

CrossTab

ReportMill CrossTab User Guide

This document describes ReportMill's CrossTab component. CrossTabs are the best way to present a matrix of data.

Table of Contents

- Creating a CrossTab Component
- CrossTab Parts
- Header Cells
- Cross-Sections
- Nested Grouping
- Summary Row/Column

		G	PG	PG-13	R	Totals
Action	BlockBusters	1	0	0	3	4
	Others	0	1	1	3	5
Film-noir	BlockBusters	0	0	0	2	2
	Others	1	0	0	2	3
Drama	BlockBusters	1	1	0	5	7
	Others	1	5	0	15	21
Totals		4	7	1	30	42



CrossTab

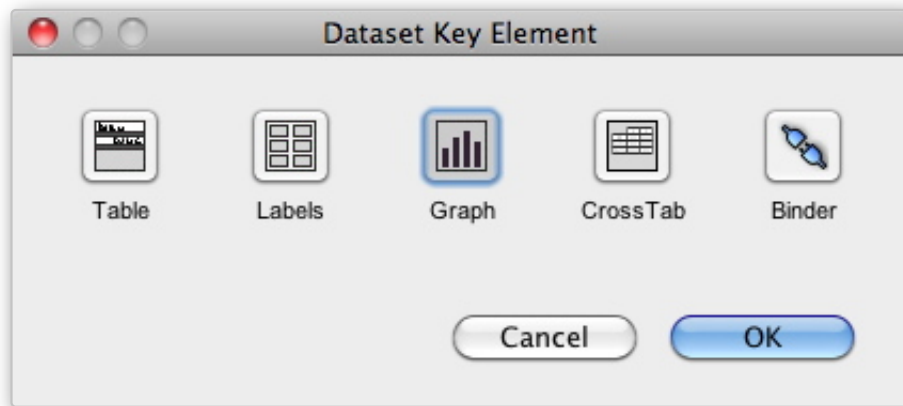
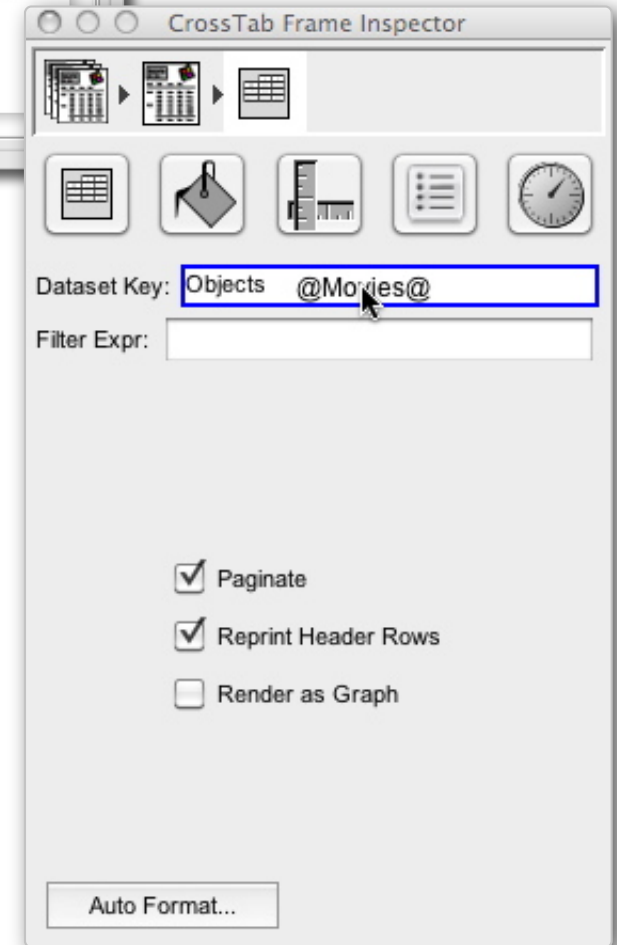
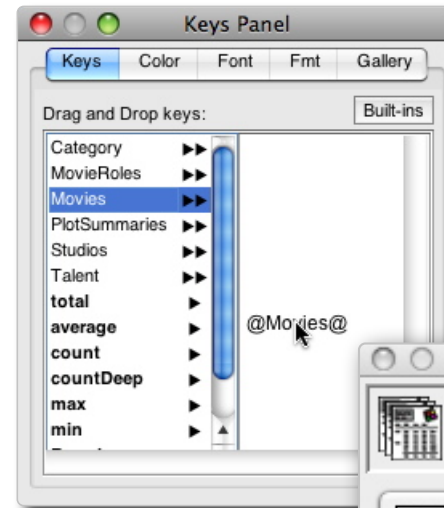
Creating a CrossTab Component

Method 1: Drag a Dataset Key from Keys Panel

CrossTabs are created the same way as tables and graphs - you simply drag and drop a "dataset key" into the document and select the CrossTab component from the Dataset Key Panel. A dataset key is a key that represents a list of objects and is rendered in the keys browser with a double arrow.

Method 2: Click the "Add CrossTab" button in the tool bar

The second option works even if a data source hasn't been provided: simply click the Add CrossTab button from the list of tools at the top of the open document. The first field in the graph inspector is for the dataset key. You can type one in, or drag one down from the Keys Panel (this would be equivalent to method one).





CrossTab

CrossTab Parts

CrossTab Frame

If you created a crosstab as described previously, then the top level component is actually a "crosstab frame". This is a component that contains the actual crosstab component in order to define the maximum size of the final table.

CrossTab

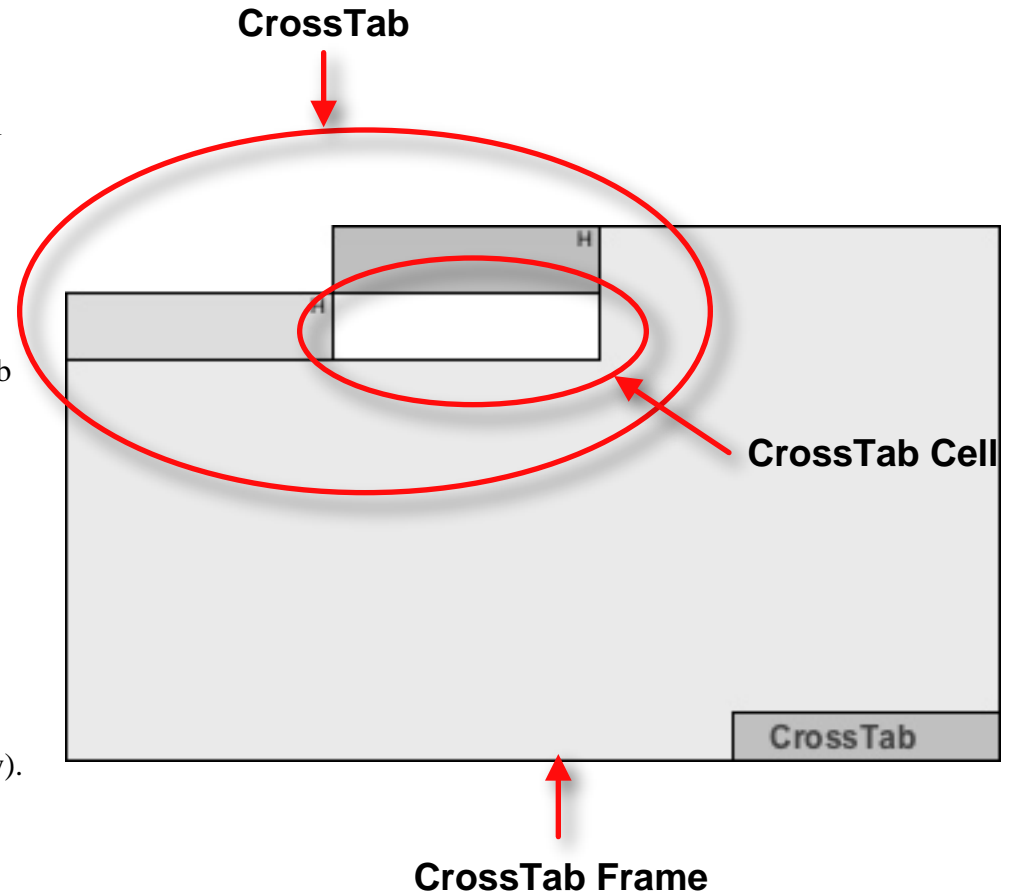
The actual crosstab component is a simple block of cells. In the default case there are two rows and two columns, for a total of 4 cells (though the one in the upper left corner is hidden by default). To get the crosstab inspector, you need to single-click on one of the cells, or select the crosstab from the inspector panel's selection path.

CrossTab Cell

The core building block of a crosstab is the crosstab cell. A cell is basically a text field with added functionality.

CrossTab Divider

Between the cells are crosstab dividers (both horizontally and vertically). These can be selected and moved to resize rows and columns.





CrossTab

Header Cells

The key to configuring a crosstab is the Header cell. A default crosstab has two of these - a row header cell and a column header cell. They can be identified by the small "H" in the upper right hand corner (or "G" if a grouping key has been added).

If we add a key to a header cell, by dragging a key from the keys browser or by configuring it in the inspector, then the generated report will extend that row or column by one row for every grouping that key generates.

For example, if we create a crosstab for the list of Movies in the standard Hollywood dataset and drag the Rating key to the column header and the count key to the empty cell, we'll get a report showing movie ratings with count for each rating.

	@getRating@ ^G
H	@count@

CrossTab

A simple CrossTab for Movies Dataset after dragging Rating key to Header and count key to cell

	G	PG	PG-13	R
	5	16	2	46

Generated report shows Movie ratings with count for each rating

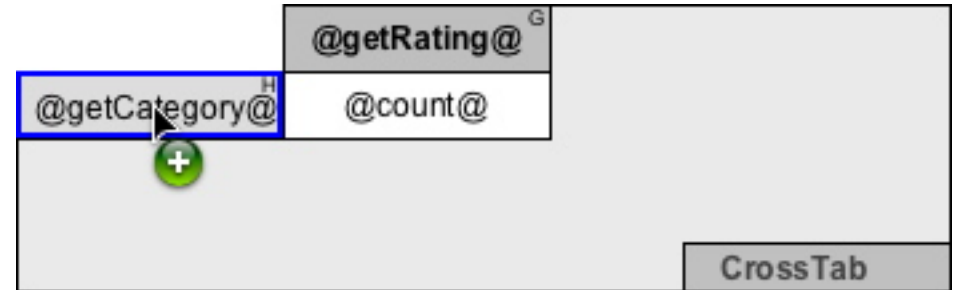


CrossTab

Cross-Sections

To create a true cross-section, we simply need to have grouping keys on both axes.

Continuing with our Movies example, we can just drop the Category key on the default row header.



Drag Category key to row header cell

	G	PG	PG-13	R
Action	1	1	1	6
Film-noir	1	0	0	4
Drama	2	6	0	20
Western	0	1	0	0
Documentary	0	0	1	1

Resulting crosstab now has true cross-section



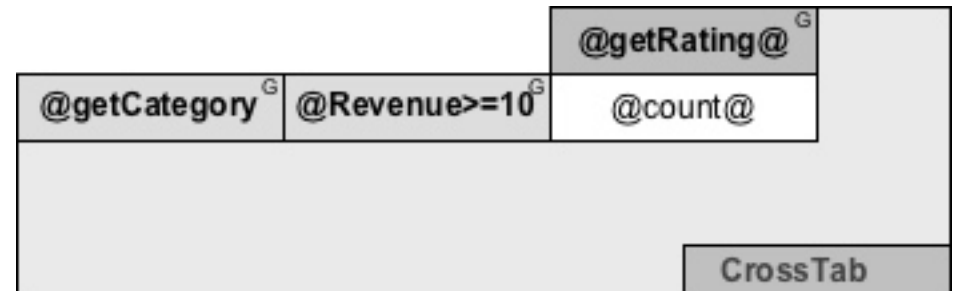
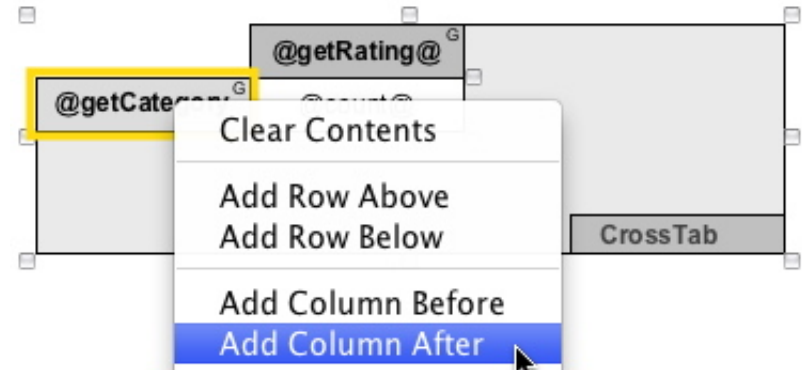
CrossTab

Nested Grouping

To add multi-level grouping, we simply add a new row header after the existing header row (or a column header below the existing column header). We can do this by selecting the current row header for Category and right-clicking to bring up the context menu. Then we select "Add Column After".

Then we will configure this cell with a grouping key on "Revenue>1000000", to create a grouping of "BlockBusters" and "Others". We can similarly set the text to be:

Others



		G	PG	PG-13	R
Action	BlockBusters	1	0	0	3
	Others	0	1	1	3
Film-noir	BlockBusters	0	0	0	2
	Others	1	0	0	2
Drama	BlockBusters	1	1	0	5
	Others	1	5	0	15



CrossTab

Summary Row/Column

To add a total row or column (or both), simply add the new row or column in the inspector. You can set the text to the static string "Totals" and set the key(s) to the same as the cross-section cells.

In this example we've added a total row and column.

		@getRating@ ^G	Totals ^H
@getCategory ^G	@Revenue>=10 ^G	@count@	@count@
	Totals ^H	@count@	@count@

CrossTab

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