



Account Desc	France			Italy				Portugal				Spain			
		Dif	% Var	Balance	Bal. LY (k)	Dif	% Var	Balance	Bal. LY (k)	Dif	% Var	Balance	Bal. LY (k)	Dif	% Var
Other mfr overhead	0	400.000	-9,1%	-4.500.000	-4.950,00	450.000	-9,1%	-900.000	-990,00	90.000	-9,1%	-3.000.000	-3.300,00	300.000	-9,1%
Net mfr overhead	5	-215.950	2,3%	-10.825.875	-10.582,93	-242.944	2,3%	-2.165.175	-2.116,59	-48.589	2,3%	-7.217.250	-7.055,29	-161.963	2,3%
Net costs of goods sold	5	-61.355.060	-156,1%	-24.798.375	44.226,07	-69.024.443	-156,1%	-4.959.675	8.845,21	-13.804.889	-156,1%	-16.532.250	29.484,04	-46.016.295	-156,1%
Gross profit	5	20.347.050	-216,3%	12.307.500	-10.582,93	22.890.431	-216,3%	2.461.500	-2.116,59	4.578.086	-216,3%	8.205.000	-7.055,29	15.260.288	-216,3%
Operating expenses	0	0	0	0	0,00	0	0	0	0,00	0	0	0	0	0	0
Selling expenses	0	0	0	0	0,00	0	0	0	0,00	0	0	0	0	0	0
Sales salaries	0	-210.000	5,3%	-4.725.000	-4.488,75	-236.250	5,3%	-945.000	-897,75	-47.250	5,3%	-3.150.000	-2.992,50	-157.500	5,3%
Warranty expenses	0	-715.400	4900,0%	-821.250	-16,43	-804.825	4900,0%	-164.250	-3,29	-160.965	4900,0%	-547.500	-10,95	-536.550	4900,0%
Depreciation, store equipment	0	12.000	-9,1%	-135.000	-148,50	13.500	-9,1%	-27.000	-29,70	2.700	-9,1%	-90.000	-99,00	9.000	-9,1%
Other selling expenses3	0	3.164.600	-76,5%	-1.093.500	-4.653,68	3.560.175	-76,5%	-218.700	-930,74	712.035	-76,5%	-729.000	-3.102,45	2.373.450	-76,5%
Total selling expenses	0	2.251.200	-27,2%	-6.774.750	-9.307,35	2.532.600	-27,2%	-1.354.950	-1.861,47	506.520	-27,2%	-4.516.500	-6.204,90	1.688.400	-27,2%
General & administrative expenses	0	0	0	0	0,00	0	0	0	0,00	0	0	0	0	0	0
Administration salaries	5	-61.450	5,3%	-1.382.625	-1.313,49	-69.131	5,3%	-276.525	-262,70	-13.826	5,3%	-921.750	-875,66	-46.088	5,3%
Rent expenses	7	-180.170	-105982,4...	-202.500	0,19	-202.691	-105982,4...	-40.500	0,04	-40.538	-105982,4...	-135.000	0,13	-135.128	-105982,4...
Depreciation, computers	0	17.900	-9,1%	-201.375	-221,51	20.138	-9,1%	-40.275	-44,30	4.028	-9,1%	-134.250	-147,68	13.425	-9,1%
Other general & admin expenses	3	1.164.280	-85,3%	-225.000	-1.534,82	1.309.815	-85,3%	-45.000	-306,96	261.963	-85,3%	-150.000	-1.023,21	873.210	-85,3%
total general & admin expenses	5	940.560	-34,5%	-2.011.500	-3.069,63	1.058.130	-34,5%	-402.300	-613,93	211.626	-34,5%	-1.341.000	-2.046,42	705.420	-34,5%
total operating expenses	5	3.191.760	-29,0%	-8.786.250	-12.376,98	3.590.730	-29,0%	-1.757.250	-2.475,40	718.146	-29,0%	-5.857.500	-8.251,32	2.393.820	-29,0%
Operating income before taxes	1	1.535.290	96,3%	3.521.250	1.794,05	1.727.201	96,3%	704.250	358,81	345.440	96,3%	2.347.500	1.196,03	1.151.468	96,3%
Financial revenue & expenses	0	0	0	0	0,00	0	0	0	0,00	0	0	0	0	0	0

# Smart Reporting with Qlik Sense

## User Guide

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## Dear Colleagues

I would like to introduce a new feature for Qlik Sense, through the P&LSmartPivot extension.

This extension is based on the previous one P&LSmart.

P&LSmart was created to solve some reporting basic needs for financial areas. After few months of use I' ve received many common requests from the field in order to improve it and have a better adoption through real needs. The most important are:

- *implementing the custom look&feel without using dimensions to pass the info*
- *allow pivoting at least a second dimension*
- *allow making selections inside the grid*

This manual shows all the current capabilities and how to proceed to take profit from the whole new functionalities.

All features are available for Qlik Sense Desktop and Qlik Sense Enterprise, except the ability to export to Excel preserving the original look&feel, which is only available for Qlik Sense Enterprise option.



- **The basics:**

- You can include a maximum of:
  - 2 dimensions and 8 measures
  - *or* 1 dimension and 9 measures

The screenshot displays the configuration interface for a Smart Report. It is divided into two main sections: **Dimensions** and **Measures**.

**Dimensions Section:**

- At the top is a button labeled "Add dimension".
- Below it are two dimension cards: "P&L Concepts" and "Year". Each card has a right-pointing arrow on the left and a close icon (X) on the right.
- Under these cards is a "Dimension" field containing the text "Year" and a link icon.
- Below that is a checkbox labeled "Show null values", which is currently checked.
- At the bottom of this section is a "Limitation" dropdown menu set to "No limitation".

**Measures Section:**


- At the top is a button labeled "Add measure".
- Below it are two measure cards: "Amount" and "Amount LY". Each card has a right-pointing arrow on the left and a close icon (X) on the right.
- Under these cards is a "Measure" field containing the text "Amount LY" and a link icon.
- At the bottom of this section is a "Number formatting" dropdown menu set to "Auto".

- If you work with 2 dimensions then the second one will be pivot automatically.




## • Dimensions

- You' ll have a basic report if you work with one single dimension.

 Account Desc	Balance	Bal. LY (k)	Dif	% Var
<i>Revenues</i>				
Gross sales revenues	195.274.61...	0,00	195.274.61...	0
Less return & allowances	1.823.420	0,00	1.823.420	0
Net sales revenues	194.952.83...	0,00	194.952.83...	0
Cost of goods sold	0	0,00	0	0
Direct materials	-40.163.600	0,00	-40.163.600	0
Direct labor	-37.252.700	0,00	-37.252.700	0
<i>Manufacturing overhead</i>				
Indirect labor	-31.814.835	0,00	-31.814.835	0
Depreciation, manufacturing equip	-1.138.320	0,00	-1.138.320	0
Other mfr overhead	-26.040.000	0,00	-26.040.000	0

- If you work with 2 dimensions then the second one will pivot automatically.

 Account Desc	France				Italy			
	Balance	Bal. LY (k)	Dif	% Var	Balance	Bal. LY (k)	Dif	% Var
Revenues	0	0,00	0		0	0,00	0	
Gross sales revenues	62.991.810	0,00	62.991.810		70.865.786	0,00	70.865.786	
Less return & allowances	588.200	0,00	588.200		661.725	0,00	661.725	
Net sales revenues	62.888.010	0,00	62.888.010		70.749.011	0,00	70.749.011	
Cost of goods sold	0	0,00	0		0	0,00	0	
Direct materials	-12.956.000	0,00	-12.956.000		-14.575.500	0,00	-14.575.500	
Direct labor	-12.017.000	0,00	-12.017.000		-13.519.125	0,00	-13.519.125	
Manufacturing overhead	0	0,00	0		0	0,00	0	
Indirect labor	-10.262.850	0,00	-10.262.850		-11.545.706	0,00	-11.545.706	
Depreciation, manufacturing equip	-367.200	0,00	-367.200		-413.100	0,00	-413.100	
Other mfr overhead	-8.400.000	0,00	-8.400.000		-9.450.000	0,00	-9.450.000	
Net mfr overhead	-19.030.050	0,00	-19.030.050		-21.408.806	0,00	-21.408.806	

Both dimensions are selectable inside the grid, header and first col.



- **Measures**

- The expressions works as usual in Qlik Sense, but there are some tricks.
- Trick 1:
  - You can work with 'k' (amount in thousands)
  - and also you can work with 'm' (amount in millions)
  - For that you can use the number format 'Custom' and include one of those characters k/K/m/M at the end of the custom format

▼ Amount

Measure

Amount

Number formatting

Custom

Decimal separator

Thousands separator

Format pattern

Example

XLS P&L Concepts (k)

Revenue

2014

2015

240.880,60

255.333,44

1.000,12k



▼ Amount ✕

Measure

Amount 🔗

---

Number formatting

Custom ▼

Decimal separator

Thousands separator

Format pattern

#.##0,00m

Example

**1.000,12m**

	2014	2015
P&L Concepts (M)		
Revenue	240,88	255,33

○ Trick 2:

- If you work with '%' number format the width of the cells will be reduced.
- If there are some Accounts that contain info in percentage format, i.e. :
  - Revenues 2.000.000 €
  - % Cost 6%
  - ...

The number format of your measure will be automatically adapted and change the amount format into %.

Revenue	240,88	255,33
% growth crecimiento	0,06%	0,06%



- **Sorting**

- Works as usual.
- It's highly recommended that you maintain a field for sorting use when you need to create P&L reports.

- **Appearance→General**

- Works as usual.
- It's recommended that you fill the titles, as they will be exported when you click on 'export to xls' button.
- Suggestion: use the expression `=GetCurrentSelections()` to fill the foot note.

General

Show titles

On

Title

My Title *fx*

Subtitle

My Subtitle *fx*

Footnote

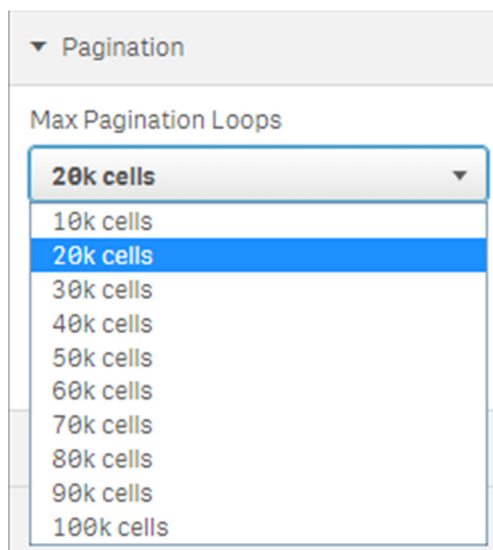
=GetCurrentSelections() *fx*

	A	B	C	D	E
1	<b>P&amp;L Report Title</b>				
2					
3	Resumed version				
4					
5	Note: Year:2015				
6					
7	Account Desc	Balance	Bal. LY (k)	Dif	% Var
8	<i>Revenues</i>				
9	Gross sales revenues	103.319.900	91.954,71	11.365.189	12,40%
10	Less return & allowances	1.072.600	750,82	321.780	42,90%



- **Appearance→Pagination**

- You must know... each data transfer between QIX engine and an extension can contain a maximum of 10.000 elements, i.e:
  - 1000 rows and 10 columns
  - 10000 rows and 1 column
  - 5000 rows and 2 columns
  - ...
- It' s set to 10 columns and 1000 rows each loop.
- Sometimes you may need to include more data into your report, in that case the extension will make an automatic request for more info. That' s what I mean for 'Pagination' .
- There is a real limit of 100.000 elements, it' s not possible to make any request over this 100k cells.
- In our case we pass 20k cells by default in each request for info (2 data request loops).
- But if you want you can modify this limit, up to 100k cells.







- The user will get an error message when the data limit applied is exceeded. You can modify the error message if needed.

▼ Pagination

Max Pagination Loops

20k cells ▼

Default error message

Ups! It seems you asked for too many

---



- **Appearance→Header Format**
  - You can modify many features of the report header:

▼ Header Format

Header Alignment

**Left** **Center** **Right**

BackGround Header Color

**Dark** ▼

Text Header Color

**Black** ▼

Font Size

**Small** **Medium**

- Alignment
  - Left
  - Center
  - Right
- Background color
  - Clean
  - Soft
  - Dark
  - Night
  - Blue
  - Orange
  - Red



- Green
- Violete
- Custom

**\*\* All this color descriptions are associated to an hexadecimal color code that you can modify through the menu 'Primary Colors Library'**

- Text color
  - Black
  - DimGray
  - ForestGreen
  - Gainsboro
  - Indigo
  - Navy
  - Purple
  - WhiteSmoke
  - Whie
  - YellowGreen

**\*\* This text color descriptions are more than a simple description, this names are valid html colors and cannot be modified.**

- FontSize
  - Small (useful when using large measure descriptions)
  - Medium



- **Appearance→Table format**

- These are main characteristics of your report.
- By default it' s set like:

Table Format

☒ Indent

☐ Separator Columns

☐ Include External File

BackGround Style

Clean

Text Body Color

Black

FontFamily

Calibri

Font Size

Small Medium

Symbol for Nulls

Allow export to Excel

On



## ○ Features description:

### ▪ Indent

- When it's active the elements of the first dimension will be indented 15 pixels left.
- Note that the indent will affect only to the basic accounts. I mean those elements from the first dimension that does not contain any special format (not bold, background color, italic,...). i.e:

Revenues
Gross sales revenues
Less return & allowances
Net sales revenues
Cost of goods sold
Direct materials
Direct labor

### ▪ Separator Columns

- It's useful when you work with 2 dimensions. i.e.:

Account Desc	France				Italy			
	Balance (M)	Bal. LY (k)	Dif	% Var	Balance (M)	Bal. LY (k)	Dif	% Var
Revenues								
Gross sales revenues	62,99	0,00	62.991.810	0	70,87	0,00	70.865.786	0
Less return & allowances	0,59	0,00	588.200	0	0,66	0,00	661.725	0
Net sales revenues	62,89	0,00	62.888.010	0	70,75	0,00	70.749.011	0
Cost of goods sold	0,00	0,00	0	0	0,00	0,00	0	0
Direct materials	-12,96	0,00	-12.956.000	0	-14,58	0,00	-14.575.500	0
Direct labor	-12,02	0,00	-12.017.000	0	-13,52	0,00	-13.519.125	0
Manufacturing overhead								
Indirect labor	-10,26	0,00	-10.262.850	0	-11,55	0,00	-11.545.706	0
Depreciation, manufacturing equip	-0,37	0,00	-367.200	0	-0,41	0,00	-413.100	0
Other mfr overhead	-8,40	0,00	-8.400.000	0	-9,45	0,00	-9.450.000	0
Net mfr overhead	-19,03	0,00	-19.030.050	0	-21,41	0,00	-21.408.806	0
Net costs of goods sold	17,27	0,00	17.269.060	0	19,43	0,00	19.427.693	0
Gross profit	1,53	0,00	1.532.950	0	1,72	0,00	1.724.569	0
Operating expenses	0,00	0,00	0	0	0,00	0,00	0	0
Selling expenses	0,00	0,00	0	0	0,00	0,00	0	0



- Include External File
  - Check it if you want to apply a look&feel template.
  - It will allow you to perform a report with high fidelity to the corporate standards.
  - When checked you' ll be prompted to include the name of the template, which is an external file, and the background color combo box will disappear, as they are not compatible.

☒ Include External File

Name of CSV file (; separated)

Accounts.csv

- About the external template:
  - There are several instructions that you may know, you' ll find them in the paragraph 'External Template' at the end of this manual.
- Background Style
  - If you are not using an external template this option will be available.
  - There are some pyjamas predefined, with the same options offered in the header color options:
    - Clean, Soft, Dark, Night,...
    - You can modify the color codes for the primary color and the second pyjama color in the color library options.



- Text Body Color
  - If you are not using an external template this option will be available.
  - There are some text color predefined, with the same options offered in the header color options:
    - Black, DimGray, ForestGreen,...
    - You cannot modify this color code because the description are valid html color codes.
- Font Family
  - There are some font family available, the font will affect the body grid and the header:
    - Arial
    - Calibri (**this is the one by default**)
    - Comic Sans MS
    - MS Sans Serif
    - Tahoma
    - Verdana
- Font Size
  - It refers to the size font in the grid
  - There are 2 options: small and medium
- Column Width
  - Use this option to modify the width of the KPI columns.
  - It won't affect the First dimension column
  - You'll find 3 options: small, medium and large
- Symbol for Nulls
  - You can chose any symbol or string to include in those KPI cells with null values



- Allow Export to Excel
  - This is a general option, affects to everyone who use the P&L.
  - When active, you' ll be able to export to Excel preserving the original format.





- **Appearance→Concept Semaphores**

- By default it's checked to allow alerts in all your concepts.

▼ Concept Semaphores

All concepts affected **On**

- But you can allow to generate alerts only for some P&L Concepts, uncheck the switch and write the name of the P&L Concepts that you want to alert. i.e:

▼ Concept Semaphores

All concepts affected **Off**

Concept 1  
Revenue

Concept 2  
EBITDA

Concept 3

Concept 4

In this case there'll be a maximum of 10 concepts to be alerted.



- **Appearance→Metric Semaphores**

- By default it' s checked to avoid alerts in all your metrics.

▼ Metric Semaphores

All metrics affected ☐ Off

Metrics affected (1,2,4,...)

1,3

Critic is less than

-0.05

Critic Color Fill

Critic Color Text

Medium is less than

1.1

Medium Color Fill


Medium Color Text

Success Color Fill

Success Color Text

- In this case it' s needed to indicate which metrics are being alerted, in this case 1,3 (first and third metric)



 Account Desc	France			
	Balance (M)	Bal. LY (k)	Dif	% Var
<i>Revenues</i>				
Gross sales revenues	33,33	29.662,81	3.666.190	12,4%
Less return & allowances	0,35	242,20	103.800	42,9%
Net sales revenues	32,98	29.905,01	3.077.990	10,3%
Cost of goods sold	0,00	0,00	0	0
Direct materials	-6,32	-6.636,00	316.000	-4,8%
Direct labor	-6,10	-5.917,00	-183.000	3,1%

- You can choose the background color and text color inside the color-picker object, and define 3 possible alert status, i.e.:
  - Critic is less than -0.1 (red)
  - Medium achievement is less than 0 (yellow)
  - And Success is over 0 (green)



- **Appearance→Primary Color Library**

- Here you can modify the color codes you found previously in the combo boxes.
- And also this will affect the color names you may include in your external look&feel template.
- The new color codes must be defined in hexadecimal or RGB, i.e.:

▼ Primary Colors Library

Clean

#ffffff

Soft

RGB(255,0,0)

Dark

#c4c4c4

Night

#808080

Red


#d58b94



- **Appearance→Pyjama Color Library**

- Here you can modify the color codes for the pyjamas.
- By default the pyjamas styles join two colors, the second is the one you can modify here.
- Works the same way the primary colors library, you can modify the color code with hexadecimal or RGB styles.

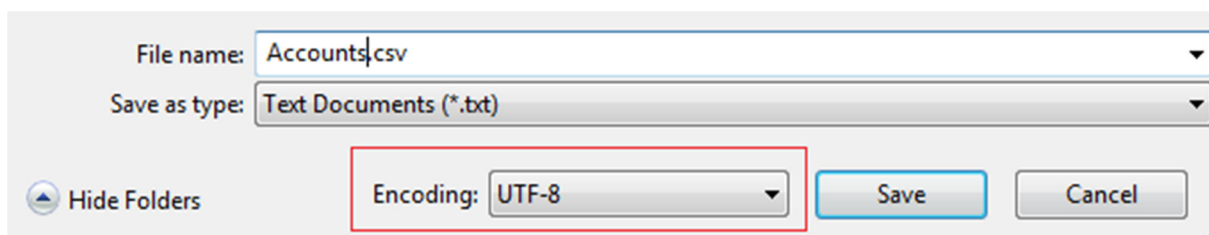
(This is a pyjama with soft style)

 Account Desc (k)	France	Italy	Portugal	Spain
Revenues	0,00	0,00	0,00	0,00
Gross sales revenues	33.329,00	37.495,13	7.499,02	24.996,75
Less return & allowances	346,00	389,25	77,85	259,50
Net sales revenues	32.983,00	37.105,88	7.421,18	24.737,25
Cost of goods sold	0,00	0,00	0,00	0,00
Direct materials	-6.320,00	-7.110,00	-1.422,00	-4.740,00
Direct labor	-6.100,00	-6.862,50	-1.372,50	-4.575,00



- **External Template Use**

- As mentioned previously, now you can work with an external template to define your corporate look & feel.
- This will prevent the use of dimensions to define your special tags (bold, italic, center,...)
- There are few considerations you may follow when creating the template:
  - Allocate it in  
C:\Users\user\Documents\Qlik\Sense\Extensions\PLSmartPivot  
**when working with Desktop**
  - Allocate it in  
C:\ProgramData\Qlik\Sense\Repository\Extensions\PLSmartPivot  
**when working with Server**
  - The template must be a .csv (; separated) file and must be saved in UTF8 mode, i.e.:
    - open it with the notepad, fill it, when click on save as choose Encoding = UTF-8:



It' s needed to be read in Ajax mode.



- You can include different kind of tags between '`<>`' :
  - **Bold:** `<bold>` (it's set to not bold by default)
  - **FontStyle :** `<italic>`, `<oblique>` (normal by default)
  - **FontSize:** `<large>`, `<medium>`, `<small>` (medium by default)
  - **BackgroundColor:**  
`<dark>`, `<night>`, `<soft>`, `<red>`, `<orange>`, `<violet>`, `<blue>` and `<green>` or an specific color code in hexadecimal or RGB `#b7dbff` is the same as `rgb(183, 219, 255)` (white by default). **The color codes are an exception and they don't need to include them between '`<>`', as there is no risk of coincide with any field.**
  - **TextColor:** `<white>` (black by default)
  - **TextAlign :** `<center>` (Left by default in strings and always right by default for the numbers)
  - **Comments:** `<comment>` (comment means that there will be a blank space in the kpi cells instead a 0 and will only include the description of the concept in the row)
- You don't need to fill everything, only the concepts affected and the special tags desired,i.e:

```
Revenues;;rgb(183, 219, 255);<italic>;<center>;<comment>
Net sales revenues;<bold>;<soft>;
Cost of goods sold;<bold>;
Manufacturing Costs;;>no need to include this
Net Incomes;;#b7dbff;<italic>;<center>;<comment>
```
- You'll find two examples called `Accounts.csv` and `Accounts2.csv` in the extension zip.



- Field headers are not necessary in the csv template. So you can include the custom tags wherever you want, i.e.:
  - `Revenues;<white>;<bold>;<night>` is the same as
  - `Revenues;<bold>;<night>;<white>`
- You can have many CSV templates in the same extensions, no limit detected.
- It' s necessary to import the extension again in the server each time you include a new CSV template file, but once it' s imported you' ll be able to modify the CSV content on the fly and then get the new look in your report immediately.

**That' s all about the user guide and the features available in the first version 1.0 of P&LSmartPivot.**

**Thanks for reading!**