Use MS Chart with Data Binding

Contents

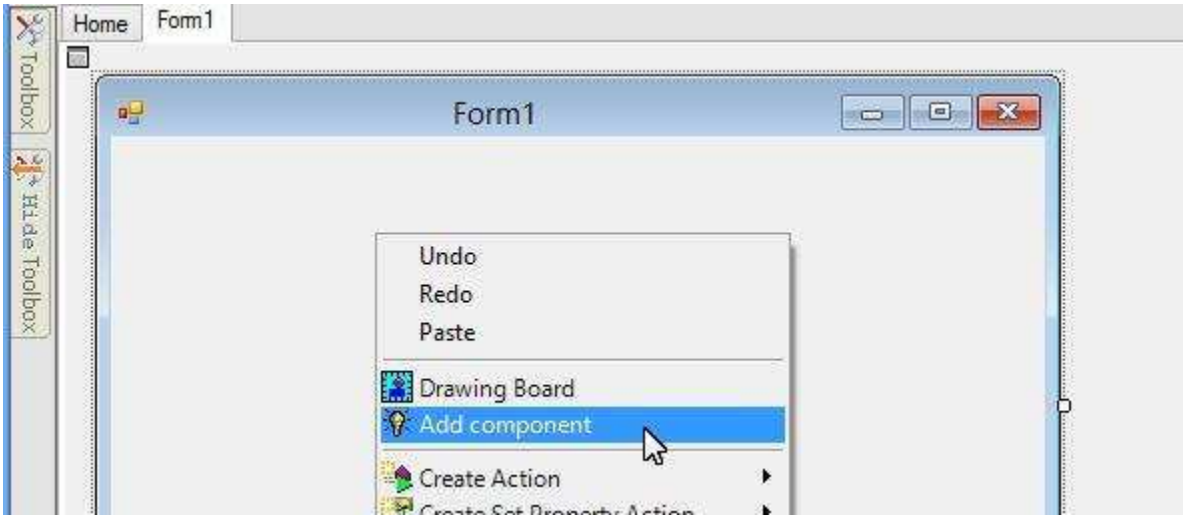
Introduction

MS Chart control can be used to visualize data from your databases. This document shows some samples using MS Chart.

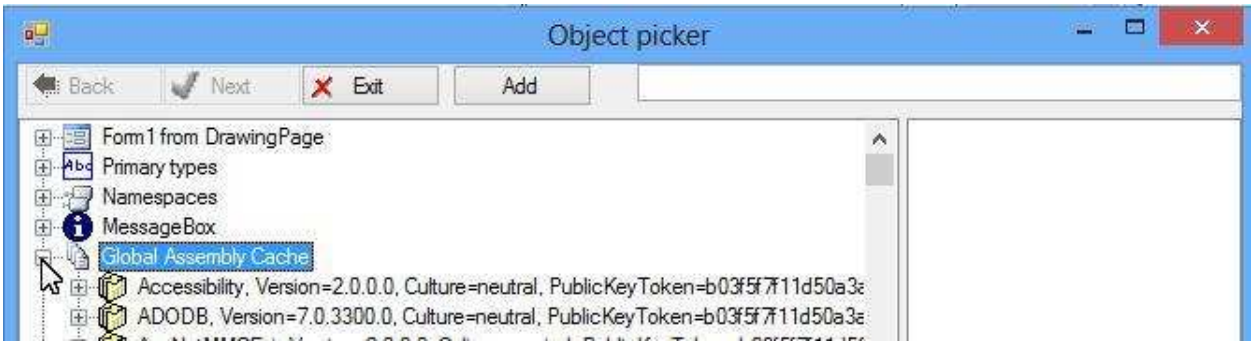
MS Chart control can be downloaded from http://www.microsoft.com/en-us/download/details.aspx?id=14422

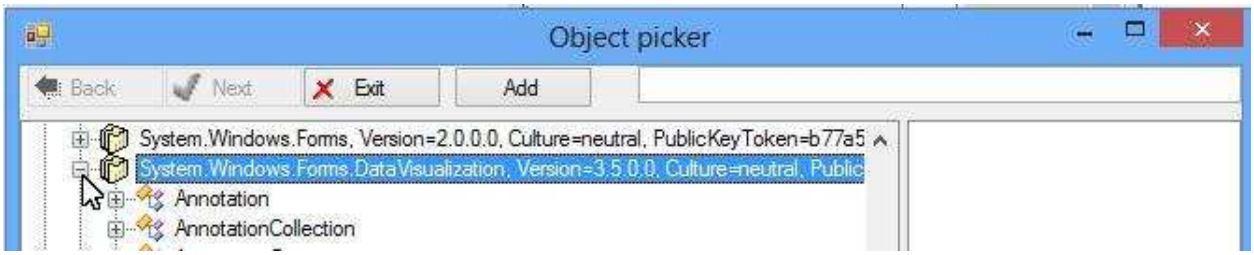
Add MS Chart to Form

Create a Windows Form application. Right-click a form, choose “Add component”:



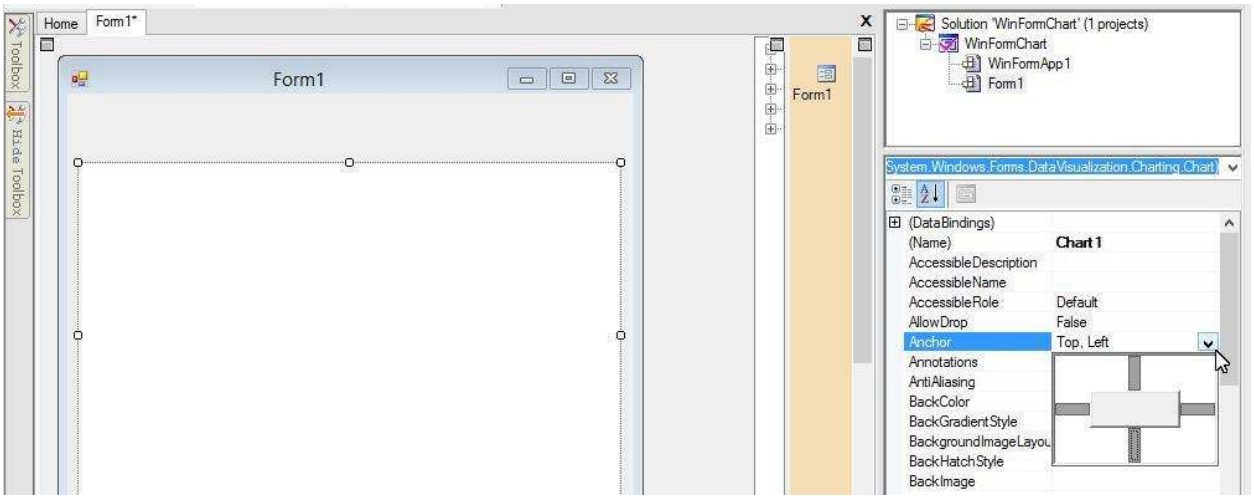
MS Chart is in Global Assembly Cache under namespace System.Windows.Forms.DataVisualization:





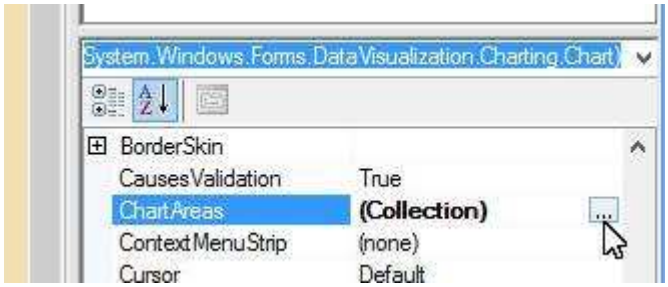
Select Chart class:

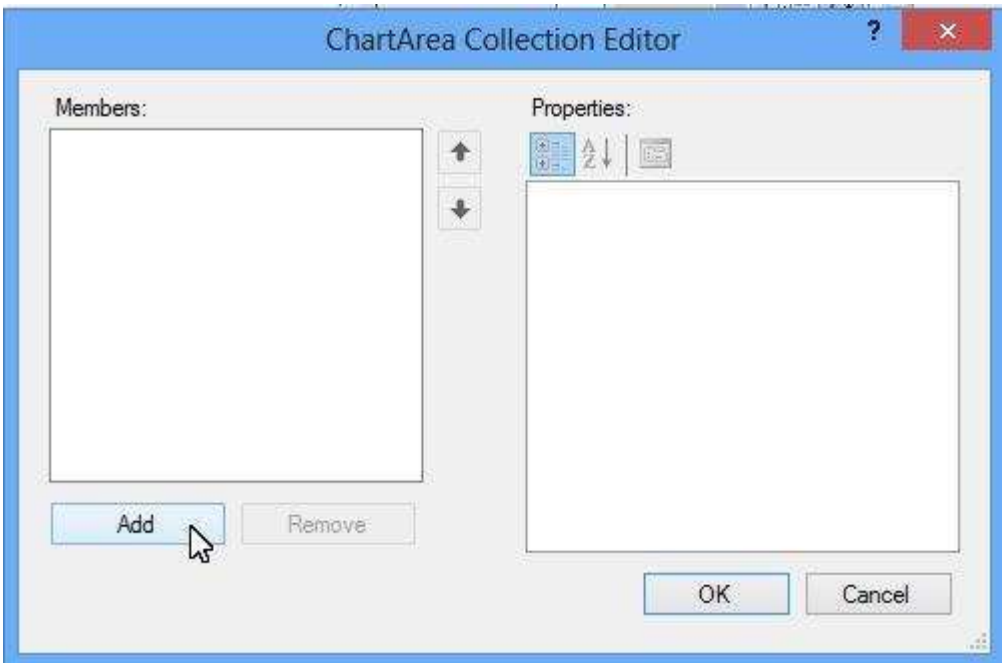
A chart control appears on the form. You may set its properties:



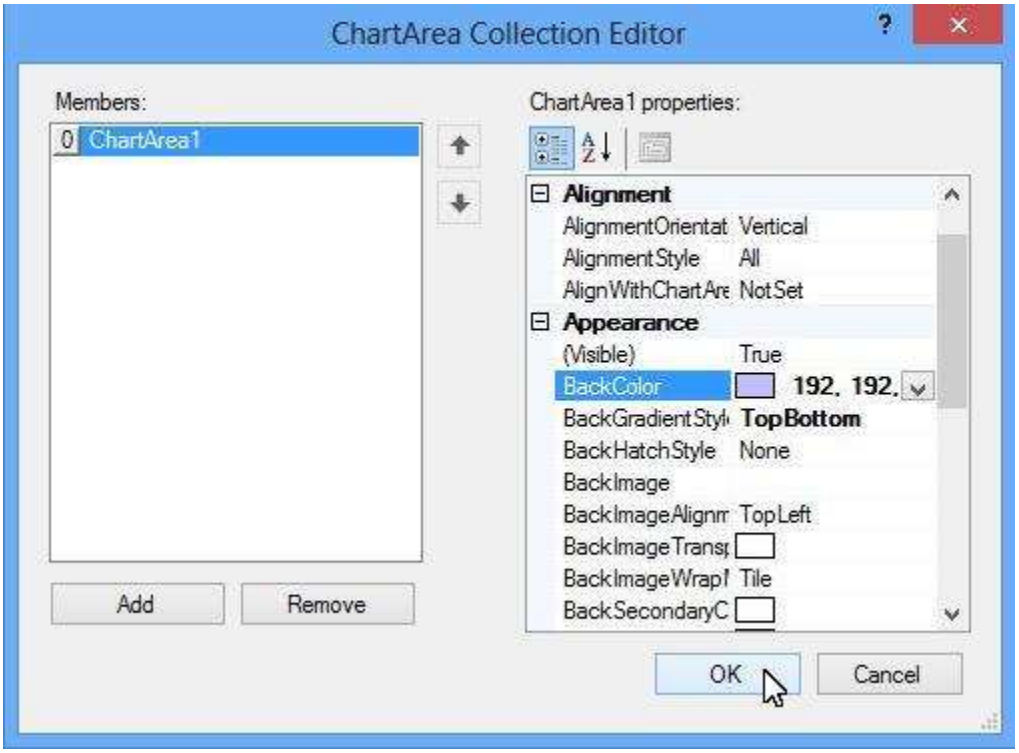
Create Chart Area

If ChartAreas property does not contain an item then we need add one:



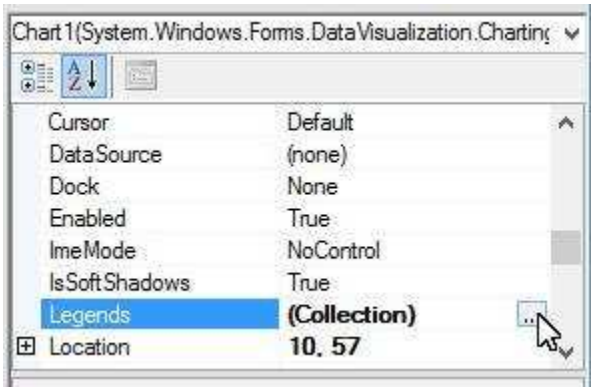


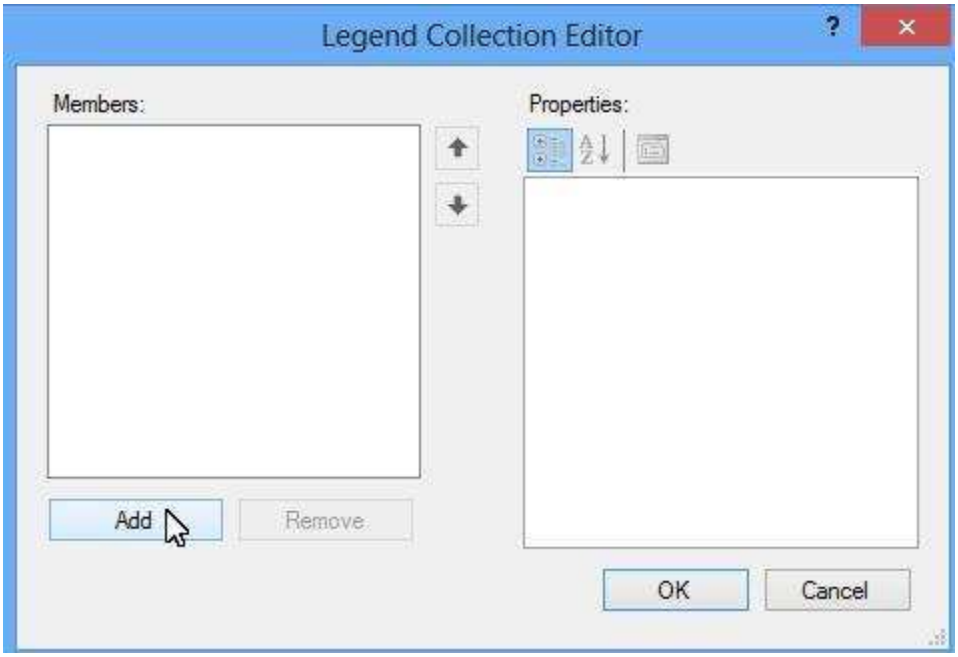
You may set properties for the chart area. For example, set background properties.

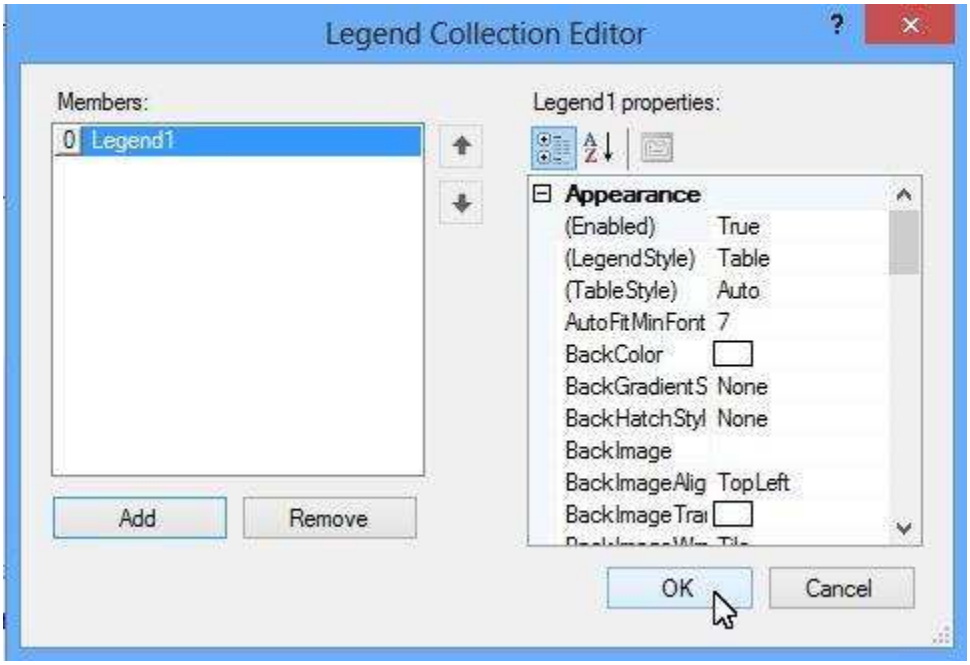


Add Legends

If you want to use legends then you may set Legends property:







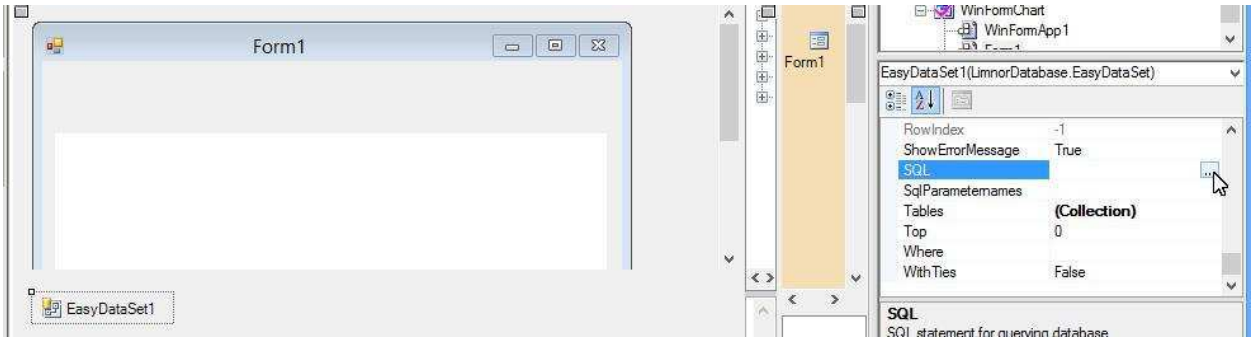
Use DataBindTable

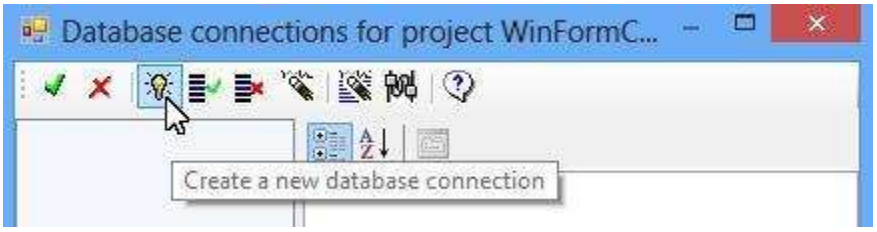
A MS Chart control has a DataBindTable method to pass data from database to the control.

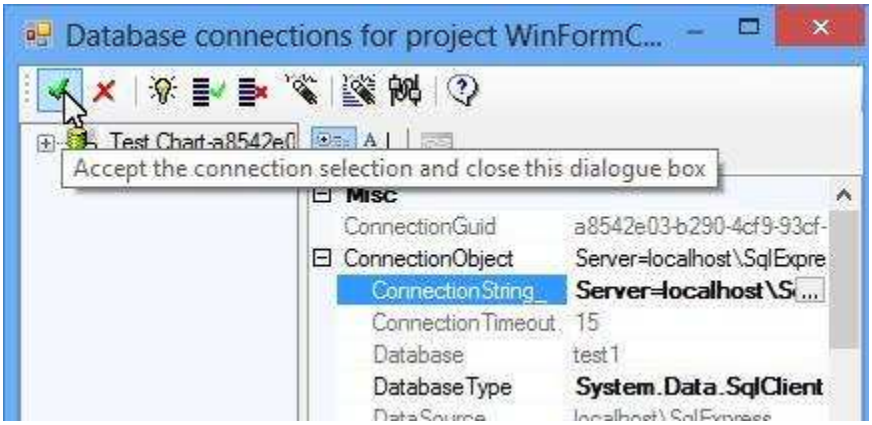
Use EasyDataSet as Data Source

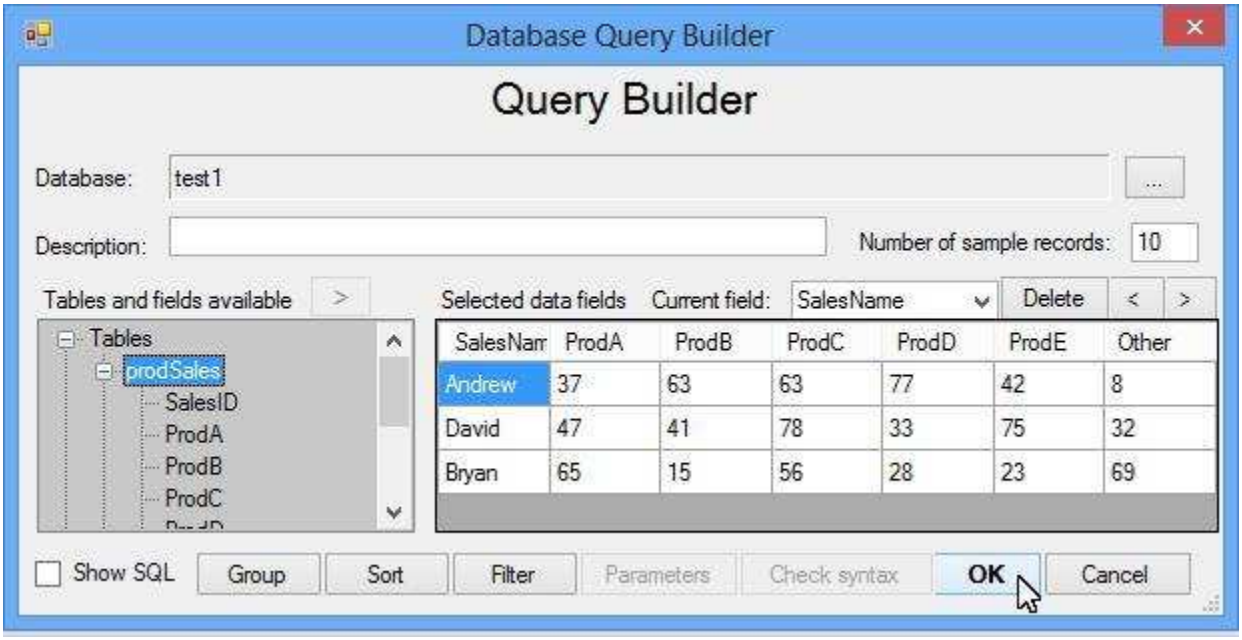
We may use an EasyDataSet to get data from a database. For more details on using database, see http://www.limnor.com/support/Limnor%20Studio%20-%20User%20Guide%20-%20Part%20VI.pdf.

Here we use a simple query to get data:



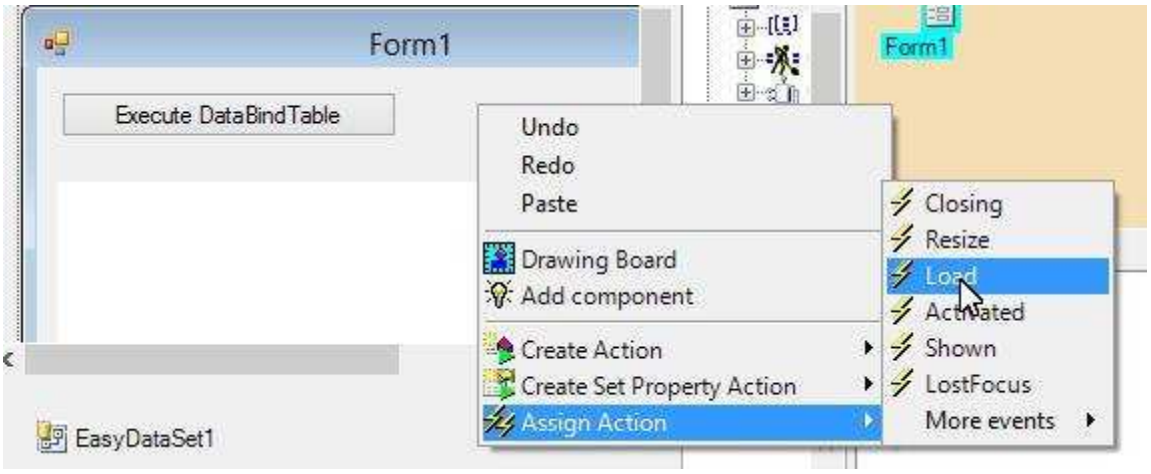




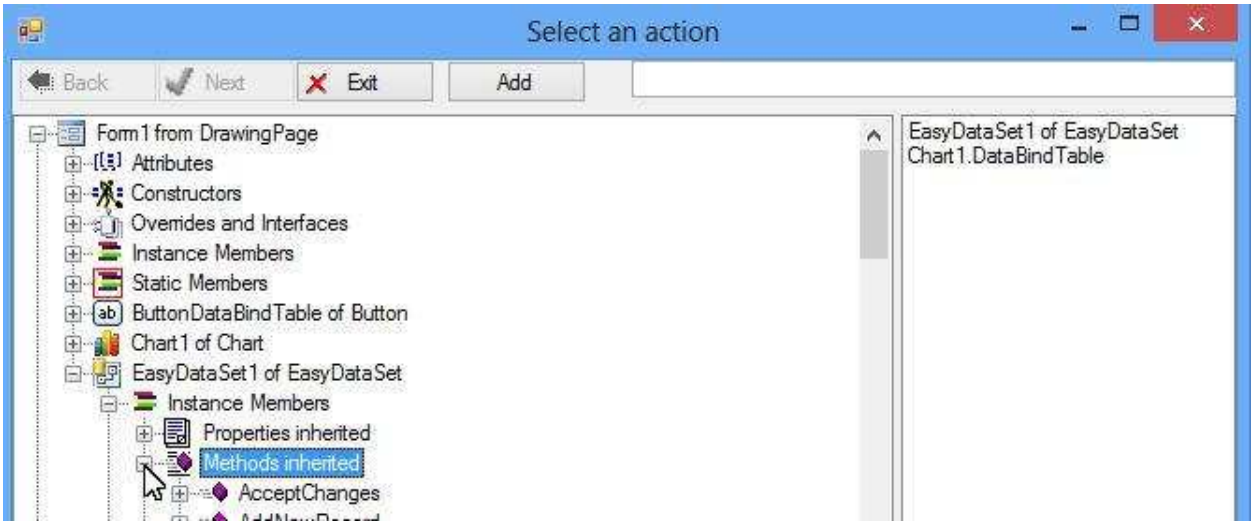


Fetch data from database

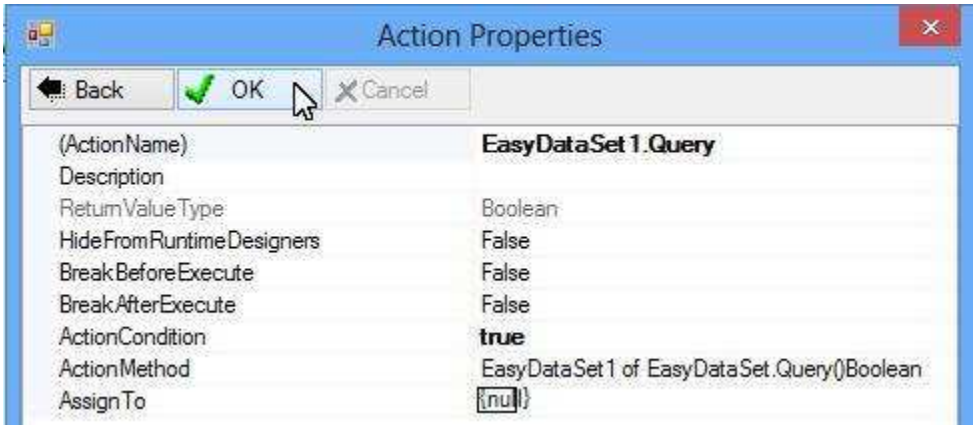
We do it at the time the form is loaded:



Select Query method:



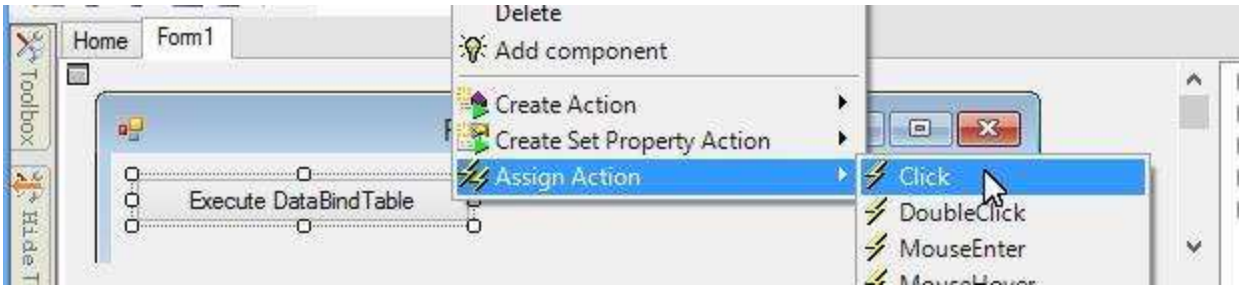
Click OK:



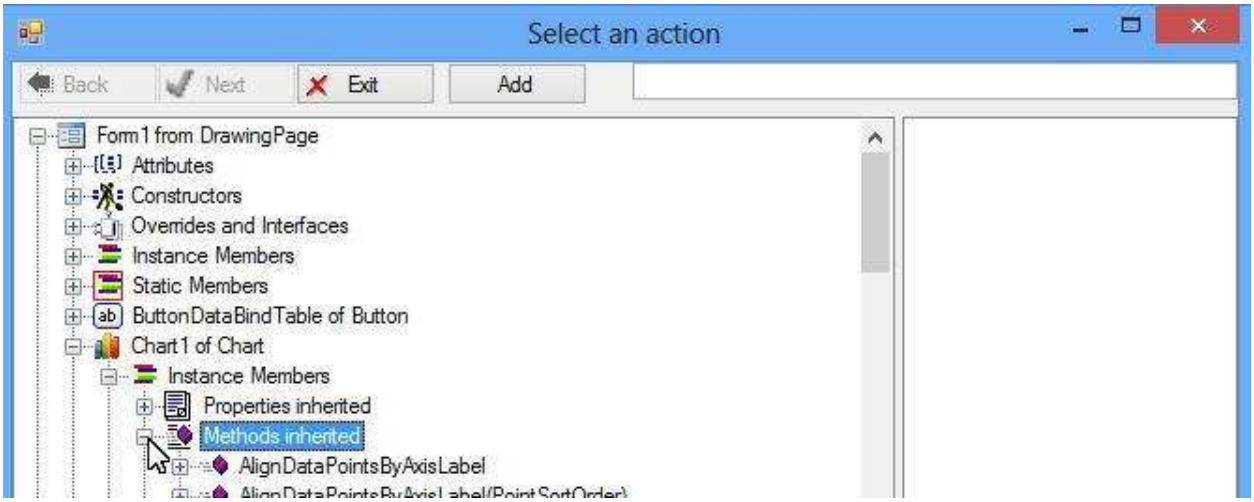
The action is created and assigned to Load event of the form:

Create and execute DataBindTable action

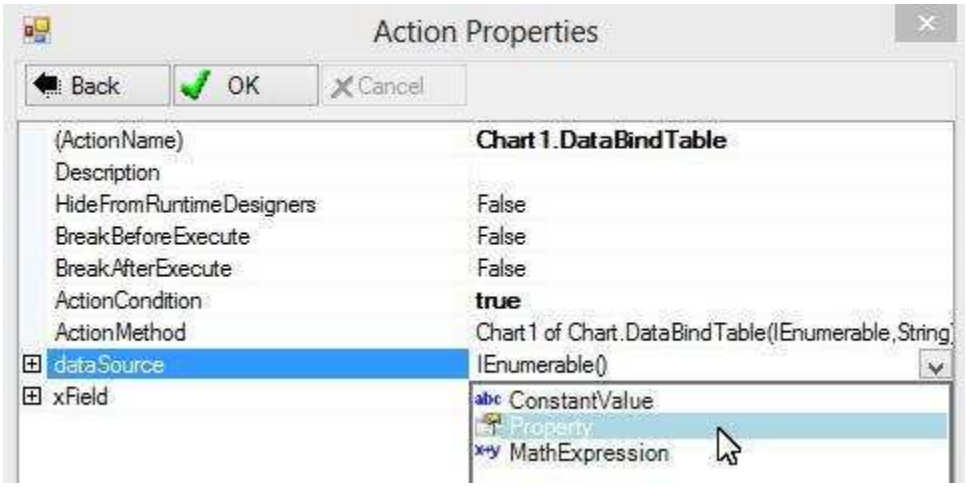
We use a button to execute a DataBindTable action:

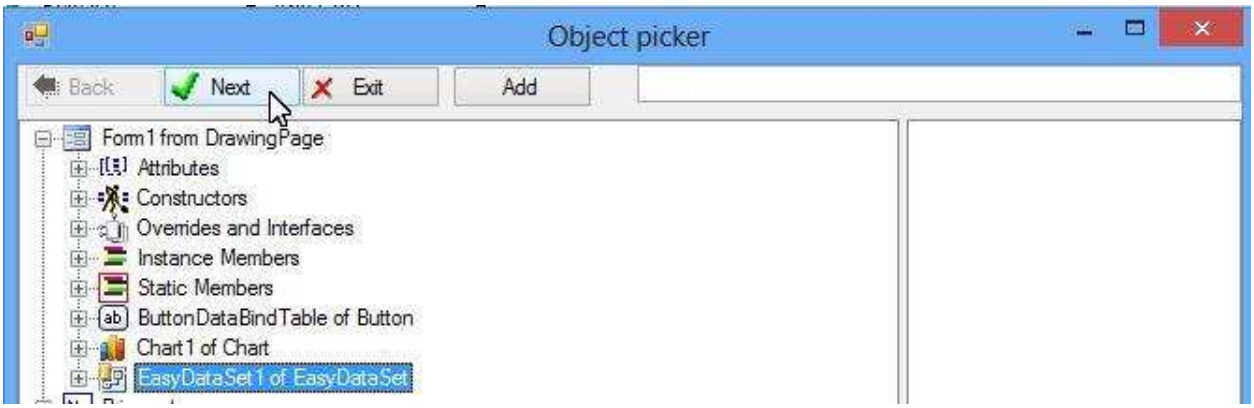


Select DataBindTable method:

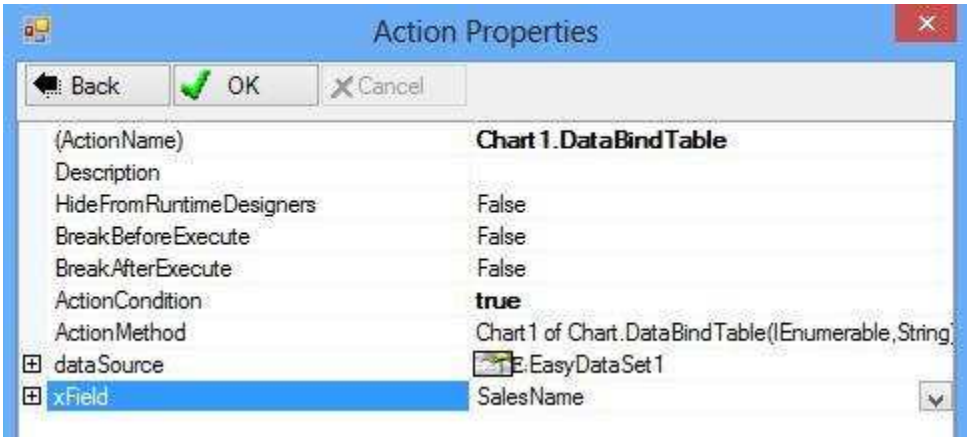


Select the EasyDataSet as the data source:

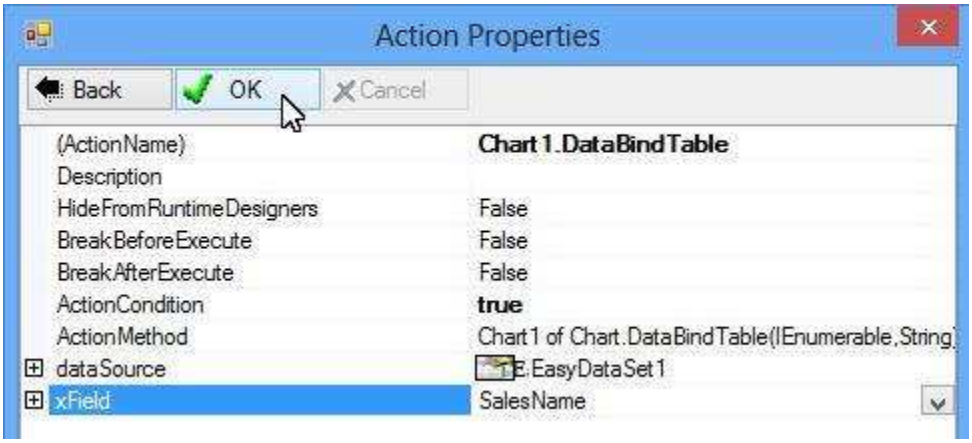




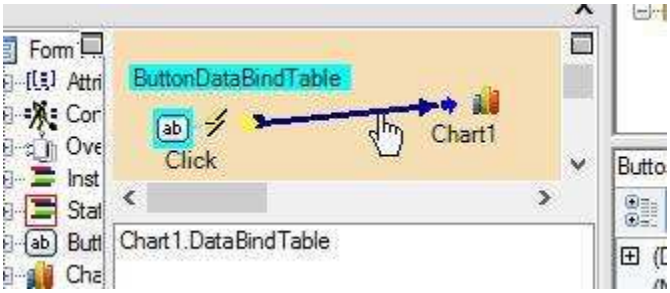
Use “SalesName” field for x-axis:



Click OK to create this action and assign it to the button:

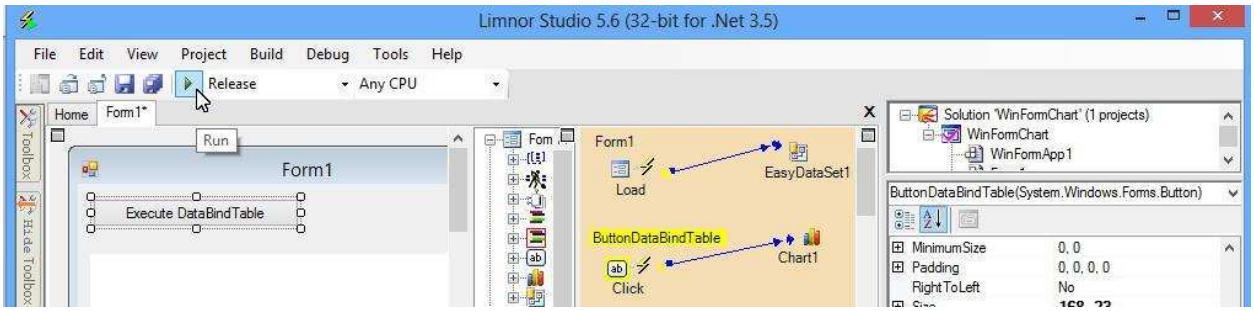


The action is created and assigned to the button:

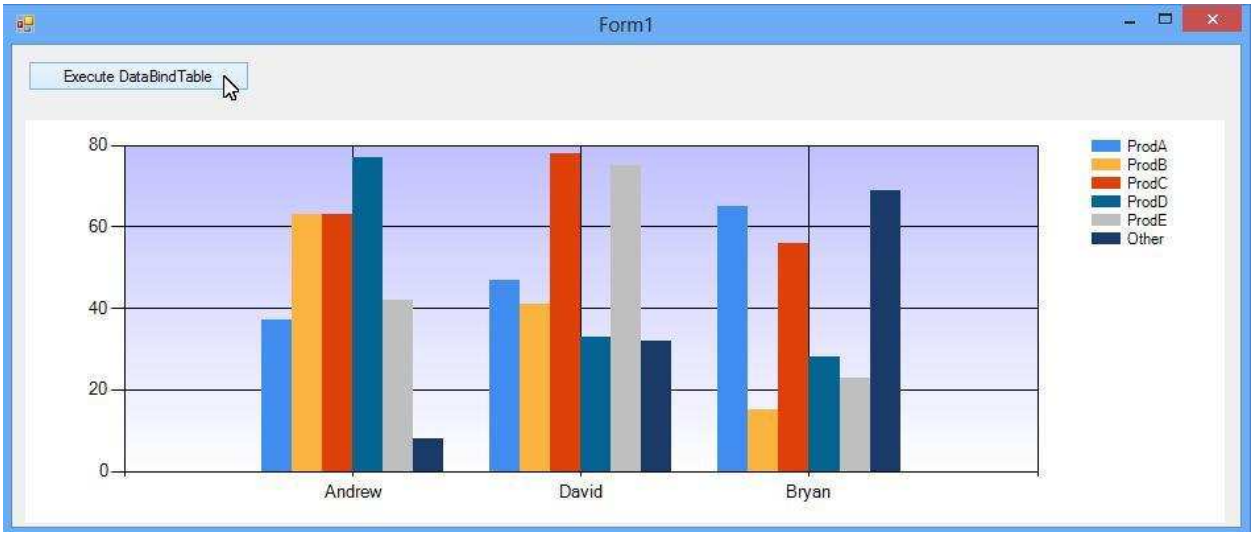


Test

Compile and run the program:



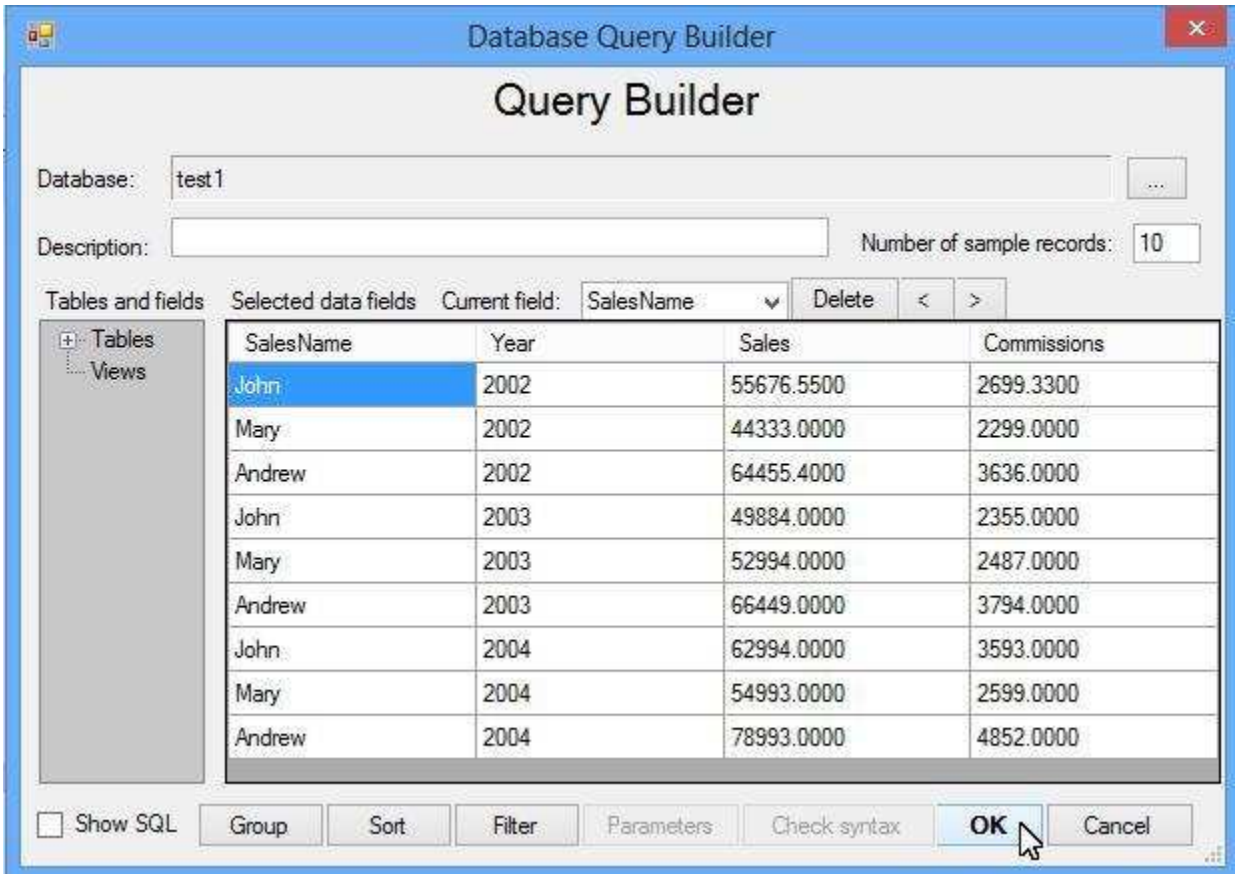
Click the button “Execute DataBindTable”. The chart shows the data:



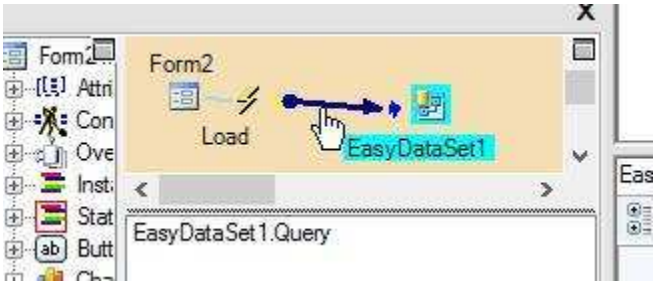
Use DataBindCrossTable

Cross-table data

MS Chart may show cross-table data. Let's use an EasyDataSet to show a sample of cross-table data:

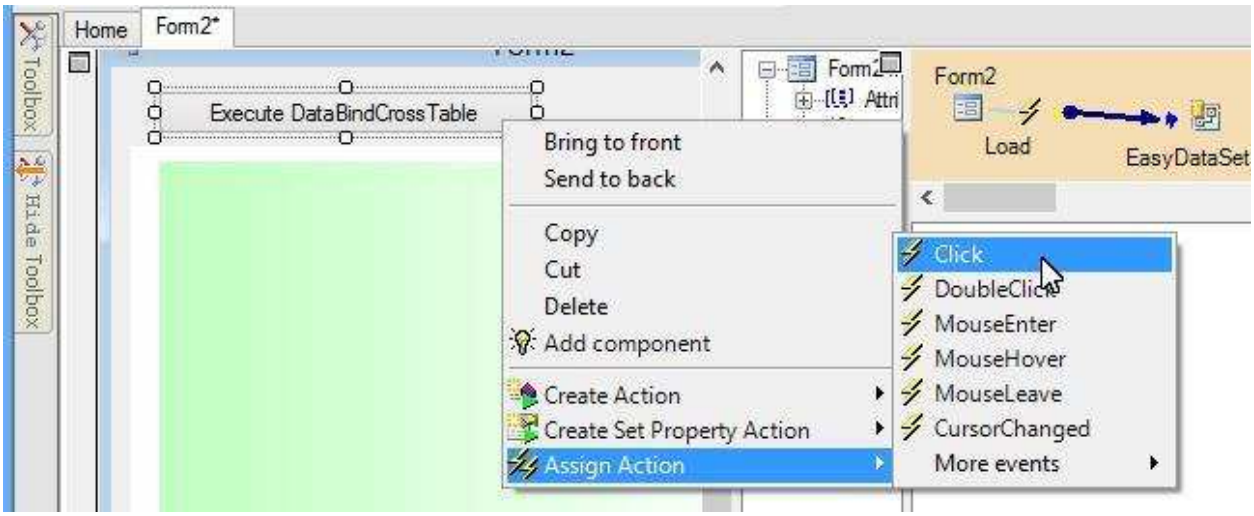


As we did before, we fetch data when the form is loaded:

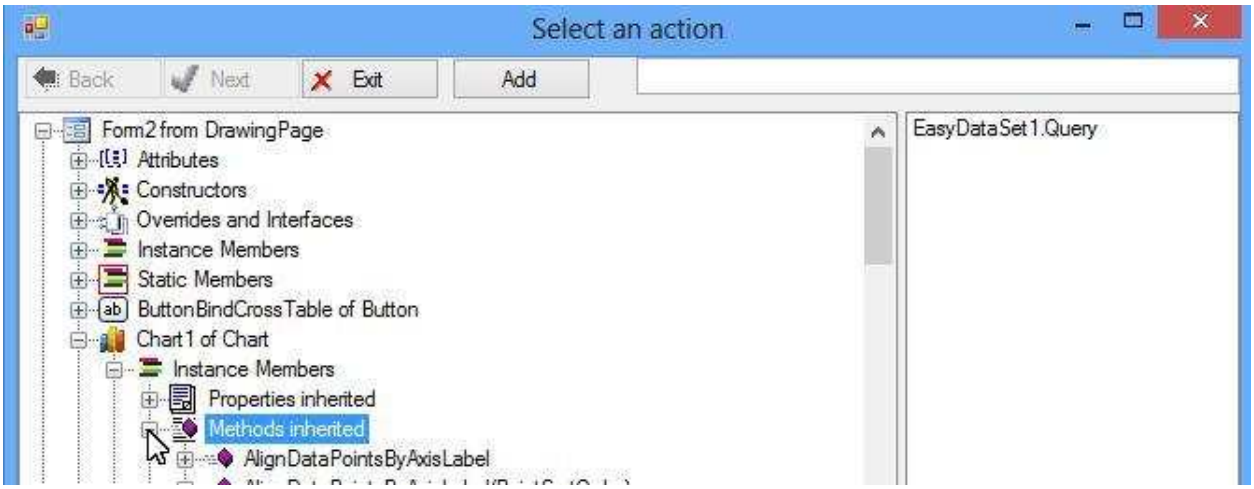


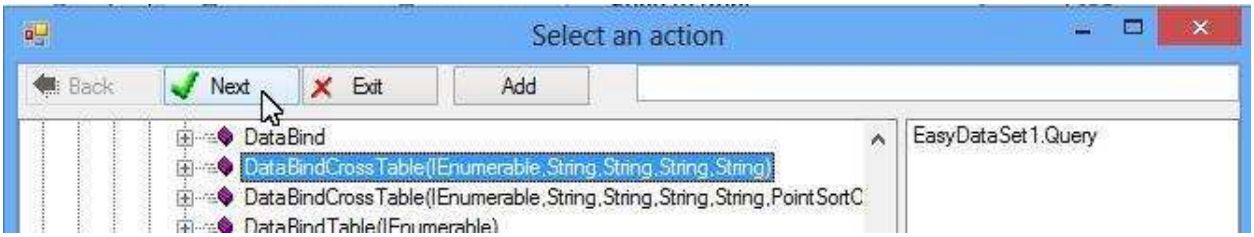
Create and Execute DataBindCrossTable Action

We use a button to execute a DataBindCrossTable action:

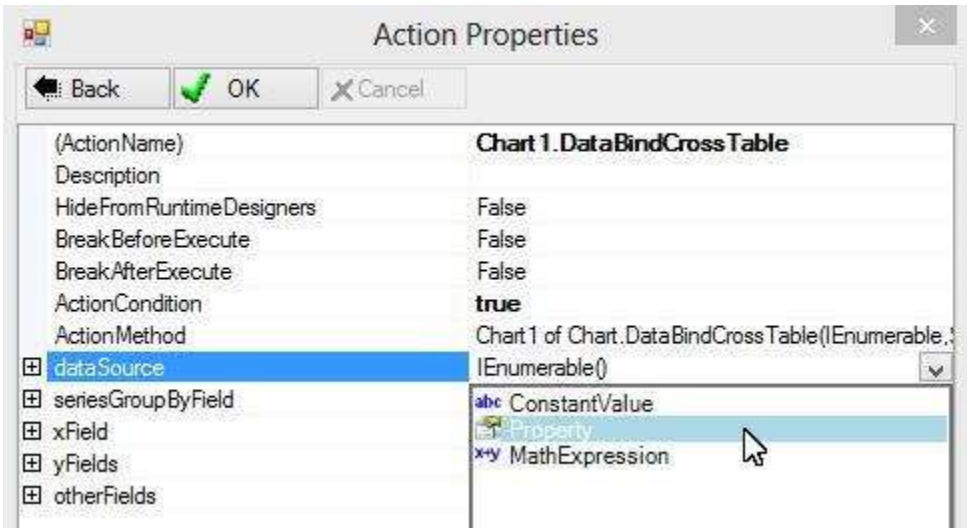


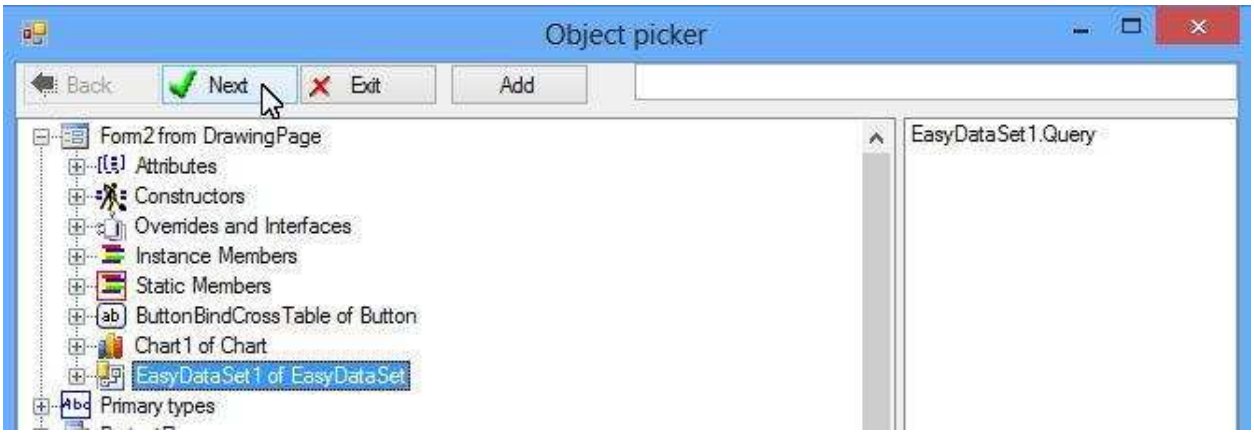
Select DataBindCrossTable method:





Use the EasyDataSet as the data source:





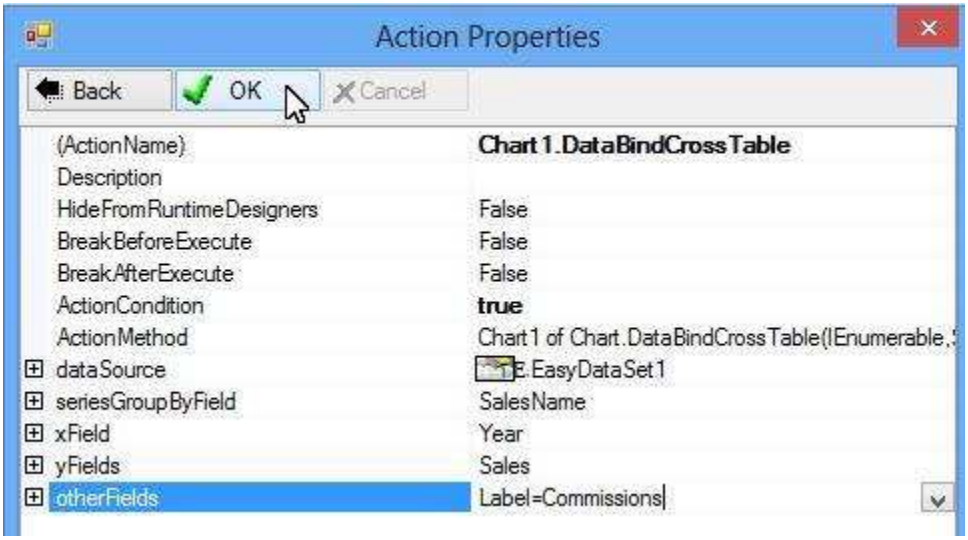
“serialsGroupByField” is a field name indicating the field used to group data. In our sample, we may use SalesName field to group data.

“xField” is a field name indicating the field for x-axis. In this sample, we use “Year” for x-axis.

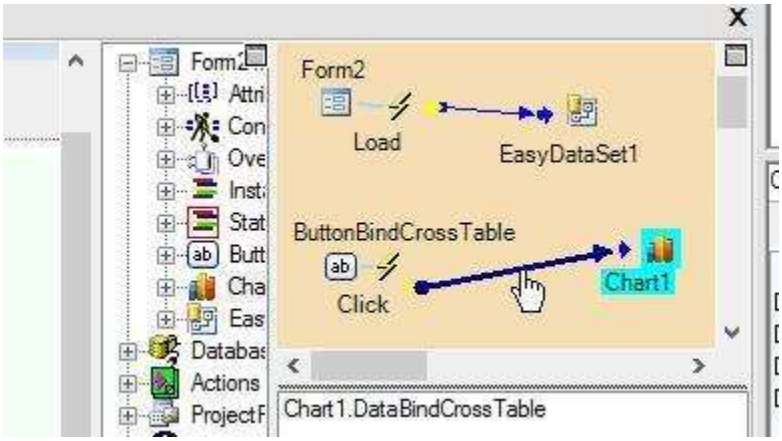
“yField” is a field name indicating the field for y-axis. In this sample, we use “Sales” for y-axis.

“otherFields” is a comma-delimited string listing additional data-bindings. Following properties of a serial can be bound:

AxisLabel, Tooltip, Label, LegendText, LegendTooltip and CustomPropertyName. In this sample, we use Label=Commissions to bind Label to field Commissions.

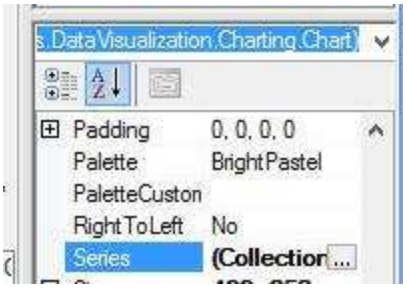


The action is created and assigned to the button:

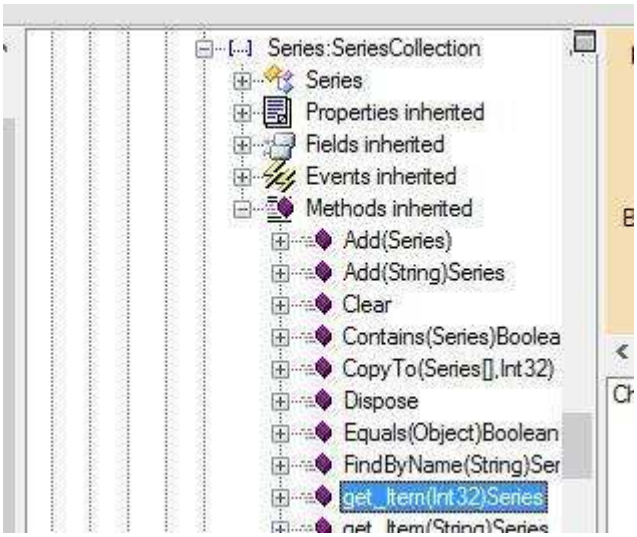


Change Chart Type

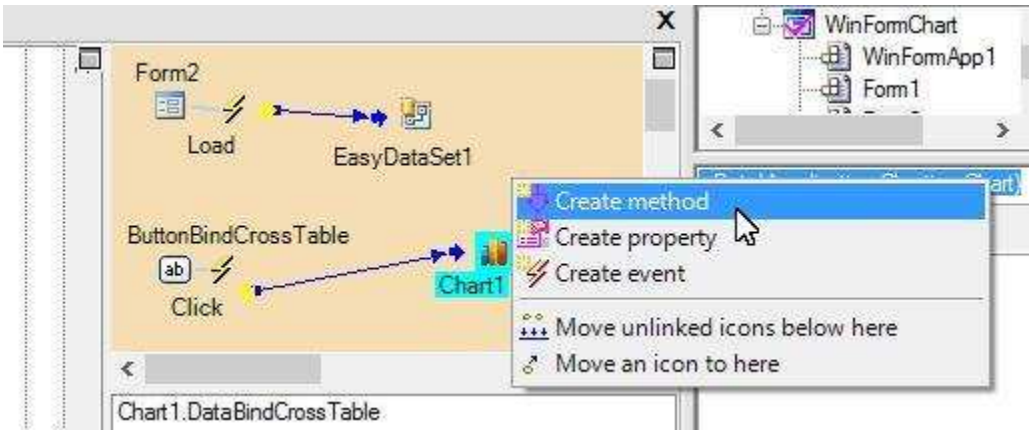
The chart type can be changed for each series. All series are accessible through Series property:



We may get a series via get_Item method:

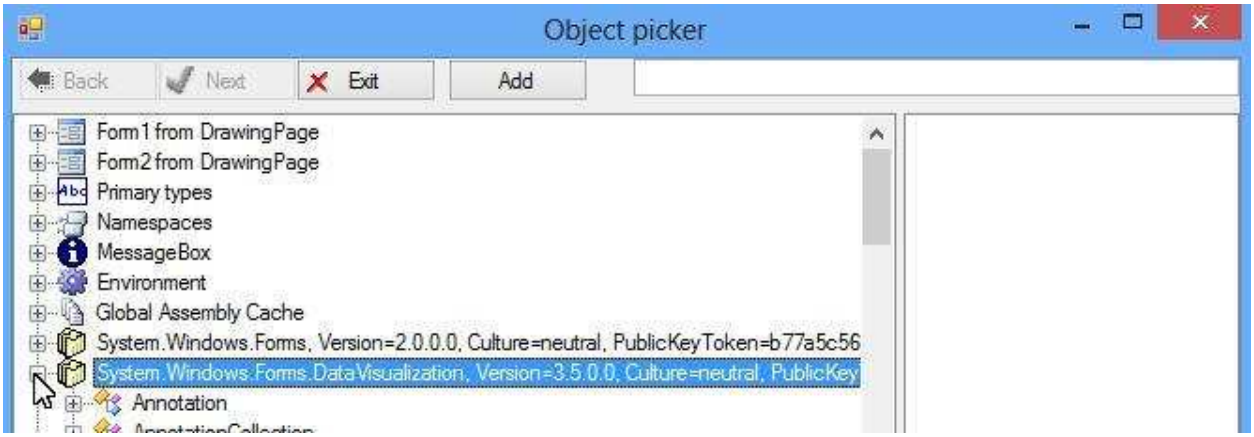


We may also use a loop action to change chart types for all series. We'll do it by creating a method:

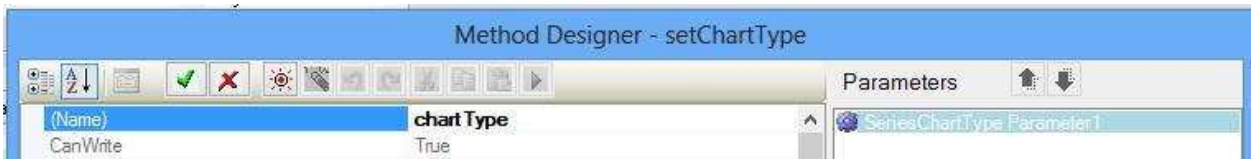


Change the method name and add a parameter:

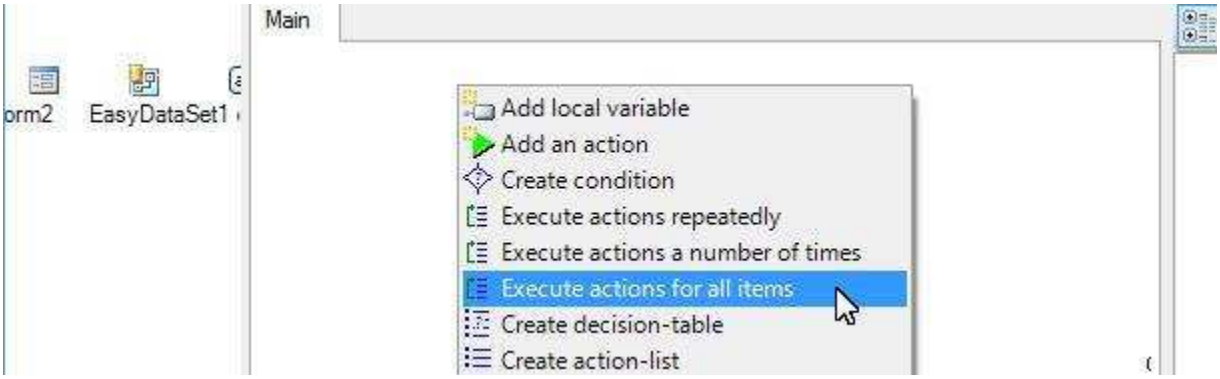
Find SeriesChartType:



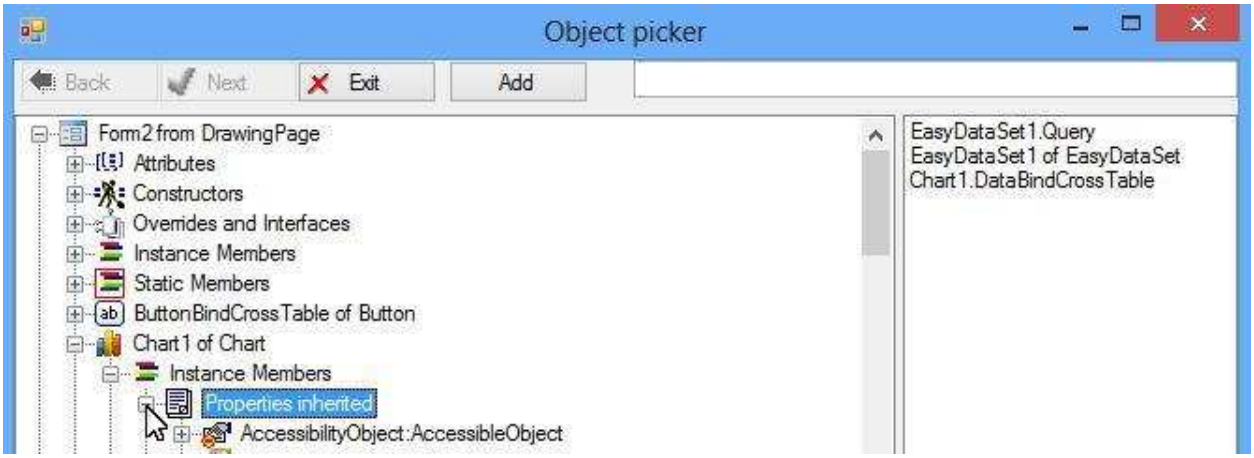
Change parameter name:



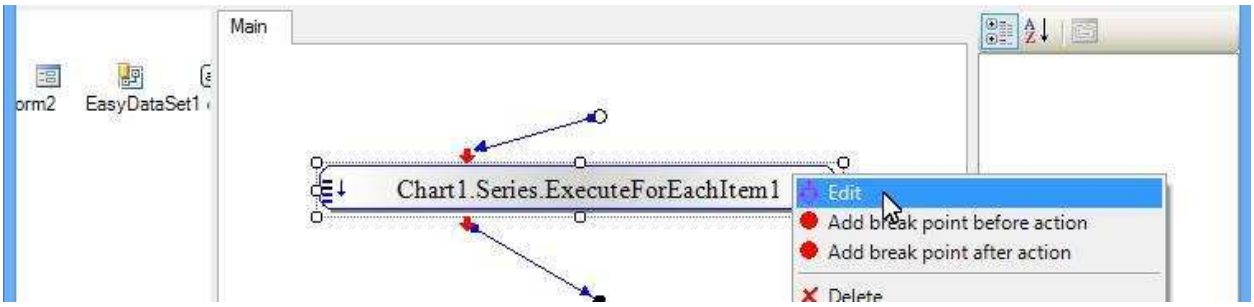
Add an “Execute actions for all items” action to work on all series:



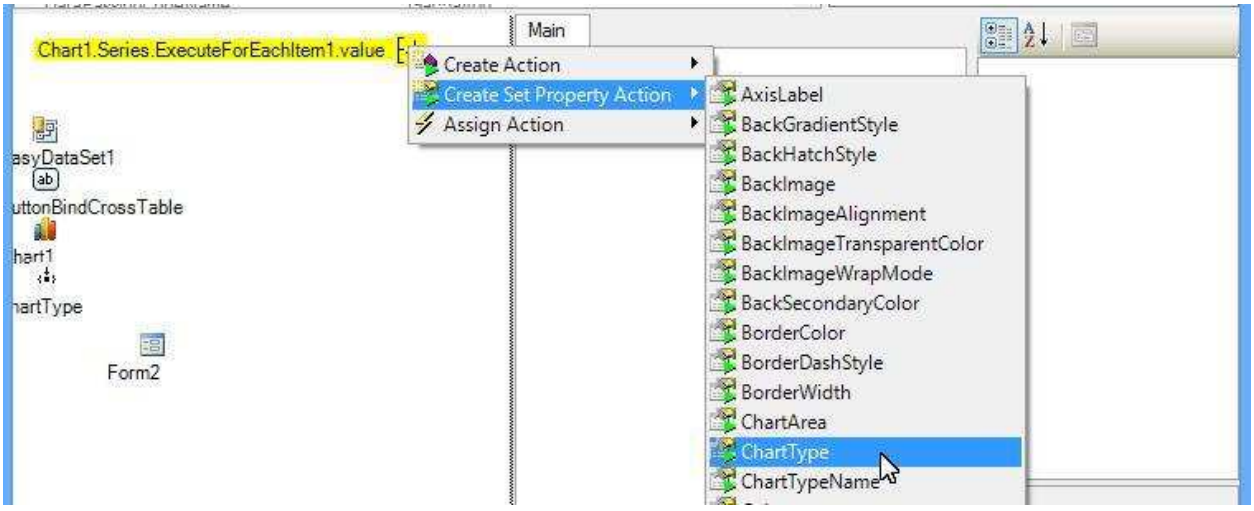
Select Series:



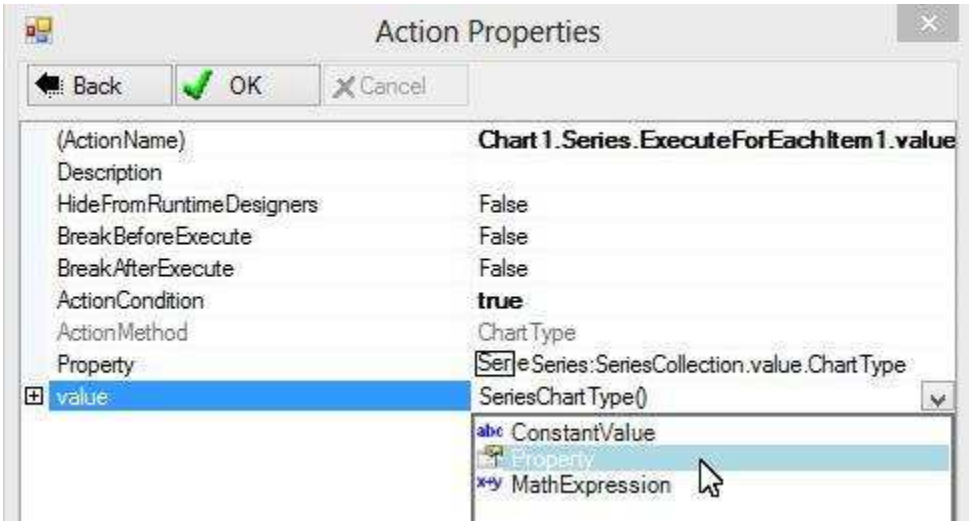
Edit the new action to work on each series:

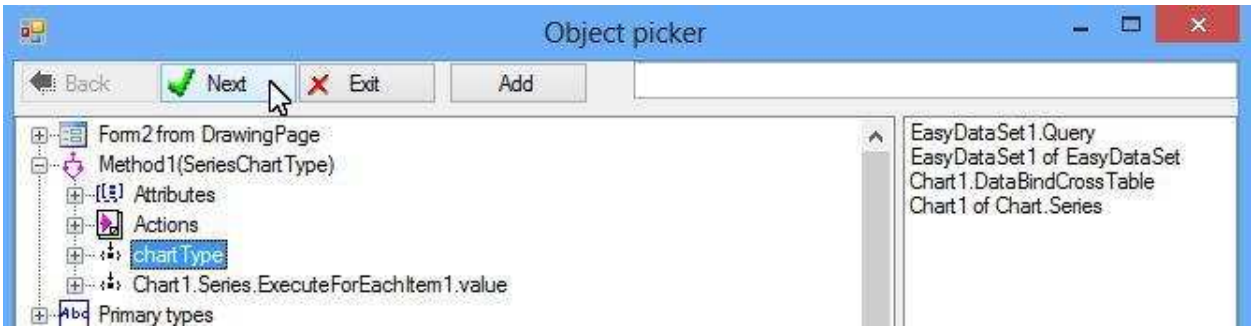


ExecuteForEachItem1.value is the series to work on. Create an action to change its chart type:

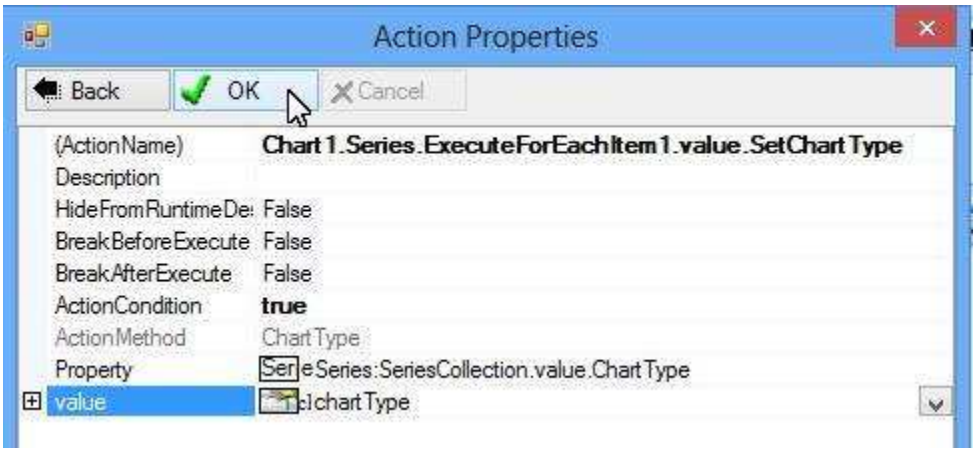


Set the chart type to the method parameter:

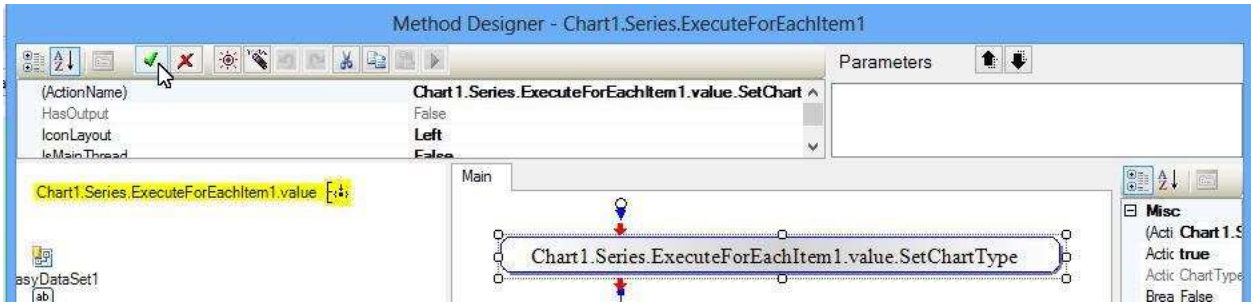




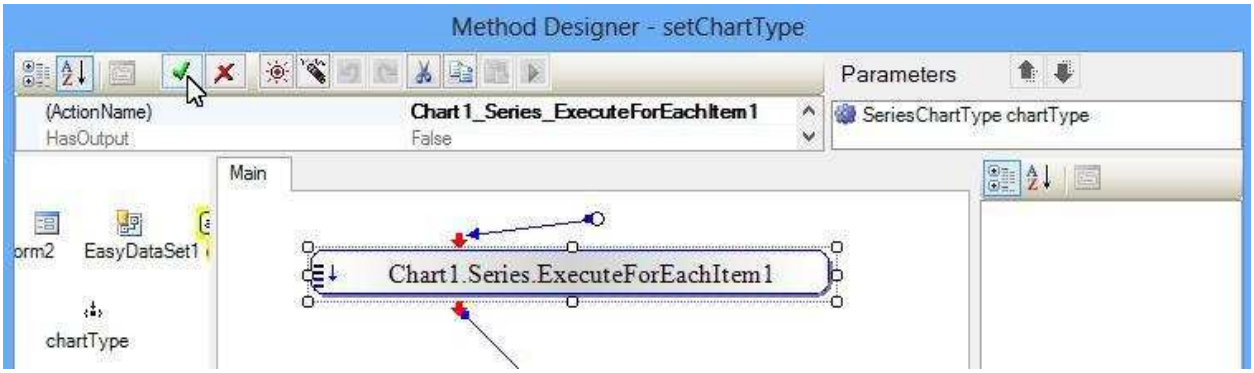
Click OK to create the action:



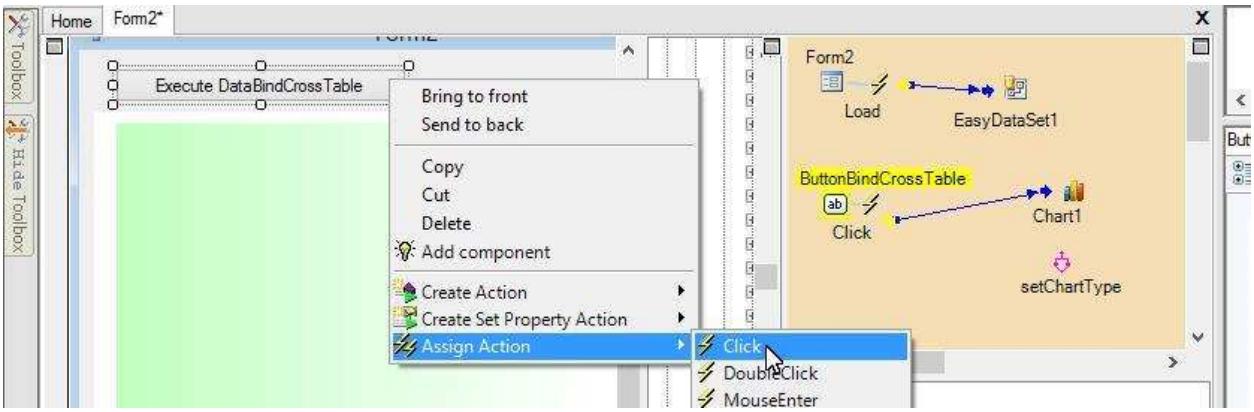
The new action appears. For this sample, that is all we need:



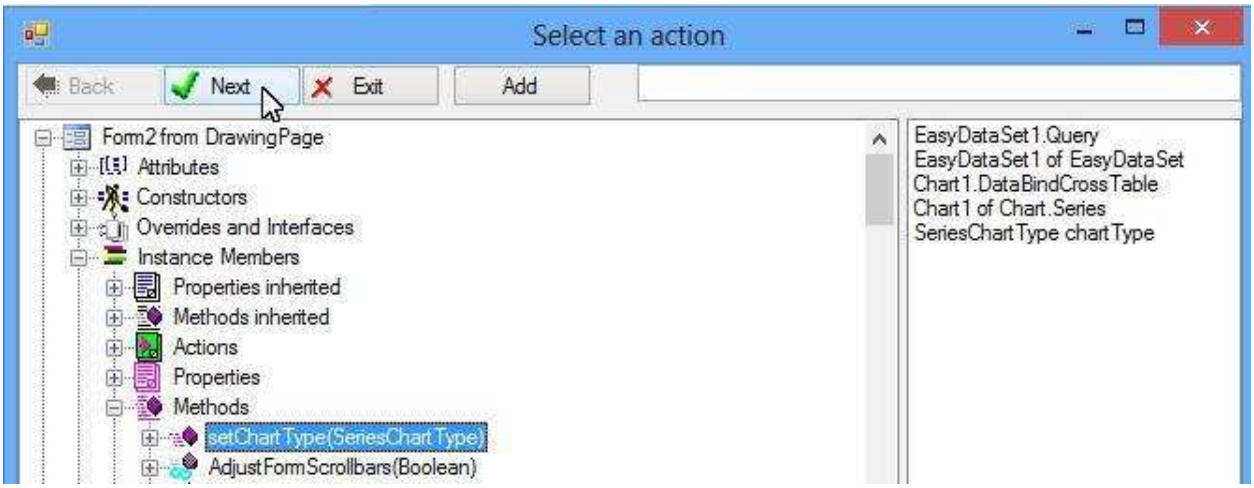
That is all for this method:



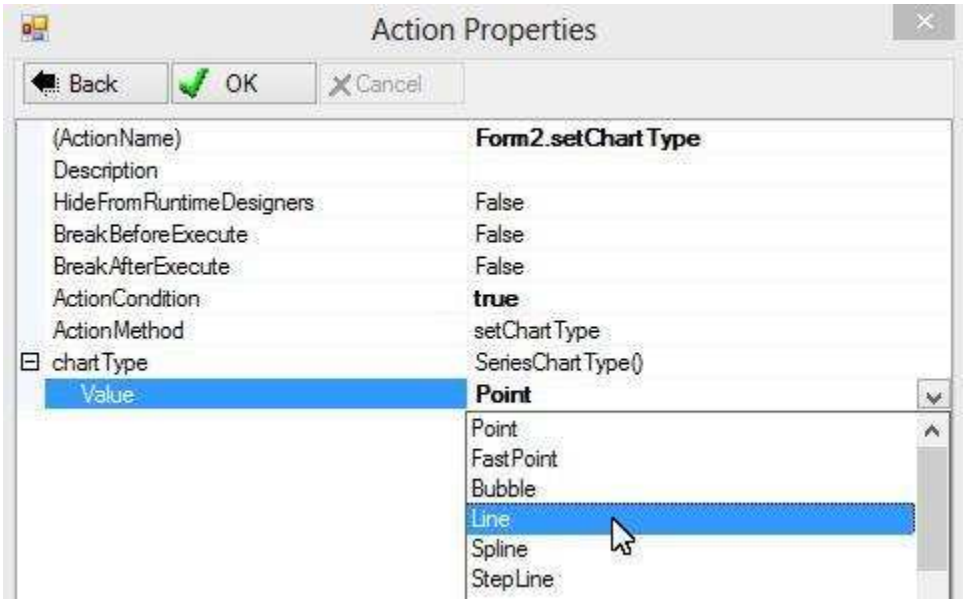
We may execute this method after the data-binding action:



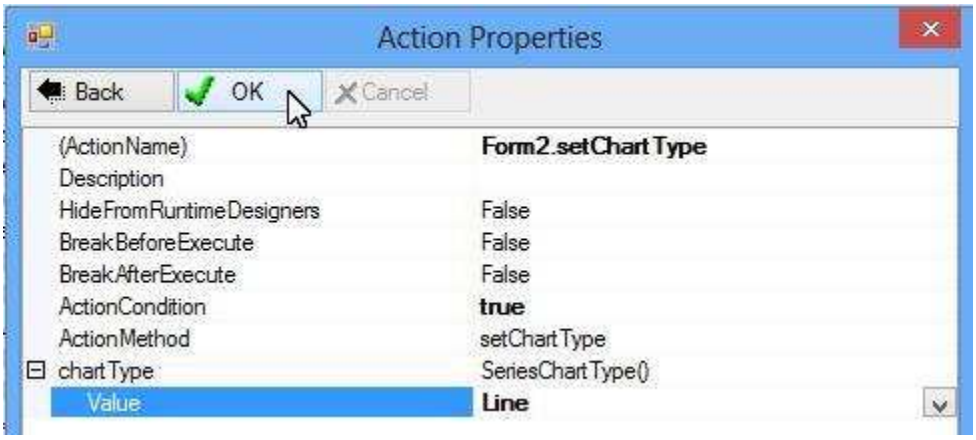
Select the method:



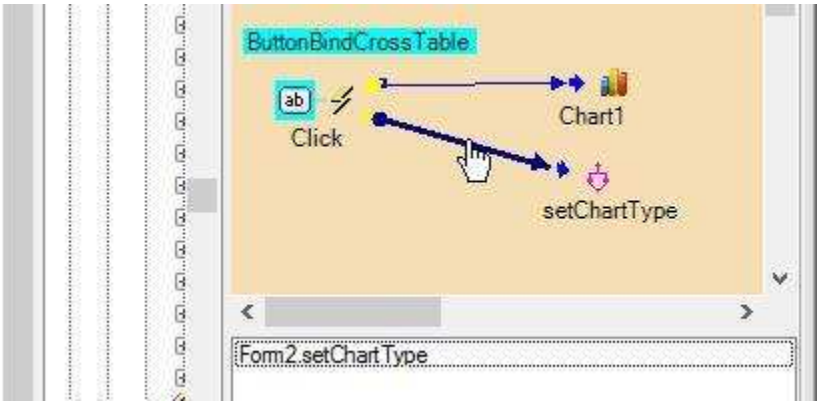
Choose a desired chart type:



Click OK:

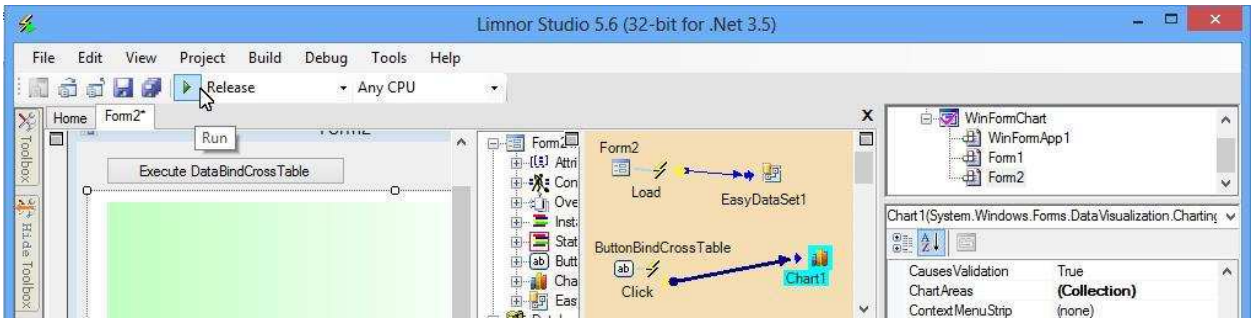


The action is created and assigned to the button:

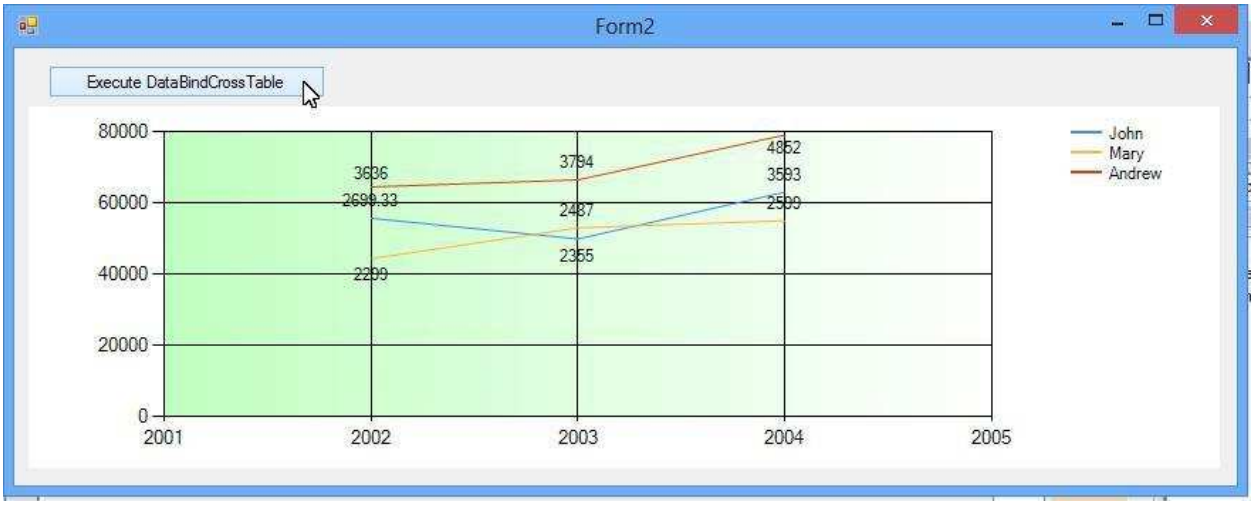


Test

Click Run button:



The form appears. Click “Execute DataBindCrossTable”. The cross-table data are displayed:



Feedbacks

Please send your feedbacks to support@limnor.com. Thanks!