

ffice Doc



MS-OFFICE 2013
WORD & EXCEL
English version

Graphic tools
(pictures, shapes, DDE or OLE links)

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GRAPHIC GENERALITIES

Some basic explanations to better understand what is a « picture » and how to manage it.

1 Pictures from digital cameras

The pictures are related to the notion of *array*. They are also called bitmap pictures

1.1 The number of pixels indicated with your digital camera

In digital photography, the sensor converts the light into electrical signals and finally into digital pixels. Cameras range from 3 to more than 12 million pixels.

The picture **definition** indicates the total number of pixels, without considering its size in cm.

The picture **resolution** refers to printing (or screen display) and it is the number of pixels contained by inch. The term *dpi (dots per inch)* is probably familiar to you. The more dots per inch, the better graphic result.

Camera	Definition (Width / Height) in pixels	Possible printing sizes (in cm)
20 millions (Sony Cybershort DSC-RX100)	5472 / 3648	72 dpi → 193.04 / 128.69 150 dpi → 92.66 / 61.77 220 dpi → 63.18 / 42.12 350 dpi → 39.71 / 26.47

220 = a printing standard value / 150 = a standard value for screen display

The human eye can distinguish two dots separated by 1 mm on a given picture at a distance of about 3m. The distance that is naturally chosen to look at a picture corresponds to 2 or 3 times its diagonal. The nearer you get to the picture, the higher density of points is required to consider that the picture is clear enough. A standard for this is 150 dpi.

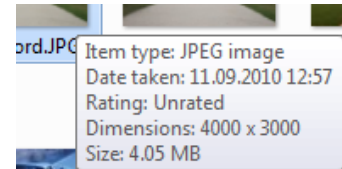
This is why a given picture inserted in Word can be enlarged and still look good (because the source picture is large and already reduced inside the document margins) while another one will look awful (because the source size is small and consequently when you enlarge it the pixels density gets lower).

1.2 Computer files created by digital cameras

There are three main families :

- **JPEG** files (Joint Photographic Experts Group).
JPEG is a compression method. The compression principle is that the human eye is more disturbed by subtle changes of brightness than by subtle changes in colors. The surface of the picture is divided into blocks, where an average color is calculated. The small intermediate tones are removed and the final file size is smaller. This type of compression is said destructive as information is lost. But the compression does not noticeably detract from the image's quality (for human vision)

Picture shot by a 12 mios pixels Reflex camera : 4.05 Mb
Similar picture with a 20 mios pixels Sony camera : 7.83 Mb



- **TIFF** files are non-compressed files or compressed but with a lossless compression. This means it is not destructive but this lossless compression is slightly less efficient than the JPEG method. The problem is that the TIFF format is not universal and some people will not be able to open your pictures unless they use a special program.
- **Special : RAW** files. They are sometimes called digital negatives, as they are not yet processed and therefore are not ready to be printed or edited. The format is managed by the camera manufacturer, who will provide the required software to edit the picture. A lossless compression is usually applied. The file will be much heavier than a JPEG one and requires special software to be edited. Advantage for the photographer : great possibilities to work on the picture : white balance, managing the colors etc ...

1.3 Size and weight

1.3.1 Inserting into Office (Word, Excel or PowerPoint)

When inserting a picture, Word automatically reduces the picture **screen size** to make sure it fits between the document margins. It also **compresses** the picture and the weight will be lower (Test : the above 4.5 Mb picture reduced to 470 Kb)

1.3.2 How to reduce the weight in Office (Word, Excel or PowerPoint)

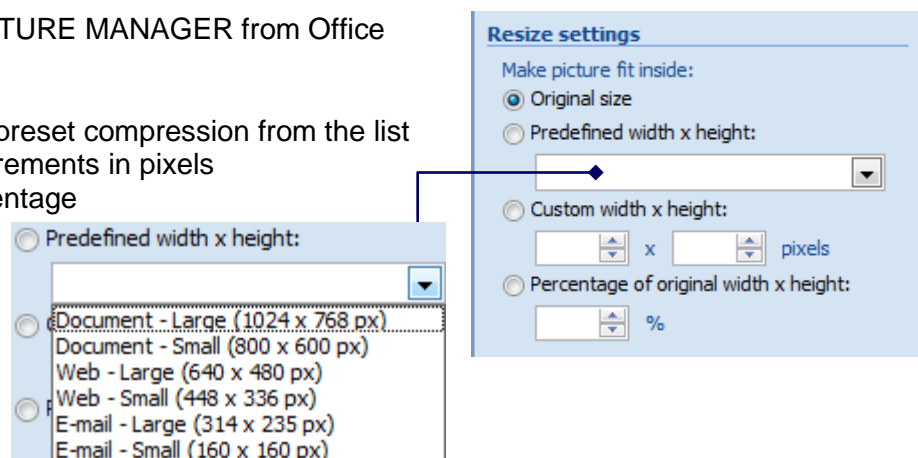
*Compress the picture again by assigning a lower resolution
Crop unnecessary parts of the picture and delete the cropped areas*

1.3.3 A better solution

Compress the picture before your insert it into Word, Excel or PowerPoint (test 470 Kb in Word and 276 Ko if compressed before). All programs that can edit and touchup a picture (such as Photoshop, Gimp ...) provide such options. Office 2007-2010 also provide a tool to compress pictures (but not Office 2013).

Here below the PICTURE MANAGER from Office 2007-2010

You may choose a preset compression from the list
You can set measurements in pixels
You can set a percentage



Some well-known program dedicated to working pictures : Photoshop, Gimp ...

2 What are the GIF and PNG formats

GIF (stands for Graphics Interchange Format) was developed in the late 1980's by CompuServe (online network service) to create light pictures that could be easily shared over the network. The GIF format is a format which compresses files using an algorithm called LZW (from the name of its authors : Lampel Ziv Welch) which keep traces of the colors and helps to reduce the size of the file.

GIF was not patent-free and a similar format – patent-free – was created to replace it : PNG

Gif characteristics

GIF compression

It is a lossless data compression technique to reduce the file size without degrading the visual quality. This means that the GIF source bit-by-bit bitmap array can be retrieved (contrary to the JPEG method). The principle is rather simple . the RGB values (the entries) used in the picture are saved into the picture “header” and then each pixel will import its color from the header. Consequently all pixels of the same color have one unique entry.

The PNG compression is identical but at times more interesting as it can lead to a compression of 5% to 25% smaller than the Gif compression (sometimes 40%-50% for small pictures).

The animated GIF

This is a special feature of the Gif method. The principle is simple : it is a number of images or *frames* to be displayed successively, each described by its own GCE (Graphic Control Extension), preceded by a header whose content by default applies to all the frames. All frames are saved into one unique file. The creator can set the time for each frame, how many times it should be repeated, the transparency ratio etc ...

3 Vector graphics

Vector graphics is the use of geometrical primitives such as points, lines, curves, and shapes or polygon(s), which are all based on mathematical equations, to represent images in computer graphics. Special effects are possible such as rotation, movement, mirroring, stretching, skewing ...

With vector graphics, there is no array of pixels, so typical of photographic images. By nature, a vector graphic is re-drawn every time it is displayed which generates calculations by the computer processor.

There is technically no resolution limit to a vector graphic. And if compared with a bitmap picture of the same resolution, it will be usually much smaller.

Some well-known programs dedicated to vector graphics : Adobe Flash, Adobe Illustrator, CorelDraw

OFFICE GENERALITIES

1 Word : the links between the object and the body text

1.1 The *text* layer, the *object* layer in Word and their specific rules for positioning.

It is important to know that Word is made of two "layers" : the first layer includes the text (*linear filling*) and the second layer includes all free floating objects such as WordArt or drawn objects or even external objects that are imported in the floating mode.

The main rule of the first layer is that you cannot place a picture or a text anywhere you wish on the page. Your picture behaves like a "very large character" and you cannot place it on the page by simply dragging it. If you need to display a picture and text next to each other or several pictures horizontally, it would be a good idea to use a table. It is a handy and powerful page setup tool. You place each object into a cell and simply remove the table borders.

In the second layer, the floating objects float freely but they are nevertheless linked to the main body text through an anchor. This anchor belongs to the nearest paragraph. Inserting text before or after the anchoring paragraph may considerably affect the position of the object on the page. If the anchoring paragraph has many lines of text, it is possible to place the object inside it and wrap the text around the picture.

Graphic objects automatically belong to one layer or the other. Pictures, SmartArt charts belong to the *text* layer and WordArt objects, drawn shapes to the *object* layer.

It is possible to « free » a picture, a SmartArt chart ... and make it « float ». And it is also possible to « fix » a floating object into the text layer.

There is also a third possibility : *the drawing canvas*. You place floating objects such as pictures, WordArt texts, drawn shapes into a drawing canvas that belongs to the text layer.

You may set how Word inserts pictures by default : text layer or object layer (do so in the Word options).

1.2 Characteristics of the floating mode and how to manage it

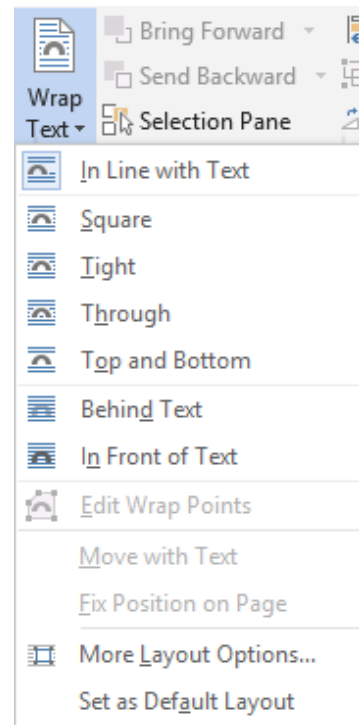
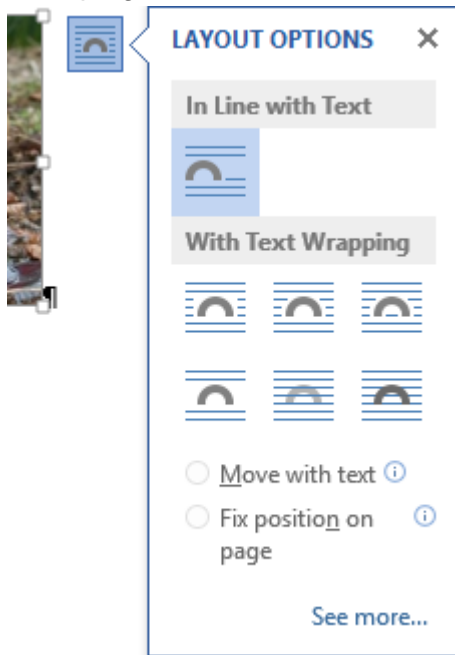
An additional tab is automatically displayed in the ribbon when you insert an object. This tab contains all the commands related to this object. The command to position the object is part of these specific commands. The user can therefore change the default layer and set the object to belong to the other layer. As this is very important, we wish this topic to be the first one to be explained.

Main characteristics of the floating mode :

The object can be placed freely on the page
The body text wraps around the object

1.2.1 Turn a fixed object into a floating one : position and text wrapping

- Select the object – click the tag at its top right Or • Tab dedicated to this object – usually **FORMAT – ARRANGE** Group



In Line with Text

This corresponds to the text layer (layer 1)
To fix the object to the insertion point

Square, Tight, Behind or In Front of Text

The object is floating. If there is no text near, the command label is indifferent because it relates to how the text will be wrapped around. If there is text near, here below some examples :

Square



Lorem ips
Maecena:
sed pulvir
commod
enim. Fus
morbi trist
turpis ege
Aenean n

In porttitor. Donec laoreet nonummy augu
vitae. pretium mattis. nunc. Mauris eget n

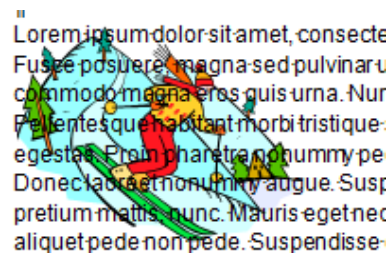
Tight



Lorem ipsum dolor sit amet, con
porttitor congu
ultrices, pu
magna erc
Vivamus
senectu
Proin pha

lorem. {n- porttitor. Don
scelerisque at vulputate vitae. pretium

Behind Text




To get a washout effect

In Front of Text



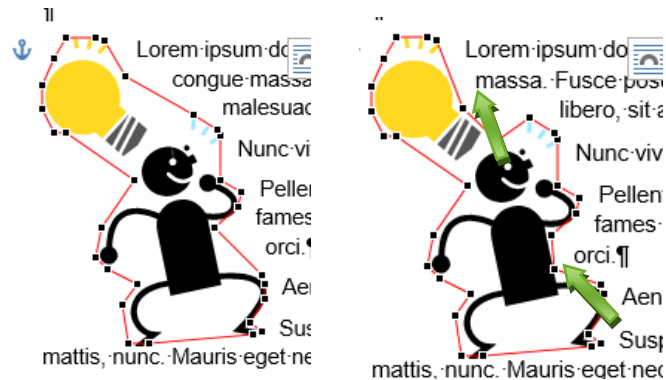
To get a washout effect

 **Behind Text** : when a very small object such as a picture is placed behind the text, you may well no longer be able to click and select it. Consequently you'll need to switch to the *select objects mode* through : HOME Tab – EDITING Group – SELECT Button – SELECT OBJECTS Button.

Edit Wrap Points

(not available if the graphic is not floating)

To be combined with *Tight* but with no effect on a bitmap image. Indeed you need to work on a vector object. With this option you can set how the text should wrap around the empty zones of the drawing :

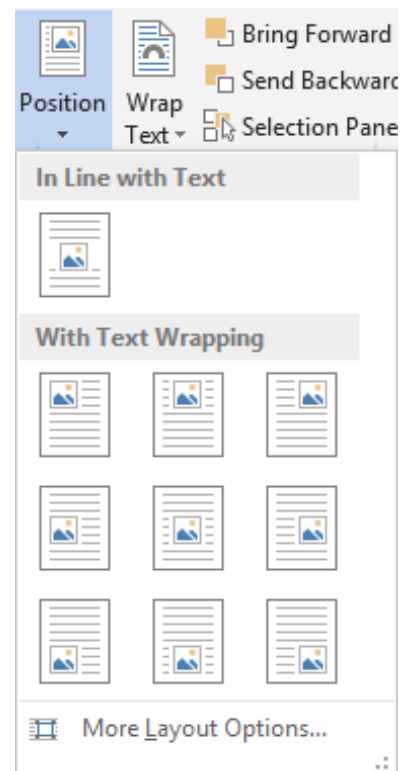


Move with text / Fix position on page

In relation with the anchor (see next topic)

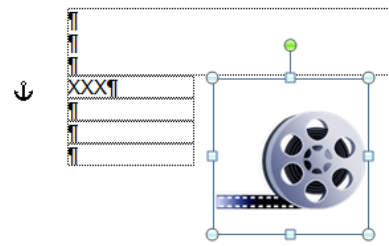
If you need to position the object *on the page* rather than inside a paragraph, you may click and drag it but it is interesting to note that there is a button with some preset positions (but caution this is only for a *square text wrapping*) :

Click on the first button to revert to layer 1 by fixing the object to the insertion point.



1.2.2 The role of the anchor

The floating object is fixed by its « anchor ». The anchor is fixed onto the nearest paragraph (in the screen capture, the XXX paragraph). When you click on a picture the anchor appears next to its paragraph.



When you move the object, the anchor automatically moves.

The anchor belongs to layer 2 and will no longer be displayed once you click in the text.

You select the anchoring paragraph and delete it

The object is deleted

You insert text *before* the anchoring paragraph

The object is moved

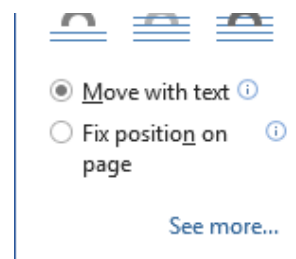
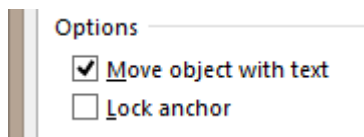
You insert text *after* the anchoring paragraph

The object is NOT moved

Fixing the anchor – Moving with text

- Drop-down menu of the TEXT WRAPPING Button or of the POSITION Button – MORE LAYOUT OPTIONS Option – PICTURE POSITION Tab

Drop-down list of the picture (top right)



Move object with text

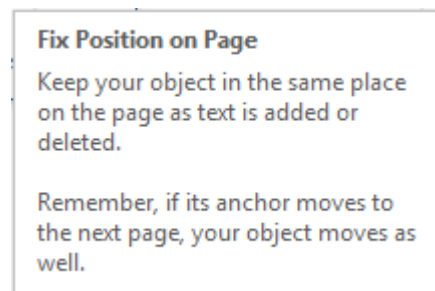
On (by default) : when you move the anchoring paragraph, the object moves.

Off : when you move the anchoring paragraph, the object does not move.

Fix position on page

Corresponds to turning off the previous option

The tooltip tells you about it quite clearly :

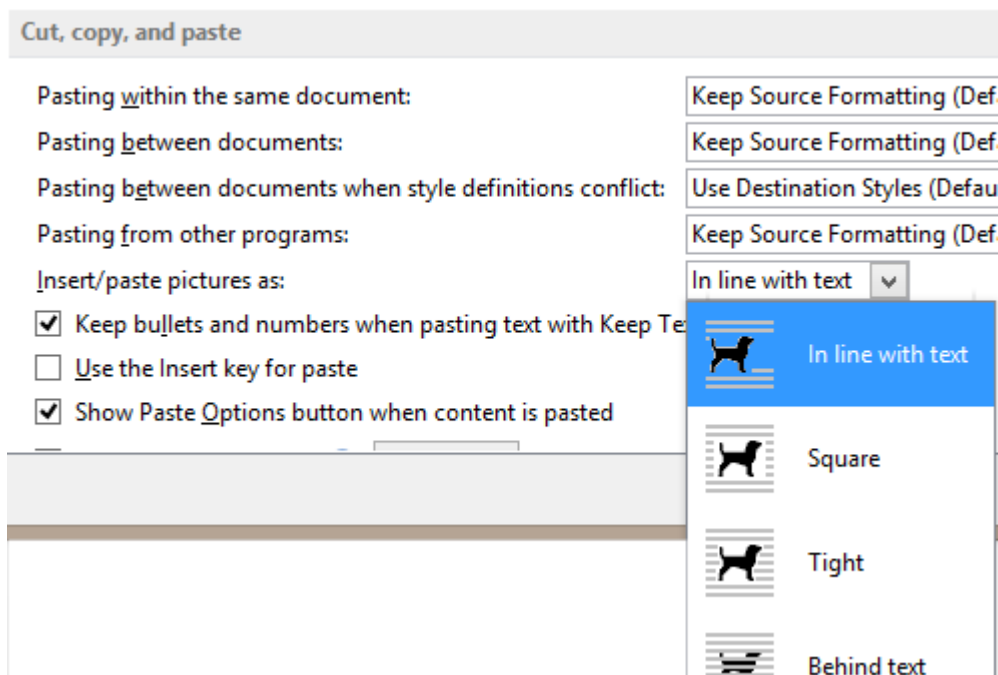


Lock anchor

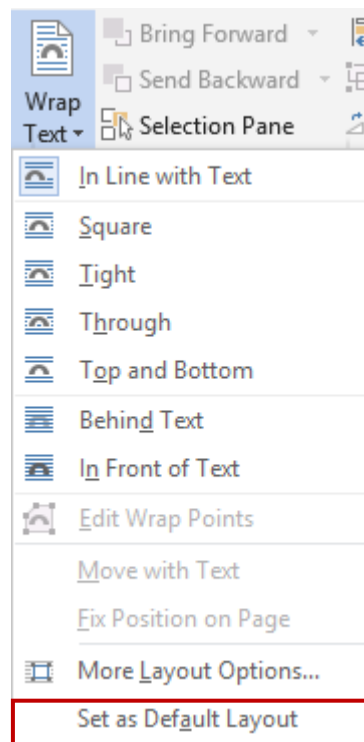
The anchor displays a paddle lock. If the option is on, it means that the object can be moved but the anchor will stay next to the anchoring paragraph. Moreover the object and the anchoring paragraph will always remain on the same page.

1.2.3 Default wrapping settings

❶ FILE – OPTIONS – ADVANCED Category



❷ Tab dedicated to the object – usually FORMAT – ARRANGE Group



Interactions between the two methods :

In Front of Text + *Fix position on page* ❷

Then *Square* par ❶

In Line with Text par ❶ ou ❷

→ *Fix Position ...* remains

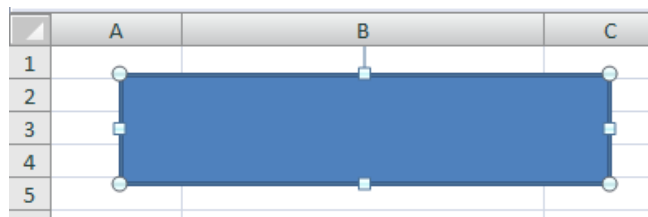
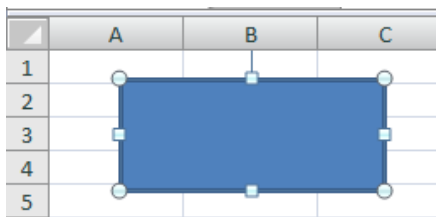
Back to default settings : *Move with Text*

2 Excel : the links between the object and the underlying cells

Less visible and less « bulky » than in Word but definitely present ... Any object (picture, shape, chart ...) is linked to the underlying cells.

At first the object seems free : you can move it and position it on the sheet as you need.

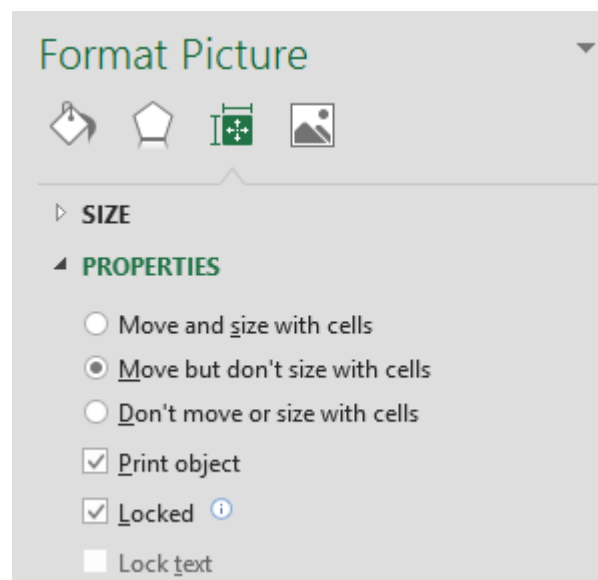
But if you change the width of one of the underlying columns, this is what will happen :




How to free the object

Display the object properties. Usually a right click and the shortcut menu will display the **SIZE AND PROPERTIES** option or you can use the dialog box launcher that is located at the bottom right of the **SIZE** group (**FORMAT** Tab)

The formatting pane will be displayed on the right of the window



 **Drawn shapes and charts** : complete link when you work on the underlying col/rows
Picture : the **MOVE BUT DON'T SIZE WITH CELLS** option is automatically active. This is why the picture size does not change when you work underlying col/rows.

Move and size with cells

Default setting. The object will be automatically sized when you change the width/height of the underlying columns/rows and will be moved when the underlying cells are moved.

Move but don't size with cells

No incidence on the object when you change the width/height of the underlying columns/rows but the object will be moved when the underlying cells are moved.

Don't move or size with cells The object not affected by any of the two above mentioned commands.

Chart : no right click to access these options but the SIZE group is located as usual on the FORMAT Tab.

3 Excel : printing and locking (protection)

3.1 Printing

By default objects are printed. But you may choose not to print one particular object. This can be handy when you have set navigation buttons or macro buttons, as these are required on screen but not with a printout.

In the properties dialog box (previous screen capture) and uncheck the PRINT OBJECT option.

3.2 Locking the object (and its text) when protecting the sheet

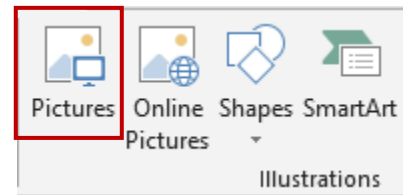
Check on/off the LOCKED and LOCKED TEXT options in the above properties dialog box (previous screen capture) if you need to prevent users to move or size the object and/or edit its text. The two options are on by default.

The locking will become active when the sheet has been protected : HOME Tab – CELLS Group – Drop-down list of the FORMAT Button – PROTECT SHEET Option (adding a password is optional).

PICTURES AND CLIPARTS

1 Inserting a picture file

- INSERT Tab – ILLUSTRATIONS Group – PICTURE Button



- A File-Open dialog box is displayed.
- Select the required file
- Insert

Word reminder : the inserted picture belongs to layer 1. Even though the green handle allows rotation, the picture is still fixed to its insertion point. It is not possible to drag it and place it freely on the page.

Default folder

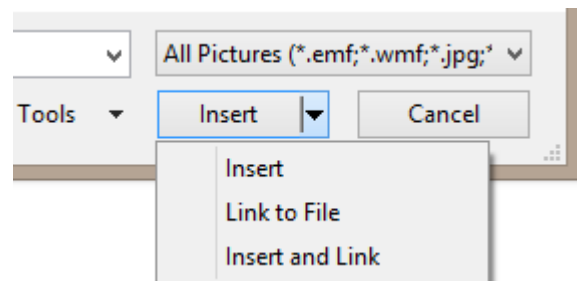
Word : the folder defined in the Word options : FILE OPTIONS Button –ADVANCED Category – GENERAL Topic - FILE LOCATIONS Button – CLIPART PICTURES Line
If the line is empty, the default folder will be the last used one.

Excel : by default it is the PICTURES folder (in your profile – on the C drive). Otherwise, it is the last used one.

Inserting and linking

Word

At the bottom of the inserting dialog box, the INSERT button displays the following drop-down list :



Insert

Simple insertion. Corresponds to double-clicking on the file. The picture is totally inserted and the file weight will increase accordingly.

Link to File

Even though the picture is displayed in the document, the picture does not belong to the file. There is only a *link* indicating the folder where the picture is stored. If you rename, delete or move the picture file, the link will be broken and the next time the document is opened, there will be an error message in place of the picture. As this option does not incorporate the picture to the document, the file weight is not increased.

Updating the picture file : automatic when the document is opened or manually through pressing the F9 key on the picture.
(funny to say SHIFT + F9 or ALT + F9 does not toggle codes).

Updating the link : FILE – INFO – PROPERTIES Pane (on the right) .

Si l'option n'est pas là, cela veut dire qu'il n'y a pas de liaison.

Related Documents

Open File Location

Edit Links to Files

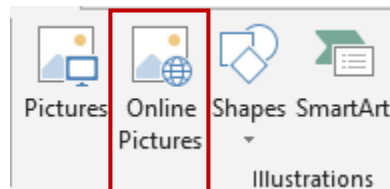
Show All Properties

Insert and Link As for the previous option but additionally the picture is fully inserted in the document.

Excel : identical options. FILE – INFO – PROPERTIES does not display any link option. Nevertheless, when you modify the source picture file, there is indeed a link as the picture is automatically updated when you *close and re-open the workbook*. (only hint about this link : the picture is inside a white square)

2 Inserting an online picture

- INSERT Tab



Insert Pictures

Office.com Clip Art
Royalty-free photos and illustrations

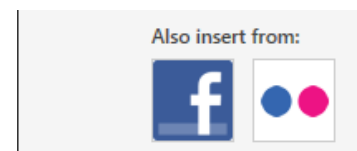
Bing Image Search
Search the web

Jael De Nardo's OneDrive
jaeldenardo@hotmail.fr

Browse ▶

At the bottom of the dialog box : access to the social networks such as Facebook ...

If you go ahead you will be re-assured about Microsoft confidentiality policy. You will be then prompted to provide your login and password ...



Bing : you are warned that pictures can have a copyright. Each picture displays its source site.

Type one or more keywords

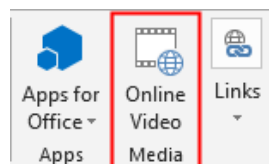
The dialog box displays the matching pictures : CTRL for a possible multi-selection and click on the INSERT button.

Caution : the inserted picture must be considered as a « big » character. It is not possible to click and drag it for a free placement on the page. If you wish to position the picture, a good idea is to insert it into a table cell (whose borders should have been removed). A handy solution to display pictures or pictures and text side by side.

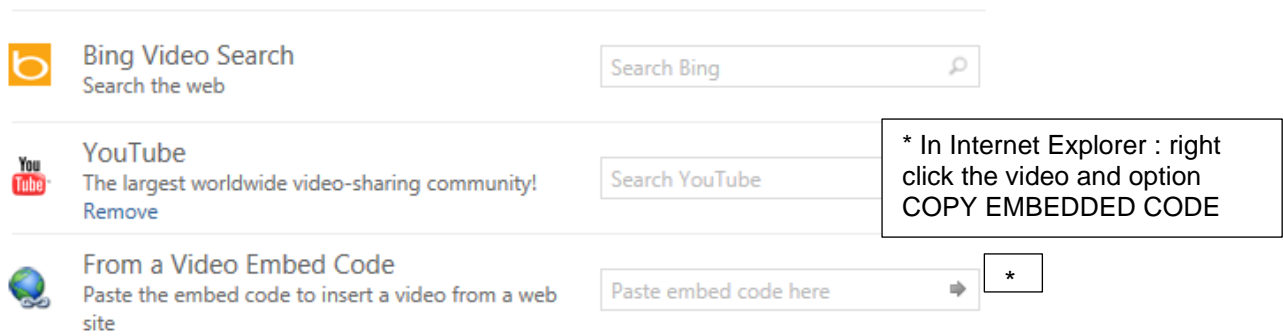
Even though the picture has a round handle to rotate it, this does not make it a floating object that can be placed freely onto the page.

3 Inserting online videos (Word and PowerPoint but not Excel)

- INSERT Tab



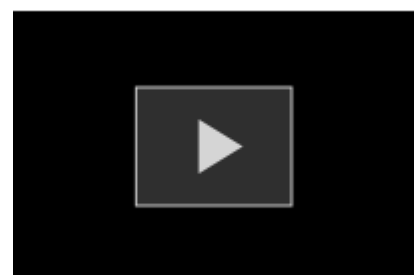
Insert Video



YouTube was suggested at the bottom of the dialog box. A simple click and the *service* was added.

Here after a video from DAILY MOTION (Paléo Festival 2013)

Running the video : the Word document goes into the background and the video window gets a little bit enlarged. Press the ESC key to revert to the document.

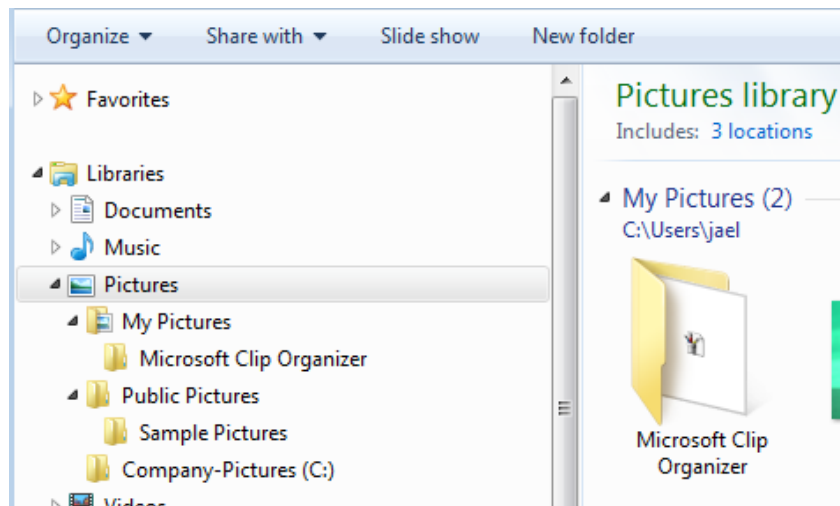


4 Windows 7 : the concept of libraries

When it comes to pictures, it is important to understand well what is behind a *library* or mishandling can become dangerous.

Picture files always have a physical storing address : a subfolder in the public profile for default Windows pictures, a subfolder in *your* profile for downloaded pictures, a network drive for the company's pictures and so on. But it can be a bit awkward to navigate from one folder to the other one when you search for a specific picture. That is when a library can be handy : it includes all the folders you need into the main Windows Explorer tree.

Here below my personal library :



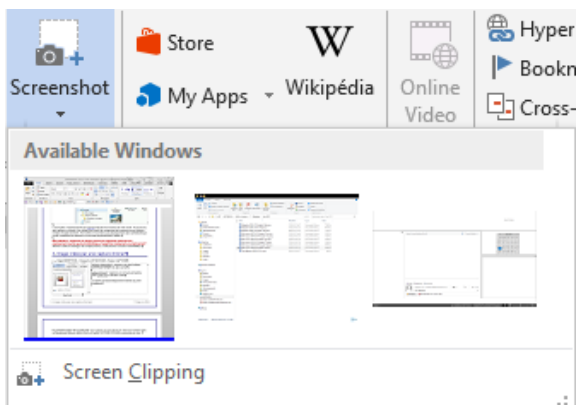
It is the option *3 locations* that allows to add any custom folders. In the above screen capture, I have added a folder named *Company-Pictures* and containing lots of subfolders filled up with various pictures and clips.

Your files are not physically stored in the library and consequently the folders are not physically *double*.

But caution : removing a file implies that you remove it from the library and also from its source location. To remove only a location : display the location dialog box, select the required folder and click on the REMOVE button.

5 Creating a picture with the screen shot tool

- Onglet INSERT – Groupe ILLUSTRATIONS - Bouton SCREENSHOT



Available Windows : capture one of the underlying windows by simply clicking on it

Screen clipping : capture a region of the window located just *beneath the active one*.

The screen capture is automatically inserted to the insertion point.

Major drawback of this little tool : to capture a window region, it is compulsory that the window is located just beneath the active one as the SCREEN CLIPPING option does not provide any other choice.

6 Managing by using the mouse

Selecting a picture

Click on it

Selecting more than one picture

Word : *the pictures must be in floating mode*

Excel : no special mode

Usual Windows techniques : CTRL or SHIFT

You may also use the object selecting arrow :

Word : *HOME Tab – EDITING Group – Drop-down list of the SELECT Button - SELECT OBJECTS Option*

Excel : *HOME Tab — EDITING Group – Drop-down list of the FIND & SELECT Button –SELECT OBJECTS Option*

Only objects can be selected. You may click and drag to include all required objects (any object 100% included will be selected)

Sizing

Caution : if you click and drag a side handle, the picture's proportionality will not be preserved and the picture will get deformed.

Therefore always click and drag a *corner* handle.

To resize all corners simultaneously : hold down the CTRL key then click and drag

Moving/Copying

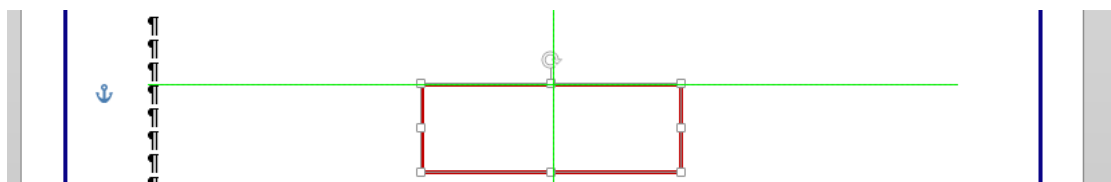
Move : click and drag the picture (make sure you do not click onto a sizing handle)

Copy : proceed as for a move but hold down the CTRL key while dragging. *You may also click-and-drag using the mouse right button : a shortcut menu will give you the choice between move and copy.*

Deleting

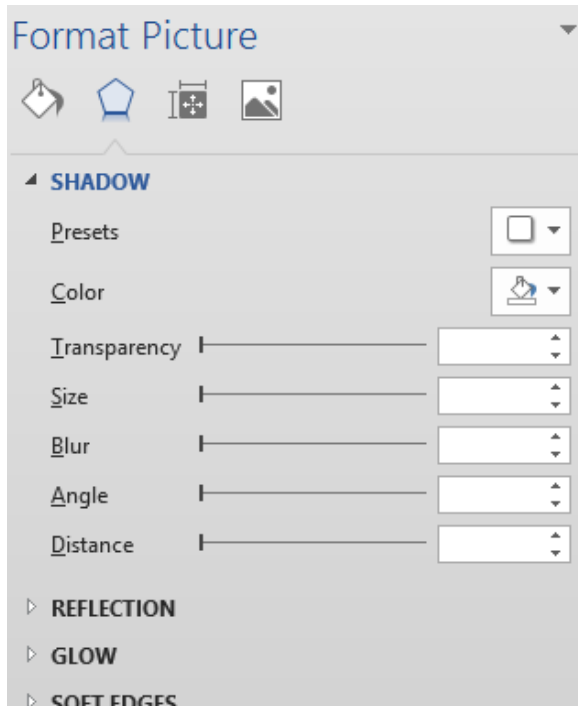
Click on the picture and press the DEL key

New 2013 for floating objects : When you move an object such as an image, chart, drawing ... around in a document, green alignment guides automatically appear to show you when the object is lined up with other elements or key page locations (edge – left – right margin). Here a middle alignment :



7 Working the on the picture

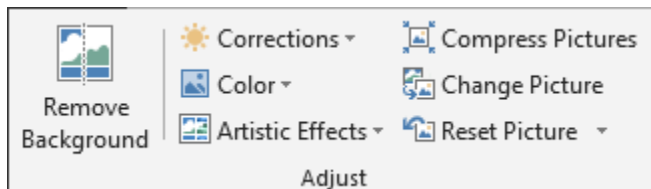
- 1 FORMAT Tab on the Ribbon
- 2 Right click the picture and FORMAT PICTURE



The commands of the FORMAT tab but also *more advanced graphic settings*

Alas no quick preview on the selected picture

7.1 The ADJUST Group



7.1.1 Remove Background

Or when Word tries to do the same as Photoshop

(the picture below is free of rights because it is provided by Microsoft in its online gallery)

Source picture



You modify the area



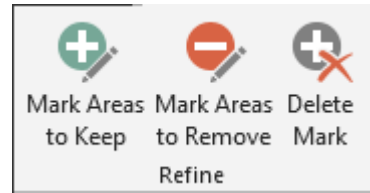
The result



Let's be honest : the result is rarely what we expect. Photoshop is still better ...

Use the following buttons to add / remove areas :

The mouse pointer turns into a pen : draw a line. But please note that the exact area will be automatically set by the program ...

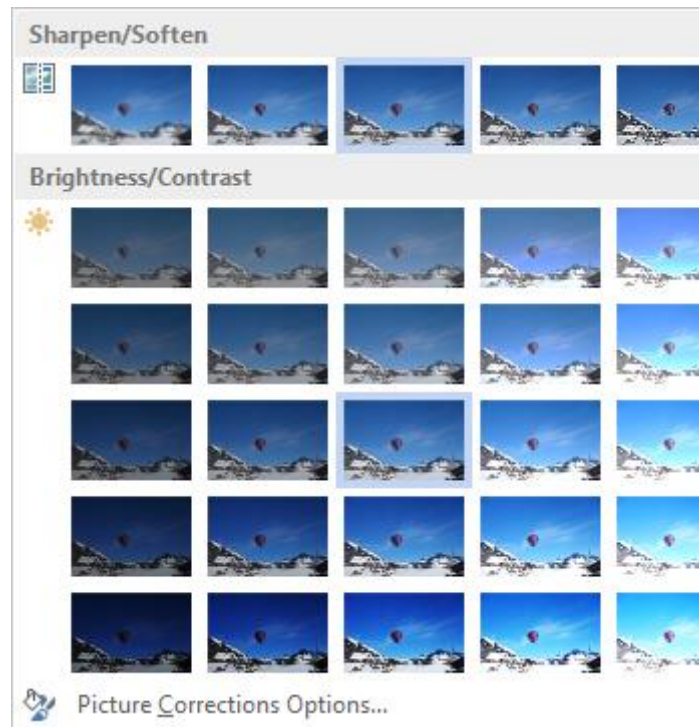


7.1.2 Corrections

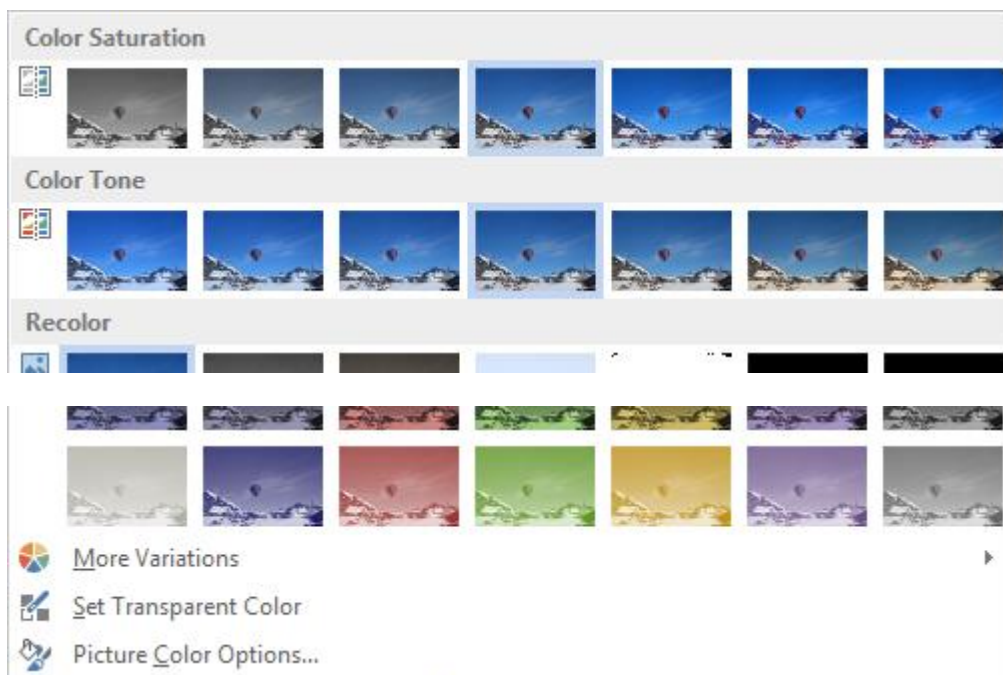
Another picture :



The tear-off displays lots of possibilities in terms of brightness



7.1.3 Color



MORE VARIATIONS

Choose a filter color from the active theme

SET TRANSPARENT COLOR

Click on the option

The mouse pointer will change shape

Point the required color on the picture or on the clip

Caution : only one color (if it is shaded : only one shade)

Cancel

Select *No recolor* (bordered picture in the RECOLOR section)

Shading off all colors (watermark)

It corresponds to the 4th picture in the RECOLOR section

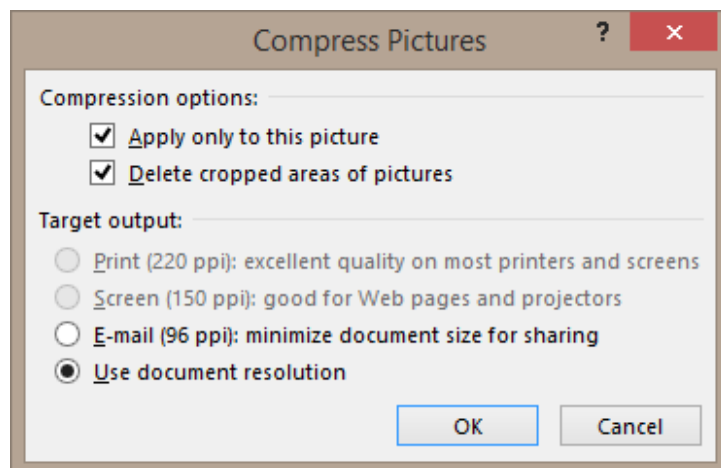
7.1.4 Artistic Effects

Sketch, hand drawing or painting effects









7.1.5 Compress Pictures

To reduce the weight of the pictures inserted into a document or a workbook and consequently reduce the size of the final file.



Here below some tests (1 picture file of 4.05 Mb inserted into a Word document) :
 Test done for Word but valid for Excel

 0-standard-insert.docx	19.04.2011 07:48	Document Micros...	470 Ko
 1-compression.docx	19.04.2011 07:49	Document Micros...	470 Ko
 2-crop-compression.docx	19.04.2011 07:49	Document Micros...	269 Ko
 3-96pp.docx	19.04.2011 07:51	Document Micros...	52 Ko
 4-220pp.docx	19.04.2011 07:50	Document Micros...	470 Ko
 5-150pp.docx	19.04.2011 07:51	Document Micros...	100 Ko

Simple insertion

Insert the picture file and save the document – standard
(test no 0).
 Microsoft automatically applies compression as the size of the
 file is far less than the picture source file.

Compressing the picture (using the default settings)

Default settings and press the OK button *(test no 1)*.
 The size is identical to test no 0
 Rule : pictures are ALWAYS compressed

The Delete cropped areas of pictures option

If you crop but do not compress the picture, cropping is only a
 "screen" operation. Click on the RESET PICTURE button and
 you will see the cropped areas. Consequently the same size.

The picture in the document has been cropped and the cropped
 area deleted *(test no 2)*. The size is reduced significantly and the
 picture can no longer be reset.

Target output

Compression at 220 pp *(test no 3)*
 Compression at 150 pp *(test no 4)*
 Compression at 96 pp *(test no 5)*
The size is drastically reduced

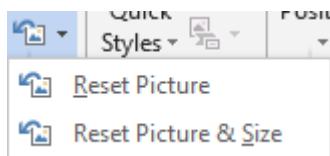
 The compression remains when you copy-paste compressed pictures

7.1.6 Change Picture

Purpose : replace a picture with another one but without losing customization (formatting effects for instance).

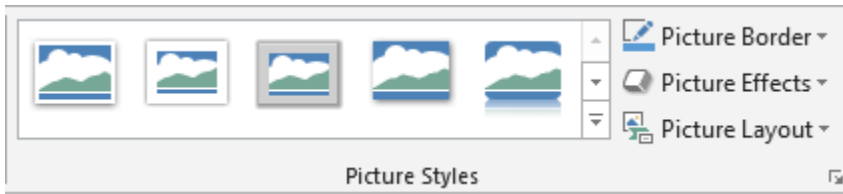
- Select the picture to be replaced and click on the CHANGE PICTURE
- An OPEN dialog box is displayed : select the required picture file
- The replacement is done

7.1.7 Reset Picture



Reset Picture: remove all formatting attributes
Reset Picture & Size : back to the source size (even before it was inserted into the document)

7.2 The PICTURE STYLES Group

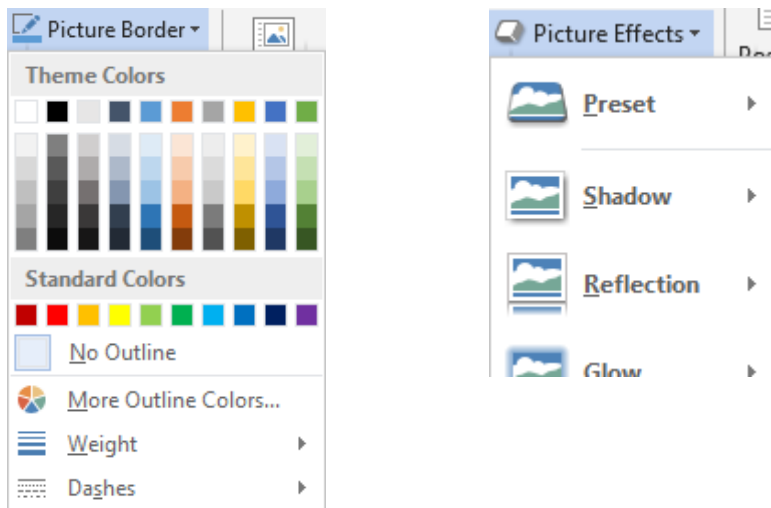


7.2.1 Picture Styles

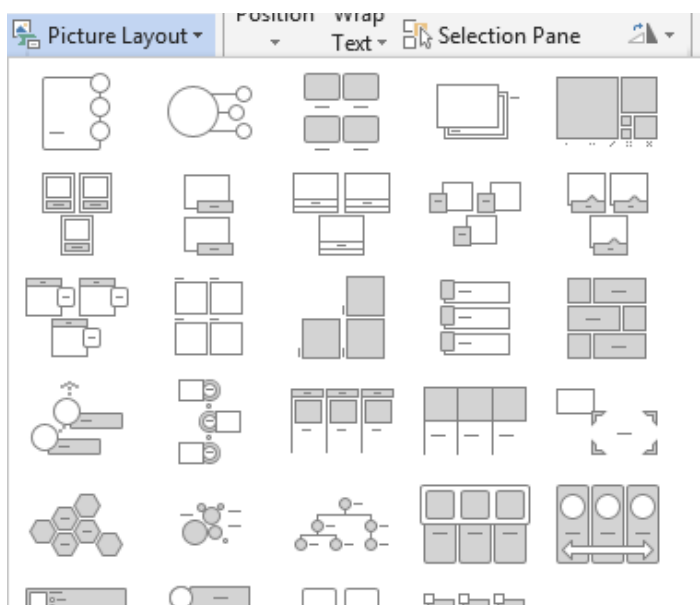
Make your choice, it is a large one.

7.2.2 Picture Shape and Picture Effects

Border color, size, weight ... Theme colors or standard colors. Heap of effects ...



7.2.3 Picture Layout




To turn one or more pictures into a SmartArt

Fixed pictures : you can only select one picture to create the SmartArt



Floating pictures : you can select more than one picture to create the SmartArt (floating)

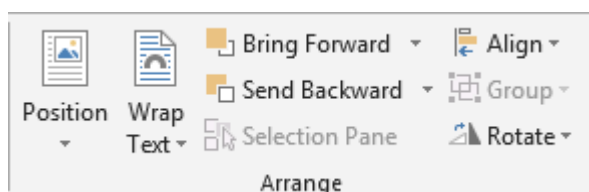


 Pictures are not *copied* into the SmartArt but they are *moved*.

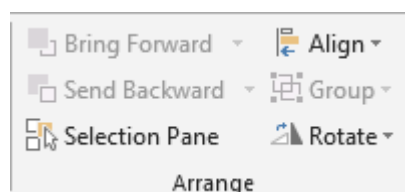


7.3 The ARRANGE Group

Word



Excel



Floating mode

All above tools imply that the pictures are in FLOATING mode.

This is quite logical : how could you have a background, foreground ... ?

The buttons to position and work with text wrapping have already been explained in the *Office Generalities* chapter.

7.3.1 Bring Forward / Send Backward

The commands include BRING TO FRONT / SEND TO BACK.

Word additionally includes BRING IN FRONT OF TEXT / SEND BEHIND TEXT.

When pictures are overlapping

Front and Back

Select the picture you wish to place at the top / bottom of the pile. Click on the corresponding option

Forward and Backward

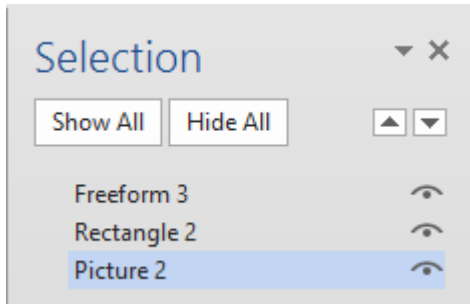
If more than two pictures are stacked, you may choose to move up or down the selected picture in the pile.

Word : Front / Behind Text

Does not work with pictures, rather with drawn shapes.

7.3.2 Selection Pane

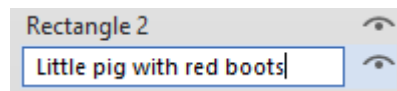
This selection pane is helpful to manage objects on the Word page or Excel worksheet



Click on the « eye » button and the object will not be displayed on the sheet (and also not printed)

The eye is grayed out : the object is not floating

Double-click on the object name : you can rename it.

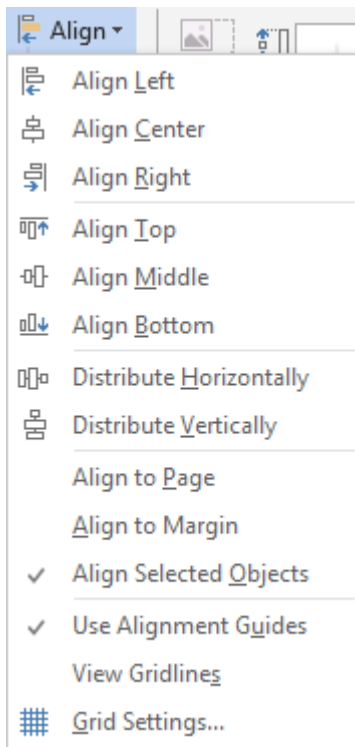


 Other access: HOME Tab – EDITING Group – Drop-down list of the SELECT (Word) / FIND & SELECT (Excel) Button –SELECTION PANE Option.

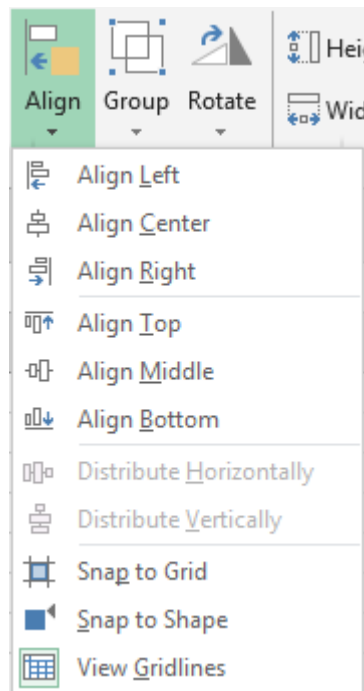
7.3.3 Align

First select the pictures (with the CTRL or SHIFT key). Here below the pull-down menu :

Word



Excel



Align (left, center ...)

For the following three cliparts the option was ALIGN CENTER (middle – vertical)



Distribute ...

To horizontally or vertically distribute the spacing between the selected pictures (or objects)

Word

Align to Page, Align to Margin or Align Selected Objects

These options change the result generated by the above ALIGN options

On by default : Align Selected Objects

Align to Page : when you choose one of the align options it is applied *to the page*. *Top* will mean *top of the page* – above the header for instance.

Align to Margin : when you choose one of the align options, it is applied according to the document margins. *Top* will mean top of the editing area (inside the document margins), just below the header.

Align Selected Objects

The objects are aligned after their own position and regardless where they are placed on the page.

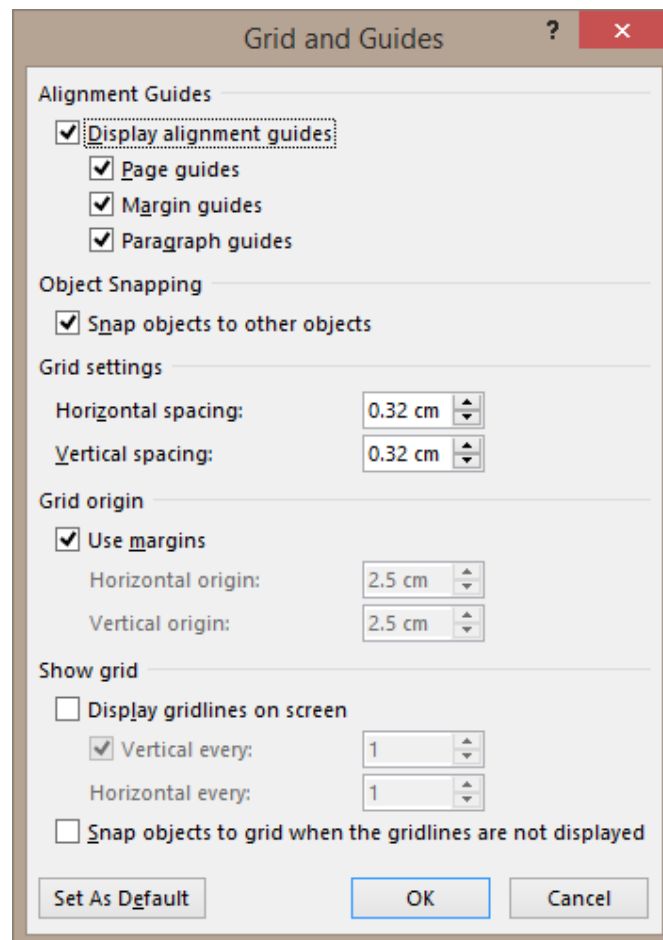
View Gridlines

The editing area (inside the document margins) displays gridlines (it looks like *graduated paper*).

Gridlines and grid are equivalent options. (see next topic).



Grid Settings



Snap objects to other objects (on by default)


This option will help you to align a drawing on the vertical or horizontal lines of another drawing.

For example : draw a line or an arrow between two shapes so that each end touches the shape's borders.

Grid (off by default)

The grid is an invisible network of lines that covers the screen. As you draw objects, their corners align on the nearest intersection of the grid. Although you do not see the grid, it automatically helps align objects. If you release the mouse button and the shape or any other drawing automatically « jumps » one or two millimeters it means that the grid is active. The object is adjusted to the nearest intersection.

Grid settings : spacing for the grid lines (0.32cm by default), where the grid should start on the page, display grid lines every 1 - 2 - 3 lines ...

 It is possible activate the grid but move an object without following the grid by pressing the ALT key while moving the object.

When the grid is off : moving is free and to the mm.

Excel

Snap to Grid
Snap to Shape
View Gridlines

Corresponds to the explained above options. Less options as there is no dialog box.

7.3.4 Group

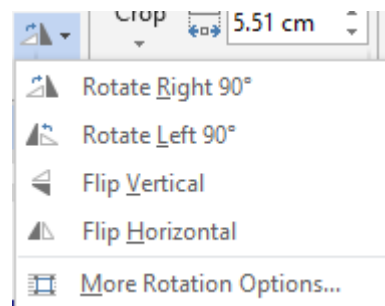
When you select several pictures or objects they can be grouped to create one graphic object (the inside objects can still be selected individually). And later on you may ungroup or regroup them very easily.



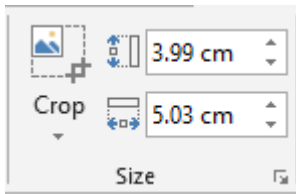
7.3.5 Rotate

Word : rotate options can be applied to any picture (a fixed one/layer 1 or a floating one/layer 2).

More Rotation Options : displays the formatting pane at the Size section (where you may specify a rotation in degrees).

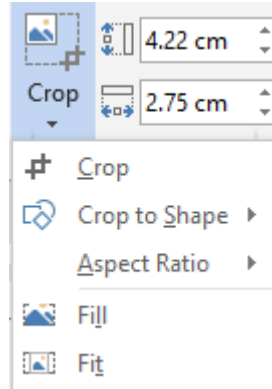


7.4 The SIZE group



Crop and size

The possibilities to crop have been tremendously improved (including the 2007 release) :



Here below a picture (free from right as it comes from the Microsoft online library)



Crop

The picture displays the cropping handles that you can drag



Crop to Shape

The shapes tear-off is displayed

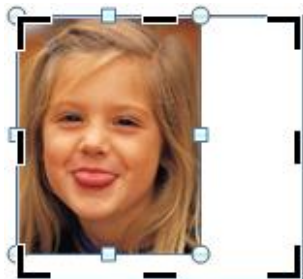


Aspect Ratio (16 :9)

Choose from 2:3, 3:4, 4:5 ... for portrait, 16:9, 16:10 ... for landscape



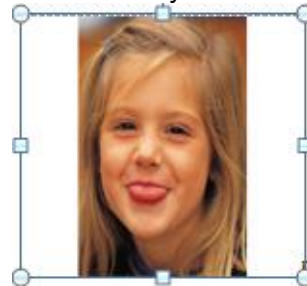
Fill : the picture has been enlarged by cropping « out »



Fill : the picture fills the area, the ratio is preserved but this can imply that some parts of the pictures may be missing



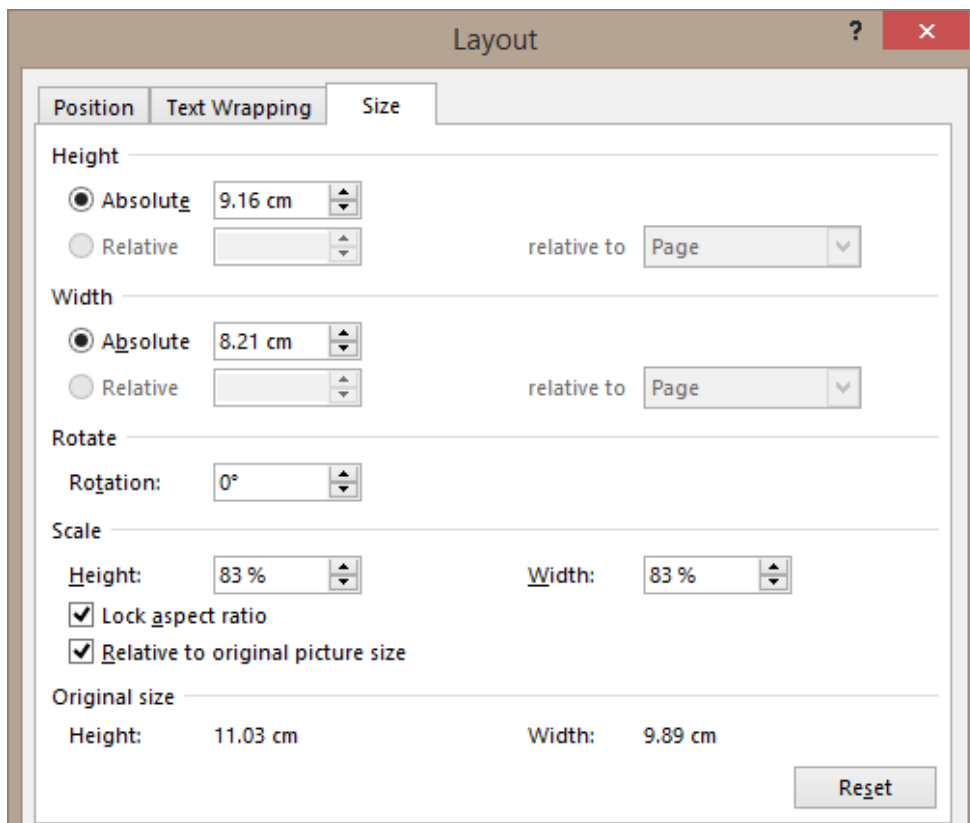
Fit : the picture fills the area as much as possible, the ration is preserved. Nothing is missing from the picture but the area may not be fully filled.



Size in cm

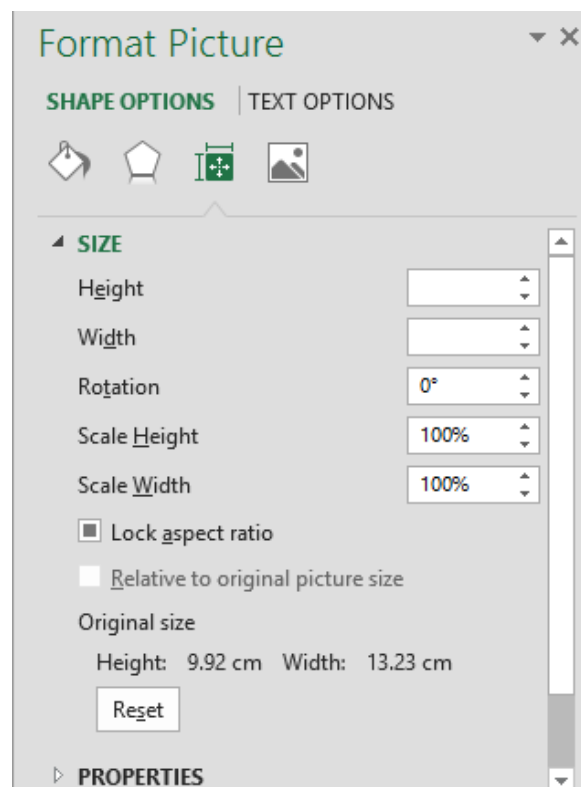
Set one measure only, the other will automatically adapt to preserve the aspect ratio (on by default)

Dialog box launcher



The options are rather clear : size, rotation, scale and crop ...
Scale is interesting : is preserving proportionality important ?

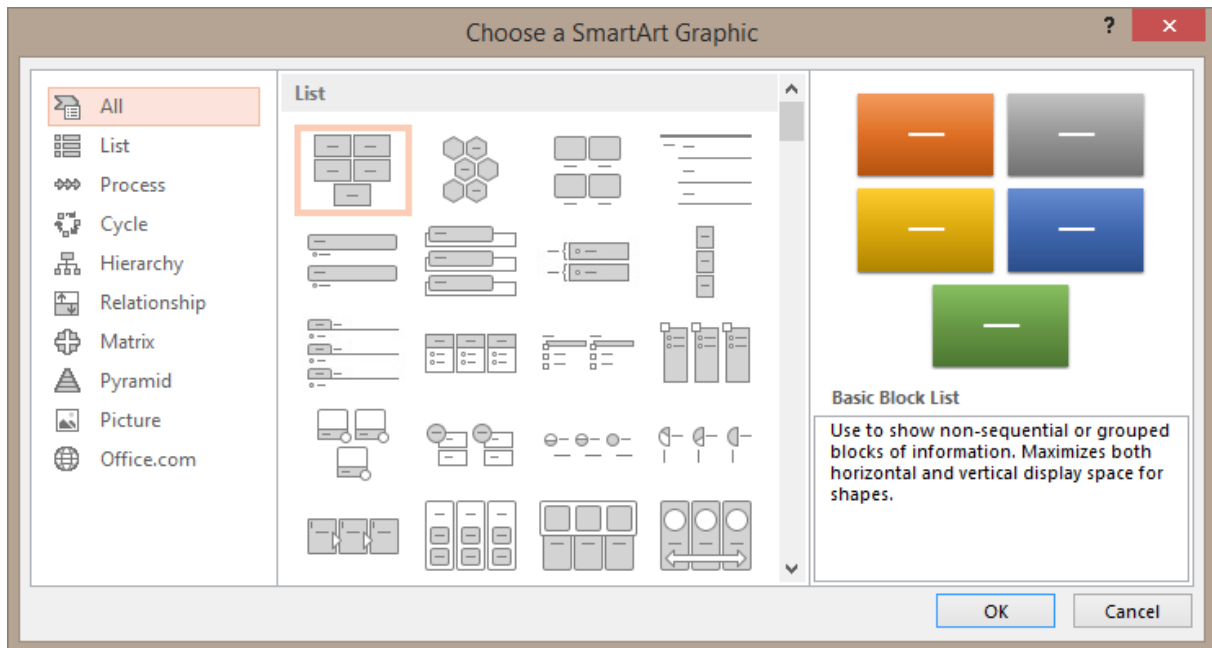
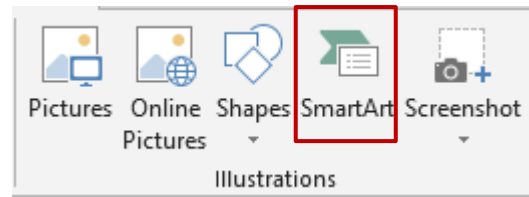
Excel : the above dialog box displays the formatting pane on the right, open at the SIZE and PROPERTIES sections



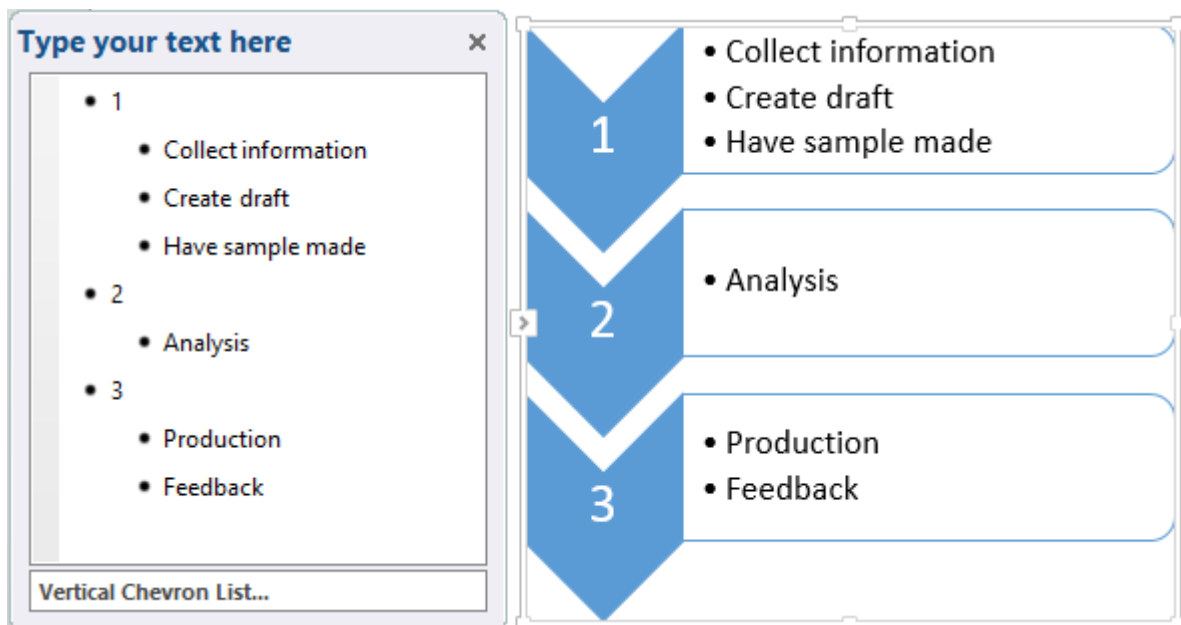
SMARTART

1 Inserting a SmartArt

- INSERTION Tab – ILLUSTRATIONS Group – SMARTART Button



Here below an example :



Word : by default a SmartArt belongs to the text layer (not floating)

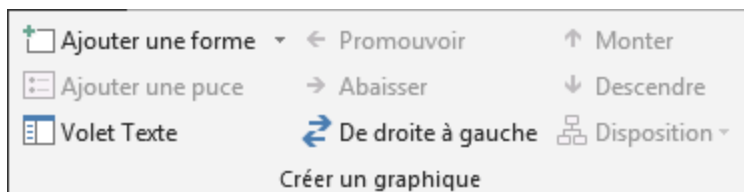
Excel : standard object

2 Managing the SmartArt by using the mouse

Select	<p>Click on the outside border. No round handles as for pictures but corner handles display three little dots. No green rotation handle.</p> <p>If you click on one of the inside shapes, you only select this one. This shape will display the usual sizing round handles and the green rotation handle.</p> <p>When you click onto text, you simply position the cursor.</p>
View / Hide the Text Pane	Click on the handle – on the SmartArt left side
Delete	Select according to what you need to delete (either the SmartArt itself or a given inside shape) and press the DELETE key.
Move/Copy	<p>Inside shapes can be freely moved (they are <i>floating</i> inside the SmartArt)</p> <p>Word : the SmartArt cannot be freely moved because it is not floating. Excel : the SmartArt can be moved as any standard graphic object.</p>
Size	Click and drag a size or corner handle (no problem of proportionality as with pictures).

3 DESIGN Tab

3.1 The CREATE GRAPHIC group : adding a shape, a bullet, changing the layout, the shapes order ...



Add Shape	<p>To add in an <i>inside</i> shape.</p> <p><i>Note</i> : some types of diagrams will not allow you to add shapes (such as the gear type). In this case, a red crossed out bullet will indicate the command unavailability.</p>
Add Bullet	<p>You can add a bullet provided that the insertion point is placed in the text, inside a shape. <i>Note</i> : pressing the ENTER key at the end of a bulleted paragraph will produce the same result</p> <p>According to the type of diagram, adding a new bullet may generate : <i>a new paragraph inside the existing shape</i> (list diagrams for example) or <i>a new shape containing a bulleted paragraph but attached to the active shape</i> (gear diagram for example).</p>

Text Pane

To show or hide the typing pane that is displayed at the left or at the right of the SmartArt.

Promote / Demote Move Up / Move Down

Change the shape/bullet position in the SmartArt hierarchy
Change the shape/bullet order position

Visual help : display the Text Pane

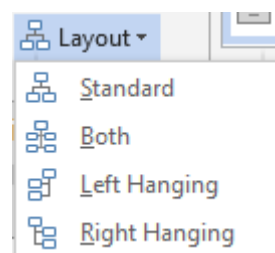
For a bullet : TAB = demote / SHIFT + TAB = promote


Right to Left

Inside shapes are reversed according to the chosen direction
(one click = from right to left / one more click = from left to right)

Layout

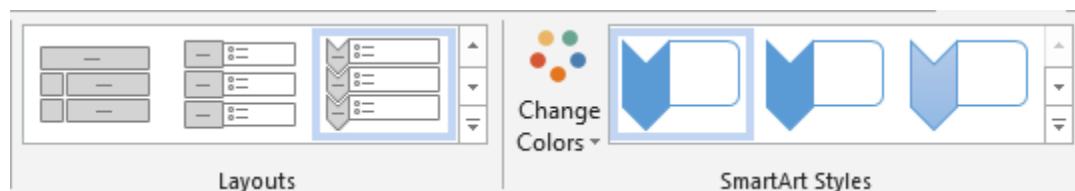
Not available for all types.
Essentially for hierarchy diagrams



 **Typing text inside a bulleted list** : when the quantity of text increases, the size is automatically reduced accordingly. Not only inside the current shape, but in all shapes.

 **Format of the text** : you may apply formatting attributes in the Text Pane or directly in the shape itself. But please note that the format will be displayed only in the shape (not in the Text Pane)

3.2 The LAYOUTS and SMARTART STYLES groups



Use the *Layouts gallery* to change the SmartArt without having to return to the INSERT Tab.
At the bottom of the gallery : the MORE LAYOUTS option display the general SmartArt insert dialog box.

The CHANGE COLORS button displays variations of the theme colors

At the bottom of its gallery : the RECOLOR PICTURES options will let you match the pictures colors to the SmartArt colors

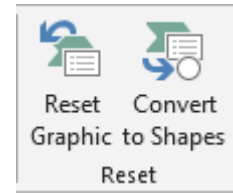
3.3 The RESET group

What will be reset ? Changing the order (right to left for instance), changing the colors or the styles effects ... but no effect if you have applied levels to typed text, changed the layout or changed the size.



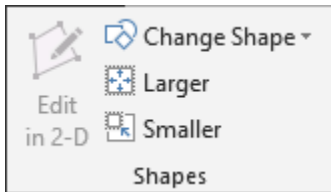
Excel

The group displays an additional button : CONVERT TO SHAPES
To convert each inside shape into an independent drawn shape



4 FORMAT Tab

4.1 The SHAPES group : working each shape individually



Select the required inside shape(s)

Edit in 2-D

Available only if the SmartArt is in 2D *style*

Change Shape

The gallery is the one displayed when you need to create a drawn shape. Make your choice and the shape will be adapted accordingly.

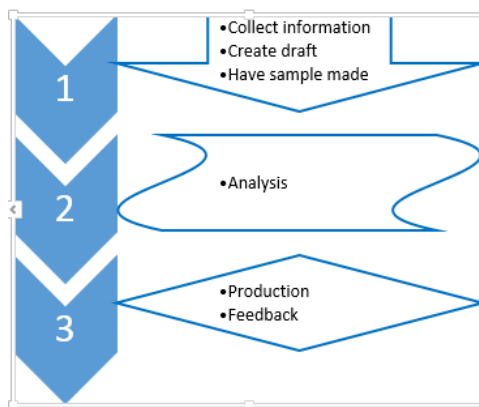
Larger / Smaller

To change the size of the internal shapes.

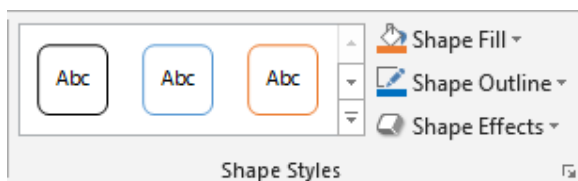
You may also produce the same result by clicking and dragging the shape handles.

Here after our SmartArt with a few changes

:

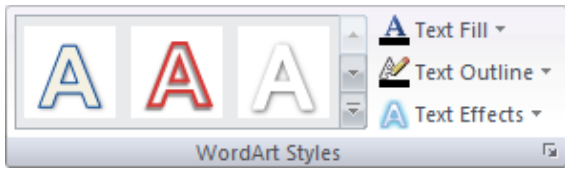


4.2 The SHAPE STYLES group : colors, fill, outline ...



According to your selection : the whole SmartArt or the selected shape(s)

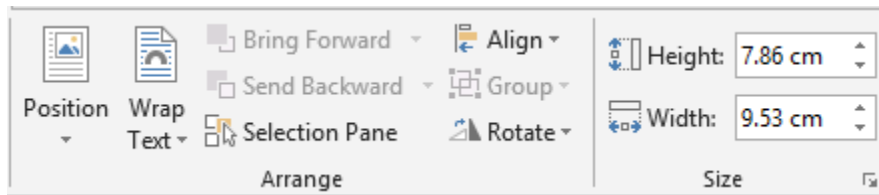
4.3 The WORDART STYLES group : effects applied to the shape text




According to the selected text

4.4 The ARRANGE group : bringing to front or sending to back, aligning, rotating ...

Word :

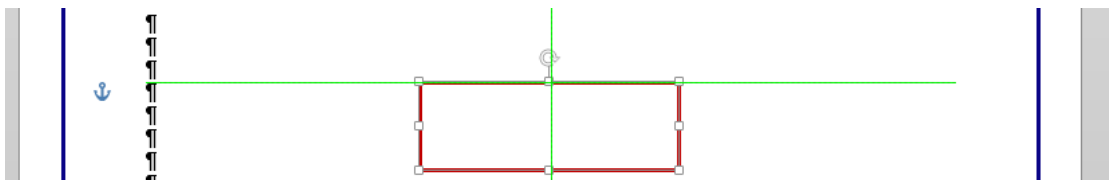


The commands will be available only if the SmartArt diagrams are floating (layer 2).

To make it floating : WRAP TEXT button or POSITION or the following button  *at its top right side*

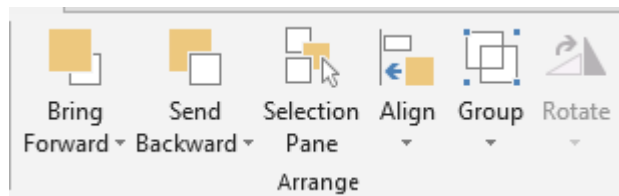
Options about Position and Text Wrapping have been explained at the beginning of this documentation. The Bring to Front, Send to Back, Align, Alignment, Gridlines ... options are explained on page 33.

New 2013 for floating objects : When you move an object such as an image, chart, drawing ... around in a document, green alignment guides automatically appear to show you when the object is lined up with other elements or key page locations (edge – left – right margin). Here a middle alignment :

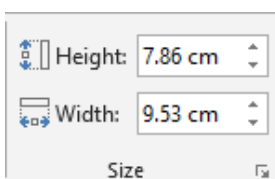


Excel :

Same commands without the buttons linked to position and text wrapping.



4.5 The SIZE group



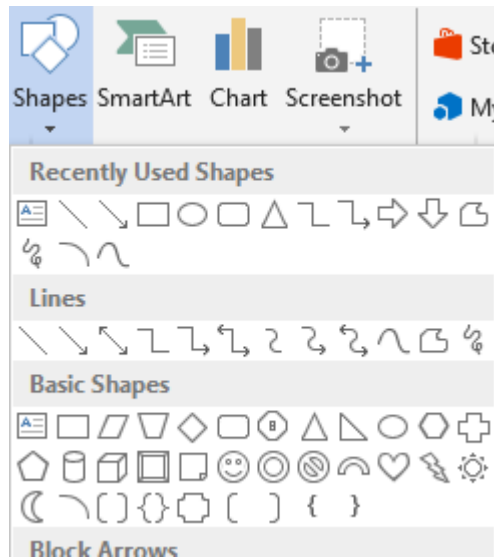
Set the size in cm

Note : you may also size the SmartArt by simply clicking and dragging its sizing handles.

DRAWN SHAPES AND DRAWING CANVAS

1 Inserting a drawn shape

- INSERT Tab – ILLUSTRATIONS Group – SHAPES Button



Word : these autoshapes are floating and therefore belong to the layer number 2. The shape is *anchored* to the nearest paragraph but it can be dragged and positioned freely on the page. **Excel** : standard graphic object.

1.1 Creating the shape

- Click on the required type then release mouse
- Position the mouse pointer where you need to start drawing
- Click and drag to size the shape

1.1.1 [Drawing perfect shapes \(squares, rounds ...\)](#)

Keep the SHIFT key pressed while drawing.

1.1.2 [Drawing from the center outward](#)

Keep the CTRL key pressed while drawing.

1.1.3 [Drawing a perfect shape from the center outward](#)

Keep the CTRL + SHIFT keys pressed while drawing.

1.1.4 [Drawing the same shape several times](#)

For all shapes except the text box

Right click the required shape

Select the LOCK DRAWING MODE option

Click and drag and create as many shapes as you need

Finished ? : press the ESC key on the keyboard

1.1.5 Special : scribble and freeform

Scribble : the mouse pointer turns into a pencil. Click and drag to draw.
pointeur de la souris se transforme en crayon, dessinez.

Free form : click in sequence to create straight segments and click and drag to create curves.
Double-click to end the shape or click on the start point.

*Edit segments to modify them : right click the shape and select the EDIT POINTS option.
See topic on page 51.*

1.1.6 Adding text

Select the shape and type *or*
Right click the shape and ADD TEXT (Word) / EDIT TEXT (Excel)

1.2 Managing the shape by using the mouse

Selecting

Click on the shape

Select more than one shapes by using the usual Windows techniques : CTRL or SHIFT. You may also use the *arrow* to select objects.

Word : HOME Tab – EDITING Group – Drop-down list of the SELECT Button – SELECT OBJECTS Option.

Excel : HOME Tab – EDITING Group – Drop-down list of the FIND & SELECT Button – SELECT OBJECTS Option

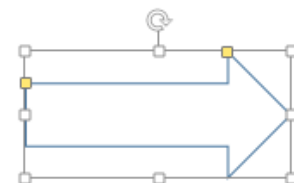
Objects will have a selection priority. You can click and drag to include all the required objects (any object 100% included will be selected)

Sizing

Click and drag a side or corner handle. No proportionality issue as for pictures.

The yellow lozenge

Many shapes will display this yellow lozenge when selected. You can use it to re-size a portion of the shape (here the width of the arrow)



Rotating

It is the round white handle

Word : the typed text does not follow the rotation applied to the shape. The only solution : the TEXT ORIENTATION button (FORMAT Tab – TEXT group). *Or copy-paste the same shape but created in Excel ... (caution, the text will not be editable)*

Excel : the text follows the shape.

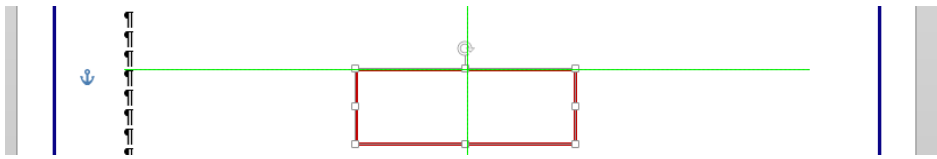
Moving/Copying

Move : click and drag the shape (caution do not click onto a sizing handle). If you combine this with the CTRL key, you will *copy* the shape. *Or click and drag the shape but using the right mouse button and you will be prompted to choose between a copy and a move.*

Deleting

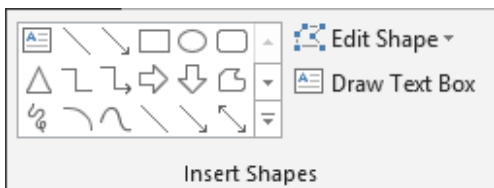
Click to select the shape and press the DELETE key

New 2013 for floating objects : When you move an object such as an image, chart, drawing ... around in a document, green alignment guides automatically appear to show you when the object is lined up with other elements or key page locations (edge – left – right margin). Here a middle alignment :

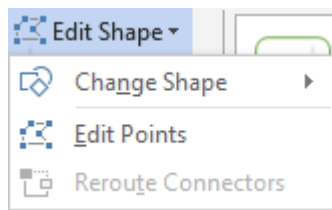


1.3 FORMAT Tab

1.3.1 The INSERT SHAPES group



The Insert Shapes gallery



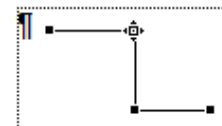
To change the type of shape without having to switch to the INSERT tab.

Change Shape

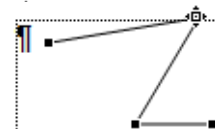
To change the shape without losing formatting attributes (colors, effects ...)

Edit Points

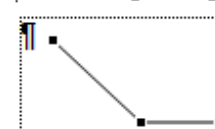
Each segment is displayed



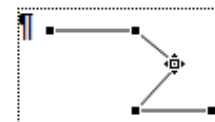
Click and drag a point = the « arrow » is distorted



CTRL + click a point = the point is deleted and the two segments are consequently merged

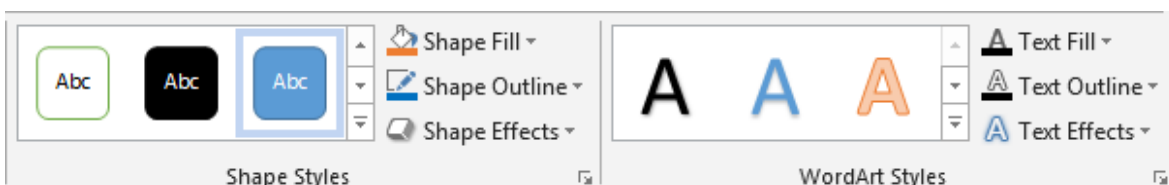


Click and drag a segment = you create a new point at the dragging start point.



Draw Text Box Button To insert a new text box without reverting to the INSERT Tab

1.3.2 The SHAPE STYLES and WORDART STYLES groups



The Shape Styles gallery

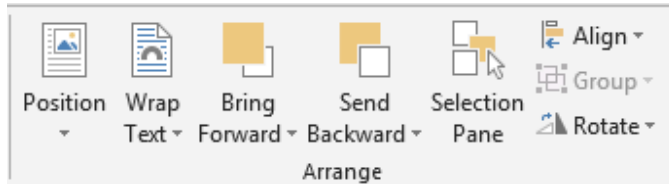
Colors and various shadings ... from the current theme.

WordArt Styles

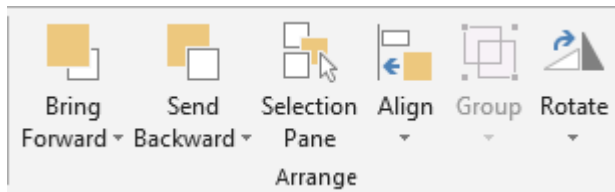
WordArt Text effects are applied to the shape selected text

1.3.3 The ARRANGE group : bring to front or send to back, alignment, rotation ...

Word

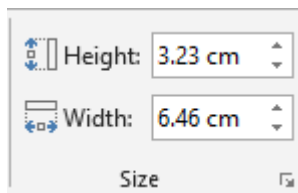


Excel



The ARRANGE commands have been explained on page 33 (chapter about pictures)

1.3.4 The SIZE group



Set the size in cm.

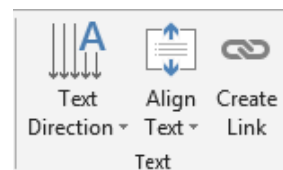
Sizing using the mouse can be more comfortable.

1.4 A special shape : the text box

Excel : this shape is not different from the others. The only exception : no automatic fill color

Word :

Whether you have converted a drawn shape into a text box (by adding text to it) or directly drawn one, the FORMAT tab displays an extra group between the WordArt Styles and the Arrange groups :



Text Direction

Three choices : horizontal, 90° rotation, 270° rotation

Align Text

A drop-down list provides choices for the text vertical alignment in the shape.

Create Link


To link several text boxes

- Create the first text box.
- If the text inside is too long and won't fit inside, create a second, third ... box

- Click on box 1 and click on the link button
- The mouse pointer turns into a jug
- Click inside box 2, then box 3

*The text split between the total number of boxes
The other button - Break Link – becomes available when you click on the first one*

1.5 Set the current shape format as default format

 Only valid for this document / workbook

Right click on the shape and select the SET AUTOSHAPE DEFAULTS option.

2 Word only : creating a new drawing canvas

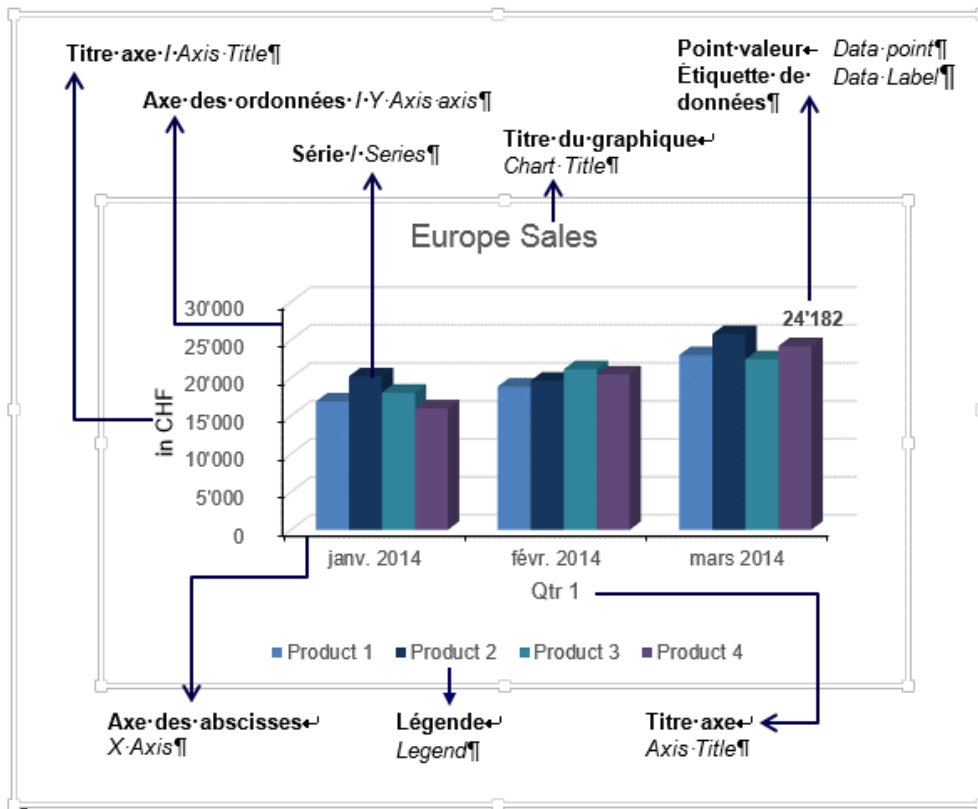
It is the option located at the bottom of the INSERT – SHAPES gallery.

Aim

Pictures belong to the "text layer" by default and drawings belong to the "objects layer" by default.

Word offers a third possibility : using canvas to create a fixed drawing area into which pictures and drawings are floating. Advantage : no need to worry about the object anchor, no need to group object so that they can be selected a one group.

Here below an example of such a canvas :



Managing by using the mouse :

- | | |
|-----------------------|--|
| Selecting | Click into the canvas |
| Sizing | Click and drag a side or corner handle |
| Moving/Copying | <i>Move : click and drag the shape (caution do not click onto a sizing handle). If you combine this with the CTRL key, you will copy the shape. Or click and drag the shape but using the right mouse button and you will be prompted to choose between a copy and a move.</i> |
| Deleting | Click on the canvas border and press the DELETE key |

Right click the canvas and the shortcut menu will display options specific to canvas : *Fit, Expand, Scale Drawing.*

Can a canvas be made floating ?

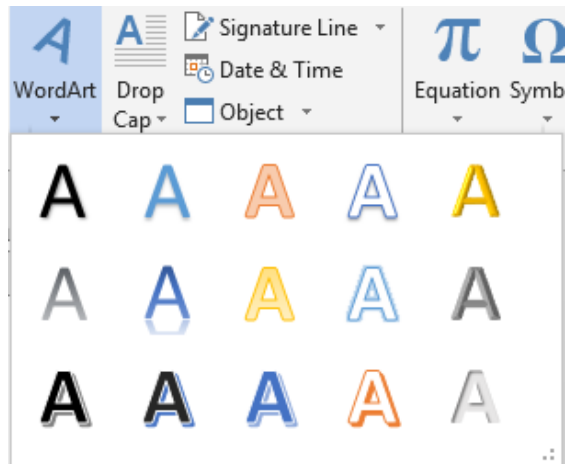
Yes no problem. Do as you would with a picture.

- ① Formatting tag at the drawing top right side
- ② Double-click on it (on the border for instance)
FORMAT Tab – ARRANGE Group – TEXT WRAPPING Button

**TEXT GRAPHIC OBJECTS
(ESSENTIALLY WORD)**

1 Word and Excel : inserting a WordArt object

- INSERT Tab – TEXT Group – WORDART Button



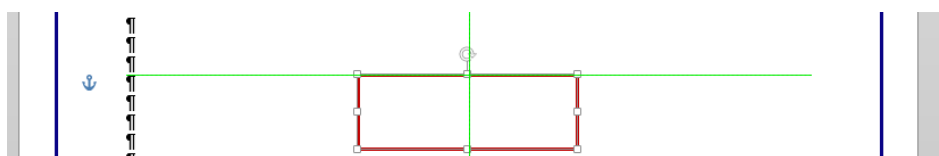
As Word provides WordArt effects to selected characters, the WordArt object automatically belongs to the layer no2. It is therefore a floating object.

The Ribbon displays the FORMAT tab with the usual groups to work on drawn shapes (for more explanations see page 49)

1.1 Managing using the mouse

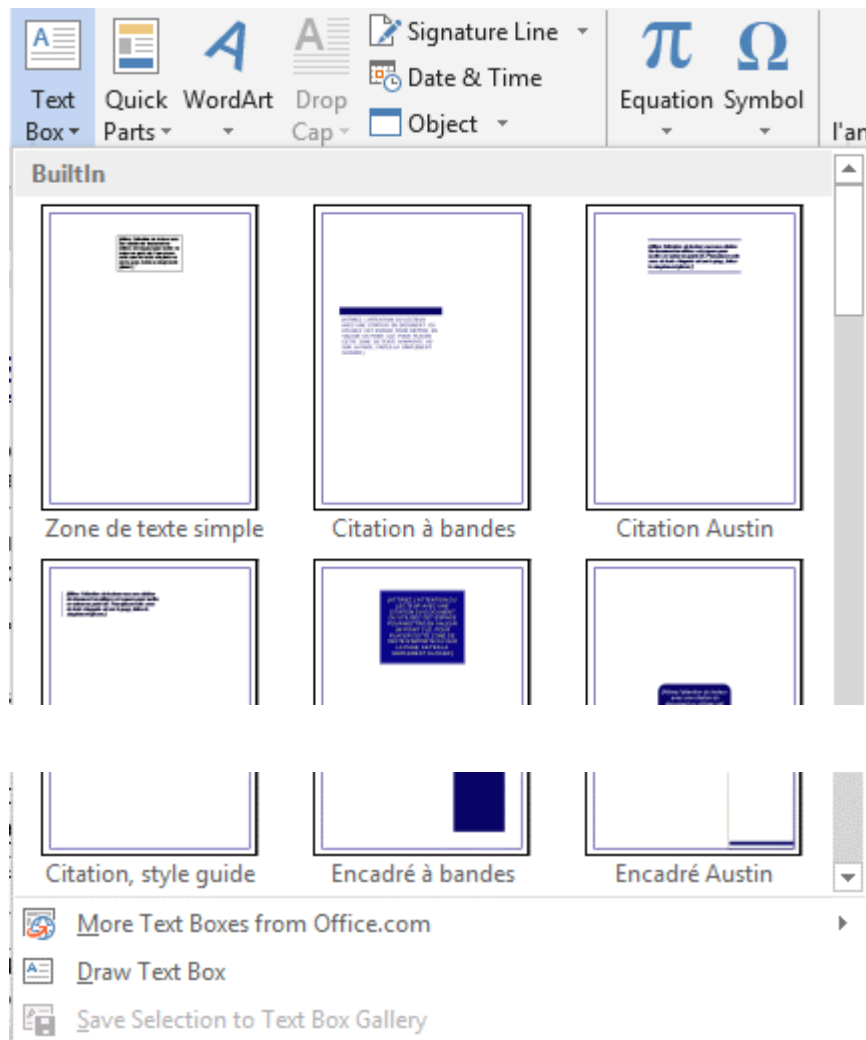
- | | |
|--------------------|--|
| Select | <i>Text</i> : click into the WordArt
<i>Object</i> : click on the border |
| Size | Drag a corner or side handle |
| Move / Copy | <i>Move</i> : click and drag the shape (caution do not click onto a sizing handle). If you combine this with the CTRL key, you will <i>copy</i> the shape. <i>Or click and drag the shape but using the right mouse button and you will be prompted to choose between a copy and a move.</i> |
| Delete | Click the WordArt border and press the DEL key |

New 2013 for floating objects : When you move an object such as an image, chart, drawing ... around in a document, green alignment guides automatically appear to show you when the object is lined up with other elements or key page locations (edge – left – right margin). Here a middle alignment :



2 Word only : inserting a text box pre-defined and pre-formatted

- INSERT Tab – TEXT Group – TEXT BOX Button
The gallery :



These preset "templates" present how the text box will be formatted and automatically placed on the current page. All you have to do is type text and maybe nudge down, up ... the box or change some format attributes.

The DRAW TEXT BOX option, located at the bottom of the above gallery, can be used to draw a standard text box.

A custom text box can be saved through the SAVE SELECTION TO TEXT BOX GALLERY option. It can then be retrieved through the QUICK PARTS button (in the drop-down list of building blocks – see *documentation on Templates and Forms (Automate)*).

Managing the text box : as for normal shapes. See corresponding topic

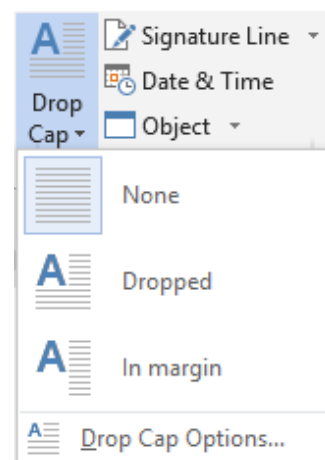
3 Word only : inserting a drop cap

This year marks the 140th anniversary of the birth of Camille Claudel, a genius of sculpture who has never obtained the popularity she deserved and whose life and work still remain obscure to most of us. Very often, those who ever heard of her will automatically relate her to sculptor Auguste Rodin (her teacher and lover), but very few people have really seen her as a genuine, individual artist. For this reason, it is important to honor the memory of Camille Claudel.

Required result :

This year marks the 140th anniversary of the birth of Camille Claudel, a genius of sculpture who has never obtained the popularity she deserved and whose life and work still remain obscure to most of us. Very often, those who ever heard of her will automatically relate her to sculptor Auguste Rodin (her teacher and lover), but very few people have really seen her as a genuine, individual artist. For this reason, it is important to honor the memory of Camille Claudel.

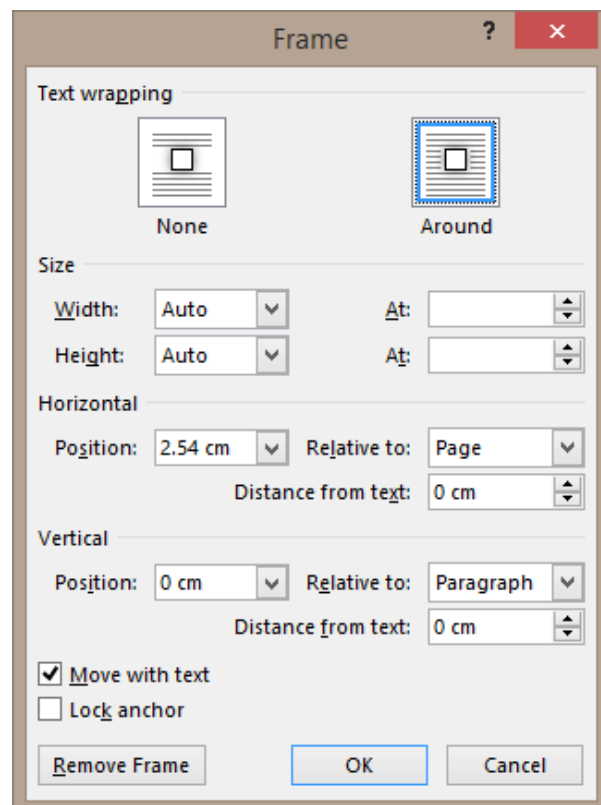
- INSERT Tab – TEXT Group – DROP CAP Button



Drop Cap Options to modify the font, the number of lines to drop and the distance to text

The drop cap is a *frame*. A frame works like a text box and is managed similarly.

Double-click on the frame border and here below the dialog box that will be displayed.



4 Word only : inserting the content of a file

Not really a topic related to graphic object, rather a sort of global copy-paste.
But we decided to mention the command as finding it was not really intuitive to us.

- INSERT Tab – TEXT Group – OBJECT Button – TEXT FROM FILE Option

 For Excel : use a standard text copy-paste as there is no global command.

5 Word only : inserting an equation

This is an object, whose nature would be between a graphic object and a text object.

We decided to place it among the text objects. Why ? Because of its main characteristic : it is a content control and not an object.

This topic will not be exhaustive as only specific users will need to create equations.

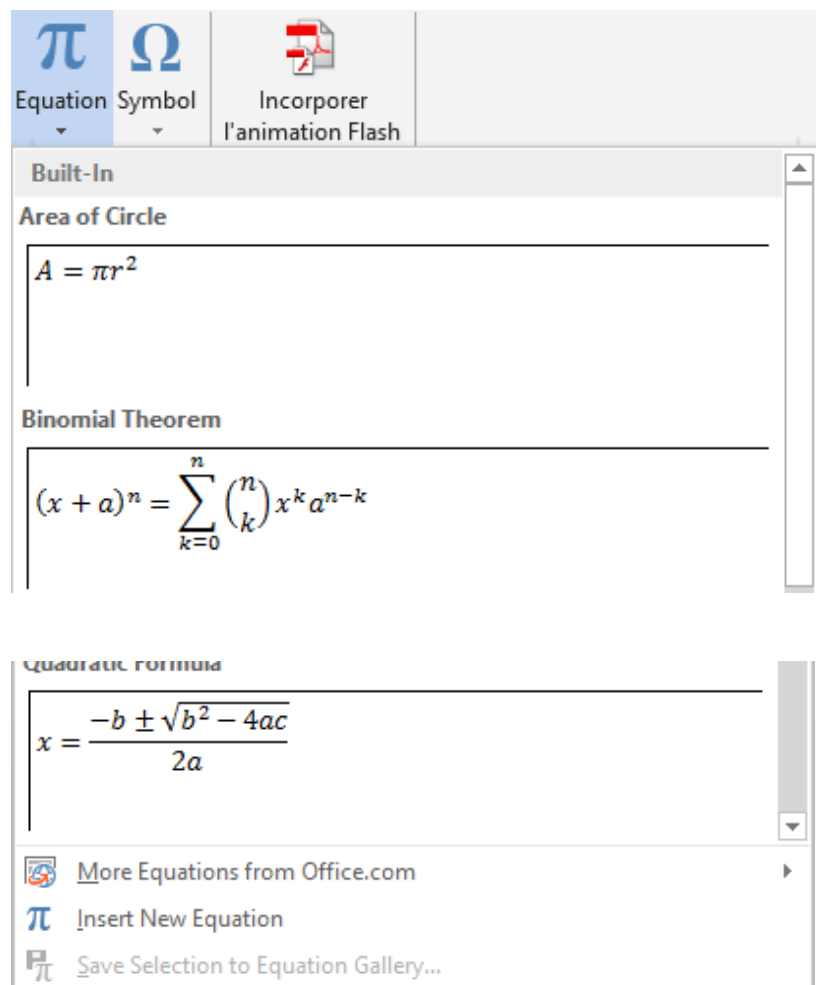
Here below the main points to know :

5.1 The gallery to choose a pre-set equation or creating a new one manually

- INSERT Tab –
SYMBOL Group –
EQUATION Button

*Click on the upper part
The EQUATION TOOLS /
DESIGN Tab will be
displayed*

*Click on the lower part,
that is on the word
Equation
The following gallery will
be displayed :*



Make your choice. A content control showing the equation will be inserted at the insertion point. As standard controls, it is not floating.

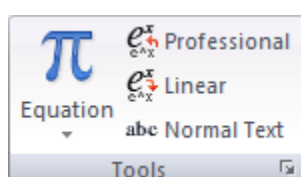
Creating a equation manually

Click on the INSERT NEW EQUATION option

The EQUATION TOOLS / DESIGN tab and its options will give you all the related tools to modify a pre-set equation or build your own.

$$e^x = 1 + x/1! + x^2/2! + x^3/3! + \dots, \quad -\infty < x < \infty$$

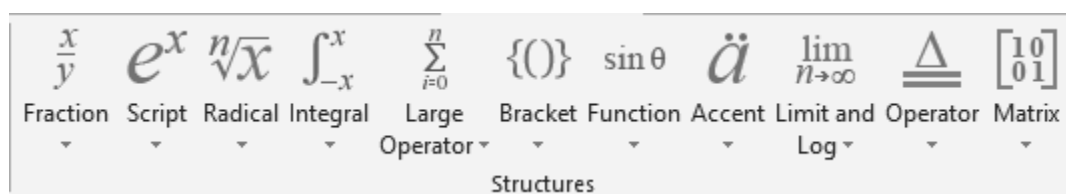
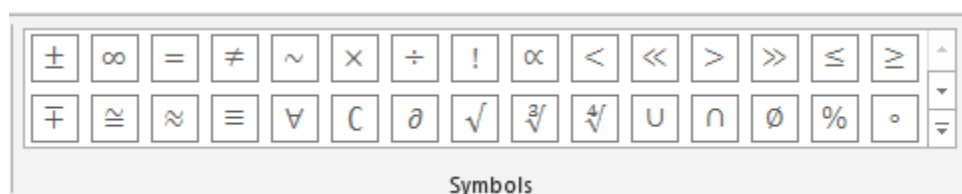
5.2 EQUATION TOOLS / DESIGN Tab



Equation : gallery of pre-set equations (to avoid reverting to the INSERT tab)

Professional, Linear ... : changes the selection to a 2D, 1D that is normal text

Dialog box launcher : advanced options for professionals



You can work with the two groups simultaneously : you can insert a symbol, then a structure into which you will insert one or more symbols ...

Excel : no equation button. You will have to create an object and the default program will be « Microsoft Equation Editor 3.0 ». Provided it has been installed.

COPIED & PASTED OBJECTS :
(standard, DDE link or OLE)

1 Generalities

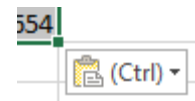
1.1 Standard copy&paste

The copy-paste command is no problem in Word ...

If you copy-paste an Excel range of cells into a new sheet or into a new workbook, problems may well occur if there are formulas.

If you copy-paste an Excel range of cells into a Word document or a PowerPoint presentation, various possibilities are possible but managing the object and controlling the file size can become a real headache ...

What you must do whenever you paste : click on the paste options tag to check the possibilities and their implications



1.2 Pasting with a link (DDE)

DDE stands for Data Dynamic Exchange

This link can be set when you copy-paste from one program into another one. For instance when you copy-paste an Excel range of cells into a new Excel workbook or into a new Word document.

The two files are *linked*. When you modify the source file, the destination file (called the *client*) is automatically updated accordingly. But it is important to know how to manage the update (when it fails, when the source file is moved or renamed ...). As the files are simply linked, the size of the destination file is never a problem. On the other hand, it requires to be cautious if the two files are sent over the mail (possible problems with the update)

1.3 Creating an OLE object

OLE stands for Object Linking and Embedding

The concept behind an OLE object is the following : without exiting the current program – the *destination* program – another application is launched, that "lends" its menus and commands to create the required object (by typing the data manually or by pasting previously copied data). The application is then closed and you revert to the current program.

- *Linking* because there is a link between the object and its source application. Usually double-clicking the object runs the source application.
- *Embedding* because the object is *totally incorporated* into the destination file (document or workbook). It is not saved as a separate file.

All programs can be launched to create an OLE object but true to admit, some belong more often to *destination* applications (such as Word) while others work as the *source* application for the required object (such as Excel).

2 Example 1 : a range of cells is copied and pasted into another worksheet or workbook

- Copy the range of cells and paste it into the existing workbook or into a new one

The *Paste Options* tag options and the PASTE SPECIAL are identical. They display buttons that you can point to get a help tooltip :

Paste

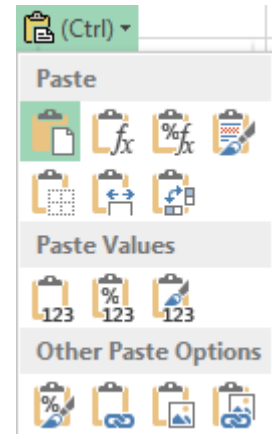
Paste – Formulas – Formulas & Number Formatting – Keep Source Formatting – No Border – Keep Source Formatting - Transpose

Paste Values

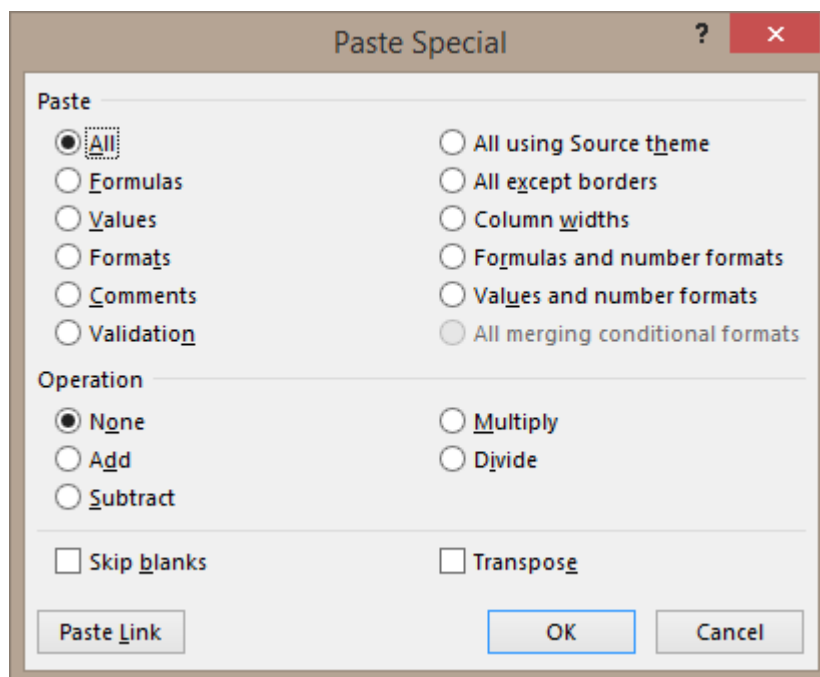
Values – Values & Number Formatting – Values & Source Formatting

Other Paste Options

Formatting – Paste Link – Picture – Linked Picture

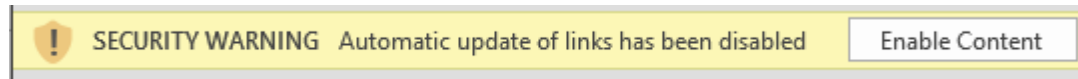


The PASTE SPECIAL dialog box

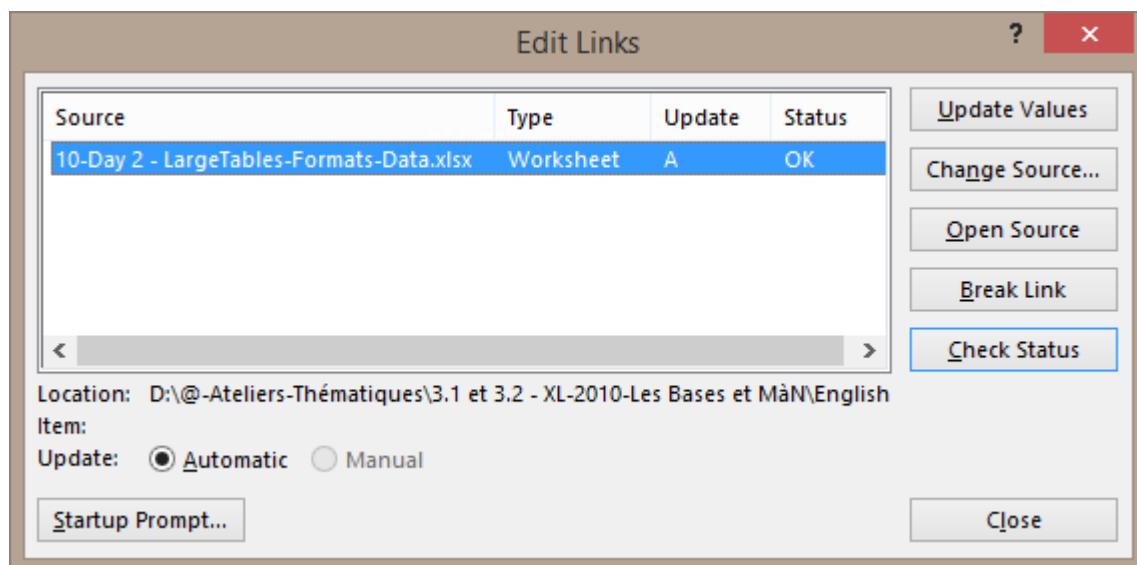
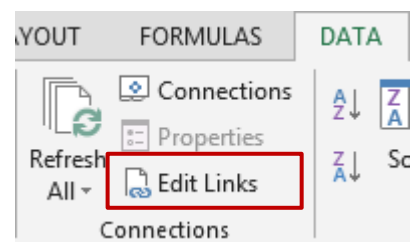


- Choose the type of paste :
As in Word : with or without a link – values only, format ...
Note : the Paste Options menu does not include a *Link ... and format* option.
Consequently you must first set the link and then go to the Paste Special dialog box to retrieve the format ...

- In case of a link *inside the same workbook*: it is a standard link such as a =B2. No specific implication. When you modify the source cells, the destination cells are automatically updated.
- In case of a link *into another workbook*: when you open the "client" workbook, there will be no dialog box to prompt you to update. Links are automatically turned off. A warning message will be displayed at the top of the window giving you the possibility to *enable the content* :



- If you accept, the update will be automatic.
- Access to the LINKS dialog box : DATA Tab - CONNECTIONS Group – EDIT LINKS Button. *The button is active only if there is such a link.*



- UPDATE VALUES** To update the Excel workbook (client). Updating is usually automatic but it can at times fail.
- CHANGE SOURCE** Has the Excel file been moved to another folder or renamed ? It is then necessary to re-establish the link by updating the file name or path.
- OPEN SOURCE** To open the source file (here our Excel file) if it is closed or bring it to the foreground if it is active..
- BREAK LINK** To remove the link. A message warns you that the command cannot be undone.
- CHECK STATUS** Is the source *open, unknown ... ?*

Update

Il peut être pratique de demander une mise à jour manuelle lorsque l'on a de nombreuses modifications, calculs etc... à faire. Elle ne sera déclenchée que par le bouton UPDATE VALUES. Cette option a perdu de son utilité tant la vitesse de calcul des ordinateurs s'est améliorée et ne concerne que les feuilles de calcul d'une grandeur "extra ordinaire".

Startup Prompt

How to manage the update when you open the document : should Excel ask you and let you decide, or display no warning message and automatically update or display no warning message and skip the update ?

Advantages

The size of the file is VERY, VERY small.
The two files remain independent (they can be edited, modified, printed ... separately).

Drawbacks

« travelling »
If you send the file over the mail, if you move the files ... the link often remains set on the original path (when the file was created and saved). Consequently updating fails.

The solution is simply to press the CHANGE SOURCE button in the LINKS dialog box but most of the time the recipient ignores this ...

Therefore DDE links should be created between files that do not "travel".

- Other access to the managing dialog box : FILE - INFO – the option is in the file PROPERTIES section. *This option is only displayed if there is a link and also provided both files are saved.*

3 Example 2 : pasting a range of cells from Excel into Word (standard or as a DDE link)

Here after a small Excel table :

	A	B	C	D
1	Sales	January	February	March
2	Product 1	56	96	75
3	Product 2	85	45	57
4	Product 3	69	54	63
5	Total	210	195	195

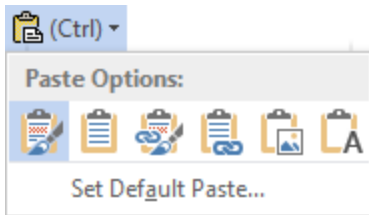
- Select the range of cells in Excel and copy into the clipboard
- LEAVE THE EXCEL SOURCE FILE OPEN or the clipboard is emptied
- Activate the destination Word document

3.1 Standard paste

The result : a standard Word table

Sales	January	February	March
Product-1	56	96	75
Product-2	85	45	57
Product-3	69	54	63
Total	210	195	195

When pasting, the *paste options* tag will automatically be displayed. The tag drop-down menu displays combinations of options found in the normal Paste Special dialog box.

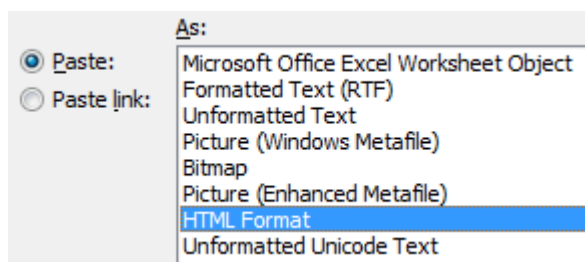


Point a button to get the tooltip :

-  Keep Source Formatting
-  Use Destination Styles
(*style Normal brut*)
-  Link & Keep Source Formatting
-  Link & Use Destination Styles
-  Picture
-  Keep Text Only
(*simples paragraphes avec des tabulations sur taquets*)

3.2 Paste special – standard with no link

- HOME Tab – CLIPBOARD Group – Drop-down menu of the PASTE Button



Format HTML = standard paste

Whether you have use the Paste Special dialog box or the *Paste Options* tag, here below a sample of the most common options :

3.2.1 Microsoft Office Excel Worksheet Object

Sales	January	February	March
Product 1	56	96	75
Product 2	85	45	57
Product 3	69	54	63
Total	210	195	195

At first it looks like a "picture" (you can size it as such).

❗❗❗ **But a double-click shows that THE WHOLE EXCEL FILE has been copied and inserted in the Word document. Dangerous if the Excel file is a heavy one ...**

	A	B	C	D
1	Sales	January	February	March
2	Product 1	56	96	75
3	Product 2	85	45	57
4	Product 3	69	54	63
5	Total	210	195	195

The fact that the file displays all its worksheets proves that the file was copied *fully*

3.2.2 Formatted Text

Similar to default pasting. One difference though : the colors are not strictly identical.

Sales	January	February	March
Product-1	56	96	75
Product-2	85	45	57
Product-3	69	54	63
Total	210	195	195

3.2.3 Unformatted Text

Sales	January	February	March
Product 1	56	96	75
Product 2	85	45	57
Product 3	69	54	63
Total	210	195	195

3.2.4 Picture

Sales	January	February	March
Product 1	56	96	75
Product 2	85	45	57
Product 3	69	54	63
Total	210	195	195

3.3 Paste special – with a DDE link

- HOME Tab – CLIPBOARD Group – Drop-down menu of the PASTE button or the options with the word "link" in the Paste Options tag drop-down list.

The formats displayed by the Paste Special box are the same as for a standard paste but there is now A LINK.

This type of link is called *DDE link (Data Dynamic Exchange)*

Word displays the table but in reality this is only a LINK field code.

Here below the field code for the previous range of cells :

```
{ LINK Excel.Sheet.12 "C:\\Users\\jael\\Desktop\\2012-Projections.xlsx" "Data!R1C1:R5C4" \\a \\f 4 \\r }
```

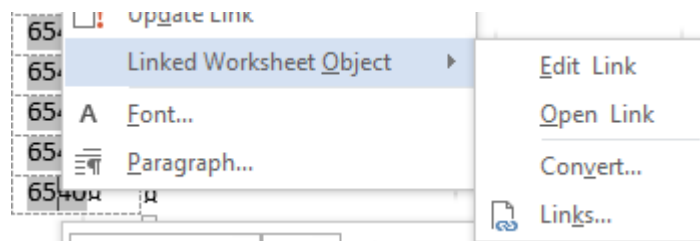
How to switch from the code to the result and vice versa – Reminders :

SHIFT + F9 on the code to toggle THIS field code

ALT + F9 to toggle all the document field codes

3.3.1 Managing the object : updating / opening the source file

Right click to display the following options :



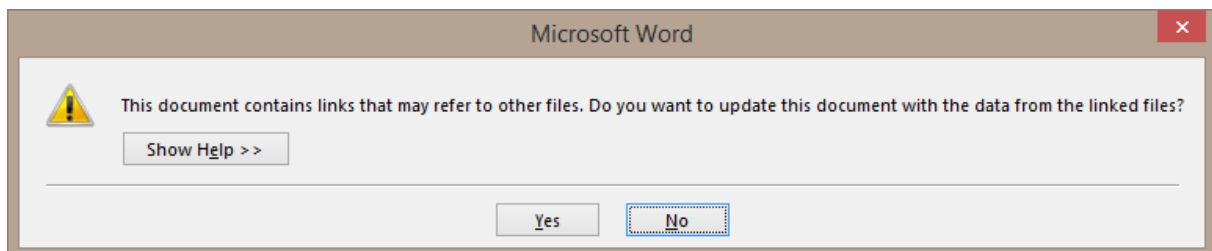
Update Link : field codes are not automatically updated. So click this option if you have made a modification into the source file and want the Word document to be updated.

Other possibility to update : F9 on the field code.

Edit / Open Link : same result - Excel is run and the source file is opened

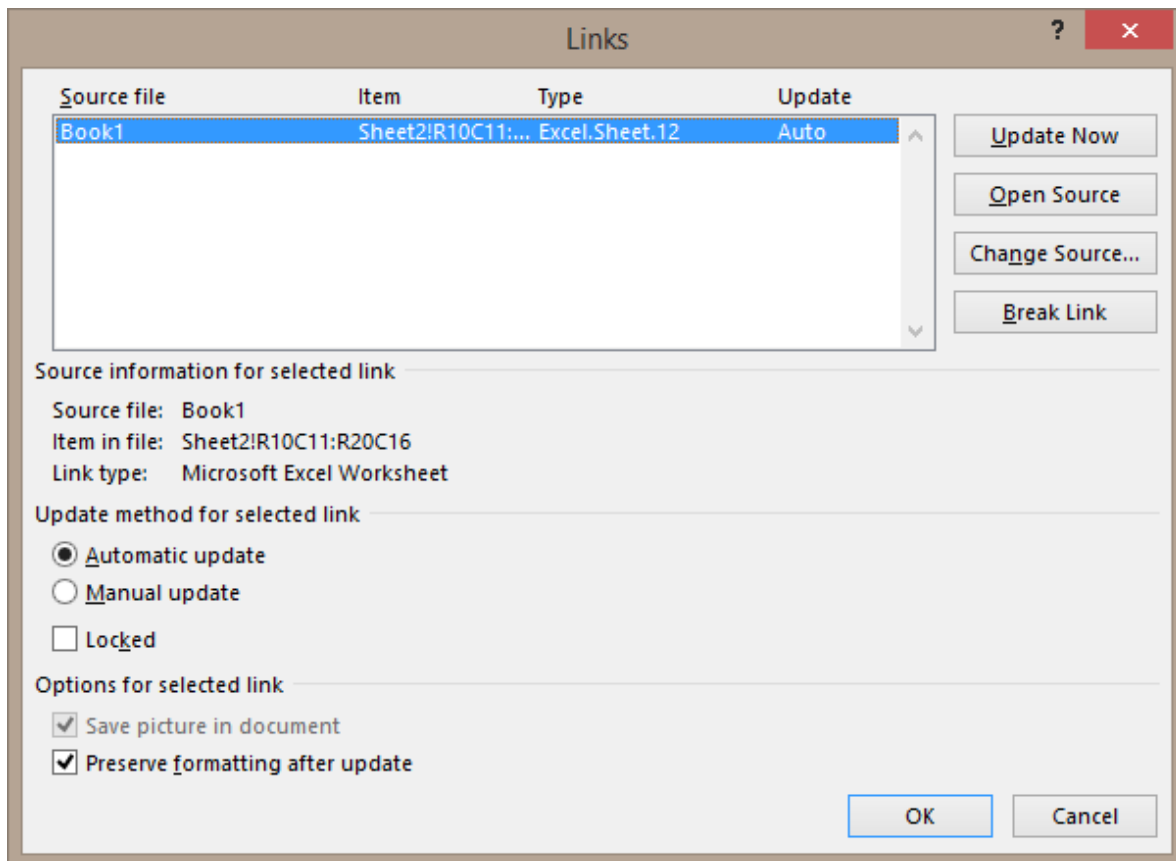
3.3.2 The source file has been modified but the destination file was closed

When you open the destination document (technically called *client*), the following dialog box will be displayed :



Yes and the Word document will be updated

In case of failure or bad answer : FILE – INFO – THE PROPERTIES PANE (on the right) – RELATED DOCUMENTS Section – EDIT LINKS TO FILES Option. *This command is displayed only if there is such a link and if the files have been saved.*



UPDATE NOW

To update the Word document (client). Updating is usually automatic but it can at times fail.

OPEN SOURCE

To open the source file (here our Excel file) if it is closed or bring it to the foreground if it is active.

CHANGE SOURCE

Has the Excel file been moved to another folder or renamed ? It is then necessary to re-establish the link by updating the file name or path.

BREAK LINK

To remove the link. But you can also use the key combination CTRL + SHIFT + F9 directly over the { LINK} field code. Caution : once broken, no magic "undo" or "redo". You must start the whole process again.


Update method

Automatic or Manual

It can be handy at times to set the file on manual update when there are a lot of formulas and other calculations on the worksheet. Updating will only be run when you press the UPDATE NEW button or if you click on the field code and press the F9 key. But this option has lost part of its importance, as technology and speed constantly improve and now would be a good idea for "extra – large" sheets full of calculations.

Locked

Caution : this does not mean that the *type of update* is locked. It block the update, whatever the method and related options are no longer available.

 Interactivity with the following Word setting : OFFICE Button – WORD OPTIONS Button – ADVANCED Category – GENERAL Topic - UPDATE AUTOMATIC LINKS AT OPEN Option

None. This option lets you decide whether you wish Word to display a dialog box with a prompt to update when you open the destination document. . If you choose not display any box, it is obvious that updating will be manual and left up to you.

Preserve formatting ...

An Excel table is pasted into a Word document with an RTF format. The user can then change the format attributes as required, without affecting the link itself.

If this option is not on (by default it is off), all these manual changes will be lost.

If the option is on, the update will preserve all the current format attributes and will only affect the data.

Advantages

The size of the file is VERY, VERY small.
The two files remain independent (they can be edited, modified, printed ... separately).

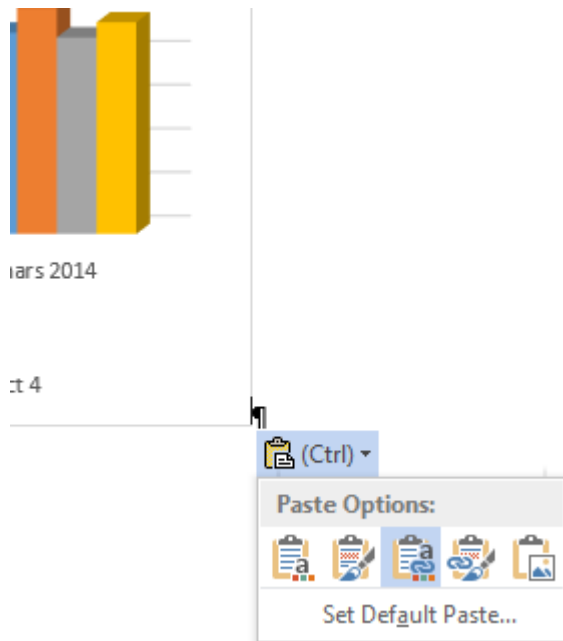
Drawbacks

« travelling »
If you send the file over the mail, if you move the files ... the link often remains set on the original path (when the file was created and saved). Consequently updating fails.
The solution is simply to press the CHANGE SOURCE button in the LINKS dialog box but most of the time the recipient ignores this ...
Therefore DDE links should be created between files that do not "travel".

4 Example 3 : copy-paste of an Excel chart into Word

- Select the Excel chart and copy it into the clipboard
- LEAVE THE SOURCE FILE OPEN or the clipboard is emptied
- Activate the client or destination document and paste

As for a range of cells, you can use the PASTE button menu and its commands but taking advantage of the *Paste Options* tag menu is very handy :



Use Destination Theme & Embed Workbook
 Keep Source Formatting & Embed Workbook
 Use destination Theme & Link Data
 Keep Source Formatting & Link Data
 Picture

Caution : the differences between the options are quite subtle but very important !

Options with the word *Link*

It is a DDE link (without any field code to display or toggle)
 If you modify the data : back into the source file.

Options with the word *Embed*

It is an OLE object. A copy of the WHOLE file is *incorporated* along with the chart (unless you edit data , **you** only see the chart).
 Edit data : the incorporated file is opened.

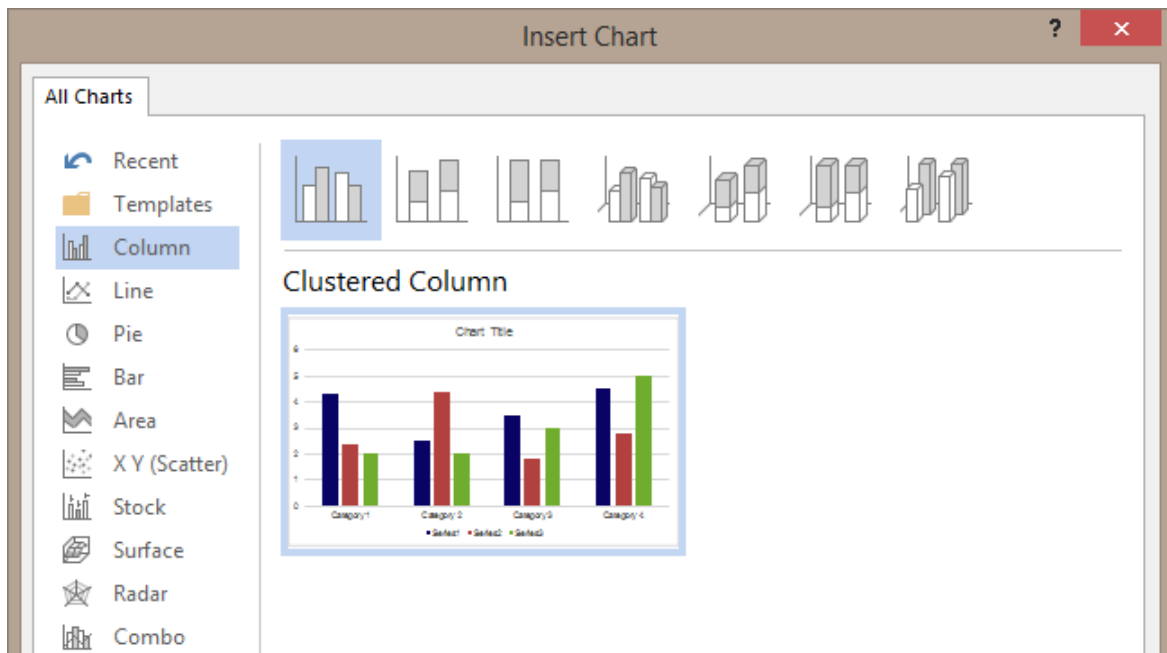
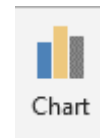
Picture

A standard picture

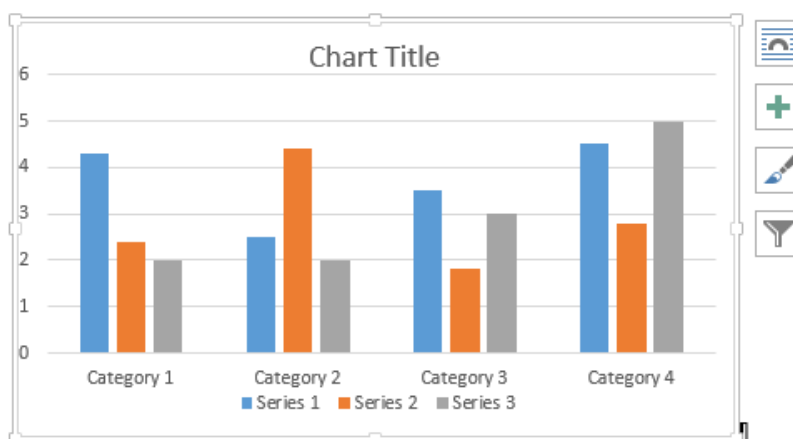
Double-click on the chart to display the CHART TOOLS / DESIGN – LAYOUT – FORMAT. Tabs. The commands on these tabs will let you work on the chart (on the data through the EDIT DATA button for instance).

5 Example 4 : creating an Excel chart directly in Word

- INSERT Tab – ILLUSTRATIONS Group – CHART Button



As soon you have validated your choice, Excel is run and will share the screen with Word (half-half). Work on your chart as if you were really in Excel. DO NOT SAVE. Simply close the Excel window.



If you save the Excel file, you will create a separate file that will have no link with the Word chart.

Double-click on the chart to display the CHART TOOLS / DESIGN – LAYOUT – FORMAT. Tabs. The commands on these tabs will let you work on the chart (on the data through the EDIT DATA button for instance).

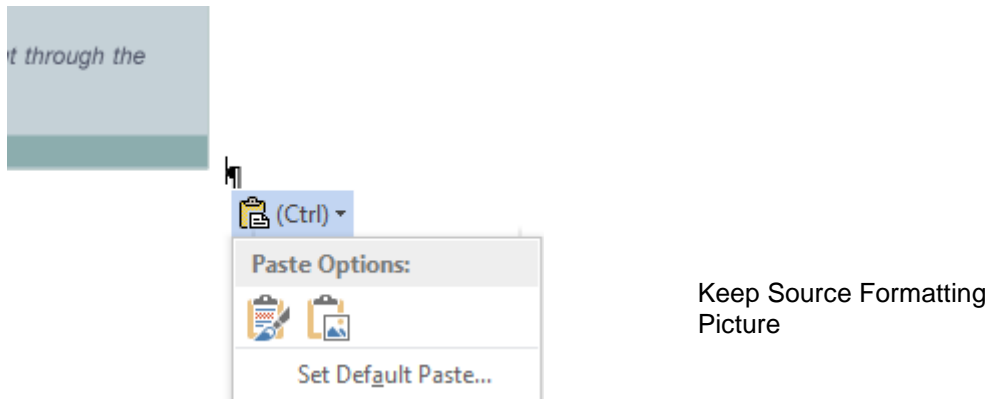
6 Example 5 : copy-paste of a PowerPoint slide into Word or Excel

- Open the PowerPoint presentation
- Select the required slide and copy it into the clipboard

PASTE

Word : the usual *Paste Options* tag

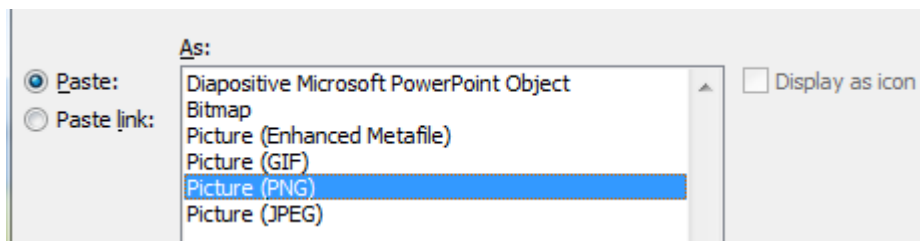
Excel : no tab



Word : **some tests** : no real difference whether you select a standard paste, a picture or even keep the source formatting

Excel : pasting generates a standard picture

PASTE SPECIAL



Only for a PASTE : more choice for the picture extension

Choosing an *object* (Paste)

Standard OLE object : double-click on the slide to edit and work on it in PowerPoint.

Choosing an *object* (Paste Link)

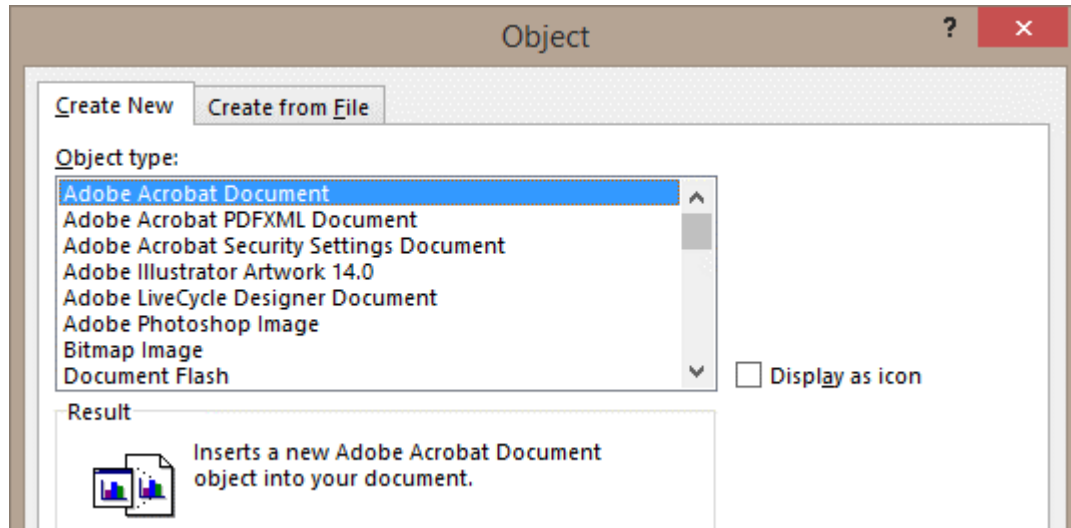
Standard OLE object *but with a link to the source file* : it is a DDE link. Double-click to open the PowerPoint source file.

- **Excel** : activate the destination workbook and paste. The options are the same as in Word. The only difference : no *Paste Options* tag.

7 Example 6 : various OLE objects

7.1 Creating a new object

- INSERT Tab – TEXT Group – OBJECT Button – OBJECT Option



Object type

Select the application you need to create the object
Usually a small "window" will be opened directly onto the page or the worksheet and the Word or Excel ribbon will be momentarily replaced with the program own ribbon..

Here below some examples :

Inside Word : an Excel worksheet

	A	B	C	D	E
1	Sales	January	February	March	
2	Product 1	45	58	76	
3	Product 2	65	47	95	
4	Product 3	85	74	49	
5	Total	195	179	220	
6					
7					

Give a quick glance at the Word ribbon and you will recognize ... the Excel ribbon and its tabs

Click outside this "window" and the object is created.

But before you do so, check that the window has been sized to include only the cells really filled with data or format. Size by clicking and dragging the sizing handles (small black squares). If you forget to do so, the object will display the above table but also the unused cells around and the worksheet gridlines. As shown in the following screen capture :

Sales	January	February	March
Product 1	45	58	76
Product 2	65	47	95
Product 3	85	74	49
Total	195	179	220

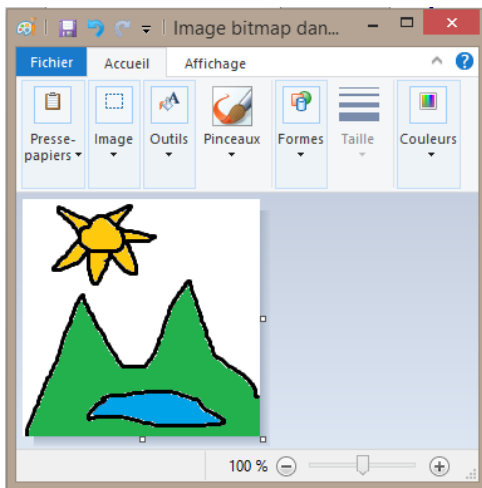
Other access to create this object : INSERT Tab – TABLES Group – Drop-down list of the TABLE Button – Option EXCEL SPREADSHEET

Inside Word or Excel: a PowerPoint slide



Give a quick glance at the Word or Excel ribbon and you will recognize ... the PowerPoint ribbon and its tabs

Inside Word or Excel : an object created with a non Office program :

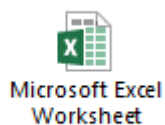


Give a quick glance at the tools displayed at the left top of the Word window and you will recognize ... Paint.

Yes ... your master piece might look a bit like a child drawing ... but this example was to prove that any program can be used to create an OLE object and not only Office programs.

Display as icon

Display as icon

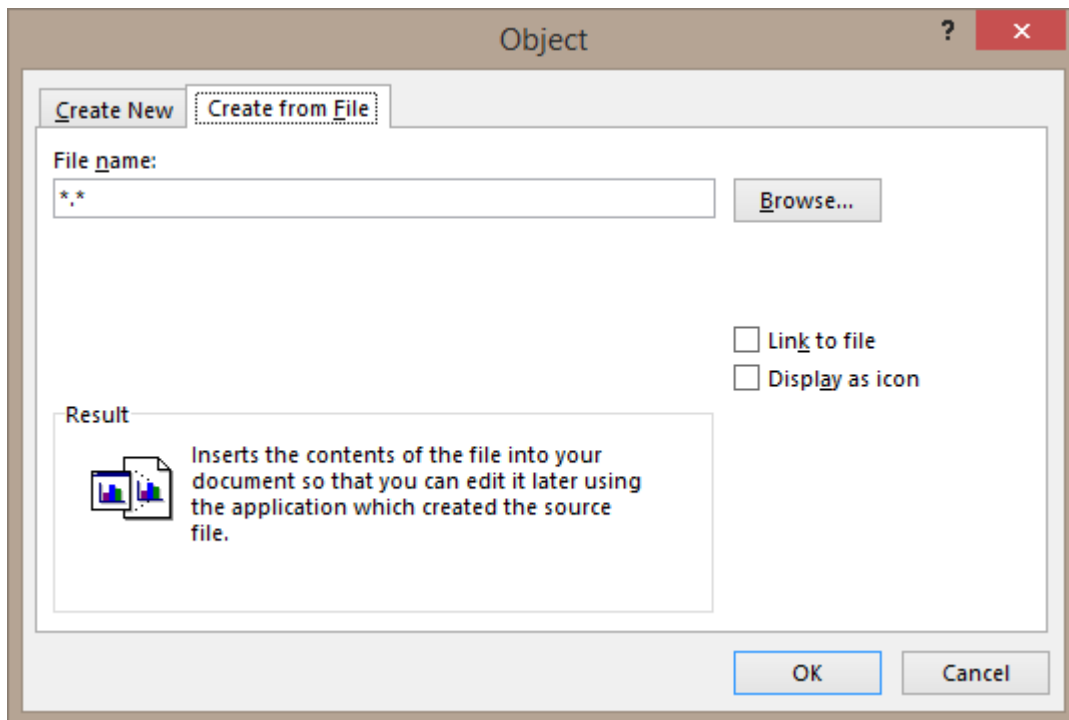


Microsoft Excel Worksheet

Change Icon...

You can choose to display the icon of the source program rather than the object content (you can even select a different icon if the program has more than one to offer – it is the case for *Bitmap Image* for instance)

7.2 Creating an object from an existing file



- An Open type dialog box will be displayed
- Select the required file : Word, Excel, PDF
- The first page of the file will be display into the current Word document

Open

Double-click on the object to open the file into its source application and also into a separate window. Navigate as required.

You can even make modifications. No saving will be required. Simply close the window and the changes will be saved inside the object..

Does a modification affect the source file ?

Not at all. The file will in fact simply totally imported (copied) into the destination document. There is no link with the source file. Unless you have clicked the option explained here below.

Additional settings that can be selected when the object is created

Link to file

By default there is no link between the source file and the corresponding object. Unless you set that there should be one. In this latter case, modify the source file and the object will be automatically updated accordingly.

This link is a DDE link. When you open the destination file, you will be prompted to update or not.

If you answer no instead of yes, updating will still be possible through : OFFICE Button – PREPARE – EDIT LINKS TO FILES.
This option is displayed in the menu only if there is a link

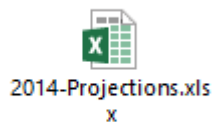
For more explanations : see topic :

Paste special – with a DDE *at page 71*

Display as icon

Instead of inserting the first page of the file, Word or Excel displays an icon for the file.

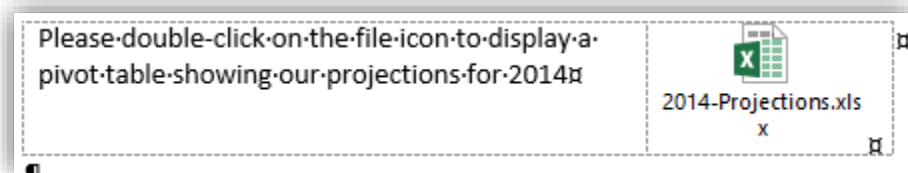
Display as icon



Change Icon...

Click on the CHANGE ICON button to rename the *legend* displayed below the file icon.

Here below
an example :



Double-click on the icon to run the source application and display the spreadsheet.
Or right click and option LINKED FEUILLE DE CALCUL OBJECT - EDIT or OPEN

Try with other programs.

But always make sure that what you import does not increase the size of the file by too much.