Account Desc	Saldo	Saldo LY
Operating Revenue		
Product sales	12.300,00	11.000,00
Service sales	3.000,00	3.200,00
TOTAL OPERATING REVENUE	**15.300,00**	**14.200,00**
Operating Expenses		
Cost of goods sold	-7.000,00	-6.500,00
GROSS PROFIT	**8.300,00**	**7.700,00**
Overhead		
Rent	-1.500,00	-1.500,00
Insurance	-250,00	-230,00
Office Supplies	-150,00	-145,00
Utilities	-100,00	-110,00
Total Overhead	**-2.000,00**	**-1.985,00**
OPERATING INCOME	**6.300,00**	**5.715,00**
Other Income Expenses	-500,00	-550,00
Earnings Before Income Taxes	**5.800,00**	**5.165,00**
Income Taxes	**-500,00**	**-450,00**
NET EARNINGS	**5.300,00**	**4.715,00**

Send to Excel

Smart reports for financial needs 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&LSmart extension.

P&LSmart was created to fill a specific gap we can find very often in addressing the SIBs for the financial area: reporting with a minimum look & feel style.

Through this manual shows all the current capabilities and how to generate the various models supported by the extension.

All features are available for Qlik Sense Desktop and Qlik Sense Enterprise, except the ability to export the report to Excel, which is only available for Qlik Sense Enterprise option.

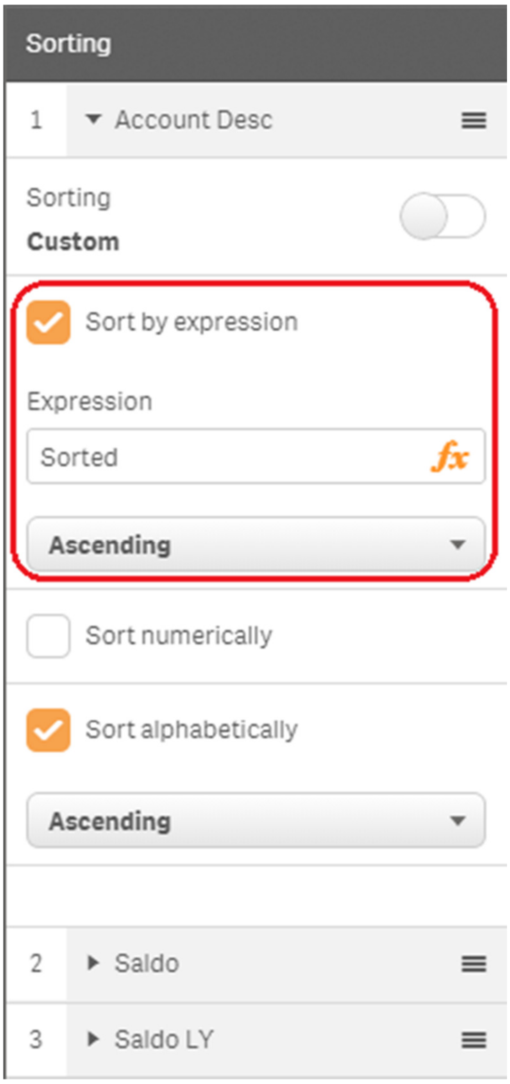
- **Creating each report:**
  - The common options
    - There are 4 major menus:
      - Dimensions
      - Measures
      - Sorting
      - and Appearance

    - The first 3 options are quite the same as any native QS chart and also are the same for the rest of the possible reporting formats supported by the extension.

    - As this is an extension object you can work with a maximum of 10 elements (if you sum the number of dimensions and measures). For example you can include 1 dimension and 9 measures, or 3 dimensions and 7 measures.

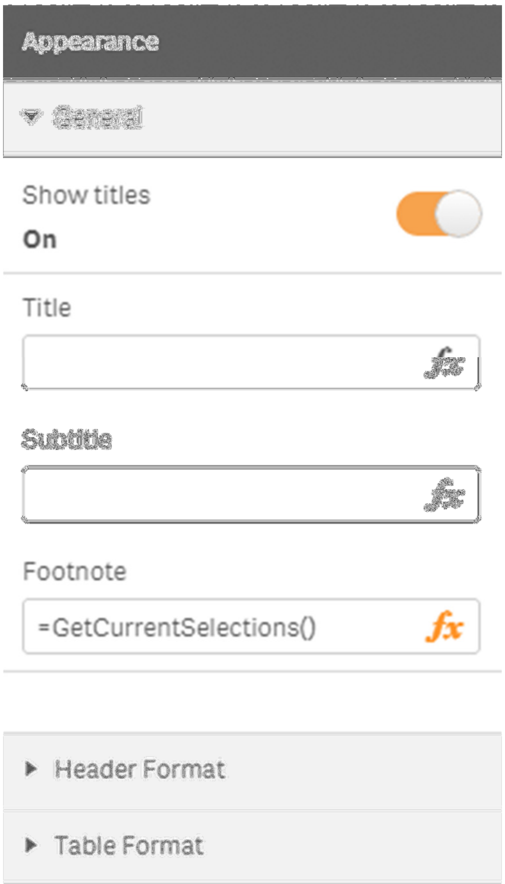
    - **IMPORTANT**: In a P&L report it’s mandatory showing the rows in an specific an non logic order. Because of that you need to maintain a field with the info about the order it may show each P&L concept. So you’ll need to modify the Sorting parameters as follows:
      - Click on the Sorting menu and expand the features of your **first** dimension.
      - Select the option ‘Sort by expression’
      - Include the name of the field you use to maintain this information. It’s usually maintained in an XLS and it use to be numeric→an

advice, include management numbers 10 to 10, so it will be easier to insert new tags in the future, you won' t have to sort again all the P&L concepts.



- To modify the look&feel features and chose a kind of report you must click on the 'Appearance' major menu.

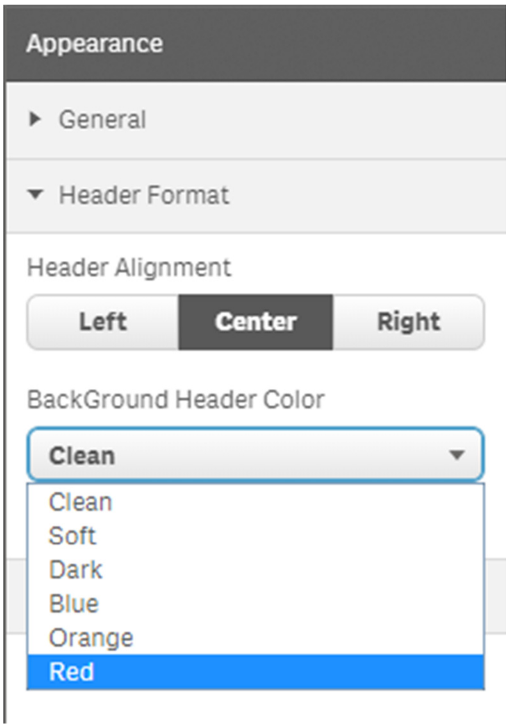
- In the Appearance menu there are 3 submenus, 2 of them are common for each report format: General and Header Format

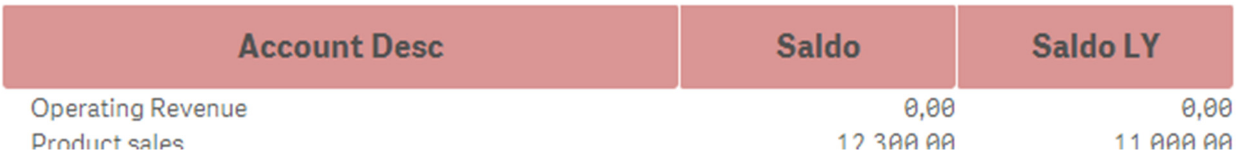


- **General**: there are the same options you can find in a native QS object but… there is a trick.

  Trick: If you fill the Footnote box with any info then you' ll be able to export the string when you export the report to Excel. So it could be a good idea to include an expression like '=GetCurrentSelections()' and then you' ll have a detail of the selections you made when you export.

- **Header Format**: You can chose two features, align the column headers and modify the background color of the headers.





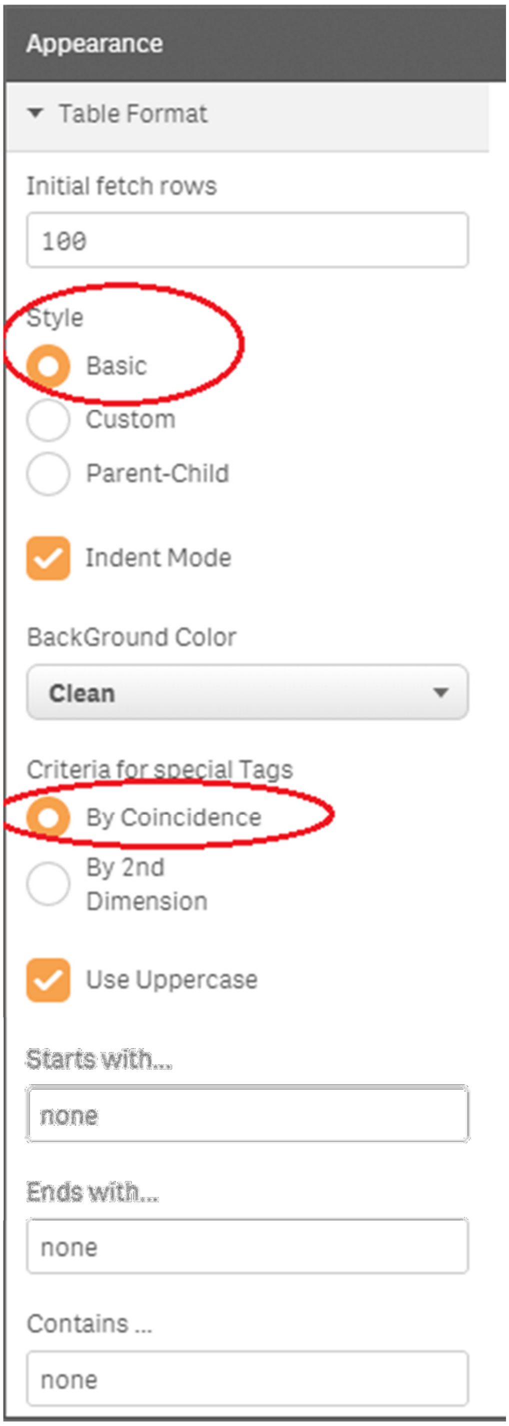
Account Desc	Saldo	Saldo LY
Operating Revenue	0,00	0,00
Product sales	12 300,00	11 000,00

These were the common features, now let' s see how to create the different reports and which available options they have.

The key tuning options are available in the menu Appearance→Table Format. So let see the different reports supported.

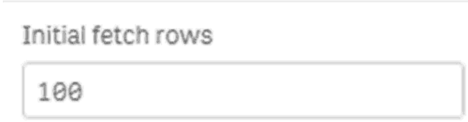
First format:

- **Creating a basic report**
  - This is the report format proposed by default.
  - These are the options filled by default, two of them are key to define a basic report: **Style** = Basic and **Criteria for special Tags** = By Coincidence.

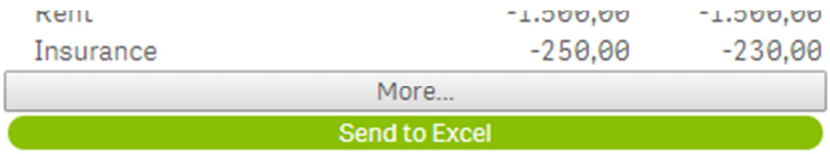


Let' s see the purpose of each option.

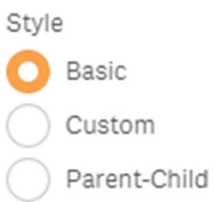
- Initial fetch rows



By default its value is 100, that' s the number of rows of your P&L it will show. If you see a button like 'Show More' at the bottom of your report then maybe you should increase the 100 Initial fetch rows value.

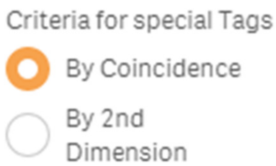


- Style



As this is a basic report, you should chose the option 'Basic' . The Basic mode has fewer impact in your data modeling strategy.

- Criteria for special Tags: The Basic report has two options available for the feature Criteria for special Tags, the more basic one is 'By Coincidence' .



This means that the report will change the format of those concepts that :

- They are in uppercase or
- They start with some specific word or char or
- They contain an specific word or char or
- They end with an specific word or char

For example:

- [x] Use Uppercase

Starts with...

Total

Ends with...

Taxes

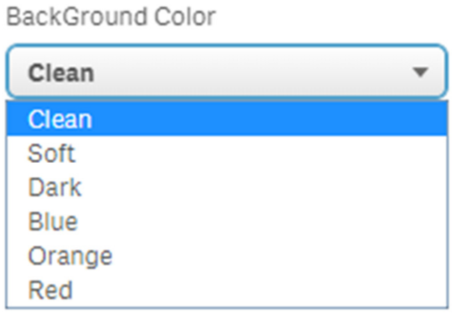
Contains ...

goods

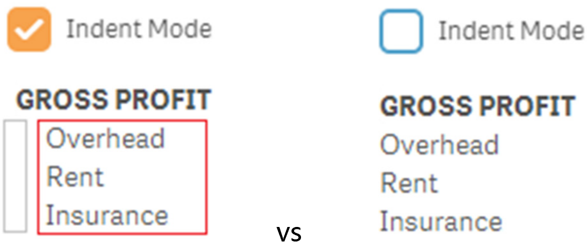
The result is:

Operating Revenue
Product sales
Service sales
TOTAL OPERATING REVENUE
Operating Expenses
Cost of goods sold
GROSS PROFIT
Overhead
Rent
Insurance
Office Supplies
Utilities
Total Overhead
OPERATING INCOME
Other Income Expenses
Earnings Before Income Taxes
Income Taxes
NET EARNINGS

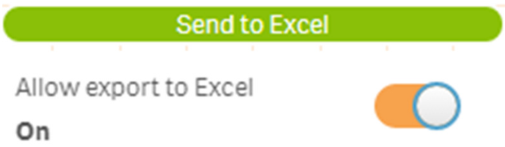
- BackGround Color : The format for those concepts can be **bold** (if you chose the option ‘**Clean**’ in the combo box or a new background color (if you chose another option in the combo box)



- Indent Mode: if you mark this option then all the concepts that doesn’ t match with you coincidence parameters will be indented.



- Allow export to Excel: for any use case you need to avoid exporting to Excel. This refers to the new export mode that the extension offers,

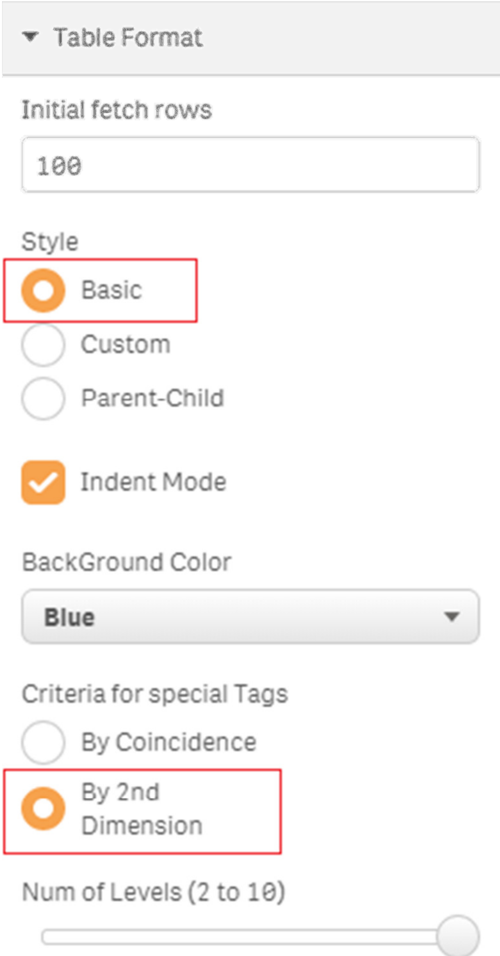


not for the native property: right button→ Export data

this won’ t be affected

Second format:

- **Creating a report with different levels of degrade**
  - These are the options you should chose: **Style** = Basic and **Criteria for special Tags** = By 2nd Dimension.



Some of the options will remain as in the previous report, like ‘Indent Mode’ or ‘Initial fetch rows’, but there will be new options and new behavior for BackGround Color.

Let’s see the purpose of each option.

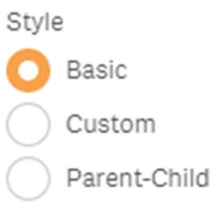
- This report needs two dimensions and a maximum of 8 measures.
- The first dimension must be the <u>P&L Concepts</u>
- The second dimension must be the <u>Level</u>. The 'Level' (or any other name you want) is a kind of hierarchic info that the extension use to paint with different degraded colors the background of the cells.

  For example:

<u>P&L Concept</u>	<u>Level</u>	<u>*Result Look*</u>
Revenue	1	Revenue
GROSS PROFIT	2	GROSS PROFIT
NET MARGIN	3	**NET MARGIN**

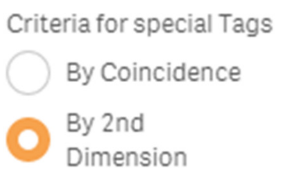
  Trick : if you use a level 0, the extension will understand that this P&L Concept is just a comment and then it will hide the numbers, so you won't show a 0,00 in the Amount Columns.

- Style



  As this is a basic report too, you should chose the option 'Basic'. As I mentioned you'll need to maintain a new field in your data model, 'Level', or if you prefer you can include just a calculated dimension.

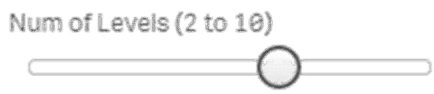
- Criteria for special Tags: The Basic report has two options available for the feature Criteria for special Tags, just chose the option 'By 2nd Dimension' instead the one by default.



The report will change the format of each concept depending on the level informed.

There will be a maximum of 10 Look&Feel levels, that you can reduce with the slider, if you detect that there are an excessive variety of colors :

For example:



The result is:

Account Desc	Saldo	Saldo LY
Operating Revenue		
Product sales	12.300,00	11.000
Service sales	3.000,00	3.200
TOTAL OPERATING REVENUE	**15.300,00**	**14.200**
Operating Expenses		
Cost of goods sold	-7.000,00	-6.500
GROSS PROFIT	**8.300,00**	**7.700**
Overhead		
Rent	-1.500,00	-1.500
Insurance	-250,00	-230
Office Supplies	-150,00	-145
Utilities	-100,00	-110
Total Overhead	-2.000,00	-1.985
OPERATING INCOME	**6.300,00**	**5.715**
Other Income Expenses	-500,00	-550
Earnings Before Income Taxes	5.800,00	5.165
Income Taxes	-500,00	-450
NET EARNINGS	**5.300,00**	**4.715**

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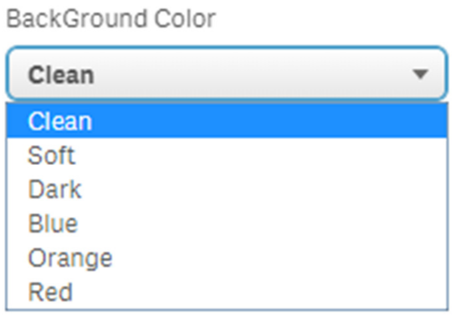
- BackGround Color : The format for those concepts can be **bold** (if you chose the option ‘**Clean’** in the combo box or a new background pajama (if you chose another option in the combo box)

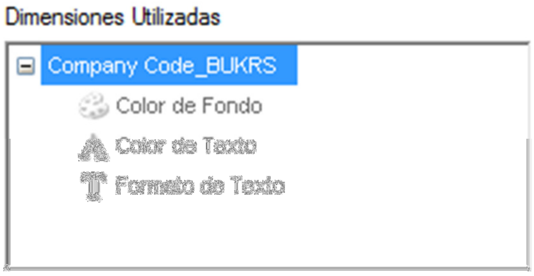


So in this case there will be color pajama with different degrades of color and bold format depending on the hierarchy level.

These are all the particular features of the report by levels, but remember to have a read on all the previous common options that are available too.

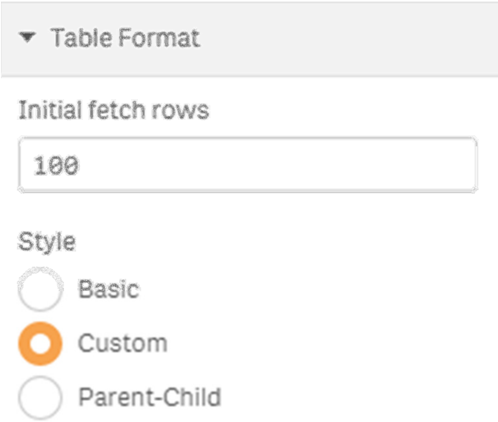
Third format:

- **Creating a high custom report**
  - This report needs much more dimensions. The reason is this format treats the second dimension and ahead as custom properties. Do you remember QlikView? The second dimension and ahead will be the equivalent as the expanded properties of the dimensions in QV charts.

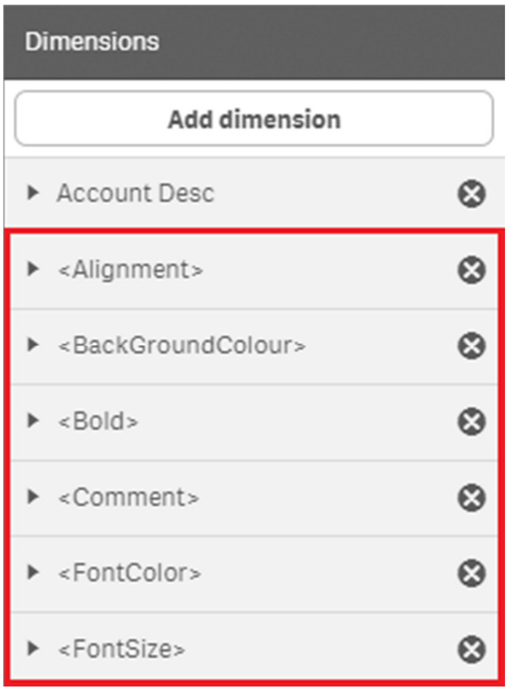
    

    Even you will be able to add new features like 'font size', 'alignment' or 'tag as comment' for each row.

  - First chose the **Style** = Custom

    and include one dimension for each look&feel property



- So, the first dimension must be the P&L Concepts
- The second dimension and ahead must be the look&feel parameters.

  These are the supported features and the possible values, you will need a dimension field for each parameter you want to inform:

Bold	**Background color**	**Font Size**	**Alignment**	**Fontcolor**	**Comment**
<bold>	<violete>	<medium>	<center>	<black>	<comment>
<normal>	<clear>	<large>	<left>	<white>	
	<dark>				
	<soft>				
	<red>				
	<orange>				
	#HTML Colors				

#HTML Colors: if needed you can include specific corporate colors, they must be informed in html format, for example : **#ffc819** (this is a kind of blue), **#ff33cc** (this is a kind of pink).

Rules:

- The name of the fields is not relevant, you can change any name.
- The order you inform the second dimension and ahead is not relevant.
- All the parameters must be informed between '< >' , except if you choose an specific HTML color for the Background color option ('#ff0000').
- Remember include the tag <comment> for those P&L Concepts that are just a comment, then the extension will hide the numbers (it won' t show a '0,00' in the amount columns).

- WARNING : take care, if you include a P&L Concept dimension and all the possibilities (so 7 dimensions) you will have space available only for 3 measures (remember 10 maximum elements between dimensions and measures).

Fourth format:

- **Creating a report based on a parent-child association**
  - This report needs **3** dimensions and a maximum of **2** measures.
  - The first dimension must be the P&L Concepts ID
  - The second dimension must be the P&L Concepts Parent
  - The third dimension must be the P&L Concepts Description

For example:

P&L Concept ID	**P&L Concepts Parent**	**P&L Concepts Desc**
00701	GROSS PROFIT	Revenue
00601	GROSS PROFIT	Costs
GROSS PROFIT	NET MARGIN	GROSS PROFIT...

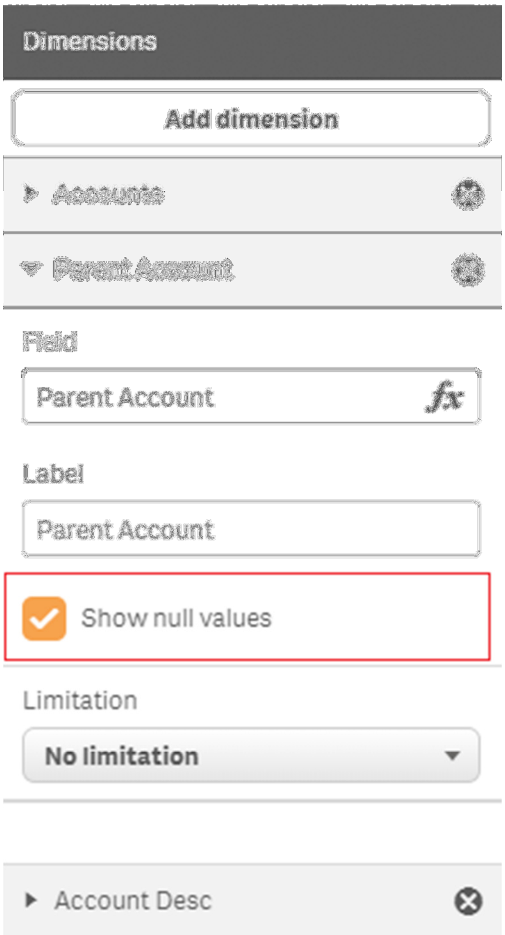
Trick 1 : by default you can include comments if you inform that the parent of the comment concept is '*' . You can change the character '* ' if you want, and then inform which is the new comment flag in the input box of the last feature.

If you use a parent with the value '*' , the extension will understand that this P&L Concept is just a comment and then it will hide the numbers, so you won' t show a 0,00 in the Amount Columns.

Trick 2 : You shouldn' t fill the parent info of the last concept. When I refer to the last concept I mean the Total Net concept. Example:

P&L Concept ID	**P&L Concepts Parent**	**P&L Concepts Desc**
00701	GROSS PROFIT	Revenue
00601	GROSS PROFIT	Costs
GROSS PROFIT	NET MARGIN	GROSS PROFIT...
NET MARGIN		NET MARGIN

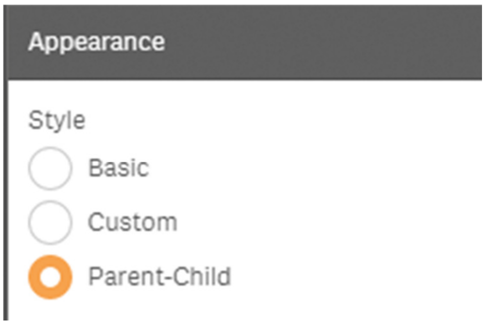
Trick 3 : As the last concept may have not parent you should never UNCHECK the option 'Show null values' for the Parent dimension (the 2nd one).



Trick 4 : If you include a second measure, then the extension will create automatically 2 more measures for you 'Abs. Var' and '% Var'.

Why? This report use the values by default but it calculates all the sums for all parent groups and create the different hierarchy levels. So it just has sense to calculate the typical 'Abs. Var' and '% Var' internally, once it has all the subtotals.

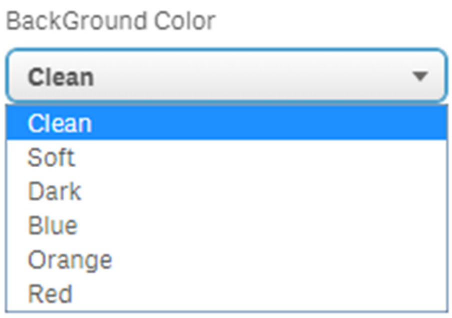
- The style associated to this kind of report is **Style** = Parent-Child. Once you chose this style it won't paint it until you include almost 3 dimensions and 1 or 2 measures.



Some of the options will remain as in the previous report, like 'Indent Mode' or 'Initial fetch rows' , but there will be new options and new behavior for BackGround Color.

Let' s see the purpose of each option.

- BackGround Color : The format for those concepts can be **bold** (if you chose the option '**Clean'** in the combo box or a new background pajama (if you chose another option in the combo box)



So in this case there will be color pajama with different degrades of color and bold format depending on the hierarchy level.

Basically the same as Basic report by 2nd Dimension. The main difference is you may not inform about hierarchy 'Levels' to create a color degraded pajama. The extension will create internally all the hierarchy levels (using the parent-child info).

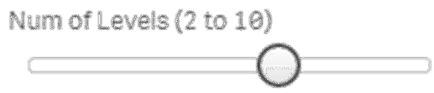
So it will paint different set of colors and by default recalculate all the subgroups amounts.

Trick: the cost and other negative numbers must be informed directly in negative: **costs**;**-12000** , as the extension will only sum values.

That can be obvious, but you may found some P&L Concept costs values in positive, as many times this info is just prepared to be calculated and manipulated in Excel. Or you can find some column in the customer DataBase that inform if the value must be multiplied by 1 or -1.

There will be a maximum of 10 Look&Feel levels, that you can reduce with the slider, if you detect that there are an excessive variety of colors :

For example:



The result is:

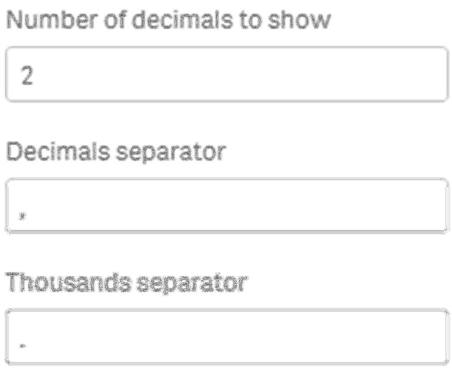
Parent Child

Accounts	Saldo PC	Saldo PC LY	Abs. Var	% Var
Operating Revenue				
Product sales	12.300,00	11.000,00	1.300,00	11,82%
Service sales	3.000,00	3.200,00	-200,00	-6,25%
TOTAL OPERATING REVENUE	**15.300,00**	**14.200,00**	**1.100,00**	**7,75%**
Operating Expenses				
Cost of goods sold	-7.000,00	-6.500,00	-500,00	7,69%
GROSS PROFIT	8.300,00	7.700,00	600,00	7,79%
Overhead				
Rent	-1.500,00	-1.500,00	0,00	0,00%
Insurance	-250,00	-230,00	-20,00	8,70%
Office Supplies	-150,00	-145,00	-5,00	3,45%
Utilities	-100,00	-110,00	10,00	-9,09%
Total Overhead	**-2.000,00**	**-1.985,00**	**-15,00**	**0,76%**
OPERATING INCOME	**6.300,00**	**5.715,00**	**585,00**	**10,24%**
Other Income Expenses	-500,00	-550,00	50,00	-9,09%
Earnings Before Income Taxes	**5.800,00**	**5.165,00**	**635,00**	**12,29%**
Income Taxes	-500,00	-450,00	-50,00	11,11%
NET EARNINGS	**5.300,00**	**4.715,00**	**585,00**	**12,41%**
Foot Note>> Year: 2015				

Send to Excel

Quite the same as we saw in the Custom by 2nd Dimension report, but here we do not need to maintain nor create a linear hierarchy in the script (I mean one field containing all the concepts and the groups).

- The number format tags. This is what it seems, just intro your specific number format.



You may ask, why is it necessary if I already have a specific space in each measure to do that?

Well, that' s because this Parent-Child style works with the hypercube info in a different way. As it can' t show directly the info (it need to calculate and associate everything inside) it works with a multiarray to collect, group and sum. So it modifies the features of the receiving default values.

Anyway I admit it could be better made up, and just collect the default measure format. Maybe in future releases.

- Recalc Measures for All groups: **by default** this value will be checked.

If it' s checked the extension will recalculate all the subgroup values.

When should you use it or not?

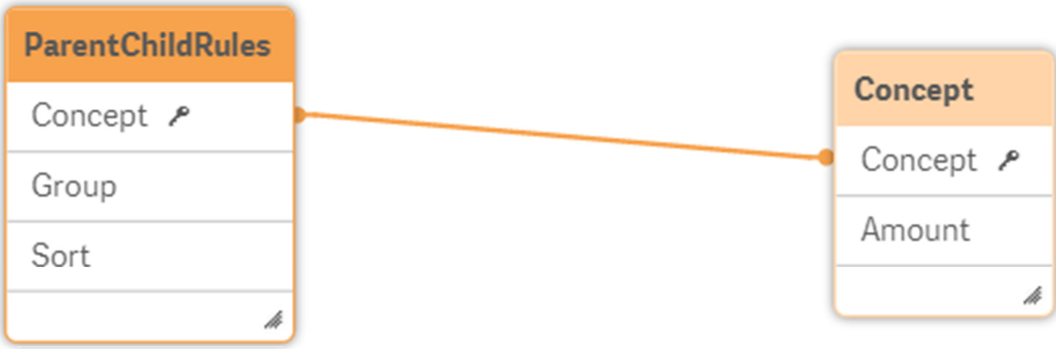
We should keep it checked in majority of the cases:

In a parent-child report you may have not all subgroups already calculated. It' s expected to work with an hypercube like that:

P&L Concept ID	P&L Concepts Parent	P&L Concepts Desc	Amount
00701	GROSS PROFIT	Revenue	1000
00601	GROSS PROFIT	Costs	-600
GROSS PROFIT	NET MARGIN	GROSS PROFIT...	**0**
NET MARGIN		NET MARGIN	**0**

Where we just have the basic concepts amounts and the relations with their parent accounts.

So we have something like that in our DataModel.



The 'Concept' table just contains the basic concepts:

Concept	Amount
00701	1000
00601	-600

The 'ParentChildRules' table contains the logic relations and the sorting rules:

Concept	**Group**	**Sort (info for sorting)**
00701	GROSS PROFIT	10
00601	GROSS PROFIT	20
GROSS PROFIT	NET MARGIN	30
NET MARGIN		40

We shouldn' t check it in the case:

It' s possible to find customers that already have all the P&L Concepts calculated and they have the info about the relations parent-child, but they do not want to maintain a column with the hierarchy levels and do not want to create this info in the script because they are not technicians.

I may have some info like this available in the origin:

P&L Concept ID	**P&L Concepts Parent**	**Amount**
00701	GROSS PROFIT	1000
00601	GROSS PROFIT	-600
GROSS PROFIT	NET MARGIN	400
Taxes	NET MARGIN	-40
NET MARGIN		360

Other considerations about the Parent-Child report format

Warning: this kind of report allows a maximum of 14 parent-child logic levels. What' s a parent-child logic level? It' s a hierarchic jump, for example let' s make an analogy with geographic data:

- I live in Barcelona
- Barcelona is in Spain
- Spain is in Europe

Here we have 3 hierarchic levels.

Even if we include a new City + Country + Continent (London + UK + Europe), we will keep on having only 3 hierarchic levels.

That' s all about the user guide and the features available in the last version 2.0.

Thanks for reading!