USER'S GUIDE

STReport

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1. INTRODUCTION

STReport is a software tool for creating, changing and viewing reports. It is an open source tool developed by Stratebi.

STReport will allow handling custom or ad hoc reports in an intuitive and easy-to-use way.

This document serves as an introduction to the tool, STReport, how to use it and get more out of your own environment.

2. STREPORT FEATURES

At the begging, when STReport was defined, its main goal was to build a user-friendly solution, focused on simple and intuitive management by the end user.

STReport users will define their own reports, re-open, change, save, export them to different formats, and all of this, with no previous knowledge in programming languages (e.g. SQL).

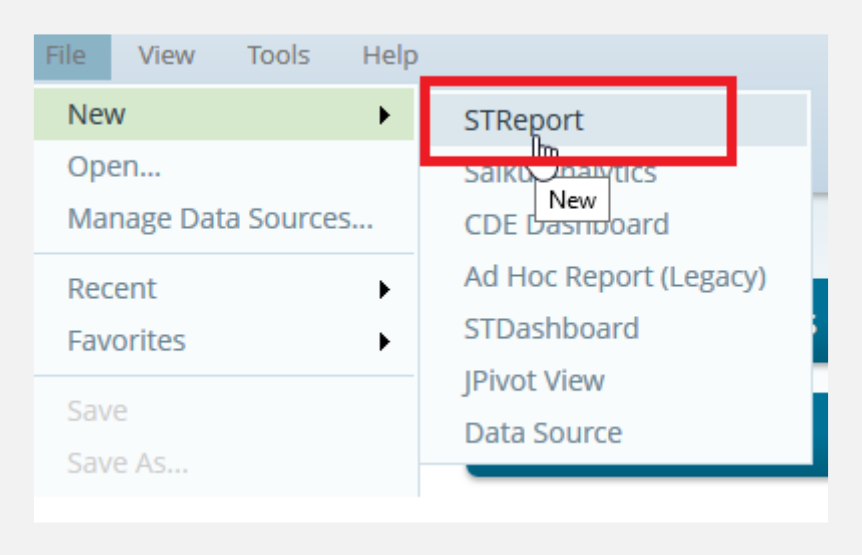
STReport supports the languages: Spanish, English, German and Catalan, both at the user interface level and at the data level.

3. CREATE A NEW REPORT WITH STREPORT

STReport is a plug-in developed by Stratebi. It is fully integrated with the Pentaho User Console. To create a new report with STReport, Pentaho provides multiple ways:

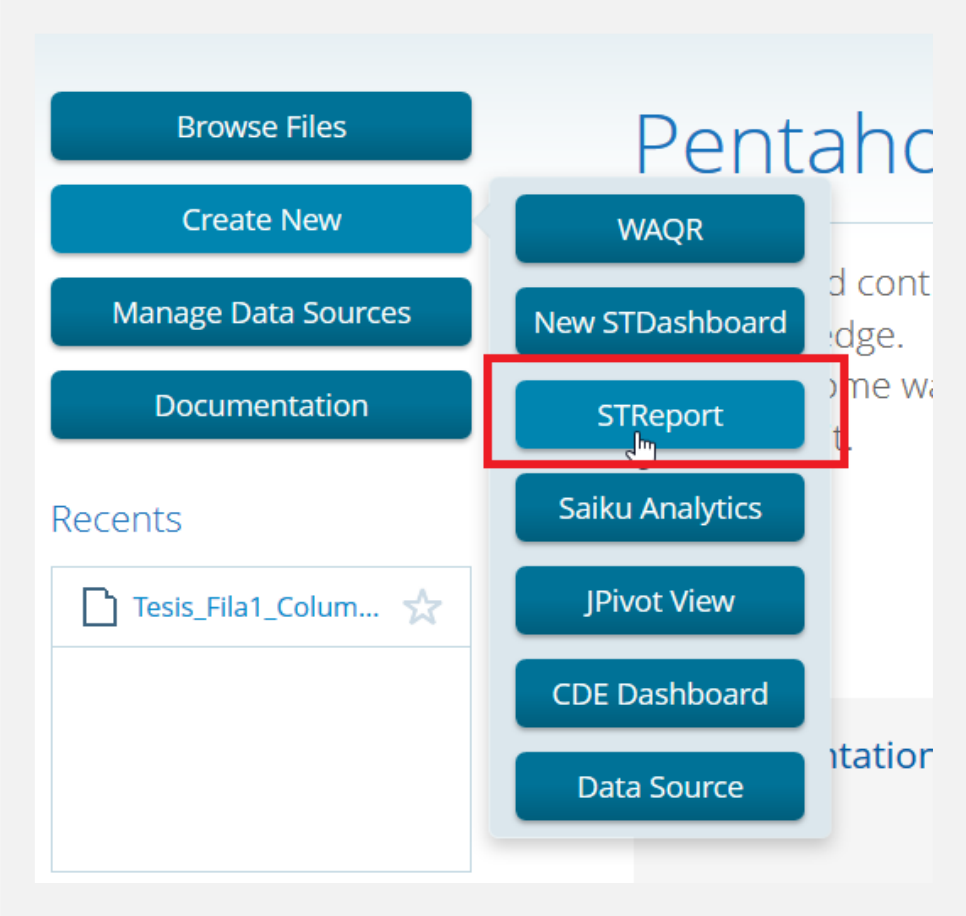
3.1 From the menu bar

From: File -> New -> STReport



3.2 From the bar in the Pentaho User Console

From: Create New -> STReport



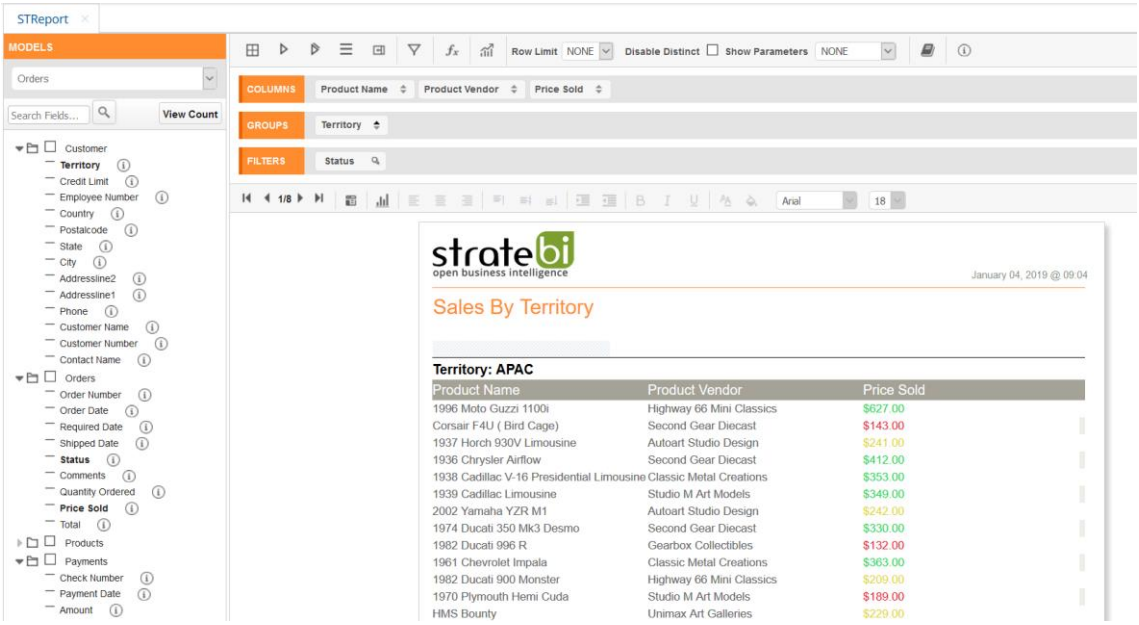
3.3 From the home page

Depending on the environment, if some kind of customization has been applied, a button to create an adhoc report with STReport directly is available.

For example:

4. STREPORT USER INTERFACE

The STReport visual layout is as shown in the following image.



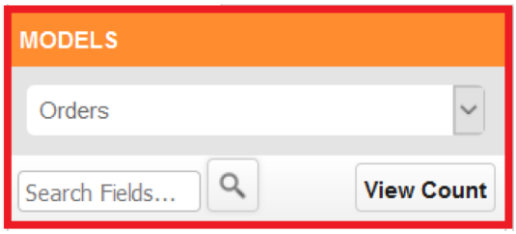
The STReport features or options will be explained, which are:

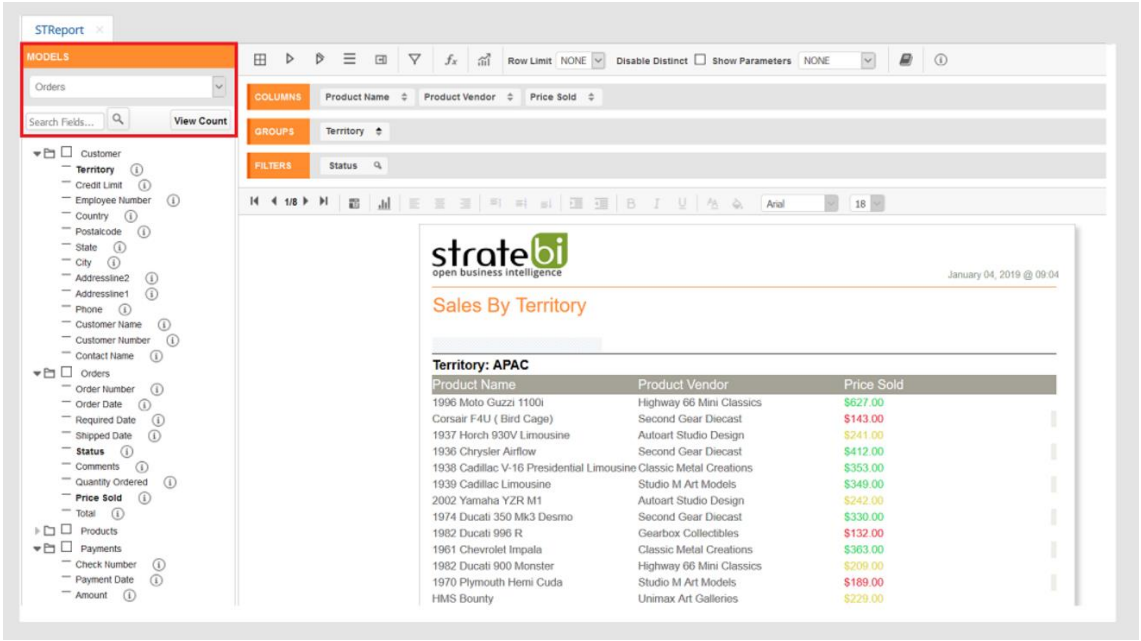
- Model.
- Categories: items to display in the report.
- STReport toolbar.
- Layout of the report: Columns, Groups, Filters.
- Toolbar of the report.
- Body of the report.
- Table Mode & Excel output.

5. MODEL

In the left frame, the option to Model (Models) is available.

In this section, the data model will be selected. In addition, for each report, just one data model is used.



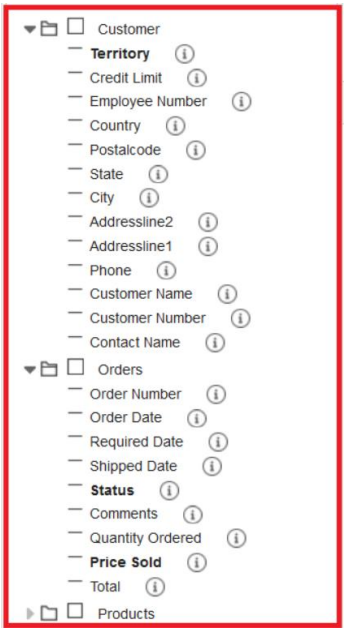


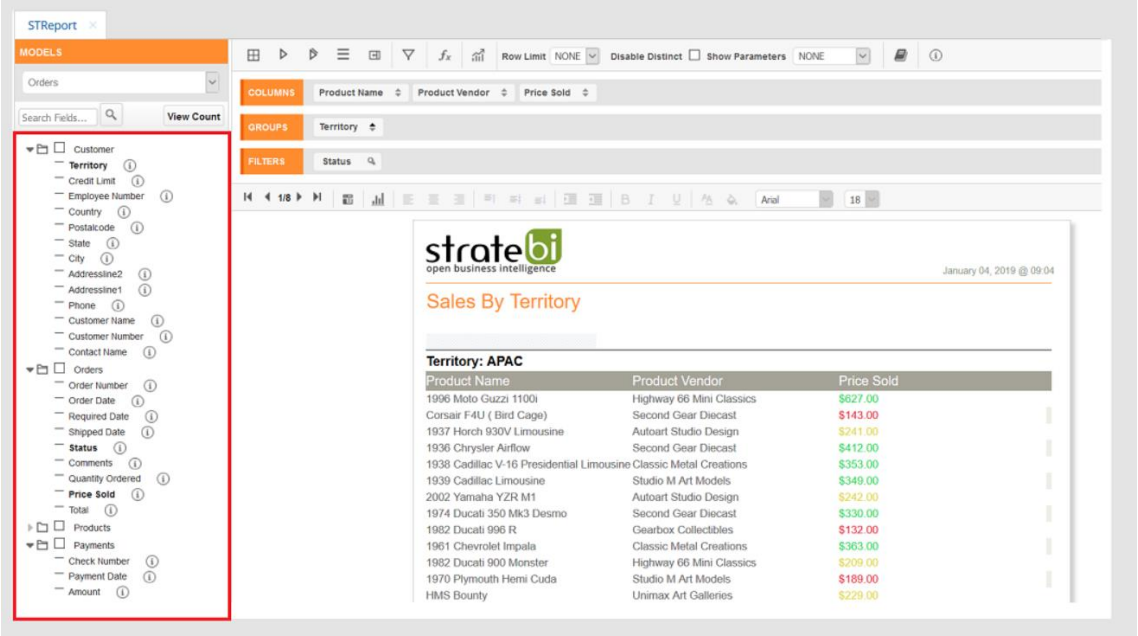
Once the model is selected, the folders and items will appear in the 'Categories' section.

6. CATEGORIES

Each data model will be organized into folders and these into elements. The folders will be employed to organize our fields, which will be used in the report.

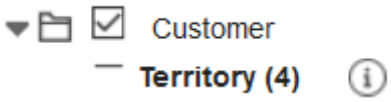
In the next image, 'Customer' and 'Orders' would be the folders and the ones under them are the elements.





The view Count Option show the number of elements for each field in the categories of the model. This option provides information about the data size, which help to situate the field in the report (columns, groups or filters).

Next to each field, the information (i) is displayed.



It is possible to define the glossary of terms in the following path:

$ / pentaho_home/pentaho-solutions/system/ saiku-adhoc/web/js/adhoc/glosary/

For example, if the metadata model is named 'steel-wheels.xmi' and an auxiliary file 'steel-wheels.json' is needed for the model.

Content example:

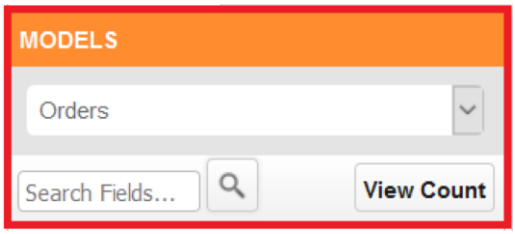
```
{
  "Product Name":"This is the 'Name of the Product'"
}
```

7. CREATE A NEW STREPORT

Before proceeding with the detail of the other components of STReport, let review the following list with a few quicks steps to create a report.

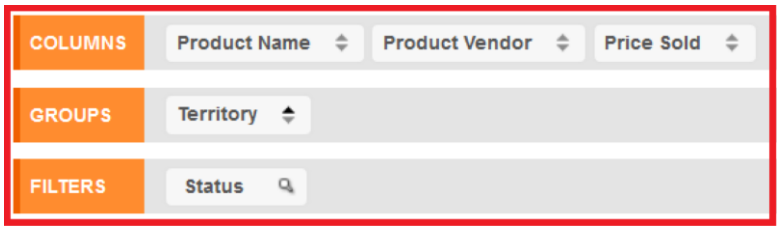
7.1 Choose the model

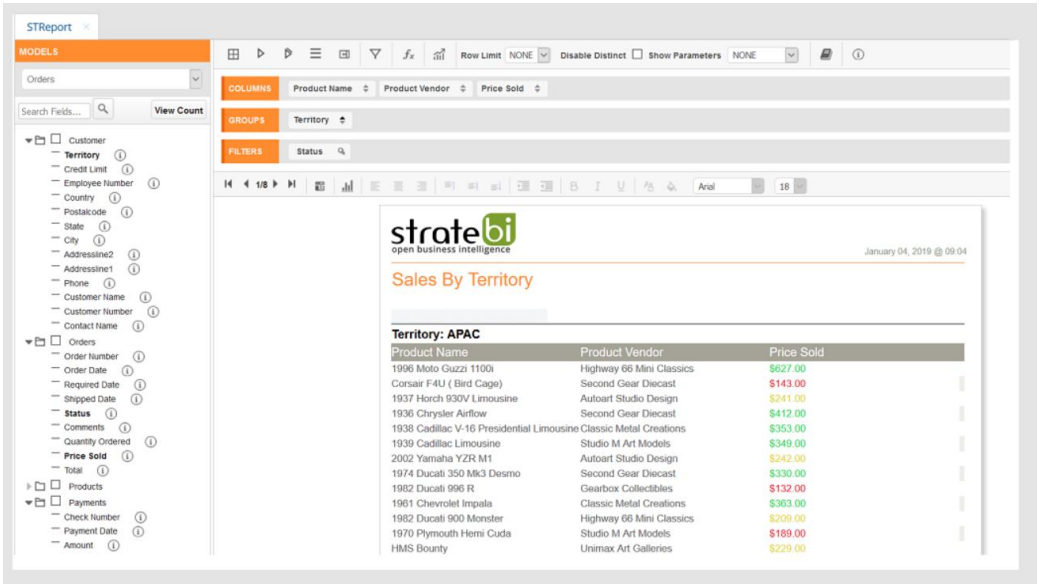
The first thing it is choose the data model.



7.2 Drag fields

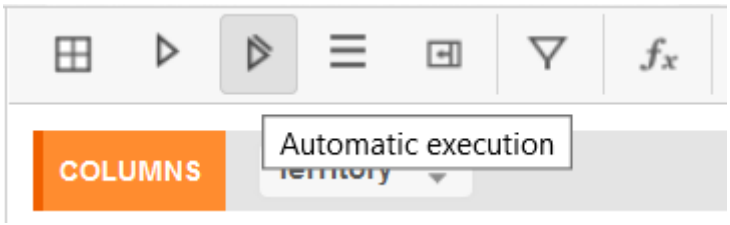
Once the model is chosen, the next step it is to drag and drop the fields to Columns, Groups or Filters.





7.3 'Run the Report' button (Run query)

Once the selection is made, the icon must be pressed to execute the report. By default, auto execution is enabled. To disable it, just deselect the icon below.

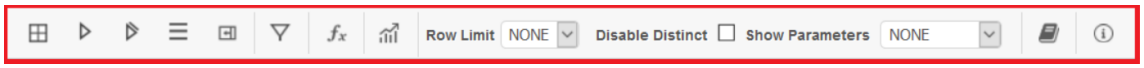


7.4 Asynchronous Execution

STReport allows the execution of the query regardless of the rendering process. Therefore, the tool provides the possibility of interruption of the execution before the display of the data is finished.

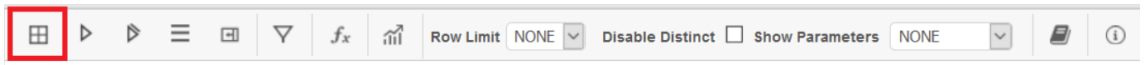
8. STREPORT TOOLBAR

The toolbar will allow to interact with the report: execute it, create formulas, etc.



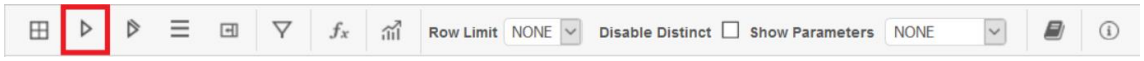
8.1 Switch Table/Report

It allows changing the visual aspect of table to report and vice versa.



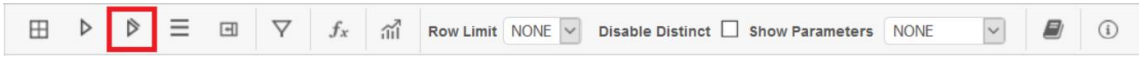
8.2 Run Query

Manually run the query (the selected items) of the report.



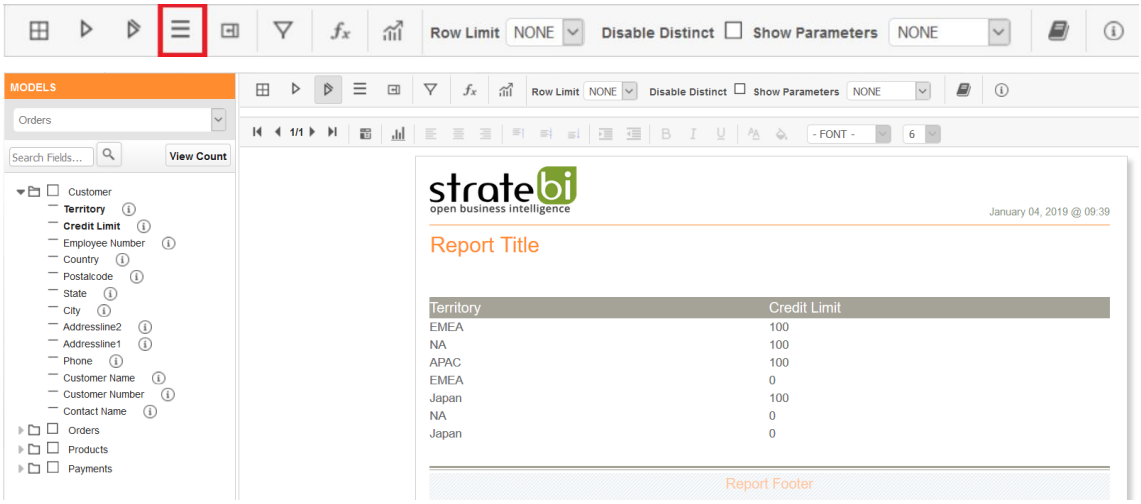
8.3 Automatic Execution

For each change that is made in the report, it runs automatically. For example, a new element is moved from the Categories to Columns option.



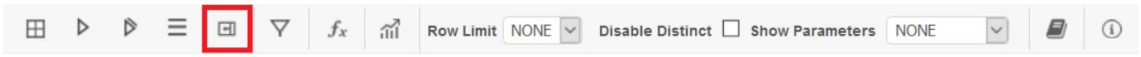
8.4 Toggle Fields

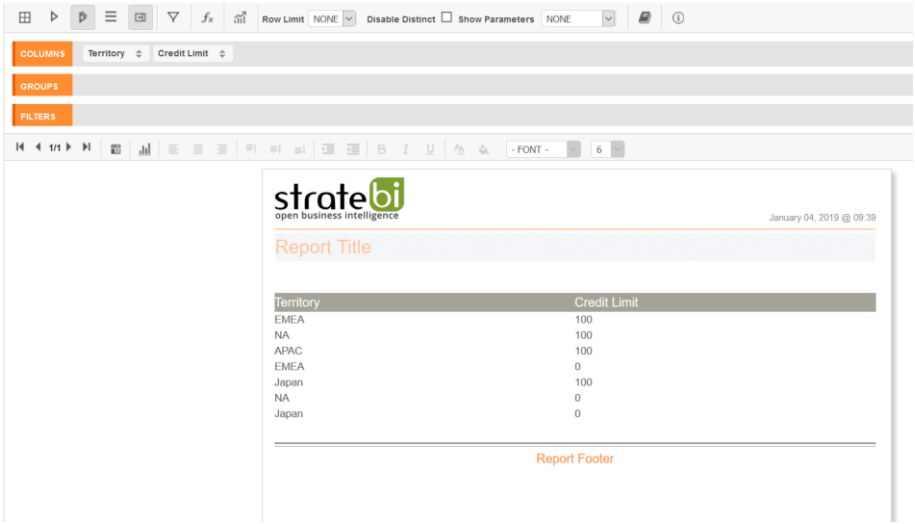
Hide/Show the STReport Columns, Groups & Filters.



8.5 Hide Sidebar

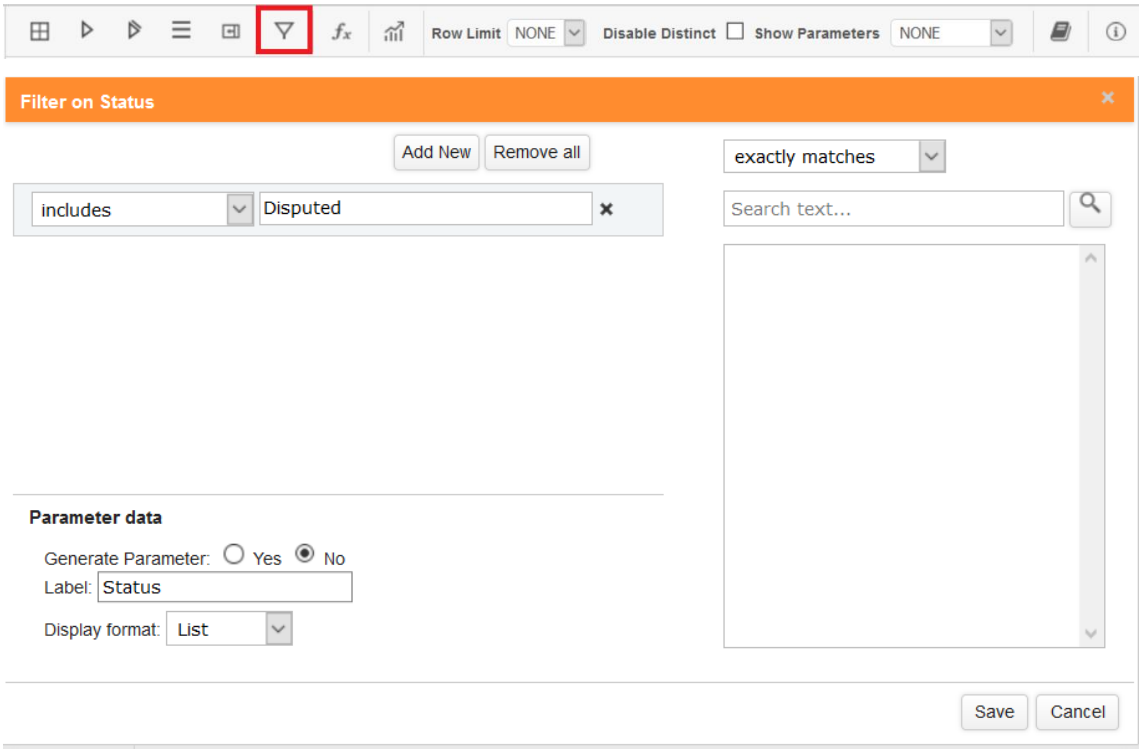
Hide the left frame: Models and Categories.





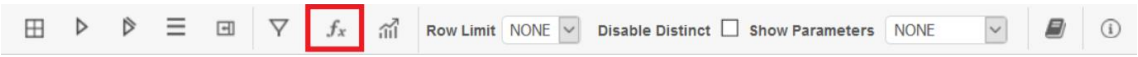
8.6 Applied Filters

Lists the filters that are created for the report.



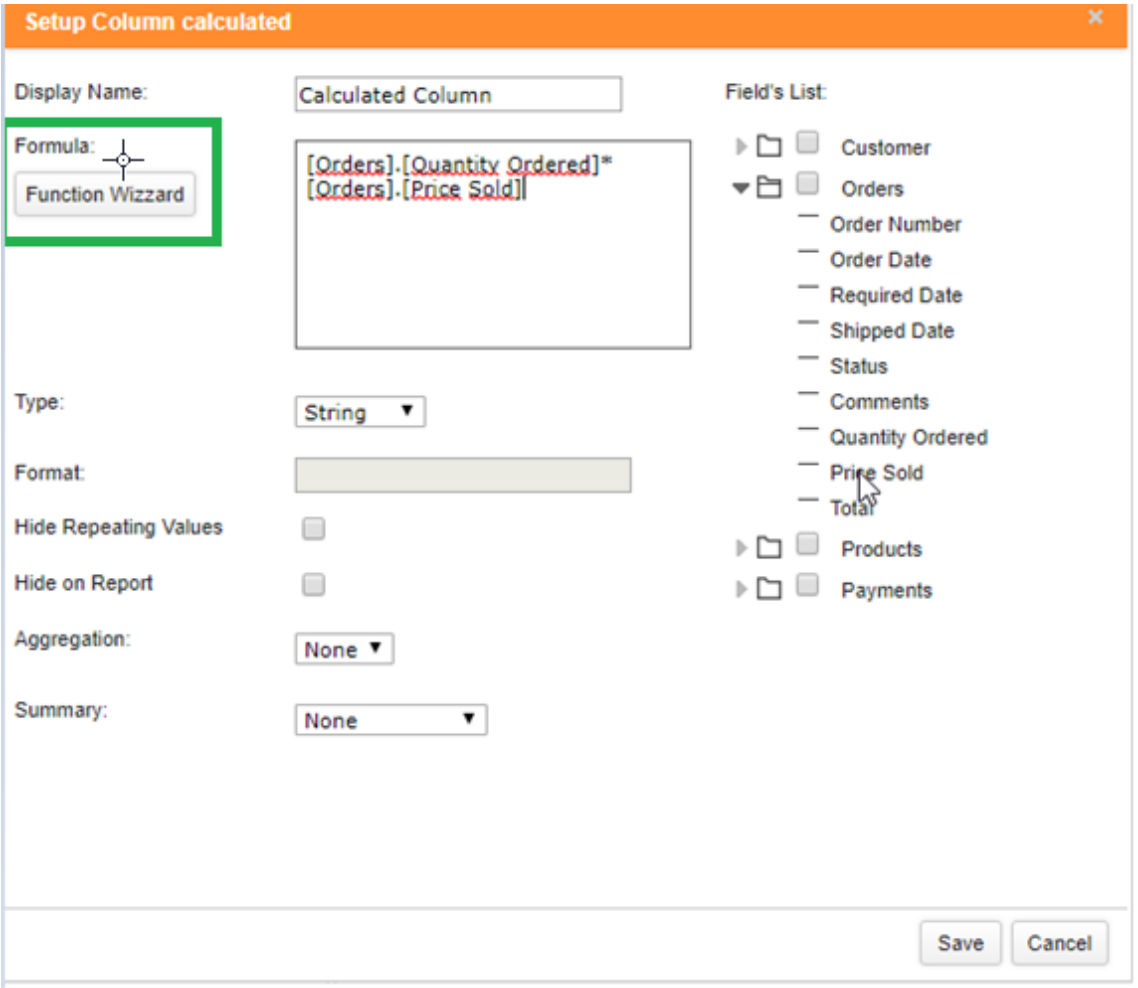
8.7 Add Calculated Column

It allows to create calculated members or formulas that could be used in the report.



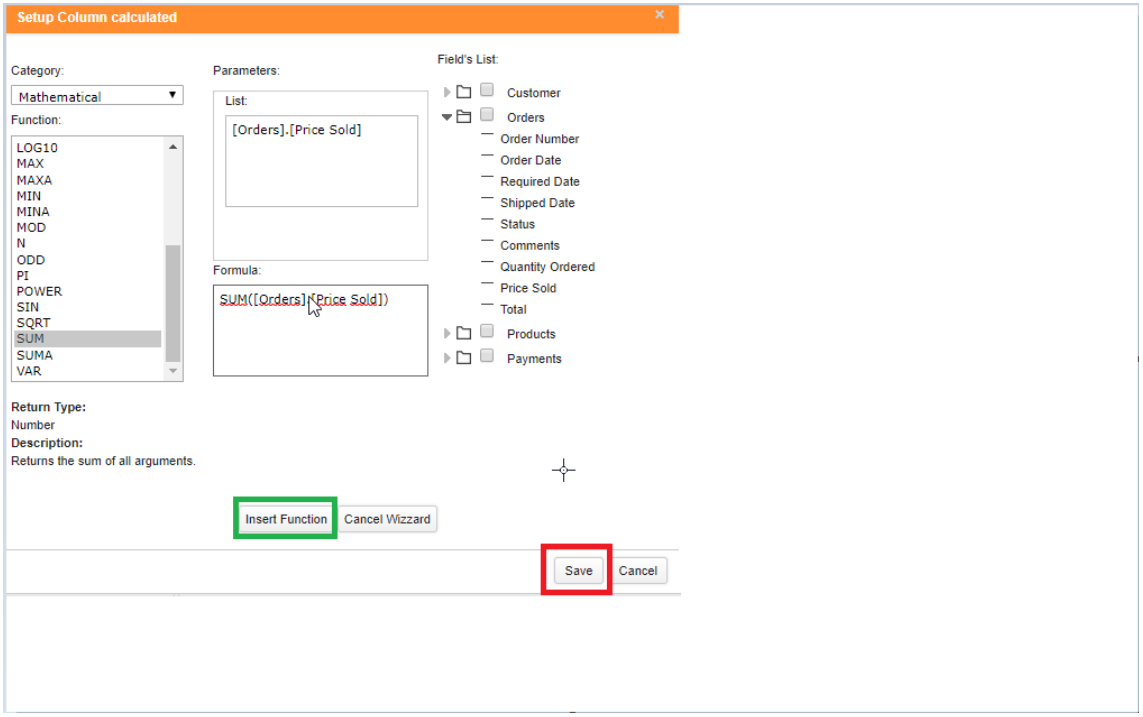
To calculate more complex metrics, there is a formula editor accessible through the button. Double clicking on the items displayed on the right side (or using drag & drop) will appear in the formula section where it can apply the most usual operators: +, -, *, /.

The data type will be selected there too (usually numeric). In the Format section, the mask could be specified and an additional aggregation can be included by the summary property, which provides the next operators: sum, count, a distinct count, max, min and average.



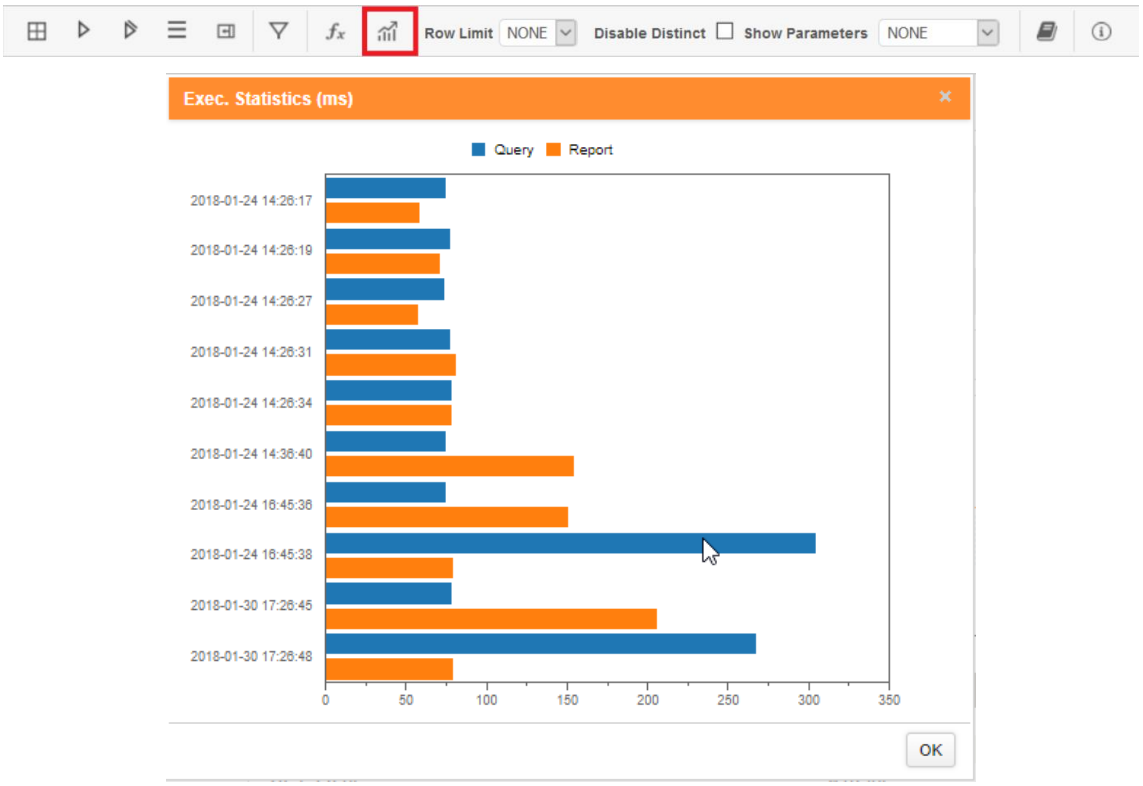
On the left side, there is a button named Function Wizard an assistant that provides an easier way to build formulas for metrics. As an important note, it is needed to click

on Insert Function button and then push Save.

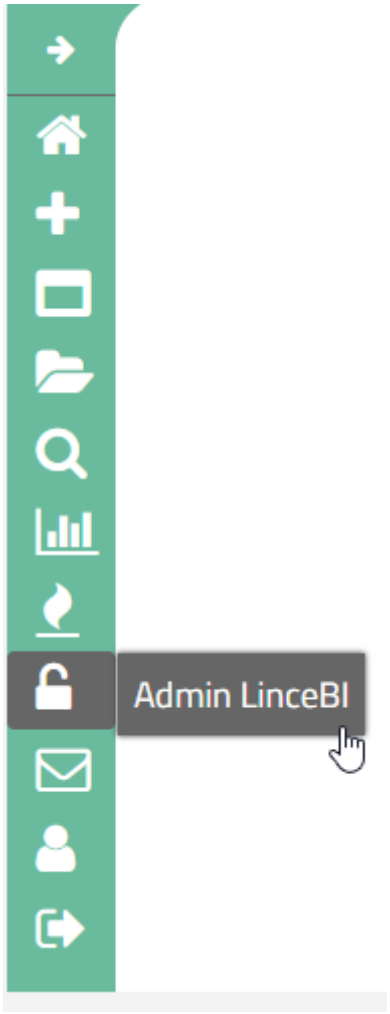


8.8 Statistics

Displays the statistics (the time spent in milliseconds for the query and the report) when the report is executed.



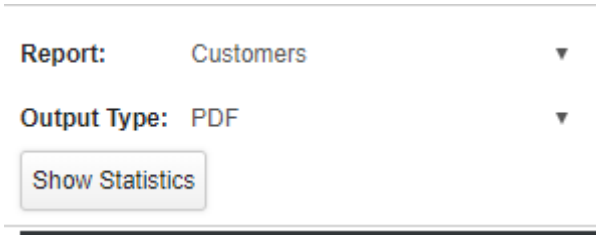
In LinceBI, there is one option called 'Admin LinceBI'

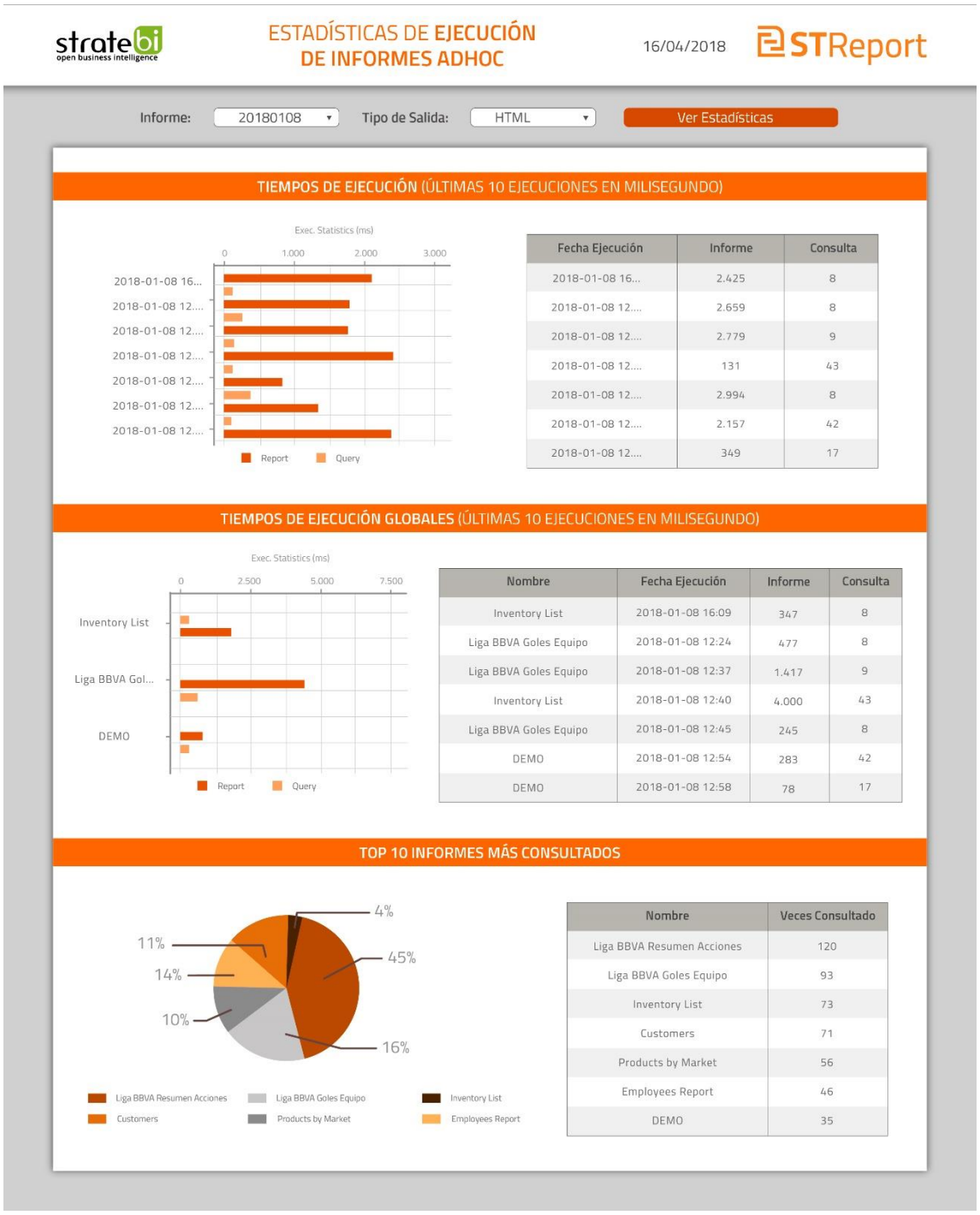


In addition, there is the operation called 'STReport Statistics'

which, allows to widen the information about a specific report and compare different statistics like global Executions, executions times or top ten reports.

When a report from the list is chosen and an Output Type click on Show Statistics detailed information will be shown.



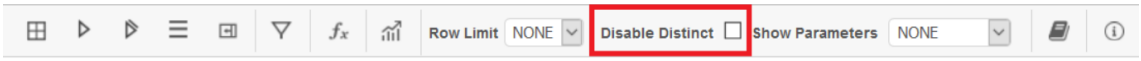


8.9 Row Limit

It allows visualizing a reduced set of results, being useful to make a preview of the construction of the report.

8.10 Disable Distinct

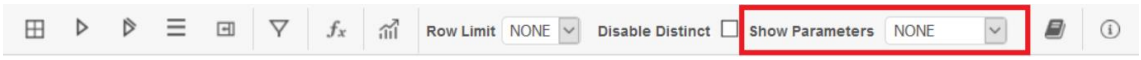
Disables the display of elements (fields) that are different.



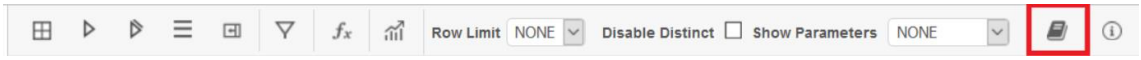
8.11 Show Parameters

If any parameter has been defined in the FILTERS section (see the documentation in section 9.3) it will be displayed in execution mode. The options to choose are NONE, AT HEADER or AT FOOTER.

For more details on how to show in execution mode, see point 12.1.

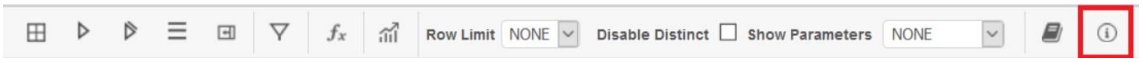


8.12 Report Description



It allows to add a description to the report. This description could be seen on the same button in execution mode.

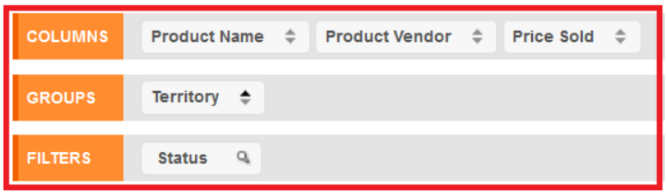
8.13 About

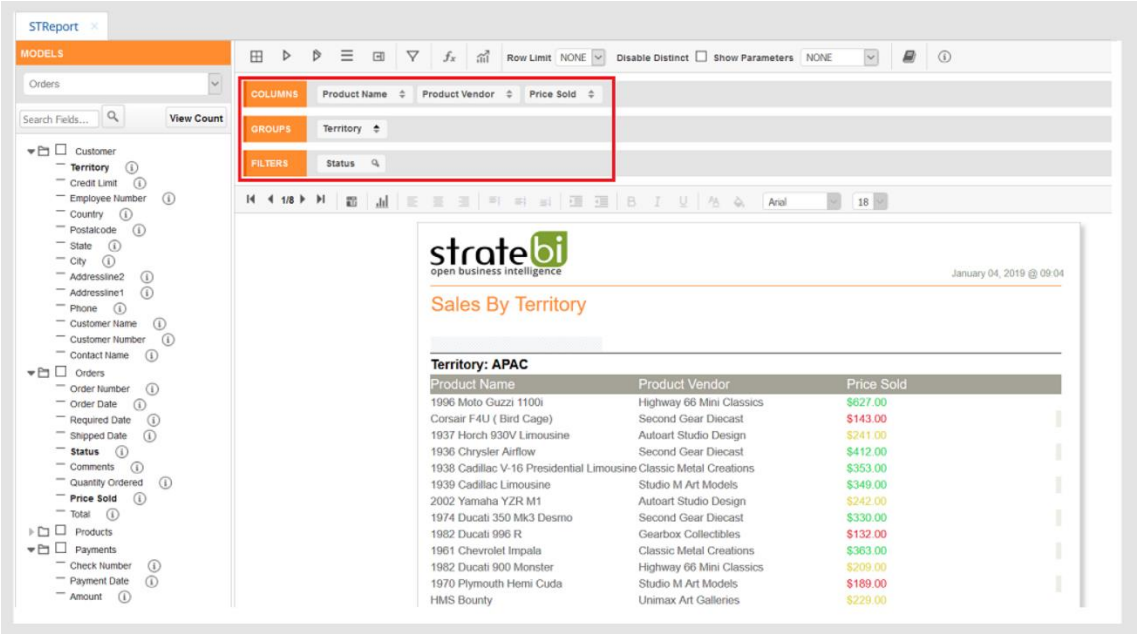


The botton (i) allows getting the version of the tool also the date of compilation and the identifier of the version.

9. REPORT LAYOUT: COLUMNS, GROUPS, FILTERS

It represents the body of the report where the selected elements (fields) and filters are applied. The elements are placed in Columns or Groups have an ascending / descending arrow that enables the sorting between them.





Next, the sections: Columns, Groups and Filters will be described.

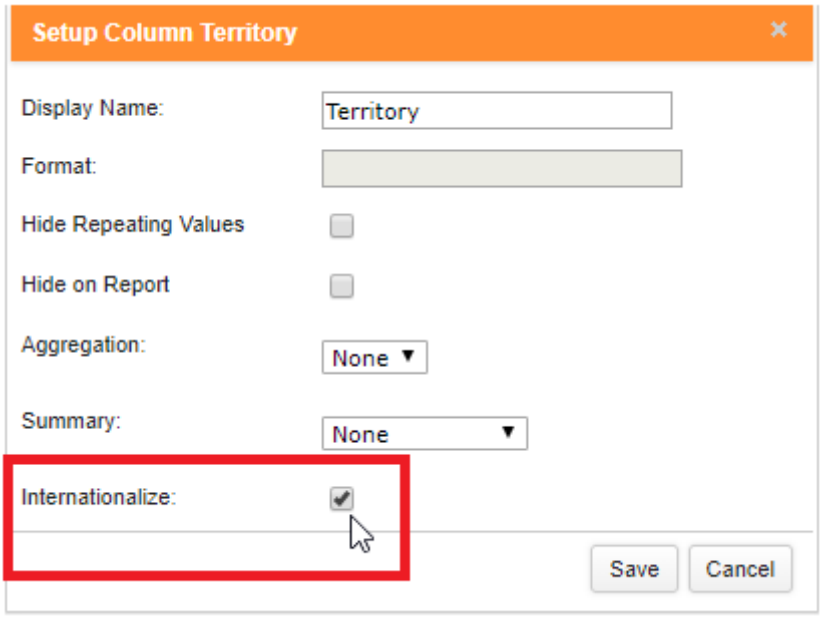
9.1 Columns Section

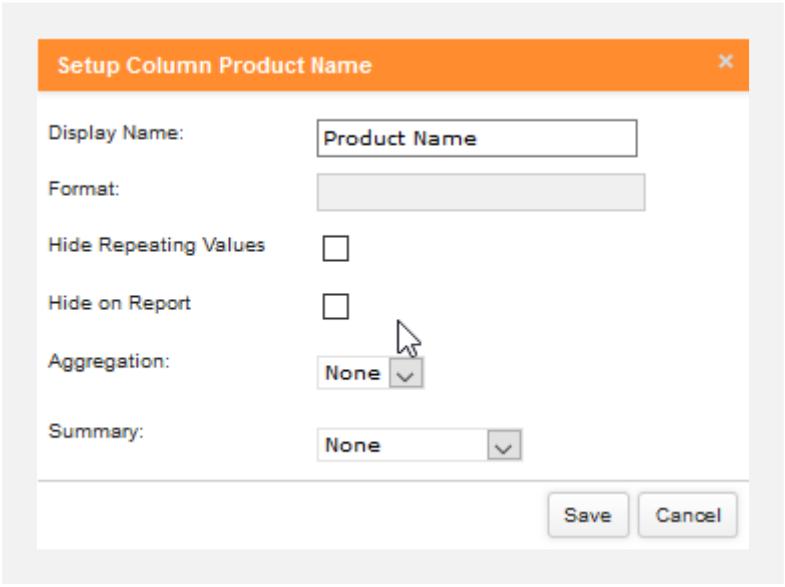
In this section, the elements are dragged, which are needed for the visualization of the columns. If a field is clicked a new frame will appear with different possibilities of configuration. For example, over a text type field, a new operation could be applied.

- Display Name.
- Format.
- Hide Repeating Values.

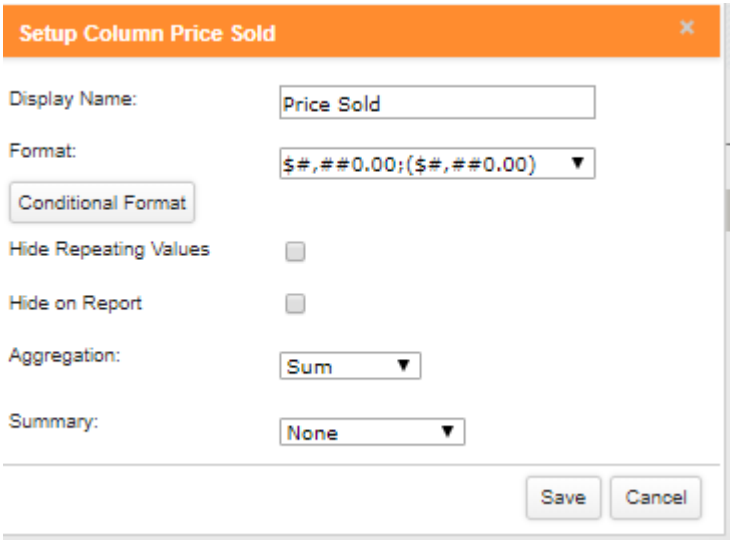
- Hide on Report.
- Aggregation.
- Summary.
- Internationalize.

If it there is any the data internationalized (in the database), there is an Internationalize check box to show them in different languages.

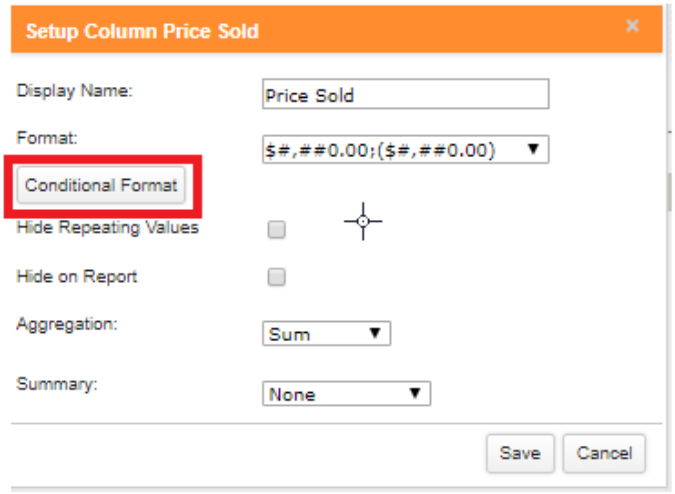


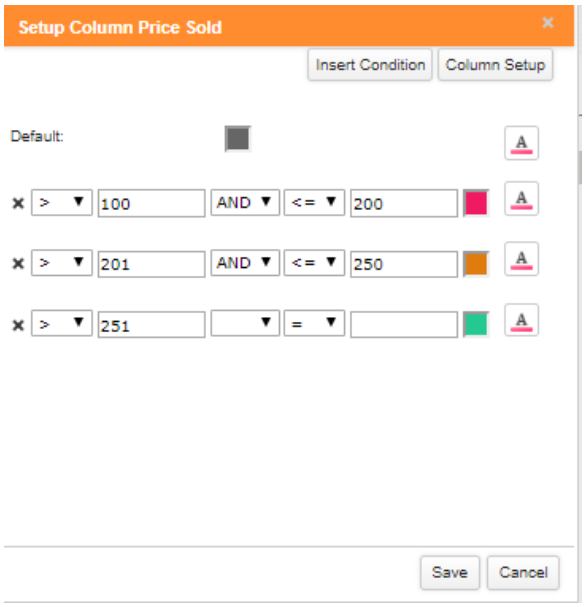


If it is a field of numerical type, it will be possible to change the mask of the data (format), displayed name, and add a new aggregation over the selected field which could be a sum, count, a distinct count, max, min or average.



There is a Conditional Format button that allows defining how the values are represented with different colors, depending on the ranges or conditions that are established.





Territory: APAC

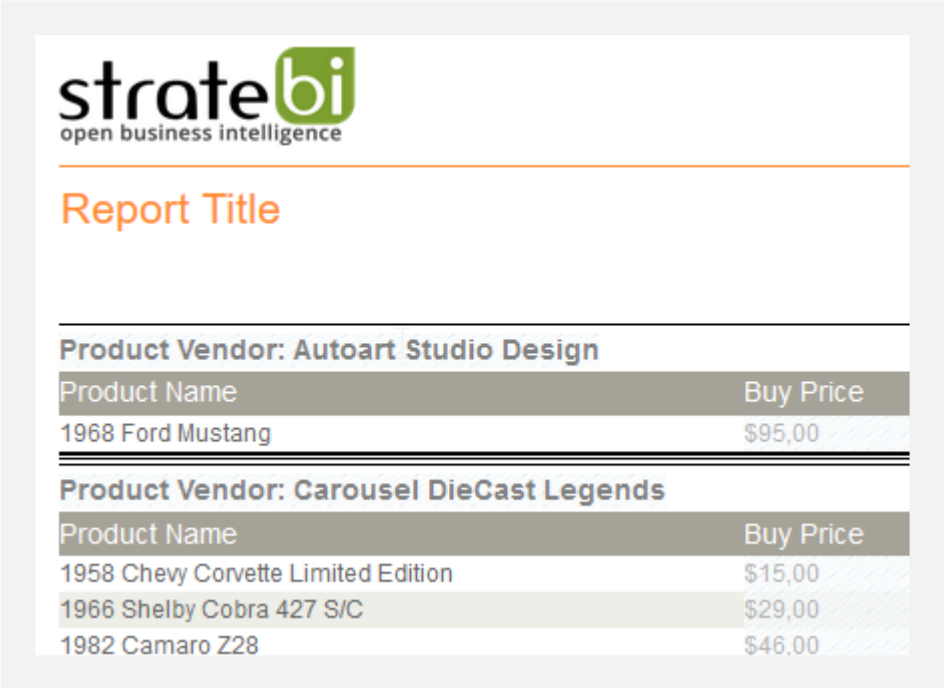
Product Name	Product Vendor	Price Sold
1996 Moto Guzzi 1100i	Highway 66 Mini Classics	$627.00
Corsair F4U (Bird Cage)	Second Gear Diecast	$143.00
1937 Horch 930V Limousine	Autoart Studio Design	$241.00
1936 Chrysler Airflow	Second Gear Diecast	$412.00
1938 Cadillac V-16 Presidential Limousine	Classic Metal Creations	$353.00
1939 Cadillac Limousine	Studio M Art Models	$349.00
2002 Yamaha YZR M1	Autoart Studio Design	$242.00

9.2 Groups Section

The section Groups allows to group by different fields. For example, if the field Product Vendor are dragged to the groups section, the displayed data will be grouped by the dragged field.

In the picture:

- Product Vendor: Autoart Studio Design.
- Product Vendor: Carousel DieCast Legends.



Also like columns, there is possible to sort the groups ascendent or descendent order by using the arrows.

9.3 Filters Section

It allows creating and changing filters (restrictions in the values) on the fields positioned in this section. To filter click on the field name and the 'Filter on Field_Name' a new window will be open.

Depending on the data type, the appropriate filter window will be displayed.

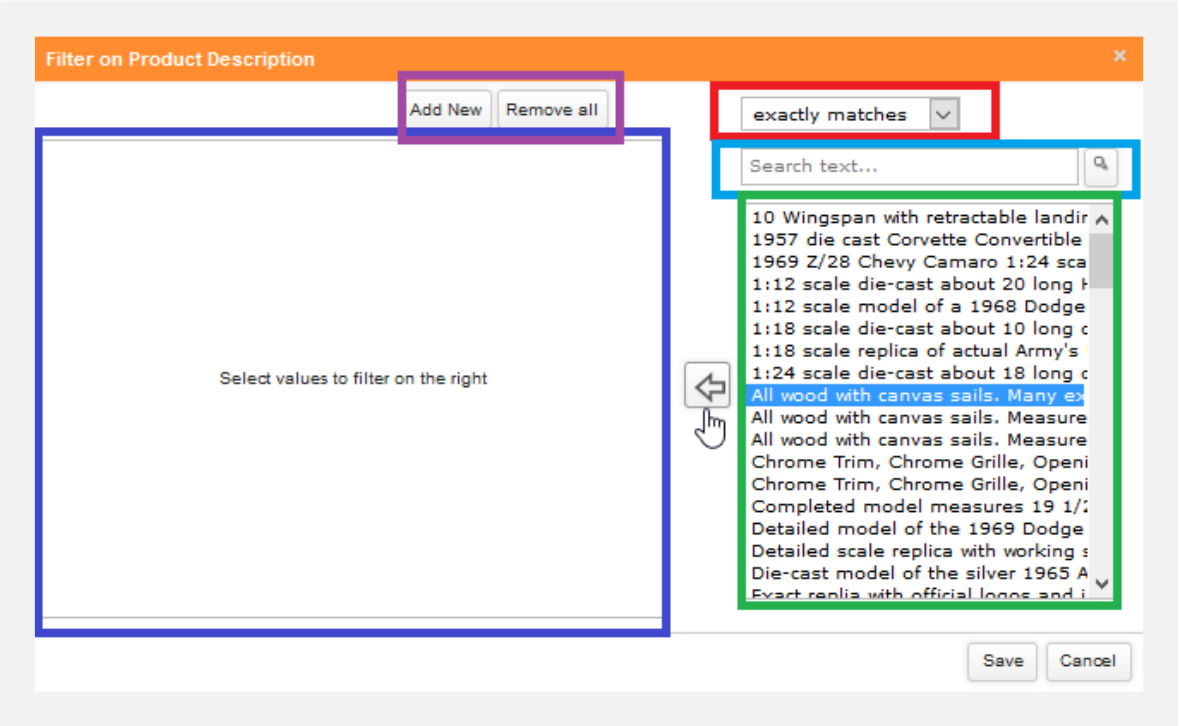
- **Numeric Type:** using comparators

  =, <>, >=, <=, >, <, is null, is not null

Multiple conditions could be added to the same filter:

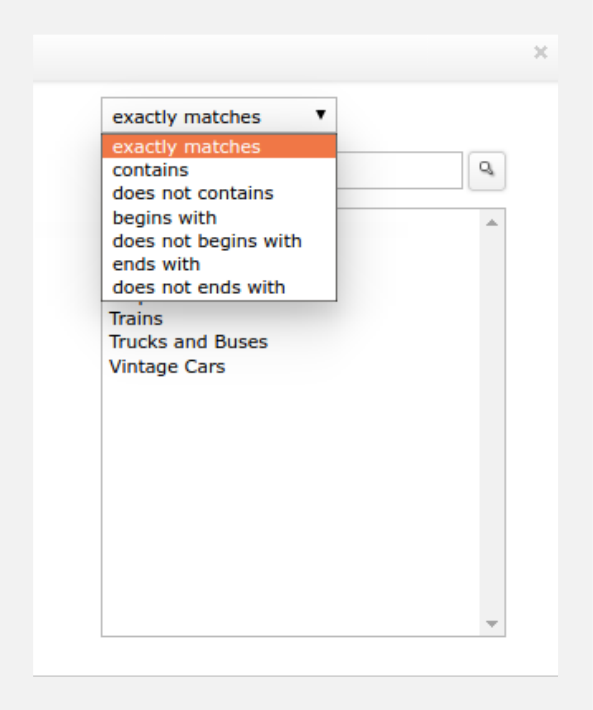
OR
OR NOT
AND
AND NOT

-Text Type: there are several parts for these kind of filters:



In the right side, the magnifying glass icon shows all the values where could be selected as a filter.

In addition, a drop-down will allow to select between different ways of making the comparison:

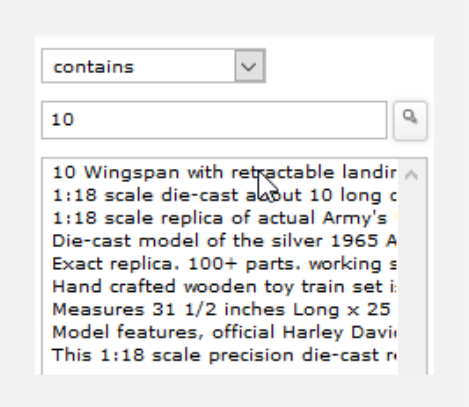


For example, the products that contain the word 10 could be searched.

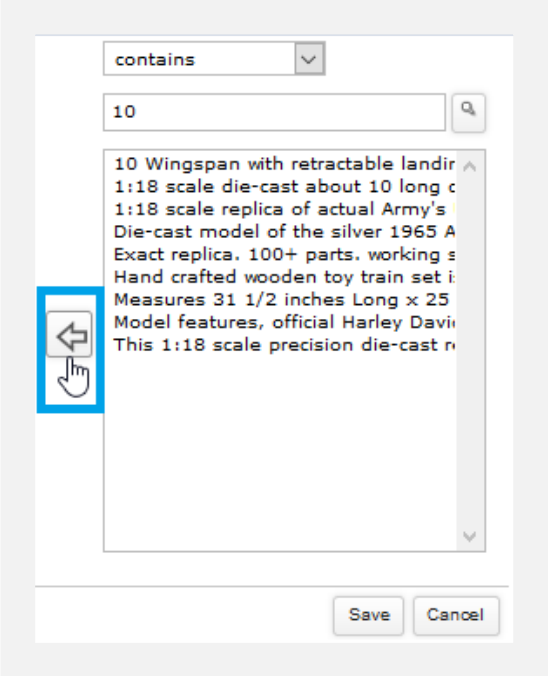
contains

10

Then, click the lookup icon.



Once the filter has been created, the arrow keys could be used to move the filter to the right.

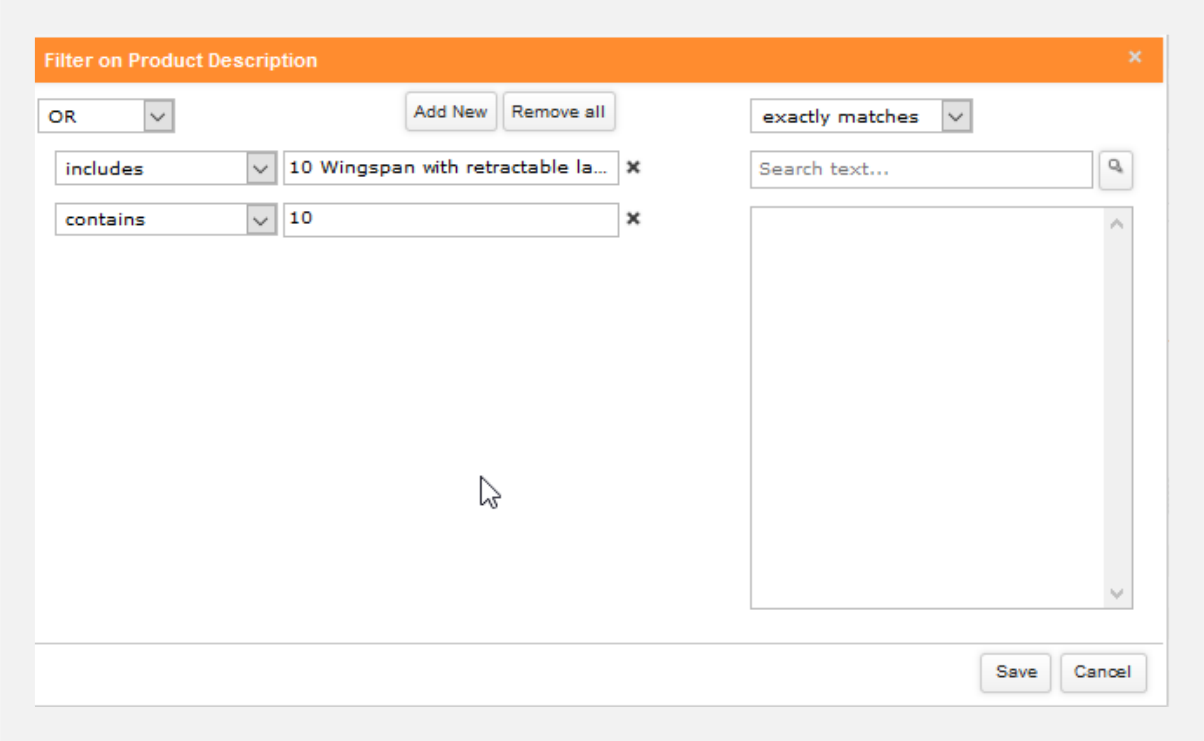


In the left side, the conditions will be seen. In addition, a new operation will be possible:

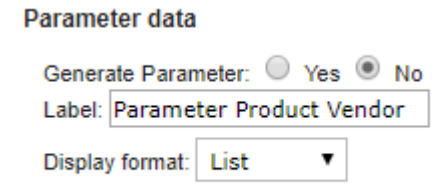
- Add a New
- Remove All
- Delete a condition (x)

Further, a link between the conditions could be created with the following operators:

OR
OR NOT
AND
AND NOT



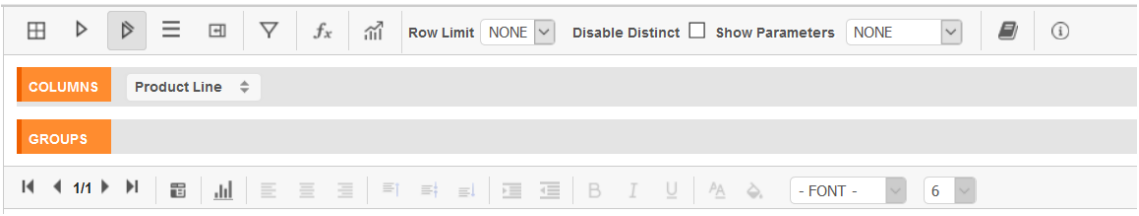
In the bottom left side, it shows the option of 'Parameter data' that allows generating a new parameter.



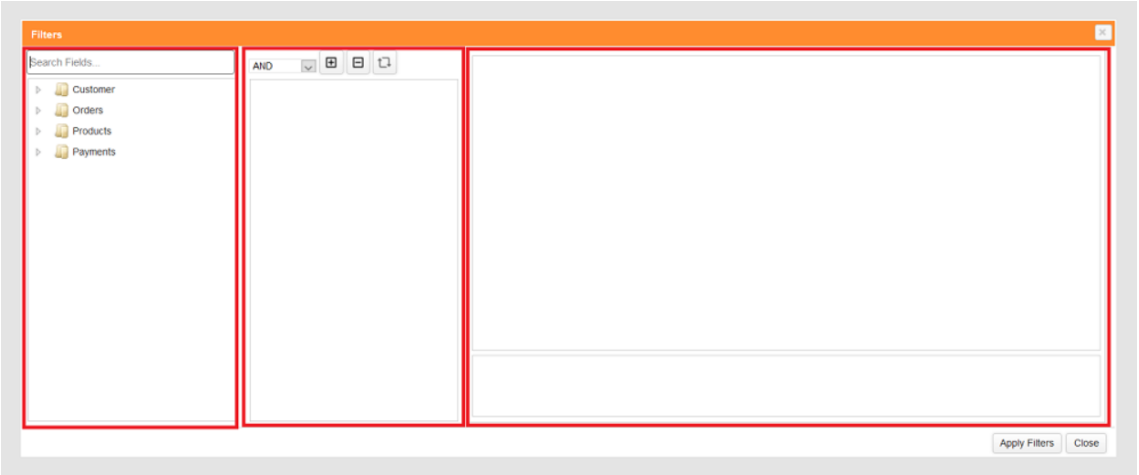
The parameter will be displayed in the execution mode (documentation section 12) which it allows to select the values shown by the parameter.

9.4 Advanced Filter

STReport has an additional mode for handling filtering it is called Advanced Filter. When the Advanced Filter mode is enabled, the display of the toolbar changes. These changes include losing the row of Filters.



However, the filtering option gets additional functionalities. Mainly, the advanced filtering gets the ability to nest filters.



The new filter menu is distributed into three sections:

- Model Explorer.
- Filter type.
- Filter configuration.

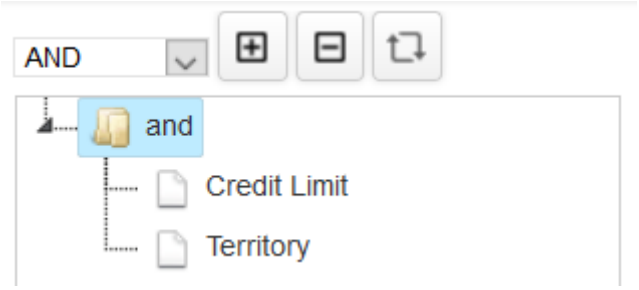
Then, we proceed to explain each section and the general procedure of the advanced mode.

Model Explorer: It gets the categories and elements of the selected model.

Filter type: the advanced filtering mode allows selecting different filters that include: *OR, OR NOT, AND* y *AND NOT*

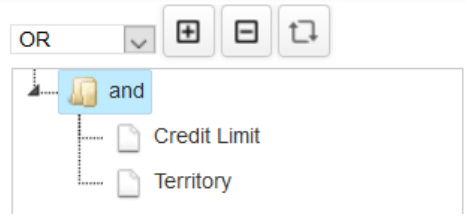
The procedure begins with the selection of the filter type and pushing the add button (⊞).

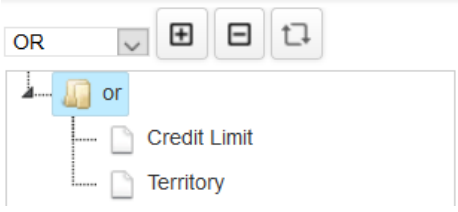
Once the filter is selected, you can *drag and drop* the elements of the model to the filter.



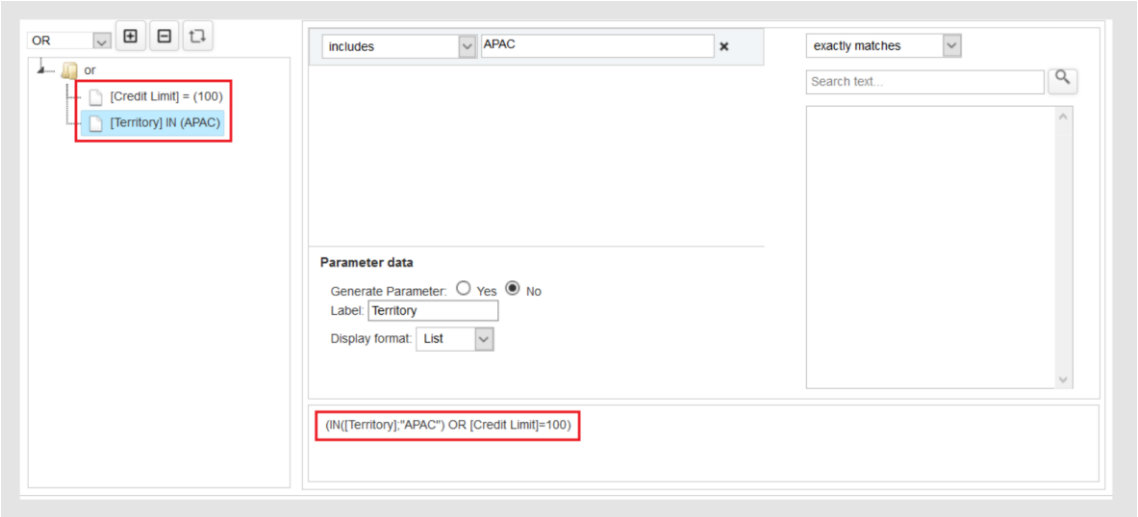
The delete button (⊟) allows to remove items (filters or fields from the model).

To modify the filter type, it is required use the update button, the standard procedure is to choose a new filter and press update.

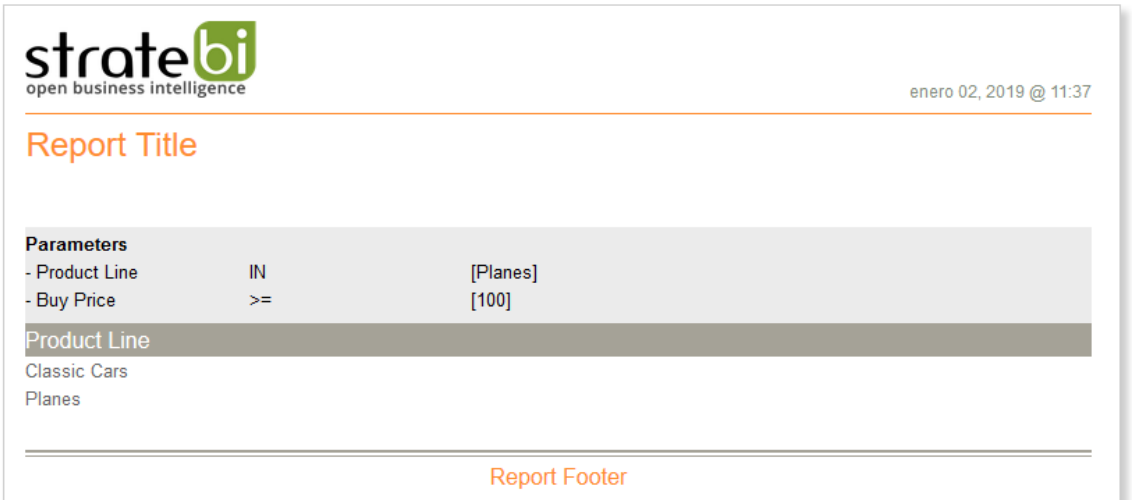




Filter configurator: the last section actually is the standard mode of filtering (seen in the 9.3 section).

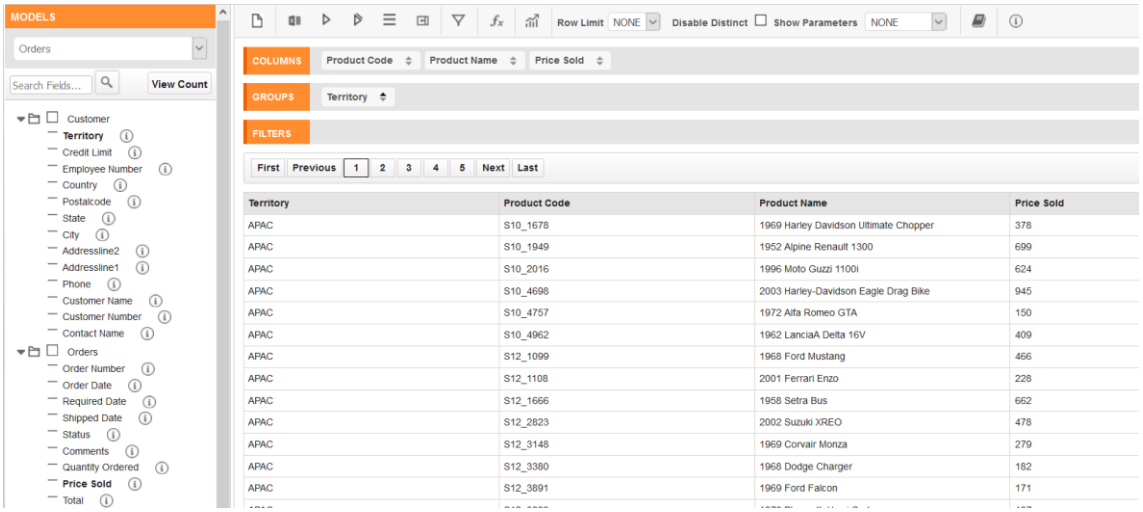


In addition, the advanced mode shows the conditions established for each element included in the filter. Finally, select Apply Filters.

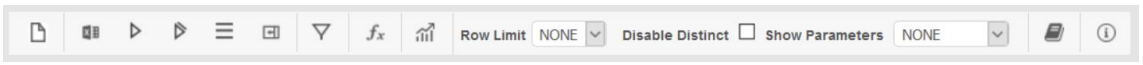


9.5 Table Mode

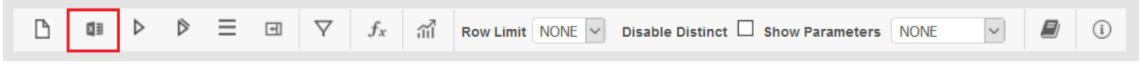
After selecting the table mode (seen in point 8.1), the next view is obtained:



There are changes in the way of the report toolbar is displayed over both toolbars (execution and format).



The main added functionality is the immediate export to Excel using the icon:



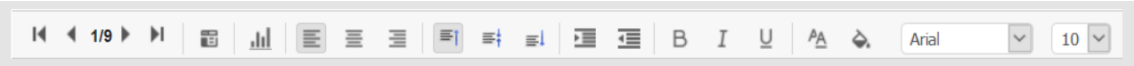
Which returns a file in Excel format with the query created in the report through the

columns, groups and filters.

	A	B	C	D
1	Territory	Product Code	Product Name	Price Sold
2	APAC	S10_2016	1996 Moto Guzzi 1100i	398
3	APAC	S18_2319	1964 Mercedec Tour Bus	179
4	APAC	S50_4713	2002 Yamaha YZR M1	81
5	APAC	S32_4485	1974 Ducati 350 Mk3 Desmo	115
6	APAC	S32_2206	1982 Ducati 996 R	40
7	APAC	S24_4620	1961 Chevrolet Impala	95
8	APAC	S24_2360	1982 Ducati 900 Monster	74
9	APAC	S12_3990	1970 Plymouth Hemi Cuda	64
10	APAC	S12_2823	2002 Suzuki XREO	133
11	APAC	S18_4668	1939 Cadillac Limousine	239
12	APAC	S12_1099	1968 Ford Mustang	167
13	APAC	S24_3191	1969 Chevrolet Camaro Z28	171
14	APAC	S24_2887	1952 Citroen-15CV	225
15	APAC	S24_2766	1949 Jaguar XK 120	175
16	APAC	S24_1628	1966 Shelby Cobra 427 S/C	117
17	APAC	S24_1046	1970 Chevy Chevelle SS 454	125
18	APAC	S18_4933	1957 Ford Thunderbird	215
19	APAC	S18_4409	1932 Alfa Romeo 8C2300 Spider Sport	297

10. REPORT TOOLBAR

It will allow scrolling through the report, change page settings, justify each field, fill the field, text color, font, etc.



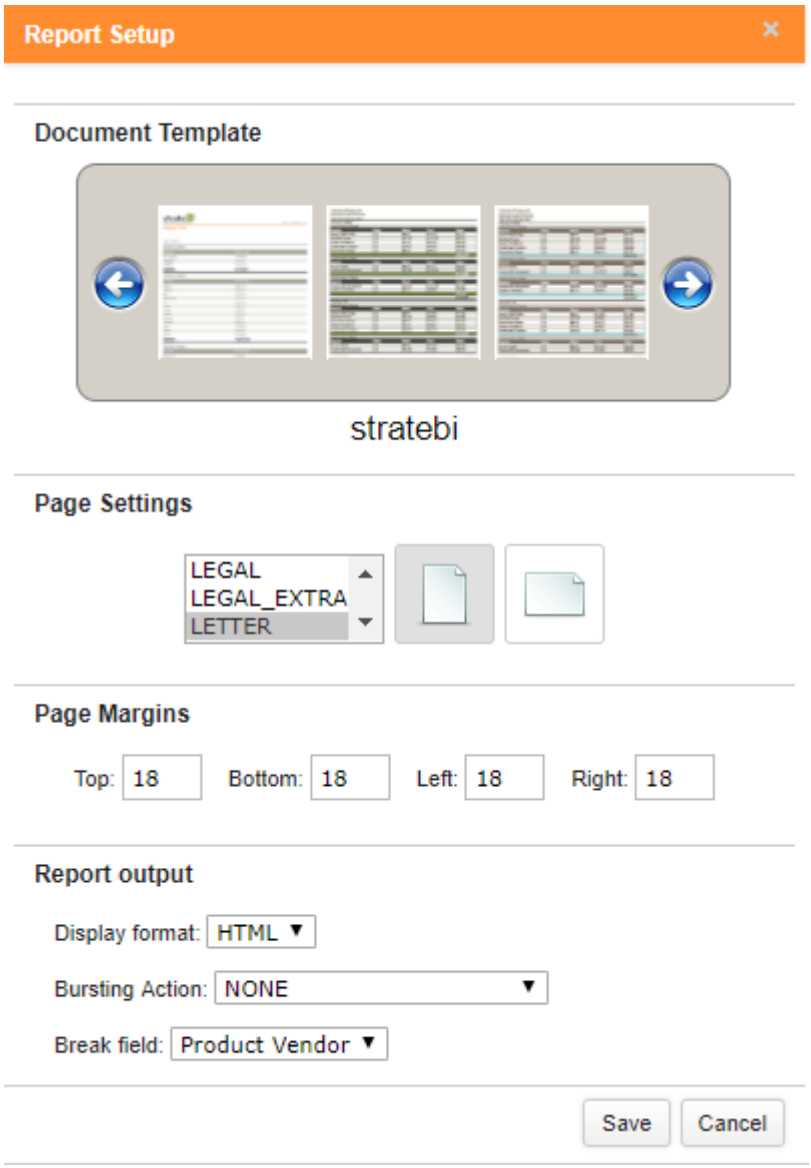
10.1 Move to other report pages

It permits to move to the:

- First Page.
- Previous Page.
- Next Page.
- Last Page.

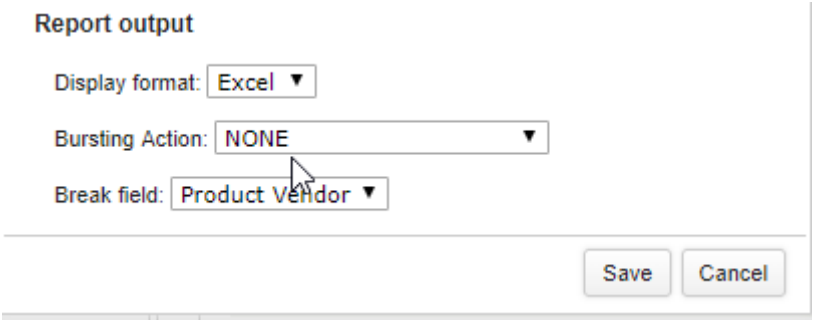
10.2 Page Setup

It assigns a template for our report, the orientation of the page, change the margins and other options of the report, such as the output format, busting action or division field.



At the bottom side, there are three interesting options to choose:

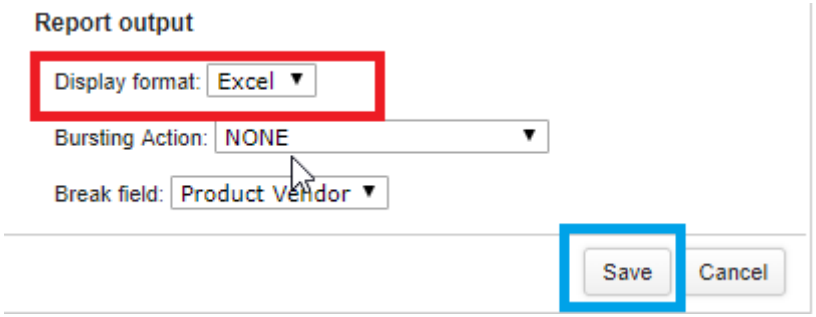
- Display format.
- Bursting Action.
- Break field.



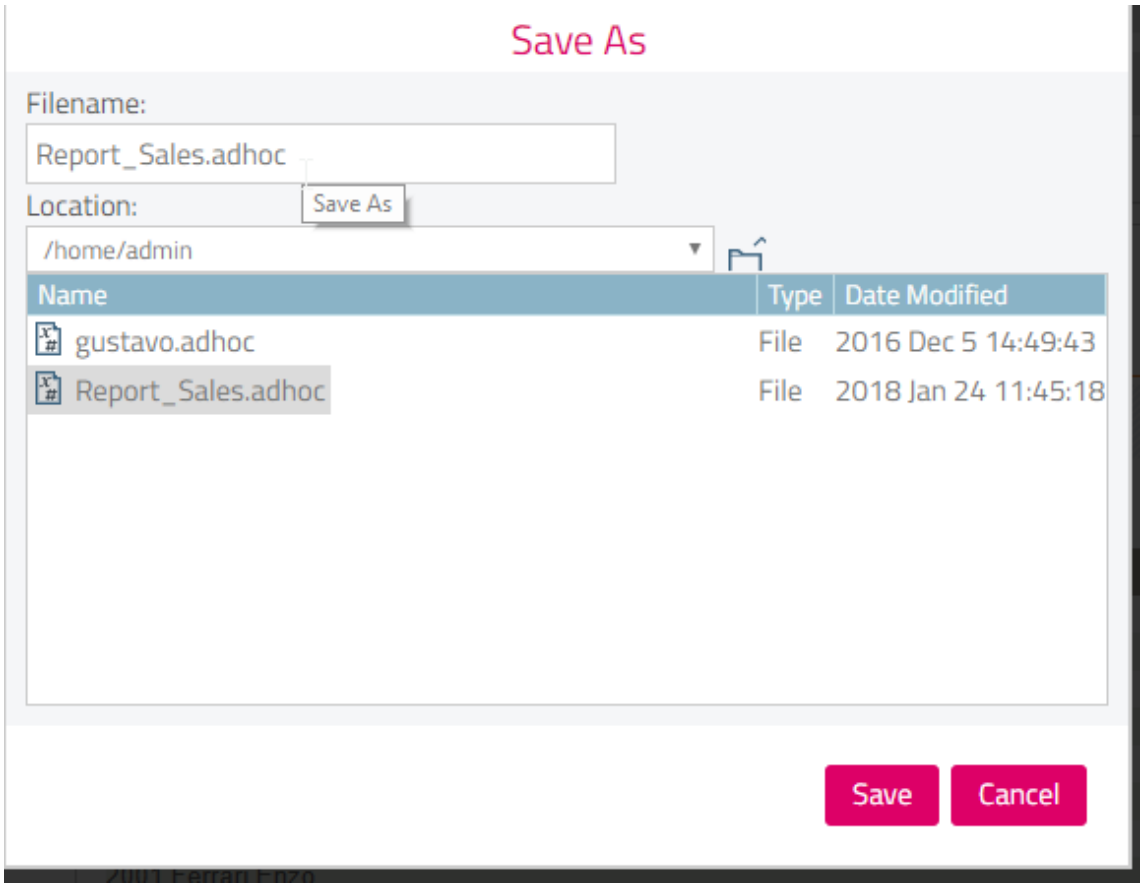
The three options will be explained below:

Display format: it will allow selecting the format of the report once saved it. The options to choose are: HTML, PDF, Excel and CSV.

For instance, to keep the format of the report in Excel, it is necessary, select Display format as Excel and the click on Save.

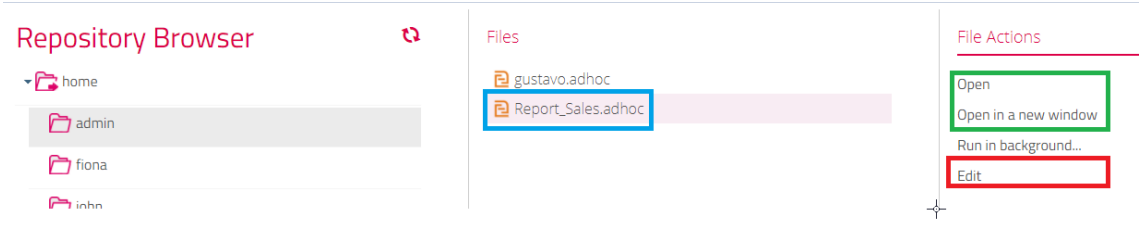


Then the report is saved with a name, for example, 'Report_Sales-adhoc'.



Once the report is saved, to open it, use the tab 'Explore your data' and two options will be seen.

- Edit Mode (Edit): will allow modifying the report that has just been saved.
- Run Mode (Open, Open in a new window): will open the report in the format in which it was saved with the option Display format (Output format), in our example, is on Excel format.

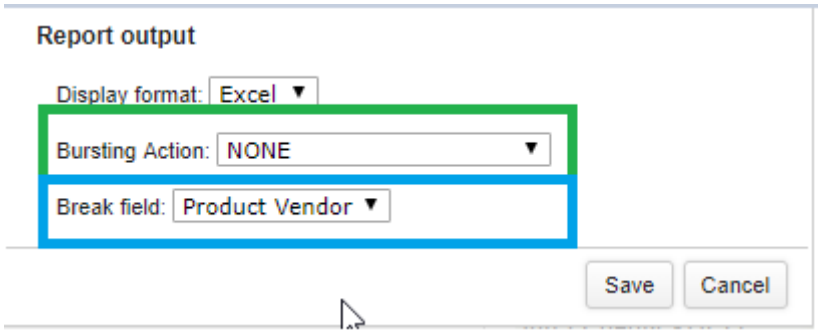


- Bursting Action and Break field

  Busting Action will permit to save the report format using one of these three options:

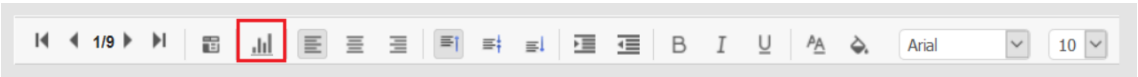
  1. NONE: it does not use the page break.

2. Page break after: it adds a page break using the field chosen in the Break Field.
3. Generate multiple reports: it creates a new report for each value of the field used in the Break Field.

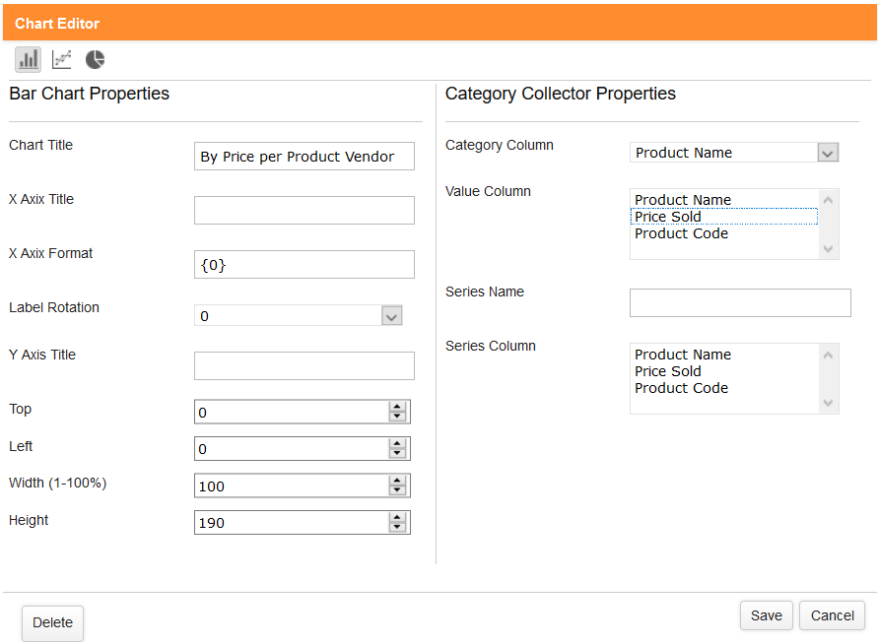


10.3 Add/Edit Chart

It will allow creating or modifying a graphic based on the data selected in the report.

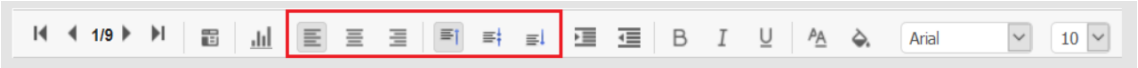


Three types of graphics could be chosen between: bar, line and pie.
Depending on the graphic, it is necessary to choose the corresponding options in Bar Chart Properties and Category Collector Properties. Also, it is important to select a measure in 'Value Column'.



10.4 Page Setup

It will allow aligning the contents of a field or its title in the report.

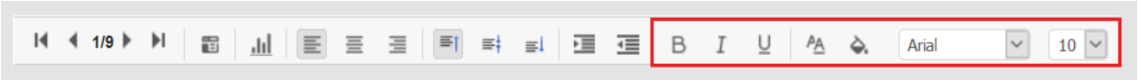


10.5 Padding

It will allow filling the values displayed in the report with blank space.

10.6 Font

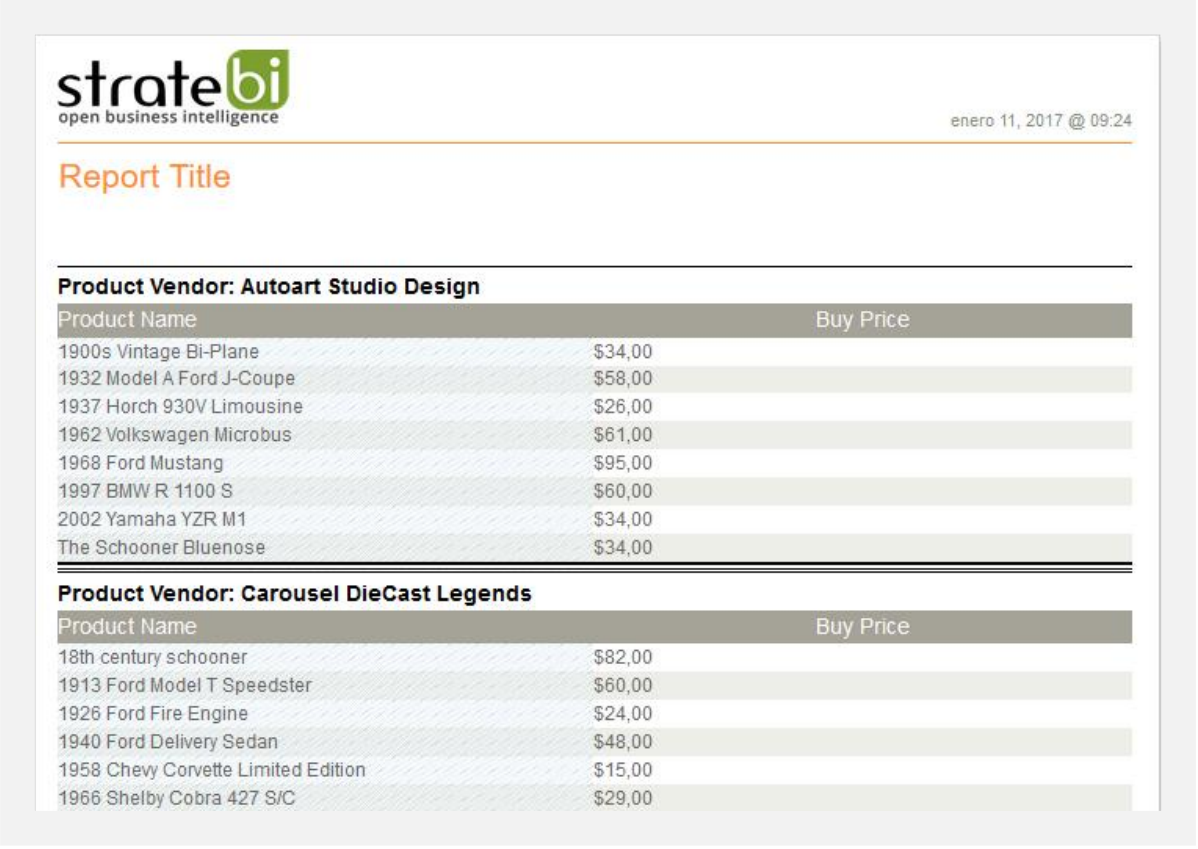
The following icons allow putting the contents of a field in bold, italic, underline, change the font color, background color, font, and font size.



11. REPORT BODY

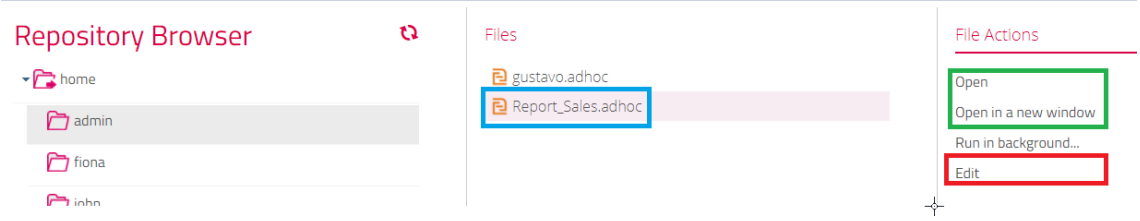
Once the fields have been selected, and a format has been applied, an operational report will be available. Different fields could be changed as well:

- **Logo:** in Page Setup.
- **Title:** simply click on it and change the text.
- Click on the headers of each field and change your text.
- Select a field and apply the format that (seen in point 10).

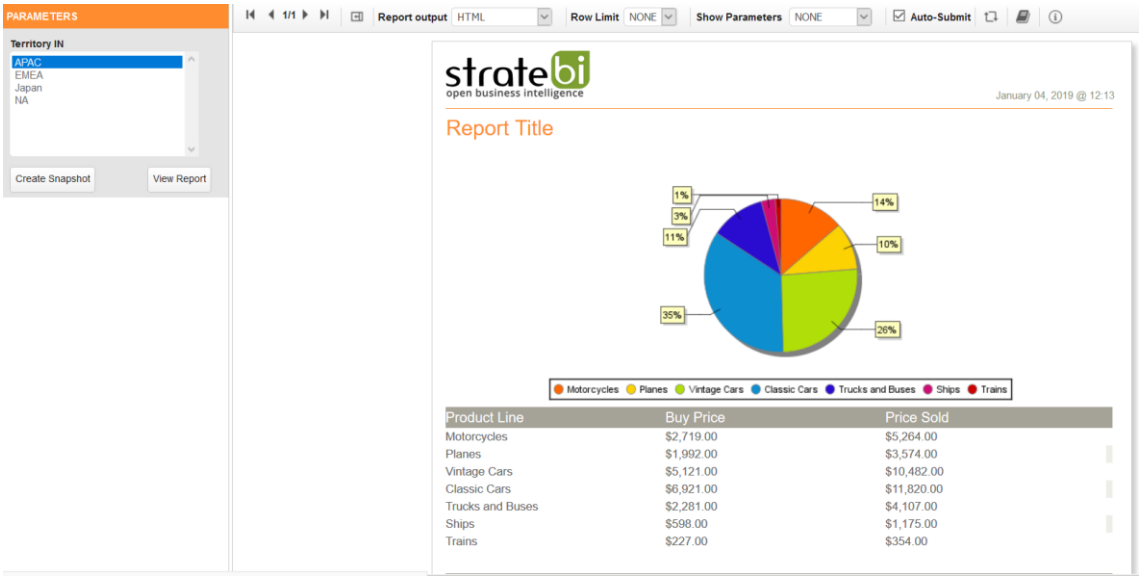


12. RUN MODE (OPEN)

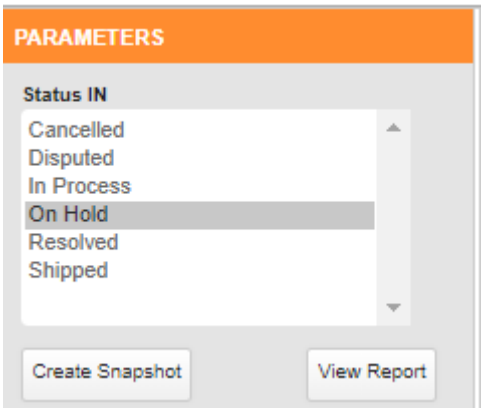
When a report is executed in Run Mode (Open, Open in a new window), it will be opened in the same format it was saved under the Display format option, as it is described previously.



Next, we will see what a report looks like in execution mode and the main options.



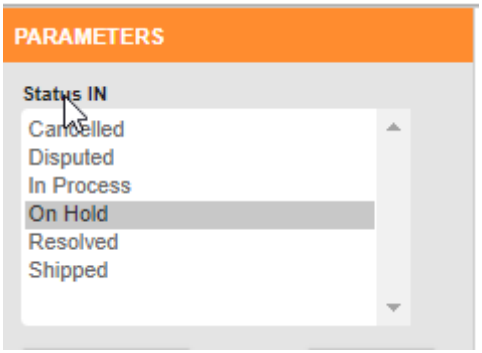
12.1 LEFT FRAME



On the left side, the parameters (if they were defined in edit mode -> Filters -> Generate Parameters), the buttons' Create Snapshot 'and View Report' will be seen.

Parameters

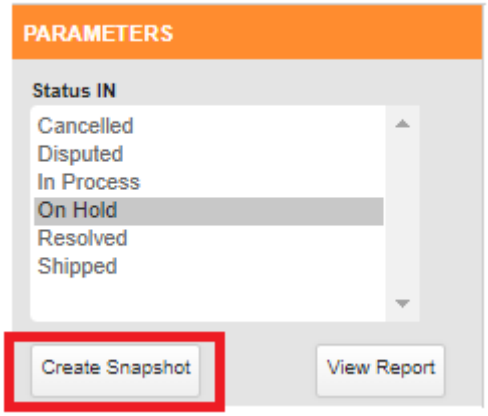
Furthermore, if a parameter has been defined previously in STReport, on the filters section (Generate parameter); the name of the parameter and the values of the field used will be displayed.



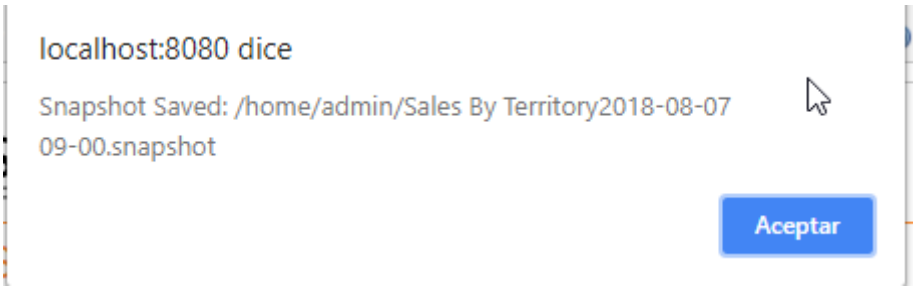
When one or more values are selected, the report will be filtered by them.

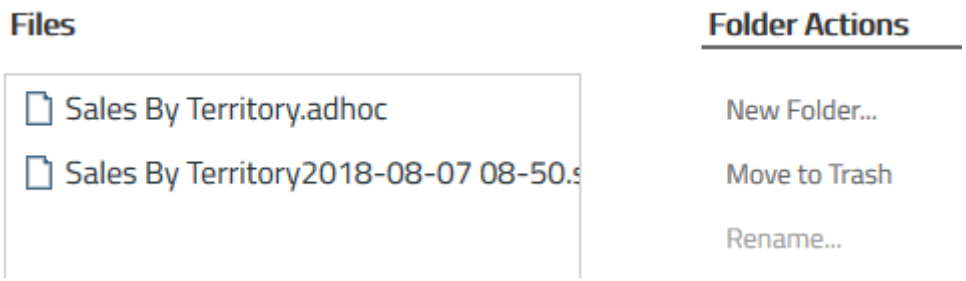
Create Snapshot

The snapshots are created in the execution mode and generate a 'photo' of the data that is in the source system in that moment. If the data changes at the origin, the values displayed by the snapshot will remain unchanged.



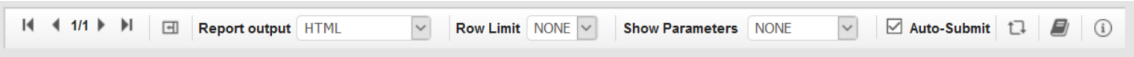
When clicking on the 'Create Sanspshot' button, a new file is created with the name of the report, the concatenated date and with extension .adhoc.snapshot. This created file is executable but not editable. You can also schedule the shipment (see the report planning 13 section).



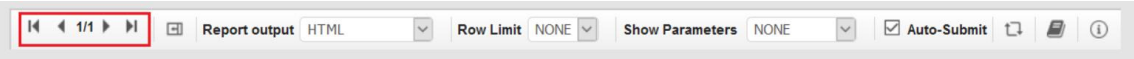


12.2 Toolbar

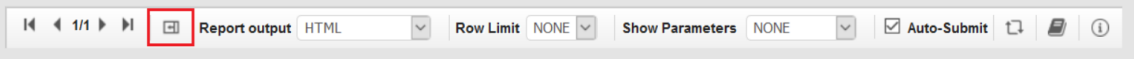
In the upper side, the toolbar is available, which will allow to navigate through the pages of the report, show parameters, etc.



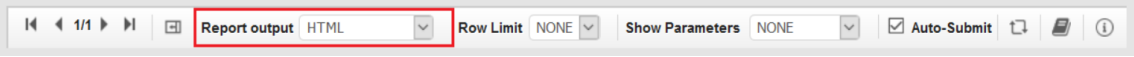
The following buttons allow going to the beginning, page or the end of the report.



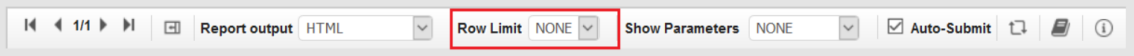
This button allows to hide or not the toolbar.



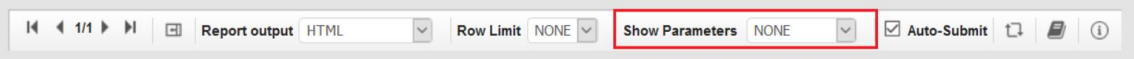
This option give permission to determine the output format of the report: HTML Paginated, HTML, PDF, Excel or CSV.



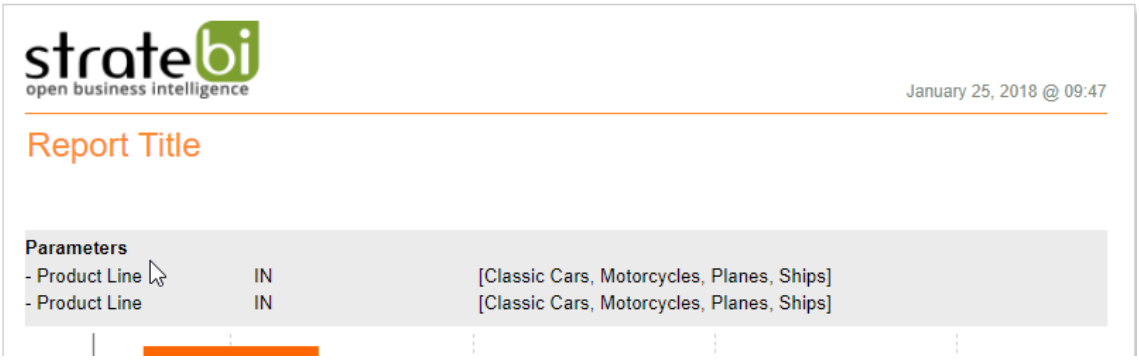
This option enable to limit the number of rows that will be displayed in the report:



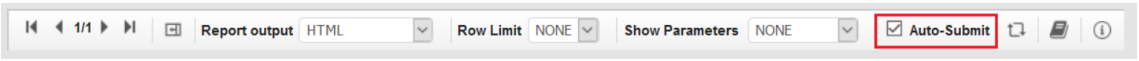
If in edition mode the option 'Show Parameters' was chosen, here in execution mode the three options are shown where the parameter can be displayed:
NONE, AT HEADER, AT FOOTER.



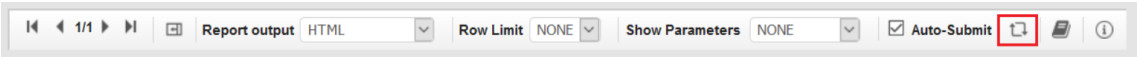
This is an example of one parameter set AT HEADER:



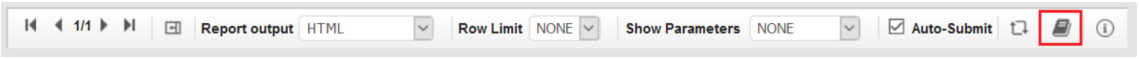
This 'check box' refresh the values of the report automatically when the parameter value is chosen:



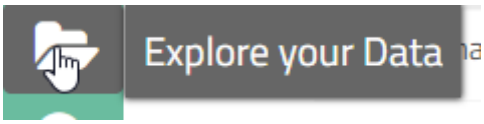
This button allows refreshing the report values manually:



This icon permit to see the description of the report.

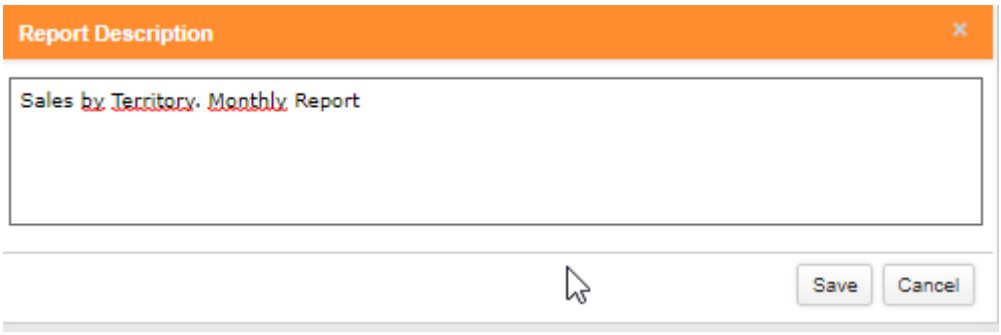


However, to be able to see the description, it has had to be previously defined in edition mode, that is, when it is created or edited, through 'Explore your Data'



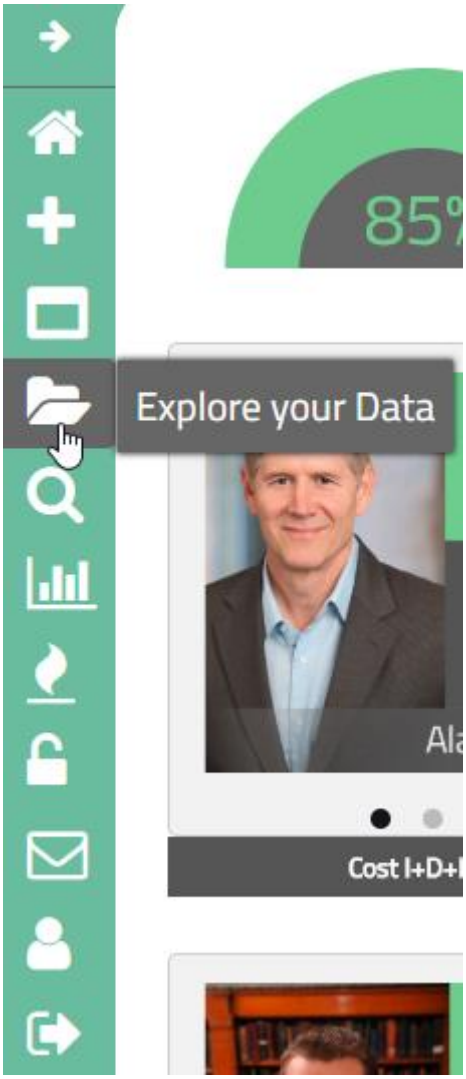
Then in Files, Edit, the report is opened in edition mode:

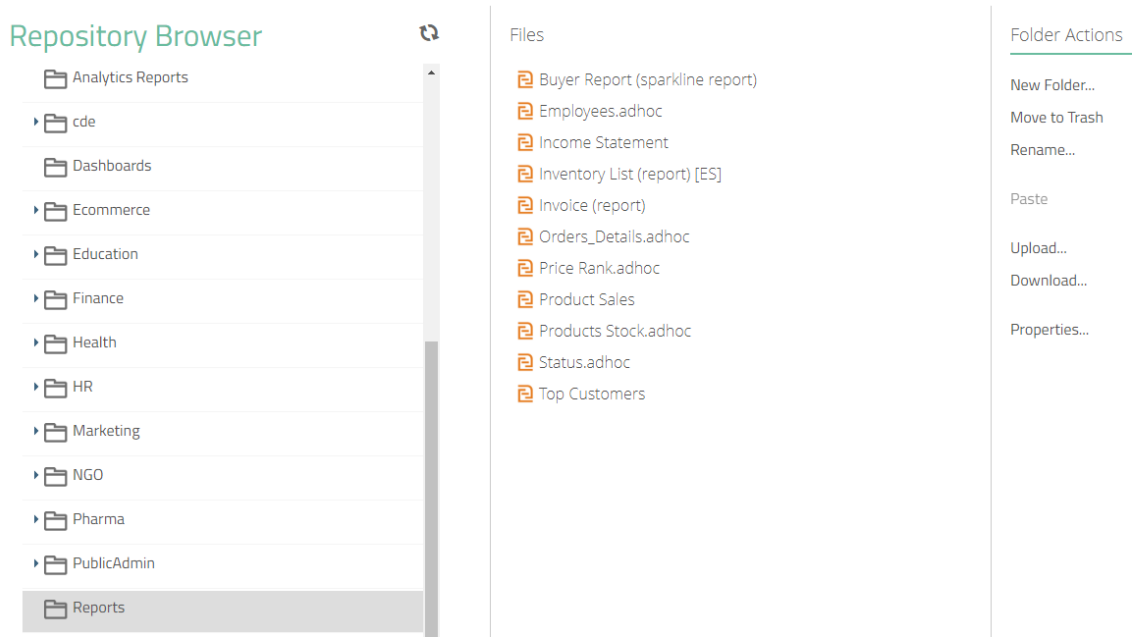
In the toolbar, the description is placed in the 'Report Description' icon.


Report Description
Sales by Territory. Monthly Report
Save
Cancel

13. SCHEDULE REPORTS

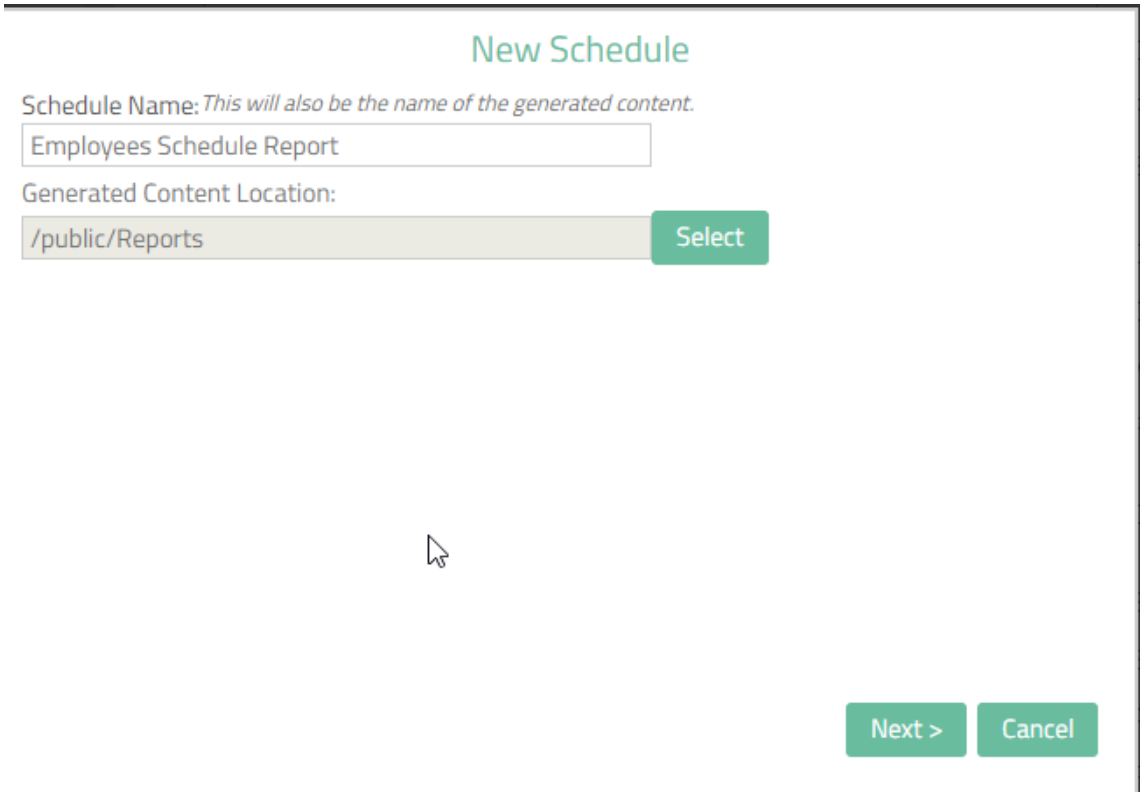
LinceBI will allow planning the execution of the reports of STReport. From LinceBI menu chose the option Explore your Data then navigate through the logical folders that are created.



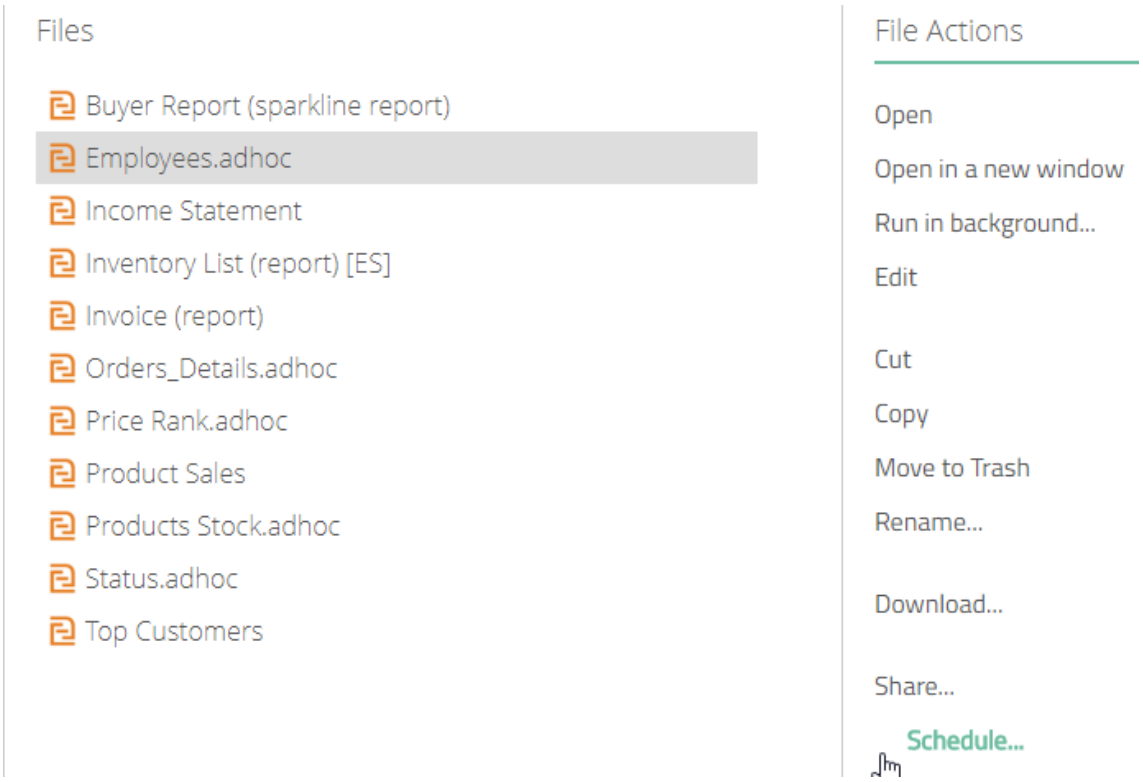


There is a Schedule option, which will allow executing a STReport report on the day and time.

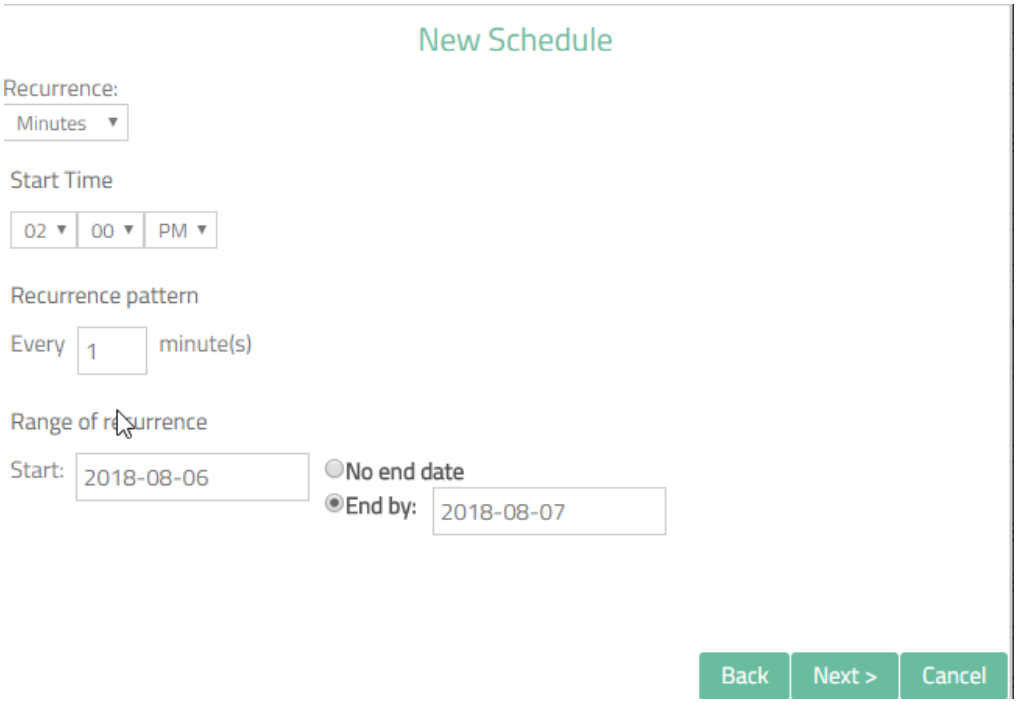
The Schedule will require a name (Schedule Name) and a directory for storing purposes (Generated Content Location).



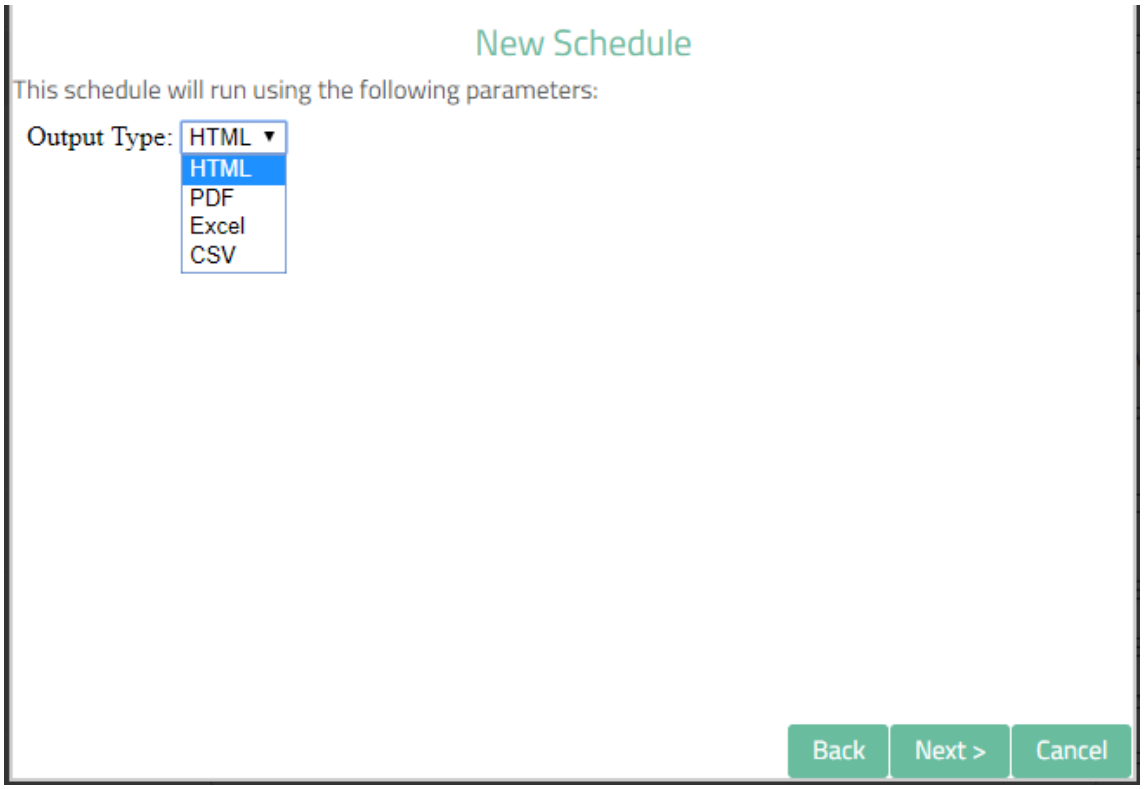
Next, the report will be selected from the list of files and in the right frame (File Actions) the Schedule option need to be selected as well.



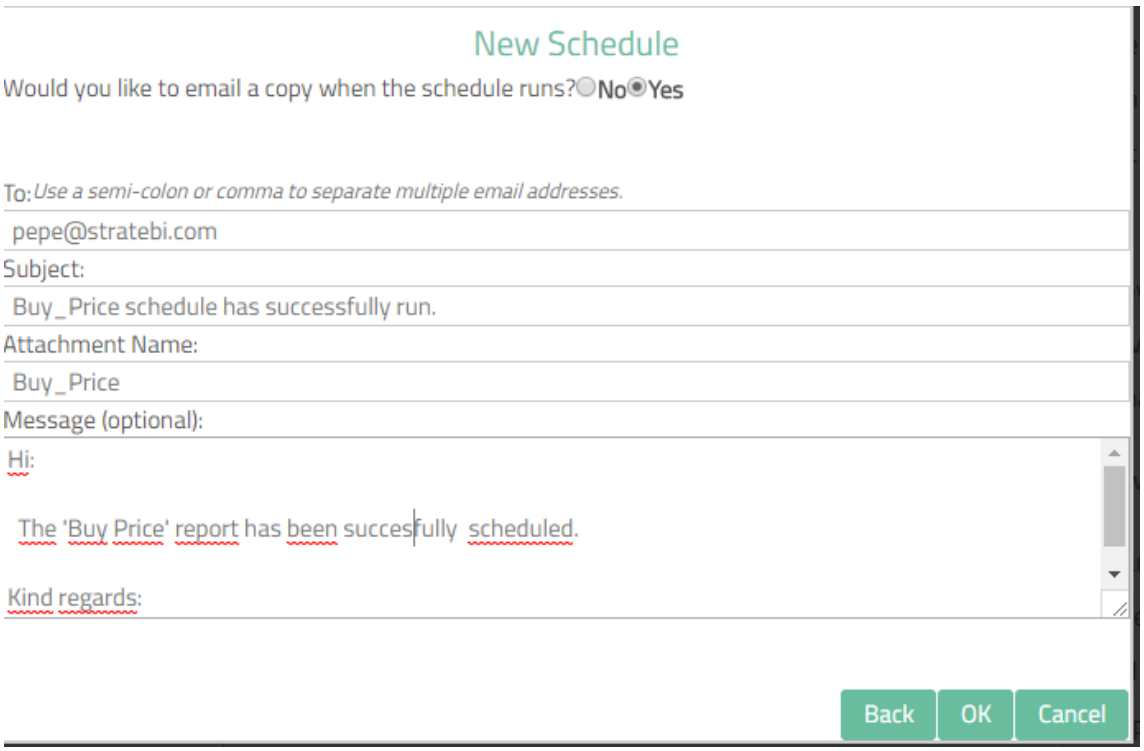
The schedule allow select between the following options: recurrence, start time, recurrence pattern, and range of recurrence.



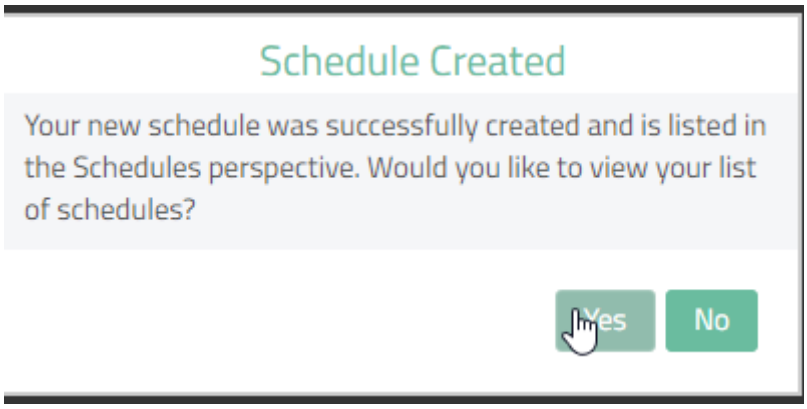
Finally, the format of the scheduled report could be chosen: HTML, PDF, Excel or CSV.



In addition, it allows sending an email with that report attached:



The scheduled report is seen by default in the Scheduled option



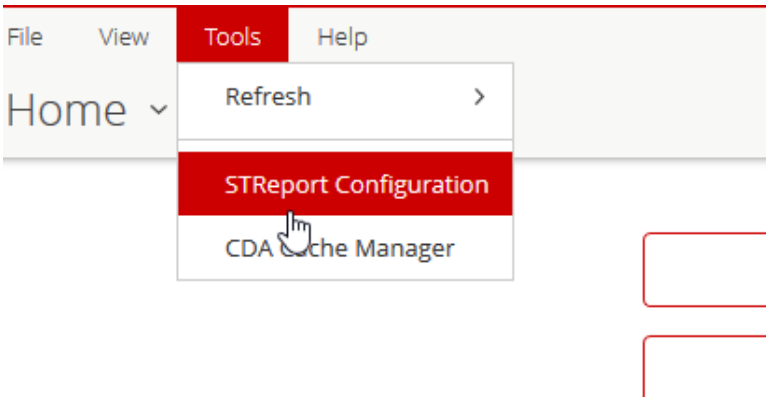
Also in the folder (File List), where reports are created, in the format that was selected, which could be viewed from Explore your Data and open, execute, edit.

14. USER/ROL CONFIGURATION

STReport includes a brand-new feature which allows you to assign templates and colors to the user and roles.

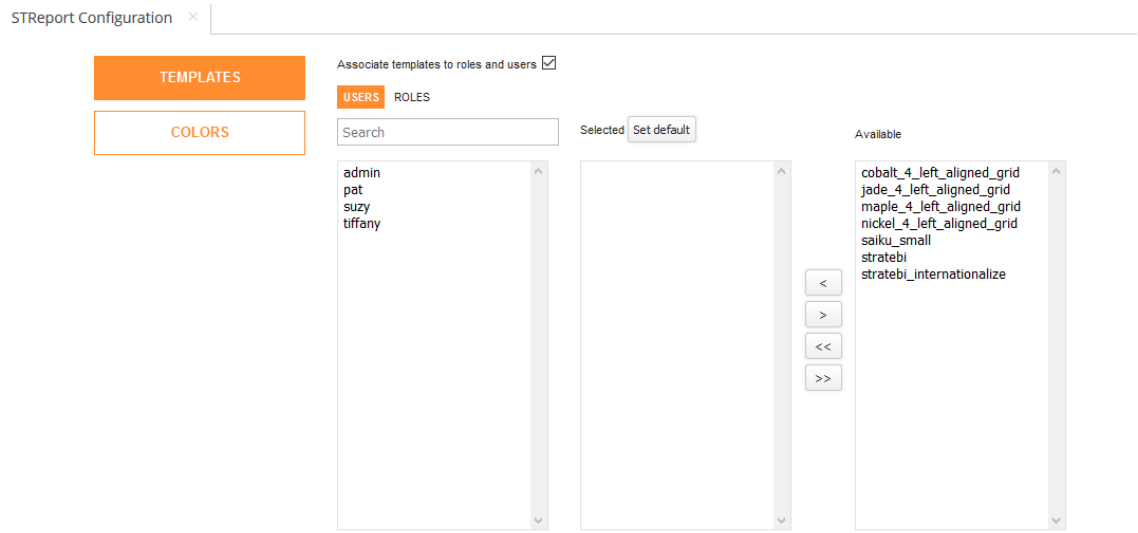
It may happen that several clients share the same environment and each client wants to see their corporate templates and colors. With this new feature, the administrator user will have the possibility to configure this option from the browser itself.

To perform this configuration, the admin user will have access to "STReport Configuration" located at Tools dropdown:

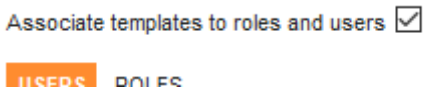


14.1 Customize templates

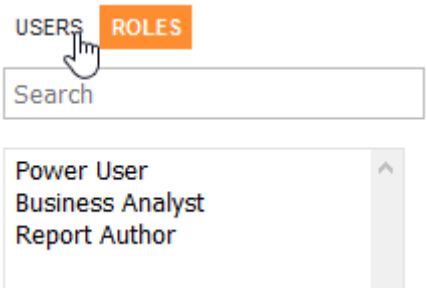
Access the first option of the Configurator called "TEMPLATES":



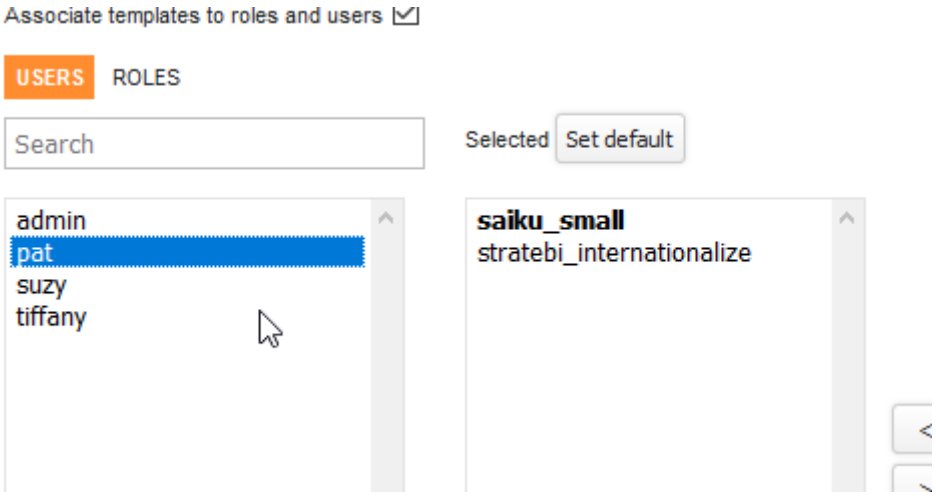
Firstly we can active/disable this feature thanks to the checkbox "Associate templates to roles and users ".



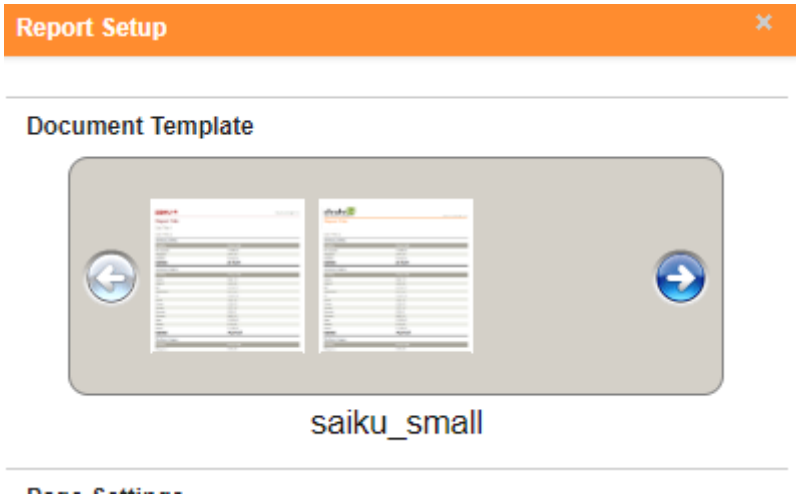
We can assign the available templates at both leves, roles and users:



Using the "Set Default" button, we will choose the template assigned by default to that role / user. This template will be marked in bold:



Pat user will only have access to saiku_small and stratebi_internationalize:

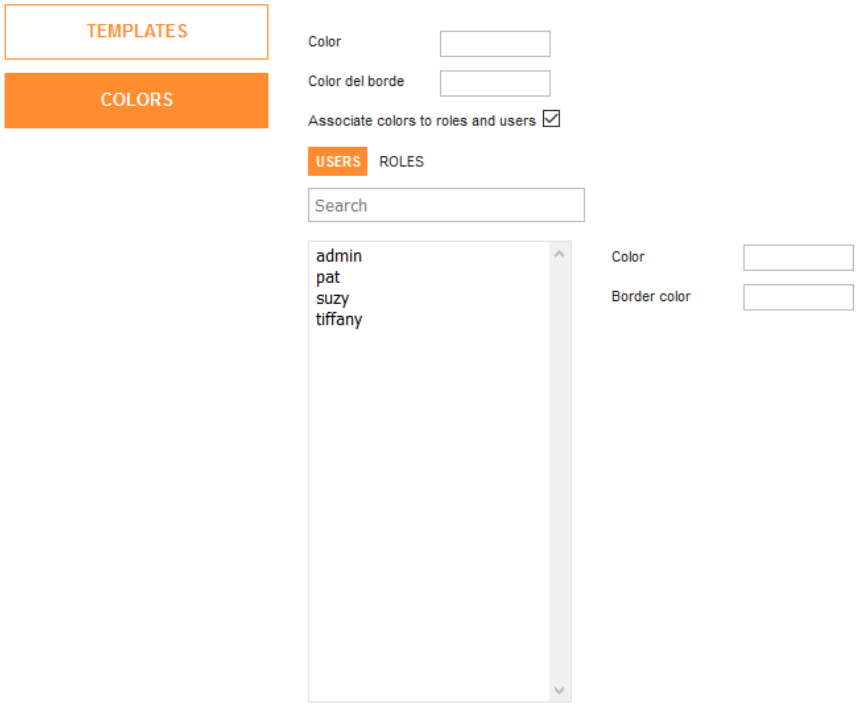


The template assignment logic is done as follows:

- The administrator sees all the templates
- The role and user permissions complement each other, for example, if the pat user is assigned 1 template and belongs to the role "Business Analyst" wich can choose 2 other templates, that user can choose all 3 templates.
- In case you don't have a template assigned by default, the first located at the "Selected" section will be assigned by default.
- In case you don't have any template available, you can only use the template specified in the saiku-adhoc.default.template property of the saiku-adhoc.properties file. Defaults configuration's is stratebi template.

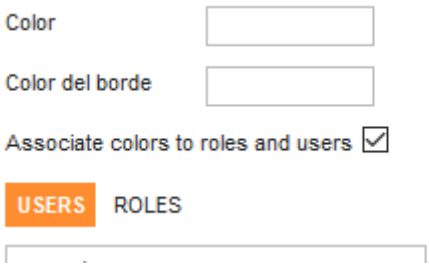
14.2 Customize colors

In the same way, we can assign the colors of the STReport interface in the "COLORS" section.

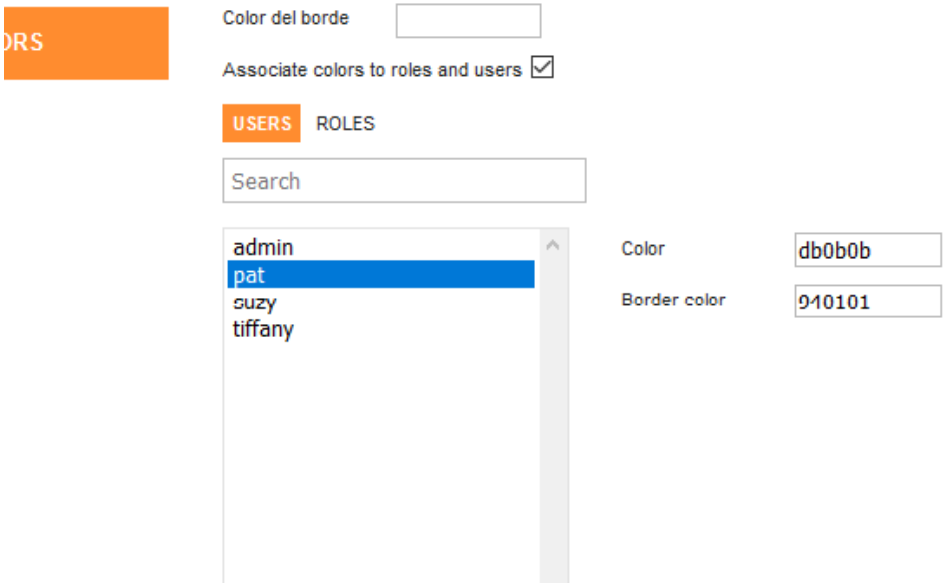


The configurator allows you to customize 2 colors, border-color and Color:

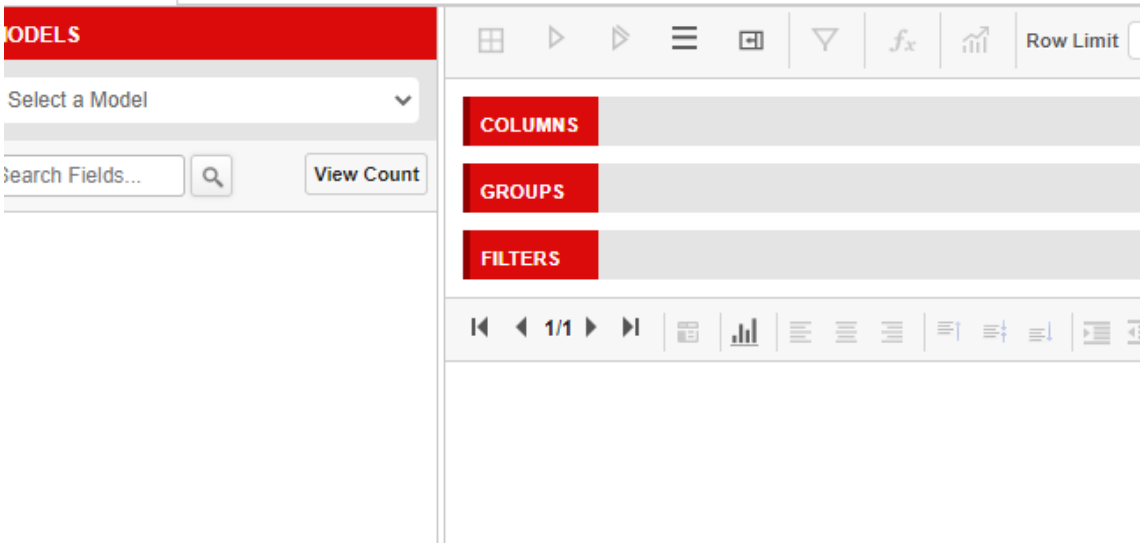
In addition to being able to customize the color at the User and Role level, it can also be customized at the global level, this is done in the 2 inputs located above the "Associate templates to roles and users" checkbox.



User pat will have the border color # 940101 and the background color # db0b0b:



The following image is the result:



15. ADDITIONAL MATERIAL

You can check the following video with STReport's features, inside the Stratebi channel on youtube:

https://www.youtube.com/watch?v=ibdxGSct8zM