How to create a BoxPlot/Box and Whisker Chart in Excel

SUMMARY
Microsoft Excel charts do not include a BoxPlot/Box & Whisker chart type. However, you can create a reasonable representation of this type of chart by following the steps outlined in this article.

MORE INFORMATION
To create a sample BoxPlot/Box and Whisker chart, use the appropriate method for your version of Excel.

Excel 2004, X, 2001 and 98

1. In a new worksheet, type the following data:


   (See matrix below)


3. On the Standard types tab, click Stock under Chart type, and then click the fourth chart sub-type.

   The following explanation appears below the chart sub-type: Volume-Open-High-Low-Close. Requires five series of values in this order.

4. Click Next.

5. On the Data Range tab, click Rows under Series in, and then click Next.

6. On the Legend tab, click to clear the Show legend check box.

7. On the Axes tab, click to clear the Value (Y) Axis check box under Secondary axis, and then click Finish.

8. Click once on any one of the colored columns to select the series. Do not click one of the white columns.

9. On the Chart menu, click Chart Type. Under Chart type, click Line, and then click OK.

   A line that connects the three white columns appears in the chart.
10. Click once on the line, and then click **Selected Data Series** on the **Format** menu. For Line select NONE; for Marker select CUSTOM, then your preference, a horizontal line works well; default is an “x”

**Step 1 Data**

<table>
<thead>
<tr>
<th>statistic</th>
<th>A</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>median</td>
<td>40</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>q1</td>
<td>20</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>min</td>
<td>10</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>max</td>
<td>100</td>
<td>110</td>
<td>90</td>
</tr>
<tr>
<td>q3</td>
<td>70</td>
<td>75</td>
<td>57</td>
</tr>
</tbody>
</table>

11. You will probably want to right click in the plot area and select Format Plot Area and select Area NONE. Also, get rid of the horizontal lines by clicking near the top and under Chart Options Gridlines, *Clear* Value Y Axis Major Gridlines. (Dr. D. Recc.)

In Excel 2004 for Mac

1. Click the **Colors and Line** tab. Under **Line for Color**, click **No Line**.

2. Under **Marker**, select the plus sign (+).

3. In the **Foreground** list, click the black color. In the **Background** list, click **No Color**. Click **OK**.

In Excel X and earlier
1. Click the **Patterns** tab. Under **Line**, click **None**.

2. Under **Marker**, click **Custom**. In the **Style** list, click the plus sign (+)

3. In the **Foreground** list, click the black color.

4. In the **Background** list, click **No Color**. Click **OK**.

**Excel 5.0 and Excel 7.0**

1. In a new worksheet, type the following data:

<table>
<thead>
<tr>
<th>A1</th>
<th>B1</th>
<th>C1</th>
<th>D1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>A2</td>
<td>median</td>
<td>B2</td>
<td>40</td>
</tr>
<tr>
<td>A3</td>
<td>q1</td>
<td>B3</td>
<td>20</td>
</tr>
<tr>
<td>A4</td>
<td>min</td>
<td>B4</td>
<td>10</td>
</tr>
<tr>
<td>A5</td>
<td>max</td>
<td>B5</td>
<td>100</td>
</tr>
<tr>
<td>A6</td>
<td>q3</td>
<td>B6</td>
<td>70</td>
</tr>
</tbody>
</table>

2. Select cells A1:D6. On the **Insert** menu, point to **Chart**, and then click **On This Sheet**.

3. Click and drag the area for the chart. In the **Step 1 of 5** dialog box of the ChartWizard, click **Next**.

4. In the **Step 2 of 5** dialog box, click the **Combination** chart type, and then click **Next**.

5. In the **Step 3 of 5** dialog box, click the sixth chart style, and then click **Next**.

   The following message appears in an Alert Box:

   **A volume-open-high-low-close stock chart must contain five series**

6. Click **OK**.

7. In the **Step 4 of 5** dialog box, click **Rows** under **Data Series in**, and then click **Next**.

8. In the **Step 5 of 5** dialog box, click **No** under **Add a Legend?**, and then click **Finish**.

9. Double-click the chart to activate it. On the **Insert** menu, click **Axes**. Under **Secondary Axis**, click to clear the **Value (Y) Axis** check box, and then click **OK**.

10. Click once on any one of the colored columns to select the series. Do not click one of the white columns.

11. On the **Format** menu, click **Chart Type**. In the list of chart types, click **Line**, and then click **OK**.

   A line that connects the three white columns appears in the chart.
12. Click once on the line, and then click **Selected Data Series** on the **Format** menu.

13. Click the **Patterns** tab. Under **Line**, click **None**.

14. Under **Marker**, click **Custom**. In the **Style** list, click the plus sign (+). In the **Foreground** list, click the black color. In the **Background** list, click **None**. Click **OK**.

**REFERENCES**

**Excel X and later versions:**
For more information about creating charts, click **Excel Help** on the **Help** menu, type **about charts**, click **Search**, and then click a topic to view it.

**Excel 98 and Excel 2001**
For more information about creating charts, click the **Office Assistant**, type **charts**, click **Search**, and then click a topic to view it.

**Note** If the Assistant is hidden, click the **Office Assistant** button on the **Standard** toolbar.

**Excel 7.0**
For more information about creating charts, click **Answer Wizard** on the **Help** menu and type: **how do I create a chart**

**Excel 5.0**
For more information about creating charts, choose the **Search** button in Help and type: **charts**

**APPLIES TO**
- Microsoft Excel 95 Standard Edition
- Microsoft Excel 5.0a
- Microsoft Excel 95a
- Microsoft Excel 5.0 Standard Edition
- Microsoft Excel 5.0c
- Microsoft Excel 98 for Macintosh
- Microsoft Excel 5.0 for Macintosh
- Microsoft Excel 5.0a for Macintosh
- Microsoft Excel 2001 for Mac
- Microsoft Excel 2004 for Mac

Thanks to Laura Bruynell, Rice University STAT 280, 2/10/2005, for providing this reference. Source URL: [http://support.microsoft.com/default.aspx?scid=kb;en-us;155130](http://support.microsoft.com/default.aspx?scid=kb;en-us;155130)