Subject: Re: New graph packages
Posted by Didier on Mon, 26 Mar 2012 21:53:13 GMT
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Hi all,

My graph package is taking form so I'm going to publish a first version.

The design guideline I followed was to make it the most configurable possible, in order to be able to do a lot of things (at least for 2D graphs)

GraphDraw is based on the followinf principles:

A coordinate manager is in charge of each graph<->screen conversion => a unique instance is used for plotting, grid/axis management
The plot can be decorated with "GraphElements" (Left, right, top, bottom, over the whole graph, ...) just like Ctrls.
They are stacked on each side of the plot. You can create whatever class you need for you're graph (like drawing exclusion zones on a graph, ...)
One nice feature of GraphElements is that they have a callback that is called when mouse clicks on it ==> In the example try clicking on the axis
The Grid and Axis drawing are grouped in one class that can be overloaded (in fact it is a GraphElement)
The tick management is dedicated to a specific class: GridStepManager : it calculates the positions where ticks/grid needs to be drawn. The intent of this class is to allow custom step calculation (log, ...)

The main classes are:

CoordinateConverter : it manages the coordinate conversion and can be overloaded for custom needs
GraphLementFrame :
GridAxisDraw
GridStepManager
GraphDraw
EmptyGraphDraw |
StdGraphDraw | helper classes intended to ease the use

The code is pretty dirty and not cleaned at all (lots and lots of templates, I will kick them out once architecture and optimisations are finished)
The easyest way to use it to use the 'StdGraphCtrl' as in the example

Many functions are missing (zoom, scroll, ...) but the code architecture is pretty much finished although a lot of work is still to be done .

The data management is 100% compatible with ScatterDraw since it uses the same interface.

You can put as many axis as you wan't

File Attachments

1) GraphCtrlExample.png, downloaded 1219 times