automatically created onto a new sheet.

	Trainer	Cost	Net	I	J	K
930.00	Christine	SFr.	400.00	SFr.	530.00	
1'400.00	Ken	SFr.	600.00	SFr.	800.00	
1'000.00	Marc	SFr.	900.00	SFr.	100.00	
1'350.00	Françoise	SFr.	500.00	SFr.	850.00	
680.00	Marc	SFr.	250.00	SFr.	430.00	
930.00	Lucie	SFr.	500.00	SFr.	430.00	
1'350.00	Christine	SFr.	500.00	SFr.	850.00	
930.00	Marc	SFr.	500.00	SFr.	430.00	
1'000.00	Laurent	SFr.				
680.00	Marc	SFr.				
1'350.00	Françoise	SFr.				
1'300.00	Lucie	SFr.				
450.00	Françoise	SFr.				
450.00	Françoise	SFr.				
1'400.00	Ken	SFr.				
200.00	Marc	SFr.				
1'350.00	Françoise	SFr.				
400.00	Marc	SFr.				
750.00	Christine	SFr.				
1'300.00	Ken	SFr.				
1'350.00	Marc	SFr.				
2'100.00	Pierre	SFr.				

Row Labels	Sum of Net
ACIFER SA	4250
ASSOCIATION INFORMATIQUE ROMANDE	-250
ASSURANCES GENEVOISES	0
ASSURANCES LE MONDE	1020
BANQUE DE CREDIT MUTUEL	1850
BANQUE INTERNATIONALE	2690
CAFE ZARA	130
CREDIT GENEVOIS	2500
EXPERTS SA	400
HOTEL LEMAN BLEAU	600
PROMOTION IMMOBILIERE	3140
Grand Total	16330

Formatting | Charts | Totals | **Tables** | Sparklines

Table | PivotTable | **PivotTable** | PivotTable | PivotTable | More

Sum of Net by Client

Tables help you sort, filter, and summarize data.

5 Sparkline charts

Introduced in the 2010 release : small charts added to the cell background

	Qtr1	Qtr2	Qtr3	
Qct 1	89	65	42	
Qct 2	56	75	89	
Qct 3	23	12	14	
Qct 4	52	85	63	
Qct 5	45	56	96	
Qct 6	12	21	31	
Qct 7	45	95	23	
Qct 8	22	88	33	
Qct 9	45	63	99	

