July, 2023

OUTPUT TO EXCEL STARTER KIT

14 sample techniques to reproduce to bring your output Excel generation to a high level of dynamicity.

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alteryx

OUTPUT TO EXCEL – A SOLUTION FOR EVERY CONTEXT

You must choose and combine method according to your expectations and level

- Fast, high-quality formatting & Graphs
- Not dynamic
- Double maintenance Excel & Alteryx

- Dynamic
- Centralized maintenance
- Can be used for other format (pdf, mail, pcxml server, word, ppt…)
- Take longer to master
- Less precise rendering

- Simplicity
- Dynamicity
- Centralized maintenance
- No formatting

CONTENT

Understand and select the examples

	Level	Multi-file generation ?	Dynamic ?	Multi-tab generation ?	Dynamic ?	Formatting via Alteryx ?	Possibility of formats other than xlsx?	Multiline header management ?	Generating and pasting formula in Excel ?	Using Excel Preformated template?
The basics of Output Tool										
01. Generate static file+tab with raw data	Beginner	NO	NO	YES	NO	NO	NO	NO	NO	NO
02. Generation of a static file+tab with raw data pointing to a specific Excel area of the tab	Beginner	NO	NO	YES	NO	NO	NO	NO	YES	YES
03. Generation of a file with tabs dynamically generated according to dataset values	Beginner	NO	NO	YES	YES	NO	NO	NO	NO	NO
04. Generation of a Path + file + tabs + zone dynamically generated according to dataset values	Beginner	YES	YES	YES	YES	NO	NO	NO	NO	NO
Reporting tool basics (Table, Render, Layout, Report Text)										
05. Single-line header formatting using Table tool, then .xlsx generation using Render tool	Beginner	NO	NO	NO	NO	YES	YES	NO	NO	NO
06. Single-line header formatting via Table tool, then .xlsx generation via Render tool. Dynamic tab generation	Beginner	NO	NO	OUI	YES	YES	YES	NO	NO	NO
07. Multi-line header formatting (complex) via Table tool then Render.	Advanced	NO	NO	NO	NO	YES	YES	YES	NO	NO
The basics of using Excel templates = I copy/paste into a pre-formatted Excel file										
08. Insertion of result data in a pre-formatted Excel zone	Beginner	NO	NO	NO	NO	NO	NO	YES	NO	YES
09. Insertion of raw data in a data tab, which is then processed by a reporting tab with formulas and calculation	Beginner	NO	NO	NO	NO	NO	NO	YES	NO	YES
10. Duplicate a reference XLSX template BEFORE copying data into it.	Intermediate	NO	NO	NO	NO	NO	NO	YES	NO	YES
Mass distribution based on a single template										
11. Duplicate the same XLSX template for the N combinations, then copy/paste data into these N variations.	Intermediate	YES	YES	YES	YES	NO	NO	YES	NO	YES
12. Using Reporting tools, multi-tab N combinatorial declensions for SINGLE-line header tables	Intermediate	YES	YES	YES	YES	YES	YES	NO	NO	NO
13. Using Reporting tools, Combinatorial N declensions for MULTI-line header tables on several tabs	Advanced	NO	NO	YES	YES	YES	YES	YES	NO	NO
14. Dynamic formatting via Reporting + dynamic generation of formulas to paste into formatted output	Advanced	NO	NO	YES	YES	YES	NO	NO	YES	YES

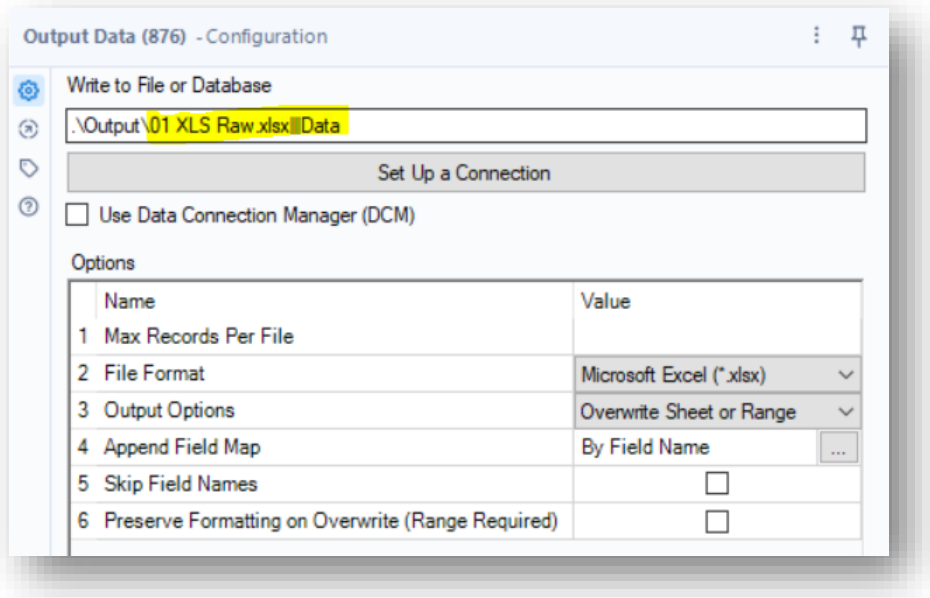
THE BASICS OF THE OUTPUT TOOL

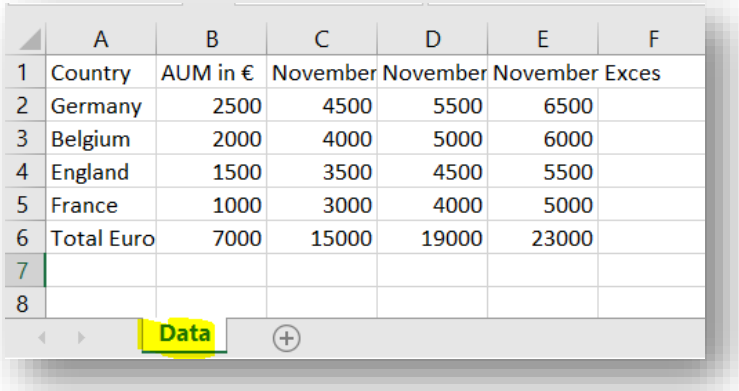
Master the basics to get the full potential.
There is powerful hidden options.

1 simple tool and so many options

01. Generate static file + tab with raw data

Easy to learn





	A	B	C	D	E	F
1	Country	AUM in €	November	November	November	Exces
2	Germany	2500	4500	5500	6500	
3	Belgium	2000	4000	5000	6000	
4	England	1500	3500	4500	5500	
5	France	1000	3000	4000	5000	
6	Total Euro	7000	15000	19000	23000	
7						
8						

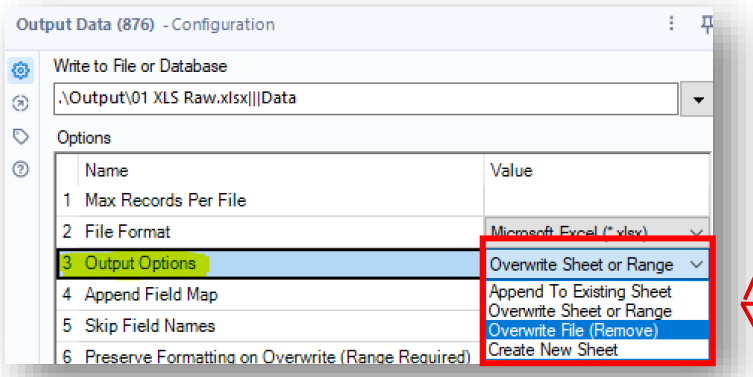
Data

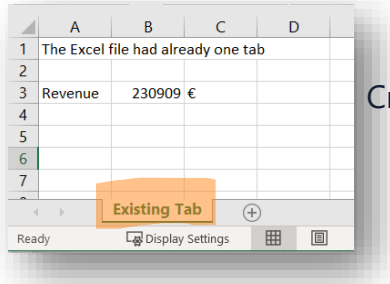
Comfort zone Basic single output with dynamic number of columns/ rows without formatting

01. Generate static file + tab with raw data

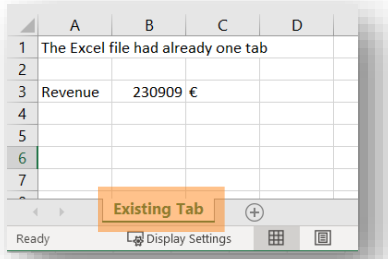
Understand how to manage the Existing Excel tabs.

Output Options allows you to manage the expected behavior of tabs that may already be present (previous launch) in the Excel workbook you're writing in.

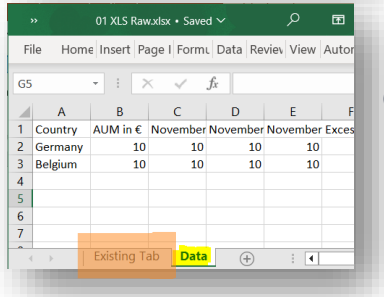




Create New sheet

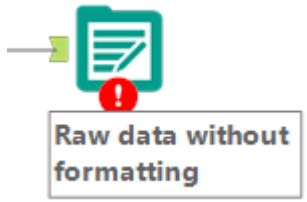


Overwrite File (Remove)

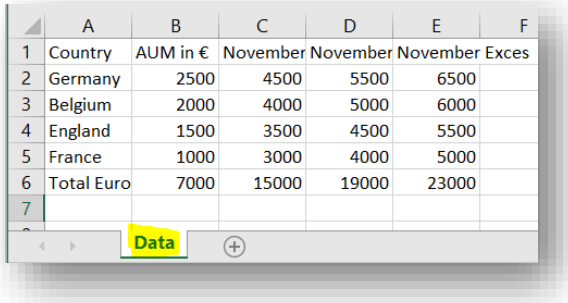


Overwrite sheet or Range

! ERROR !



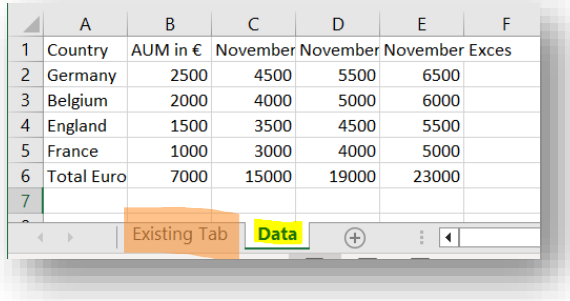
It raises an error if the **file** already exists. Otherwise create file and tab.
= you are sure this is the 1st time it runs



	A	B	C	D	E	F
1	Country	AUM in €	November	November	November	Exces
2	Germany	2500	4500	5500	6500	
3	Belgium	2000	4000	5000	6000	
4	England	1500	3500	4500	5500	
5	France	1000	3000	4000	5000	
6	Total Euro	7000	15000	19000	23000	
7						

Data

Delete/create the **file** (and existing tabs) to create a new one with just this tab.
= You are sure there is no old unrelevant tabs left



	A	B	C	D	E	F
1	Country	AUM in €	November	November	November	Exces
2	Germany	2500	4500	5500	6500	
3	Belgium	2000	4000	5000	6000	
4	England	1500	3500	4500	5500	
5	France	1000	3000	4000	5000	
6	Total Euro	7000	15000	19000	23000	
7						

Existing Tab | Data

Delete/create only the **tab** with the same name (if any). Existing tabs remain.
= you are sure you do not drop by mistake other tabs

02. Generation of a static file + tab with raw data pointing to a specific Excel range of the tab

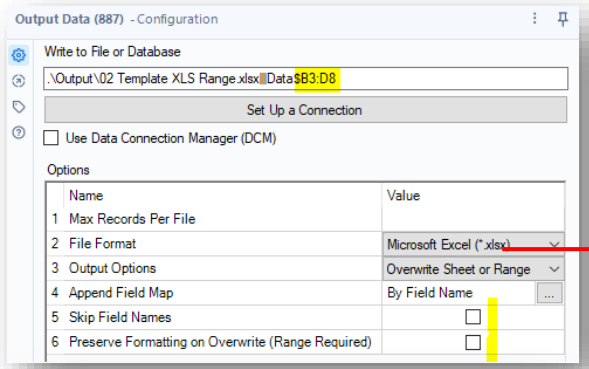
So powerful to reach advanced automation and dynamicity (cf next cases)

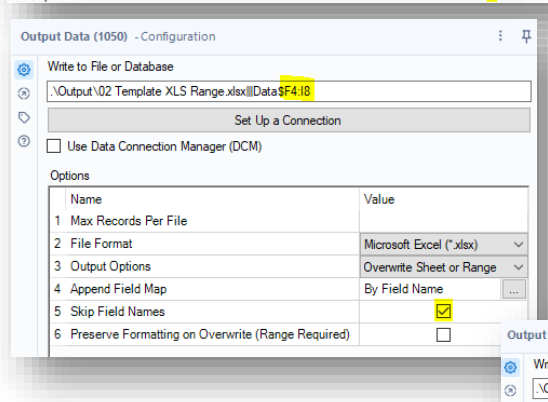
1 Raw data in Excel range

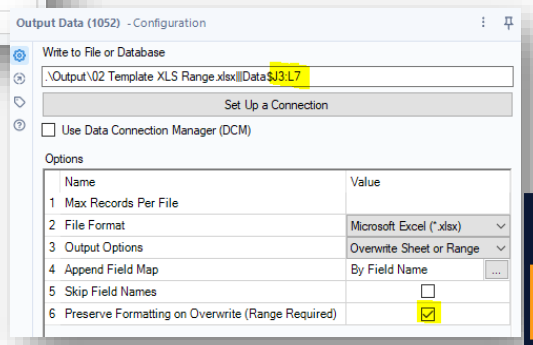
2 Raw data in Excel range without header

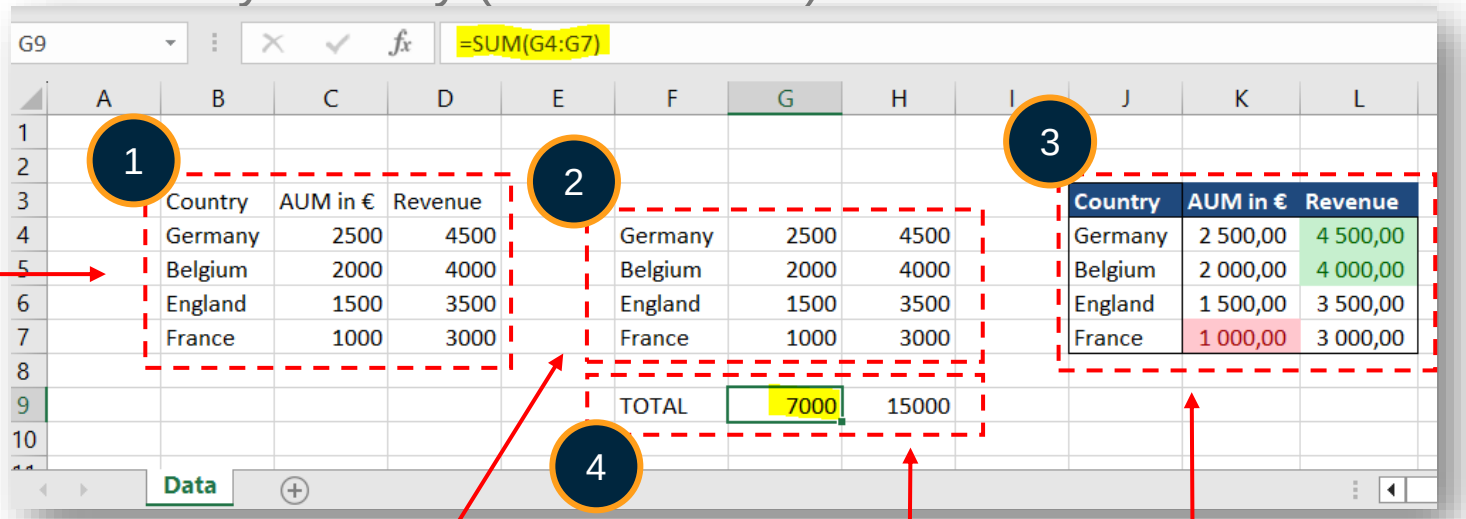
3 Raw data in Excel range without header

Keep existing formatting









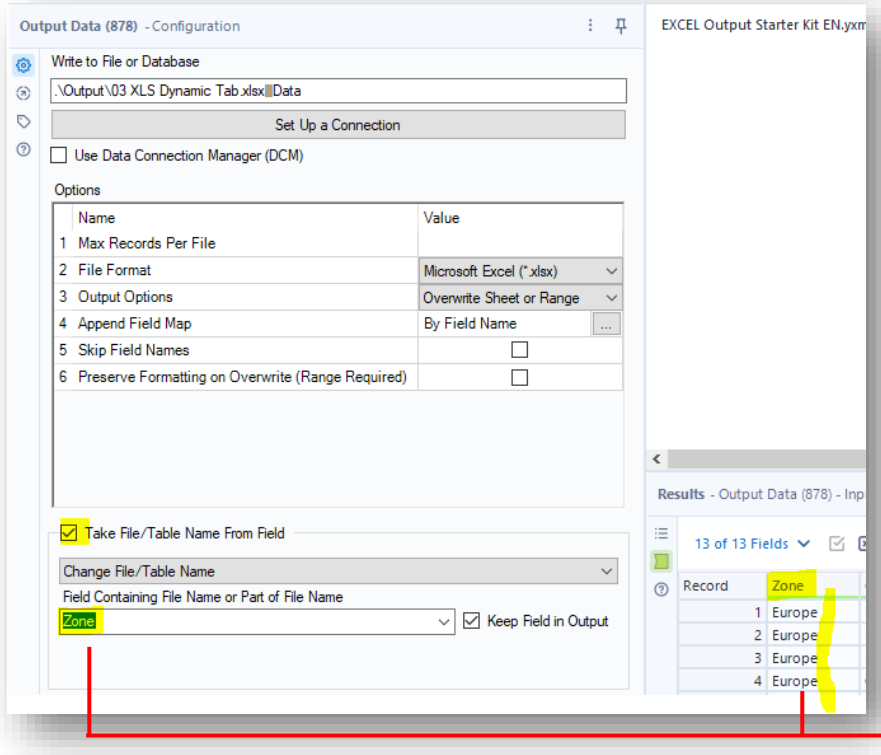
4 Copy/Past of an Excel formula

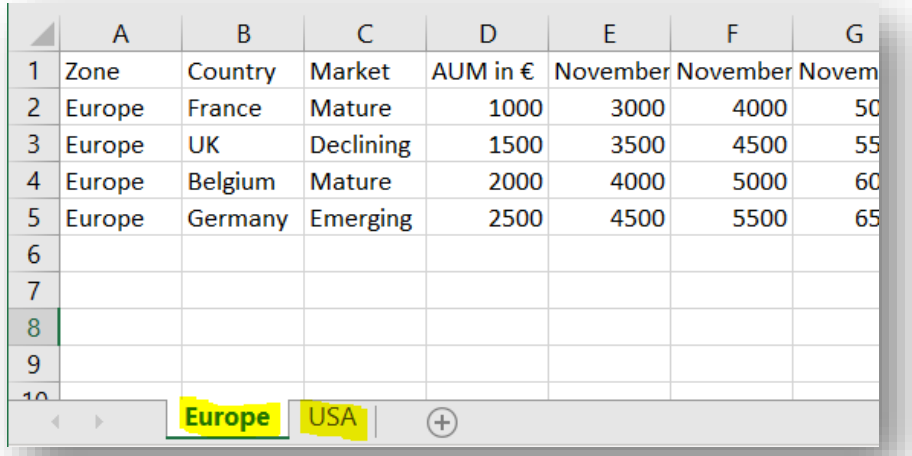
Comfort zone Few application as a standalone.
Very powerful when combined for advanced usage.

03. Generation of a file with tabs dynamically generated according to dataset values

Easy magic dynamicity starts here

You can select a column in your dataset on which you will split your output with different naming options





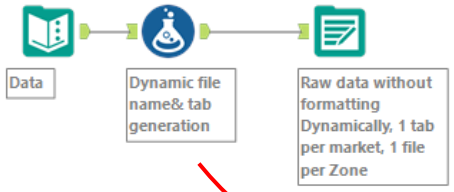
	A	B	C	D	E	F	G
1	Zone	Country	Market	AUM in €	November	November	Novem
2	Europe	France	Mature	1000	3000	4000	50
3	Europe	UK	Declining	1500	3500	4500	55
4	Europe	Belgium	Mature	2000	4000	5000	60
5	Europe	Germany	Emerging	2500	4500	5500	65
6							
7							
8							
9							

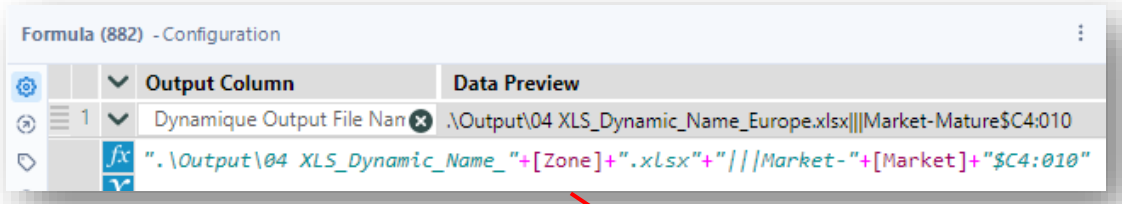
Europe USA

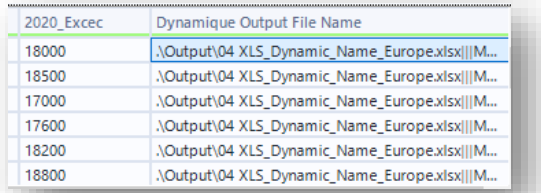
Comfort zone No formatting and when the number of output tab vary in time, maintenance is easier.

04. Generation of a Path + file + tabs + zone dynamically generated according to dataset values

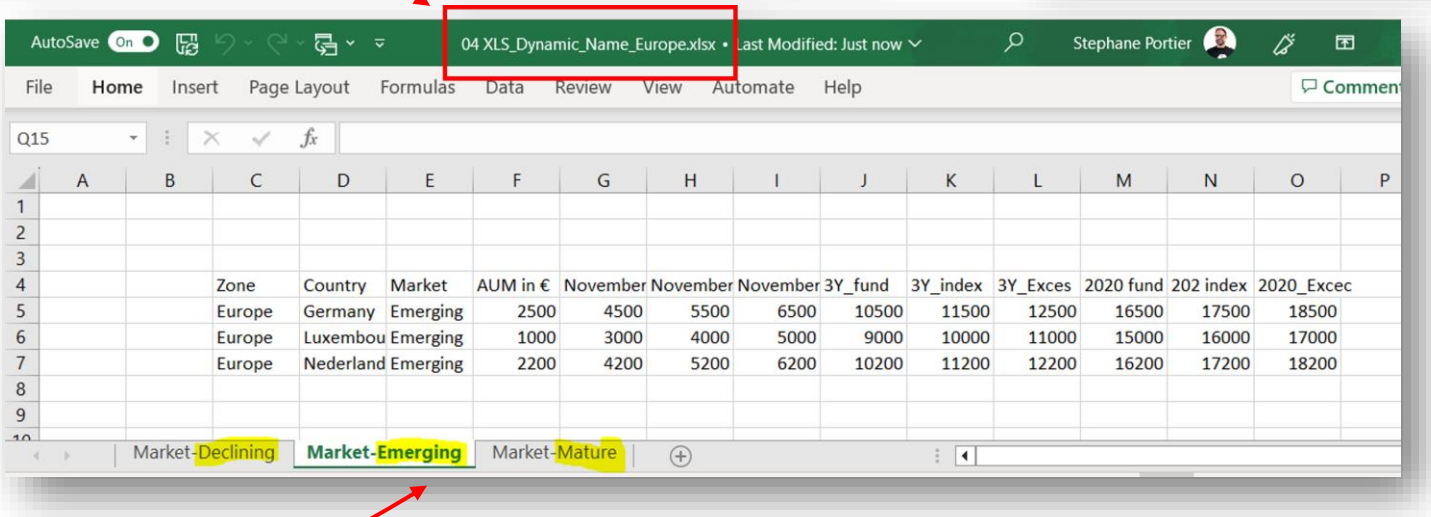
The MUST to know. Allow every single output Excel option to be dynamic based on your data



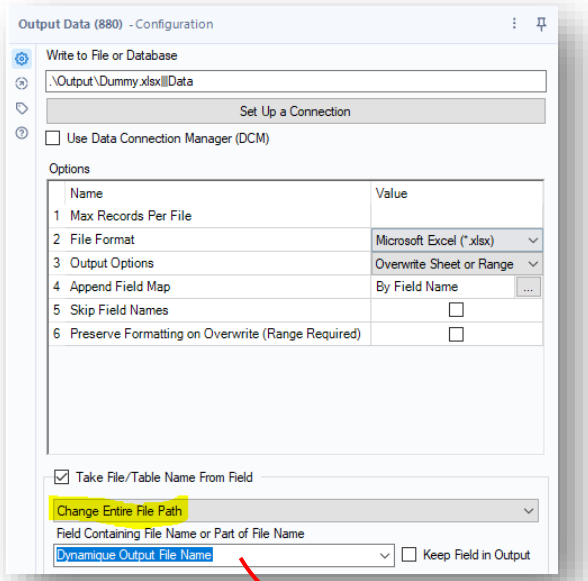




2020_Excec	Dynamique Output File Name
18000	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...
18500	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...
17000	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...
17600	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...
18200	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...
18800	.\Output\04 XLS_Dynamic_Name_Europe.xlsx|||M...



	Zone	Country	Market	AUM in €	November	November	November	3Y_fund	3Y_index	3Y_Exces	2020 fund	202 index	2020_Excec
5	Europe	Germany	Emerging	2500	4500	5500	6500	10500	11500	12500	16500	17500	18500
6	Europe	Luxembou	Emerging	1000	3000	4000	5000	9000	10000	11000	15000	16000	17000
7	Europe	Nederland	Emerging	2200	4200	5200	6200	10200	11200	12200	16200	17200	18200



Comfort zone Need of generate any output name dynamically based on data: Folder, file, tab, range Excellent for maintenance.

04. Generation of a Path + file + tabs + zone dynamically generated according to dataset values

The MUST to know. Allow every single output Excel option to be dynamic based on your data

The syntax always follow the same pattern:

[Windows path]\[File name].[extension]|||[Tab name]$[Upper left corner]:[Lower right corner]

Be sure to include separators:
\ before the file name
. Before the extension
||| (3 pipes) before the tab name
$ before the Excel range
: between the 2 corners delimiting the Excel zone

Mastering this syntax using the formula tool is a game changer and the path to a fully automated and dynamic workflow

Example:
C:\Alteryx\Workflows\REPORTING_XLS.xlx|||Data$A2:H90
⇒write in the file REPORTING_XLS.xlsx in the data tab in the range A2:H90

C:\Alteryx\Workflows\REPORTING_XLS.xlx|||Data
⇒write to file REPORTING_XLS.xlsx in data tab. No range defined.

So ANYTHING can be made dynamic via a formula.
Example:
".\Output\04 Reporting_"+[Zone]+".xlsx"+"|||Market-"+[Market]+"$C4:010"
generates:
.\Output\04 Reporting_Europe.xlsx|||Market-Mature$C4:010

=> Alteryx can be used to generate any files/tabs/zones in any directory.

THE BASICS OF THE REPORTING TOOL

Complex at 1st sight they have an incredible scaling ability once understood.

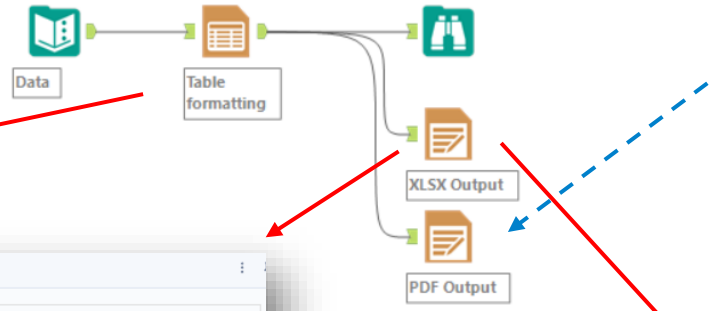
Beyond Excel they can generate a lot of others formats.

Native Alteryx's reporting tool, they allow to fully maintain the formatting in 1 place in a dynamic way

05. Single-line header formatting using Table tool, then .xlsx generation using Render tool

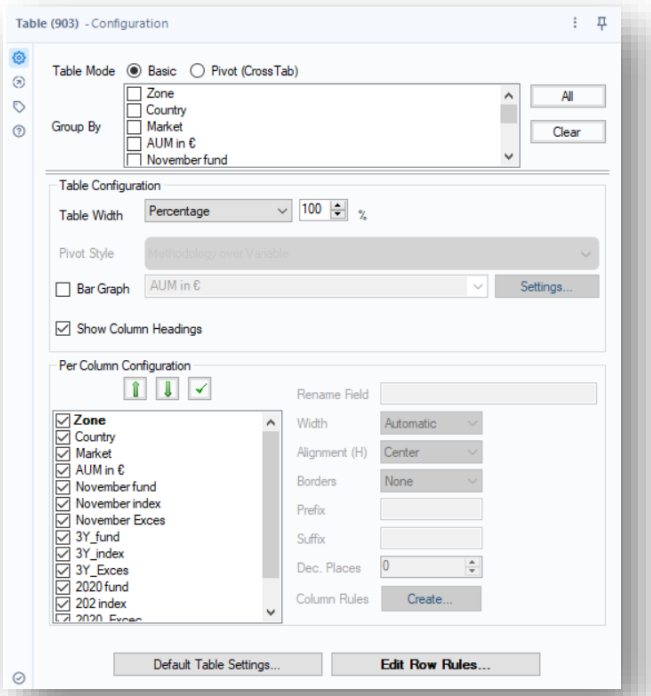
Learn the basics

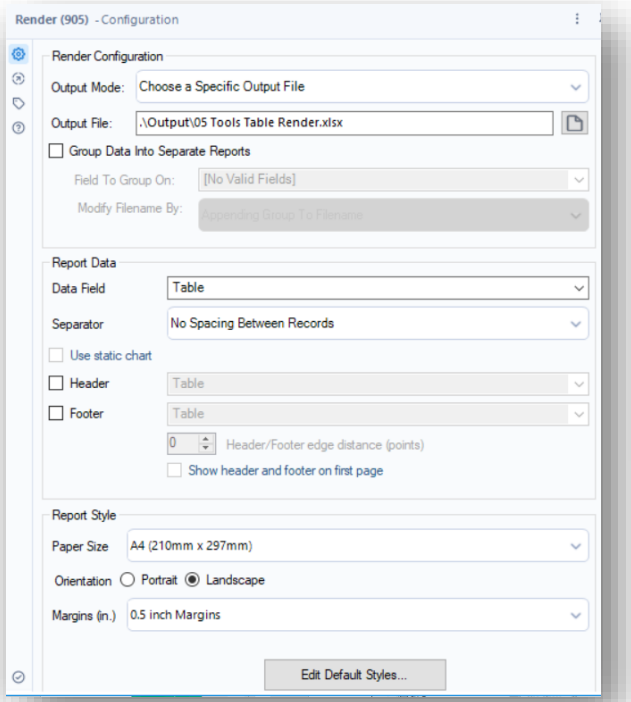
Unlike standard tools, **Table** and **Render** are more small application like and then richer. It also take more time to discover all the functionalities



With no additional effort you can generate other format (for other audience)

By default the table tool manage only single line header





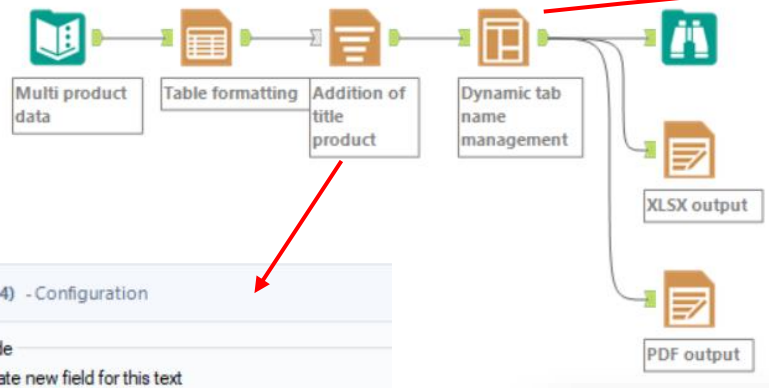
	A	B	C	D	E	F	G	H	I	J	K	L
1	Zone	Country	Market	AUM in €	November fund	November index	November Exces	3Y_fund	3Y_index	3Y_Exces	2020 fund	202 index
2	Europe	France	Mature	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000
3	Europe	UK	Declining	1 500	3 500	4 500	5 500	9 500	10 500	11 500	15 500	16 500
4	Europe	Belgium	Mature	2 000	4 000	5 000	6 000	10 000	11 000	12 000	16 000	17 000
5	Europe	Germany	Emerging	2 500	4 500	5 500	6 500	10 500	11 500	12 500	16 500	17 500
6	USA	Nevada	Emerging	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000
7	USA	Arizona	Mature	1 600	3 600	4 600	5 600	9 600	10 600	11 600	15 600	16 600
8	USA	Colorado	Emerging	2 200	4 200	5 200	6 200	10 200	11 200	12 200	16 200	17 200
9	USA	Texas	Mature	2 800	4 800	5 800	6 800	10 800	11 800	12 800	16 800	17 800
10												
11												

sheet1

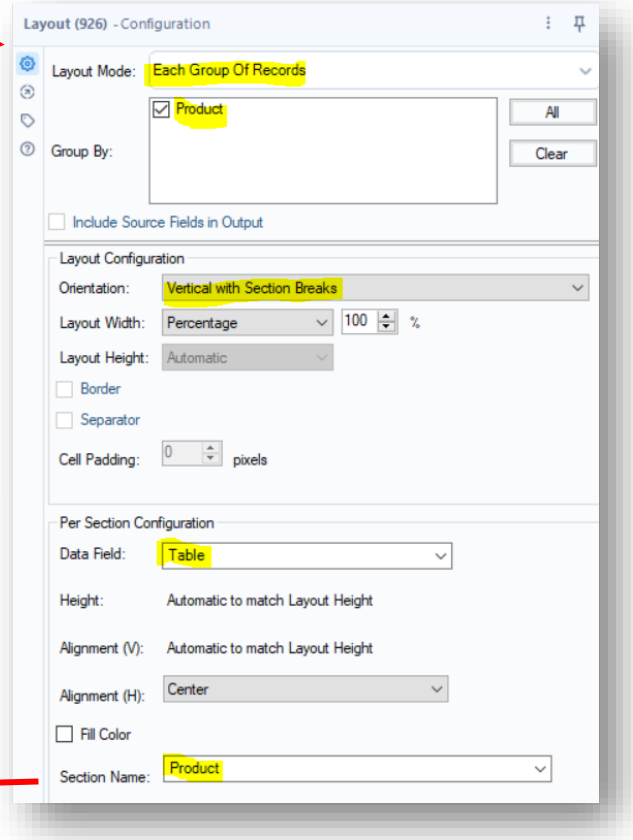
Comfort zone Single line header with dynamic numbers of rows and formatting. Potentially multi format output.

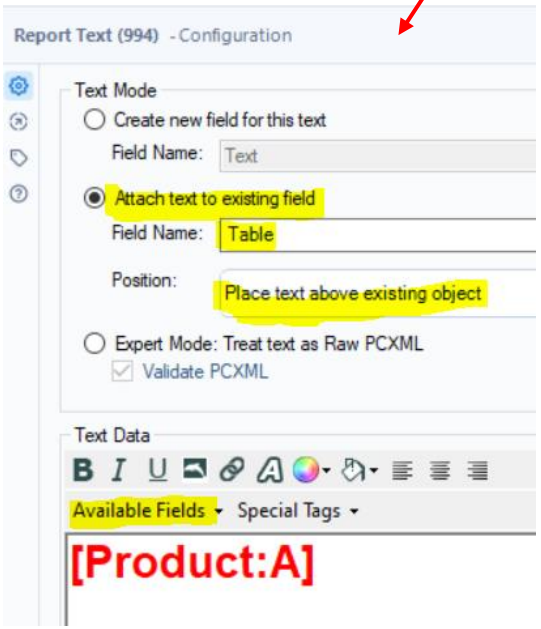
06. Single-line header formatting via Table tool, then .xlsx generation via Render tool. Dynamic tab generation

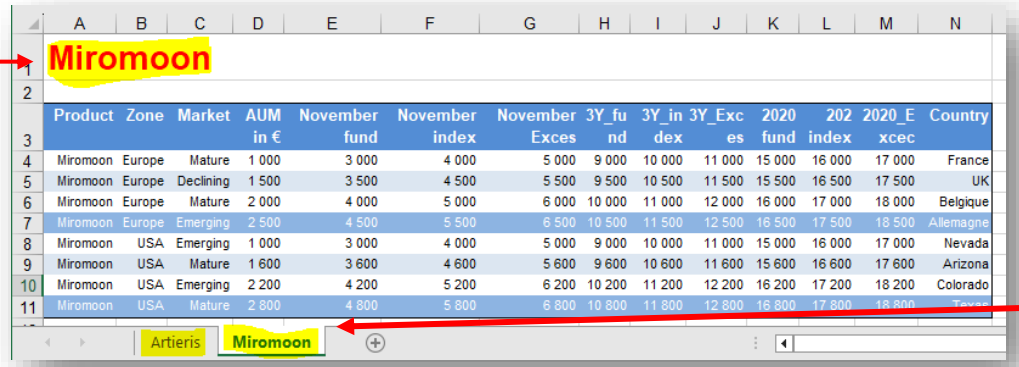
Easy to use (once you know the right options)



The **Layout** create sections (here based on Product) that are going to be used in the Render tool to switch from one tab to another.



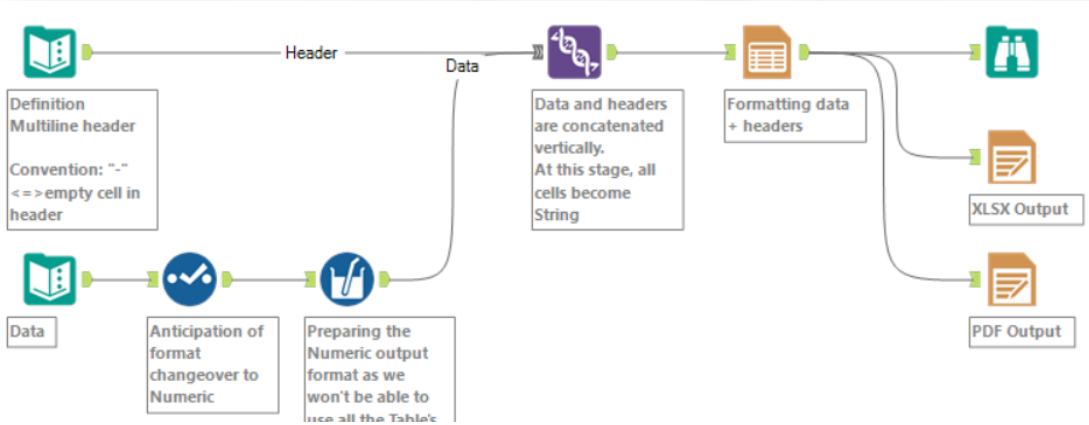




Comfort zone Single line header with dynamic numbers of rows, tabs and formatting. Potentially multi format output.

07. Multi-line header formatting (complex) via Table tool then Render.

Advanced formatting to manage dynamic number of rows/format and multi header



Scenario	AUM in €	November fund	November index	November Excess	3Y_fund	3Y_index	3Y_Excess	2020 fund	202 index	2020_Excec
1 -	-	-	-	-	-	Anualized	-	-	-	-
2 -	-	-	November	-	-	3Y	-	-	2023	-
3 Country	AUM in €	Fund	Index	Excess	Fund	Index	Excess	Fund	Index	Excess
5 Belgium	2 000	4 000	5 000	6 000	10 000	11 000	12 000	16 000	17 000	18 000
6 England	1 500	3 500	4 500	5 500	9 500	10 500	11 500	15 500	16 500	17 500
7 France	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000	17 000
8 Total Europe	7 000	15 000	19 000	23 000	39 000	43 000	47 000	63 000	67 000	71 000
9 Arizona	1 600	3 600	4 600	5 600	9 600	10 600	11 600	15 600	16 600	17 600
10 Colorado	2 200	4 200	5 200	6 200	10 200	11 200	12 200	16 200	17 200	18 200
11 Nevada	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000	17 000
12 Texas	2 800	4 800	5 800	6 800	10 800	11 800	12 800	16 800	17 800	18 800
13 Total USA	7 600	15 600	19 600	23 600	39 600	43 600	47 600	63 600	67 600	71 600
14 Grand Total	14 600	30 600	38 600	46 600	78 600	86 600	94 600	126 600	134 600	142 600

1						Anualized					
2			November			3Y			2023		
3	Country	AUM in €	Fund	Index	Excess	Fund	Index	Excess	Fund	Index	Excess
5	Belgium	2 000	4 000	5 000	6 000	10 000	11 000	12 000	16 000	17 000	18 000
6	England	1 500	3 500	4 500	5 500	9 500	10 500	11 500	15 500	16 500	17 500
7	France	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000	17 000
8	Total Europe	7 000	15 000	19 000	23 000	39 000	43 000	47 000	63 000	67 000	71 000
9	Arizona	1 600	3 600	4 600	5 600	9 600	10 600	11 600	15 600	16 600	17 600
10	Colorado	2 200	4 200	5 200	6 200	10 200	11 200	12 200	16 200	17 200	18 200
11	Nevada	1 000	3 000	4 000	5 000	9 000	10 000	11 000	15 000	16 000	17 000
12	Texas	2 800	4 800	5 800	6 800	10 800	11 800	12 800	16 800	17 800	18 800
13	Total USA	7 600	15 600	19 600	23 600	39 600	43 600	47 600	63 600	67 600	71 600
14	Grand Total	14 600	30 600	38 600	46 600	78 600	86 600	94 600	126 600	134 600	142 600

By default the Table tool only manage single header. You can combine different Table object to create a multi-header but this is complex and not easy to maintain.

This presented solution manage the multi header as special case of data rows. You move from complex combination of several tools to complex formatting of one single Table tool.

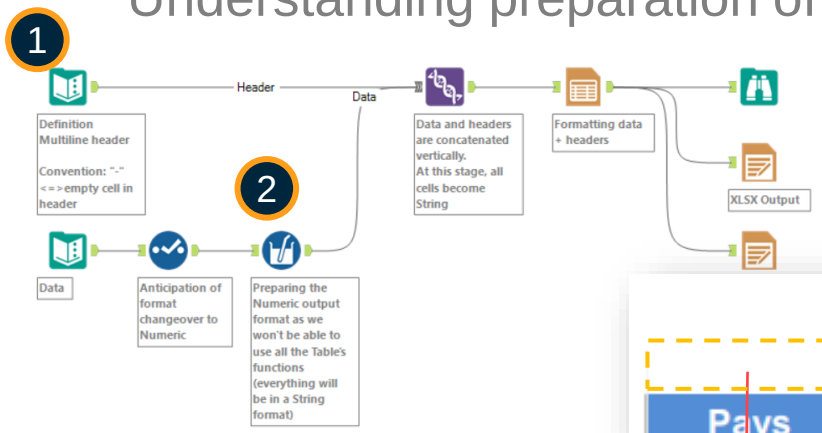
Principle: generate a single data table which is the vertical Union of the Header and the Data.

Then you format this single table using the standard Table formatting, the header being a particular case to manage.

Comfort zone Multi line header with dynamic numbers of rows and formatting. Potentially multi format output.

07. Multi-line header formatting (complex) via Table tool then Render.

Understanding preparation of the header



1 Generate separately Data and Header. Easier to build dynamically the header.

- Tips: Header blank cells have to be filled with a “-” to differentiate it from emply data and also have a common heigh regarding other cells

		Anualized								
		November			3Y			2020		
Pays	AUM in €	Fund	Index	Excess	Fund	Index	Excess	Fund	Index	Excess

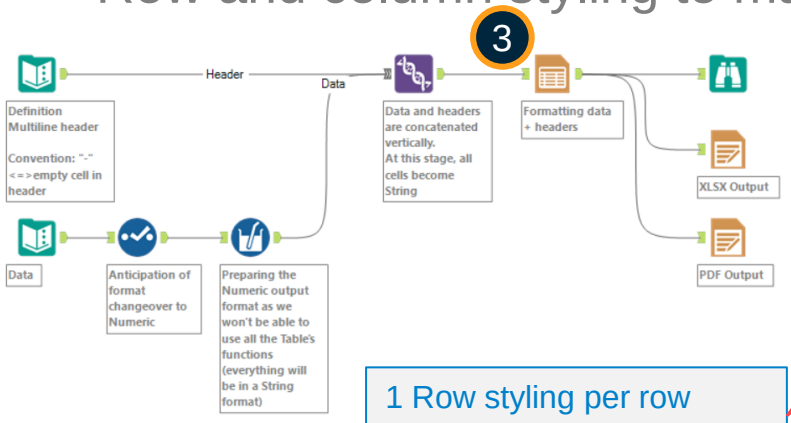
- 3 header rows => 3 dedicated data rows in the table
- Header blanks "without text" are indicated by a dedicated character "-".

...	Scenario	AUM in €	November fund	November index	November Exces	3Y_fund	3Y_index	3Y_Exces	2020 fund	202 index	2020_Excec
1	-	-	-	-	-	-	Anualized	-	-	-	-
2	-	-	-	November	-	-	3Y	-	-	2020	-
3	Pays	AUM in €	Fund	Index	Excess	Fund	Index	Excess	Fund	Index	Excess

2 As the header are String, when combining to the data it will switch the full table (header + data) to string. You then need to manage the output format before the Union.

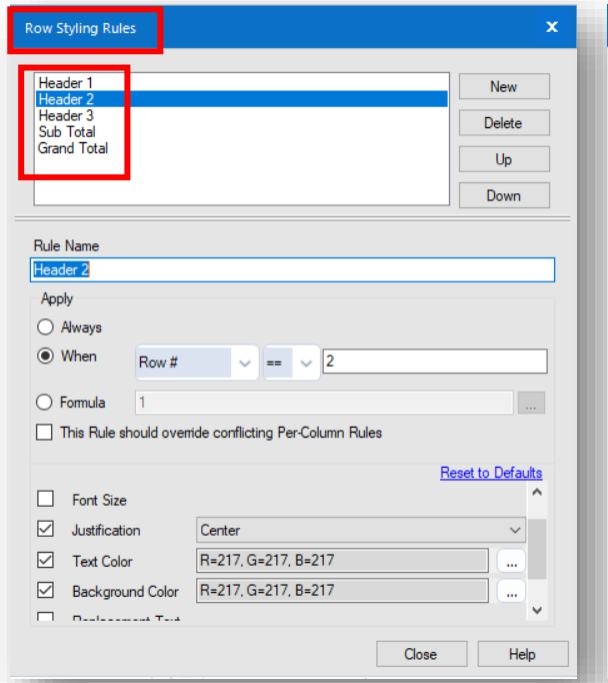
07. Multi-line header formatting (complex) via Table tool then Render.

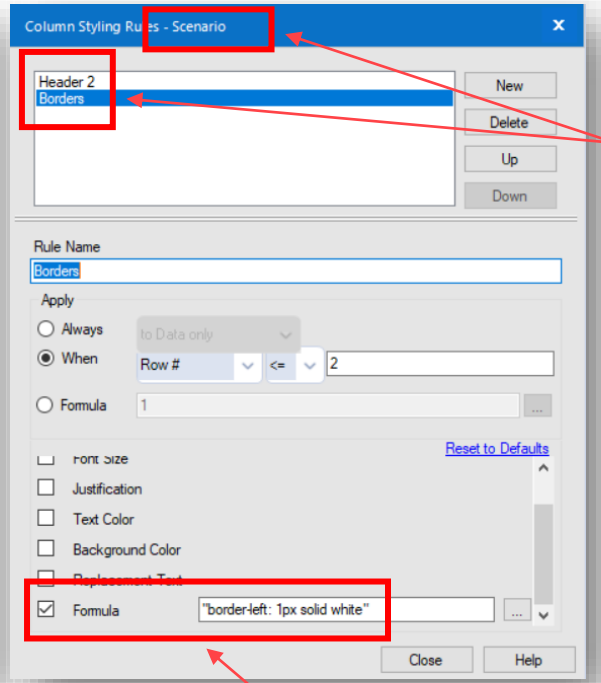
Row and column styling to manage the header specificities



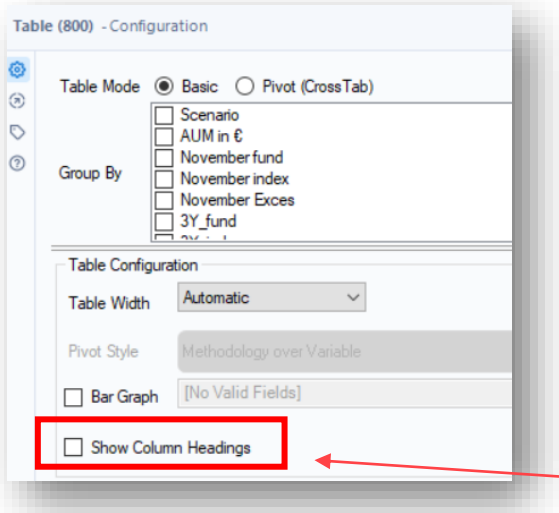
3 Formatting has to be manage jointly for header and data, in the Row styling and column styling rules.

1 Row styling per row header + per data type





… Combine with Column styling per header + per data type

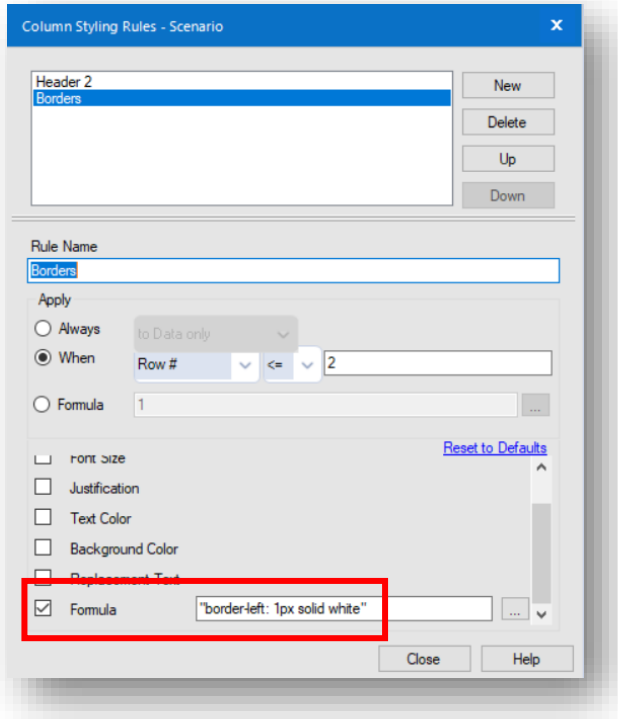


Standard Data headings have to be unchecked

Particular border case associated with header have to be managed using the CSS language (cf next slide)

07. Multi-line header formatting (complex) via Table tool then Render.

What is the CSS syntax adapt to Alteryx?



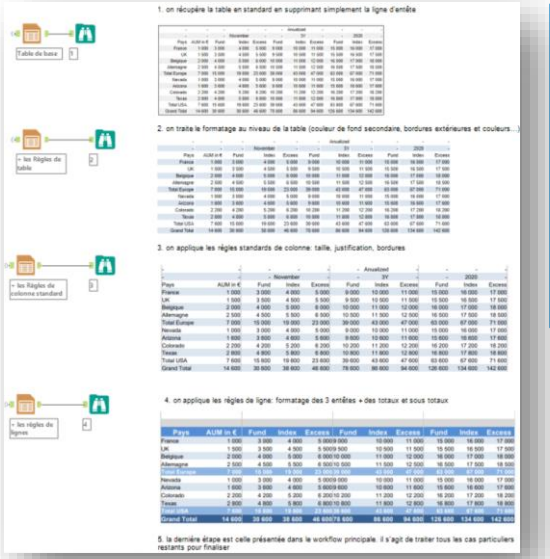
CSS is a generic language used in HTML page. It can be used in the Table to in the “Formula” menu. Its main usage is to manage conditionally the borders.

Here is a list of CSS syntax that can be used within Alteryx

CSS Syntaxe	Initial	Formated	Function
	My Text	My Text	<=== Insert on the left your syntax to test, the result will be displayed on the "Formated" column
background-color: rgb(0,128,255)	My Text	My Text	The background color of a table cell or row.
background-color: yellow	My Text	My Text	
	----	----	
prefix: $	2300	$2300	
postfix: hrs	2300	2300hrs	
	----	----	
color: red	My Text	My Text	Foreground color of the object.
color: rgb(0,128,255)	My Text	My Text	
	----	----	
border-left: 1px solid red	My Text	My Text	Define the borders around an element.
border-right: 3px solid green	My Text	My Text	3px = 3 pixel wide
border-top: 1px solid grey	My Text	My Text	solid = plain row (Note: dash or double line does not work)
border-bottom: 4px solid rgb(0,128,255)	My Text	My Text	For the color you can use RGB or the color name (cf table)
	----	----	
font-family: broadway	My Text	My Text	select the font
	----	----	
font-size: 11	My Text	My Text	Set how thick or thin characters in text should be displayed.
	----	----	
font-style: normal	My Text	My Text	Set the style of a font: normal, italic, oblique
font-style: oblique	My Text	*My Text*	
	----	----	
font-weight: normal	My Text	My Text	
font-weight: bold	My Text	**My Text**	
	----	----	
text-align: left	My Text	My Text	Align the text in an element
text-align: right	My Text	My Text	
text-align: center	My Text	My Text	
	----	----	
text-decoration: underline	My Text	My Text	The decoration of the text such as overline, underline, line-through, none, or blink
text-decoration: line-through	My Text	~~My Text~~	
text-decoration: none	My Text	My Text	

07. Multi-line header formatting (complex) via Table tool then Render.

More explanations about Multi header and CSS?



Articles about the multi row header using the Table tool + Workflow examples (French):

- **Lesson 1**
  https://community.alteryx.com/t5/Blog-Francais/Reporting-avance-ou-le-paradoxe-de-Spock-10-Entete-multi-lignes/ba-p/956769
- **Lesson 2**
  https://community.alteryx.com/t5/Blog-Francais/Reporting-avance-ou-le-paradoxe-de-Spock-11-Entete-multi-lignes/ba-p/956821

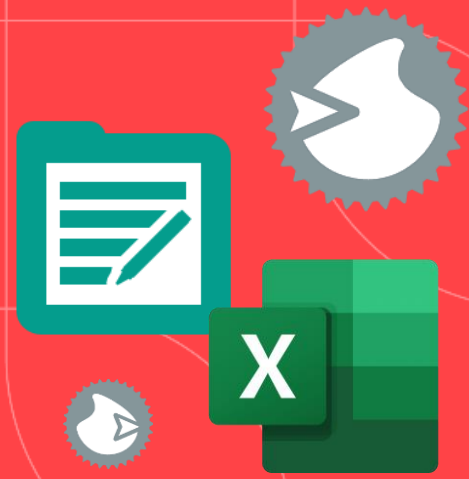
```
// Valeur <= 2
if [Col1]<=2
then
       "color: dodgerblue;
       background-color: white;
       border-right: 2px solid dodgerblue;
       border-left: 2px solid dodgerblue;
       border-top: 2px solid dodgerblue;
       border-bottom: 2px solid dodgerblue;"
// Valeur >= 8
elseif [Col1]>=8
then
       "color: white;
       border-right: 1px solid dodgerblue;
       border-left: 1px solid dodgerblue;
       border-top: 1px solid dodgerblue;
       border-bottom: 1px solid dodgerblue;
       background-color: dodgerblue"
// Autres cellules
else ""
endif
```

Detailed CSS Article (French) & workflow examples:

- **Discover CSS in Alteryx**
  https://community.alteryx.com/t5/Blog-Francais/Reporting-avance-ou-le-paradoxe-de-Spock-3-Decouverte-de-la/ba-p/918777
- **1st advanced example:**
  https://community.alteryx.com/t5/Blog-Francais/Reporting-avance-ou-le-paradoxe-de-Spock-4-1er-Exemple-avance-d/ba-p/919319
- **2nd Advanced Example:**
  https://community.alteryx.com/t5/Blog-Francais/Reporting-avance-ou-le-paradoxe-de-Spock-5-2eme-Exemple-avance-d/ba-p/919380

THE BASICS OF USING EXCEL TEMPLATES

= Alteryx copy/paste into a pre-formatted Excel file



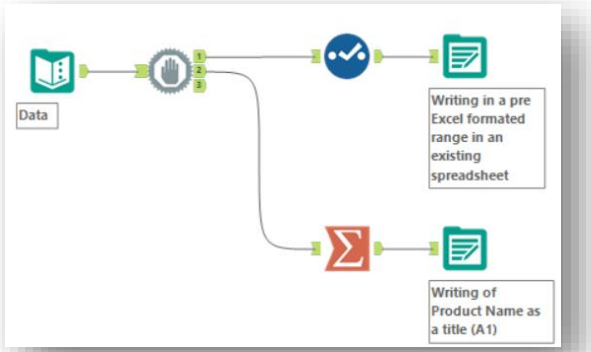
Best of breed

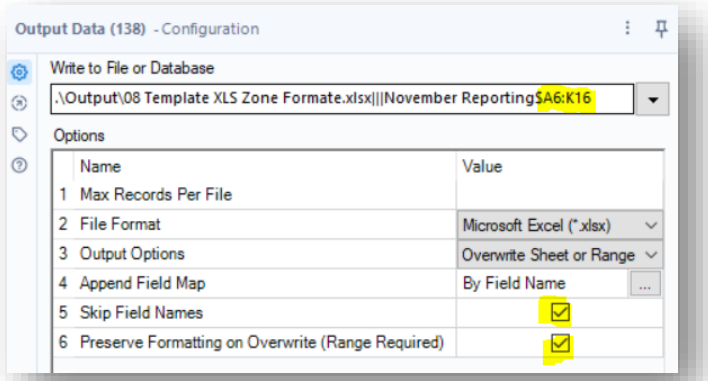
Leverage the power of Alteryx to dynamically prepare the data and…

the power of Excel to prepare quick and nice reports

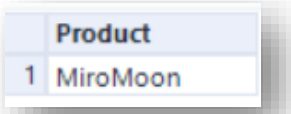
08. Insertion of result data in a pre-formatted Excel range

Quick win for single table output.

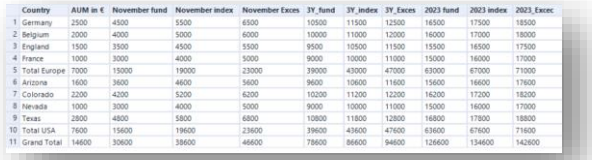




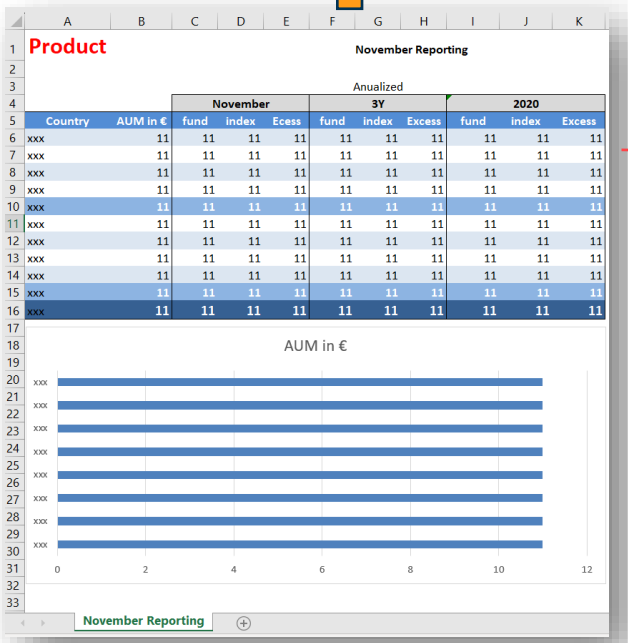
Range definition + No header + preserving of Excel format



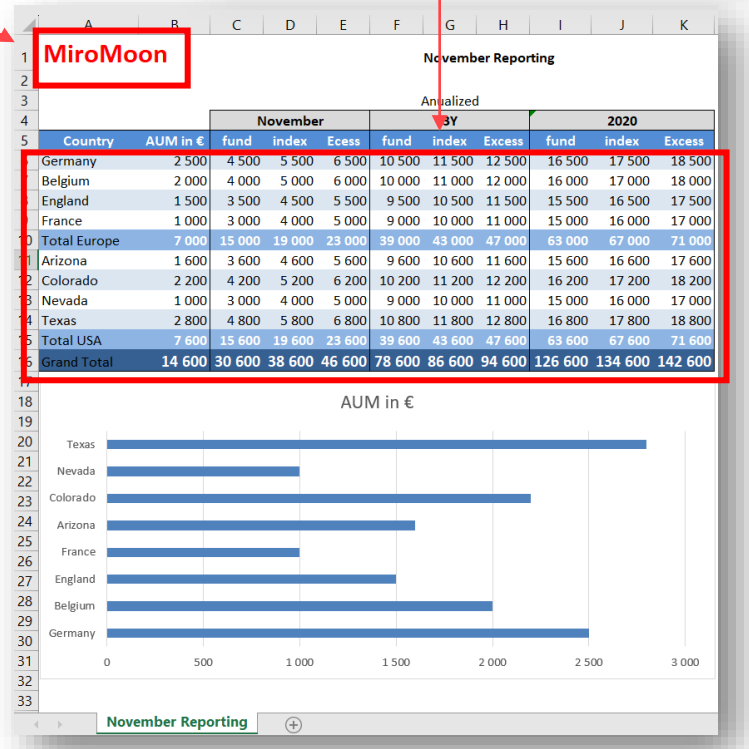
2. Alteryx Single data



3. Alteryx data table



1. Excel clean template

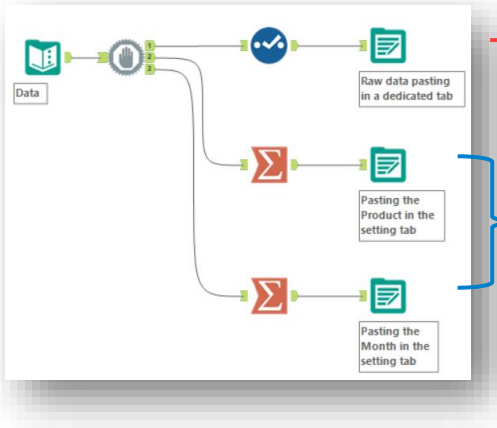


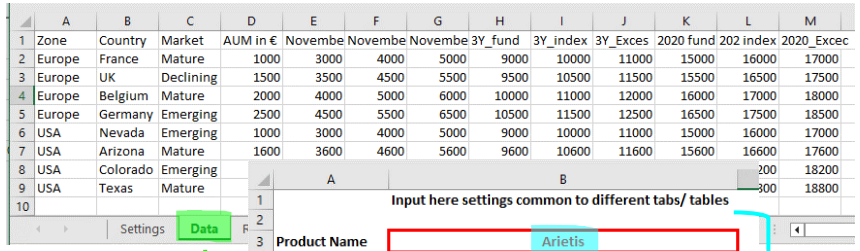
Comfort zone Basic single output table with stable clean format + graph. No dynamicity except on data.

09. Raw data in a data tab, which is then processed by a reporting tab with formulas and calculations.

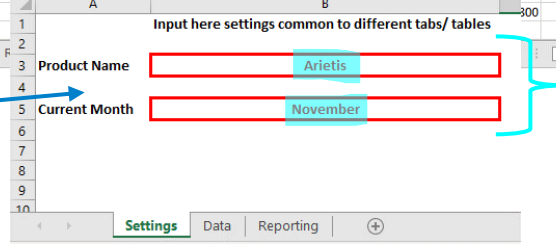
Quick win for several tabs and tables output

1 Pasting raw data in a Data tab

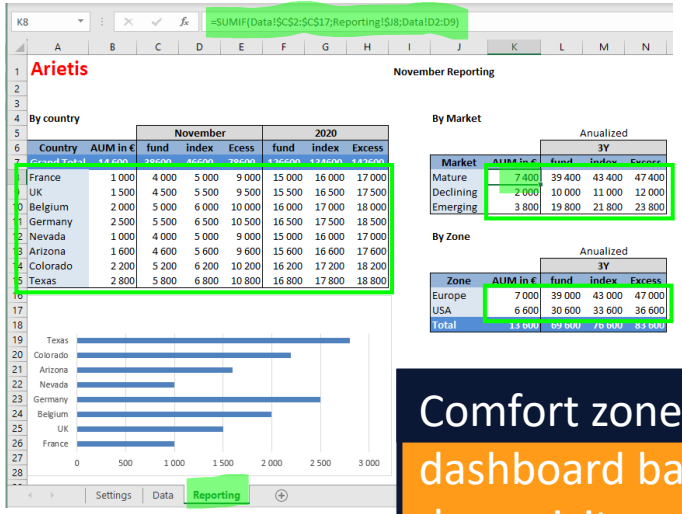




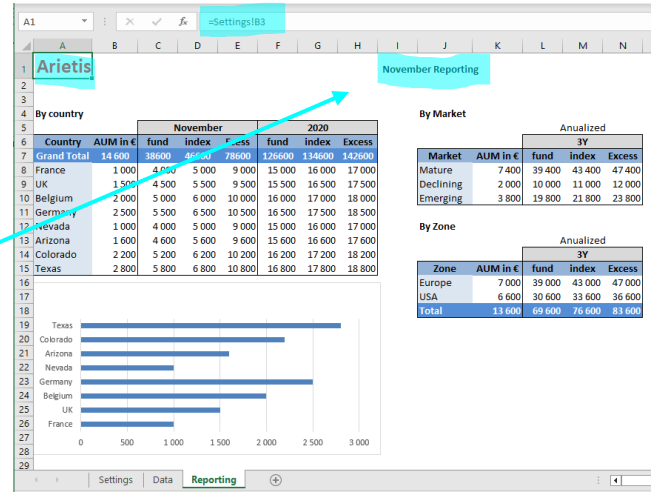
2 Pasting "Current setting" info in a Setting tab



3 Existing Formulas in pre-formatted tables use the data in every needed Tab to populate dashboard and graph



4 Existing Formulas in pre-formatted tabs use the settings in every needed Tab



A pre-existing template exists with 3 tabs:

- **Data** to receive raw data
- **Settings** to receive common settings (month, product…)
- **Reporting** with pre-formatted reporting with formulas pointing on the data tab

When several dashboard are presenting the same dataset on different view it can be easier to maintain by having all of it pointing on a single tab using formulas. Excel file can be updated independently from Alteryx workflow. This is a 1 alteryx output to N Excel Reports.

Comfort zone Excel booklet with several dashboard based on common dataset. No dynamicity except on data.

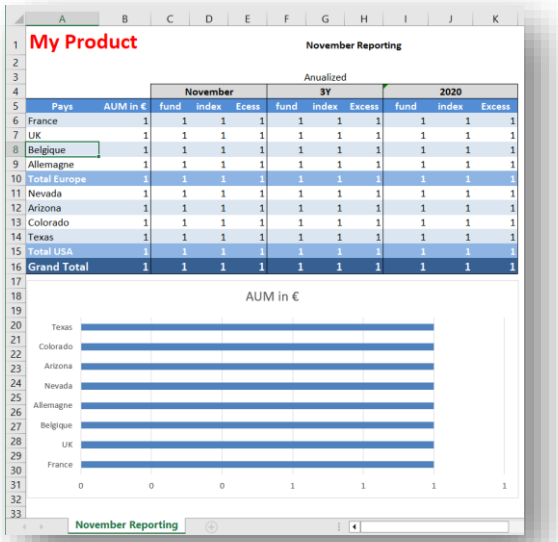
Mass distribution based on a single template

Here are the example combining the best of each options to bring the workflow at an high level of dynamicity and customisation

11. Duplicate the same XLSX template for the N combinations, then copy/paste data into these N variations.

The ultimate quick win for mass reporting

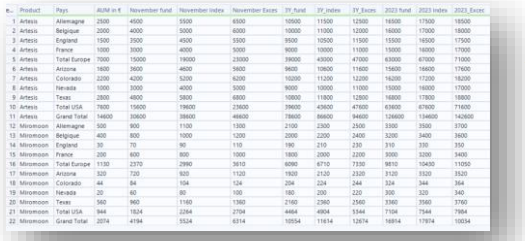
One Excel Empty Template



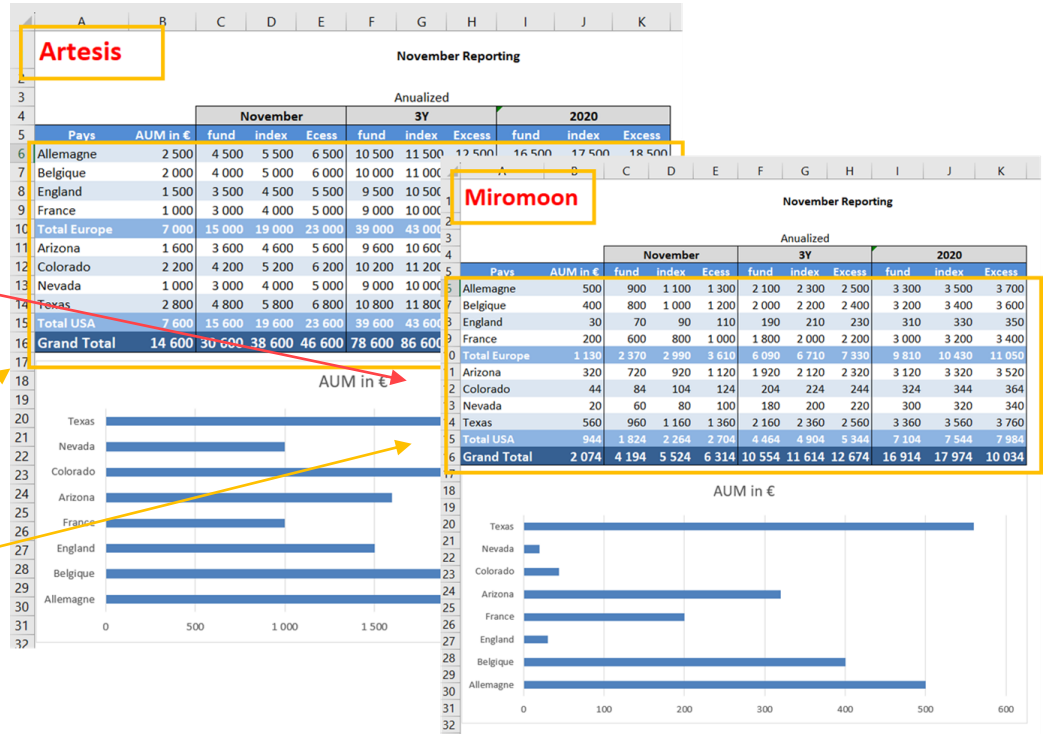
1 Template duplication

2 Pasting N times the data in specific File/Tab/range

Prepared data by Product



N times the template filled with the right data

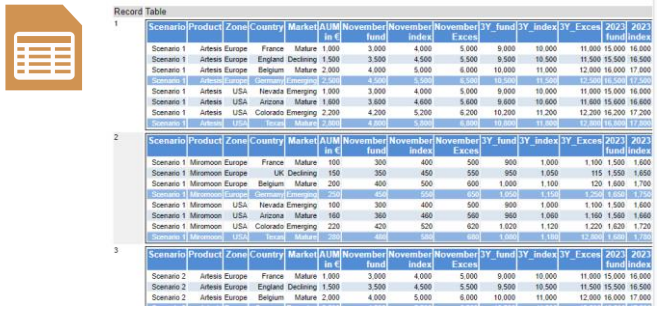


Comfort zone Mass reporting with advanced Excel formatting but no dynamicity in the table size

12. Using Reporting tools, multi-tab N combinatorial declensions for SINGLE-line header tables

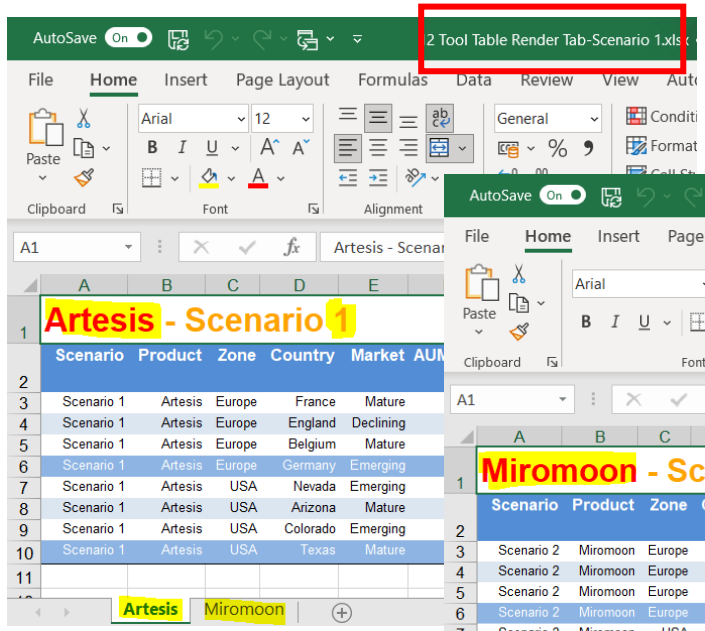
From 1 unique Table tool you can generate hundreds of declinations

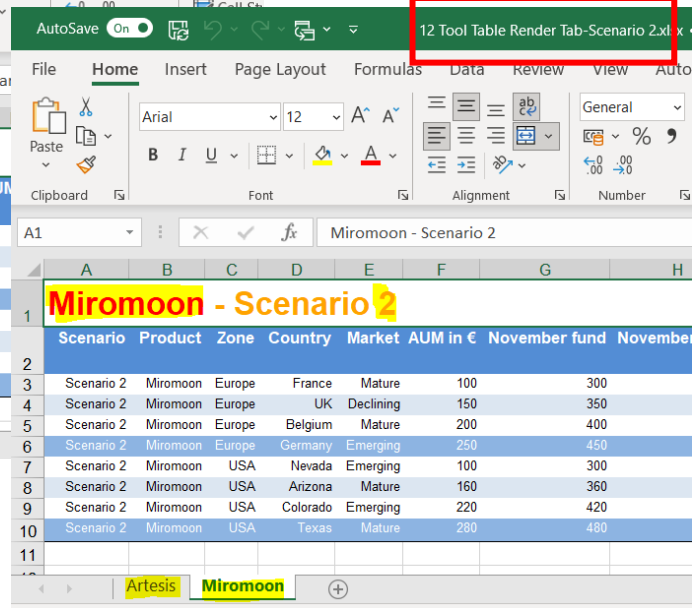
1 *Table* tool to format the common table for all the data combination



2 *Layout* tool to split the combination by File / Tab and *Formula* to generate the file path/name

	Scenario	Product	Layout	Output File
1	Scenario 1	Artesis	Layout - Visualiser Explorateur Outil Rapport On...	.\Output\12 Tool Table Render Tab-Scenario 1.xlsx
2	Scenario 1	Miromoon	Layout - Visualiser Explorateur Outil Rapport On...	.\Output\12 Tool Table Render Tab-Scenario 1.xlsx
3	Scenario 2	Artesis	Layout - Visualiser Explorateur Outil Rapport On...	.\Output\12 Tool Table Render Tab-Scenario 2.xlsx
4	Scenario 2	Miromoon	Layout - Visualiser Explorateur Outil Rapport On...	.\Output\12 Tool Table Render Tab-Scenario 2.xlsx





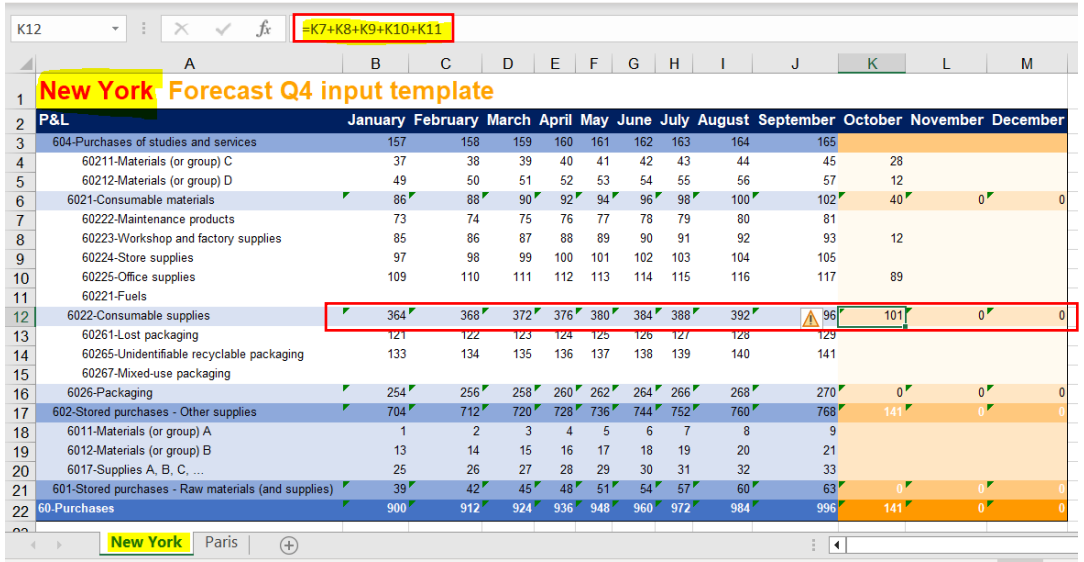
Comfort zone Single mono header table to decline by numerous combination File + tab. Range have to be dynamic and advanced Excel formatting is not important.

14. Dynamic formatting via Reporting + dynamic generation of formulas to paste into formatted output

Advanced example showing dynamicity at every step. Only in Alteryx…

Use case description:

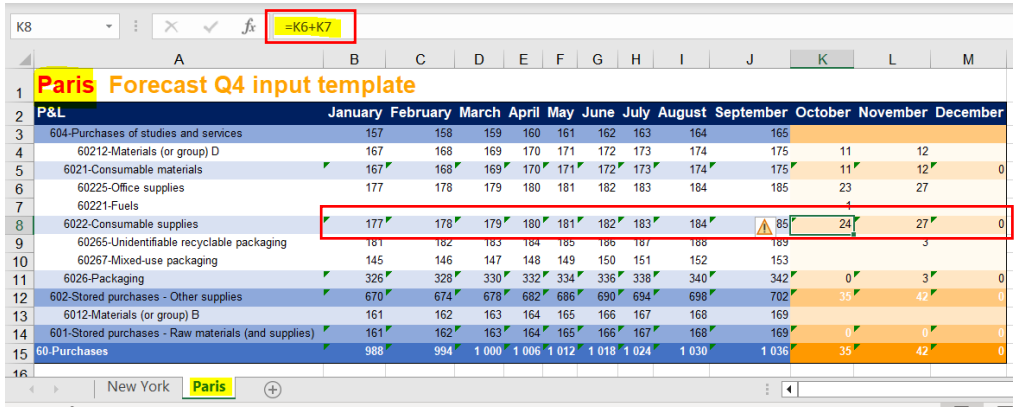
I want to generate an input template for each entity. But from one to another they must not input the same rows. Moreover, to help my user to validate their input 1 want them to have Subtotals live within Excel ⇔ Excel formulas have to be generated. In blue the historical data. In orange the part to be inputed by users for Q4 forecast.



P&L	January	February	March	April	May	June	July	August	September	October	November	December
604-Purchases of studies and services	157	158	159	160	161	162	163	164	165			
60211-Materials (or group) C	37	38	39	40	41	42	43	44	45	28		
60212-Materials (or group) D	49	50	51	52	53	54	55	56	57	12		
6021-Consumable materials	86	88	90	92	94	96	98	100	102	40	0	0
60222-Maintenance products	73	74	75	76	77	78	79	80	81			
60223-Workshop and factory supplies	85	86	87	88	89	90	91	92	93	12		
60224-Store supplies	97	98	99	100	101	102	103	104	105			
60225-Office supplies	109	110	111	112	113	114	115	116	117	89		
60221-Fuels												
6022-Consumable supplies	364	368	372	376	380	384	388	392	96	101	0	0
60261-Lost packaging	121	122	123	124	125	126	127	128	129			
60265-Unidentifiable recyclable packaging	133	134	135	136	137	138	139	140	141			
60267-Mixed-use packaging												
6026-Packaging	254	256	258	260	262	264	266	268	270	0	0	0
602-Stored purchases - Other supplies	704	712	720	728	736	744	752	760	768	141	0	0
6011-Materials (or group) A	1	2	3	4	5	6	7	8	9			
6012-Materials (or group) B	13	14	15	16	17	18	19	20	21			
6017-Supplies A, B, C, …	25	26	27	28	29	30	31	32	33			
601-Stored purchases - Raw materials (and supplies)	39	42	45	48	51	54	57	60	63	0	0	0
60-Purchases	900	912	924	936	948	960	972	984	996	141	0	0

New York

Have all the accounts to be inputed. So that for instance the subtotal account 6022 (in K12) is the sum of 5 others cells.



P&L	January	February	March	April	May	June	July	August	September	October	November	December
604-Purchases of studies and services	157	158	159	160	161	162	163	164	165			
60212-Materials (or group) D	167	168	169	170	171	172	173	174	175	11	12	
6021-Consumable materials	167	168	169	170	171	172	173	174	175	11	12	0
60225-Office supplies	177	178	179	180	181	182	183	184	185	23	27	
60221-Fuels										1		
6022-Consumable supplies	177	178	179	180	181	182	183	184	85	24	27	0
60265-Unidentifiable recyclable packaging	181	182	183	184	185	186	187	188	189		3	
60267-Mixed-use packaging	145	146	147	148	149	150	151	152	153			
6026-Packaging	326	328	330	332	334	336	338	340	342	0	3	0
602-Stored purchases - Other supplies	670	674	678	682	686	690	694	698	702	35	42	0
6012-Materials (or group) B	161	162	163	164	165	166	167	168	169			
601-Stored purchases - Raw materials (and supplies)	161	162	163	164	165	166	167	168	169	0	0	0
60-Purchases	988	994	1 000	1 006	1 012	1 018	1 024	1 030	1 036	35	42	0

Paris

Is smaller so less account have to be filled and displayed in the report.Then the same subtotal account 6022 (now in K8) is the sum of only 2 others cells.

Comfort zone High level of dynamicity (format and size), need of dynamically generating and pasting Excel formulas.

14. Dynamic formatting via Reporting + dynamic generation of formulas to paste into formatted output

Advanced example showing dynamicity at every step. Only in Alteryx…

To administer we use a single report

	A	B	C	D	E
1	ACCOUNT HIERARCHY DEFINITION			ENTITY MAPPING	
2	P&L	GENERATION	Detailled Level	New York	Paris
3	604-Purchases of studies and services	2	1	1	1
4	60211-Materials (or group) C	4	1	1	0
5	60212-Materials (or group) D	4	1	1	1
6	6021-Consumable materials	3	0	1	1
7	60222-Maintenance products	4	1	1	0
8	60223-Workshop and factory supplies	4	1	1	0
9	60224-Store supplies	4	1	1	0
10	60225-Office supplies	4	1	1	1
11	60221-Fuels	4	1	1	1
12	6022-Consumable supplies	3	0	1	1
13	60261-Lost packaging	4	1	1	0
14	60265-Unidentifiable recyclable packaging	4	1	1	1
15	60267-Mixed-use packaging	4	1	1	1
16	6026-Packaging	3	0	1	1
17	602-Stored purchases - Other supplies	2	0	1	1
18	6011-Materials (or group) A	3	1	1	0
19	6012-Materials (or group) B	3	1	1	1
20	6017-Supplies A, B, C, …	3	1	1	0
21	601-Stored purchases - Raw materials (and supplies)	2	0	1	1
22	60-Purchases	1	0	1	1
23					

Hierarchy | Detailled accounts

Central definition of the Account hierarchy with info like Generation and Detailed level.

Generation = level in the hierarchy. 1 = the root and so on

Detailled Level = 1 if this is an account that have to be filled by the user. 0 otherwise.

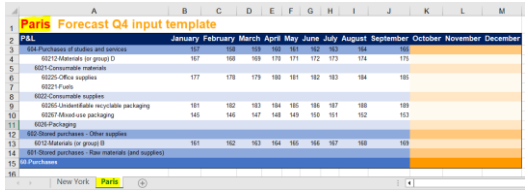
For each entity, mapping of which account is relevant (and then need to be filled by the user)

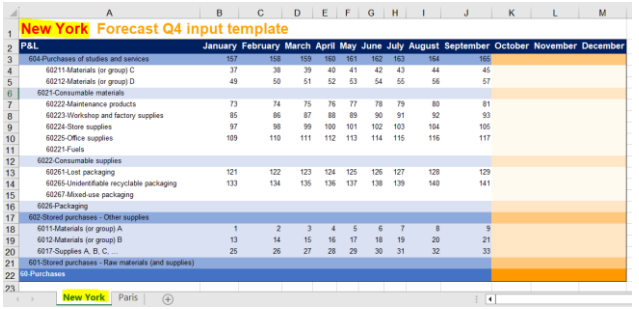
It means that everything as to be generated dynamically: Number of entity, number of rows per entity, organization of the Account hierarchy, Number of subtotals, Excel formulas of subtotals and range where to put those formulas… This is why Alteryx is so powerful.

14. Dynamic formatting via Reporting + dynamic generation of formulas to paste into formatted output

Advanced example showing dynamicity at every step. Only in Alteryx…

1. You dynamically generate a template for each entity (dynamic number of rows + formatting)



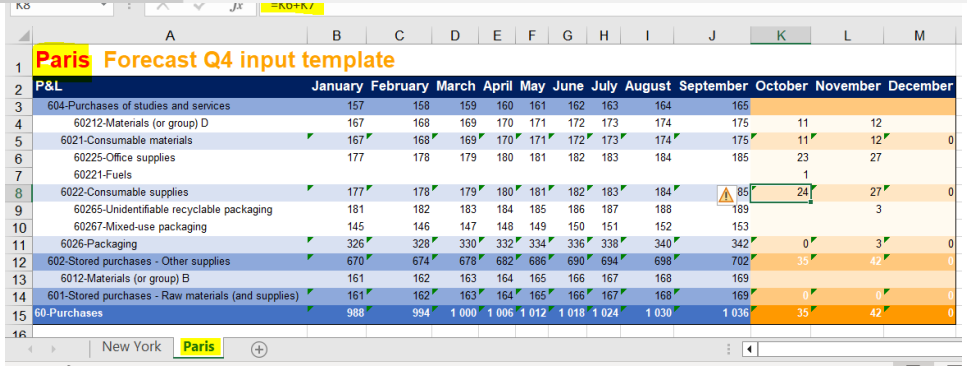


2. You dynamically generate the Excel formulas for each rows and columns of the subtotals + the Excel range where to paste it

	Entity	P&L	Starting Column	Ending Column	Excel Row Number	Output Ligne	M	M+1
1	New York	6021-Consumable materials	B	M	6	.\Output\14 Output Sub Totals.xlsx|||New York$B6:M6	=B4+B5	=C4+C5
2	New York	6022-Consumable supplies	B	M	12	.\Output\14 Output Sub Totals.xlsx|||New York$B12:M12	=B7+B8+B9+B10+B11	=C7+C8+C9+C10+C11
3	New York	6026-Packaging	B	M	16	.\Output\14 Output Sub Totals.xlsx|||New York$B16:M16	=B13+B14+B15	=C13+C14+C15
4	New York	602-Stored purchases - Other supplies	B	M	17	.\Output\14 Output Sub Totals.xlsx|||New York$B17:M17	=B6+B12+B16	=C6+C12+C16
5	New York	601-Stored purchases - Raw materials (an...	B	M	21	.\Output\14 Output Sub Totals.xlsx|||New York$B21:M21	=B18+B19+B20	=C18+C19+C20
6	New York	60-Purchases	B	M	22	.\Output\14 Output Sub Totals.xlsx|||New York$B22:M22	=B3+B17+B21	=C3+C17+C21
7	Paris	6021-Consumable materials	B	M	5	.\Output\14 Output Sub Totals.xlsx|||Paris$B5:M5	=B4	=C4
8	Paris	6022-Consumable supplies	B	M	8	.\Output\14 Output Sub Totals.xlsx|||Paris$B8:M8	=B6+B7	=C6+C7

3. You paste the subtotal formulas in the previous dynamically generated templates.

   Then when filling a cell manually the subtotal are automatically calculated in Excel.



THANK YOU

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alteryx