Converting the Stock Program

1 Conversion
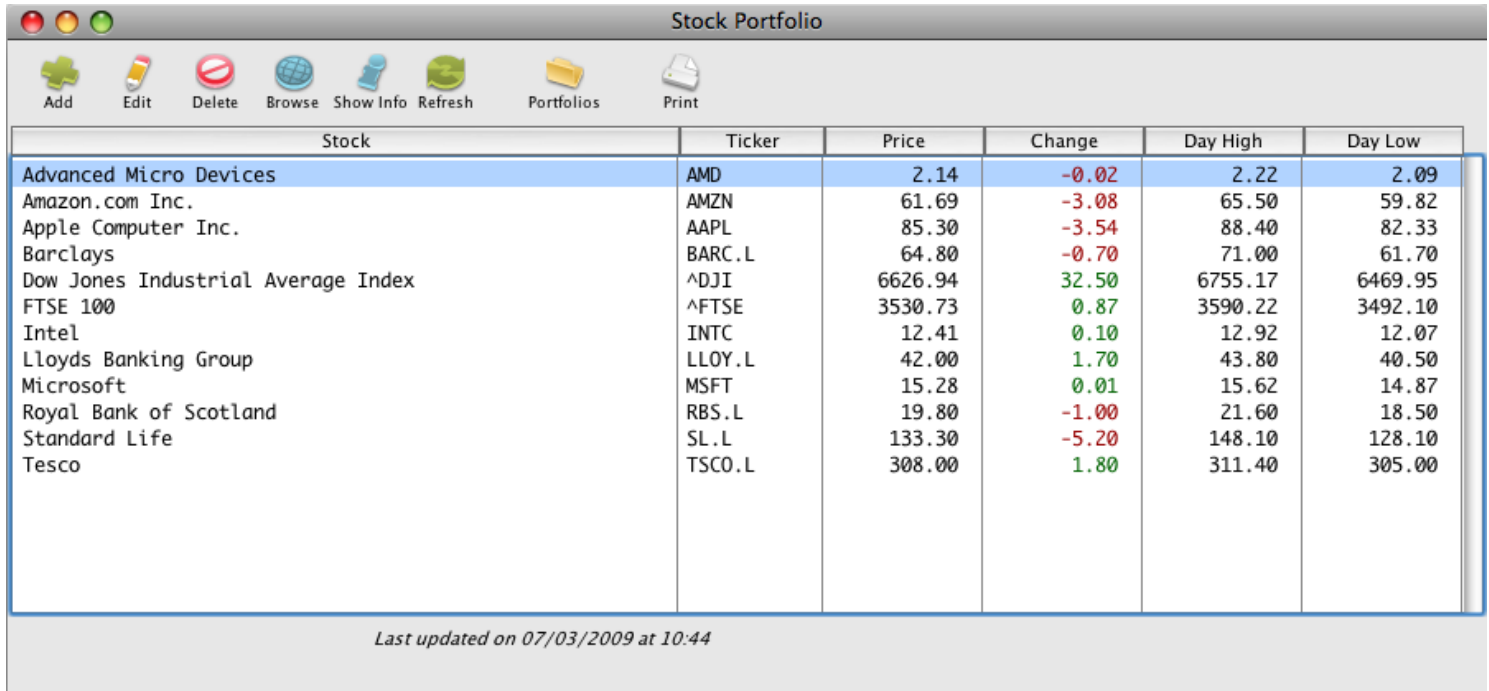
Conversion

Original UI

These lessons you will show you how Karen Hughes' stock program was converted to use the data grid.

This is what the original UI looks like. We are going to convert the the list of stocks from a field to a data grid table.

Stock Portfolio

Stock	Ticker	Price	Change	Day High	Day Low
Advanced Micro Devices	AMD	2.14	-0.02	2.22	2.09
Amazon.com Inc.	AMZN	61.69	-3.08	65.50	59.82
Apple Computer Inc.	AAPL	85.30	-3.54	88.40	82.33
Barclays	BARC.L	64.80	-0.70	71.00	61.70
Dow Jones Industrial Average Index	^DJI	6626.94	32.50	6755.17	6469.95
FTSE 100	^FTSE	3530.73	0.87	3590.22	3492.10
Intel	INTC	12.41	0.10	12.92	12.07
Lloyds Banking Group	LLOY.L	42.00	1.70	43.80	40.50
Microsoft	MSFT	15.28	0.01	15.62	14.87
Royal Bank of Scotland	RBS.L	19.80	-1.00	21.60	18.50
Standard Life	SL.L	133.30	-5.20	148.10	128.10
Tesco	TSCO.L	308.00	1.80	311.40	305.00

Last updated on 07/03/2009 at 10:44

Create the Data Grid Table

We will begin by creating a data grid table and configuring it.

Add Data Grid to Card
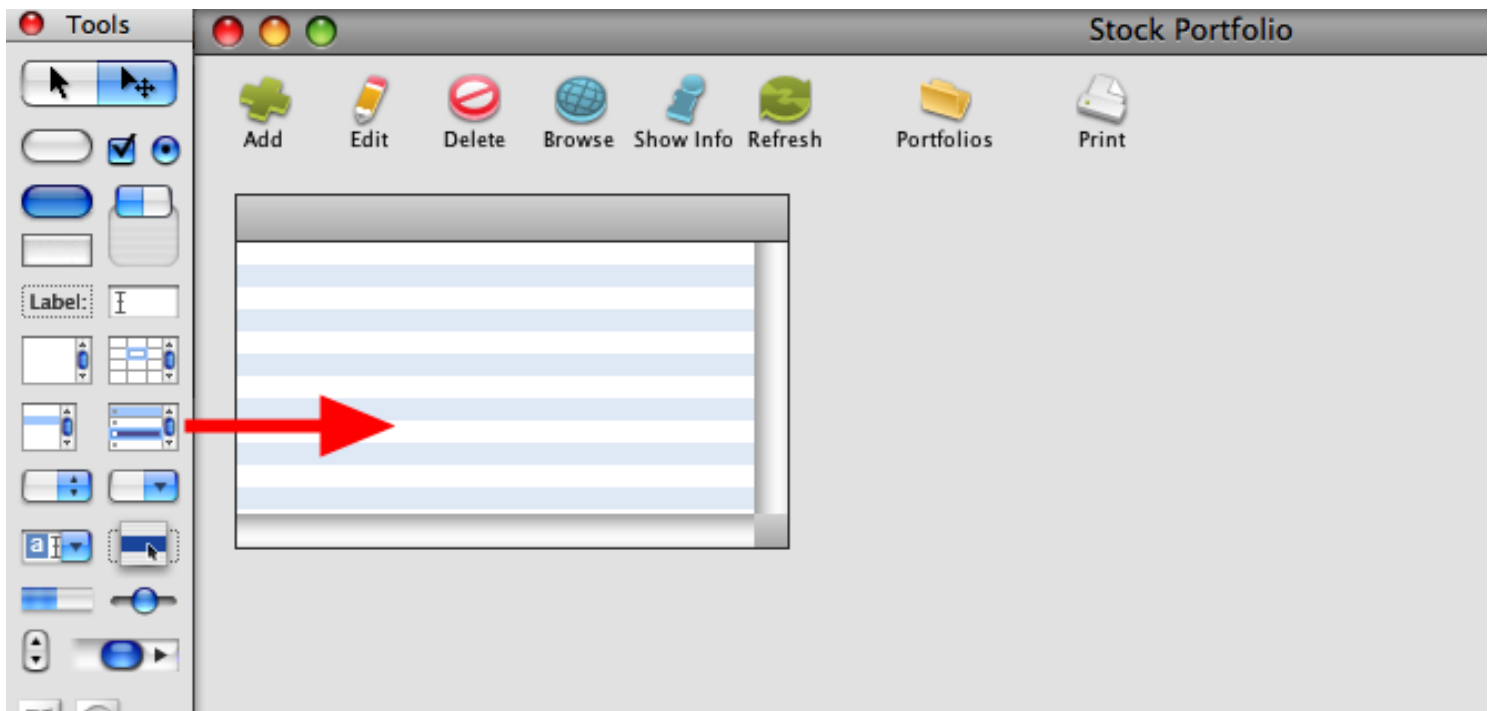
Add a data grid to a card by dragging from the Tools palette onto your stack.

Turn Off Text Editing

Since this table will only display data turn off **Allow Text Editing** in the Basic Properties pane of the property inspector.
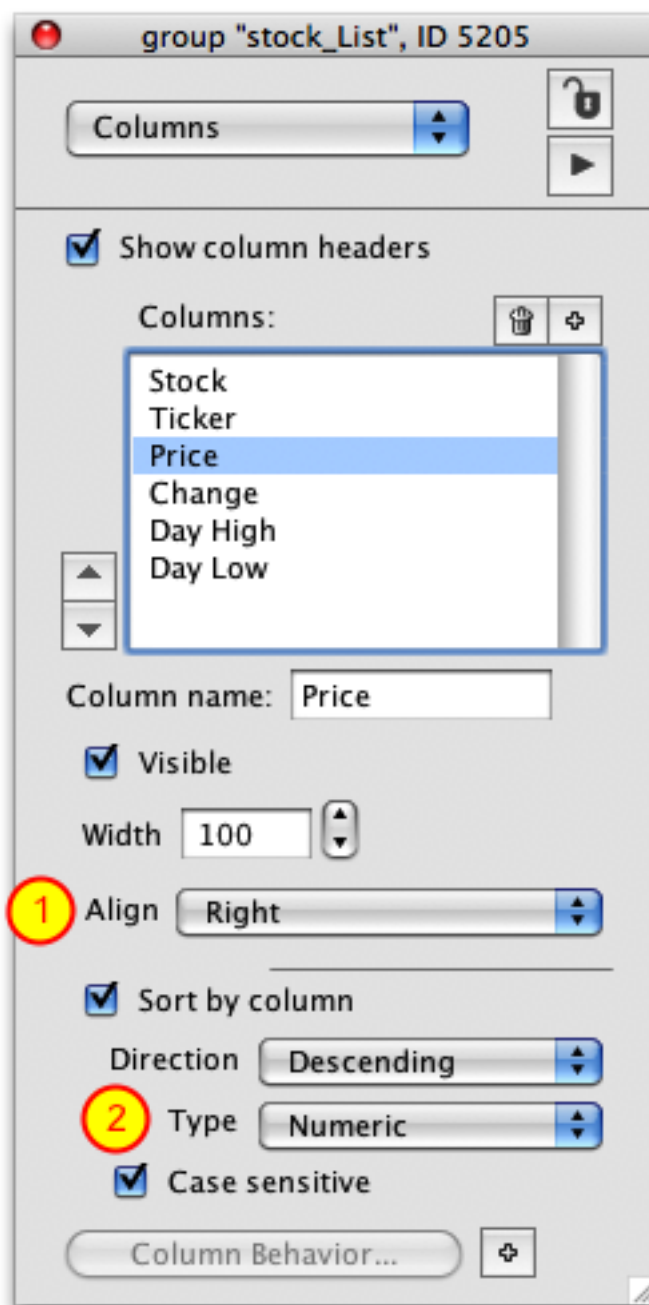
Resize and Add Columns
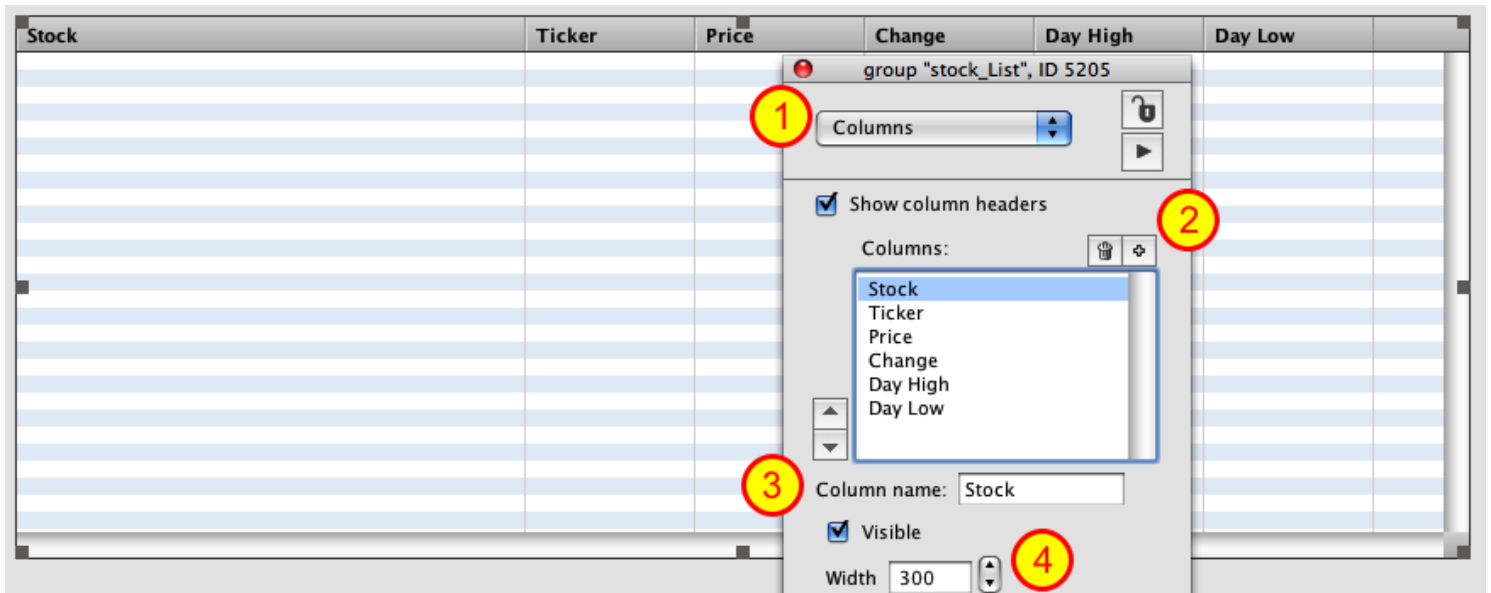
Resize the data grid to the size you want it to be and then open the property inspector. Switch to the **Columns** pane (1) and use the **+** button (2) to add columns. You can then set the name (3) and width (4).

What You Have So Far

If you set the uText or uData property at this point you will see something like this.

Set Column Properties

Now you can change the alignment and sort type of the columns. For all numeric columns set the alignment to *Right* (1) and the sort type to *Numeric* (2).

	Price		Change	Day
	85.30	▼	-3.54	
	61.69		-3.08	
	2.14		-0.02	

If you refresh the data in the data grid table you will see the new alignment and if you sort then the column will be sorted numerically.
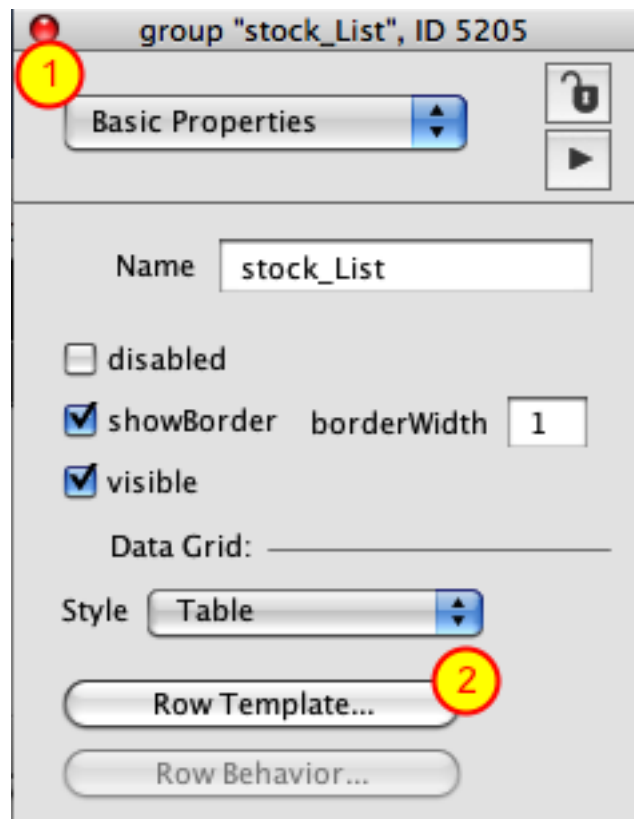
Customize Column Templates

Now that you have created and configured the data grid table you can customize any columns that need to display data in a special way.

Create a Column Template
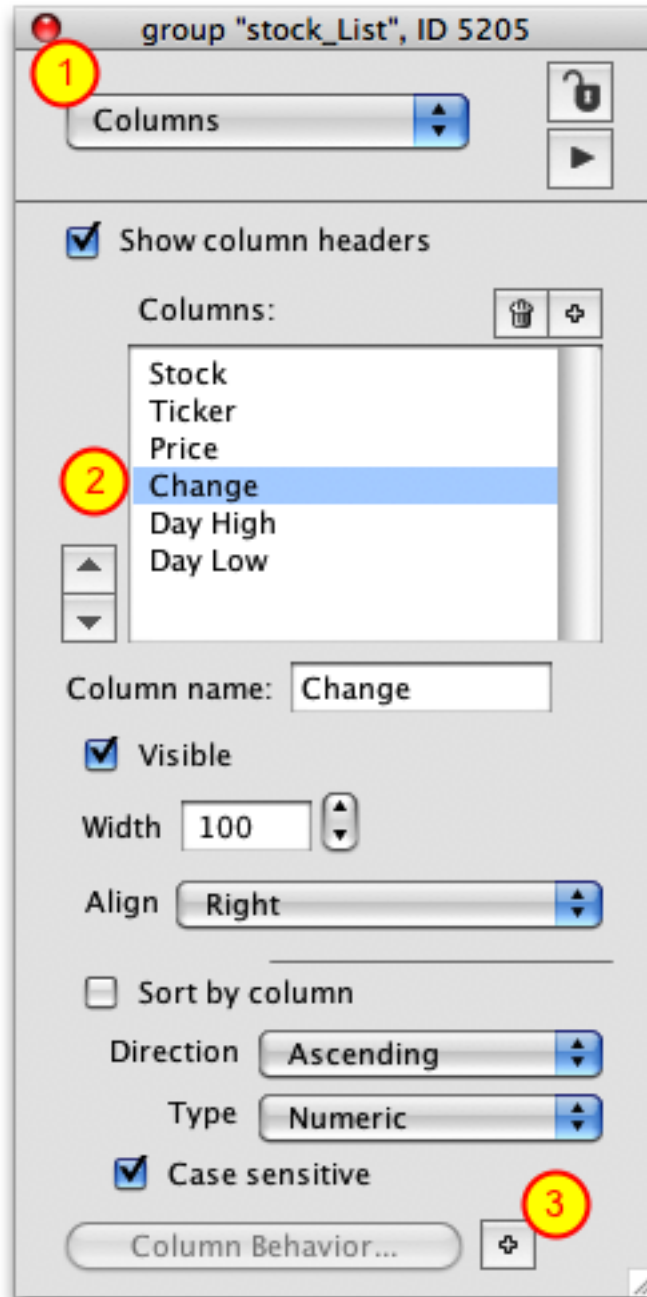
With the data grid selected, switch to the Columns pane (1) of the property inspector and select the column that you want to customize (2) and click the "Add custom column behavior" button (3).

Edit the Row Template

group "stock_List", ID 5205

1

Basic Properties

Name   stock_List

☐ disabled
☑ showBorder   borderWidth   1
☑ visible

Data Grid:

Style   Table

Row Template...   2

Row Behavior...

Now switch back to the Basic Properties pane (1) and click the Row Template button (2) to open the card with the template on it.

Editing template for group "stock_List" of card "card id 1002

New Button   1
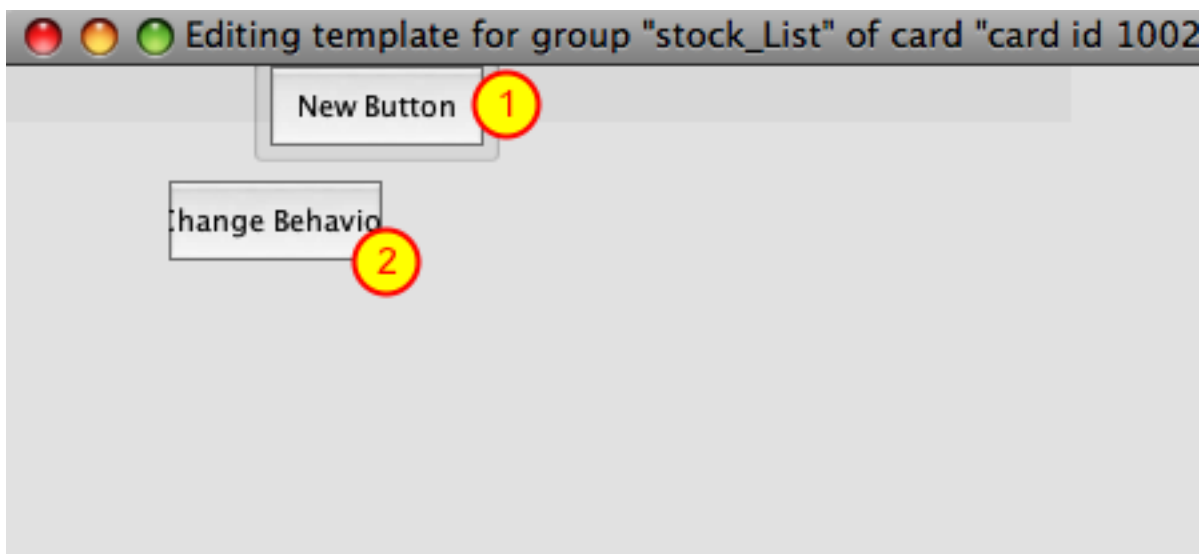
Change Behavio
2

When the card opens up you will see a group named *Change* (1). This is the custom template for the *Change* column. You will also see a button named *Change Behavior* (2). This script of this button defines the behavior for the *Change* group.
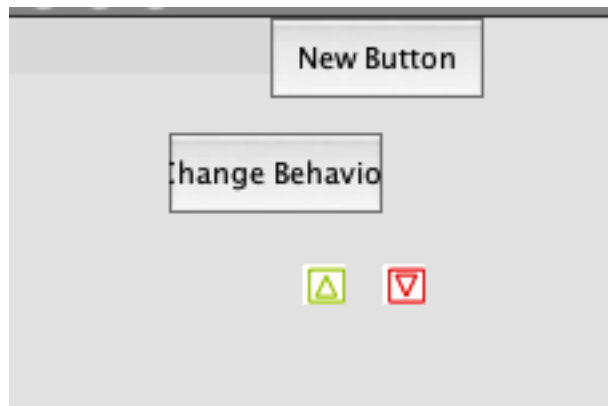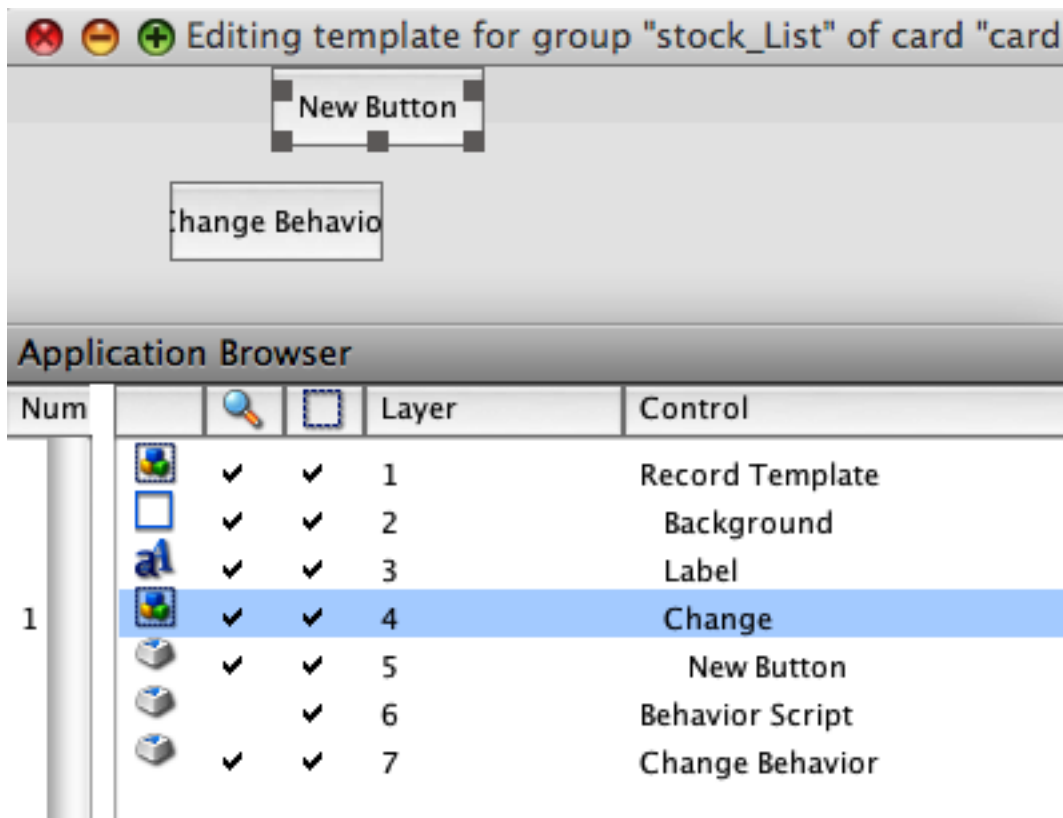
The *Change* column needs to images in order to visually represent the change in stock price as having gone up or down. Import those two images and note their ids.

Note: When a control has a behavior property and the control (or a child of the control if the control is a group) references an image id the Revolution engine first looks for a matching id on the card where the behavior button resides. For this reason you don't have to worry if the ids of the images you just imported are unique for the card where your data grid resides.

Edit "Change" Group Properties

As of Revolution 3.5 dp-7 you need to change some of the *Change* group properties before you do anything else. Select the *Change* group in the Application Browser and open the property inspector.
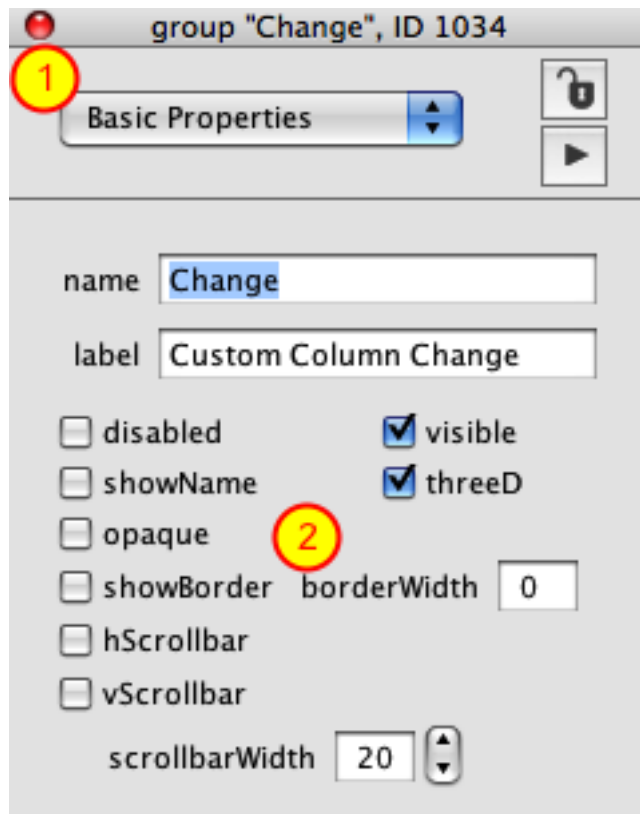
From the Basic Properties pane (1) set showname, opaque and showBorder to false and set borderWidth to 0 (2).
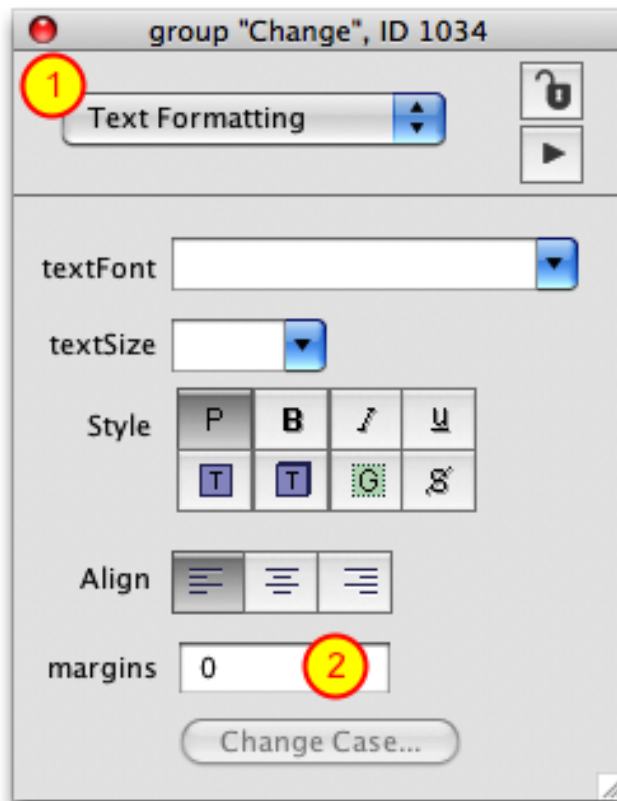
Switch to the Text Formatting pane (1) and set the margins to 0 (2).

Now you need to edit the *Change* group contents using the Edit Group button in the toolbar.

Add a label field and set the width to 100 (the width of the column is 100). Set the textAlign of the field to "right".

Rename the existing button "ChangeIndicator" and set the height and width to 15.
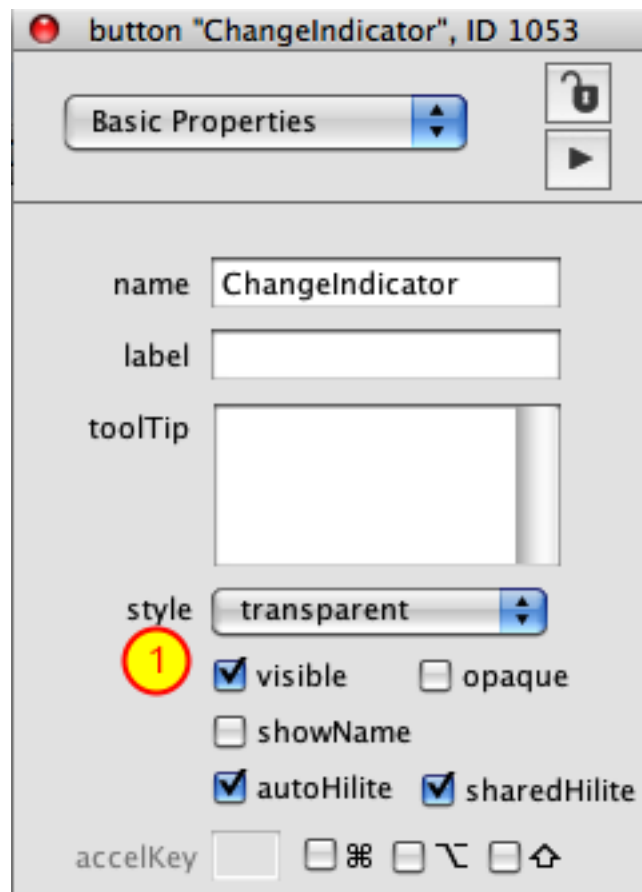
Edit the properties of the button. From the Basic Properties pane change the button style to *transparent* and set showName and opaque to false (1).
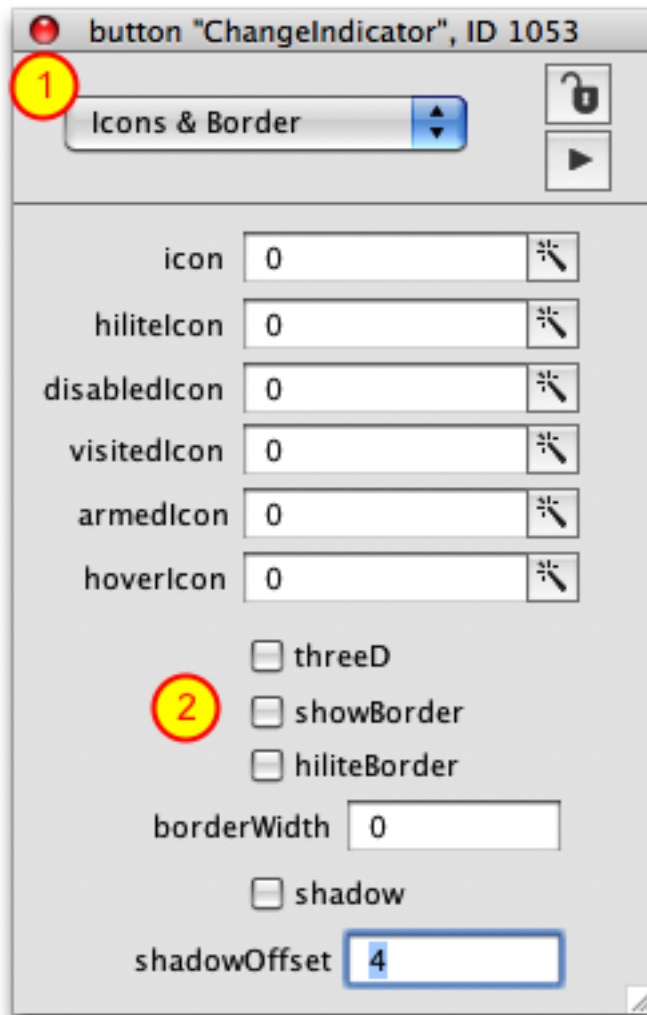
Switch to the Icons & Border pane (1) and set threeD, showBorder and hiliteBorder to false and set the borderWidth to 0 (2).

What We Have So Far
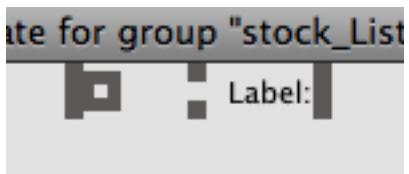
If you select both the field and the button they should be positioned as seen above.

Edit "Change" Column Behavior

Application Browser

			Layer	Control
🔲	✓	✓	1	Record Template
☐	✓	✓	2	Background
a1	✓	✓	3	Label
🔲	✓	✓	4	Change
a1	✓	✓	5	Label Field
🔷	✓	✓	6	ChangeIndicator
🔷		✓	7	Behavior Script
🔷	✓	✓	8	① Change Behavior
🖼	✓	✓	9	image id 1050
🖼	✓	✓	10	image id 1051

group "stock_List", ID 5205

Columns ▲▼

☑ Show column headers

Columns: 🗑 ✛

Stock
Ticker
Price
Change
Day High
Day Low

Column name: Change

☑ Visible

Width 100 ▲▼

Align Right ▲▼

☐ Sort by column

Direction Ascending ▲▼

Type Numeric ▲▼

☑ Case sensitive

② Column Behavior... ✛

Now we need to write the script that will determine how data will appear in the *Change* column. You can do this by editing the script of button **Change Behavior** (1) or you can select the data grid, open the property inspector, switch to the Columns pane and click on the **Column Behavior** button (2).

FillInData

```
on FillInData pData
    -- This message is sent when the Data Grid needs to populate
    -- this template with the column data. pData is the value to be disp
    -- You do not need to reposition any of your template's controls (if y
    -- in this message. Any repositioning should be handled in resizeCor

    -- Example:
(1) set the text of field 1 of of me to pData
    if pData > 0 then set the icon of button 1 of me to 1051
    else if pData < 0 then set the icon of button 1 of me to 1050 (2)
    else set the icon of button 1 of me to 0
end FillInData
```

All you need to do in FillInData is set the text of the field and determine which image to display in the button. The first parameter passed to FillInData is the column value. Assign that to the field (1) and then determine the image (2).

Assign the Row Hilite Color

```
set the uProps["hilite color"] of group "stock_List" to "61,128,223"
```
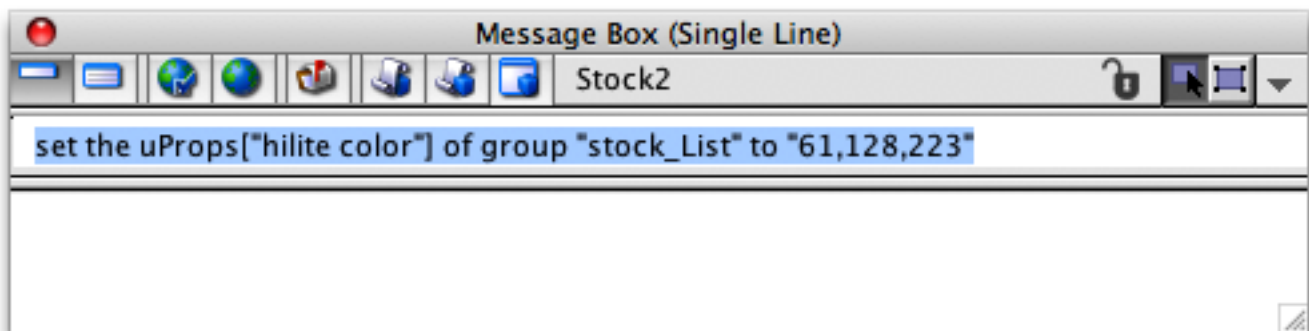
As of Revolution 3.5 dp-7 here is no UI for assigning the row hilite color. You can do this from the message box however using the above script.

What We Have So Far

Price		Change	Day High	D:
85.30	▽	−3.54	88.40	
61.69	▽	−3.08	65.50	
2.14	▽	−0.02	2.22	

If you preview some data you will see that we have no right-aligned numbers with the appropriate arrow showing and up or down change.

The End Result

Stock	Ticker	Price	Change	▲	Day High	Day Low	
Apple Computer Inc.	APPL	85.30	▽	−3.54	88.40	82.33	
Amazon.com Inc.	AMZN	61.69	▽	−3.08	65.50	59.82	
Barclays	BARC.L	64,80	▽	−0.70	71.00	61.70	
Advanced Micro Devices	AMD	2.14	▽	−0.02	2.22	2.09	
Microsoft	MSFT	15.28		0.00	15.62	14.87	
Dow Jones Industrial Average Index	^DJI	6626.94	△	32.50	6755.17	6469.95	