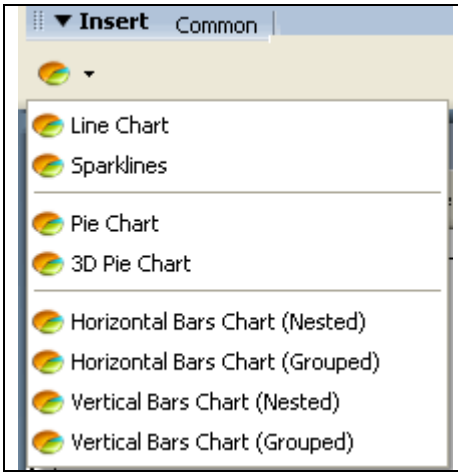
I have been a Dreamweaver user since 1999. I have been a Team Macromedia member/Adobe Community Expert for Dreamweaver or UltraDev since the end of 2001. I have worked with a fair number of extensions over the years, I have watched or worked with a number of extension developers and I have even made a few extensions of my own.

My point in starting this article with this brief personal history is to illustrate that, when you've used a variety of extensions that do everything from insert some JavaScript or a TimeStamp to full blown menus and server behaviors, you learn what to look for in the extension experience and you quickly recognize when an extension is great, as opposed to when it's not. When I look at a new extension, I am looking for three things: easy and quick installation, quick to figure out and actually start using, and something that makes my Dreamweaver better without taking it over or adding 6,000 files to get the job done.
If you've investigated Google Charts, you have probably been impressed with some fairly nice looking possibilities for laying out data in a visual way that departs from the usual table or grid. You may also be thinking "wow, this looks cool, but how would I ever do something like that?"

Dreamweaver developers out there can wonder no more. The Google Charts extension from the DMXzone team has put Google Charts functionality right into the program you live and breathe with if you have either DW8 or DW CS3. The DMXzone Google Charts Extension meets all three of my requirements nicely. Installation was quick and easy with the MXP provided and popup activation with my serial number. Two minutes and one restart of the program later, I was ready to roll. I have a 24/7 broadband connection which means I'm always on. This is important because the Google Charts Extension does require an internet connection to work since it has to access Google Code to make the charts. I selected a chart type from the dropdown menu visible from the DMXzone tab added to the Insert Bar, set a couple of parameters on the user interface and boom .. I had a chart on my page. Nice! And now it's time to get my hands dirty and figure out how this easy to use, nice looking toy can enhance my work product. Read on.

How It Works

Create and save a new document in Dreamweaver, Then select the DMXzone tab (or menu item) from the Insert bar and you'll see the types of charts you can create on the dropdown menu (figure 1).



The options available encompass pretty much any kind of chart you would want to make. We'll try each of them, but first, it's a good idea to look at the options and see what works best in what situation. A picture is worth 1,000 words so let's take a look at the product of each option and you will quickly get a better idea of when you might want to use each of the various options. The menu has divided them into types of charts, with the first group being line charts, the second group pie charts and the last group bar charts.

Typically, a bar chart is good for showing frequencies or values for different categories. A pie chart is best for showing percentage values as a slice of a pie and line charts are two-dimensional scatterplots of ordered observations where the observations are connected following their order.

Fig 1: The DMXzone Google Charts Menu

Line Charts

Line charts are good for showing the up and down progress of a particular behavior. Let's suppose we are selling toys and we want to see how many toys we sold from January to March of this year. We can show a table that has our sales, but will the common user really read a bunch of numbers? Probably not. But what if we could put the same data into a quick line chart that would show, at a glance, what trend our sales are taking over the 3-month period? The user could take one quick look at the chart and know immediately what direction our toy sales were taking and what, then, they may expect going forward, given the fact that history tends to repeat itself. This would be very valuable information for our toy sales force, indeed.

Suppose we are selling dolls and toy cars and in January, we sold 10 dolls and 20 cars; in February, we sold 25 dolls and 50 cars; and in March, we sold 5 dolls and 70 cars. How could we quickly show this to our user so that one glance would give them the picture of what is happening?

With the DMXzone Google Charts Extension, it's quick and easy to make a line chart to illustrate to our viewers. In your document, click the DMXzone tab or menu item in Dreamweaver and click Line Chart in the dropdown menu that appears. In the interface that comes up, you have options on how to create this chart. You can use the Graphical editor and drag the line to the point of your Sales End figure, or you can use the Data Grid Editor and type in the figures to get a more accurate representation of your sales. In this case, I would use the latter to get the most accurate representation of values that I could. The figure below shows the values plotted into the Data Grid Editor and the final chart that is created.

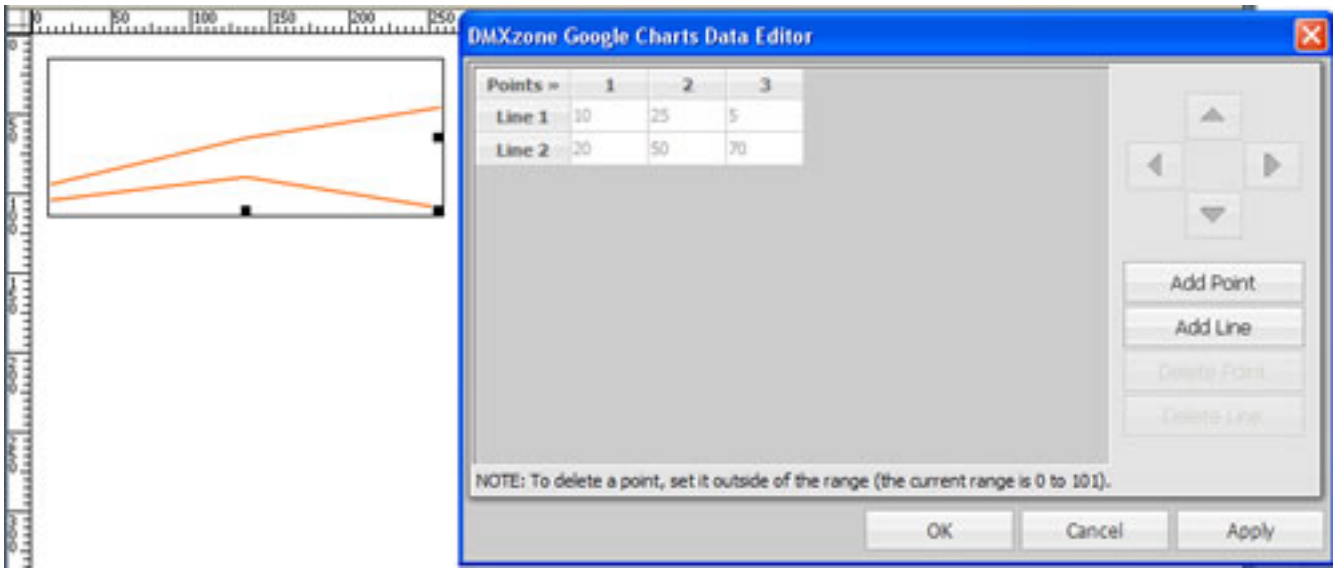


Fig 2: Creating a simple Line Chart

The next option on the Charts dropdown is Sparklines, which is also a line chart, but has a little different use. In fact, my first attempt at a Sparklines chart looked exactly like my Line Chart so I dove into some documentation and discovered that you use a line chart when you want to plot the general trend of data where you might not have a lot of data, but when you have a lot of data and want to plot out the data and the up or downward tendency where there is a lot of fluctuation, use a sparklines chart. Figure 3 below shows both the Data Editor interface with this data plotted and the resulting sparklines chart.

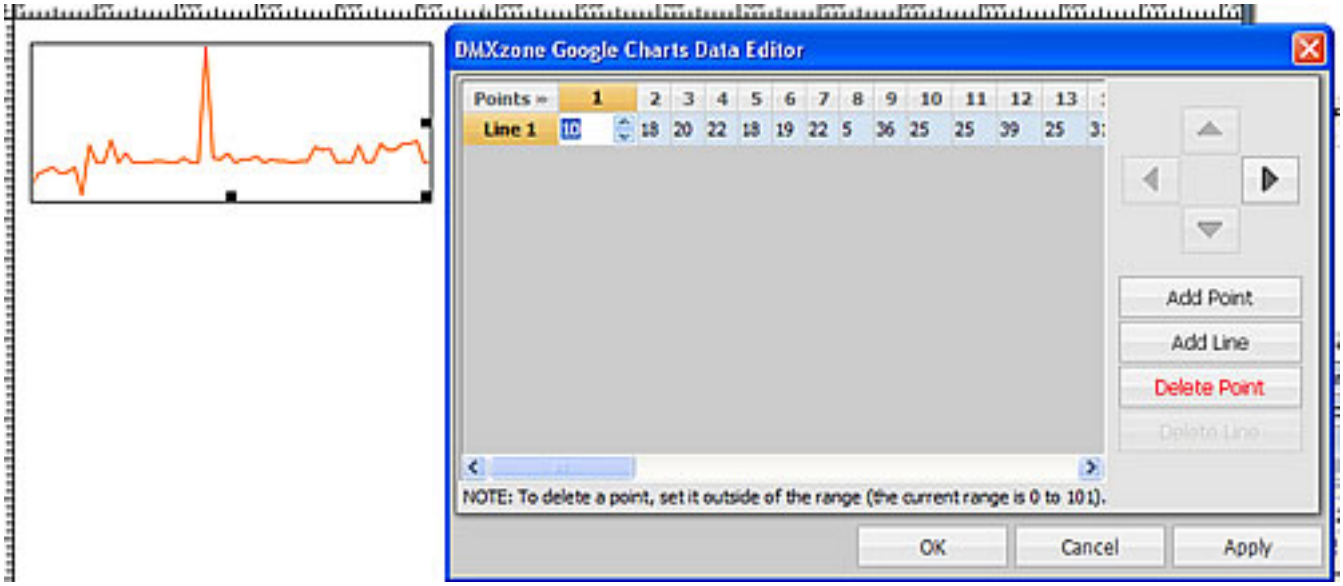


Fig 3: Creating a Sparklines Chart with much more data to plot.

Time for Pie – Yummy!

Moving along from the basic line type charts, we look next at the next group on the menu, Pie Charts and 3D Pie Charts. Pie Charts are fantastic for quickly showing how "slices" of the total are divided among the various portions … hence the name. No, it's really not designed to make you hungry. For this type of chart, I found the Graphical Editor to be most helpful. Continuing the example of a toy shop, I have dolls and cars for sale and I want to show my investors what portion of the total is representated by what product. In the month of March, I sold 250 toys and out of those, 120 were dolls and the remaining 130 were cars. So I create this in Dreamweaver with the Pie Chart option as shown below. When you first select the Pie chart option, you will notice that it makes a pie on your page that says Hello and World for the portions. You can quickly click on each label to change them to Dolls and Cars.

Okay, now you think, I'll just change the values from the default to make Dolls 120 and Cars 130 and I'm good to go. Try that and you will quickly see that you're wrong. Making Dolls 120 quickly shows it as being most of the chart and you can't make Cars 130 because there isn't 130 left in the circle. Why?

Because Pie Charts are not numbers out of the total number. They are a percentage out of 100%. When you make Cars 130, it's not 130 cars, but about 65% and that's what the pie chart is meant to show. You can also choose the 3D Pie Chart option and you'll have a little fancier representation of the same thing, as in the picture below.

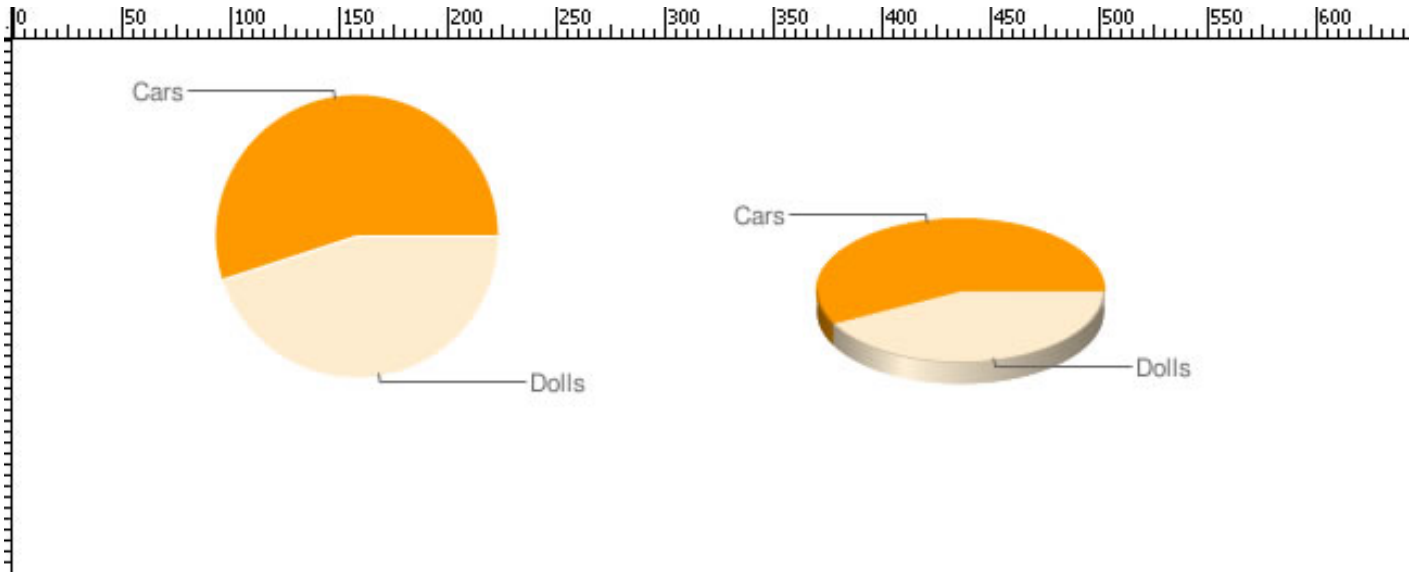


Fig 4: The Pie Chart and 3D Pie Chart for our sales of Dolls and Cars

Bar Charts

The last group of charts are the bar charts and there are several options for this group. You can create nested bar charts in horizontal or vertical representation and you can also create bar chart groups which allow you to show progress in an easy to read graphic representation. Adding a bar in the nested example is self explanatory but you can also add a region which will show the progress from a specific point in time and it's easy to see which region saw the most change. The grouped chart allows you to add a new barset to add a new category or a new bar to measure another attribute in every group.

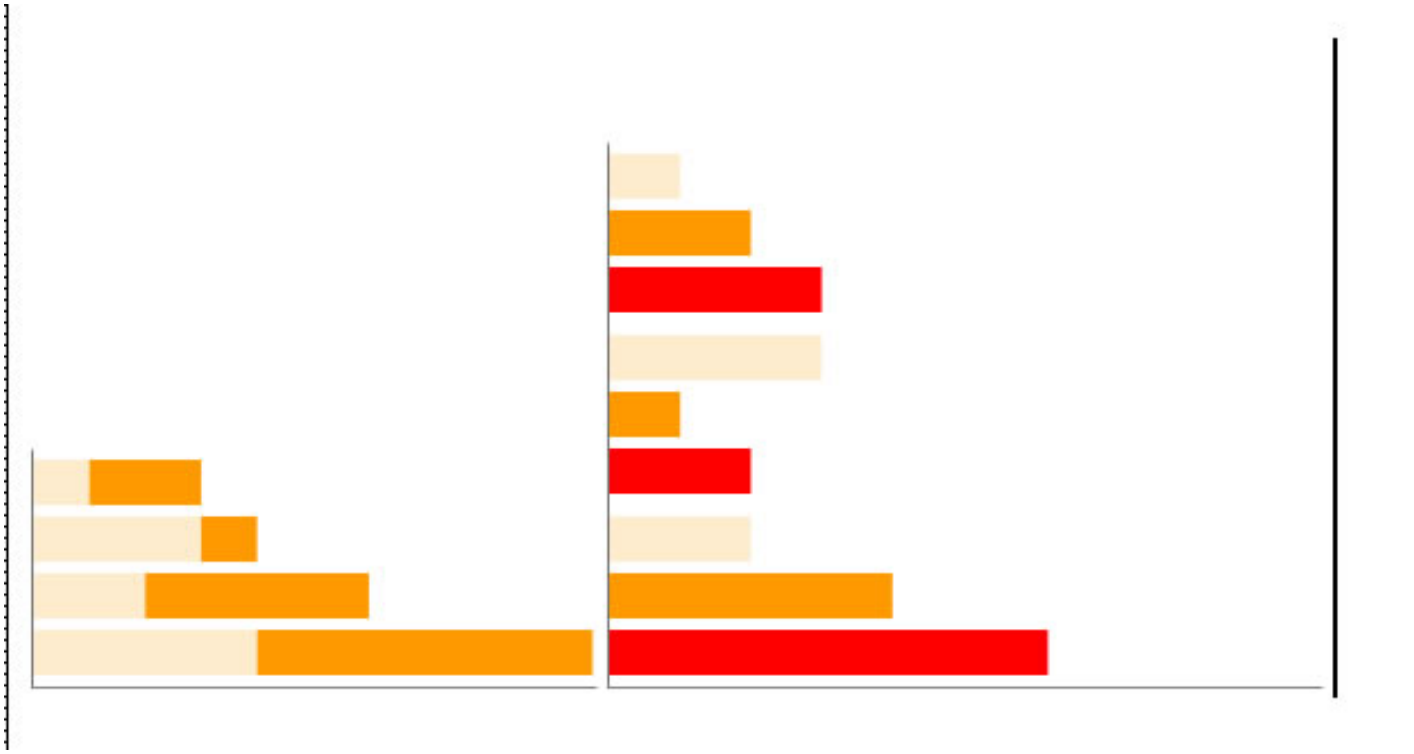


Fig 5: Simple Horizontal Bar and Grouped Bar Chart

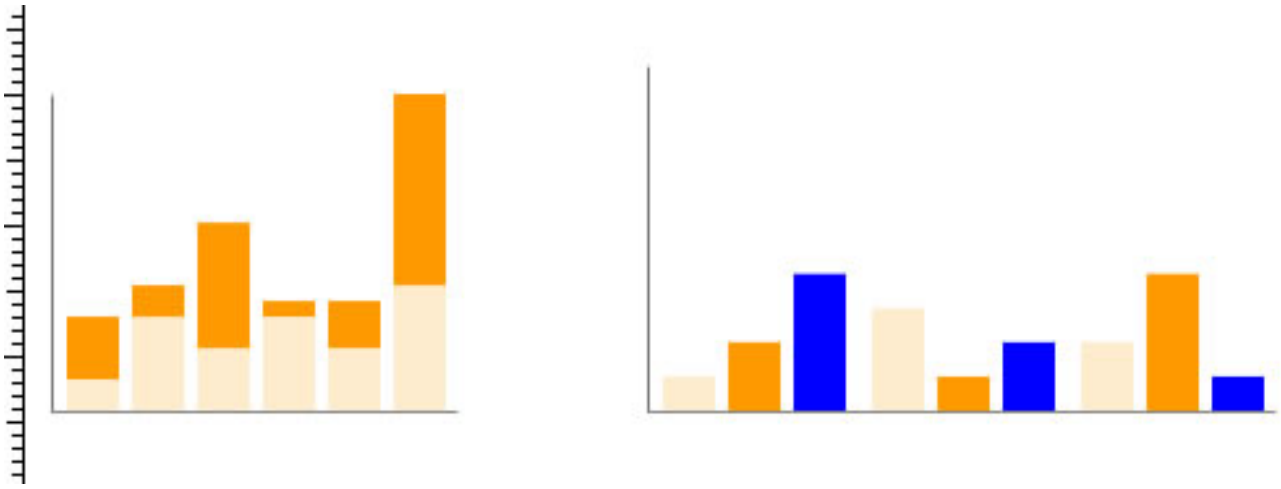


Fig 6: Simple Vertical Bar and Grouped Bar Chart

Something to note is that, by default, a new bar group adds in in the same light orange color as the second one which makes it very difficult to tell them apart. At this time, the only I found to change the color of the bar was to edit the code itself. In the example above, I just added a new color for the third barset of 0000ff to get the blue you see in the example immediately about and ff0000 to get the red that you see in the horizontal group example. In the code snippet below this tip, the value I added is highlighted in red.

```
<img width="271" height="133"
src="http://chart.apis.google.com/chart?cht=bvg&amp;chd=t:10,30,20|20,10,40|40,20,10&amp;chds=0,101&amp;chs=271x133&amp;chco=FFECCC,FE9900,0000FF&amp;chbh=20,5,10" />
```

Setting Options

The preceding section shows the basics, but please don't think that is all you can do. There are many options you can set on all the types of charts, including custom labels, custom background and chart background colors, changing sizes of bars and on and on. There is so much you can do to customize right within the extension interface and there are great explanations of what Google charts do and what everything means available here: http://code.google.com/apis/chart/. I do suggest reading through this page to imagine the possiblilties. The code is very extendable and the DMXzone Google Charts extension makes creating the charts very very easy.

And now ... for the Developer

When I first started looking at this extension, a big question occurred to me almost immediately. Wouldn't it be great if this would work with recordsets in Dreamweaver and allow me to create charts that would change upon request to reflect changes in those values through database updates? I asked the DMXzone this question and they thought it was a great idea so I started playing with what is out there to see what it would take. Turns out many DMXzone forum posters had the same idea as I was pointed to some forum comments about the same thing. Here it is, guys. While it doesn't work in the extension interface and in fact, renders the existing interface unusable after changing the code, it still works in the chart and I have a feeling there will be an update to this extension fairly soon that will make this all point and click.

The following example is ASP because that's my best thing. It should work in all other server models however.

I first started by defining some variables to see what I would have to do to the code in order to create a line chart that reflected my values. Here is my code for defining the variables and setting their values:

```
<%
dim dstart, dmax, dvalues
dstart = 10
dmax = 50
dvalues = “20,30,15”
%>
```

Pretty easy. I defined variables for the starting and maximum values used by Google Charts and a third variable called dvalues. Google Charts uses comma delineated values for line charts so dvalues simply has three values for what I want the line to do.

Then I modified the image tag to allow it to use these values in creating the chart as follows:

```
<img width=“250” height=“100”
src=“http://chart.apis.google.com/chart?cht=lc&amp;chd=t:<%=dvalues%>&amp;chds=<%=dstar
t%>,<%=dmax%>&amp;chs=250x100&amp;chco=FF6600” />
```

All I did here was to replace the values from a chart with ASP placeholders so the values I defined in the first code block would be substituted by the server when the page was requested and batta-bing ... my chart was created using my values created in the dvalues variable.

Line Chart created with the values in my dvalues variable

Now try this with a recordset. I created a simple Access database with a table called Products and I gave columns StartingValue, MaxValue, MondaySales, TuesdaySales, WednesdaySales, etc. Then I created the following recordset:

```
<%
Dim rssales
Dim rssales_cmd
Dim rssales_numRows

Set rssales_cmd = Server.CreateObject (“ADODB.Command”)
rssales_cmd.ActiveConnection = MM_conn DMXzone_STRING
rssales_cmd.CommandText = “SELECT StartingValue, MaxValue, MondaySales, TuesdaySales,
WednesdaySales FROM Sales”
rssales_cmd.Prepared = true

Set rssales = rssales_cmd.Execute
rssales_numRows = 0
%>
```

Since I had already defined varlables for the previous example, I just used the same variable definitions and set the recordset column equal to the appropriate definition as follows:

```
<%
dim dstart, dmax, dvalues
dstart = (rssales.Fields.Item("StartingValue").Value)
dmax = (rssales.Fields.Item("MaxValue").Value)
dvalues =
"(rssales.Fields.Item('MondaySales').Value),(rssales.Fields.Item('TuesdaySales').Value)
,(rssales.Fields.Item('WednesdaySales').Value)"
%>
```

Doing it this way allowed me to leave the remaining code unchanged and the graph turns out to be the same. Doing this in Cold Fusion or PHP would be very similar to the preceding example since you can do all of this, other than setting the variables, right in the tool UI. Create a recordset, apply the variable values to the recordset columns and upload the page and of course, the connection page. Very easy to adapt, but like I said, the extension graphical interface will now throw an error since the interface doesn't (yet) recognize the dynamic code, but the code will work in the browser. I am pretty sure there will be an update up the road that will do this right in the interface.

All in all, this is a marvelous extension. I am currently working on a project for a client where the client wanted better reports for his backend and this fits right in! Not only can I make data grids with all the information, but now I can quickly and easily graph out the results for the administration site. Thanks to DMXzone.com, another satisfied client!

Happy Charting!