



# AUTHOR MANUAL

flwpx

A guide to get you starting on producing your own publications on [flwpx](#).

## Table of Contents

1	Introduction .....	6
2	Registering on flwpx.....	7
3	Word .....	8
3.1	Table of contents: Chapters and Headings .....	8
3.2	Pages .....	8
3.3	Page Breaks .....	8
3.4	Images .....	9
4	Flwpx commands in Word .....	10
4.1	Images .....	10
4.1.1	i_ : Insert .jpg image.....	10
4.2	Vector charts .....	10
4.2.1	v_ : Insert vector chart with optional image icon.....	10
4.3	Output cells .....	10
4.3.1	CO_ : Output cell.....	10
4.4	Input cells .....	10
4.4.1	CI_ : Input one cell .....	10
4.4.2	CJ_ : Input full.....	11
4.4.3	CV_ : Input versioning cell .....	11
4.4.4	CDS_ : Single column display .....	11
4.5	Attachments.....	11
4.5.1	CF_ : Attachment field .....	11
4.5.2	CFN_ : Variable number of attachment fields .....	11
4.5.3	CG_ : Attachment image.....	12
4.6	Conditional commands .....	12
4.6.1	CCE_ : Conditional Command Evaluation .....	12
4.7	Output regions .....	12
4.7.1	CD_ : Display Excel region .....	12
4.8	Text segments .....	12
4.8.1	TS_ : Text segment start and TE_ : Text segment end.....	12
4.8.2	TCS_ : Conditional text segment start and TCE_ : Conditional text segment end	13
4.8.3	TO_ : Conditional text segment output .....	13
4.9	Printing.....	13



- 4.9.1 TOC\_ : Table of Contents ..... 13
- 4.9.2 SOP\_ : Start of Print ..... 13
- 4.9.3 EOP\_ : End of Print ..... 13
- 4.9.4 POL\_ : Print orientation landscape ..... 13
- 4.9.5 POP\_ : Print orientation portrait ..... 14
- 5 FlwpX Commands in Excel ..... 15
  - 5.1 Input Cell / region ..... 15
    - 5.1.1 CI\_ : Define cell / region as input ..... 15
    - 5.1.2 CJ\_ : Define cell / region as full input ..... 15
    - 5.1.3 CK\_ : Define cell / region as non-workgroup input ..... 15
    - 5.1.4 CIR\_ : Define cell / region as input triggering refresh ..... 15
  - 5.2 Reset button ..... 15
    - 5.2.1 CR\_ : Define reset button ..... 15
  - 5.3 Conditional Row / Column ..... 16
    - 5.3.1 CVR\_ : Conditionally exclude row ..... 16
    - 5.3.2 CVC\_ : Conditionally exclude column ..... 16
    - 5.3.3 CCE\_ : Apply the command of a nominated cell to a region ..... 16
  - 5.4 Attachment cell ..... 16
    - 5.4.1 CF\_ : Define attachment cell ..... 16
  - 5.5 Hyperlink ..... 17
    - 5.5.1 CH\_ : Define publication hyperlink ..... 17
  - 5.6 User privileges ..... 17
    - 5.6.1 CLE\_ relates to editing rights per user ..... 17
    - 5.6.2 CLV\_ relates to viewing rights per user ..... 17
- 6 FlwpX commands in Visio ..... 19
  - 6.1 Conditional Nodes ..... 19
    - 6.1.1 CVN\_ : Conditionally display Visio node ..... 19
  - 6.2 Node Titles ..... 19
    - 6.2.1 CT\_ : Node title update ..... 19
  - 6.3 Composite Visio commands ..... 19
- 7 Excel authoring ..... 21
  - 7.1 Sheets Allowed per Excel File ..... 21
  - 7.2 Drop List ..... 21
  - 7.3 Check Box ..... 21



- 7.4 Attachment Field .....22
- 7.5 Tables .....22
- 7.6 Inputs and Outputs Fields from Excel .....23
- 7.7 Graphs .....23
- 7.8 Dates.....24
- 7.9 Hyperlinks.....24
- 7.10 Reset .....25
- 7.11 Naming Cells .....26
- 7.12 Managing Bookmarks .....26
- 7.13 Conditionality in Excel .....26
  - 7.13.1 CVR\_, CVC\_, and CCE\_ : conditional exclusions.....26
- 7.14 Managing user exclusion in Excel for Visio charts.....27
  - 7.14.1 CLE\_ : determining user editing rights.....27
  - 7.14.2 CLV\_ : determining user viewing rights .....27
- 7.15 Spreadsheet Prefixes .....28
- 8 Visio.....30
  - 8.1 Images in Word .....30
  - 8.2 Navigational Map Links .....31
- 9 General.....33
  - 9.1 Finishing .....33
  - 9.2 Bookmarking .....33
    - 9.2.1 Word .....34
    - 9.2.2 Excel .....34
    - 9.2.3 Visio.....35
  - 9.3 Hyperlinks.....35
  - 9.4 Special Characters .....36
- 10 Prefix Summary.....37
- 11 Publishing.....48
  - 11.1 First Time Publishing.....48
  - 11.2 Republishing .....50
- 12 Sending a Publication.....51
- 13 Workgroup participation .....53
- 14 Printing.....54
- 15 Worked Out Examples .....55



- 15.1 Publication with Word .....55
  - 15.1.1 Modify .....55
  - 15.1.2 Images and Bookmarks .....57
  - 15.1.3 Hyperlink .....59
- 15.2 Publication with Excel .....62
  - 15.2.1 Word .....62
  - 15.2.2 Excel .....63
- 15.3 Publication with Visio / Navigational Map .....73
  - 15.3.1 Interactive Visio Image .....79
  - 15.3.2 Conditional Visio Maps .....82
- 15.4 Using Conditional exclusion to allow or remove regional editing rights in a publication .....85
- 15.5 Using Conditional exclusion in Word.....89
- 15.6 Using conditionals to allow regions to appear only when predetermined input made 91
- 15.7 Reset button .....97
- Appendix A: Currently Implement Excel functions.....99
- Appendix B: All unimplemented Excel functions.....105

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## 1 Introduction

flwpx can take multiple Microsoft documents, including Word documents, Excel spreadsheets, Microsoft Visio files and create one all-inclusive publication that can be shared with multiple readers.

Furthermore, if used correctly, the publication will become editable by multiple parties while still retaining the original documents with the author and allowing the author full control on what can be edited and by whom.

This document will show you the basics on how to create a publication, and the best way to create a publication and key points on how flwpx handles the basic elements of all documentation. This document will also show you how to create more complex publications as dynamic interactive documents, to get the most out of your publication.

## 2 Registering on flwpx

To download flwpx, please visit <https://www.flwpx.com/introduction>.

At the bottom of the page, there is a *Download flwpx lektur* button. Please click on this button and the download will start automatically. Please feel free to watch the video while waiting. To see this video please click on the *Video of flwpx lektur* button. Once downloaded, please run the .exe file. Please allow flwpx to make changes to your computer and accept the license agreement.

On start-up, this registration window will automatically appear.



**Please enter your personal details**

Enter the name by which you will be identified to other users

User name

Label the device you are using (e.g. Laptop, Desktop, Tablet)

Device

Email

City

Password

Registry Code

Unlisted

User name: Your given name (and surname)

Device : Something recognizable like *Laptop*, *Desktop*, or *Work PC* - to distinguish it from other possible registrations in your name.

Email : Your email address, Optional, but this allows other users to recognise your registration name as belonging to you. Not used for any purpose other than human recognition.

City : Again, for human recognition

Password : I would suggest leaving this blank - it is not needed except for extreme circumstances

Registry code : I would suggest username. This creates your flwpx address, which would then be Elana&flwpx (for example). Avoid using spaces.

Do not flag the "unlisted" flag. This will make it impossible for us to contact you at the current time.

When complete, click on "Register".



### 3 Word

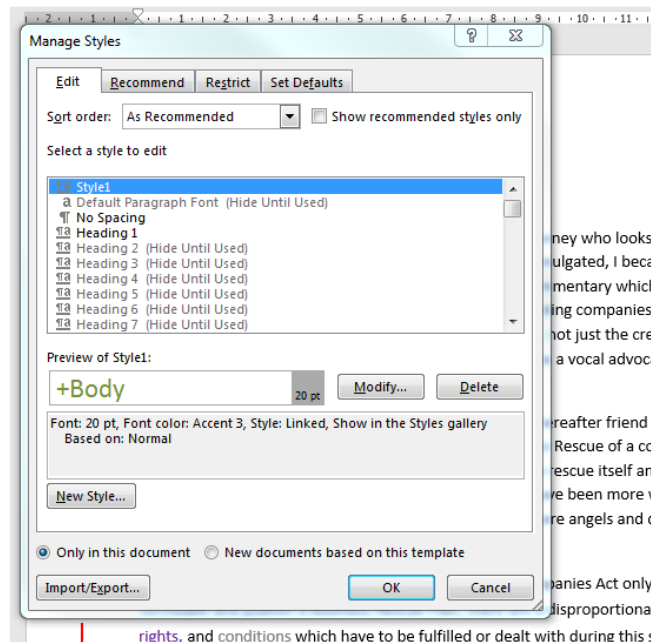
The most basic documents that flwpx can handle is Microsoft Word. The following sections, will explain how to make the most of your Word documents and how flwpx handles some of Word's functionality.

#### 3.1 Table of contents: Chapters and Headings

The flwpx viewer does not make use of the Table of Contents created in Word, this functionality therefore must not be included or created.

Instead, flwpx creates a Table of Contents based on the level of headings used, where Heading 1 is assigned to a Chapter heading, and the Headings 2 to 9 can be used in descending ranking, as best suited to the work in your Word document.

It is essential that the heading styles are only applied to actual headings. The rest of the text should be normal. All heading styles should be based on normal.



To personalise the look of the level of heading chosen, in the Home ribbon, Styles (*Alt+Ctrl+Shift+S*) -> manage styles -> Modify.

A consistent approach will achieve the optimum results.

#### 3.2 Pages

The flwpx viewer adjusts the page size dynamically to fit the size of the device used to view the content. This means that pages are not fixed. In your document, when wishing to refer to a specific page, rather create a hyperlink to the content referred to so that it can be directly accessed, alternatively refer to a table/figure or chapter number. Do not specify a page as this will invariably be incorrect.

#### 3.3 Page Breaks

The uniqueness of the flwpx viewer is that paging is managed internally and thus there is no use of page breaks made within lektur unless the publication needs to be printed. When printing, page breaks are obeyed, so that it is possible to divide printouts at the given page breaks, if required. Please remember that if you permit printing, the user can print your document to Acrobat PDF, from which all your text can be copied.

Aside from printing, the **flwpx** viewer will ensure that headings align with their assigned images, tables or paragraphs, and that pages are formatted dynamically to the size of the screen used to display the document, which will differ from user to user.

### 3.4 Images

Currently **flwpx** can handle other types of image files such as *.png* or *.bmp*, but the explanations below use *.jpg* as the image type. A feature of the **flwpx** viewer is that images are presented as scalable high resolution Jpegs without having to undertake the pain of sizing images to fit into the Word document. Presented in the form of thumbnails in the media panel, these thumbnails can be flipped into the Utility panel for closer inspection by panning and zooming. To make use of this feature, follow these easy steps:

- Save all the *.jpg*'s that are to be included in your Word document in one folder,
- Label each image sensibly, so that you can at a glance determine which image is which, "sensible\_name.jpg",
- In your word document place a holder at the point where you wish your image to be, "Sensible image", add a short description on the next line,
- Bookmark the placeholder with the identical name of your image preceded by "i" followed by an underscore, "i\_", so that for example, the placeholder "Sensible image" is given the bookmark "i\_sensible\_name" or "i\_sensiblename", note that the "jpg" does not form part of the bookmark as it denotes a file type,
- Prefixing a bookmark with "i\_" indicates to the **flwpx** system that a jpg file will be placed at the place holder.

Word has its quirks, one is that bookmarking a placeholder can over run other text and cause your **flwpx** document to lose some of its features. This is especially prevalent when pressing enter after a bookmarked field. When this happens, check your bookmarks using the "Go To", ensure that the bookmark encompasses only the placeholder and does not include the text below or further placeholders. If this has happened, copy the bookmark "*Ctrl c*" then delete the bookmark, exit the bookmark box, reassign the area of the placeholder, invoke the bookmark box, add the copied bookmark "*Ctrl v*".

Images specified as bookmarked text in the document will be understood to refer to a *.jpg* image file, and this image will be merged into the document during the **flwpx** import process, where the size of the thumbnail image is specified when configuring your document for publication.

Remember to store your images in a subfolder of your publication.

## 4 Flwp commands in Word

### 4.1 Images

#### 4.1.1 i\_ : Insert .jpg image

To insert images in your publication, save your image as a jpg where the name has no spaces. Use an “\_” instead of a space. In Word place the bookmark for the name of the “i\_Image” over “image”. Consider using a table in Word to enhance layout.

Jpgs and svgs are stored in a sub-folder of your publication folder.

*(See example in Word Document “Draft Publication” bookmark: “i\_Colosseum”)*

### 4.2 Vector charts

#### 4.2.1 v\_ : Insert vector chart with optional image icon

To display your Visio chart within the publication you need to export your Visio file as a “svg”. Map linking between “svgs” aids navigation through your publication. If you would also to display a reduced size image of your Visio file in the publication and make it available for printing, export the Visio as a “jpg”.

Jpgs and svgs are stored in a sub-folder of your publication folder.

*(See example in Word Document “Draft Publication” bookmark: “v\_project\_life”)*

### 4.3 Output cells

#### 4.3.1 CO\_ : Output cell

The CO\_ command in word is used to output a single cell from your excel spreadsheet. This can be used, for example, to complete a sentence, as follows:

The owner of the car is *CO\_nameofowner* and he is responsible

The italic section above, *CO\_nameofowner* should, of course, be a bookmark. The label portion - *nameofowner* - should refer to an excel label which resolves to a single cell. That cell can be a value or a formula, and in this case should provide the appropriate name.

*(See example in Word Document “Draft Publication” bookmark: “CO\_invest\_val\_1”)*

### 4.4 Input cells

#### 4.4.1 CI\_ : Input one cell

If CI\_ is used in the word document, this denotes an input field from a single cell - i.e., for the command CI\_inputcell, the label "inputcell" must denote a single cell in excel not containing a formula. Note that as with all input cells in excel, it is important that this cell in your excel

workbook must not be empty. A single space, a dot or a digit (0) is required to ensure that the cell exists and can be used as input.

*(See example in Word Document “Draft Publication” bookmark: “CI\_issue”)*

#### **4.4.2 CJ\_ : Input full**

As with CI\_, CJ\_ also denotes input of a single cell, but in this case all available framed space is used for the input. For practical reasons, this means that CJ\_ in a word document should only be used within a word table, where the frame of the cell in which you place the command will be used as the limits of the input field.

*(See example in Word Document “Draft Publication” bookmark: “CJ\_Basic\_issue\_shares”)*

#### **4.4.3 CV\_ : Input versioning cell**

Relates to a single cell of arbitrary size in Excel. It is labelled and then bookmarked in Word with the prefix “CV\_”. Take cognisance on the intended size of the cell and constrain it in a table in Word for improved layout. The effect of the CV\_ command is that the contents of the cell are available for editing and the edits are visible as strikethroughs and added content, much as in Word when “Track Changes” is enabled.

*(See example in Word Document “Draft Publication” bookmark: “CV\_Version\_text”) with the corresponding: cell in Excel Document “Draft Publication” name: “Version\_text”)*

#### **4.4.4 CDS\_ : Single column display**

Relates to a single column in excel of arbitrary height. The region is labelled and then bookmarked in Word using the prefix “CDS\_”. This column is primarily used for large text segments, and obeys all formatting placed on the text.

If the column extends the length of the page, a page break will be enforced within the column and the column will continue on the next page. And the text within the column will be split accordingly.

### **4.5 Attachments**

#### **4.5.1 CF\_ : Attachment field**

Provides a single attachment field in your publication for documents. Label a cell in Excel, bookmark in Word with a CF\_Label.

*(See example in Word Document “Draft Publication” bookmark: “CF\_Attachment”)*

#### **4.5.2 CFN\_ : Variable number of attachment fields**

Provides for multiple attachments in your publication for documents. Label a column in Excel, bookmark in Word with a CFN\_Label. Only the first attachment point is visible in your publication, if that is filled, the next one pops up and so on until the column provided has been filled.

*(See example in Word Document “Draft Publication” bookmark: “CFN\_multiple\_attach”)*

### 4.5.3 CG\_ : Attachment image

Provides a single attachment field in your publication for images. Label a cell in Excel, bookmark in Word with a CG\_Label. In flwpx when an image is placed in this attachment field, the attachment field will update and the image will be displayed within the publication.

## 4.6 Conditional commands

### 4.6.1 CCE\_ : Conditional Command Evaluation

The CCE\_ command in a word document (ex.: CCE\_mycondition) denotes the conditional generation of a command bookmark. The extension ("mycondition" in the example above) must denote a single cell in Excel which would, typically, contain a conditional command generating an actual bookmark to be used in place of the CCE\_ bookmark.

For example: The bookmark in Word is CCE\_mycondition

The name "mycondition" in your excel spreadsheet denotes a cell which contains the following formula:

```
=IF(C23>500,"CD_firstrange","CD_secondrange")
```

The result of this command will be that if cell C23 has a value greater than 500, the actual command to be executed will be CD\_firstrange (that is, a range of cells labeled "firstrange" in your spreadsheet will be displayed, see below for CD\_ command) whereas if the content of cell C23 is not greater than 500, the command to be executed will be CD\_secondrange.

*(See example in Word Document “Draft Publication” bookmark: “CCE\_client\_info\_1”)*

## 4.7 Output regions

### 4.7.1 CD\_ : Display Excel region

Used to display an excel named region using the prefix CD\_. The region itself consist of a single output cell or a region with further bookmarking using flwpx prefixes such as CI\_, CJ\_, CF\_, CVR\_, CVC, CCE, etc.

*(See example in Word Document “Draft Publication” bookmark: “CD\_check\_box”)*

## 4.8 Text segments

### 4.8.1 TS\_ : Text segment start and TE\_ : Text segment end

This marks a text segment that can be flipped into the utility panel for printing. Ensure that the suffix is consistent related commands.

(See example in Word Document “Draft Publication” bookmark: “TS\_Certificate\_1”/ “TE\_Certificate\_1”)

#### **4.8.2 TCS\_ : Conditional text segment start and TCE\_ : Conditional text segment end**

This is a conditional text segment; ie it appears when certain selections or inputs have been made. Additionally, it can be flipped into the utility panel for printing.

(See example in Word Document “Draft Publication” bookmark: “TCS\_Certificate\_2\_show”/ “TCE\_Certificate\_2\_show”)

#### **4.8.3 TO\_ : Conditional text segment output**

Is nested into an IF statement in an Excel cell which is labelled and then bookmarked in Word as CCE\_Label. In Word the CCE\_ prefix instructs flwpx to find the labelled cell in Excel and execute the instructions.

(See example in Excel Document “Draft Publication” in the cell named: “Certificate\_2\_condition”, you will find the following: “TO\_certificate\_2\_show”)

## **4.9 Printing**

### **4.9.1 TOC\_ : Table of Contents**

Place a page break at the end of the page before the Table of Contents, insert TOC\_# bookmark on its own on the next page, force the continuation of the publication to the next page without using a page break. flwpx will generate a Table of Contents based on the headings used at print time.

(See example in Word Document “Draft Publication” bookmark: “TOC\_01”)

### **4.9.2 SOP\_ : Start of Print**

Place a SOP\_# at the point in the publication where you wish the printable region to begin. This is useful for creating setup fields for an interactive publication, where these fields should not be printed

(See example in Word Document “Draft Publication” bookmark: “SOP\_01”)

### **4.9.3 EOP\_ : End of Print**

Place a EOP\_# at the point in the publication where you wish the printable region to end. This is useful for creating setup fields for an interactive publication, where these fields should not be printed.

(See example in Word Document “Draft Publication” bookmark: “EOP\_01”)

### **4.9.4 POL\_ : Print orientation landscape**

Place a POL\_# at the point in the publication where you wish the page orientation to change to landscape during a print, this is useful for printing extended tables



#### **4.9.5 POP\_ : Print orientation portrait**

Place a POP\_# at the point in the publication where you wish the page orientation to change back to portrait during a print, after a POL\_ has been used

**Note:** POL\_ and POP\_ take effect during a second print of the document

## 5 FlwpX Commands in Excel

### 5.1 Input Cell / region

#### 5.1.1 CI\_ : Define cell / region as input

Can be a region or a cell within a named region for providing input cells. Is limited to the size of the content of the cell. Blank cells do not allow for input.

*(See example in Excel Document "Draft Publication" name: "CI\_address")*

#### 5.1.2 CJ\_ : Define cell / region as full input

As with CI\_, provides for input. The size of the cell determines the limit of the input, not the content. Blank cells do not allow for input.

*(See example in Excel Document "Draft Publication" name: "CJ\_Comment")*

#### 5.1.3 CK\_ : Define cell / region as non-workgroup input

Becomes an entry field in the publication. Retains its contents for the local user during workgroup sessions. This means that the field is not over-written by another user's input.

Note that the CV\_ function is only available in Word

#### 5.1.4 CIR\_ : Define cell / region as input triggering refresh

Marking regions in Excel with a CIR\_Label instructs flwpX to update the related Visio charts and Excel calculations in real-time.

*(See example in Excel Document "Draft Publication" name: "CIR\_clear\_check")*

### 5.2 Reset button

#### 5.2.1 CR\_ : Define reset button

Create a button within a named region by labelling it CR\_ABC. Please note that the CR\_ must be followed by three characters, no more, no less. Label the region or regions, that exist within a named region, to be reset XX\_ABC. Any number of regions can be reset by inserting 01, 02 etc XX\_01\_ABC, XX\_02\_ABC. This in effect can create global reset for your publication. In Word the bookmark to display the named region is then CD\_named\_region.

*(See example in Excel Document "Draft Publication" name: "CR\_ROL")*

*(See example in Excel Document "Draft Publication" name: "XX\_ROL")*

*(See example in Excel Document "Draft Publication" name: "Director\_assignment\_table")*

*(See example in Excel Document "Draft Publication" name: "CD\_Director\_assignment\_table")*



## 5.3 Conditional Row / Column

### 5.3.1 CVR\_ : Conditionally exclude row

CVR\_Name relates to a Cell "Name" that resolves as TRUE, FALSE using an IF statement. Where the name of the cell "Name" is then used with the prefix CVR\_ to name a spanned region (ie. end to end horizontally) within a named region that. It can be used multiple times using 01, 02 ie CVR\_01\_Name, CVR\_02\_Name, and so on.

*(See example in Excel Document "Draft Publication" name: "CVR\_Clear\_all")*

### 5.3.2 CVC\_ : Conditionally exclude column

CVC\_Name relates to a cell "Name" that resolves as TRUE, FALSE using an IF statement. Where the name of the cell "Name" is then used with the prefix CVC\_ to name a spanned region (ie. end to end vertically) within a named region that. It can be used multiple times using 01, 02 ie CVC\_01\_Name, CVC\_02\_Name, and so on. CVC\_01\_Control\_quarter\_119

*(See example in Excel Document "Draft Publication" name: "CVC\_01\_Control\_quarter\_119")*

### 5.3.3 CCE\_ : Apply the command of a nominated cell to a region

CCE\_Name in Excel will evaluate a nominated cell "Name" to determine the actual command to be executed. The area covered by CCE\_Label need not span the horizontal or vertical axis of the named region.

For example:

Label a cell or region as CCE\_mycond.

In a cell labelled mycond, place the following conditional:

```
=IF(C23>300,"CD_firstregion","CD_secondregion")
```

This will result in a cell region display (CD\_) of firstregion if cell C23 is greater than 300, and of secondregion otherwise.

The derived command in either case can be any valid command. If, for example, no command should be executed in the false case, it is fine to just place a blank string ("") in the else (false) clause.

*(See example in Excel Document "Draft Publication" name: "CCE\_01\_April\_19\_Edit")*

## 5.4 Attachment cell

### 5.4.1 CF\_ : Define attachment cell

Is a cell within a named region that provides for attachment functionality for documents, cannot be blank, insert text such as "drop attachment here".



*(See example in Excel Document “Draft Publication” name: “CF\_sow\_pclient\_1”)*

Note that the **CG\_** and **CFN\_** functions is only available in Word.

## 5.5 Hyperlink

### 5.5.1 CH\_ : Define publication hyperlink

Naming a cell with the prefix CH\_ provides for linking to the named area in Word sans prefix.

*(See example in Word Document “Draft Publication” name: “Contract”)*

*(See example in Excel Document “Draft Publication” name: “CH\_Contract”)*

*(See example in Excel Document “Draft Publication” name: “Contract\_link”)*

*(See example in Word Document “Draft Publication” name: “CD\_Contract\_link”)*

## 5.6 User privileges

### 5.6.1 CLE\_ relates to editing rights per user

Only used in Excel.

This prefix, CLE\_XX, applies editing rights to sheet XX based on a TRUE/FALSE cell that is written at the time of issuing the license in flwpx. If at licensing the recipient is given editing rights on sheet XX, the cell is set to TRUE by flwpx and the recipient can edit the regions that refer to the CLE. If the recipient receives no editing rights, flwpx sets the cell to FALSE and the regions become view only. This means that the editing rights of any cell or range of cells on any sheet can be managed and controlled using the prefix CCE\_, a label for a cell with instructions, and a CLE\_ cell.

*(See example in Excel Document “Draft Publication” name: “CLE\_01”)*

### 5.6.2 CLV\_ relates to viewing rights per user

Only used in Excel, for Visio blocks.

This prefix, CLV\_XX, applies editing rights to sheet XX based on a TRUE/FALSE cell that is written at the time of issuing the license in flwpx. If at licensing the recipient is given viewing rights on sheet XX, the cell is set to TRUE by flwpx and the recipient can view the map nodes that refer to the CLV. If the recipient receives no editing rights, flwpx sets the cell to FALSE and the Visio map nodes disappear. So viewing map nodes can be controller with a CLV\_ and a CVN\_

*(See example in Excel Document “Draft Publication” name: “CLV\_08”)*



## 6 Flwpx commands in Visio

### 6.1 Conditional Nodes

#### 6.1.1 CVN\_ : Conditionally display Visio node

For any Visio node, the "shape name" can be used to specify flwpx commands.

Using a CVN\_ prefix shape name denotes the node as being conditionally displayed. For example:

Shape name is CVN\_displaythisnode

The extension ("displaythisnode") must be an excel label which resolves to a single cell in your spreadsheet. This cell would typically have a formula such as the following:

```
=IF(C23 > 400, TRUE, FALSE)
```

In this case, if cell C23 has a value greater than 400, the cell "displaythisnode" resolves to TRUE, and the node in the Visio chart is displayed. If the cell C23 has a value not greater than 400, the cell resolves to FALSE and the Visio node is not displayed.

*(See in Visio file: mini\_publication\_map, within group "Client\_1", the shape name of the chevron is "CVN\_01\_client\_status\_1")*

### 6.2 Node Titles

#### 6.2.1 CT\_ : Node title update

If, for a Visio node, the "shape name" is specified with a CT\_ prefix, this allows the title of the node to be determined in your excel spreadsheet.

For example, if you specify the shape name CT\_thisnodetitle, the extension "thisnodetitle" should be an excel label which resolves to a single cell in your spreadsheet. This cell would typically have a formula such as :

```
=IF(C23 > 400, "Big Value", "Smaller value")
```

In this case, if cell C23 has a value greater than 400, the cell "thisnodetitle" resolves to "Big Value", and this becomes the displayable title of the Visio node. In the opposite case, the title "Smaller value" becomes the displayable title of the node.

### 6.3 Composite Visio commands

It is possible to specify a Visio node as being both conditional and having an excel determined title. This is achieved by specifying both commands, separated by a semicolon (";")



For example, you can specify the following shape name:

CVN\_displaythisnode;CT\_thisnodetitle

Both commands will be obeyed - the node will conditionally display, and if it displays the node title will be derived from the excel cell referred to in the CT\_ command.

*(See in Visio file: mini\_publication\_map, within group "Client\_1", the shape name of the rectangle is "CT\_person\_name\_1;CVN\_01\_client\_status\_1")*

## 7 Excel authoring

### 7.1 Sheets Allowed per Excel File

The first 12 sheets of an Excel file allow definition of viewing and editing rights. Note that Excel always numbers the sheets as per the listing sequence in the sheet tab at the bottom of the spreadsheet. The leftmost sheet in this tab set is sheet 1, and they number sequentially to the right from this sheet onward.

For each of the first 12 sheets, the flwpx licence allows the licence issuer (author or publisher) to define whether that sheet may be viewed and/or edited. In this way, it is possible to provide the same document to different recipients and (for example) allow up to 12 recipients to edit distinct regions of the document, with no overlap (if so desired).

From sheet 13 onwards, all content is automatically editable and viewable.

For this reason, it is important to place all content with security requirements within the first 12 sheets. No control over content access is available beyond this limit.

**Note:** Although inter-sheet references are fully supported, off-spreadsheet references (in other words, references to other spreadsheets) are not supported at all. Should a spreadsheet contain an off-spreadsheet reference, the last text entry generated will be used.

### 7.2 Drop List

To create a drop list:

1. Create a list of options
2. Highlight that list and name it something sensible.
3. Select the cell you want the drop list to appear in
4. In the excel ribbon: Data > Data Validation
5. Select list from the drop down menu under allow
6. Source is your named list.
7. Click okay.
8. Rename the cell that contains the drop down to something sensible with the prefix "CI\_" or "CIR\_"
9. Encompass that cell with another bookmark.
10. Duplicated that second bookmark in word with the prefix "CD\_"

### 7.3 Check Box

To create a check box:

1. In the ribbon: Developer > Insert (The briefcase icon) > Form Controls > Check box
2. Draw the check box on your spreadsheet.

3. Right click on the check box > Format Control... > Cell Link: (Select the cell where you wish for the checkbox to appear in flwpx)
4. Selecting and de-selecting the checkbox will change the selected cell to “TRUE” or “FALSE” respectively.
5. Rename the cell that contains the TRUE/FASLE to something sensible with the prefix “CI\_” or “CIR\_”
6. Encompass that cell with another bookmark.
7. Duplicated that second bookmark in word with the prefix “CD\_”

## 7.4 Attachment Field

In the excel file, name a single cell something sensible, and put some form of text within it.

In the word document create a bookmark with the prefix “CF\_” and the sensible name. This will change that cell to accept any attachment.

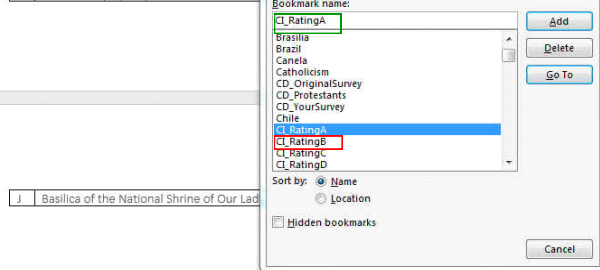
## 7.5 Tables

Create a table in your Word document suitable for your purposes. Bookmark the fields that are to be editable with the names of the Excel “name box” prefixing with “CI\_” (capital c and i followed by an underscore, no spaces) to indicate that the field is for calculation. And in the cases which the editable fields are going into the document blank, just place a full stop in the editable cells, to ensure that they can be edited on flwpx.

Rate your top three churches

We have prepared an analysis tool for you to see how your choice of the most amazing three churches in Brazil, South America, affects the rating. Simply enter your scores from 1 to 3 to indicate your most amazing churches and see the effect that your vote has on the outcome.

Description	Your Rating
A Cathedral de Sé de São Paulo	Rating
B Cathedral Basilica of Our Lady of the Snows, João Pessoa	Rating
C Cathedral of Brasília	Rating
D Old Cathedral of Rio de Janeiro	Rating
E Rio de Janeiro Cathedral	Rating
F Cathedral of Our Lady of Lourdes (Canela)	Rating
G Cathedral of Maringá	Rating
H Christ the King Cathedral, Toledo	
I Golden Chapel, Holy Saviour of the World	



Outcome of the survey

## 7.6 Inputs and Outputs Fields from Excel

Use Excel to create editable fields in your document. Refresh will show the results of the entries made. Create your table with supporting calculations in Excel. Name the editable fields to be used in word suitably in the Excel “name box”.

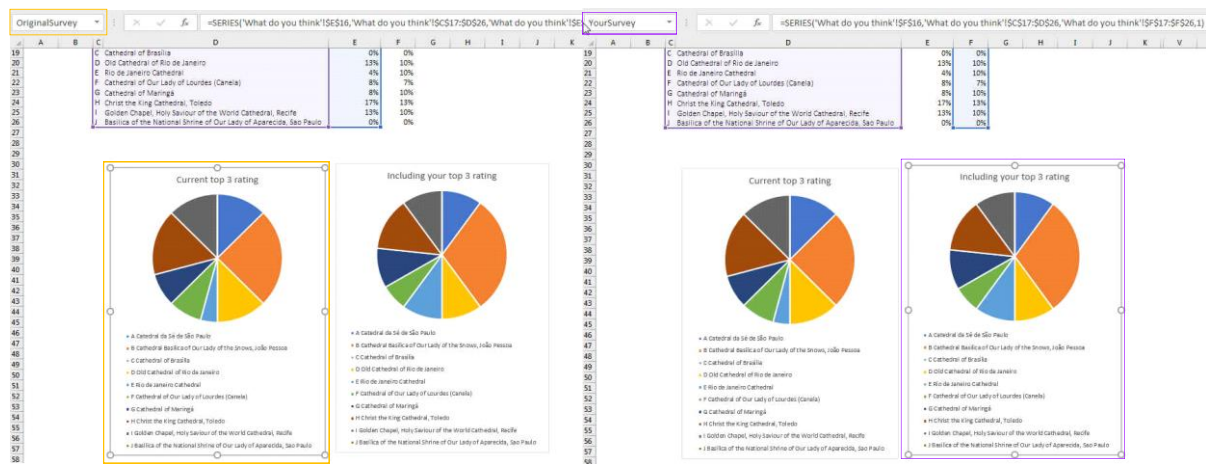
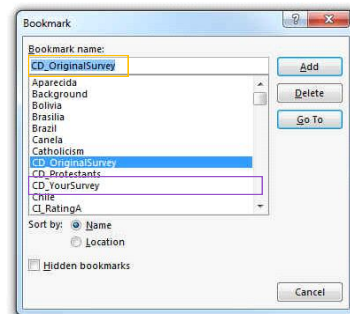
Description	Your choice	Your Opinion
A Cathedral da Sé de São Paulo	0	3
B Cathedral Basílica of Our Lady of the Snows, João Pessoa	1	6
C Cathedral of Brasília	0	0
D Old Cathedral of Rio de Janeiro	0	3
E Rio de Janeiro Cathedral	2	1
F Cathedral of Our Lady of Lourdes (Canela)	0	2
G Cathedral of Maringá	3	2
H Christ the King Cathedral, Toledo	0	4
I Golden Chapel, Holy Saviour of the World Cathedral, Recife	0	3
J Basilica of the National Shrine of Our Lady of Aparecida, Sao Paulo	0	0

## 7.7 Graphs

To include a pie chart with the results of the editable fields, Label your pie chart in your Excel spreadsheet in the Excel name box. Create your place holder in your Word document followed by a description on the next line. Book mark the place holder with the name of the pie chart preceded by “CD\_”, no spaces. flwpx currently supports pie charts, bar graphs, line graphs, and column graphs

Outcome of the survey

- Original Survey
- Original Survey
- YourSurvey
- YourSurvey





## 7.8 Dates

Date updates can be made using `=DATE(YEAR,MONTH,DAY)` and `=EDATE(DATE,MONTH)`.

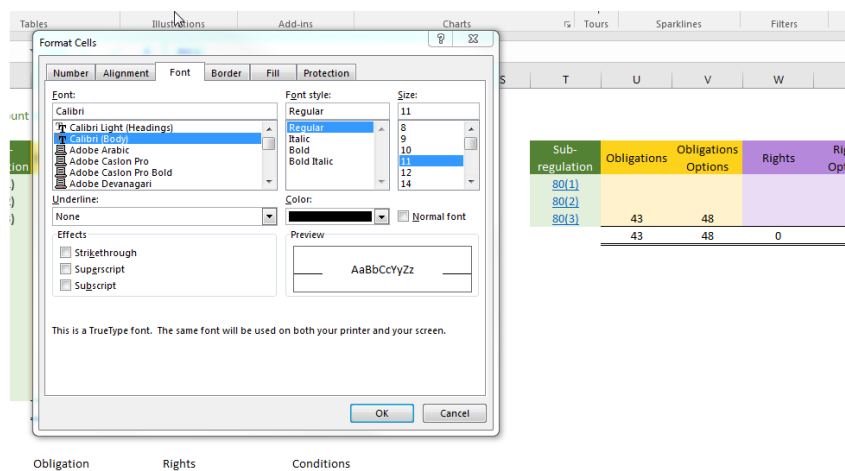
When using the “DATE” functionality, create a date cell, and a cell for the number of years using a drop down list, then in the outcome cell call the results of the following calculation. Split the original date entry cell in three discrete cells, one for Year, for Month and for Day. Below Year call the value of the drop down list. Sum the Year and drop value. In the outcome cell call the summed Year, the original Month and the original Day.

When using EDATE functionality, again create a date cell, and a drop down list for the number of months to be considered. In the outcome cell `=EDATE(original date, drop list of months selected)`

## 7.9 Hyperlinks

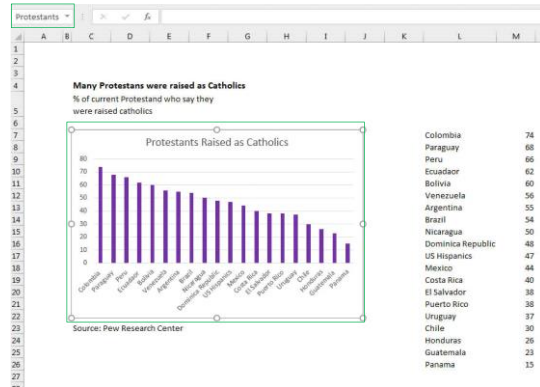
To create a hyperlink in your Excel spreadsheet or region to be incorporated into your Word document, insert the destination bookmark in the Address field at the bottom of the Edit Hyperlink dialogue box, make sure to prefix the bookmark with “WD:” with no spaces or underscore.

Change the hyperlink style to your chosen text format or individually per linked field to ensure consistency, as Excel in default turns a hyperlink blue, which may not be your preferred choice of colour in your Word document. Right click -> Format cells -> Underline -> none -> Colour -> black or other choice.



To insert a selected Excel region or graphs generated in Excel in your document:

- Name the graph or name of the selected region in the “name box” of your Excel spreadsheet. Name each graph or region sensibly, so that you can at a glance determine which graph or region belongs where in your document,
- In your word document place a holder at the point where you wish your graph or region to be, “Sensible name”, add a short description on the next line,
- Bookmark the placeholder with the identical name of your graph or region preceded by “CD” followed by an underscore, “CD\_”, so that for example, the placeholder “Sensible name” is given the bookmark “CD\_sensible\_name” or “CD\_sensiblename”. Note that “.xls” does not form part of the bookmark as it denotes a file type,
- Prefixing a bookmark with “CD\_” indicates to the **flwpx** system that a graph will be placed at the place holder.



Word has its quirks, one is that bookmarking a placeholder can over run other text and cause your **flwpx** document to lose some of its features. This is especially prevalent when pressing enter after a bookmarked field. When this happens, check your bookmarks using the “go to”, ensure that the bookmark encompasses only the placeholder and does not include the text below or further placeholders. If this has happened, copy the bookmark “Ctrl c” then delete the bookmark, exit the bookmark box, reassign the area of the placeholder, invoke the bookmark box, add the copied bookmark “Ctrl v”.

Graphs specified as bookmarked text in the document will be understood to refer to an Excel file, and the graph will be merged into the document during the **flwpx** import process, where the size of the thumbnail image is specified when configuring your document for publication. Only one Excel file supporting all the graphs or spread sheet calculations for your document is used and the thumbnails do not need to be generated separately.

### 7.10 Reset

There is the ability to reset values within the publication. What this means is that when you have a table that a user inputs numbers into and you wish to clear that information, you can use the reset button to remove and replace all input cells with a defined value. To do this, you will need to create a cell above, below or next to the table you wish to reset, and give it a value, for instance “0” or “0.0”, then name this cell “CR\_sensible”, then select the region your table is in, including this cell, and name it “XX\_sensible”, the XX can be whatever letters you want, just ensure that the letters you are using have not already been defined. Then select the input cells and instead of naming them “CI\_name”, you will use the new prefix “CIR\_”. And then in word you will have the bookmark “CD\_XX\_sensible”.

This reset does not just work for tables; it works for Visio files that are defined with conditional statements. The reset will reset the values to whatever you define as the reset value and resets the Visio to its original state.

The CIR\_ prefix has the additional functionality of updating the spreadsheets and Visio charts in real-time with the requirement for a refresh. Use this instead of CI\_ or CJ\_.

## 7.11 Naming Cells

**Name Uniqueness:** Excel allows for naming of cells or regions to be duplicated within a file, as these names are sheet specific within the file. flwpx requires that the entire excel file, which may consist of a number of sheets, adheres to a unique name per cell or region referenced in your Word document. Duplication of names for cells or regions across sheets will result in arbitrary display of information in your flwpx document - the first cell found for the given name will be used, and this is unlikely to be the correct cell. Make sure that all your cells have unique names.

## 7.12 Managing Bookmarks

Now you might come across a situation where you have named something incorrectly or have removed the use of that bookmark and now you want to delete it from your list of bookmarks in excel. This isn't a simple as it is in word, you have to make some changes to your ribbon.

To find the name manager: File > Options > Customize Ribbon > Under the main tabs find Data and click on it > At the bottom there will be a *New Group* button. This will create a new group under the Data tab. Make sure to click on the new group that was just created, then on the left, scroll down till you find Name Manager, click on it and then click the *Add >>* button to add it to the ribbon.

In the ribbon you will now find Name Manager under Data > New Group.

By clicking on Name Manager, a window will pop up with a list of all current bookmarks, you can now select, edit or delete any of the bookmarks.

## 7.13 Conditionality in Excel

### 7.13.1 CVR\_, CVC\_, and CCE\_ : conditional exclusions.

In an Excel spreadsheet, the CVR\_ command is used to conditionally exclude one or more rows, the CVC\_ command is used to conditionally exclude one or more columns from a spreadsheet region, and the CCE\_ command is used to evaluate a nominated cell to determine the actual command to be executed.

Consider the following. In word, you have a bookmark CD\_myregion. The label myregion resolves to a range in your excel spreadsheet - let's say A5 through G20.



This would normally result in this entire region being displayed in your flwpx publication.

Now, imagine that under certain conditions you don't want row 8 to be displayed.

If you create a label CVR\_checkrow8 and this label resolves to the range A8 .. G8, and the label checkrow8 resolves to a cell which has a formula :

```
=IF(C23>300,TRUE, FALSE)
```

If cell C23 has a value greater than 300, the cell referred to by checkrow8 resolves to TRUE, and row 8 displays. If C23 has a value not greater than 300, the cell resolves to FALSE, and row 8 does not display.

Note that for the CVR\_ command to be considered, the range referred to by the label extension (checkrow8 in this case) must extend from or before the display region to at or after the display region - in other words, in this case for CD\_myregion, it must extend from column 1 to at or after column 8.

Also, note that the exclusion rows may be any number from 1 or more. You can exclude 5 rows in this example by defining the label checkrow8 as defining A8 .. G12.

In the same way, a column region can be conditionally excluded using CVC\_. In this case, the label must resolve to a column or set of columns ranging from at or before the top of the display region to at least the bottom of the display region. So, for example, if this range were to be A5 .. C20, columns A through C would display conditionally depending on the value of the referenced boolean cell.

## 7.14 Managing user exclusion in Excel for Visio charts

### 7.14.1 CLE\_ : determining user editing rights

If you need to be able to evaluate which editing rights the user has on a given sheet in a workbook, you can use the CLE\_ command to obtain this value.

In any given sheet, label any single cell using the CLE\_ prefix. For example, we can label cell A1 of the sheet as CLE\_rights (the label extension in this case is discarded, you can use anything you wish).

In this example, the current user's editing rights for this sheet will be placed in cell A1. That is : if the current user has permission to edit the sheet, the value of cell A1 will become TRUE, otherwise false.

### 7.14.2 CLV\_ : determining user viewing rights

If you need to be able to evaluate which viewing rights the user has on a given sheet in a workbook, you can use the CLV\_ command to obtain this value.



In any given sheet, label any single cell using the CLV\_ prefix. For example, we can label cell A1 of the sheet as CLV\_rights (the label extension in this case is discarded, you can use anything you wish).

In this example, the current user's viewing rights for this sheet will be placed in cell A1. That is : if the current user has permission to view the sheet, the value of cell A1 will become TRUE, otherwise false.

### 7.15 Spreadsheet Prefixes

The following bookmark prefixes are used in Word documents with specific reference to your spreadsheet :

---

Prefix	Function
CD_	Display a cell, region or graph
CI_	Define a single input cell
CO_	Output the value of a cell as text
CF_	Define an attachment cell - declares a drop region for an attachment
CG_	Define an attachment cell for an image - image displayed after drop
CCE_	Define a conditional cell bookmark
CVR_	Define conditional row exclusion bookmark
CVC_	Define conditional column exclusion bookmark
CH_	Used within Excel to define a hyperlink into the document
CK_	Define a machine specific cell for workgroup purposes

---

CR\_      Resets a given region

CIR\_     Cells which will be affected by a reset

---

In addition to the above, there is a special case when using CD\_ to display a spreadsheet region.

If you wish to define a given cell, column or row region within the CD\_ region for input, that region must be “named” (the excel equivalent of a bookmark) using a CI\_ prefix name. The actual bookmark name is not important and is not used, it can be anything unique. The only relevant issue is the CI\_ prefix, which the parser uses to denote the named region as an input region. Any number of regions inside of a CD\_ display region may be named for input.

## 8 Visio

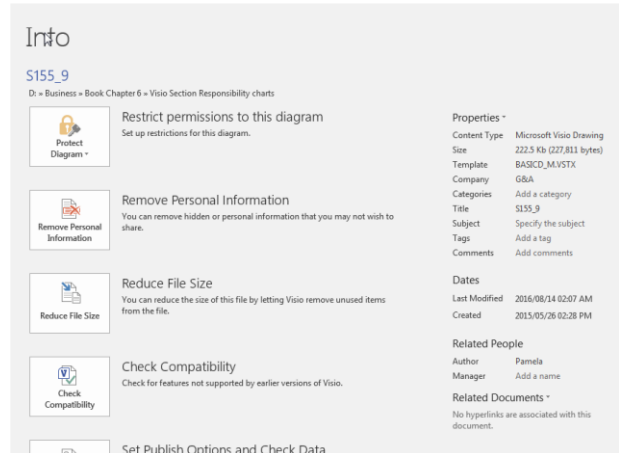
### 8.1 Images in Word

A further feature of the **flwpx** viewer is that **.svg** charts or diagrams are presented as thumbnail **.jpg**'s in the **flwpx** document, and expanded as scalable high resolution diagrams which present the linking functionality saved when flipped into the utility panel for closer inspection by panning and zooming. To make use of this feature, follow these easy steps:

1. Save all the Visio created diagrams that are to be included in your Word document individually as both **.svg** and **.jpg** in one folder. **Note:** If you wish to keep your general images and those created from Visio separate, i.e have a *Chart* and *Image* folder, all **.jpg**'s will need to go into the *Image* folder, regardless of how they originated and all **.svgs** will need to be kept in the *Chart* folder.
2. Label each image sensibly, so that you can at a glance determine which diagram is which, "sensible\_name.vsd" and then export them as **.svg** and **.jpg**,
3. To create an identical **.jpg** image of the chart or diagram, go File -> Export -> Change File Type -> JPEG File Interchange Format -> Save As,
4. To create an identical **.svg** image of the chart or diagram, go File -> Export -> Change File Type -> SVG Scalable Vector Graphics -> Save As,
5. In your word document place a holder at the point where you wish your diagram to be, "Sensible image", click enter and add a short description on the next line to create a boundary for your diagram,
6. After having clicked enter and adding a further line with a short description, go back to the placeholder and Bookmark it with the identical name of your diagram preceded by "v" followed by an underscore, "v\_", so that for example, the placeholder "Sensible image" is given the bookmark "v\_sensible\_name" or "v\_sensiblename", note that the neither "vsdx", *svg*, nor "*jpg*" form part of the bookmark as they denote a file type,
7. Prefixing a bookmark with "v\_" indicates to the **flwpx** system that a **jpg** file in the form of a thumbnail will be placed at the place holder in the media panel and a navigable and scalable *svg* diagram will be available in the utility panel.
8. It is possible to cause the display of a node in a Visio chart to be conditional. To achieve this, select the node, then from the Developer tab choose "Shape Name". Give the node a shape name prefixed by "CVN\_". The name following the prefix must match the bookmark (name) of a Boolean cell in the spreadsheet. If the cell evaluates to TRUE (1) the node will display, if FALSE (0) the node will not display.
9. The title of a node can be derived from the content of a spreadsheet cell. To achieve this, select the node, then from the Developer tab choose "Shape Name". Give the node a shape name prefixed by "CT\_". The name following the prefix must match the bookmark (name) of a text (string) cell in the spreadsheet which will provide the required title.

Word has its quirks, one is that bookmarking a placeholder can over run other text and cause your flwpx document to lose some of its features. This is especially prevalent when pressing enter after a bookmarked field. When this happens, check your bookmarks using the “go to” button, ensure that the bookmark encompasses only the placeholder and does not include the text below or further placeholders. If this has happened, copy the bookmark “Ctrl c” then delete the bookmark, exit the bookmark box, reassign the area of the placeholder, invoke the bookmark box, add the copied bookmark “Ctrl v”.

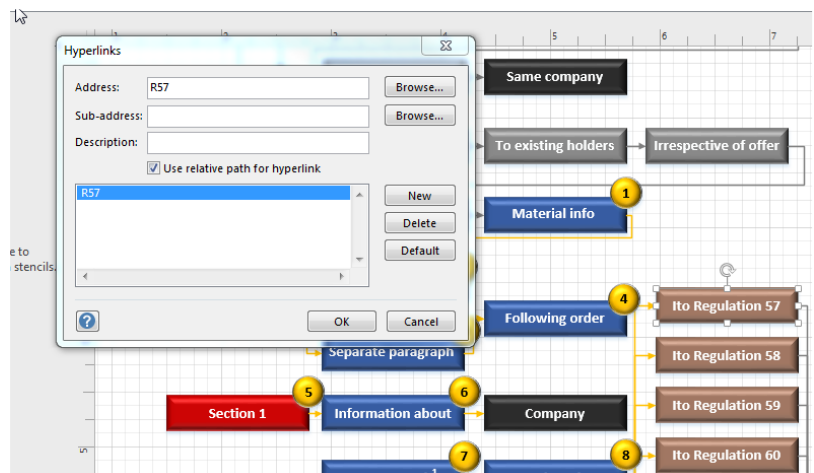
The diagrams created in Visio and used in the Word document must be saved as individual files where the file title (File -> Title) is the same as the file name assigned to the image pasted as an enhanced metafile into the word document.



The file title and file name must be one word with no spaces, alternatively use “\_” (underscore) in lieu of a space.

All the individual diagrams created in Visio are saved in a separate folder as both a .vsdx, a .svg and a .jpg which is submitted together with the Word document to flwpx.

Links are created in the Visio diagrams as Insert -> Hyperlink -> insert in Address the destination bookmark created in the Word document. This would typically be a bookmark assigned to a heading.



Consistency and accuracy will determine the outcome of the quality of the links in the Word book.

## 8.2 Navigational Map Links

Another unique feature of the flwpx viewer is its ability to make use of a navigational overview of the entire Word document, determined by the author, to emphasize important aspects of the document, making it easier for the user to find the information they are looking for.

This overview of the entire document and then per chapter is created in Visio and requires a different linking mechanism from the ones described above, as the link is intended to open the map in the Utility panel and the related chapter in the media panel.



To achieve this the hyperlink needs to have addresses separated by a colon “:”, again no spaces. The first address must be the bookmark of the Chapter heading, the second the bookmark of the map. Such as “childbookmark:v\_childmap”.

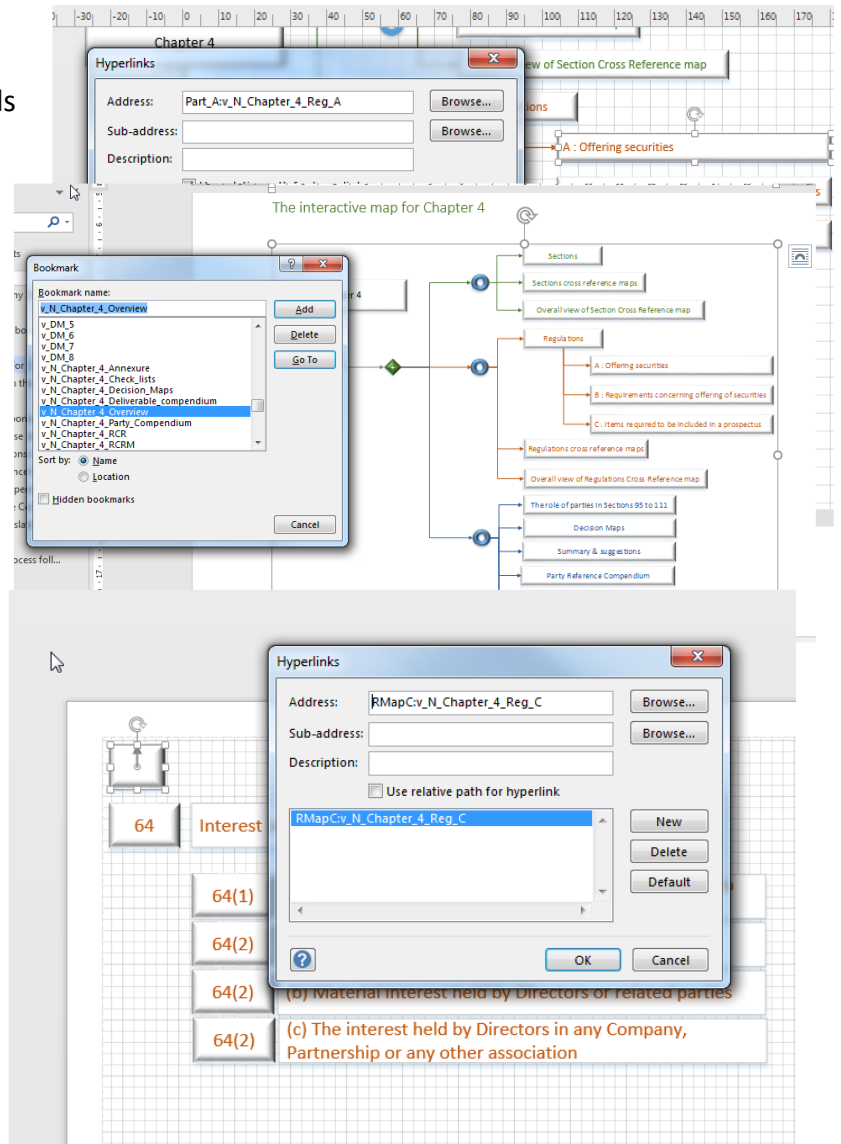
A further feature of the navigational mechanism is that one can travel down and up the navigational maps with a simple click. This is accomplished by including an up button in the child maps. Again, two addresses are required in the hyperlink separated by a colon “:”, no spaces, that of the parent chapter and then the parent map, such as

“parentbookmark:v\_parentmap”.

This means in the word document, there will be two bookmarks, parentbookmark and v\_parentmap.

The first bookmark will move the publication to the point at which the bookmark exists and the second will change the map view to the correct map.

It is possible to make the links conditional. Refer to point 8 under 5.1.

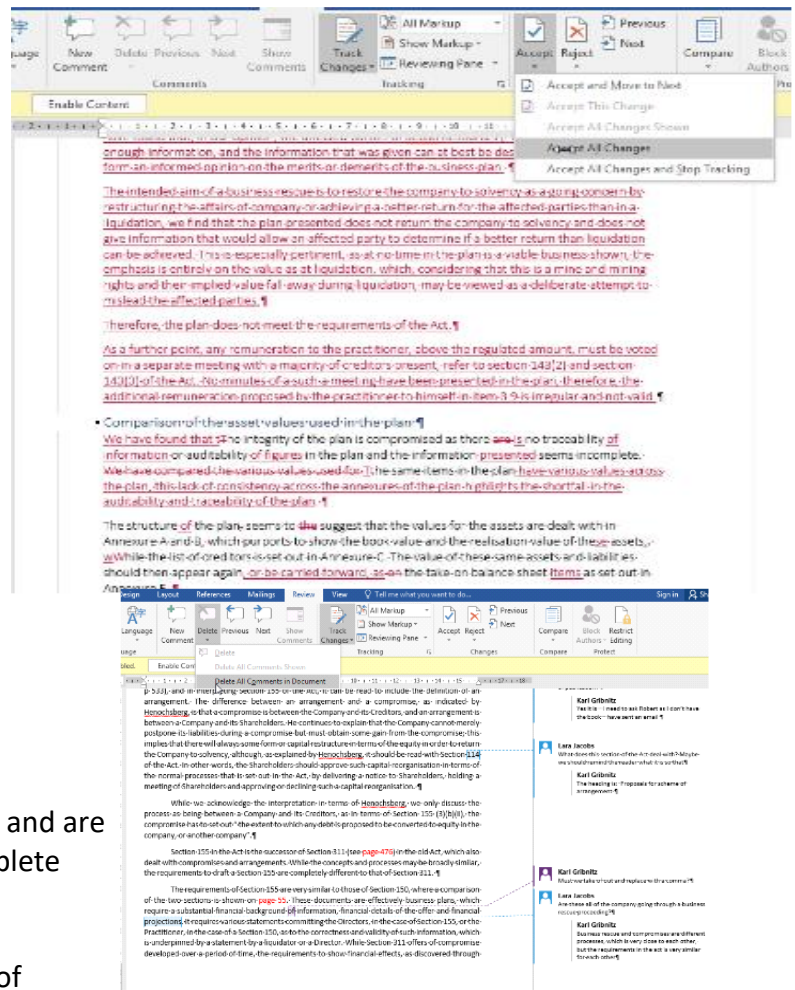


## 9 General

### 9.1 Finishing

To ensure that a Word document is ready to be sent for import into **flwpx** viewer, all changes to document must be accepted, comments deleted and the document must be saved as a “docx”.

Both .doc and .docx are Word file extensions from Microsoft. The default file extension for Word 2007 became docx, prior to that, the default file extension was doc. The doc file format was proprietary to Microsoft, limiting its readability in other applications. To open the readability of the Microsoft Word documents the standard was changed to an open format incorporating XML, hence the “x”. If you are using a version of Word document older than 2007, it must be converted to docx format before submitting for publication.



Once you are happy with your editing and are ready to submit your document, complete the following:

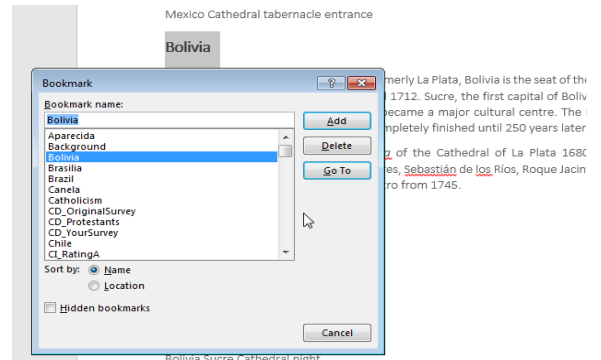
Go to “Review”, click on down arrow of Accept, Accept All Changes. Still in “Review”, click on down arrow in Delete next to New Comment, Delete All Comments in Document.

### 9.2 Bookmarking

Bookmarks are a critical element of incorporating the dynamic functionality into a **flwpx** document. Take the time to validate your bookmarks, here are a few tips:

### 9.2.1 Word

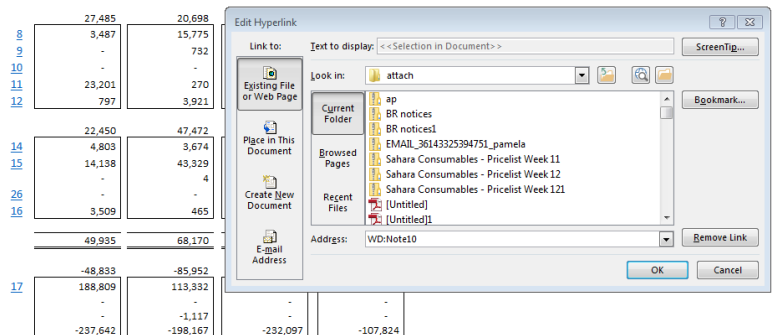
A technique for validating your bookmarks: *Shift +Ctrl+ F5* -> scroll to topmost bookmark -> *Alt 'g'*, check that bookmark correct, scroll down one, *Alt 'g'* again and so on.



### 9.2.2 Excel

Highlight the cell which will be used to hyperlink to the named sheet region, click "Hyperlink", select "Place in this Document" under "Link to:", scroll "Select a place in this document" down to "Defined names" branch, select the appropriate named region that you would like to travel to.

Hyperlink checking: go to each link -> Ctrl 'k' -> check that the "WD:" document bookmark is correct.

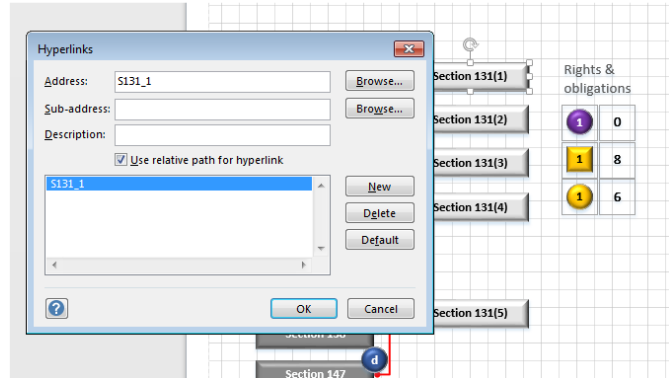


Bookmark checking: cell or graph name checking, go to names tag, hit down arrow, go to each name and make sure that the area properly defined.

	30-Jun	Group	30-Jun	Company	30-Jun
Notes	27,485	20,698	25,332	10,218	
and equipment	3,487	15,775	-	-	-
by subsidiaries	-	732	997	10,218	-
set	23,201	270	24,335	-	-
releases	797	3,921	-	-	-
receivables	22,450	47,472	-	-	-
by group Companies	4,803	3,674	-	-	-
equivalent	14,138	43,329	4	-	-
	-	-	-	-	-
	3,509	485	-	-	-
	49,935	68,170	25,332	10,218	
premium	-48,833	-85,952	-42,288	5,518	
ie reserve	188,809	113,332	188,809	113,342	
ss	-237,642	-1,117	-232,097	-107,824	
Shareholder	65,010	8,410	61,060	-	
wings	61,060	-	61,060	-	
	3,950	8,410	-	-	
Short term borrowings	33,758	144,712	7,560	4,861	
Trade and other payables	-	60,467	-	893	
Taxation	3,587	33,481	7,560	37	
Provisions	30,171	45,113	-	3,803	
	-	799	-	-	
	-	4,872	-	-	
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>49,935</b>	<b>68,170</b>	<b>25,332</b>	<b>10,218</b>	

### 9.2.3 Visio

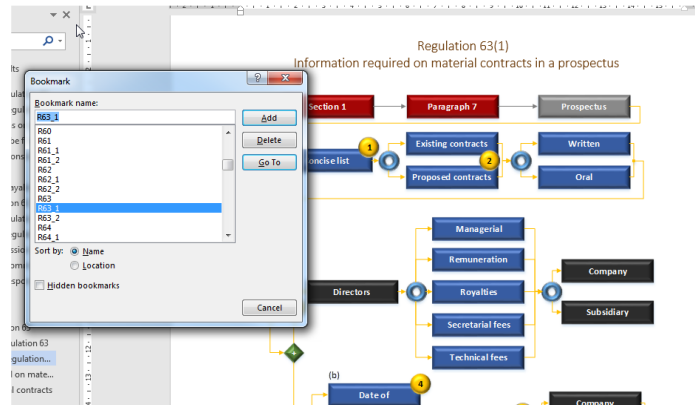
Hyperlink checking: go to each linked item -> *Ctrl 'k'* -> check that the word document bookmark is identical to that entered as the hyperlink. Also, ensure that “Use relative path for hyperlink” is checked.



### 9.3 Hyperlinks

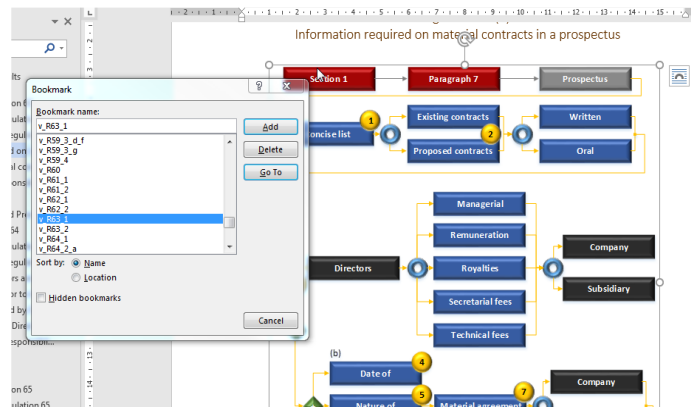
A bookmark is the destination or target, the hyperlink the journey or source. Typically, a heading or image of the subject in the Word document would be a bookmark, and any reference to that subject would be a hyperlink, either in the Word document, the selected Excel region, or in the Visio diagram.

Ensure that all destinations in the Word document are bookmarked as one word with no spaces, alternatively use “\_” (underscore) in lieu of a space, this same bookmark is then used in the hyperlink as the target to follow.



Highlight the text which will be used to hyperlink to the bookmark, click “Hyperlink”, select “Place in this Document” under “Link to:”, scroll “Select a place in this document” down to “Bookmark” branch, select the appropriate bookmark that you would like to travel to.

Where a heading is bookmarked which has a related image or diagram from Visio, bookmark the heading as normal, then use the same bookmark with the prefix “v\_” for the image. This will ensure that the heading and image appear together when referenced.



A hyperlink in Word is default blue underlined. To modify this, create your first hyperlink, then select Styles, scroll down to Hyperlink, click Modify style, Modify, Select colour and de-select underscore button (u).

## 9.4 Special Characters

|| : (two vertical bars, alone in line in a paragraph): hard line break. The two characters are absorbed, and a line break is displayed in the output publication.

This character is build using two pipe key strokes. The pipe key can be found as the caps of the forward slash key. Where the key is located is keyboard dependant, generally it can be found above the enter key (solid vertical line), otherwise somewhere along the number key line at the top of the keyboard (dashed vertical line).

## 10 Prefix Summary

The following bookmark prefixes are used to create flwpx functionality.

Prefix	Description	Word	Excel	Visio
i_	Embed an image in the document	i_Label, where Label.jpg is the name of the image to be embedded	not used	not used
v_	Embed a vector chart in the document	v_Label where Label.svg is the name of the vector chart to be embedded, and (optional) Label.jpg is the image to be displayed as a link to the chart in the document	not used	Generate a chart and export to Label.svg.  Optionally generate an image to be presented, named Label.jpg
f_	(future provision)			
CR_	Creates a Reset button	not used	CR_region, where region is the section of the spreadsheet that needs to be reset	not used
CIR_	Input cell which causes chart refresh and formula recalculation for current display page	not used	CIR_name, where name is the name of the cell/s that are input fields	not used

Prefix	Description	Word	Excel	Visio
CCE_	Conditional link	CCE_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell which will provide the final bookmark.  See note <i>i</i> below	Linked from Word: <i>Label</i> is the bookmark (name) of a cell which itself generates a conditional bookmark.  <i>CCE_Label</i> in Excel will evaluate a nominated cell to determine the actual command to be executed.  See note <i>i</i> below	not used
CVR_	Conditional link	not used	Rows are displayed conditionally depending on the value of the referenced boolean cell where <i>CVR_Label</i> is the <i>Label</i> of the bookmark of the Boolean cell	not used

Prefix	Description	Word	Excel	Visio
CVC_	Conditional link	not used	Columns are displayed conditionally depending on the value of the referenced boolean cell where <i>CVR_Label</i> is the <i>Label</i> of the bookmark of the Boolean cell	not used
CVN_	Conditional link	not used	Linked from Visio : <i>Label</i> is the bookmark (name) of a cell which provides a TRUE (1) or FALSE (0) value, indicating whether a Visio node should be displayed or not	<i>CVN_Label</i> is the Shape Name of a node, where <i>Label</i> links to a spreadsheet cell with a TRUE (1) or FALSE (0) value indicating whether the node should be displayed or not.





Prefix	Description	Word	Excel	Visio
CD_	Spreadsheet Display	<p>CD_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell or region.</p> <p>The bookmarked text is replaced by a read-only cell field with the value of the cell, or arbitrary function region. See note <i>iii</i> below.</p>	<i>Label</i> is the bookmark (name) of a cell or region to be displayed.	not used
CF_	Attachment drop region	<p>CF_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell used to store the filename of a dropped attachment file</p>	<i>Label</i> is the bookmark (name) of a string cell (must not be blank initially) used to store the name of a file attachment	not used
CFN_	Attachment drop region with next	<p>CF_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet region used to store the filename of a dropped attachment file.</p> <p>The region must nominate a column of cells - each cell is used for the next file attachment, the row is incremented with each dropped file</p>	<i>Label</i> is the bookmark (name) of a string region (must not be blank initially) nominating a column of cells used to store the names of a set of file attachments	not used



Prefix	Description	Word	Excel	Visio
CG_	Attachment drop region for an image	CG_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell used to store the filename of a dropped attachment image	<i>Label</i> is the bookmark (name) of a string cell (must not be blank initially) used to store the name of an image attachment	not used
CH_	Hyperlink definition	not used	Used as the final value in a CCE_ cell link from word, to provide a hyperlink into the document.  See note <i>i</i> below.	not used
CI_	Input cell	CI_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell presented as an input field	<i>Label</i> is the bookmark (name) of a cell to be presented for input.  Used in excel display regions (displayed from Word using a CD_ command) to denote input cell	not used

Prefix	Description	Word	Excel	Visio
CJ_	Input full cell	CJ_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell presented as an full input field (the input field extends to fill the table cell)	<p><i>Label</i> is the bookmark (name) of a cell to be presented for input.</p> <p>Used in excel display regions (displayed from Word using a CD_ command) to denote input cell</p>	not used
CO_	Output text from cell	<p>CO_<i>Label</i> where <i>Label</i> is the name of a spreadsheet cell for which the value is output as text.</p> <p>See note <i>iii</i> below.</p>	<p><i>Label</i> is the bookmark (name) of a cell of which the value is output as text.</p>	not used
CT_	Title derived from cell	not used	<p><i>Label</i> is the bookmark (name) of a cell which provides the title.</p> <p>See note <i>iv</i> below</p>	<p>CT_<i>Label</i> is the Shape Name of a node, where <i>Label</i> links to a spreadsheet cell which provides the title of the node</p>



Prefix	Description	Word	Excel	Visio
CV_	Input versioned cell	CV_ <i>Label</i> where <i>Label</i> is the name of a spreadsheet cell presented as a versioned input (the delta for the input field is displayed below the field)	<i>Label</i> is the bookmark (name) of a cell to be presented for input.	not used
TOC_	Table of contents	TOC_0  Inserted in Word after Title page preceded and followed by page break.  Instructs <b>flwpx</b> to create a table of contents in the publication for printing to pdf Creator	not used	not used
SOP_	Start of Print	SOP_0.  This indicates the begin of the printed region	not used	not used
EOP_	End of print	EOP_0.  This indicates the end of the printed region.  Typically followed by setup-only fields, not intended for printing	not used	not used

Prefix	Description	Word	Excel	Visio
TS_	Start of text segment	TS_ <i>Label</i> defines the start of an arbitrary-length text segment which may be flipped into the utility panel	not used	not used
TE_	End of text segment	TE_ <i>Label</i> defines the end of a text segment. <i>Label</i> must match exactly the value of <i>Label</i> in the TS_ <i>Label</i> for the segment.	not used	not used
TCS_	Start of conditional text segment	TCS_ <i>Label</i> defines the start of an arbitrary-length text segment which is not displayed at the point of definition.  See note v below.	not used	not used
TCE_	End of conditional text segment	TCE_ <i>Label</i> defines the end of a conditional text segment.  <i>Label</i> must match exactly the value of <i>Label</i> in the TCS_ <i>Label</i> for the segment.  The segment so defined is not displayed at the point of definition.  See note v below.	not used	not used

Prefix	Description	Word	Excel	Visio
TO_	Text segment display	Rarely used. More commonly used as an evaluated bookmark through a CCE_ bookmark. See note v below.	TO_ <i>Label</i> specifies the display of a text segment marked in the Word document through use of TCS_ / TCE bookmarks.  See note v below.	not used
_00_ _000 _	Multiple suffix	Allows for re-use of the same bookmark at different places in the document.  See note ii below.	Used in name manager for repetition of CCE_,  CVC_, CVR_, CI_, CJ_, CK_, CLE_, CLV_	Used for Shape Names where necessary to allow for re-use of the same Shape Name for multiply nodes within the same chart
CK_	Machine only	not used	Allows for the changes made on one machine not to change anything on another machine during a workgroup scenario.	not used
CLE_	Elevating editing rights	Not used	To follow	To follow

CLV_	Elevating viewing rights	Not used	To follow	To follow
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**Notes:**

- i* The CCE\_ bookmark type allows for conditional generation of the bookmark itself. In other words, the CCE\_ bookmark is not the bookmark that will be used; rather, it indicates a cell in the spreadsheet that will provide the final bookmark. An example may illustrate this best.

The Word document specifies a bookmark *CCE\_Label*. The cell bookmarked (named) *Label* in the spreadsheet contains an IF statement, perhaps something like this:  
`=IF($c$3, 'CH_Label2', 'CO_Label3')`

The result of this would be that if cell C3 evaluates as TRUE (1), the CCE\_ bookmark will be replaced by CH\_Label2, if FALSE (0), then replaced by CO\_Label3. In other words, the CCE\_ bookmark provides the ability to derive the final bookmark via conditionals in the spreadsheet, thus reacting to user input rather than being a fixed reference.

- ii* In Word (for bookmarks) and Visio (for Shape Names) each label may be used only once. Where a given label needs to be used more than once, it may be suffixed by a two-digit counter to provide uniqueness. For example, if you wish to output the text in a given cell at multiple points in the document, you may use CO\_00\_Label, CO\_01\_Label, CO\_02\_Label ... and so on. All of these will be exactly equivalent to CO\_Label. The suffix may be used for any of the prefixes where uniqueness is required. The author may use either form, as required. In other words, CO\_00\_Label is equivalent to CO\_000\_Label. The 3-digit variant is presented in cases where vast numbers of alias bookmarks are required in a single document.

**Note:** multiple suffixes may **NOT** be used with TS\_ or TCS\_ text segments.

- iii* The difference between CD\_ and CO\_ is as follows:
- CD\_ if referring to a single cell defines a read-only cell - this is an input field which does not allow editing, i.e. read-only. The value of the cell may be selected and copied, but not changed. Note that if CD\_ is used for an Excel region, bookmarks in Excel define the individual cell functions.
  - CO\_ outputs the value of a cell as text, in line with the surrounding text in the document. This text is not selectable or can be copied, and appears as if it is part of the surrounding text.

- iv This technique would only be used where the title of the node depends on user input or is conditional on user selections. In other words, the node shape name would probably link to a cell which has an =IF() or =CHOOSE() or perhaps a =CONCATENATE() function, which creates a conditional or composite title for the node. In this way, the title of the node will adjust to user selections or input.
- v A conditional text segment is used where the author wishes to be able to display a complex text segment conditionally at one or more places in the document.

Where it is defined, the text segment is not displayed. Instead, it creates a text segment which may be referenced typically by using a CCE\_ bookmark. An example may illustrate this best:

The author creates two conditional text segments. The first, TCS\_Car, is a paragraph that describes a passenger sedan motor vehicle. The second, TCS\_SUV, is a paragraph that describes a 4x4 off\_road vehicle. Neither of these paragraphs display where they are defined. Now, at a given point in the document, the author uses a CCE\_ bookmark to trigger a bookmark from a spreadsheet cell which may look as follows:

```
-IF($C$3='Off_road', TO_SUV, TO_Car)
```

The result is that if the user has selected an off\_road vehicle, the SUV paragraph displays, otherwise the sedan paragraph displays at the point where the CCE\_ bookmark is specified.

Conditional text segments may contain any bookmarks that are permissible at any other point in the document - in other words, bookmarks such as CD\_, CI\_ or CO\_ as well as v\_ and i\_ bookmarks may be used freely in the segment.

**Note:** that although not prohibited, nesting TCS\_ bookmarks is not sensible in most cases. It is, however, permissible to nest a TS\_ / TE\_ segment within a TCS\_ / TCE\_ segment.

A TCS\_ / TCE\_ segment may be any length, not limited to one paragraph.

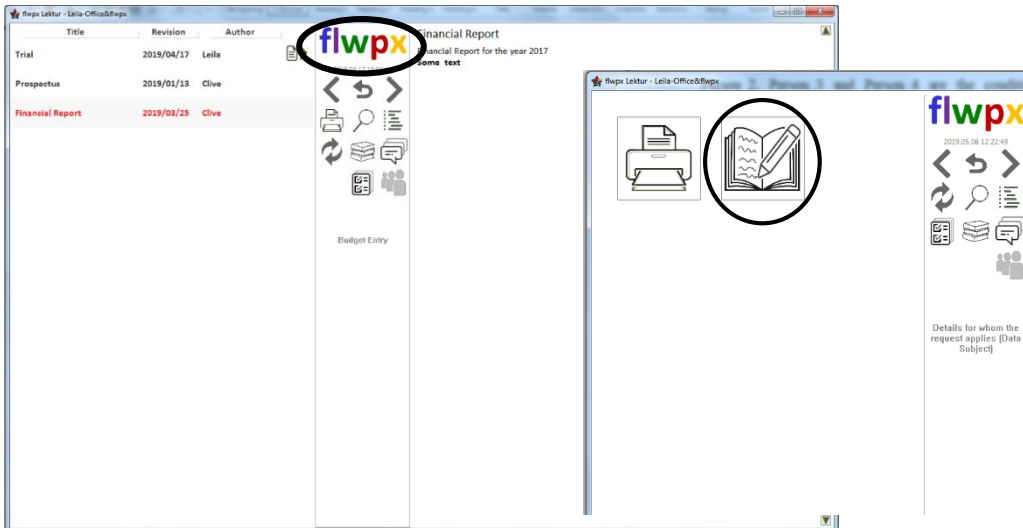
Like a TS\_ / TE segment, TCS\_ / TCE\_ segments may be flipped to the utility panel.



# 11 Publishing

## 11.1 First Time Publishing

Once open, you should find your last publication or it will be blank if you are a new user. Click on the **flwpx** icon and click on the publication icon that will appear.



The 'Publish' dialog box contains the following fields and options:

- Publication:** A dropdown menu with a 'Publish' button to its right.
- Title:** A text input field.
- Cover Image:** A text input field with a small image icon to its right.
- Word Document:** A text input field with a document icon and a 'L' button to its right.
- Excel Spreadsheet:** A text input field with a spreadsheet icon and a 'L' button to its right.
- Image folder:** A text input field with a folder icon to its right.
- Chart folder:** A text input field with a folder icon to its right.
- Font size:** A dropdown menu.
- Media width:** A dropdown menu.
- Thumbnail width:** A dropdown menu.
- Map label:** A text input field.
- Chapter style:** A text input field.
- Chapter level:** A dropdown menu.

Buttons for 'Publish' and 'Cancel' are located at the top right of the dialog box.

Fill in the necessary details, excel spreadsheet is not a requirement, but the Image and Chart folders are, even if they are empty folders. The *Map label* will be the name of your first navigational map. Once all the fields have been filled in, and the relevant documents

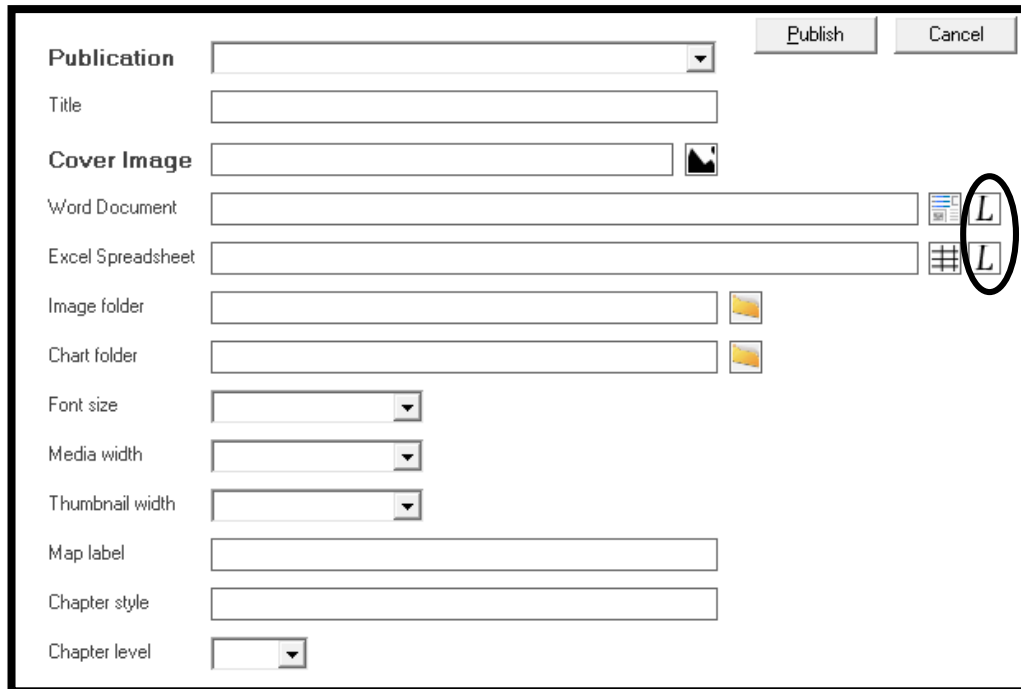
uploaded, click “Publish”. When the publication has been generated, you will receive a notification at the bottom of the navigation tab.



Clicking on this notification, will take you directly to the publication, alternatively you can find the publication in your library list, accessed by clicking on the pile of books icon in the navigation tab. Your new publication will appear on the left-hand side.

## 11.2 Republishing

If you have already published a publication on **flwpx** and make changes afterwards, click on the publish icon, the publish window will appear and then in the “**Publication**” section, click on the name of your original publication from the drop down list of publications generated previously.



The screenshot shows a publication window with the following fields and controls:

- Publication:** A dropdown menu with a downward arrow.
- Title:** A text input field.
- Cover Image:** A text input field with a small image icon to its right.
- Word Document:** A text input field with a document icon and a circled 'L' icon to its right.
- Excel Spreadsheet:** A text input field with a spreadsheet icon and a circled 'L' icon to its right.
- Image folder:** A text input field with a folder icon to its right.
- Chart folder:** A text input field with a folder icon to its right.
- Font size:** A dropdown menu.
- Media width:** A dropdown menu.
- Thumbnail width:** A dropdown menu.
- Map label:** A text input field.
- Chapter style:** A text input field.
- Chapter level:** A dropdown menu.

At the top right of the window are two buttons: **Publish** and **Cancel**.

You can select the icon to the far right of the Word document or Excel spreadsheet section and **flwpx** will automatically fill it in with the last files used, the image and charts folders will be inserted if this was the last publication uploaded.

For new publications click on the icon to the left of the “L” and manually find the files. Once all the necessary fields are completed, click **Publish** and wait for the notification to appear. Once it appears, click on it and your document will open.

## 12 Sending a Publication

Now that you have built a complete publication, you can send it out to be filled in. To do this, click on the stack of books icon in the middle panel. This will take you to your library.

The screenshot shows the flwpxx application interface. On the left, there is a table with the following data:

Title	Revision	Author
Test	2019/05/03	Leila
UBS document	2019/04/29	Pamela
<b>Trial</b>	<b>2019/05/03</b>	<b>Leila</b>
Prospectus	2019/01/13	Clive
Financial Report	2019/03/25	Clive

On the right, there is a sidebar with the flwpxx logo and a date '2019.05.06 14:05:13'. Below the logo are several navigation icons, including a stack of books icon which is circled in red. The sidebar also shows '1 Se' and 'PI' labels. At the bottom of the sidebar, there is a section titled 'Details for whom the request applies (Data Subject)'.

If you are the author of the document or have had sending rights given to you by the original author, you will see the following icon next to your document.

This is a close-up of the 'Trial' document row from the previous screenshot. The row contains the text 'Trial', '2019/05/03', and 'Leila'. To the right of the row is a red document icon with a right-pointing arrow, which is circled in red.

Click on this icon, and pick the person you wish to send the document too.

Click on the target icon next to the person you wish to send it too. You will then see the following page.

The screenshot shows a dialog box titled 'Select recipient for publication' for the document 'Trial'. It contains a table with the following data:

user	device	email	city	flwpx address	online
Clive	Phaedrus	clive@flwpx.com	Pretoria	Phaedrus&flwpx	<input type="checkbox"/>
Leila	Desktop_Home	leila@lavadesign.co.za	Pretoria	LeilaDH&flwpx	<input checked="" type="checkbox"/>

The 'online' column has a target icon (a circle with a crosshair) next to each row. The target icon for the 'Leila' row is circled in red.

This is the license page. This allows you to control for how long someone will have access to your publication. “Allow forwarding” lets your recipient to send your publication to other people. Once the license expires they will no longer have access to it, i.e. they cannot change any of the fields. “Erase on expiry” removes the publication from their library. “Sheet view” and “Sheet edit” allows you to select what excel sheets your recipient can view or edit. Alternatively, select “All” and “All”. Once you have filled in the necessary fields or ticked the boxes, click Transmit and the publication will be sent.

**Note:** The *Relative Expiry* is based off the values imputed into #Day and #Hours, while the *Absolute Expiry* is based off the date chosen in the calendar.

### 13 Workgroup participation

A workgroup allows multiple parties to edit the same publication at the same time with all parties receiving real time edits.

To create a workgroup, the author will need to send the form data to the workgroup participates.

The author will need to enter the publication and then select the form data button.

Then select the form data from the form list and click on the send button. That will take the author to their contact list, select the target contact that requires the form data. Once the target contact has been selected a new window will pop up.



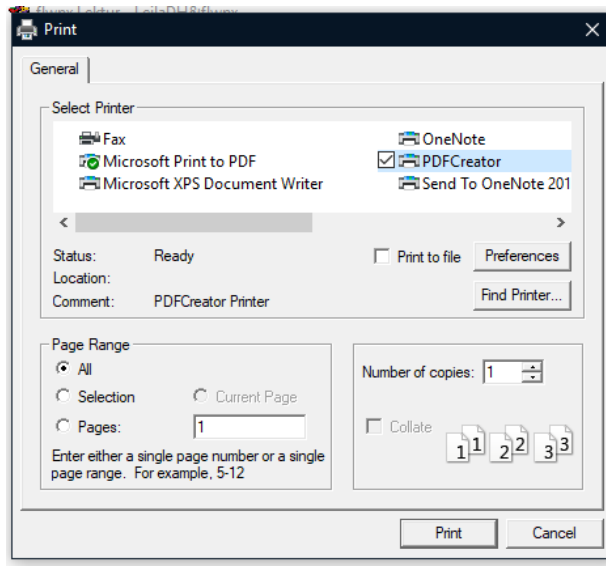
The screenshot shows the application's settings window. On the left, it displays 'Publication : Draft V4', 'Form : Default', and 'Target user : Clive'. There are input fields for 'user', 'device', and 'flwpx address', with an 'Add to workgroup' button. On the right, there are settings for 'Form License : Draft V4 -> Clive', including 'Max Printed Pages' and 'Visible Pages (no licence)', both set to 0. Below these are 'Full prints (Draft)' and 'Full prints (Final)', also set to 0. There are fields for '# Days' and '# Hours', both set to 0. The 'Relative Expiry' option is selected. Other options include 'Absolute Expiry', 'Erase on expiry', 'Allow Forwarding', and 'Transfer Ownership'. A calendar for June 2019 is shown with the 10th selected. On the far right, there are two lists of sheets: 'Sheet View' and 'Sheet Edit', each with checkboxes for 'Sheet 1' through 'Sheet 12'.

The author will need to give the target contact the same license as they did for the publication. Then they must click the *Add to workgroup* button. Finally click the Transmit button to send the form data.

## 14 Printing

Please ensure you have PDFCreator installed on your computer before you attempt to print a document. Go to the website: <https://www.pdfforge.org/pdfcreator/download>

When you are ready to print a document from flwpx, select the logo -> print button.



Find and select your PDFCreator and click *Print*. It will take a minute or longer depending on the size of your publication. But once it has been compiled this window will appear.



Fill in all the relevant details and then *Save* the pdf.

**Note:** If you wish to print a document please make sure that the rows in your Word tables do not exceed the length of the page minus all the margins. IF the row extends the length of the page, the document will not be printed correctly, it will lose all the information after the first page.

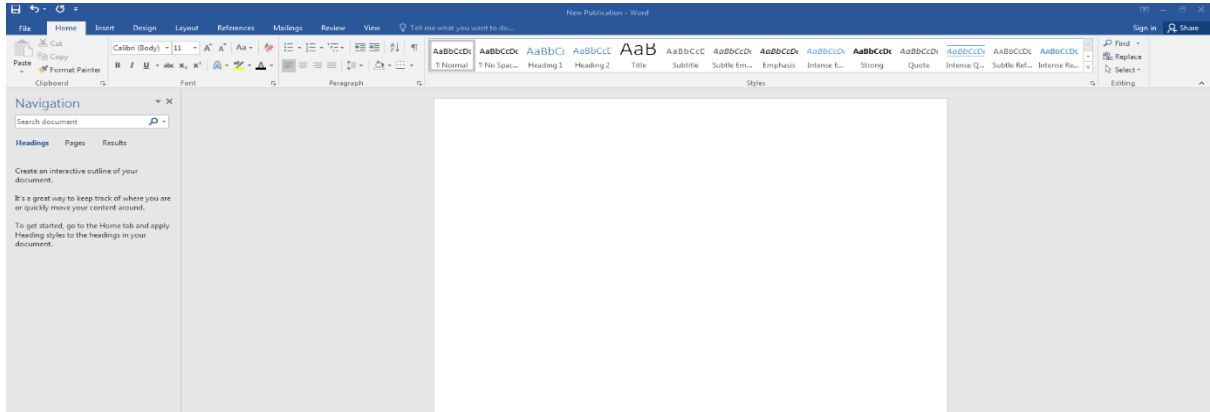
**Note:** By creating a saving a pdf the document is no longer secure and can be sent to anyone. You will need a PDF viewer like Adobe Acrobat Reader to view and print the pdf.

# 15 Worked Out Examples

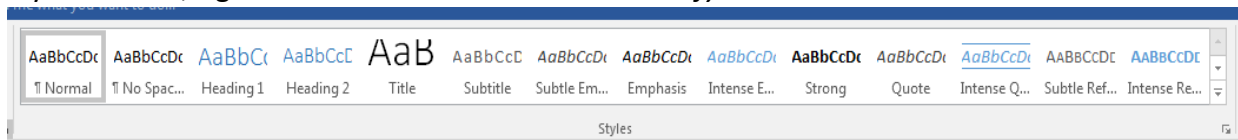
## 15.1 Publication with Word

### 15.1.1 Modify

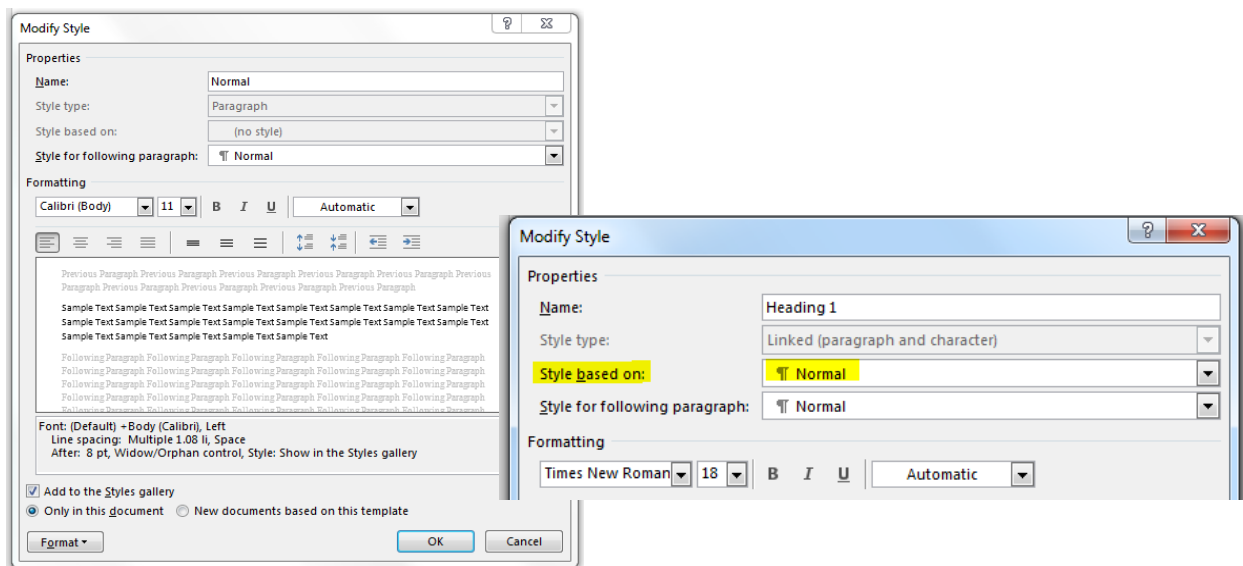
Start by opening up a blank Word document.



Personally I would modify all styles to what the author prefers. Start with the ribbon, in the styles section, right click on normal and click on *modify*.



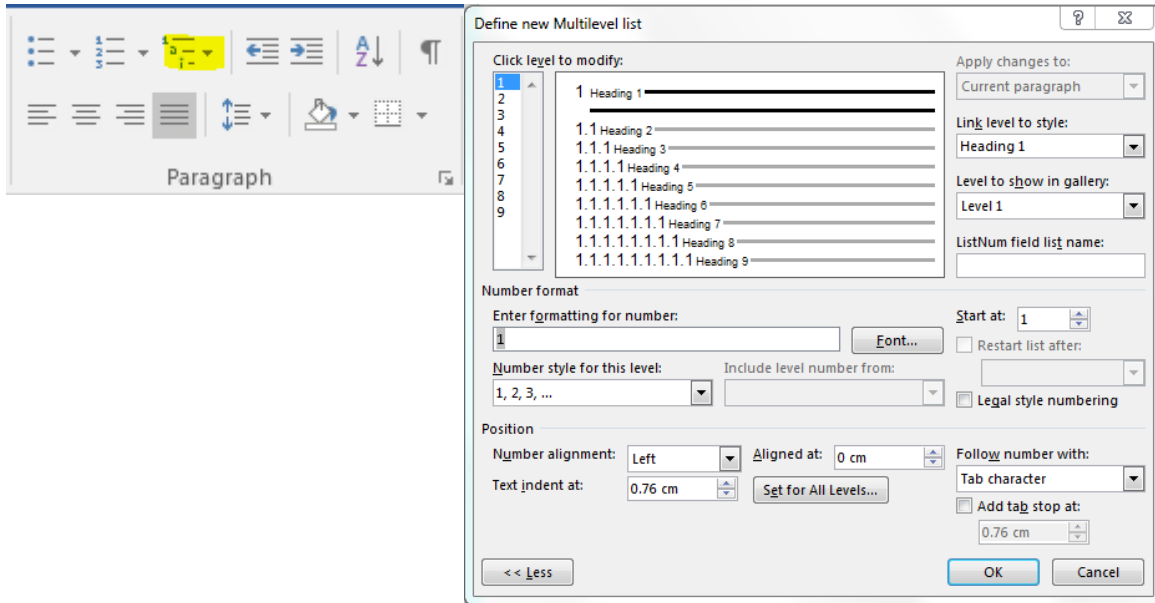
The following window will pop up, it is up to the author to decide on the text, text size, colour, and justification of the text of the document.



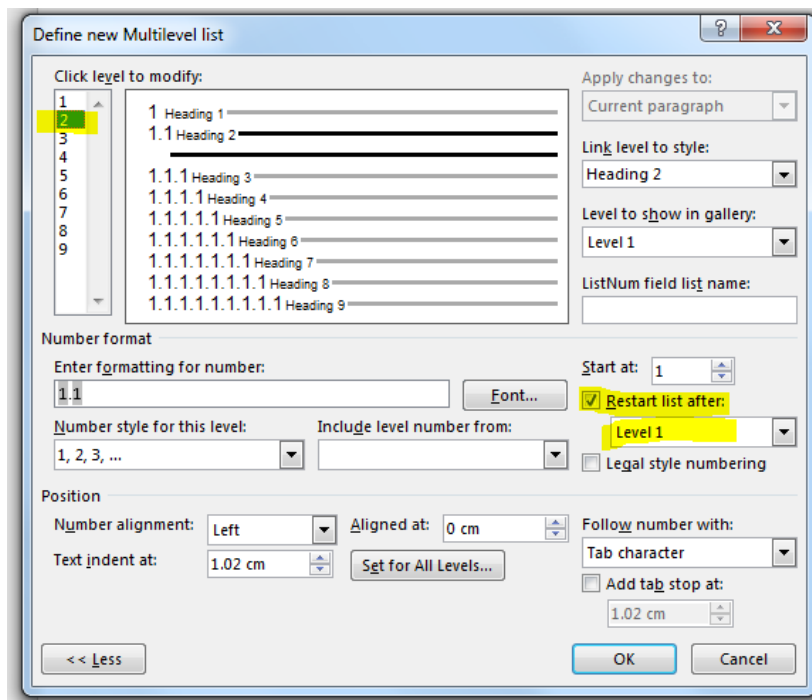
Next do the same thing for your headings, ensure that the styles are all based off “normal”.



An author can number their headings though it's not a requirement. To achieve numbering for the headings, click on the down arrow next to the multi-level numbering.



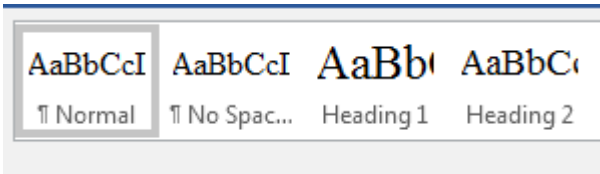
At the bottom of the drop-down menu, there is a “Define New Multilevel List” click on it and the following window should pop-up:



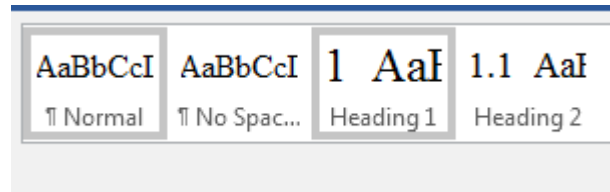
This will allow you to modify the numbering for each heading, just ensure that the level is linked to the correct style and that the next level will restart after the previous level.

Once all the modifications are complete, click okay. The styles section of the ribbon will have changed.

From this:



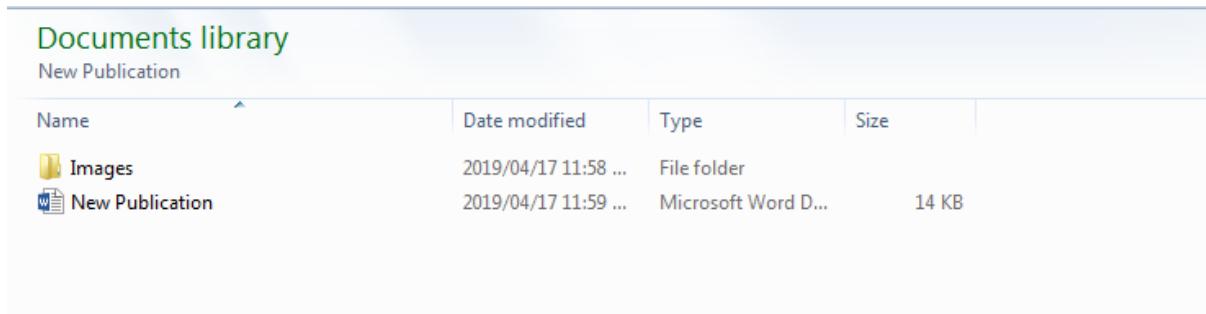
To this:



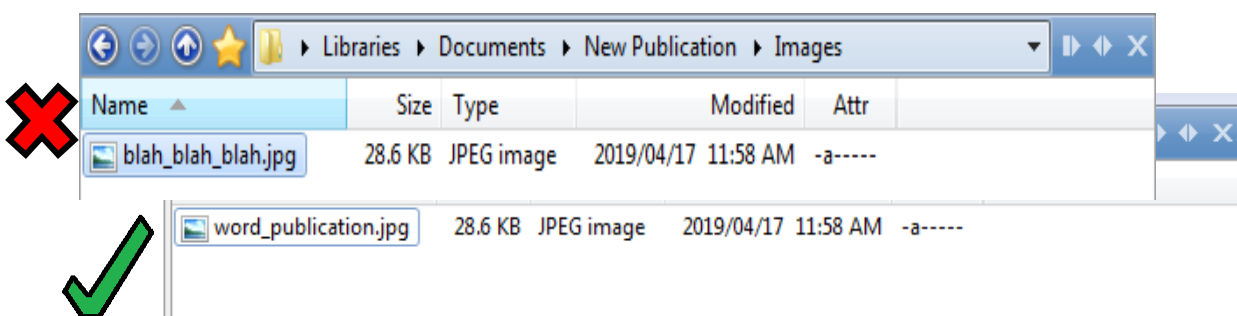
The author is now ready to start typing out the word document.

### 15.1.2 Images and Bookmarks

To insert images into the word document, save your images in a single sub-folder of the folder of your word document, like so:



flwpx can currently support .jpg, .png and .bmp image files. Name the images in such a way that you can tell what the image is without opening it. Please note that there are no spaces in the name, replace all spaces with an underscore “\_”.



Within the word document, type out a placeholder and the text that is required for the image such as a description. The highlighted words below are the placeholder for the image.

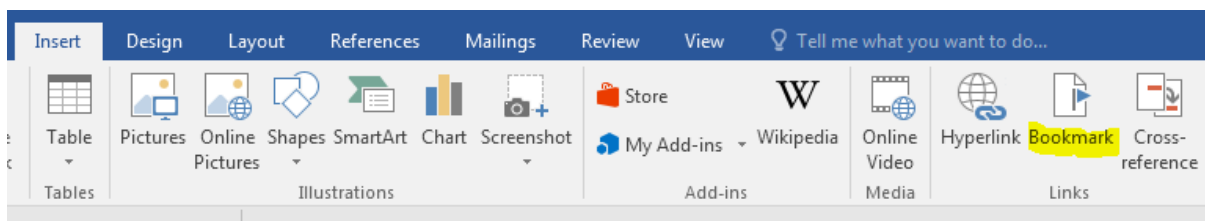
# 1 Chapter 1

This is a brand new publication.

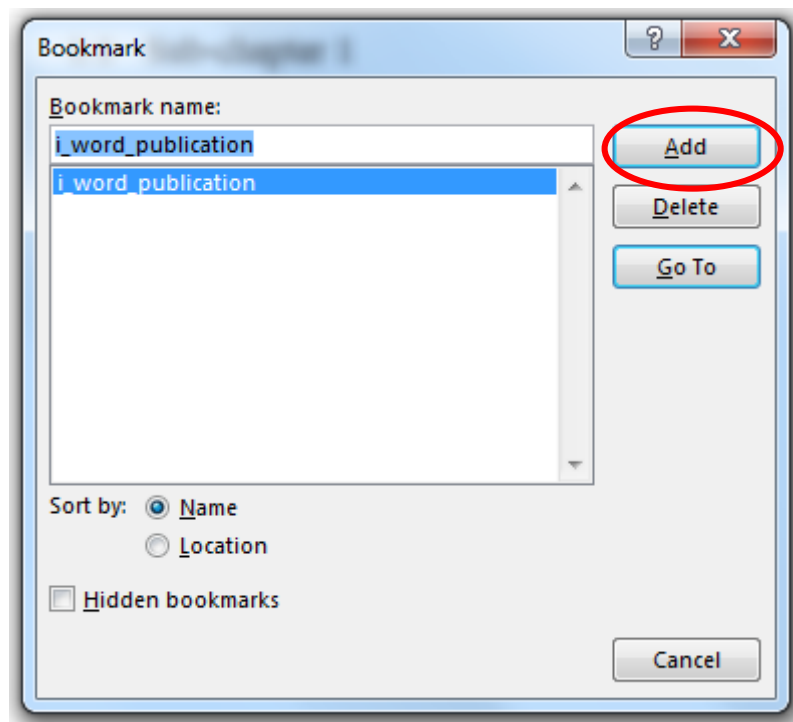
**Publication Image.**

This is an image of the word publication.

Select the place holder then click Insert -> Bookmark



Label your bookmark identically to the image name but preceded with an "i\_" (for image), then click "Add".



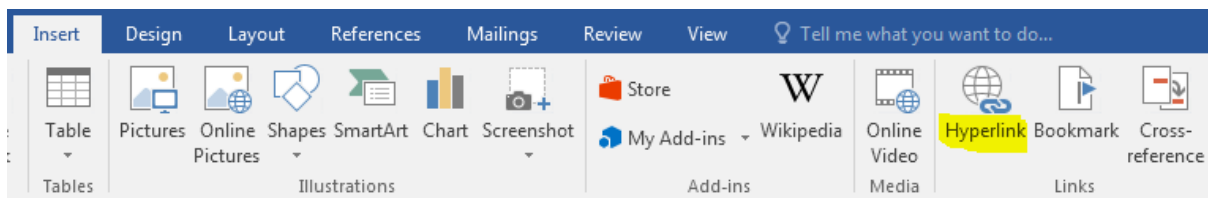
To ensure that the bookmark will only affect the placeholder, click on the “Go To” button and confirm that only the placeholder is selected. To ensure that the description of the image is below that of the image, start the description on a new line, you can also centre the text, flwpx will centre the text below the image.

### 15.1.3 Hyperlink

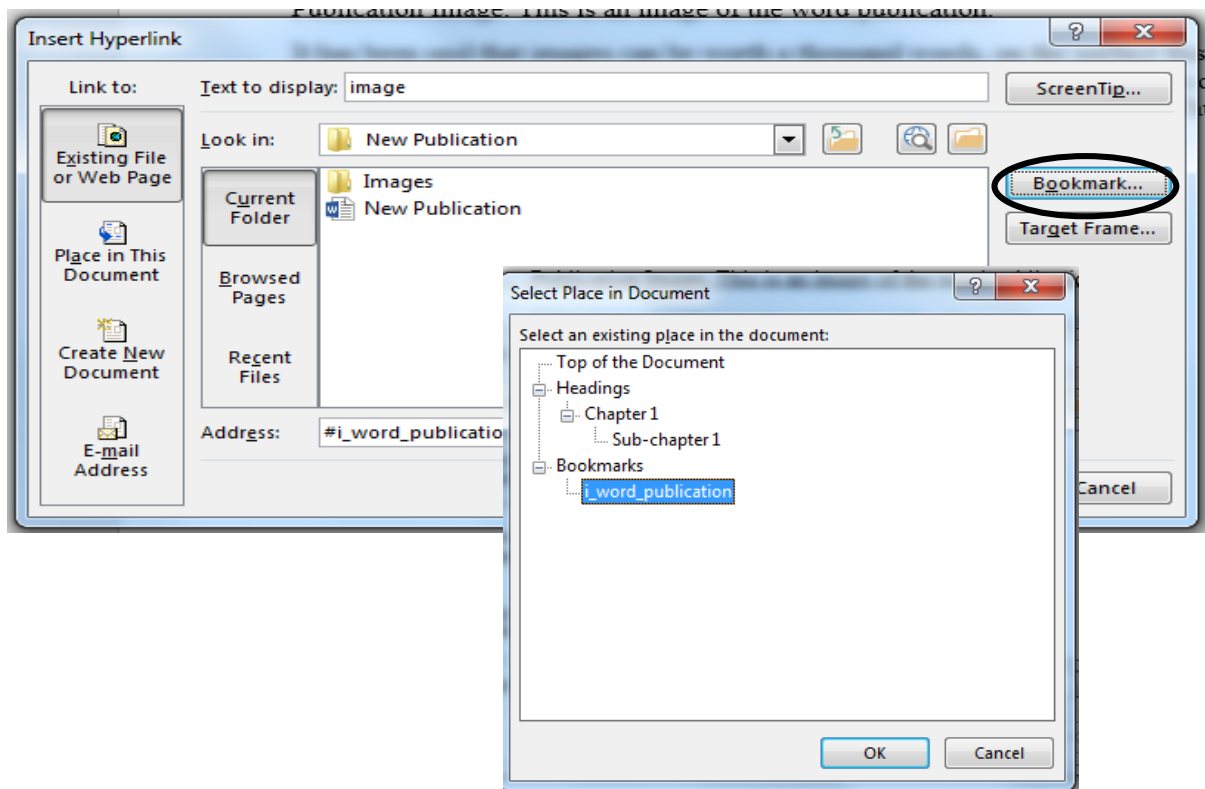
To create a hyperlink within the text, create a name for the hyperlink that will appear in the text,

It has been said that images can be worth a thousand words, on the surface this image (image) only has one, but further insight shows that the word “Publication” is written on the spines of books, and each book can contain many words, even more than a thousand. Thus this image is worth more than a thousand words.

Select the placeholder and then click Insert -> Hyperlink:



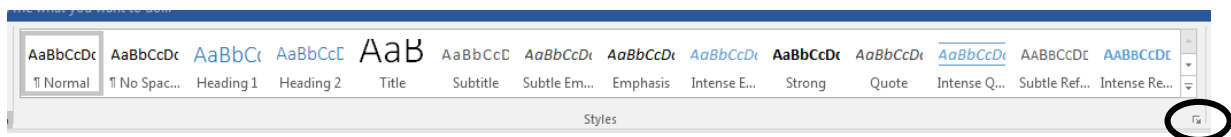
In this instance, the hyperlink will refer to the image that was bookmarked, click on “Bookmark...” to gain access to the current bookmark list. Select the correct bookmark.



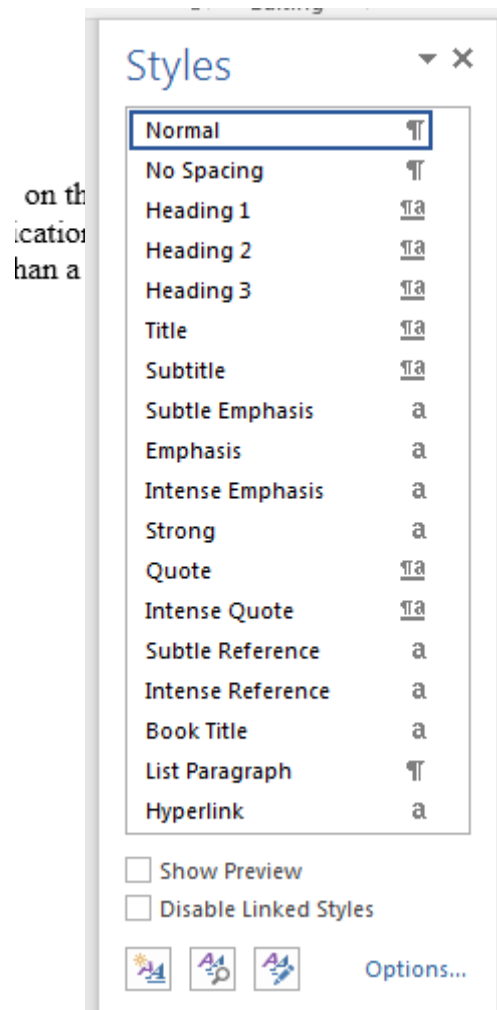
You will notice that the “Address” has changed to reflect the current hyperlink and the text the hyperlink in link to is now blue and underlined.

on the surface this image ([image](#))  
ication” is written on the spines of  
han a thousand. Thus this image is

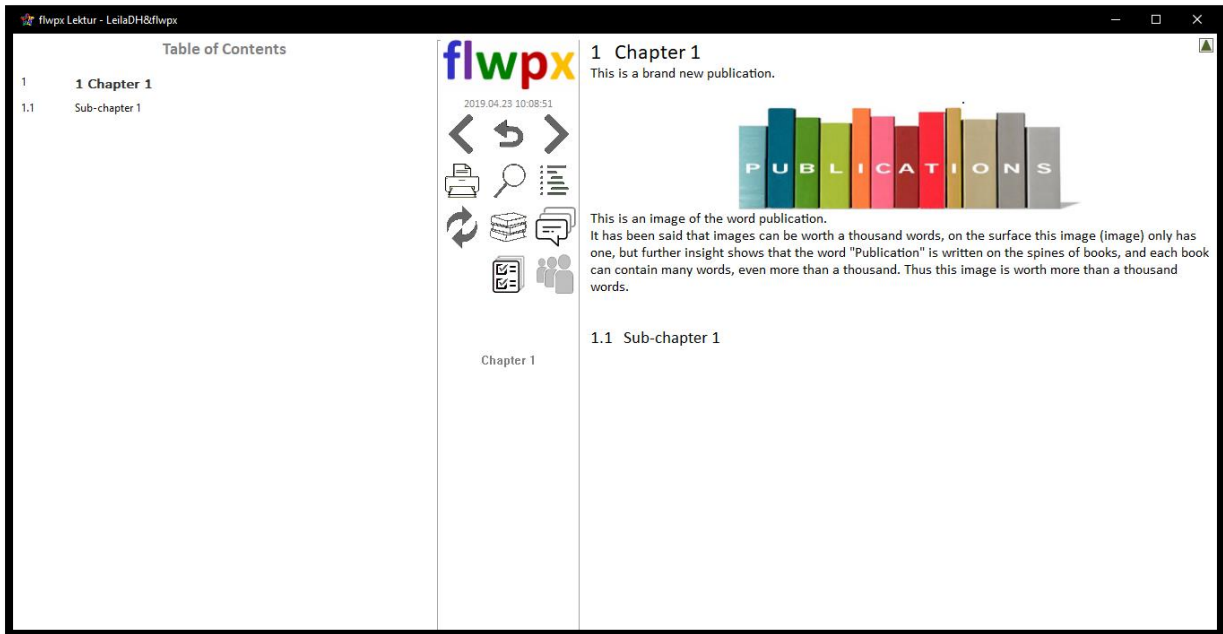
To remove this blue and underline, go back to style section of the ribbon and click the little arrow at the bottom.



This window should appear, just scroll down until you find “Hyperlink”.



Hover your mouse over “Hyperlink” and click on the arrow that appear to the right, and then click *Modify* in the drop-down menu, and modify the style of the hyperlink to what you want.



With the **lektur** built table of contents on the left. One can now navigate the publication at will. In this instance, there is not much to navigate as this was only created as a starting point of the publication. As the publication grows and becomes and more complex, interactivity can be included to allow users to make inputs to the publication. The image seen is only a thumbnail and if you were to click on it, a full sized image will appear on the left panel.

## 15.2 Publication with Excel

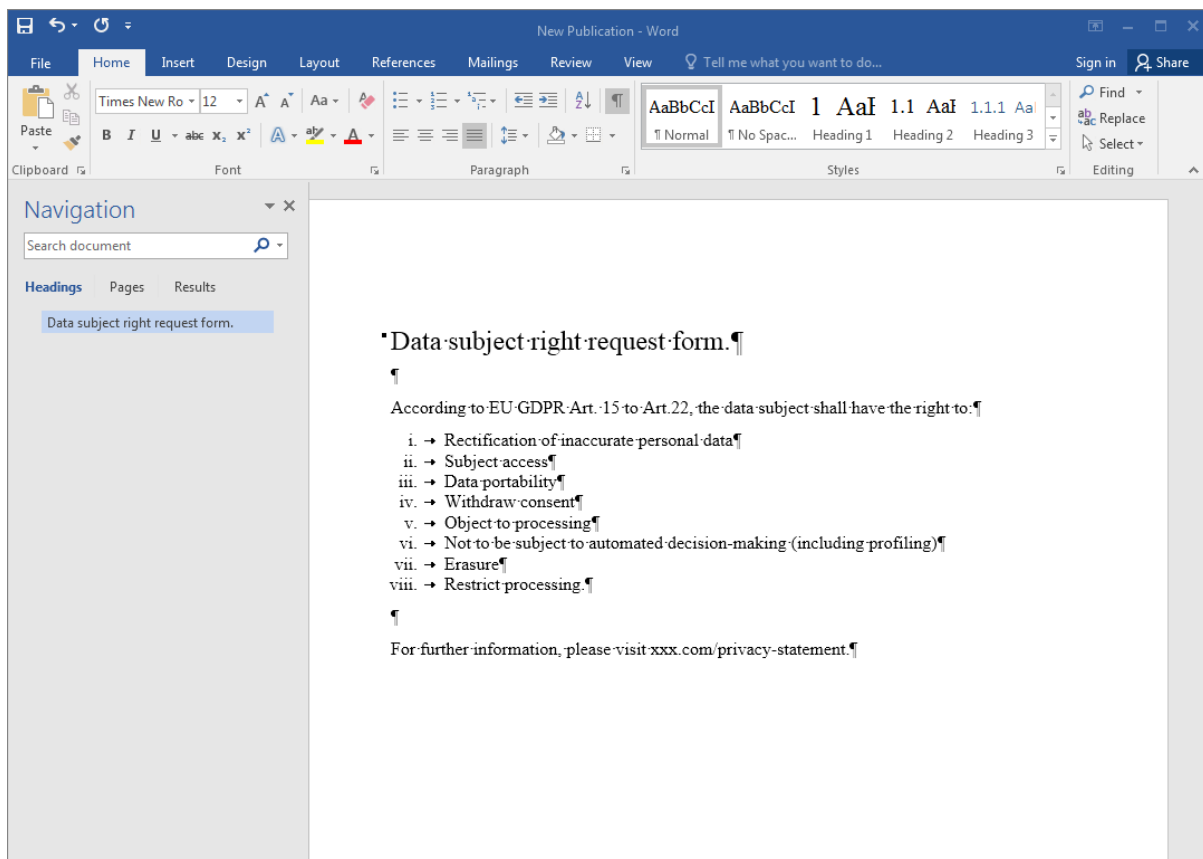
### 15.2.1 Word

Now that you know the basics of formatting, creating and publishing in flwpx, let us start making the publication more complex.

Note: The following example does not include any images, but flwpx still requires an image/chart folder, so create an image or chart sub-folder in the folder that will house your Word Document and Excel spreadsheet.

Say there is someone who wishes to request data or any information on the company, and to do that they will need to fill in a form to request such access. One could make it one step more complex and say that multiple people need access to the same data, thus one form can be filled out for multiple people simultaneously, which allows the company to only have to deal with one form instead of dozens.

To begin, we open up a word document. Format it and add any details that are required.



The information in this word document relates to GDPR regulations that come with sharing on information and are put in the document to protect the company.

### 15.2.2 Excel

Next, we need to open up a spreadsheet.

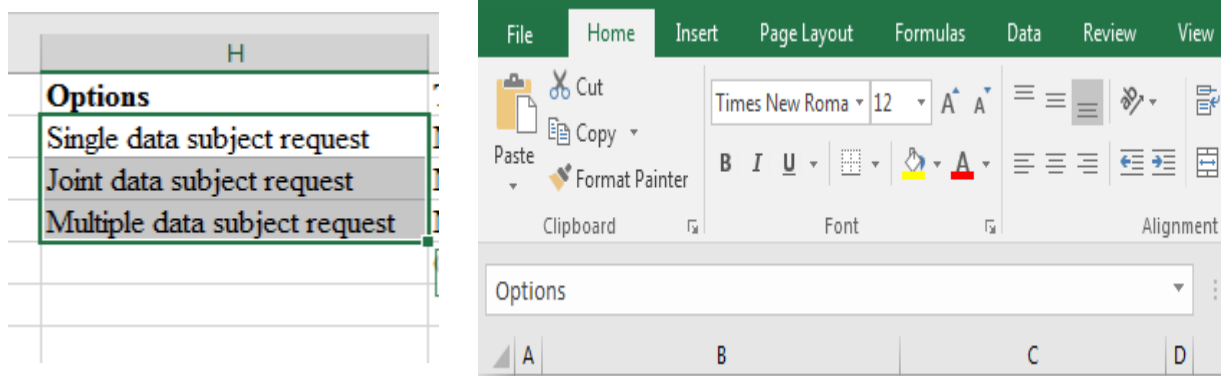
In the cases where multiple people need access we should be able to build one document for multiple requests, instead of one document per request.

To start out with, we will create a field which asks the user how many requests are required and provide a drop down menu with the options.

	A	B	C	D
1				
2		Please select the correct option:	Single data subject request	
3				

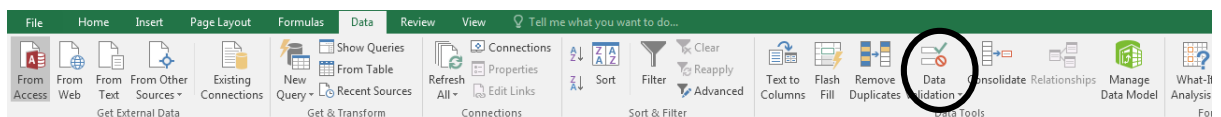
The small gaps that column A and D make are act as a border for the document to allow for printing.

To create a drop down menu, we will create a list of options to the side, and then select all of them and give them a name.



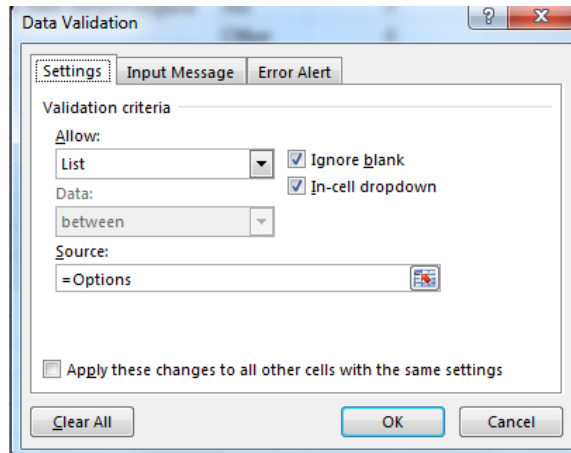
By doing this, data validation of creating a drop down menu is made easier to read.

Once we have the region for our drop down list named, we select the cell where we want the drop down menu to appear, then select Data → Data Validation.



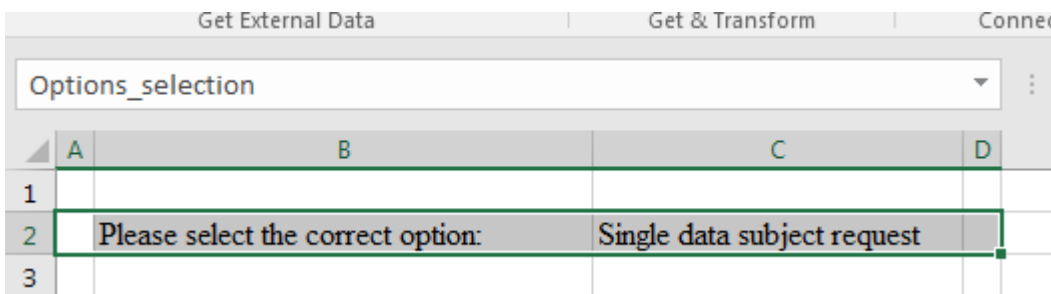


A window will pop up and we will pick “list” from the “Allow” section. The source will be the named list we just created.



To get this to appear in our document, we will need to create several bookmarks.

To start with, we will select the entire range of our cells, and give them a sensible name. Do not forget to add the A & D columns to give a border.



Open up the Word document and create a bookmarked placeholder for this region of cells.

1 Details for whom the request applies (Data Subject)

||

||

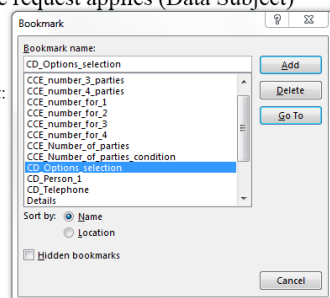
Selection required for request:

Options\_selection

Number\_of\_parties

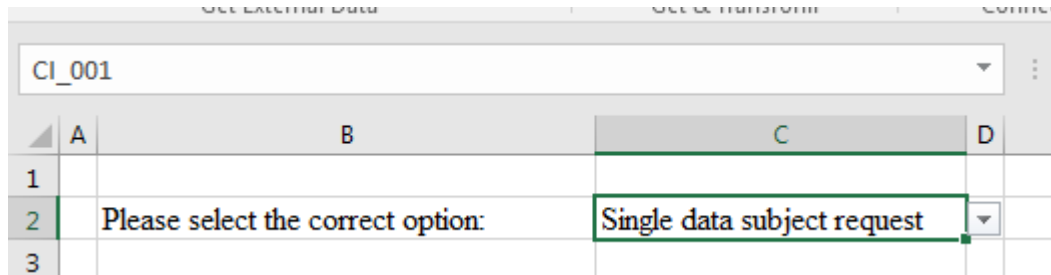
Telephone\_Number

||



Take note that the only difference between the names is that the Word bookmark has the prefix “CD\_”, this is used to tell flwpx that the document requires a range of cells here, and will match the Word bookmark to the Excel bookmark.

This will make the option selection appear in our document, but the drop down menu will still not allow for user input, so we will go back to the Excel spreadsheet, select the cell that contains the drop down menu, rename it something sensible, and add the prefix "CI\_".



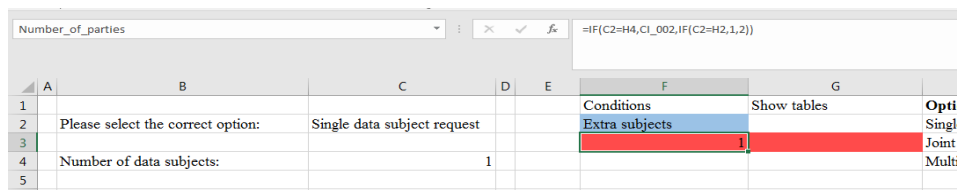
If you were to save both document and upload to flwpx lektur, you would have a working drop down menu.

In the case that someone selects the multiple data subject request option, we will require a means to pop up a new option of exactly how many data requests are there.

Pick a number, in this case we used the number four, and create a new drop down menu with the values 1 to 4.

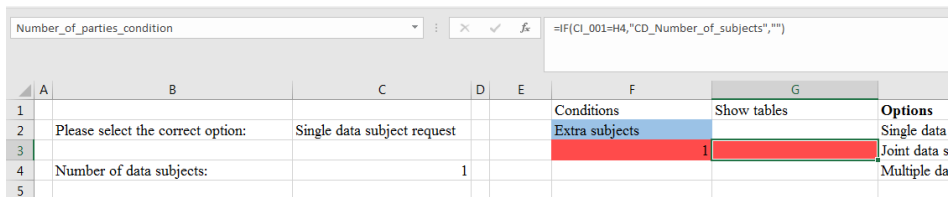
J	A	B	C	D
<b>Number</b>				
1	1			
2	2	Please select the correct option:	Single data subject request	
3	3			
4	4	Number of data subjects:		1
5	5			

We only want that number of data subjects to appear in our document if the user selects "Multiple data subject request" from our option list. To achieve this, we will create a conditional cell. The highlighted cell in the image below was chosen for the conditional cell.

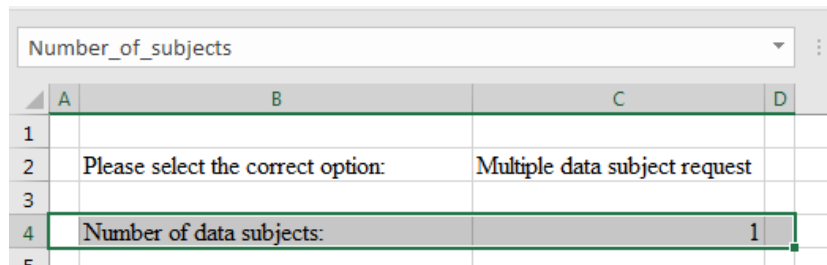


In the formula we use an IF statement, IF cell input (C2) is equal to the "Multiple data subject request (H4)", input cell (CI\_002) this input name corresponds to cell C4 is valid and return this value, else do the other IF statement. The next IF statement says, if cell input (C2) is equal to "Single data subject request", return 1, else return 2. This entire conditional statement will come in useful later.

Next, we will select another cell. In this case the adjoining cell to was used.



This formula also uses an IF statement, so IF the cell input (C2) is equal to the “Multiple data subject request (H4)”, show the entire range of cells, else do nothing. In this case, that name is referring to:

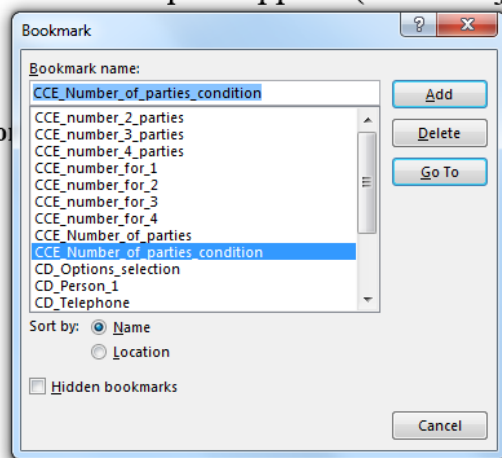


The “CD\_” prefix is used to inform **flwpx** that a range of cells is required. For a conditional cell, the name with prefix CCE\_ is used in Word.

To allow this to show in the document, we will create a placeholder in Word and give it the same name as the Excel bookmark but with the extra prefix of “CCE\_” to inform **flwpx** that this is a conditional region.

### 1 Details for whom the request applies (Data Subject)

||  
 ||  
**Selection required for**  
Options selection  
Number of parties  
Telephone Number  
 ||  
**Please insert details:**



Now the information that is required for the application for the request.

Person 1			
Title:			
Last name:	.		
First name:	.		
Previous name (if relevant):	.		
Nationality:	.		
Date of birth:	.		
Domicile address:	.		
Country of domicile address:	.		
Previous domicile address:	.		
Email address:	.		
Telephone number (incl. country code):	.		

The title is a drop down menu and created in same manner as the other drop down menus above:

<b>Title</b>
Mr
Mrs
Ms
Other

The full stops in each of the other cells are there to ensure that flwpx picks them up as editable fields. The principle of how to get this to appear in the document is the same as above. Select the entire range of cell and give it a sensible name, and then select the entire range of input cells and give it a name with the prefix of "CI\_".

Person_1				CI_003			
A	B	C	D	A	B	C	D
1				1			
2	Please select the correct option:	Multiple data subject request		2	Please select the correct option:	Multiple data subject request	
3				3			
4	Number of data subjects:		1	4	Number of data subjects:		1
5				5			
6	Show my telephone number:	No		6	Show my telephone number:	No	
7				7			
8	Person 1			8	Person 1		
9	Title:			9	Title:		
10	Last name:	.		10	Last name:	.	
11	First name:	.		11	First name:	.	
12	Previous name (if relevant):	.		12	Previous name (if relevant):	.	
13	Nationality:	.		13	Nationality:	.	
14	Date of birth:	.		14	Date of birth:	.	
15	Domicile address:	.		15	Domicile address:	.	
16	Country of domicile address:	.		16	Country of domicile address:	.	
17	Previous domicile address:	.		17	Previous domicile address:	.	
18	Email address:	.		18	Email address:	.	
19	Telephone number (incl. country code):	.		19	Telephone number (incl. country code):	.	
				20			

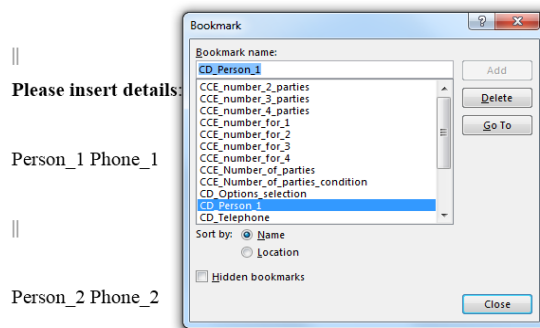
In the Word document, create a placeholder with a “CD\_” prefixed bookmark.

You might notice that there is an extra question “Show my telephone number:” and that telephone number is not a part of the Person\_1 information block. This is because it was requested that the telephone number be separate and be conditional on the input of the user. If this request is not required, you can remove that question and add the telephone number to the information block.

The method on how to achieve this request is as follows:

Create the question, and a simple drop down menu with options of “Yes” and “No”.

Then create a conditional statement within a separate cell.



	A	B	C	D	E	F	G	
1						Conditions	Show tables	Options
2		Please select the correct option:	Single data subject request			Extra subjects		Single d
3							1	Joint dat
4		Number of data subjects:		1				Multiple
5								
6		Show my telephone number:	Yes					
7						This one will always show		
8		Person 1						
9		Title:					Remove phone number:	
10		Last name:	.				CD_number_1	
11		First name:	.					
12		Previous name (if relevant):	.					
13		Nationality:	.					
14		Date of birth:	.					

The formula is an IF statement that states, IF input of CI\_007 (cell C6) is equal to “Yes” show the “Telephone number (incl. country code): input cell (cell C19)” set of cells, else do nothing. Do not forget to name the input cell with the prefix of “CI\_”. Name the conditional cell a sensible name, then add a placeholder with the prefixed “CCE\_” bookmark in the Word document. This conditional statement will be implemented for every person.



The document should add information blocks for every person who is requesting access, i.e if 4 people are requesting access four information blocks should appear. You will need to create the information block for each person, and bookmark each block.

A	B	C	D	A	B	C
1				34	Person 3	
2	Please select the correct option:	Multiple data subject request		35	Title:	
3				36	Last name:	.
4	Number of data subjects:		1	37	First name:	.
5				38	Previous name (if relevant):	.
6	Show my telephone number:	Yes		39	Nationality:	.
7				40	Date of birth:	.
8	Person 1			41	Domicile address:	.
9	Title:			42	Country of domicile address:	.
10	Last name:	.		43	Previous domicile address:	.
11	First name:	.		44	Email address:	.
12	Previous name (if relevant):	.		45	Telephone number (incl. country code):	.
13	Nationality:	.		46		
14	Date of birth:	.		47	Person 4	
15	Domicile address:	.		48	Title:	
16	Country of domicile address:	.		49	Last name:	.
17	Previous domicile address:	.		50	First name:	.
18	Email address:	.		51	Previous name (if relevant):	.
19	Telephone number (incl. country code):	.		52	Nationality:	.
20				53	Date of birth:	.
21	Person 2			54	Domicile address:	.
22	Title:			55	Country of domicile address:	.
23	Last name:	.		56	Previous domicile address:	.
24	First name:	.		57	Email address:	.
25	Previous name (if relevant):	.		58	Telephone number (incl. country code):	.
26	Nationality:	.		59		
27	Date of birth:	.		60		
28	Domicile address:	.				
29	Country of domicile address:	.				
30	Previous domicile address:	.				
31	Email address:	.				
32	Telephone number (incl. country code):	.				
33						

Now every person has a new information block. If you require more people, just add extra information blocks and increase the numbered drop down list.

We do not want the entire number of blocks to appear in our document unless they are required. Therefore, we will need to use conditional statements.

This is easy for person 3 and 4 as you can just use the input field C4 as the condition, but it is slightly more complicated for person 2. The information block for person 2 should appear when the "Joint data subject request" is selected or if the user selects "Multiple data subject request" → 2.

As it so happens, we have already created the fix for it. Remember that very first conditional statement cell we created, the one with the two IF statements? If "Joint data subject request" is the selected option, the cell will return 2, if the user selects "Multiple data subject request" → 2, the cell will return 2. Thus, the conditional statements for Person 2 will be as such.

number_2_parties							=IF(Number_of_parties>1,"CD_Person_2","")
A	B	C	D	E	F	G	
10	Last name:	.				CD_number_1	
11	First name:	.					
12	Previous name (if relevant):	.					
13	Nationality:	.					
14	Date of birth:	.					
15	Domicile address:	.					
16	Country of domicile address:	.					
17	Previous domicile address:	.					
18	Email address:	.					
19	Telephone number (incl. country code):	.					
20							
21	Person 2						
22	Title:			no. = 2 / joint data subject			
23	Last name:	.					
24	First name:	.					
25	Previous name (if relevant):	.					

The condition is if Number\_of\_parties (cell F3) is greater than 1, return the Person\_2 information block, else do nothing. The greater than symbol is used because if the user selects 3, you will still require Person 2 information block.

You can use this conditional statement for Person 3 and Person 4, just change the value from 1 to 2 or 1 to 3 respectively and change the "CD\_Person\_2" to whatever name you have chosen for person 3 and person 4, just remember the prefix "CD\_" in the conditional statement.

For these to appear in the document, name your conditional cell some sensible name starting with "CD\_". Then in the Word document add a placeholder with a prefixed "CCE\_" bookmark. Your Word document should look something like this:



## 1 Details for whom the request applies (Data Subject)

### Selection required for request:

Options\_selection

Number\_of\_parties

Telephone\_Number

### Please insert details:

Person\_1 Phone\_1

|

Person\_2 Phone\_2

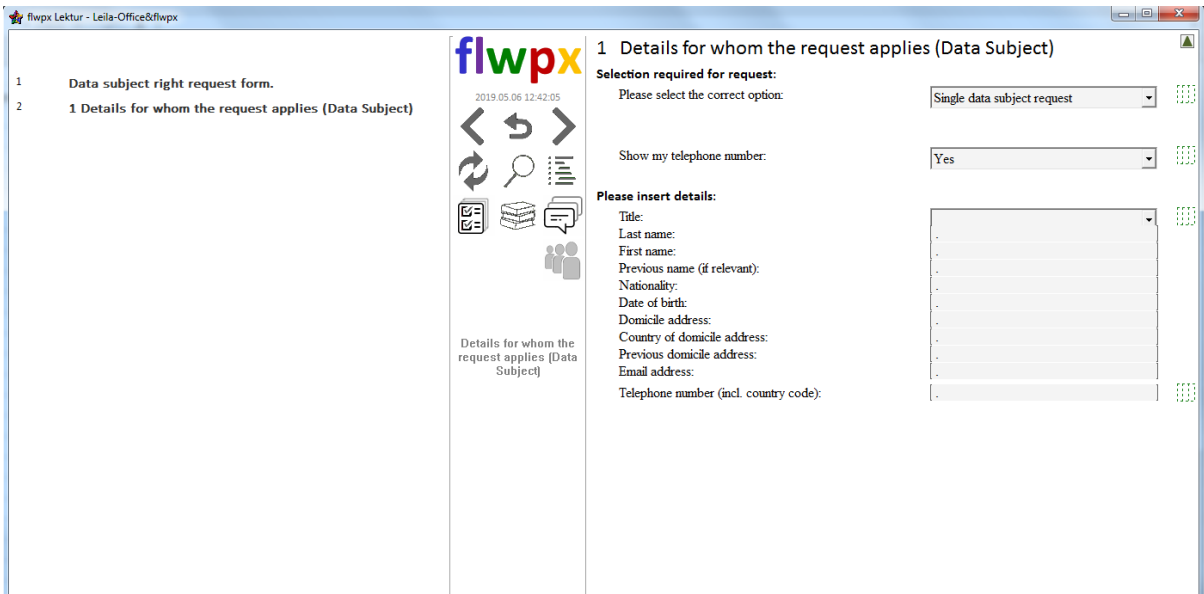
Person\_3 Phone\_3

Person\_4 Phone\_4

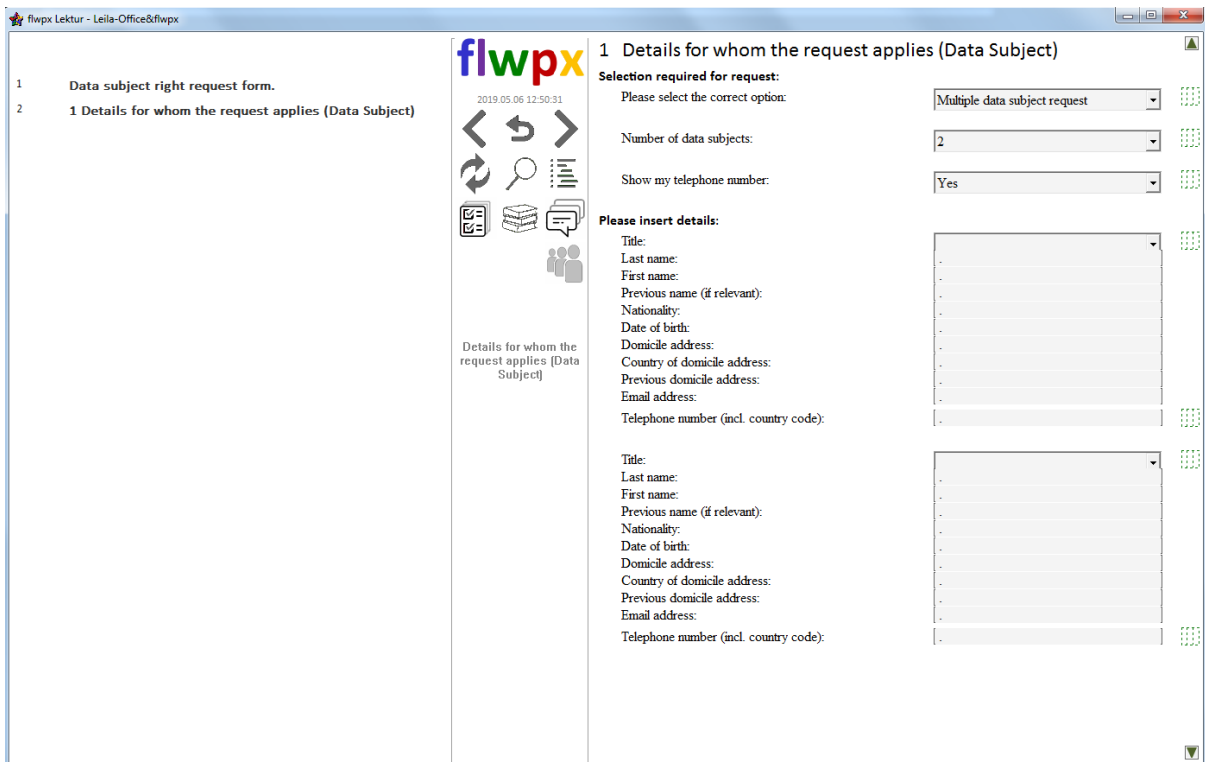
Person\_2, Person\_3 and Person\_4 are the conditional bookmarks. While the phone placeholders are the phone number conditional bookmarks. The reason for placing the placeholders on the same line is to reduce the gap between the information block and the telephone input cells in flwpx.



Once published the interface should look like this :



If all the conditional statements hold, changing the options will change the document accordingly.



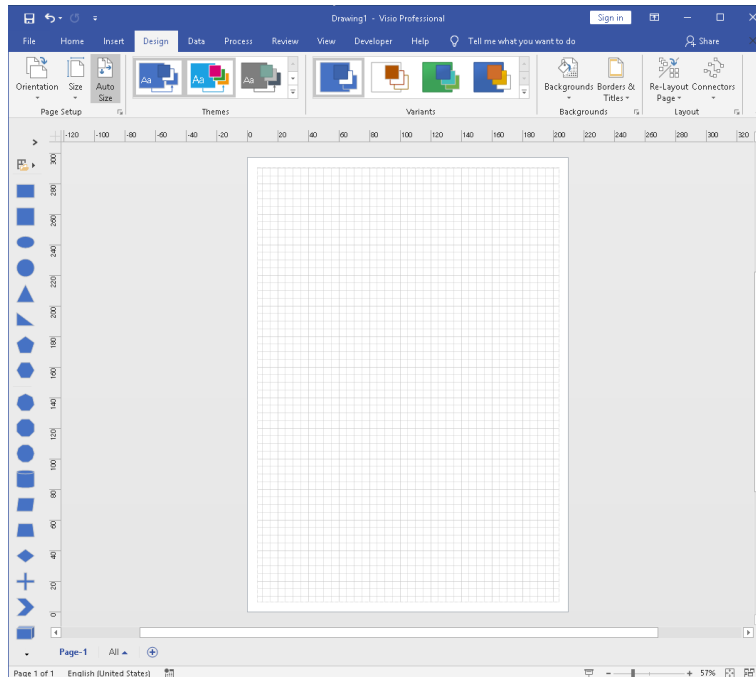
## 15.3 Publication with Visio / Navigational Map

With a working and editable publication, add a navigational map. For this, you will need Microsoft Visio.

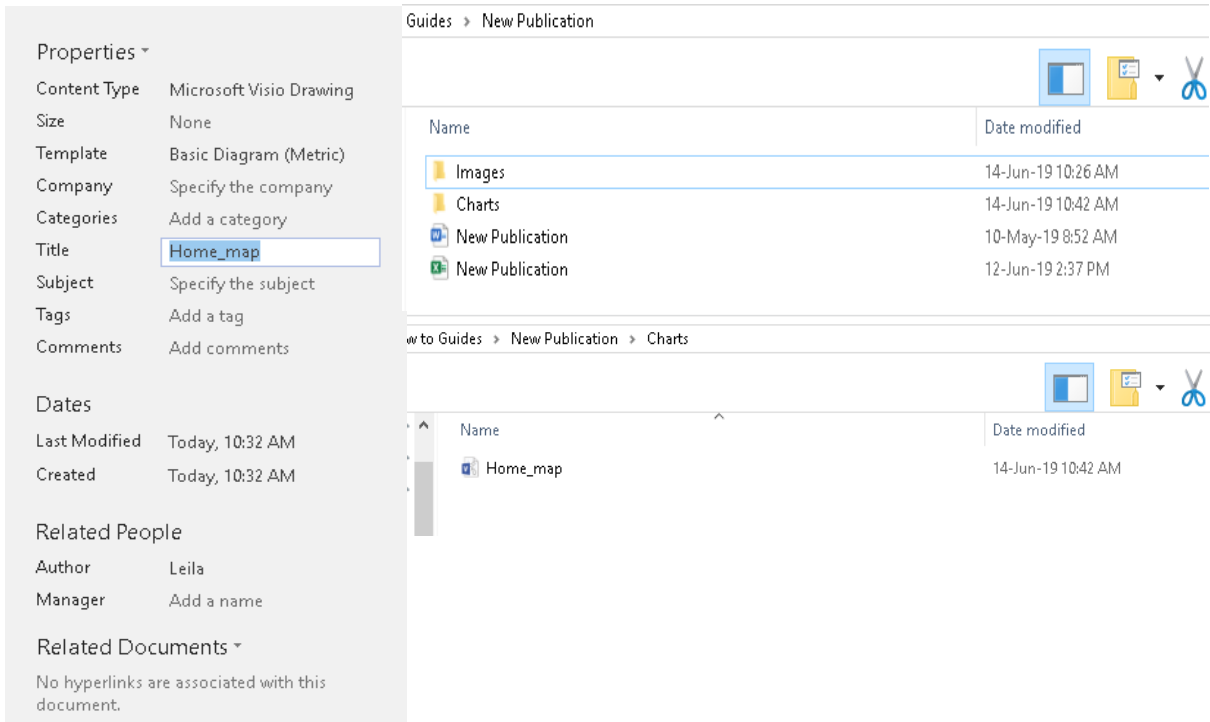
You will always start with your home map. This map is the first map that will be seen when the publication is opened and the map the *Global Map Button* is linked to.

Open up Visio, Click *Basic Diagram* (this ensures that you will have direct access to the most basic shapes i.e you do not have to go searching for them.) Select *Metric Units* and then *Create*.

The default will be a grid-less landscape page. When building maps, I personally find it easier to use a gridded portrait page. To change the orientation, go to the ribbon > Design > Page Setup > Orientation > Portrait. To get gridlines, go to the ribbon > View > Show > Check the Grid box.

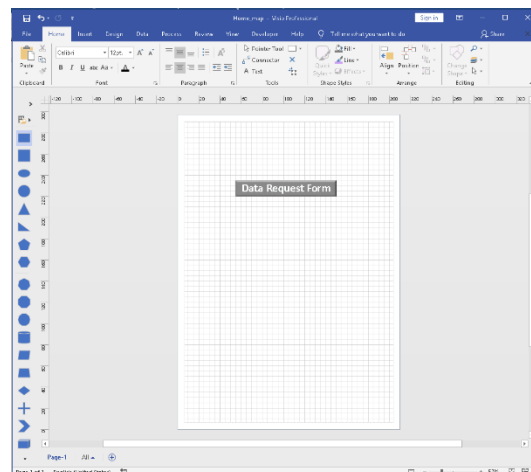
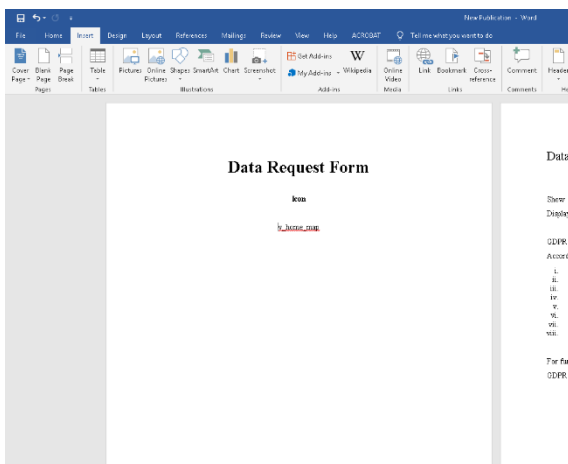


Your Visio file should look like this: click on File > Info, on the right-hand side you will see a list of Properties, one of them is labelled *Title*. Rename this Title and push Enter, it will highlight the title, then push Ctrl + C, this will copy your title, click Save As, save your Visio file either in the Image folder (if you have one large folder) or in the Charts folder. In file name use the shortcut Ctrl + V, this will paste the copied title. **Remember:** If you want your title to be more than one word, use an underscore to split the words and not a space.

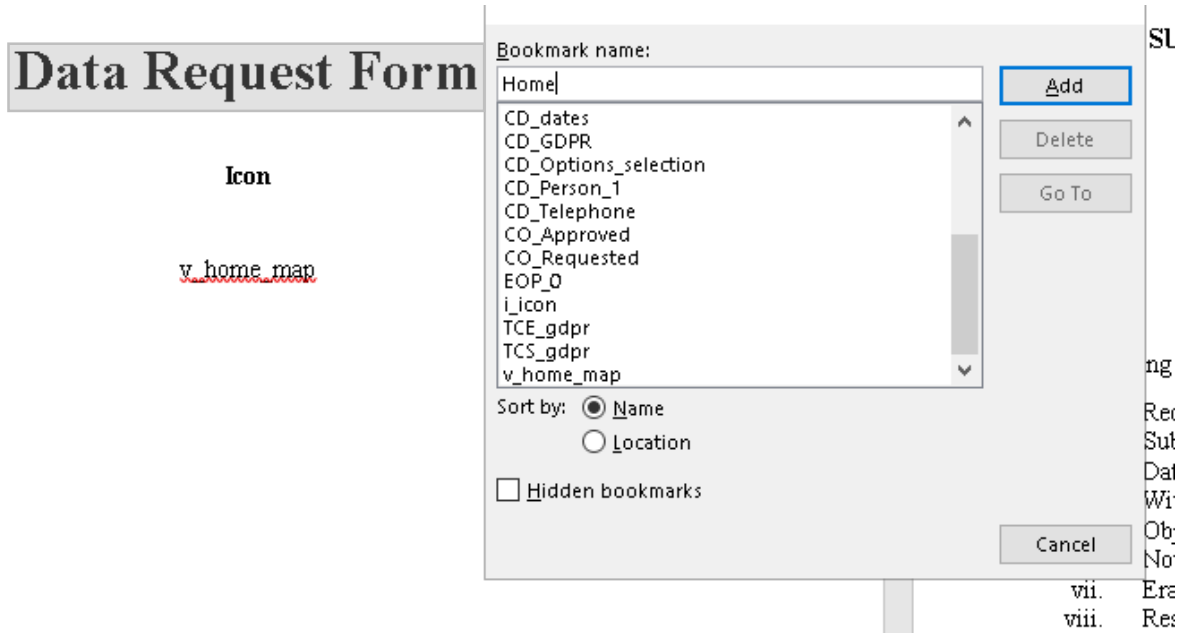


In this case there is a separate Chart folder where Visio files has been saved. To start creating a map, we will create a map for the “Data subject right request form” publication we built in the previous example.

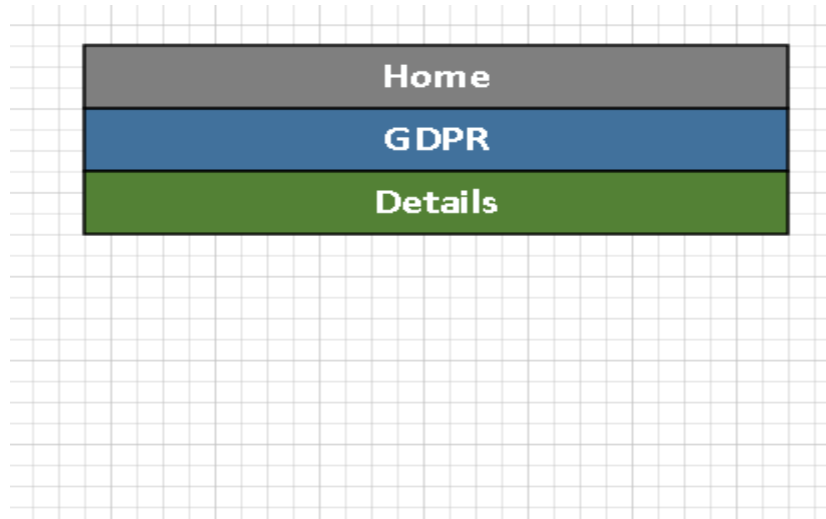
Because this publication is so small, I am going to add a “cover” page in the word document that will act as a home page, and then the home map will only get one block. If you look to the left of your Visio page you will see a line of shapes, by clicking and dragging the image across to your Visio page, you will get a shape you can work with. You can also create your own shapes. If you wish to create your own shape, make use of the line tool. To get this tool go to your ribbon > Home > Tools and select the drop list next to the little rectangle and select line. I suggest using line rather than pencil as the flwpx / svg files not always register/construct arcs and circles accurately, which will reduce the quality of your map in the flwpx interface.



Save all files. (Shortcut Ctrl + S). In the word document highlight **the Data Request Form** and add a bookmark to it, I suggest naming it something similar to the Visio, so if the Visio files is Home\_map, then bookmark it Home.



Open a new visio file. The next visio file I gave the title "Section\_map" and created buttons that will link to the various sections in the document.



Return to your word document, and create two placeholders with bookmarks to link to your maps

## Data Request Form

Icon

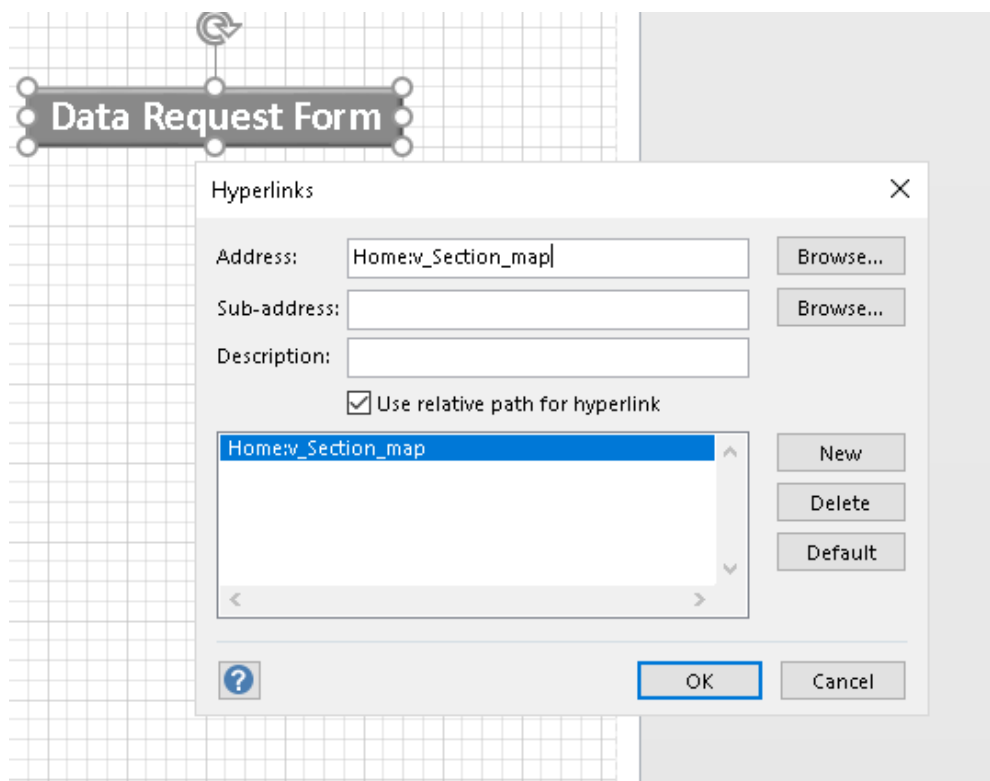
v\_Home\_map

v\_Section\_map

|

Remember to include the “v\_” to inform flwpx that this is a Visio image and make sure the name is correct, it might be useful to copy and paste the name. It is good practise to name placeholders the same as the bookmark, so you can see what it is at a glance.

Return to your Home\_map Visio file and select the block, then in the ribbon > Insert > Link create a double hyperlink as follows :



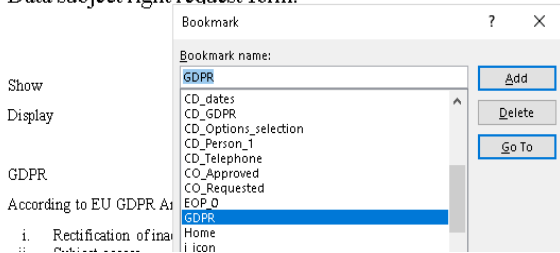
The double hyperlink talks first to the Word bookmark and then to the Visio file bookmark and is separated by a colon. The first bit “Home” will direct the publication to that bookmark, which in this case is the front page, while the second bit “v\_Section\_map” will change the home\_map to the section\_map. Separate the two links with a colon “:”. Once

your hyperlink is added, save your file. Go File > Export > Change File Type > SVG > Save as. The file name will pick up the title of the file. **Remember:** Save it within the Chart folder. You may now close the Home\_map Visio file.

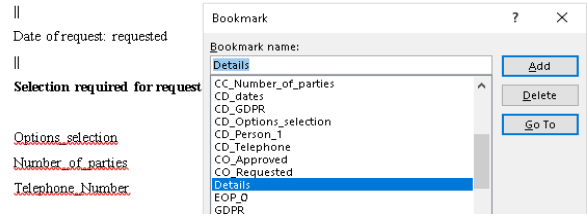
In your section\_map Visio file, the home button's hyperlink will be Home:v\_Home\_map. This will return the map to the home map. The GDPR and the Details buttons hyperlinks will be a bit different.

Go to your word document and add a bookmark for the GDPR and Details sections.

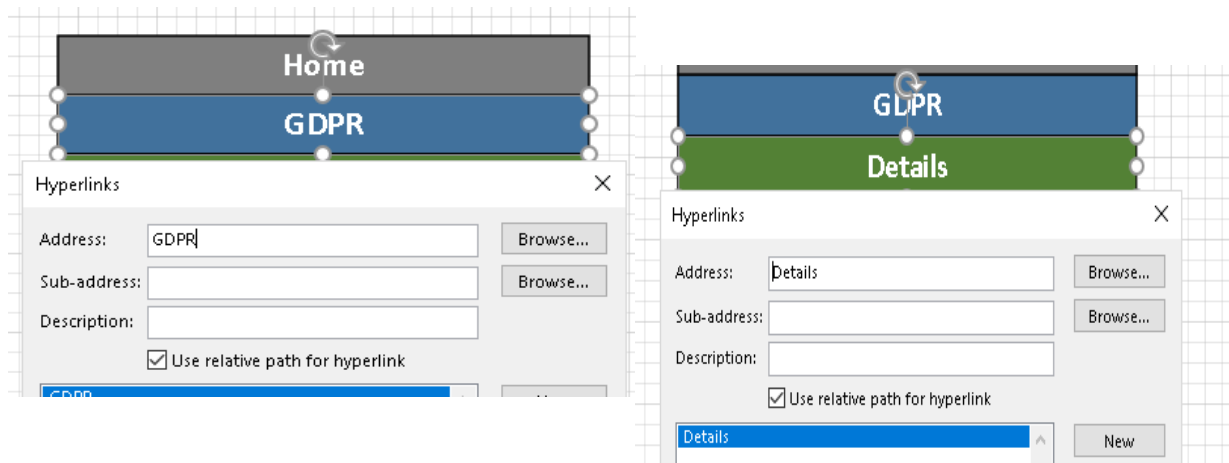
Data subject right request form.



1 Details for whom the request applies (Data Subject)



In the Visio file select the GDPR block and give it the hyperlink of "GDPR" and then give the details block the hyperlink of "Details", exactly like the bookmark in word.



Once you have put in all your hyperlinks, save your file. Go File > Export > Change File Type > SVG > Save as. The file name will pick up the title of the file. **Remember:** Save it within the Chart folder. You can now close the Section\_map Visio file.

Save your word document and close it.

Open up flwpx, click the flwpx icon > new publication > fill in the necessary details. Look for the third last option called **Map Label**, in this entry field put the name of your first map. In this case, it is Home\_map.



**Publication** \* New Publication \*

Title

**Cover Image**

Word Document

Excel Spreadsheet

Image folder

Chart folder

Font size

Media width

Thumbnail width

Map label

Chapter style

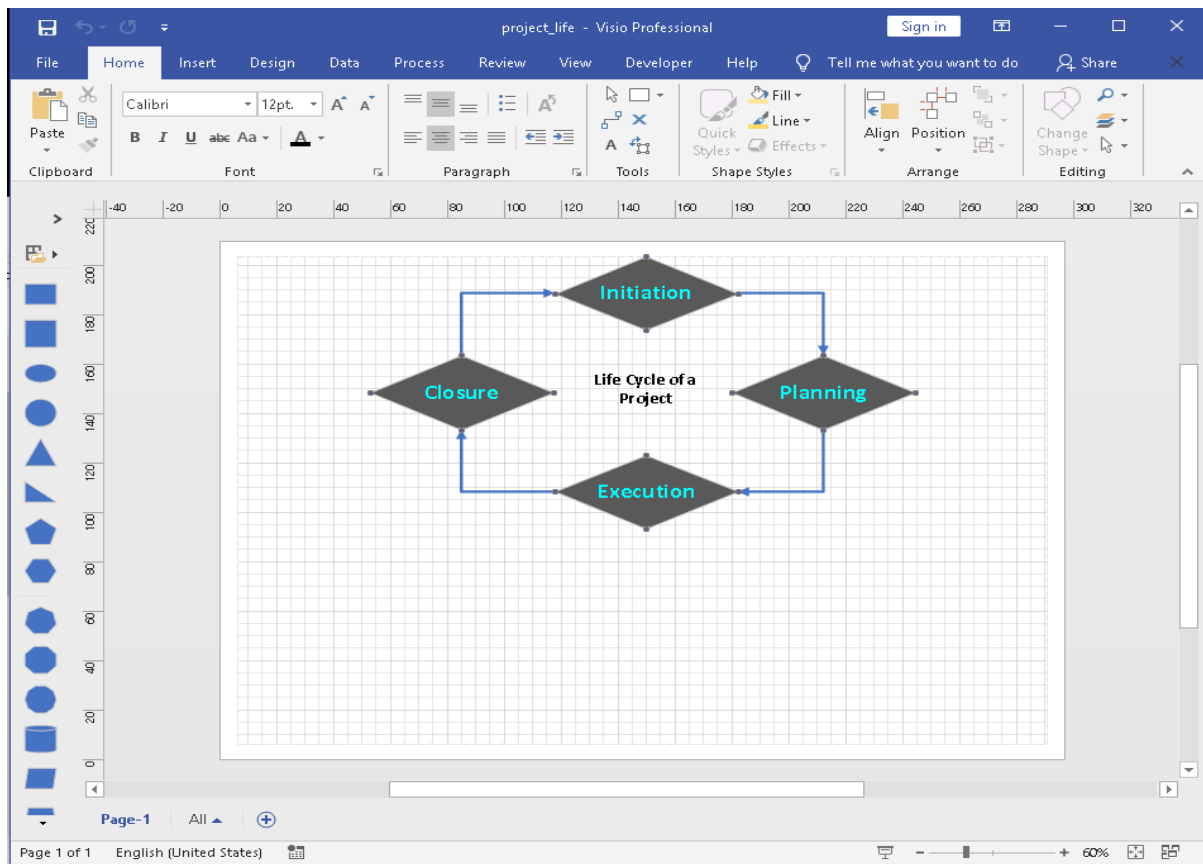
Chapter level

Click Publish. Wait a few moments, and your publication with a map will be generated.


Visio is not used solely for maps; it can be used to create interactive diagrams within your publication. If you wish to place an interactive diagram within your publication, a few additional steps need to be taken. In your Word document, place a “i\_visio\_image” bookmark where you wish the image to appear and export your visio file to JPG. **Remember:** Save your .jpg in the image folder and NOT the chart folder.

### 15.3.1 Interactive Visio Image

To create an interactive image open up a Visio file and create your image. In this example, I created an image of the Project Life Cycle.

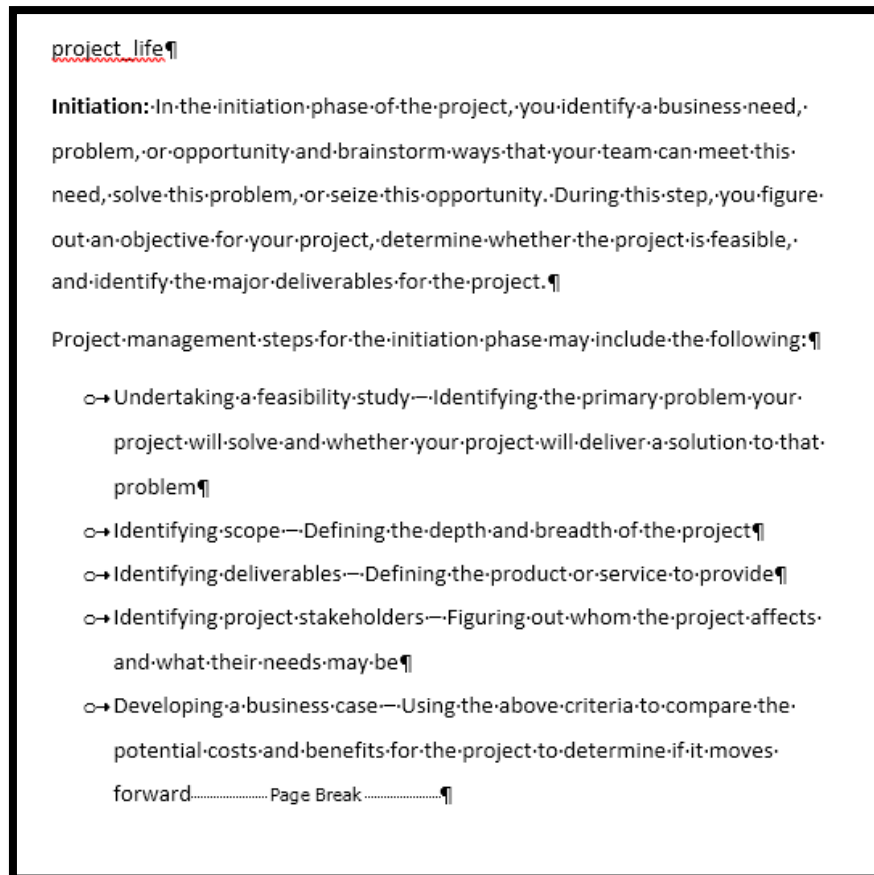


Remember to go to File>Info and fill in the “title” section and save the visio files with the same name.

To create the lines, I used the connector tool, you can find this in the ribbon. Home > Tools > Icon . Then click on the corner where you want the line to begin and drag the line to the next corner.

Then in your word document, add the information you require that coincides with this image. For this example, I will show you how to get one of the diamonds to work as they all follow the same procedure.



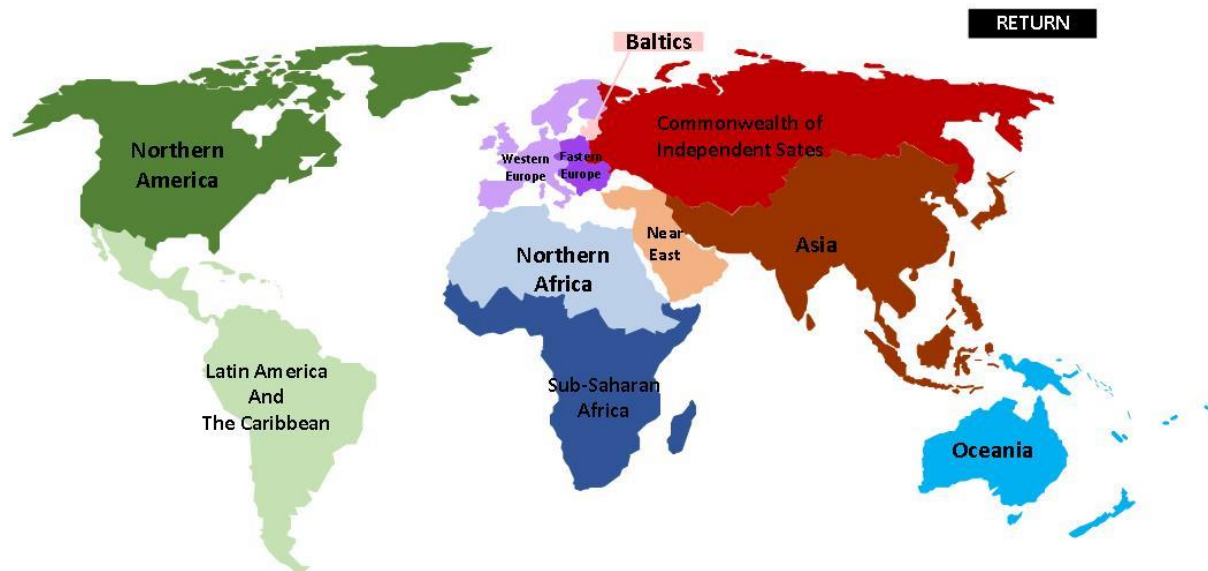


Above is the text that links to the Initiation diamond in the Visio file. Also, note the “project\_life” above the “**Initiation**”, this is the placeholder for the .svg file, and it has the bookmark, “v\_project\_life”. Highlight “**Initiation**” and give it the bookmark “Initiation” or similar and save your word document.

Return to the Visio file and give the “**Initiation**” diamond the hyperlink “Initiation” or as bookmarked in Word. Save your Visio file and export it twice: one as an .svg and once as a .jpg. **Remember:** Save your .jpg in the image folder and NOT the chart folder, if you are using to separate folders.

In flwpx, the .jpg will produce a thumbnail in your media panel and if you click on it will open the .svg in the utility panel. The “**Initiation**” diamond will be interactive, if you click on it the media panel will jump to the information about initiation.

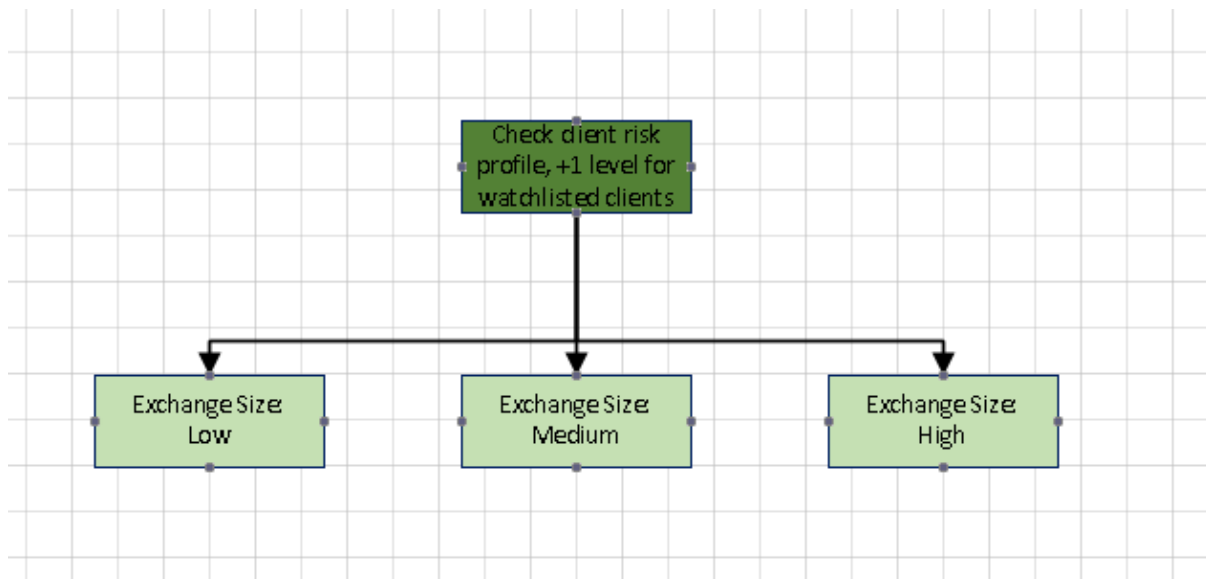
The image used in the example above is a simple one; you can make much more complex ones. For instance:



This map was created in Visio using the line tool. Each region is selectable for the media panel to display information about that region.

### 15.3.2 Conditional Visio Maps

If you want only parts of a Visio image to display depending on what the user inputs into your publication, you can achieve this by giving your Visio shapes conditional names.



Using the base map above as an example, to allow the first block “Check client risk profile” and “Exchange Size: Low” with the linking line to appear only if the client’s risk level is low and simultaneously exclude “Exchange Size: Medium” and “Exchange Size: High”.

To do this we need an excel spreadsheet.

			Low	Medium	High
Transaction Value	120000		TRUE	FALSE	FALSE

The user will see the Transaction Value and be able to input a number.

- Cell with number: Name: “CI\_something”
- Highlighted region: Name: “Transact\_value”
- Word document: Bookmark of “CD\_Transact\_value” (Save and close your Word file)

The red cells are your conditional cells. Each with the following formula and cell name

Formula:

- Low risk: =IF(CI\_Transaction\_value>=100000,TRUE,FALSE)
- Medium risk: =IF(AND(CI\_Transaction\_value<100000,CI\_Transaction\_value>=50000),TRUE,FALSE)
- High risk: =IF(AND(CI\_Transaction\_value<50000,CI\_Transaction\_value>=5000),TRUE,FALSE)

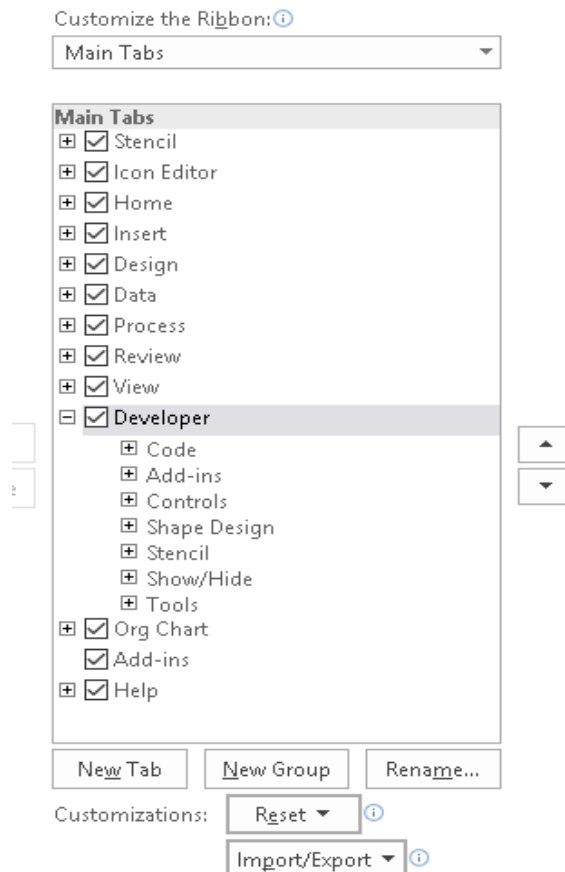
Cell name:

- Low risk: low\_risk
- Medium risk: medium\_risk
- High risk: high\_risk

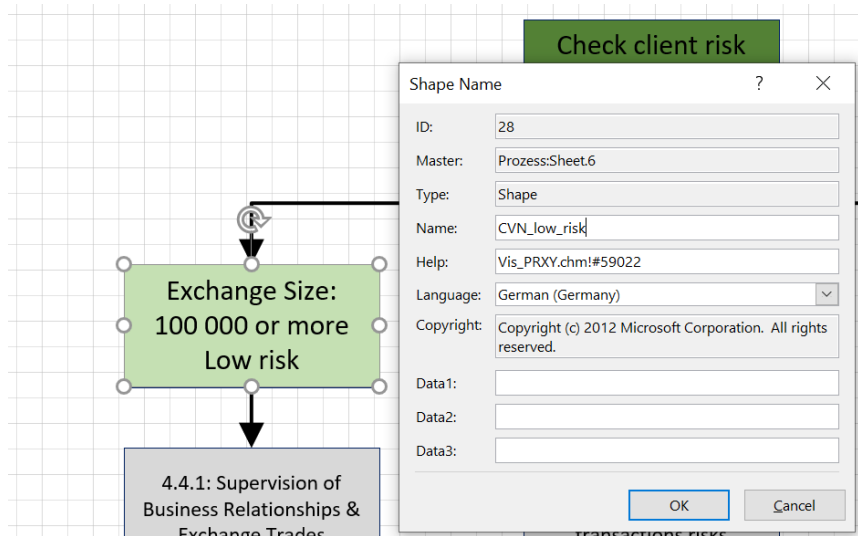
Save your Excel file.

Return to your Visio file, click on the “Exchange Size: Low” block and then in the ribbon: Developer > Shape Design > Shape name.

If you do not have the Developer tab, File > Options > Customize Ribbon and tick the developer check box.



Give your shape the name “CVN\_low\_risk”



In this case there is a “01” in the name, this is because the line connecting the “Check client risk profile” and “Exchange Size: Low” blocks has been given the same conditional statement. (Names need to be unique in Visio, Word and Excel. To re-use names insert a number between the prefix and the name separated by an underscore “\_”.) When you have two or more names that are the same, you must add “\_00\_” between the “CC” and the name. **(Note:** this applies to duplicated images in your Word file as well). You can do the same thing to the other blocks, but leave the “Check client risk profile” block unnamed, as it is always visible.

Save your Visio file and export it to .svg. Now if the user selects a value larger than 100 000, the only part of the map that will show is the “Check client risk profile” and “Exchange Size: Low” blocks with the connecting line.

## 15.4 Using Conditional exclusion to allow or remove regional editing rights in a publication

Apart from setting viewing and editing rights to the Excel worksheets at the time of transmitting the publication, rights can also be set within a worksheet depending on the conditions that are resolved with an IF statement.

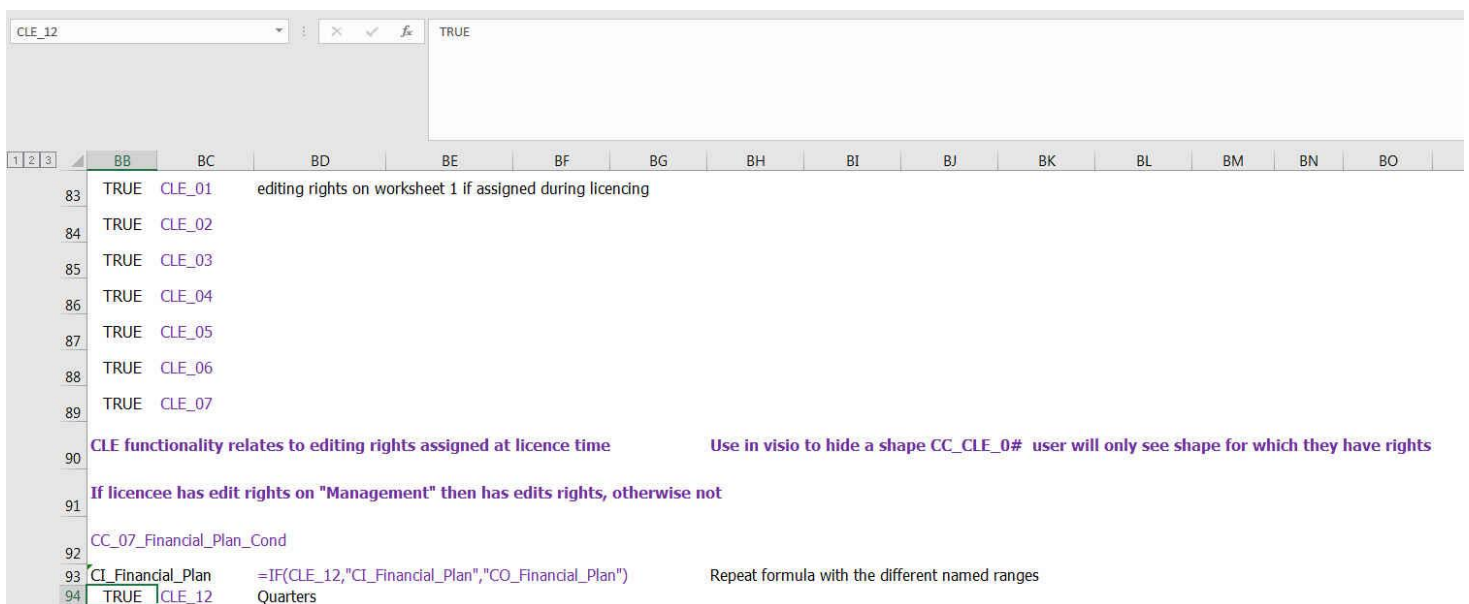
The IF statement can be simple or complex, but must resolve to choice of two options: do this or do that. The CCE\_Label command is an instruction to flwpx to resolve the statement in the cell to which the label refers and follow the command that results.

As a straightforward example: Label a cell “Financial\_Plan\_Cond” and insert an IF statement such as :

`=IF(CLE_12,"CI_Financial_Plan","CO_Financial_Plan")`



Provide rights to a user by inserting TRUE in a cell and labelling the cell “CLE\_12”. This tells flwpx that the user who has been assigned full editing rights to sheet 12 may edit regions in other sheets IF that region has been given the label “CCE\_Financial\_Plan\_Cond”



Label regions in other sheets for which CLE\_12 does not have editing rights that you would like the user to be able to edit with "CCE\_00\_Financial\_Plan\_Cond", if the user does not have editing rights for sheet 12 the area is view only.

	Z	AA	AB	AC	AD	AE	AF
96	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
97	-	-	-	11.0	11.0	11.0	12.4
98	-	-	-	-	-	-	-
99	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-
101	-	-	-	-	-	-	-
102	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-
106	-	-	-	11.0	11.0	11.0	12.4
109	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-

As a more complex example: Label a cell "Jan\_20\_Cond" and insert an IF statement such as:

```
=IF(OR(AND(Management!BN114=Management!AJ100,CLE_12),Jan_20),"CIR_Jan_20_Cond",
,"CD_Jan_20_Cond")
```

	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL
138		CO_Jul_19_edit	=IF(OR(AND(Management!BM114=Management!AJ100,CLE_12),Jul_19),"CI_Jul_19_edit","CO_Jul_19_edit")							
139		CO_Aug_19_edit								
140		CO_Sep_19_edit								
141		CO_Oct_19_edit								
144		CO_Nov_19_edit								
145		CO_Dec_19_edit								
147		CI_Jan_20_edit	=IF(OR(AND(Management!BN114=Management!AJ100,CLE_12),Jan_20),"CI_Jan_20_Cond","CO_Jan_20_Cond")							
148		CO_Feb_20_edit								
149		CO_Mar_20_edit								
151		CO_Apr_20_edit								
152		CO_May_20_edit								
153		CO_Jun_20_edit								
154		CO_Jul_20_edit								
155		CO_Aug_20_edit								
156		CO_Sep_20_edit								
157		CO_Oct_20_edit								
159		CO_Nov_20_edit								
160		CO_Dec_20_edit								

Three conditions are presented in the statement:

i) cell BN114 (which is a drop down list) must equal AJ100; AND

	AJ	AK	AL	BN	BO	BP	BQ	BR
98	Status_tmo_review							
99	No status							
100	Financial review							
101	Accepted							
102	Declined							
103	Invalid							
109				<b>Monthly Financial Forecast Dashboard</b>				
110								
111				<b>Validated</b>	<b>Validation failed - Action required</b>			
112								
113								
114				No status	Please recheck deliverables			
115				Financial review	Describe			
116				Financial review	Describe			
117				Financial review	Describe			
118				Financial review	Describe			
119				Financial review	Describe			

ii) the user has full rights to worksheet 12 (insert TRUE in a cell and label cell as CLE\_12), OR

	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO
83	TRUE	CLE_01	editing rights on worksheet 1 if assigned during licencing											
84	TRUE	CLE_02												
85	TRUE	CLE_03												
86	TRUE	CLE_04												
87	TRUE	CLE_05												
88	TRUE	CLE_06												
89	TRUE	CLE_07												
90	CLE functionality relates to editing rights assigned at licence time						Use in visio to hide a shape CC_CLE_0# user will only see shape for which they have rights							
91	If licencee has edit rights on "Management" then has edits rights, otherwise not													
92	CC_07_Financial_Plan_Cond													
93	CI_Financial_Plan	=IF(CLE_12,"CI_Financial_Plan","CO_Financial_Plan")												
94	TRUE	CLE_12	Quarters											



iii) cell labelled Jan\_20 resolves as TRUE:FALSE

	AU	AV	AW	AX	AY	AZ
478						
479	<b>Financial Forecast Edit Permissions:</b>					
480	Jan-19	FALSE	Jan-20	TRUE	<input type="checkbox"/> Check Box 2	<input checked="" type="checkbox"/> Check Box 3
481	Feb-19	FALSE	Feb-20	FALSE	<input type="checkbox"/> Check Box 2	<input type="checkbox"/> Check Box 3
482	Mar-19	FALSE	Mar-20	FALSE	<input type="checkbox"/> Check Box 2	<input type="checkbox"/> Check Box 3
483	Apr-19	FALSE	Apr-20	FALSE	<input type="checkbox"/> Check Box 2	<input type="checkbox"/> Check Box 3
484	May-19	FALSE	May-20	FALSE	<input type="checkbox"/> Check Box 3	<input type="checkbox"/> Check Box 3

If the AND condition is TRUE, OR if “Jan\_20” is TRUE, a “CIR\_Jan\_20\_Cond” as an editable region results, otherwise a “CD\_Jan\_20\_Cond” as a display only region results

	AK	AL	AM	AN
29	-	-	-	-
30	-	-	-	-
31	-236.7	-236.7	-236.7	-236.7
33				
35	<b>Dec-19</b>	<b>Jan-20</b>	<b>Feb-20</b>	<b>Mar-20</b>
36	-	-	-	-
37	-	-	-	-
38	6.8	6.8	6.8	6.8
39	2.5	2.5	2.5	2.5
40	-	-	-	-
41	-	-	-	-
44	-	-	-	-
45	9.3	9.3	9.3	9.3

## 15.5 Using Conditional exclusion in Word

Conditionality in Word can be used in a number of ways. In this worked example, we are displaying one of three regions laid out in Excel depending on the drop list selection made. Create three conditional IF statements in Excel and label them.

Cond_Fifteenth_Region_1		=IF(AF62="Discretionary", "CD_Fifteenth_Region_1", "")	
AF	AH	AJ	
56			
58			
60	CD_Fifteenth_Region_1		=IF(AF59="Discretionary", TRUE, FALSE)
62	Discretionary		=IF(AF59="Bespoke", TRUE, FALSE)
64			=IF(AF59="Non-Discretionary", TRUE, FALSE)

Cond_Fifteenth_Region_2		=IF(AF62="Bespoke", "CD_Fifteenth_Region_2", "")	
AF	AH	AJ	
56			
58			
60			=IF(AF59="Discretionary", TRUE, FALSE)
62	Bespoke		=IF(AF59="Bespoke", TRUE, FALSE)
64			=IF(AF59="Non-Discretionary", TRUE, FALSE)

Cond_Fifteenth_Region_3		=IF(AF62="Non-Discretionary", "CD_Fifteenth_Region_3", "")	
AF	AH	AJ	
56			
58			
60			=IF(AF59="Discretionary", TRUE, FALSE)
62	Non-Discretionary		=IF(AF59="Bespoke", TRUE, FALSE)
64	CD_Fifteenth_Region_3		=IF(AF59="Non-Discretionary", TRUE, FALSE)

In Word label three bookmarks with the same labels as the name of the conditionals in Excel using the prefix CCE\_



Thus which region will be displayed in flwpx, is dependent on the drop list value that is chosen.

## 15.6 Using conditionals to allow regions to appear only when predetermined input made

In your named region, label the cell that will trigger a TRUE/FALSE, in the example below a tick box will resolve as TRUE/FALSE and has been labelled as CIR\_Entry20.

The image shows two overlapping Excel spreadsheets. The background spreadsheet is titled 'HighMediumCCond' and contains several sections: 'High Value Exchange', 'Source of Wealth Declaration', 'Proof of Wealth Check', 'Block Chain Analysis', 'Any Suspicious activity', and 'Report failure of Block Chain Analysis'. The 'Source of Wealth Declaration' section includes 'Presence Check' (FALSE) and 'Material Check' (FALSE). The 'Proof of Wealth Check' section includes 'Presence Check' and 'Material Check'. The 'Block Chain Analysis' section includes 'Any Suspicious activity' and 'Report failure of Block Chain Analysis'. The 'Any Suspicious activity' section includes a 'Transaction Clear 1' checkbox and a 'CJ\_Describe11' cell. The 'Report failure of Block Chain Analysis' section includes a formula: `=IF(BB47=G8,=IF(BB47=G8,TRUE,FALSE))`.

The foreground spreadsheet is titled 'CIR\_Entry20' and shows a 'FALSE' value in cell BB47. This spreadsheet is a detailed view of the 'Block Chain Analysis' section of the background spreadsheet, showing the 'Any Suspicious activity' section with the 'Transaction Clear 1' checkbox and the 'CJ\_Describe11' cell. The 'Report failure of Block Chain Analysis' section is also visible, showing the formula: `=IF(BB47=G8,=IF(BB47=G8,TRUE,FALSE))`.



Apply conditional row exclusion that must appear when the tick box is TRUE, in the example below I have labelled a region CVR\_CIR\_Entry20.

CVR_CIR_Entry20										
	AY	AZ	BA	BB	B	BD	BE	BF	B	BH
29										
31	<b>Proof of Wealth Check</b>									
33		<b>Presence Check</b>		FALSE		<input type="checkbox"/>	Transaction Clear 1			
35		Describe				CJ_Describe11				
37		<b>Material Check</b>		FALSE		<input type="checkbox"/>	Transaction Clear 1			
39		Attachment				CF_Attachment11				
41						BlockChain CVR_CIR_Entry20				
43		<b>Block Chain Analysis</b>		-		FALSE	FALSE			
45						Suspicious	SuspiciousActivity10a			
47		<b>Any Suspicious activity</b>		-		FALSE	FALSE			
49						CVR_BlockChain3				
51		<b>Report failure of Block Chain Analysis</b>		-		=IF(BB47=G8,TRUE,FALSE)				
53						CVR_BlockChain3a				

In the region, CVR\_CIR\_Entry20, a dropdown list for -/Yes/No is selectable. Outside of the display region, create a TRUE/FALSE cell that resolves TRUE when Yes for “Block Chain Analysis” is selected.

	A	AY	AZ	BA	BB	BC	BD
7				-			
8				Yes			
9				No			
10							
11							
12					CI_Entry17		CIR_Clear12
13				HighMediumC	CI_Entry18		
14				<b>Medium Risk Client</b>	CI_Entry19		
15				<b>High Risk Client</b>	CIR_Entry20		
16					HighMediumCCond		
17				<b>High Value Exchange</b>			
19				<b>Source of Wealth Declaration</b>			
21				<b>Presence Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
23				Describe			CJ_Describe10
25				<b>Material Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
27				Attachment			CF_Attachment10
29							
31				<b>Proof of Wealth Check</b>			
33				<b>Presence Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
35				Describe			CJ_Describe11
37				<b>Material Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
39				Attachment			CF_Attachment11
41							Blockchain CVR_CIR_Entry20
43				<b>Block Chain Analysis</b>	-		=IF(BB43=B, FALSE
45							Suspicious/SuspiciousActivity10a
47				<b>Any Suspicious activity</b>	-		FALSE FALSE
49							CVR_BlockChain3
51				<b>Report failure of Block Chain Analysis</b>	-		=IF(BB47=G =IF(BB47=G8,TRUE,FALSE)
53							CVR_BlockChain3a



Again, outside of the display region, create a second TRUE/FALSE cell that resolves TRUE when No for "Block Chain Analysis" is selected.

	A	AY	AZ	BA	BB	B	BD
7				-			
8				Yes			
9				No			
11							
12					CI_Entry17		CIR_Clear12
13				HighMediumC	CI_Entry18		
14				<b>Medium Risk Client</b>	CI_Entry19		
15				<b>High Risk Client</b>	CIR_Entry20		
16					HighMediumCCond		
17				<b>High Value Exchange</b>			
19	<b>Source of Wealth Declaration</b>						
21				<b>Presence Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
23				Describe			CJ_Describe10
25				<b>Material Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
27				Attachment			CF_Attachment10
31	<b>Proof of Wealth Check</b>						
33				<b>Presence Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
35				Describe			CJ_Describe11
37				<b>Material Check</b>	FALSE		<input type="checkbox"/> Transaction Clear 1
39				Attachment			CF_Attachment11
41							BlockChain CVR_CIR_Entry20
43				<b>Block Chain Analysis</b>	-	FALSE	=IF(BB43=BA9,TRUE,FALSE)
45							Suspicious,SuspiciousActivity10a
47				<b>Any Suspicious activity</b>	-	FALSE	FALSE
49							CVR_BlockChain3
51				<b>Report failure of Block Chain Analysis</b>	-		=IF(BB47=G8,TRUE,FALSE)
53							CVR_BlockChain3a

Label your two TRUE/FALSE cells. In the example, one is “BlockChain3” and the other “BlockChain3a”

BlockChain3

=IF(BB43=BA8,TRUE,FALSE)

	AY	AZ	BA	BB	BD	BE	BF	BH
7								
8			Yes					
9			No					
10								
11								
12				CI_Entry17	CIR_Clear12			
13			HighMediumC	CI_Entry18				
14			Medium Risk Client	CI_Entry19				
15			High Risk Client	CIR_Entry20				
16				HighMediumCCond				
17			High Value Exchange					
19			Source of Wealth Declaration					
21			Presence Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
23			Describe		CI_Describe10			
25			Material Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
27			Attachment		CF_Attachment10			
29								
31			Proof of Wealth Check					
33			Presence Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
35			Describe		CI_Describe11			
37			Material Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
39			Attachment		CF_Attachment11			
41				BlockChain3				
43			Block Chain Analysis	-	FALSE			
45					Suspicious,SuspiciousActivity10a			
47			Any Suspicious activity	-	FALSE			
49					CVR_BlockChain3			
51			Report failure of Block Chain Analysis	-	=IF(BB47=G8,TRUE,FALSE)			
53					CVR_BlockChain3a			

BlockChain3a

=IF(BB47=BA9,TRUE,FALSE)

	AY	AZ	BA	BB	BD	BE	BF	BH
7								
8			Yes					
9			No					
10								
11								
12				CI_Entry17	CIR_Clear12			
13			HighMediumC	CI_Entry18				
14			Medium Risk Client	CI_Entry19				
15			High Risk Client	CIR_Entry20				
16				HighMediumCCond				
17			High Value Exchange					
19			Source of Wealth Declaration					
21			Presence Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
23			Describe		CI_Describe10			
25			Material Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
27			Attachment		CF_Attachment10			
29								
31			Proof of Wealth Check					
33			Presence Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
35			Describe		CI_Describe11			
37			Material Check	FALSE	<input type="checkbox"/>	Transaction Clear 1		
39			Attachment		CF_Attachment11			
41				BlockChain3				
43			Block Chain Analysis	-	FALSE	FALSE		
45					Suspicious,SuspiciousActivity10a			
47			Any Suspicious activity	-	FALSE	FALSE		
49					CVR_BlockChain3			
51			Report failure of Block Chain Analysis	-	=IF(BB47=G8,TRUE,FALSE)			
53					CVR_BlockChain3a			





Apply your row validation to the areas that are to appear when the condition cell results in TRUE. In the example, CVR\_BlockChain3 and CVR\_BlockChain3a have been applied, resulting in "Any Suspicious activity" appearing when "Yes" is selected for "Block Chain Analysis" and "Report failure of "Block Chain Analysis" when "No" is selected.

The image displays two overlapping Excel spreadsheets. The left spreadsheet, titled 'CVR\_BlockChain3', shows a grid with columns AY through BH and rows 7 through 53. It contains data for various risk categories and checks. The right spreadsheet, titled 'CVR\_BlockChain3a', shows a similar grid with columns AY through BH and rows 7 through 53. It includes a formula bar with the formula '=IF(BB47=G8,TRUE,FALSE)'. Both spreadsheets show data for 'Block Chain Analysis' and 'Any Suspicious activity'.

Row	AY	AZ	BA	BB	BI	BD	BE	BF	BI	BH
7										
8			Yes							
9			No							
10										
11										
12				CI_Entry17		CIR_Clear12				
13			HighMediumC	CI_Entry18						
14			Medium Risk Client	CI_Entry19						
15			High Risk Client	CIR_Entry20						
16				HighMediumCCond						
17			High Value Exchange							
19			Source of Wealth Declaration							
21			Presence Check	FALSE						
23			Describe							
25			Material Check	FALSE						
27			Attachment							
29										
31			Proof of Wealth Check							
33			Presence Check	FALSE						
35			Describe							
37			Material Check	FALSE						
39			Attachment							
41										
43			Block Chain Analysis	-						
45			Any Suspicious activity	-						
47										
49										
51			Report failure of Block Chain Analysis	-						
53										

### 15.7 Reset button

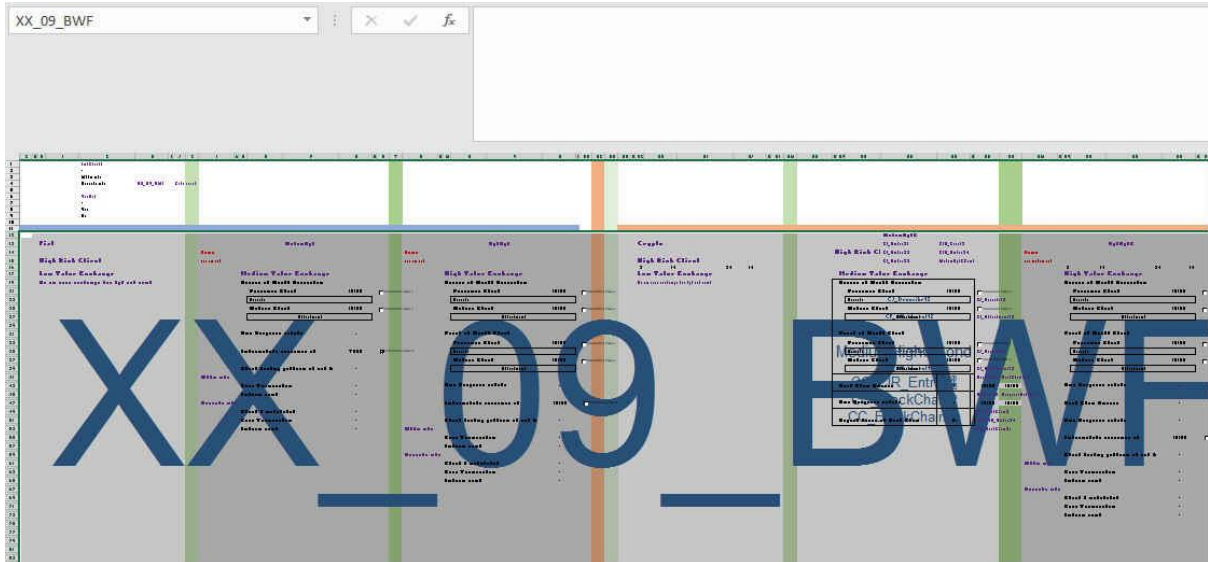
Continuing with the above example, insert a 0 in a cell within a named region and label the cell CR\_ followed by three characters, in this example we have used CR\_BWF. The “0” indicates that all TRUEs will be reset to FALSE and any drop list will be reset to the first item which in our example is a “-”.

The first screenshot shows a spreadsheet with a form. A dropdown menu at the top is set to 'CR\_BWF'. In cell C4, the value '0' is entered. The form contains several sections: 'Transaction Value' (Fr. 0), 'Check if watchlisted' (with 'Natural' and 'Legal' sub-sections, each with a 'Date of check and comment' field and a 'Details' text box), 'Source of wealth' (with 'Declaratio' and 'Proof' sub-sections, each with a 'Describe' text box), and 'Intermediate clearance of transaction'.

The second screenshot shows a similar spreadsheet but with a dropdown menu set to 'CR\_02\_BWF'. In cell C46, the value '0' is entered. The form contains sections for 'Determine if transaction is Fiat or Crypto' (value: none), 'Determine client risk category' (with sub-questions: 'Select risk level of country' (Low), 'Is the investor a company' (Domiciliary), 'Presence of Politically Exposed Person' (none), 'Outcome of client risk category' (High), 'Listed on watchlist' (no), 'If on watch list, increase in risk level' (High)), and 'Fiat'.

The reset button can be placed in multiple places in the publication by inserting numbering between the CR\_ and the three characters to create uniqueness. Alternatively, a new reset button can be created by using a different set of three characters.

Label the areas that are to be reset with XX\_ followed by the same three characters used for your reset button. Do not include areas that need to retain their data. XX\_ can be used in multiple places in the publication by inserting numbering between the XX\_ and the three characters used to create uniqueness.



## Appendix A: Currently Implement Excel functions

This table holds all the current Excel functions that flwpx supports.

Function Name	Type and description
ABS Function	<b>Math and trigonometry:</b> Returns the absolute value of a number
ACOS Function	<b>Math and trigonometry:</b> Returns the arccosine of a number
AND function	<b>Logical:</b> Returns TRUE if all of its arguments are TRUE
ASIN function	<b>Math and trigonometry:</b> Returns the arcsine of a number
ATAN function	<b>Math and trigonometry:</b> Returns the arctangent of a number
AVERAGE function	<b>Statistical:</b> Returns the average of its arguments
AVERAGEIF function	<b>Statistical:</b> Returns the average (arithmetic mean) of all the cells in a range that meet a given criteria
CEILING function	<b>Math and trigonometry:</b> Rounds a number to the nearest integer or to the nearest multiple of significance
CHAR function	<b>Text:</b> Returns the character specified by the code number
CHOOSE function	<b>Lookup and reference:</b> Chooses a value from a list of values
COLUMN function	<b>Lookup and reference:</b> Returns the column number of a reference
COLUMNS function	<b>Lookup and reference:</b> Returns the number of columns in a reference

Function Name	Type and description
CONCAT function	<p><b>Text:</b> Combines the text from multiple ranges and/or strings, but it doesn't provide the delimiter or IgnoreEmpty arguments.</p> <p>This function isn't available in Excel 2016 for Mac.</p>
CONCATENATE function	<p><b>Text:</b> Joins several text items into one text item</p>
CONCATENATE function	<p><b>Text:</b> Joins several text items into one text item</p>
COUNT function	<p><b>Statistical:</b> Counts how many numbers are in the list of arguments</p>
COUNTIF function	<p><b>Statistical:</b> Counts the number of cells within a range that meet the given criteria</p>
DATE function	<p><b>Date and time:</b> Returns the serial number of a particular date</p>
DAY function	<p><b>Date and time:</b> Converts a serial number to a day of the month</p>
DAYS function	<p><b>Date and time:</b> Returns the number of days between two dates</p>
DAYS360 function	<p><b>Date and time:</b> Calculates the number of days between two dates based on a 360-day year</p>
EDATE function	<p><b>Date and time:</b> Returns the serial number of the date that is the indicated number of months before or after the start date</p>
EOMONTH function	<p><b>Date and time:</b> Returns the serial number of the last day of the month before or after a specified number of months</p>
EVEN function	<p><b>Math and trigonometry:</b> Rounds a number up to the nearest even integer</p>
EXP function	<p><b>Math and trigonometry:</b> Returns <math>e</math> raised to the power of a given number</p>
FALSE function	<p><b>Logical:</b> Returns the logical value FALSE</p>

Function Name	Type and description
FIND, FINDB functions	<b>Text:</b> Finds one text value within another (case-sensitive)
FLOOR function	<b>Compatibility:</b> Rounds a number down, toward zero
FLOOR function	In Excel 2007 and Excel 2010, this is a <b>Math and trigonometry</b> function.
FORMULATEXT function <span style="border: 1px solid black; padding: 2px;">2013</span>	<b>Lookup and reference:</b> Returns the formula at the given reference as text
IF function	<b>Logical:</b> Specifies a logical test to perform
IFERROR function	<b>Logical:</b> Returns a value you specify if a formula evaluates to an error; otherwise, returns the result of the formula
INDIRECT function	<b>Lookup and reference:</b> Returns a reference indicated by a text value
INT function	<b>Math and trigonometry:</b> Rounds a number down to the nearest integer
ISEVEN function	<b>Information:</b> Returns TRUE if the number is even
ISODD function	<b>Information:</b> Returns TRUE if the number is odd
LEFT, LEFTB functions	<b>Text:</b> Returns the leftmost characters from a text value
LEN, LENB functions	<b>Text:</b> Returns the number of characters in a text string
LN function	<b>Math and trigonometry:</b> Returns the natural logarithm of a number
LOG10 function	<b>Math and trigonometry:</b> Returns the base-10 logarithm of a number
LOOKUP function	<b>Lookup and reference:</b> Looks up values in a vector or array
MAX function	<b>Statistical:</b> Returns the maximum value in a list of arguments

Function Name	Type and description
MIN function	<b>Statistical:</b> Returns the minimum value in a list of arguments
MOD function	<b>Math and trigonometry:</b> Returns the remainder from division
MONTH function	<b>Date and time:</b> Converts a serial number to a month
NETWORKDAYS function	<b>Date and time:</b> Returns the number of whole workdays between two dates
NOT function	<b>Logical:</b> Reverses the logic of its argument
OR function	<b>Logical:</b> Returns TRUE if any argument is TRUE
PI function	<b>Math and trigonometry:</b> Returns the value of pi
POWER function	<b>Math and trigonometry:</b> Returns the result of a number raised to a power
RADIANS function	<b>Math and trigonometry:</b> Converts degrees to radians
RAND function	<b>Math and trigonometry:</b> Returns a random number between 0 and 1
RIGHT, RIGHTB functions	<b>Text:</b> Returns the rightmost characters from a text value
ROUND function	<b>Math and trigonometry:</b> Rounds a number to a specified number of digits
ROUNDDOWN function	<b>Math and trigonometry:</b> Rounds a number down, toward zero
ROUNDUP function	<b>Math and trigonometry:</b> Rounds a number up, away from zero
ROW function	<b>Lookup and reference:</b> Returns the row number of a reference
ROWS function	<b>Lookup and reference:</b> Returns the number of rows in a reference

Function Name	Type and description
SEARCH, SEARCHB functions	<b>Text:</b> Finds one text value within another (not case-sensitive)
SIGN function	<b>Math and trigonometry:</b> Returns the sign of a number
SIN function	<b>Math and trigonometry:</b> Returns the sine of the given angle
SQRT function	<b>Math and trigonometry:</b> Returns a positive square root
SUM function	<b>Math and trigonometry:</b> Adds its arguments
SUMIF function	<b>Math and trigonometry:</b> Adds the cells specified by a given criteria
TAN function	<b>Math and trigonometry:</b> Returns the tangent of a number
TODAY function	<b>Date and time:</b> Returns the serial number of today's date
TRUE function	<b>Logical:</b> Returns the logical value TRUE
TRUNC function	<b>Math and trigonometry:</b> Truncates a number to an integer
UPPER function	<b>Text:</b> Converts text to uppercase
VALUE function	<b>Text:</b> Converts a text argument to a number
VLOOKUP function	<b>Lookup and reference:</b> Looks in the first column of an array and moves across the row to return the value of a cell
WEEKDAY function	<b>Date and time:</b> Converts a serial number to a day of the week
WORKDAY function	<b>Date and time:</b> Returns the serial number of the date before or after a specified number of workdays





**Function Name**

**Type and description**

XOR function

2013

**Logical:** Returns a logical exclusive OR of all arguments

YEAR function

**Date and time:** Converts a serial number to a year

## Appendix B: All unimplemented Excel functions

This table contains all Excel functionality that does not currently work in the flwpx environment, but can be implemented if the need arises and is great enough.

Function Name	Type and description
ACCRINT function	<b>Financial:</b> Returns the accrued interest for a security that pays periodic interest
ACCRINTM function	<b>Financial:</b> Returns the accrued interest for a security that pays interest at maturity
ACOSH function	<b>Math and trigonometry:</b> Returns the inverse hyperbolic cosine of a number
ACOT function	<b>Math and trigonometry:</b> Returns the arccotangent of a number
ACOTH function	<b>Math and trigonometry:</b> Returns the hyperbolic arccotangent of a number
AGGREGATE function	<b>Math and trigonometry:</b> Returns an aggregate in a list or database
ADDRESS function	<b>Lookup and reference:</b> Returns a reference as text to a single cell in a worksheet
AMORDEGRC function	<b>Financial:</b> Returns the depreciation for each accounting period by using a depreciation coefficient
AMORLINC function	<b>Financial:</b> Returns the depreciation for each accounting period
ARABIC function	<b>Math and trigonometry:</b> Converts a Roman number to Arabic, as a number
AREAS function	<b>Lookup and reference:</b> Returns the number of areas in a reference
ASC function	<b>Text:</b> Changes full-width (double-byte) English letters or katakana within a character string to half-width (single-byte) characters
ASINH function	<b>Math and trigonometry:</b> Returns the inverse hyperbolic sine of a number

Function Name	Type and description
ATAN2 function	<b>Math and trigonometry:</b> Returns the arctangent from x- and y-coordinates
ATANH function	<b>Math and trigonometry:</b> Returns the inverse hyperbolic tangent of a number
AVEDEV function	<b>Statistical:</b> Returns the average of the absolute deviations of data points from their mean
AVERAGEA function	<b>Statistical:</b> Returns the average of its arguments, including numbers, text, and logical values
AVERAGEIFS function	<b>Statistical:</b> Returns the average (arithmetic mean) of all cells that meet multiple criteria.
BAHTTEXT function	<b>Text:</b> Converts a number to text, using the ₪ (baht) currency format
BASE function	<b>Math and trigonometry:</b> Converts a number into a text representation with the given radix (base)
BESSELI function	<b>Engineering:</b> Returns the modified Bessel function $I_n(x)$
BESSELJ function	<b>Engineering:</b> Returns the Bessel function $J_n(x)$
BESSELK function	<b>Engineering:</b> Returns the modified Bessel function $K_n(x)$
BESSELY function	<b>Engineering:</b> Returns the Bessel function $Y_n(x)$
BETADIST function	<b>Compatibility:</b> Returns the beta cumulative distribution function  In Excel 2007, this is a <b>Statistical</b> function.
BETA.DIST function	<b>Statistical:</b> Returns the beta cumulative distribution function

<b>Function Name</b>	<b>Type and description</b>
BETA.INV function	<b>Compatibility:</b> Returns the inverse of the cumulative distribution function for a specified beta distribution  In Excel 2007, this is a <b>Statistical</b> function.
BETA.INV function	<b>Statistical:</b> Returns the inverse of the cumulative distribution function for a specified beta distribution
BIN2DEC function	<b>Engineering:</b> Converts a binary number to decimal
BIN2HEX function	<b>Engineering:</b> Converts a binary number to hexadecimal
BIN2OCT function	<b>Engineering:</b> Converts a binary number to octal
BINOMDIST function	<b>Compatibility:</b> Returns the individual term binomial distribution probability  In Excel 2007, this is a <b>Statistical</b> function.
BINOM.DIST function	<b>Statistical:</b> Returns the individual term binomial distribution probability
BINOM.DIST.RANGE function	<b>Statistical:</b> Returns the probability of a trial result using a binomial distribution
BINOM.INV function	<b>Statistical:</b> Returns the smallest value for which the cumulative binomial distribution is less than or equal to a criterion value
BITAND function	<b>Engineering:</b> Returns a 'Bitwise And' of two numbers
BITLSHIFT function	<b>Engineering:</b> Returns a value number shifted left by shift_amount bits
BITOR function	<b>Engineering:</b> Returns a bitwise OR of 2 numbers
BITRSHIFT function	<b>Engineering:</b> Returns a value number shifted right by shift_amount bits

Function Name	Type and description
BITXOR function	<b>Engineering:</b> Returns a bitwise 'Exclusive Or' of two numbers
CALL function	<b>Add-in and Automation:</b> Calls a procedure in a dynamic link library or code resource
CEILING.MATH function	<b>Math and trigonometry:</b> Rounds a number up, to the nearest integer or to the nearest multiple of significance
CEILING.PRECISE function	<b>Math and trigonometry:</b> Rounds a number the nearest integer or to the nearest multiple of significance. Regardless of the sign of the number, the number is rounded up. <b>Information:</b> Returns information about the formatting, location, or contents of a cell
CELL function	This function is not available in Excel Online. <b>Compatibility:</b> Returns the one-tailed probability of the chi-squared distribution
CHIDIST function	<b>Note:</b> In Excel 2007, this is a <b>Statistical</b> function. <b>Compatibility:</b> Returns the inverse of the one-tailed probability of the chi-squared distribution
CHIINV function	<b>Note:</b> In Excel 2007, this is a <b>Statistical</b> function. <b>Compatibility:</b> Returns the test for independence
CHITEST function	<b>Note:</b> In Excel 2007, this is a <b>Statistical</b> function.
CHISQ.DIST function	<b>Statistical:</b> Returns the cumulative beta probability density function
CHISQ.DIST.RT function	<b>Statistical:</b> Returns the one-tailed probability of the chi-squared distribution

Function Name	Type and description
CHISQ.INV function	<b>Statistical:</b> Returns the cumulative beta probability density function
CHISQ.INV.RT function	<b>Statistical:</b> Returns the inverse of the one-tailed probability of the chi-squared distribution
CHISQ.TEST function	<b>Statistical:</b> Returns the test for independence
CLEAN function	<b>Text:</b> Removes all nonprintable characters from text
CODE function	<b>Text:</b> Returns a numeric code for the first character in a text string
COMBIN function	<b>Math and trigonometry:</b> Returns the number of combinations for a given number of objects
COMBINA function	<b>Math and trigonometry:</b> Returns the number of combinations with repetitions for a given number of items
COMPLEX function	<b>Engineering:</b> Converts real and imaginary coefficients into a complex number <b>Compatibility:</b> Returns the confidence interval for a population mean
CONFIDENCE function	In Excel 2007, this is a <b>Statistical</b> function.
CONFIDENCE.NORM function	<b>Statistical:</b> Returns the confidence interval for a population mean
CONFIDENCE.T function	<b>Statistical:</b> Returns the confidence interval for a population mean, using a Student's t distribution
CONVERT function	<b>Engineering:</b> Converts a number from one measurement system to another
CORREL function	<b>Statistical:</b> Returns the correlation coefficient between two data sets
COSH function	<b>Math and trigonometry:</b> Returns the hyperbolic cosine of a number

Function Name	Type and description
COT function	<b>Math and trigonometry:</b> Returns the hyperbolic cosine of a number
COTH function 2013	<b>Math and trigonometry:</b> Returns the cotangent of an angle
COUNTA function	<b>Statistical:</b> Counts how many values are in the list of arguments
COUNTBLANK function	<b>Statistical:</b> Counts the number of blank cells within a range
COUNTIF function	<b>Statistical:</b> Counts the number of cells within a range that meet the given criteria
COUNTIFS function	<b>Statistical:</b> Counts the number of cells within a range that meet multiple criteria
COUPDAYBS function	<b>Financial:</b> Returns the number of days from the beginning of the coupon period to the settlement date
COUPDAYS function	<b>Financial:</b> Returns the number of days in the coupon period that contains the settlement date
COUPDAYSNC function	<b>Financial:</b> Returns the number of days from the settlement date to the next coupon date
COUPNCD function	<b>Financial:</b> Returns the next coupon date after the settlement date
COUPNUM function	<b>Financial:</b> Returns the number of coupons payable between the settlement date and maturity date
COUPPCD function	<b>Financial:</b> Returns the previous coupon date before the settlement date
COVAR function	<b>Compatibility:</b> Returns covariance, the average of the products of paired deviations

In Excel 2007, this is a **Statistical** function.

**Function Name****Type and description**

COVARIANCE.P function

2010

**Statistical:** Returns covariance, the average of the products of paired deviations

COVARIANCE.S function

2010

**Statistical:** Returns the sample covariance, the average of the products deviations for each data point pair in two data sets

**Compatibility:** Returns the smallest value for which the cumulative binomial distribution is less than or equal to a criterion value

CRITBINOM function

In Excel 2007, this is a **Statistical** function.

CSC function

2013

**Math and trigonometry:** Returns the cosecant of an angle

CSCH function

2013

**Math and trigonometry:** Returns the hyperbolic cosecant of an angle

CUBEKPIMEMBER function

**Cube:** Returns a key performance indicator (KPI) name, property, and measure, and displays the name and property in the cell. A KPI is a quantifiable measurement, such as monthly gross profit or quarterly employee turnover, used to monitor an organization's performance.

CUBEMEMBER function

**Cube:** Returns a member or tuple in a cube hierarchy. Use to validate that the member or tuple exists in the cube.

CUBEMEMBERPROPERTY function

**Cube:** Returns the value of a member property in the cube. Use to validate that a member name exists within the cube and to return the specified property for this member.

CUBERANKEDMEMBER function

**Cube:** Returns the nth, or ranked, member in a set. Use to return one or more elements in a set, such as the top sales performer or top 10 students.



Function Name	Type and description
CUBESET function	<b>Cube:</b> Defines a calculated set of members or tuples by sending a set expression to the cube on the server, which creates the set, and then returns that set to Microsoft Office Excel.
CUBESETCOUNT function	<b>Cube:</b> Returns the number of items in a set.
CUBEVALUE function	<b>Cube:</b> Returns an aggregated value from a cube.
CUMIPMT function	<b>Financial:</b> Returns the cumulative interest paid between two periods
CUMPRINC function	<b>Financial:</b> Returns the cumulative principal paid on a loan between two periods
DATEDIF function	<b>Date and time:</b> Calculates the number of days, months, or years between two dates. This function is useful in formulas where you need to calculate an age.
DATEVALUE function	<b>Date and time:</b> Converts a date in the form of text to a serial number
DAVERAGE function	<b>Database:</b> Returns the average of selected database entries
DB function	<b>Financial:</b> Returns the depreciation of an asset for a specified period by using the fixed-declining balance method
DBCS function 2013	<b>Text:</b> Changes half-width (single-byte) English letters or katakana within a character string to full-width (double-byte) characters
DCOUNT function	<b>Database:</b> Counts the cells that contain numbers in a database
DCOUNTA function	<b>Database:</b> Counts nonblank cells in a database

Function Name	Type and description
DDB function	<b>Financial:</b> Returns the depreciation of an asset for a specified period by using the double-declining balance method or some other method that you specify
DEC2BIN function	<b>Engineering:</b> Converts a decimal number to binary
DEC2HEX function	<b>Engineering:</b> Converts a decimal number to hexadecimal
DEC2OCT function	<b>Engineering:</b> Converts a decimal number to octal
DECIMAL function 2013	<b>Math and trigonometry:</b> Converts a text representation of a number in a given base into a decimal number
DEGREES function	<b>Math and trigonometry:</b> Converts radians to degrees
DELTA function	<b>Engineering:</b> Tests whether two values are equal
DEVSQ function	<b>Statistical:</b> Returns the sum of squares of deviations
DGET function	<b>Database:</b> Extracts from a database a single record that matches the specified criteria
DISC function	<b>Financial:</b> Returns the discount rate for a security
DMAX function	<b>Database:</b> Returns the maximum value from selected database entries
DMIN function	<b>Database:</b> Returns the minimum value from selected database entries
DOLLAR function	<b>Text:</b> Converts a number to text, using the \$ (dollar) currency format
DOLLARDE function	<b>Financial:</b> Converts a dollar price, expressed as a fraction, into a dollar price, expressed as a decimal number

Function Name	Type and description
DOLLARFR function	<b>Financial:</b> Converts a dollar price, expressed as a decimal number, into a dollar price, expressed as a fraction
DPRODUCT function	<b>Database:</b> Multiplies the values in a particular field of records that match the criteria in a database
DSTDEV function	<b>Database:</b> Estimates the standard deviation based on a sample of selected database entries
DSTDEVP function	<b>Database:</b> Calculates the standard deviation based on the entire population of selected database entries
DSUM function	<b>Database:</b> Adds the numbers in the field column of records in the database that match the criteria
DURATION function	<b>Financial:</b> Returns the annual duration of a security with periodic interest payments
DVAR function	<b>Database:</b> Estimates variance based on a sample from selected database entries
DVARP function	<b>Database:</b> Calculates variance based on the entire population of selected database entries
EFFECT function	<b>Financial:</b> Returns the effective annual interest rate  <b>Web:</b> Returns a URL-encoded string
ENCODEURL function 2013	This function is not available in Excel Online.
ERF function	<b>Engineering:</b> Returns the error function
ERF.PRECISE function 2010	<b>Engineering:</b> Returns the error function
ERFC function	<b>Engineering:</b> Returns the complementary error function

Function Name	Type and description
ERFC.PRECISE function 2010	<b>Engineering:</b> Returns the complementary ERF function integrated between x and infinity
ERROR.TYPE function	<b>Information:</b> Returns a number corresponding to an error type  <b>Add-in and Automation:</b> Converts a number to euros, converts a number from euros to a euro member currency, or converts a number from one euro member currency to another by using the euro as an intermediary (triangulation).
EUROCONVERT function	
EXACT function	<b>Text:</b> Checks to see if two text values are identical
EXPON.DIST function 2010	<b>Statistical:</b> Returns the exponential distribution  <b>Compatibility:</b> Returns the exponential distribution  In Excel 2007, this is a <b>Statistical</b> function.
EXPONDIST function	
FACT function	<b>Math and trigonometry:</b> Returns the factorial of a number
FACTDOUBLE function	<b>Math and trigonometry:</b> Returns the double factorial of a number
F.DIST function 2010	<b>Statistical:</b> Returns the F probability distribution  <b>Compatibility:</b> Returns the F probability distribution  In Excel 2007, this is a <b>Statistical</b> function.
FDIST function	
F.DIST.RT function 2010	<b>Statistical:</b> Returns the F probability distribution  <b>Web:</b> Returns specific data from the XML content by using the specified XPath
FILTERXML function 2013	This function is not available in Excel Online.

Function Name	Type and description
F.INV function 2010	<b>Statistical:</b> Returns the inverse of the F probability distribution
F.INV.RT function 2010	<b>Statistical:</b> Returns the inverse of the F probability distribution
FINV function	<b>Statistical:</b> Returns the inverse of the F probability distribution
FISHER function	<b>Statistical:</b> Returns the Fisher transformation
FISHERINV function	<b>Statistical:</b> Returns the inverse of the Fisher transformation
FIXED function	<b>Text:</b> Formats a number as text with a fixed number of decimals
FLOOR.MATH function 2013	<b>Math and trigonometry:</b> Rounds a number down, to the nearest integer or to the nearest multiple of significance
FLOOR.PRECISE function	<b>Math and trigonometry:</b> Rounds a number the nearest integer or to the nearest multiple of significance. Regardless of the sign of the number, the number is rounded up. <b>Statistical:</b> Returns a value along a linear trend
FORECAST function	In Excel 2016, this function is replaced with FORECAST.LINEAR as part of the new Forecasting functions, but it's still available for compatibility with earlier versions. <b>Statistical:</b> Returns a future value based on existing (historical) values by using the AAA version of the Exponential Smoothing (ETS) algorithm
FORECAST.ETS function 2016	This function isn't available in Excel 2016 for Mac.

**Function Name****Type and description**

FORECAST.ETS.CONFINT function

2016

**Statistical:** Returns a confidence interval for the forecast value at the specified target date

This function isn't available in Excel 2016 for Mac.

**Statistical:** Returns the length of the repetitive pattern Excel detects for the specified time series

FORECAST.ETS.SEASONALITY function

2016

This function isn't available in Excel 2016 for Mac.

**Statistical:** Returns a statistical value as a result of time series forecasting

FORECAST.ETS.STAT function

2016

This function isn't available in Excel 2016 for Mac.\*

**Statistical:** Returns a future value based on existing values

FORECAST.LINEAR function

2016

This function isn't available in Excel 2016 for Mac.\*

FREQUENCY function

**Statistical:** Returns a frequency distribution as a vertical array

F.TEST function

2010

**Statistical:** Returns the result of an F-test

**Compatibility:** Returns the result of an F-test

FTEST function

In Excel 2007, this is a **Statistical** function.

FV function

**Financial:** Returns the future value of an investment.\*

FVSCHEDULE function

**Financial:** Returns the future value of an initial principal after applying a series of compound interest rates

GAMMA function

2013

**Statistical:** Returns the Gamma function value

Function Name	Type and description
GAMMA.DIST function 2010	<b>Statistical:</b> Returns the gamma distribution  <b>Compatibility:</b> Returns the gamma distribution  In Excel 2007, this is a <b>Statistical</b> function.
GAMMADIST function	
GAMMA.INV function 2010	<b>Statistical:</b> Returns the inverse of the gamma cumulative distribution  <b>Compatibility:</b> Returns the inverse of the gamma cumulative distribution  In Excel 2007, this is a <b>Statistical</b> function.
GAMMAINV function	
GAMMALN function	<b>Statistical:</b> Returns the natural logarithm of the gamma function, $G(x)$
GAMMALN.PRECISE function 2010	<b>Statistical:</b> Returns the natural logarithm of the gamma function, $G(x)$
GAUSS function 2013	<b>Statistical:</b> Returns 0.5 less than the standard normal cumulative distribution
GCD function	<b>Math and trigonometry:</b> Returns the greatest common divisor
GEOMEAN function	<b>Statistical:</b> Returns the geometric mean
GESTEP function	<b>Engineering:</b> Tests whether a number is greater than a threshold value
GETPIVOTDATA function	<b>Lookup and reference:</b> Returns data stored in a PivotTable report
GROWTH function	<b>Statistical:</b> Returns values along an exponential trend
HARMEAN function	<b>Statistical:</b> Returns the harmonic mean

Function Name	Type and description
HEX2BIN function	<b>Engineering:</b> Converts a hexadecimal number to binary
HEX2DEC function	<b>Engineering:</b> Converts a hexadecimal number to decimal
HEX2OCT function	<b>Engineering:</b> Converts a hexadecimal number to octal
HLOOKUP function	<b>Lookup and reference:</b> Looks in the top row of an array and returns the value of the indicated cell
HOUR function	<b>Date and time:</b> Converts a serial number to an hour
HYPERLINK function	<b>Lookup and reference:</b> Creates a shortcut or jump that opens a document stored on a network server, an intranet, or the Internet
HYPGEOM.DIST function	<b>Statistical:</b> Returns the hypergeometric distribution
HYPGEOMDIST function	<b>Compatibility:</b> Returns the hypergeometric distribution  In Excel 2007, this is a <b>Statistical</b> function.
IFNA function 2013	<b>Logical:</b> Returns the value you specify if the expression resolves to #N/A, otherwise returns the result of the expression
IFS function 2016	<b>Logical:</b> Checks whether one or more conditions are met and returns a value that corresponds to the first TRUE condition.  This function isn't available in Excel 2016 for Mac.



Function Name	Type and description
IMABS function	<b>Engineering:</b> Returns the absolute value (modulus) of a complex number
IMAGINARY function	<b>Engineering:</b> Returns the imaginary coefficient of a complex number
IMARGUMENT function	<b>Engineering:</b> Returns the argument theta, an angle expressed in radians
IMCONJUGATE function	<b>Engineering:</b> Returns the complex conjugate of a complex number
IMCOS function	<b>Engineering:</b> Returns the cosine of a complex number
IMCOSH function 2013	<b>Engineering:</b> Returns the hyperbolic cosine of a complex number
IMCOT function 2013	<b>Engineering:</b> Returns the cotangent of a complex number
IMCSC function 2013	<b>Engineering:</b> Returns the cosecant of a complex number
IMCSCH function 2013	<b>Engineering:</b> Returns the hyperbolic cosecant of a complex number
IMDIV function	<b>Engineering:</b> Returns the quotient of two complex numbers
IMEXP function	<b>Engineering:</b> Returns the exponential of a complex number
IMLN function	<b>Engineering:</b> Returns the natural logarithm of a complex number

Function Name	Type and description
IMLOG10 function	<b>Engineering:</b> Returns the base-10 logarithm of a complex number
IMLOG2 function	<b>Engineering:</b> Returns the base-2 logarithm of a complex number
IMPOWER function	<b>Engineering:</b> Returns a complex number raised to an integer power
IMPRODUCT function	<b>Engineering:</b> Returns the product of complex numbers
IMREAL function	<b>Engineering:</b> Returns the real coefficient of a complex number
IMSEC function 2013	<b>Engineering:</b> Returns the secant of a complex number
IMSECH function 2013	<b>Engineering:</b> Returns the hyperbolic secant of a complex number
IMSIN function	<b>Engineering:</b> Returns the sine of a complex number
IMSINH function 2013	<b>Engineering:</b> Returns the hyperbolic sine of a complex number
IMSQRT function	<b>Engineering:</b> Returns the square root of a complex number
IMSUB function	<b>Engineering:</b> Returns the difference between two complex numbers
IMSUM function	<b>Engineering:</b> Returns the sum of complex numbers
IMTAN function 2013	<b>Engineering:</b> Returns the tangent of a complex number

Function Name	Type and description
INDEX function	<p><b>Lookup and reference:</b> Uses an index to choose a value from a reference or array</p> <p><b>Information:</b> Returns information about the current operating environment</p>
INFO function	<p>This function is not available in Excel Online.</p>
INTERCEPT function	<p><b>Statistical:</b> Returns the intercept of the linear regression line</p>
INTRATE function	<p><b>Financial:</b> Returns the interest rate for a fully invested security</p>
IPMT function	<p><b>Financial:</b> Returns the interest payment for an investment for a given period</p>
IRR function	<p><b>Financial:</b> Returns the internal rate of return for a series of cash flows</p>
ISBLANK function	<p><b>Information:</b> Returns TRUE if the value is blank</p>
ISERR function	<p><b>Information:</b> Returns TRUE if the value is any error value except #N/A</p>
ISERROR function	<p><b>Information:</b> Returns TRUE if the value is any error value</p>
ISFORMULA function 2013	<p><b>Information:</b> Returns TRUE if there is a reference to a cell that contains a formula</p>
ISLOGICAL function	<p><b>Information:</b> Returns TRUE if the value is a logical value</p>
ISNA function	<p><b>Information:</b> Returns TRUE if the value is the #N/A error value</p>

Function Name	Type and description
ISNONTEXT function	<b>Information:</b> Returns TRUE if the value is not text
ISNUMBER function	<b>Information:</b> Returns TRUE if the value is a number
ISREF function	<b>Information:</b> Returns TRUE if the value is a reference
ISTEXT function	<b>Information:</b> Returns TRUE if the value is text
ISO.CEILING function 2013	<b>Math and trigonometry:</b> Returns a number that is rounded up to the nearest integer or to the nearest multiple of significance
ISOWEEKNUM function 2013	<b>Date and time:</b> Returns the number of the ISO week number of the year for a given date
ISPMT function	<b>Financial:</b> Calculates the interest paid during a specific period of an investment
JIS function	<b>Text:</b> Changes half-width (single-byte) characters within a string to full-width (double-byte) characters
KURT function	<b>Statistical:</b> Returns the kurtosis of a data set
LARGE function	<b>Statistical:</b> Returns the k-th largest value in a data set
LCM function	<b>Math and trigonometry:</b> Returns the least common multiple
LINEST function	<b>Statistical:</b> Returns the parameters of a linear trend

Function Name	Type and description
LOG function	<b>Math and trigonometry:</b> Returns the logarithm of a number to a specified base
LOGEST function	<b>Statistical:</b> Returns the parameters of an exponential trend
LOGINV function	<b>Compatibility:</b> Returns the inverse of the lognormal cumulative distribution
LOGNORM.DIST function 2010	<b>Statistical:</b> Returns the cumulative lognormal distribution
LOGNORMDIST function	<b>Compatibility:</b> Returns the cumulative lognormal distribution
LOGNORM.INV function 2010	<b>Statistical:</b> Returns the inverse of the lognormal cumulative distribution
LOOKUP function	<b>Lookup and reference:</b> Looks up values in a vector or array
LOWER function	<b>Text:</b> Converts text to lowercase
MATCH function	<b>Lookup and reference:</b> Looks up values in a reference or array
MAXA function	<b>Statistical:</b> Returns the maximum value in a list of arguments, including numbers, text, and logical values
MAXIFS function 2016	<b>Statistical:</b> Returns the maximum value among cells specified by a given set of conditions or criteria  This function isn't available in Excel 2016 for Mac.
MDETERM function	<b>Math and trigonometry:</b> Returns the matrix determinant of an array

Function Name	Type and description
MDURATION function	<b>Financial:</b> Returns the Macauley modified duration for a security with an assumed par value of \$100
MEDIAN function	<b>Statistical:</b> Returns the median of the given numbers
MID, MIDB functions	<b>Text:</b> Returns a specific number of characters from a text string starting at the position you specify
MINIFS function <span style="border: 1px solid black; padding: 2px;">2016</span>	<b>Statistical:</b> Returns the minimum value among cells specified by a given set of conditions or criteria.  This function isn't available in Excel 2016 for Mac.
MINA function	<b>Statistical:</b> Returns the smallest value in a list of arguments, including numbers, text, and logical values
MINUTE function	<b>Date and time:</b> Converts a serial number to a minute
MINVERSE function	<b>Math and trigonometry:</b> Returns the matrix inverse of an array
MIRR function	<b>Financial:</b> Returns the internal rate of return where positive and negative cash flows are financed at different rates
MMULT function	<b>Math and trigonometry:</b> Returns the matrix product of two arrays
MODE function	<b>Compatibility:</b> Returns the most common value in a data set  In Excel 2007, this is a <b>Statistical</b> function.

Function Name	Type and description
MODE.MULT function 2010	<b>Statistical:</b> Returns a vertical array of the most frequently occurring, or repetitive values in an array or range of data
MODE.SNGL function 2010	<b>Statistical:</b> Returns the most common value in a data set
MROUND function	<b>Math and trigonometry:</b> Returns a number rounded to the desired multiple
MULTINOMIAL function	<b>Math and trigonometry:</b> Returns the multinomial of a set of numbers
MUNIT function 2013	<b>Math and trigonometry:</b> Returns the unit matrix or the specified dimension
N function	<b>Information:</b> Returns a value converted to a number
NA function	<b>Information:</b> Returns the error value #N/A
NEGBINOM.DIST function 2010	<b>Statistical:</b> Returns the negative binomial distribution  <b>Compatibility:</b> Returns the negative binomial distribution  In Excel 2007, this is a <b>Statistical</b> function.
NEGBINOMDIST function	<b>Date and time:</b> Returns the number of whole workdays between two dates using parameters to indicate which and how many days are weekend days
NETWORKDAYS.INTL function 2010	<b>Financial:</b> Returns the annual nominal interest rate
NOMINAL function	<b>Statistical:</b> Returns the normal cumulative distribution
NORM.DIST function 2010	

**Function Name****Type and description**

NORMDIST function

**Compatibility:** Returns the normal cumulative distributionIn Excel 2007, this is a **Statistical** function.

NORMINV function

**Statistical:** Returns the inverse of the normal cumulative distribution**Compatibility:** Returns the inverse of the normal cumulative distribution

NORM.INV function

2010

**Note:** In Excel 2007, this is a **Statistical** function.

NORM.S.DIST function

2010

**Statistical:** Returns the standard normal cumulative distribution**Compatibility:** Returns the standard normal cumulative distribution

NORMSDIST function

In Excel 2007, this is a **Statistical** function.

NORM.S.INV function

2010

**Statistical:** Returns the inverse of the standard normal cumulative distribution**Compatibility:** Returns the inverse of the standard normal cumulative distribution

NORMSINV function

In Excel 2007, this is a **Statistical** function.

NOW function

**Date and time:** Returns the serial number of the current date and time

NPER function

**Financial:** Returns the number of periods for an investment

NPV function

**Financial:** Returns the net present value of an investment based on a series of periodic cash flows and a discount rate

NUMBERVALUE function

2013

**Text:** Converts text to number in a locale-independent manner



Function Name	Type and description
OCT2BIN function	<b>Engineering:</b> Converts an octal number to binary
OCT2DEC function	<b>Engineering:</b> Converts an octal number to decimal
OCT2HEX function	<b>Engineering:</b> Converts an octal number to hexadecimal
ODD function	<b>Math and trigonometry:</b> Rounds a number up to the nearest odd integer
ODDFPRICE function	<b>Financial:</b> Returns the price per \$100 face value of a security with an odd first period
ODDFYIELD function	<b>Financial:</b> Returns the yield of a security with an odd first period
ODDLPRICE function	<b>Financial:</b> Returns the price per \$100 face value of a security with an odd last period
ODDLYIELD function	<b>Financial:</b> Returns the yield of a security with an odd last period
OFFSET function	<b>Lookup and reference:</b> Returns a reference offset from a given reference
PDURATION function 2013	<b>Financial:</b> Returns the number of periods required by an investment to reach a specified value
PEARSON function	<b>Statistical:</b> Returns the Pearson product moment correlation coefficient
PERCENTILE.EXC function 2010	<b>Statistical:</b> Returns the k-th percentile of values in a range, where k is in the range 0..1, exclusive

Function Name	Type and description
PERCENTILE.INC function 2010	<p><b>Statistical:</b> Returns the k-th percentile of values in a range</p> <p><b>Compatibility:</b> Returns the k-th percentile of values in a range</p> <p>In Excel 2007, this is a <b>Statistical</b> function.</p>
PERCENTILE function	
PERCENTRANK.EXC function 2010	<p><b>Statistical:</b> Returns the rank of a value in a data set as a percentage (0..1, exclusive) of the data set</p>
PERCENTRANK.INC function 2010	<p><b>Statistical:</b> Returns the percentage rank of a value in a data set</p> <p><b>Compatibility:</b> Returns the percentage rank of a value in a data set</p> <p>In Excel 2007, this is a <b>Statistical</b> function.</p>
PERCENTRANK function	
PERMUT function	<p><b>Statistical:</b> Returns the number of permutations for a given number of objects</p>
PERMUTATIONA function 2013	<p><b>Statistical:</b> Returns the number of permutations for a given number of objects (with repetitions) that can be selected from the total objects</p>
PHI function 2013	<p><b>Statistical:</b> Returns the value of the density function for a standard normal distribution</p>
PHONETIC function	<p><b>Text:</b> Extracts the phonetic (furigana) characters from a text string</p>
PMT function	<p><b>Financial:</b> Returns the periodic payment for an annuity</p>
POISSON.DIST function 2010	<p><b>Statistical:</b> Returns the Poisson distribution</p>

Function Name	Type and description
POISSON function	<p><b>Compatibility:</b> Returns the Poisson distribution</p> <p>In Excel 2007, this is a <b>Statistical</b> function.</p>
PPMT function	<p><b>Financial:</b> Returns the payment on the principal for an investment for a given period</p>
PRICE function	<p><b>Financial:</b> Returns the price per \$100 face value of a security that pays periodic interest</p>
PRICEDISC function	<p><b>Financial:</b> Returns the price per \$100 face value of a discounted security</p>
PRICEMAT function	<p><b>Financial:</b> Returns the price per \$100 face value of a security that pays interest at maturity</p>
PROB function	<p><b>Statistical:</b> Returns the probability that values in a range are between two limits</p>
PRODUCT function	<p><b>Math and trigonometry:</b> Multiplies its arguments</p>
PROPER function	<p><b>Text:</b> Capitalizes the first letter in each word of a text value</p>
PV function	<p><b>Financial:</b> Returns the present value of an investment</p>
QUARTILE function	<p><b>Compatibility:</b> Returns the quartile of a data set</p> <p>In Excel 2007, this is a <b>Statistical</b> function.</p>
QUARTILE.EXC function <span style="border: 1px solid black; padding: 2px;">2010</span>	<p><b>Statistical:</b> Returns the quartile of the data set, based on percentile values from 0..1, exclusive</p>

Function Name	Type and description
QUARTILE.INC function 2010	<b>Statistical:</b> Returns the quartile of a data set
QUOTIENT function	<b>Math and trigonometry:</b> Returns the integer portion of a division
RANDBETWEEN function	<b>Math and trigonometry:</b> Returns a random number between the numbers you specify
RANK.AVG function 2010	<b>Statistical:</b> Returns the rank of a number in a list of numbers
RANK.EQ function 2010	<b>Statistical:</b> Returns the rank of a number in a list of numbers  <b>Compatibility:</b> Returns the rank of a number in a list of numbers
RANK function	In Excel 2007, this is a <b>Statistical</b> function.
RATE function	<b>Financial:</b> Returns the interest rate per period of an annuity
RECEIVED function	<b>Financial:</b> Returns the amount received at maturity for a fully invested security
REGISTER.ID function	<b>Add-in and Automation:</b> Returns the register ID of the specified dynamic link library (DLL) or code resource that has been previously registered
REPLACE, REPLACEB functions	<b>Text:</b> Replaces characters within text
REPT function	<b>Text:</b> Repeats text a given number of times
ROMAN function	<b>Math and trigonometry:</b> Converts an arabic numeral to roman, as text

Function Name	Type and description
RRI function 2013	<b>Financial:</b> Returns an equivalent interest rate for the growth of an investment
RSQ function	<b>Statistical:</b> Returns the square of the Pearson product moment correlation coefficient
RTD function	<b>Lookup and reference:</b> Retrieves real-time data from a program that supports COM automation
SEC function 2013	<b>Math and trigonometry:</b> Returns the secant of an angle
SECH function 2013	<b>Math and trigonometry:</b> Returns the hyperbolic secant of an angle
SECOND function	<b>Date and time:</b> Converts a serial number to a second
SERIESSUM function	<b>Math and trigonometry:</b> Returns the sum of a power series based on the formula
SHEET function 2013	<b>Information:</b> Returns the sheet number of the referenced sheet
SHEETS function 2013	<b>Information:</b> Returns the number of sheets in a reference
SINH function	<b>Math and trigonometry:</b> Returns the hyperbolic sine of a number
SKEW function	<b>Statistical:</b> Returns the skewness of a distribution

Function Name	Type and description
SKEW.P function <span style="border: 1px solid black; padding: 2px;">2013</span>	<b>Statistical:</b> Returns the skewness of a distribution based on a population: a characterization of the degree of asymmetry of a distribution around its mean
SLN function	<b>Financial:</b> Returns the straight-line depreciation of an asset for one period
SLOPE function	<b>Statistical:</b> Returns the slope of the linear regression line
SMALL function	<b>Statistical:</b> Returns the k-the smallest value in a data set
SQL.REQUEST function	<b>Add-in and Automation:</b> Connects with an external data source and runs a query from a worksheet, then returns the result as an array without the need for macro programming
SQRTPI function	<b>Math and trigonometry:</b> Returns the square root of (number * pi)
STANDARDIZE function	<b>Statistical:</b> Returns a normalized value
STDEV function	<b>Compatibility:</b> Estimates standard deviation based on a sample
STDEV.P function <span style="border: 1px solid black; padding: 2px;">2010</span>	<b>Statistical:</b> Calculates standard deviation based on the entire population
STDEV.S function <span style="border: 1px solid black; padding: 2px;">2010</span>	<b>Statistical:</b> Estimates standard deviation based on a sample
STDEVA function	<b>Statistical:</b> Estimates standard deviation based on a sample, including numbers, text, and logical values

**Function Name****Type and description**

STDEVP function

**Compatibility:** Calculates standard deviation based on the entire population

In Excel 2007, this is a **Statistical** function.

STDEVPA function

**Statistical:** Calculates standard deviation based on the entire population, including numbers, text, and logical values

STEYX function

**Statistical:** Returns the standard error of the predicted y-value for each x in the regression

SUBSTITUTE function

**Text:** Substitutes new text for old text in a text string

SUBTOTAL function

**Math and trigonometry:** Returns a subtotal in a list or database

SUMIFS function

**Math and trigonometry:** Adds the cells in a range that meet multiple criteria

SUMPRODUCT function

**Math and trigonometry:** Returns the sum of the products of corresponding array components

SUMSQ function

**Math and trigonometry:** Returns the sum of the squares of the arguments

SUMX2MY2 function

**Math and trigonometry:** Returns the sum of the difference of squares of corresponding values in two arrays

SUMX2PY2 function

**Math and trigonometry:** Returns the sum of the sum of squares of corresponding values in two arrays

SUMXMY2 function

**Math and trigonometry:** Returns the sum of squares of differences of corresponding values in two arrays

**Function Name****Type and description**

SWITCH function

2016

**Logical:** Evaluates an expression against a list of values and returns the result corresponding to the first matching value. If there is no match, an optional default value may be returned.

This function isn't available in Excel 2016 for Mac.

SYD function

**Financial:** Returns the sum-of-years' digits depreciation of an asset for a specified period

T function

**Text:** Converts its arguments to text

TANH function

**Math and trigonometry:** Returns the hyperbolic tangent of a number

TBILLEQ function

**Financial:** Returns the bond-equivalent yield for a Treasury bill

TBILLPRICE function

**Financial:** Returns the price per \$100 face value for a Treasury bill

TBILLYIELD function

**Financial:** Returns the yield for a Treasury bill

T.DIST function

2010

**Statistical:** Returns the Percentage Points (probability) for the Student t-distribution

T.DIST.2T function

2010

**Statistical:** Returns the Percentage Points (probability) for the Student t-distribution

T.DIST.RT function

2010

**Statistical:** Returns the Student's t-distribution

TDIST function

**Compatibility:** Returns the Student's t-distribution



Function Name	Type and description
TEXT function	<b>Text:</b> Formats a number and converts it to text
TEXTJOIN function 2016	<b>Text:</b> Combines the text from multiple ranges and/or strings, and includes a delimiter you specify between each text value that will be combined. If the delimiter is an empty text string, this function will effectively concatenate the ranges.  This function isn't available in Excel 2016 for Mac.
TIME function	<b>Date and time:</b> Returns the serial number of a particular time
TIMEVALUE function	<b>Date and time:</b> Converts a time in the form of text to a serial number
T.INV function 2010	<b>Statistical:</b> Returns the t-value of the Student's t-distribution as a function of the probability and the degrees of freedom
T.INV.2T function 2010	<b>Statistical:</b> Returns the inverse of the Student's t-distribution
TINV function	<b>Compatibility:</b> Returns the inverse of the Student's t-distribution
TRANSPOSE function	<b>Lookup and reference:</b> Returns the transpose of an array
TREND function	<b>Statistical:</b> Returns values along a linear trend
TRIM function	<b>Text:</b> Removes spaces from text
TRIMMEAN function	<b>Statistical:</b> Returns the mean of the interior of a data set

Function Name	Type and description
T.TEST function 2010	<b>Statistical:</b> Returns the probability associated with a Student's t-test
TTEST function	<b>Compatibility:</b> Returns the probability associated with a Student's t-test
	In Excel 2007, this is a <b>Statistical</b> function.
TYPE function	<b>Information:</b> Returns a number indicating the data type of a value
UNICHAR function 2013	<b>Text:</b> Returns the Unicode character that is references by the given numeric value
UNICODE function 2013	<b>Text:</b> Returns the number (code point) that corresponds to the first character of the text
	<b>Compatibility:</b> Estimates variance based on a sample
VAR function	In Excel 2007, this is a <b>Statistical</b> function.
VAR.P function 2010	<b>Statistical:</b> Calculates variance based on the entire population
VAR.S function 2010	<b>Statistical:</b> Estimates variance based on a sample
	<b>Statistical:</b> Estimates variance based on a sample, including numbers, text, and logical values
VARA function	<b>Compatibility:</b> Calculates variance based on the entire population
VARP function	In Excel 2007, this is a <b>Statistical</b> function.
	<b>Statistical:</b> Calculates variance based on the entire population, including numbers, text, and logical values
VARPA function	<b>Statistical:</b> Calculates variance based on the entire population, including numbers, text, and logical values

Function Name	Type and description
VDB function	<p><b>Financial:</b> Returns the depreciation of an asset for a specified or partial period by using a declining balance method</p>
WEBSERVICE function <span style="border: 1px solid black; padding: 2px;">2013</span>	<p><b>Web:</b> Returns data from a web service.</p> <p>This function is not available in Excel Online.</p>
WEEKNUM function	<p><b>Date and time:</b> Converts a serial number to a number representing where the week falls numerically with a year</p>
WEIBULL function	<p><b>Compatibility:</b> Calculates variance based on the entire population, including numbers, text, and logical values</p> <p>In Excel 2007, this is a <b>Statistical</b> function.</p>
WEIBULL.DIST function <span style="border: 1px solid black; padding: 2px;">2010</span>	<p><b>Statistical:</b> Returns the Weibull distribution</p>
WORKDAY.INTL function <span style="border: 1px solid black; padding: 2px;">2010</span>	<p><b>Date and time:</b> Returns the serial number of the date before or after a specified number of workdays using parameters to indicate which and how many days are weekend days</p>
XIRR function	<p><b>Financial:</b> Returns the internal rate of return for a schedule of cash flows that is not necessarily periodic</p>
XNPV function	<p><b>Financial:</b> Returns the net present value for a schedule of cash flows that is not necessarily periodic</p>
YEARFRAC function	<p><b>Date and time:</b> Returns the year fraction representing the number of whole days between start_date and end_date</p>

Function Name	Type and description
YIELD function	<b>Financial:</b> Returns the yield on a security that pays periodic interest
YIELDDISC function	<b>Financial:</b> Returns the annual yield for a discounted security; for example, a Treasury bill
YIELDMAT function	<b>Financial:</b> Returns the annual yield of a security that pays interest at maturity
Z.TEST function <input type="text" value="2010"/>	<b>Statistical:</b> Returns the one-tailed probability-value of a z-test  <b>Compatibility:</b> Returns the one-tailed probability-value of a z-test
ZTEST function	In Excel 2007, this is a <b>Statistical</b> function.