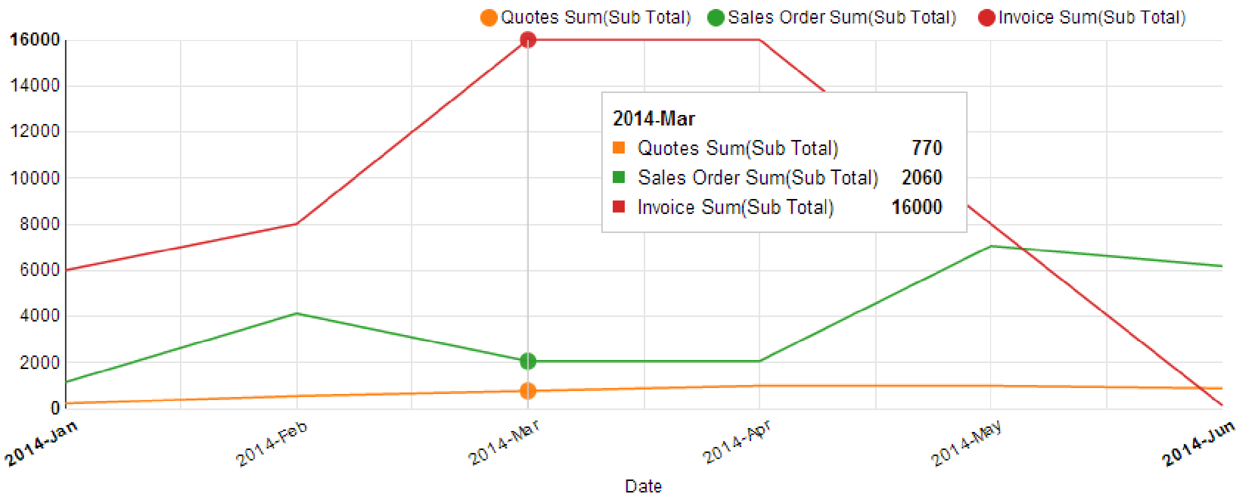
User Manual for Sapiens.BI PRO

SAPIENS.BI FEATURE OVERVIEW

- Various pre-defined reports are available for most of CRM system modules containing different summary types and chart types
- You can modify any of the existing reports or you can copy an existing report in order to create new one
- You can
  - add/remove fields or columns to be displayed in a report
  - Select what should be summarized, counted or calculated as min, max, average value
  - Filter your report data to see a specific date range, statuses or any other option
  - Calculate your own functions
  - Create detailed, summary and pivot(matrix) reports
  - Choose report grouping and summary options, incl. the grouping order
  - Identify what should be displayed as a row and what should be a column in your report
  - Identify the order for unlimited grouping and summary levels
  - Chart types: Pie, Line, Bar, Horizontal Bar, Area, Combined (Multi-axis), Funnel, Gauge and Geographic
  - Change chart types and set options what should be displayed on which axis
  - In the same report and chart you can summarize and compare data from various modules
  - Add your own formatted Excel templates to the report
  - Reporting based on history audit/ audit trial & snapshots is available
- Charts are interactive: on mouse over or mouse click on the chart area a small tooltip will show you the name and amount of the corresponding area, with drill-down option to detailed data

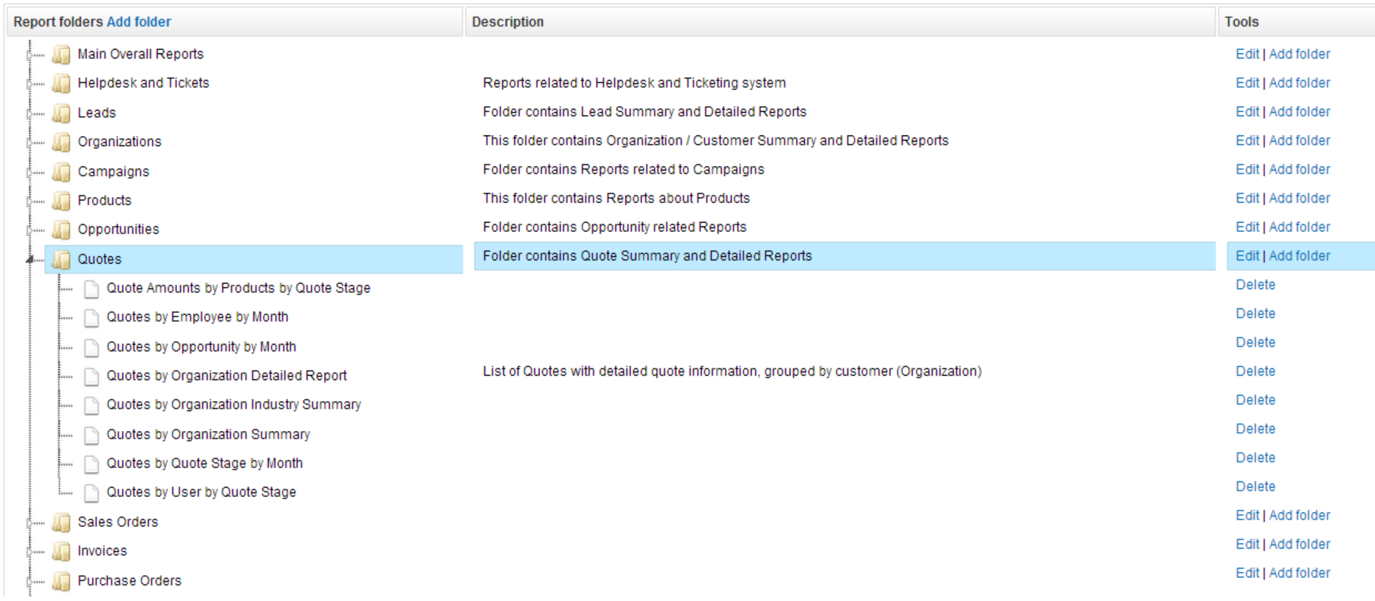


- Reports can be exported to Excel, PDF or CSV
- Charts can be saved as pictures (.png format)
- Charts can be added to CRM system Homepage / Dashboard/Widgets
- For each report you can set permissions for individual users or user groups to allow to see or edit/delete the report; set user access to the data: own or all access; allow/deny to edit filters
- Regular Report auto-creation and emailing as a link and/or PDF/Excel attachment to selected users can be scheduled
- Reports are organized in folders. You can move reports between folders. You can edit/delete these folders and you can create your own new main folders or sub-folders.

PRE-DEFINED REPORT LIST AND FOLDERS

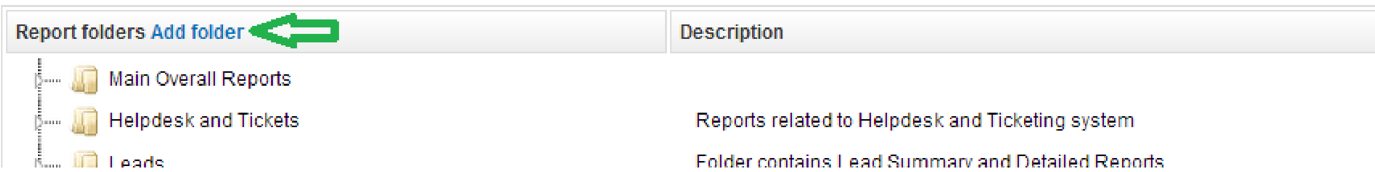
List of the folders with pre-defined reports will be the first thing you see after opening „Sapiens.BI" from the main menu. Reports are mainly organized according to CRM system modules, for example, in the „Invoices" folder, you will see summary and detailed reports related to Invoices, Quote related reports are found in the „Quotes" folder. The „Combined Reports" folder contains combined summary reports which apply to multiple CRM system areas, for example, a report containing summary of Quotes, Sales Orders, Invoices and Purchase Orders.

Open a folder by simply clicking its name or icon to see the reports inside. Close the folder by clicking it again.



Report folders Add folder	Description	Tools
Main Overall Reports		Edit | Add folder
Helpdesk and Tickets	Reports related to Helpdesk and Ticketing system	Edit | Add folder
Leads	Folder contains Lead Summary and Detailed Reports	Edit | Add folder
Organizations	This folder contains Organization / Customer Summary and Detailed Reports	Edit | Add folder
Campaigns	Folder contains Reports related to Campaigns	Edit | Add folder
Products	This folder contains Reports about Products	Edit | Add folder
Opportunities	Folder contains Opportunity related Reports	Edit | Add folder
Quotes	Folder contains Quote Summary and Detailed Reports	Edit | Add folder
Quote Amounts by Products by Quote Stage		Delete
Quotes by Employee by Month		Delete
Quotes by Opportunity by Month		Delete
Quotes by Organization Detailed Report	List of Quotes with detailed quote information, grouped by customer (Organization)	Delete
Quotes by Organization Industry Summary		Delete
Quotes by Organization Summary		Delete
Quotes by Quote Stage by Month		Delete
Quotes by User by Quote Stage		Delete
Sales Orders		Edit | Add folder
Invoices		Edit | Add folder
Purchase Orders		Edit | Add folder

In the folder list you can drag&drop reports to another folder but only if you have edit permissions to this Report. Click „Edit" on the right side of the folder if you want to change the Folder name and/or its Description. Clicking „Add folder" on the right side of the folder lets you add a sub-folder. To add a regular folder click "Add folder" in the top-left section:



Report folders Add folder	Description
Main Overall Reports	
Helpdesk and Tickets	Reports related to Helpdesk and Ticketing system
Leads	Folder contains Lead Summary and Detailed Reports

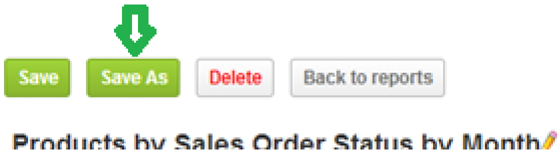
Clicking „Delete" on the right side of the Report deletes the Report. This option is only available if you have the permissions to Delete the report. You can delete folders in the same way. However, only empty folders can be deleted. If there are any reports in the Folder, you will not be able to delete it.

Note: A folder might appear to be empty but in fact there might be reports which you don't have permissions to see. In this case you will not be able to remove the folder.

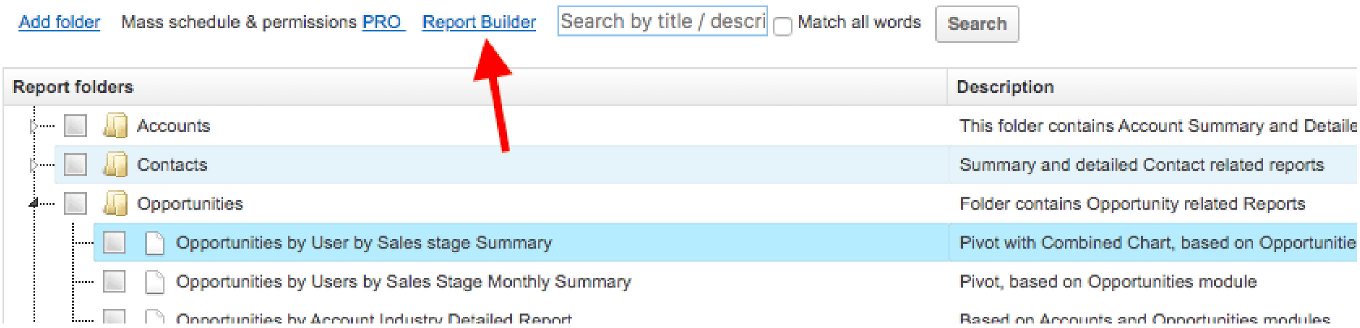
New folders and reports are sorted in the order of their creation date&time (latest will appear at the end of the list). After they are saved you can easily rearrange their order by dragging & dropping them as you wish.

Open a report by clicking its name from the list.

To create a new report you should start from opening an existing report, which contains data of those modules that you need to see in your new report. Then click „Save as" and in the pop-up window enter the name, description and folder of your new report and after clicking „Save" the report will be created.

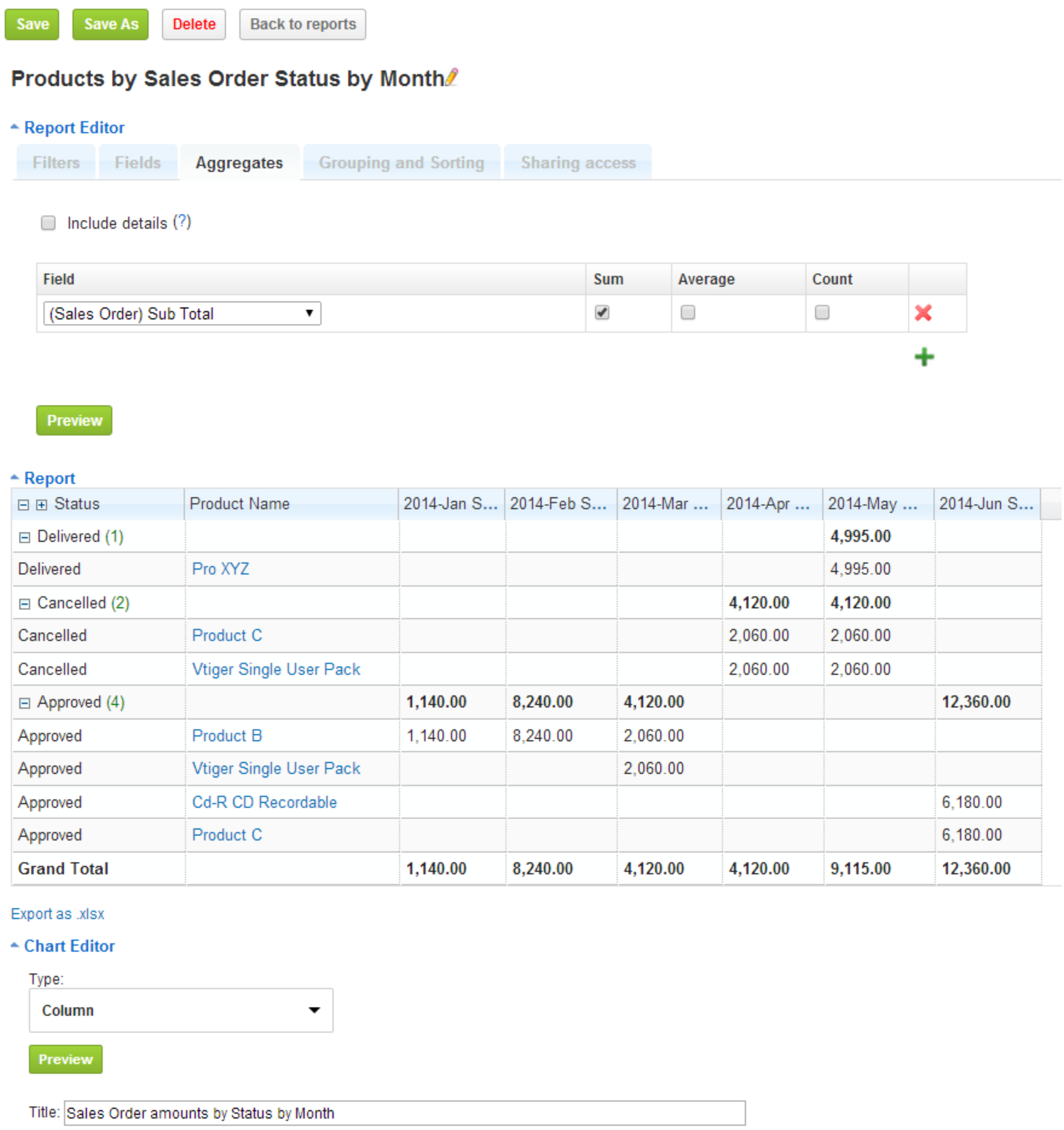


Or you can build a report from scratch by clicking to ‘Report Builder’ link on top of Report and Folder list.

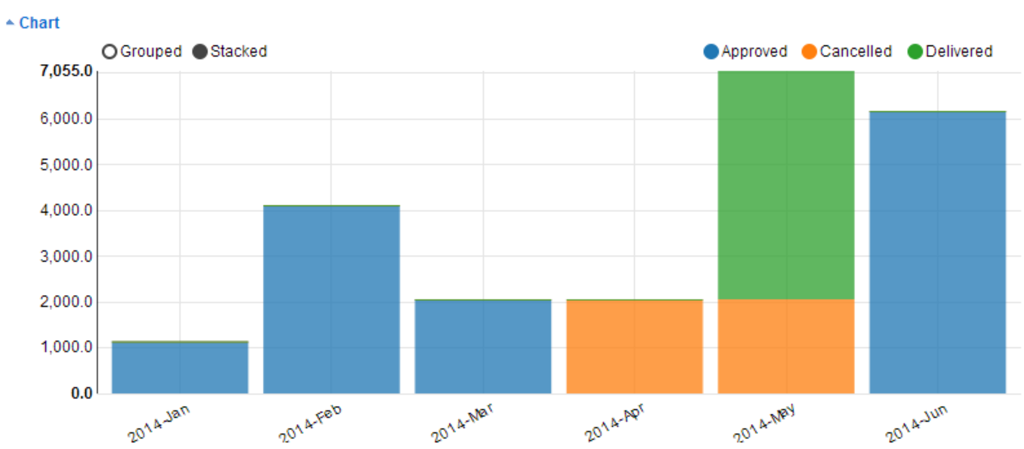


REPORT AND CHART SETTINGS OVERVIEW

When you have your report open, in the upper part of your screen you will see the Report editor and Report data. In the lower part of the screen you will see the Chart editor and the Chart related to this report.



Status	Product Name	2014-Jan S...	2014-Feb S...	2014-Mar ...	2014-Apr ...	2014-May ...	2014-Jun S...
Delivered (1)						**4,995.00**	
Delivered	Pro XYZ					4,995.00	
Cancelled (2)					**4,120.00**	**4,120.00**	
Cancelled	Product C				2,060.00	2,060.00	
Cancelled	Vtiger Single User Pack				2,060.00	2,060.00	
Approved (4)		**1,140.00**	**8,240.00**	**4,120.00**			**12,360.00**
Approved	Product B	1,140.00	8,240.00	2,060.00			
Approved	Vtiger Single User Pack			2,060.00			
Approved	Cd-R CD Recordable						6,180.00
Approved	Product C						6,180.00
Grand Total		**1,140.00**	**8,240.00**	**4,120.00**	**4,120.00**	**9,115.00**	**12,360.00**



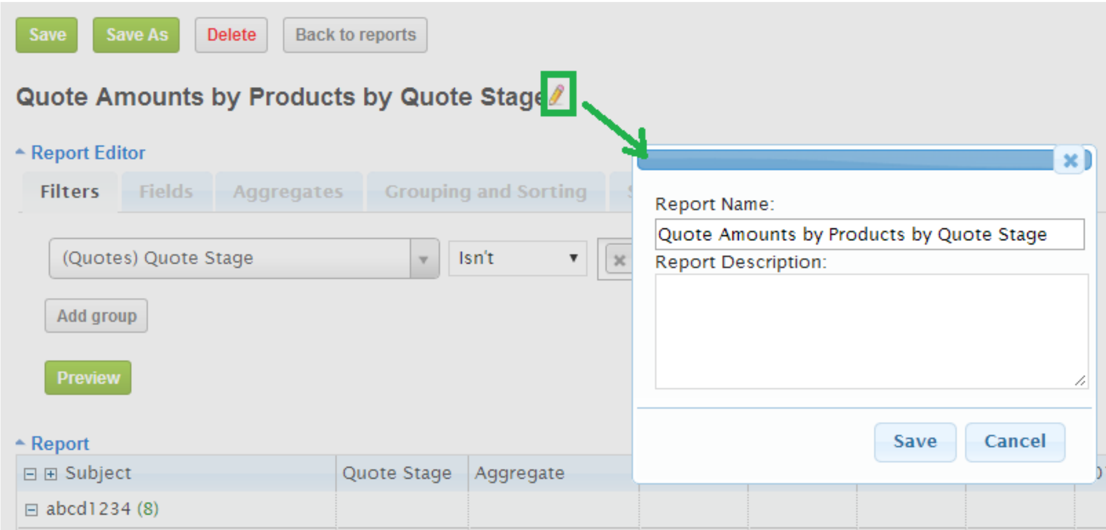
For any changes to take effect you need to click the „Save" button. The save button applies to both: Report and Chart settings.

The „Delete” button also applies to both: current report and chart. Confirming a deletion of a report removes it permanently.

Note: „Save”, „Save as” and „Preview” buttons are only visible if you have permissions to Edit this report. The „Delete” button is only visible if you have permissions to delete this report.

„Back to reports” will return to the Folder and Report list, without saving any changes made to the report (unless you have saved those changes already).

On the next line is the Report Name. Clicking the pencil icon (to the right of the report name) you can change the name and description of this report.

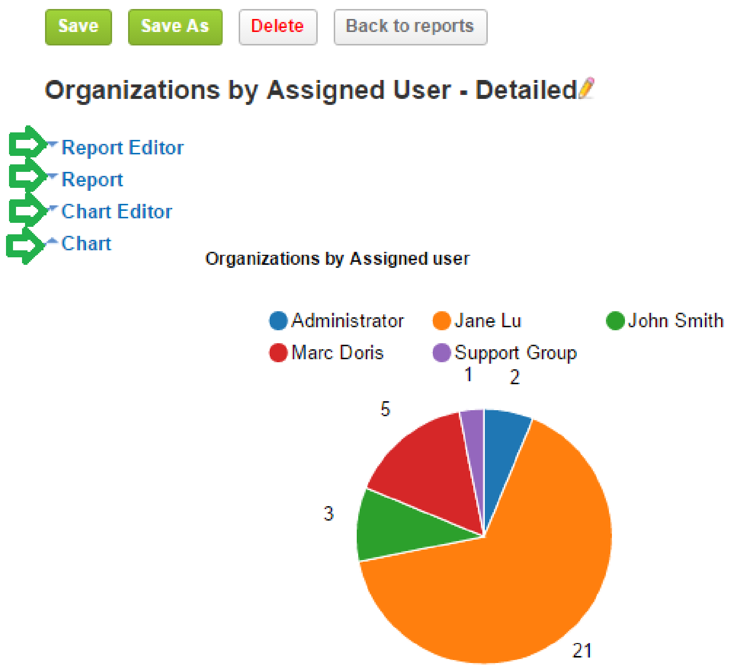


Bellow the Report Name you can see the four main parts of your report:

1. Report Editor – here you can edit the Report settings
2. Report - shows report data according to its settings
3. Chart Editor – for Chart Settings
4. Chart – shows your chart according to report and chart settings

Each of these sections can be closed or opened with the small arrow next to the section name: 

This way you can hide some parts. For example, you can keep the report settings always closed and open them only when you need to make changes. The small triangle next to the section title identifies its state, whether it is open or closed. In the example below only the “Chart” section is open, all others i.e. Report Editor, Report, Chart Editor are closed:



After clicking “Save” the report will remember the section states for when it is opened the next time.

When changing settings in the Report Editor, click „Preview” to see the report data according to the new settings. It is important to remember to Save (or „Save as”), if the Preview gives satisfactory results and you would like to keep the new settings ;).

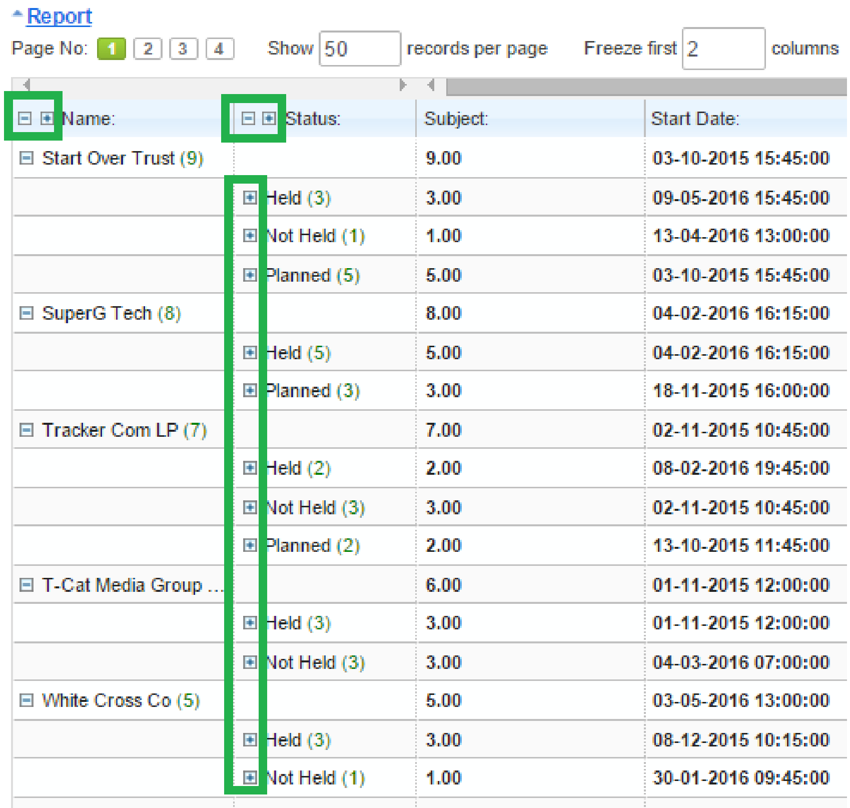
After changing the report settings, you need to change the chart settings properly, and then click on the Chart „Preview” button. Modified Chart settings should be saved as well.

Blue colored text inside of your report means that you can open it. For example (picture bellow), clicking on the Organization Name „EDFG Group Limited” will open that Organization's Detail View to see all its data. Clicking the Contact Name „Margaret” will open Margaret's Contact Information detailed view. Clicking „t3M Invest A/S – 1000 units” will open the corresponding Opportunity.

Report

⊟ ⊞ Organization Name	Quote No	Sub Total	Subject	Opportunity Name	Quote Stage	Valid Till	Contact Name	Total	A
⊟ EDFG Group Limite...	400	44000							
EDFG Group Limited	QUO10	11000	Prod_Quote	samplevtiger - 1000 units	Accepted	08-Apr-2014	Margaret	16000	Ja
EDFG Group Limited	QUO1	11000	Prod_Quote	samplevtiger - 1000 units	Accepted	03-Feb-2014	Margaret	16000	Ja
EDFG Group Limited	QUO11	11000	Prod_Quote	samplevtiger - 1000 units	Accepted	20-May-2014	Margaret	16000	Ja
EDFG Group Limited	QUO9	11000	Prod_Quote	samplevtiger - 1000 units	Accepted	05-Mar-2014	Margaret	16000	Ja
⊞ Good4you Inc. (15)	1500	330000							
⊟ ROCUS Ltd. (2)	200	44000							
ROCUS Ltd.	QUO3	22000	SO_Quote	t3M Invest A/S - 1000 units	Accepted	20-May-2014	Jennifer	27000	Jc
ROCUS Ltd.	QUO8	22000	SO_Quote	t3M Invest A/S - 1000 units	Accepted	20-May-2014	Jennifer	27000	M

If you have grouped items selected under the “Grouping & Sorting” tab for a detailed report or you have some additional grouping levels, then you can select to expand or collapse each group in the report table by clicking “+” or “-“ next to it. Selected expanded or closed state will be remembered if this is common for all items within a group. In the example below we have expanded all of the customer names and collapsed all of the Statuses, these settings will be saved by clicking the “Save” button at the top of this report.



Report

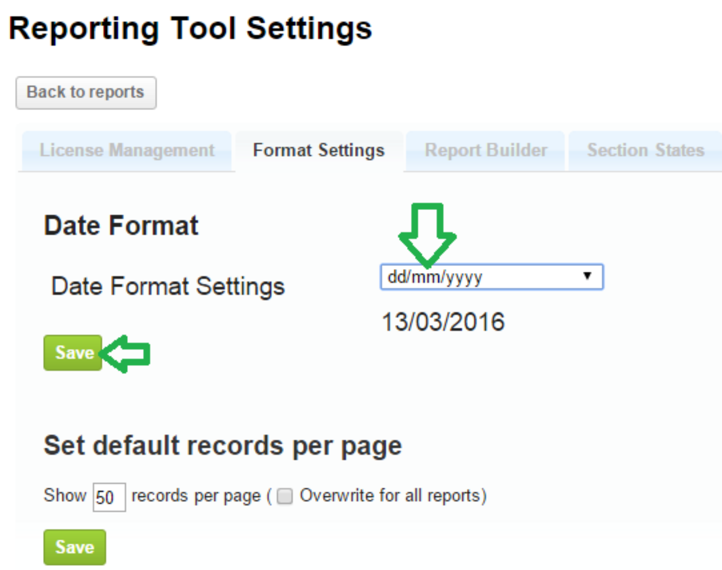
Page No: 1 2 3 4 Show 50 records per page Freeze first 2 columns

Name:	Status:	Subject:	Start Date:
Start Over Trust (9)		9.00	03-10-2015 15:45:00
	Held (3)	3.00	09-05-2016 15:45:00
	Not Held (1)	1.00	13-04-2016 13:00:00
	Planned (5)	5.00	03-10-2015 15:45:00
SuperG Tech (8)		8.00	04-02-2016 16:15:00
	Held (5)	5.00	04-02-2016 16:15:00
	Planned (3)	3.00	18-11-2015 16:00:00
Tracker Com LP (7)		7.00	02-11-2015 10:45:00
	Held (2)	2.00	08-02-2016 19:45:00
	Not Held (3)	3.00	02-11-2015 10:45:00
	Planned (2)	2.00	13-10-2015 11:45:00
T-Cat Media Group ...		6.00	01-11-2015 12:00:00
	Held (3)	3.00	01-11-2015 12:00:00
	Not Held (3)	3.00	04-03-2016 07:00:00
White Cross Co (5)		5.00	03-05-2016 13:00:00
	Held (3)	3.00	08-12-2015 10:15:00
	Not Held (1)	1.00	30-01-2016 09:45:00

Numeric values in your report data will be formatted according to your CRM system user settings. To change those, you need to go to your User Preferences – in CRM system top right corner, then set your preferred Decimal Separator and Digit Grouping Separator:

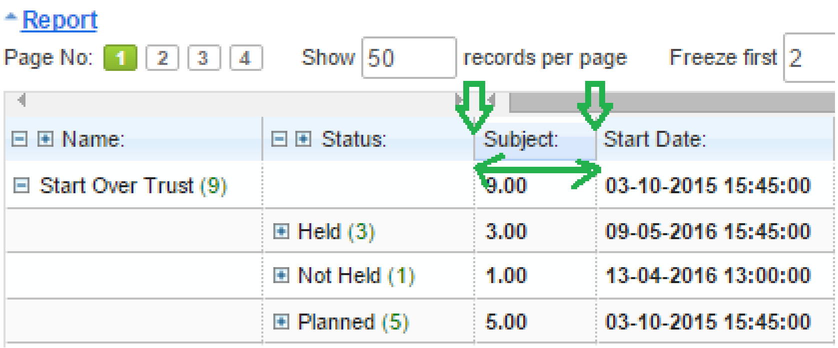
Date format settings for Sapiens.BI can be managed via “Reporting Tool Settings” (you can open it by clicking the link on the top-right corner of the report folder list. “Reporting Tool Settings” is available only for admin users.)

By default, all dates in the report tables will be displayed in the ‘yyyy-mmm-dd’ format, for example: “2016-Jan-01”. In cases when it is necessary to change the date format in your reports, you should open “Reporting Tool Settings”. Under the tab “Format Settings”-> “Date format”, please select the necessary format from the drop-down selection:



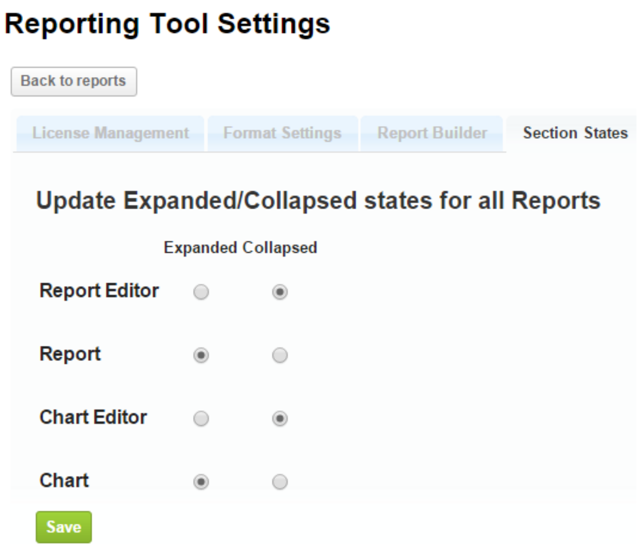
Click the “Save” button after the necessary format is selected. From the sample above, this will give you the following outcome:

You can change the width of columns by dragging the edges of its header. After saving the report the column sizes will be remembered.



Mass Update for Collapsed / Expanded Report Sections

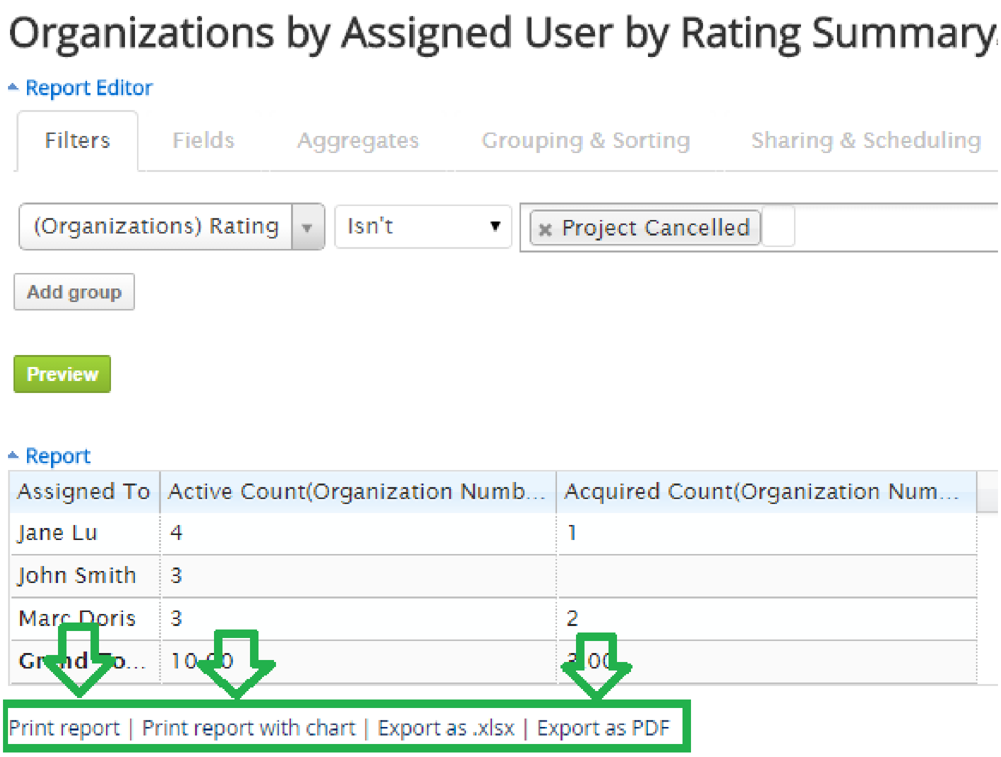
As described before, collapsed/expanded report sections are saved for each report separately. In case you need to update the same settings for all the reports, it would take a lot of time to do so one by one. In order to make it quick, you can do the following; Under “Reporting Tool Settings” which is located in the folder list, is a tab “Section States”. Here you can select, whether each section should be collapsed or expanded. After clicking “Save”, the section states will be updated for all reports independently on what they were before.



After making these changes, each report section state can again be edited and saved separately.
Please note that "Reporting Tool Settings" in the report folder list is only visible and available for admin users.

Print Report, Export to Excel/ PDF

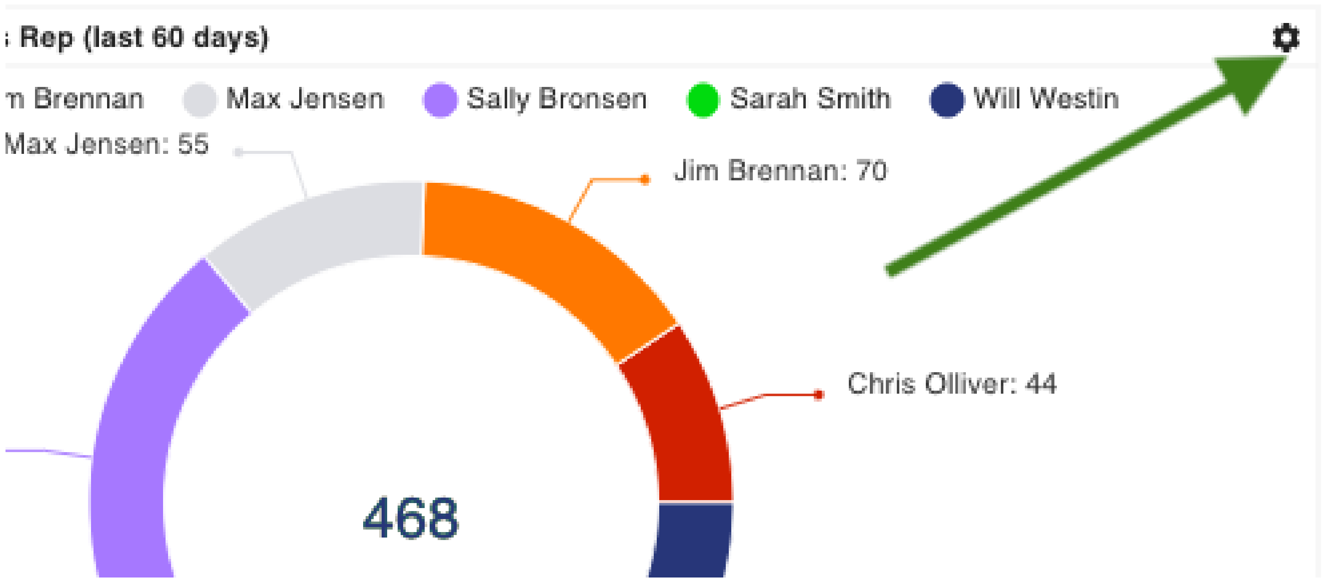
To print the Report, click the link „Print Report" (or „Print Report with Chart" if you would like to print the Chart as well) at the bottom of your report. This will open Print Preview and Printing options.
To export the Report Data to Excel, click the link, „Export as .xlsx" at the bottom of your report:

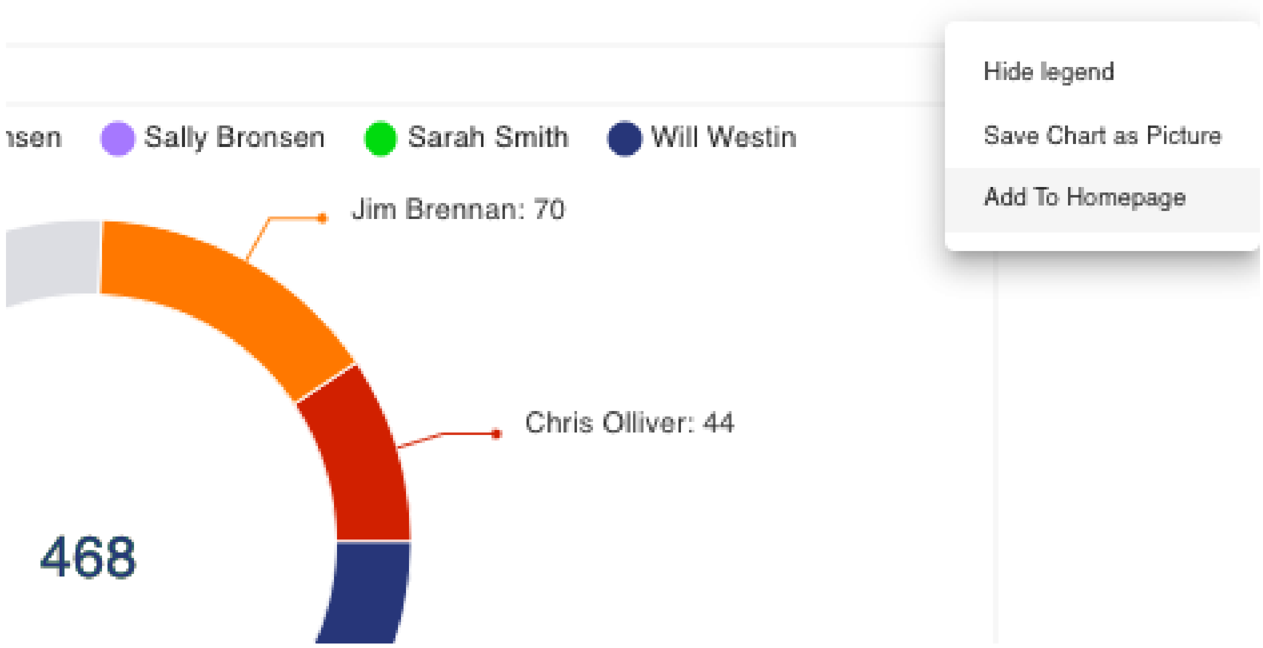


Note: Older Excel versions than .xlsx might have problems with export. To solve them, upgrade the Ms Office plug-in or upgrade the Ms Office version.

„Export as PDF" will export your report in PDF format.

To save your chart as a Picture (.png format), click on the gear icon and then „Save Chart as Picture" link option:





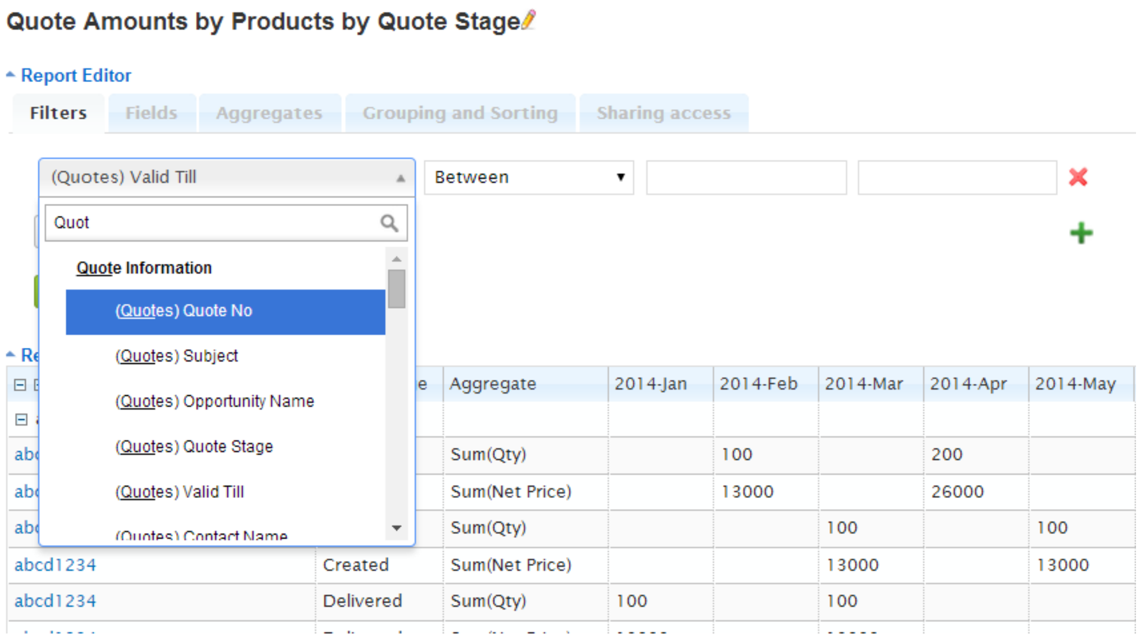
Note: Please check your Browser - older Web browsers (Chrome, Firefox or Internet Explorer) might have issues with Saving charts as pictures.

FILTERING REPORT DATA - „REPORT FILTERS" TAB

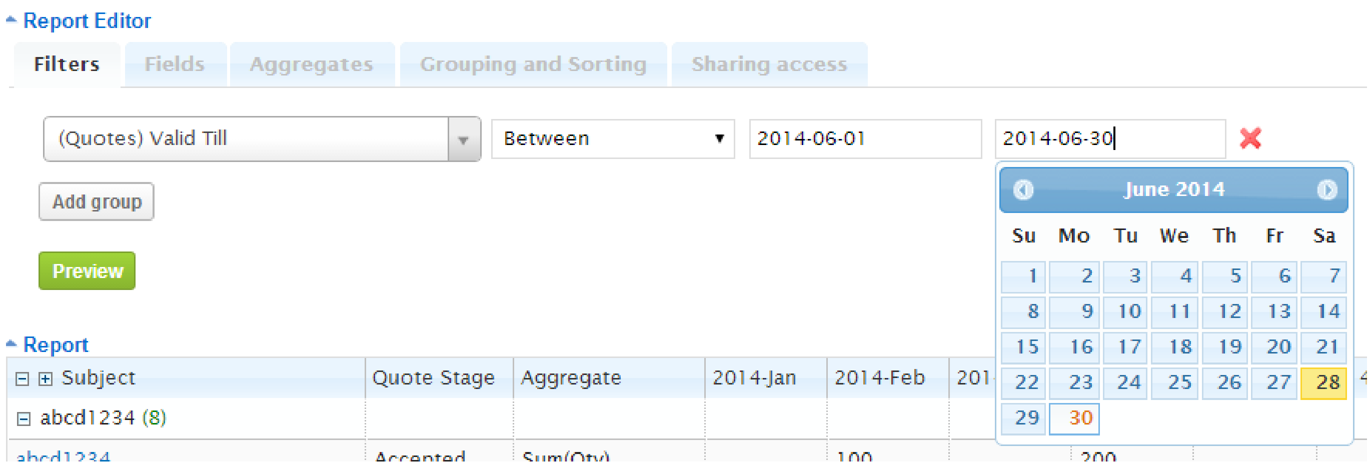
You can limit the data in your report by adding filter options. This can be done under the „Filters" tab. Selected filters will apply to both: the Report data and Chart. Filters can also be used for Search purposes.

In the pre-defined reports you can see what filters have already been applied. You can add/remove or edit the existing filters.

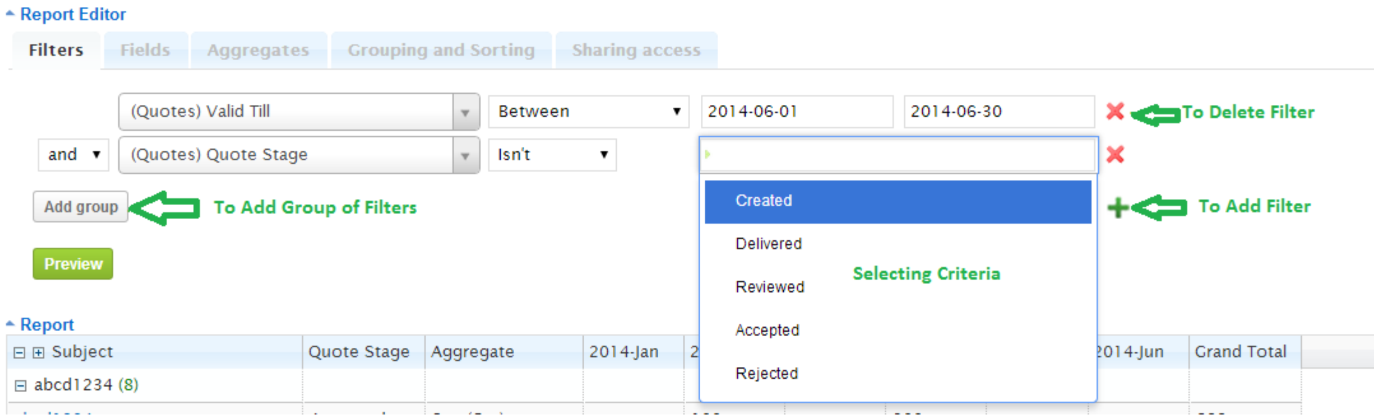
1. First you need to select the column (field) on which the filter will be applied. Start typing the field name and the drop-down menu will quickly narrow down the available fields.



2. Select the operator for the criteria, for example, „Is" if you need to get a match with your specified criteria, „Isn't" if you want to set criteria to be dismissed from the report. In our example we want to filter only those Quotes, which have Valid dates between June 1st, 2014 and June 30th, 2014. We choose the „Between" operator.
3. We then set the criteria. In our example since we chose the „Between" operator, we can now set the start date and end date:



4. If we want to add one more criteria and, for example, we want to filter out rejected quotes. First we add a second filter by clicking the green „+". Choose „Quote Stage" as the column to be filtered. Select „Isn't" as the operator. We are now given a drop-down selection of all the "Quote Stage" values:



If both filter conditions must strictly match our criteria at the same time for each Quote, we set „And" between both filter rows. This is the case in our example. If either one or the other filter can be be a match select "or".

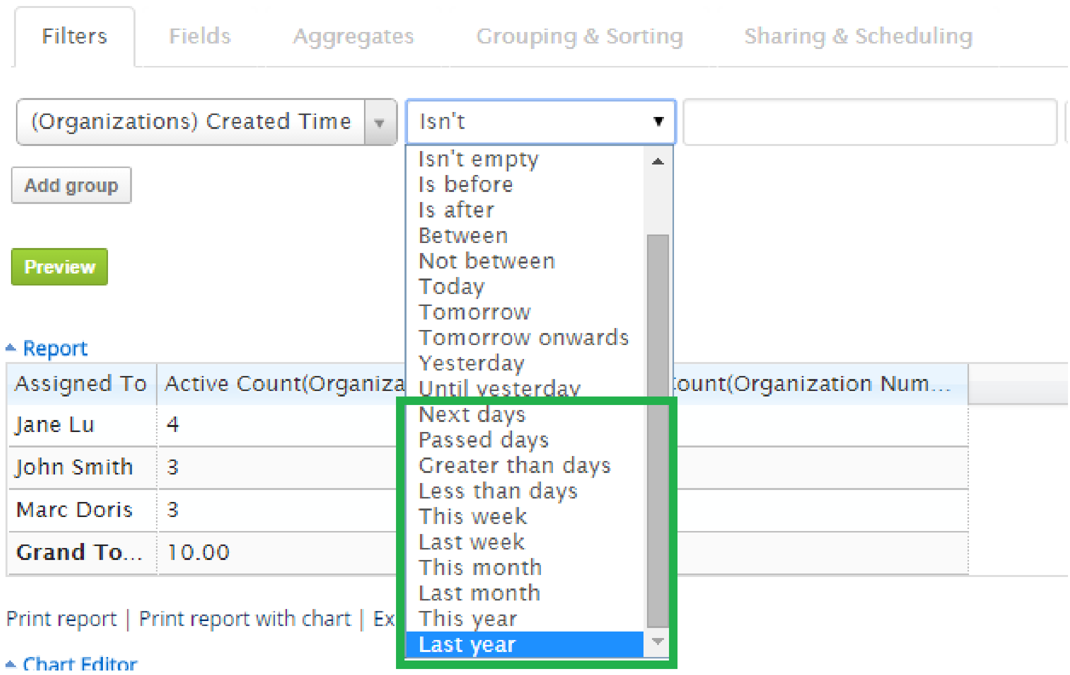
You can have groups of Filter conditions as well (this is needed, if there are complex combinations of "and"/"or" filter connectors). In such cases you should click the „Add group" button and then set another group of filter conditions.

Remove filters with the red „x".

Please remember to save the Filter changes. If you are not sure, that you want to Save your changed filters, you can „Preview" the report and then close the report without saving if you do not wish to save the changes. You can also „Save as" to keep the current report without changes and play with the new report at the same time.

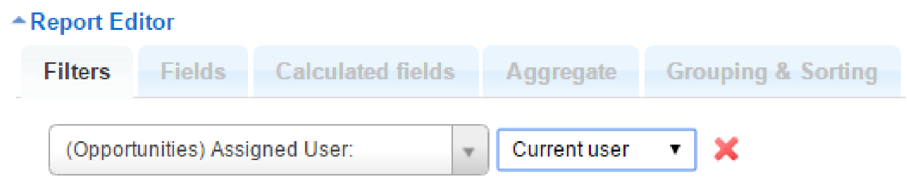
Additional pre-defined date and datetime filters for report viewing and for regular e-mail scheduling:

- # of Next days (for example, next 25 days or next 60 days from report viewing/auto-sending date);
- # of Passed days (for example, last 25 days or last 60 days till report viewing/auto-sending date);
- # of Greater than days (for example, 5 days will filter data where the date is 5 days or more in the future from the viewing/auto-sending date)
- # of Less than days (for example, 5 days will filter data where the date is 5 days or more in the past from the viewing/auto-sending date)
- You can also use date filters for: this week, last week, this month, last month, this year, last year.

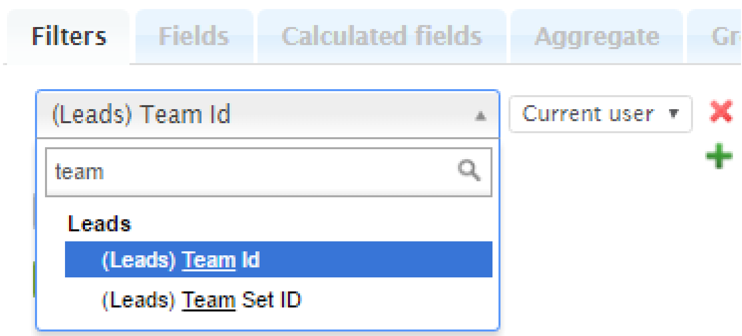


All filters are runtime for e-mail scheduling, except the ‘Current user’ filter will not be taken in account when the report is sent via e-mail in PDF and Excel format. Only the link to the report will work with the ‘Current User’ filter.

With the “Current user” filter you can limit the User access to the data. If such filter is set, each user will see only their assigned entries.



It is also possible to filter by the assigned main team or all teams assigned to the object. ‘Team Id’ will identify only the main assigned team. ‘Team Set ID’ identifies all assigned teams, not only the main team. If you need a User to see only their assigned team data, please use ‘Current user’ criteria as you can see below.

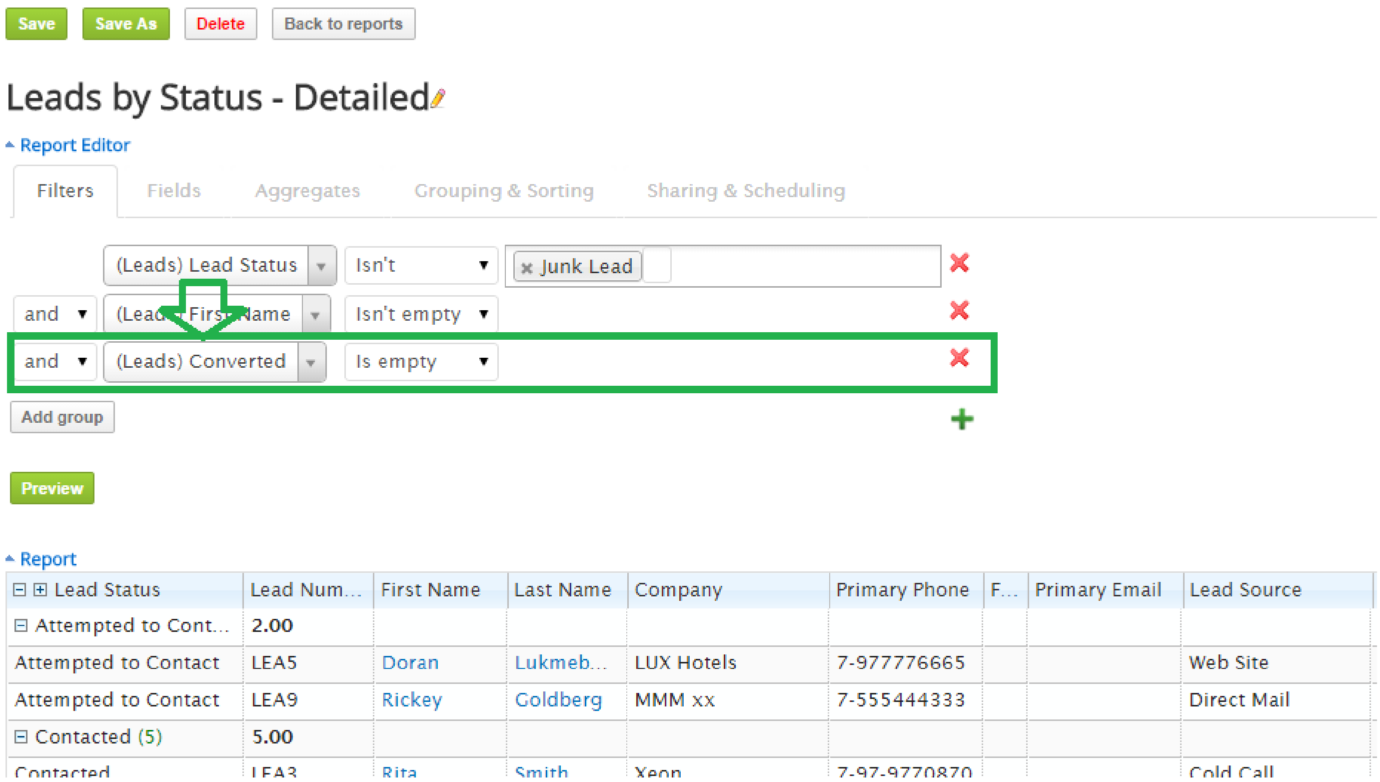


Selection of converted / not converted Leads for Leads Reports

If you are using the Leads module, it might be interesting for you to compare unconverted leads versus converted leads. In order to do that, you can select the field „Converted” and then Group by this field.

If you only want to see Leads that are unconverted, set up a filter for „Converted” to „Is empty” – this means that lead is not converted.

Vice versa if you set the „Converted" field filter to „Isn't empty" you will only see those leads that are converted.



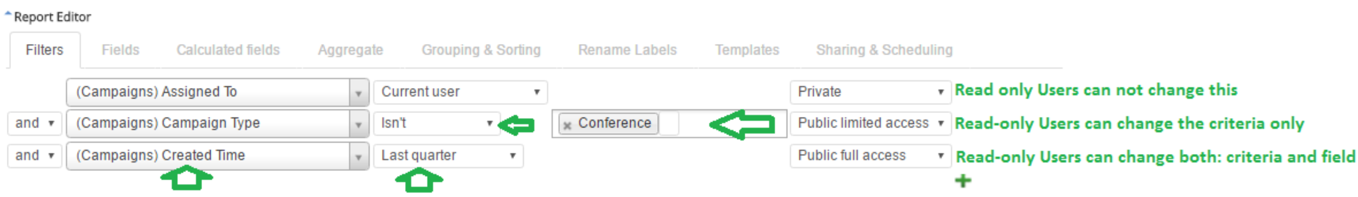
Permissions to Edit Selected Filters for Read-Only Users

Users with 'View' report permissions, considered as 'Read-only users', can not edit any of the report settings at all. In some cases it is still necessary to allow a few filter changes by the Read-only users.

If you do not want to allow any edits to this filter from a Read-only user, keep the 'Private' setting for this filter.

If you want your 'Read-only' user to be able to change the filter criteria, without allowing to change the selected filter field, assign 'Public limited access'.

If the Read-only user should be able to change the filter field as well, assign 'Public full access' permission to the filter. In this case they will be able to change it to any other field, except those, selected as 'Private'.

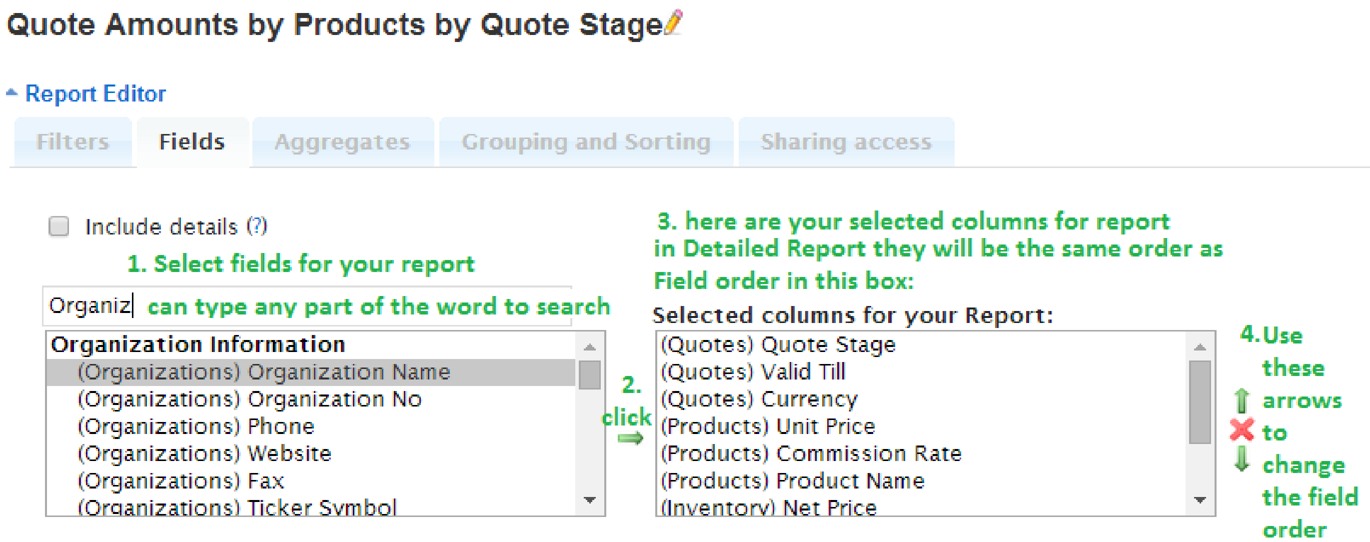


Please note, that any filter, even 'Private' will still be fully editable for all users having 'Edit' or 'Edit, Delete' permissions to this report.

SELECTING COLUMNS FOR YOUR REPORT – „FIELDS” TAB

Under the „Fields” tab you can select fields to be shown, grouped or summarized in your Report and Chart:

1. Simply click on the field in the left-side selection box to highlight it (you can scroll down to find the field or you can type any part of the field title and also the module name to search)
2. Click on the green arrow to move the highlighted field from left to right side box
3. All fields, which appear in the right-side box, are selected for your report
4. If you have selected „Include details” check-box, then you will see all field data in your report. The column order in a detailed report will be organized same way as the fields in the right-side box. Highlight a field and then use the up/down arrows to change the field order.
   You can remove a field from your report by highlighting it and then clicking the red „x” to remove it.



5. If you only need to see the summary data in your report keep „Include details” unchecked. Only those fields which are selected under the „Aggregates” and „Grouping and Sorting” tabs will be shown. The column order will depend on the selected grouping and sorting order as set in the „Grouping and Sorting” tab.

In both of the selection boxes you can highlight multiple fields by holding down the „Ctrl” key while clicking the fields.

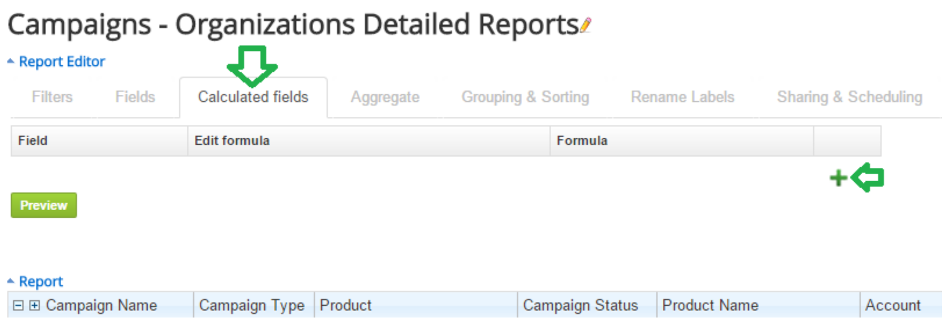
Remember to save the selected Field changes. If you are not sure, that you want to Save the modified Field selection, you can „Preview” the changes and then close the report without saving if you do not wish to save the changes. You can also use „Save as” to keep the current report without changes and play with the new report at the same time.

CALCULATE YOUR OWN FUNCTIONS – „CALCULATED FIELDS” TAB

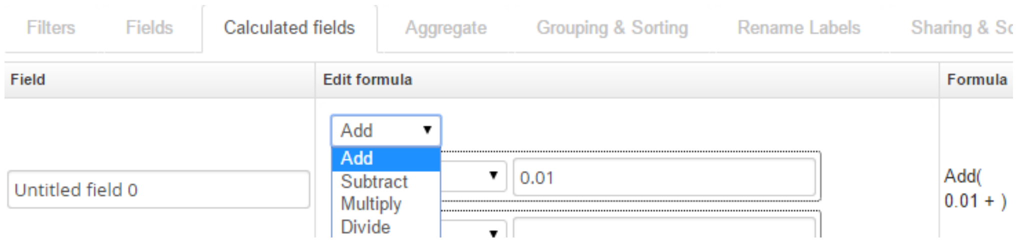
With Sapiens.BI you can now calculate your own functions using field values and/or constants.

Please follow these steps for function creation:

1. Open the report where you would like to add the function
2. Open the „Calculated fields” tab

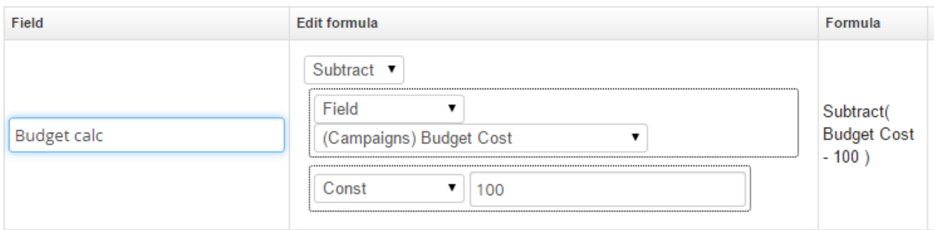


3. Click the green „+” to add a formula. You can add an unlimited number of calculated functions.
4. Replace the „Untitled field 0” with the name of the new field. In the „Edit formula” column first choose the operator: Add/Subtract/Multiply/Divide/Add Date/Subtract Date/If.

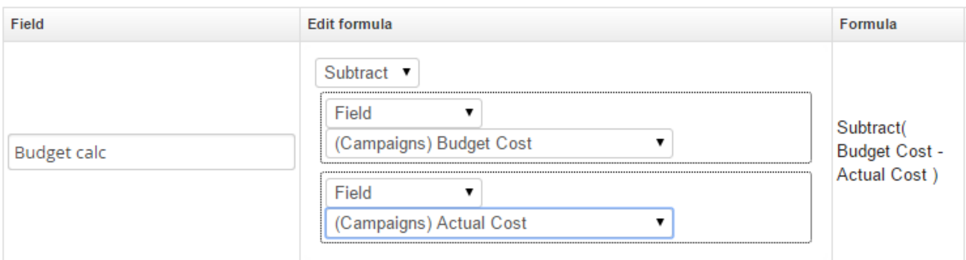


5. After you have selected the necessary operation type, please select fields or constants on which to operate;

For example, to have the Budget cost reduced by 100 USD for every Campaign choose „Subtract”, then choose „Field” and select „Budget cost”. Select „Constant” in the next line and input „100”. The formula will be displayed in the last column. The example will look like:

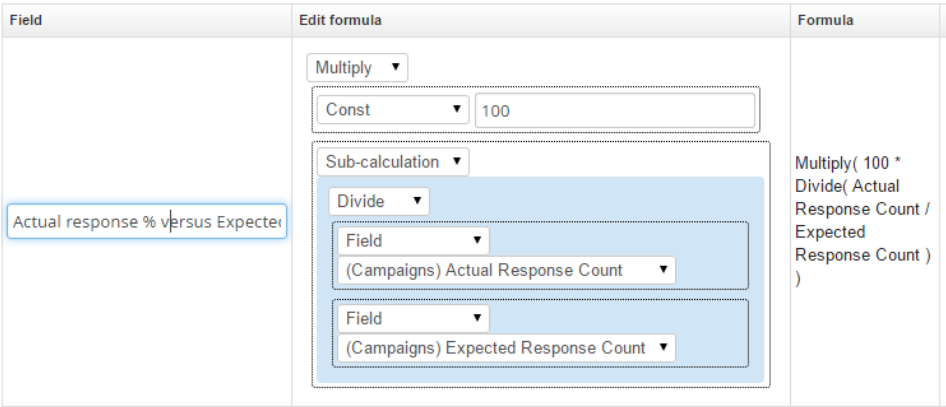


To continue the example, to subtract the Actual cost from the Budget cost, change „Constant” to „Field” and then select „Actual cost”:



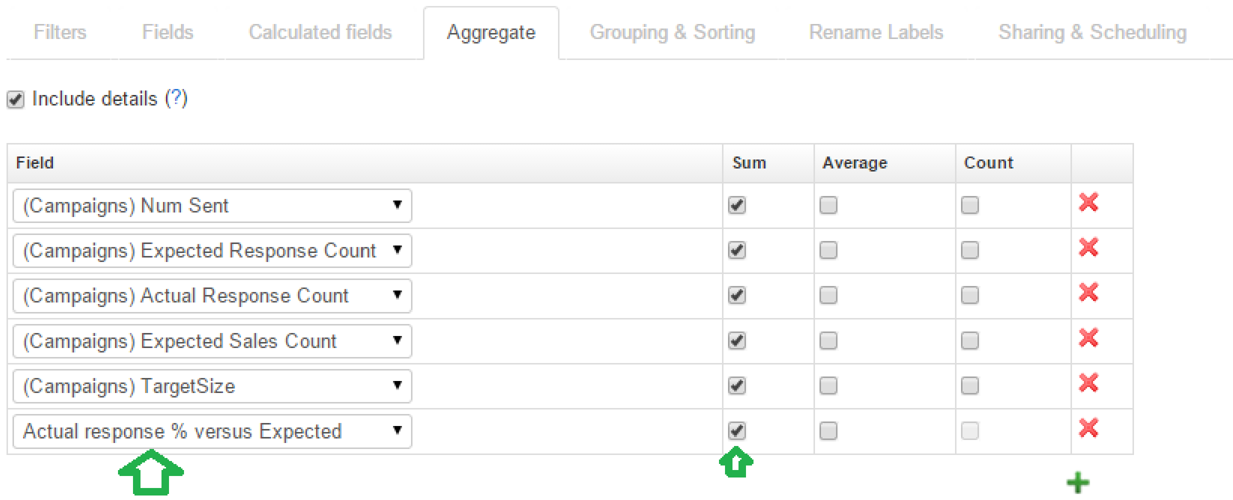
6. To add additional calculations to the formula, select „Sub-calculation” in this way it is possible to make as many sub calculations as necessary.

For example, to calculate Campaign Actual Response Percentage (%) from Expected, the formula would need „*100” and two field division, so it would look like this:

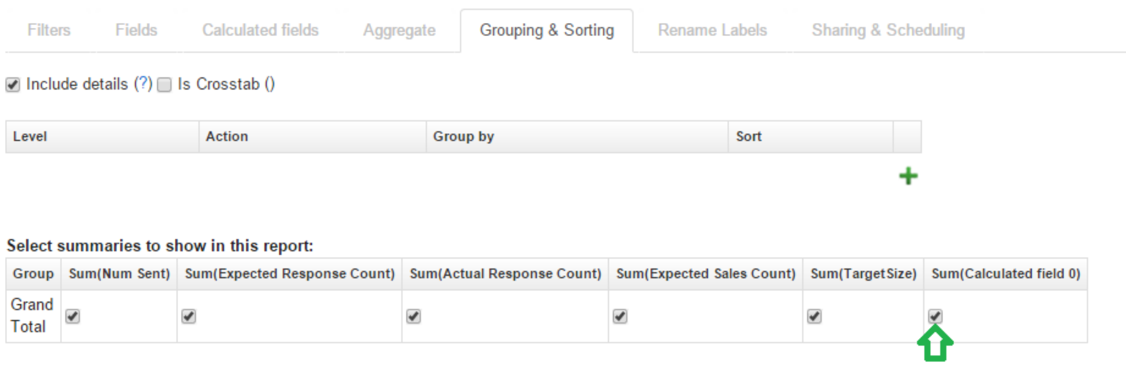


You can remove any formula with the red „x” on the right side.

7. In the Detailed Report it is possible to „Preview” the changes, however, in summary or pivot reports it is better to save the report. It is also possible to average or sum the calculated value under the „Aggregates” tab:

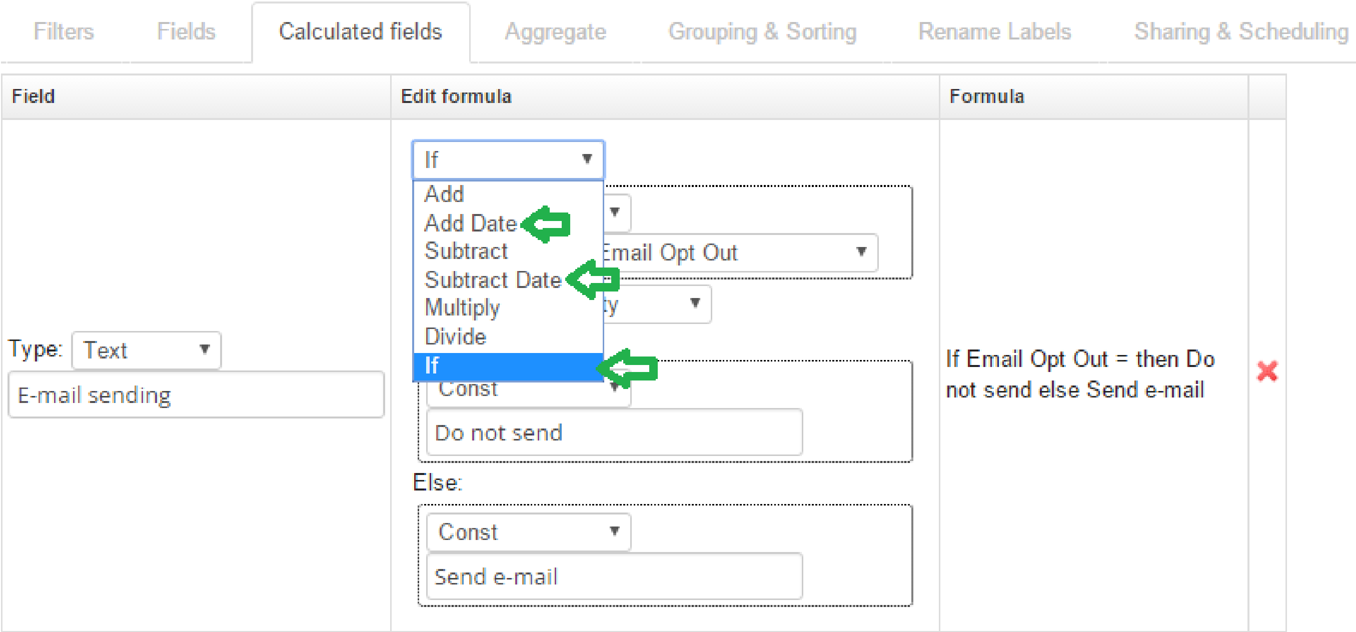


8. Finally identify under „Grouping and Sorting” if summaries / grand totals of the newly calculated value are needed:

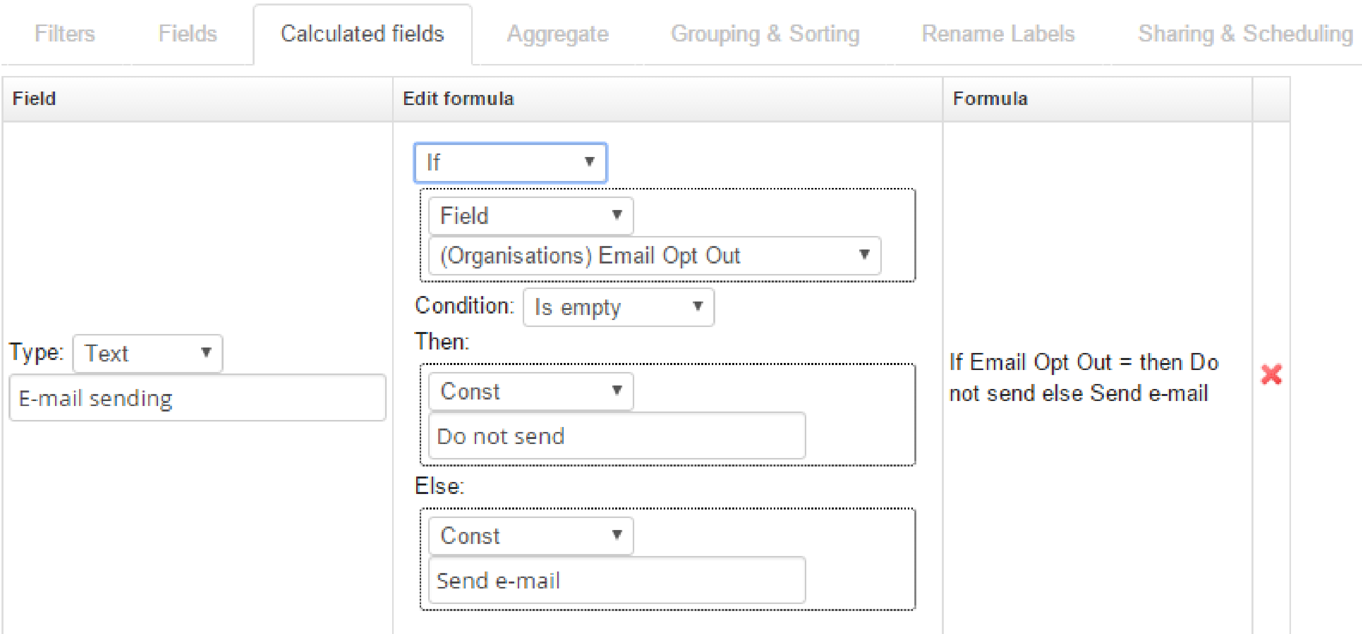


9. Remember to save the new settings!

Under ‘Calculated fields’, you can also use “Add Date”, “Subtract Date” and “If”, which will work a bit differently than “Add”, “Subtract”, “Multiply”, “Divide”, as they have different calculation rules.

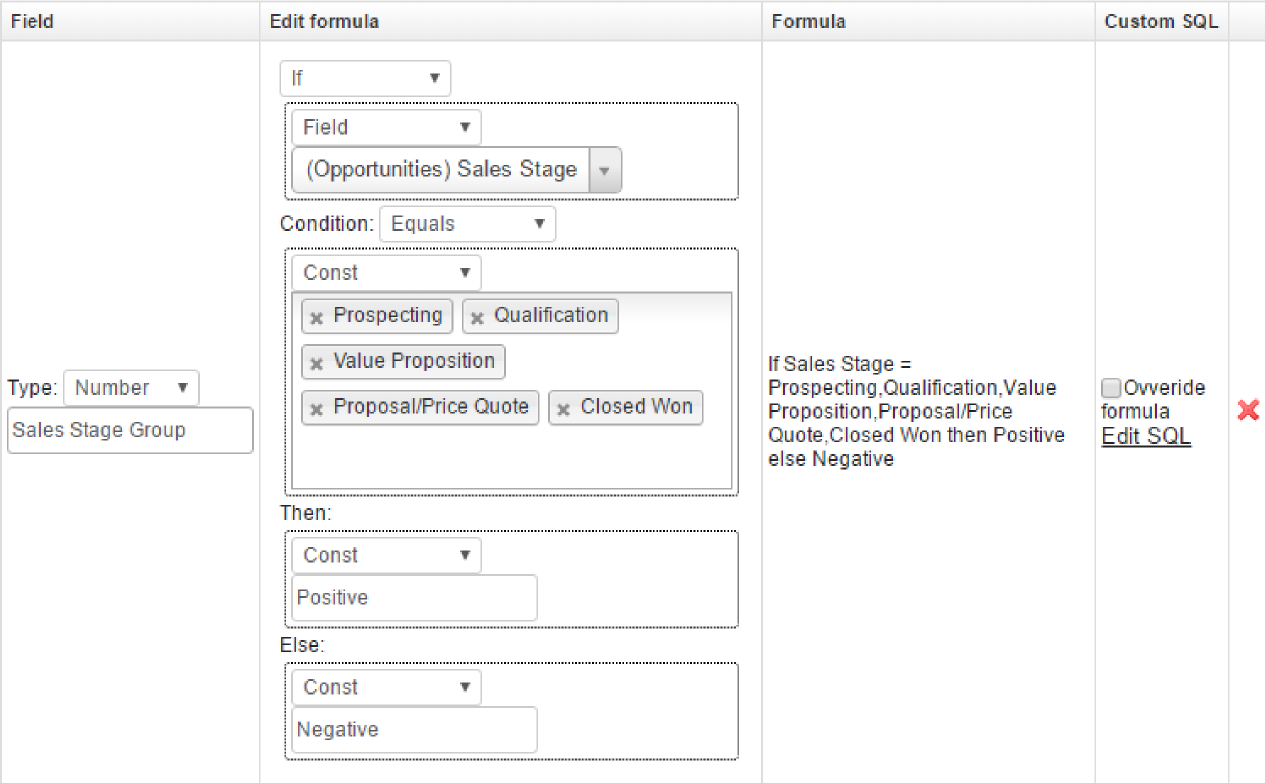


The example below is for “If” condition.

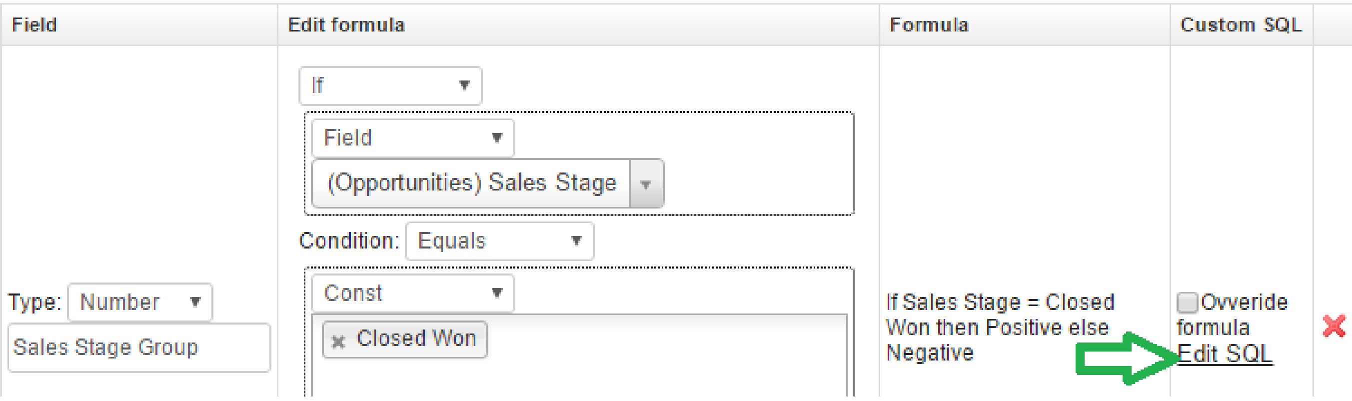


All “If”…”then”…”else” have nested function capability. If nested functions are necessary, please select “sub-calculation”.

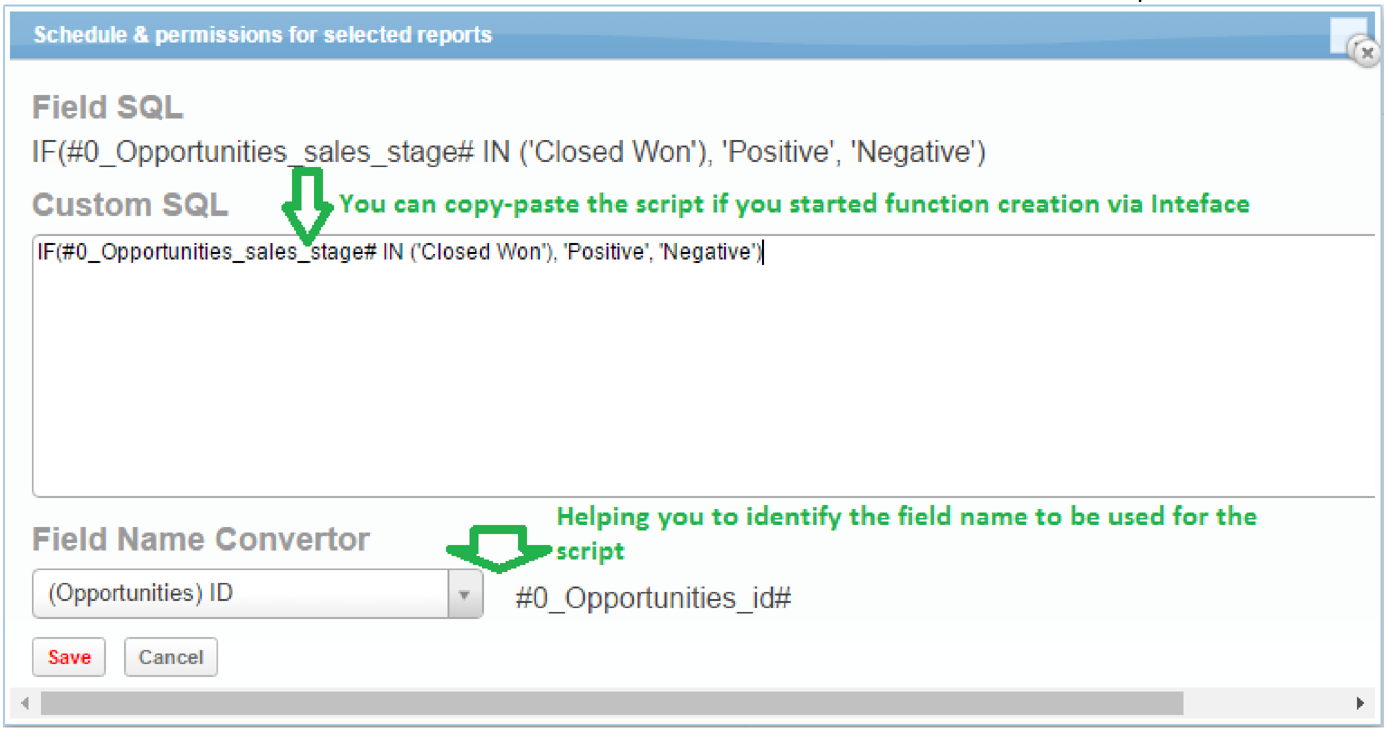
More than 1 picklist value can be selected under ‘If…then’ filters:



To edit the formula script manually, click ‘Edit SQL’ on the right side.



Important! If you edited and saved the custom script, you will no longer be able to edit it via the Interface. Added custom scripts can be further edited manually only.

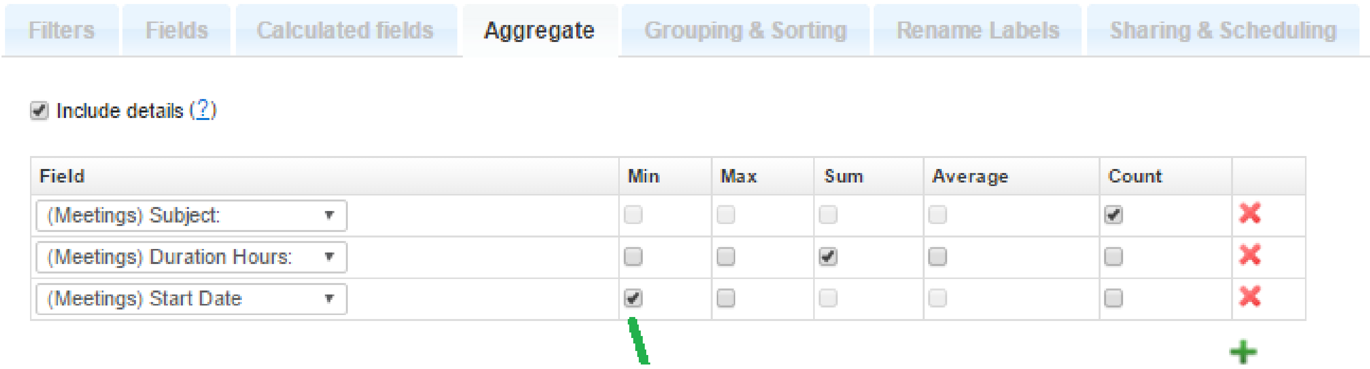


After editing the custom script, remember to save to make your function available for use.

The checkbox 'Override formula' allows you to switch between the manually edited script and the original formula (before editing). Keep the checkbox selected, if you wish to use the edited formula. Deselecting the checkbox will use the original function.

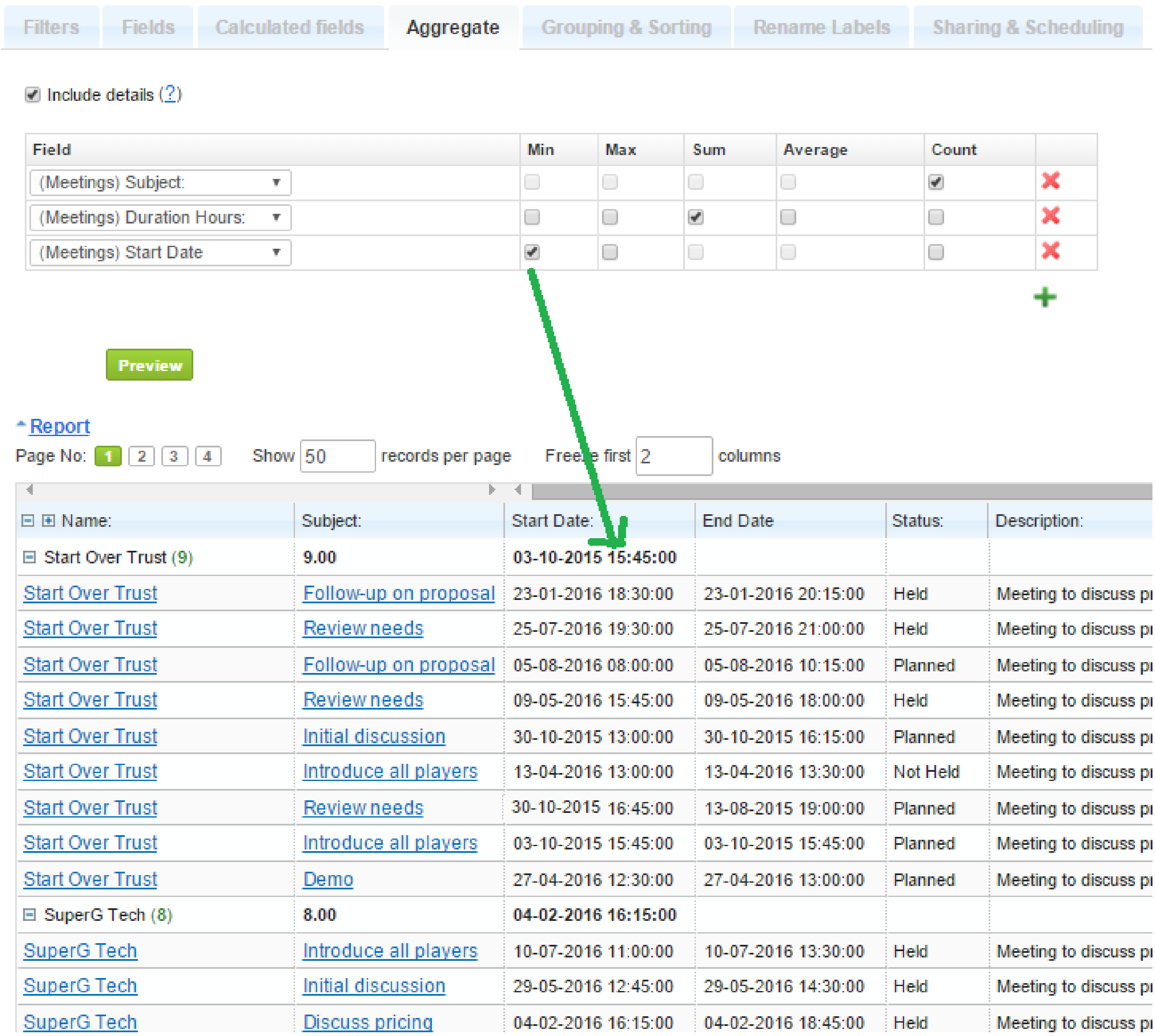
SET COLUMNS TO SUM, AVG OR COUNT – „AGGREGATES" TAB

Under the „Aggregates" tab you can select which fields you would like to Count, Summarize, or find Minimal, Maximal or Average value. Simply select the field from the drop-down menu and then mark the check-box next to the selected field. Click the green „+" to add additional fields for aggregating. Remove fields with the red „X".



For each selected field at least one of the summary options must be selected: Sum, Average, Min, Max or Count. All of the options can be selected but it is recommended to use only Sum or Average for amount and currency fields, while ID or Number should be used for count (or any unique field is highly recommended for correct count).

Min / max values you can calculate for amounts and for date/date-time field types. As always, it is necessary to select at least one "Group by" item under "Grouping & Sorting". For example, if you need to see the first meeting date and time for each of your Customers, please select "Min" value for meeting Start Date under "Aggregates" and "Account Name" to be grouped by under "Grouping & sorting" tab.



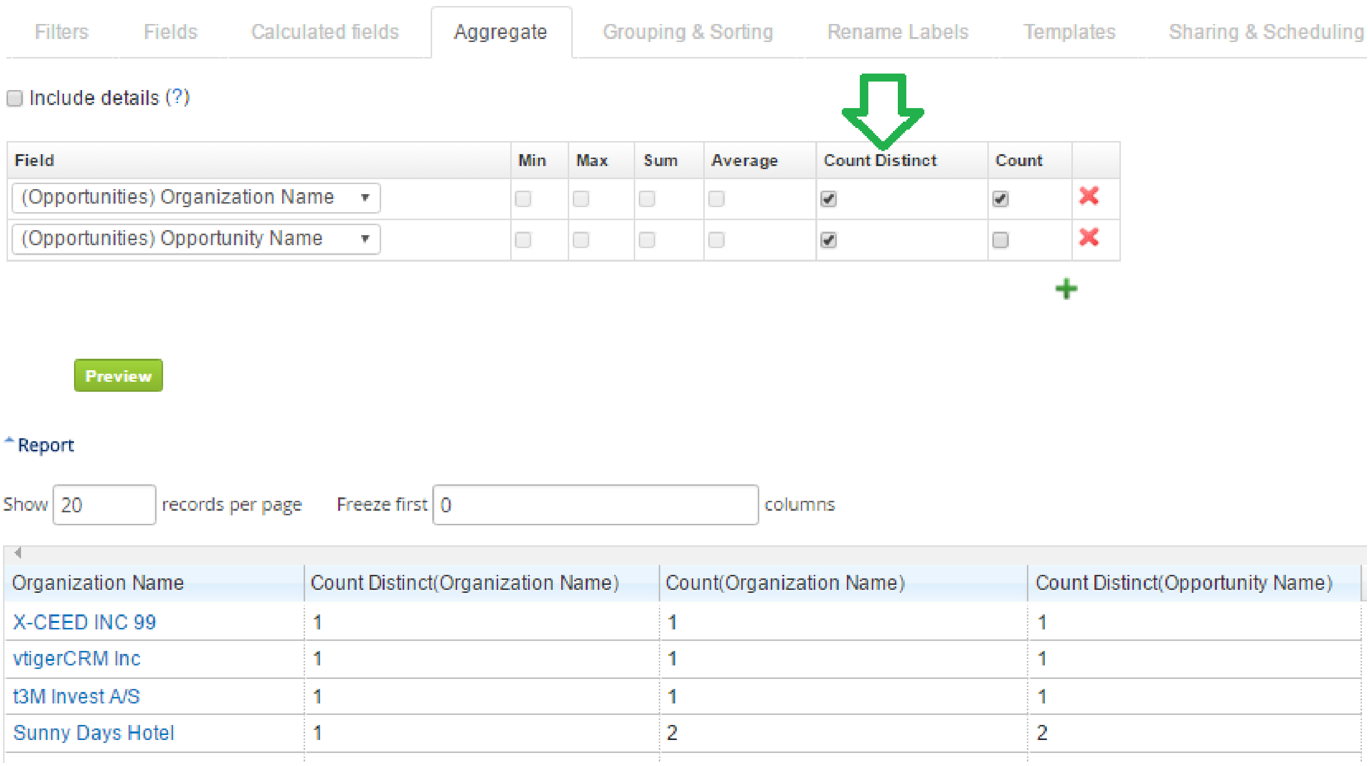
Include details check-box is there to select detailed or summary report type. For more information about „Include details" please see the previous section „SELECTING COLUMNS FOR YOUR REPORT – „FIELDS" TAB" tab description, point 4 and 5.

Remember to save the selected Summary option changes. If you are not sure, whether you want to Save the changed Summary settings, you can click „Preview" and then close the report without saving. You can also use the „Save as" option, - to keep the current report without changes and play with the new report at the same time.

Count Unique Values

Selecting simple 'Count' under 'Aggregate' tab would count all records in the report, while 'Count Distinct' would count unique values only.

For example, you create report of Organizations with Opportunities, where 5 Organizations are related to 10 Opportunities in Total. If you need to count, how many Organizations are there, you should select 'Count Distinct' – for 'Organization Name'; it will return correct number: '5'. If you select just 'Count' for 'Organization Name' instead, it will return number 10 (no matter, if you choose 'Count' for Account Name or Opportunity, since 'Count' returns total count of all records).



„GROUPING & SORTING” TAB

After you have selected the necessary Columns(fields) and summaries in your Report, you can identify how data should be grouped and sorted – under the „Grouping and Sorting” tab.

In the Grouping & sorting upper table in „Group by” select the field from the drop-down menu by which the data should be grouped and summarized in our Report. The drop-down menu contains only those fields which are selected under „Fields” tab. You can have several grouping levels in your report. The order of selected fields is replicated in your report. The first selected group (in the first row) is the upper level of the grouping and summarizing in your report, the „Level” number is „1”. The next summary you add (Level „2”) will be summarized already inside the 1st group. For example, if we want to see in our report Invoice amounts by Date and then by Product, we select date first and Product name second (please see the picture below). If you need to have this field grouped for summary, it is important to choose „Group” or „Group and sort” in the „Action” pick-list.

„Group and sort” and „Sort” options will allow you to identify the sort order in the „Sort” column: „Ascending” or „Descending”. If your report has selected Aggregates for summaries (under „Aggregates” tab), for the „Group and sort” option you can also choose to sort by this summary aggregate, for example, if you would like to sort not by Product name, but by product sold amounts.

For detailed reports (if „Include details” is checked) you can also select only to „sort” by this column. For more information about „Include details” please see the previous „Aggregates” tab section, point 4 and 5.

For date and date-time fields we can identify one of the following grouping levels: Day, Week, Month, Quarter, Year. In our example below we have selected to group and sort by Month of the Invoice date. In „Sort” selection you can identify the sort order (Ascending/ Descending) and also – do you want to sort by the group (in Alphabetic order) or by Sums in this group. For example, if you want to see the the month with the largest income from invoices first, you need to select Sum(Net Price)+Descending in sort options. In our example we want this to be sorted in calendar order, not by amounts, so we select the Invoice Date Ascending.

Filters | Fields | Aggregates | **Grouping & Sorting** | Sharing & Scheduling

☐ Include details (?) ☐ Is Crosstab (?)

Level	Action	Group by		Sort		
1	Group & Sort ▼	(Invoice) Invoice Date ▼	Month ▼	Invoice Date ▼	Ascending ▼	✖
2	Group & Sort ▼	(Products) Product Name ▼		Product Name ▼	Ascending ▼	✖

✚

Select summaries to show in this report:

Group	Sum(Net Price)	Sum(Qty)
(Invoice) Invoice Date	☑	☑
(Products) Product Name	☑	☑
Grand Total	☑	☑

Preview

Report

Invoice Date	Product Name	Sum(Net Price)	Sum(Qty)
⊟ 2014-Jan (1)		**2,200.00**	**1.00**
2014-Jan	Product B	2,200.00	1.00
⊟ 2014-Mar...		**8,600.00**	**2.00**
2014-Mar	Product B	8,600.00	2.00
⊟ 2014-Apr...		**15,597.00**	**6.00**
2014-Apr	Brother Ink Jet Cartridge	1,908.00	2.00
2014-Apr	Cd-R CD Recordable	789.00	1.00
2014-Apr	Product B	8,600.00	2.00
2014-Apr	Product C	4,300.00	1.00

The green „+" adds one more grouping level and the red „x" removes it.

After the Grouping and Sorting options is the „Select summaries to show in this report:" table to select where we want our summaries to be shown/hided. In our case we have selected to show selected summaries for all our groups and to display the Grand total as well:

Select summaries to show in this report:

Group	Sum(Net Price)	Sum(Qty)
(Invoice) Invoice Date	☑	☑
(Products) Product Name	☑	☑
Grand Total	☑	☑

When our grouping options are set, we can click „Preview" button to see the result:

Report

Invoice Date	Product Name	Sum(Net Price)	Sum(Qty)
2014-Jan (1)		**2,200.00**	**1.00**
2014-Jan	Product B	2,200.00	1.00
2014-Mar (1)		**8,600.00**	**2.00**
2014-Mar	Product B	8,600.00	2.00
2014-Apr (4)		**15,597.00**	**6.00**
2014-Apr	Brother Ink Jet Cartridge	1,908.00	2.00
2014-Apr	Cd-R CD Recordable	789.00	1.00
2014-Apr	Product B	8,600.00	2.00
2014-Apr	Product C	4,300.00	1.00

If you want to see the group items each as a new column (instead of row), you should select the check-box for „Pivot (Matrix)”. As soon as „Pivot (Matrix)” check-box is selected, we see additional options in our Grouping and sorting table: „Position”. Here we need to select at least one group item that should be organized as a „Column”. In our case it is Invoice Date, while Product name will be as „Row”.

In our example, we want to see each month in a new column. We select the „Pivot (Matrix)” check-box, set „Column” next to Invoice Date and click „Preview”. Now our report looks different:

☐ Include details (?) ☑ Pivot (Matrix) (?) ☐ Aggregates as column ☐ Empty values as 0

Level	Action	Group by	Sort	Position
1	Group & Sort	(Invoice) Invoice Date Month	Invoice Date Ascending	Column
2	Group & Sort	(Products) Product Name	Product Name Ascending	Row

Select summaries to show in this report:

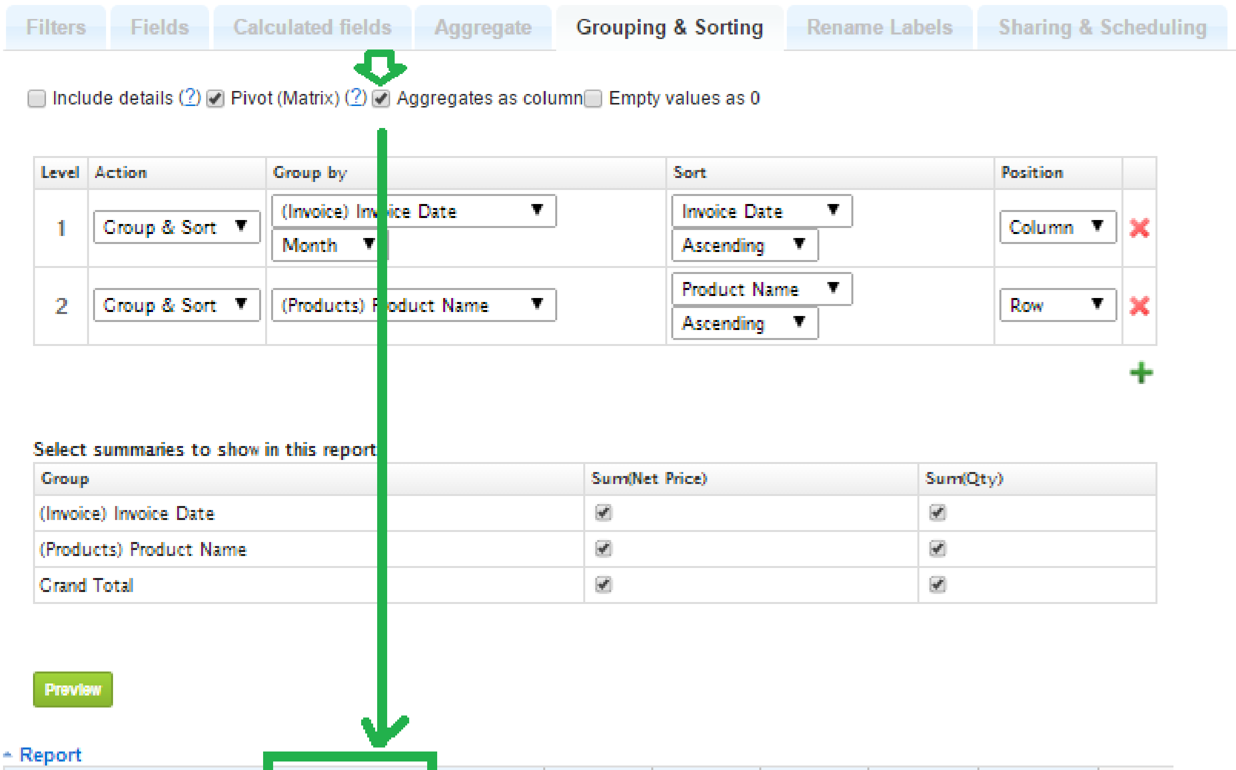
Group	Sum(Net Price)	Sum(Qty)
(Invoice) Invoice Date	☑	☑
(Products) Product Name	☑	☑
Grand Total	☑	☑

Preview

Report

Product Name	2014-Jan Sum(Net Price)	2014-Jan Sum(Qty)	2014-Mar Sum(Net Price)	2014-Mar Sum(Qty)	2014-Apr Sum(Net Price)	2014-Apr Sum(Qty)	2014-May Sum(Net Price)	2014-May Sum(Qty)
Brother Ink Jet Cartridge					[illegible]	[illegible]		
Cd-R CD Recordable					789.00	1.00		
Product A							4,300.00	1.00
Product B	2,200.00	1.00	8,600.00	2.00	8,600.00	2.00		
Product C					4,300.00	1.00	4,300.00	1.00
Grand Total	2,204.00	5.00	8,604.00	6.00	15,598.00	7.00	8,603.00	5.00

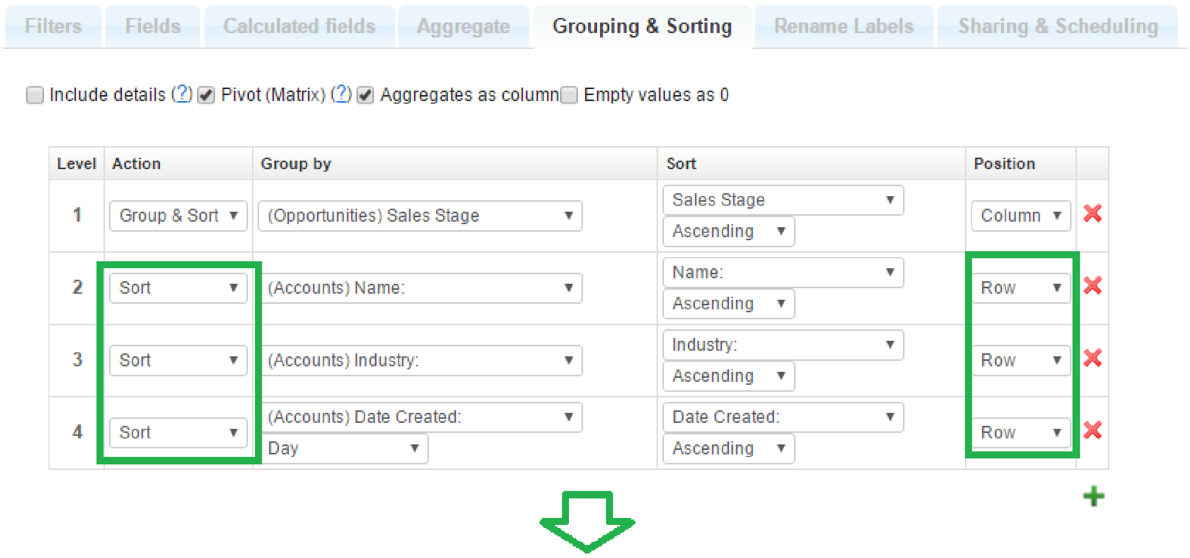
However, since we have two aggregates: Sum of Net Price and Sum of Quantity, each column for each month is shown twice (additional column per aggregate within each month) and our report looks unnecessarily large. To solve this, we can select „Aggregates as column” and we get:



Product Name	Aggregate	2014-Jan	2014-Mar	2014-Apr	2014-May	2014-Jun	Grand Total
Brother Ink Jet Cartridge	Sum(Net Price)			1,908.00			1,908.00
Brother Ink Jet Cartridge	Sum(Qty)			2.00			2.00
Cd-R CD Recordable	Sum(Net Price)			789.00			789.00
Cd-R CD Recordable	Sum(Qty)			1.00			1.00
Product A	Sum(Net Price)				4,300.00	699.00	4,999.00
Product A	Sum(Qty)				1.00	1.00	2.00
Product B	Sum(Net Price)	2,200.00	8,600.00	8,600.00			19,400.00
Product B	Sum(Qty)	1.00	2.00	2.00			5.00
Product C	Sum(Net Price)			4,300.00	4,300.00		8,600.00
Product C	Sum(Qty)			1.00	1.00		2.00

Each month now has only one column, but Sum of Net Price and Sum of Quantity are organized as rows in our report.

Sometimes it is necessary to see detailed data together with summary pivot view in the same report. For example, if you need to see Account details, Name, created date, Industry in each row and then summary by Opportunity Stage as a matrix, then just select “Pivot (Matrix)” checkbox again, and for detailed entries identify as “sort” and “row” – please see the sample below:



Report

Name:	Industry:	Date Created: (Day)	Closed Lo...	Closed Won...	Id. Decision ...	Needs Analysis ...	Negotiation/Revi..
194 Cochrane CORPORATION	Environmental	23-03-2016	1.00				
194 Cureton NATIONAL	Transportation	23-03-2016	1.00				
194 Darst Corp		23-03-2016	1.00				
194 Depue 1654		23-03-2016	1.00				
194 Diedrich Corp	Energy	23-03-2016	1.00				
194 Goodspeed LLC	Consulting	23-03-2016	1.00				
194 Grow FUNDS	Government	23-03-2016	1.00				
194 Gurganus 1654	Apparel	23-03-2016	1.00				
194 Hague 123	Media	23-03-2016	1.00				
194 Hulett Sugar	Engineering	23-03-2016	1.00				
194 Jules CORPORATION	Education	23-03-2016	1.00				
194 Kehl LLC	Machinery	23-03-2016	1.00				
194 Mackin inc	Hospitality	23-03-2016	1.00				

For Pivot types of reports, empty summary values are displayed empty by default like this:

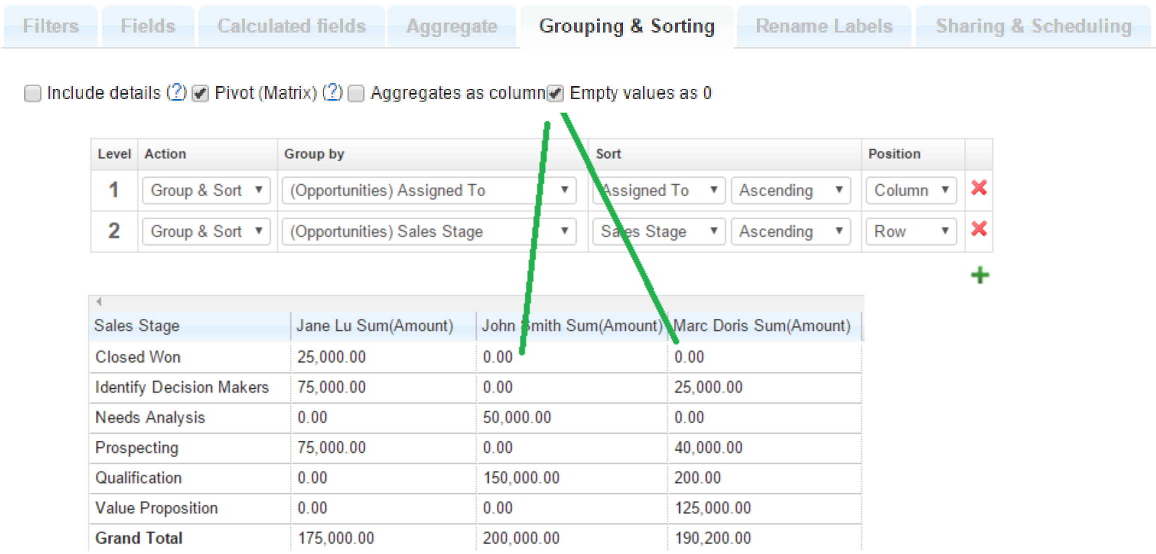
Sales Stage	Jane Lu Sum(Amount)	John Smith Sum(Amount)	Marc Doris Sum(Amount)
Closed Won	25,000.00		
Identify Decision Makers	75,000.00		25,000.00
Needs Analysis		50,000.00	
Prospecting	75,000.00		40,000.00
Qualification		150,000.00	200.00
Value Proposition			125,000.00
Grand Total	175,000.00	200,000.00	190,200.00

In some cases it is preferred to show empty values as '0' instead, for example, for exporting to Excel. This can be achieved by selecting the "Empty values as 0" checkbox under "Grouping & Sorting" tab.

Please note that „Pivot (Matrix)" is not available if you have selected „Include details".

Remember to save the selected Grouping and Sorting changes. If you are not sure, if you want to Save the changed Grouping and sorting settings, you can preview and close the report without saving. You can also use the „Save as" option to keep the current report without changes and play with the new report at the same time.

Note: If you are using the Leads module, it might be interesting for you to compare unconverted leads versus converted leads. In order to do that, you can select field „Converted" and then Group by this field.



Sales Stage	Jane Lu Sum(Amount)	John Smith Sum(Amount)	Marc Doris Sum(Amount)
Closed Won	25,000.00	0.00	0.00
Identify Decision Makers	75,000.00	0.00	25,000.00
Needs Analysis	0.00	50,000.00	0.00
Prospecting	75,000.00	0.00	40,000.00
Qualification	0.00	150,000.00	200.00
Value Proposition	0.00	0.00	125,000.00
Grand Total	175,000.00	200,000.00	190,200.00

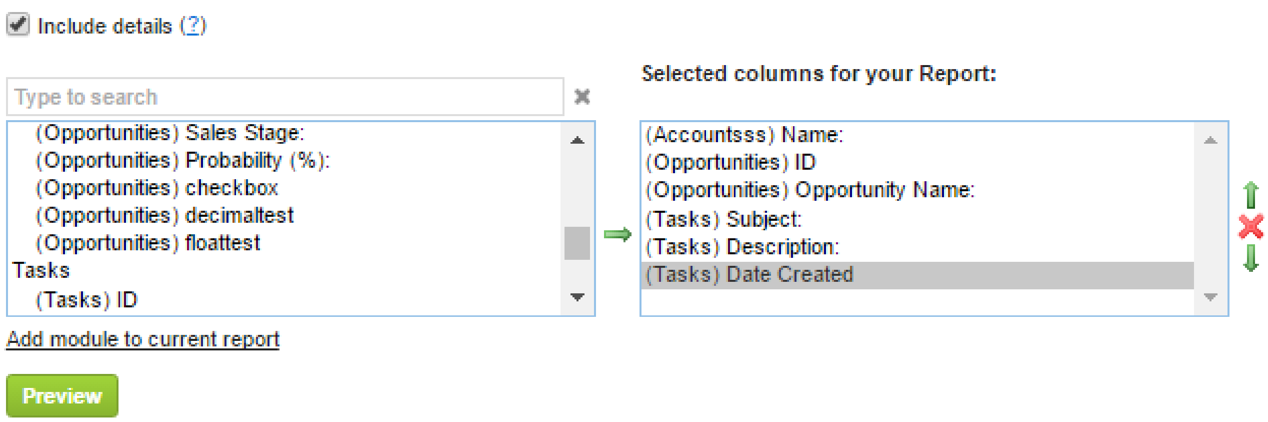
Detailed info on top first/last grouped items

There are cases when you need to see detailed information of the first or last activity or opportunity by customer or by user, for example. Till now, if you could group by User, Customer etc., then you could either see all detailed information of all activities (without the option to filter first/last) or you could see the first/last date of the activity, opportunity or other (or any other min/max value), but there was no way to see detailed information, like Subject, description etc. of this first/last entry.

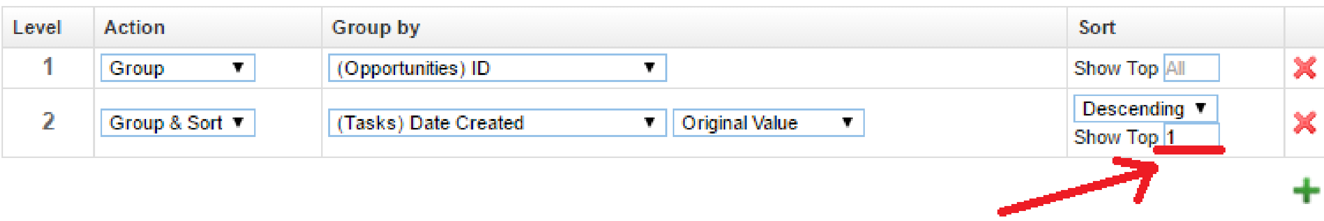
You can select to filter one or several first/last/min/max grouped entries.

In our example we want to see the last task information for each opportunity. We need to see Account Name, Opportunity name, Opportunity ID and Task Subject, Description and Date Created. In order to do this,

1. We select the necessary fields under ‘Fields’ tab and keep ‘Include details’ checked.



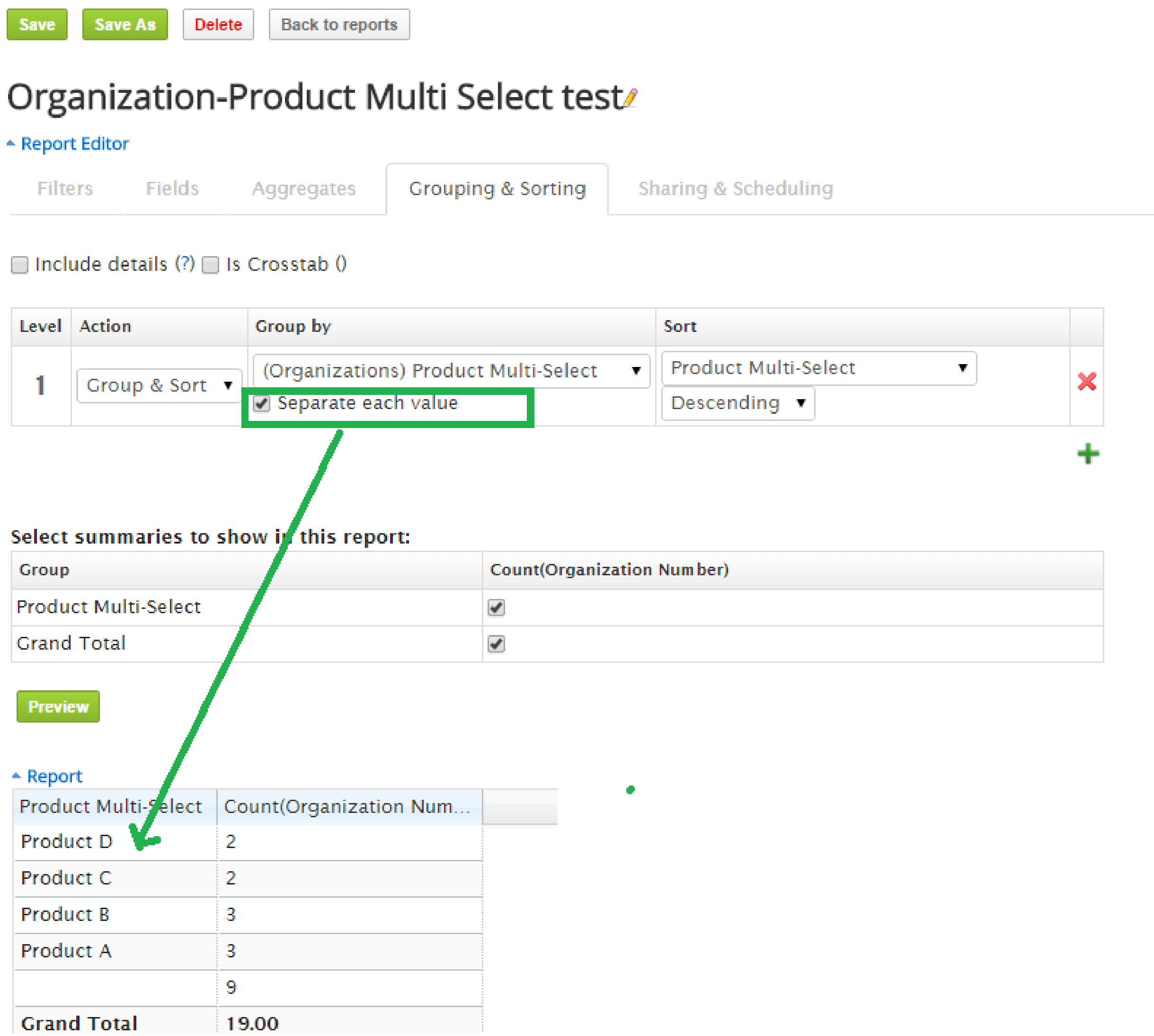
2. Under ‘Grouping and sorting’ we first select to group by ‘Opportunity ID’ field and then for the second level ‘Group & sort’ option - ‘Task Date Created’. We select ‘Descending’ to see the most recent dates (or ‘Ascending’ if we wished to see the first or oldest ones). Define the number of ‘Show Top’ entries. Type ‘1’ if you need to see only the latest detailed Task information by each Opportunity.



You can choose any value for ‘Show Top’ in case you wish to see several last activities by opportunity.

Grouping and sorting for multi-select pick-lists

If you have a multi-select pick-list and have selected several pick-list values for each e.g. Organization and you still want to see how many Organizations have selected each value, you can choose the option „Separate each value” (on demo versions you will see a Report „Organization-Product Multi Select test” in the „Test” folder):



If you would like to see how many organizations have selected a combination of certain pick-list values, you simply need to deselect the check-box „Separate each value”.

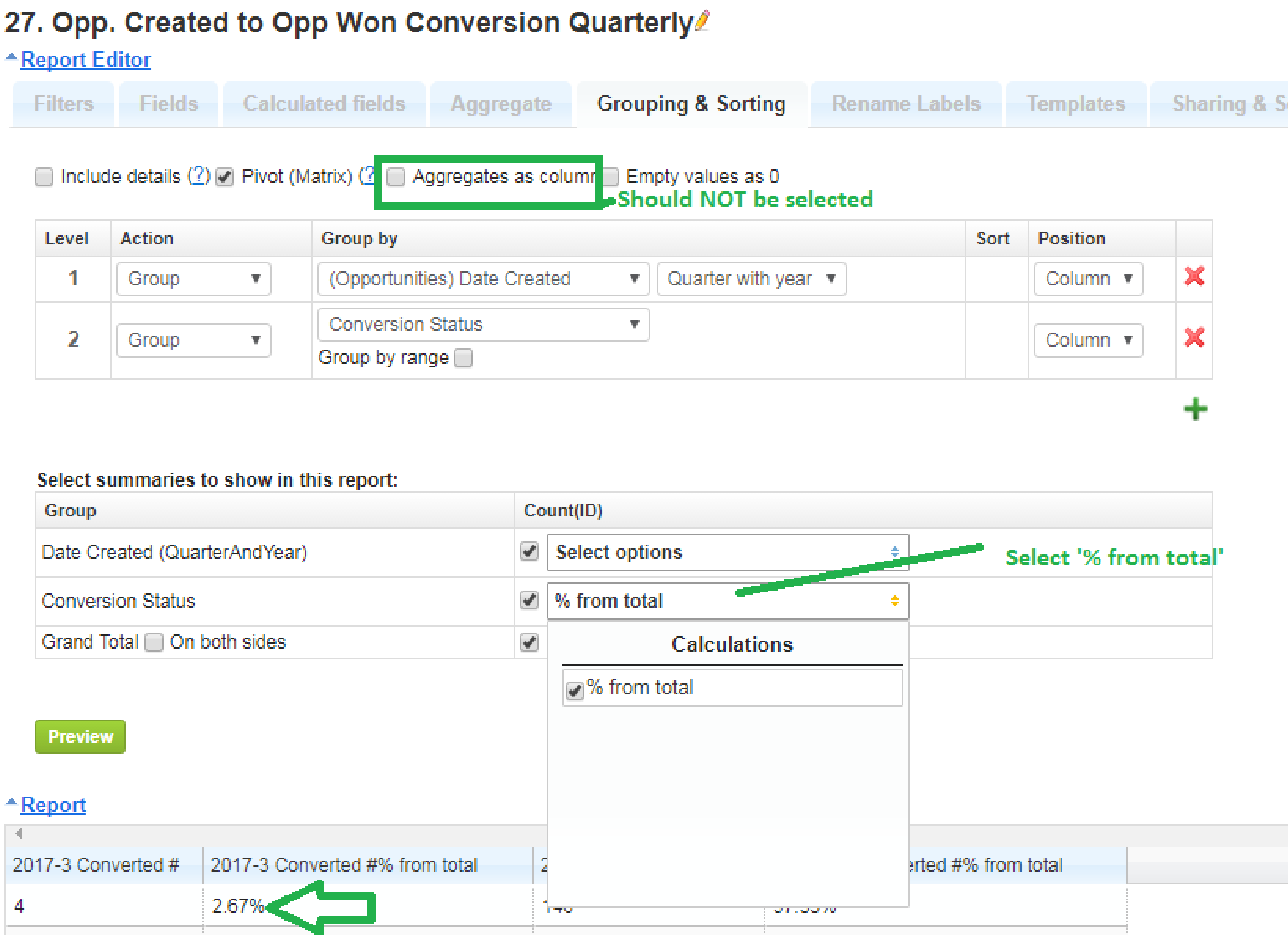
Calculate % from Total

It is possible to calculate % from total, if you have detailed or summary report with Groups and Aggregates.

You should have at least one aggregate selected under ‘Aggregates’ tab and at least one Group added under ‘Grouping & Sorting’ tab, with action identified either as ‘Group & Sort’ or ‘Group’. (If the ‘Action’ is set to ‘Sort’, there will be no option for % calculation).

Now under ‘Grouping & Sorting’ tab in the lower table of settings ‘Select summaries to show in this report:’ you should select the checkbox for the necessary Aggregate, which you want to calculate % for and then in the drop-down you should select ‘% from total’.

Important! Please note that Grand Total also must be selected, since we need to know it in order to be able to calculate %.



On ‘Preview’ or after report ‘Save’ with the new settings you will see a new column showing the calculated %.

% Calculations are available in Detailed, Simple Summary and Pivot (Matrix) report types.

Currently this functionality does not support ‘Aggregates as column’, which means that this checkbox should stay unchecked.

Identify Your Own Ranges for Report Summaries

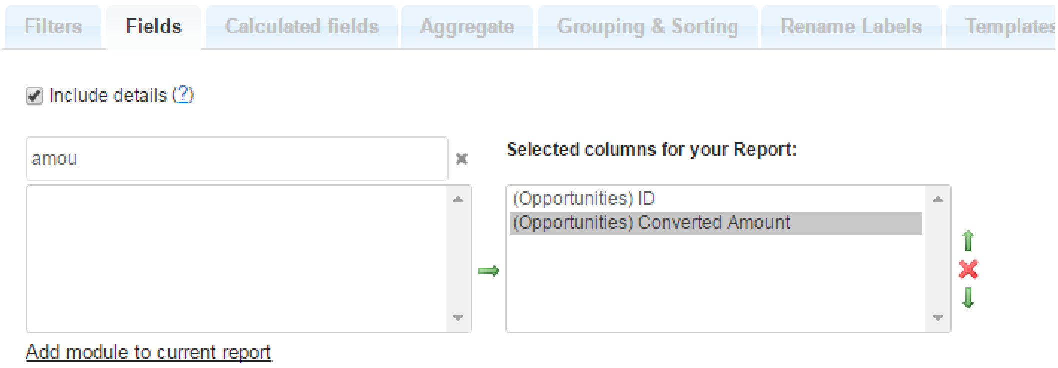
In some cases it is necessary to split your summary reports in certain ranges. For example, if you need to see how many deals do you have for up to $100k; how many between $100 -$200k etc.

There is another case, often used for KPI reporting, when you set certain goals to be reached monthly or quarterly by your sales agents. This is a bit different case, as here you need to see, how total count or sum of an amount for each time period is allocated for each individual.

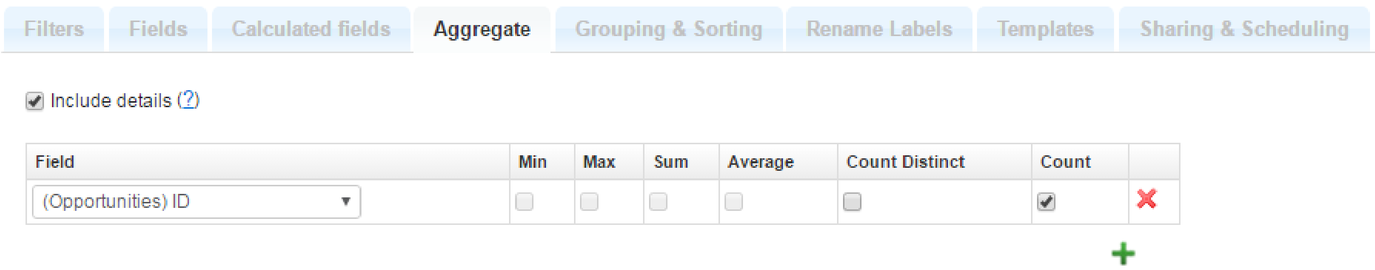
Sapiens.BI PRO has now the solution for all of these cases!

Let's start with the most simple case, where you need to see how many opportunities have converted amount of up to $100k, how many between $100 - $200k and how many exceed $200k.

First of all you need to have opportunities added to your report and under 'Fields' tab let's select 'Id' for counting and 'Converted amount' for our ranges.

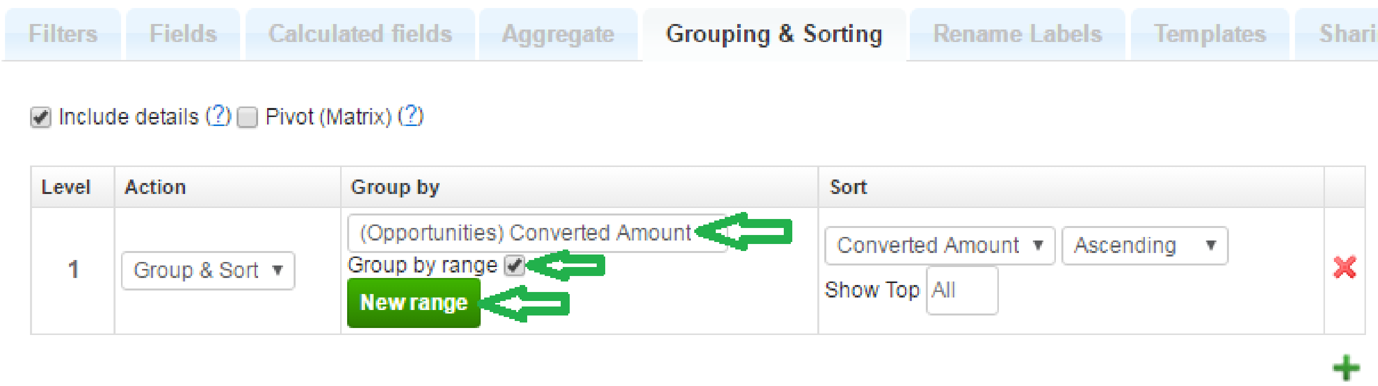


Under 'Aggregate' let's select 'Id' to be counted

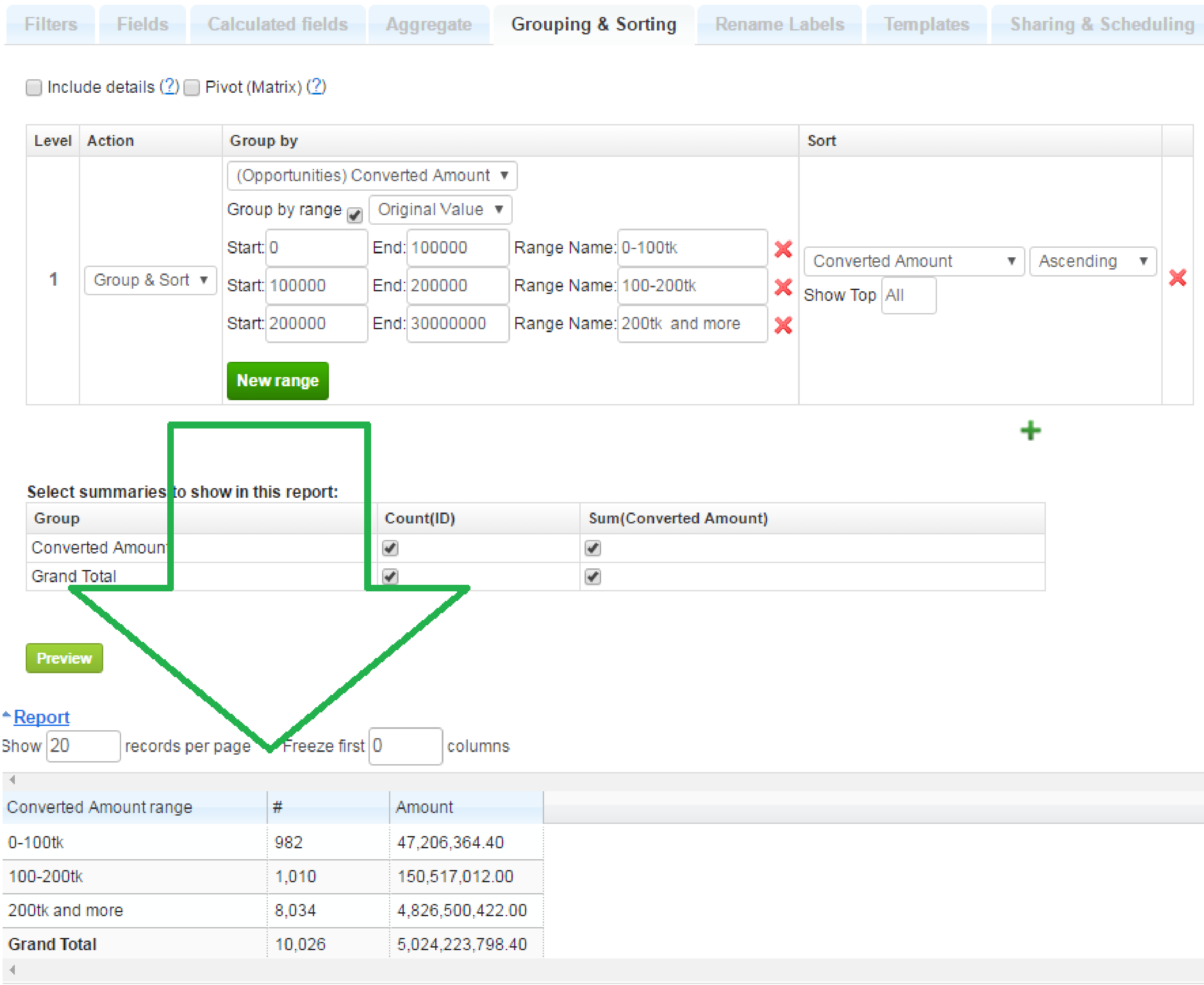


'Grouping & Sorting' tab is where you actually set your ranges.

1. After you select any of the Amounts under 'Group by', the checkbox of 'Group by range' will appear. *(Be aware that 'Group by range' appears only if the numeric type field is selected, it will not be available for other field types, like text fields and dates.)*
2. You need to select the checkbox in order to set your ranges. 'New range' button will appear. Click to the button in order to add a new range:

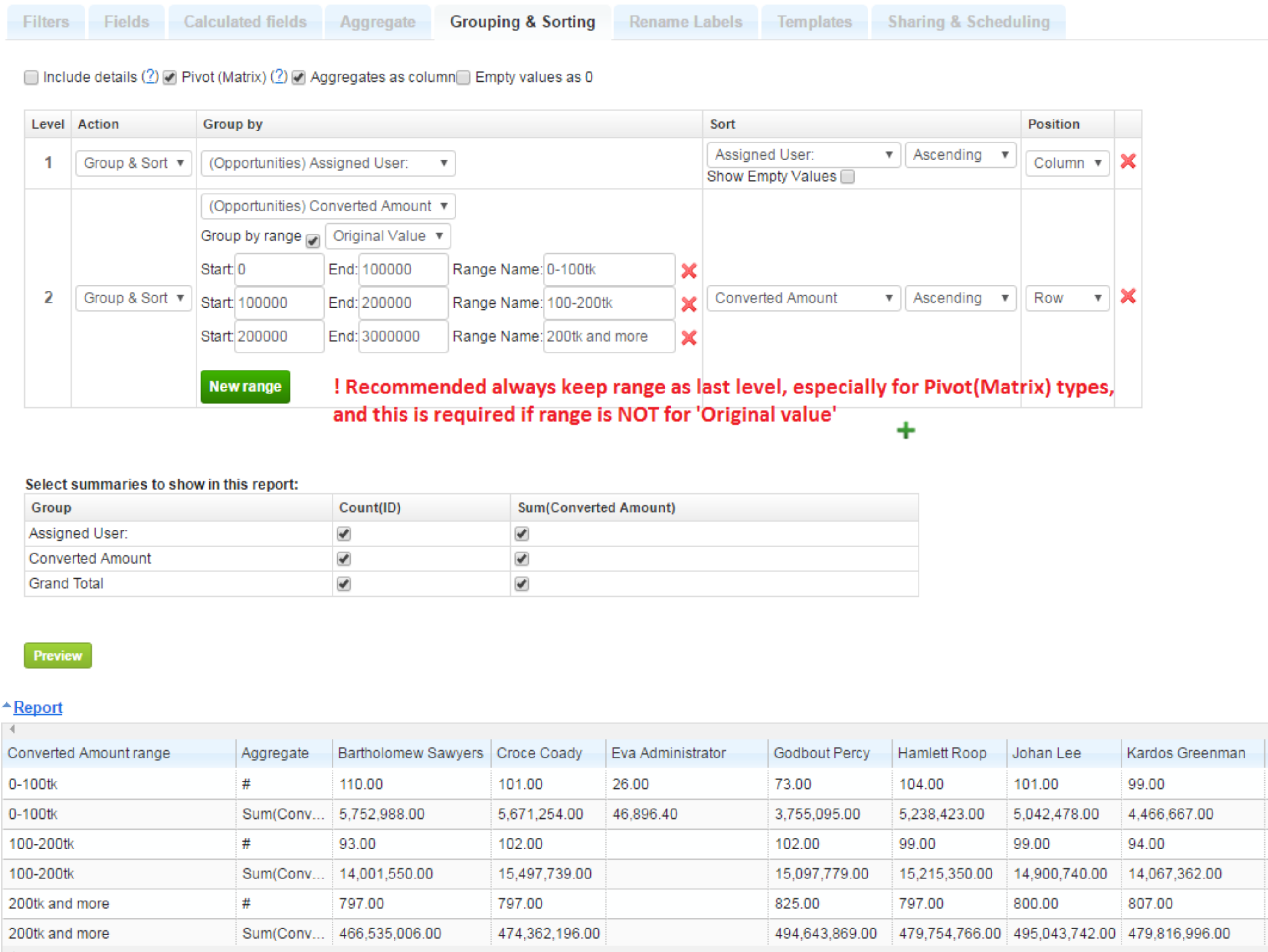


3. Now you can identify each range, by entering the amount to start and end with and name your ranges for a better looking report. Returned values will be inclusive, e.g. first range in our sample will include 0 and 100k amount opportunities; second range will not include 100k opportunities, because it is already grouped in the first range. Click 'Preview' to see the result of your settings.



In this example we can see that we have 982 Opportunities with a converted amount between 0 and 100k and their total converted amount is 47’206’364.40; 1010 opportunities with amount between 100 and 200k etc.

4. If we want, under ‘Grouping & Sorting’ tab we can also add grouping by month and/or by user etc. – same way as usually.



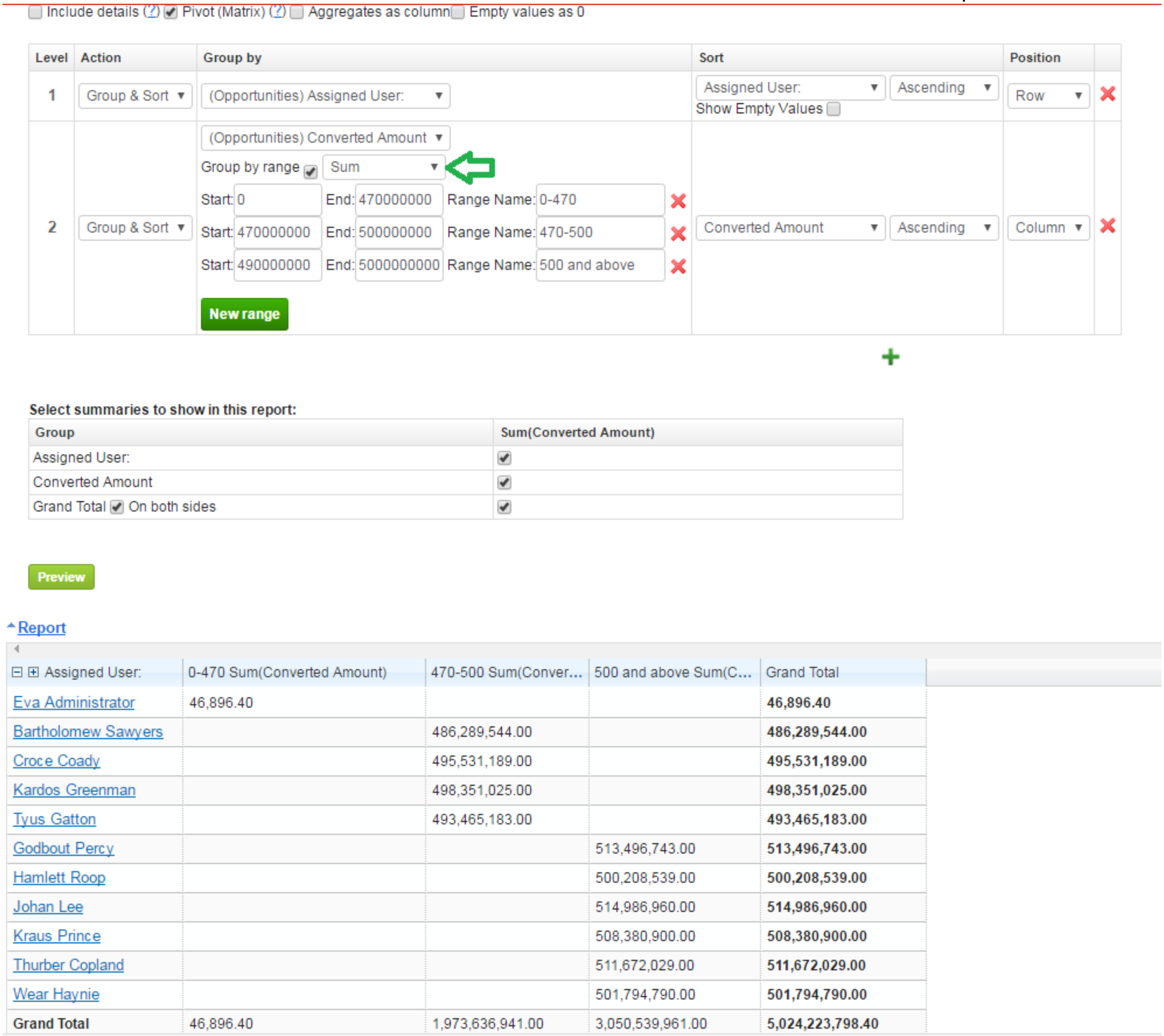
Converted Amount range	Aggregate	Bartholomew Sawyers	Croce Coady	Eva Administrator	Godbout Percy	Hamlett Roop	Johan Lee	Kardos Greenman
0-100tk	#	110.00	101.00	26.00	73.00	104.00	101.00	99.00
0-100tk	Sum(Conv...	5,752,988.00	5,671,254.00	46,896.40	3,755,095.00	5,238,423.00	5,042,478.00	4,466,667.00
100-200tk	#	93.00	102.00		102.00	99.00	99.00	94.00
100-200tk	Sum(Conv...	14,001,550.00	15,497,739.00		15,097,779.00	15,215,350.00	14,900,740.00	14,067,362.00
200tk and more	#	797.00	797.00		825.00	797.00	800.00	807.00
200tk and more	Sum(Conv...	466,535,006.00	474,362,196.00		494,643,869.00	479,754,766.00	495,043,742.00	479,816,996.00

Ranges for aggregated values (i.e. summarized, counted values, etc.)

In our previous examples we added ranges for original values (i.e. for Converted Opportunity Amount). If we need to set ranges for already summarized or counted values, first of all, we need to identify the Group under 'Grouping & Sorting' tab – Sum by User, Month or any other grouping. And only afterwards should we add another group for ranges, because the range of summarized values needs to know this option beforehand in order to perform correctly.

For example, if we want to see which Sales representatives have reached the target of total opportunity amount, which are below, and which ones have exceeded it, we can do the following:

1. First of all, we select 'User' under 'Grouping & sorting' as the first level; next level will be for ranges.
2. We should select a numeric field type and then 'Group by range' checkbox will appear, this should be selected. In our case we will add ranges to Sum of Converted Amount.
3. We need to select 'Sum' (if we want add ranges for Count or other, we can simply select 'Count' here.
4. Identify ranges and their names (red **x** is there to remove unnecessary ranges, if needed).
5. 'Preview' to see the result (remember to 'Save' / 'Save as' if the result is as expected)



Assigned User:	0-470 Sum(Converted Amount)	470-500 Sum(Conver...	500 and above Sum(C...	Grand Total
Eva Administrator	46,896.40			46,896.40
Bartholomew Sawyers		486,289,544.00		486,289,544.00
Croce Coady		495,531,189.00		495,531,189.00
Kardos Greenman		498,351,025.00		498,351,025.00
Tyus Gatton		493,465,183.00		493,465,183.00
Godbout Percy			513,496,743.00	513,496,743.00
Hamlett Roop			500,208,539.00	500,208,539.00
Johan Lee			514,986,960.00	514,986,960.00
Kraus Prince			508,380,900.00	508,380,900.00
Thurber Copland			511,672,029.00	511,672,029.00
Wear Haynie			501,794,790.00	501,794,790.00
Grand Total	46,896.40	1,973,636,941.00	3,050,539,961.00	5,024,223,798.40

Grouping order matters!

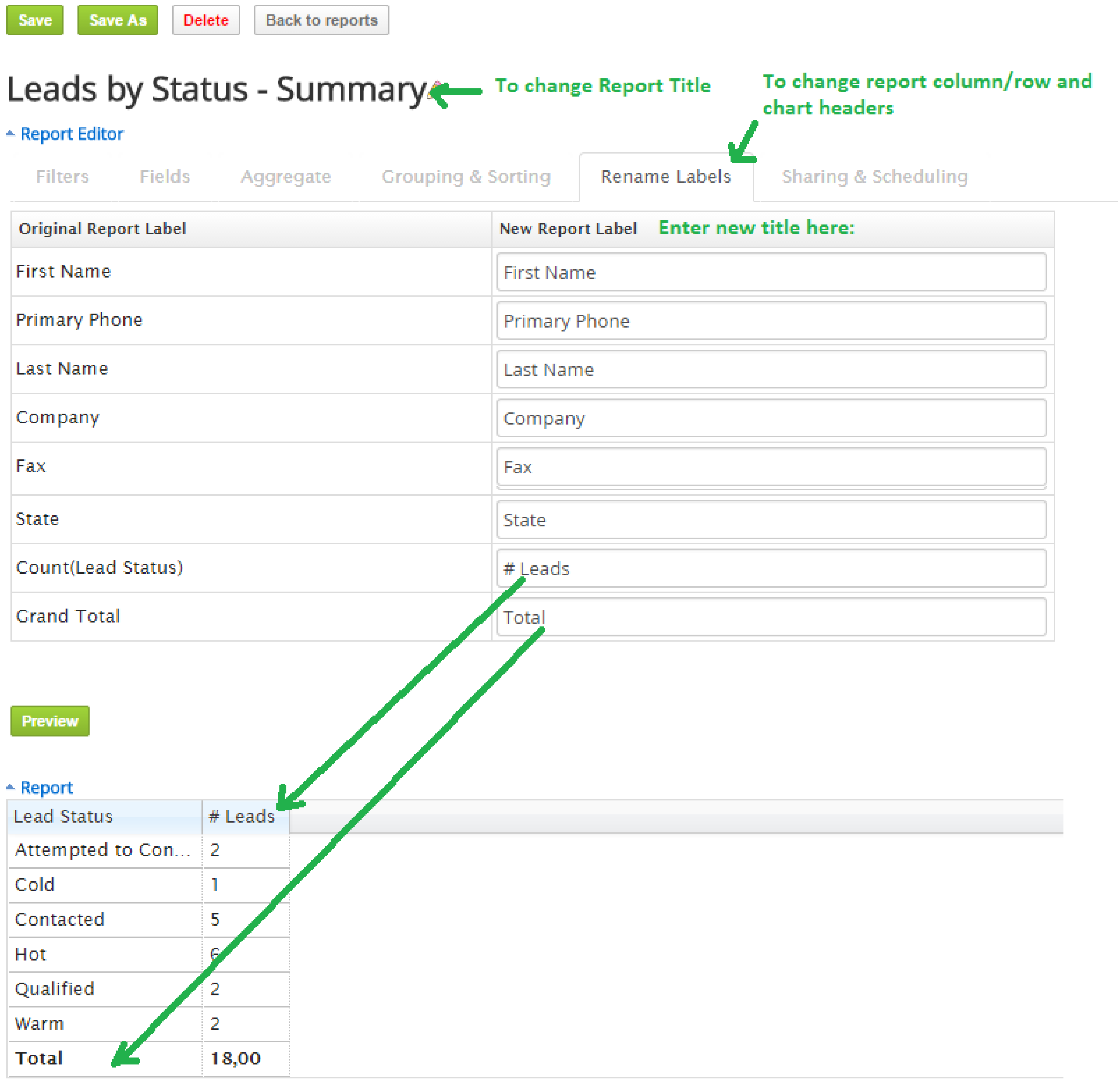
If your report is not a Pivot(Matrix) type and you need ranges for the original values, you can simply add User or Month grouping as the next item under Grouping & Sorting tab.

However, if this is a Pivot (Matrix) type and also, if you need to have ranges for already summarized or counted values, **you should always keep the range as the last item in the 'Grouping & Sorting' tab table**.

REPORT HEADER AND LABEL RENAMING - RENAME LABELS TAB

If you want to change your report column / row titles or labels as well as chart labels click the „Rename Labels" tab. Here in the left column you can see the original report labels and on the right side you can edit and enter new labels which you would like to show in your report. Please see the example below.

Please note that you can edit the Report Title not under „Rename Labels" tab but with the pencil icon next to the Report Title. You can edit the Chart Title simply by clicking the Chart Title inside the Chart Title box.



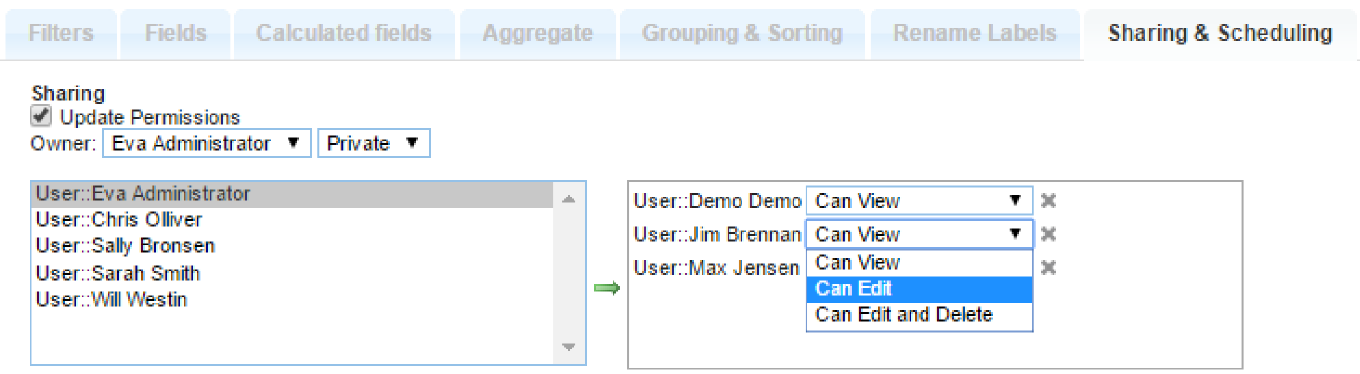
Remember to save the Report Label changes. If you are not sure, whether you want to Save the changed Report Labels, you can preview and exit the report without saving. You can also use the „Save as" option to keep the current report without changes and play with the new report at the same time.

REPORT PERMISSIONS - „SHARING & SCHEDULING" TAB

After you have installed the Sapiens.BI module, for security reasons all available pre-defined reports are available for admin users only (users with „Admin" checked). If the user profile has permissions to see the Sapiens.BI module, then all users without admin permissions can only see empty folders and can not see any reports, until their report viewing permissions are changed.

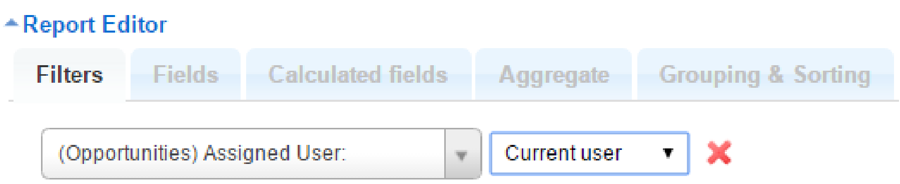
1. For each report under the „Sharing & Scheduling" tab the report owner (by default admin after the module installation) can set permissions to see, edit and delete for Individual users or for Roles (to apply permissions for all Users within a Role).

   - *„View" permissions means that a user can open and preview report data with current settings. The user will not be able to change or save any of the report or chart settings and will also not be able to use the „Save as" button.*
   - *„Edit" permissions allows to change any of the report and chart settings and also to use the „Save as" option for copying an existing report.* Edit permissions also automatically grant View permissions.
2. The user identified as „Owner" can always see, edit and delete the report with chart.
3. You can then set the report mode to „Public" or „Private". „Public" reports will be visible to all CRM system users, who have Sapiens.BI module enabled for their profiles. For Public Report you can set permissions for all users- should they be able to only see this report and chart, or can they also edit or even delete it.
4. If you set the Report mode to „Private", then only the Owner can see, edit and delete this report. In addition to the owner you can identify either specific user(s) or user group(s) to be able to View, edit or delete the current report. Click on the User or Group in the left box, then use the green arrow to move it to the right-side box. Now you can identify permissions to View, Edit or Delete the report for each user or group by selecting the proper drop-down value next to the User/Group name.



With the gray „x" in the right-side box you can remove User or Group permissions, this User or Group will no longer see the Report after the changes are saved.
All user permission setting changes under „Sharing & Scheduling" apply only after saving the Report (click the „Save" button above the report).

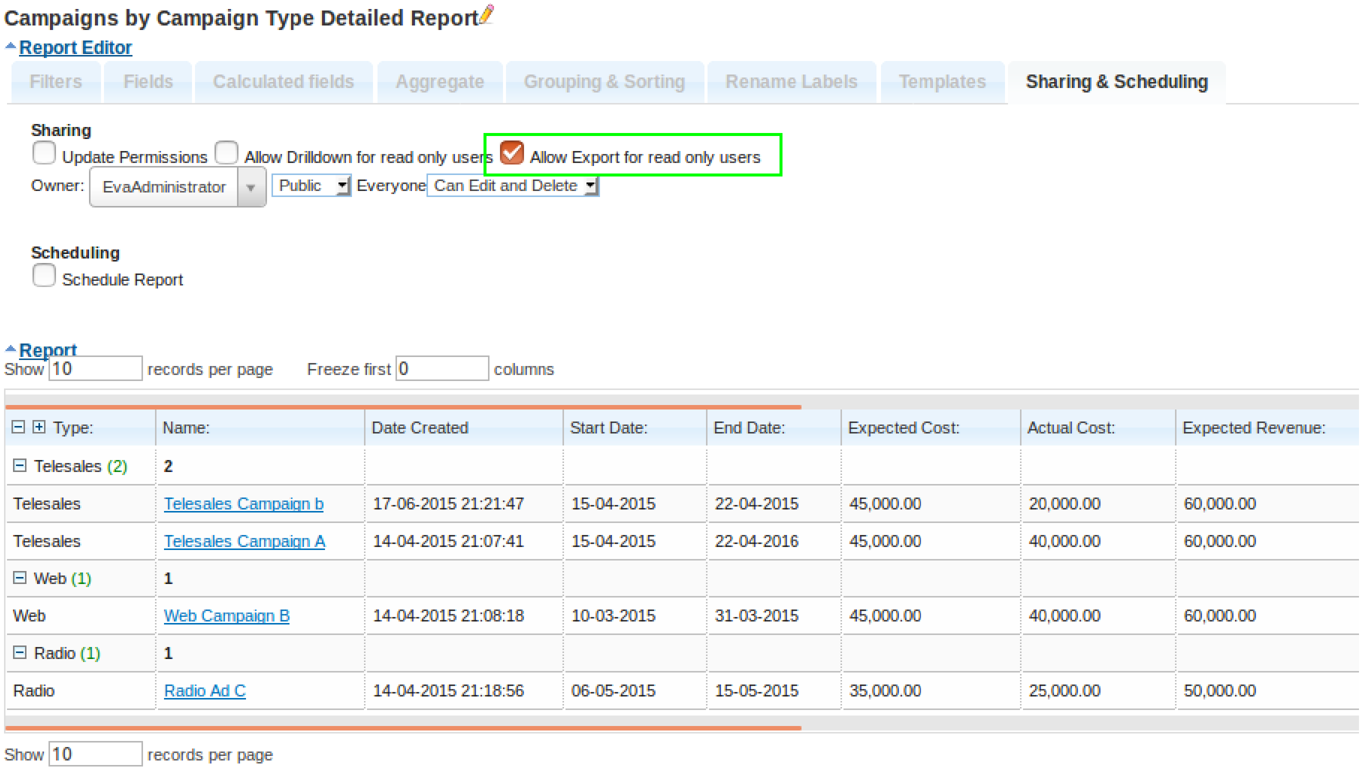
If you need to limit users to see only their data, you should use the filter "Current user". With "Current user" filter you can limit the User access to the data. If such filter is set, each user will see only their assigned entries.



'Current user' filter will not be taken in account when report scheduled via e-mail in PDF and Excel format. Only link to the report will work with 'Current User' filter.

You can disable the permissions for PDF and Excel Export for users who have report 'View' permissions. This can be done under the 'Sharing & Scheduling' tab. You need to uncheck the "Allow Export for read only users" checkbox.

This will apply only to those users who have their permissions set as 'View'. If a user has permissions to edit the report, they will still be able to Export the report in PDF or Excel format.



Same way you can disable the permissions for drilldown from the Chart to detailed date for users who have report 'View' permissions. You need to uncheck the "Allow Drilldown for read only users" checkbox.

REPORT E-MAIL SCHEDULING - „SHARING & SCHEDULING" TAB

You can schedule regular Report sending by e-mail. To enable and schedule automated regular Reports first select the check-box „Schedule Report" under the „Sharing & Scheduling" tab. As soon as the check-box is selected, options for scheduling will appear.

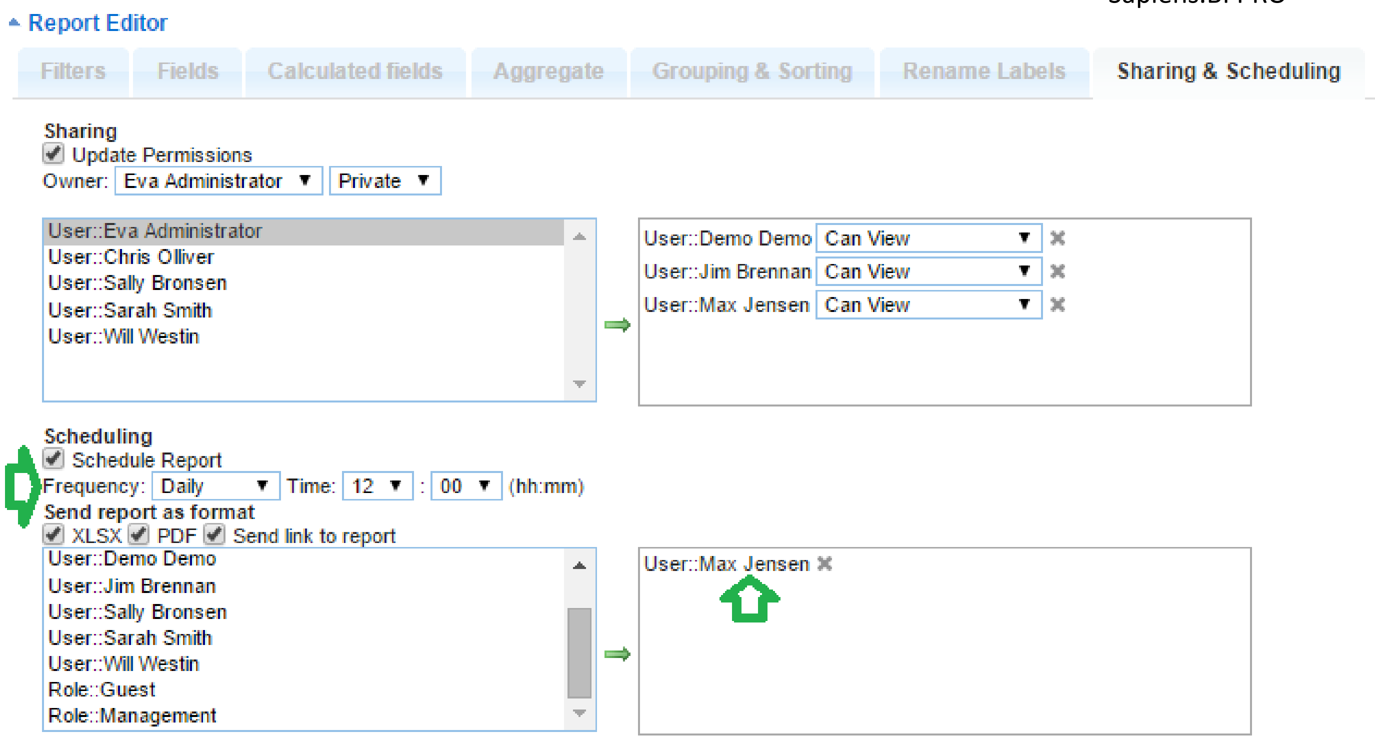
First, you need to select the frequency from the drop-down menu. For example, if you select „Daily", then the report will be e-mailed once per day. „Weekly", „Monthly" and „Yearly" options are also available.
If you have selected „Daily", then select what time this e-mail will be sent each day.
Weekly – which weekday (e.g. Monday, Tuesday, etc.) and time.
Monthly – which date and time;
For „Yearly" you can select which month of the year, date and time.

Scheduled e-mail time setting applies to report owner time zone which is identified in their user settings, taking into account CRM server time zone settings.

Under „Send report as format", you can select one or several of the following options:

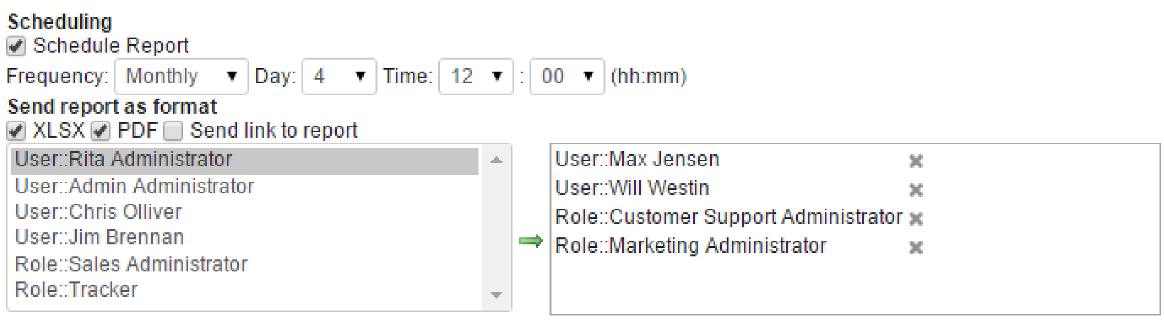
- „XLSX" to send the report attached to the e-mail in Excel format
- „PDF" to send the report as attached to the e-mail in PDF format
- „Send link to report" will send the e-mail with a link to this report

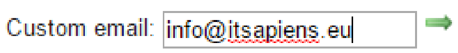
The e-mail subject will contain the report name and date sent.



To identify report recipients select from the available users/groups/roles from the left box and then move them to the right by clicking the green arrow.
E-mails are sent to the user e-mail address which is defined in the CRM system user settings.
You can remove an e-mail recipient from the selected list with the gray „x".
All users, or users within a group or role appearing on the right side box will be receiving an e-mail with the report attached according to the scheduled settings.

Under "Sharing and Scheduling", it is also possible to enter an e-mail address manually – even if there is no user with such an e-mail address registered. In order to do that, please enter the necessary e-mail address in the "Custom email" field and then click the green arrow next to it – in order to move the entered address to the recipient box on the right side.





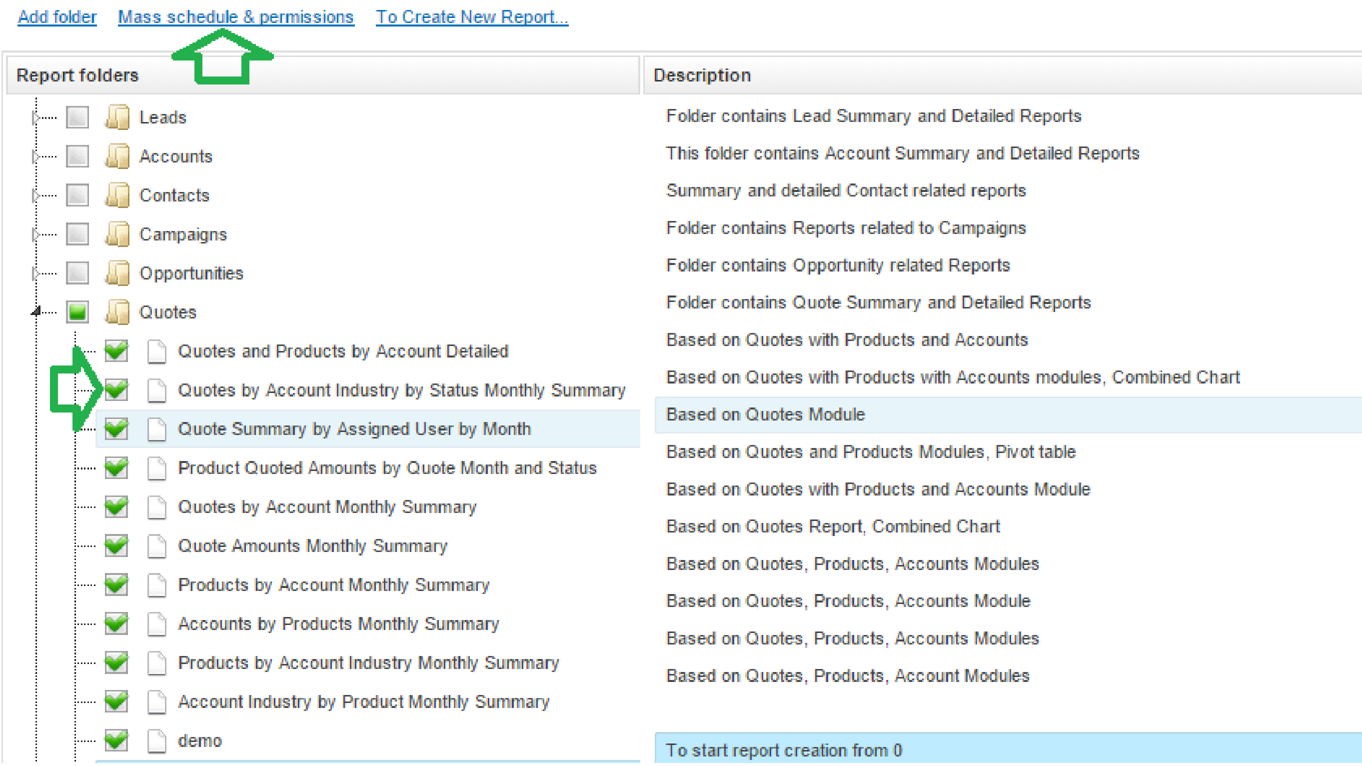
For security purposes custom e-mail addresses can be entered only by admin users or by the report owner. Other users will not have this option available.

It is important to always remember to Save the report for the e-mail scheduling changes to take effect.

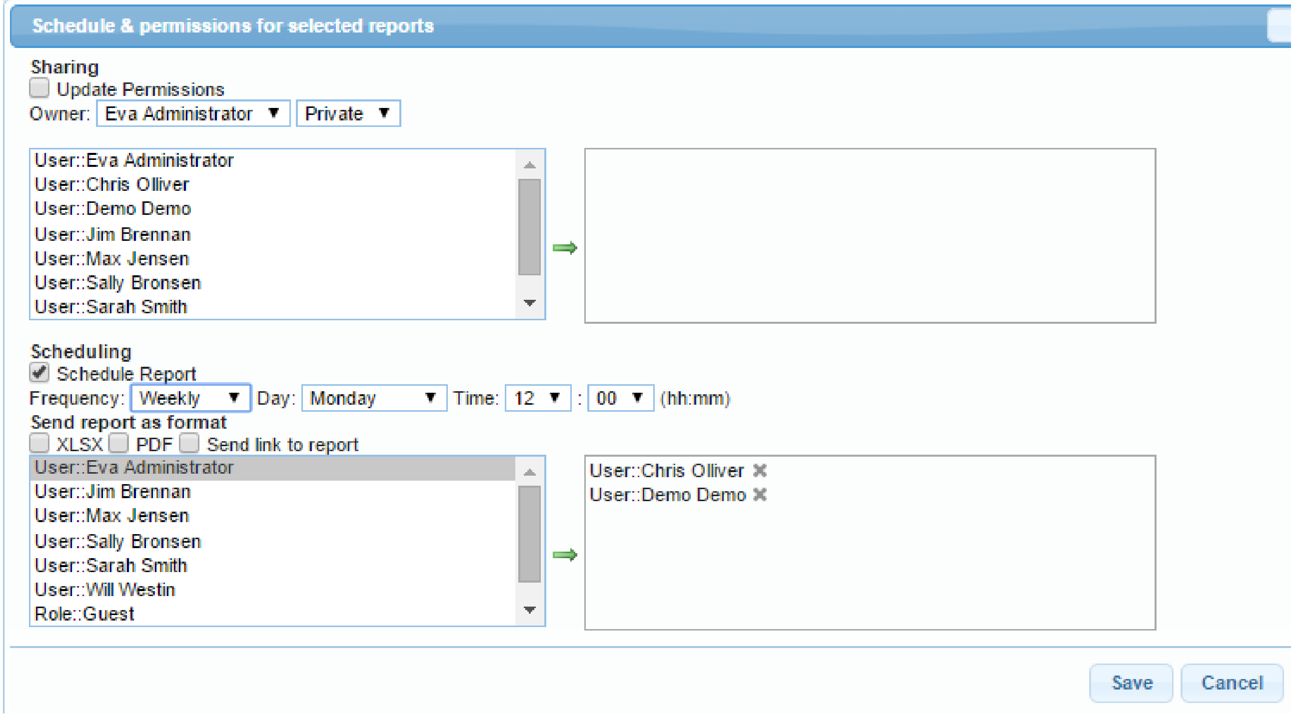
MASS EDIT FOR PERMISSIONS AND SCHEDULING

It is possible to set the same permissions and/or report e-mail scheduling options for several reports at once. This can be done from the Report and Folder list.

1. Mark the necessary reports for scheduling (if you mark a folder, then all reports within that folder will be selected). You can select only those reports, where you have editing permissions.
2. Click „Mass schedule and permissions" to open the Sharing and Scheduling options.



3. Inside the pop-up window select what you would like to update:
   a. „Update permissions" should be selected in case you need to update permissions for the selected reports (leave „Schedule Report" blank, in case you don't want to change the previous Scheduling Options for those reports.)
   b. „Schedule Report" should be selected in case certain options of report scheduling via e-mail should be applied to all selected reports. Leave „Update Permissions" check-box unselected in case you don't need to change previous permissions for the selected reports.
   c. You can select both „Update Permissions" and „Schedule Report", in case both – permissions and also the scheduling options should be changed for all selected reports.



4. Please identify the necessary sharing and/or scheduling options (you can find more information about setting changes in the previous sections).

Please note that if you want to remove e-mail scheduling for all selected reports, you can simply select the „Schedule Report" check-box and then leave the right side box empty.

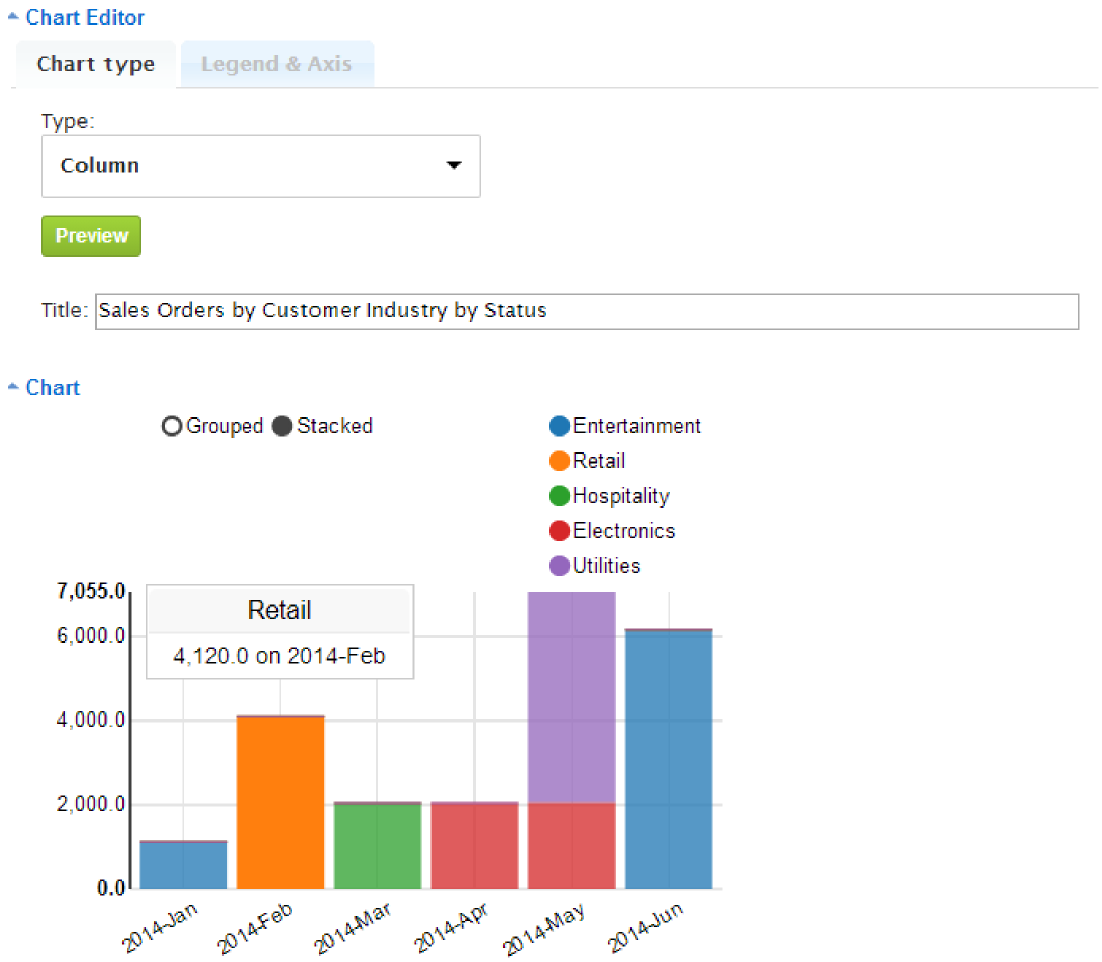
5. Changes will be applied to all selected reports after clicking the „Save" button. Or you can click „Cancel" in case you do not wish to apply the changes to the selected reports.

CHART TYPES AND SETTINGS

Below the Report data you can find the Chart and Chart editor. Chart information is strictly related to Report data above and Report settings, such as Filters, Aggregates and Groups. This means that every time you change the Report settings in the Report Editor, you need to Save those settings in order to be able to see them changed accordingly in the Chart Editor before adjusting the Chart Settings.

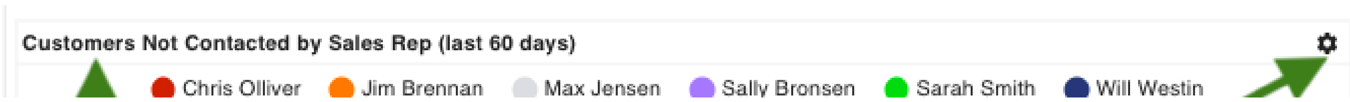
In the Chart Editor you can identify the chart type and other chart settings. After changing the chart settings, click on „Preview" button inside Chart editor to see the new look of the chart. Changed chart settings are saved only after you save the Report.

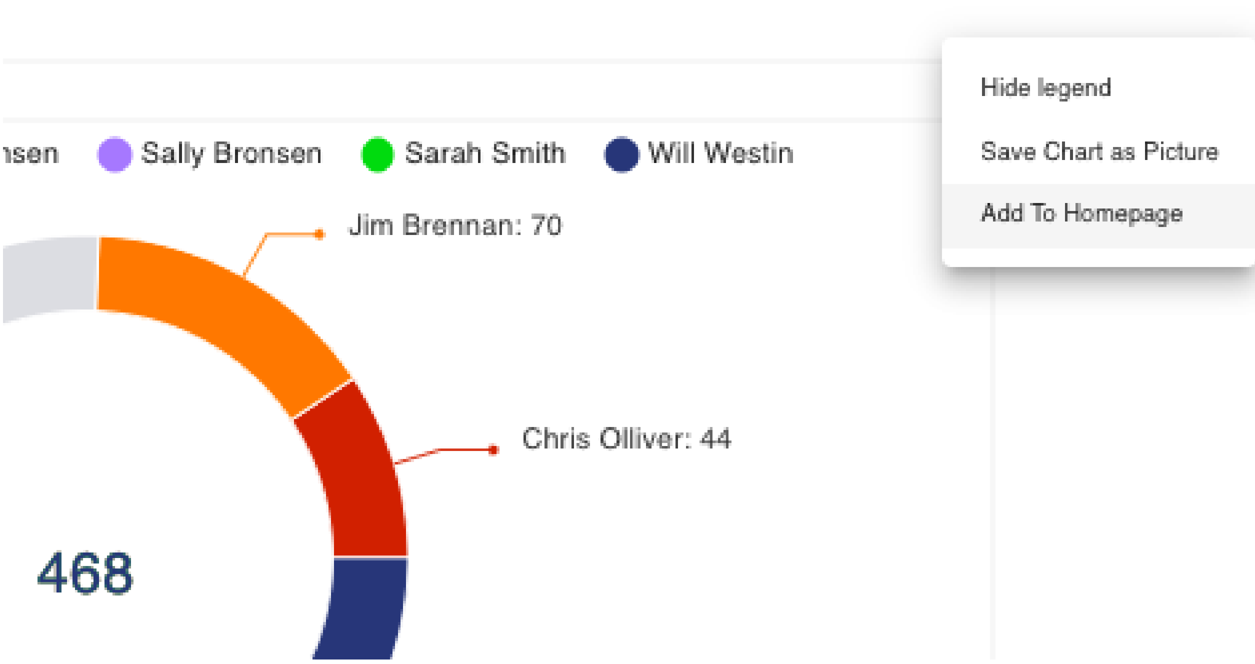
In the „Title" area you can enter the Chart title. Hovering or clicking on the colored chart area will display the data represented by this area:



Clicking on the chart legend will hide/show the data.

By click to a gear icon you can use option to hide chart legend – all at once.

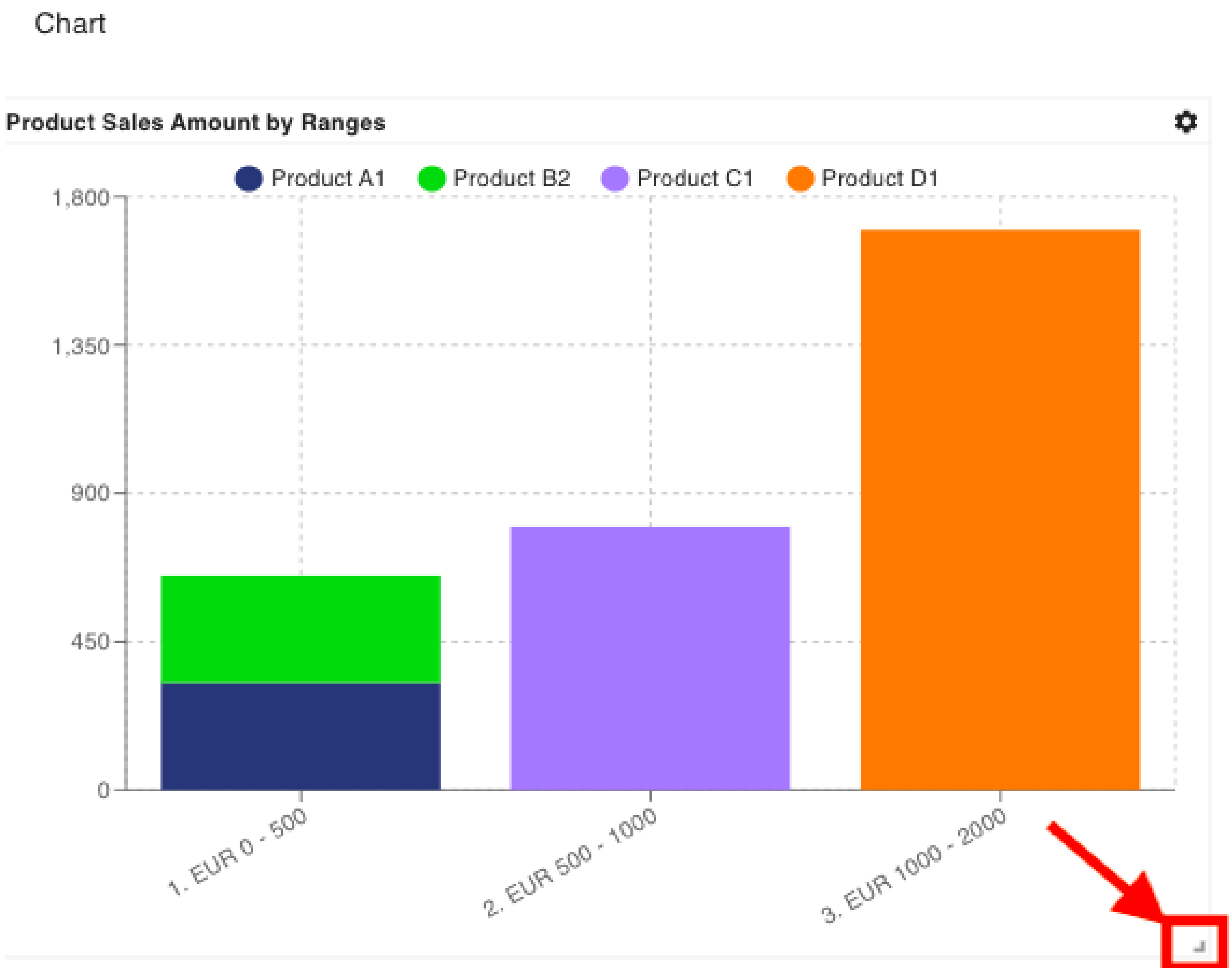




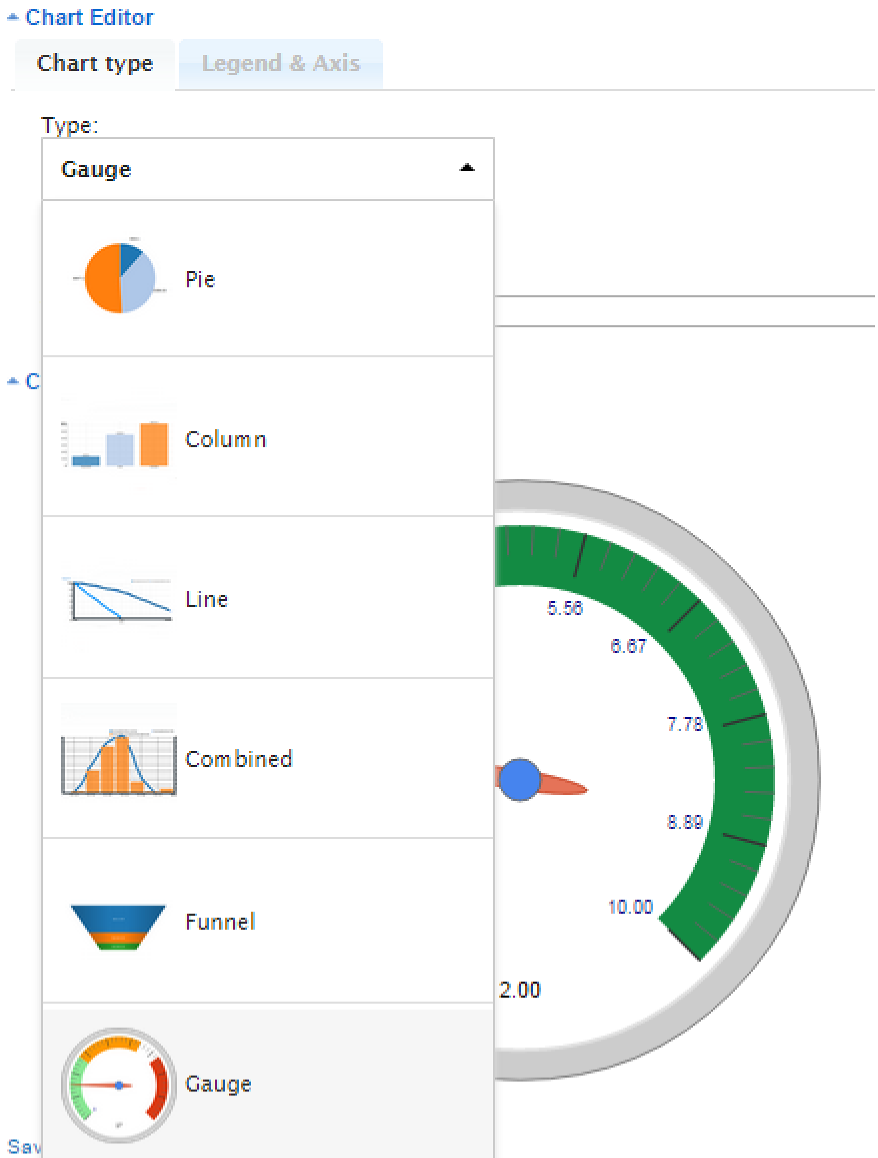
Click to the gear icon and then „Save Chart as Picture" to save the Chart as a PNG format picture.

You can change the chart size by drag & drop of the bottom-right angle of the chart.

Chart size increase will also help you in case you have a large number of labels and they do not fit in the original chart size.

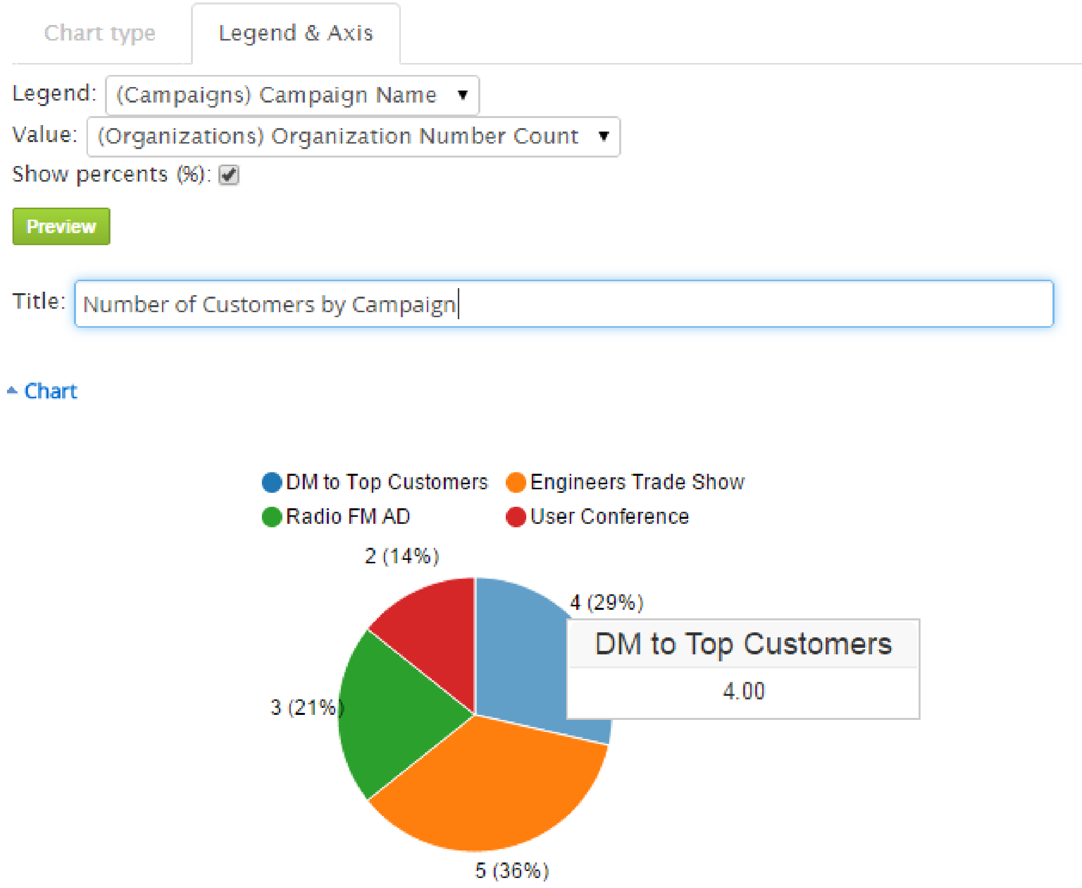


In the Chart Editor „Type" selection you can pick the necessary chart type: Pie, Column, Horizontal Bar, Area, Line, Combined (multi-axes), Funnel, Gauge or Geographic chart:



Pie Chart

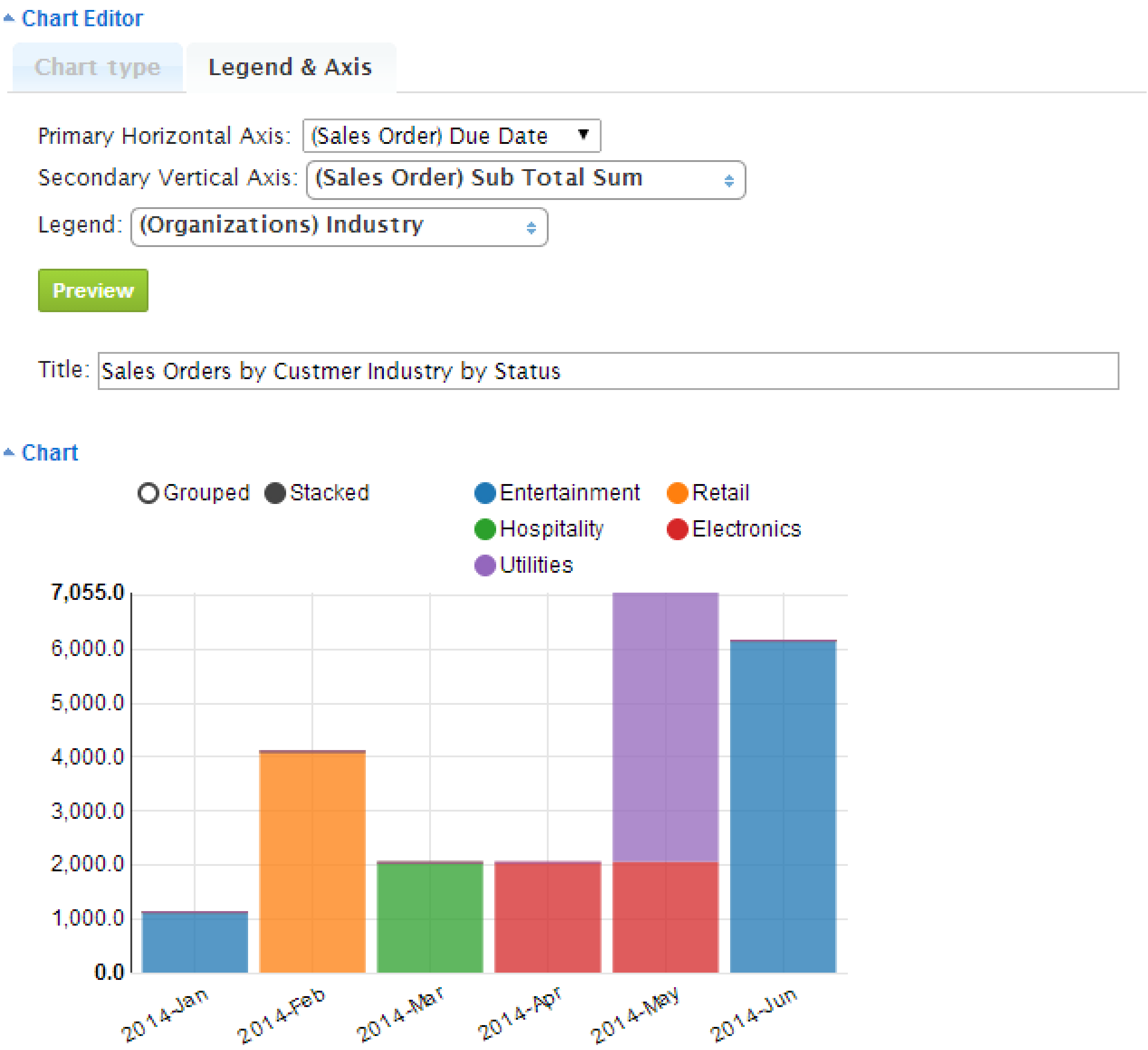
If you have selected „Pie" chart Type, under the „Legend & Axis" tab you can choose Legend and Summary or Counted Value to be displayed by your chart. If you mark the „Show percent (%)" check-box, the percentage for each value will be shown next to it in brackets, as you can see in the example below.



Hovering or clicking on any chart area will display the data represented by this area. Clicking the circles next to the Chart Legend will hide/show the corresponding data in the chart.
It is important to Save the report if you want your new chart settings to be saved.

Column Chart

If you have selected the „Column" chart type, under „Legend and Axis" you can identify the group from your Report which should be represented by the Primary Horizontal Axis. The summary, count or average should be selected for the Secondary Vertical Axis. You can select more than one of the Summary Aggregates under Secondary Vertical Axis, in this case the „Legend" should be same as selected under Vertical Axis. Otherwise it can be any of the Groups from your report.



For Column chart you can select „Grouped” or „Stacked” data representation. Hovering or clicking on any chart area will display the data represented by this area. Clicking the circles next to the Chart Legend will hide/show the corresponding data in the chart. It is important to Save the report if you want your new chart settings to be saved.

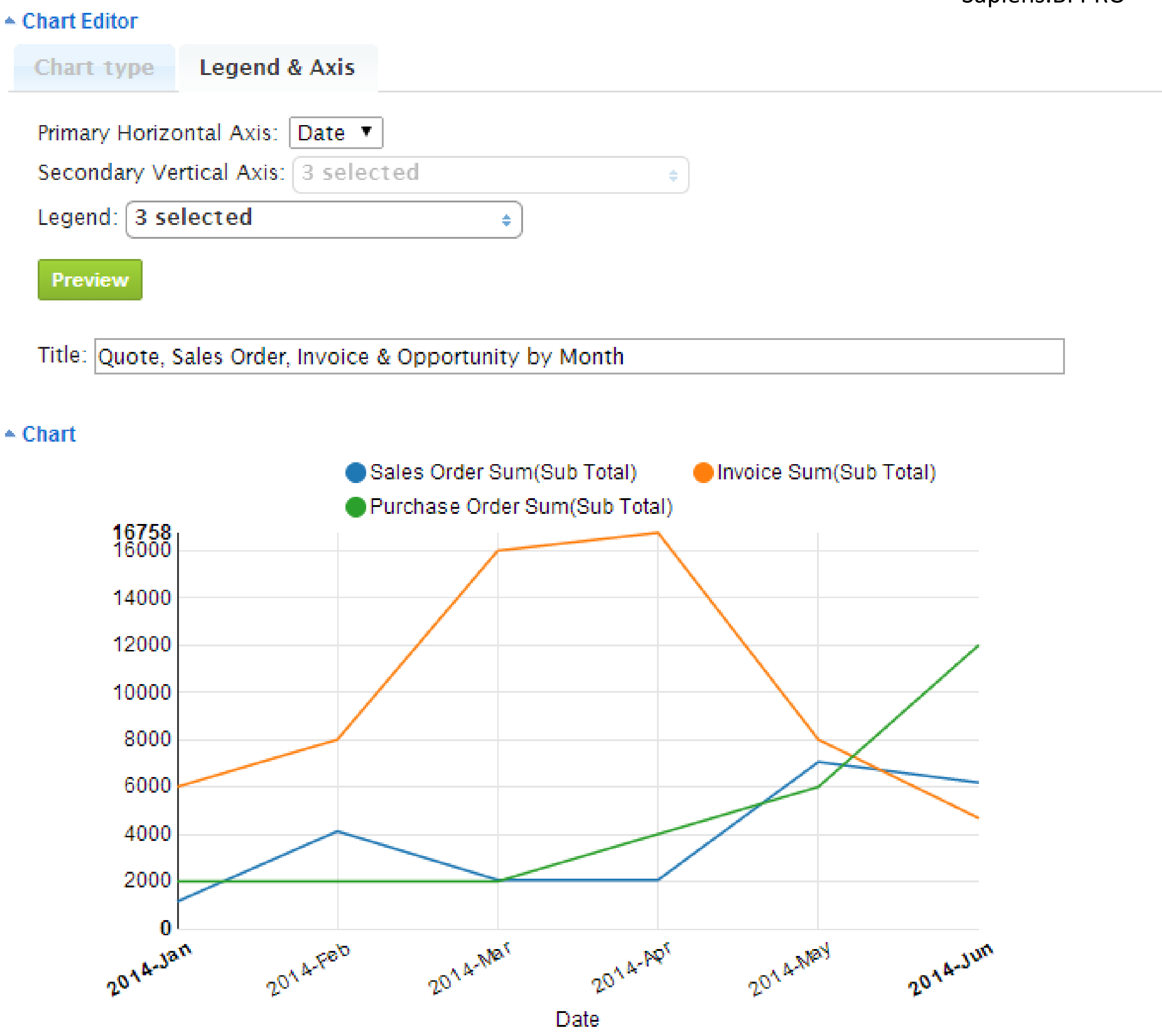
Horizontal Bar Chart

If you have selected the „Horizontal Bar” chart type, under „Legend and Axis” you can identify the group from your Report which should be represented by the Primary Horizontal Axis. The summary, count or average should be selected for the Secondary Vertical Axis. You can select more than one of the Summary Aggregates under Secondary Vertical Axis, in this case the „Legend” should be same as selected under Secondary Vertical Axis. Otherwise it can be any of the Groups from your report.

For Horizontal Bar chart you can select „Grouped" or „Stacked" data representation. Hovering or clicking on any chart area will display the data represented by this area. Clicking the circles next to the Chart Legend will hide/show the corresponding data in the chart.
It is important to Save the report if you want your new chart settings to be saved.

Line Chart

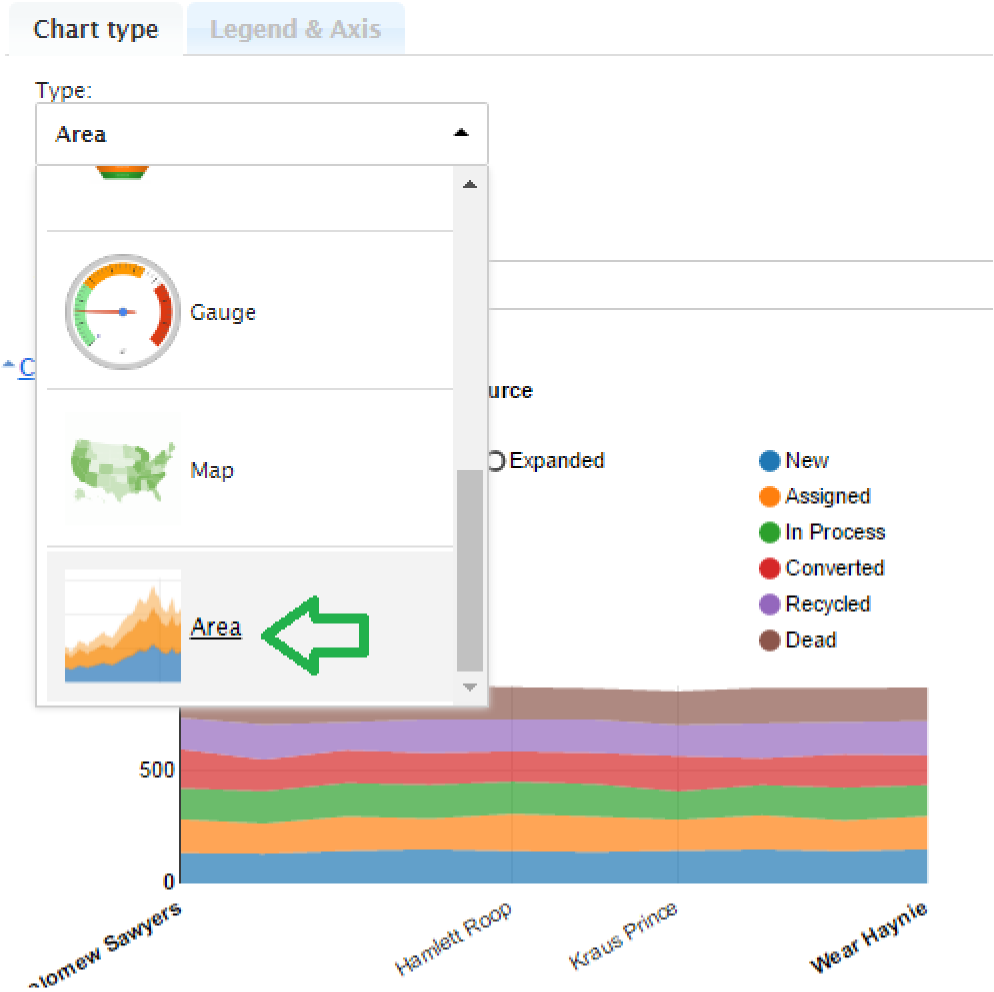
If you have selected the „Line" chart type, under „Legend and Axis" you can identify the group from your Report which should be represented by the Primary Horizontal Axis. The summary, count or average should be selected for the Secondary Vertical Axis. You can select more than one of the Summary Aggregates under Secondary Vertical Axis, in this case the „Legend" should be same as selected under Vertical Axis. Otherwise it can be any of the Groups from your report.



Hovering or clicking on any chart segment will display the data represented by this segment. Clicking the circles next to the Chart Legend will hide/show the corresponding data in the chart. It is important to Save the report if you want your new chart settings to be saved.

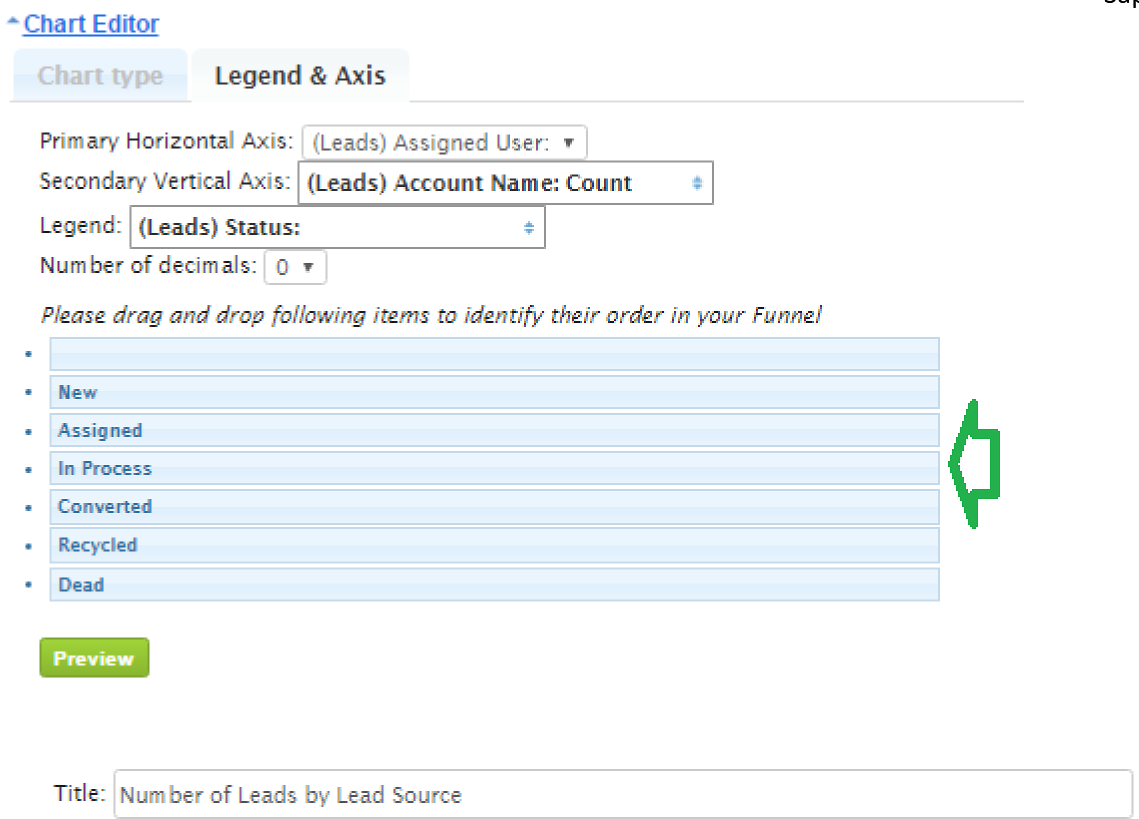
Area Chart

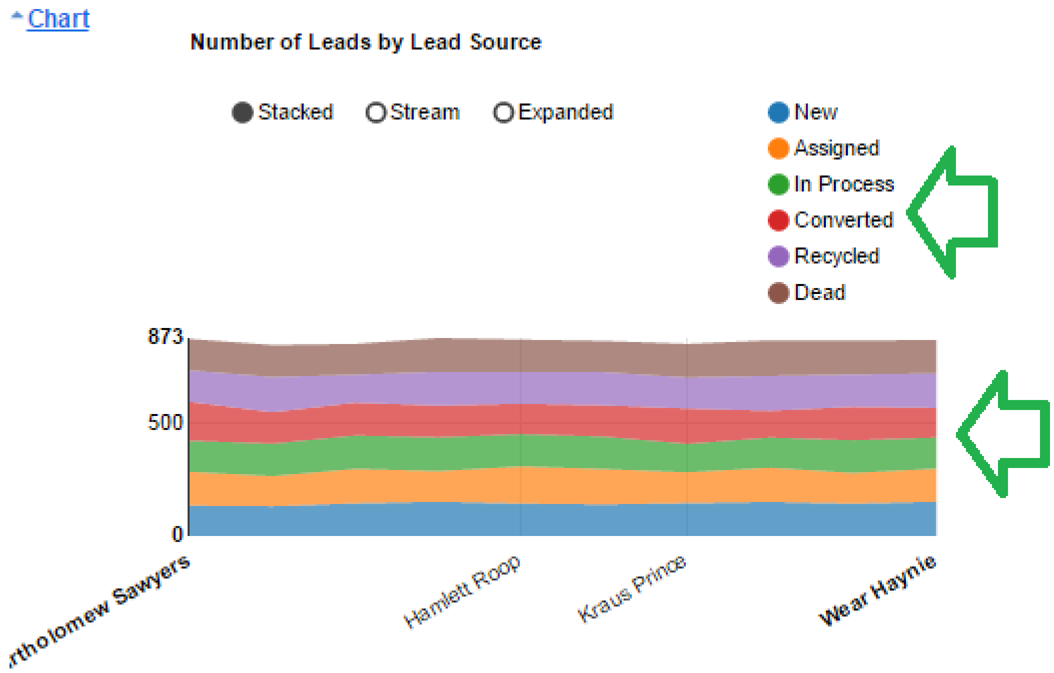
In order to select the new chart type “Area Chart”, please select the ‘Area’ Chart type under Chart Settings:



Under Legend & Axis you can now identify, what should be displayed in your Area Chart. The chart is using previously Saved Report settings (identified Aggregates under "Aggregates" tab and Groups under "Grouping and Sorting" tab).

When choosing 'Stacked' and the selected 'Legend' source is a picklist type field, e.g. 'Status', you will be able to drag&drop the order of the values to be displayed in your Area chart.

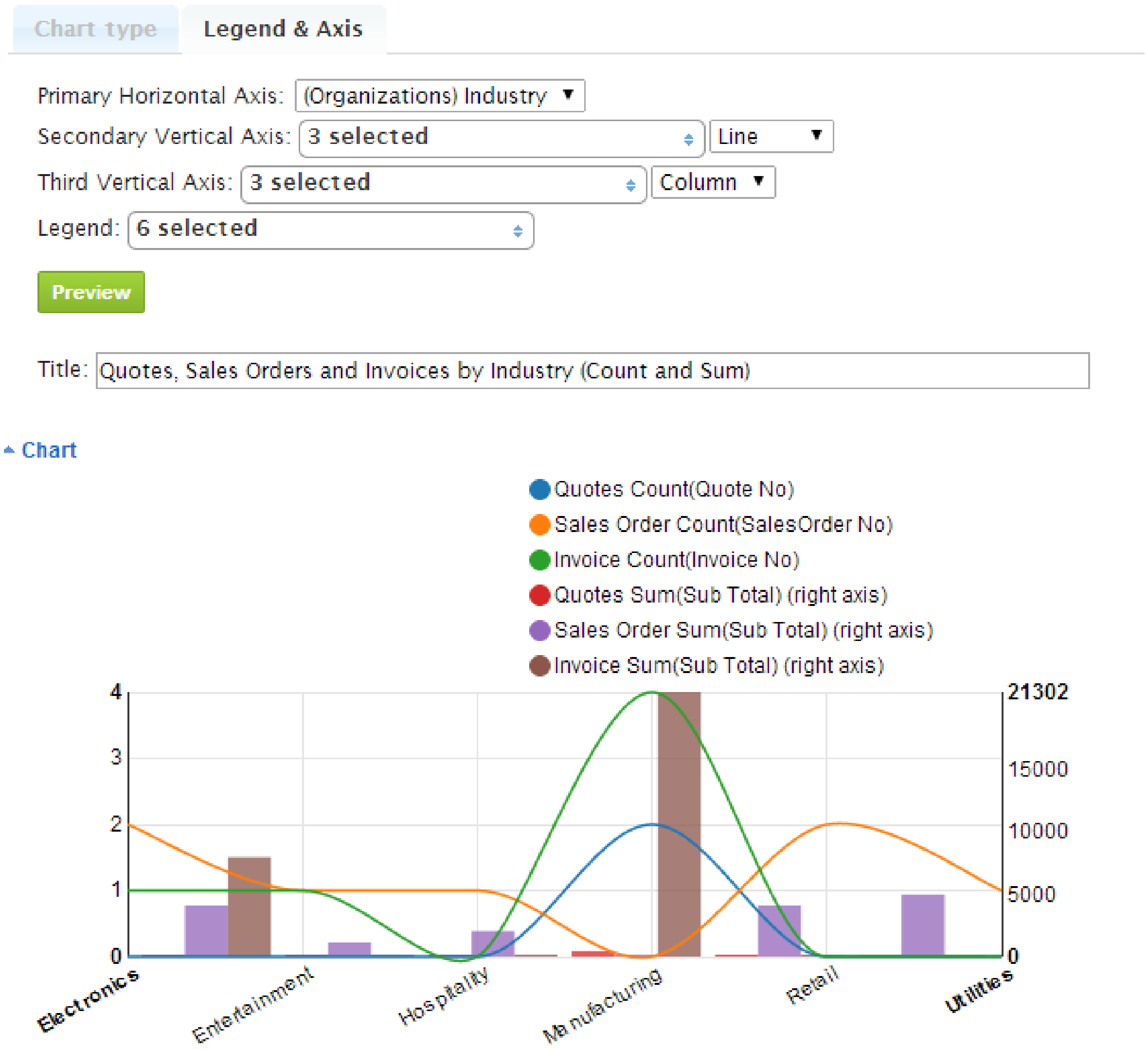




Combined (Multi-Axis) Chart

The Combined chart has two Vertical Axes, which is important if you want to see differently scaled amounts in the same chart, for example, if you need to see Sales Order Sums and Count in the same chart, like in the picture below. In this chart all selected data can be represented as Line or as Column. The legend should then contain all those values, which are selected under both Vertical Axes. The group (which is date, status, name etc.) is recommended to be selected for the Horizontal axis.

In our example below we have Lines representing Count on the Secondary vertical axis (Quote, Sales Order and Invoice Count), and Columns representing Sums on the Third Vertical Axis (Sum of Quote, Sales Order and Invoice Sub total).

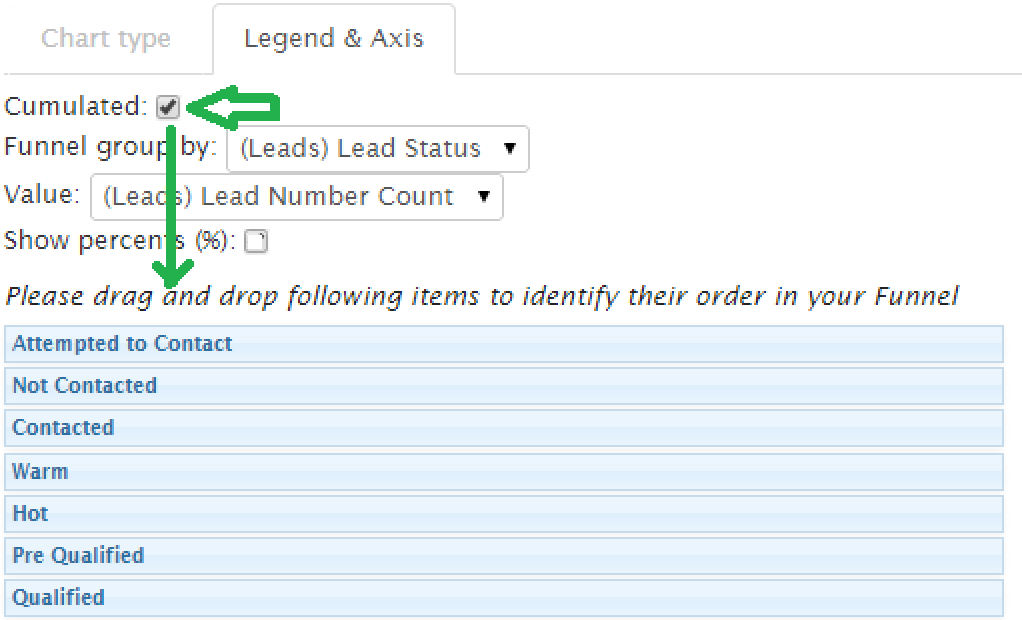


Hovering or clicking on any chart area will display the data represented by this area. Clicking the circles next to the Chart Legend will hide/show the corresponding data in the chart. It is important to Save the report if you want your new chart settings to be saved.

Funnel Chart

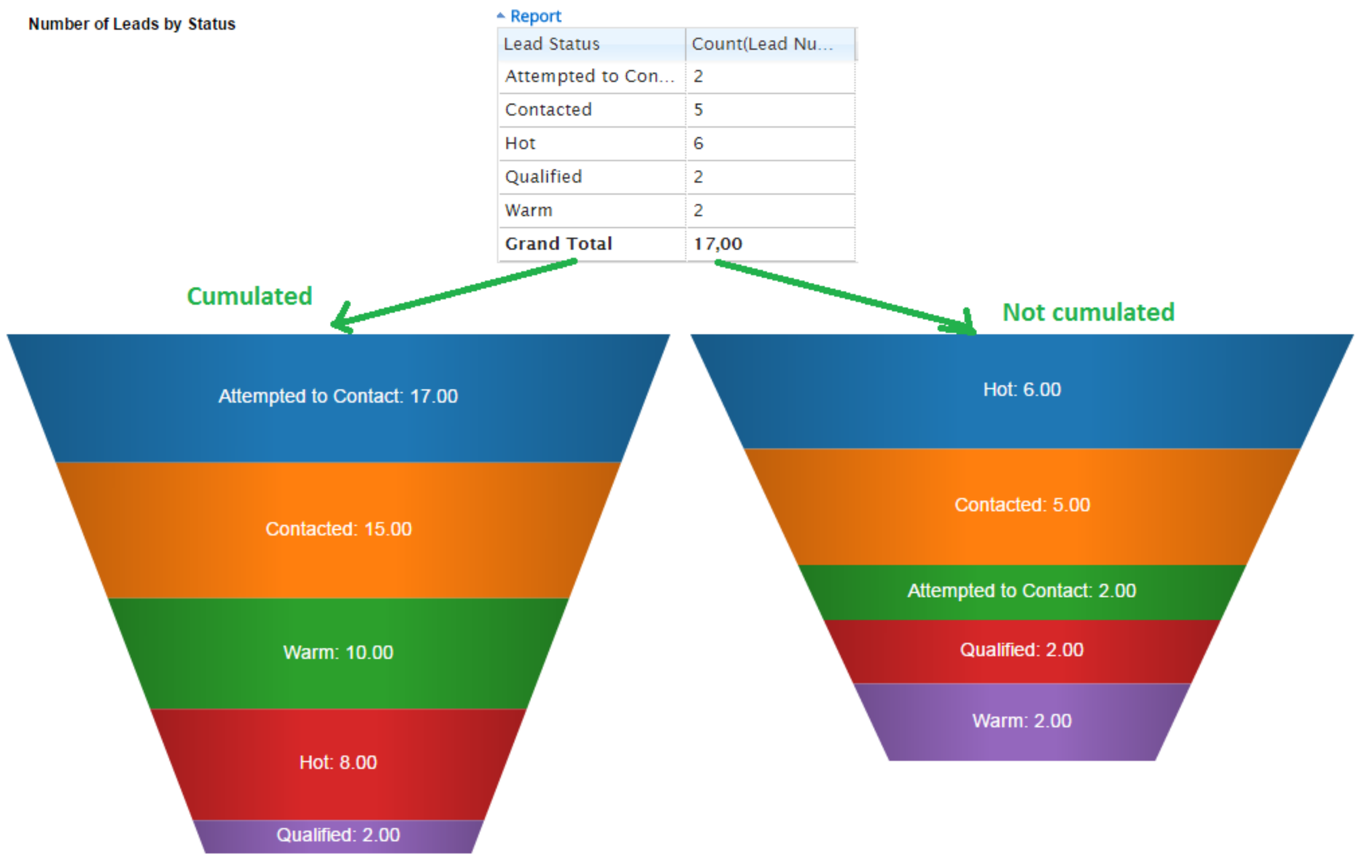
After you have selected the „Funnel" chart type, under „Legend and Axis", you can choose to have the values accumulated in the Funnel chart or not. Select Grouped Item and then Value to be displayed on the Funnel.

If you have selected the „Cumulated" check-box, you will be able to identify the item order to be displayed in your Funnel Chart. All available Items will appear below and you can re-order them by drag and drop.



If you don't want to cumulate values in the chart, you need to deselect the „Cumulated" check-box. In this case you will not be able to identify the Item order in the Funnel manually, as it will be sorted automatically in Descending order (from the largest amount to the smallest).

Note the difference in the example below:

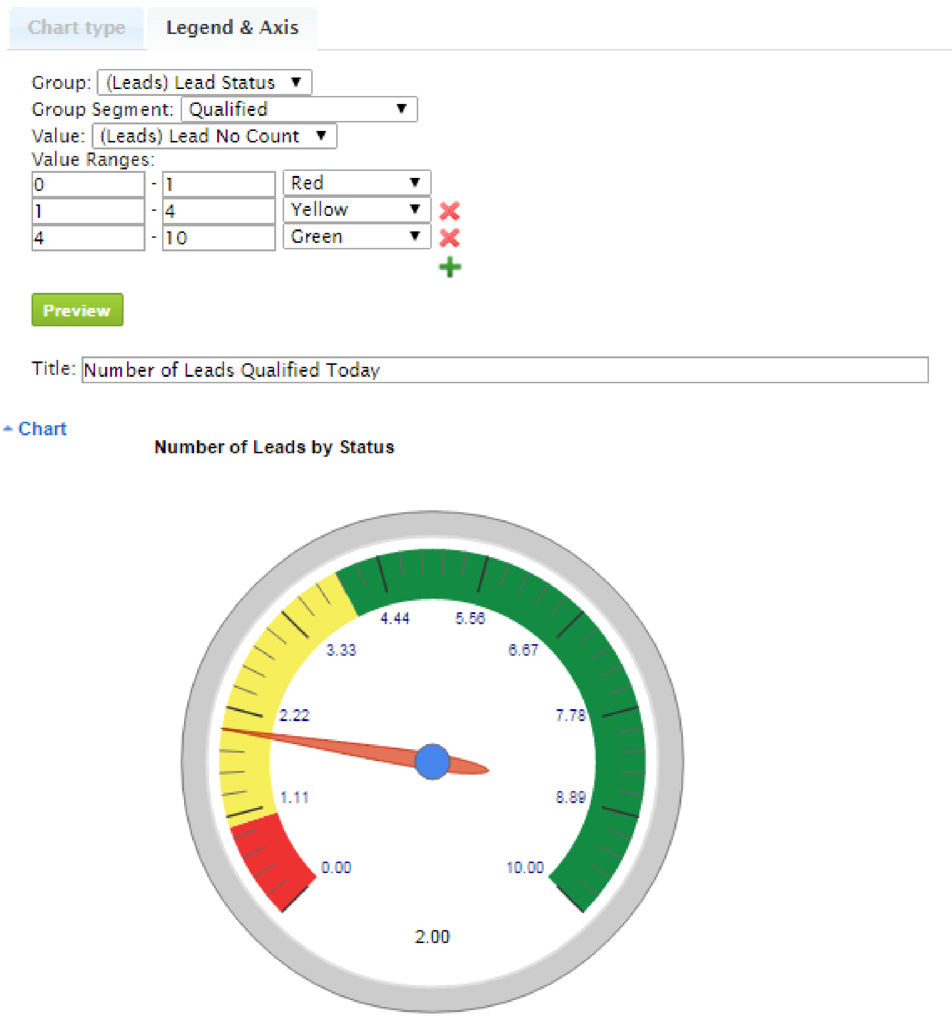


If you mark the check-box near „Show percent (%)", the calculated % for each value will be shown next to the value in brackets.

Gauge (Dial) Chart

After you have selected „Gauge” chart type, under „Legend and Axis”, you can select one of the Groups and then the Segment (Item) of this Group, then summarized, averaged or counted Value to be displayed in your Gauge chart. If you select „All” under Grouped Segment, then Gauge will show the grand total value. For example, if you only want to see, how many Leads with the Qualified status there are, you need to select „Lead Status” for the Group and „Qualified” – for Group Segment, then „Lead No Count” for the value. In the example below you can see how it would look.

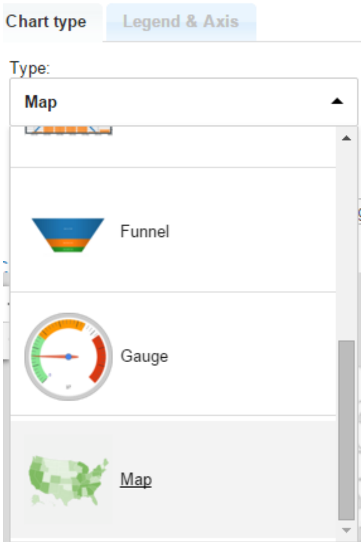
Before that, you need to identify the ranges and their colors for your Gauge. In our example Qualified lead numbers between 0 and 1 will be in a red colored area; between 1 and 4 – yellow and the best values between 4 and 10 will be green. The arrow in the Dial will point to the value, which you can see at the bottom as well – it is „2” in our case.



GEOGRAPHIC (MAP) CHART

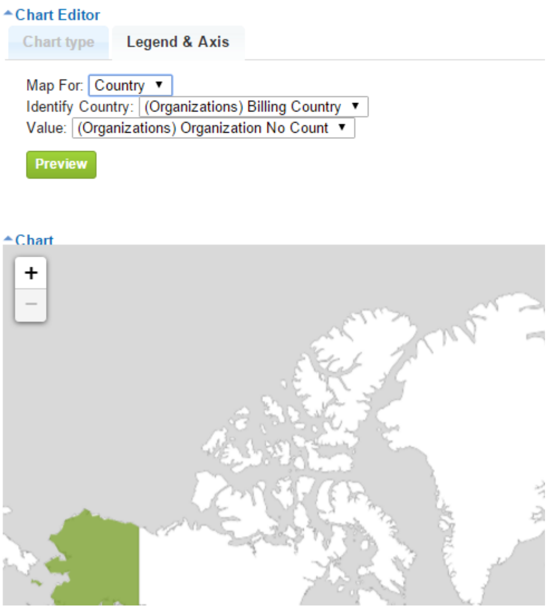
Selecting Countries and States for Geographic Chart

Under “Chart Editor” the selection of Map chart type is now available.

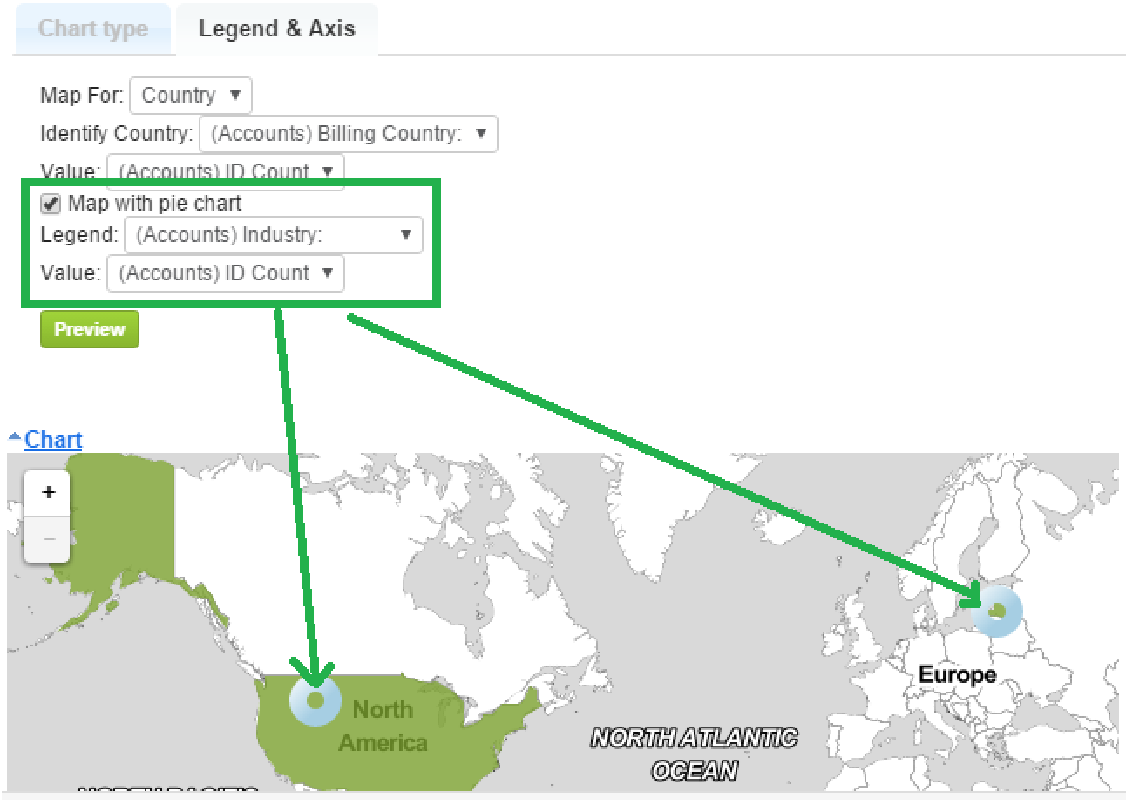


Currently the Map Chart is available for data representing either Countries or States. Under “Legend & Axis” -> “Map for:” please select whether you need to see the chart representing Countries or just States.

Under “Identify Country” – please select the report column, which contains country or state names. Under “Value” please identify the summary column with values that should be represented in the chart.



In addition, you can add one more dimension to be displayed in your Geographic chart. For example, it can be customer industry by country. If this is necessary, please select “Map with pie chart” checkbox and then identify the dimension field name as you can see in the sample below.



If the chart doesn't fit, you can use "Chart size" and "Chart height" to increase / decrease its size. As always, please remember to Save the added or modified Chart settings.

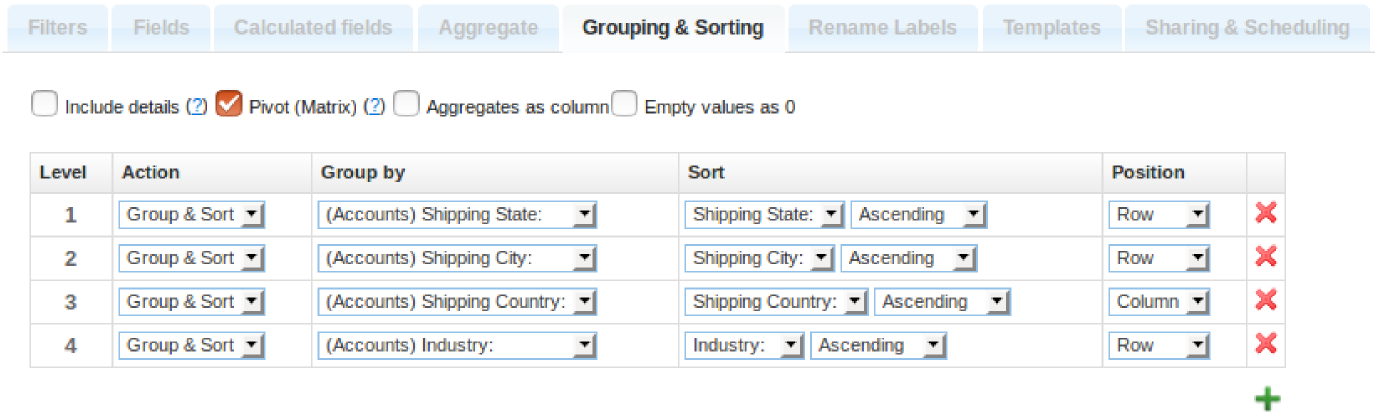
Selecting Cities for Geographic Chart

Geographic charts are a great way to visualize your data! Besides Country and State you can now also show data on Cities.

We are constantly extending the list of supported Countries for the Geographic chart. Please email us at info@itsapiens to inquire about specific Country support and we will add support for Cities in that Country in case it is currently unsupported.

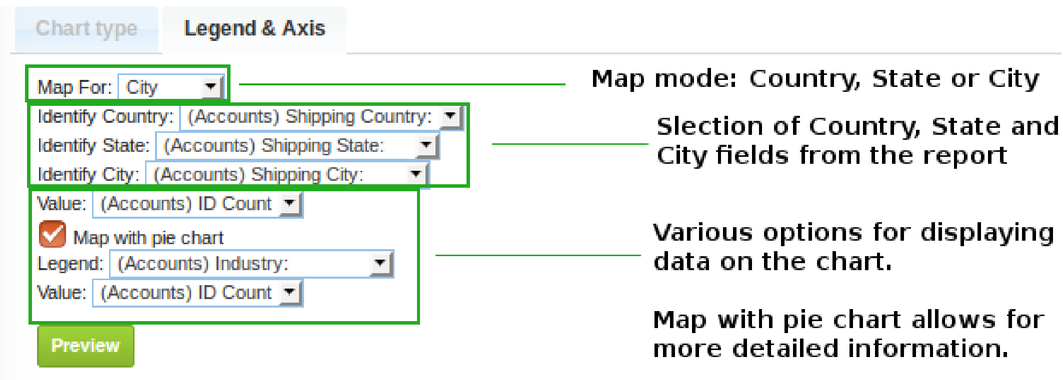
To create a Geographic chart with Cities you will need a report that has Grouping by Country and City and some cases also State/Province for disambiguation.

In our example we will create a Geographic Chart to display Accounts by Industry on a City to City basis. Our grouping options are as follows:



We have grouped our report by Country, State and City. We have also grouped and aggregated the count of our field of interest – Industry. The report is ready at this point but you might also want to change other Report options like Filters.

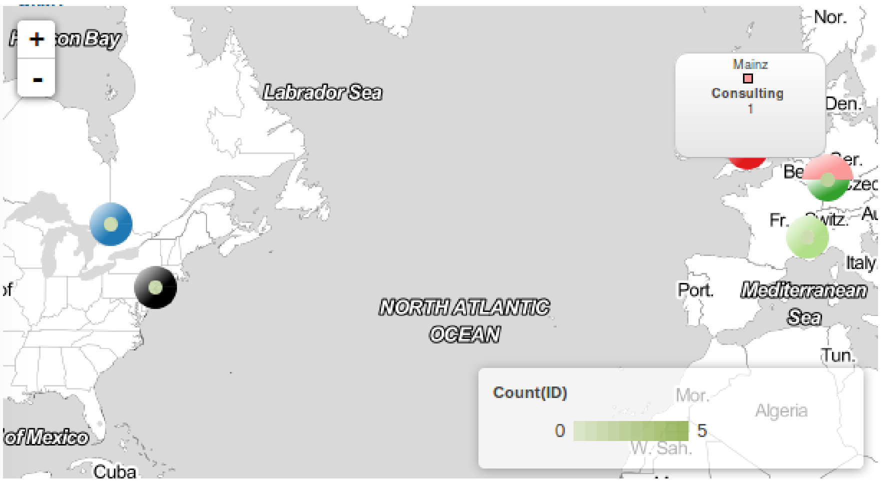
We select the Geographic Chart type and under Legend & Axis we set all the options and fields to match our report. Match the Country, State and City fields and identify the value which will be displayed on the density-colored Map Markers.



The "Map with Pie chart" adds a small Pie Chart on top of the Regular Map Marker with a more detailed breakdown of the data. You can display different values for the regular markers and the Pie Chart.

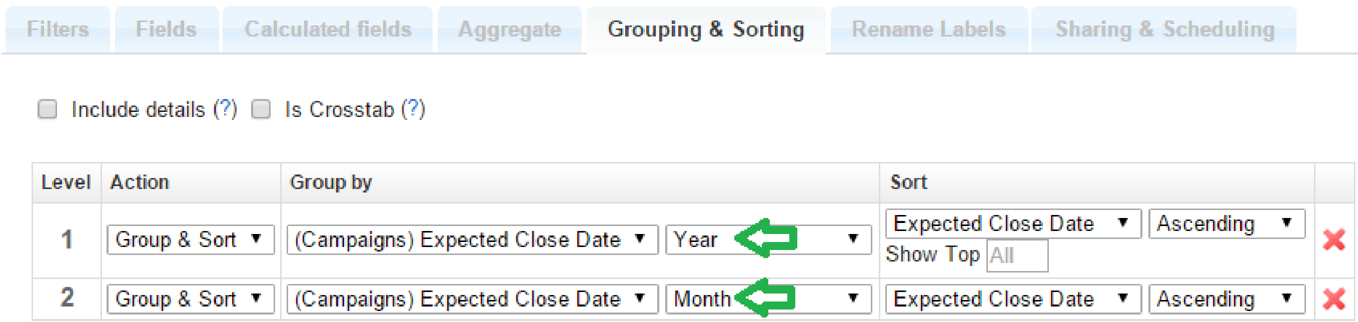
Regular Map Markers are heat colored for better visibility of low density regions. Adding Pie Charts changes the coloring to a green shaded scale for less color clutter.

As an end result we get all our data beautifully displayed on the Geographic Chart with great visual insights and flexibility.

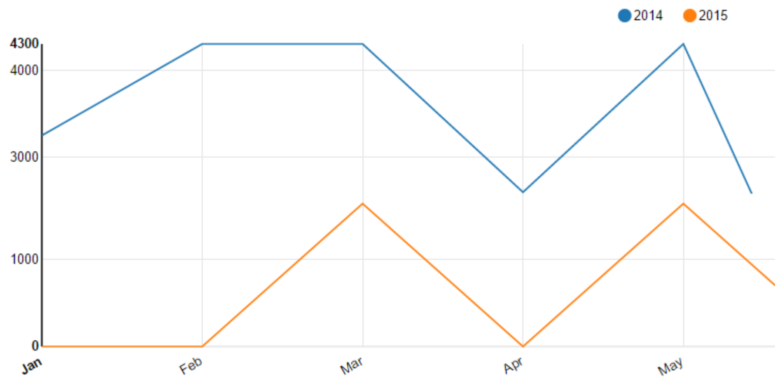


Yearly Comparison by Quarter/Month/Week for Charts

Sapiens.BI allows you to have more than one date dimension for the same date field in the same report. It is available for both: the report table and the chart. For example, if you need to compare the monthly pipeline of 2015 versus 2014, under "Grouping & Sorting" you need to select the same date field twice. In "Group by" you should select date + "Year" for one and then date "Month" for the other, like in the example below:



After saving these options you can now identify the Year for the Label and Month for the Horizontal Axis. Our example might look something like this:

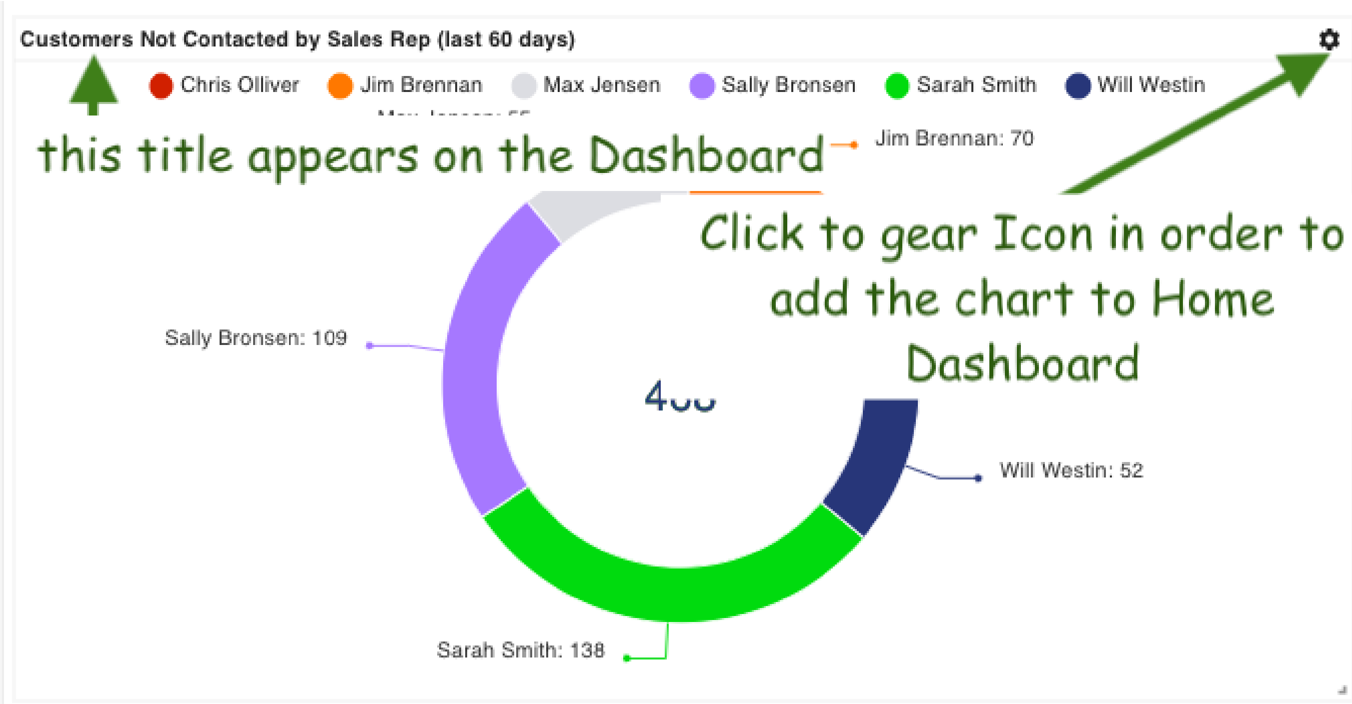


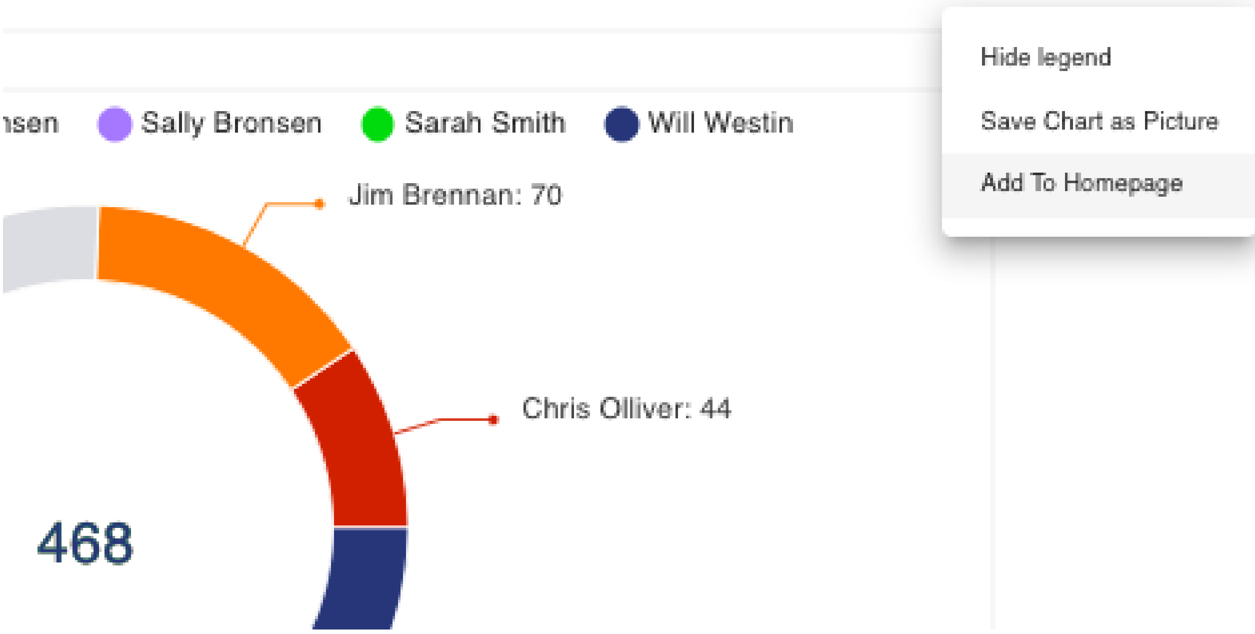
Adding a Chart to the Homepage Dashlets

You can add the charts to Sugar / SuiteCRM standard built-in Dashboards or you can create New Sapiens.BI Dashboard and add the charts and tables to that Dashboard.

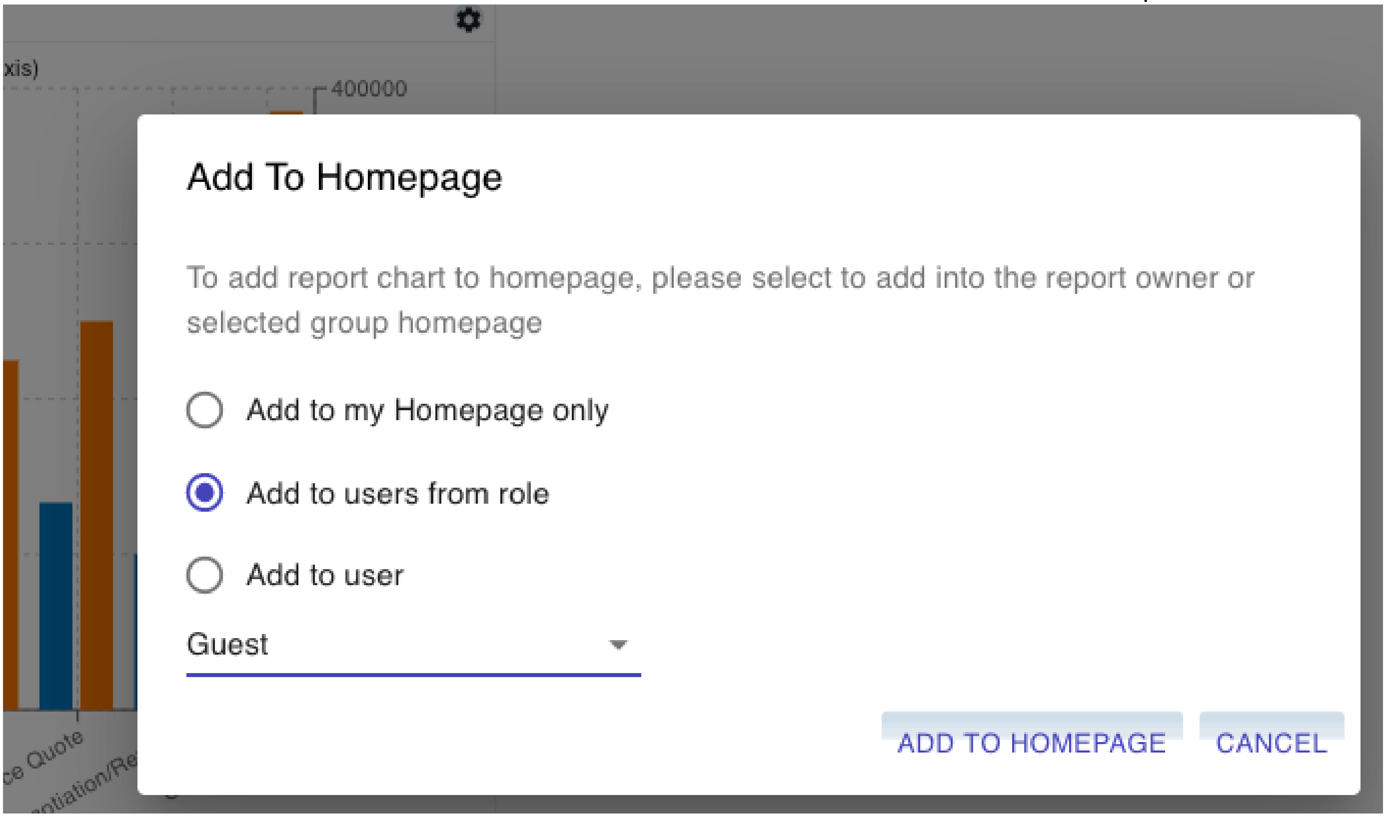
Adding Chart to built-in Dashboard:

When the report is open, you can add the chart to your Home Dashlets. Click the gear icon and then „Add to Homepage" link to add this chart to your CRM system Homepage Dashlets.

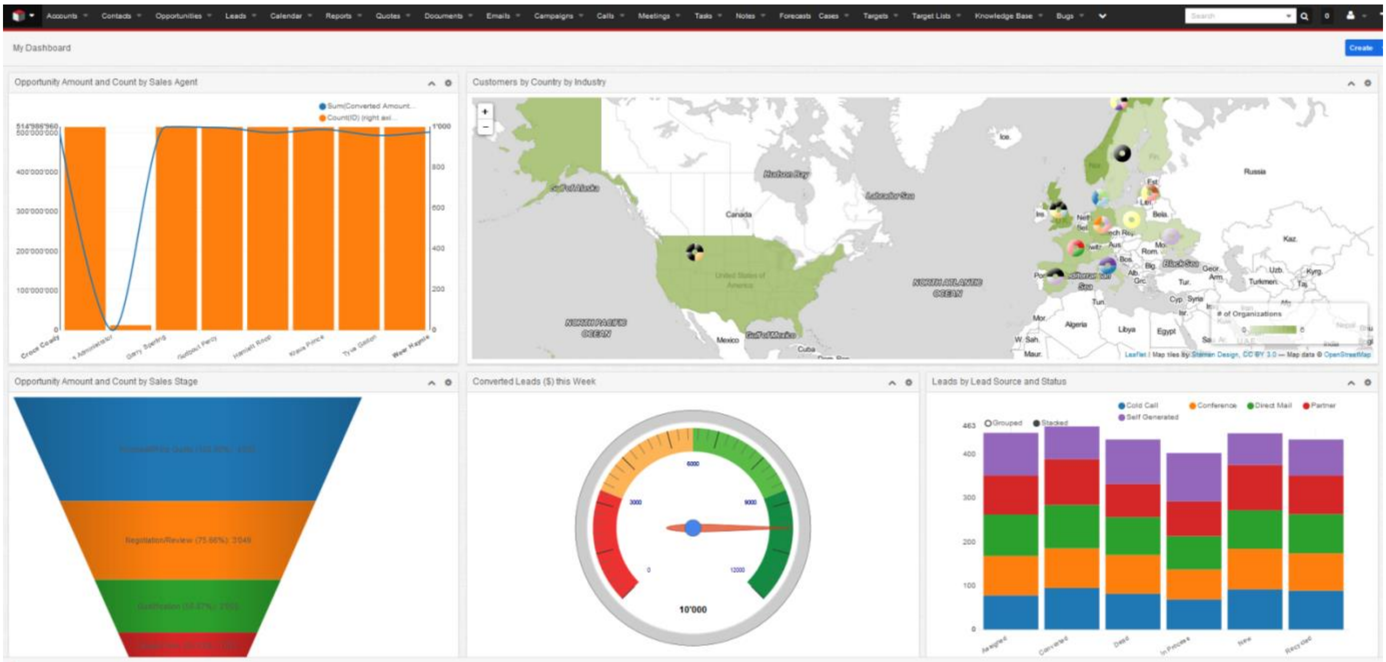




If you are an admin user or report owner, you can also add the chart to other user's home dashlets. You can either add it to all users within a selected role, or a specific user. After clicking “Add to Homepage”, the current chart will be added to the dashlet according to your options.



After a pop-up confirmation the Chart and its Title will appear in your CRM system Homepage Dashlet:



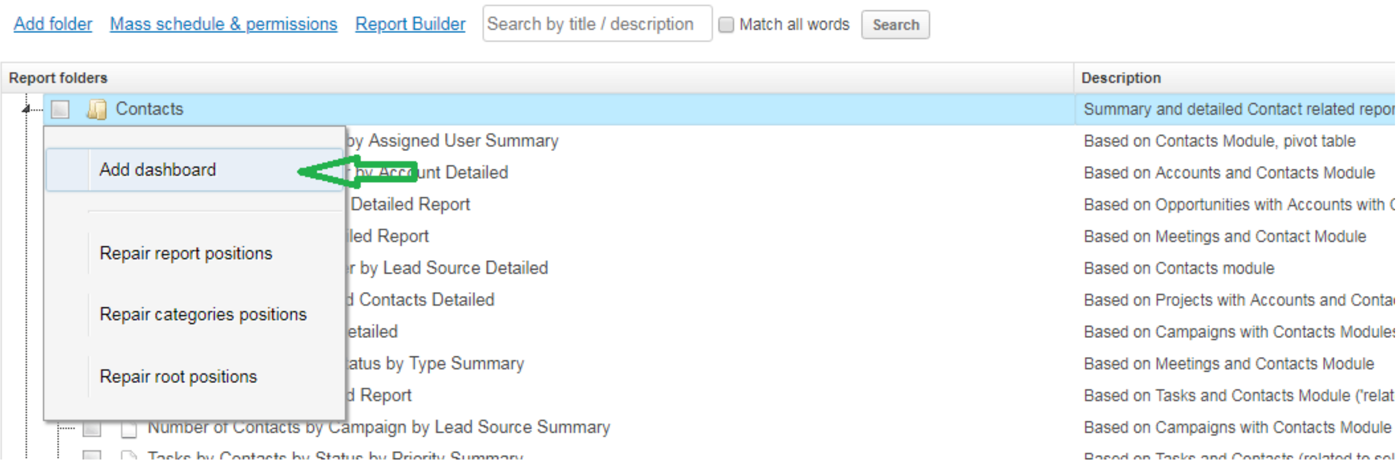
On the Homepage charts are still interactive (i.e. displays the information on mouse-over represented by the area, can hide/show by clicking on the legend, etc.).
Clicking the Chart Title link inside the Homepage Chart Dashlet will open the corresponding Report and Chart. Changed and saved Report or Chart settings will apply to charts in the Homepage Dashlet as well.

However you can only add the chart to your default home dashboard and you can’t add it to any other dashboard if you are doing the way it is described before.

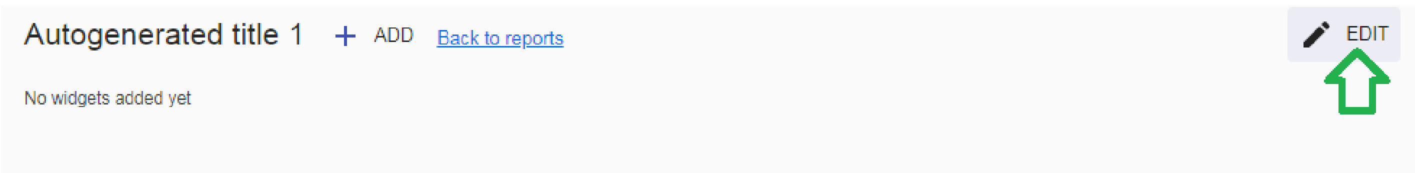
In order to add Chart to any other Dashboards, you can follow standard Sugar / SuiteCRM procedure – go to the Dashboard, click to add dashlets and then select Sapiens.BI Chart from a list.

Sapiens.BI Dashboard

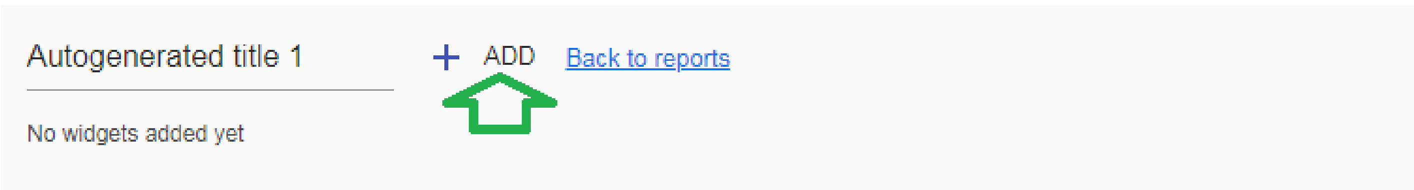
1. In the report and folder list, right-click the folder title where you want to store your dashboard, select 'Add dashboard':



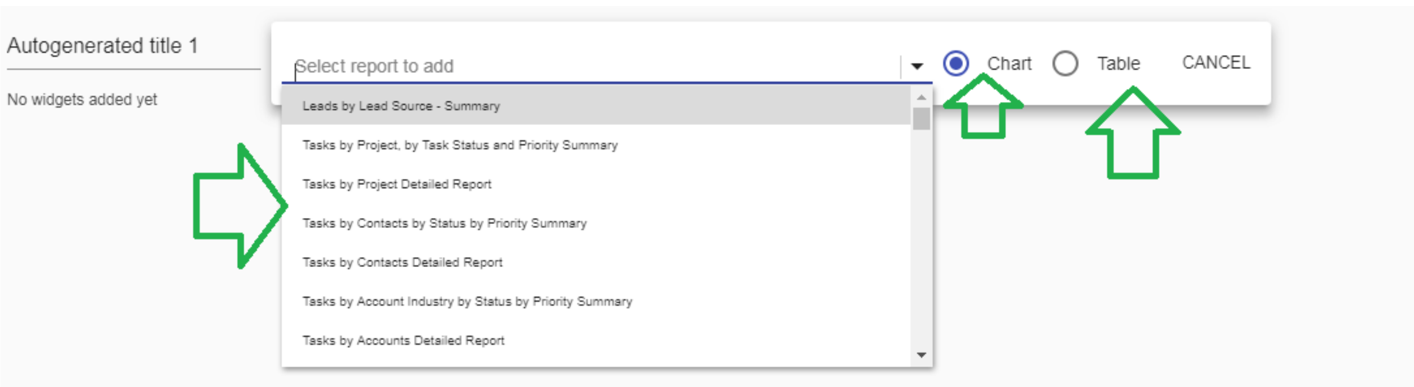
2. Click the 'Edit' button:



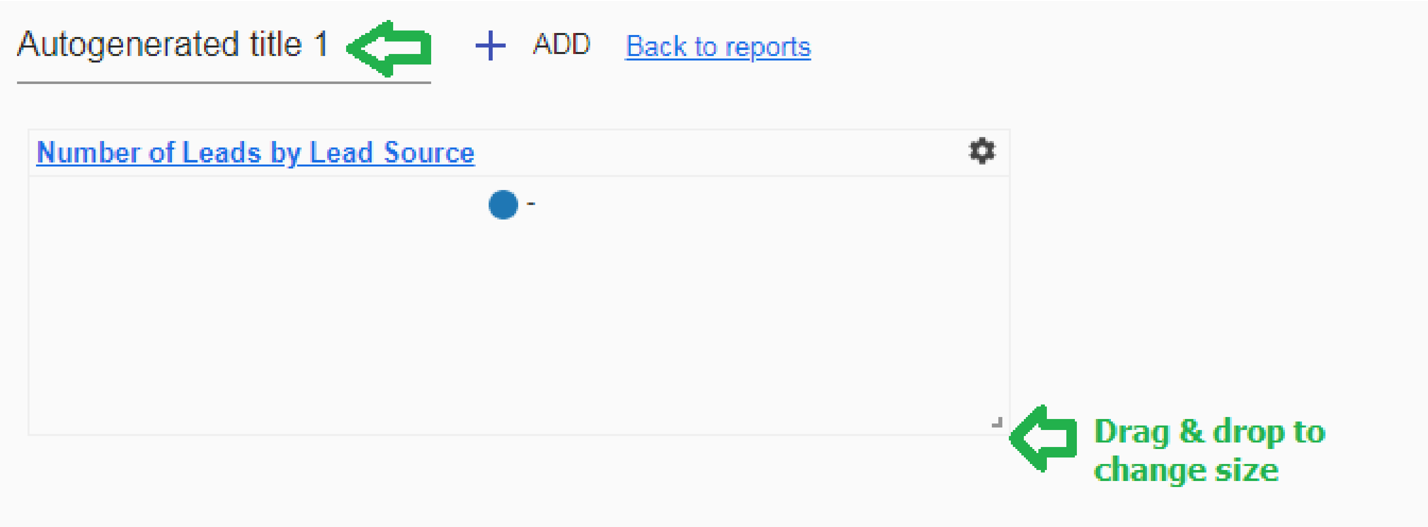
3. Click '+ ADD'



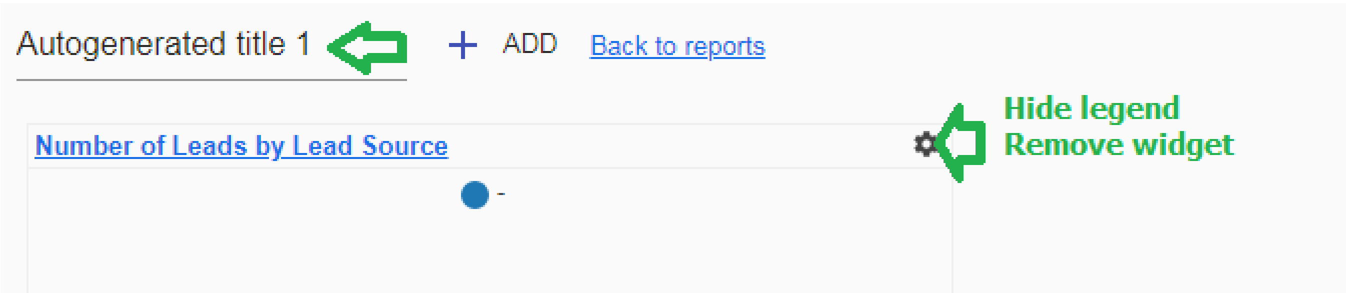
4. Select the report (type any part of the report title to search) and select – 'Chart' or 'Table':



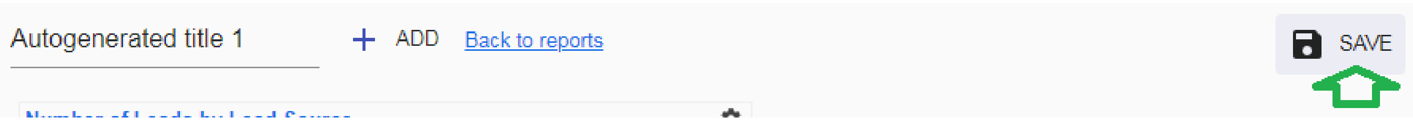
5. A Widget with a chart or table is now added. You can change the size by drag & drop on the bottom-right corner:



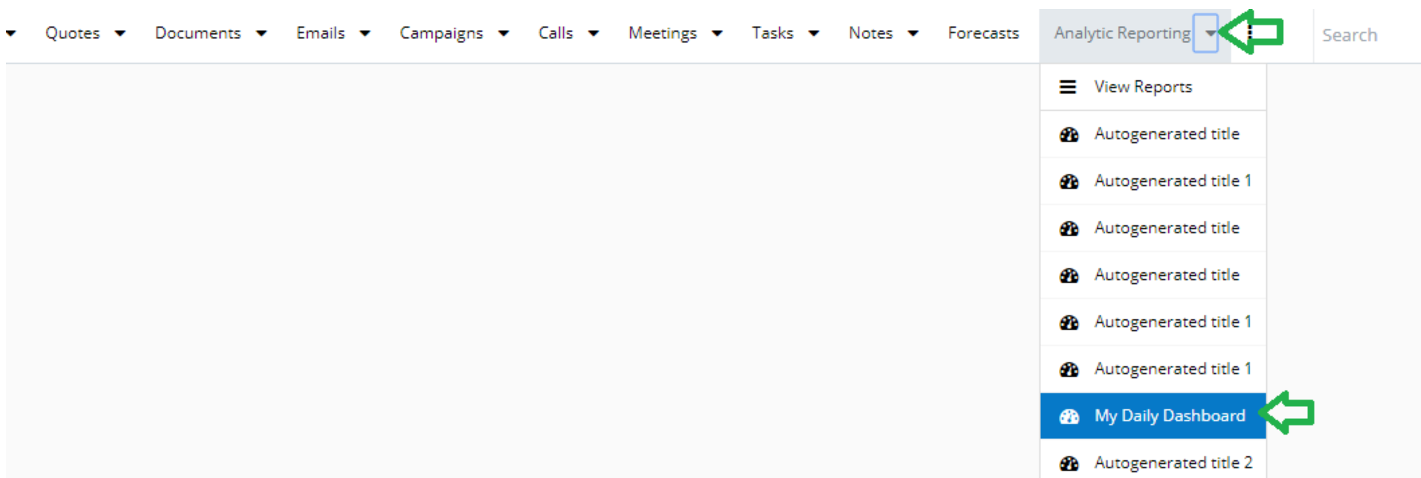
6. When several widgets are added, you can also change their position by dragging them around. You can change the Dashboard title before saving.



7. Remember to **save** before leaving this page, or all changes will be lost:



8. All Dashboards can be opened from the top-menu of the Sapiens.BI tab



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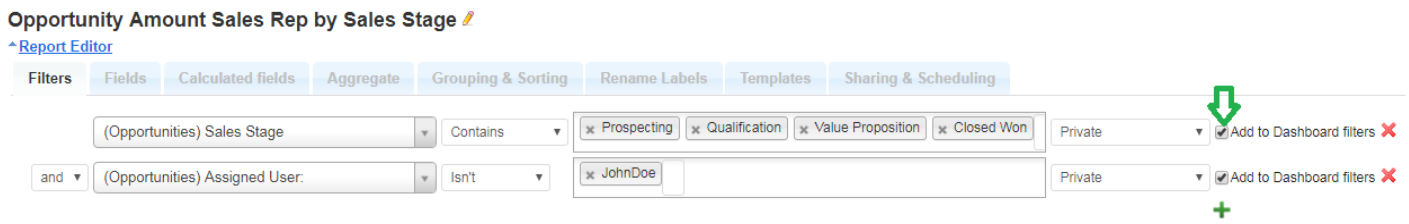
9 Common Filters on Dashboard

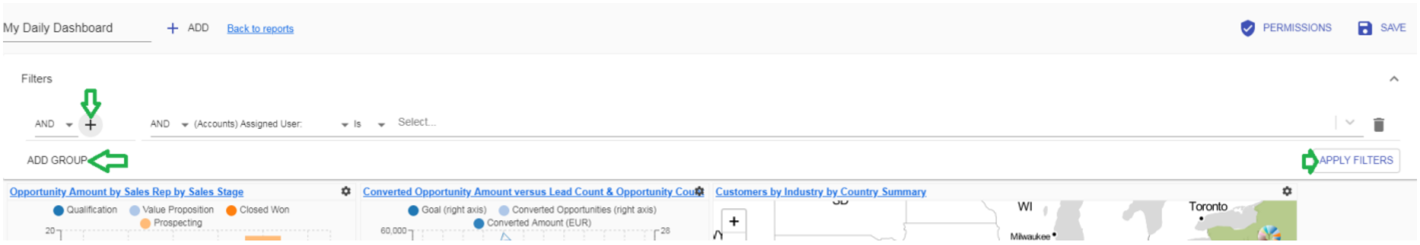
You can add a new Filter to your Dashboard in Edit Mode. Filter criteria can be changed in View mode (no need to Edit). For each module you have to use separate Filter (or filter line). Howeveer several reports and chanrts can have common filters for the same module and field.

Before adding the Filter inside of the Dashboard, you have to allow this Filter Inside the report by checking 'Add to dashboard filters':

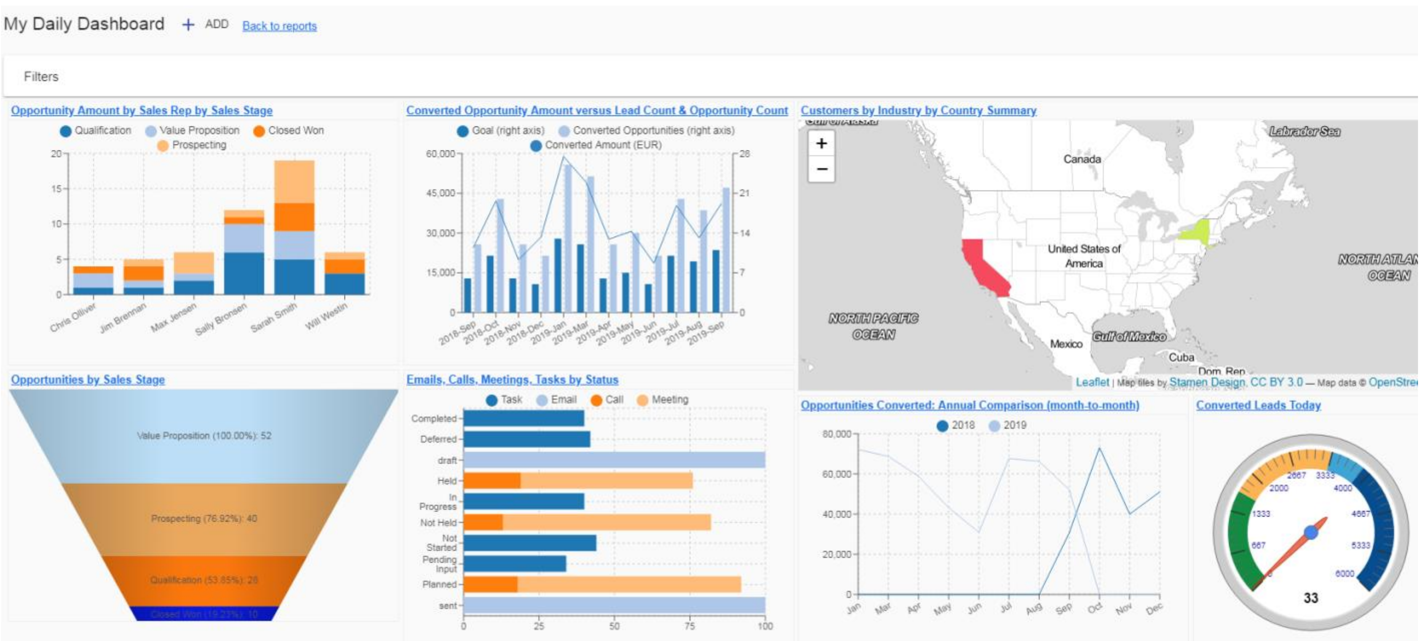


This checkbox should be selected for all charts and tables which you want to apply filters in the Dashboard.

Now you can open the Dashboard. Click 'Edit' -> 'Filters' and if there are no filter added yet then click the 'Add Group' button. If there are already some filters, click the '+' next to the existing filter to add new filters.

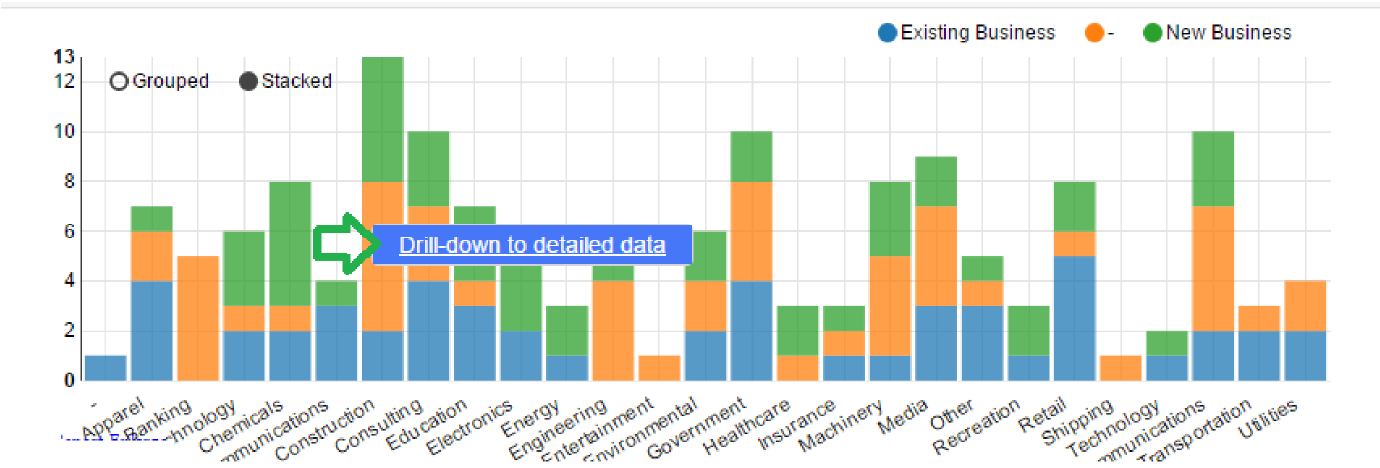


Hope, you enjoy your new dashboard:

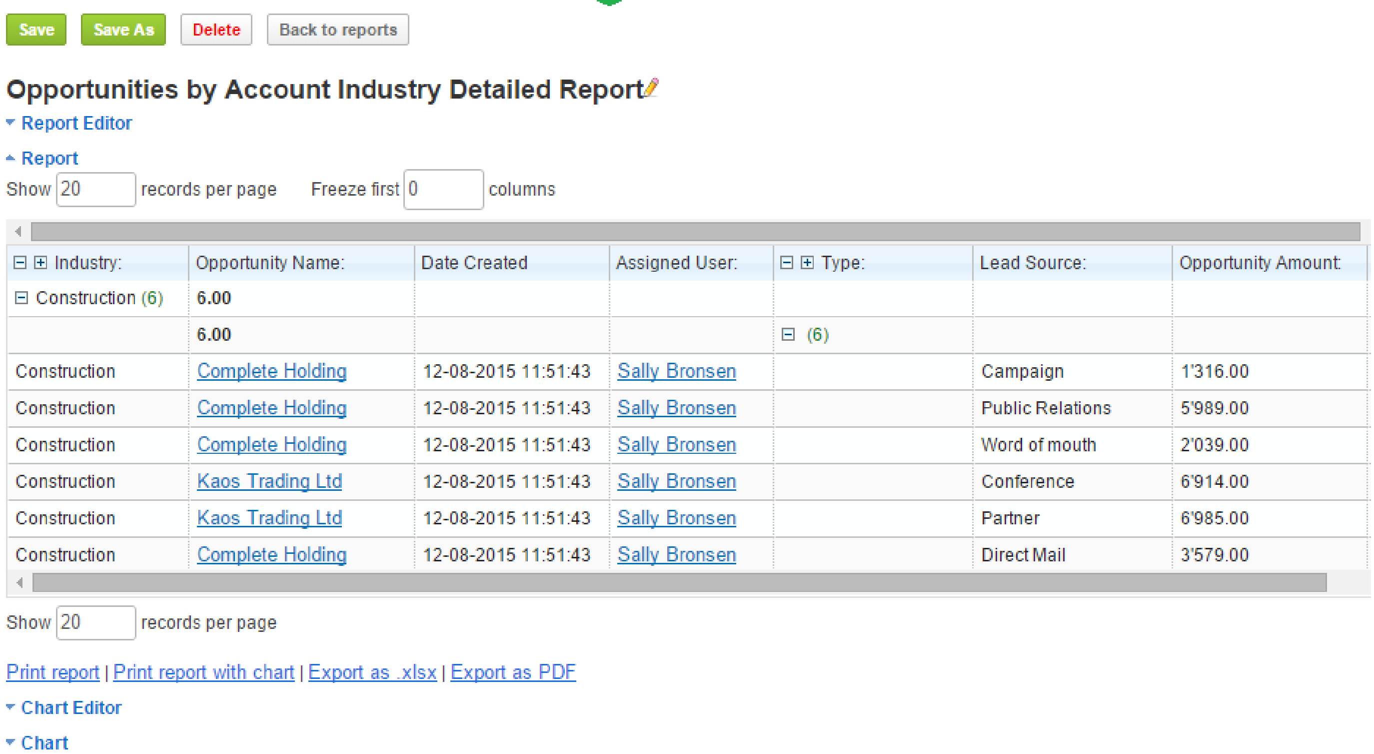


DRILL DOWN FROM CHART AREA TO DETAILED DATA

You can drill-down to the detailed data with a click to the chart area:



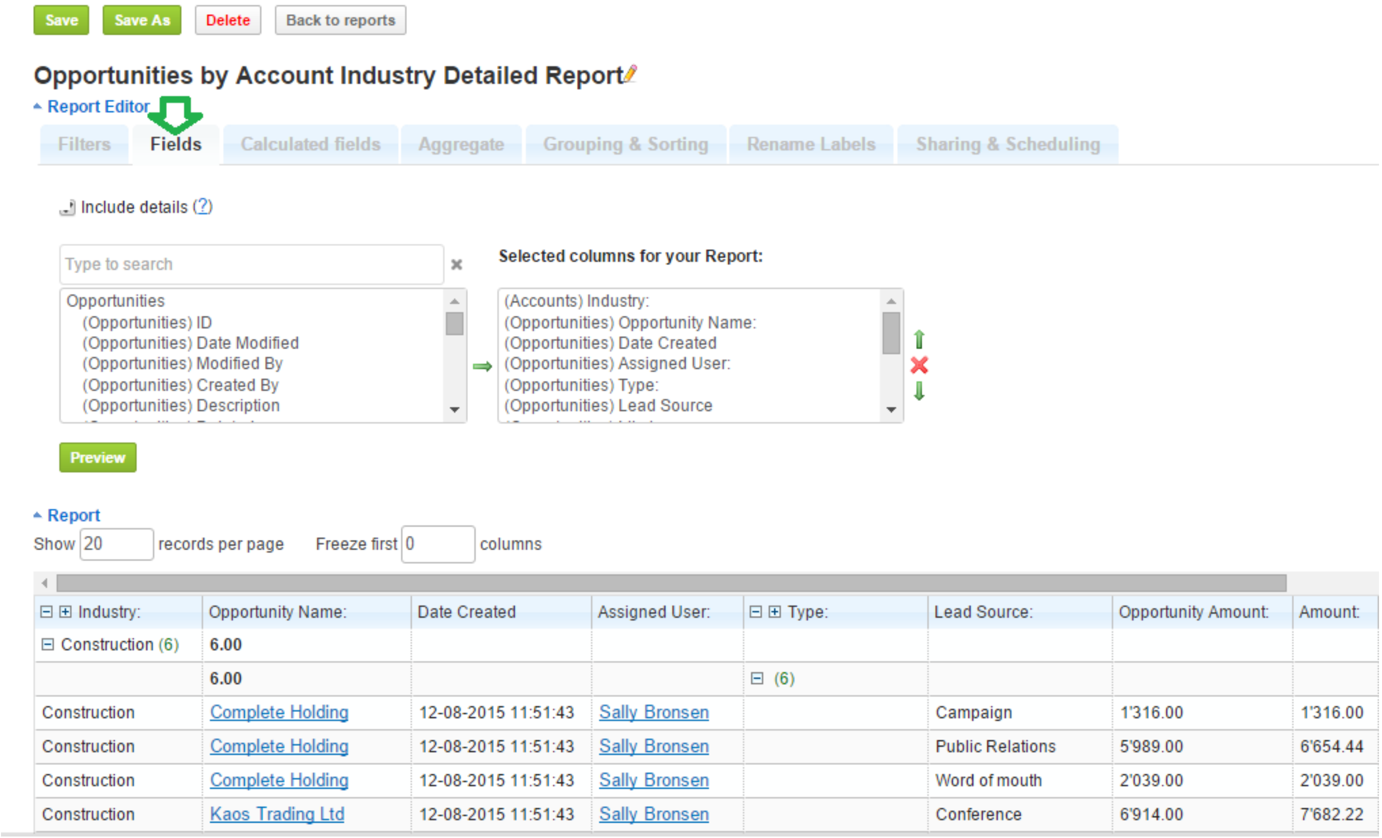
A report with detailed data represented by this chart area will open in a new browser tab.



Industry:	Opportunity Name:	Date Created	Assigned User:	Type:	Lead Source:	Opportunity Amount
Construction (6)	6.00					
	6.00			(6)		
Construction	Complete Holding	12-08-2015 11:51:43	Sally Bronsen		Campaign	1'316.00
Construction	Complete Holding	12-08-2015 11:51:43	Sally Bronsen		Public Relations	5'989.00
Construction	Complete Holding	12-08-2015 11:51:43	Sally Bronsen		Word of mouth	2'039.00
Construction	Kaos Trading Ltd	12-08-2015 11:51:43	Sally Bronsen		Conference	6'914.00
Construction	Kaos Trading Ltd	12-08-2015 11:51:43	Sally Bronsen		Partner	6'985.00
Construction	Complete Holding	12-08-2015 11:51:43	Sally Bronsen		Direct Mail	3'579.00

As you can see from the ScreenShot above, you can save the new detailed data as a report, export it, or use the report settings for additional filters or report layout changes, as well as to add the chart, if necessary.

Whenever you create or edit any summary report, you can identify, what columns and in what order should be displayed upon drill-down. This can be done in the Report Editor “Fields” tab.

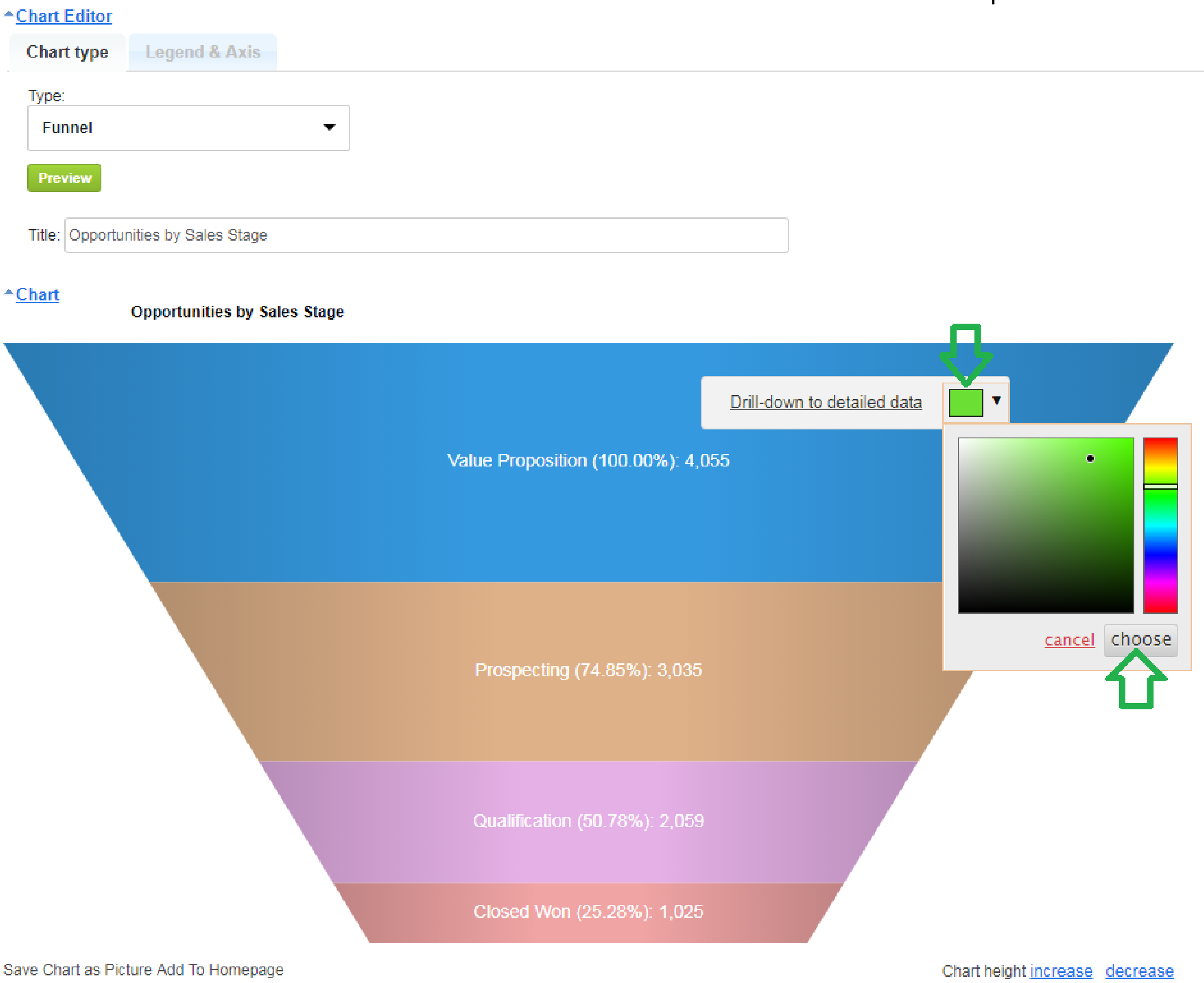


Drill down is available for both: Charts in the Home Dashlets and for Charts under the Report.

Drill down is not available for users who have no permission to drill-down the data. It is also not available for customized combined reports, Geographic Chart and Gauge Chart.

Change Chart Colors

In order to change the chart area colors, you should open the report containing your chart. Click any chart area to change its color and select the color from the color-picker located next to the Drill-down. Remember to save the report in order to update the chart with the new colors.

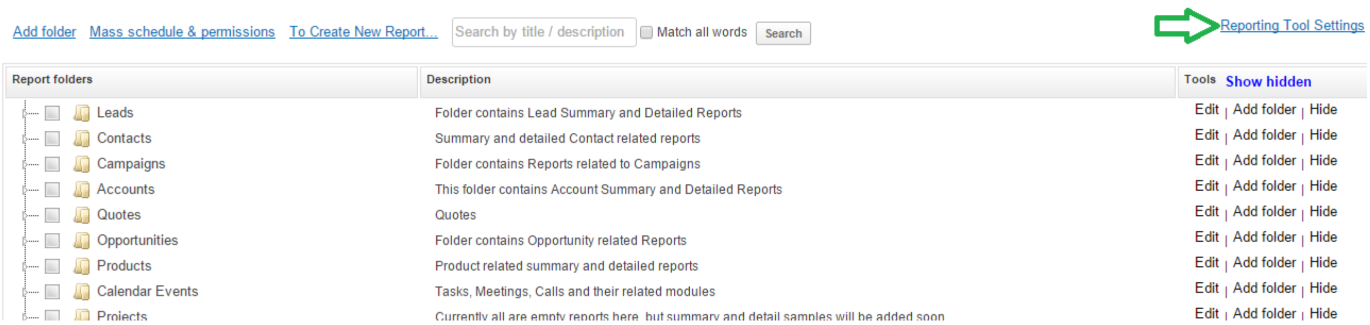


If you change the chart type, colors that have been set previously will be remembered across all charts if the names are the same.

CREATING NEW REPORT TEMPLATES VIA REPORT BUILDER

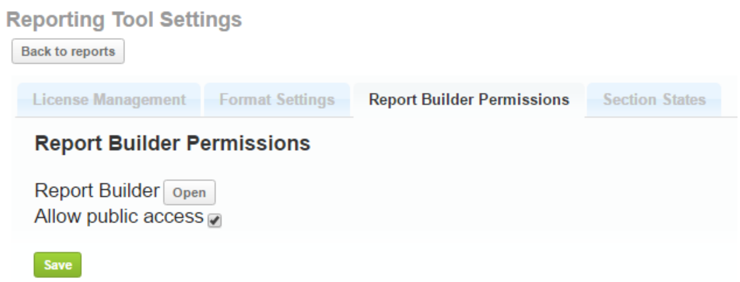
It is recommended to start from an already pre-defined report template, and then use “Save as” in order to add a new Report (you can use Search to find a report by related modules). However, if there is no report with your necessary module or required relationships, or if you have a custom module, you can create a new report template using the Report Builder.

1. The Report Builder is located under “Reporting Tool Settings” in the top-right corner of the Sapiens.BI folder list. “Reporting Tool Settings” link is visible and available only for admin users.

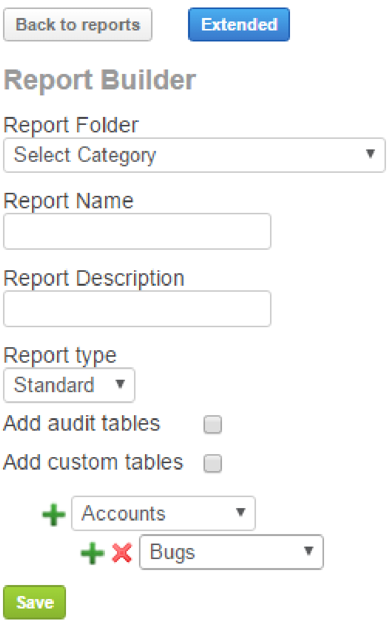


2. Click to open the tab “Report Builder”:

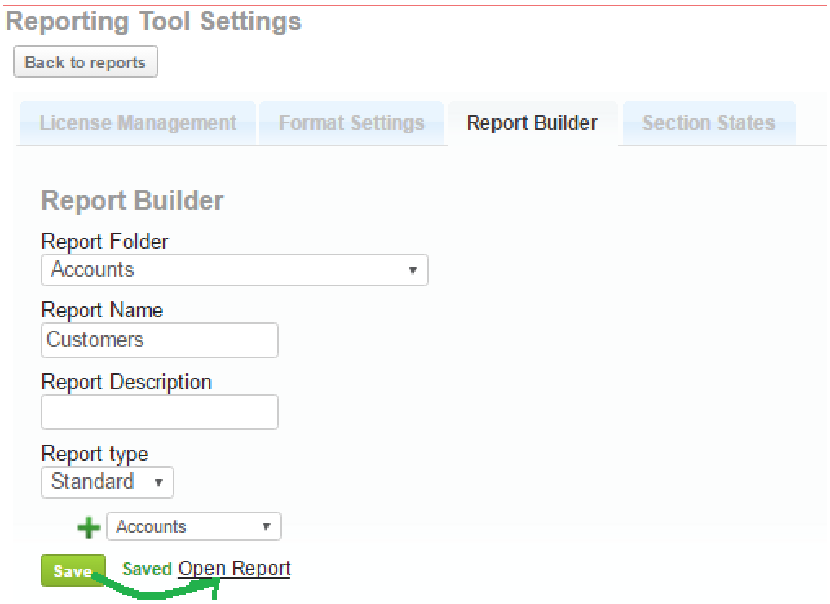
First of all, here you set permissions to report builder by selecting “Allow public access” and saving. If you keep this checkbox un-selected, after “Save” only admin users will be able to create new reports via Report Builder.



Click “Open” next to “Report Builder” in order to Open it. Simple report builder will open first, it has an easy User Interface, but can be limited in case you have some custom relationships. In case Simple Report Builder functionality doesn't meet your needs, admin users can open Extended Report Builder by clicking the “Extended” button.

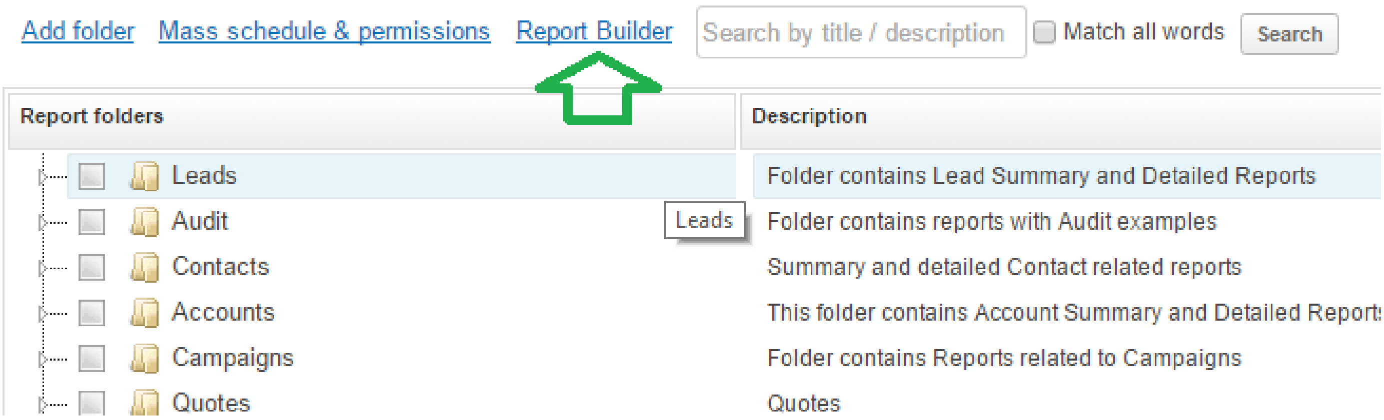


3.1. Under “Report Folder” please choose the Report folder, where the new report will be stored
3.2. Enter the Report Name and Description
3.3. The recommended Report Type is “Standard”; “Combined” reports will be covered later in this section.
3.4. Select the main module for your new report. If you don't need any further modules click “Save”;



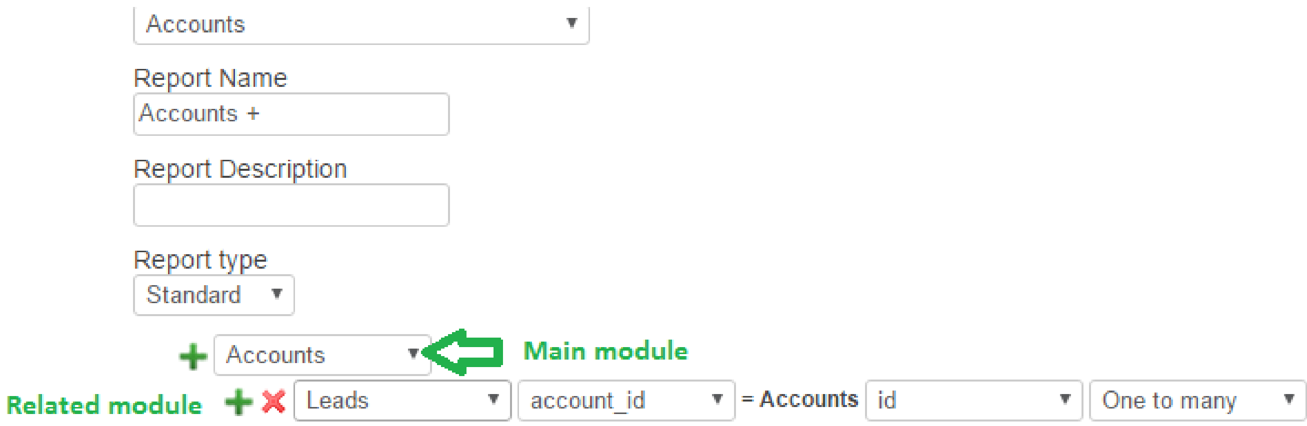
After saving, the status “Saved” will appear along with the link “Open Report”. You can open the new report by following this link. Please remember to add the necessary columns and data for your report under “Fields” tab, as well as to add other needed settings and then “Save” again.

If non-admin users have granted permissions, they can open the report builder by clicking the link in Sapiens.BI report and folder list:



Adding a second module to the new report:

If you need to add a second related module, stay in the Report Builder (without Save) and click the green "+" next to the selected main module. In our example below, "Accounts" is the main module. Clicking the "+" in front of "Accounts" we added a second row – and selected Leads as our related module.



Simple Report Builder has only the option to select module names, while Extended Report Builder will also allow you to identify the relationship, like in the example above.

In case you have more than one module added to your report, the correct choice of the main module is important. This means that all entries from the main module will be displayed in your report, but only matching entries from the related modules will be added.

In our example, all Accounts will be displayed in the report, even those Accounts, which don't have a related Lead. However, only those Leads that are related to an Account will be shown. Leads without an Account will not be shown.

If you do not want to see all the entries from the main module, you can later on limit those by filters. This way we are more flexible to various reporting needs.

3.5. When a related module is selected the relationship fields need to be identified. In most cases those are ids, and if matching ids are identified by the system, they will be set automatically.
In our case it is the account_id in the Leads module, which is related to the Account module id field. Relationship "One to many" is identified by default and recommended. Still sometimes module relationships are more complicated and require a many-to-many relationship. Reporting tools often don't support those. We have tried

to be more flexible, and allow a many-to-many relationship selection even via the user interface. Please see the "Many-to-many relationship" topic for instructions.

If you need a report with no more than the two selected modules, click the "Save" button at the top of the Report Builder.

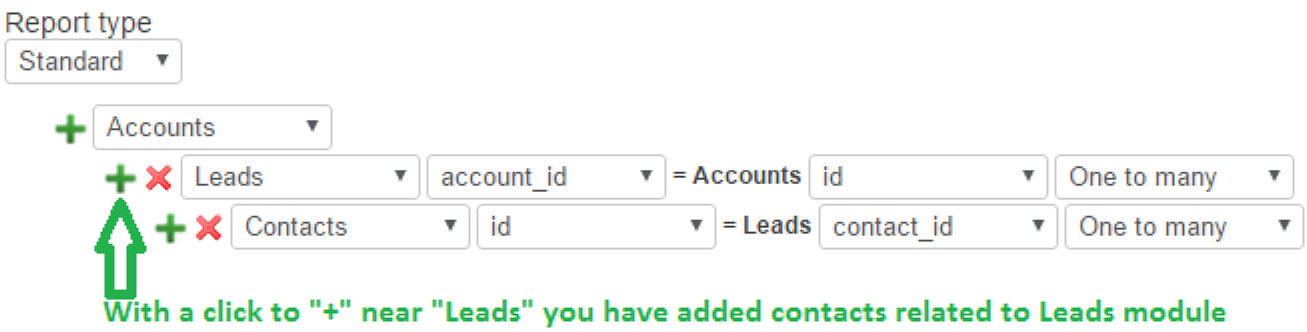
After saving, the status "Saved" will appear along with the link "Open Report". You can open the new report by following this link. Please remember to add the necessary columns and data for your report under "Fields" tab, as well as to add other needed settings and then "Save" again.

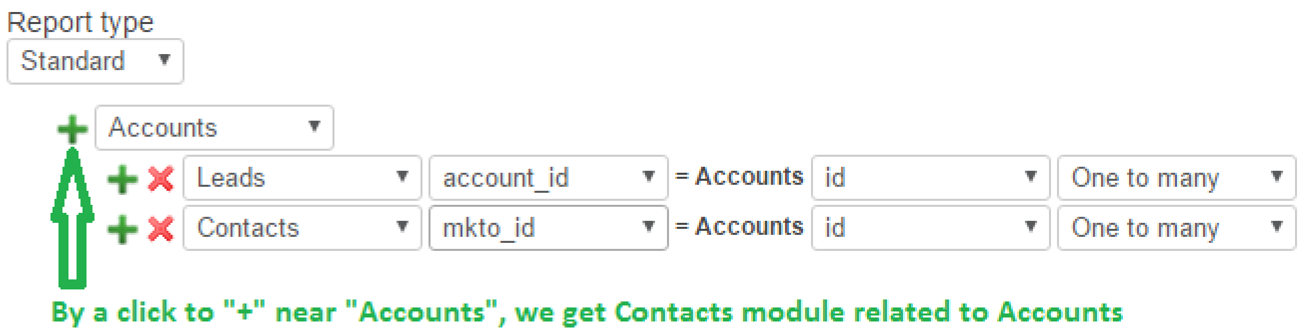
3.6. **Adding further related modules**

When adding more than two related modules, it is very important to identify, which relations to use as often modules are related to each other in more than one way.

Continuing our previous example, if we want to add the Contacts module, we can decide to see all contacts which were related to Leads. In this case click the green "+" near Leads and then select the Contacts module. But if we require Contacts that are related to Accounts, we should click the green "+" near Accounts.

Please see the difference below (it can also be seen from the hierarchy layout):





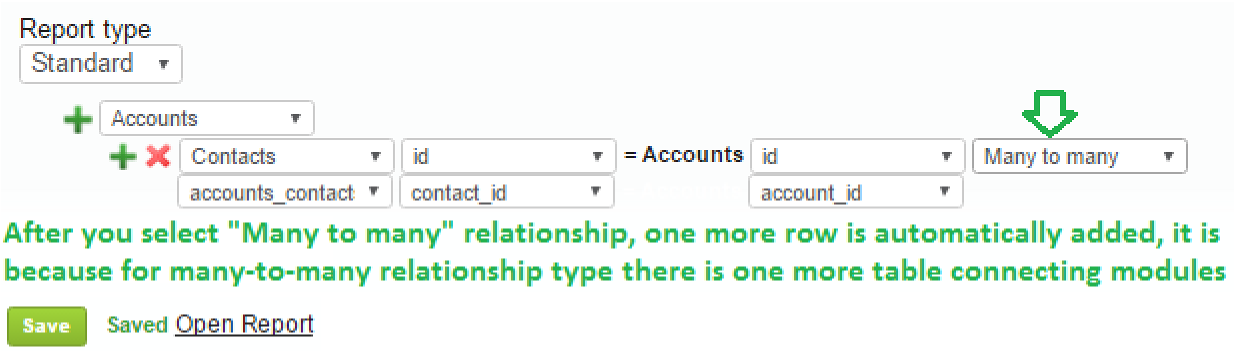
3.7. Many-to-many relationship

A many-to-many relationship is necessary in cases when both entities can be related to several other module entities. For example, we can add several Accounts to the same Contact; and we can add several Contacts to the same Account.

In this case the Report Type is still "Standard". Same as previously we first select the main module. In our example we want to see all Service Contracts, whether or not they have a Trouble Ticket related to them, so Service Contracts is the main module.

Next we add a new row and select “Helpdesk” as the related module and identify the relationship type “Many to many” instead of “One to many”.

An additional row is automatically added:



This is due to the fact, that Many-to-many relationships are defined through an additional table. Our Tool automatically detected the correct values. You can follow this example if you have similar cases.

3.8. **Combined Report Template Creation**

Combined Report Types are the most complex. The reports have different logic and Report Settings UI. These are quite different from standard reports and don’t have detailed data view – only the summary. Yet, they are sometimes needed and creating them can be a little tricky.

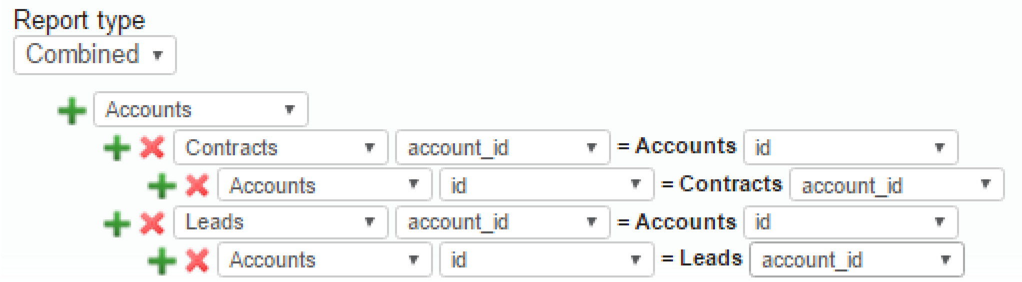
Combined reports are needed, for example, if you would like to see the summary of all Activities related to a User (Calendar events, Contacts, Accounts, Opportunities, Tickets, Quotes, etc.). Calendar events, Contacts, Accounts, Opportunities, Tickets and Quotes do not need to be all connected. The only relation they have is the relation to the User.
In our example, we would like to create a Summary Report by Account to see all Contracts and Leads related to the Account only, but not necessarily related among themselves.

In this case we select Report Type: “Combined”. We then select the main module “Accounts” and with the green “+” near “Accounts” we select all the necessary related modules.

After saving this we will be able to see the count of Contracts & Leads by each Account name. From this example only the Account name will be available from the Accounts module.

However, if we need to filter or group by some additional Account information, for example, if we want to see the summary of activities and Sales by Account Industry, we need to make some additional relations.

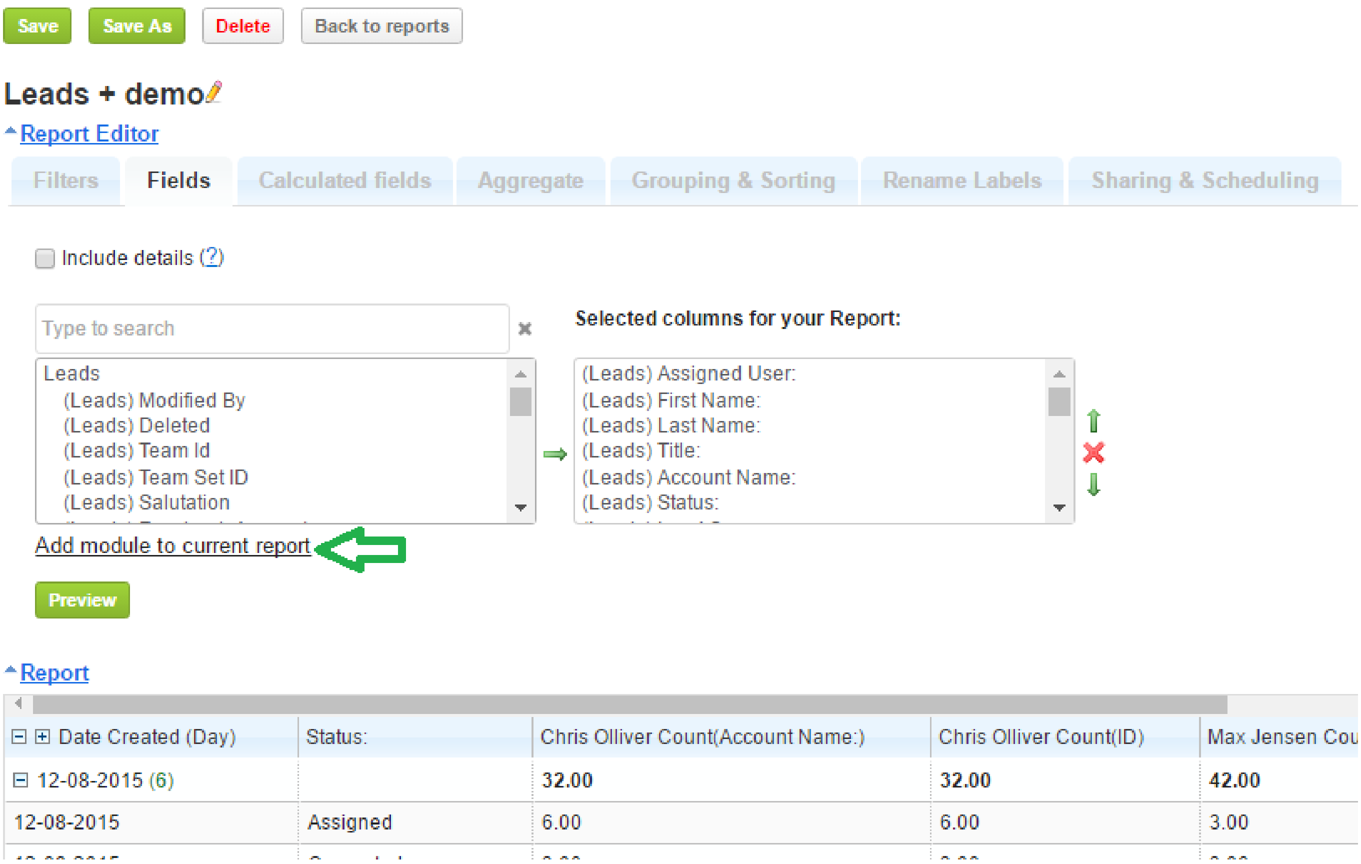
In this case we need to Add accounts to each of the related modules: to Contracts and to Leads. And then ensure that the relations are correct. Please see the sample below:



When all is ready, please remember to click “Save” in order to create your new report, after that click “Open report”, and add the necessary fields and other settings to get your report ready for use.

ADDING AN ADDITIONAL MODULE TO EXISTING REPORTS

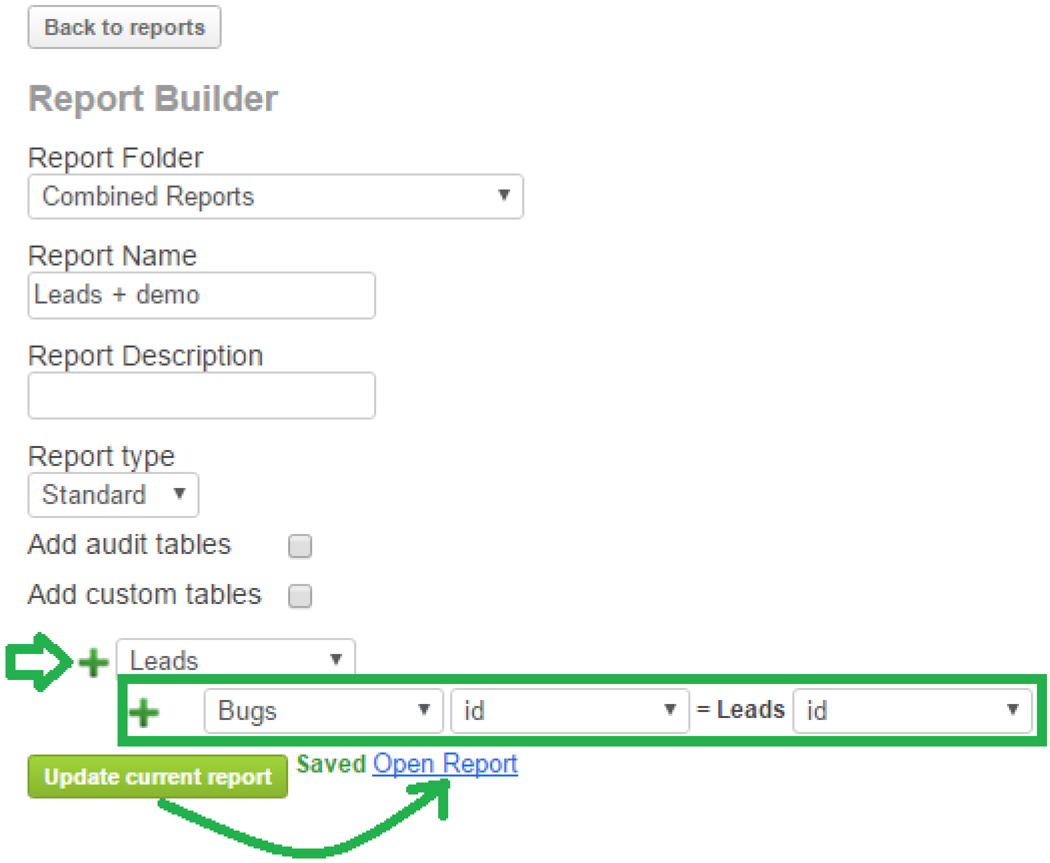
If you already have a report or a report template with all the settings identified and you need to add an additional module, which is not yet available under the “Fields” tab, it is possible to do so under “Fields” tab.



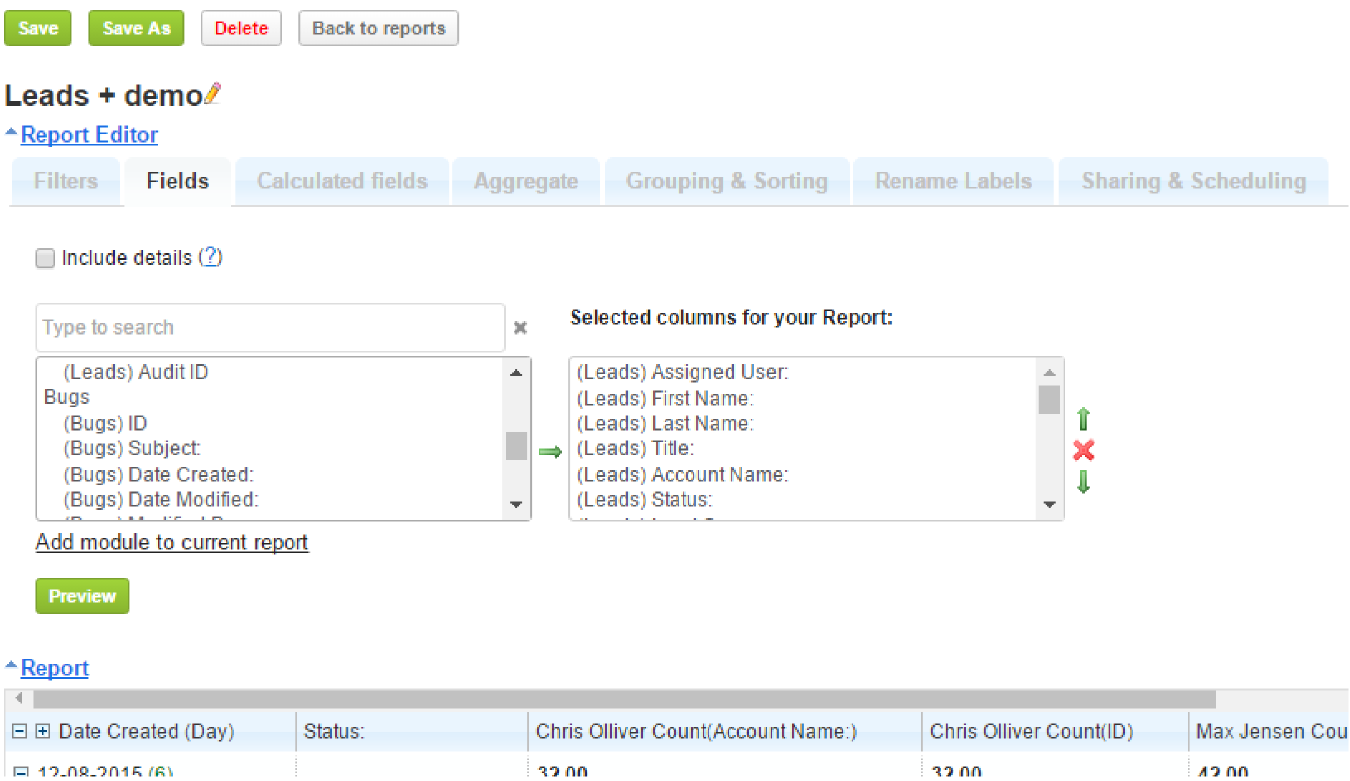
For data security purposes, only admin users can add modules to already created reports and this feature is not visible for other users.

In our example we have a report which is only related to the “Leads” module. If we need to add the “Bugs” module, we click “Add module to current report”. This will open the “Report builder” screen. The identified report folder and report name is already identified there, no need to change. With the green “+” near the “Leads” module name, we add a second row where we select the “Bugs” module.

When the necessary additional module and the relationship are identified, we can click the “Update current report” button. A “Saved” text will verify the success of the update and a “Open Report” link will appear:



Please click the “Open Report” link to go back to your original report with the new module added. Now, you can open the “Fields” tab again and you will see the new module with its fields added – they are now available for your report.

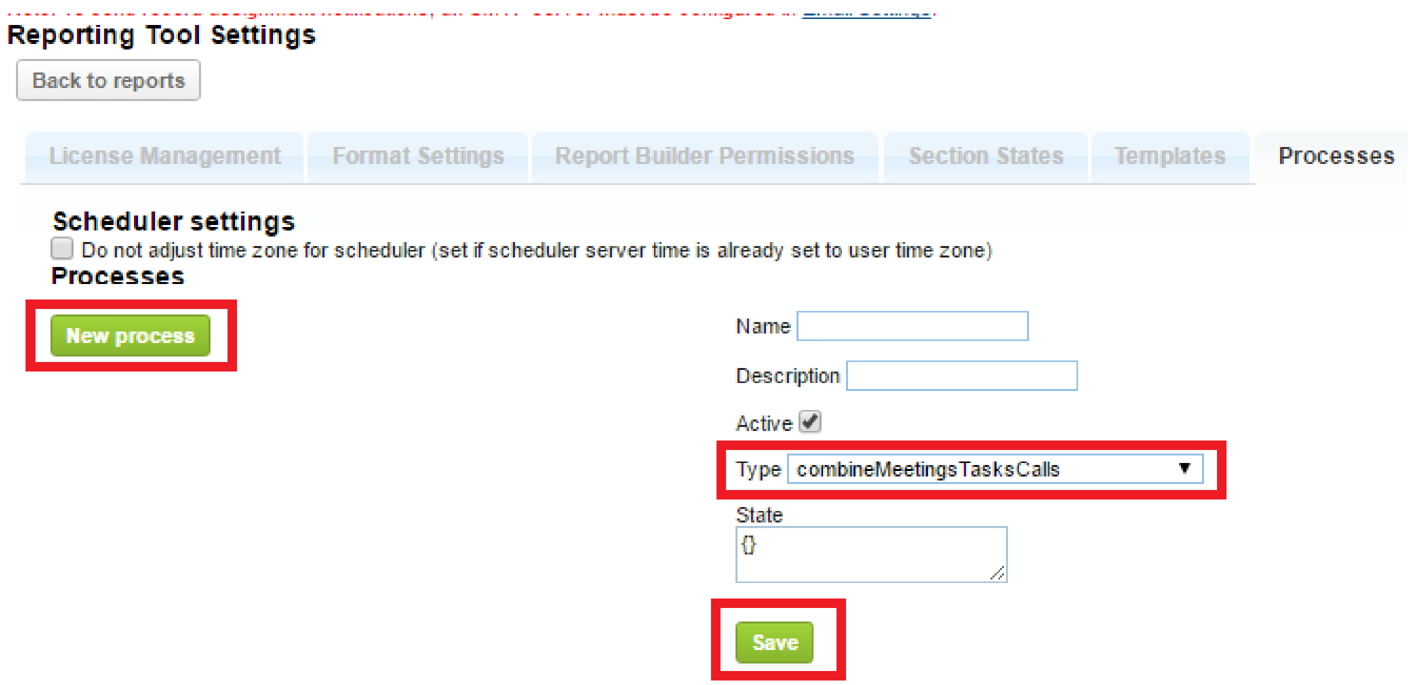


ADDING CALLS, MEETINGS AND TASKS TO THE SAME REPORT

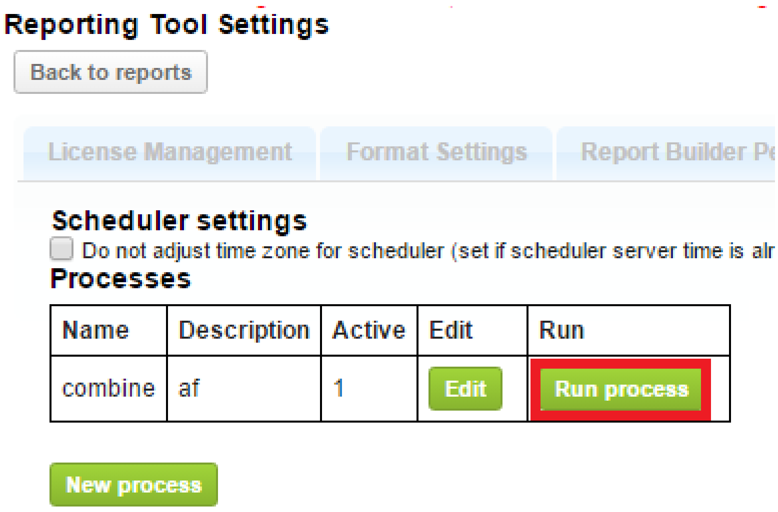
Calendar Calls, Meetings and Tasks are very essential tools to organize your work. However, in Sugar and SuiteCRM systems they are treated as separate modules, making it difficult to bring them all together and keeping an overview.

Sapiens.BI now lets you do just that. With a few simple steps to set up you can now create Reports with all Calendar entries in one place.

1. Go to Sapiens.BI Settings ‘Processes’ tab.
2. Add a new process with type 'combineMeetingsTasksCalls'

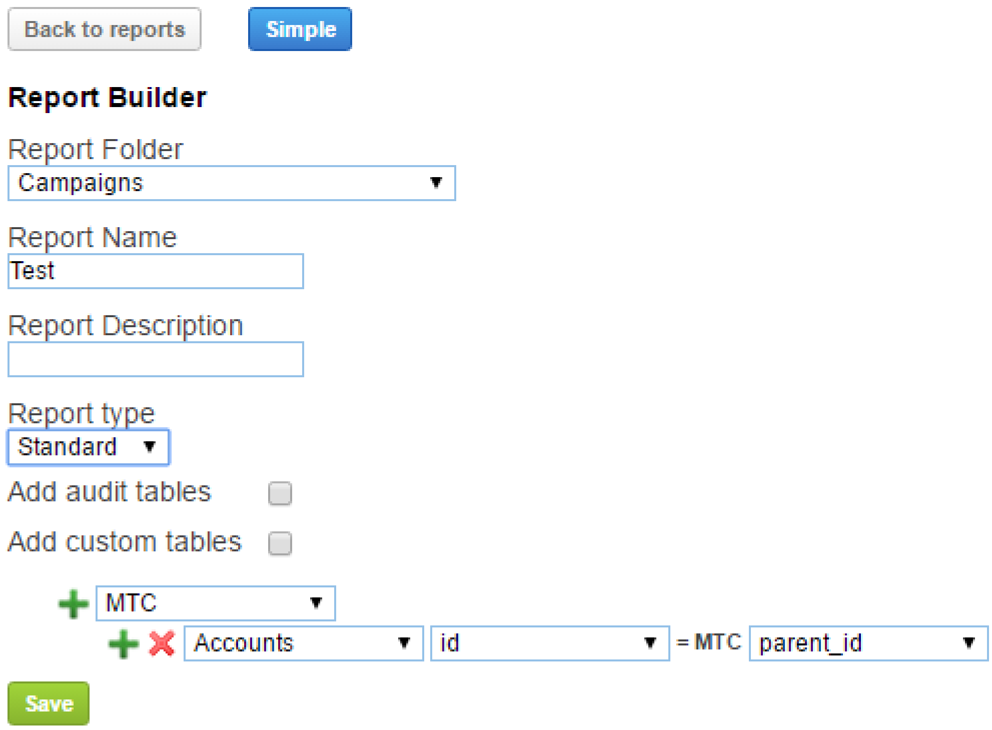


3. Run the process (it will create a new table via union that combines calls, meetings and tasks). This process should be executed regularly to update the table with current data. It can be scheduled from the sugar scheduler by selecting ‘Sapiens.BI Processes’ .

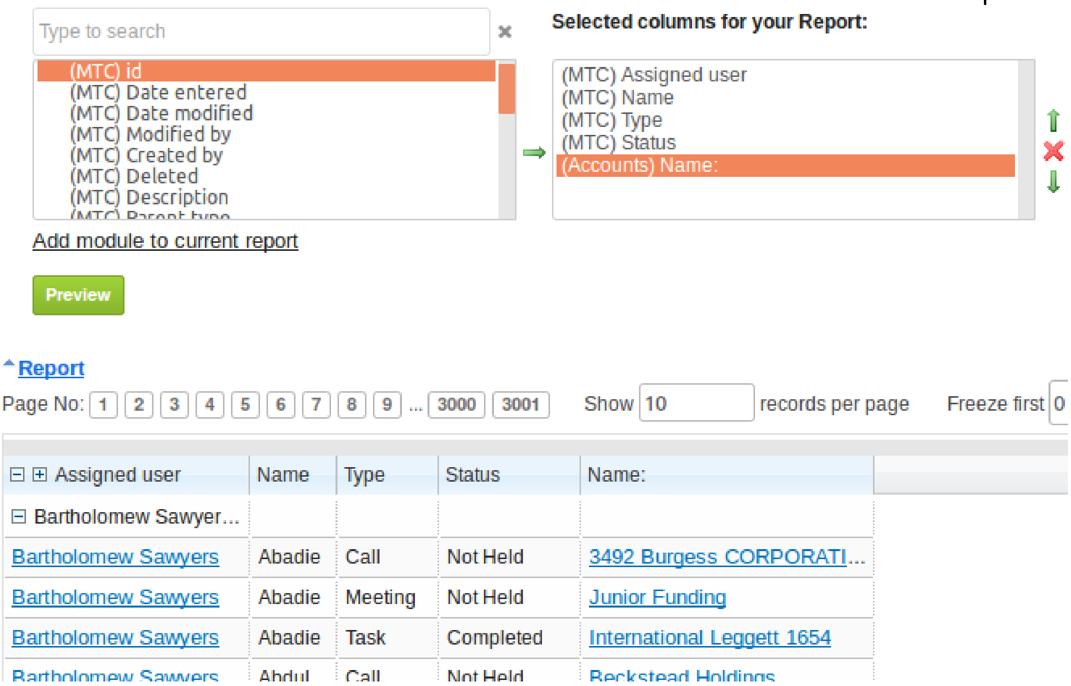


Now everything is set up and we can make our Report from the Report Builder

4. Open the Report Builder in 'Extended' mode.
5. Select the 'MTC' module (short for Meetings Tasks Calls) and any additional related modules if needed.



6. Save and open the newly created Report.
7. MTC Field 'Type' is either Meeting, Task or Call. This field can be filtered if you only wish to see certain Calendar entries in the report.

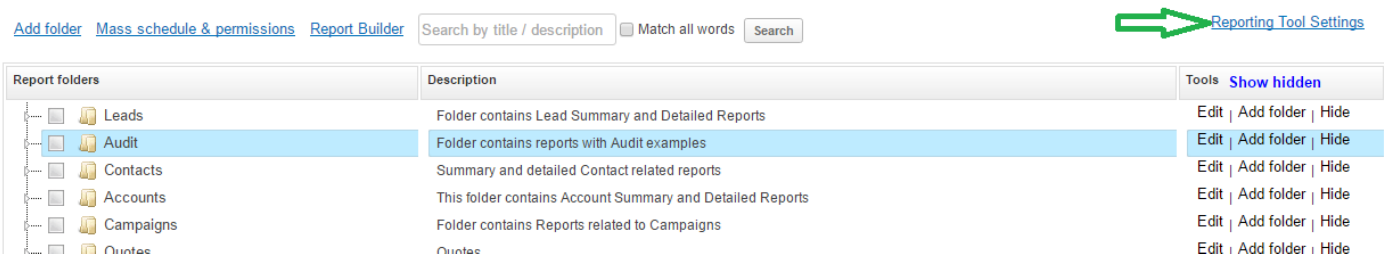

Type to search
(MTC) id
(MTC) Date entered
(MTC) Date modified
(MTC) Modified by
(MTC) Created by
(MTC) Deleted
(MTC) Description
Selected columns for your Report:
(MTC) Assigned user
(MTC) Name
(MTC) Type
(MTC) Status
(Accounts) Name:
Add module to current report
Preview
Report
Page No: 1 2 3 4 5 6 7 8 9 ... 3000 3001
Show 10 records per page
Freeze first 0
Assigned user
Name
Type
Status
Name:
Bartholomew Sawyer...
Bartholomew Sawyers Abadie Call Not Held 3492 Burgess CORPORATI...
Bartholomew Sawyers Abadie Meeting Not Held Junior Funding
Bartholomew Sawyers Abadie Task Completed International Leggett 1654

ADDING YOUR OWN EXCEL/PDF TEMPLATES

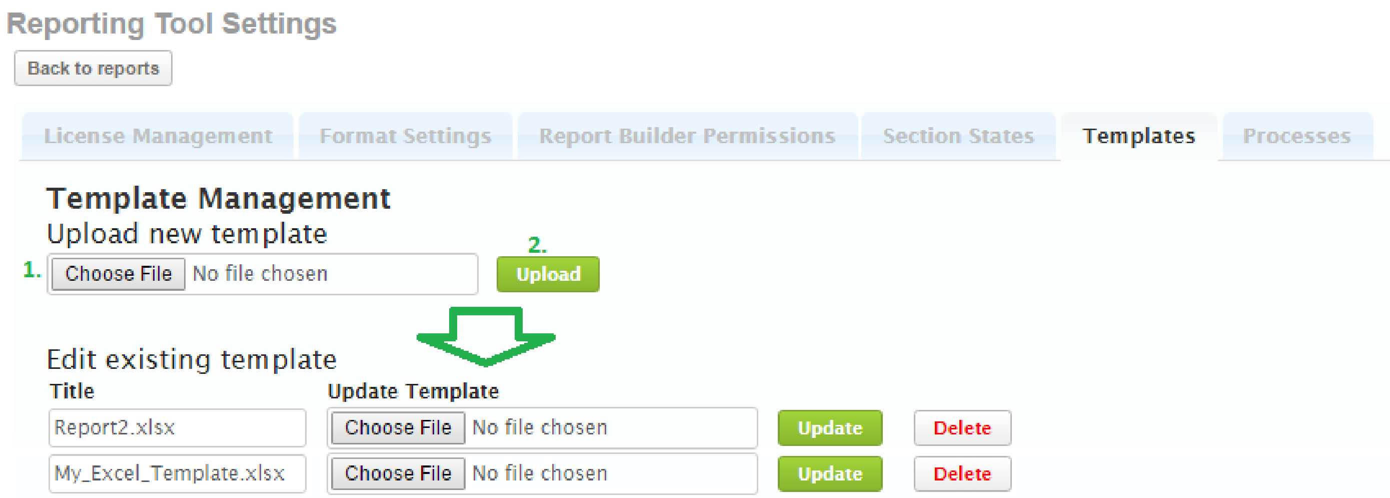
You can format your own Excel templates in order to have the Sapiens.BI output the report data in your formatted Excel / PDF template.

In order to do this, start by creating an Excel file that you will use as a template. In your Excel template you can add logos, colors, define the text format, formulas and even Excel charts.

When the Excel file is ready, an admin user can upload it under Sapiens.BI Settings-> 'Templates' tab:

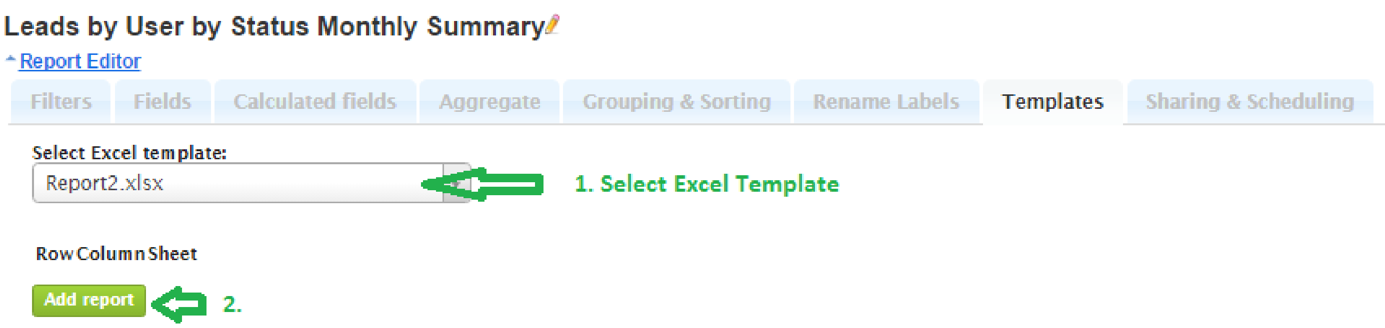


The uploaded templates can later be changed, via the 'Update' button or removed via the 'Delete' button.

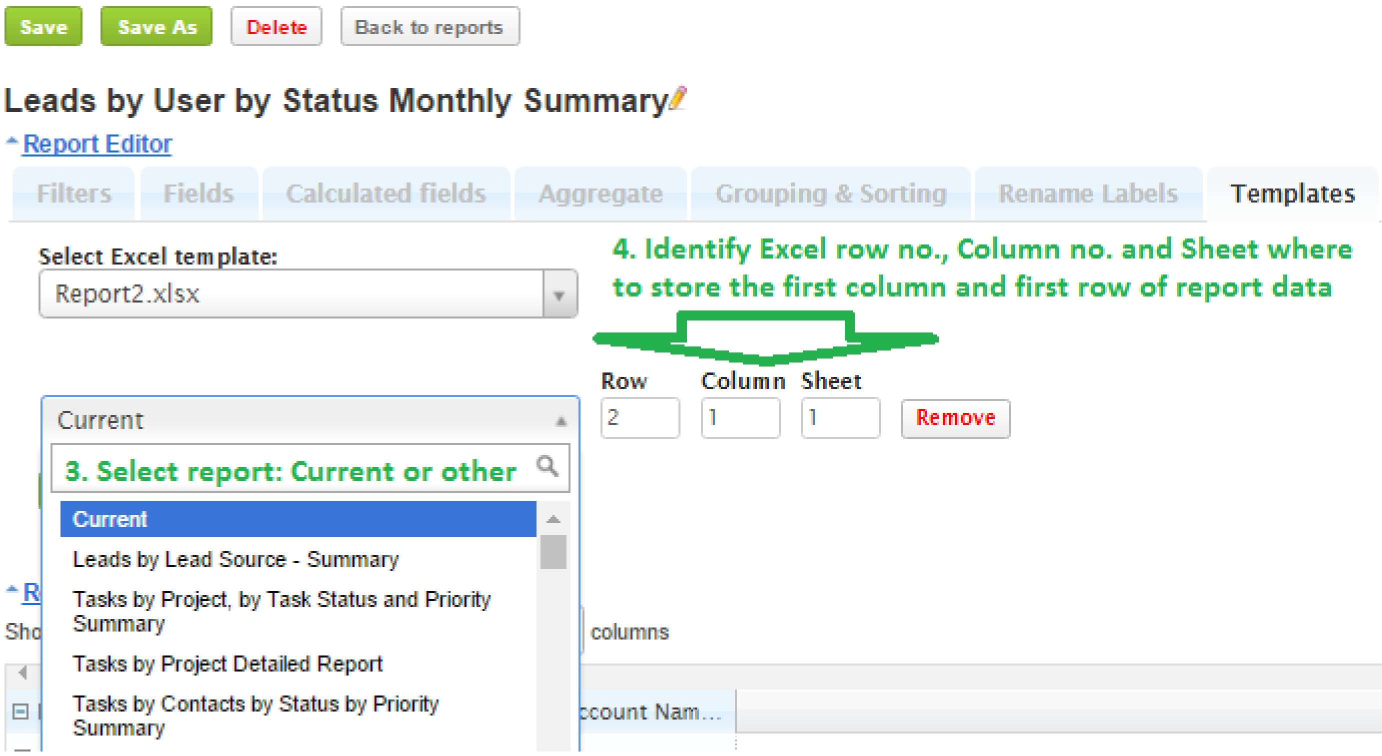


When this is done, you can open a report, which you want to relate to the template.

1. Under the 'Templates' tab you can select one of the uploaded Excel file templates.
2. Clicking 'Add report' will add a new row with settings for report data merging with the identified Excel template

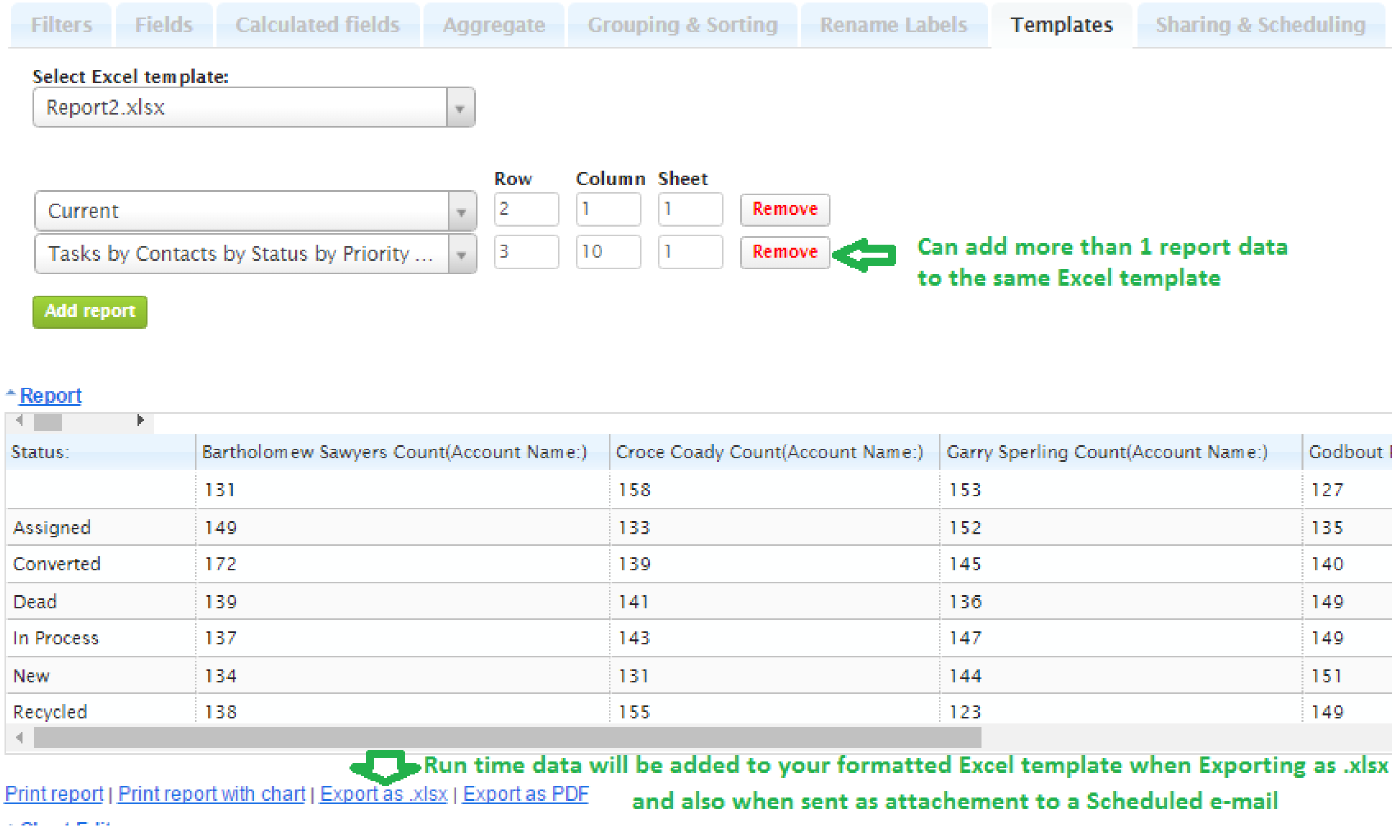


3. In the drop-down menu you can select which report will be merged with a template. Select 'Current' if you want to merge with the current report. You can also select any other report by its title.



4. You can identify where the very first row and column with the report data will be stored in the template.
5. You can add more than one report to the same Excel template. Click 'Add report' to add one more report to this template.

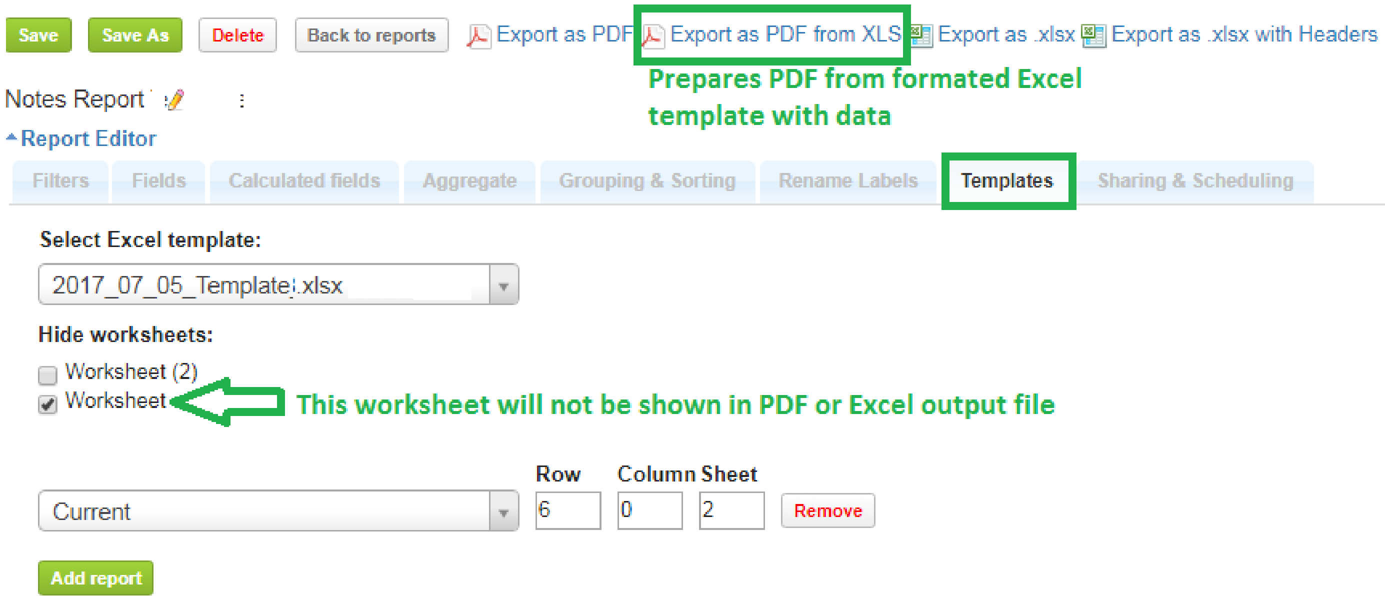
Important! *Make sure that multiple reports don't overlap with each other! To do this you can identify a different row, column and sheet.*



Status:	Bartholomew Sawyers Count(Account Name:)	Croce Coady Count(Account Name:)	Garry Sperling Count(Account Name:)	Godbout I
	131	158	153	127
Assigned	149	133	152	135
Converted	172	139	145	140
Dead	139	141	136	149
In Process	137	143	147	149
New	134	131	144	151
Recycled	138	155	123	149

The report will be prepared in the new Excel template each time you click “Export as .xlsx” or when scheduled via e-mail as an Excel attachment.

You can also generate your report in PDF format directly form a formatted excel template. Same applies to scheduled reports sent via e-mail. If you have selected a PDF attachment to be scheduled via e-mail and this report has an Excel template, the PDF will be e-mailed already from the formatted Excel template.

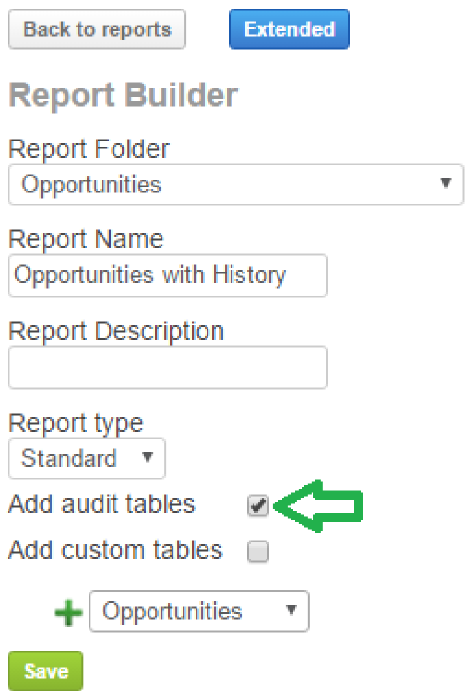


You can also use the option to hide Excel worksheets from the template, in order to not generate them in PDF or Excel output. This is sometimes needed when you have raw data in some Excel worksheets, which you want to hide in order to print only the formatted Worksheet which has references to the hidden ones.

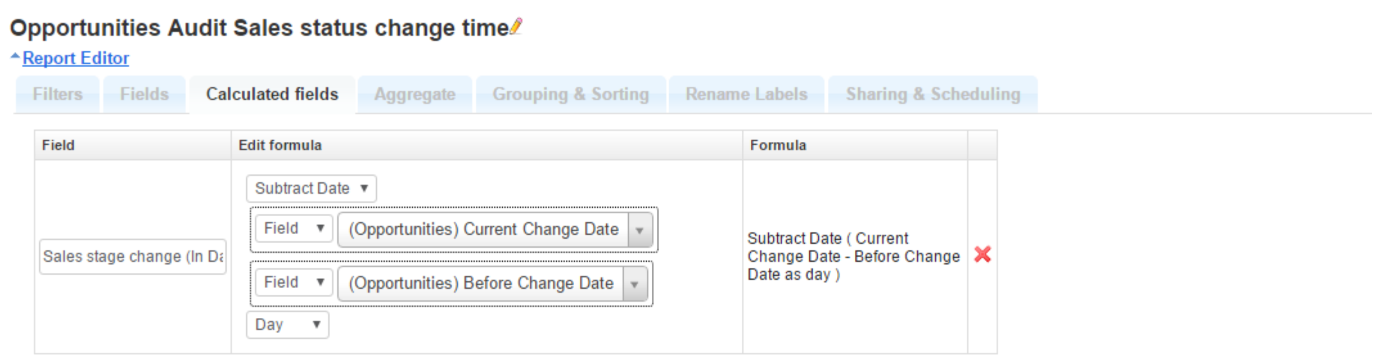
ADDING DATA FROM CRM SYSTEM HISTORY AUDIT TO YOUR REPORT

Sometimes it is necessary to see, for example, how long it took for one status to be changed to another. The system only shows you the current status, but if you keep your system data history audit, it is possible to analyze this data in a report as well. In order to add the data from history audit, please open the Report Builder.

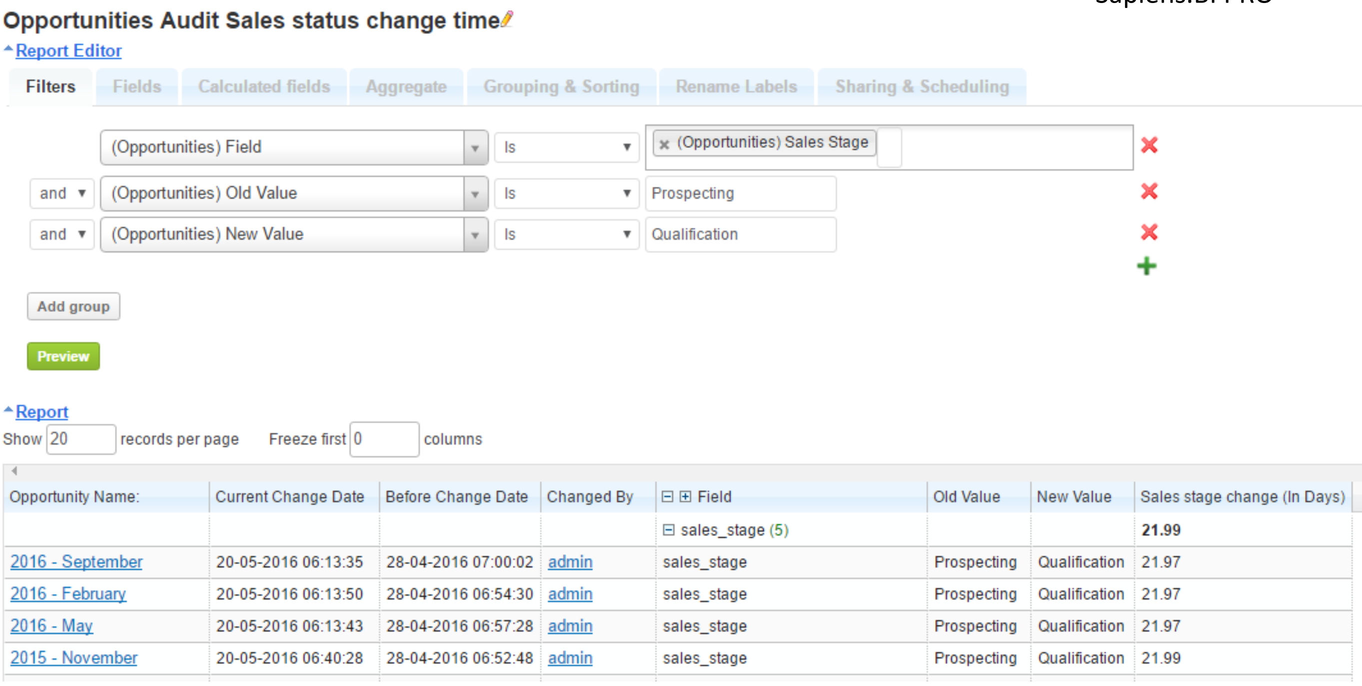
Select the necessary module and simply mark the ”Add audit tables” checkbox. Save and open the new report.



Now you can select the necessary fields from the audit table as well. If we want to calculate the time it took from the old value being changed to the new value, you can use “Calculated fields”, “Subtract Date” function as in the example below:



Normally you need to analyze the time, how long it took from one status value to be changed to another, please identify these necessary values in a filter, and you can already Preview the outcome:



Opportunity Name:	Current Change Date	Before Change Date	Changed By	Field	Old Value	New Value	Sales stage change (In Days)
				sales_stage (5)			**21.99**
2016 - September	20-05-2016 06:13:35	28-04-2016 07:00:02	admin	sales_stage	Prospecting	Qualification	21.97
2016 - February	20-05-2016 06:13:50	28-04-2016 06:54:30	admin	sales_stage	Prospecting	Qualification	21.97
2016 - May	20-05-2016 06:13:43	28-04-2016 06:57:28	admin	sales_stage	Prospecting	Qualification	21.97
2015 - November	20-05-2016 06:40:28	28-04-2016 06:52:48	admin	sales_stage	Prospecting	Qualification	21.99

Important: Please try to identify all your necessary filters before you click the "Preview" button, otherwise it might take a very long time to run, because the history audit can have a lot of data.

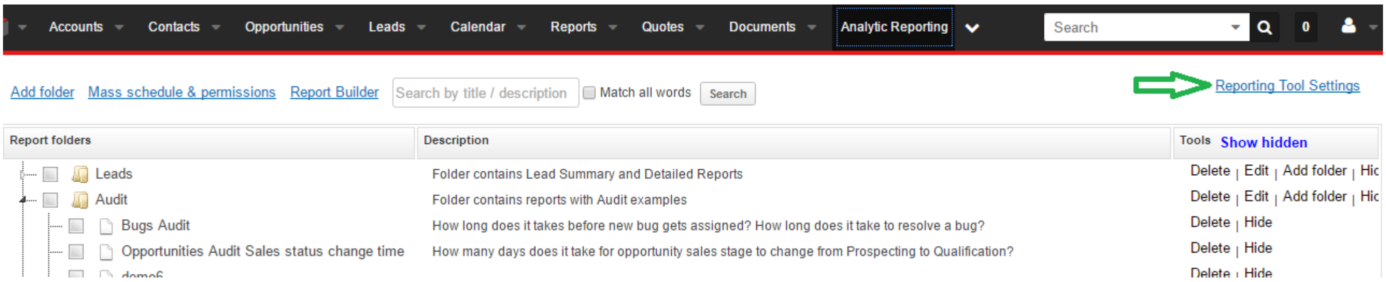
SNAPSHOT REPORTING FROM AUDIT HISTORY

It is possible to create a Snapshot report for a given time period as well as periodically generate new snapshot data (i.e. by the end of each day, week or month). The Snapshot report is using data from Sugar history audit (this means that to keep track of changes - Audit History has to be enabled in Sugar via Sugar Module Builder).

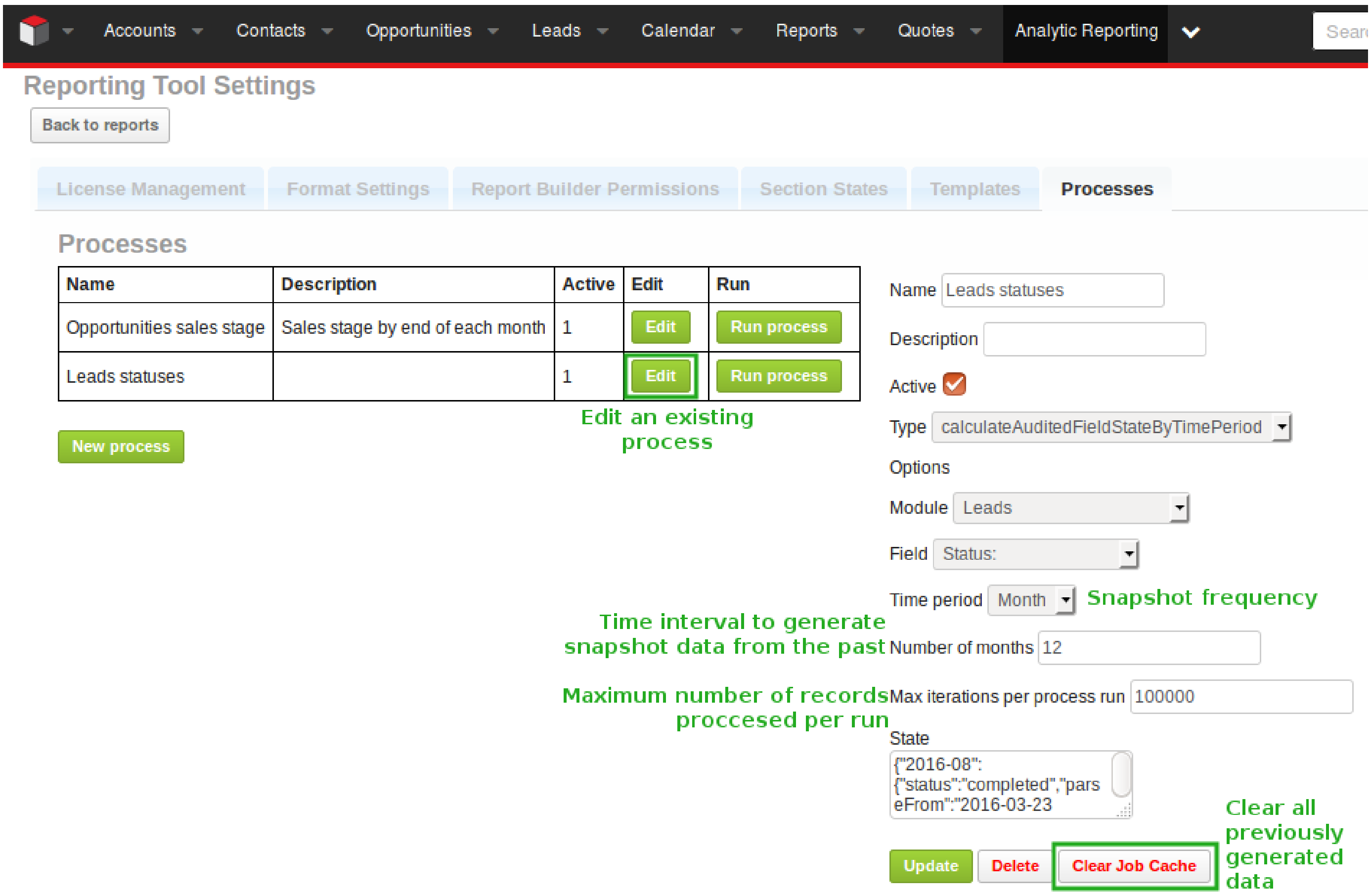
If this is the first time you want to start using the Audit History data for Snapshot reports, you need to generate the necessary data first.

In order to do that, open the "Reporting Tool Settings" found in the top-right corner of the Sapiens.BI report and folder list.

(Please note that 'Reporting Tool Settings' are available only for users with Admin privileges.



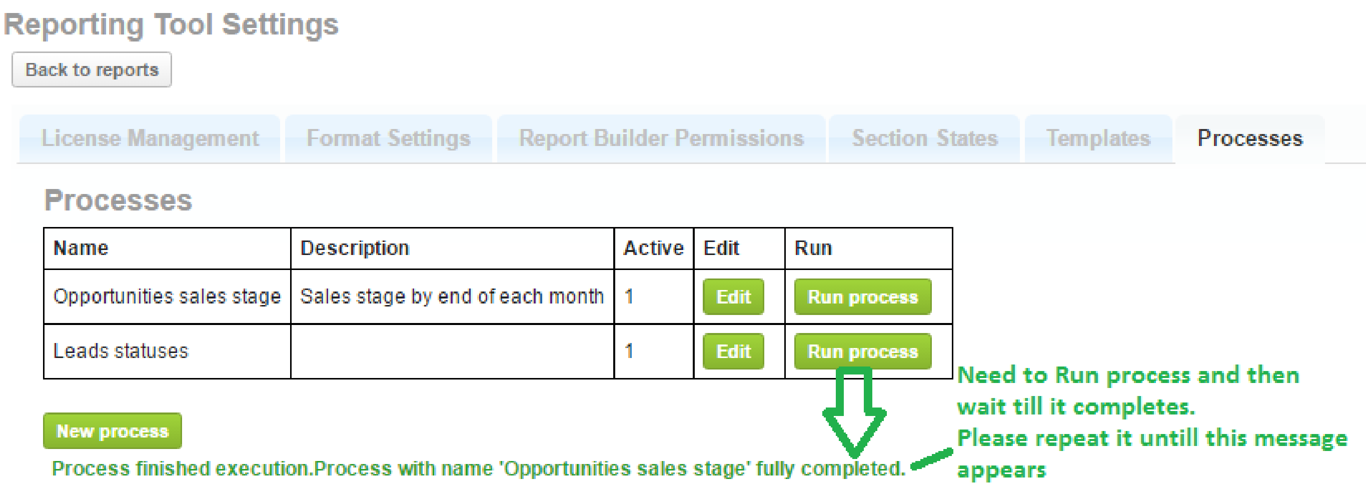
If necessary you can edit the process before running it under 'Processes':



For the job type select 'calculateAuditedFieldStateByTimePeriod' as the other option 'calculateAuditedFieldStateByMonth' is there only for backwards compatibility and can be considered redundant.

Select the Module and Field of interest and choose the time period. The time period defines the snapshot frequency. A time period of “Day” will create snapshot data for each day. The 'Week' and 'Month' options will create snapshots at the end of each week and month respectively.

Click ‘Run process’ in order to create historical data for a given time period. The following example will create leads with leads statuses at the end of each month.



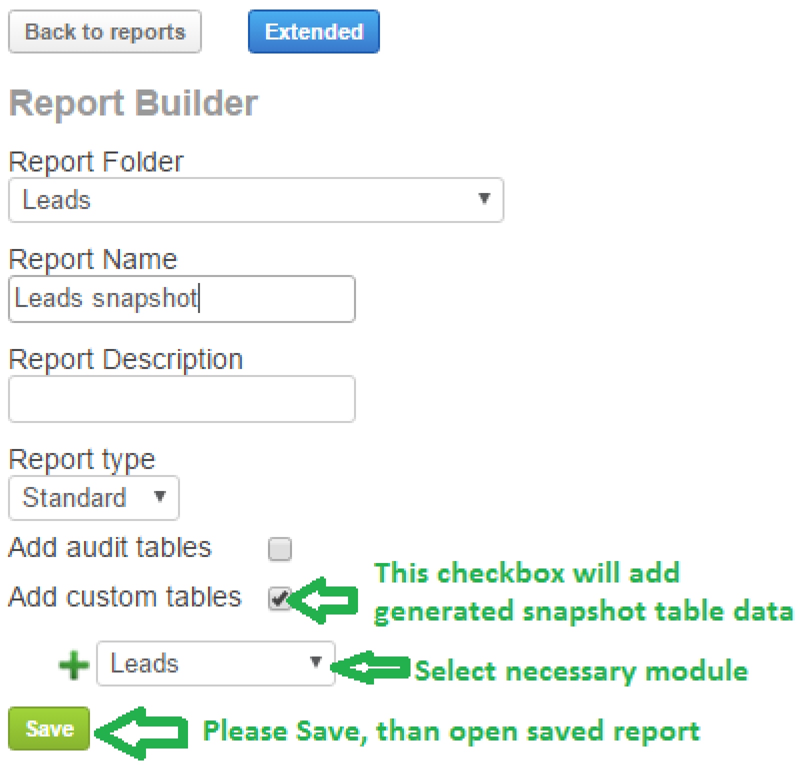
In the case of lots of data, you might need to run the process several times by clicking the same button ‘Run process’ again until the following green text appears: “Process finished execution”.

On a more technical level 'Max iterations per process' defines the maximum number of records from the audit tables processed each run to create snapshot data. This setting can prevent the process from timing out on a lot of unprocessed audit data. This is why it might be necessary to run the process repeatedly initially. However, once all the initial snapshot data is generated and schedulers are set up data will be generated continuously. For instructions setting up the Scheduler see below.

Once the initial data is generated it is necessary to set up a Scheduler to automate continuous snapshot data generation. To set up a scheduler go to the Admin panel and select “Scheduler”. Select the “Sapiens.BI Processes” job and choose a Job Name and interval settings most suitable to you and save the scheduled job. Once this is done everything is set up to start using the Snapshot report.

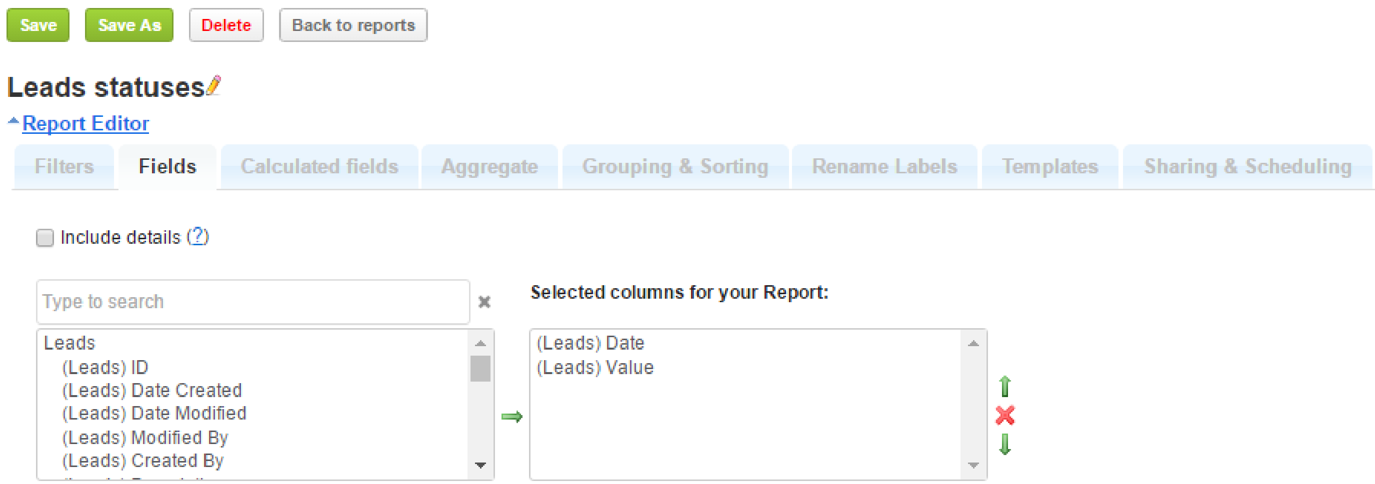
Go to the Report Builder and create your Snapshot report as any other report- select the report folder, enter the preferred report name and description, keep the report type ‘Standard’ and then select the necessary module.

It is important to remember to select ‘Add custom tables’ checkbox, as you can see in the example below:

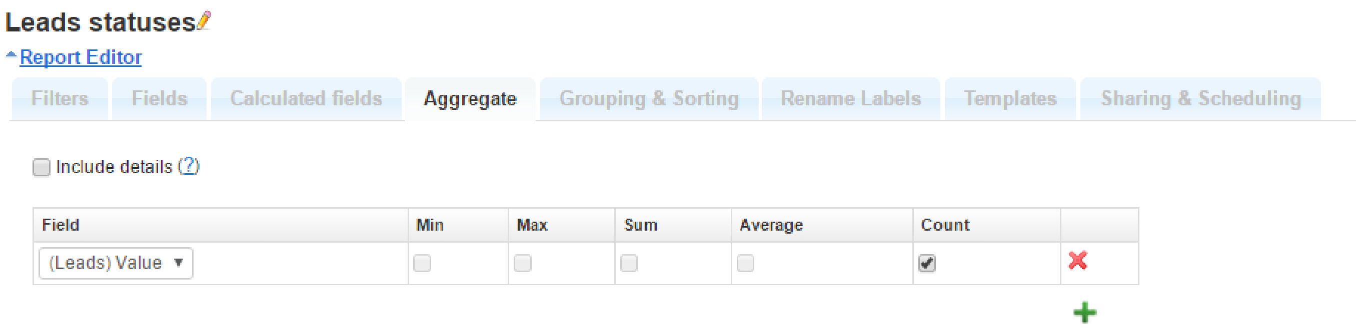


'Save' and open your new report.

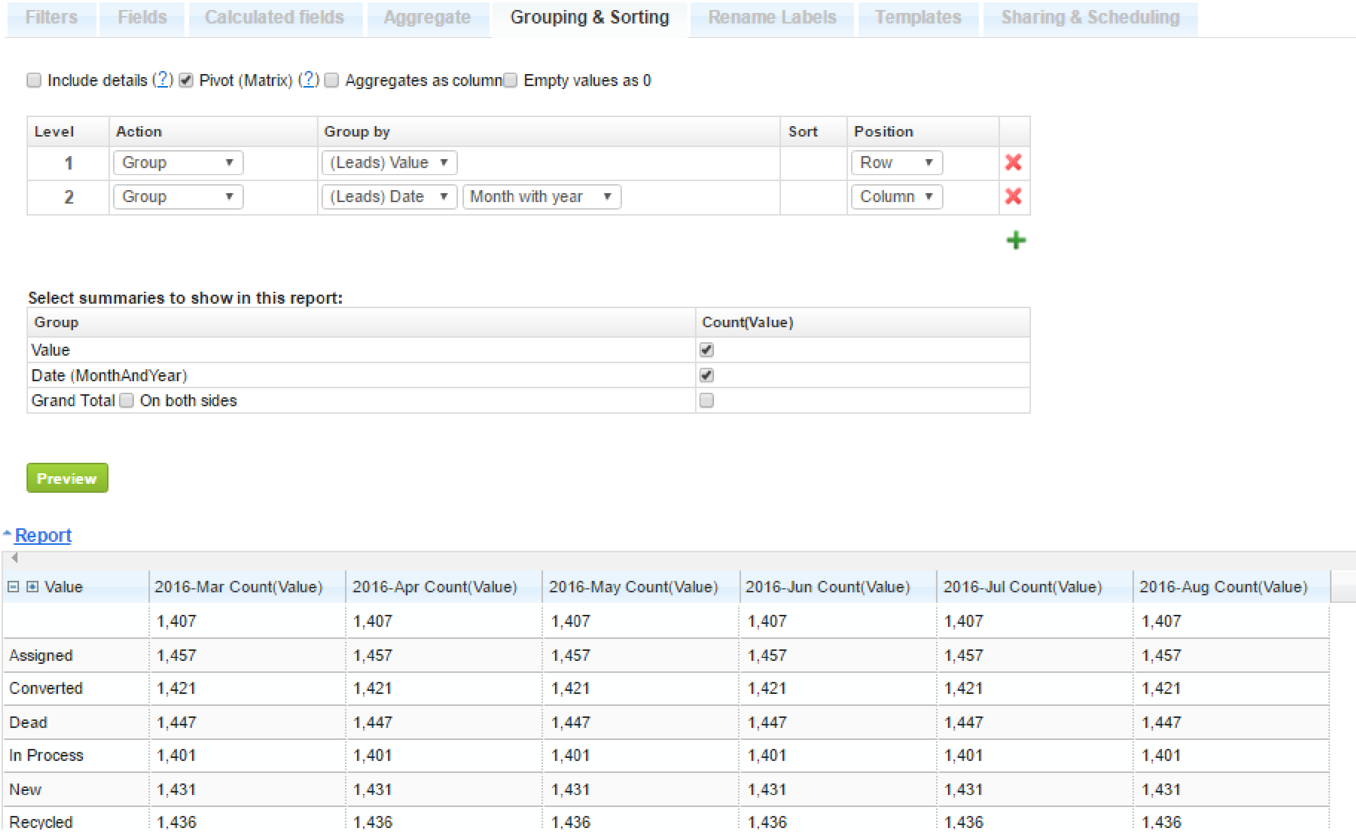
Under the 'Fields' tab please select the fields "Date" and "Value" - those are the names of the generated snapshot data and can be found in the fields list under the "Snapshot" category.



Under 'Aggregate' please select Leads(Value) to 'Count'.



Under ‘Grouping & Sorting’ select the grouping and sorting options for your Summary report according to example below:



Level	Action	Group by	Sort	Position
1	Group	(Leads) Value		Row
2	Group	(Leads) Date / Month with year		Column

Select summaries to show in this report:

Group	Count(Value)
Value	✔
Date (MonthAndYear)	✔
Grand Total ☐ On both sides	☐

Preview

Report

Value	2016-Mar Count(Value)	2016-Apr Count(Value)	2016-May Count(Value)	2016-Jun Count(Value)	2016-Jul Count(Value)	2016-Aug Count(Value)
	1,407	1,407	1,407	1,407	1,407	1,407
Assigned	1,457	1,457	1,457	1,457	1,457	1,457
Converted	1,421	1,421	1,421	1,421	1,421	1,421
Dead	1,447	1,447	1,447	1,447	1,447	1,447
In Process	1,401	1,401	1,401	1,401	1,401	1,401
New	1,431	1,431	1,431	1,431	1,431	1,431
Recycled	1,436	1,436	1,436	1,436	1,436	1,436

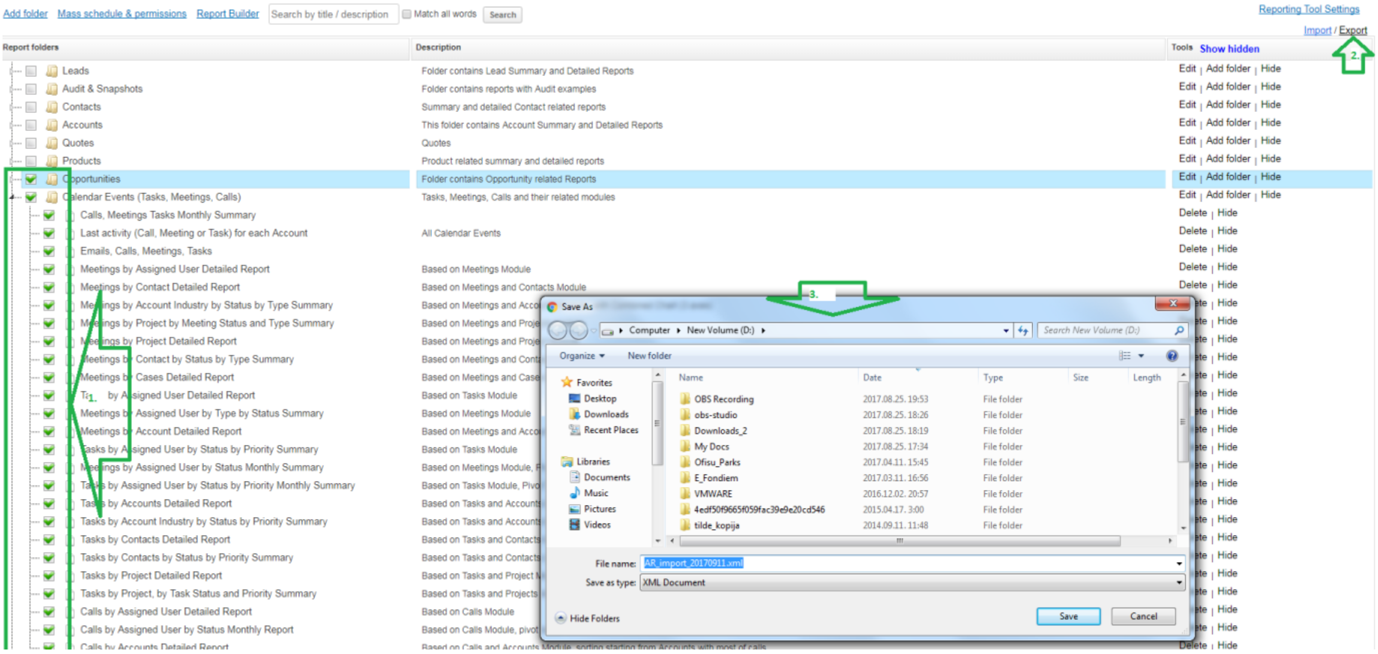
The summary report is now ready for use.

Continuing with our Lead status report we will create a chart for our report as well. In this example we will create an Area Chart that illustrates the changes in Lead statuses over the course of time.

For the horizontal axis and legend we choose the 'Date Month with year' grouping and for the vertical axis the value count aggregate. Since the Value grouping we have defined we will get nice data series for each individual Lead status.

EXPORT / IMPORT REPORTS FROM ONE SYSTEM TO ANOTHER

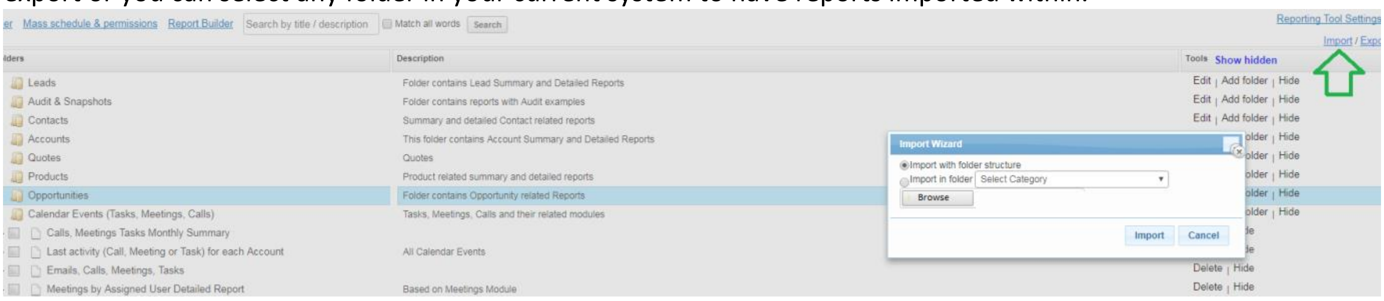
You can easily export / import Sapiens.BI reports from one system to another. You can also use the report export as a backup of your created reports before system upgrades or migrations.
In order to do this, you need to log-in into your CRM system as an admin user. Open Sapiens.BI report list.
For report export, please select the necessary reports. Click ‘Export’ in the top-right corner.



Then Save the file for later use.

For Report Import, you have to be an admin user and navigate to Sapiens.BI report list.

Click ‘Import’ in the top-right. You can choose to import the reports with their folder structure as they were during export or you can select any folder in your current system to have reports imported within.



Click to select previously exported reports file and then click the ‘Import’ button.

You should now see the newly imported reports in your system.

You are welcome to contact our IT Sapiens team via: info@itsapiens.eu for further questions!