Subject: Scatter. Faster updates for huge datasets
Posted by koldo on Wed, 19 May 2010 13:50:17 GMT
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Hello all

As usually datasets are sequential in X axis, for example, there is a value/second, there are two new functions in Scatter that use this to multiply the update speed:

- SetSequentialX: Indicates that the data has been sequentially inserted following X axis

- SetFastViewX: Indicates that it will be viewed a point per horizontal pixel. This point will be the average of all data that is in that pixel

TestScatter2 includes now a new tab with 200000 points datasets that are easily handled. I have tried it with 2000000 in my two years old computer and it works well in debug mode.

This possibility has been included in .usc file so it can be used at least partially in Layout editor.

Subject: Re: Scatter. Faster updates for huge datasets
Posted by tojocky on Wed, 19 May 2010 19:38:20 GMT
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koldo wrote on Wed, 19 May 2010 16:50Hello all

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Hello Koldo,

Nice Optimization you did!
But i think that will not works correct for all points data! It works only for x sorted points.
I did not look in detail your changes. But I will do!

Overall, nice realization!

Subject: Re: Scatter. Faster updates for huge datasets
Posted by koldo on Wed, 19 May 2010 19:55:46 GMT
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Yes it is. Both optimizations are centered on X data series. Remember the names. Both ends with "X":

- SetSequentialX: Requires a series of ordered data in X axis
- SetFastViewX: Minimizes pixel drawing considering X axis

Both optimizations could be implemented for vertical series. For real XY plots (like a circle) they are not useful.

However in many cases (from my experience) datasets are sequentially ordered following X axis. And the speed improvement is very high.

Subject: Re: Scatter. Faster updates for huge datasets
Posted by tojocky on Thu, 20 May 2010 07:10:29 GMT
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koldo wrote on Wed, 19 May 2010 22:55Quote:Hello Koldo,

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From a few days ago I started to use this control! I will try to come with improvements!
