



# Knowage v6.4

## Cross-Table widget

**KNOWAGE**

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# Table of contents

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<b>1</b>	<b>Introduction .....</b>	<b>3</b>
<b>2</b>	<b>Dataset example .....</b>	<b>4</b>
<b>3</b>	<b>Cross-table .....</b>	<b>5</b>
3.1	Dataset.....	5
3.1.1	Column Style .....	6
3.2	Configuration .....	6
3.2.1	General.....	6
3.3	Style .....	7
3.4	Filters .....	7

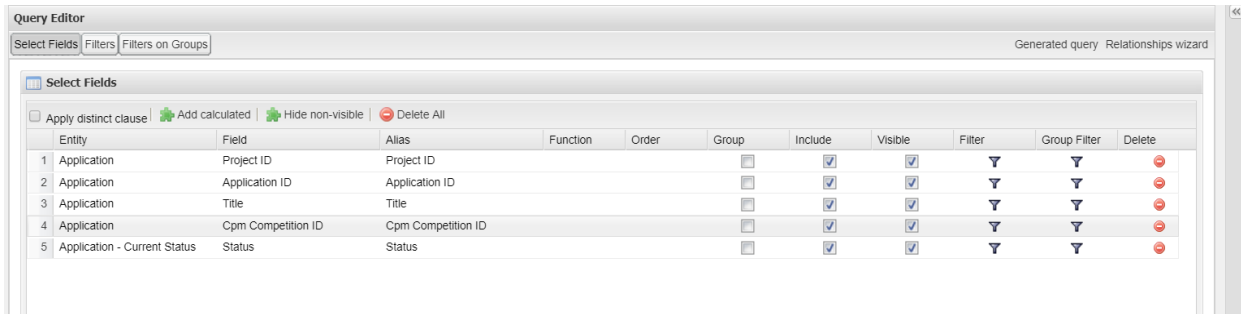
## 1 Introduction

Before going further, the user must have followed the training “*Understand Knowage's menus and creating your first report, using tables, charts and filters*” or know the basics of Knowage and how to create a Cockpit report.

The goal of this training is to teach the user how to use Cross-tables in their Cockpit reports. Cross-table are useful to quantitatively analyze relationships between variables.

## 2 Dataset example

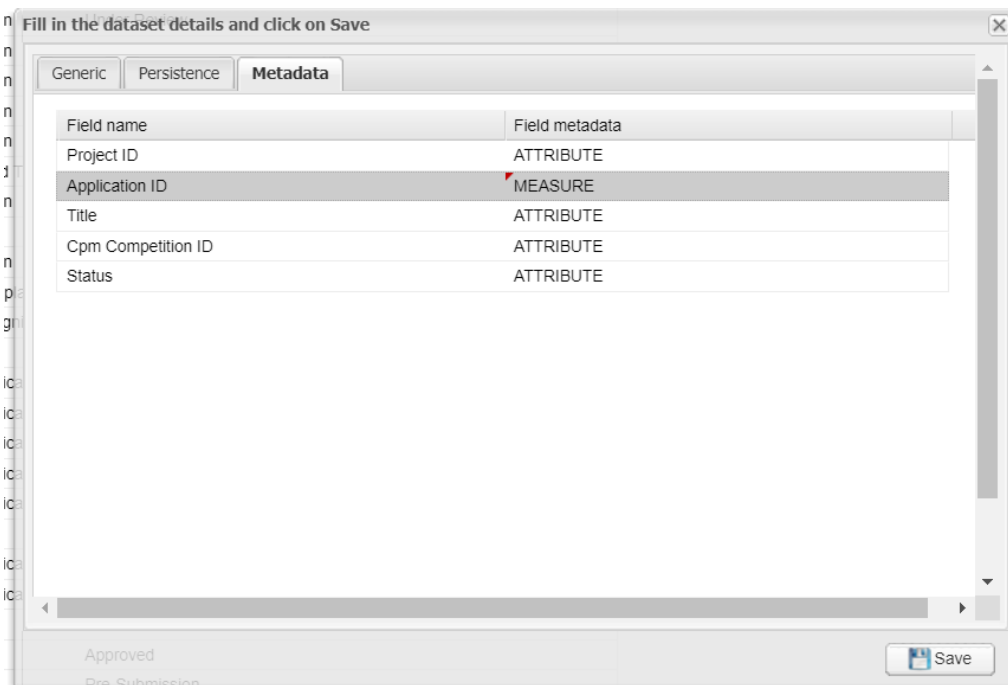
Before creating our first Cross-table, we need a valid dataset having attributes and measures. Attributes are used for grouping and categorizing of our data in our table. The later are the fields for which we want to apply aggregation functions. In this example, we will create a report telling us the number of applications of each status for each competition. To do so, let's create a new QbE selecting the fields below :



And let's apply a filter on the language of the status we need. In our case, English :



We can now preview our results and save the dataset. After giving it a label and a name, we will go in the **Metadata** tab to specify that our field **Application ID** will be a measure instead of an attribute. This will allow us to apply a COUNT function in our report to come.



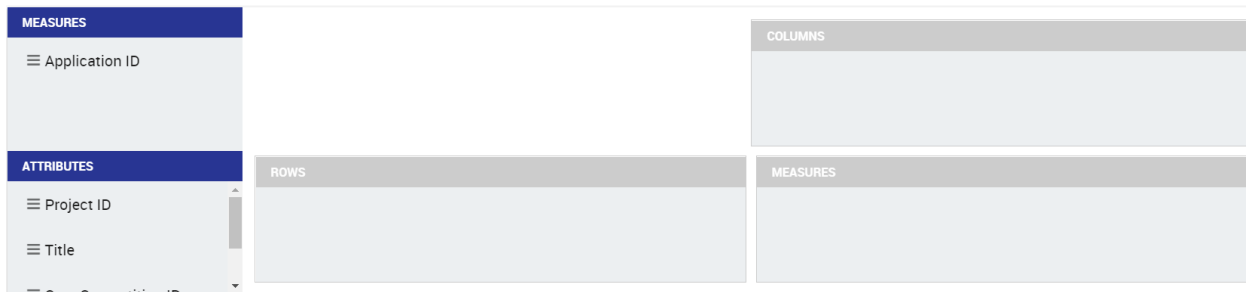
### 3 Cross-table

Having our dataset, we can now create our report. Once our Cockpit is in edition mode and your dataset added to the report, we will add a cross-table widget.

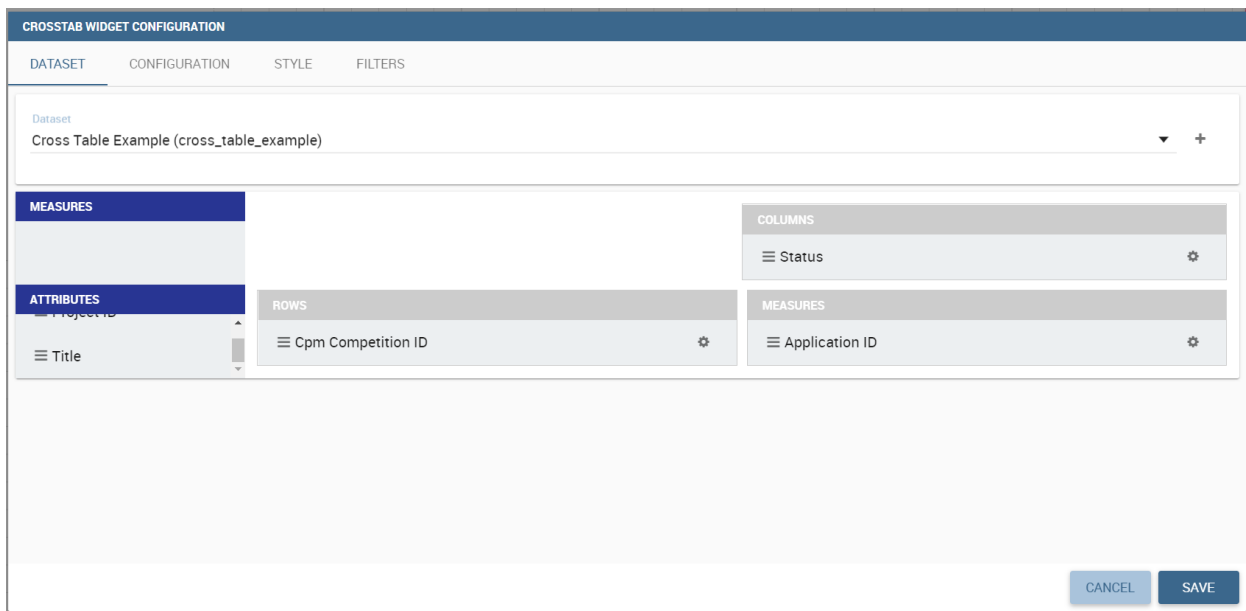
Click on the **Add widget** from the Cockpit's action menu and choose the cross-table option.

#### 3.1 Dataset

This tab lets you choose the dataset that will provide the data to your table. Once selected, multiple charts will appear.



The **Measures** and **Attributes** sections show you the fields available for each category. The **Columns** section lets you add fields to as columns of the report. This will create a column for each value of the field chosen. Note you can add multiple fields as columns, and the same goes for the rows. In our case, let's put the status of our projects as a column. The **Rows** section acts the same as the **Columns**'. Let's add our competition ID field. Your window should look like so :



Now, since we wanted to count the number of applications, we must tell Knowage to apply the COUNT function to our measure. Click on the setting wheel next to the field **Application ID**.

### 3.1.1 Column Style

This will open a new window. Here you can edit the label of your measure and choose an aggregation function. You can also add thresholds to your measures. For example, if the total number of application for a column would exceed a certain value, we could apply a threshold icon like a warning or change the background color of the cell. Let's select our aggregation type as a COUNT DISTINCT in case our report would have duplicates of a same application and remove the header for our measure.

Once finished, click save.

## 3.2 Configuration

This tab allows you to configure your cross-table in multiple ways.

### 3.2.1 General

The **General** is composed of 3 fields.

#### Measures on

This field specifies where the measures' header should be shown.

#### Max Cells Number

This allows you to choose the maximum number of columns or rows your report should show, depending the selection of the **Measures on** field.

#### Percentage calculated on

This field lets you add percentage after your measures' value to show the distribution of your results. If **Columns** is selected, the percentage will be calculated on the columns and vice-versa.

Below an example of a configuration and its result :

**CROSTAB WIDGET CONFIGURATION**

DATASET    CONFIGURATION    STYLE    FILTERS

General

Max Cells Number  
5

Measures on  Columns  Rows

Percentage calculated on  Columns  Rows  no

On rows  show totals  show sub-totals

On columns  show totals  show sub-totals

CANCEL    SAVE

NEW WIDGET

↑ Status

↑ Cpm Competition ID	Approved	Pre-Submission	Waiting for Director/Dean/Chair approval	SubTotal
6	223 (32.75%)	443 (65.05%)	15 (2.20%)	681 (100.00%)
10		3 (100.00%)		3 (100.00%)

We can see that the report limited its display to 5 columns, counting the totals and the headers. It also shows the percentage next to the measures and a **SubTotal** column as we selected above.

### 3.3 Style

This tab is the same as in the other widgets but with options to edit the style of the totals' and subtotals' cells and the grid's style.

### 3.4 Filters

This tab behaves the same way as in the other widgets. You can add filters to your cross-tab to exclude values to appear in your report.