Guide to optimal *Chart-me XLS* performance

When you are creating more complex report pages with Chart-me XLS, you might experience a slow-down in the response of your workbook. This is because Chart-me XLS graphs utilise multiple Excel chart objects containing a large number of data series. The underlying data controlling the look of your graphs have to be dynamically recalculated in the so called control sheets (figure 1).
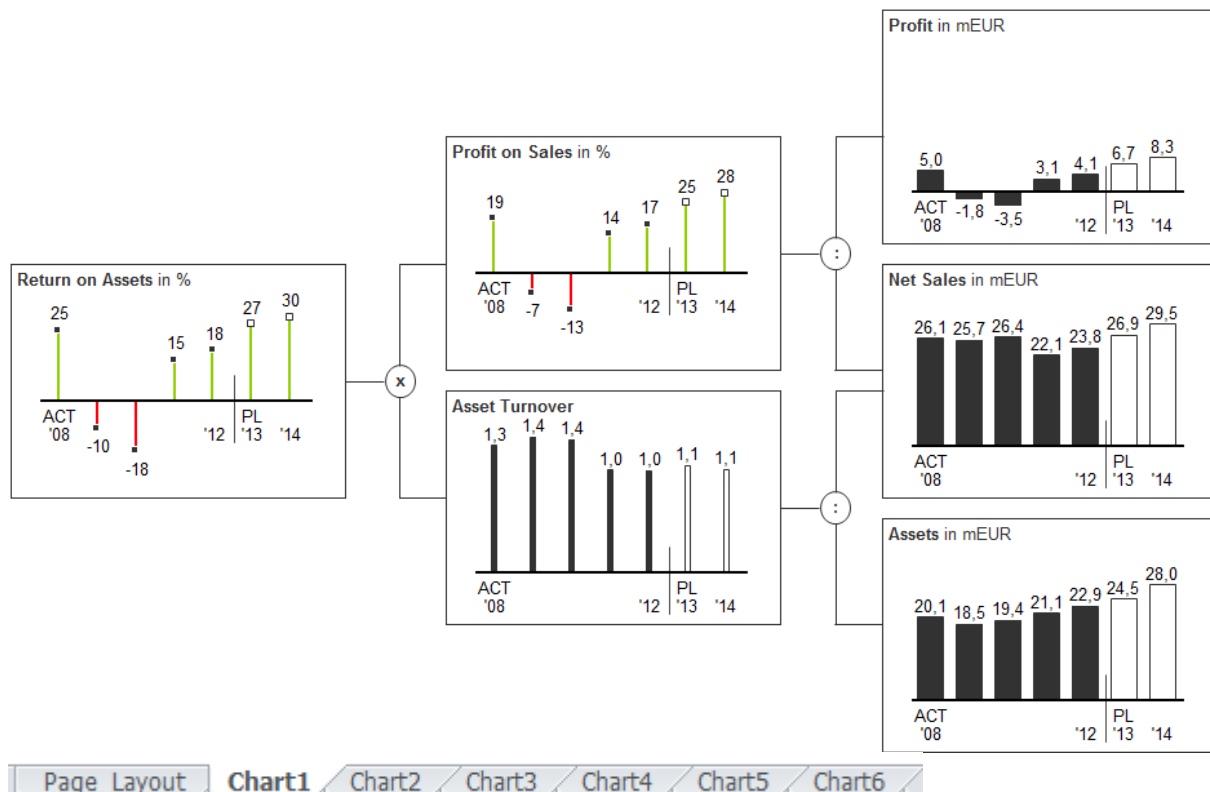

Figure 1: Chart-me XLS report page (section) with six control sheets in one workbook

Excel takes some time to perform two frequently recurring actions: a) recalculate all formulas, and b) redraw all charts. Also, most of the waiting time on inserting and duplicating charts is used by Excel to open or save the related files. These runtimes mainly depend on the overall Excel performance.

To achieve the best possible Chart-me XLS performance on your computer, please make use of the following recommendations. These will also be helpful when working with any other sophisticated Excel files.

Recommendations

1. Use a fast computer

If you have the choice, you should prefer: multicore processor, 4GB RAM or more, SSD (solid state drive) instead of a traditional HDD (hard disk drive), 64bit Windows and Office instead of 32bit versions.

2. Hold Excel on top (in focus, not in the background)

When you have started any major Chart-me XLS action (insert, edit, shrink, duplicate) and see the progress bar (figure 2), hold Excel on top (in focus) and don't send it to the background by switching to any other application. Background execution is usually very slow. If you can resist the temptation of reading e-mails while the progress bar is being displayed, Chart-me XLS will finish its job much faster.
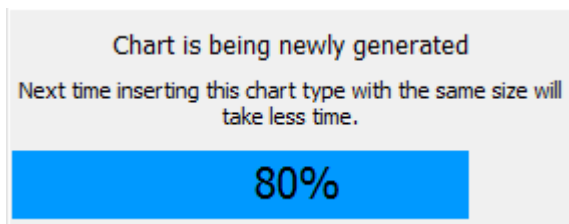

Figure 2: Allow Excel to stay on top of other applications (in focus) while Chart-me XLS actions are performed

3. Use Shrink feature

Once you have created a graph with Chart-me XLS, save a master copy and apply the Shrink feature (figure 3) to your working copy of the file. This process will remove everything from the chart and from the related control sheet that is not needed to draw the graph you have just configured. Unnecessary formulas and data series are automatically removed. The result is a smaller file size with a better performance.

This procedure is particularly important before you use the Duplicate feature to create multiple charts of the same kind. In this case we highly recommend shrinking the first one before you duplicate.
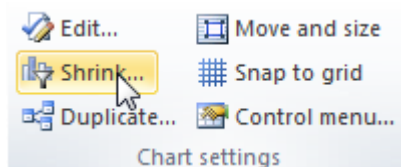

Figure 3: Shrink feature optimises workbook performance by removing unused functionality

4. Use XLSB format

When you save Excel workbooks using the XLSB file format, the files will consume less disk space and will be opened/saved significantly faster than XLSX files. This is why Chart-me XLS automatically suggests XLSB format for saving your workbooks (figure 4).
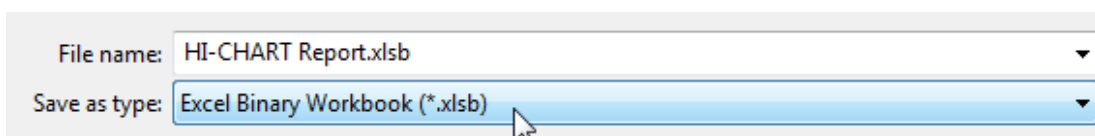

Figure 4: XLSB files are smaller and read/write much faster than XLSX

5. Hide chart objects

When typing data or formulas in Chart-me XLS workbooks, you might experience a slow response. After pressing Enter it takes some seconds before Excel accepts your input and switches over to the next cell.

To avoid this unpleasant effect, you can temporarily hide the chart objects using the selection pane (figure 6). Your cell inputs will be accepted instantly, as long as the chart objects are hidden. The calculation mode should remain automatic in this case. This way you may type in data and build formulas that show the correct results without any delay.

When you have done your inputs, please make sure to show (unhide) the chart objects, so that your Chart-me XLS graphs become visible again.

Figure 5: Enable selection pane and hide chart objects while typing in data and formulas

6. Create multiple charts with one chart object (for advanced users)

To minimize the number of chart objects, use one chart instead of multiple ones, as shown in the picture below.
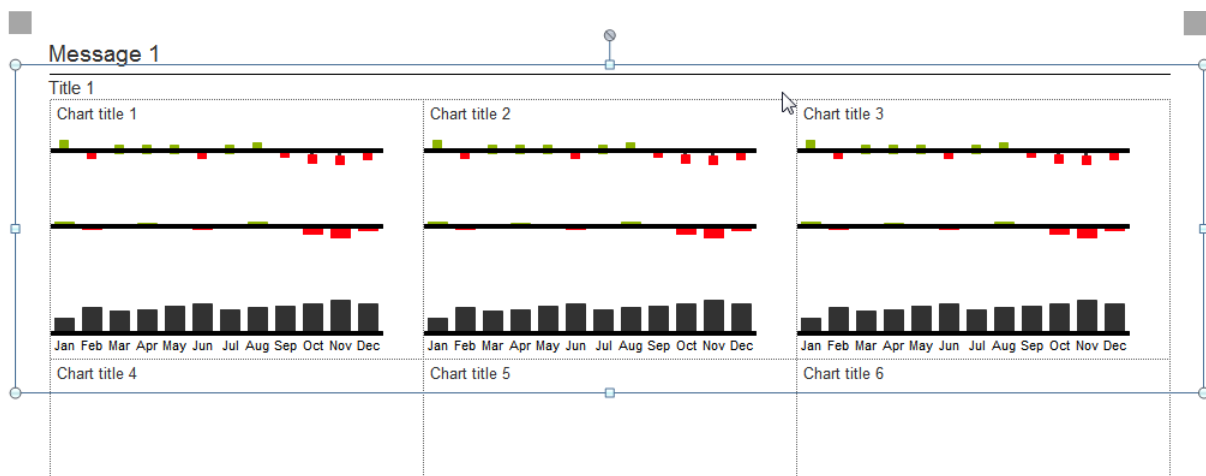

Figure 6: Three charts are created with one chart object

The distance between two charts can be realized with the setting *Differing category width* in the chart control sheet.

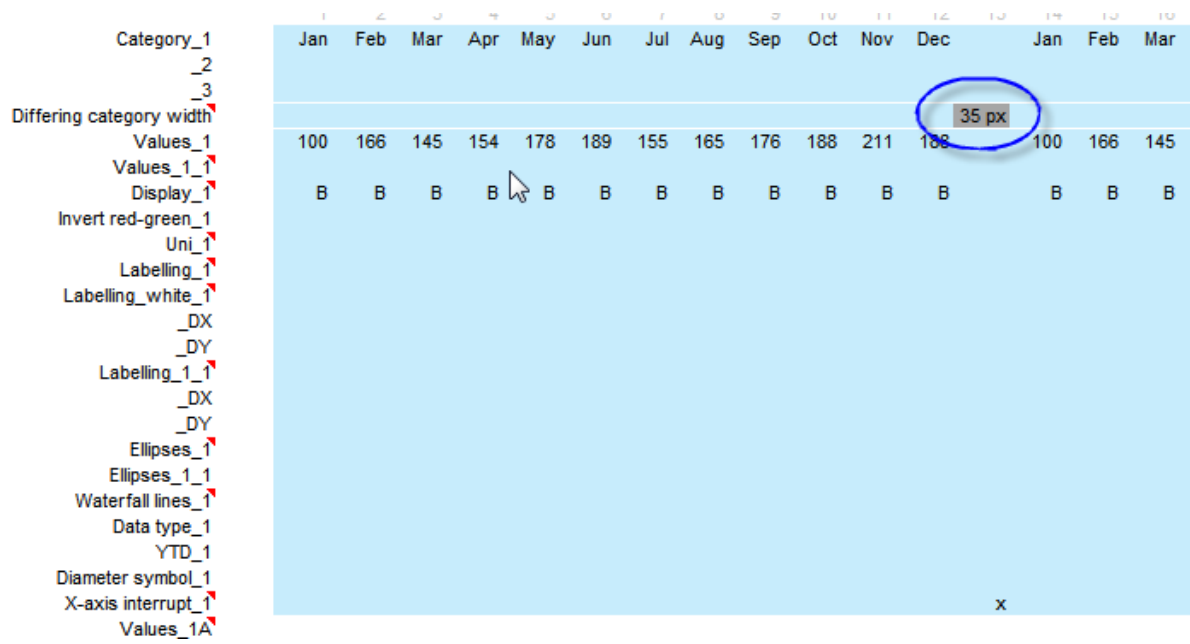|	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Category_1	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar
_2																
_3																
Differing category width													35 px			
Values_1	100	166	145	154	178	189	155	165	176	188	211	188		100	166	145
Values_1_1																
Display_1	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B
Invert red-green_1																
Uni_1																
Labelling_1																
Labelling_white_1																
_DX																
_DY																
Labelling_1_1																
_DX																
_DY																
Ellipses_1																
Ellipses_1_1																
Waterfall lines_1																
Data type_1																
YTD_1																
Diameter symbol_1																
X-axis interrupt_1													x			
Values_1A																

Figure 7: Realize the distance between two charts with differing category width