



# Knowage v6.3

**KNOWAGE**

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## 1 Introduction

**Knowage** is an Open Source Business Intelligence suite, it offers a large range of analytical functions, a highly functional semantic layer often absent in other open source platforms and projects, and a respectable set of advanced data visualization features including geospatial analytics.

### 1.1.1 Supported Browsers

#### *Windows Environment*

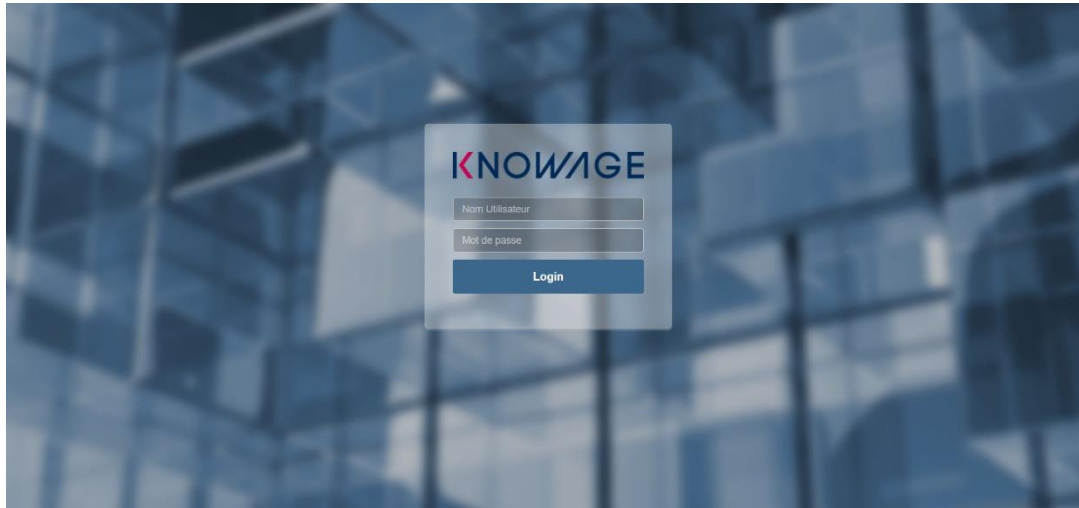
The system is optimized for Firefox 30+, Microsoft Edge and Chrome.

#### *MacOS Environment*

The system is supported by Safari 6+, Firefox 30+ and Chrome.

## 2 General Graphic User Interfaces (GUIs)

### 2.1.1 Login



eVision should set username, password and privileges prior the user can log in.






## 2.1.2 User menu

To open the main menu, simply click the button in the upper left corner of the home page :





Main menu consists in a set of icons associated with basic features. It is divided in two submenus: the general menu, which is collapsed, and the BI functionalities menu. It is important to underline that not all the components of the menu are mandatory, but they may be configured by the administrator according to user's needs.

*Menu components - General menu*

Icon	Name	Description
	Knowage user	Open a hidden menu with extra functionalities.
	Select role	Select the authentication role (available if you are associated to more than one role).
	Languages	Language options.
	Info	Info about Knowage version.
	Log Out	Log out.

*Menu components - BI functionalities menu*

Icon	Name	Description
	Document browser	Show the archive folders and related documents.
	Workspace	Inquiry, navigate and create your data.

**Document Browser**

It enables you to access the documents shared to you and the functionality trees.

**Workspace**

Entering the Workspace, you will find the sections: Recent, Documents, Data and Analysis. The “Recent” area shows the latest documents you were working on, while “Documents” contains the analytical documents the user asks to be archived on this area. This way the user has a more rapid and efficient way to retrieve the documents of his interest. The “Data” section is made up of the “Dataset” and the “Models” subsections. In the Dataset one you can access all the self-service BI features.

The **General menu** is identified with the first icon in General Menu and a label containing your user name. Opening the general menu, you have the following extra buttons:

**Select role**

If your user is associated with more than one role, Knowage requests you to specify the default role. You can select it when executing a document, or right after authentication by clicking on this icon and choosing a default role.

**Languages**

Select the language of Knowage environment.

**Info**

View the details of current Knowage version.

To conclude the overview of this area we describe a not mandatory element. When configured by the Knowage administrator, you can have quick links to a static page, a document, a folder or an external application, like for instance a web page. These links are displayed below the BI functionality’s menu, as shown below.



### 3 Summary of features

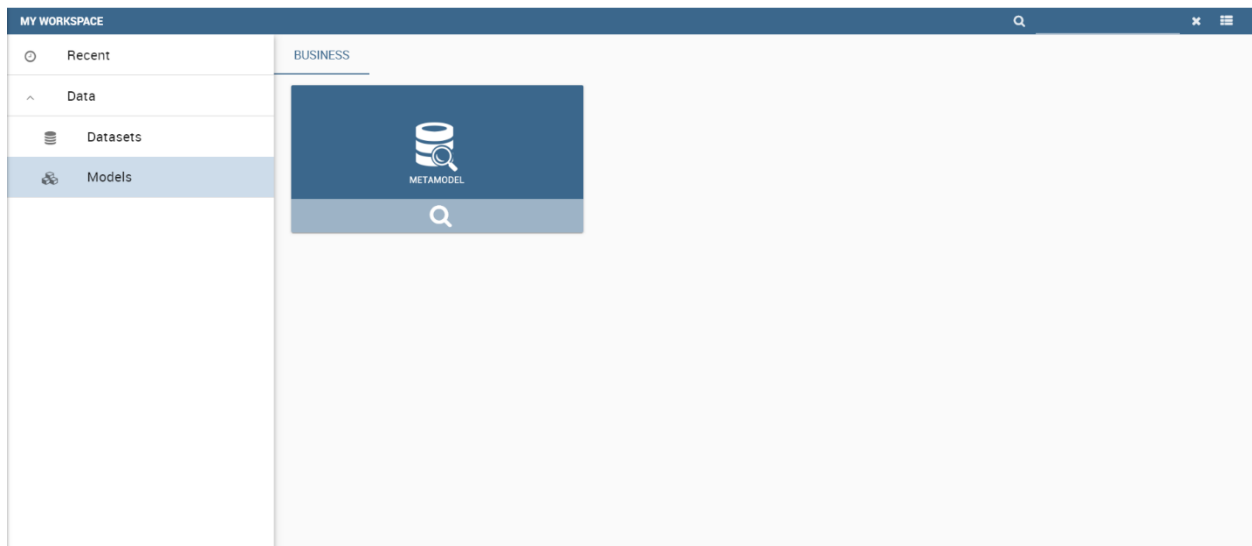
The process of creating a report with widgets is divided in three parts. First, you create a dataset from a model using the QbE, use one that has been shared with you or one you already created. Next, you create a Cockpit document allowing you to use one or more datasets and display their data the way you want, using widgets. Finally, you save your newly created Cockpit where you want in the functionality tree. You can then view it whenever you want, whether you need to consult it or export it as a file.

#### 3.1 Query by Example (QbE) or Datamart

##### 3.1.1 QbE – Designer

###### 3.1.1.1 Models

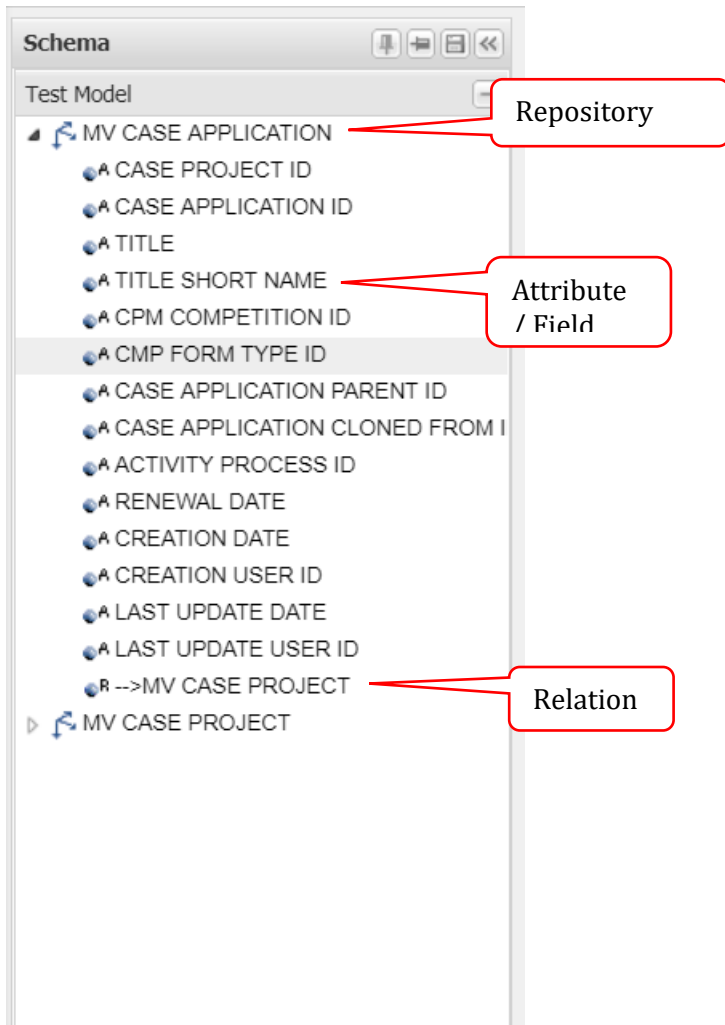
The models available to a user are shown in the **Models** section of the user's workspace. You can click on the magnifying glass to open the QbE.





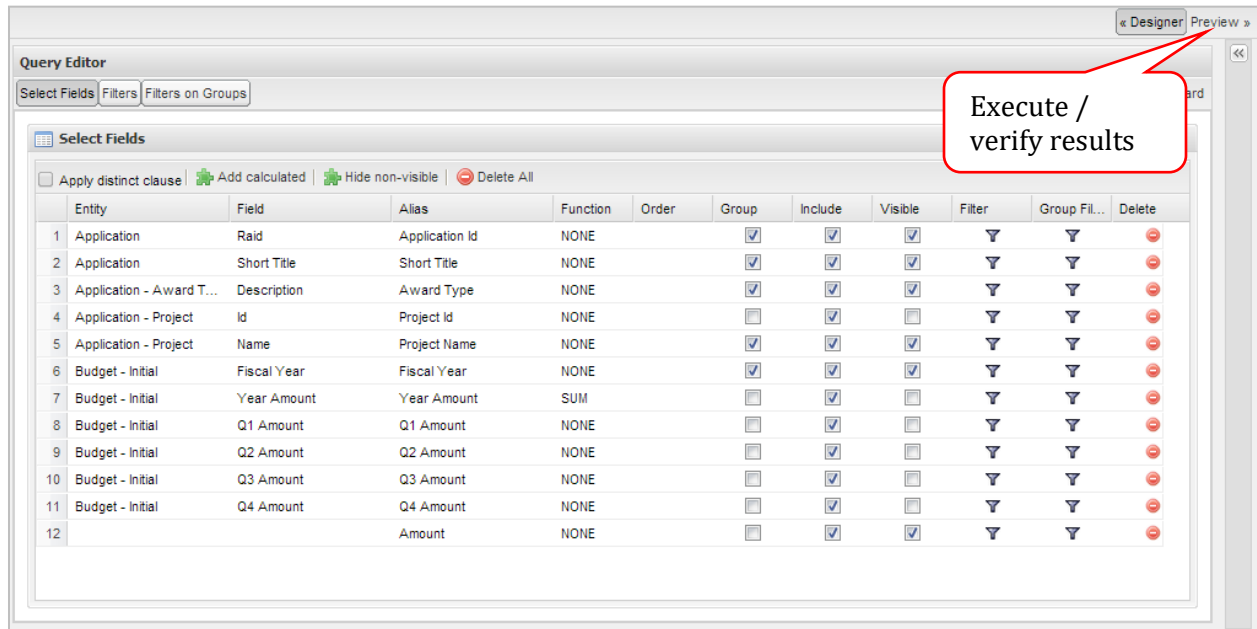
### 3.1.1.2 Schema

The **Schema** section lists all the repositories available in the selected model. Each repository has its own use and fields. You can use fields from multiple repositories if they are linked together with a relation or if they can be linked by multiple relations.



### 3.1.1.3 Query Editor – Select Fields

Query Editor contains selected attributes/fields for reporting. Select fields of interest (apply grouping or function for each and add calculated fields) from the **Schema** section.



#### Alias

Specify the name of field that appears on the report. Each field name must be unique in the query, so you must use aliases when needed.

#### Group

Specify which fields to group for calculations.

#### Visible

Specify if the field appear on the report or not. Uncheck the box if the field has been choosing only for calculation purposes.

### 3.1.1.4 Functions

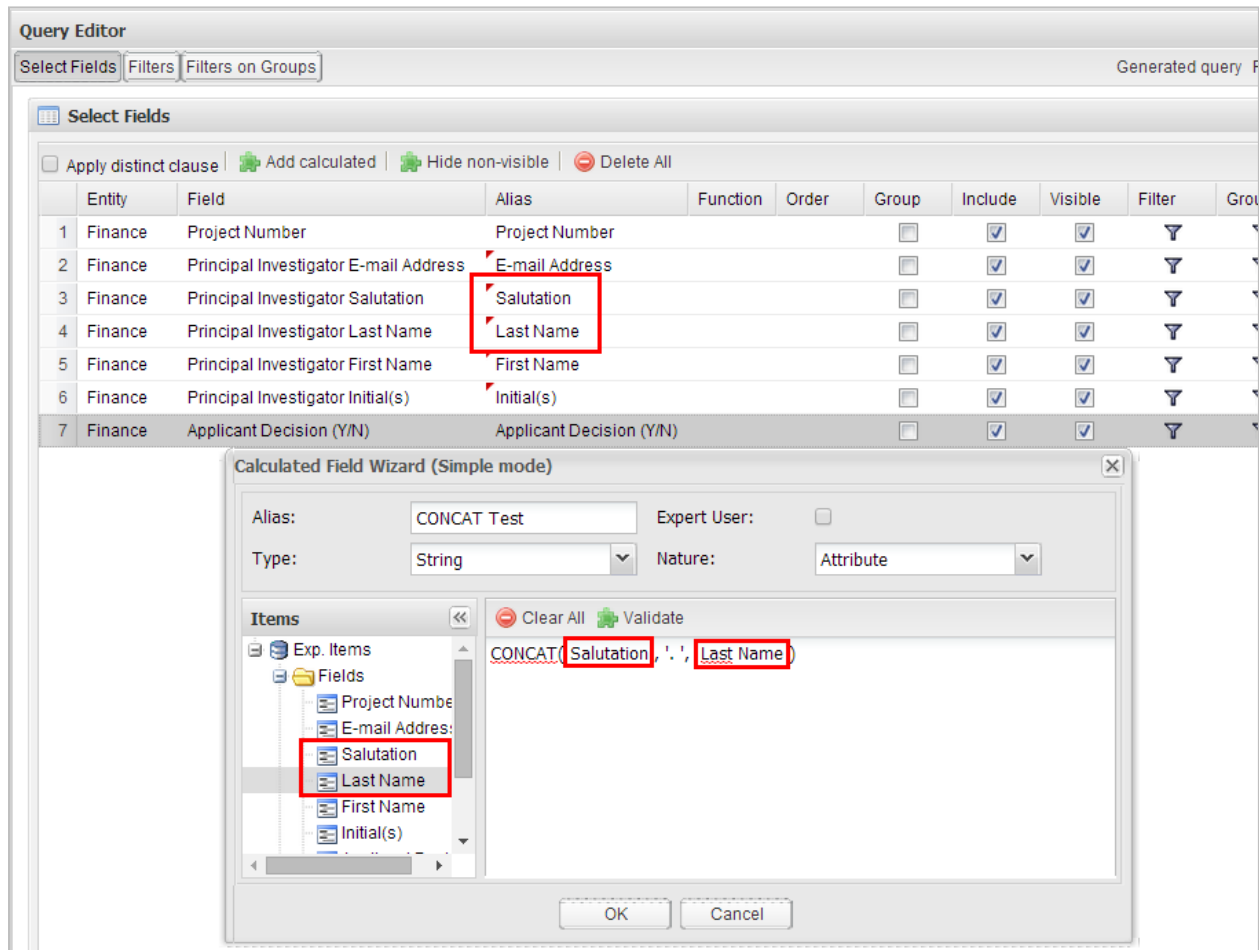
Specify the appropriate function (sum, count ...) for each non-grouped field.

### 3.1.1.5 Calculated Fields

If you select the “Add calculated” option from the header's context menu, a wizard will appear. You have to fill the name and the expression of the calculated field.

**Note that a calculated field cannot be at the beginning of the query editor and it should not be a space between an SQL expression and a bracket (e.g. CONCAT (....))**

You can also use SQL functions in the text area.



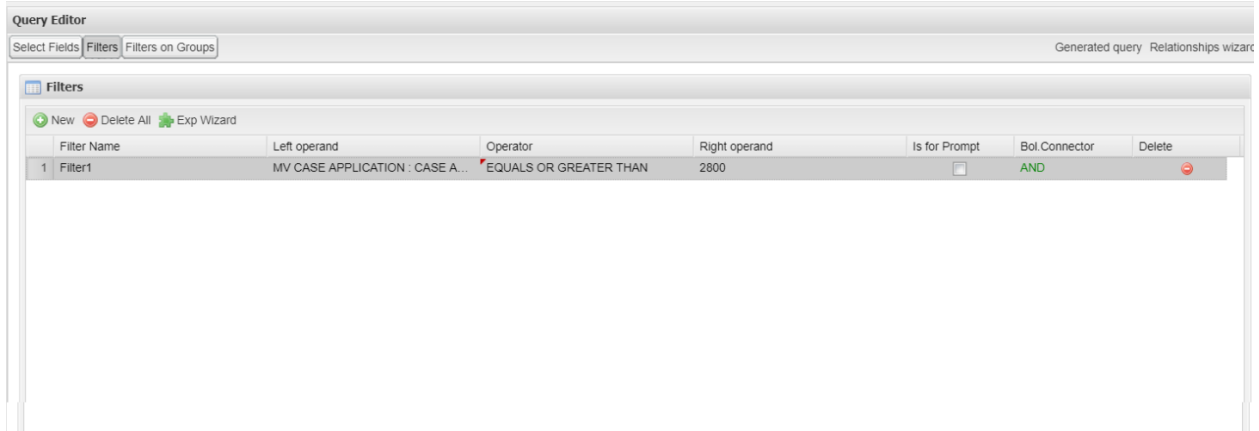
3.1.1.5.1 Available Functions

Fonction	Oracle	MySQL	Exemple
<b>CASE WHEN ... THEN ...</b>	x	x	<b>CASE WHEN</b> Signed = 'Y' <b>THEN</b> 'Yes' <b>ELSE</b> 'No' <b>END</b>
<b>CONCAT</b>	x	x	<b>CONCAT</b> (Dr, '.', Name) →
<b>UPPER</b>	x	x	<b>UPPER</b> ('tremblay') → 'TREMBLAY'
<b>LOWER</b>	x	x	<b>LOWER</b> ('TREMBLAY') → 'tremblay'
<b>LCASE</b>		x	<b>LCASE</b> ('TREMBLAY') → 'tremblay'
<b>UCASE</b>		x	<b>UCASE</b> ('tremblay') → 'TREMBLAY'
<b>INITCAP</b>	x		<b>INITCAP</b> ('tremblay') → 'Tremblay'
<b>CHR</b>	x		<b>CHR</b> (116) → 't'
<b>COALESCE</b>	x		<b>COALESCE</b> ('Tremblay', 'Jean') → 'Tremblay'
<b>CHAR_LENGTH</b>		x	<b>CHAR_LENGTH</b> ('Tremblay') → 8
<b>INSTR</b>	x		<b>INSTR</b> ('Tremblay', 'e') → 3
<b>LENGTH</b>	x		<b>LENGTH</b> ('Tremblay') → 8
<b>LPAD</b>	x		<b>LPAD</b> ('Tremblay', 12, 'X') → 'XXXXTremblay'
<b>LOCATE</b>		x	<b>LOCATE</b> ('Tremblay', 'bla') → 5
<b>RPAD</b>	x		<b>LPAD</b> ('Tremblay', 12, 'X') → 'TremblayXXXX'
<b>TRIM</b>	x	x	<b>TRIM</b> (' Tremblay ') → 'Tremblay'
<b>LTRIM</b>	x	x	<b>LTRIM</b> (' Tremblay ') → 'Tremblay '
<b>RTRIM</b>		x	<b>LTRIM</b> (' Tremblay ') → ' Tremblay'
<b>REVERSE</b>		x	<b>REVERSE</b> ('Tremblay') → 'yalbmerT'
<b>SUBSTRING</b>		x	<b>SUBSTRING</b> ('Tremblay', 4) → 'mblay'
<b>REPLACE</b>	x		<b>REPLACE</b> ('Tremblay', 'ay', 'eau') → 'Trembleau'
<b>NVL</b>	x		<b>NVL</b> (Nom, 'Tremblay') → 'Tremblay'
<b>NULLIF</b>	x		<b>NULLIF</b> ('Tremblay', 'Tremblay') → NULL
<b>TO_CHAR</b>	x		<b>TO_CHAR</b> (sysdate, 'yyyy/mm/dd') → '2014/07/02'
<b>DATE_FORMAT</b>		x	<b>DATE_FORMAT</b> (sysdate(), '%W %M %Y') → Wednesday July 2014
<b>TO_DATE</b>	x		<b>TO_CHAR</b> (sysdate, 'yyyy/mm/dd') → '2014-07-02'
<b>CURRENT_DATE</b>	x		<b>CURRENT_DATE</b> → '2014/07/02'
<b>CURDATE</b>		x	<b>CURDATE</b> () → '2014/07/02'
<b>SYSDATE</b>	x	x	<b>SYSDATE</b> → '2014/07/02'
<b>DATEDIFF</b>		x	<b>DATEDIFF</b> ('2014-11-30','2014-11-29') → 1
<b>ADD_MONTHS</b>	x		<b>ADD_MONTHS</b> ('01-Aug-14', 3) → '01-Nov-14'
<b>DAY</b>		x	<b>DAYOFMONTH</b> ('2014-02-03') → 3
<b>MONTH</b>		x	<b>MONTH</b> ('2014-02-03') → 2
<b>TRUNC</b>	x		<b>TRUNC</b> ( <b>TO_DATE</b> ('22-AUG-14'), 'YEAR') → '01-JAN-14'
<b>EXTRACT</b>		x	<b>EXTRACT</b> (YEAR FROM sysdate) → 2014
<b>ROUND</b>	x	x	<b>ROUND</b> (125.315, 1) → 125.315
<b>FLOOR</b>	x	x	<b>FLOOR</b> (5.9) → 5
<b>LAST_DAY</b>	x	x	<b>LAST_DAY</b> (sysdate) → '14/07/31'
<b>NEXT_DAY</b>	x		<b>NEXT_DAY</b> (sysdate, 'TUESDAY') → '2014/07/08'

<b>FROM_DAYS</b>		x	<b>FROM_DAYS</b> (730669) → '2007-07-03'
<b>FROM_UNIXTIME</b>		x	<b>FROM_UNIXTIME</b> (1196440219) → '2007/11/30 10:30:19'
<b>MONTHNAME</b>		x	<b>MONTHNAME</b> ('2014-02-03') → 'February'
<b>NOW</b>		x	<b>NOW</b> () → 2014-07-02 13:01:41
<b>QUARTER</b>		x	<b>QUARTER</b> ('2014-04-01') → 2
<b>SYSDATE</b>	x	x	<b>SYSDATE/ SYSDATE</b> () → 07/02/2014 13:04:53
<b>TO_DAYS</b>		x	<b>TO_DAYS</b> ('2014-10-07') → 735878
<b>WEEK</b>		x	<b>WEEK</b> ('2014-10-07') → 40
<b>WEEKOFYEAR</b>		x	<b>WEEKOFYEAR</b> ('2014-10-07') → 41

### 3.1.1.6 Query Editor – Filters

The filters at this stage influence the calculated fields. The system applies filters BEFORE functions and calculated fields. To add a filter, simply click on the field in the **Schema** section and apply the condition you need using an **Operator** and specify the **Right operand** when needed.



### 3.1.2 QbE – Preview (non-formatted results)

Verify data before going to next step.

	Project Type	Id	Short Title	Parent - Project Id	Parent - Name	Project Id	Name	Description	Fiscal Year	Calculated Sum Qx
1	<i>Confidential Data</i>									
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										

### 3.1.3 QbE – Save dataset

When you are satisfied with your dataset’s results, you can save it as a dataset using the save icon in the upper right corner.



#### 3.1.3.1 Generic

The Generic tab of the save window is the first one to be filled.

Fill in the dataset details and click on Save

**Generic** Persistence Metadata

Label:

Name:

Description:

Scope:  ▼

Category:  ▼

**Label**

Label of dataset used by the database. This field must be unique for all the datasets and must not contain any special or accented characters. It is preferred to use lowercase letters and separate them using underscores instead of spaces like shown in the figure above. This field is required.

**Name**

The name of the dataset that will appear in the workspace for all the users having access to the dataset. This field is required.

**Description**

Optional text providing a descriptions to the dataset for informational purposes.

**Scope**

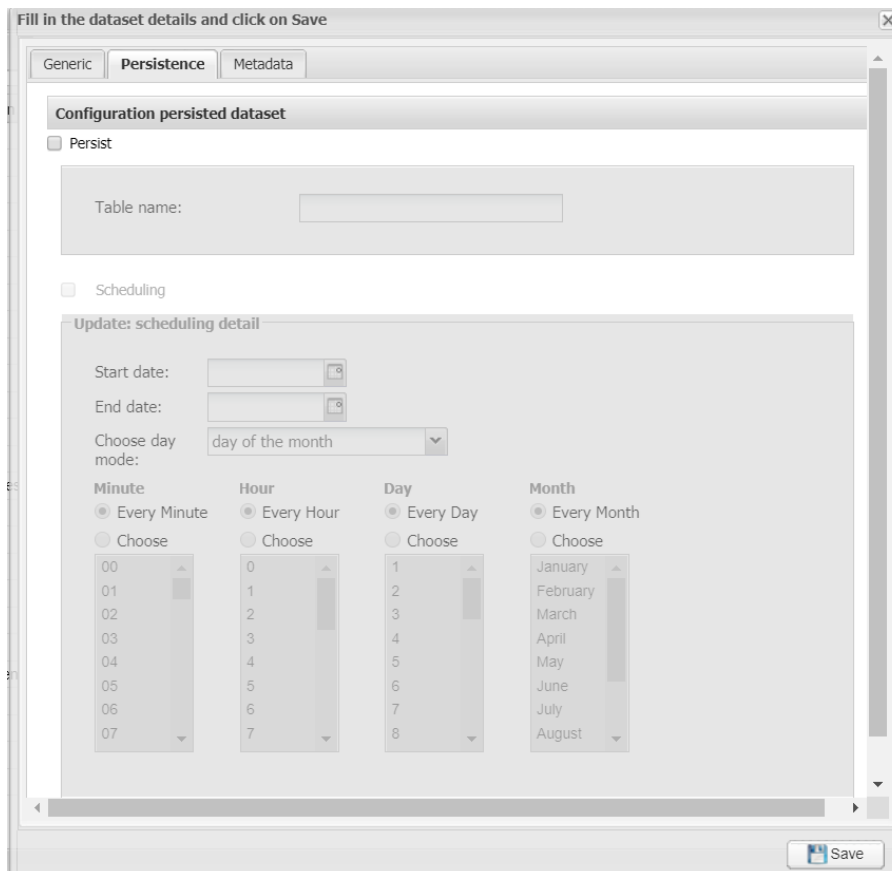
The scope of dataset. All users in the selected scope will have access to it. If you choose USER, only you will be able to use it.

**Category**

Required if selected scope is ENTERPRISE. Provides a category to the dataset to ease the categorization of datasets.

**3.1.3.2 Persistence**

This tab allows you to make the report persistent, meaning the data that it returns now will be saved in the database. Further uses of the dataset will be faster since the data will have already been fetch. However, the results might be outdated.





**Persist**

If checked, you will need to specify the name of the table containing the data in the database.

**Scheduling**

If checked, you will have to choose an interval of time that the dataset's table will refresh its data.

**3.1.3.3 Metadata**

This tab allows you to specify if each field is an attribute or a measure.

Field name	Field metadata
Project ID	ATTRIBUTE
Application ID	ATTRIBUTE
Application Title	ATTRIBUTE
Application Short Title	MEASURE
CPM Competition ID	ATTRIBUTE

**Attribute**

An attribute can be used as categories in charts and cross tables to be grouped by.

**Measure**

A measure can be used in calculations in charts and cross tables. Functions like sum or average can only be used on measures.

## 3.2 Cockpit

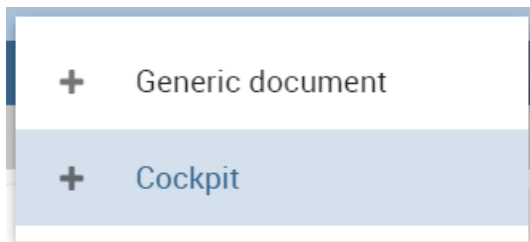
A Cockpit report allows you to visualize your datasets the way you want. Using widgets, you can filter your results, show them in tables and even use complex charts.

### 3.2.1 Cockpit - Creation

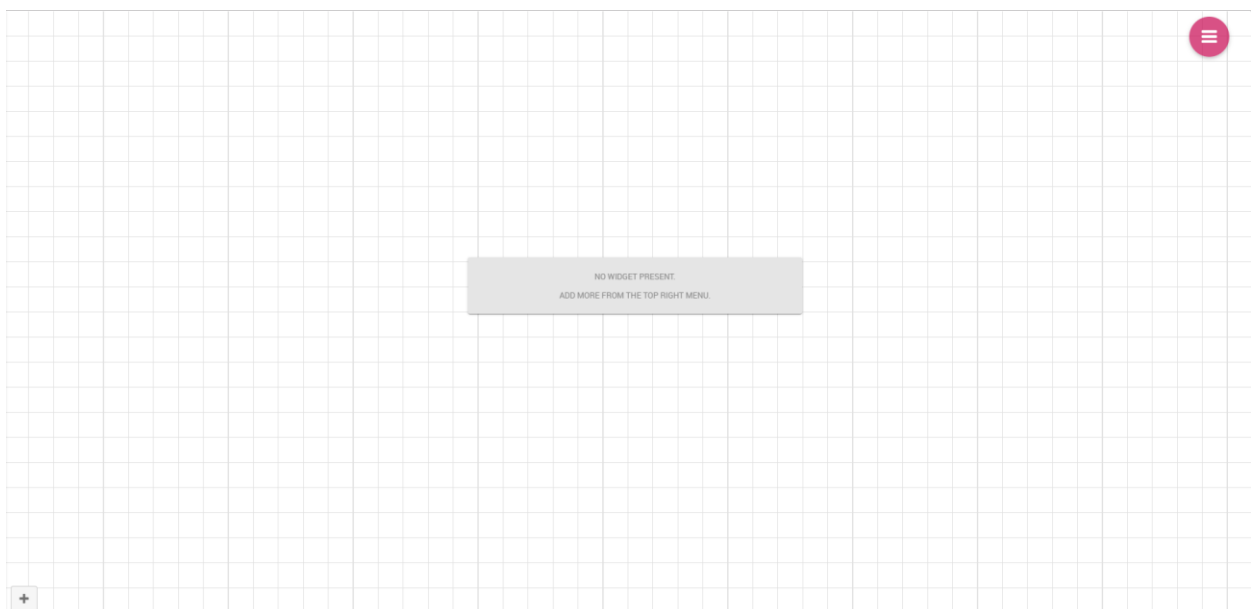
To create a cockpit, head over to the document browser and in the folder you want to add your cockpit into.



Use the white cross in the upper right corner and choose **Cockpit**










#### 3.2.1.1 Graphic User Interface (GUI)



The cockpit menu, hidden by default, can be expanded after clicking its toggle in the upper right corner.



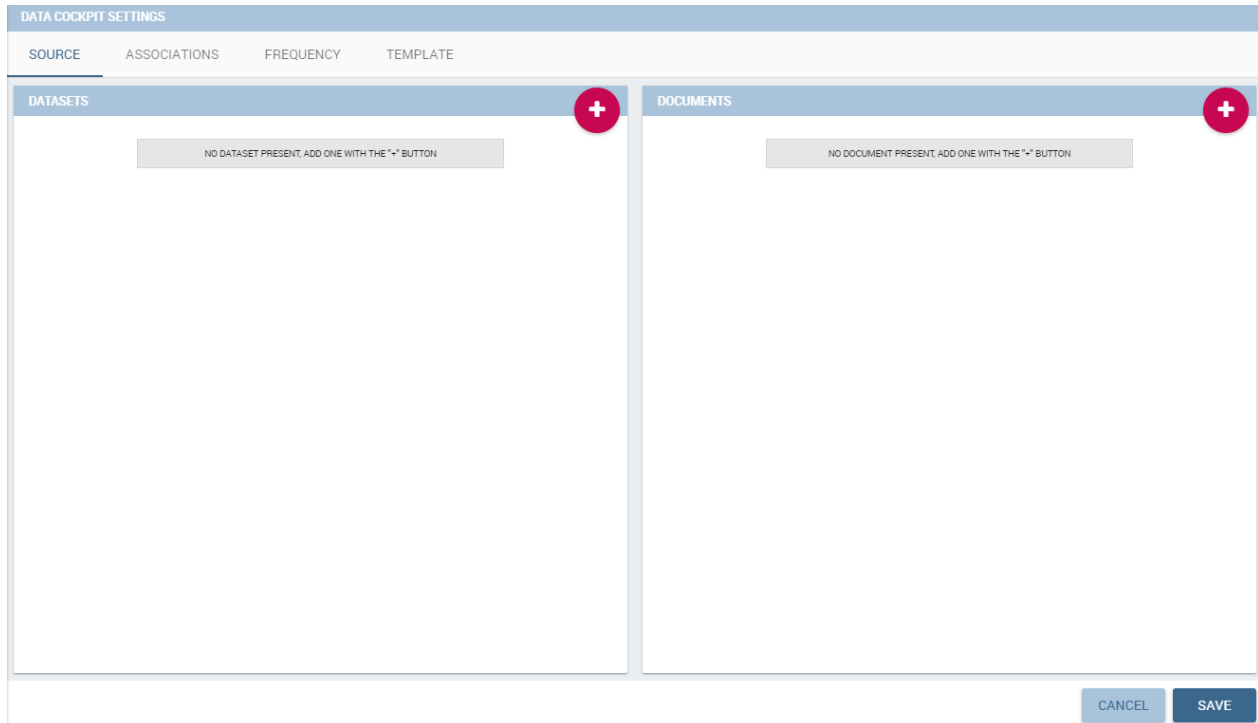
*Cockpit Menu components*

Icon	Name	Description
	Clear cache	Open a hidden menu with extra functionalities.
	Selections	It adds a widget that manages selections.
	Data configuration	It opens a window where you can manage the dataset, the association between datasets and the refresh frequency.
	General configuration	It opens the window where you set the general cockpit options (name, label, show menu, etc.) and widgets' default style (header, titles, borders, etc.).
	Add widget	It opens a window where you can create a new chart or table, add texts, images or Knowage documents.
	Save as	It opens the window to save the cockpit document as a new document.
	Cockpit menu	Configuration menu of Cockpit.

### 3.2.1.2 Data configuration

Before creating any widgets, you need to add datasets to the cockpit. These datasets provide you the data you want to show in the widgets.

This feature manages the data storage and usage. In fact, here there is the possibility to save data in cache, create associations between datasets, schedule the (data) refresh frequency and so on. Referring to the figure below, the feature is implemented through several tabs: The **Source** tab, the **Associations** tab, the **Frequency** and the **Template** tab.

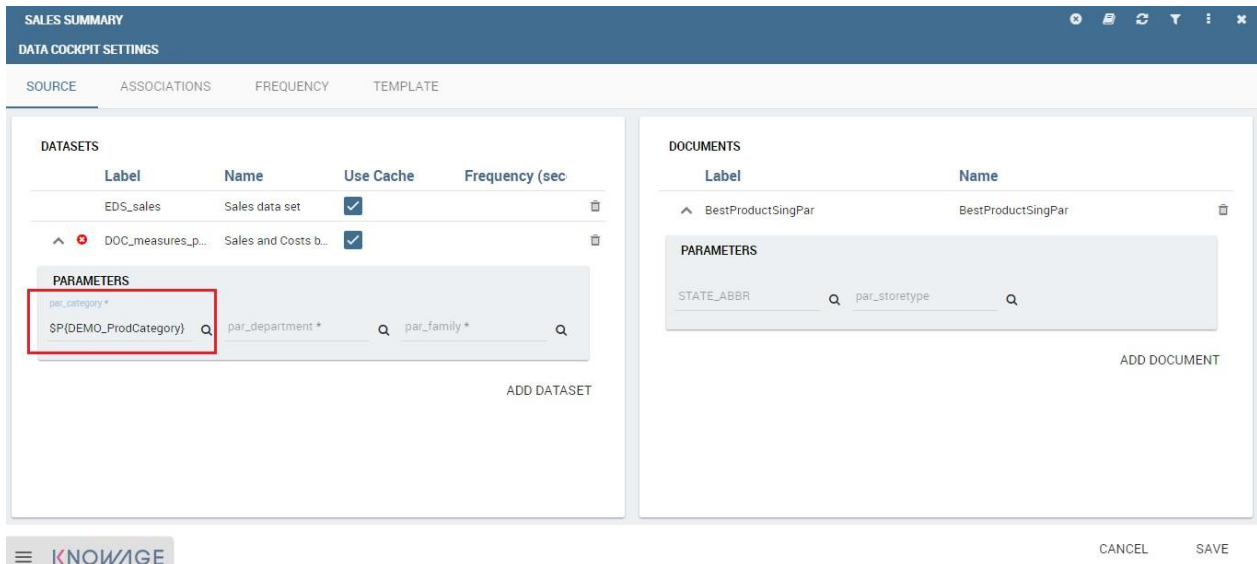


#### Source

The Source tab is split into two areas. On the left side the user can find the list of those dataset that are currently used by the cockpit. Here it is possible to add new dataset that will be passed to widgets. In other words, datasets inserted in this area will be listed in the dataset combo box of widgets like the Table, the Pivot Table and the Chart one. Note that the user can delete datasets as well.

#### Parametric sources management

If the user is adding a parametric dataset the window will exhibit them in an expandable box right below. It is also mandatory to give default values or to associate proper drivers to the document to secure its correct execution. By the way, a final user has no access to parametric dataset, and he/she cannot handle analytical drivers, therefore **parametric sources can be managed only by an admin user**. We stress that the user must also type the driver name in the field box as highlighted in Figure below. You can type it manually or use the look up just aside the parameter line.

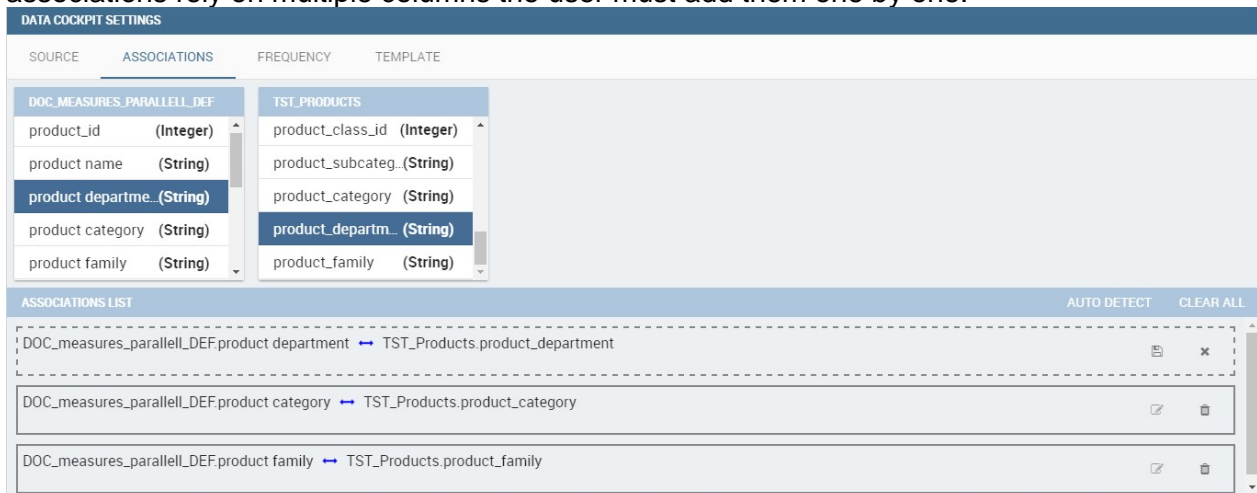


On the right side of the window the user finds the list of external documents that can be added to the cockpit (through Document widgets), or as well as for the dataset case, of documents that are already in use in (previously set) Document widgets. In the occurrence of Associations parametric documents, parameter boxes are shown below. Note that it is mandatory to link them to analytical drivers (previously hooked to the document) or be assigned a fixed (default) value.

### Associations

If your goal is to show data from a single dataset, it is not necessary to define any association. *Associations should be set within the designer when widgets are built on different datasets.* Associations can be set with the elements: dataset columns, dataset parameters and document parameters. Note that to implement an association the user must have at least one column. We show some examples in the following.

The following figure shows the association between two datasets. In this case the user must detect one field from the first dataset, the same field (in terms of values) in the other one. The relation will appear right below. Click on the save button to confirm the association. If the associations rely on multiple columns the user must add them one by one.



The same procedure can be done in the case of dataset columns and dataset parameters, as shown below.

The screenshot shows the 'DATA COCKPIT SETTINGS' window with the 'ASSOCIATIONS' tab selected. It displays two datasets: 'DOC\_MEASURES\_PARALLELL\_DEF' and 'TST\_PRODUCTS'. The 'DOC\_MEASURES\_PARALLELL\_DEF' dataset has columns: units (BigDecimal), revenues (BigDecimal), SP(par\_category) (String), SP(par\_departme...) (String), and SP(par\_family) (String). The 'TST\_PRODUCTS' dataset has columns: product\_class\_id (Integer), product\_subcateg... (String), product\_category (String), product\_departm... (String), and product\_family (String). Below the datasets, the 'ASSOCIATIONS LIST' shows three associations: DOC\_measures\_parallell\_DEF.SP(par\_family) ↔ TST\_Products.product\_family, DOC\_measures\_parallell\_DEF.SP(par\_category) ↔ TST\_Products.product\_category, and DOC\_measures\_parallell\_DEF.SP(par\_department) ↔ TST\_Products.product\_department. There are 'AUTO DETECT' and 'CLEAR ALL' buttons at the top right of the list.

Another example is supplied in Figure below. Here the association is performed between a dataset Frequency column and document parameter.

The screenshot shows the 'PRODUCT ANALYSIS' window with the 'DATA COCKPIT SETTINGS' sub-window. The 'ASSOCIATIONS' tab is selected. It displays two datasets: 'DS\_BASE\_FOR\_GIS' and 'MAP\_PAR'. The 'DS\_BASE\_FOR\_GIS' dataset has columns: product\_family (String), product\_departm... (String), the\_year (String), country (String), and region (String). The 'MAP\_PAR' dataset has a column: SP(par\_family) (String). Below the datasets, the 'ASSOCIATIONS LIST' shows one association: MAP\_PAR.SP(par\_family) ↔ DS\_BASE\_FOR\_GIS.product\_family. There is a 'CLEAR ALL' button at the top right of the list. At the bottom of the window, there is a 'KNOWAGE' logo and 'CANCEL' and 'SAVE' buttons.

Once you have defined the associations, as soon as you refresh one widget, all related widgets are refreshed simultaneously on data update.

### 3.2.1.3 Widgets

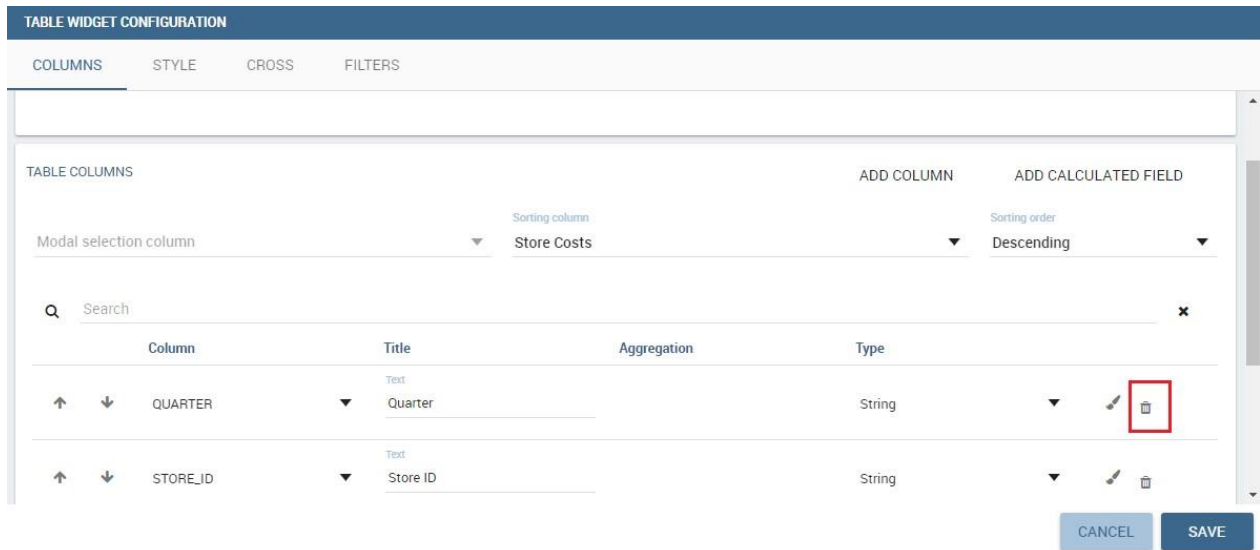
After clicking the **Add widget** item in the cockpit's menu, you can choose the widget you wish to add to the current sheet. You can add as many widgets as you want. In this guide, there will only be examples of these widgets : selector, table and chart. For further explanation on the other widgets, please refer to the [Detailed User Guide](#).

#### 3.2.1.3.1 Table

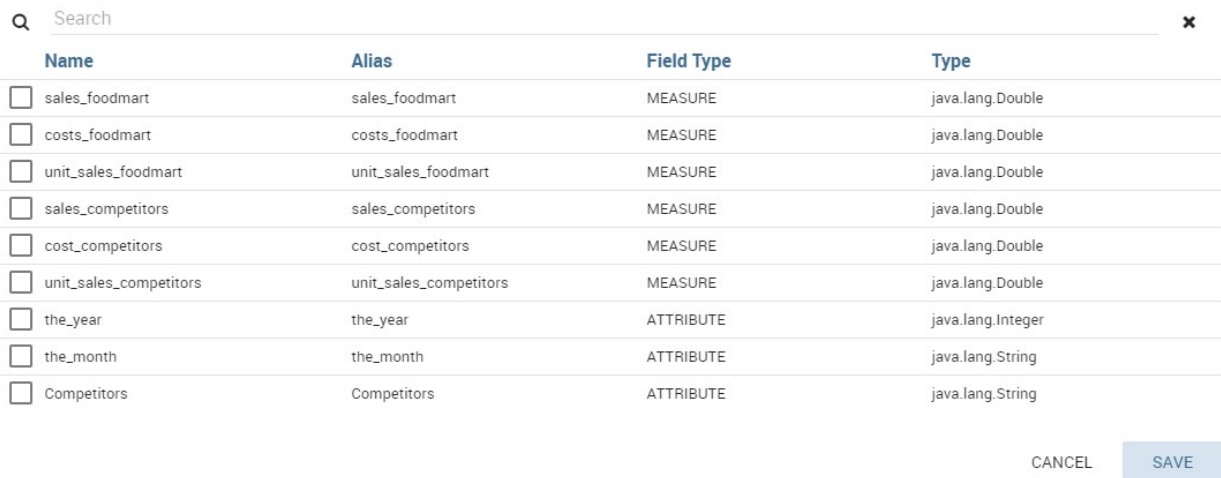
The **Widget table configuration** opens, and it guides you through the steps to configure the widget. The pop-up opens showing the **column** tab, as you can see from the figure below. It is mandatory to select a dataset using the combo box (only if at least one dataset has been loaded using the **Data Configuration** feature) or clicking on the icon **+** available aside the combo box line. You can page the table specifying the number of rows per sheet. Consequently, the user can set columns properties.

The column area is divided into two parts: on the left side you have columns ordering, on the right the user has the button to add a new column or a calculated field. As soon as the dataset is selected, you can indicate the sorting column or modal selection column. The modal selection serves to specify which value will be passed to other widgets (if interaction is enabled) when clicking on the cell at document execution time. You can specify this field by selecting a value from the combo box. In the same way, you indicate the sorting column and the order type that steers the rows ordering. You can select the field and the order from the dedicated combo boxes.

When a dataset is added to a table widget, all its columns are listed below. If the user doesn't wish to show some of them, he can use the delete button available at the end of each column row, as shown below.

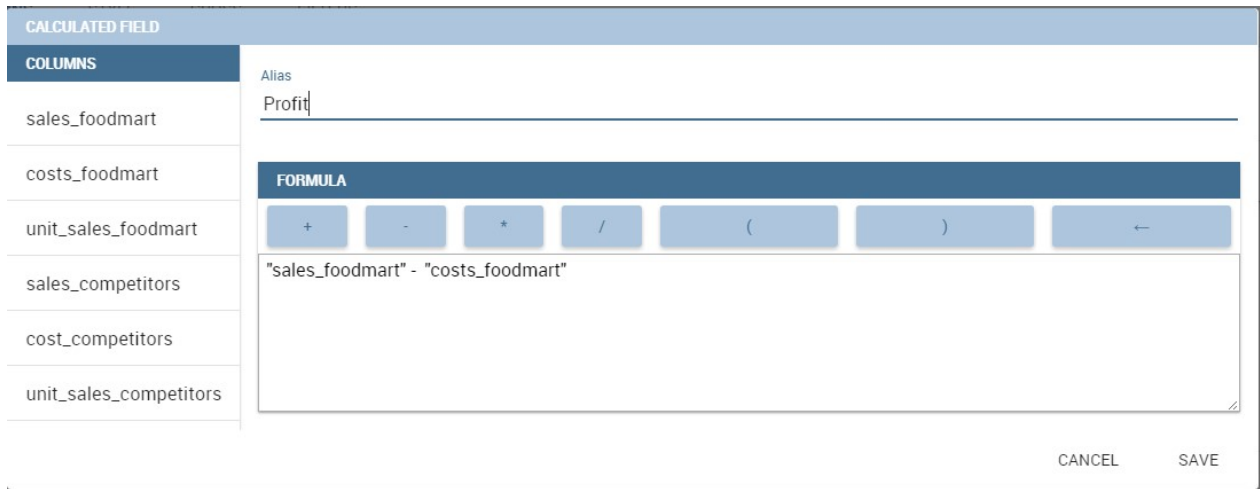


In case of accidental cancellation or new table requirements, it is possible to re-add columns. In order to add a new column, you must click on the **Add Column** icon on the top right of the second box. Once opened you can select one or more columns. When you have finished selecting the desired columns you can click on save button and your new columns will appear in the field list. Refer to Figure below.

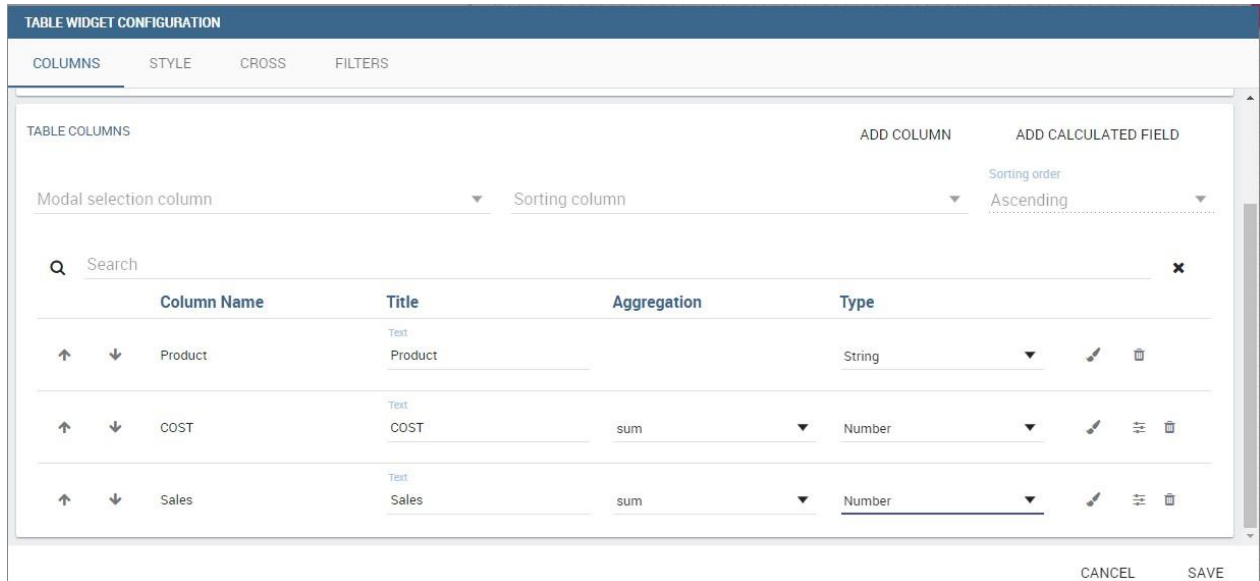


Likewise, to add a calculated field you must click on the **Add Calculated field** icon next to add column icon. Once opened the Calculated Field Wizard you must type an alias for your calculated field in the dedicated area at the top corner of the wizard. Then you can choose from the Items Tree the fields and the arithmetic function you want to use for building your expression. In the middle you can see the expression you have built. If you prefer you can create or modify the expression manually directly in the panel which is editable. When you are satisfied with your expression you can click on save button and your calculated field appears in the field list. We provide an example in the following figure.





At the very bottom of the window, you can see the dataset fields listed and you can also sort columns displayed in the table, insert a column alias and customize it by adding font and style configurations using the brush shaped icon, as you can see from the figure below. Here you can find configuration features like the column size, max cell characters, hide on mobile option, etc.



Note that here you can indicate the column type and the aggregation. To add an aggregation to a column you must control the type of data that column has. An aggregation can only be added if the column value is of “number” type. The different aggregation functions are none (you also can not add any aggregation function), Sum, Average, Maximum, Minimum, Count and Count distinct.

### 3.2.1.3.2 Chart

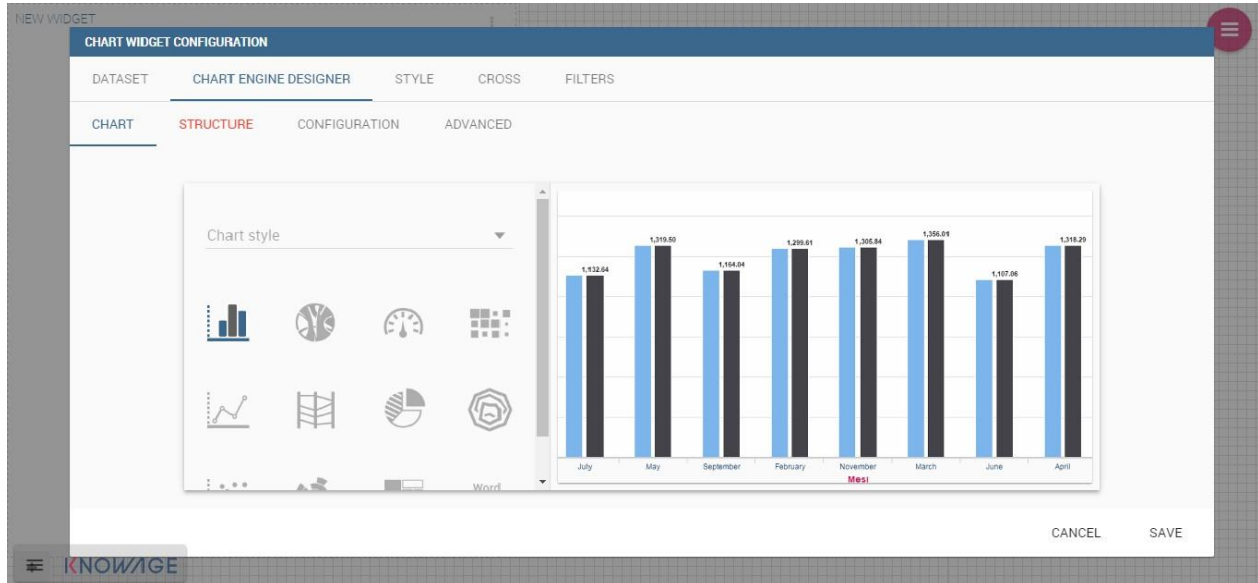
Charts are the most adopted method in presenting BI data since they allow an immediate perception of a phenomenon and are easily understandable. Focused on a visual impression more than a punctual lecture of values, they are specially suited to show trends and comparisons.

For these reasons, charts gain a pervasive level of usage and can be used by anyone to perform both synthetic and detailed analysis. Knowage provides a chart engine to create several types of charts, including:

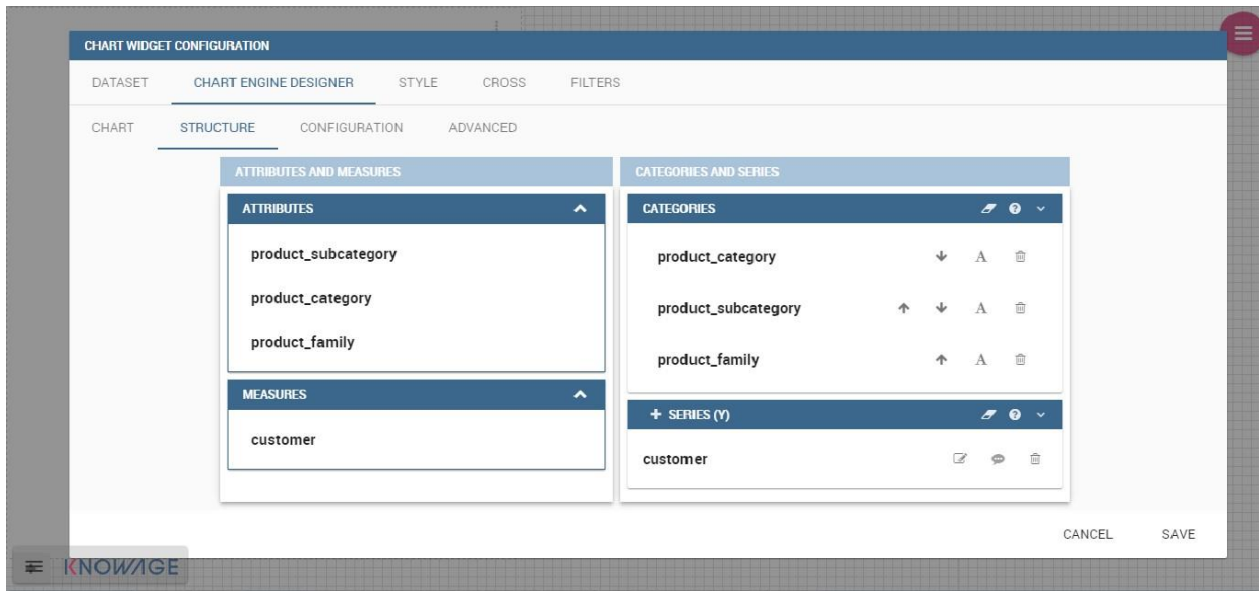
- Bar
- Line
- Pie
- Sunburst
- Wordcloud
- Treemap
- Parallel
- Radar
- Scatter
- Heatmap
- Chord
- Gauge

### My first Chart

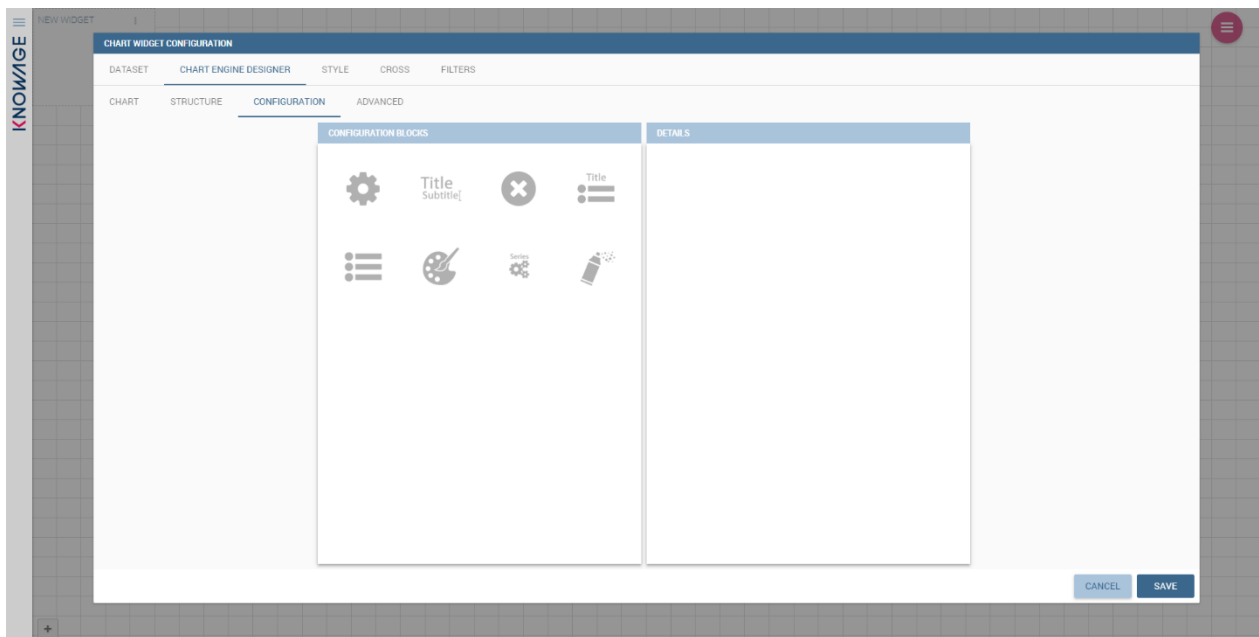
Clicking on the **Add Widget** icon, you will be asked to choose among some available widgets. Pick out the **Chart** one and let's now go into details on how to build a chart from scratch. The designer editor is divided into four principal tabs: **Dataset**, **Chart Engine Designer**, **Style**, **Cross** and **Filters**. As soon as you click on the "Add Chart" button, you enter the "Dataset" tab editor. Here you must select, using the "little plus" icon placed just aside the combo box line, one dataset. Then you must switch to the "Chart Engine Designer" tab and choose a chart type among the available ones, as shown in figure below.



After choosing the appropriate chart type you must go into the **Structure** page. Here it is possible to select the measures and the attributes chosen for the chart.



Clicking on the **Configuration** page you will find eight different blocks as you can see in figure below.



In detail these blocks concern:

- **Generic Details**, as the orientation of the chart, the family and the size font.
- **Title and Subtitle details**
- **No data message** where it is possible to put a message where the data are not founded.
- **Legend Title**
- **Legend Items**
- **Color Palette**
- **Advanced Series Configuration**
- **Custom Colors**

These eight blocks are common to all chart types; anyway, some chart types may have additional blocks.

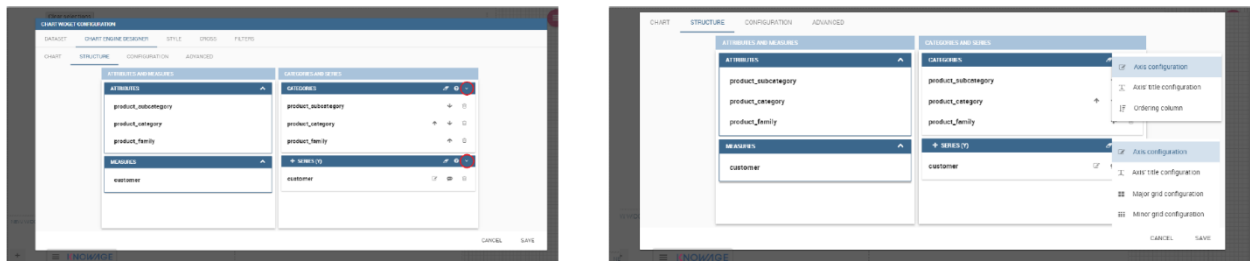
In the next subsections, the available functionalities of the Structure, the Configuration and the Advanced tabs are described in a more specific way.

## Structure

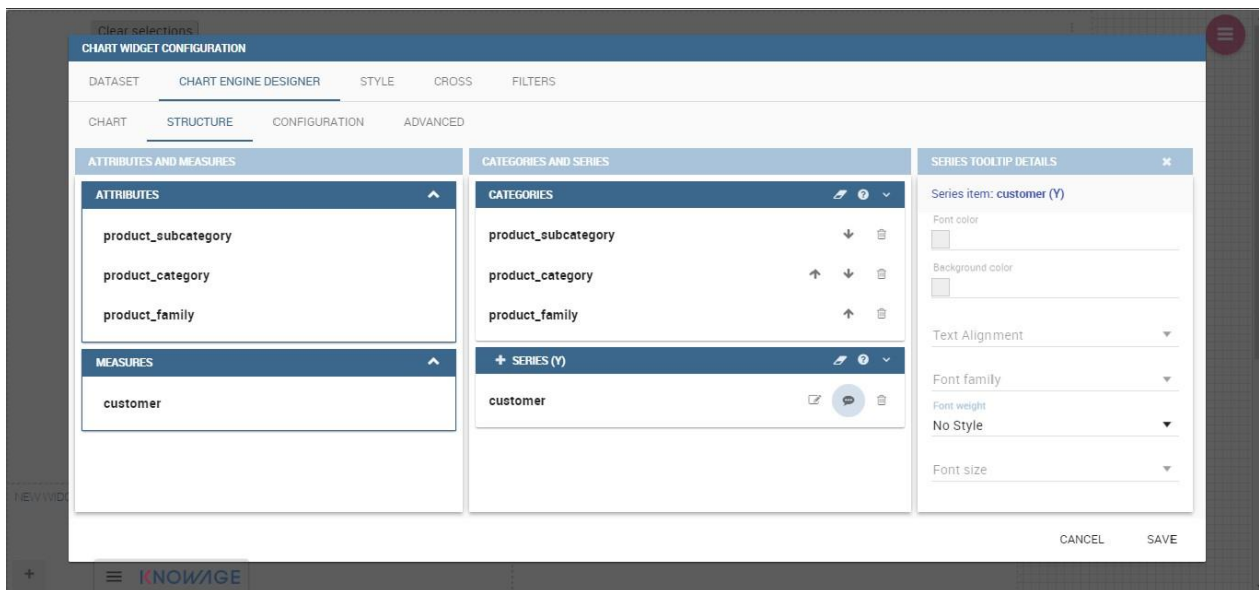
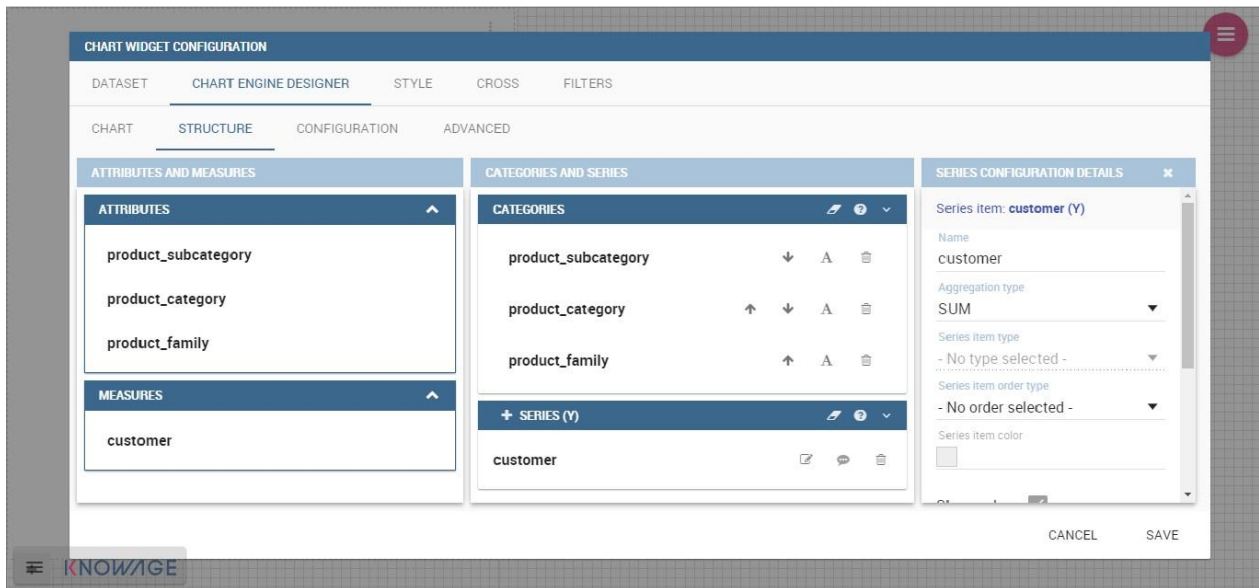
The “Structure” tab of the designer is the core of the Chart development. Here it is possible and mandatory to choose the measures and the attributes. When selected, the tab shows a two axes panel. The horizontal axis indicates the X-axis where you must choose one or more attributes. As well, the left axis is the Y-axis and here you must choose measures. You can also insert manually the axis title for both the X and the Y axis if the chart is configured to have axis titles.

Before creating any chart, it is convenient to be sure of what kind of chart you want to develop. We stress that the user can change the chart type afterwards, but at the expense of a loss of just defined settings.

In this section, it’s possible to customize the labels of the axis, title and grid style clicking on different buttons. With the arrow button, on the top of the Y-axis and X-axis, it’s possible to choose the axis configuration detail, the axis title configuration, the major and minor grid configuration (only for Y-axis) and ordering column (only for X-axis). The pencil button opens a window on the right with the series configuration details where it’s possible to choose the aggregation way, the order type of the series, if the data will be shown and so on. Finally, with the strip cartoon button, you can choose the features of the tooltip (font color, text alignment, etc.). If the chart in place does not allow the customization of the axes, the specific button will be disabled or not visible. The figure below will show in detail the three buttons above explained:



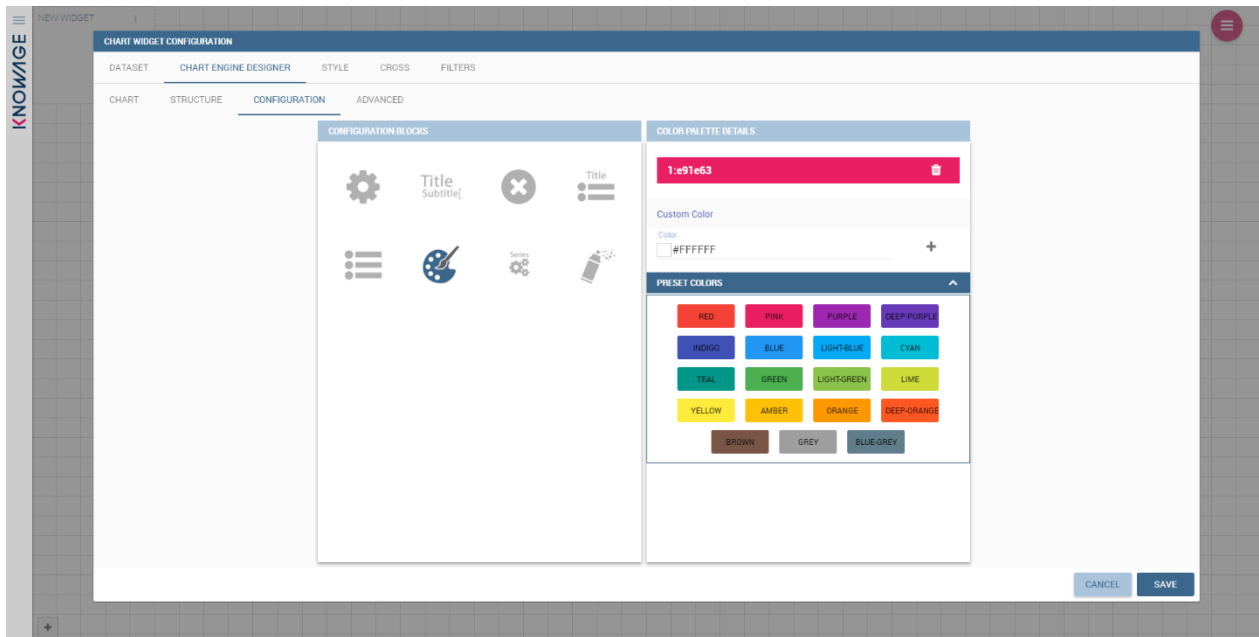
**From left to right: (a) Generic configuration axis (the specific arrow). (b) Generic configuration axis.**



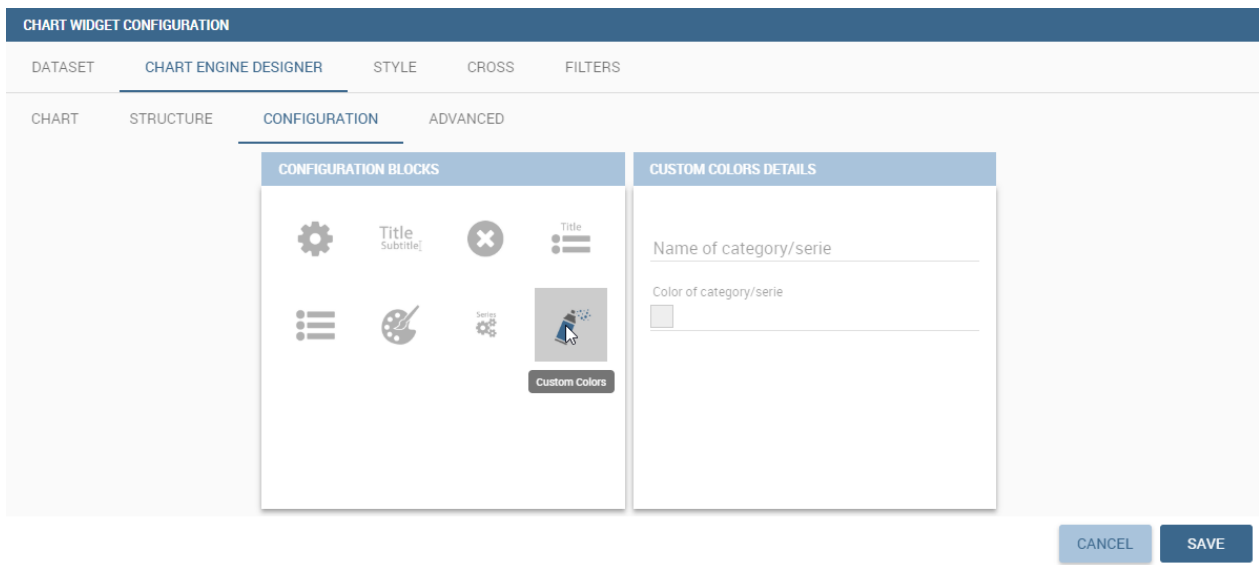
## Configuration

The **Configuration** section contains options to define the generic style of the chart. Here you can set the dimensions of the chart, the background color, insert the title and subtitle and define their style, choose the series palette, associate a specific color to a serie or category, add and configure the legend. The listed options are an example of what you can configure in the tab.

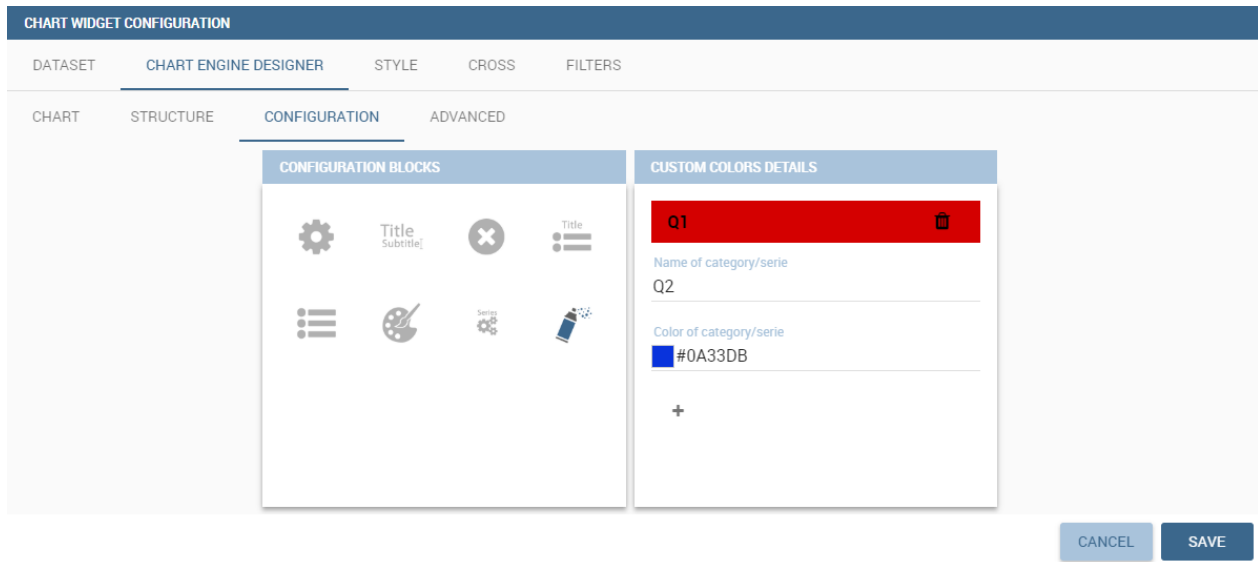
Note that for the color palette details you can use one already in the list or you can choose any color inserting the hex color code with the hashtag symbol. This is a very useful feature to customize the output.



In the 6.3 version, it has been introduced a new configuration option: The Custom Color.



With this new option it is possible to assign a specific color to a category and/or serie or to a value of a category and/or serie. Look at the following figure for an example.



To add a custom color simply write the category/serie value or name, select a color with the color piker and then click on the plus button. In the figure example it is assigned a color for each value of the 'QUARTER' category.

Indeed, the options available in this tab change according to the chart selected enabling different configurations. See Chart types in detail for a detailed description of the specific options of each chart.

## Chart types in detail

This section describes the different types of chart and how to create them within the **Chart Engine** of Knowage.

### Traditional charts

Knowage allows you to create the so-called traditional charts like bar, line, pie, radar and scatter chart in a fancy way.

Each chart type is built on a specific dataset. Despite all, there are some general rules that can be applied to those "simpler" and common charts. The minimum requirement is to define/have a dataset with at least one attribute column and one measure column. Then you can select the type of chart you want to use from the **Chart** section; meanwhile using the **Structure** section you can fill in the category box with one or more attributes (typically these will be place in the X-axis) and in the series box with one or more measures (typically placed as Y-axis' values). Refer to *Chart Structure* figure as example.

Once you have selected the attributes and measures you can edit the series style and axis style configurations as explained in My first Chart. Then go to **Configuration** to set the chart dimension, the title, the legend and to choose how to associate colors to series.

For additional information on other chart types, please refer to the [Detailed User Guide](#)

### 3.2.1.3.3 Selector

The selector widget allows you to filter every widget of the current sheet using the columns and values of your choice.

This widget is useful when an end user wants to add a parameter to the document.

The screenshot shows the 'SELECTOR WIDGET CONFIGURATION' dialog box with the 'COLUMNS' tab selected. At the top, there are three tabs: 'COLUMNS', 'STYLE', and 'FILTERS'. Below the tabs, there are two dropdown menus: 'Dataset' and 'Column', separated by a plus sign. To the right of the 'Column' dropdown is a 'Sorting order' dropdown. Below these is the 'Select modality' section with three groups of radio buttons: 'Single value' (selected) and 'Multivalued'; 'List' (selected) and 'Combobox'; and 'Vertical' (selected), 'Horizontal', and 'Grid'. Below the modalities is a 'Select default value' dropdown and a 'Wrap Text' checkbox. At the bottom right, there are 'CANCEL' and 'SAVE' buttons.

In detail, use the **Columns** tab to select the dataset and the dataset column on which you want to apply the filter. Then custom the **Select modality** options; for instance, choose between single or multivalued or to use a list or a combo box. Note that for the list option you can further choose among “vertical”, “horizontal” or “grid”. You can also decide to add a default value, chosen from main column’s first item, main column’s last item or to simply assign a static value. Finally, by clicking on the **Wrap Text** option it is possible to wrap the text shown in the selector; this option is useful when the categories to choose from are string of long dimensions.

In the case of the selector of type list “grid” it is also possible to set the grid columns width.

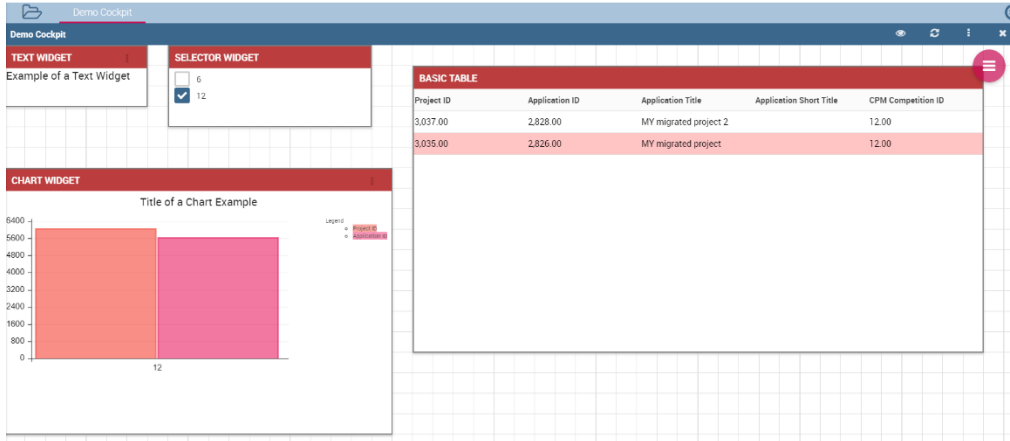
This screenshot is similar to the previous one but shows the 'Grid' modality selected. In the 'Select modality' section, the 'Grid' radio button is now selected, and the 'Grid columns width' dropdown is visible. The 'Wrap Text' checkbox remains unchecked.

Move to the **Style** tab to set the widget style in terms of label, titles, borders, shadows and background color.



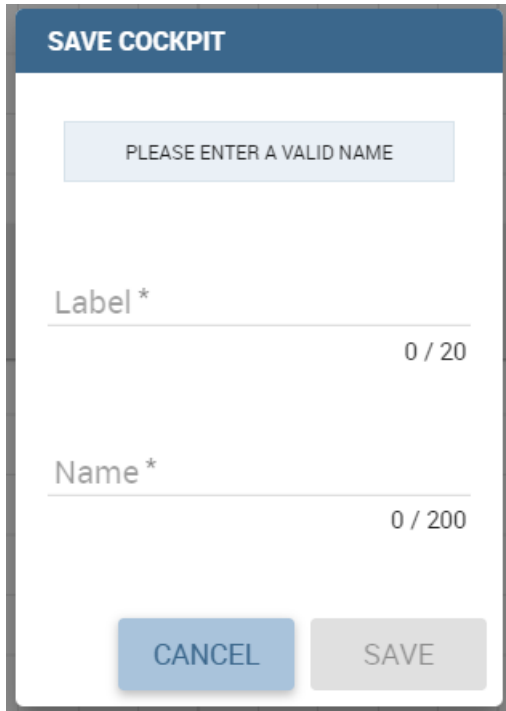
Finally use the **Filters** tab to handle pagination or filter on a dataset column.

The Selector widget works effectively as a ready-to-use filter panel.



### 3.2.2 Cockpit – Save

When you added all your widgets and you are ready to save your cockpit, open the cockpit menu and click on the save icon. A window will appear.



#### Label

Label of cockpit used by the database. This field must be unique for all the cockpits and must not contain any special or accented characters. It is preferred to use lowercase letters and separate them using underscores instead of spaces like shown in the figure above. This field is required.

**Name**

The name of the cockpit that will appear in the workspace for all the users having access to it. This field is required.

By default, every cockpit you create will be saved in your personal folder in the document browser.

**3.2.3 Cockpit – Edit**

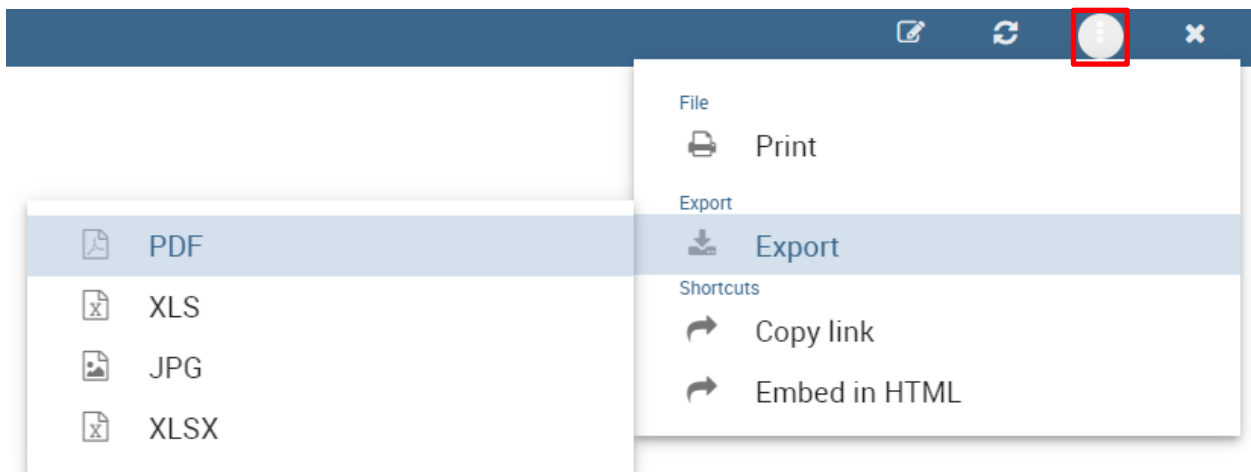
To edit an existing cockpit, you must first run the cockpit in question. Once the report opened, you must click on the edit icon in the cockpit’s action menu :



Once you’re finished with the edition, you can save the cockpit and all its instances will be updated with your latest changes.

**3.2.4 Cockpit – Export**

You can export the cockpit as so by opening the export context menu :



**Print**

Opens the printing window of your current web browser.

**Export**

Export the cockpit as the file type of your choice.

**Copy link**

Creates a link you can share and use to access the report directly.

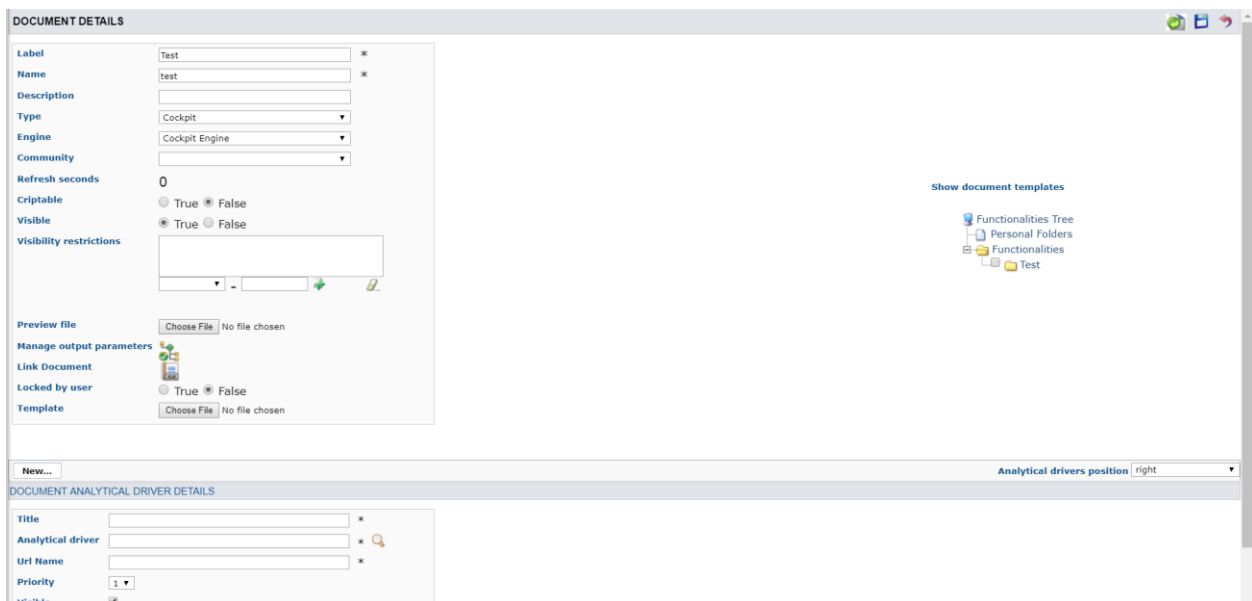
**Embed in HTML**

Generates HTML code to add to a website or web page that will display the cockpit.

### 3.2.5 Cockpit – Share

If you wish to share the report with other users, head over your personal folder in the document browser.

Select the cockpit you want to share and click on the pencil in the top of the right panel.



The figure above shows the generic document view. You can add report parameters and choose where your cockpit is visible in the document browser in the tree at the right. You only need to check the locations you wish your cockpit to appear. Once you're finished, you must click on the save button at the top right corner and then close the page using the red arrow.

#### Note

All instances of a report are the same, hence if you edit a report at a specific location, the report will be changed for all other locations as well. If you wish to edit a report without changing the other instances, you must copy the report and apply changes to the copy.