Subject: ScatterDraw/ScatterCtrl new features
Posted by koldo on Sat, 04 May 2013 00:19:24 GMT
View Forum Message <> Reply to Message

Hello all

ScatterDraw/ScatterCtrl classes have some new features:

- Trend lines
They can be handled outside Scatter classes by using ExplicitEquation class. This class can fit your data to any equation supplied.

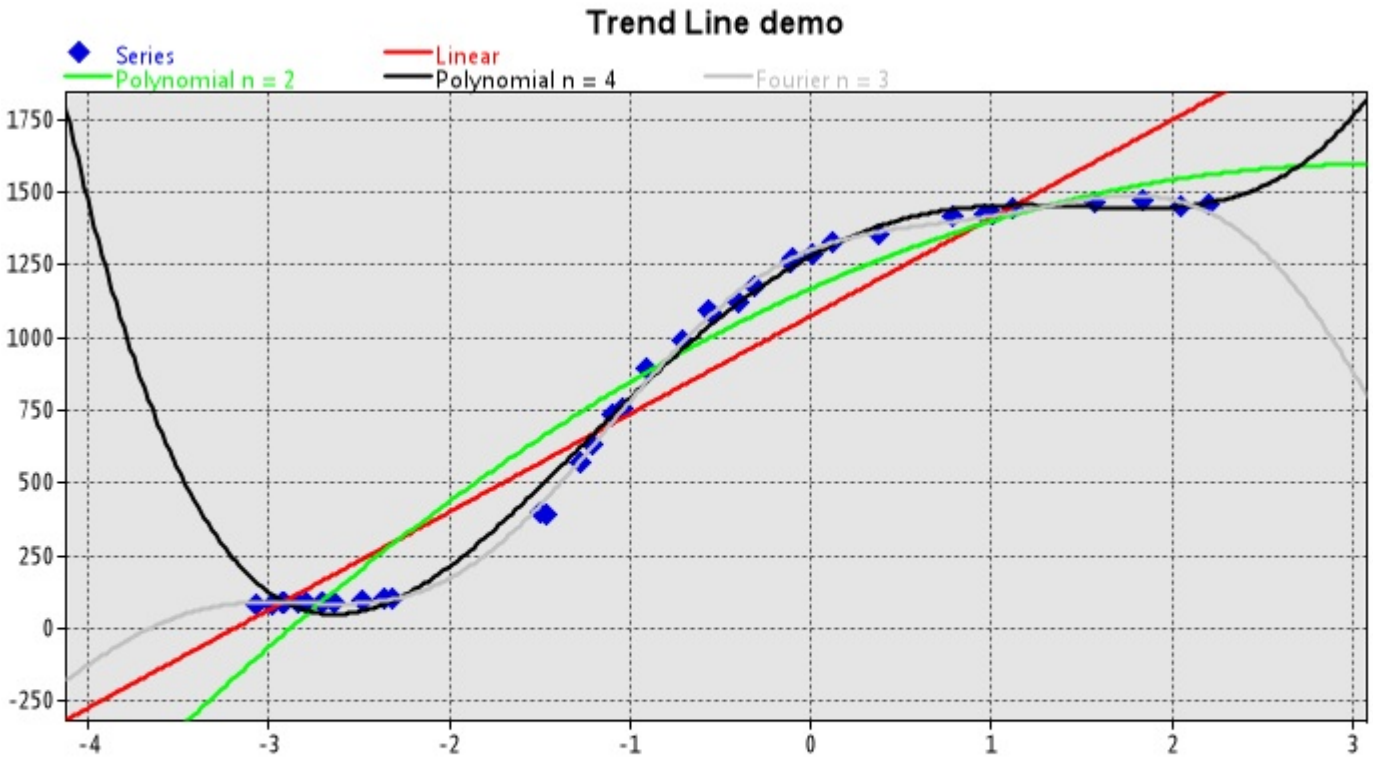
It is incredibly simple to use

- Properties window
Scatter properties window is activated by clicking right mouse button and choosing "Properties". It lets you change some properties and copy selected plot data to clipboard. It is activated by default in DEBUG mode or by ShowPropertiesDlg().

- PieChart
Andrei Catalin pie chart from Bazaar/Scatter has been moved here with some changes. It is experimental pending to be implemented in Painter.

File Attachments

1) trend.jpg, downloaded 1531 times



Trend Lines Details:

Type	Equation	R2
Linear	1073.772 + 336.678*x	0.92101
Polynomial n = 2	1167.807 + 276.449*x - 44.753*x^2	0.95753
Polynomial n = 4	1279.046 + 337.502*x - 172.135*x^2 - 7.24*x^3 + 14.967*x^4	0.99529
Fourier n = 3	597.1 + 732.436*cos(1*0.664*x) + 501.302*sin(1*0.664*x) - 134.142*cos(2*0.664	0.99891

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by BioBytes on Sat, 04 May 2013 13:13:41 GMT
View Forum Message <> Reply to Message

Hello Koldo,

This new features are very interesting in my professional field (biochemistry & diagnostics) mainly to integrate statistical trends.

Thank you for this implementation

Regards

Biobytes

Subject: Re: ScatterDraw/ScatterCtrl new features

Posted by koldo on Sat, 04 May 2013 20:31:27 GMT
View Forum Message <> Reply to Message

Hello Biobytes

That is excellent. If you have any particular needs just tell me to include them in the package.

There are many possibilities to be included but their order will depend on the priorities.

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by BioBytes on Mon, 06 May 2013 19:20:32 GMT
View Forum Message <> Reply to Message

Hi Koldo,

Thank you for your proposal in last message. Perhaps a silly inquiry but I am not yet familiar with scatterCtrl and Scatter package. Is it possible to draw bar-like or stacked-bar graphs.

Have a nice evening

Regards

Biobytes

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by koldo on Tue, 07 May 2013 06:11:28 GMT
View Forum Message <> Reply to Message

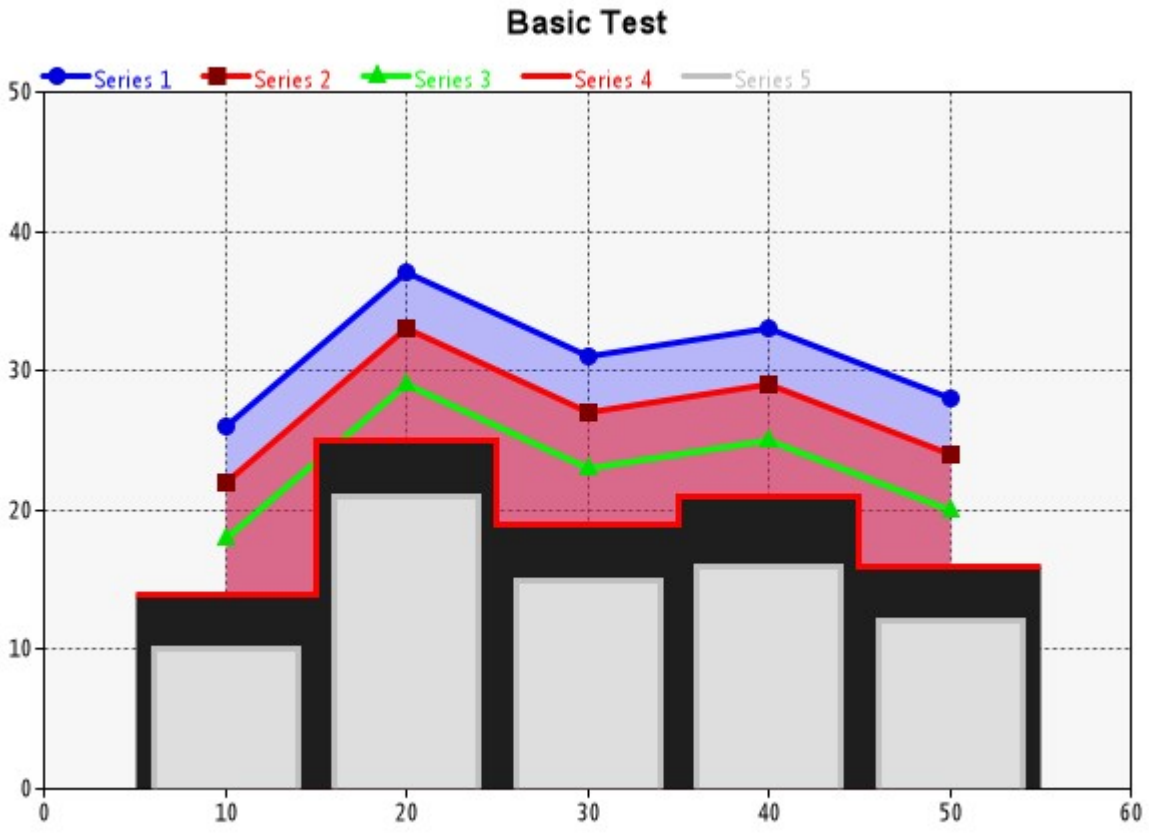
Hello BioBytes

ScatterDraw is rather flexible to include even new user defined plot and park styles.

However if you give me exact examples of what you need I can easily implement them.

File Attachments

1) plot.jpg, downloaded 1342 times



Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by BioBytes on Wed, 08 May 2013 15:56:27 GMT
View Forum Message <> Reply to Message

Hi Koldo,

Ok I see. I was too lazy to explore the samples supplied with U++ installation but it is clear that many features are available in this package.

I have another question: What is the difference with PlotCtrl/PlotLib ?

Thank you in advance for your reply

Best regards
Biobytes

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by Didier on Wed, 08 May 2013 21:51:05 GMT
View Forum Message <> Reply to Message

Hi Koldo,

I detected a small compilation issue that occurs on some compilers (gcc for arm for example).

In ScatterDraw/Equation.cpp, replace:
```
struct Equation_functor : NonLinearOptimizationFunctor<double> {
 DataSource *series;
 ExplicitEquation *fSource;
    Equation_functor() : NonLinearOptimizationFunctor() {}
```
by
```
struct Equation_functor : NonLinearOptimizationFunctor<double> {
 DataSource *series;
 ExplicitEquation *fSource;
    Equation_functor() : NonLinearOptimizationFunctor<double>() {}   --- correction here ---
```

Add <double> to the base class default constructor (or remove the call since it's the defaut constructor)

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by dolik.rce on Thu, 09 May 2013 05:17:39 GMT
View Forum Message <> Reply to Message

BioBytes wrote on Wed, 08 May 2013 17:56I have another question: What is the difference with PlotCtrl/PlotLib ?
Hi Biobytes,

PlotLib and PlotCtrl was my experiment to create a graphing based on Painter (as there was none at that time). It is not developped anymore as it was by far surpassed by the graphing widgets from Koldo and Didier. The only last feature where PlotLib might have advantage is that it can be used for drawing in non-GUI apps (event on servers with no X windows installed), as it doesn't use CtrlCore.

But as I said, it is not developed anymore, and it is probably full of bugs I wouldn't recommend using it for production code, unless you really need some of the special functionality and you're willing to spend considerable time developing it to suit your needs. Actually I think it might be better if I delete it from svn, so it doesn't confuse people

Honza

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by koldo on Thu, 09 May 2013 05:50:14 GMT
View Forum Message <> Reply to Message

Hello Didier

It is true. It is unnecesary. I have removed it (to be uploaded tomorrow). Thank you!

Didier wrote on Wed, 08 May 2013 23:51Hi Koldo,

I detected a small compilation issue that occurs on some compilers (gcc for arm for example).

In ScatterDraw/Equation.cpp, replace:
```
struct Equation_functor : NonLinearOptimizationFunctor<double> {
 DataSource *series;
 ExplicitEquation *fSource;
    Equation_functor() : NonLinearOptimizationFunctor() {}
```
by
```
struct Equation_functor : NonLinearOptimizationFunctor<double> {
 DataSource *series;
 ExplicitEquation *fSource;
    Equation_functor() : NonLinearOptimizationFunctor<double>() {}   --- correction here ---
```

Add <double> to the base class default constructor (or remove the call since it's the defaut constructor)

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by koldo on Thu, 09 May 2013 05:54:01 GMT
View Forum Message <> Reply to Message

dolik.rce wrote on Thu, 09 May 2013 07:17BioBytes wrote on Wed, 08 May 2013 17:56I have another question: What is the difference with PlotCtrl/PlotLib ?
Hi Biobytes,

PlotLib and PlotCtrl was my experiment to create a graphing based on Painter (as there was none at that time). It is not developped anymore as it was by far surpassed by the graphing widgets from Koldo and Didier. The only last feature where PlotLib might have advantage is that it can be used for drawing in non-GUI apps (event on servers with no X windows installed), as it doesn't use CtrlCore.

But as I said, it is not developed anymore, and it is probably full of bugs I wouldn't recommend using it for production code, unless you really need some of the special functionality and you're willing to spend considerable time developing it to suit your needs. Actually I think it might be better if I delete it from svn, so it doesn't confuse people

Honza
Hello BioBytes

Scatter packages are strongly inspirated in Honza's Plot packages including but not limited to the ability to create and save plots in command line applications.

Subject: Re: ScatterDraw/ScatterCtrl new features
Posted by BioBytes on Thu, 09 May 2013 18:07:17 GMT
View Forum Message <> Reply to Message

Hello Honza , Koldo and Didier,

Thank you all for useful and clear explanations about the graphs packages.

Have a nice week-end

Regards

Biobytes