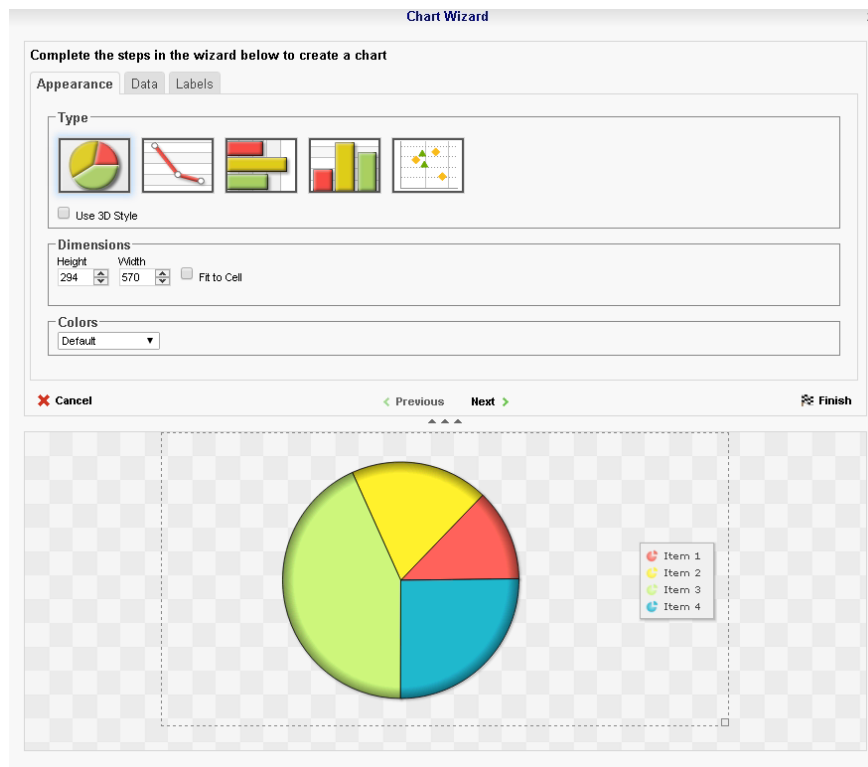# Charts Wizard

To insert a chart select a cell and then click the Insert Chart button ( 📊 ). The Chart Wizard will appear. The Chart Wizard has three tabs: Appearance, Data and Labels.

> **Note:** Charts should only be placed into a Group Header, Group Footer, Report Header or Report Footer sections.



## Appearance

In the Appearance tab select the type of chart, its size, its colors and where to display the legend.



- Select the chart type by clicking the icon that represents it. Check the 'Use 3D Style' box to make the chart three dimensional.

- There are three ways to set the size of the chart.

  o Enter the height and width in the dimension boxes.

o   Resize the chart by dragging the lower right corner in the preview.

o   Check the box 'Fit to Cell'.

- In the color drop-down either select a color theme or specify a linear range of colors.

**Note:** The legend may overlap the chart if the size is too small.

There are two types of charts: single series and multi-series.

**Single Series**

**Pie**, **Doughnut**, **Funnel**, and **Pyramid** charts utilize a single Data Field to visually compare each element to the whole. (Ex. Each section of a pie chart may represent a region and the size of the section indicates how many people live in that region).

**Pareto** charts are a special type of single series chart generally used to highlight the most important element amongst a group. The bars of a Pareto chart will display in descending order while a line show the cumulative percentage of the total. You can read more about Pareto Charts **here**.
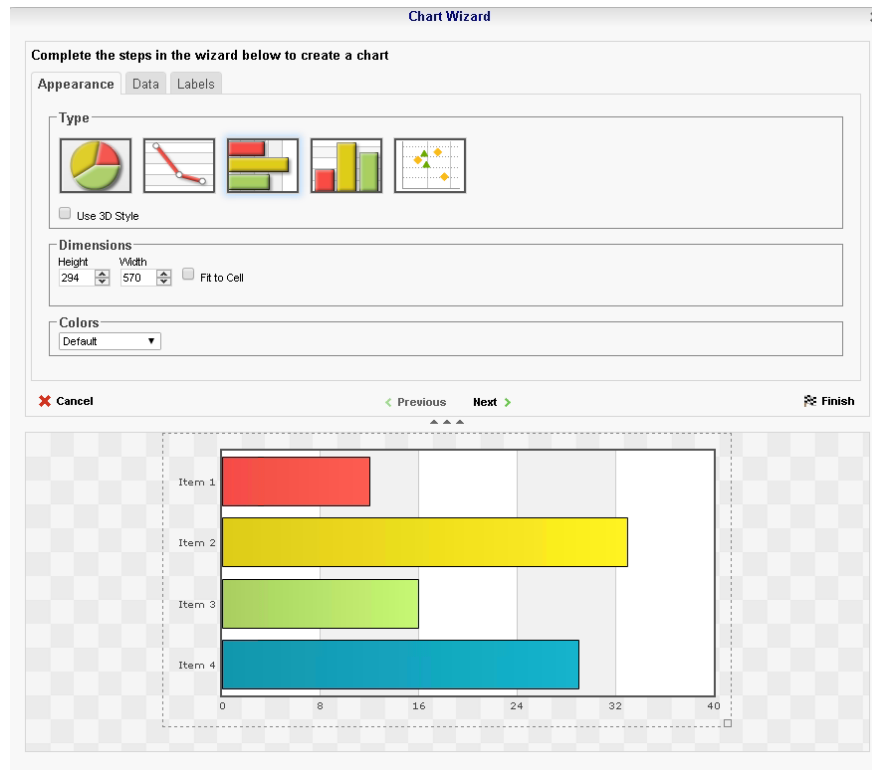
**Multi-Series**

**Bar**, **Column**, and **Scatter** charts display the values of one Data Field for each element of another Data Field. (Ex. A column chart will have a series of columns whose height indicates the number of customers in each region for each company).

**Line** and **Spline** charts display the values of one Data Field for each element of another Data Field, the second of which usually represents an interval of time.

**Area Charts** and **Spline Area Charts** are special types of Line and Spline charts which additionally display cumulative totals by filling in the areas underneath each Line or Spline.

**Bubble Charts** are a special type of Scatter chart which use a third Data Field to specify the size of the data points.
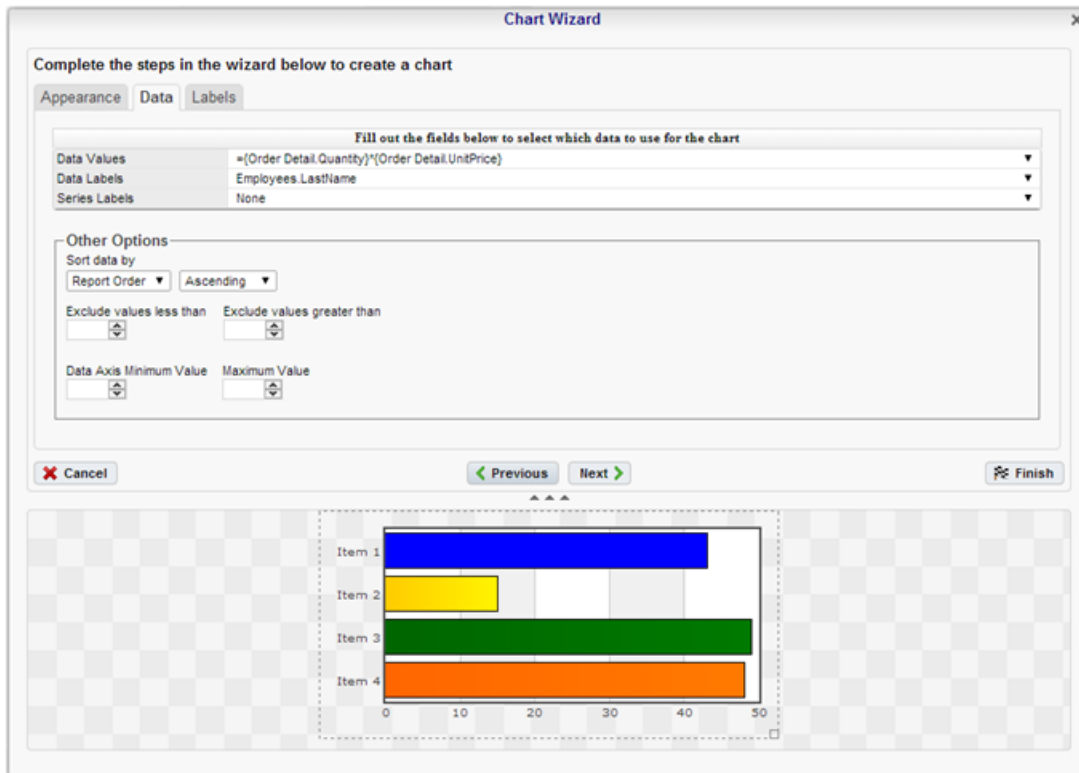
## Data

Use the Data tab to set specific data values and data labels for the chart.

- Use the Data Values drop-down to select the cell that contains the numeric value for the chart.

- Use the Data Labels drop-down to select the cell that contains the Data Field that names each element of the chart.

- Use the Y Values dropdown to select the cell containing the numeric values for the Y axis.

- Use the X Values dropdown to select the select the cell containing the numeric values for the X axis.

- From the Series Labels select the cell that contains the Data Field with the name of the series elements.

- (Bubble Charts) Use the Bubble Size dropdown to select the select the cell containing the numeric values for the size of the bubbles.

- (Bubble Charts) Use the Bubble Label dropdown to select the cell containing the Data Field with the name of each bubble.

- Use the 'Sort data by' dropdowns to specify the order of the chart data.

  o Report Order – The chart will follow the order of the information on the report.

- o    Data Labels – The chart will be sorted by the data labels (either alphabetically or numerically).

- o    Data Values – The chart will be sorted by the data values.

- To ignore values that are too large or too small, enter a value into 'Exclude values less/greater than/' boxes.

- To manually set the axis values enter a value into the 'Data Axis Minimum/Maximum Value' boxes.

- Check the 'Align Data Labels Across Series' if you have multi-series data with common data labels among series.

**Note:** For example, consider charting house values as a function of location and building type.  We choose location as the series labels and building type as data labels.  Since each location uses the same building types, we check the 'Align Data Labels Across Series' box to align like data labels in the chart.  On the other hand, if we want to chart city populations where we use country name as the series labels and city name as the data labels, we leave the box unchecked.  This is because the data labels (city name) used for one series (country name) have no relation to those used in others.
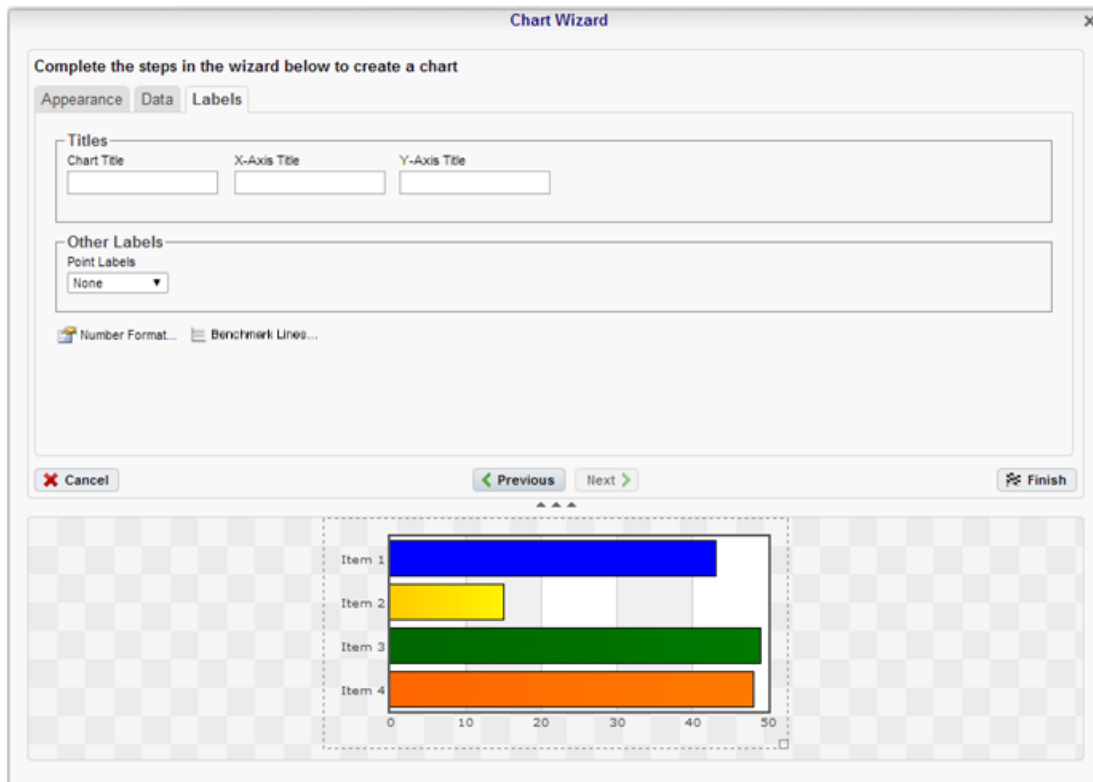


## Labels

In the Labels tab set the visual options of the Chart.

- **Chart Title**: Enter the text you want to appear in at the top of the chart.

- **X-Axis Title**: Enter the text you want to appear on the bottom of the chart.

- **Y-Axis Title**: Enter the text you want to appear on the left of the chart.

- **Point Labels**: Use the dropdown to display the values of each element of the chart.

- **Legend Position**: Use the dropdown to specify where to show the legend on the chart.

- **Number Format...**: Use the number format button menu to specify how data and axis labels should be formatted.

- **Benchmark Lines...**: Use the benchmark lines button menu to add horizontal benchmark lines at specific sections of the chart. See **Benchmark Lines**.

**Note:** Single Series charts only have a Chart Title. Multi-series charts additionally have X and Y Axis titles.



## Benchmark Lines

To add a Benchmark Line to a chart, open the Benchmark Lines menu by clicking the button in the Labels tab.

- Press the **New** button ( **New** ) for each new benchmark you wish to add to your chart.

- **Label**: Enter the text you want to appear as the label of the benchmark.

- **Value**: Specify the numeric value you would like to define as the benchmark. The benchmark line will display horizontally at this point on the Y axis.

- **Color**: Use the color drop-down to specify the color of the line.

- **Line Style**: Use the drop-down to specify the style of the line (either Solid or Dashed).

The resulting Benchmark Line will appear as so on the chart:



**Revenue by Employee**