



Graphing

ReportMill 8

Graph Inspector

Objects: Movie
Keys: revenue

Show Grid Use Color

Show Legend

Group Bars by Keys

Show Bar/Wedge Labels

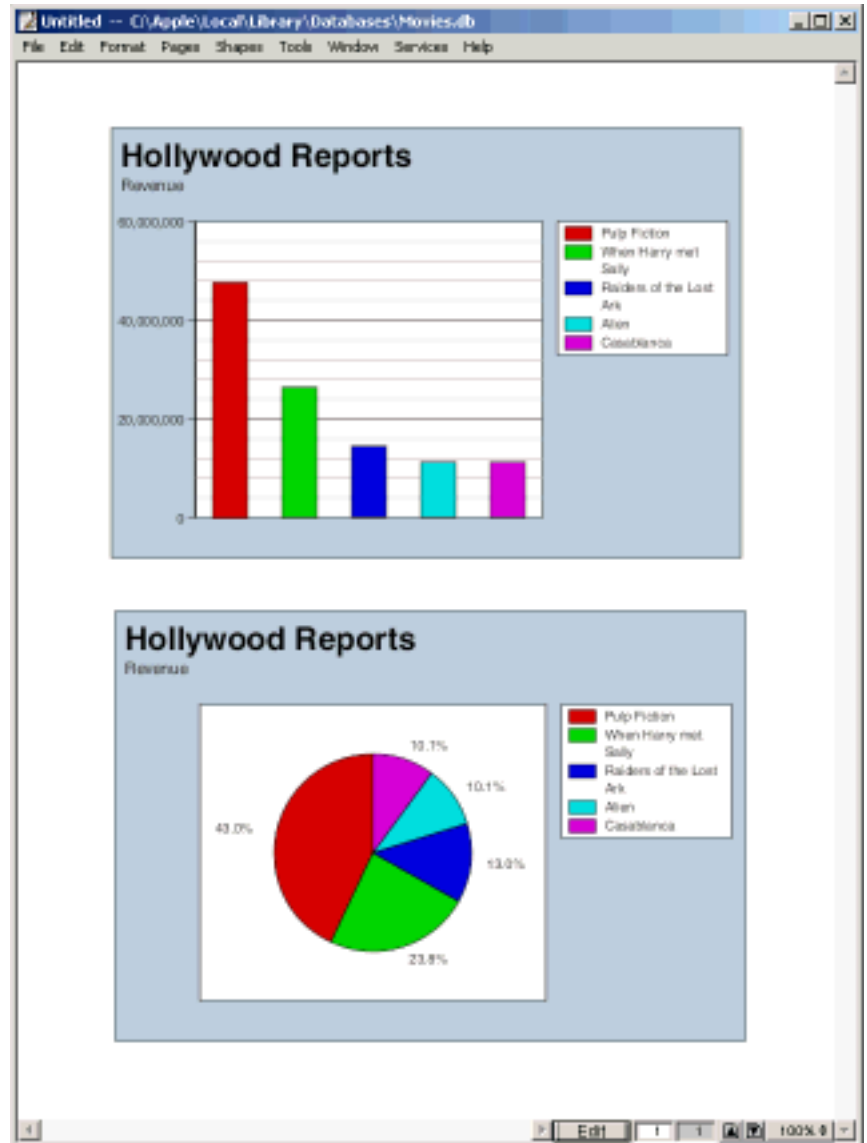
Draw Bars in 3D

Sorting:

Sort: TopN

Key Path: revenue

Count: 12 Include Others



Graphing (Continued)

Introduction

Graphs are a common element of many reports. ReportMill supports basic business graphing, including bar graphs (vertical, horizontal, stacked) and pie charts. ReportMill also integrates very well with any other graphing package that can provide images (see www.reportmill.com/support/imagesubstitution.pdf).

Step 1: Drag and Drop XML into new document

Drag an XML file into an open ReportMill document, just as you would for any ReportMill template (see the PDF tutorial for an example with Tables; see the Basic API document for ReportMill's XML generation API). Although this step is optional, it's more convenient to design templates with a XML description of your intended Java dataset.

Step 2: Drag List Key into new document

When you add an XML file to a template, ReportMill presents the Keys Browser panel. Choose any List Key (keys that represent a List in your Java dataset) and drag it into the open document. ReportMill will then give you the List Key Element selection panel. Choose the graph element.

Alternatively, you can add a graph with the "Add Graph" tool bar button at the top of the page (you'll need to do this if you didn't provide an XML file). In either case, ReportMill adds a graph element to your template. Position and size the element to cover the region of the page that you want the resulting graph to cover.

Step 3: Select Graph Key

With the graph selected, the Keys Browser will show keys relevant to an individual object from your List Key list. Drag in a key that represents a simple numerical value (like 'revenue' or 'amount') to the Keys text field (alternatively you can type this in).

Step 4: Limit the scope of the Graph

By default, a ReportMill graph has the TopN Count set to 12 (graphs can be quite useless when too many objects are present). Set this number to a value more appropriate for your specific dataset (or zero for no limit). You can also set a TopN sort key or a list of sort orderings (see the Tables document for a complete description of the Sort/TopN controls).

Step 5: Legend

Back under the "Graph" tab, if you select the "Edit" button by the "Show Legend" switch, the legend is super-selected for you. Drag in (or enter) a key for the legend. You might choose "@title@" for a Movie entity.

Step 6: The Code

Generate the report with just one line of code:

```
new RMDocument("MyTemplate.rpt").generateReport(myObjects).writeFlash("MyGraph.swf")
```

Graphing (Continued)

Additional Features

Chart Type

ReportMill supports vertical bar charts, horizontal bar charts and pie charts. Select these by choosing their icons in under the Graph tab in the Graph inspector.

Bar/Wedge Labels

Sometimes it's interesting to show a small tid-bit of information with each bar or wedge in a bar or pie chart. Select the "Edit" button by the "Show Bar/Wedge Labels" and you get a template for this. By default it has a built-in key, @Percent@, which shows the value of the bar or wedge as a percent total of all bars or wedges. You might also try a key like "\$@revenue/1000000@m" (with a formatter) to instead display a wedge label like "\$10.5m".

Grid

Select the "Show Grid" switch to show a grid behind the bars in a bar chart, which allows users to better gauge the relative values of the bars.

Use Color

If you anticipate that your graphs will mostly be output on black and white laser printers, you may choose to turn off the "Use Color" switch.

Other Custom Children

The Graph shape works fine with any added custom children. Add axis labels or arbitrary text by super-selecting (double-clicking) the graph and using the standard tools such as Text, Rect, Polygon, etc. You can also reference keys in added text children which will be evaluated against the group of objects provided for the graph.

Graphs in Table Rows

Add a graph to a table row by selecting the table row and selecting the menu item: Tools->Gallery->Add Graph. When you do this, you can choose to have the graph use the objects from the group associated with the table row (assuming it's a table row for an upper level group).

Since a graph is generally a large shape, you usually want to define an explicit page break for the row that contains the graph, so that the graph won't get chopped off on a page boundary. Select the light gray region to the left of the Group in the Table inspector to do this.

Graphing (Continued)

Drill Down Support

It's pretty straight forward to provide unique URLs for each bar or wedge in a graph. The steps for this are as follows:

1. Double click on the graph to "super-select" it.
2. Select the rectangle tool and draw a small rect somewhere in the graph interior
3. Select the fill/stroke inspector for the rectangle and set the "Name:" to "Prototype"
3. Also in the fill/stroke inspector, configure the "URL:" with the desired web address, including any necessary keys (eg, "http://abc.com?title=@getTitle@").

When the application calls generateReport, the graph looks for a child named "Prototype" and if it finds one, it removes it from the graph and uses it as the base for either the bars or wedges.

Graphing (Continued)

Graphs in Table Rows

A graph can be added to a table row by selecting the table row and clicking the toolbar "Add Graph" button. By default the graph will use the child objects associated with that row. Alternatively, you can define a list key for the graph.