User Manual
Version 3

Thank you for choosing *Chart-me XLS*. With *Chart-me XLS* you make Microsoft Excel your professional tool for business charts. In this user manual you find a detailed guideline to the numerous features of *Chart-me XLS*.

For more information, visit our website at http://support.hi-chart.com

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Installation

Chart-me XLS will be installed on your computer through a setup assistant program (installer). The installer program is part of the delivered zip archive and consists of two files:

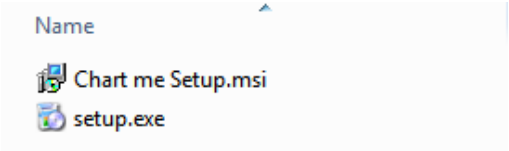


Figure: Zip-archive with *Chart-me XLS* installer files

Start the setup process by double-clicking the setup.exe file and follow the dialog boxes.

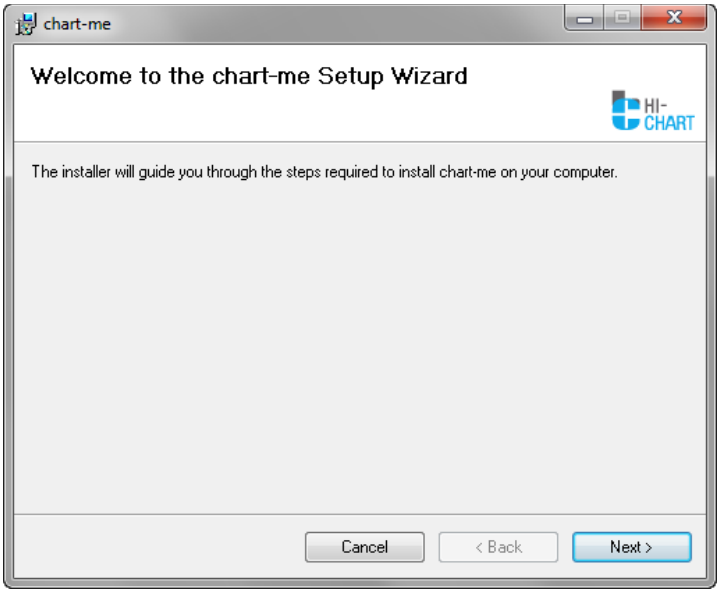


Figure: Installation dialog box of *Chart-me XLS*

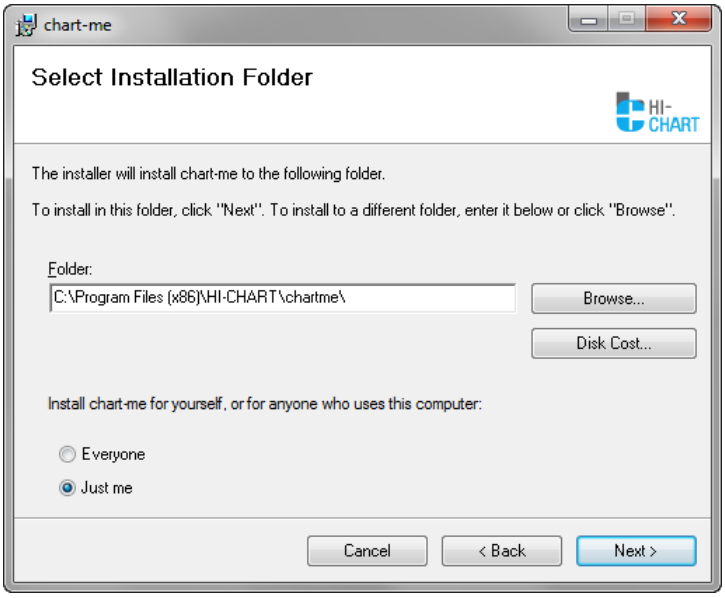


Figure: Confirm installation folder for *Chart-me XLS*

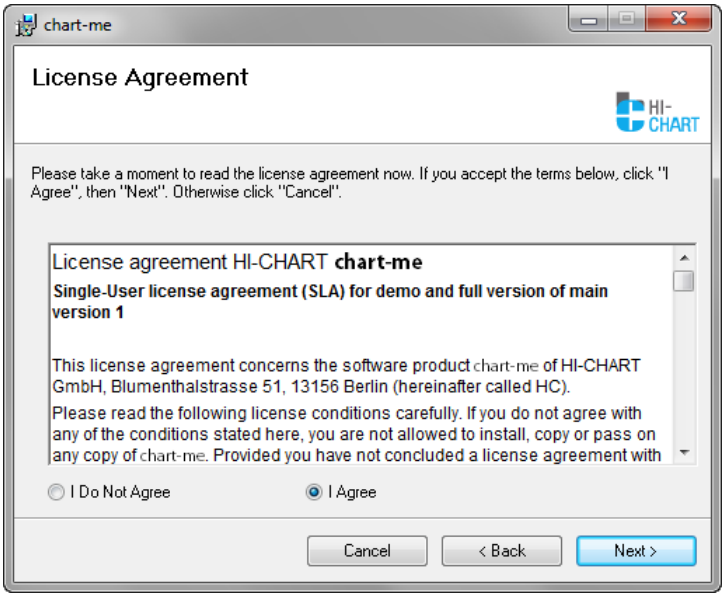


Figure: License agreement of *Chart-me XLS*

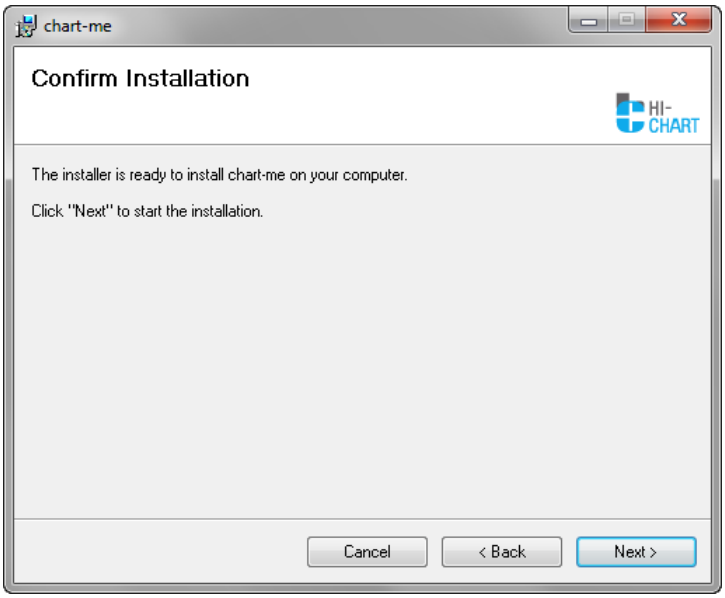


Figure: Start of *Chart-me XLS* setup program

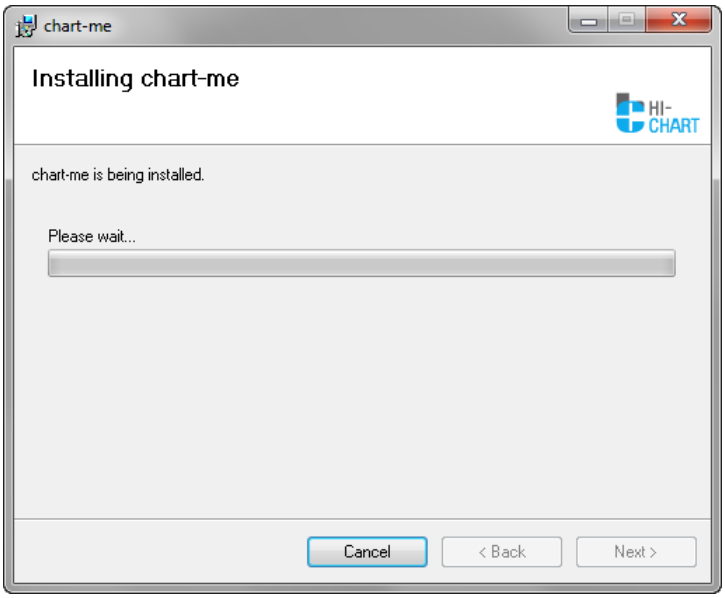


Figure: *Chart-me XLS* is being installed

In the last step of the setup process, the activation window appears. Put in your name and activation code here, as stated on your license documents or in the e-mail from our web shop.

Chart-me XLS with Tables module

Depending on the Chart-me XLS version you purchased, you get different activation codes. When acquiring Chart-me XLS with the Tables module, the following message appears on your screen.

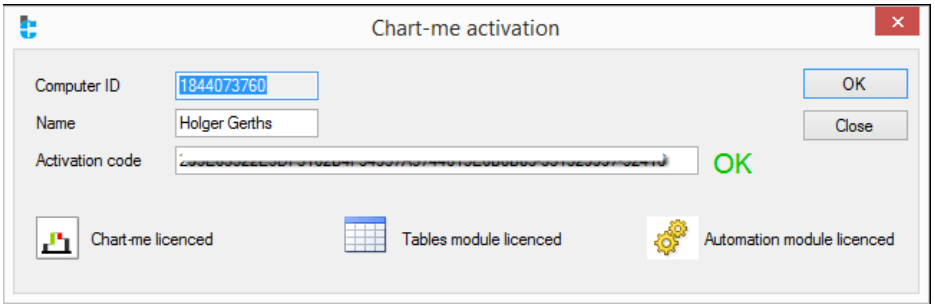


Figure: Installation of *Chart-me XLS* is finished; enter the activation code (copy&paste) for the licensed Tables module

If you want to use the free 30-day trial period, click on the Demo button. This will activate the demo version. The remaining trial-days are displayed in the lower part of the window. Then click OK.

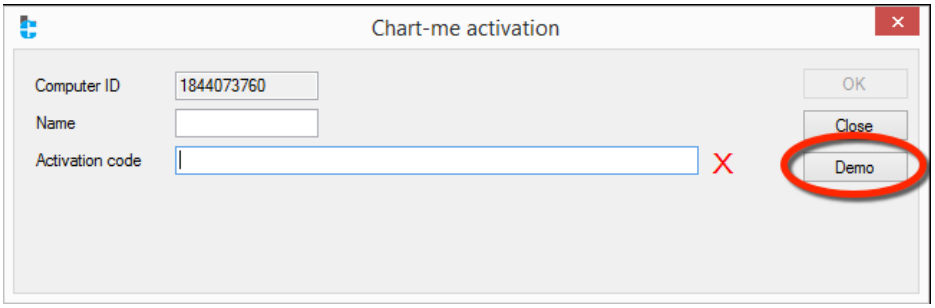


Figure: Start demo mode (trial period)

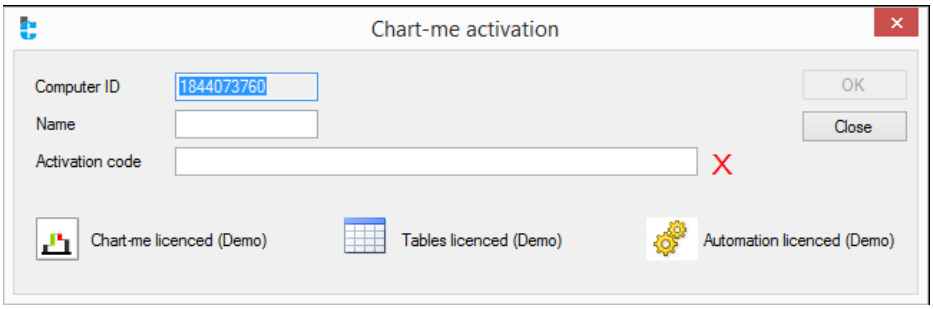


Figure: Demo mode has been activated for 30 days

Once the trial period has finished, *Chart-me XLS* stops working until you purchase a license and enter a valid activation code.

Upon successful installation, the following entries will appear in your Windows Start-menu in the folder HI-CHART*chart-me*.

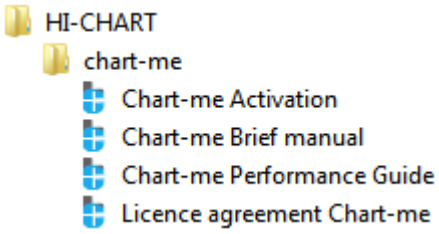


Figure: Contents of the menu folder Start/Programs/HI-CHART/*chart-me*

Chart-me XLS Activation will open the activation window.

Chart-me XLS Brief Manual will open this document.

Chart-me XLS Performance Guide will open a guideline to optimize performance while working with Chart-me XLS.

License agreement *Chart-me XLS* will open the license agreement that has previously been shown during the installation process.

Create page layouts and charts

Starting *Chart-me XLS*

Upon successful installation of *Chart-me XLS*, start your MS Excel (2007 or 2010) as usual. There will be a *Chart-me* menu item on your MS Excel menu bar.

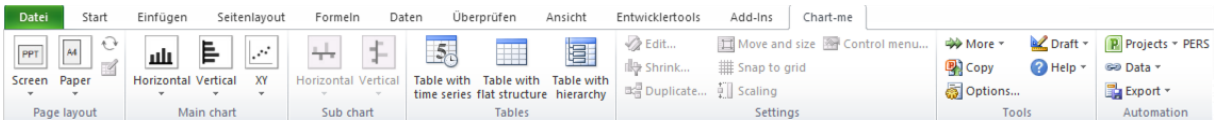


Figure: *Chart-me* menu ribbon

Create page layout

Start your *Chart-me XLS* project by first selecting a page layout:

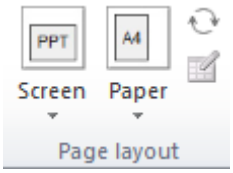


Figure: page layout

Choose between five different page formats: Screen = PowerPoint (4:3, 16:9 or individual dimensions), A4 landscape or portrait, A3 landscape or portrait.

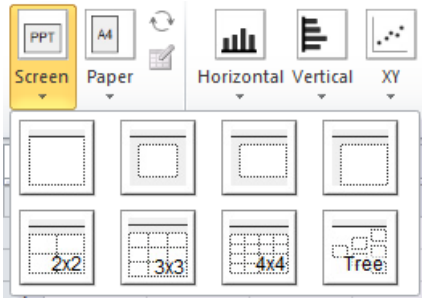


Figure: PowerPoint page grid options

Each page layout then provides various chart templates from which to choose:

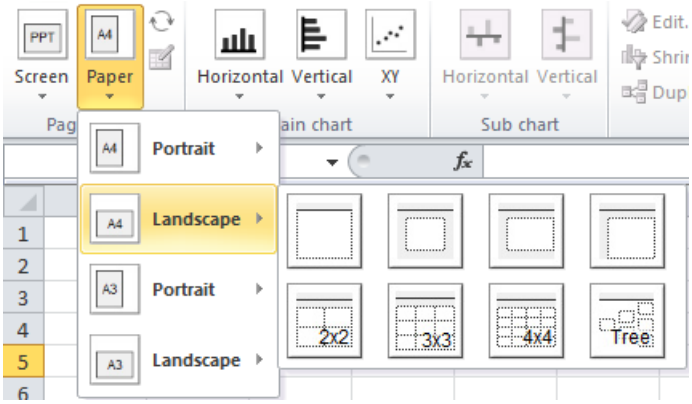


Figure: Grid options for paper formats

Every print and on-screen layout option provides various predefined page grid definitions. Choose from 4 basic types featuring a single chart with differing margins or one of the multi chart grid

definitions: 2x2, 3x3, 4x4 grids featuring 4, 9, and 16 charts (or other content) per page respectively. There is also a tree structure option composed of 6 charts.

Upon selection of the page grid, choose the number of lines for message and title display from the dialog window. Select whether to insert the new worksheet into the existing workbook or create a new workbook.

Depending on the selected page template – *Screen* or *Paper* – the page dimensions can be individually adjusted.

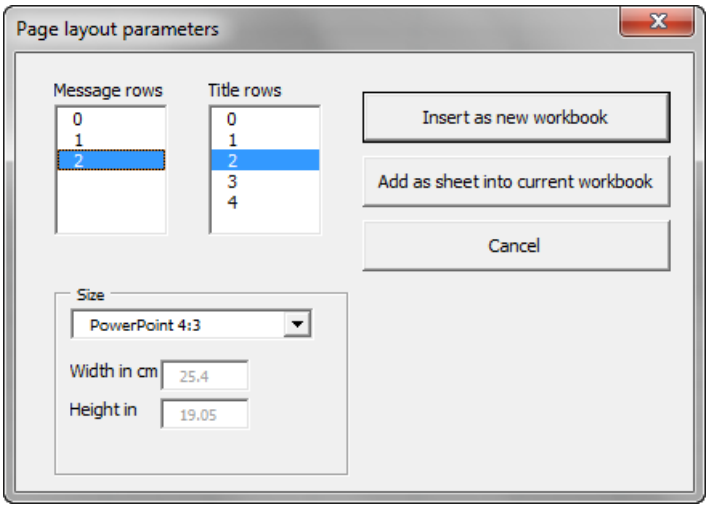


Figure: Page parameters for page type *Screen*

Selecting the page type *Screen* produces a template with fixed page size precisely fitting onto a PowerPoint slide with the same setting. You can choose from predefined PowerPoint page sizes or define your own.

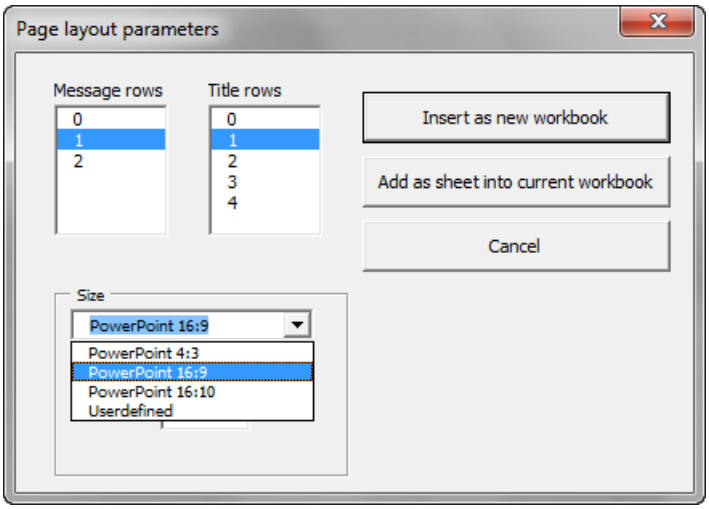


Figure: *PowerPoint* page sizes

The page type *Paper* generates a layout that will print on a single sheet of paper, without page break.

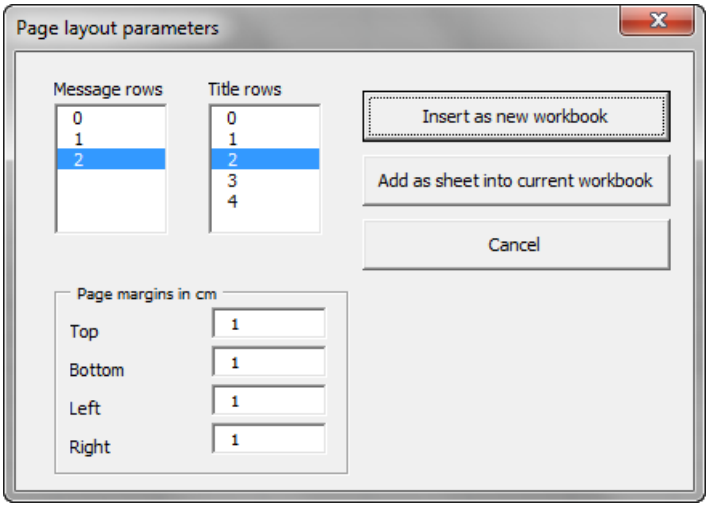


Figure: Page parameters for page type *Paper*

The new page layout can be inserted into a new workbook or as a worksheet in the current workbook.

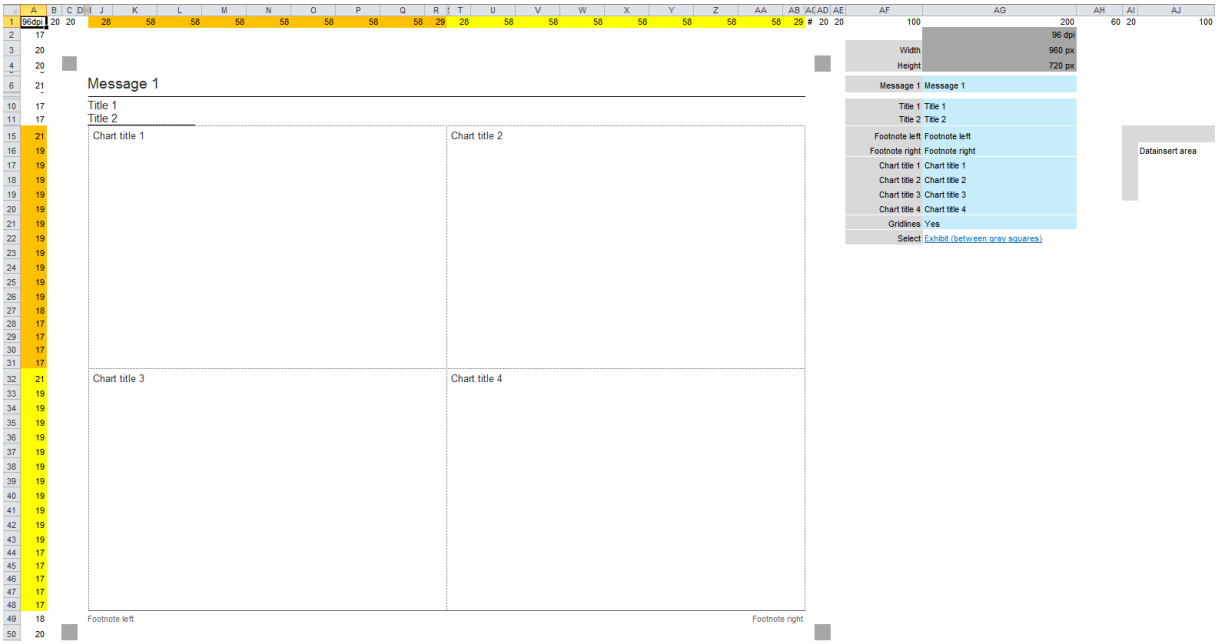


Figure: Newly created report page layout

Once a page layout has been created, it can be easily adjusted at any time:

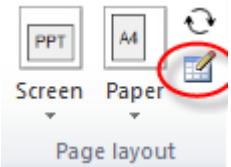


Figure: Change page layout settings

In the following window, the page type can be switched between *Screen* and *Paper*.

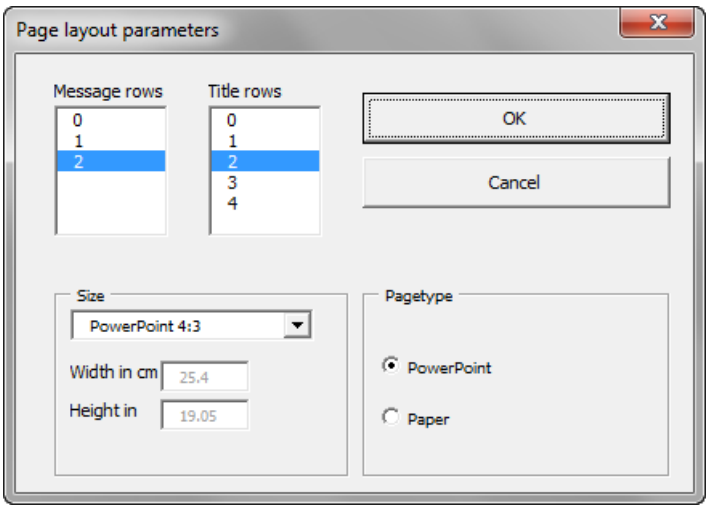


Figure: Edit layout – page type *Screen*

When switching the page type to *Paper*, the page margins can be defined.

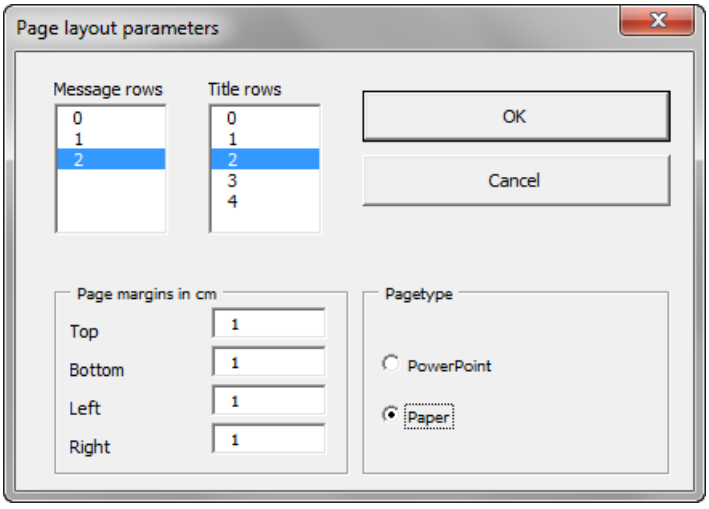


Figure: Edit layout – page type *Paper*

For printed output we recommend to adjust the printer options in Excel corresponding to the settings you chose here in *Chart-me XLS*.

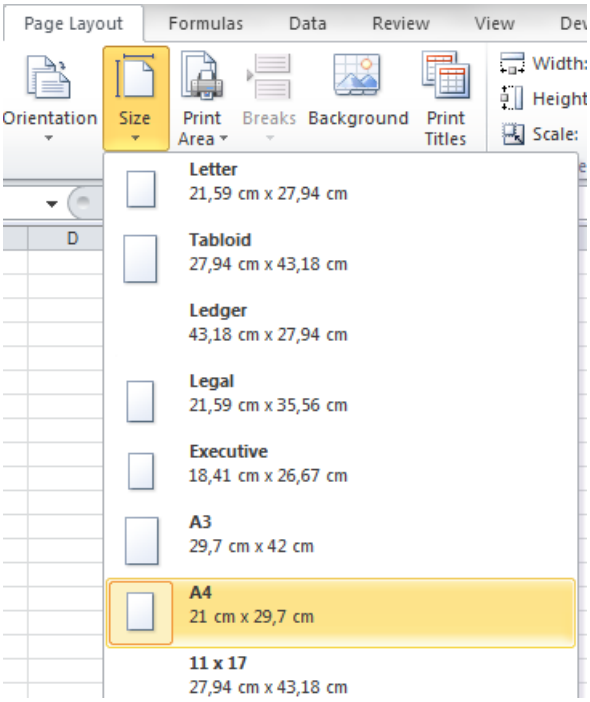


Figure: Choose printer page size of *Excel* worksheet

If you make any changes to the page size definition or modify any column width or row height in the page layout sheet, the page grid has to be recalculated.

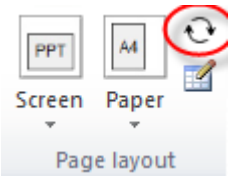


Figure: Recalculate page grid

This function adjusts the layout width and height, depending on the page type:

- Page type *Paper*

  The size of all cells is proportionally adjusted to a point just before a page break would appear. (maximum possible size without page break)

- Page type *Screen*

  The size of all cells is proportionally adjusted so that it meets the overall dimension in cm. (layout fits precisely on a PPT slide)

If the DPI-resolution[1] of the screen changes (this setting may differ from one computers to another), the page grid has to be recalculated. Charts that have already been placed inside the layout will be adjusted to the correct new page dimensions automatically.

Every *Chart-me XLS* generated page grid states its DPI-resolution in the top right range of the sheet.

Figure: Display of DPI-resolution in a page layout sheet

If *Chart-me XLS* detects that the DPI-resolution has changed but the page layout has not yet been recalculated, the DPI-display turns red.

[1] The DPI-resolution can be changed in Windows 7 *Control Panel – Display – User defined text size (DPI)*. DPI (or PPI) means: pixels per inch. This is a factor used by input and output devices to translate pixel dimensions into inches or centimeters.

Figure: Red DPI-display means: page grid has to be recalculated

Recalculate/Refresh the page grid by clicking the recalculate icon:

Insert main chart

There are 3 chart types from which to choose: Horizontal, Vertical, XY:

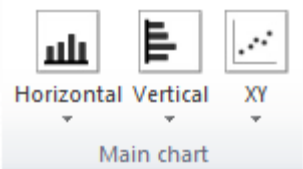


Figure: Main chart types

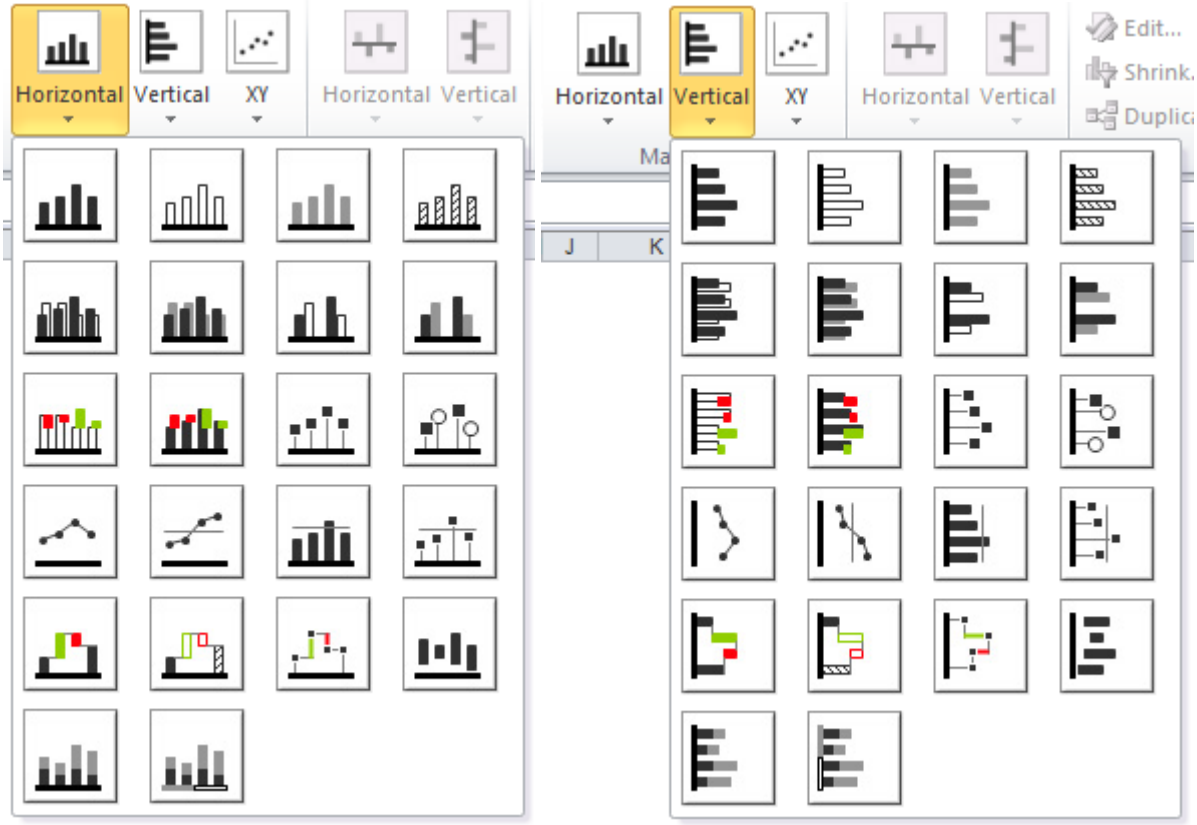


Figure: Predefined types of main charts

Set the chart size in the dialog window with one of the following options:

- Enter chart size as pixel values
- Highlight a cell range in the worksheet or
- Select one of the pre-defined cell range ranges by clicking on one of the blocks in the lower half of the dialog window

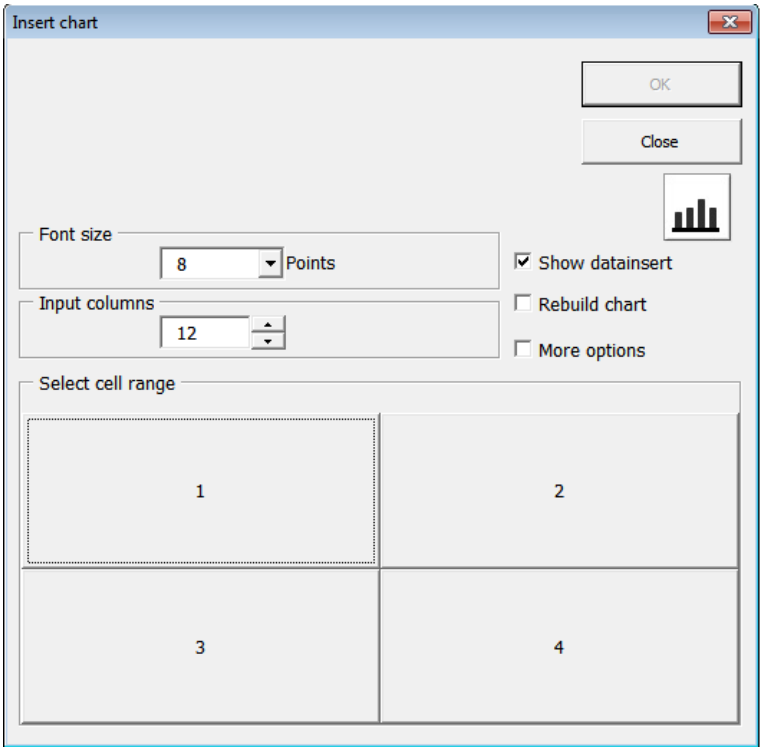


Figure: Options for inserting a main chart

The *Select cell range* option allows you to insert the chart in one of the predefined ranges. Only a single chart can be inserted at a time. By holding the STRG key, you may select multiple predefined cell ranges simultaneously, increasing the size of the single chart to be inserted. The chart size corresponds to the outer circumference of all highlighted cell ranges. The worksheet in the background displays your cell range selection, provided that a worksheet has already been created into which you are inserting this new chart.

If there is no open workbook, clicking *OK* will create a new chart template in a new workbook, regardless of the number of selected cell ranges.

The *Input columns* option determines the number of input values for the chart. When creating a one-year time series for example, the *input columns* option should be set to 12, 1 column per month.

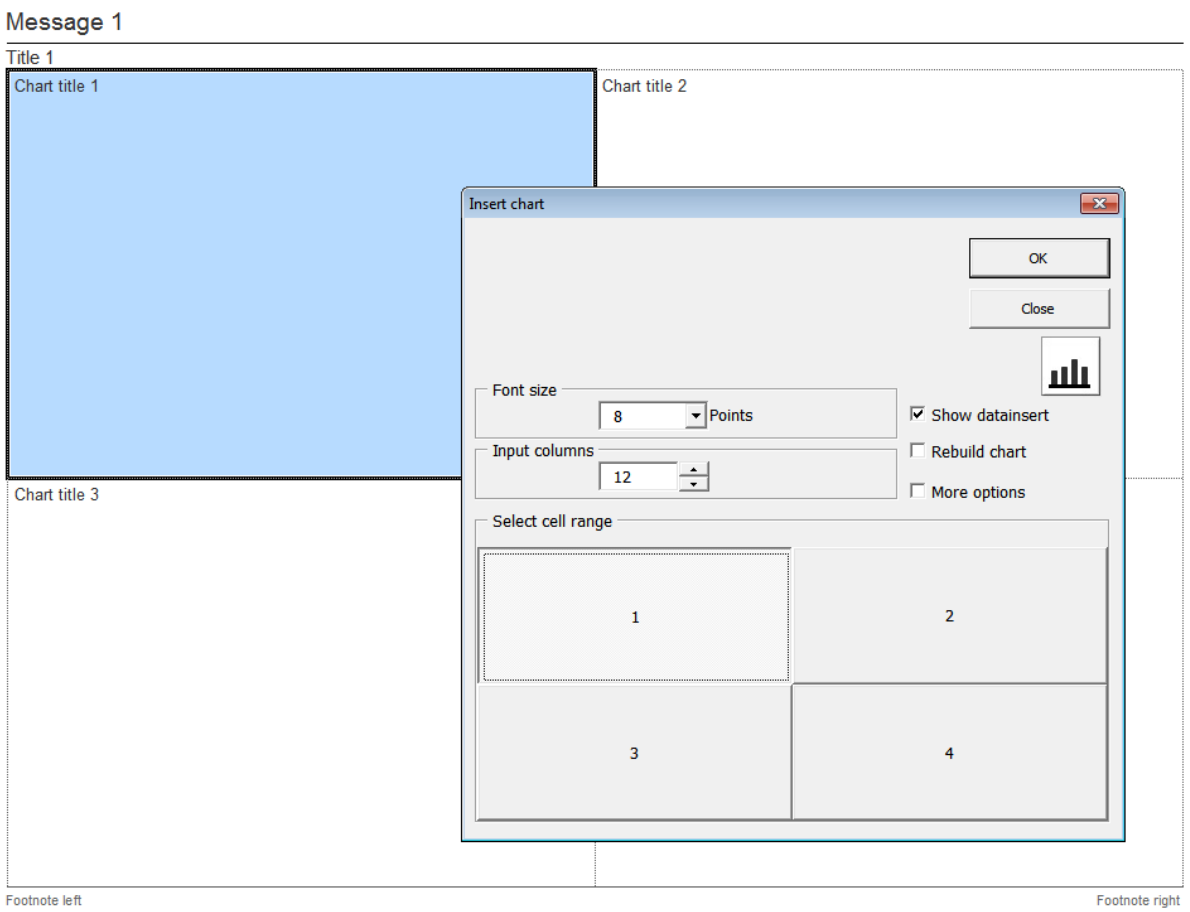


Figure: Choose chart position inside the page grid

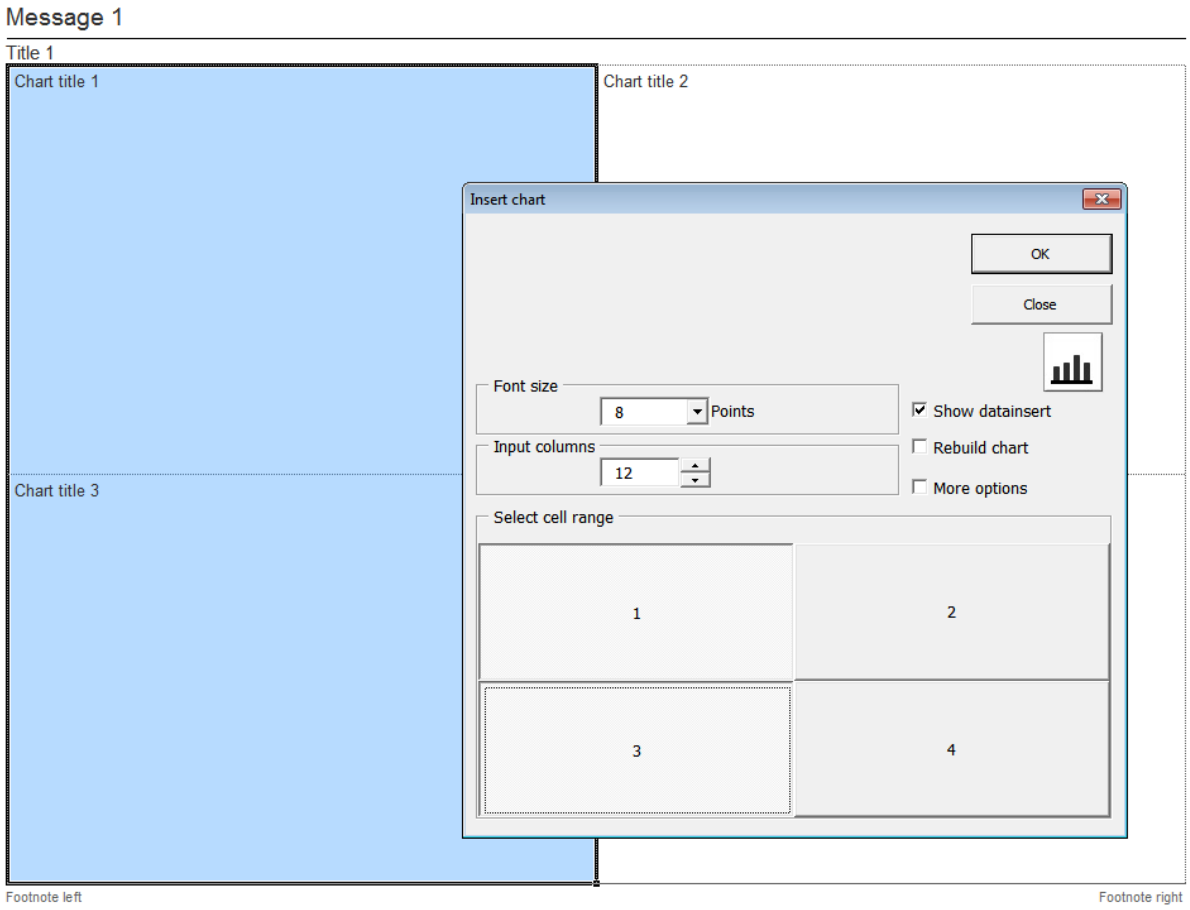


Figure: Choose multiple grid cells using CTRL (chart will cover the whole selected range)

The *font size* option sets the font size for all text elements in the chart including various dependent elements such as column width and point sizes.

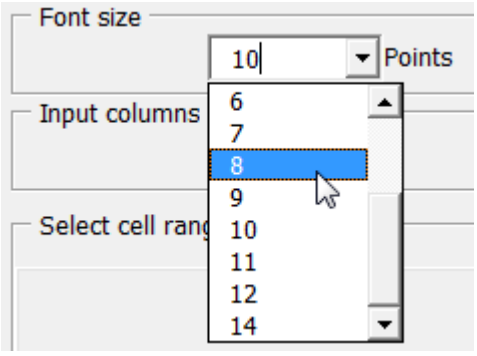


Figure: Select font size

The sample chart is rendered and configured based on your selections in the chart size window and will be inserted into the selected grid position.

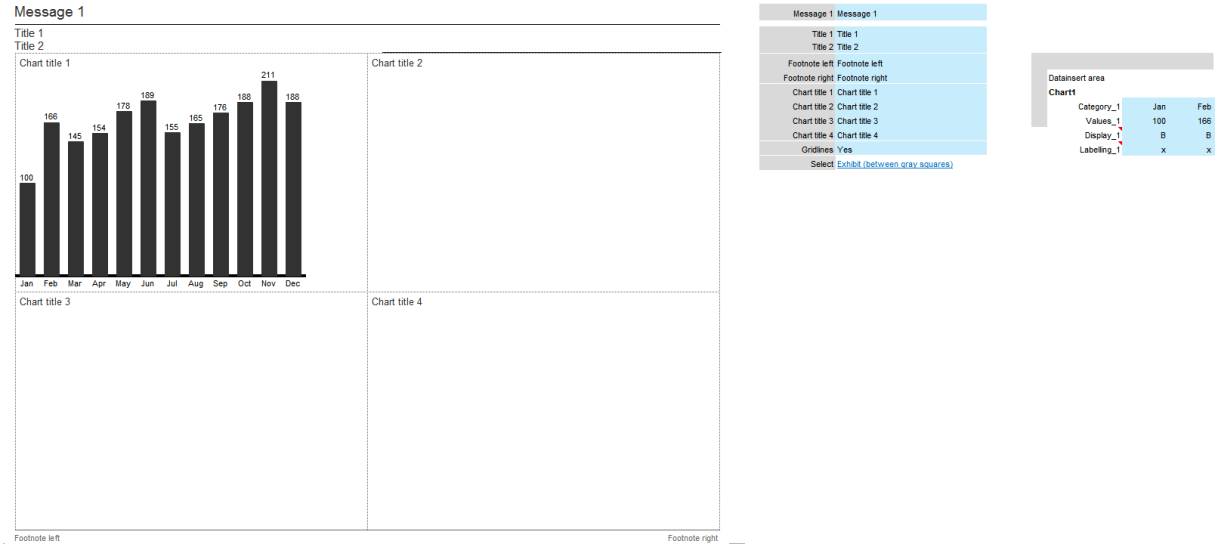


Figure: Main chart has been placed in the page grid and data insert range was automatically linked (see left side of figure)

If the option *Show datainsert* was activated, the data insert range from the chart control sheet (Chart*n*) is automatically linked into the grid sheet.

Insert sub chart

When using unstacked charts, you can insert up to two deviation charts.

Unstacked charts are displayed in the first 5 rows of both horizontal and vertical main charts:

Figure: Unstacked charts

There are horizontal and vertical sub chart templates. The available sub chart options depend on the type of main charts that have been created at a given time.

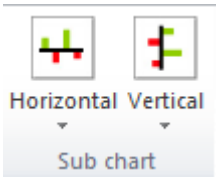


Figure: Insert horizontal or vertical sub charts

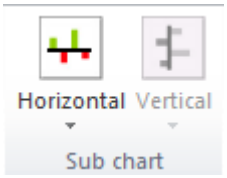


Figure: Insert horizontal sub charts only

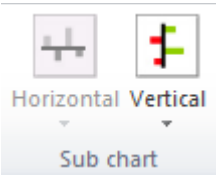


Figure: Insert vertical sub charts only

The sub chart options are inactive and unavailable for selection when either both sub charts have already been added to a main chart or there is no appropriate main chart to which a sub chart could be added.

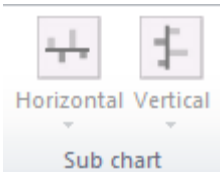


Figure: Sub chart insert options are unavailable

You may choose from the following predefined sub chart types:

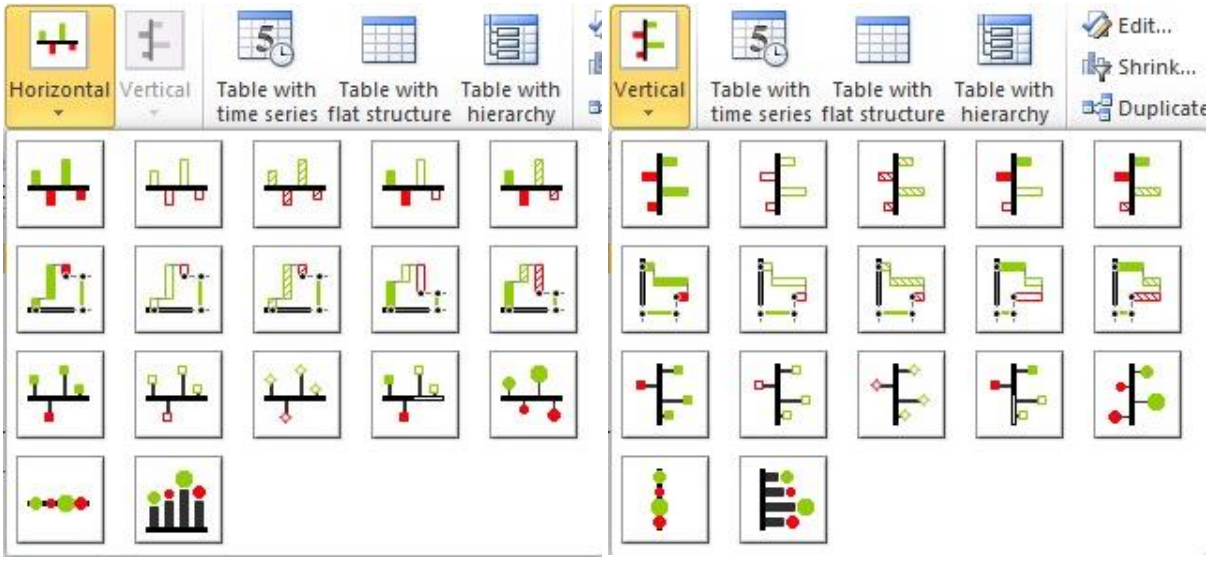


Figure: Horizontal and vertical sub charts

Upon inserting a sub chart, select the main chart to which to add a sub chart by clicking on the appropriate chart representation in the dialog box.

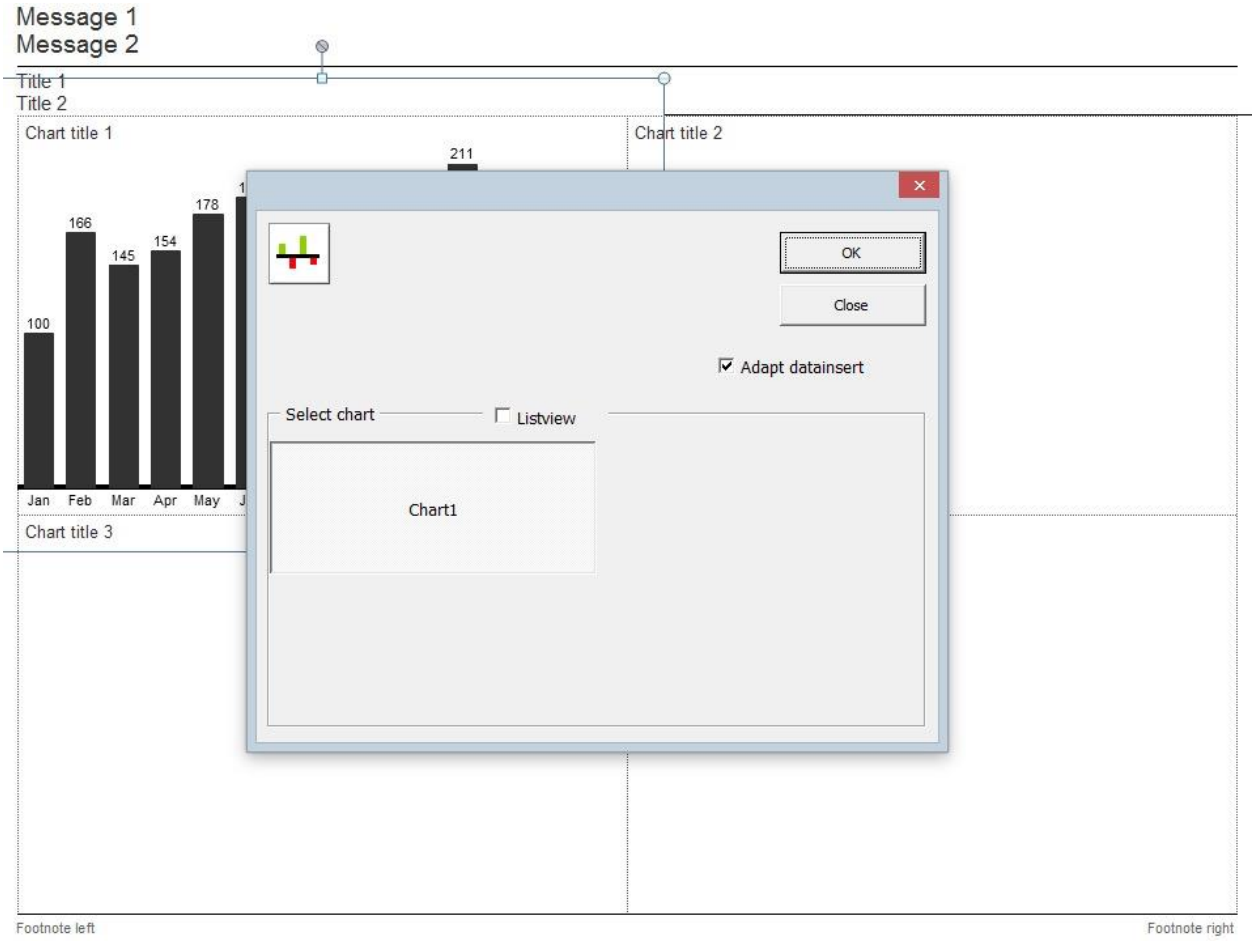


Figure: Select main chart to which to add a sub chart

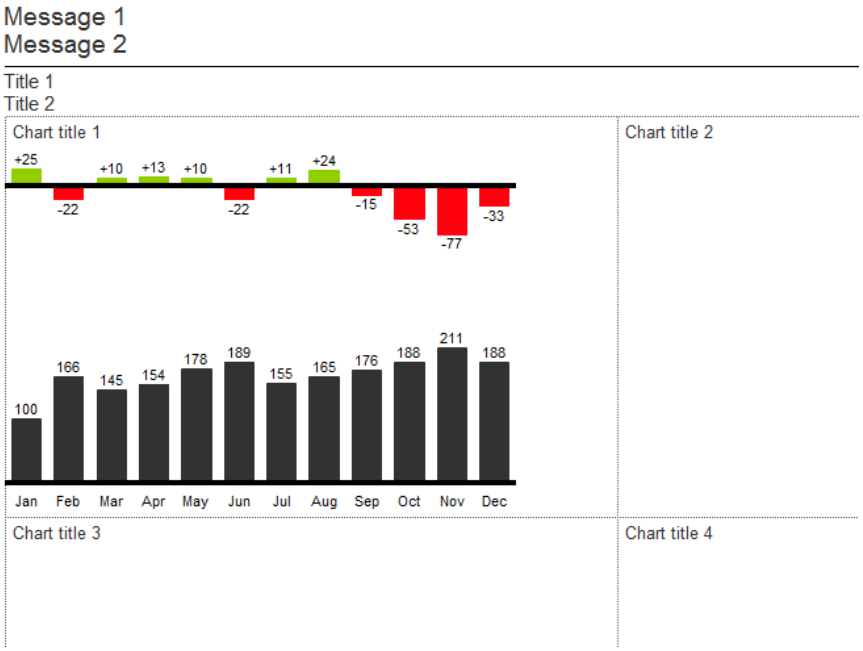


Figure: The first sub chart has been added

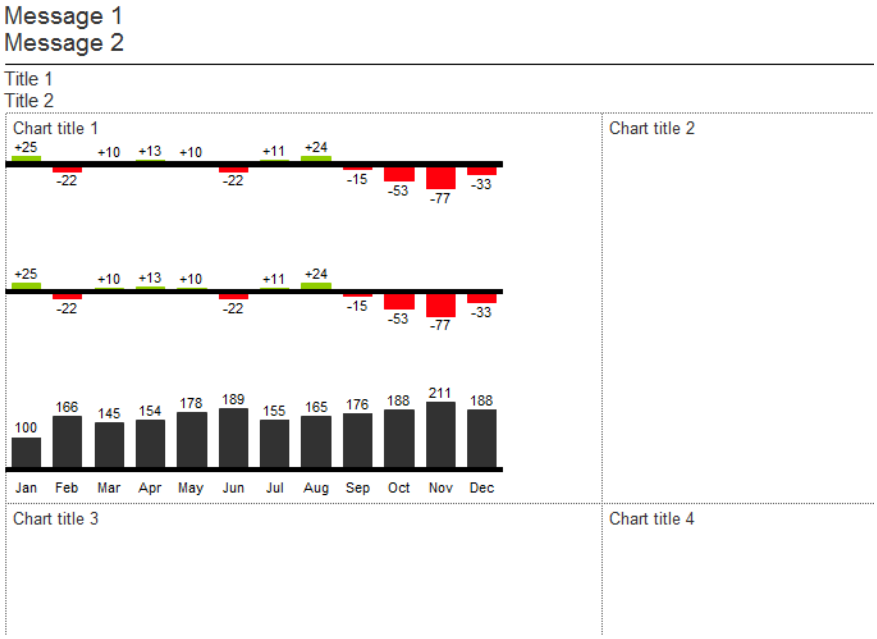


Figure: The second sub chart has been added

Define chart range sizes through margin settings

When adding main and sub charts to a chart object, *Chart-me XLS* allocates the space for the chart elements automatically. You can view and edit these space allocations by first making the margins visible:

1. Activate the control menu

2. In the *Control panel* select one or more chart objects (e.g., Chart1), select the *General* tab and set the *Display marks* option to *Yes*. In order to see the effects of your selections displayed on screen automatically, check the *Save immediately* box. If the *Save immediately* box is not checked, you need to *Confirm* your selection to see its effect on screen.

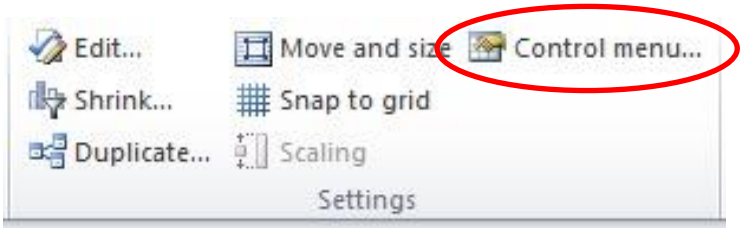


Figure: Activate the *Control menu*

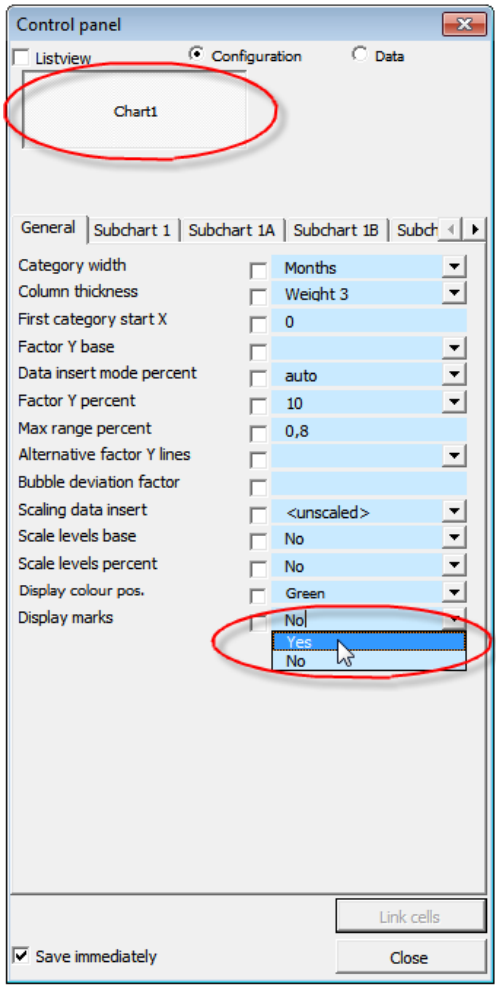


Figure: Control panel

Chart view with visible display marks:

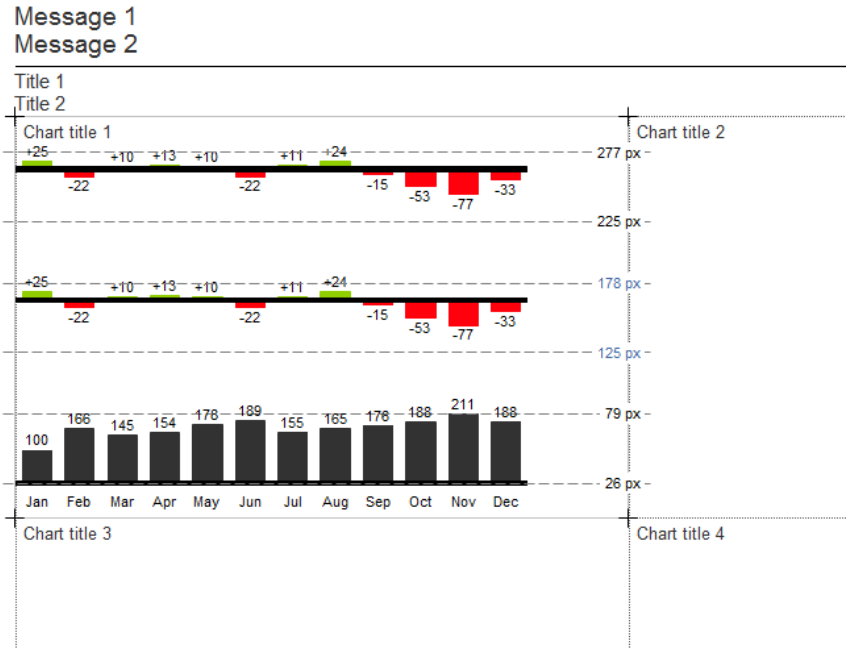


Figure: Chart with display marks made visible

These margins (visible through the display marks option) determine the amount of space allocated to each of the 3 subcharts within the chart object. You may change these space allocations by modifying the top and bottom margins of a subchart:

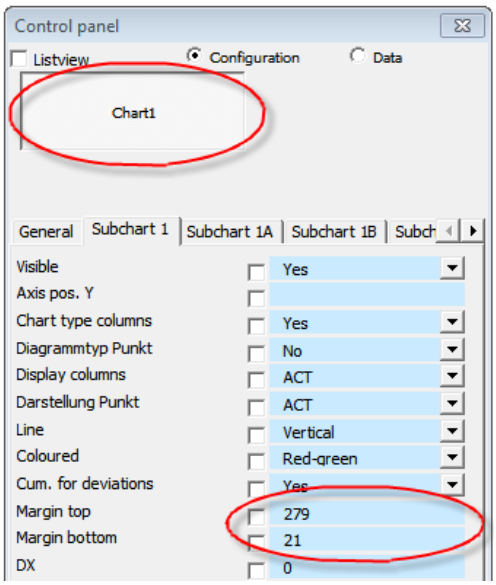


Figure: Adjust top and bottom margins in the Control panel

Chart settings

This section details various options that can be applied to modify existing charts and layout pages.

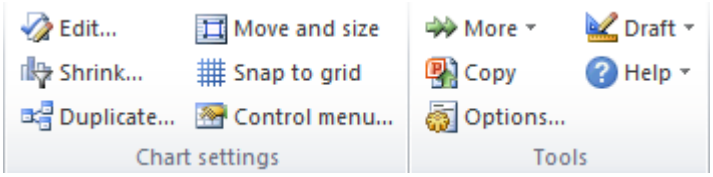


Figure: Menu ribbon with additional *Chart-me XLS* features

Edit…

The *Edit…* features allow you to modify chart size, font size and x-resolution of existing charts. The *Select chart* range allows you to highlight multiple charts to be edited at the same time.

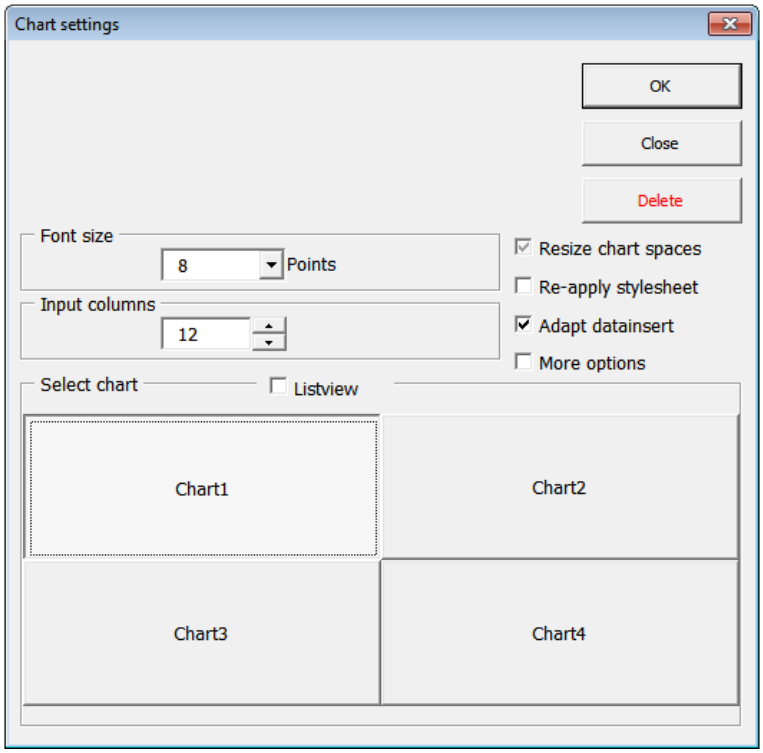


Figure: Chart settings dialog window

The *Listview* check box provides you with an alternative view and selection option of charts. This may prove useful when multiple charts are stacked on top of each other.

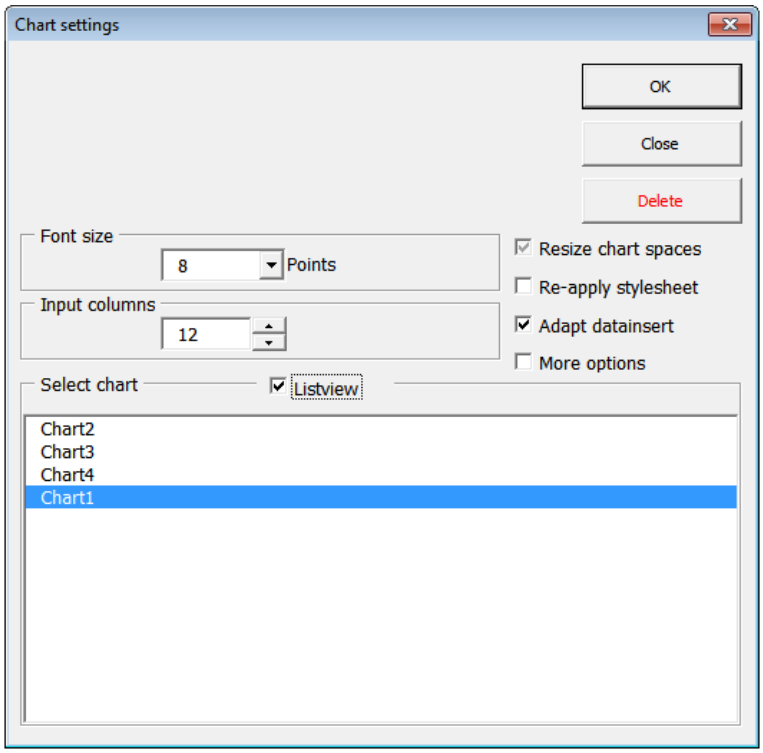


Figure: Chart settings dialog window, Listview

To facilitate a cell range selection, you may want to temporarily hide the displayed charts by unchecking the *Show charts box* and then clicking in the *Select* field and highlighting a cell range directly on the worksheet.

The checkbox *Resize chart spaces* provides the following three options:

- ☐ Chart spaces will not be recalculated and resized
- ☑ Chart spaces will only be resized if charts have not been adjusted manually (setting per chart object)
- ☑ Chart spaces for all charts will be recalculated and resized

The *Re-apply stylesheet* option determines whether the currently active style sheet will be applied to the selected charts. If the existing style sheet has been modified or a new style sheet was activated, the *Re-apply stylesheet* option allows you to cascade these changes through to the existing charts.

If the number of *Input columns* is changed and if the option *Adapt datainsert* is activated, the linked data insert ranges are automatically resized.

The Delete button will remove the selected charts permanently and irrevocably.

If the option *Adapt datasheet* has been selected, the data insert range is also deleted. This will only work with ranges that have been linked with Chart-me XLS functions.

Shrink…

The *Shrink...* function reduce the files created with *Chart-me XLS* in size to retain the necessary features used in the chart objects (e.g., chart types, number of data points, x-resolution).

A number of reduction steps are applied including the following:

1. Reduction in the number of data points
2. X-resolution adjustment for bar charts
3. Deletion of unused features such as
    a. Sub charts
    b. Individual data rows
    c. Data types

The elimination of unused elements cannot be undone and results in the loss of aforementioned features. This, however, does not or only slightly affect the existing chart images.

The *Shrink…* function is used to reduce the file in size and therefore its storage requirements and speed up performance.

The following figure shows the *Autoshrink chart* dialog window. You are provided with the option to adjust the X-Resolution for bar charts (also refer to *X-Resolution in column and bar charts*). All other settings are determined automatically.

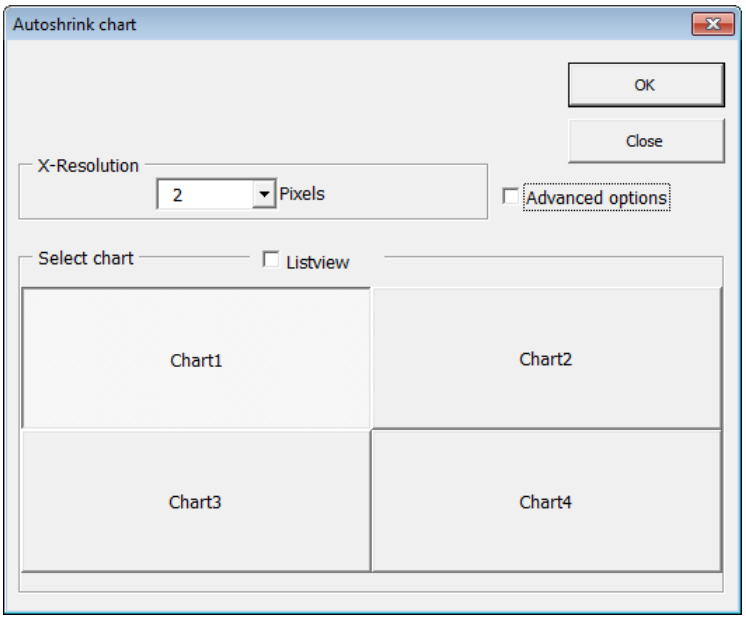


Figure: Autoshrink chart, auto detection

When checking the *Advanced options* box and clicking on *Next…*, you can customize the reduction process in the *Shrink settings* window.

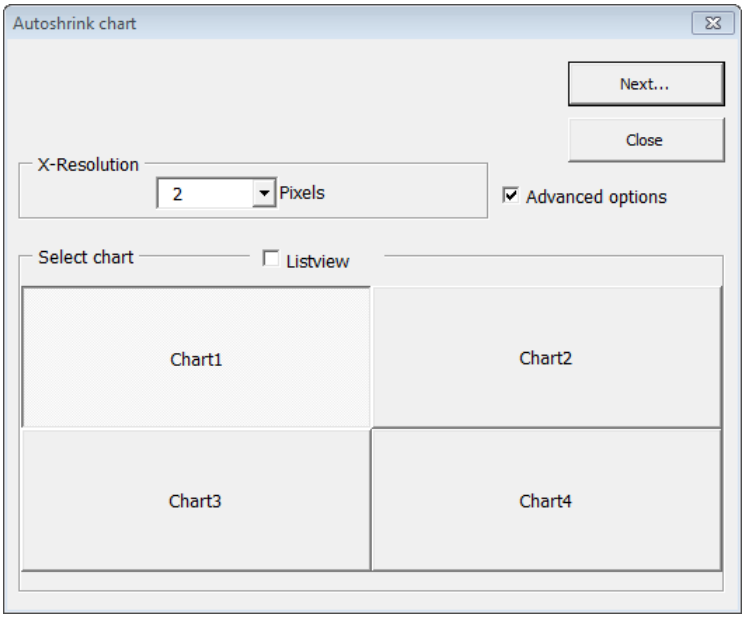


Figure: Autoshrink, advance options

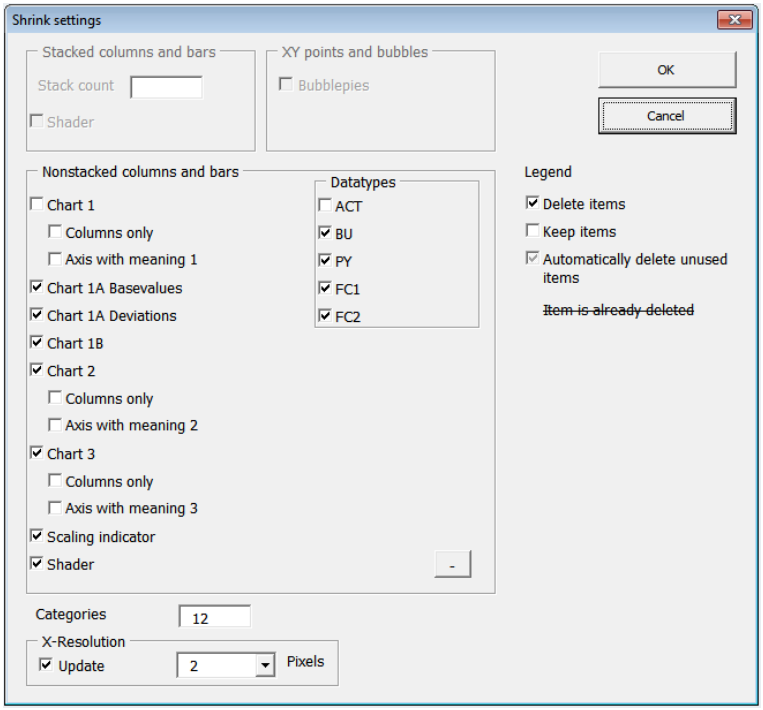


Figure: Shrink settings, advanced options

Duplicate…

This feature allows you to duplicate an existing chart into one or more identical charts on the same page grid. The *Duplicate…* feature is particularly useful when creating multiple charts of the same type. We recommend first finishing the "master chart," reducing it in size with the *Shrink…* function, and then duplicating it.

The *Duplicate…* feature steps you through the process with two dialog windows, letting you first select the chart to be duplicated and then choosing the destination position(s).

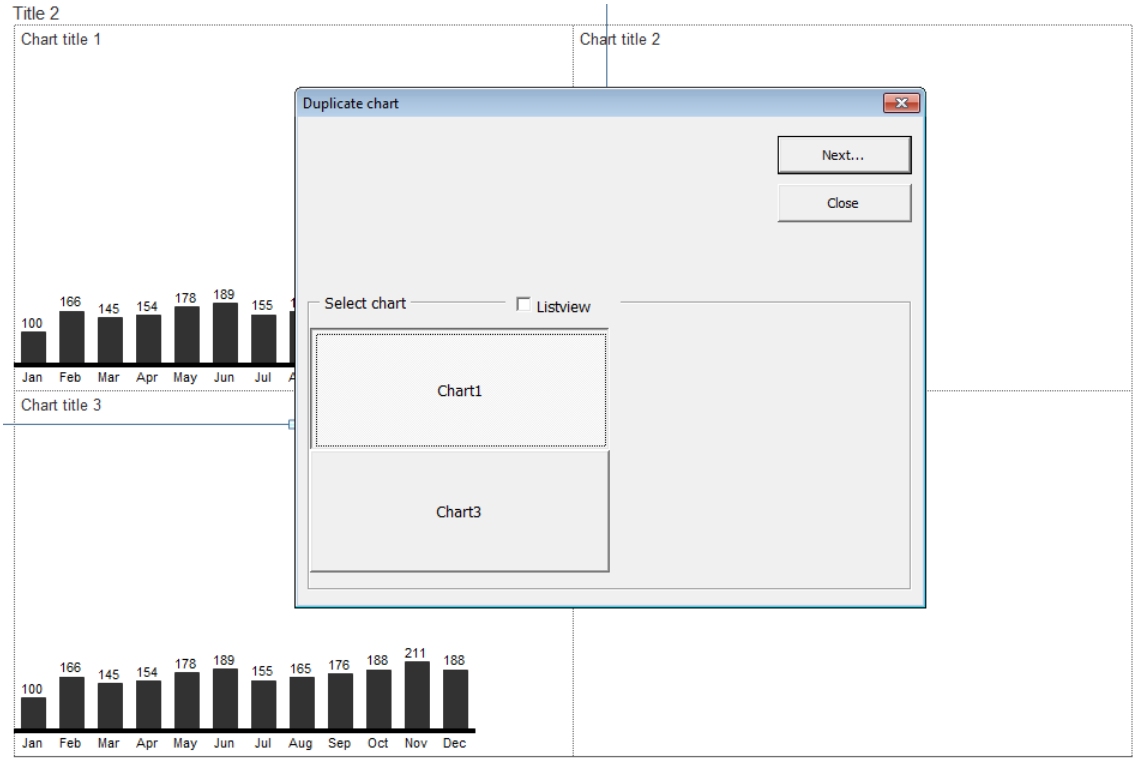


Figure: Duplicate chart dialog window, chart selection

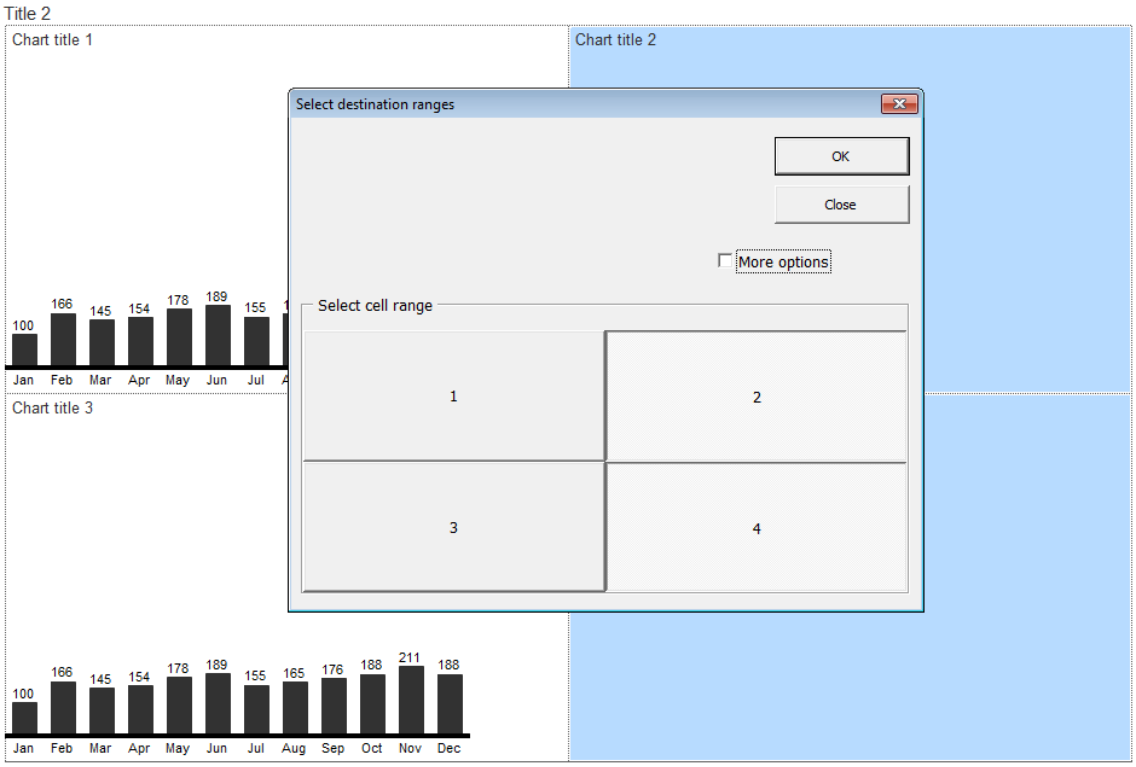


Figure: Duplicate chart dialog window, select destination range

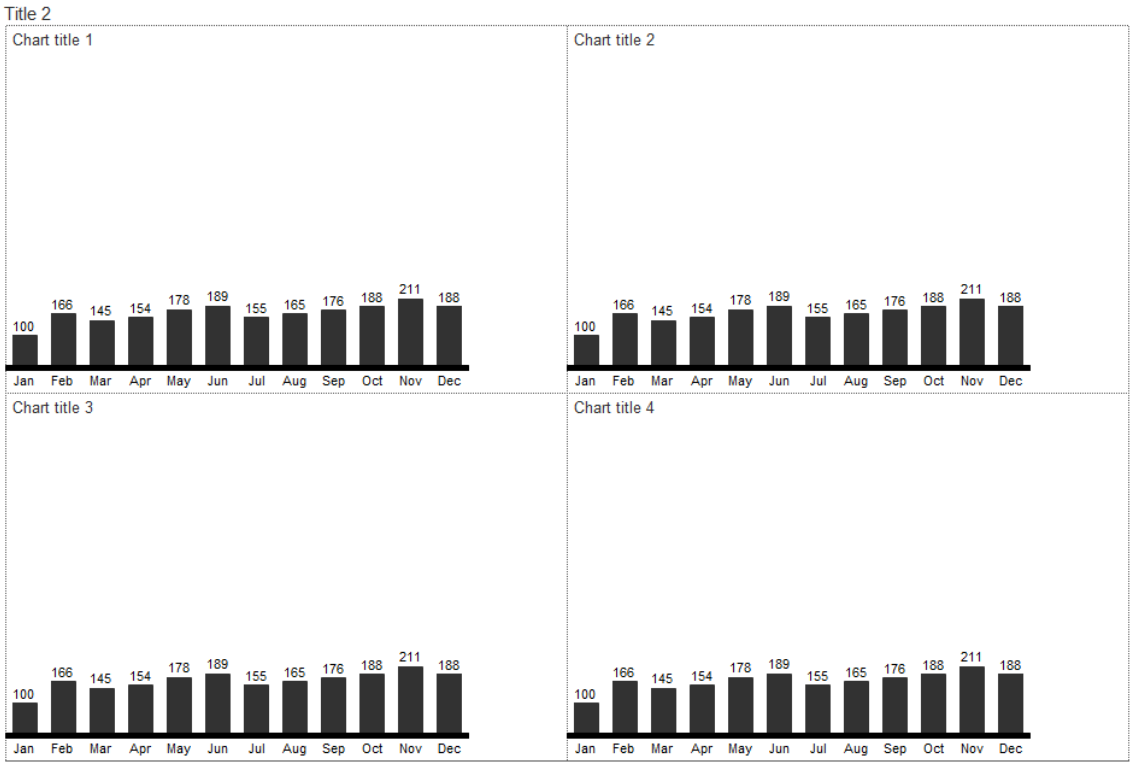


Figure: Duplicated charts

NOTE: When you duplicate a chart that has not yet been reduced in size with the *Shrink…* feature, a warning will be displayed. Although the duplication process is possible, it may, at least temporarily, result in very large data files along with slow processing times.

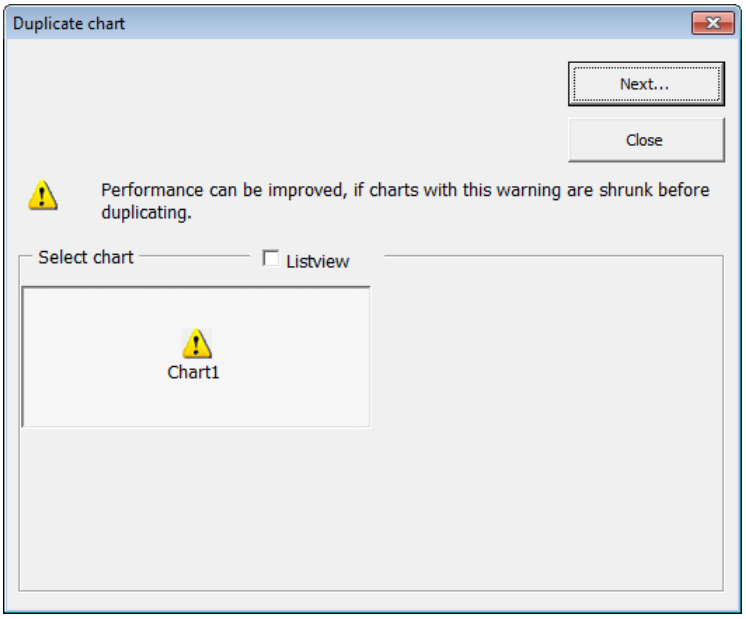


Figure: Warning display when attempting to duplicate a chart that has not been shrunken

Move and Size

The *Move and Size* feature allows you to reposition an existing chart by first selecting it:

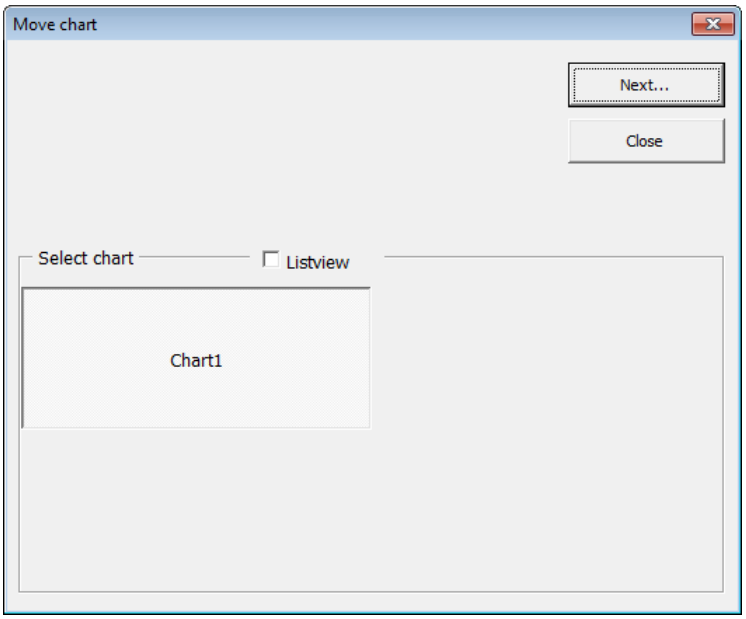


Figure: Move chart, chart selection

...and then choosing a new location:

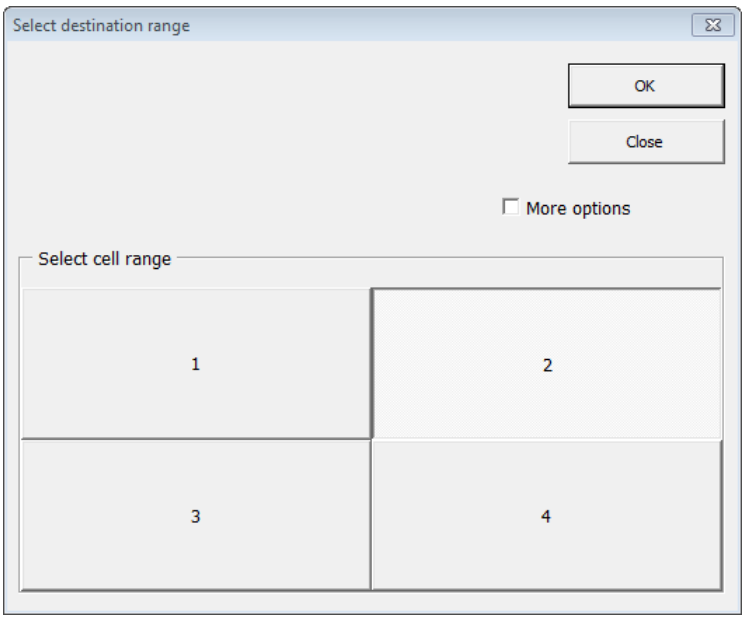


Figure: Select destination range

Check the *More options* box to select a cell range manually as well as resize the chart.

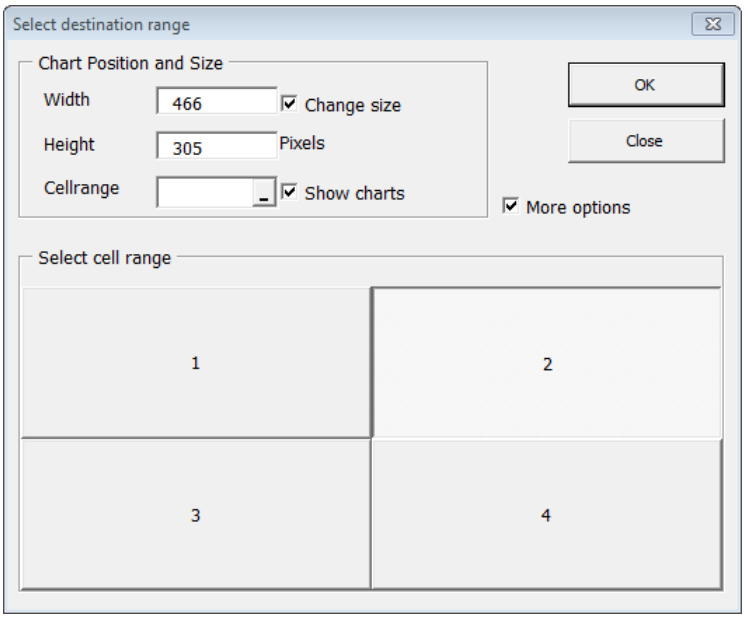


Figure: Move and Size dialog box for advanced options

Snap to grid

The feature repositions the selected charts to align with the layout grid.

Before:

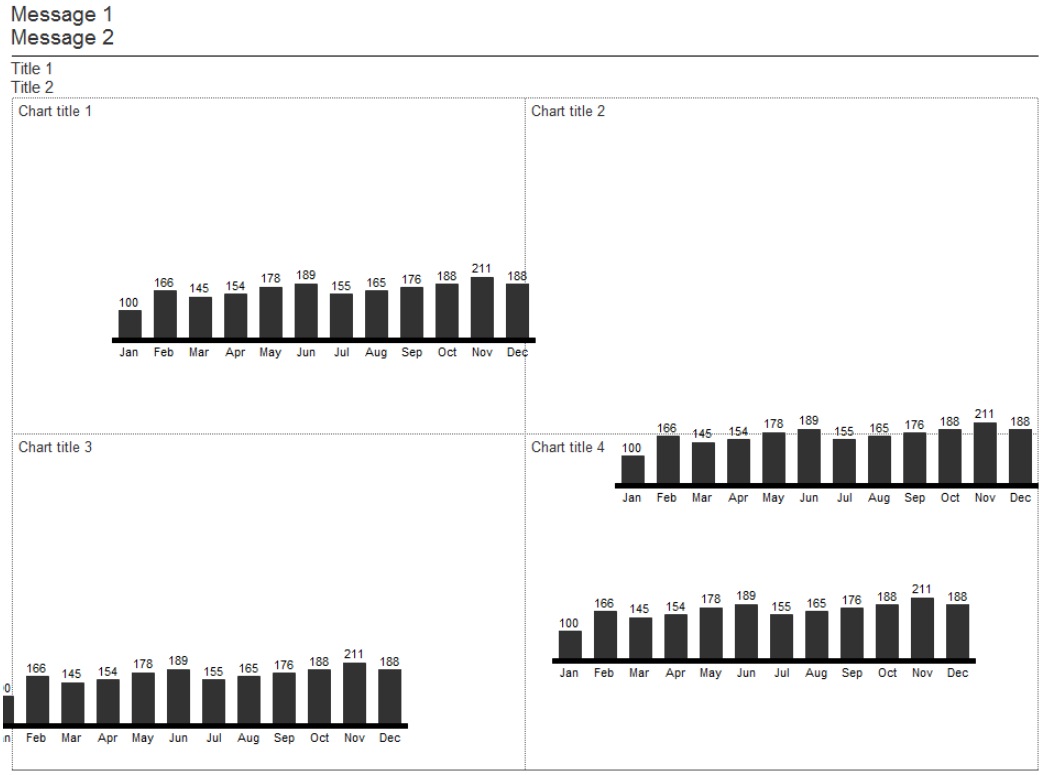


Figure: Charts have been added but are not aligned with the layout grid

After:

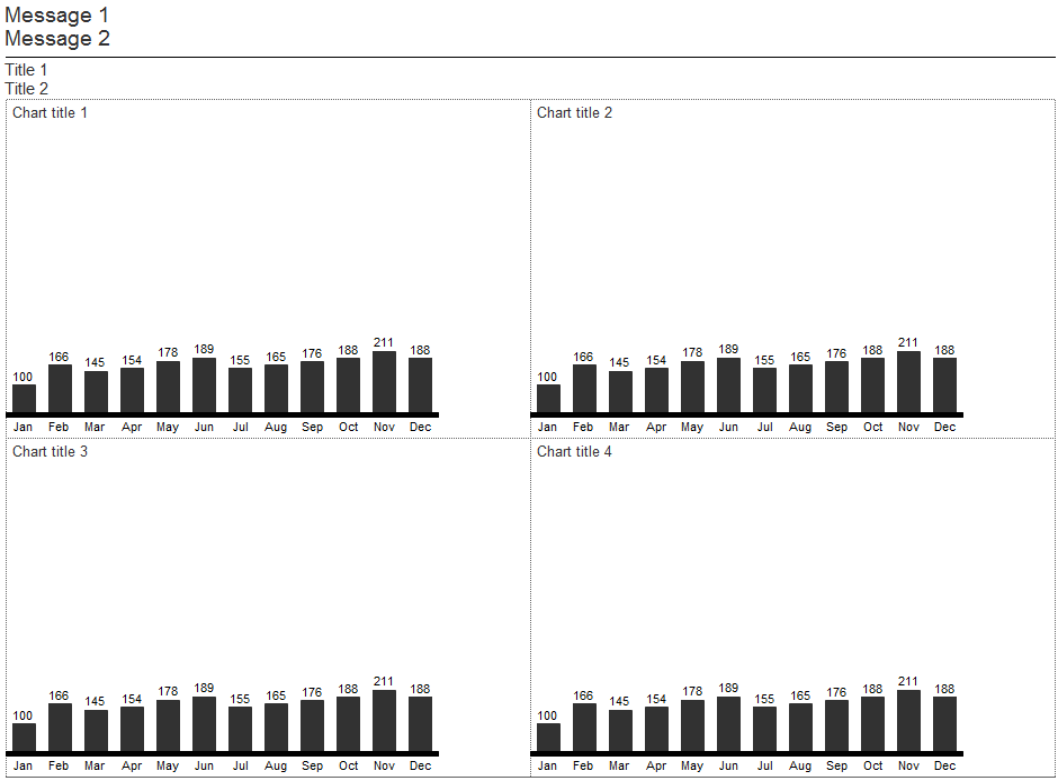


Figure: Charts snapped to grid

Scaling

With the function *scaling*, multiple charts can be grouped to scaling groups, wherein all charts automatically get the same scaling.

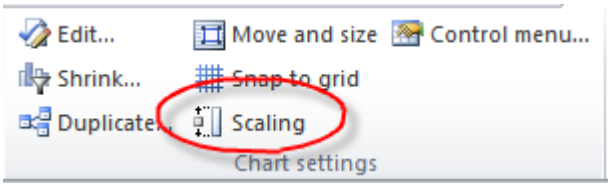


Figure: Menu item *Scaling*

The following three charts are scaled separately, not commonly over all. This can be misinterpreted and cause to be not understood from the viewer.

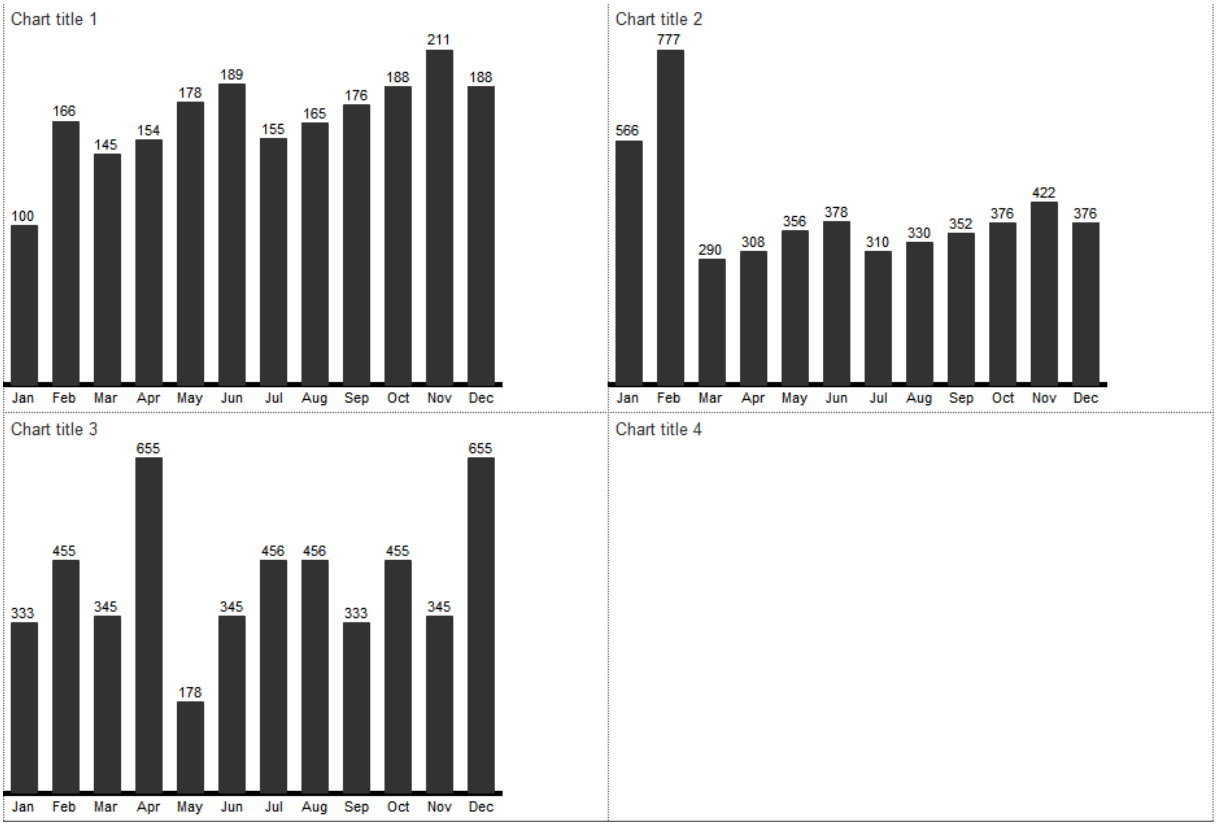


Figure: Charts that are scaled separately

In the dialog *scaling groups*, multiple charts can be selected and grouped to a scaling group with *Create scaling group*.

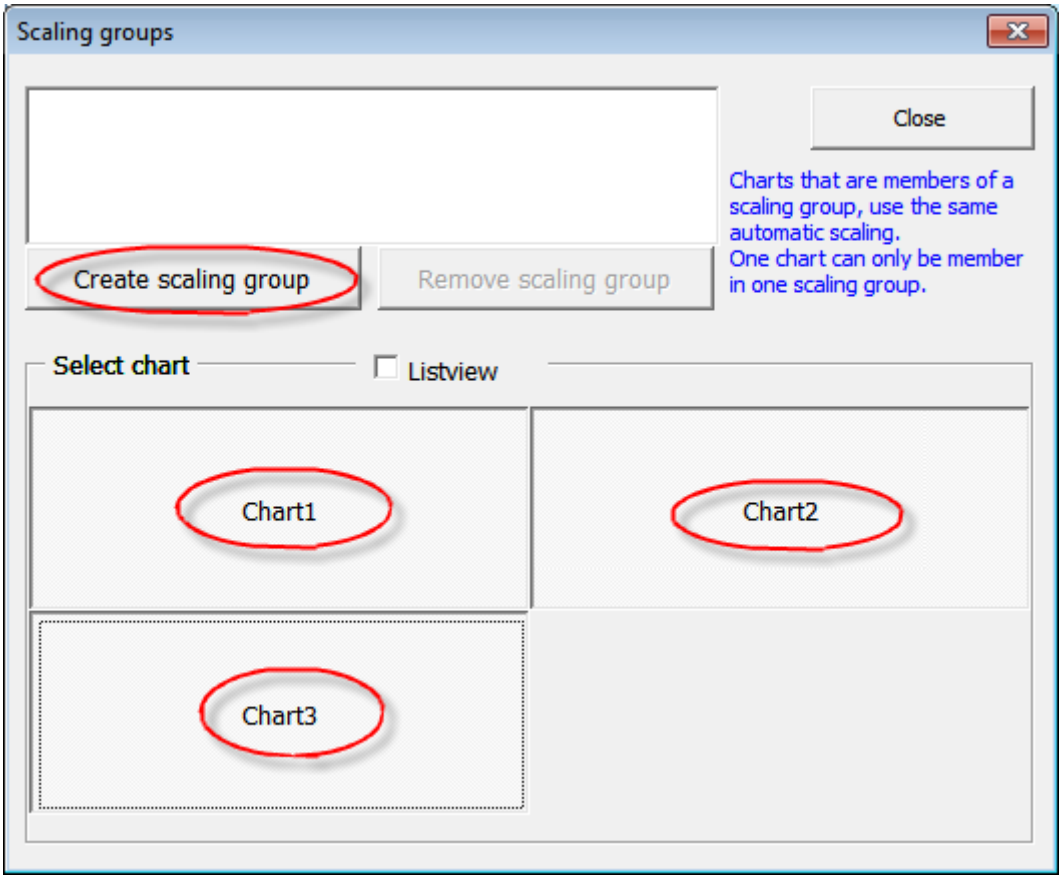


Figure: Dialog *scaling groups*

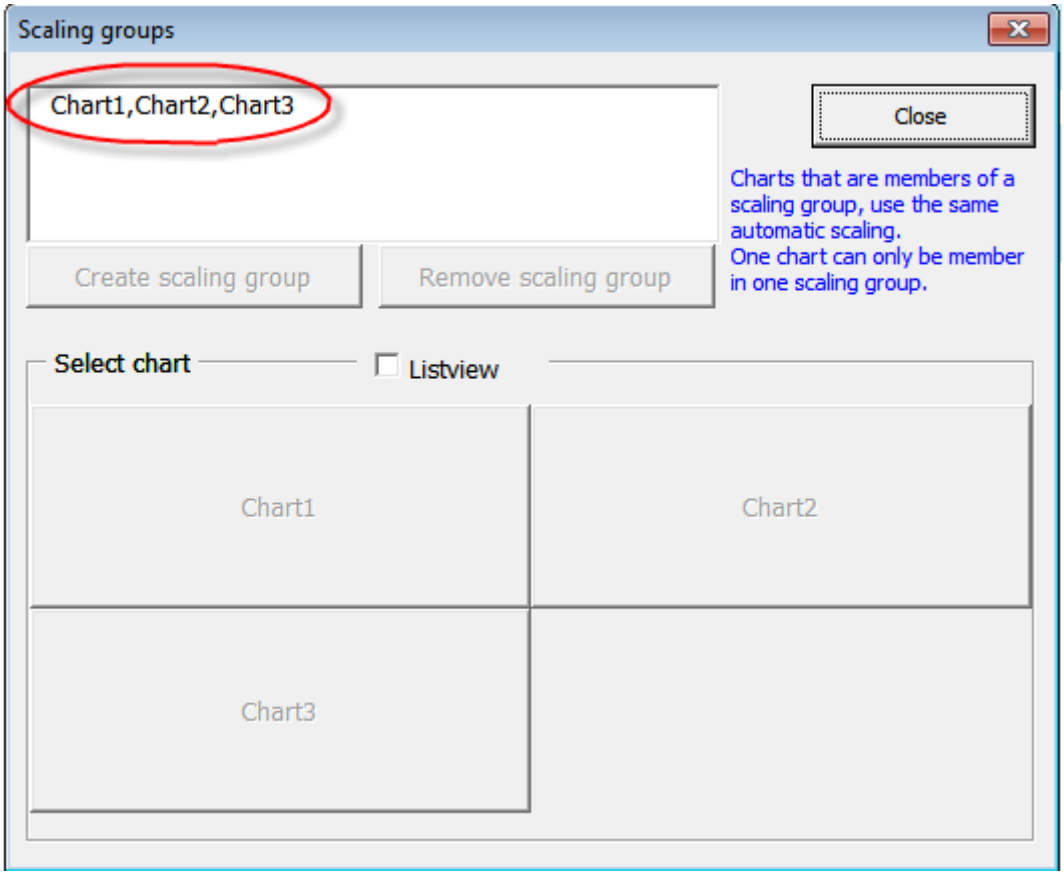


Figure: Dialog *scaling groups*

The following figure shows three charts, that are scaled commonly by grouping them into a scaling group.

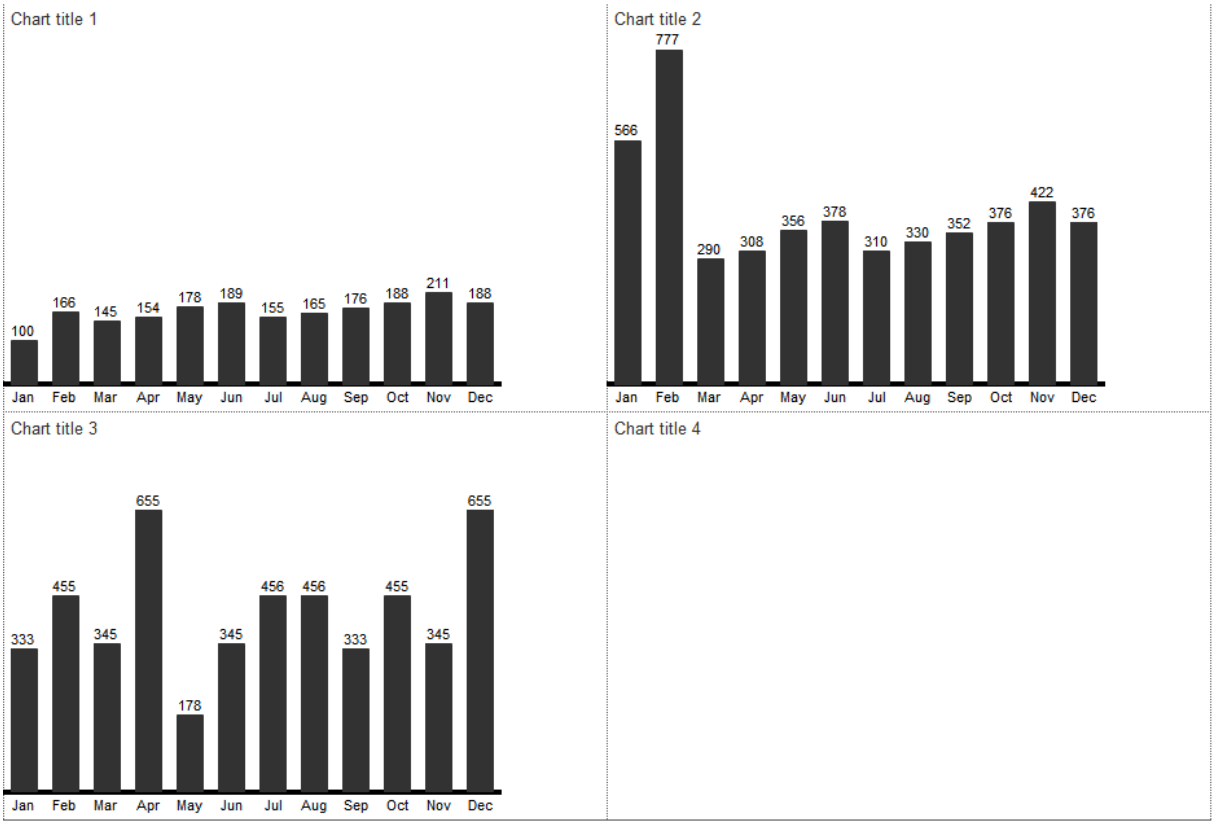


Figure: Charts that are scaled commonly

Scaling groups can be removed in the same dialog.

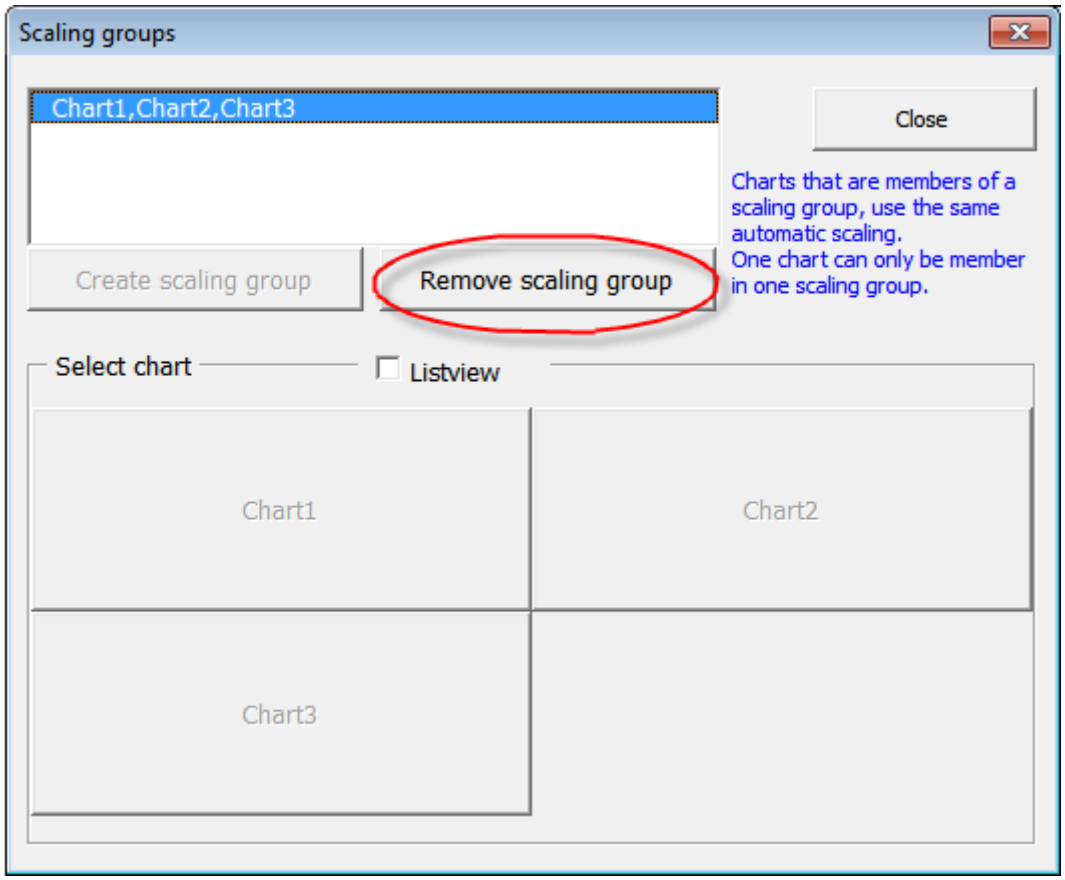


Figure: Dialog *scaling groups*

Charts are automatically arranged in one scaling groups, if they are newly inserted. If some changed where made to the existing scaling group, all charts that are inserted afterwards, must be scaled with the scaling procedure described in this paragraph.

Control menu...

You may change layout grid and chart settings in the blue formatted cells, cell style *Datainsert*.

Message 1	Message 1
Message 2	Message 2
Title 1	Title 1
Title 2	Title 2
Footnote left	Footnote left
Footnote right	Footnote right
Chart title 1	Chart title 1
Chart title 2	Chart title 2
Chart title 3	Chart title 3
Chart title 4	Chart title 4

Figure: Blue formatted data insert cells

Figure: Cell style *datainsert*

Switching between chart representation and chart configuration tabs and locating the appropriate configuration cells may, however, be cumbersome. *Chart-me XLS* provides easy access to various configuration settings through the *Control menu…*

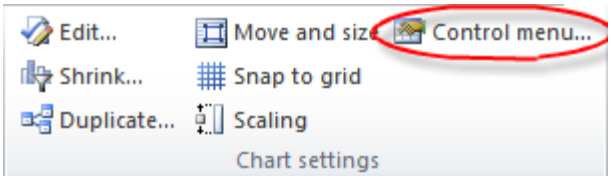


Figure: Menu item *Control menu…*

Clicking on *Control menu...* opens a dialog window providing a variety of

- configuration settings or
- data insert values

for the current worksheet:

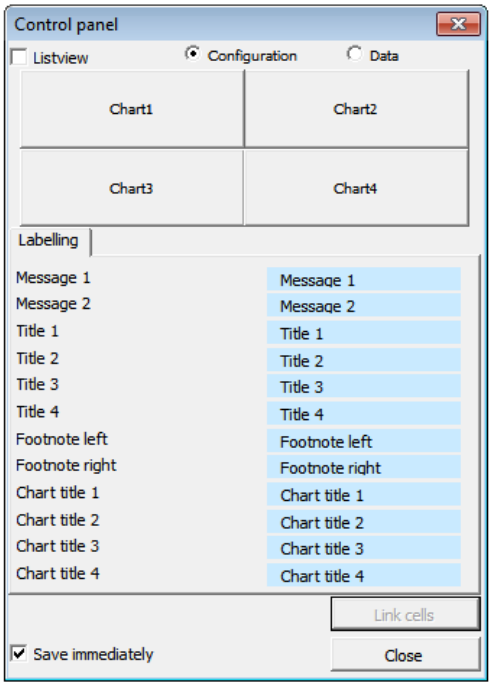


Figure: Dialog window *Control panel*

If the current worksheet is a layout grid page with one or more charts, then the control panel window will display one button for each chart on the grid. You can highlight one or more charts to activate the contextual settings for editing.

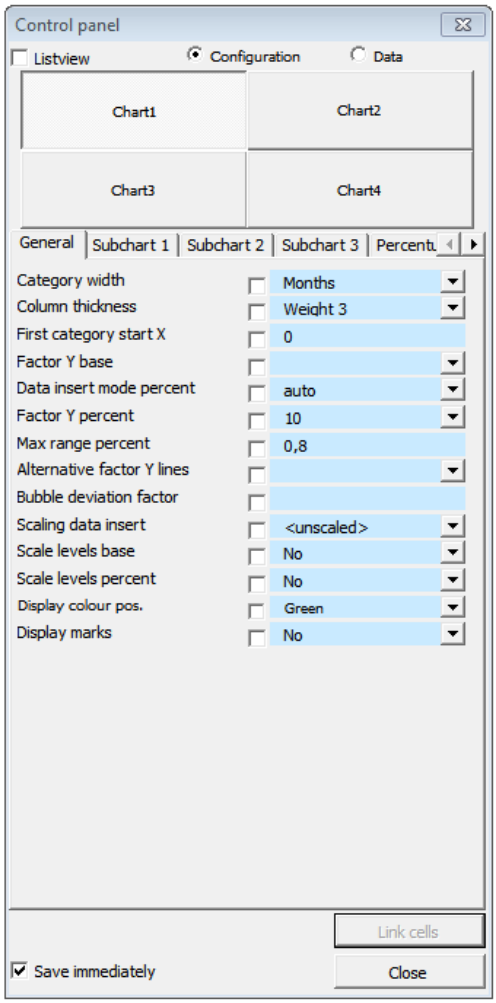


Figure: Control panel view of available charts and contextual configuration settings

The configuration settings for a chart are presented in multiple tabs to facilitate navigation. When multiple charts are selected at the same time, you can cascade configuration changes to all selected charts simultaneously.

The *Save immediately* option at the bottom of the control panel allows you to apply changes to the configuration cells immediately (when checked), or require you to *Confirm* your changes if the box is not checked.

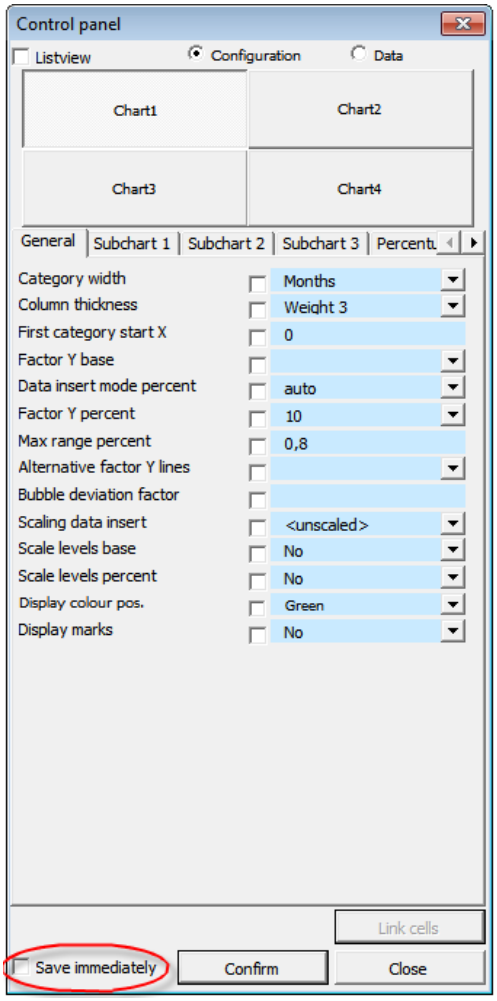


Figure: Save immediately is deactivated

Selecting the *Listview* checkbox will display the chart objects as an itemized list. This may prove useful when charts are stacked on top of each. The button representation of charts in the control panel follows their chart order positions on the page grid. Control panel chart buttons may thus be in the background and invisible without the listview representation.

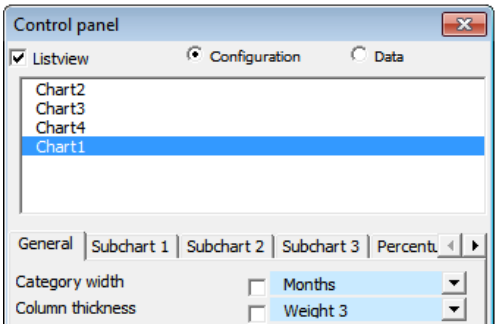


Figure: Control panel option *Listview*

To provide a future user of the chart layout page with some configuration options right on the layout page, activate the *Link cells* feature from the control panel.

The following example shows a page layout with four charts.

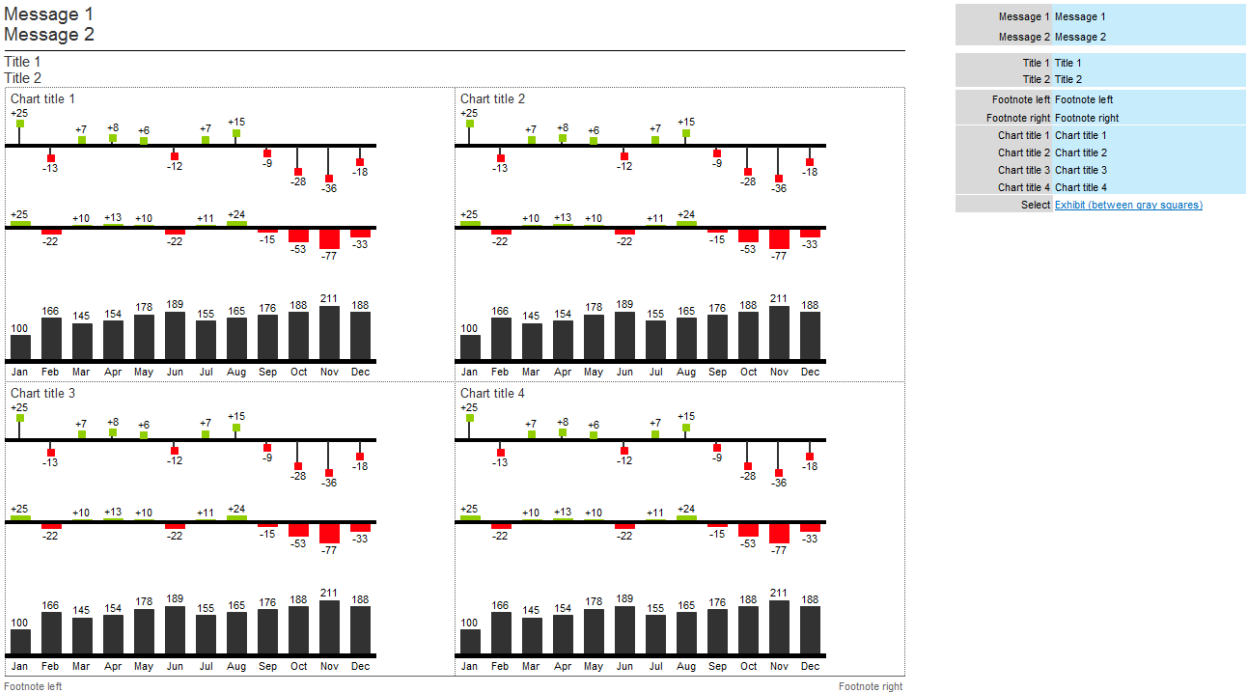


Figure: Page layout example

In this example, we want to provide configuration settings on the layout page for column width, horizontal chart positioning, and the option of displaying the second sub chart (chart 3, needles).

Open the *Control menu* and highlight all four charts.

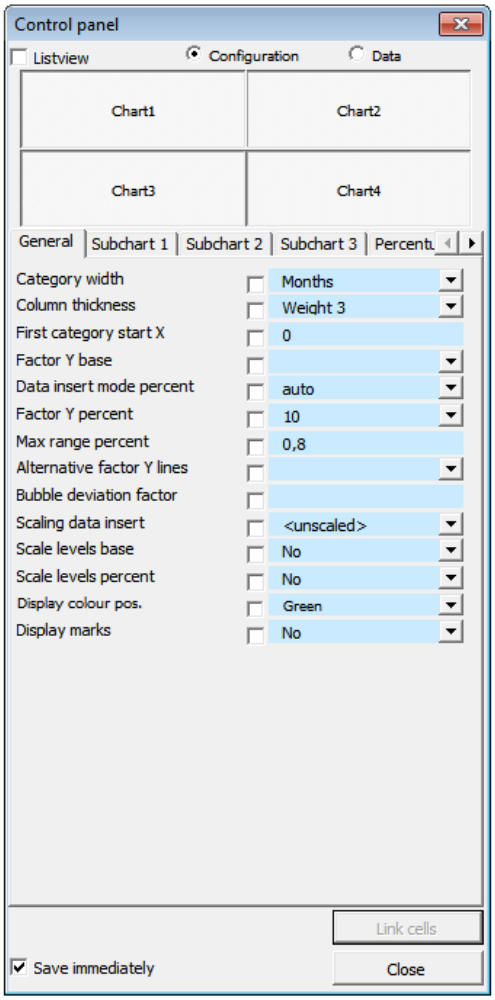


Figure: Control panel

Select the *General* tab and check the items *Column thickness* and *First category start X.*

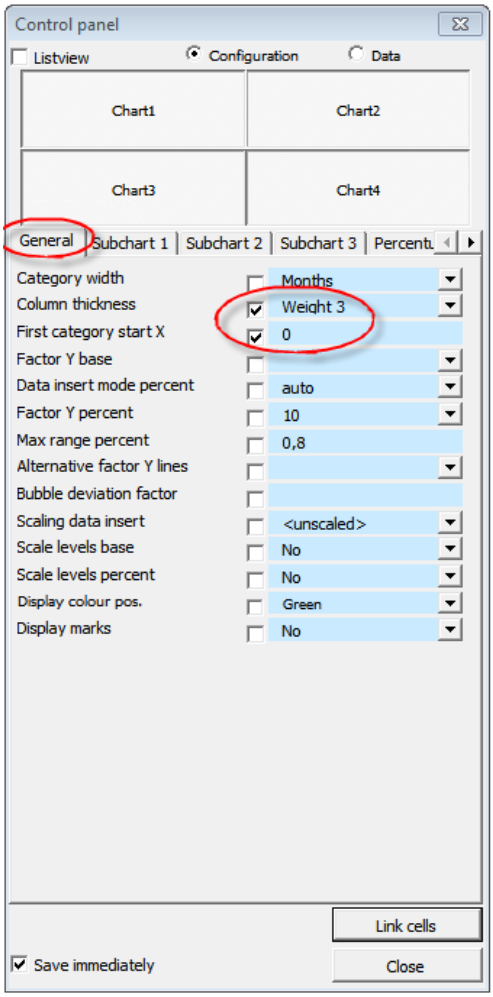


Figure: Select configuration setting in the control panel for cell linking

Select the *Subchart* 1 tab and check the *Visible* option.

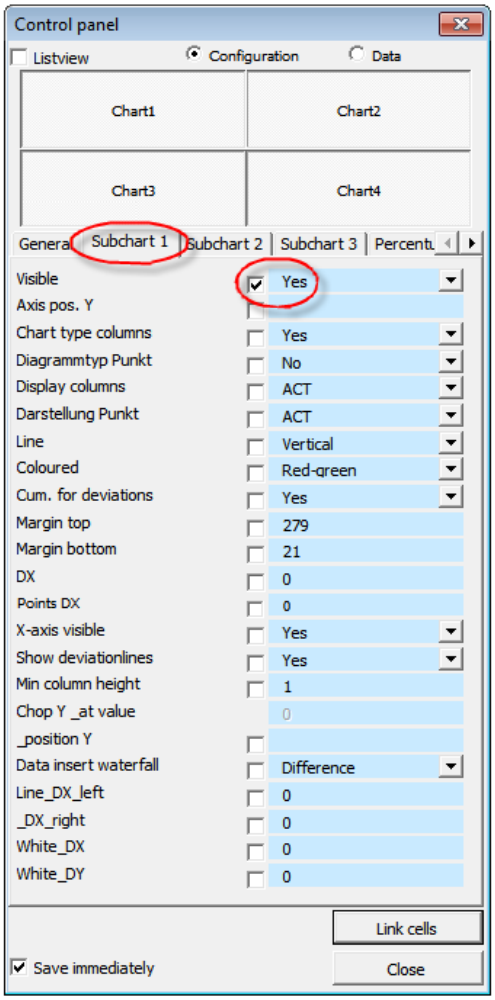


Figure: Select additional configuration setting in the control panel for cell linking

Now select with the cursor the cell range on the layout page, which will hold the configuration settings and click *Link cells* in the Control panel window.

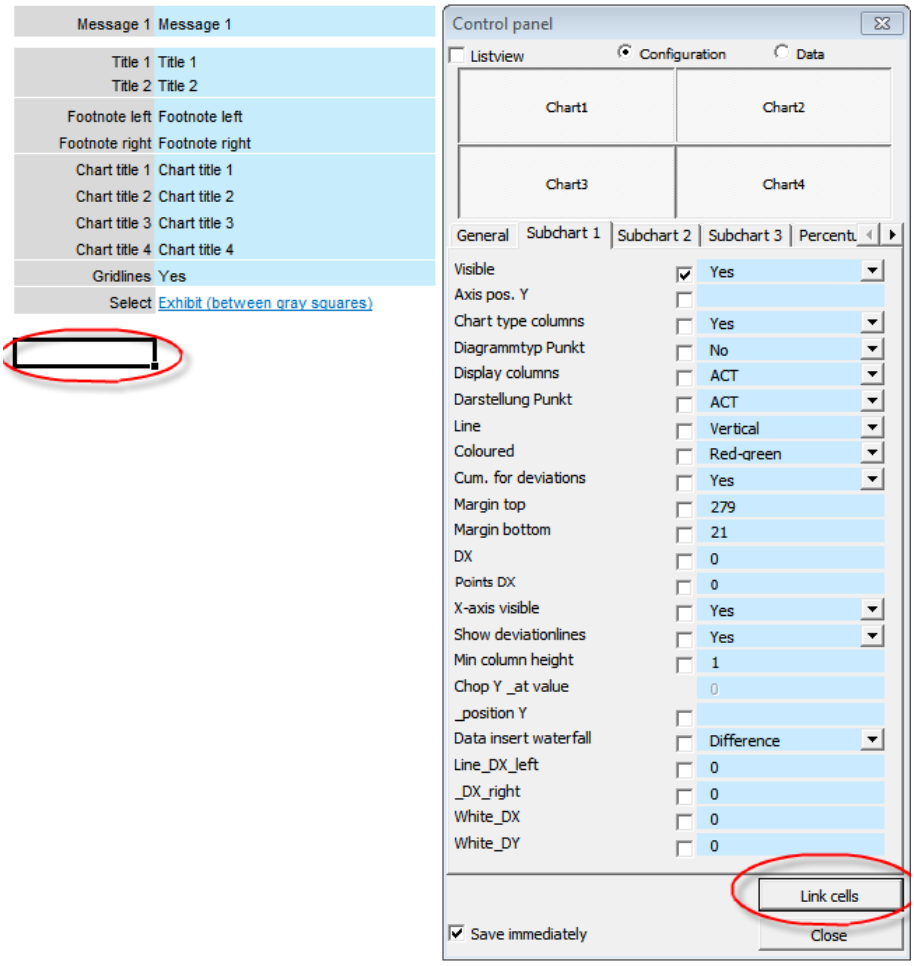


Figure: Highlight cell range and link cells

Starting at the previously marked cell, the configuration items are listed in turn with blue colored data entry ranges for each item previously selected in the control panel.

Column thickness	Weight 3
First category start X	0 px
Visible	Yes

Figure: Data entry range for configuration settings

Switching Control menu into mode Data (see the following figure) shows data insert ranges of selected chart, that are located in the chart control sheet.

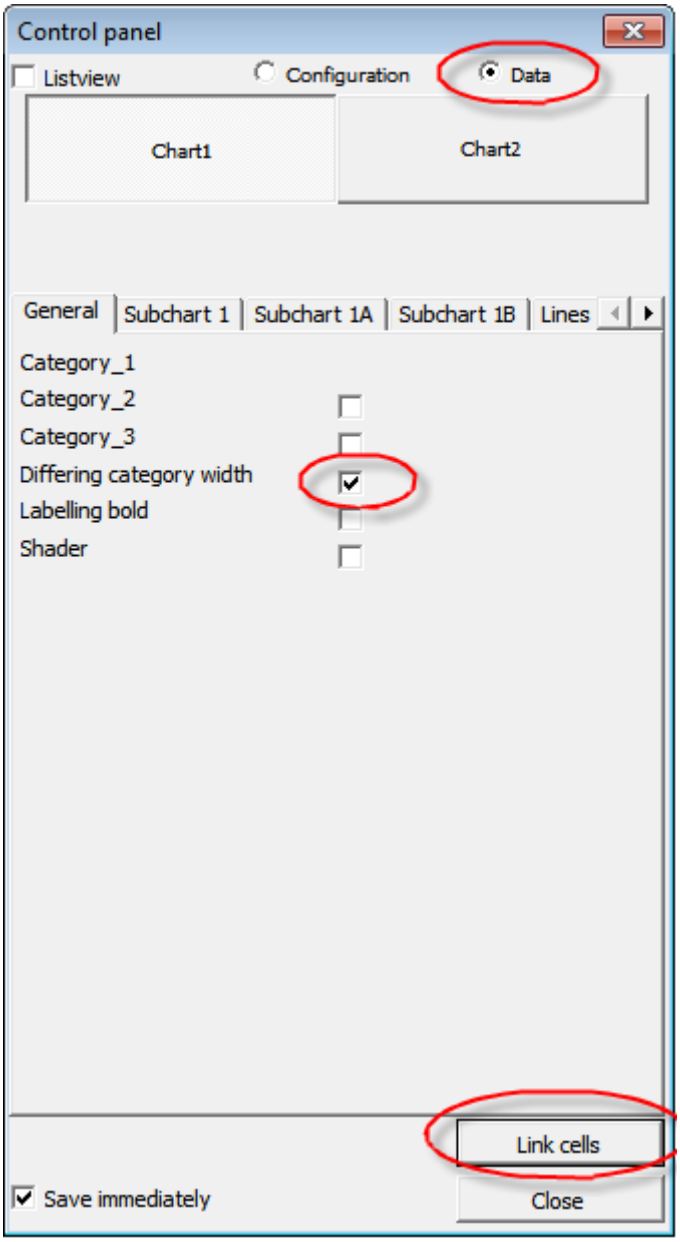


Figure: Control menu in *Data* mode

Check one or more data insert ranges to be shown near the charts. With *Link cells*, the selected ranges are automatically linked to the grid sheet.

The linked ranges are positioned automatically. These ranges can simply be moved later on.

The following figure shows a data insert range that has been created by inserting two charts.

Datainsert area

Chart1

Category_1	Jan	Feb	Mar
Values_1	100	166	145
Display_1	B	B	B
Labelling_1	x	x	x
Values_2	125	144	155
Labelling_columns_2	x	x	x
Values_3	125	144	155
Labelling_points_3	x	x	x

Chart2

Category_1	Jan	Feb	Mar
Values_1	100	166	145
Display_1	B	B	B
Labelling_1	x	x	x
Values_2	125	144	155
Labelling_columns_2	x	x	x
Values_3	125	144	155
Labelling_points_3	x	x	x

Figure: Data insert ranges for two charts with sub charts

Datainsert area

Chart1

Category_1	Jan	Feb	Mar
Values_1	100	166	145
Display_1	B	B	B
Labelling_1	x	x	x
Values_2	125	144	155
Labelling_columns_2	x	x	x
Values_3	125	144	155
Labelling_points_3	x	x	x

Chart2

Category_1	Jan	Feb	Mar
Values_1	100	166	145
Display_1	B	B	B
Labelling_1	x	x	x
Values_2	125	144	155
Labelling_columns_2	x	x	x
Values_3	125	144	155
Labelling_points_3	x	x	x

Chart1

Differing category width

Figure: Newly inserted data insert range *Differing category width*

Create tables

In the Excel menu Chart-me besides the known diagram features a section shows *Insert Table.* There are three types of tables as templates to choose from:

1. *Table with time series* - by default, a table with a description column and 12 monthly columns is generated.

2. *Table with flat structure* - by default, a table with a description column and 4 columns of data and three bar charts deviation generated.

3. *Table with hierarchy* – has the same construction as the table with a flat structure, with the difference that on the formatting of the line hierarchy levels are taken into account.

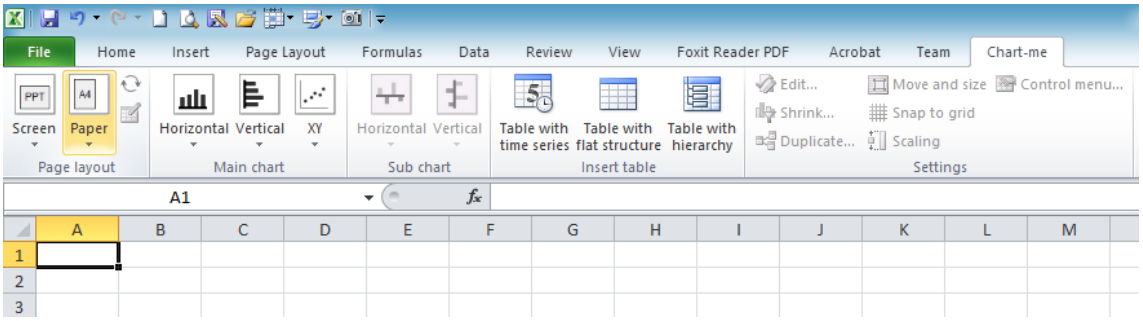
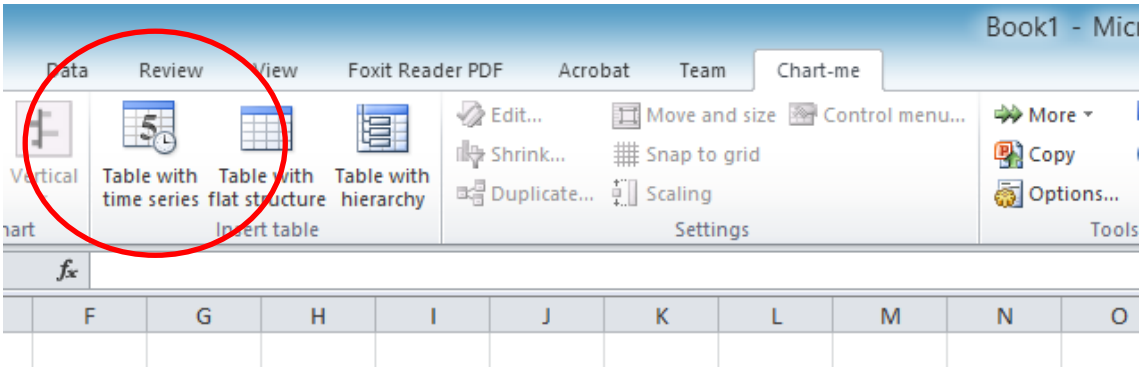


Figure: Menu ribbon with *Insert table* - features

Tables with time series

Based on the chart type *Table with time series* the creation sequence will be shown. After clicking on the icon *Table with time series* the selection menu *Insert Table* appears.



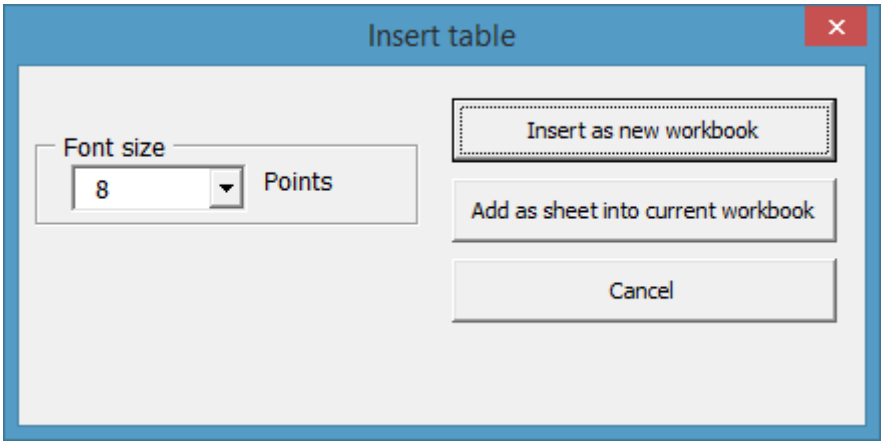


Figure: Menu ribbon and selection menu *Insert table*

The following selection options are available:

Font size due to better use of space is recommended size of 8 pt or 10 pt.
Paste as new workbook Creates a new section with table worksheet
Paste As New Sheet Adds to existing folder a new worksheet.
Cancel Exit the function

We create a new workbook with 8 pt font size to.

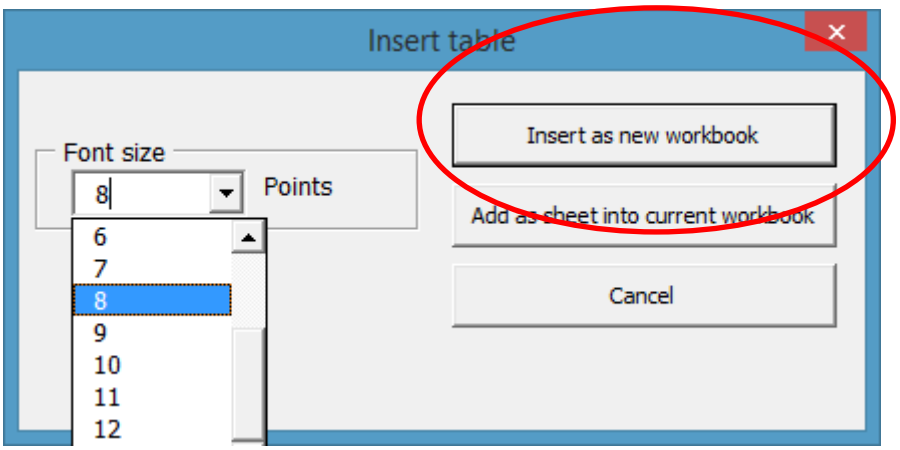


Figure: Selection options at *Insert table - Table with time series*

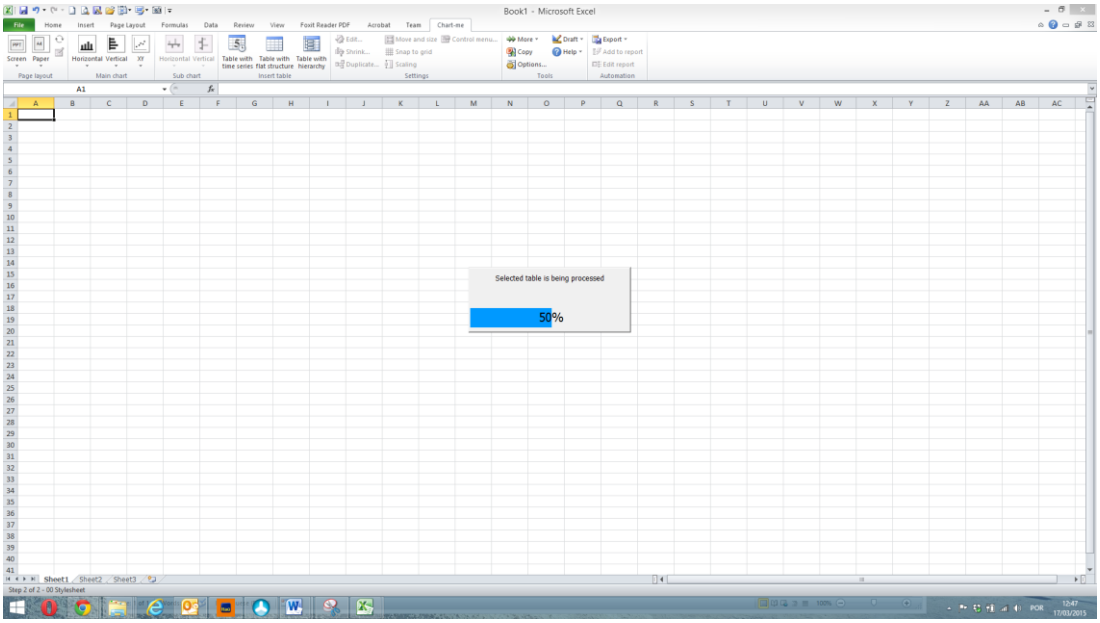


Figure: Creation process *Insert table* **-** *Table with time series*

The newly created workbook contains a time series table composed of a label column and 12 monthly columns.

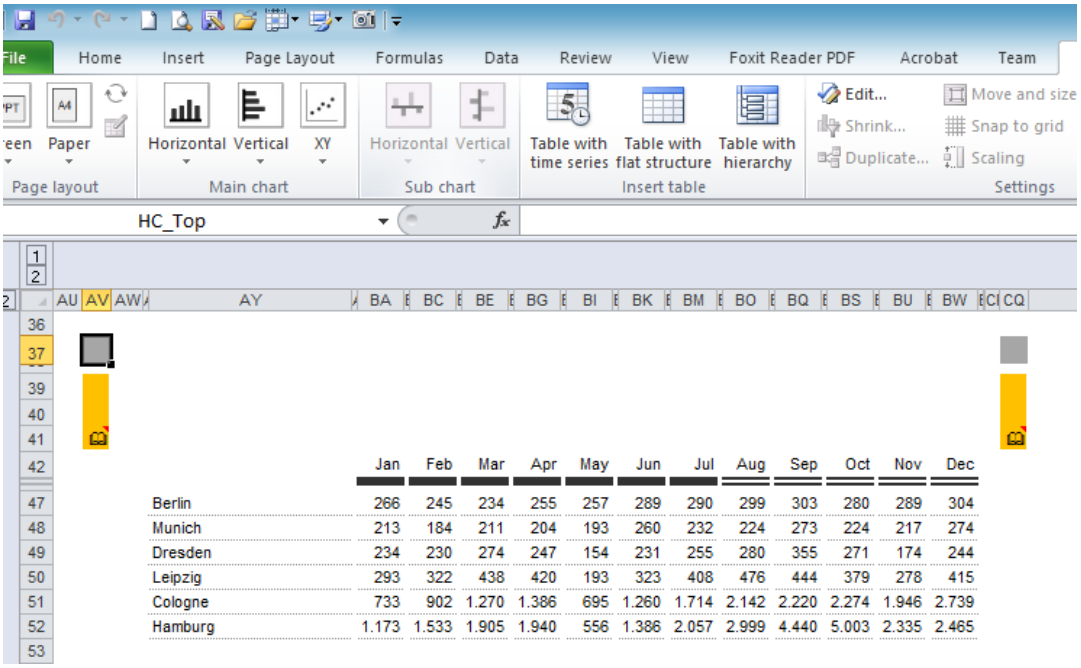


Figure: Table type *table with time series* – Display range of the worksheet

Based on the shown creation logics the other table types *Table with flat structure* and *Table with hierarchy* can be created accordingly.

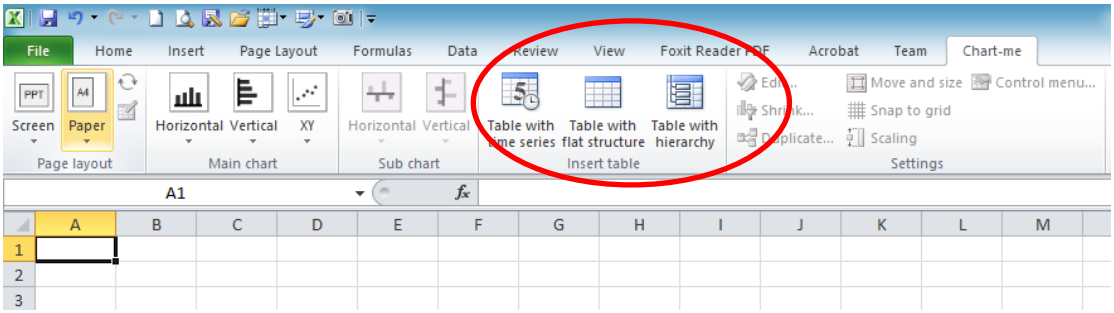


Figure: Menu ribbon *Insert table* – selection of table type 2 and 3

Table with flat structure

The newly created workbook contains a worksheet with a table with 5 columns and 3 deviation charts.

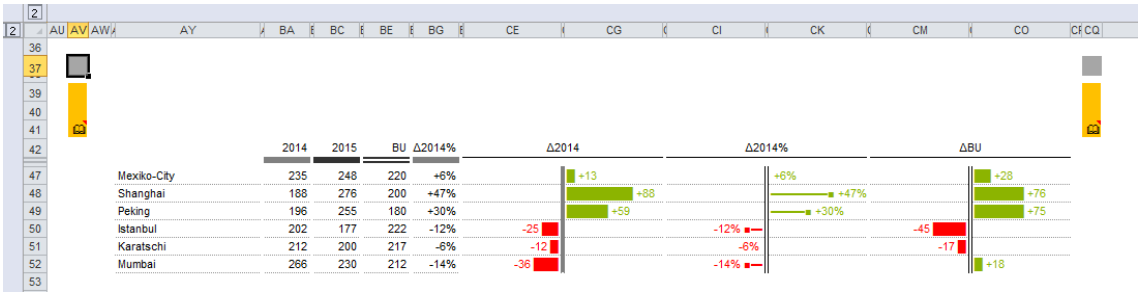
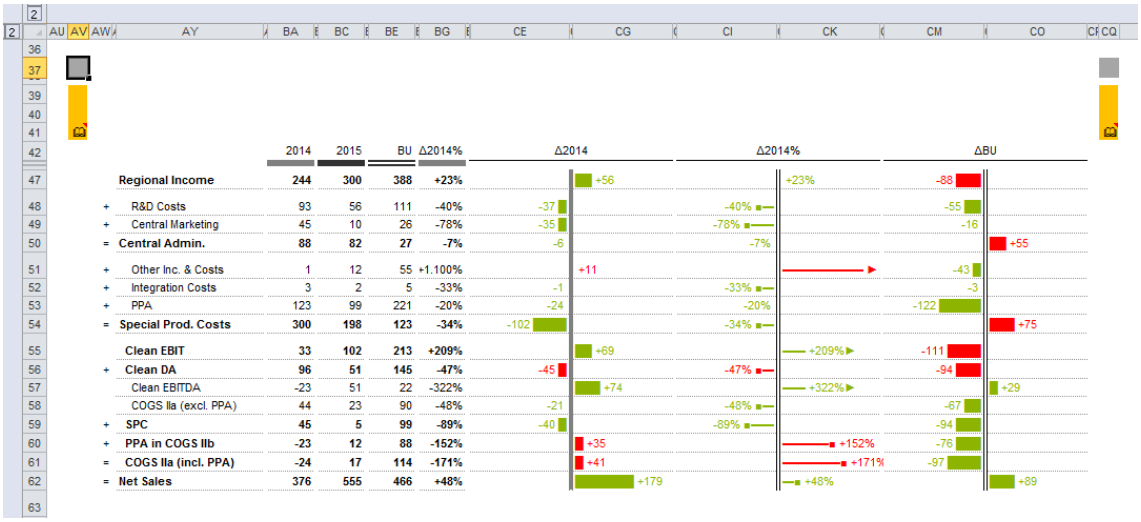


Figure: Table type *Table with flat structure*

Table with hierarchy

The newly created workbook contains a worksheet with a hierarchically structured table consisting of 5 columns and 3 deviation charts as a default.



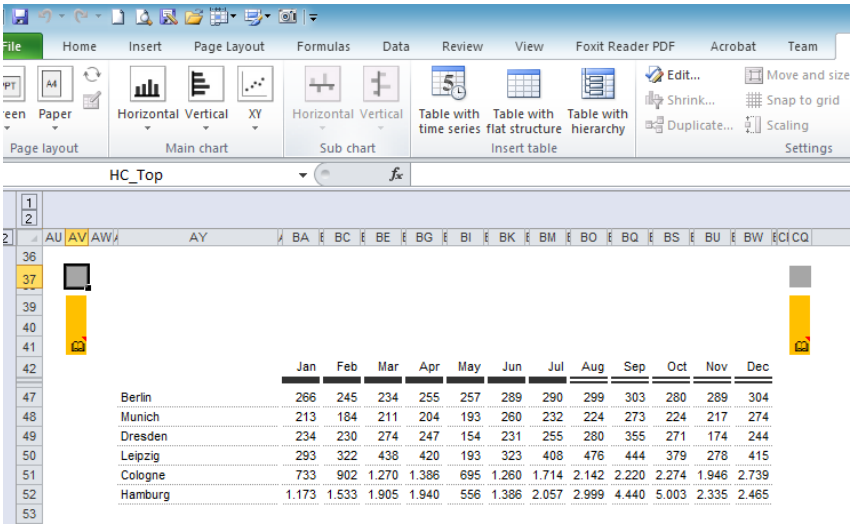
		2014	2015	BU	Δ2014%
	Regional Income	244	300	388	+23%
+	R&D Costs	93	56	111	-40%
+	Central Marketing	45	10	26	-78%
=	Central Admin.	88	82	27	-7%
+	Other Inc. & Costs	1	12	55	+1.100%
+	Integration Costs	3	2	5	-33%
+	PPA	123	99	221	-20%
=	Special Prod. Costs	300	198	123	-34%
	Clean EBIT	33	102	213	+209%
+	Clean DA	96	51	145	-47%
	Clean EBITDA	-23	51	22	-322%
	COGS IIa (excl. PPA)	44	23	90	-48%
+	SPC	45	5	99	-89%
+	PPA in COGS IIb	-23	12	88	-152%
=	COGS IIa (incl. PPA)	-24	17	114	-171%
=	Net Sales	376	555	466	+48%

Figure: Table type *Table with hierarchy*

Overview of the table worksheet elements

Table display range

In the table display part apear all the later in a report compiled content and design elements.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	266	245	234	255	257	289	290	299	303	280	289	304
Munich	213	184	211	204	193	260	232	224	273	224	217	274
Dresden	234	230	274	247	154	231	255	280	355	271	174	244
Leipzig	293	322	438	420	193	323	408	476	444	379	278	415
Cologne	733	902	1.270	1.386	695	1.260	1.714	2.142	2.220	2.274	1.946	2.739
Hamburg	1.173	1.533	1.905	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	2.465

Figure: Table display and print range

Other worksheet ranges

In addition to the first visible table display part AV37 up CQ53 there are more directly "visible" worksheet ranges that are necessary for creating a table. The following worksheet ranges are for input and selections, which are responsible for the definition of the table, as well as the appearance and dimensions of the selected table and diagrams. With the creation of each table type a few standard settings have already been taken, which can be changed by the user as necessary. A detailed description of the parameters follows in the section *Table settings*.

The worksheet is divided into nine different work ranges:
1 *Datainsert*
2 *Row settings*
3 *Highlighting*
4 *Chart visibility*
5 *Footnote references*
6 *Column settings*
7 *Base settings*
8 *Detail settings*

9 *Table chart settings*

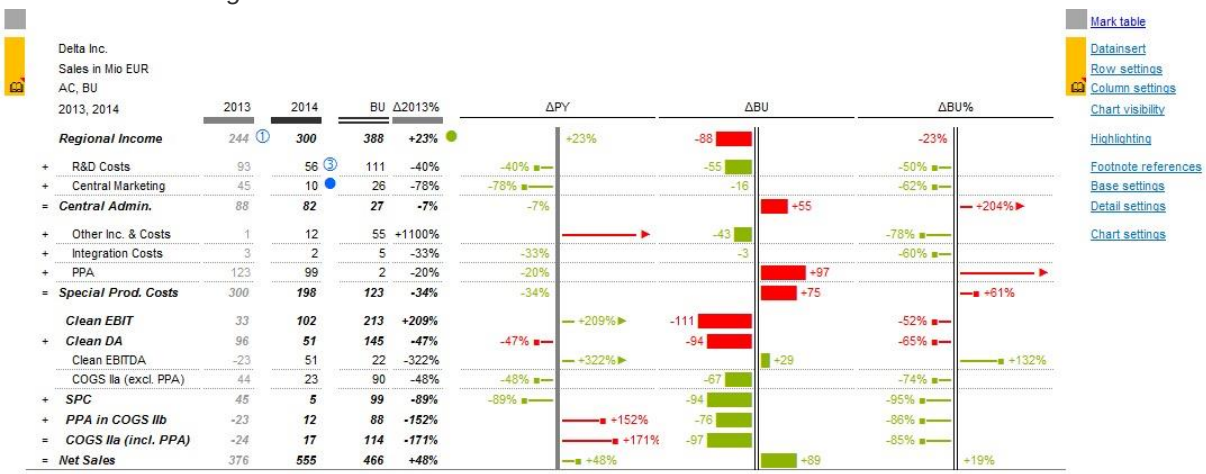


Figure: Table overview with navigation hyperlinks

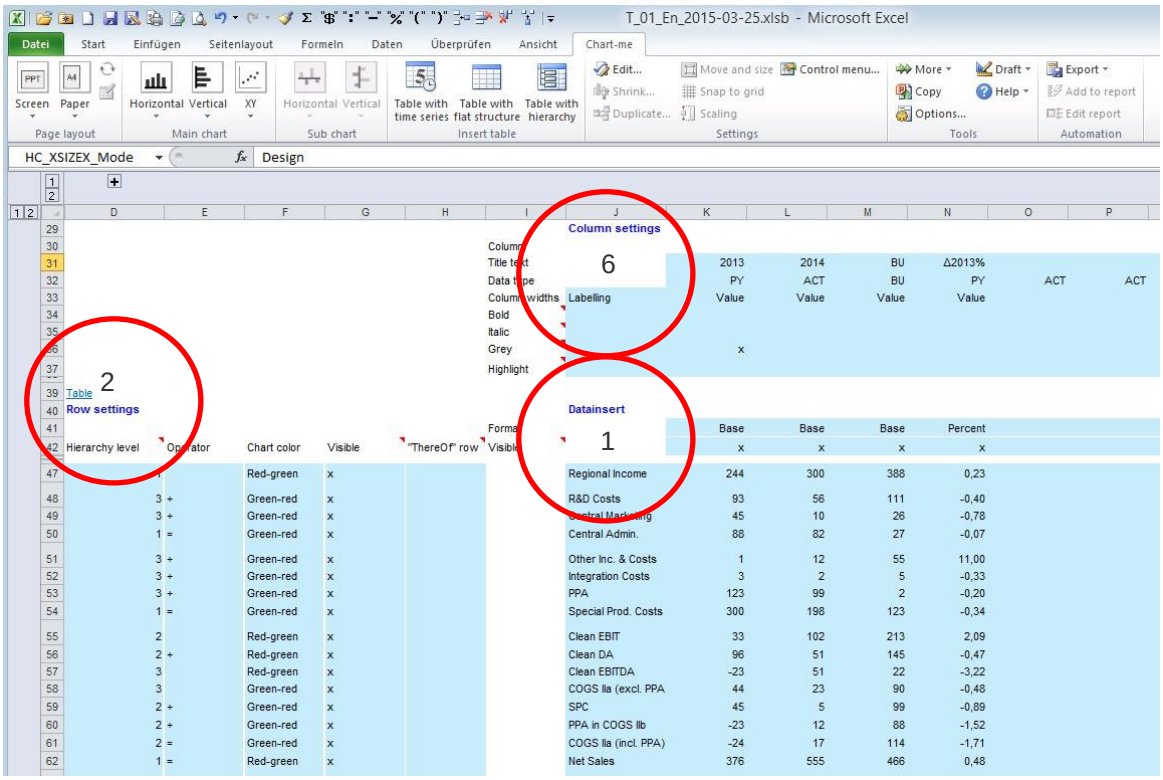


Figure: Worksheet ranges *Datainsert*, *Row settings* and *Column settings*

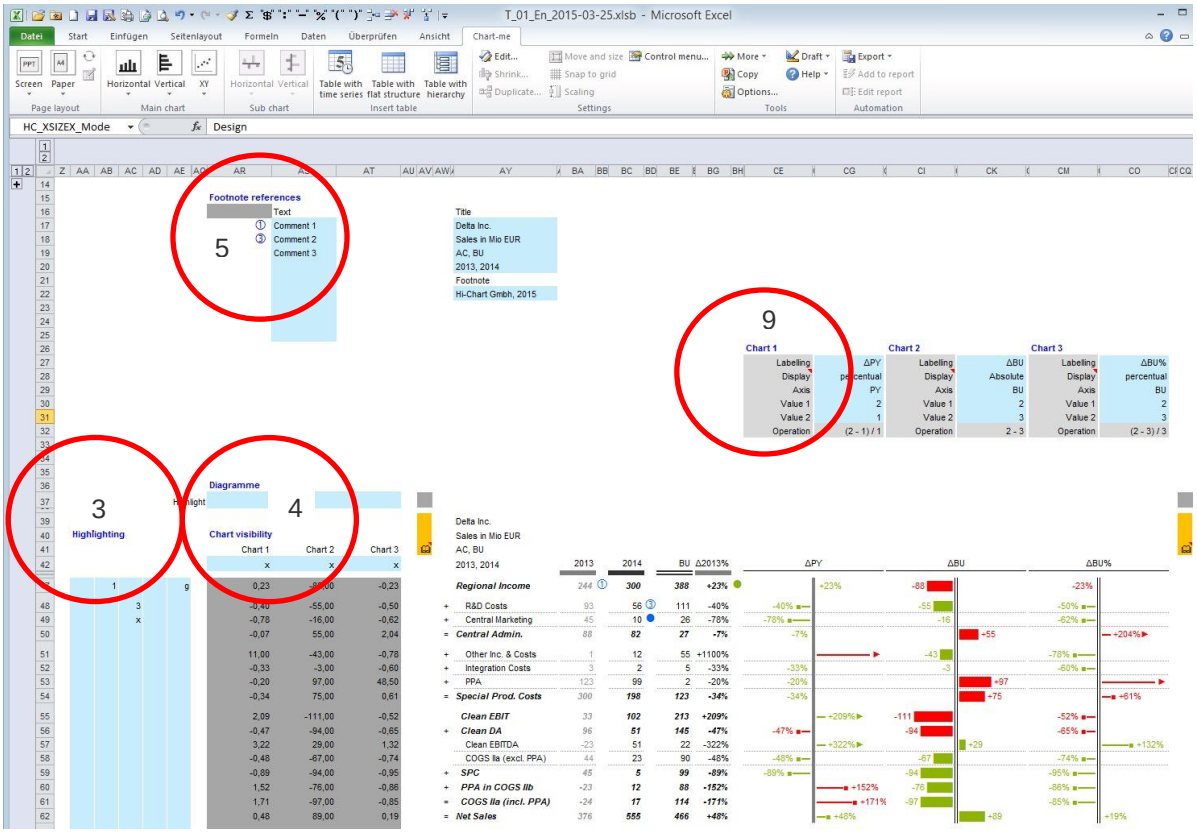


Figure: Worksheet ranges 3 *Highlighting* - 4 *Chart visibility* - 5 *Footnote references* and 9 *Table chart settings*

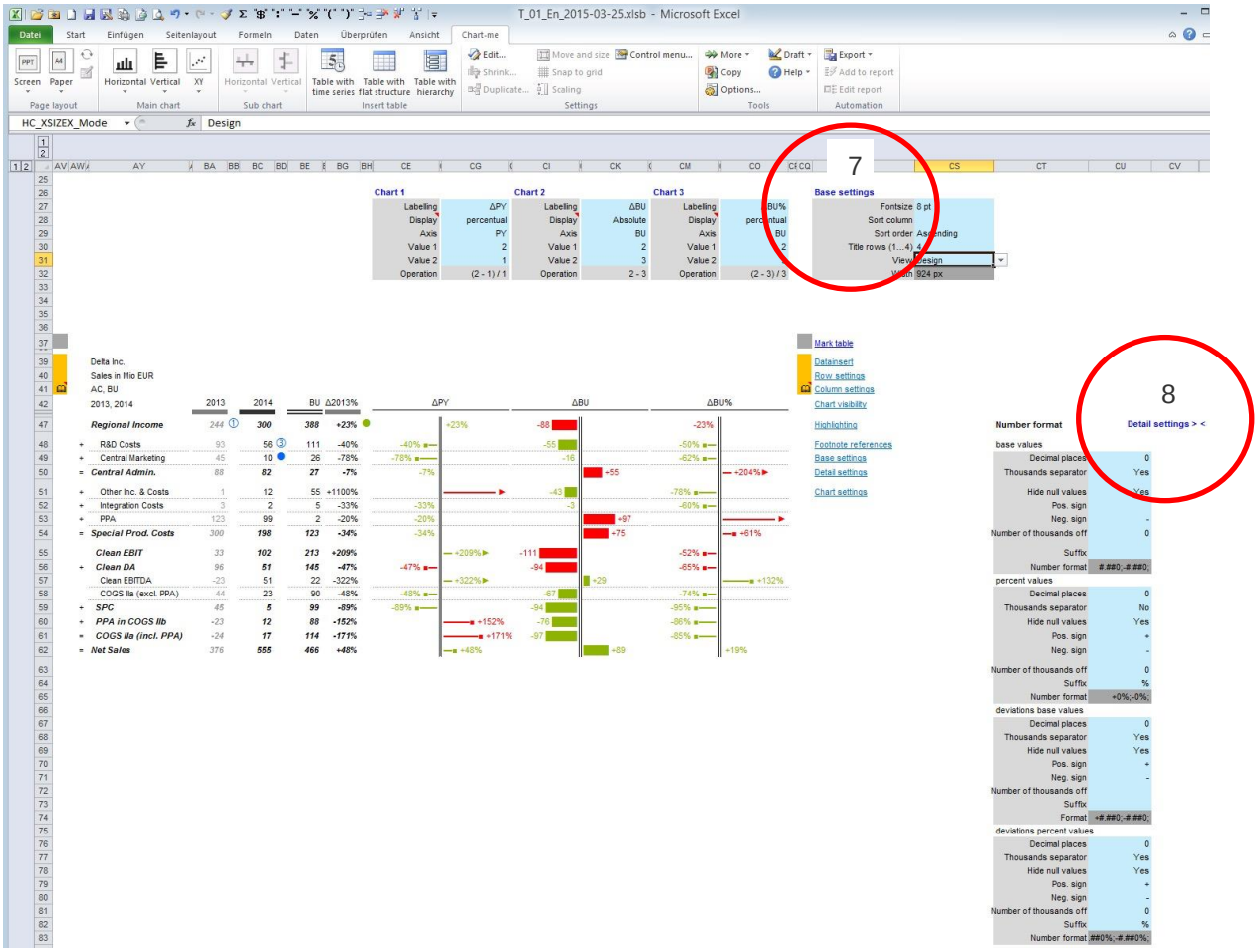


Figure: Worksheet Range 7 *Base settings* and 8 *Detail settings*

Datainsert

	I	J	K	L	M	N	O
40		Datainsert					
41	Format		Base	Base	Base	Percent	
42	Visible		x	x	x	x	
47		Regional Income	244	300	388	0,23	
48		R&D Costs	93	56	111	-0,40	
49		Central Marketing	45	10	26	-0,78	
50		Central Admin.	88	82	27	-0,07	
51		Other Inc. & Costs	1	12	55	11,00	
52		Integration Costs	3	2	5	-0,33	
53		PPA	123	99	2	-0,20	
54		Special Prod. Costs	300	198	123	-0,34	
55		Clean EBIT	33	102	213	2,09	
56		Clean DA	96	51	145	-0,47	
57		Clean EBITDA	-23	51	22	-3,22	
58		COGS IIa (excl. PPA	44	23	90	-0,48	
59		SPC	45	5	99	-0,89	
60		PPA in COGS IIb	-23	12	88	-1,52	
61		COGS IIa (incl. PPA)	-24	17	114	-1,71	
62		Net Sales	376	555	466	0,48	

Figure: Range *datainsert*

The *datainsert* range is the central entry point for the flow data and column-related meta data such as column header, width, data types, formatting and visibility.

Possible settings are enter *x* to show the column, leave empty to hide the column. This feature is only available together with Chart-me XLS AddIn.

Row settings

	D	E	F	G	H
39	Table				
40	Row settings				
41					
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row
47	1		Red-green	x	
48	3	+	Green-red	x	
49	3	+	Green-red	x	
50	1	=	Green-red	x	
51	3	+	Green-red	x	
52	3	+	Green-red	x	
53	3	+	Green-red	x	
54	1	=	Green-red	x	
55	2		Red-green	x	

Figure: Range for *Row settings*

In the *row settings* parameterizations are made relating to the rows of the tables and bar charts.

Column *Hierarchy level*: Herewith the hierarchical table row display can be controlled. Possible values are 1, 2 and 3. Automatic adjustment of row heights is only available together with Chart-me XLS AddIn.

The column *Operator* is text only for better comprehension and does not perform any calculation.

Column *Visible*: possible settings are *x* to show the row and *i* to interrupt chart axis lines, empty to hide the row.

Column *"There off"* highlights a row by indentation of values in order to show that this row is not part of a total.

The hyperlink *Table* navigates back to the table overview.

Highlighting

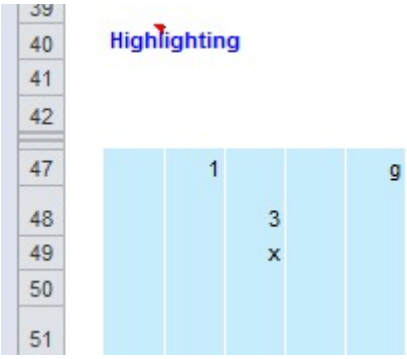


Figure: Range for *highlighting*

In the range *highlighting* single values in the table can be highlighted.

Possible settings are: the numbers *1 - 9* for footnote comments, *X* for highlighting in neutral color, *R* for red and *G* for green highlighting.

Chart visibility

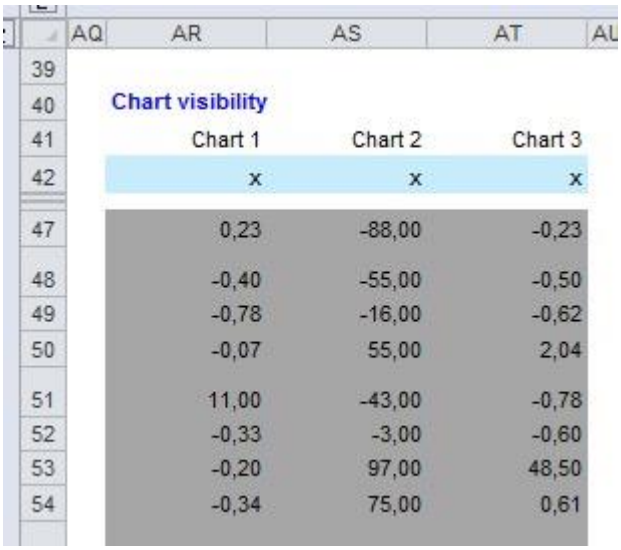


Figure: Range for *Chart visibility*

Whether a chart will be displayed or not is marked in the Chart visibility range.

Footnote references

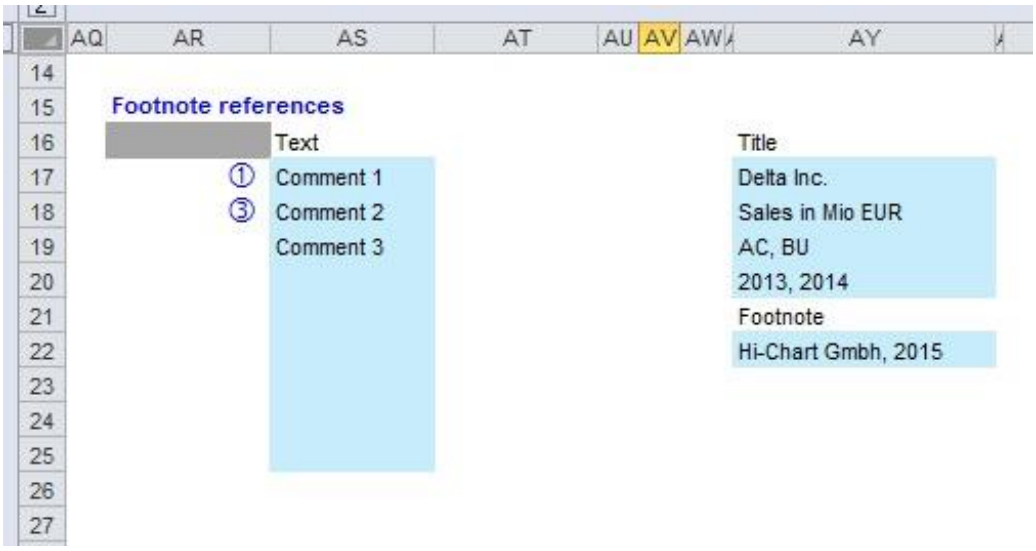


Figure: Range for *footnote references*

The marks delivered in *Highlighting* by giving a number or character for footnotes are filled with text in this range and displayed at the end of the table.

Figure: Range for *footnotes references*

If the setting *view* is switched to *output*, footnotes will be shown at their correct position at the bottom of the table.

Column settings

	I	J	K	L	M	N
		Column settings				
Column						
Title text			2013	2014	BU	Δ2013%
Data type			PY	ACT	BU	PY
Column widths		Labelling	Value	Value	Value	Value
Bold						
Italic						
Grey			x			
Highlight						

Figure: Input range for *column settings*

The range *Column settings* is used to create the table headers and to specify the display of columns.

The row *Title text* is used to create the column title.

In the row *Data type* display of row headers is configured. The detail configuration of the 4 data types can be done in the stylesheet.

In the row Column widths the widths of each column can be set. This can be done either by selecting value in the drop down list or by entering a number in fontsize (fs).

Enter an *x* in the rows *Bold, Italic, Grey* to activate this type of format.

Highlighting: Enter x to show column with coloured highlighting.

Base settings

	CQ	CR	CS
26		Base settings	
27		Fontsize	8 pt
28		Sort column	
29		Sort order	Ascending
30		Title rows (1…4)	4
31		View	Design
32		Width	924 px
33			

Figure: Input range for *Base settings*

The input range for *Base settings* inputs are provided referring to *Fontsize*, *Sort column*, number of *Title rows* and *View* type. The current table *Width* is shown for your information.

Detail settings

	CT	CU	CV	DJ
47	**Number format**		**Detail settings > <**	
48	base values			
49	Decimal places	0		
50	Thousands separator	Yes		
51	Hide null values	Yes		
52	Pos. sign			
53	Neg. sign	-		
54	Number of thousands off	0		
55	Suffix			
56	Number format	#.##0;-#.##0;		
57	percent values			
58	Decimal places	0		
59	Thousands separator	No		
60	Hide null values	Yes		
61	Pos. sign	+		
62	Neg. sign	-		
63	Number of thousands off	0		
64	Suffix	%		
65	Number format	+0%;-0%;		
66	deviations base values			
67	Decimal places	0		
68	Thousands separator	Yes		
69	Hide null values	Yes		
70	Pos. sign	+		
71	Neg. sign	-		
72	Number of thousands off			
73	Suffix			
74	Format	+#.##0;-#.##0;		
75	deviations percent values			
76	Decimal places	0		
77	Thousands separator	Yes		
78	Hide null values	Yes		
79	Pos. sign	+		
80	Neg. sign	-		
81	Number of thousands off	0		
82	Suffix	%		
83	Number format	##0%;-#.##0%;		

Figure: Input range for *Detail Settings*

The input range for *Detail Settings* includes more extensive information on the appearance of the table and graphs. As can be seen from the + mark above cell DJ, this is an area in which by extending through the detailed display further adjustment ranges for the table and chart formatting can be explored.

In general, these inputs are handled only once when fine tuning the layout. This range covers the definition of number formats to underlying base values and deviations, the representation of the hierarchical levels used, and scaling settings included in the presentation of diagrams and descriptions.

	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG
47	**Number format**		Detail settings >	Hierarchy levels	Indent	Indent	Row height	Row height	Bold	Italic	Grey	Border	Row height	Row height
48	base values				# spaces	ThereOf row		next row				Bottom		next row
49	Decimal places	0		1	0	4	1,700 fs	2,350 fs	x	x			18 px	25 px
50	Thousands separator	Yes		2	2	4	1,700 fs	0,000 fs	x	x			18 px	0 px
51	Hide null values	Yes		3	4	4	1,600 fs	0,000 fs				x	17 px	0 px
52	Pos. sign			0	0	4	1,600 fs	0,000 fs				x	17 px	0 px
53	Neg. sign	-												
54	Number of thousands off	0												
55	Suffix													
56	Number format	#.##0;-#.##0;												
57	percent values													
58	Decimal places	0												
59	Thousands separator	No												
60	Hide null values	Yes												
61	Pos. sign	+												
62	Neg. sign	-												
63	Number of thousands off	0												
64	Suffix	%												
65	Number format	+0%;-0%;												
66	deviations base values													
67	Decimal places	0												
68	Thousands separator	Yes												
69	Hide null values	Yes												
70	Pos. sign	+												
71	Neg. sign	-												
72	Number of thousands off													
73	Suffix													
74	Format	+#.##0;-#.##0;												
75	deviations percent values													
76	Decimal places	0												
77	Thousands separator	Yes												
78	Hide null values	Yes												
79	Pos. sign	+												
80	Neg. sign	-												
81	Number of thousands off	0												
82	Suffix	%												
83	Number format	.##0%;-#.##0%;												

Base variances					
Scaling	manual	automatic	Character bar		Width
Y1		0,06	▮		8,1 px
Y2		0,00	▪		8,1 px
Limit					
Y1,Y2					

Percent variances					
Scaling	manual	automatic	Character needle lin	Character n	Width
Y1		*2,61*	—	▪	11,2 px
Y2		*0,09*	—		11,2 px
Limit					
Y1,Y2	200%				
Limit exceeding variances					
Value	200%				
Character pos.	►				
Character neg.	◄				
Limit text					
Text	999%				
Text replacement pos					
Text replacement neg					

Figure: Detailed inputs for *Detail Settings* for data formats, hierarchy levels and scaling

Table chart-settings

	BH	CE	CG	CI	CK	CM	CO
25							
26		**Chart 1**		**Chart 2**		**Chart 3**	
27		Labelling	ΔPY	Labelling	ΔBU	Labelling	ΔBU%
28		Display	percentual	Display	Absolute	Display	percentual
29		Axis	PY	Axis	BU	Axis	BU
30		Value 1	2	Value 1	2	Value 1	2
31		Value 2	1	Value 2	3	Value 2	3
32		Operation	(2 - 1) / 1	Operation	2 - 3	Operation	(2 - 3) / 3
33							

Figure: Input range for *Table chart-settings*

In this part the appearance of three possible bar graphs and calculation process in terms of absolute and percentage representation is determined.

In order to hide a chart, the entry *Display* should be deleted. Thereby the chart is no more part of common scaling with other charts.

Table settings

Parameterizations

The following section describes the detailed settings for (graphical) Tables. They are represented according to their classification in the data definition ranges 1 to 9.

1 *Datainsert*
2 *Row settings*
3 *Highlighting*
4 *Chart visibility*
5 *Footnote references*
6 *Column settings*
7 *Base settings*
8 *Detail settings*
9 *Table chart settings*

1 Datainsert

The *datainsert* range is the central entry point for the flow data.

	I	J	K	L	M	N	O
39							
40		Datainsert					
41	Format		Base	Base	Base	Percent	
42	Visible		x	x	x	x	
47		Regional Income	244	300	388	0,23	
48		R&D Costs	93	56	111	-0,40	
49		Central Marketing	45	10	26	-0,78	
50		Central Admin.	88	82	27	-0,07	
51		Other Inc. & Costs	1	12	55	11,00	
52		Integration Costs	3	2	5	-0,33	
53		PPA	123	99	2	-0,20	
54		Special Prod. Costs	300	198	123	-0,34	
55		Clean EBIT	33	102	213	2,09	
56		Clean DA	96	51	145	-0,47	
57		Clean EBITDA	-23	51	22	-3,22	
58		COGS IIa (excl. PPA	44	23	90	-0,48	
59		SPC	45	5	99	-0,89	
60		PPA in COGS IIb	-23	12	88	-1,52	
61		COGS IIa (incl. PPA)	-24	17	114	-1,71	
62		Net Sales	376	555	466	0,48	
63							

Figure: *Datainsert* range

Flow data is the data that can be displayed directly in the table as the name and values. They can be entered here directly or adapted from specific data sheets.

2 Row settings

In the *row settings* parameterizations are made referring to the rows of the tables and bar charts. Settings can be made referring *hierarchy levels*, *operators*, *chart colours*, visibility and *"ThereOf"-rows*.

	D	E	F	G	H
39	Table				
40	**Row settings**				
41					
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row
47	1		Red-green	x	
48	3	+	Green-red	x	
49	3	+	Green-red	x	
50	1	=	Green-red	x	
51	3	+	Green-red	x	
52	3	+	Green-red	x	
53	3	+	Green-red	x	
54	1	=	Green-red	x	
55	2		Red-green	x	

Figure: *Datainsert* ranges for *row settings*

Hierarchy levels

Hierarchies are mainly used with *table with hierarcy* as table type. The table module provides up to 4 hierarchies. When using hierarchies its corresponding *hierarchy level* must be specified for each row.

The definition of hierarchical levels and their associated parameters are made in the *Settings* section. Among other things, a level is defined by the indention of a certain number of blanks in the label.

	CV	CW	CX	CY
42				
47		Hierarchy levels	Indent	Indent
48			# spaces	ThereOf row
49		1	0	4
50		2	2	4
51		3	4	4
52		0	0	4

Figure: *Datainsert* range for *hierarchy levels*

Operators

The operators +, -, = are simple text markers in order to help understand the calculation logic of the table. It should be noted that the operators generate any calculations. In the flow data so far only calculated values are used. (It would be conceivable, however, that in a separate data sheet calculation logic is built in, or even directly within the flow data input range.)

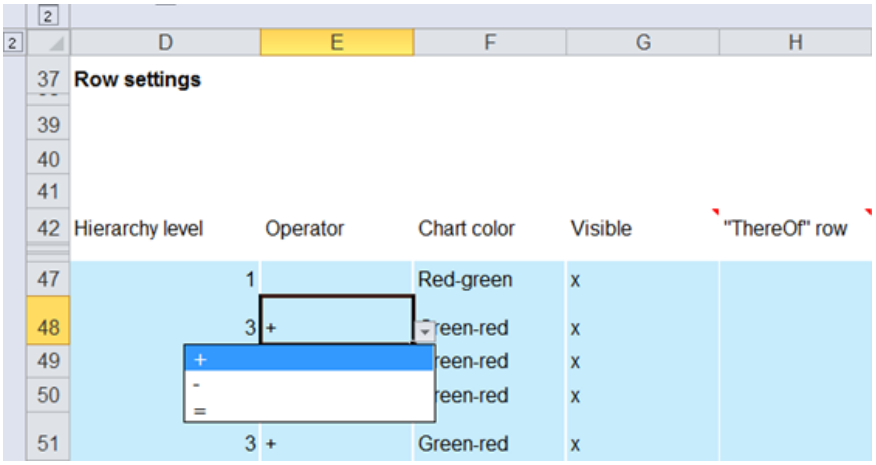


Figure: Selection options for field *operator*

Chart color

The *chart color* specifies the color in which the bars of the deviation diagrams are to be shown. In general, red for negative and green used for a positive difference. In the case of a cost analysis, this sequence can be inverted accordingly.

The color neutral is generally used for special deviation neutral situations or for displaying stock sizes.

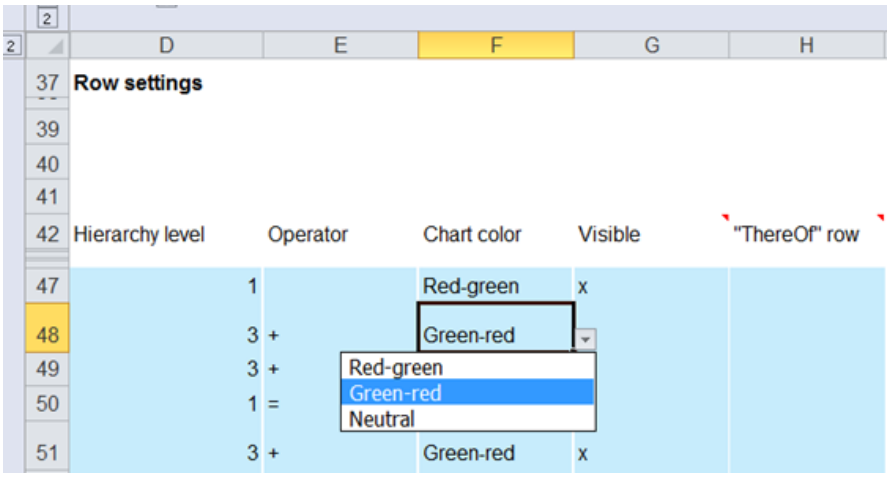


Figure: Selection options for *chart color*

Visible

Either a row can be shown and thus marked at *visible* with <x> or classified as invisible and marked in the respective field with <blank>.

	D	E	F	G	H
37	**Row settings**				
39					
40					
41					
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row
47	1		Red-green	x	
48	3	+	Green-red	x	
49	3	+	Green-red	x	

Figure: Insert range for *visible*

A special case is the marking with <i> in which the chart axis line is interrupted. This is useful if, for example, when within a table two ranges are to be presented in a differentiated way. The example how to handle this case is explained below.

	D	E	F	G	H	I	J	K
37	**Row settings**					Highlight		
39								
40								
41								
42	Hierarchy level	Operator	Chart color	Visible				
47	1		Red-green	x				
48	3	+	Green-red	x				

Empty to hide the row
"x" to show the row
"i" to interrupt chart axis lines

Figure: Input parameters for *visible*

"ThereOf"-row

By using the mark <x> in the *"ThereOf"-row* the given values will be indented and thus signalizing that this value is not involved in the summation.

	D	E	F	G	H	I	J	K
37	**Row settings**					Highlight		
39								
40								
41								
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row			
47	1		Red-green	x				

Highlights a row by indentation of values in order to show that this row is not part of a total.

Figure: *Datainsert* range for *"ThereOf"-row*

The scope of the indentation is set in the *Settings* under *hierarchy levels - Indent*. Default is 4 spaces.

	CV	CW	CX	CY
42				
47		Hierarchy levels	Indent	Indent
48			# spaces	ThereOf row
49		1	0	4
50		2	2	4
51		3	4	4
52		0	0	4

Figure: *Datainsert* range for *indentation*

Examples

	D	E	F	G	H	I	J
37	**Row settings**					Highlight	
39							
40							
41						Format	
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row	Visible	
47	1		Red-green	x			Regional Income
48	3	+	Green-red	x			R&D Costs
49	3	+	Green-red	x			Central Marketing
50	1	=	Green-red	x			Central Admin.
51	3	+	Green-red	x			Other Inc. & Costs
52	3	+	Green-red	x			Integration Costs
53	3	+	Green-red	x			PPA
54	1	=	Green-red	x			Special Prod. Costs
55	2		Red-green	x			Clean EBIT
56	2	+	Red-green	x			Clean DA
57	3		Red-green	x			Clean EBITDA
58	3		Green-red	x			COGS IIa (excl. PPA)
59	2	+	Green-red	x			SPC
60	2	+	Green-red	x			PPA in COGS IIb
61	2	=	Green-red	x			COGS IIa (incl. PPA)
62	1	=	Red-green	x			Net Sales

Figure: *Datainsert* ranges for *row settings*

			2014	2015	BU	Δ2014%	Δ2014	Δ2014%	ΔBU
47		**Regional Income**	**244**	**300**	**388**	**+23%**	+56	+23%	-88
48	+	R&D Costs	93	56	111	-40%	-37	-40%	-55
49	+	Central Marketing	45	10	26	-78%	-35	-78%	-16
50	=	**Central Admin.**	**88**	**82**	**27**	**-7%**	-6	-7%	+55
51	+	Other Inc. & Costs	1	12	55	+1.100%	+11		-43
52	+	Integration Costs	3	2	5	-33%	-1	-33%	-3
53	+	PPA	123	99	221	-20%	-24	-20%	-122
54	=	**Special Prod. Costs**	**300**	**198**	**123**	**-34%**	-102	-34%	+75
55		**Clean EBIT**	**33**	**102**	**213**	**+209%**	+69	+209%	-111
56	+	**Clean DA**	**96**	**51**	**145**	**-47%**	-45	-47%	-94
57		Clean EBITDA	-23	51	22	-322%	+74	+322%	+29
58		COGS IIa (excl. PPA)	44	23	90	-48%	-21	-48%	-67
59	+	**SPC**	**45**	**5**	**99**	**-89%**	-40	-89%	-94
60	+	**PPA in COGS IIb**	**-23**	**12**	**88**	**-152%**	+35	+152%	-76
61	=	**COGS IIa (incl. PPA)**	**-24**	**17**	**114**	**-171%**	+41	+171%	-97
62	=	**Net Sales**	**376**	**555**	**466**	**+48%**	+179	+48%	+89

Figure: Representation of *row settings* in table and charts

Difference between <i> and <blank>

Case Visible <i>

	D	E	F	G	H	I	J	K
37	**Row settings**					Highlight		
39								
40								
41						Format		Base
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row	Visible		x
47	1		Red-green	x			Regional Income	244
48	3	+	Green-red	x			R&D Costs	93
49	3	+	Green-red	x			Central Marketing	45
50	1	=	Green-red	x			Central Admin.	88
51	3	+	Green-red	x			Other Inc. & Costs	1
52	3	+	Green-red	x			Integration Costs	3
53	3	+	Green-red	x			PPA	123
54	1	=	Green-red	x			Special Prod. Costs	300
55	2		Red-green	x			Clean EBIT	33
56	2	+	Red-green	x			Clean DA	96
57	3		Red-green	i				
58	3		Green-red	i				
59	2	+	Green-red	x			SPC	45
60	2	+	Green-red	x			PPA in COGS IIb	-23
61	2	=	Green-red	x			COGS IIa (incl. PPA)	-24
62	1	=	Red-green	x			Net Sales	376

Figure: *Datainsert* ranges for the definition of an interrupted axis

In *visible* the corresponding row is marked with <i> and in the flow data range the cell contents outspaced. The labeling cell gets a leading <blank>.

As can be seen in the graph by using the <i> mark the original row structure remains and only the axis is interrupted.

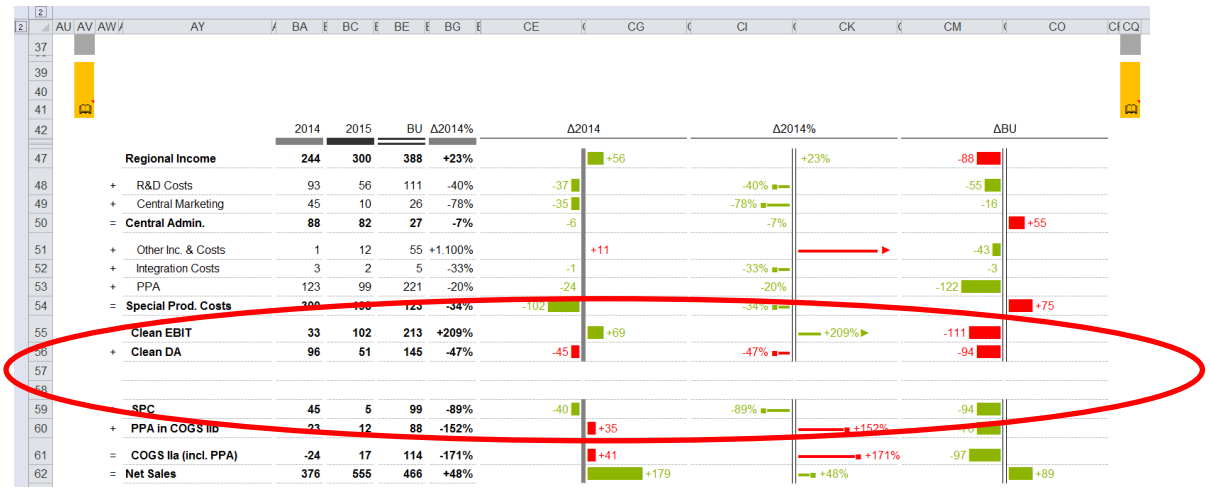


Figure: Charts with interrupted axis lines

Case Visible <blank>

	D	E	F	G	H	I	J	K
37	**Row settings**					Highlight		
39								
40								
41						Format		Base
42	Hierarchy level	Operator	Chart color	Visible	"ThereOf" row	Visible		x
47	1		Red-green	x			Regional Income	244
48	3	+	Green-red	x			R&D Costs	93
49	3	+	Green-red	x			Central Marketing	45
50	1	=	Green-red	x			Central Admin.	88
51	3	+	Green-red	x			Other Inc. & Costs	1
52	3	+	Green-red	x			Integration Costs	3
53	3	+	Green-red	x			PPA	123
54	1	=	Green-red	x			Special Prod. Costs	300
55	2		Red-green	x			Clean EBIT	33
56	2	+	Red-green	x			Clean DA	96
57	3		Red-green				Clean EBITDA	-23
58	3		Green-red				COGS IIa (excl. PPA)	44
59	2	+	Green-red	x			SPC	45
60	2	+	Green-red	x			PPA in COGS IIb	-23
61	2	=	Green-red	x			COGS IIa (incl. PPA)	-24
62	1	=	Red-green	x			Net Sales	376

Figure: *Datainsert* ranges for *hierarchy level, operator, chart color* and visibility

If the corresponding field in *visible* is only marked with <blank>, as we can see in the following figure the two marked rows are simply omitted in table and charts.

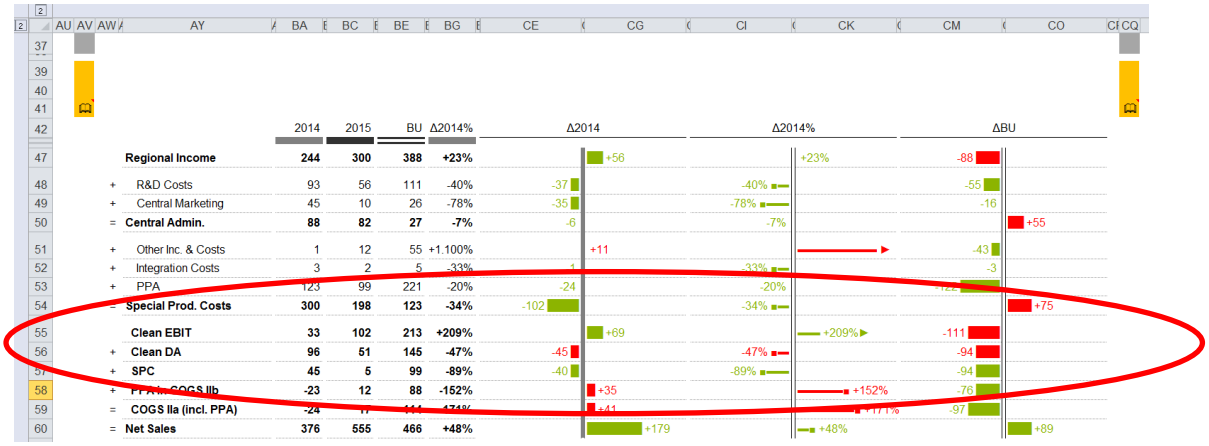


Figure: *Table with hierarchy* and deviation charts

3 Highlighting

By using *highlighting* some special cell-based ranges in the table can be marked.

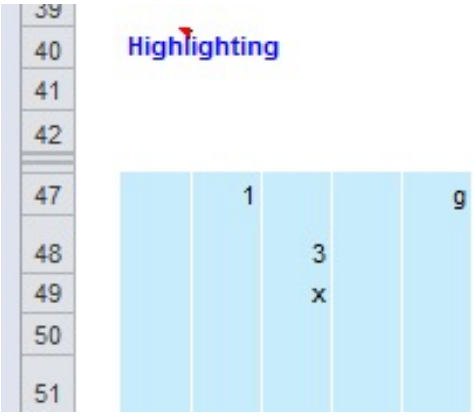


Figure: Cell-based input options in the *highlighting* ranges

The following options are available:

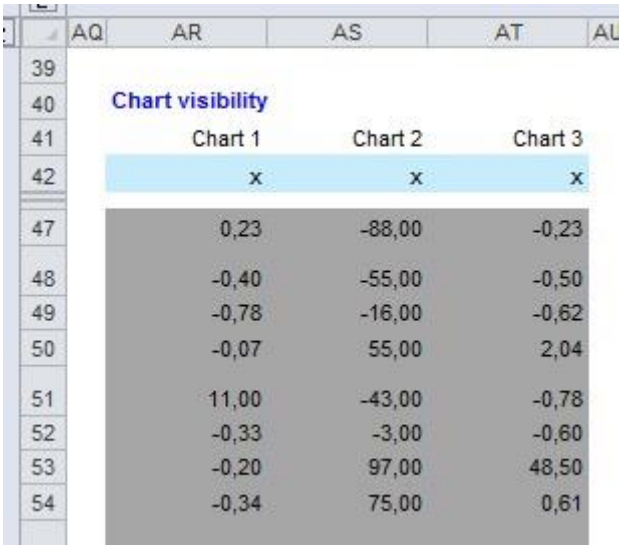
X The specific location will be highlighted with a neutral color
R The specific cell will be marked with red
G The specific cell will be marked with green
number The specific cell will be marked with a number, which represents in the footnote range a specific text and displayed below the table.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	266	245	234	255	257	289	290	299	303	280 ②	289	**304**
Munich	213	184	211	204	193	260	232	224	273	224 ②	217	**274**
Dresden	234	230	274	247	154	231	255	280	355	271	174	**244**
Leipzig	293	322	438	420	193	323	408	476	444	379	278	**415**
Cologne	733	902	1.270 ①	1.386	695	1.260	1.714	2.142	2.220	2.274 ③	1.946	**2.739**
Hamburg	1.173	1.533	1.905 ①	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	**2.465**

Figure: *Table with flat structure* and cell-based highlightings

4 Chart visibility

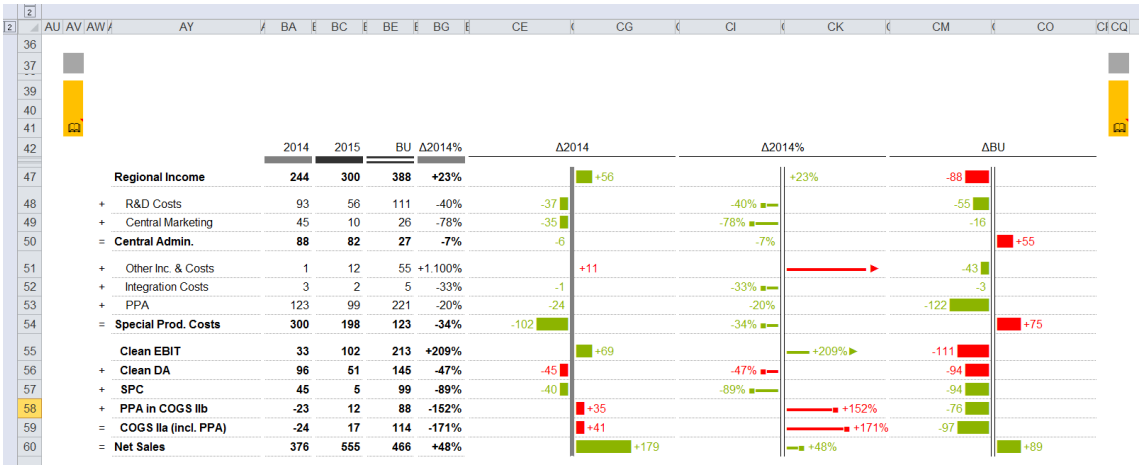
The table module of *Chart-me XLS* provides the display of up to three deviation bar charts. If the corresponding cells are marked with <x>, the related charts are displayed to the right of the table. But they still have to be defined in terms of design and calculation rules and which will be explained in detail in chapter 9 – Chart description.



	AQ	AR	AS	AT	AU
39					
40		Chart visibility			
41		Chart 1	Chart 2	Chart 3	
42		x	x	x	
47		0,23	-88,00	-0,23	
48		-0,40	-55,00	-0,50	
49		-0,78	-16,00	-0,62	
50		-0,07	55,00	2,04	
51		11,00	-43,00	-0,78	
52		-0,33	-3,00	-0,60	
53		-0,20	97,00	48,50	
54		-0,34	75,00	0,61	

Figure: Selection ranges for visible charts

In the given range, all or no or some charts can be selected for display. Selection is made by using <x>-marks.



		2014	2015	BU	Δ2014%	Δ2014	Δ2014%	ΔBU
47	Regional Income	244	300	388	+23%	+56	+23%	-88
48	+ R&D Costs	93	56	111	-40%	-37	-40%	-55
49	+ Central Marketing	45	10	26	-78%	-35	-78%	-16
50	= Central Admin.	88	82	27	-7%	-6	-7%	+55
51	+ Other Inc. & Costs	1	12	55	+1.100%	+11		-43
52	+ Integration Costs	3	2	5	-33%	-1	-33%	-3
53	+ PPA	123	99	221	-20%	-24	-20%	-122
54	= Special Prod. Costs	300	198	123	-34%	-102	-34%	+75
55	Clean EBIT	33	102	213	+209%	+69	+209%	-111
56	+ Clean DA	96	51	145	-47%	-45	-47%	-94
57	+ SPC	45	5	99	-89%	-40	-89%	-94
58	+ PPA in COGS IIb	-23	12	88	-152%	+35	+152%	-76
59	= COGS IIa (incl. PPA)	-24	17	114	-171%	+41	+171%	-97
60	= Net Sales	376	555	466	+48%	+179	+48%	+89

Figure: Here, all three marked charts are displayed..

5 Footnote references

Texts provided in the input ranges of *Footnote references and titles* will be shown by default in the corresponding ranges above and below the table.

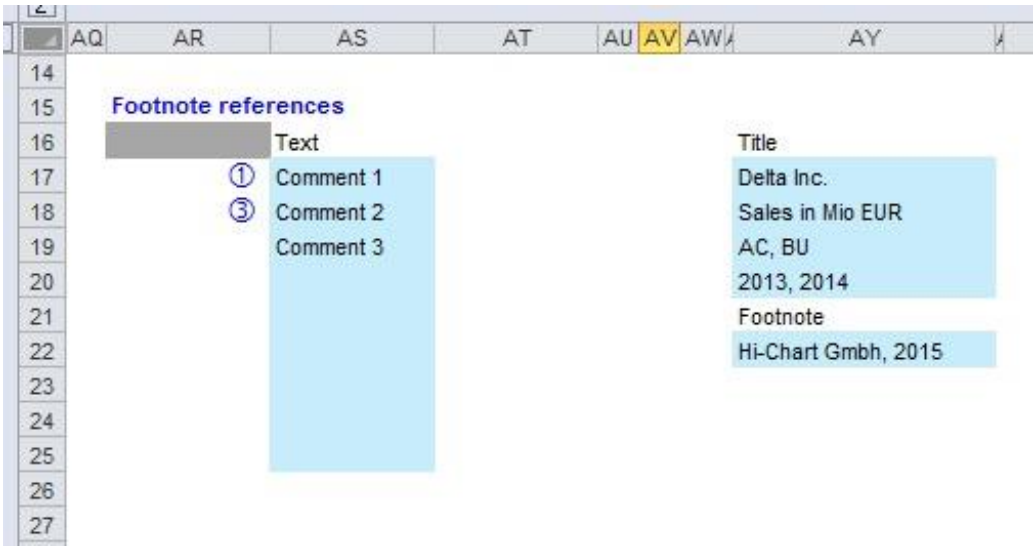


Figure: Text data input ranges for comments, title and footnote

The given number of the highlightings range will be connected at this place to the corresponding text delivered here. Eleven (11) different comment fields can be filled in.

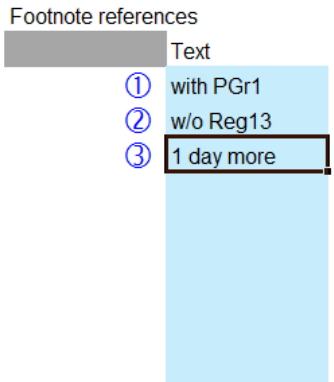
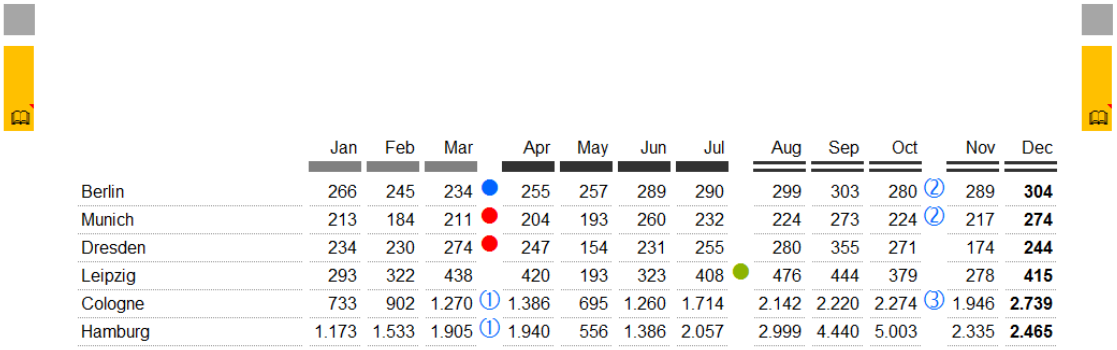


Figure: Text data input range for comments



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	266	245	234	255	257	289	290	299	303	280 ②	289	**304**
Munich	213	184	211	204	193	260	232	224	273	224 ②	217	**274**
Dresden	234	230	274	247	154	231	255	280	355	271	174	**244**
Leipzig	293	322	438	420	193	323	408	476	444	379	278	**415**
Cologne	733	902	1.270 ①	1.386	695	1.260	1.714	2.142	2.220	2.274 ③	1.946	**2.739**
Hamburg	1.173	1.533	1.905 ①	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	**2.465**

Figure: Table with flat structure and empty text fields

The *title* can be up to four lines and can occupy the whole width of the table. Positions can be found from cell AY39. The footnote and comments at end of table.

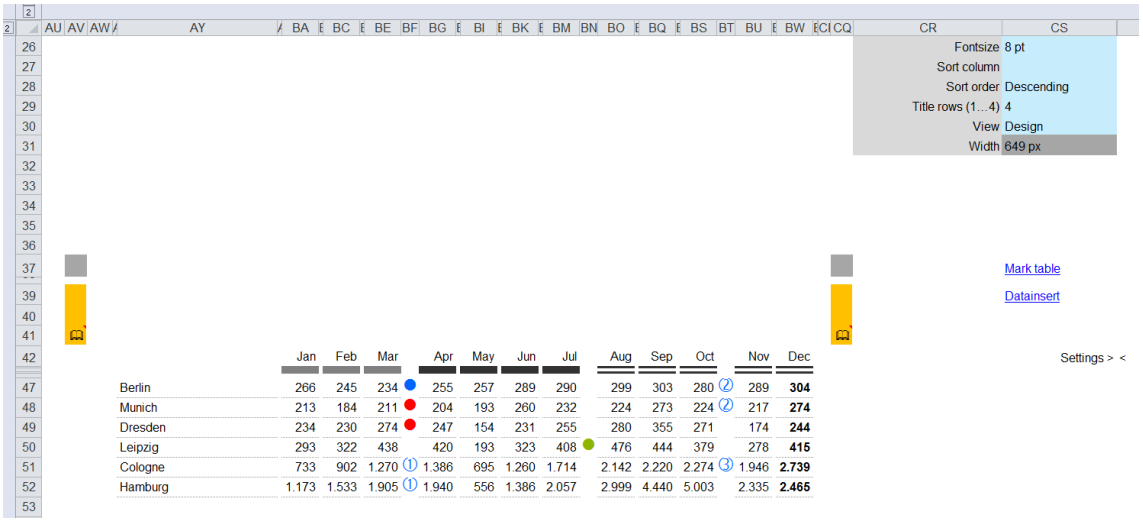


Figure: Positions of standard text display ranges

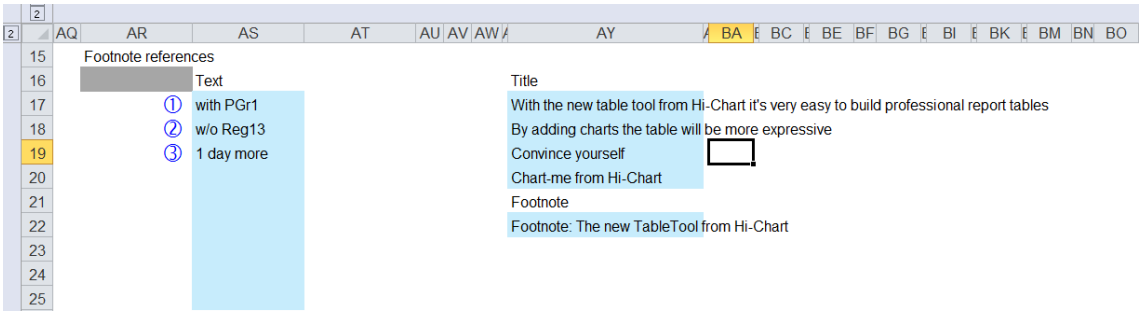


Figure: Text data input range with data in all three text blocks

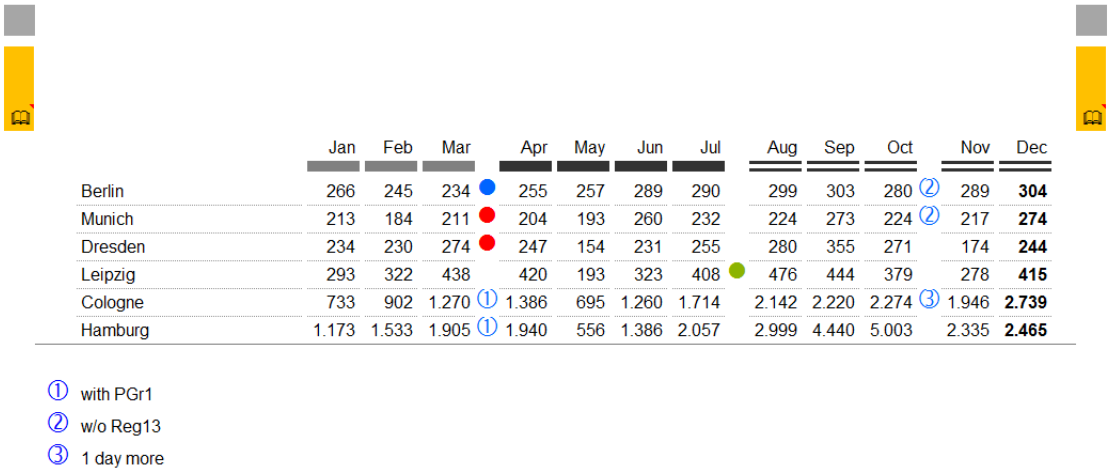


Figure: *Table with flat structure* empty *title* fields and filled in comments

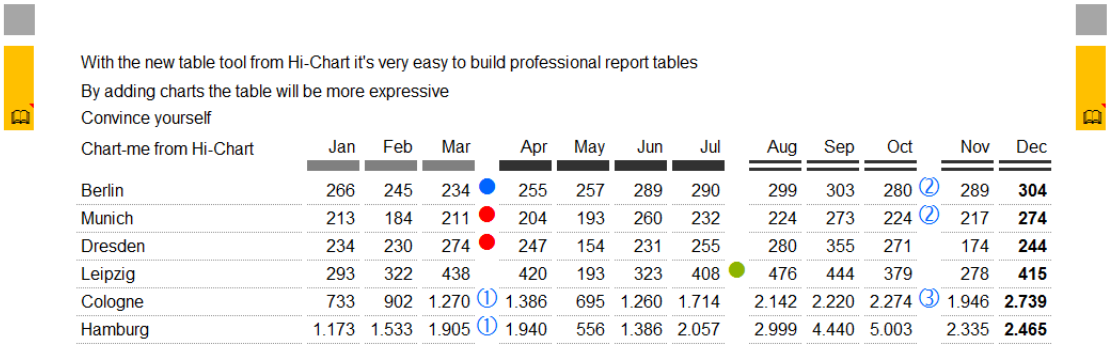


Figure: *Table with flat structure* filled in four row *title* fields without footnote and comments

With the new table tool from Hi-Chart it's very easy to build professional report tables
By adding charts the table will be more expressive
Convince yourself

Chart-me from Hi-Chart	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	266	245	234	255	257	289	290	299	303	280 ②	289	**304**
Munich	213	184	211	204	193	260	232	224	273	224 ②	217	**274**
Dresden	234	230	274	247	154	231	255	280	355	271	174	**244**
Leipzig	293	322	438	420	193	323	408	476	444	379	278	**415**
Cologne	733	902	1.270 ①	1.386	695	1.260	1.714	2.142	2.220	2.274 ③	1.946	**2.739**
Hamburg	1.173	1.533	1.905 ①	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	**2.465**

Footnote: The new TableTool from Hi-Chart
① with PGr1
② w/o Reg13
③ 1 day more

Figure: *Table with flat structure* filled in *title*, footnote and comments

6 Column settings

Column Is the numbering of the data column referenced for example when calculating the values in the diagram and calculation procedure. There are a total of 15 data columns.

Header Is the direct column naming. As far as needed, other names can be added using the header definition

Data type By using the *data types* (ACT, BU, PY, FC) columns for better differentiation are identified graphically.

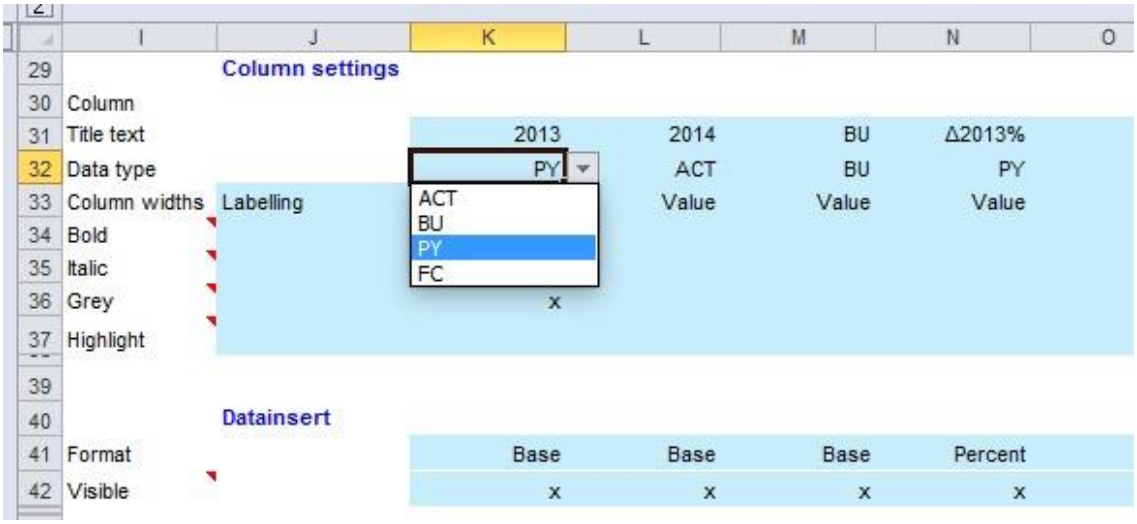


Figure: Selection options for field *data type*

Column width The *column width* can be defined as for the section width of a chart by fixed sizes such as days, weeks, months, quarters, years. Moreover, even the type label stands for text fields and value for numeric fields.

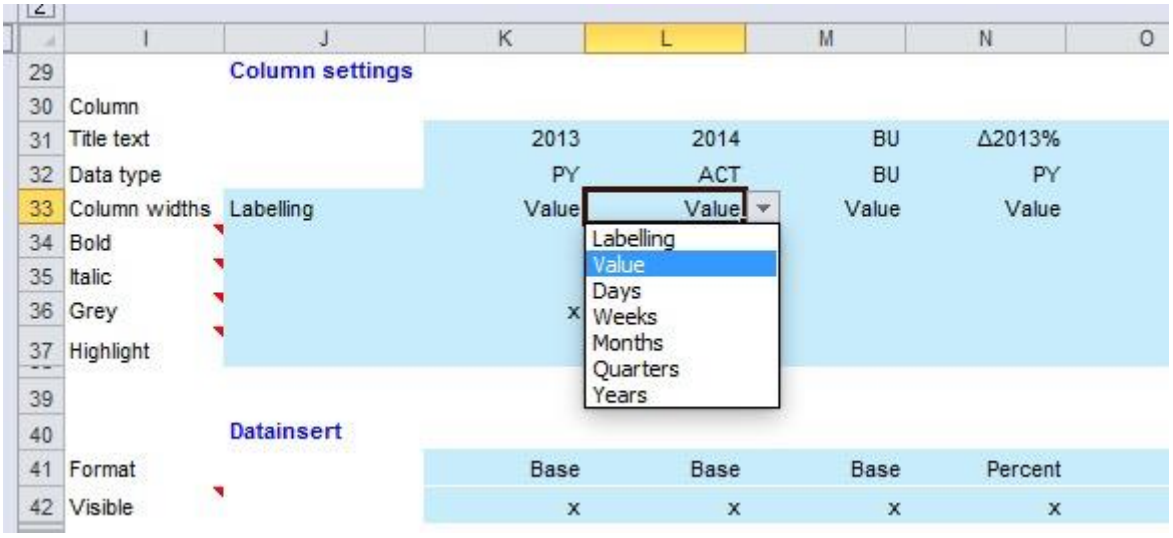


Figure: Selection options for field *column width*

Fields for column marks – Input <blank> or <X>

Bold Marked with <blank> or <X> indicates whether the signature of the corresponding column should be displayed normal or bold.

Italic Marked with <blank> or <X> indicates whether the signature of the corresponding column should be displayed normal or in italics.

Grey Marked with <blank> or <X> indicates whether the characters of the corresponding column should be displayed normal or grey.

Highlight Marked with <blank> or <X> indicates whether the header of the corresponding column should be underlined with an ocher color.

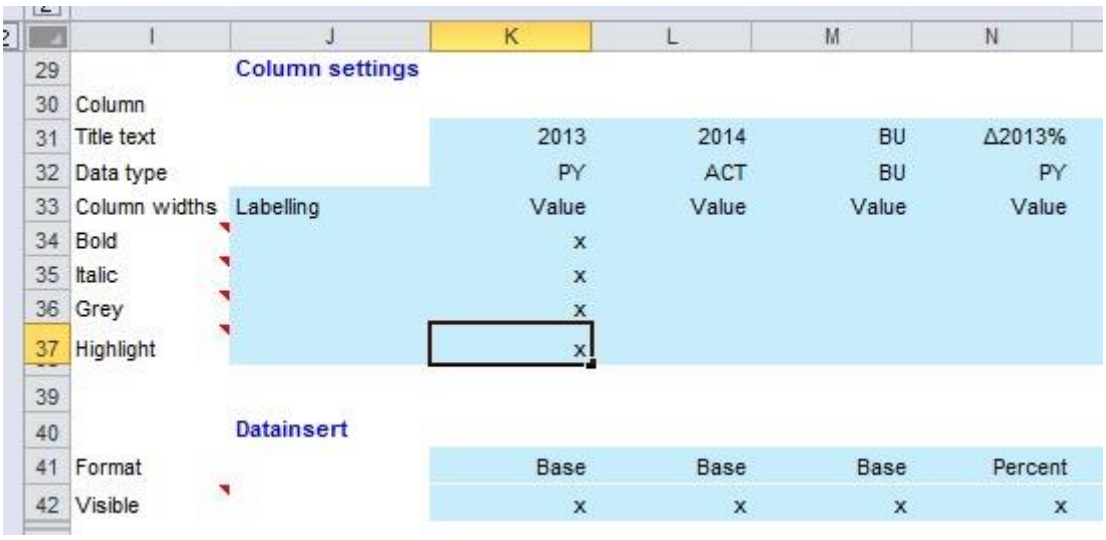


Figure: *Datainsert* ranges for *highlightings*

In the above example, column 1, shall receive a special formatting, while columns 2 and 3 are shown normally.

	I	J	K	L	M	N
29		Column settings				
30	Column					
31	Title text		2013	2014	BU	Δ2013%
32	Data type		PY	ACT	BU	PY
33	Column widths	Labelling	Value	Value	Value	Value
34	Bold		x			
35	Italic		x			
36	Grey		x			
37	Highlight		x			
39						
40		Datainsert				
41	Format		Base	Base	Base	Percent
42	Visible			x	x	x
47		Regional Income		300	388	0,23
48		R&D Costs	93	56	111	-0,40

Base
Percent
Δ Base
Δ Percent

Figure: Selection option for field *format*

Format In the *Format* field is set, what number format type is applied to the column. There are basic, percent, Δ base and Δ percent to choose from. The format types can be specified in more detail in the *Settings*. (see chapter "*Settings*")

Visible Marked with <blank> or <X> indicates whether the corresponding column should be *visible* or not.

Case studies

By the following combinations of selections the parametrisation can be clearly shown

Case 1 – Column Jan and Dec using all special column formattings

	I	J	K	L	U	V
29	**Datainsert**					
30	Column					
31	Title text		Jan	Feb	Nov	Dec
32	Data type		ACT	ACT	BU	BU
33	Column widths	Labelling	Months	Months	Months	Months
34	Bold		x			x
35	Italic		x			x
36	Grey		x			x
37	Highlight		x			x
39						
40						
41	Format		Base	Base	Base	Base
42	Visible		x	x	x	x
47		Berlin	266	245	289	304
48		Munich	213	184	217	274
49		Dresden	234	230	174	244
50		Leipzig	293	322	278	415
51		Cologne	733	902	1946	2739
52		Hamburg	1173	1533	2335	2465
53						

Figure: *Datainsert* ranges for column-based highlightings

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	*266*	245	234	255	257	289	290	299	303	280	289	*304*
Munich	*213*	184	211	204	193	260	232	224	273	224	217	*274*
Dresden	*234*	230	274	247	154	231	255	280	355	271	174	*244*
Leipzig	*293*	322	438	420	193	323	408	476	444	379	278	*415*
Cologne	*733*	902	1.270	1.386	695	1.260	1.714	2.142	2.220	2.274	1.946	*2.739*
Hamburg	*1.173*	1.533	1.905	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	*2.465*

Figure: Highlighted columns in *Table with flat structure*

Case 2 - Column Jan marked with BU, bold and highlighted, Columns Feb and Mar invisible, Column Dec bold and highlighted

Datainsert

Column						
Title text		Jan	Feb	Mar	Apr	May
Data type		BU	ACT	ACT	ACT	ACT
Column widths	Labelling	Months	Months	Months	Months	Months
Bold		x				
Italic						
Grey						
Highlight		x			x	
Format		Base	Base	Base	Base	Base
Visible		x			x	x
	Berlin	266	245	234	255,00	257
	Munich	213	184	211	204,00	193
	Dresden	234	230	274	247,00	154
	Leipzig	293	322	438	420,00	193
	Cologne	733	902	1270	1386,00	695
	Hamburg	1173	1533	1905	1940,00	556

Figure: *Datainsert* ranges for column-based highlightings

	Jan	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin	**266**	255	257	289	290	299	303	280	289	**304**
Munich	**213**	204	193	260	232	224	273	224	217	**274**
Dresden	**234**	247	154	231	255	280	355	271	174	**244**
Leipzig	**293**	420	193	323	408	476	444	379	278	**415**
Cologne	**733**	1.386	695	1.260	1.714	2.142	2.220	2.274	1.946	**2.739**
Hamburg	**1.173**	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	**2.465**

Figure: Table with hidden columns

Case 3 - Column Jan, Feb, Mar visible, PY and highlighted, Columns Jan and Feb without flow data, Column Dec bold and highlighted

Datainsert							
Column							
Title text			Jan	Feb	Mar	Apr	May
Data type			PY	PY	PY	ACT	ACT
Column widths	Labelling		Months	Months	Months	Months	Months
Bold							
Italic							
Grey							
Highlight			x	x	x		
Format			Base	Base	Base	Base	Base
Visible			x	x	x	x	x
	Berlin				234	255,00	257
	Munich				211	204,00	193
	Dresden				274	247,00	154
	Leipzig				438	420,00	193
	Cologne				1270	1386,00	695
	Hamburg				1905	1940,00	556

Figure: *Datainsert* ranges for value cells

Empty cells are shown in the table according to number format as "0".

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Berlin			234	255	257	289	290	299	303	280	289	**304**
Munich			211	204	193	260	232	224	273	224	217	**274**
Dresden			274	247	154	231	255	280	355	271	174	**244**
Leipzig			438	420	193	323	408	476	444	379	278	**415**
Cologne			1.270	1.386	695	1.260	1.714	2.142	2.220	2.274	1.946	**2.739**
Hamburg			1.905	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	**2.465**

Figure: Table with empty value cells

In contrast to the "fixed" positioned *title*, footnote and commentary it is also possible by using the preset Excel cell structure to generate individual table headers and headers and remodel value columns into text columns.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
47	Berlin	266	245	234	255	257	289	290	299	303	280	289	304
48	Munich	213	184	211	204	193	260	232	224	273	224	217	274
49	Dresden	234	230	274	247	154	231	255	280	355	271	174	244
50	Leipzig	293	322	438	420	193	323	408	476	444	379	278	415
51	Cologne	733	902	1.270	1.386	695	1.260	1.714	2.142	2.220	2.274	1.946	2.739
52	Hamburg	1.173	1.533	1.905	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	2.465

Figure: Table display range of a *table with flat structure*

	U	V	W	X	Y
30					
31	Nov	Dec	Comment		
32	BU	BU			
33	Months	Months	Labelling		
34		x			
35		x			
36		x			
37		x			
39					
40					
41	Base	Base			
42	x	x	x		
47	289	304	it is also		
48	217	274	possible		
49	174	244	that we		
50	278	415	can write		
51	1946	2739	text directly		
52	2335	2465	into the column		

Figure: *Datainsert* range with newly created column for comments

Attaching a comment column is simply done by adding a text column to the existing value columns. In the title text box eg. "Comment" is inserted. The *data type* field is left blank and *column width* is marked with the identifier "labelling". The *format* field also remains empty and the column is still marked with <x> in *Visible*. In the values cell then the corresponding text can be entered.

	AU	AV	AW	AY	BA	BC	BE	BF	BG	BI	BK	BM	BN	BO	BQ	BS	BT	BU	BW	BY	CI	CQ
36																						
37																						
39																						
40					Column header																	
41					Previous year				Actual					Budget								
42					Jan	Feb	Mar		Apr	May	Jun	Jul		Aug	Sep	Oct		Nov	Dec	Comment		
47				Berlin	266	245	234		255	257	289	290		299	303	280	②	289	*304*	it is also		
48				Munich	213	184	211		204	193	260	232		224	273	224	②	217	*274*	possible		
49				Dresden	234	230	274		247	154	231	255		280	355	271		174	*244*	that we		
50				Leipzig	293	322	438		420	193	323	408		476	444	379		278	*415*	can write		
51				Cologne	733	902	1.270	①	1.386	695	1.260	1.714		2.142	2.220	2.274	③	1.946	*2.739*	text directly		
52				Hamburg	1.173	1.533	1.905	①	1.940	556	1.386	2.057		2.999	4.440	5.003		2.335	*2.465*	into the column		

Figure: *Table with flat structure* with column for comments

	AU	AV	AW	AY	BA	BC	BE	BF	BG
37									
39									
40					Column header				
41					Previous year				Actual

Figure: *Table with flat structure* with individual column headers

If there is a need, individual, cell-related header and column headers can be inserted in the rows 39 to 41. The range from line 42 is reserved for the *title text* of the data input range and the related formatting specifications for *data types*, etc..

7 Base settings

In the input field for the display parameter details are given to the overall representation of a table in terms of font size, sorting, header lines, display type and size of the table in pixels.

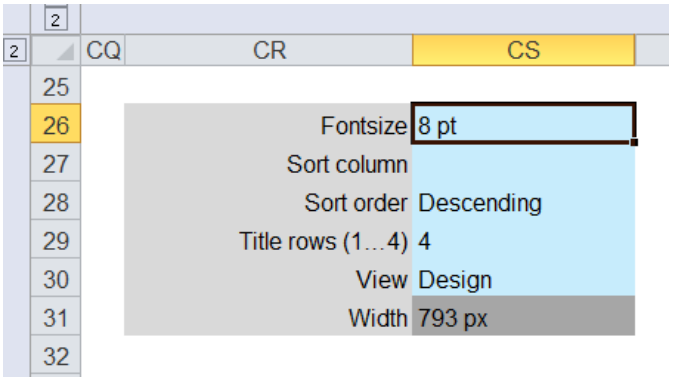


Figure: Input fields for *Fontsize* and *Title rows*

Fontsize According to the specified font size in points (pt), the entire table is resized. Useful sizes are usually pt 6-12.

Title rows (1..4) Specifies how many rows should be reserved in the header range for headlines. By default, 4 are provided.

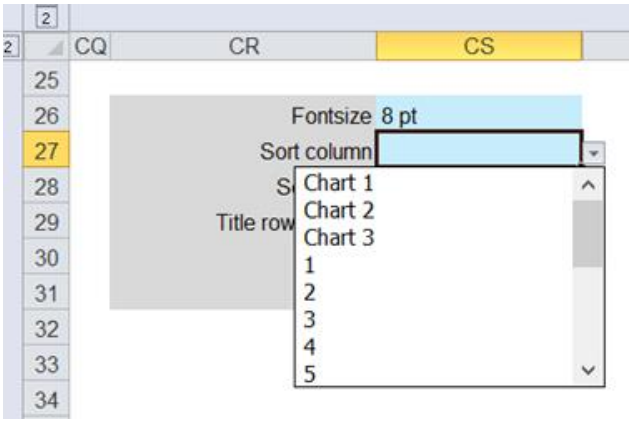


Figure: Selection field *sort column*

Sort column As criteria for *sort column* can be used value columns 1 to 15 as well as charts 1 to 3. <blank> signifies no sorting takes place.

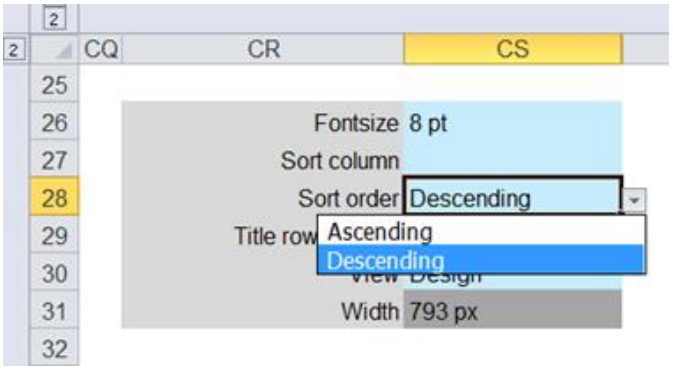


Figure: Selection field *sort order*

Sort order By referring to the selected *sort column* the table can be sorted in an ascending or descending order.

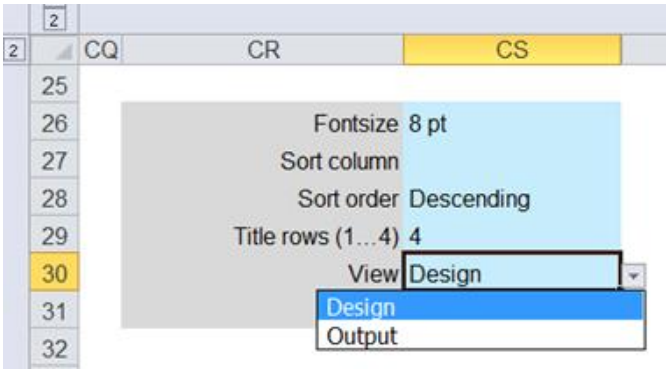


Figure: Selection field *view*

View You can choose between design and output. By default, the Design *view* is set. When switching to output then the footnote and the defined comment lines are appended to the end of the table.

Example

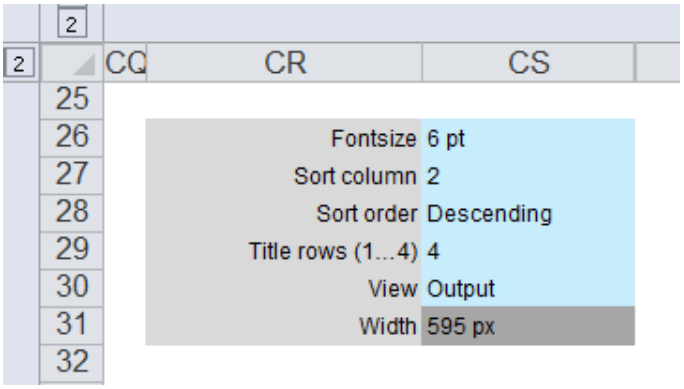
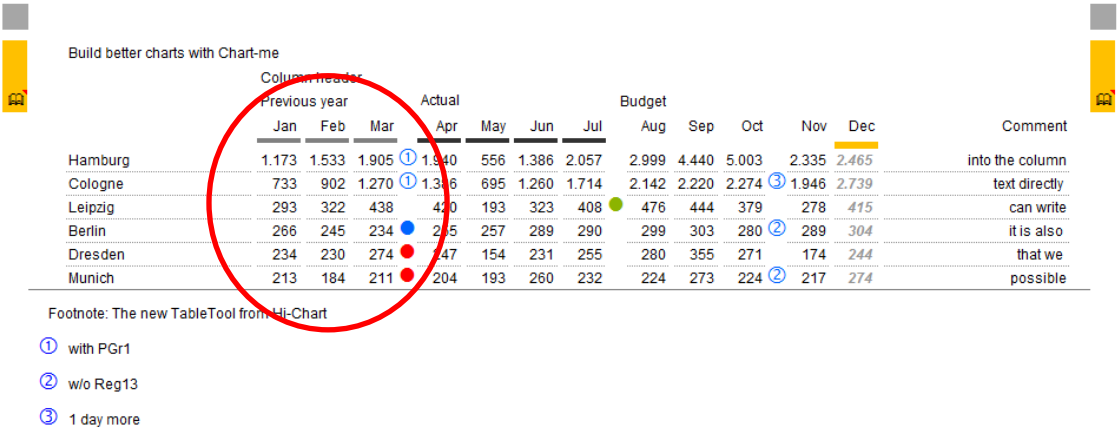


Figure: Display parameters for sorted *Output* table

As can be seen in the example, the entire table is reformatted to font size 6 pt and sorted in descending order with respect to the Feb-column. Since the *view* is set to output, the footnote and comment lines are displayed at the bottom of the table.



Build better charts with Chart-me

	Column header												
	Previous year			Actual				Budget					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Comment
Hamburg	1.173	1.533	1.905 ①	1.940	556	1.386	2.057	2.999	4.440	5.003	2.335	*2.465*	into the column
Cologne	733	902	1.270 ①	1.386	695	1.260	1.714	2.142	2.220	2.274 ③	1.946	*2.739*	text directly
Leipzig	293	322	438	420	193	323	408	476	444	379	278	*415*	can write
Berlin	266	245	234	205	257	289	290	299	303	280 ②	289	*304*	it is also
Dresden	234	230	274	247	154	231	255	280	355	271	174	*244*	that we
Munich	213	184	211	204	193	260	232	224	273	224 ②	217	*274*	possible

Footnote: The new TableTool from Hi-Chart

① with PGr1

② w/o Reg13

③ 1 day more

Figure: Flat, fully formatted and sorted Output table with individual table headings and column for comments

8 Detail Settings

The *Settings* range includes more extensive information on the appearance of the table and graphs. By clicking on the + mark above the cell DJ, further setting ranges for the table and chart formatting can be explored. In general, these inputs are handled only once when fine tuning the layout. This range comprises the definition of number formats to underlying base values and deviations, the representation of the hierarchical levels used, and scaling settings used for the presentation of diagrams and descriptions.

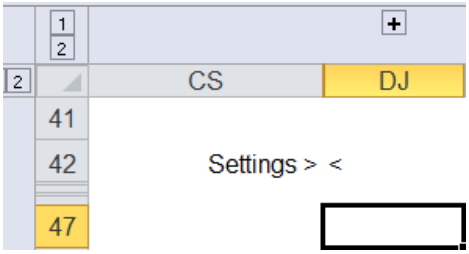
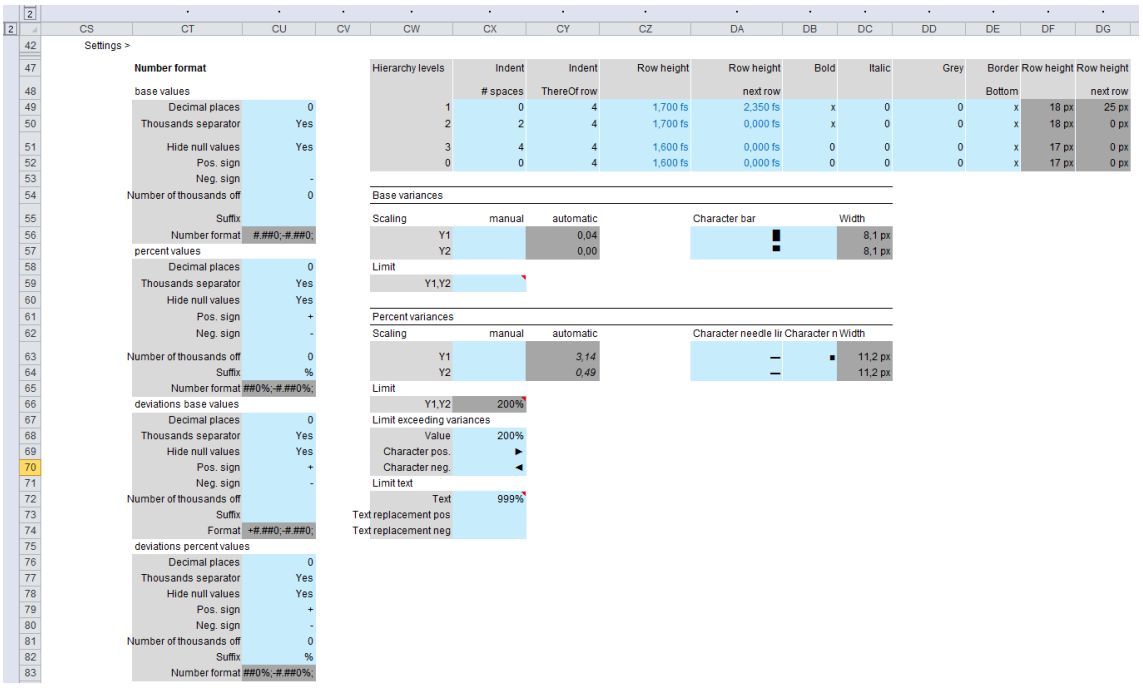


Figure: „Hidden“ *Datainsert* range *settings* (accessible by klicking on +-mark)



	CS	CT	CU
42	Settings >		
47		**Number format**	
48		base values	
49		Decimal places	0
50		Thousands separator	Yes
51		Hide null values	Yes
52		Pos. sign	
53		Neg. sign	-
54		Number of thousands off	0
55		Suffix	
56		Number format	#.##0;-#.##0;
57		percent values	
58		Decimal places	0
59		Thousands separator	Yes
60		Hide null values	Yes
61		Pos. sign	+
62		Neg. sign	-
63		Number of thousands off	0
64		Suffix	%
65		Number format	##0%;-#.##0%;
66		deviations base values	
67		Decimal places	0
68		Thousands separator	Yes
69		Hide null values	Yes
70		Pos. sign	+
71		Neg. sign	-
72		Number of thousands off	
73		Suffix	
74		Format	+#.##0;-#.##0;
75		deviations percent values	
76		Decimal places	0
77		Thousands separator	Yes
78		Hide null values	Yes
79		Pos. sign	+
80		Neg. sign	-
81		Number of thousands off	0
82		Suffix	%
83		Number format	##0%;-#.##0%;

	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG
47	Hierarchy levels	Indent	Indent	Row height	Row height	Bold	Italic	Grey	Border	Row height	Row height
48		# spaces	ThereOf row		next row				Bottom		next row
49	1	0	4	1,700 fs	2,350 fs	x	0	0	x	18 px	25 px
50	2	2	4	1,700 fs	0,000 fs	x	0	0	x	18 px	0 px
51	3	4	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px
52	0	0	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px

	CW	CX	CY	CZ	DA
53	Base variances				
54	Scaling	manual	automatic		Character bar
55	Y1		0,04		▮
56	Y2		0,00		▪
57	Limit				
58	Y1,Y2				
59	Percent variances				
60	Scaling	manual	automatic		Character needle lir Character n
61	Y1		*3,14*		— ▪
62	Y2		*0,49*		—
63	Limit				
64	Y1,Y2	200%			
65	Limit exceeding variances				
66	Value	200%			
67	Character pos.	►			
68	Character neg.	◄			
69	Limit text				
70	Text	999%			
71	Text replacement pos				
72	Text replacement neg				

	CZ	DA	DB	DC	DD	DE	DF	DG
53								
54	Width							
55	8,1 px							
56	8,1 px							
57								
58								
59								
60	Width							
61	11,2 px							
62	11,2 px							
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								

Figure: *Datainsert* range *settings*

	CS	CT	CU
47		**Number format**	
48		base values	
49		Decimal places	0
50		Thousands separator	Yes
51		Hide null values	Yes
52		Pos. sign	
53		Neg. sign	-
54		Number of thousands off	0
55		Suffix	
56		Number format	#.##0;-#.##0;
57		percent values	
58		Decimal places	0
59		Thousands separator	Yes
60		Hide null values	Yes
61		Pos. sign	+
62		Neg. sign	-
63		Number of thousands off	0
64		Suffix	%
65		Number format	#.##0%;-#.##0%;

Figure: *Datainsert* range for *number format base values*

In this range the *number format* for absolute and relative base values are defined. Input options, see below.

	CS	CT	CU
66		deviations base values	
67		Decimal places	0
68		Thousands separator	Yes
69		Hide null values	Yes
70		Pos. sign	+
71		Neg. sign	-
72		Number of thousands off	
73		Suffix	
74		Format	+#.##0;-#.##0;
75		deviations percent values	
76		Decimal places	0
77		Thousands separator	Yes
78		Hide null values	Yes
79		Pos. sign	+
80		Neg. sign	-
81		Number of thousands off	0
82		Suffix	%
83		Number format	#.##0%;-#.##0%;

Figure: *Datainsert* range for *number format deviations*

In this range the *number format* for absolute and relative deviation values are defined. There are provided the same input options for both basic as well as deviation values.

Decimal places	<0> means without decimal places, starting with <1> indicates respective number.
Thousands separator	<yes> adds sparator defined as default in Excel, <no> without separator
Hide null values	<yes> hides zeroes, <no> keeps zeroes
Pos. Sign	<blank> without sign, <+> with pos. sign

Neg. sign <blank> without sign, <-> with neg. sign
Number of thousands off hides <n> thousands, <blank> shows default.
Suffix adds special characters to values like symbols for currency (%, $,…)
Number format shows the number format in the personalized Excel standard

	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG
47		Hierarchy levels	Indent	Indent	Row height	Row height	Bold	Italic	Grey	Border	Row height	Row height
48			# spaces	ThereOf row		next row				Bottom		next row
49		1	0	4	1,700 fs	2,350 fs	x	0	0	x	18 px	25 px
50		2	2	4	1,700 fs	0,000 fs	x	0	0	x	18 px	0 px
51		3	4	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px
52		0	0	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px

Figure: *Datainsert* range for *hierarchy levels*

The entry range *hierarchy levels* allows settings for up to four hierarchies. Initially the defined default values in the stylesheet are applied. These settings apply to the formatting of the table row (as well as the diagram row) of a particular hierarchy level.

Input fields
Indent -
 # spaces Indents the text of the labelling column by the given number of blanks to the right
ThereOf row Indents the text of the labelling column of a ThereOf-row by the given number of blanks to the right
Row height insertion of the value in fontsize (fs) for the height of the given row
Row height - next row insertion of the value in fontsize (fs) for the height of the next row. Thus facilitating the building of layout blocks.
Bold <x> shows the chosen hierarchy level in bold, <0> for normal display
Italic <x> shows the chosen hierarchy level in italics, <0> for normal display
Grey <x> shows the chosen hierarchy level in grey, <0> for normal display
Border -
Bottom <x> shows for the chosen hierarchy level an underline, <0> for normal display without underline

Display fields
Row height shows the value for the height of the present row in pixel which was earlier calculated by *Chart-me XLS* according to the given fontsize input.
Row height - next row shows the value for the height of the following row in pixel which was earlier calculated by *Chart-me XLS* according to the given fontsize input.

	CV	CW	CX	CY	CZ	DA	DB	DC
54		Base variances						
55		Scaling	manual	automatic		Character bar		Width
56		Y1		0,04		▮		8,1 px
57		Y2		0,00		▪		8,1 px
58		Limit						
59		Y1,Y2						
60								
61		Percent variances						
62		Scaling	manual	automatic		Character needle line	Character ne	Width
63		Y1		*3,14*		▬	▪	11,2 px
64		Y2		*0,49*		▬		11,2 px
65		Limit						
66		Y1,Y2	200%					
67		Limit exceeding variances						
68		Value	200%					
69		Character pos.	►					
70		Character neg.	◄					
71		Limit text						
72		Text	999%					
73		Text replacement pos						
74		Text replacement neg						

Figure: *Datainsert* range for absolute and relative deviations in charts

In this input range of *settings*, the values for the appearance of the charts and their adaptation to their representable value ranges in terms of absolute and percentage deviations are defined. These parameters therefore determine crucially the appearance of the respective graphs.

Settings Absolute Deviations

The graphical limits of the diagrams are automatically determined and adjusted in the rule. Likewise, the setting of the graph elements, initially are made in the stylesheet. In special cases it may happen that the user wants to make certain settings manually.

Base variances					
Scaling	manual	automatic		Character bar	Width
Y1		0,04		▮	8,1 px
Y2		0,00		▪	8,1 px
Limit					
Y1,Y2					

Figure: *Datainsert* range for absolute deviations in charts referring to scaling, limits and bar graph symbols

Scaling

Y1, Y2 enables different scaling for different value ranges

Scaling scaling factors that are automatically calculated from the input of the data input ranges

Manual scaling factor is given manually. <blank> will use the automatically calculated factor.

Automatic scaling will be calculated with the shown factor.

Character bar

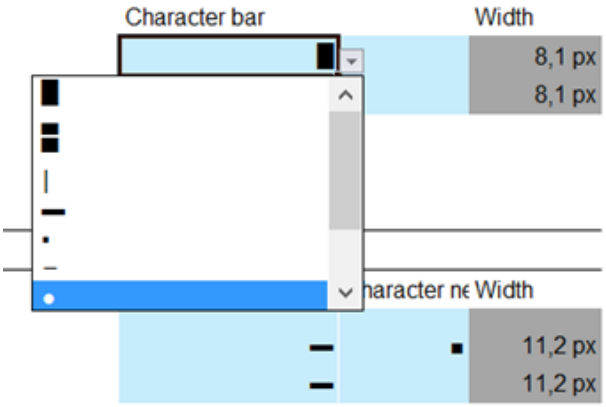


Figure: *Datainsert* range for absolute and relative deviations in charts referring to bar graph symbols

The default setting of the graphic elements of bar chart can be changed according to the selection menu. Width shows how much space in pixels is occupied by the corresponding element.

Limit

Using a scaling factor in limit, two normally incompatible value ranges can still be presented in a legible manner.

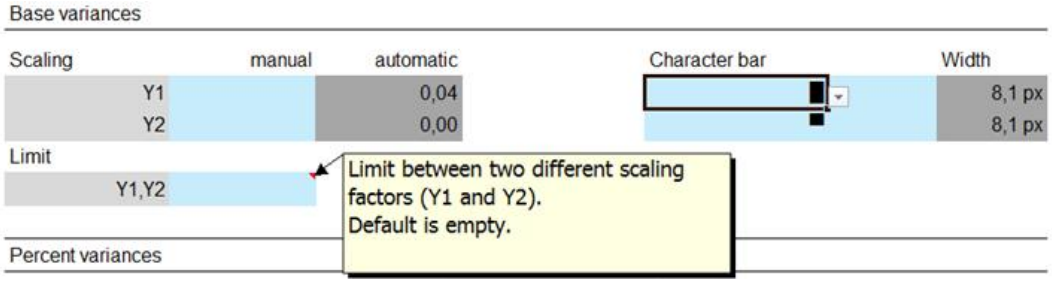


Figure: *Datainsert* range for absolute and relative deviations in charts

Percentual deviations

The same input rules for absolute deviations as shown in the previous section are valid also percentage deviations.

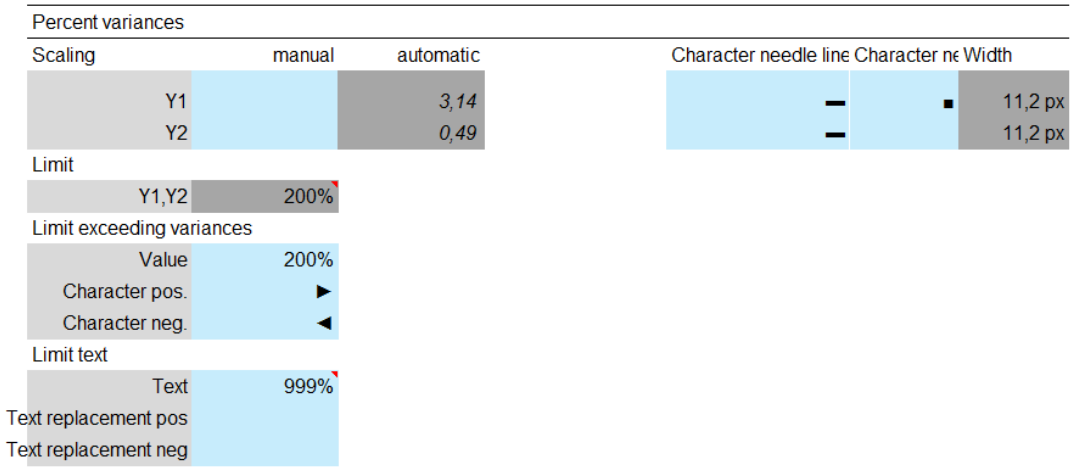


Figure: *Datainsert* range for absolute and relative deviations in charts – percent variances

Chart-me XLS identifies automatically the limit percentage for Y1,Y2.

Character needles

For the display of percentage variances *Chart-me XLS* selects according to the *IBCS* standards needles as graphic elements. These are composed of a base part and header part. Consequently, using personalized representation, a needle line as well as a pin head can be selected from the drop-down list.

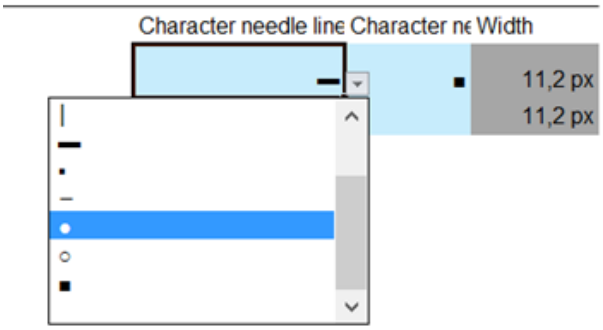


Figure: Selection list for needle line and pin head

Limit exceeding variances and Limit text

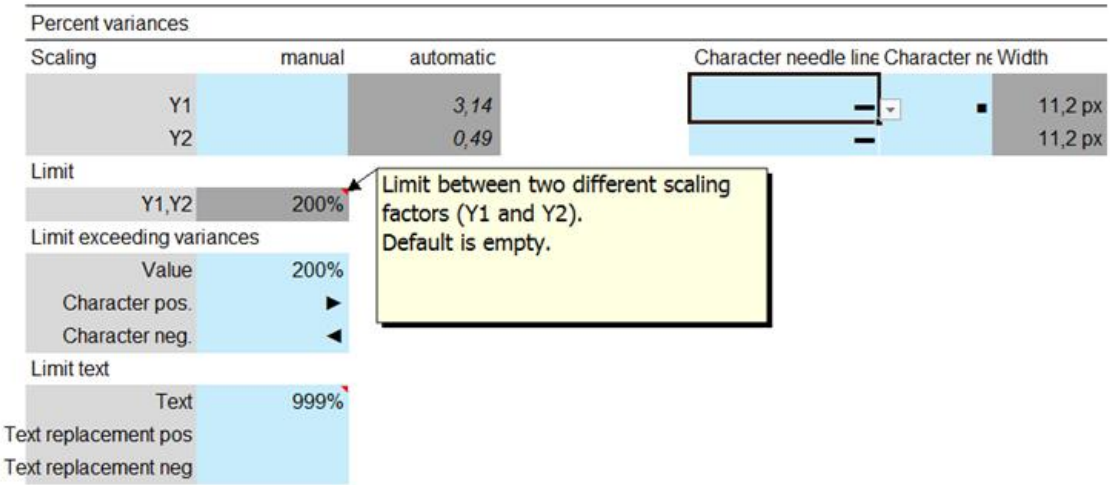


Figure: *Datainsert* range for percent variances

With the help of these fields can be determined how the charts are presented, when certain representation limits are exceeded.

Limit exceeding variances

Value is the value in % from which on the display form will be changed. Within this limit, all the elements such as needles, needle head and texts are shown
Character pos. shows the symbol which indicates exceeding limits in a pos. direction
Character neg. shows the symbol which indicates exceeding limits in a neg. direction

Limit text

Text is the value in % from which on the text display will be substitued by a symbol.
Text replacement pos. shows the symbol which will substitute text when exceeding limits in a pos. direction
Text replacement neg. shows the symbol which will substitute text when exceeding limits in a neg. direction

Example

In the following example can be seen how a percent deviation that exceeds the limit of 999% positive (+ 1.100%) is plotted in the middle diagram: A needle line without header and text, in which the arrowhead indicates that the % - value exceeds the limit value of 200%.

In the lower part is shown that the deviation of + 209% exceeds the limit of 200%, but lies below the text representation limit of 999%. Thus it is shown with a shorter needle line and arrow but with text. The properties of this parameterization will be obvious when compared to the presentation of value + 152%, which is within defined boundaries.

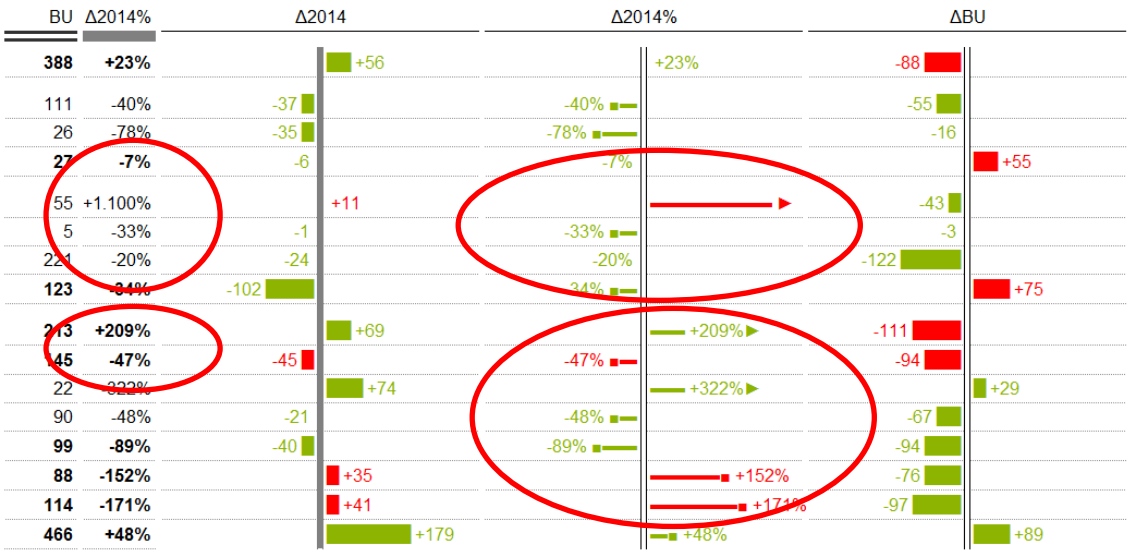


Figure: Forms of representation when limits are exceeded

Example

Hierarchies partially bold without bottom border

Hierarchy levels	Indent # spaces	Indent ThereOf row	Row height	Row height next row	Bold	Italic	Grey	Border Bottom	Row height	Row height next row
1	0	4	1,700 fs	2,350 fs	x	0	0	0	18 px	25 px
2	2	4	1,700 fs	0,000 fs	x	0	0	0	18 px	0 px
3	4	4	1,600 fs	0,000 fs	0	0	0	0	17 px	0 px
0	0	4	1,600 fs	0,000 fs	0	0	0	0	17 px	0 px

Figure: Different selection options for hierarchy levels

The figure below shows how the representation changes when hierarchies are shown only partially bold and without a frame. In addition, two data rows are labeled "visible", but without input values.

		2014	2015	BU	Δ2014%
	Regional Income	**244**	**300**	**388**	**+23%**
+	R&D Costs	93	56	111	-40%
+	Central Marketing	45	10	26	-78%
=	**Central Admin.**	**88**	**82**	**27**	**-7%**
+	Other Inc. & Costs	1	12	55	+1.100%
+	Integration Costs	3	2	5	-33%
+	PPA	123	99	221	-20%
=	**Special Prod. Costs**	**300**	**198**	**123**	**-34%**
	Clean EBIT	33	102	213	+209%
+	Clean DA	96	51	145	-47%
+	SPC	45	5	99	-89%
+	PPA in COGS IIb	-23	12	88	-152%
=	COGS IIa (incl. PPA)	-24	17	114	-171%
=	**Net Sales**	**376**	**555**	**466**	**+48%**

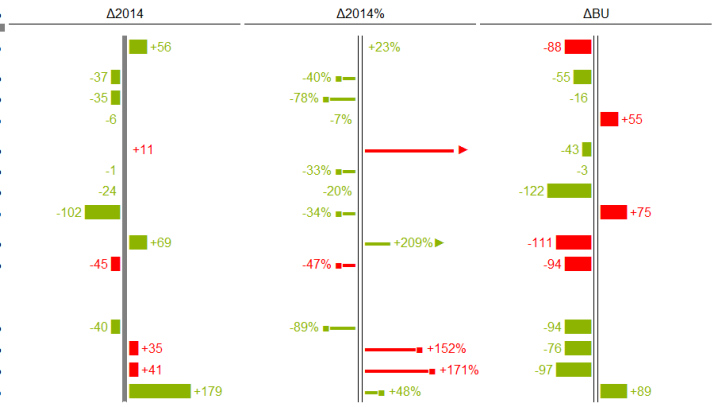


Figure: Table and charts without bottom border

Hierarchy levels	Indent # spaces	Indent ThereOf row	Row height	Row height next row	Bold	Italic	Grey	Border Bottom	Row height	Row height next row
1	0	4	1,700 fs	2,350 fs	x	0	0	x	18 px	25 px
2	2	4	1,700 fs	0,000 fs	x	0	0	x	18 px	0 px
3	4	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px
0	0	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px

Figure: Scenario option for *table with hierarchy*

The following example shows a „default“ representation of a *table with hierarchy*, where all hierarchy levels have a bottom border and levels are indicated by indented spaces.

		2014	2015	BU	Δ2014%	Δ2014	Δ2014%	ΔBU
	Regional Income	**244**	**300**	**388**	**+23%**	+56	+23%	-88
+	R&D Costs	93	56	111	-40%	-37	-40%	-55
+	Central Marketing	45	10	26	-78%	-35	-78%	-16
=	**Central Admin.**	**88**	**82**	**27**	**-7%**	-6	-7%	+55
+	Other Inc. & Costs	1	12	55	+1.100%	+11	▶	-43
+	Integration Costs	3	2	5	-33%	-1	-33%	-3
+	PPA	123	99	221	-20%	-24	-20%	-122
=	**Special Prod. Costs**	**300**	**198**	**123**	**-34%**	-102	-34%	+75
	Clean EBIT	**33**	**102**	**213**	**+209%**	+69	+209% ▶	-111
+	**Clean DA**	**96**	**51**	**145**	**-47%**	-45	-47%	-94
	Clean EBITDA	-23	51	22	-322%	+74	+322% ▶	+29
	COGS IIa (excl. PPA)	44	23	90	-48%	-21	-48%	-67
+	**SPC**	**45**	**5**	**99**	**-89%**	-40	-89%	-94
+	**PPA in COGS IIb**	**-23**	**12**	**88**	**-152%**	+35	+152%	-76
=	**COGS IIa (incl. PPA)**	**-24**	**17**	**114**	**-171%**	+41	+171%	-97
=	**Net Sales**	**376**	**555**	**466**	**+48%**	+179	+48%	+89

Figure: „default“ representation of *table with hierarchy*

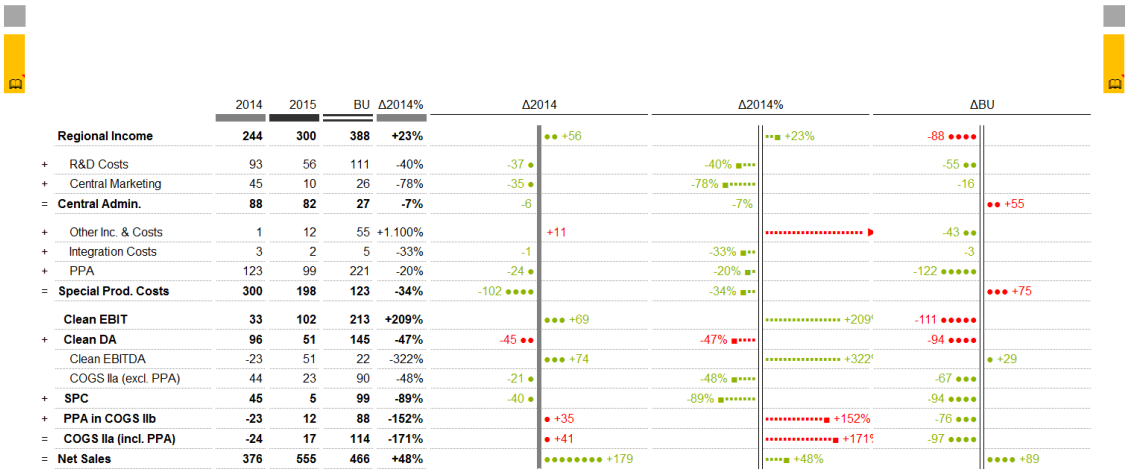
Examples

By replacing the default graph symbols personalized deviation bar charts can be designed easily.

	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG
42												
47		Hierarchy levels	Indent	Indent	Row height	Row height	Bold	Italic	Grey	Border	Row height	Row height
48			# spaces	ThereOf row		next row				Bottom		next row
49		1	0	4	1,700 fs	2,350 fs	x	0	0	x	18 px	25 px
50		2	2	4	1,700 fs	0,000 fs	x	0	0	x	18 px	0 px
51		3	4	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px
52		0	0	4	1,600 fs	0,000 fs	0	0	0	x	17 px	0 px
53												
54		Base variances										
55		Scaling	manual	automatic		Character bar		Width				
56		Y1		0,05		•		7,0 px				
57		Y2		0,00		•		7,0 px				
58		Limit										
59		Y1,Y2										
60												
61		Percent variances										
62		Scaling	manual	automatic		Character needle line	Character neg	Width				
63		Y1		8,78		•	▪	4,0 px				
64		Y2		1,36		•		4,0 px				
65		Limit										
66		Y1,Y2	200%									
67		Limit exceeding variances										
68		Value	200%									
69		Character pos.	▶									
70		Character neg.	◀									
71		Limit text										
72		Text	999%									
73		Text replacement pos										
74		Text replacement neg										

Figure: Selection ranges for graphical representation symbols

Bar blocks were replaced by bubbles (points) in absolute deviations and needle lines by dotted lines in percent deviations.

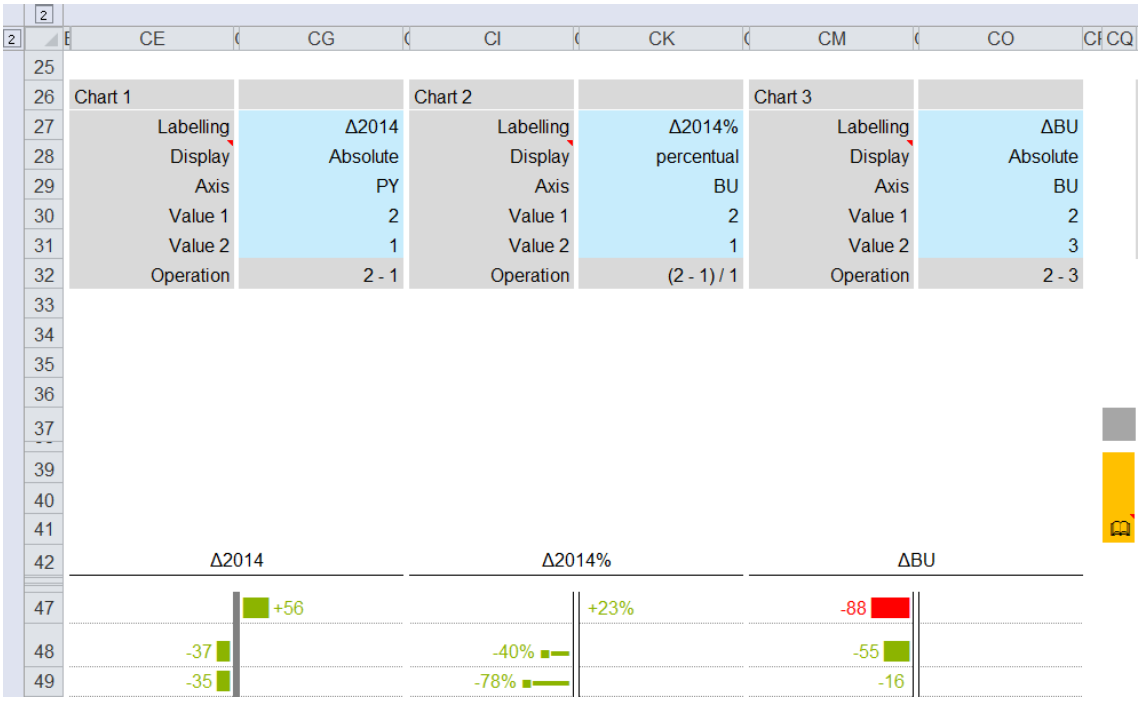


		2014	2015	BU	Δ2014%	Δ2014	Δ2014%	ΔBU
	Regional Income	**244**	**300**	**388**	**+23%**	+56	+23%	-88
+	R&D Costs	93	56	111	-40%	-37	-40%	-55
+	Central Marketing	45	10	26	-78%	-35	-78%	-16
=	**Central Admin.**	**88**	**82**	**27**	**-7%**	-6	-7%	+55
+	Other Inc. & Costs	1	12	55	+1.100%	+11		-43
+	Integration Costs	3	2	5	-33%	-1	-33%	-3
+	PPA	123	99	221	-20%	-24	-20%	-122
=	**Special Prod. Costs**	**300**	**198**	**123**	**-34%**	-102	-34%	+75
	Clean EBIT	**33**	**102**	**213**	**+209%**	+69	+209	-111
+	**Clean DA**	**96**	**51**	**145**	**-47%**	-45	-47%	-94
	Clean EBITDA	-23	51	22	-322%	+74	+322	+29
	COGS IIa (excl. PPA)	44	23	90	-48%	-21	-48%	-67
+	**SPC**	**45**	**5**	**99**	**-89%**	-40	-89%	-94
+	**PPA in COGS IIb**	**-23**	**12**	**88**	**-152%**	+35	+152%	-76
=	**COGS IIa (incl. PPA)**	**-24**	**17**	**114**	**-171%**	+41	+171	-97
=	**Net Sales**	**376**	**555**	**466**	**+48%**	+179	+48%	+89

Figure: *Table with hierarchy* using graph symbol substitution

9 Table chart settings

In this part the appearance of three possible bar graphs and calculation process in terms of absolute and percentage representation is determined.

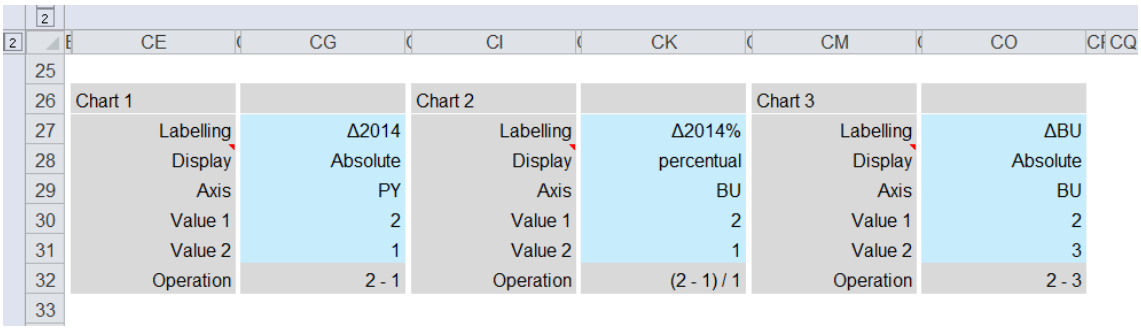


	CE	CG	CI	CK	CM	CO
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29	Axis	PY	Axis	BU	Axis	BU
30	Value 1	2	Value 1	2	Value 1	2
31	Value 2	1	Value 2	1	Value 2	3
32	Operation	2 - 1	Operation	(2 - 1) / 1	Operation	2 - 3

	Δ2014	Δ2014%	ΔBU
47	+56	+23%	-88
48	-37	-40%	-55
49	-35	-78%	-16

Figure: *Datainsert* range for chart description and respective part of chart display

Parameterizing input options are identical for all three charts.



	CE	CG	CI	CK	CM	CO
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29	Axis	PY	Axis	BU	Axis	BU
30	Value 1	2	Value 1	2	Value 1	2
31	Value 2	1	Value 2	1	Value 2	3
32	Operation	2 - 1	Operation	(2 - 1) / 1	Operation	2 - 3

Figure: *Datainsert* range for chart description

The options will be shown referring to *Chart 1*.

	CE	CG	CI	CK	CM	CO
25						
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29	Axis	PY	Axis	BU	Axis	BU
30	Value 1	2	Value 1	2	Value 1	2
31	Value 2	1	Value 2	1	Value 2	3
32	Operation	2 - 1	Operation	(2 - 1) / 1	Operation	2 - 3
33						

Figure: *Datainsert* range for three charts – Field *Labelling*

Labelling Text entry, showing the diagramm title.

The title appears in the middle of the chart above the axis.

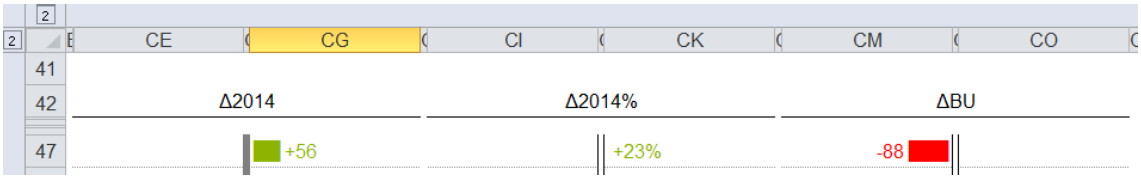


Figure: Display and position of chart label

Display

	CE	CG	CI	CK	CM	CO
25						
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29		Absolute	Axis	BU	Axis	BU
30		percentual	Value 1	2	Value 1	2
31	Value 2	1	Value 2	1	Value 2	3
32	Operation	2 - 1	Operation	(2 - 1) / 1	Operation	2 - 3
33						

Figure: Selection field *Display*

Display According to the selection <absolute> / <percentual> the appropriate chart type is generated.

Axis

	CE	CG	CI	CK	CM	CO
25						
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29	Axis	PY	Axis	BU	Axis	BU
30	ACT		Value 1	2	Value 1	2
31	BU		Value 2	1	Value 2	3
32	PY		Operation	(2 - 1) / 1	Operation	2 - 3
33	FC					

Figure: Selection field *axis* characterized by *data types*

Axis The axis is formatted according to the selected *data type*. There are the values of ACT, BU, PY, FC available

Value 1

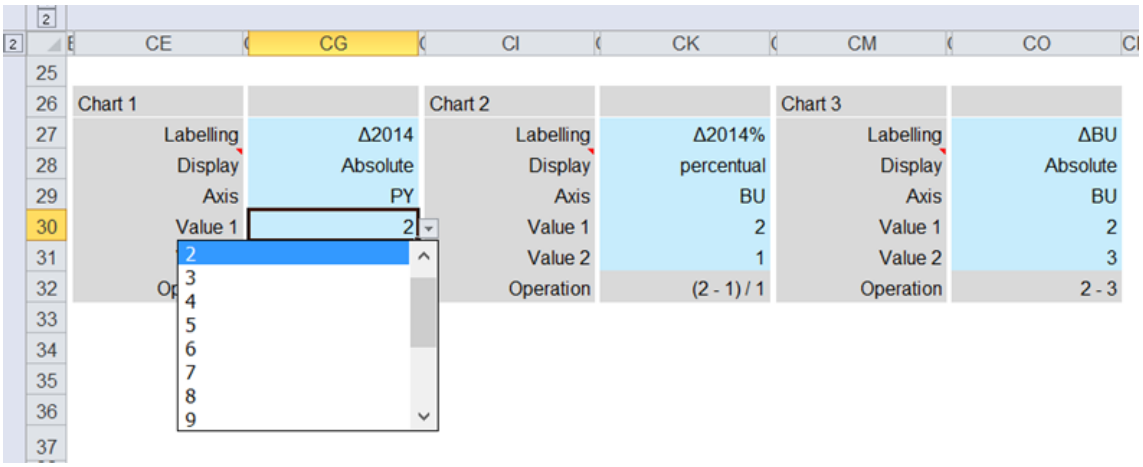


Figure: Selection field *value 1*

Value 1 The row numbers 1 to 15 of the value columns are available

Value 2

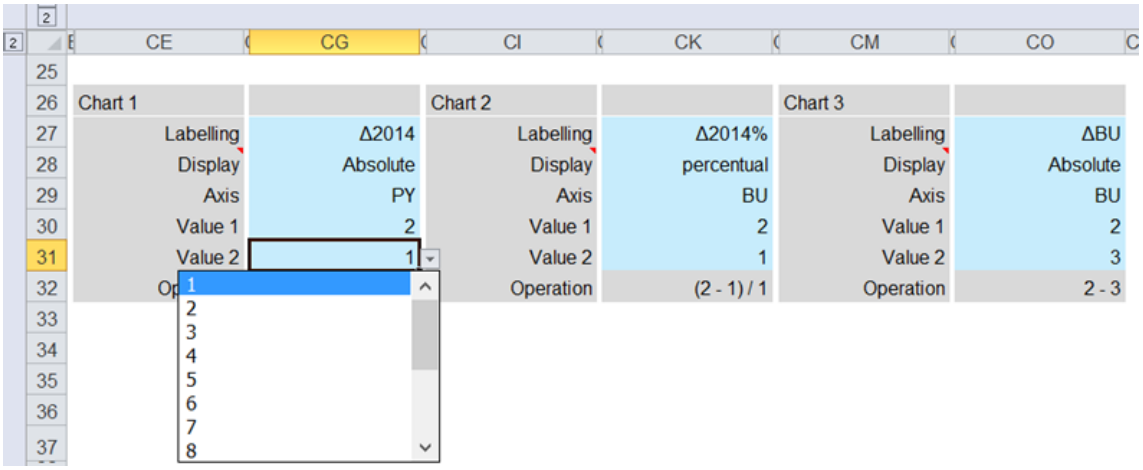


Figure: Selection field *value 2*

Value 2 The row numbers 1 to 15 of the value columns are available

Calculation process

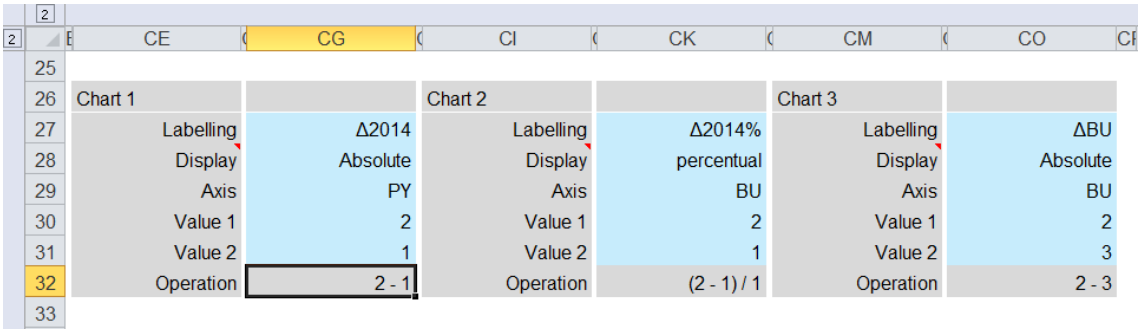
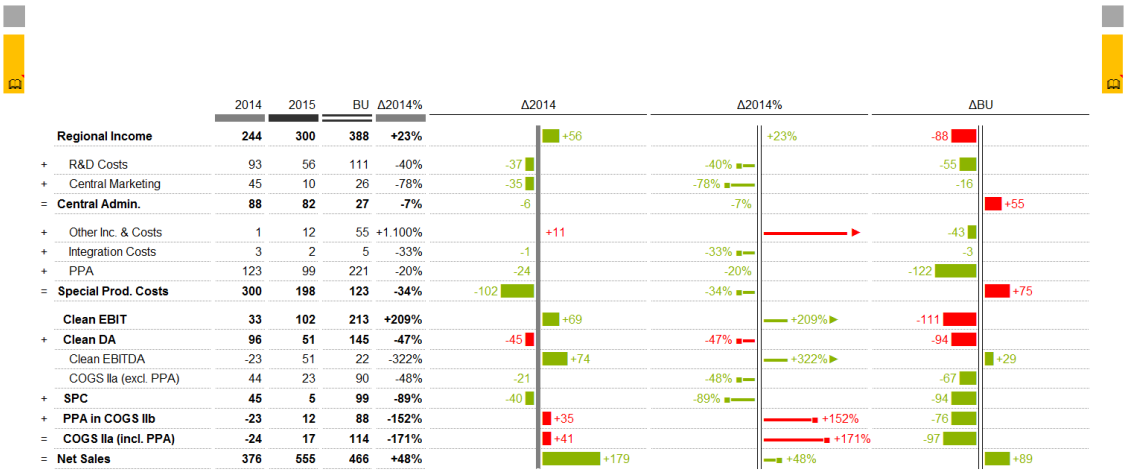


Figure: Operation according to absolute and relative representation

Operation If in field display <absolute> was choosen, the subtraction result from value 1 and value 2 form the representation for the deviation chart. When displaying <percentual> the subtraction is additionally divided by value 1

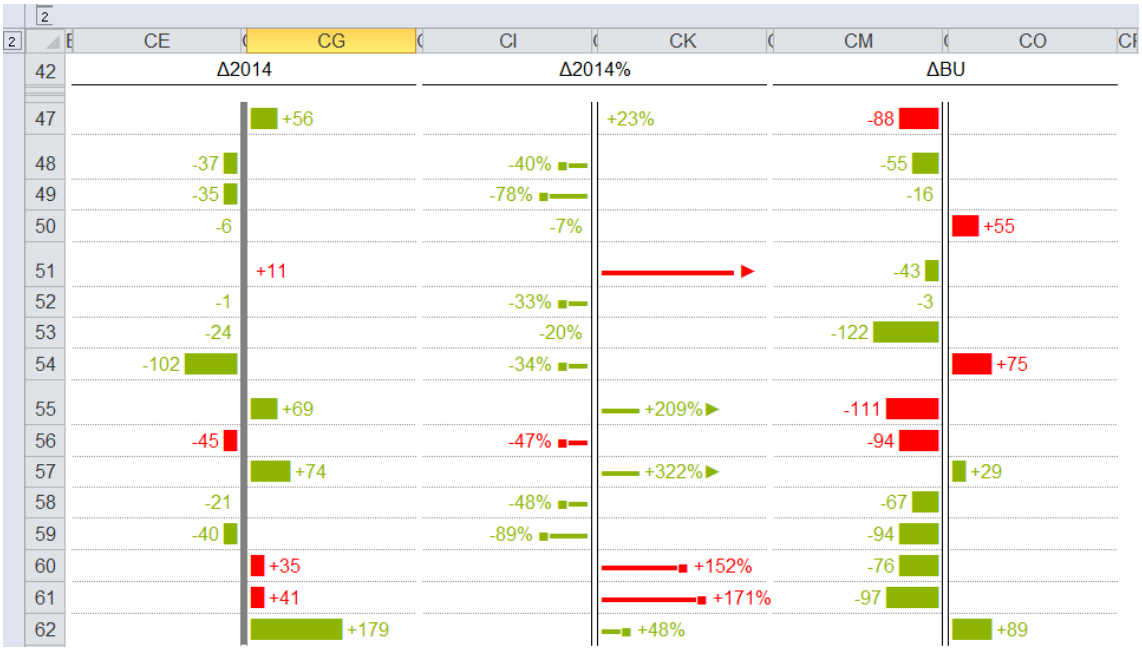
According to the inputs made in the above figure the resultung display will be the following, presented in the example below::

- absolute previous year deviation in chart 1,
- percentual deviation of previous year in chart 2 and
- absolute Actual-Budget-deviation in chart 3.



		2014	2015	BU	Δ2014%	Δ2014	Δ2014%	ΔBU
	Regional Income	**244**	**300**	**388**	**+23%**	+56	+23%	-88
+	R&D Costs	93	56	111	-40%	-37	-40%	-55
+	Central Marketing	45	10	26	-78%	-35	-78%	-16
=	**Central Admin.**	**88**	**82**	**27**	**-7%**	-6	-7%	+55
+	Other Inc. & Costs	1	12	55	+1.100%	+11		-43
+	Integration Costs	3	2	5	-33%	-1	-33%	-3
+	PPA	123	99	221	-20%	-24	-20%	-122
=	**Special Prod. Costs**	**300**	**198**	**123**	**-34%**	-102	-34%	+75
	Clean EBIT	**33**	**102**	**213**	**+209%**	+69	+209%	-111
+	**Clean DA**	**96**	**51**	**145**	**-47%**	-45	-47%	-94
	Clean EBITDA	-23	51	22	-322%	+74	+322%	+29
	COGS IIa (excl. PPA)	44	23	90	-48%	-21	-48%	-67
+	**SPC**	**45**	**5**	**99**	**-89%**	-40	-89%	-94
+	**PPA in COGS IIb**	**-23**	**12**	**88**	**-152%**	+35	+152%	-76
=	**COGS IIa (incl. PPA)**	**-24**	**17**	**114**	**-171%**	+41	+171%	-97
=	**Net Sales**	**376**	**555**	**466**	**+48%**	+179	+48%	+89

Figure: Table with absolute and percentual deviation charts



	CE	CG	CI	CK	CM	CO
42	Δ2014		Δ2014%		ΔBU	
47		+56		+23%	-88	
48	-37		-40%		-55	
49	-35		-78%		-16	
50	-6		-7%			+55
51		+11			-43	
52	-1		-33%		-3	
53	-24		-20%		-122	
54	-102		-34%			+75
55		+69		+209%	-111	
56	-45		-47%		-94	
57		+74		+322%		+29
58	-21		-48%		-67	
59	-40		-89%		-94	
60		+35		+152%	-76	
61		+41		+171%	-97	
62		+179		+48%		+89

Figure: Zoom on absolute and relative deviation charts

Variations 1

As can be seen in the following case, it may happen that, for example, no axis is to be displayed. In this case, the content of the field axis is simply set to <blank>.

	CE	CG	CI	CK	CM	CO
26	Chart 1		Chart 2		Chart 3	
27	Labelling	Δ2014	Labelling	Δ2014%	Labelling	ΔBU
28	Display	Absolute	Display	percentual	Display	Absolute
29	Axis		Axis		Axis	
30	Value 1	2	Value 1	2	Value 1	2
31	Value 2	1	Value 2	1	Value 2	3
32	Operation	2 - 1	Operation	(2 - 1) / 1	Operation	2 - 3

Figure: Deviation charts without axis

Variations 2

If the range will be used for other objects than deviation charts, by deleting all content of the input field in the charts the display range will be preserved. Visibility markers <x> for charts in chart selection range must be set.

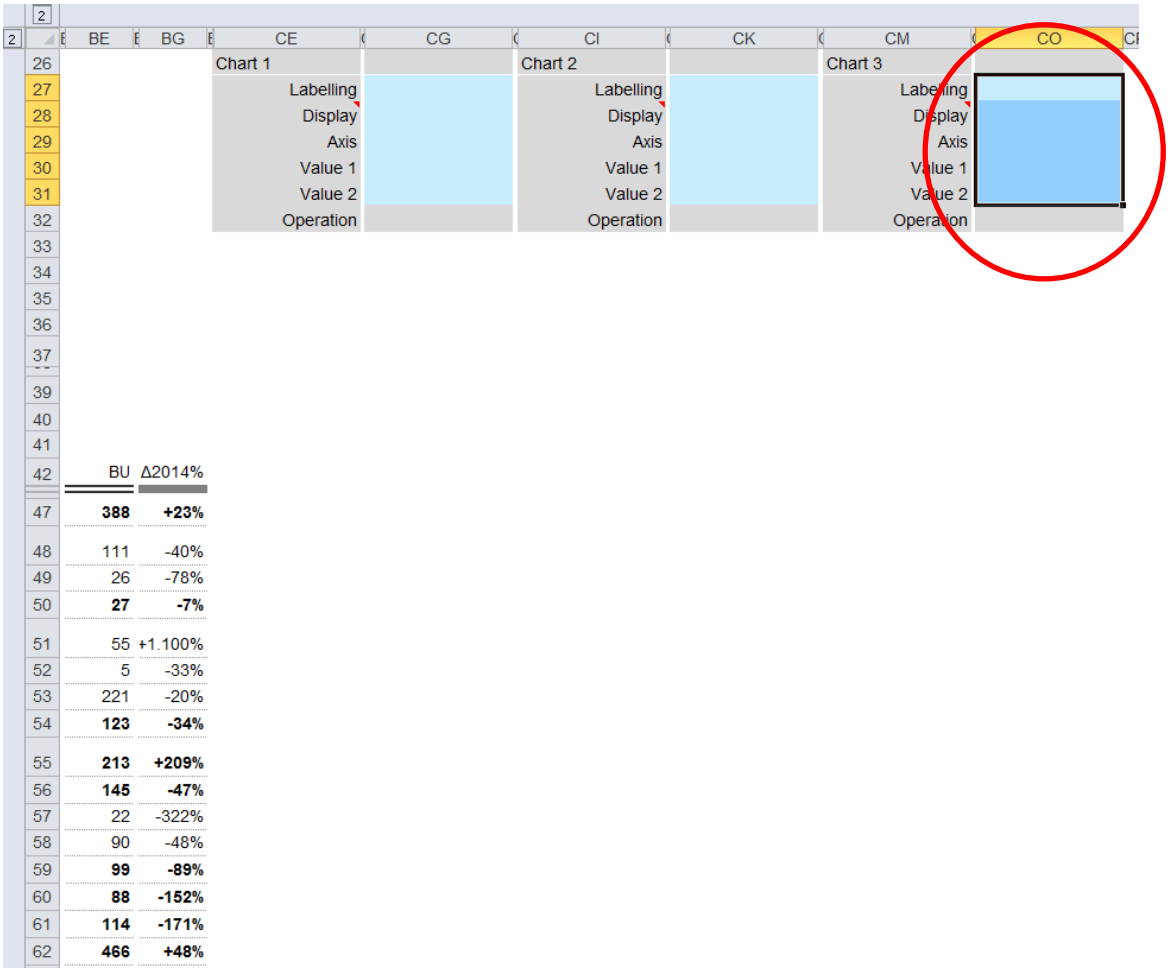


Figure: Space of deviation charts reserved for other chart types

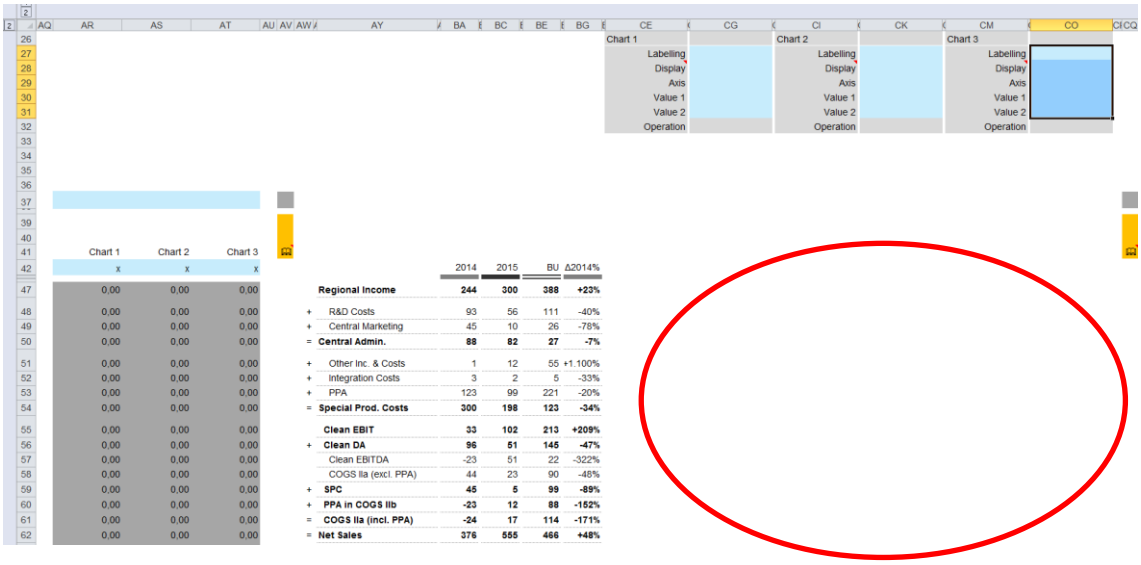


Figure: Table display with free-for-use chart range

Control panel

All of the previously discussed details of parameterizing can also be done very easily via control panel. This has the further advantage that the parameterization is performed in a targeted way and it is easier to see which parameters may not be necessary or are even missing. In addition,this also prevents from frequent switching in the worksheet.

With respect to the input rules the same as in the corresponding data entry fields apply.

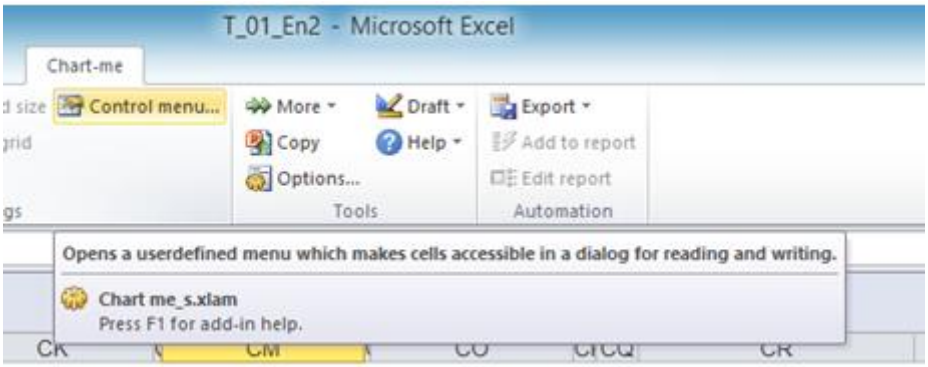


Figure: Selection *Control menu…*

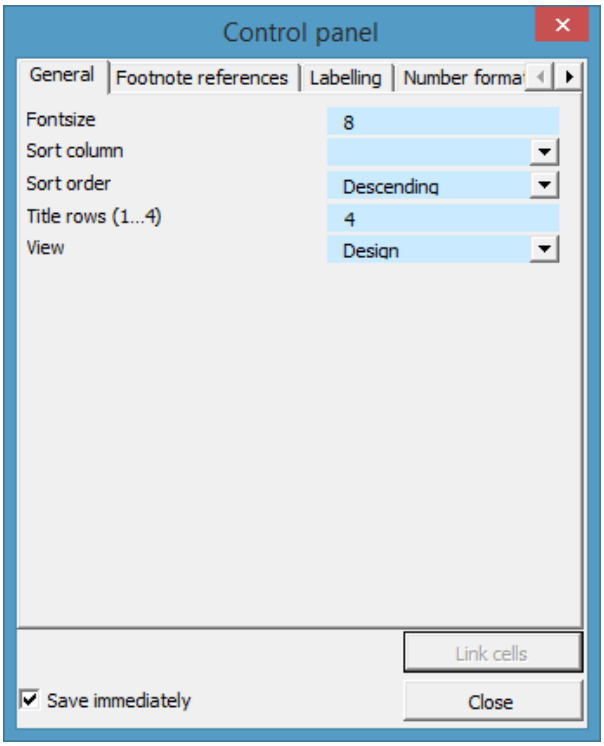


Figure: Control panel

Stylesheet

The stylesheets received a new range for table definitions.

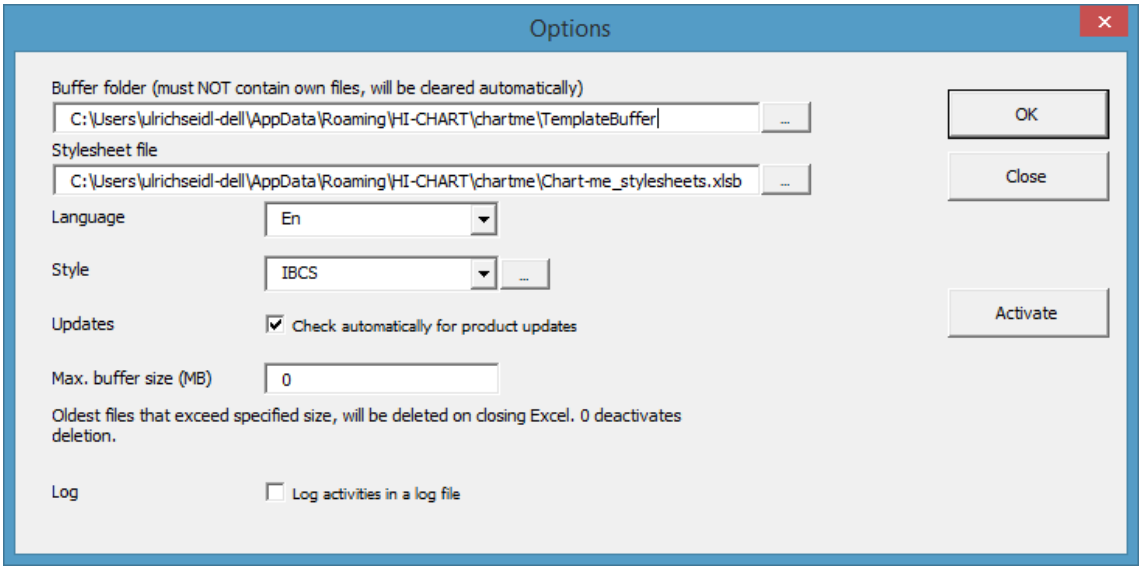
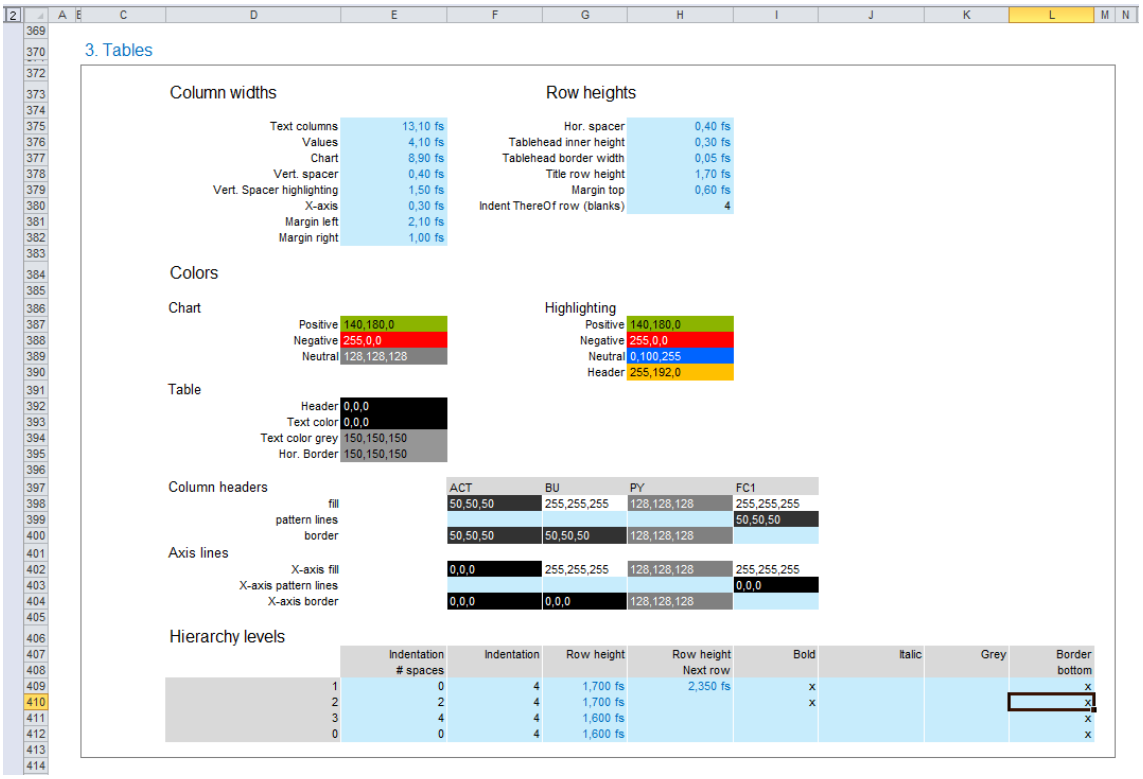


Figure: Calling Stylesheet via *Options*

New range 3. Tables



3. Tables

Column widths

Text columns	13,10 fs
Values	4,10 fs
Chart	8,90 fs
Vert. spacer	0,40 fs
Vert. Spacer highlighting	1,50 fs
X-axis	0,30 fs
Margin left	2,10 fs
Margin right	1,00 fs

Row heights

Hor. spacer	0,40 fs
Tablehead inner height	0,30 fs
Tablehead border width	0,05 fs
Title row height	1,70 fs
Margin top	0,60 fs
Indent ThereOf row (blanks)	4

Colors

Chart

Positive	140,180,0
Negative	255,0,0
Neutral	128,128,128

Highlighting

Positive	140,180,0
Negative	255,0,0
Neutral	0,100,255
Header	255,192,0

Table

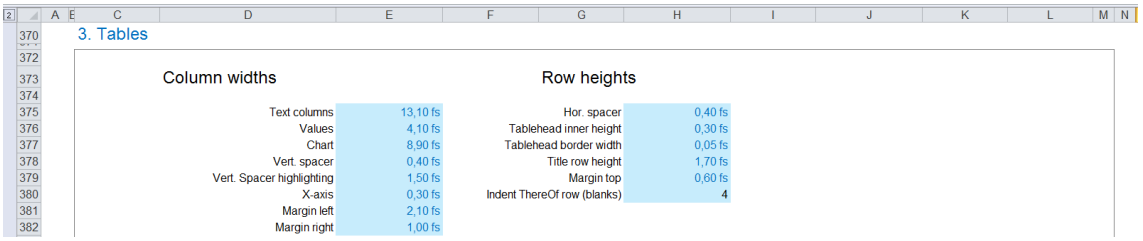
Header	0,0,0
Text color	0,0,0
Text color grey	150,150,150
Hor. Border	150,150,150

	ACT	BU	PY	FC1
Column headers				
fill	50,50,50	255,255,255	128,128,128	255,255,255
pattern lines				50,50,50
border	50,50,50	50,50,50	128,128,128	
Axis lines				
X-axis fill	0,0,0	255,255,255	128,128,128	255,255,255
X-axis pattern lines				0,0,0
X-axis border	0,0,0	0,0,0	128,128,128	

Hierarchy levels

	Indentation # spaces	Indentation	Row height	Row height Next row	Bold	Italic	Grey	Border bottom
1	0	4	1,700 fs	2,350 fs	x			x
2	2	4	1,700 fs		x			x
3	4	4	1,600 fs					x
0	0	4	1,600 fs					x

Figure: Default Stylesheet with new definitions range for tables



3. Tables

Column widths

Text columns	13,10 fs
Values	4,10 fs
Chart	8,90 fs
Vert. spacer	0,40 fs
Vert. Spacer highlighting	1,50 fs
X-axis	0,30 fs
Margin left	2,10 fs
Margin right	1,00 fs

Row heights

Hor. spacer	0,40 fs
Tablehead inner height	0,30 fs
Tablehead border width	0,05 fs
Title row height	1,70 fs
Margin top	0,60 fs
Indent ThereOf row (blanks)	4

Figure: Definitions range *column widths* and *row heights*

Hierarchy levels

	Indentation # spaces	Indentation	Row height	Row height Next row	Bold	Italic	Grey	Border bottom
1	0	4	1,700 fs	2,350 fs	x			x
2	2	4	1,700 fs		x			x
3	4	4	1,600 fs					x
0	0	4	1,600 fs					x

Figure: Definitions range *hierarchy levels*

For example, when all *hierarchy levels* are provided with an underlying bottom border, an existing sheet can be duplicated and renamed and then be modified accordingly.

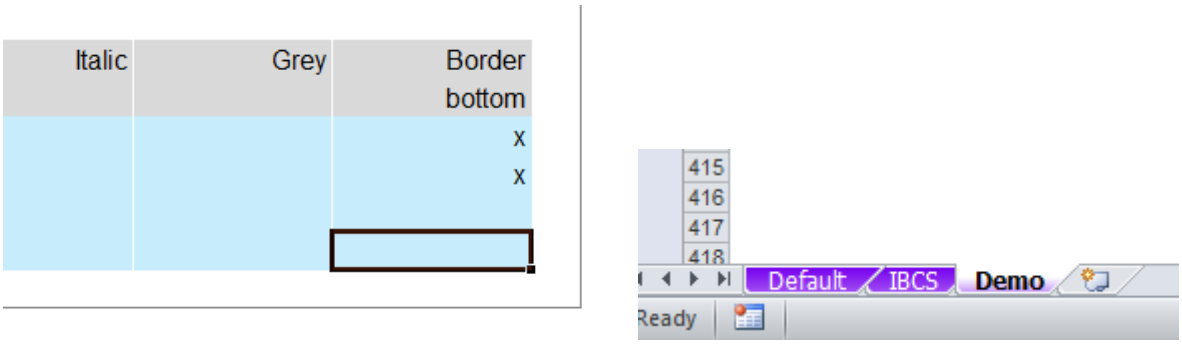


Figure: Stylesheet – Example with newly created sheet *Demo*

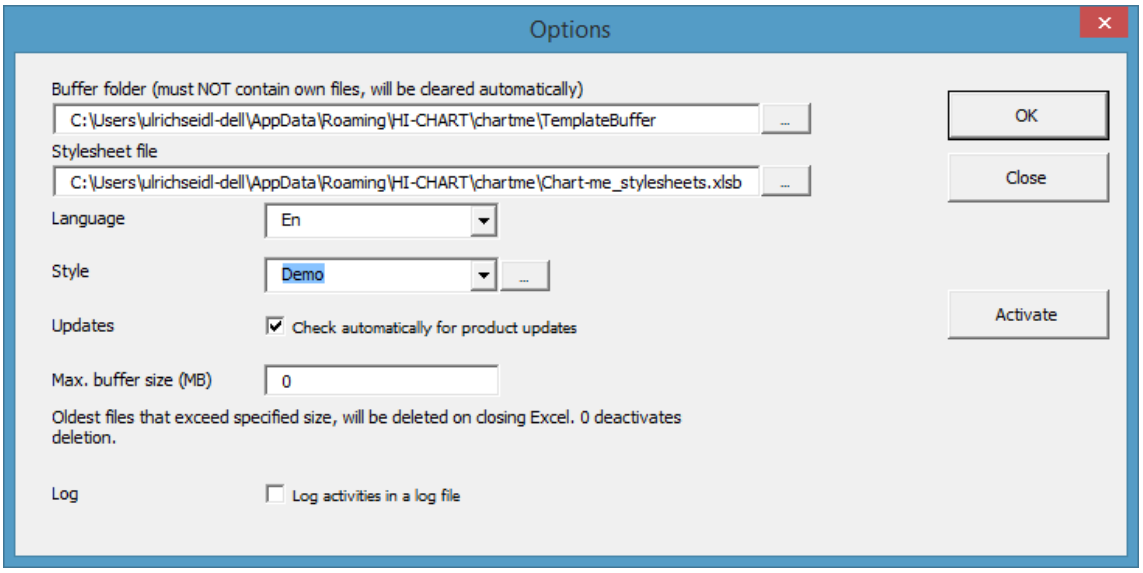
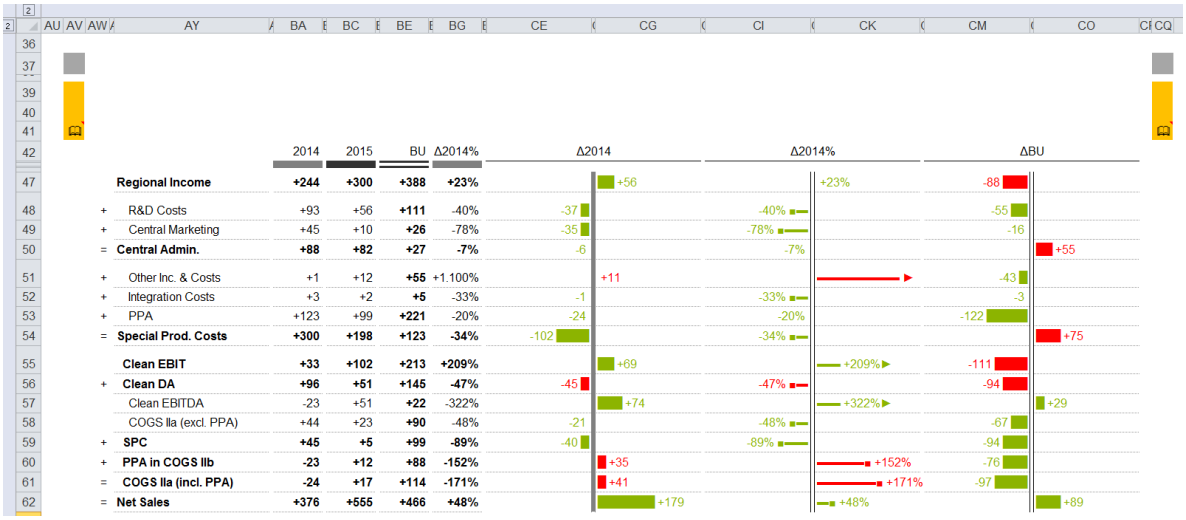


Figure: New style *Demo*

Other features...

Function Edit

In the Table module the Edit function is also active. Thus, font size changes and new style sheet definitions can be applied to tables.



		2014	2015	BU	Δ2014%
	Regional Income	**+244**	**+300**	**+388**	**+23%**
+	R&D Costs	+93	+56	**+111**	-40%
+	Central Marketing	+45	+10	**+26**	-78%
=	**Central Admin.**	**+88**	**+82**	**+27**	**-7%**
+	Other Inc. & Costs	+1	+12	**+55**	+1.100%
+	Integration Costs	+3	+2	**+5**	-33%
+	PPA	+123	+99	**+221**	-20%
=	**Special Prod. Costs**	**+300**	**+198**	**+123**	**-34%**
	Clean EBIT	**+33**	**+102**	**+213**	**+209%**
+	**Clean DA**	**+96**	**+51**	**+145**	**-47%**
	Clean EBITDA	-23	+51	**+22**	-322%
	COGS IIa (excl. PPA)	+44	+23	**+90**	-48%
+	**SPC**	**+45**	**+5**	**+99**	**-89%**
+	**PPA in COGS IIb**	**-23**	**+12**	**+88**	**-152%**
=	**COGS IIa (incl. PPA)**	**-24**	**+17**	**+114**	**-171%**
=	**Net Sales**	**+376**	**+555**	**+466**	**+48%**

Figure: Graphical table layout acording to old stylesheet definition

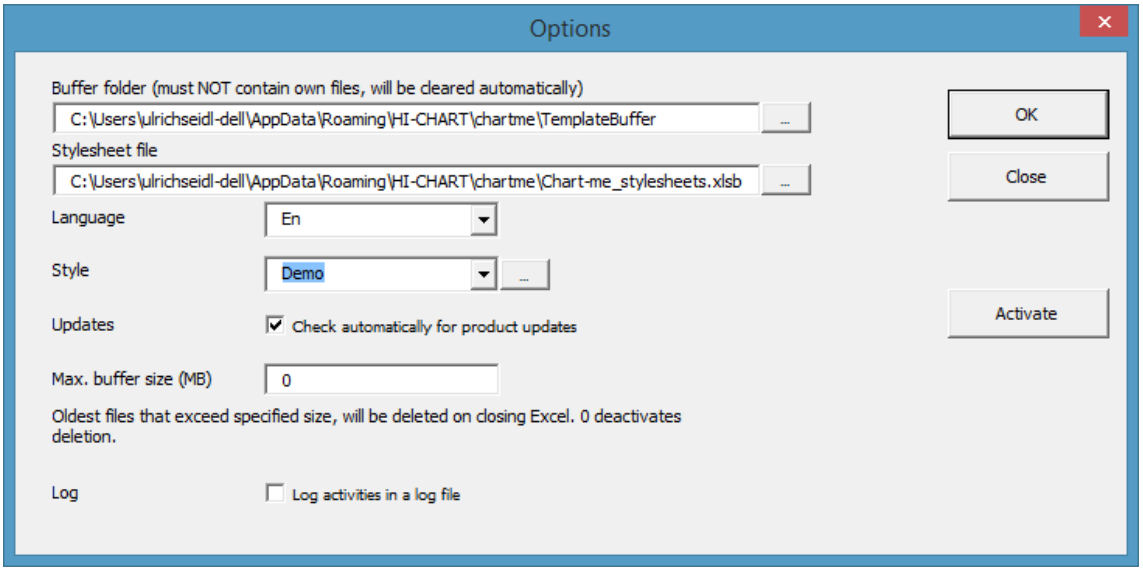


Figure: Style switched to *Demo*

Calling menu *Edit* provides new stylesheet definition for present table.

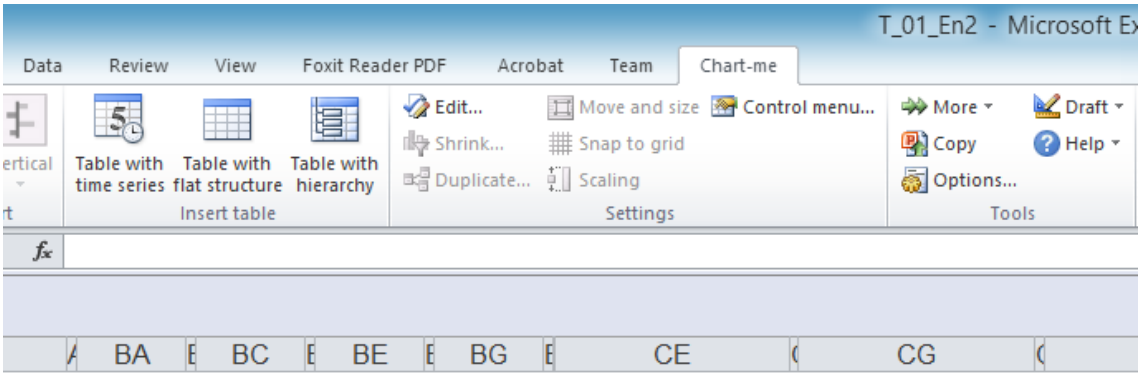


Figure: Activate function *Edit*

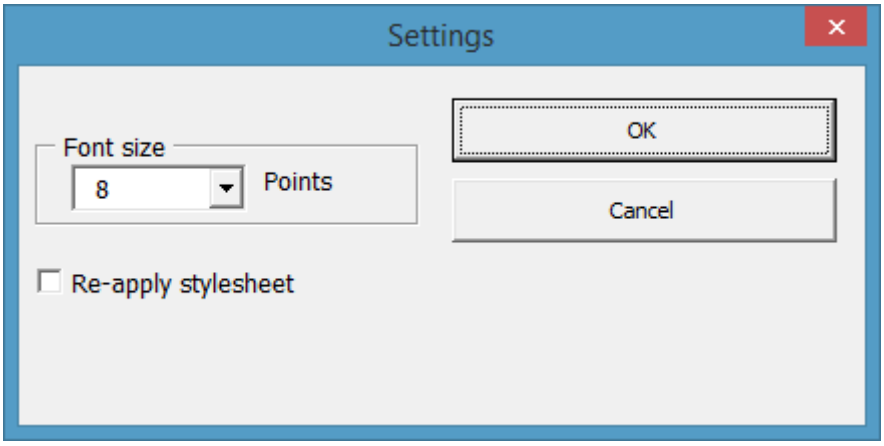


Figure: Selection options under *edit*

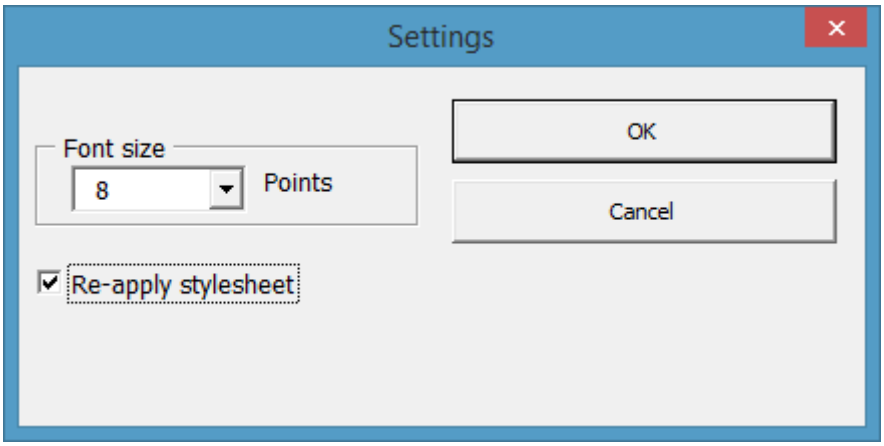


Figure: *Settings– Re-apply stylesheet marked*

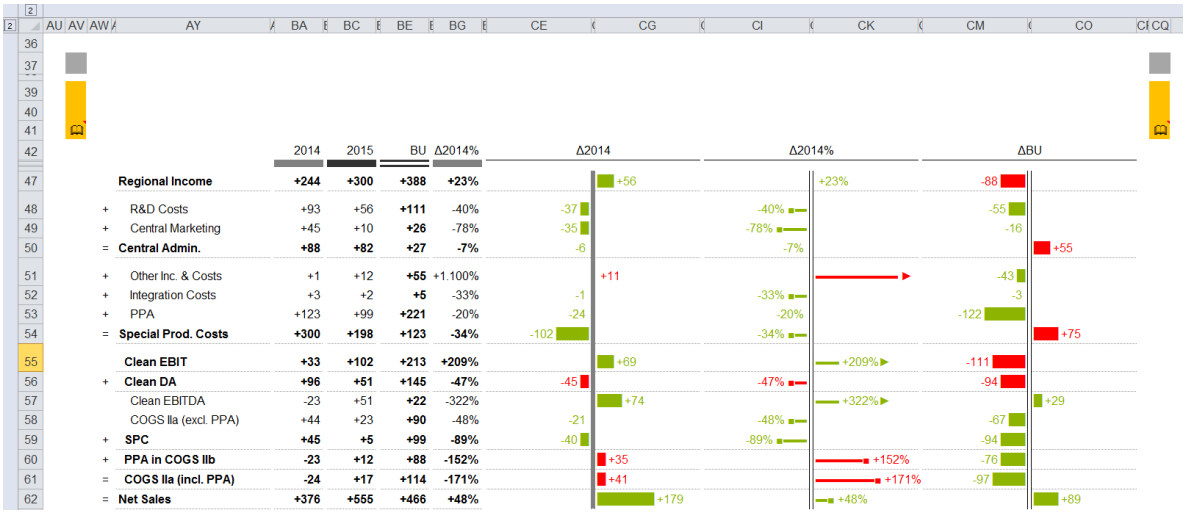
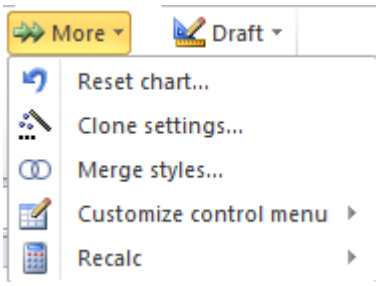


Figure: New graphical table with settings from stylesheet *Demo*

Tools

More



– Reset chart...

Resets a chart to its original configuration and deletes all data.

When *Reset chart…* is selected from the layout page with one or more charts, the following dialog window appears, in which you can select the charts to be reset.

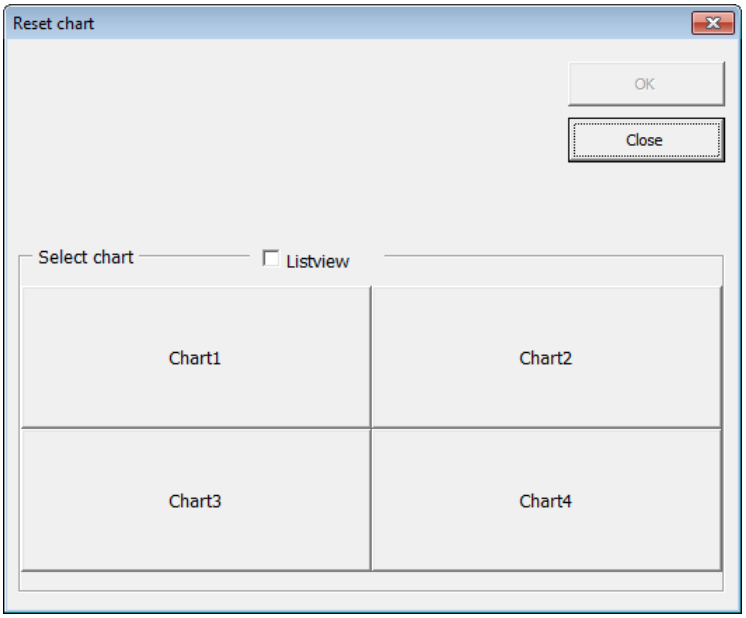
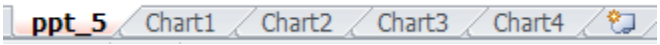


Figure: Dialog box Reset chart

– Clone settings…

For every chart on the page layout sheet, there is a chart configuration sheet, which contains all chart settings and data entry ranges for that single chart.



The *Clone settings...* function copies the settings of one such chart configuration tab to another. You may specify both a source workbook and worksheet and a destination workbook and worksheet. Both workbooks must already be opened in Excel.

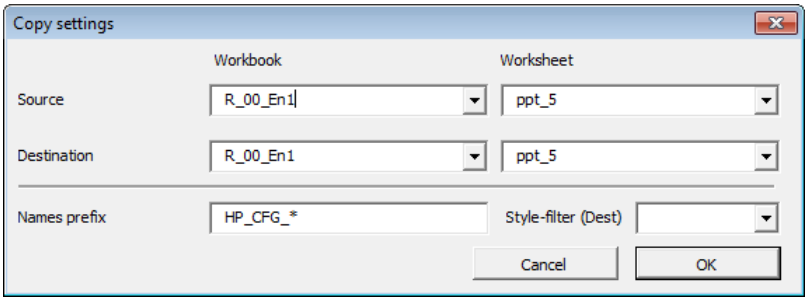


Figure: Copy settings dialog box for clone function

All data entry and configuration range are named with Excel name ranges. The clone function copies all name range ranges to the new worksheet, which correspond to the character string defined in the *Names prefix* field.

The *Style-filter* allows you to further limit the copy process to a particular cell format.

– Merge styles…

Excel defined cell styles are often duplicated, when copying multiple tabs into a single Excel workbook. This occurs primarily if the cell styles carry the same predefined name but vary slightly in their definition.

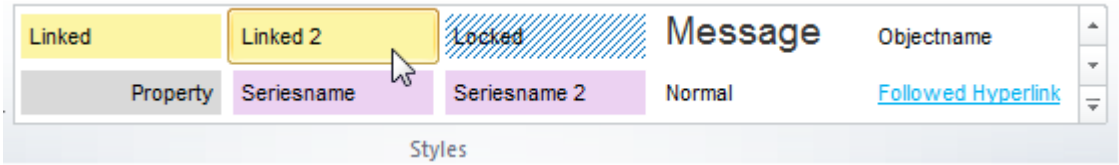


Figure: Excel cell styles

Although the duplication of cell styles does not limit their functionality, it is cumbersome for any user trying to apply them. The *Merge styles…* feature allows you to resolve this duplication either manually or automatically.

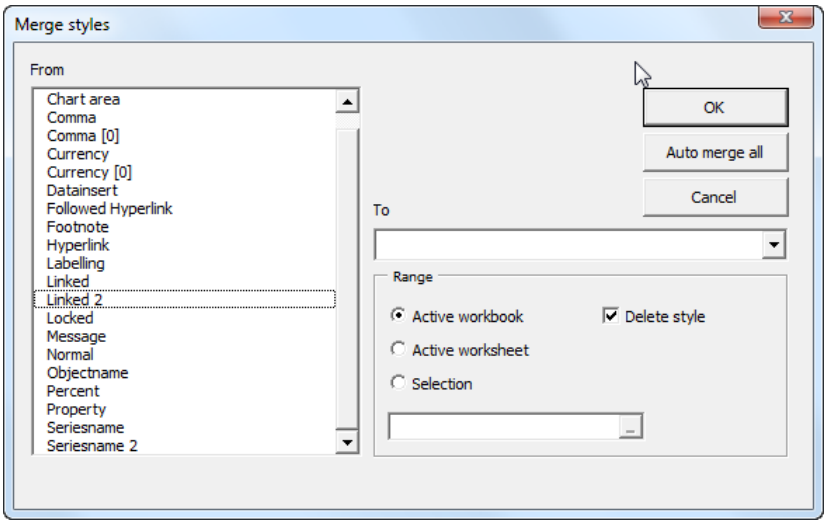


Figure: Dialog box Merge styles

You can select duplicate cell styles from the *From*-list to be merged with a style specified in the *To*-list. In the *Range* block, you can specify whether to apply these changes to the active workbook, the active worksheet, or a marked selection. Deleting styles is not recommended for any range selection other than the active workbook.

Alternatively you can remove all duplicate styles via the *Auto merge all* button, which also deletes obsolete styles upon completion.

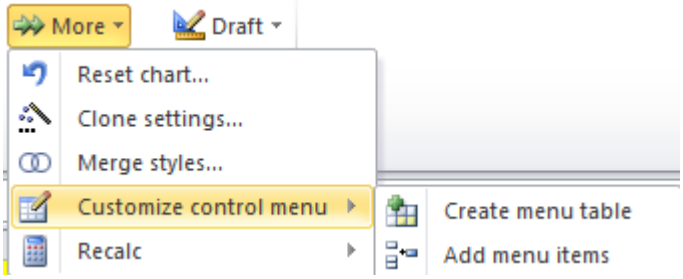
Show chart sheets

Chart-me XLS automatically hides chart control sheets on chart insertion. This function controls visibility of chart control sheets.

Sharepoint compatibility

Workbooks created with Chart-me XLS can be displayed and edited in SharePoint and MS-Office 365. For this purpose this function is needed as preparation. Please apply this function only to a copy of your original workbook, because any further editing is very limited.

Customize control menu



Create menu table

The *Customize control menu* items provide you with the option of defining special menus in your Excel workbooks.

Highlight a cell range on the worksheet tab, which will later be hidden to the user. Select from the *Chart-me* menu *More* > *Customize control menu* > *Create menu table* to create a definition table, which can then be used to customize the menu in each worksheet. The definition table requires 5 columns and a dynamic number of rows. A blank menu table consists of 13 rows and an additional row for every menu item. *Chart-me XLS* creates this basic definition table for you with the *Create menu table* feature.

Menu control	
Mnu_Labels_VPos	3
Mnu_Labels_Width	130
Mnu_Text_Box_VPos	133
Mnu_Text_Box_Width	100
Mnu_Style_DataInput	Datainsert
Mnu_Style_Labelling	Labelling
Mnu_Style_Property	Property

Register	Text	Cell reference	Control	Option
Register 1				
Mnu_End				

Figure: Empty menu table

Add menu items

You can now create your own menu entries by adding custom rows into an existing menu table.

The image below shows three configuration cells.

General	
Column thickness	Weight 3
First category start X	0 px
Chart 1	
Visible	Yes

Figure: Example for custom configuration cells

Highlight the cells to be added into your menu table. Empty rows may be selected without affecting the menu table, as they are automatically filtered from the menu table.

General	
Column thickness	Weight 3
First category start X	0 px
Chart 1	
Visible	Yes

Figure: Highlight configuration values

Now select from the *Chart-me* menu *More* > *Customize control menu* > *Add menu items.* The blue configuration cells are added as menu items to the menu table.

Menu control	
Mnu_Labels_VPos	3
Mnu_Labels_Width	130
Mnu_Text_Box_VPos	133
Mnu_Text_Box_Width	100
Mnu_Style_DataInput	Datainsert
Mnu_Style_Labelling	Labelling
Mnu_Style_Property	Property

Register	Text	Cell reference	Control	Option
Register 1	Column thickness	AG25	Mnu_Edit	VALIDATION_LIST_OPTIONAL:HP_CFG_LIST_ColumnWidths_Text
	First category start X	AG26	Mnu_Edit	
	Visible	AG28	Mnu_Edit	VALIDATION_LIST_MATCHREQUIRED:HP_XLIST_YesNo
Mnu_End				

Figure: Menu table with three new menu items

The new menu items will be displayed in the control panel (*Control menu)*.

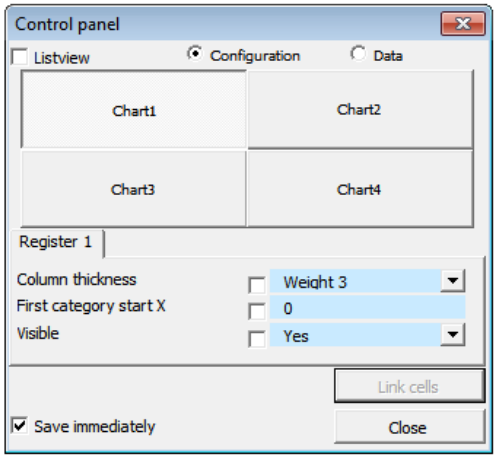


Figure: Control panel with new menu items

If the menu entries are deactivated, make sure the cell format of the input cells are open for editing. Right-click the configuration cells and click on *Format Cells…*, select the Protection tab and uncheck the *Locked* checkbox.

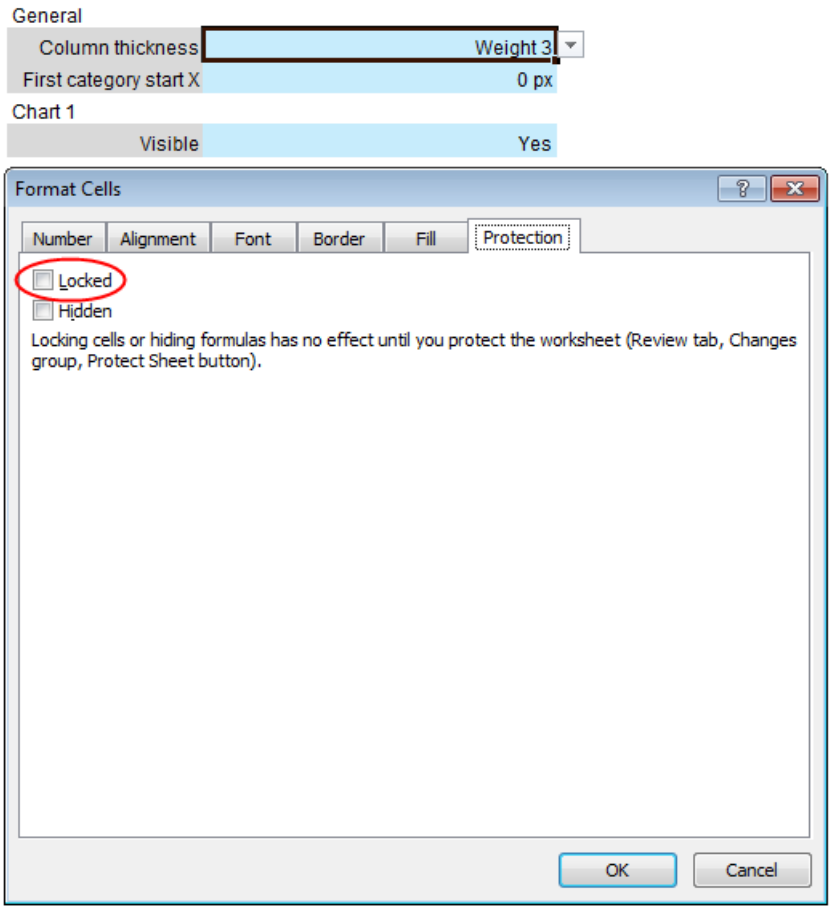


Figure: Unlock cell formatting

Once the configuration cells are unlocked, the control panel entry range will be open for editing.

In order to distribute the menu entries across multiple menu tabs, specify different register names in the *Menu control* cell range. A register name needs to be listed to the left of the first menu entry of that register.

Menu control	
Mnu_Labels_VPos	3
Mnu_Labels_Width	130
Mnu_Text_Box_VPos	133
Mnu_Text_Box_Width	100
Mnu_Style_DataInput	Datainsert
Mnu_Style_Labelling	Labelling
Mnu_Style_Property	Property

Register	Text	Cell reference	Control	Option
General	Column thickness	AG25	Mnu_Edit	VALIDATION_LIST_OPTIONAL:HP_CFG_LIST_ColumnWidths_Text
	First category start X	AG26	Mnu_Edit	
Chart 1	Visible	AG28	Mnu_Edit	VALIDATION_LIST_MATCHREQUIRED:HP_XLIST_YesNo
Mnu_End				

Figure: Entry of register names in the definition table

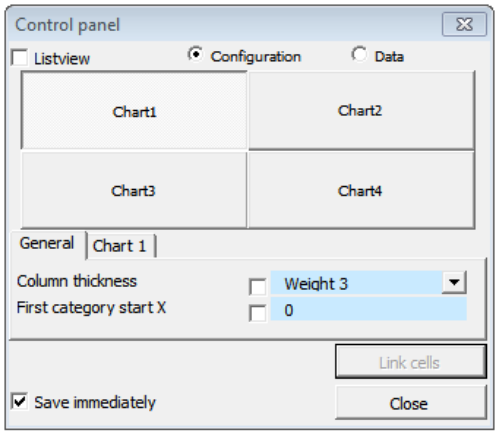


Figure: Control panel with multiple register tabs

The following list details possible menu entries for the menu control table:

Mnu_Labels_VPos

Position of menu item label measured in points, starting from the left edge of the dialog window

Mnu_Labels_Width

Width of menu item label measured in points

Mnu_Text_Box_VPos

Position of menu item text range measured in points, starting from the left edge of the dialog window

Mnu_Text_Box_Width

Width of menu item text range measured in points

Mnu_Style_DataInput

Cell style for configuration cell, to be displayed in menu control

Mnu_Style_Labelling

Cell style for labeling (alternative 1)

Mnu_Style_Property

Cell style for labeling (alternative 2)

The Mnu_Style_* cell styles (*Mnu_Style_DataInput, Mnu_Style_Labelling und Mnu_Style_Property*) are essential for the *More > Customize control menu > Add menu items* function. New entries to the control menu will be added only if the data input cell carries the cell style *Mnu_Style_DataInput,* and the data cell to its left is defined as either cell style *Mnu_Style_Labelling* or *Mnu_Style_Property*.

Explanation of the menu control table columns:

Register

The name of the control menu tab, listed only once next to the first entry of the tab.

Text

Label of entry item to be displayed in the control menu.

Cell reference

Cell reference of the data value to be displayed in control menu. Cell references are listed in A1-labelling convention or Excel defined names and are references within the same worksheet (not the entire workbook).

Control

Carries either the value *Mnu_Edit* to denote a data entry item or *Mnu_Separator* for a blank line.

Option

May denote a validation list, if the data entry cell offers a dropdown menu, which was previously defined through the Excel *Data Validation* feature.

Example:

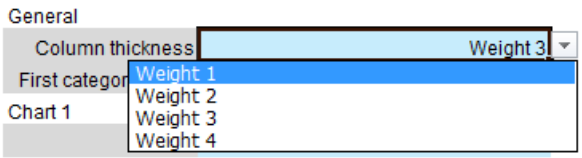


Figure: Configuration cell with data validation dropdown list

Register	Text	Cell reference	Control	Option
Register 1	Column thickness	AG25	Mnu_Edit	VALIDATION_LIST_OPTIONAL:HP_CFG_LIST_ColumnWidths_Text
	First category start X	AG26	Mnu_Edit	
	Visible	AG28	Mnu_Edit	VALIDATION_LIST_MATCHREQUIRED:HP_XLIST_YesNo
Mnu_End				

Figure: Control menu entries with data validation dropdown definitions

The data validation lists are prefixed with a character string. Either:

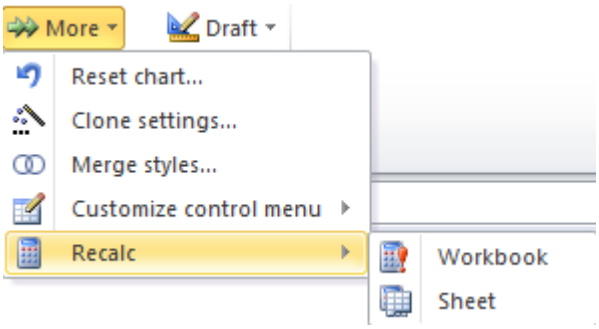
VALIDATION_LIST_MATCHREQUIRED

To denote that the entry value must correspond to a value on the validation list, or

VALIDATION_LIST_OPTIONAL

To denote that the entry value may be chosen from, but doesn't have to correspond to a value on the validation list.

– Recalc



The *Recalc* function can be used to either recalculate the entire workbook or the current worksheet. Unlike the Excel Recalc function, *Chart-me XLS* sets the status of all workbook or worksheet cells to "not updated" and subsequently initiates a full recalculation.

This feature may prove useful when Excel fails to initiate a full recalculation when complex charts have been created.

Copy (for PowerPoint)

The *Copy* function places the entire page layout on the clipboard.

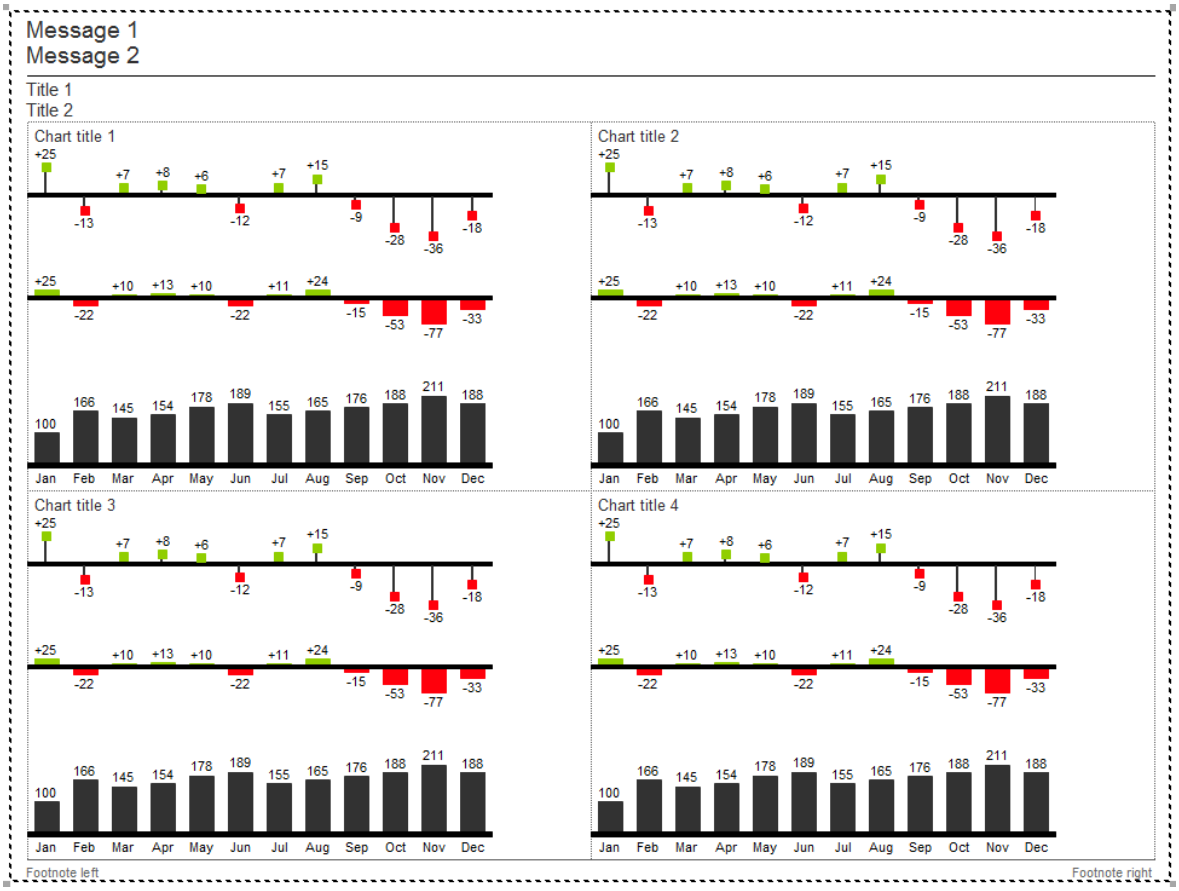


Figure: Page layout copy cell range

You can paste the copied range into PowerPoint or Word with the *File* > *Paste Special* > *Paste link* feature. The copied chart can then be updated as needed.

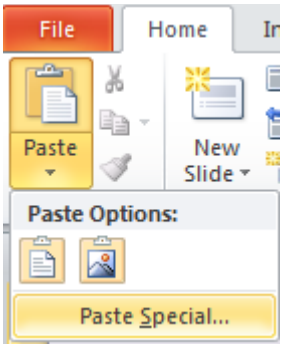


Figure: Paste Special

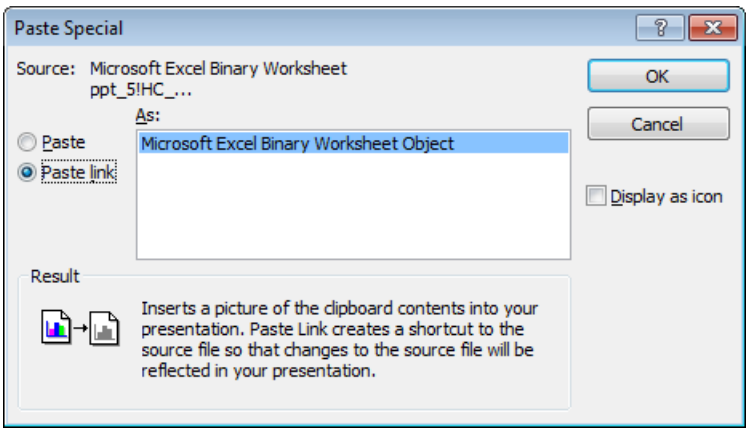


Figure: Paste link

Set the linked object size in PowerPoint to 100% in order to achieve the same image size as in Excel.

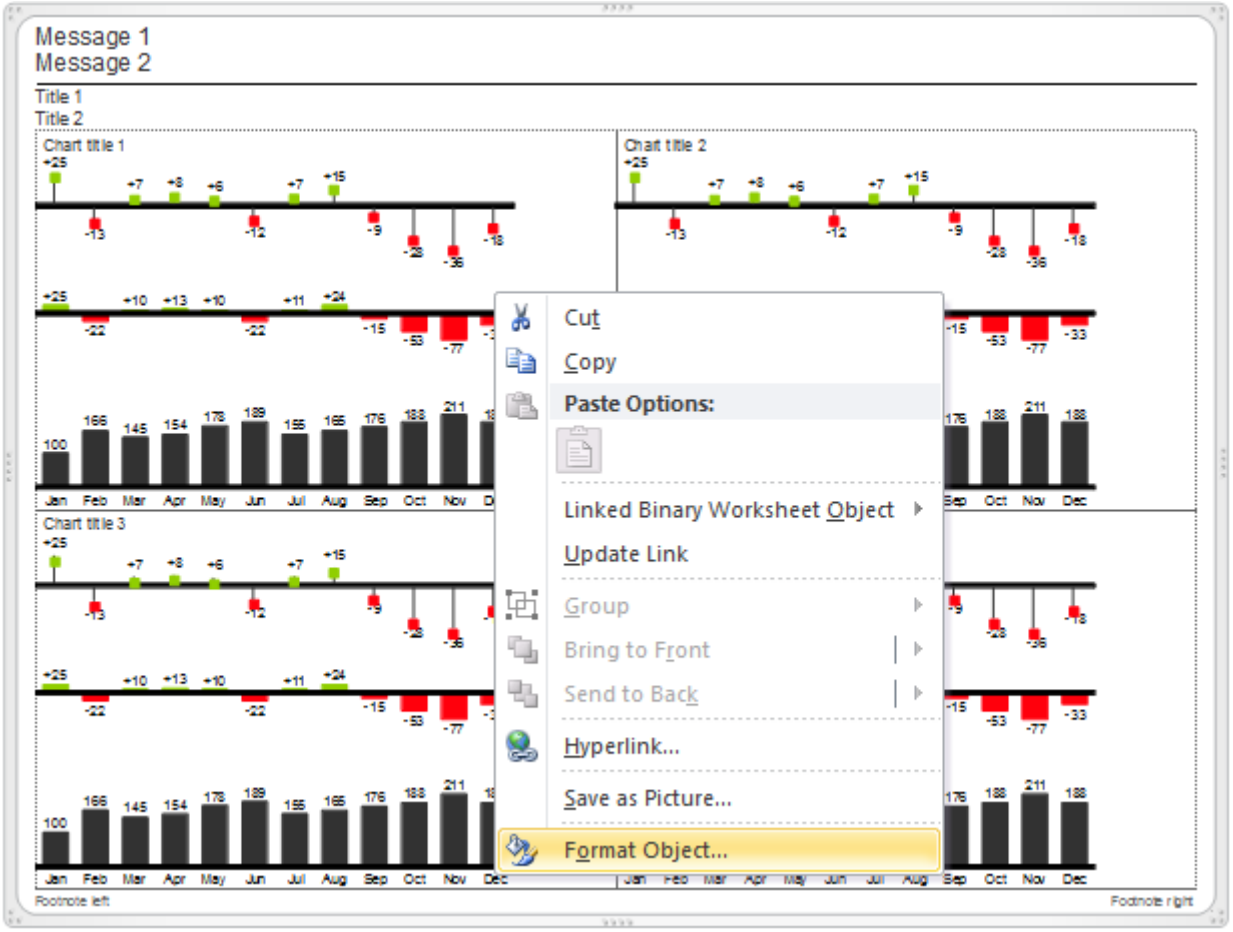


Figure: Format linked object in PowerPoint

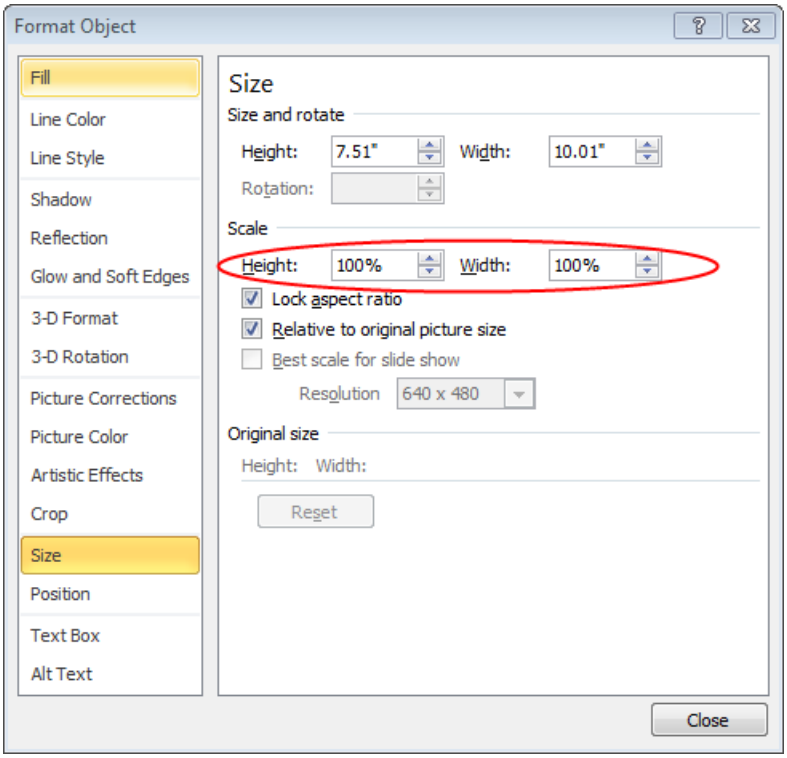


Figure: Set object size to 100%

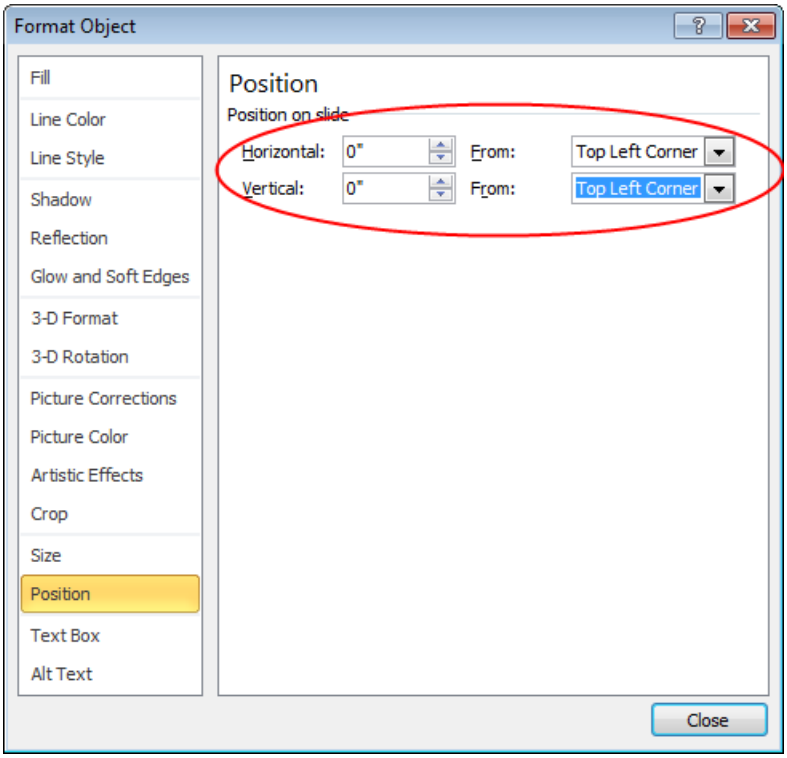


Figure: Set horizontal and vertical linked object position to 0

Options…

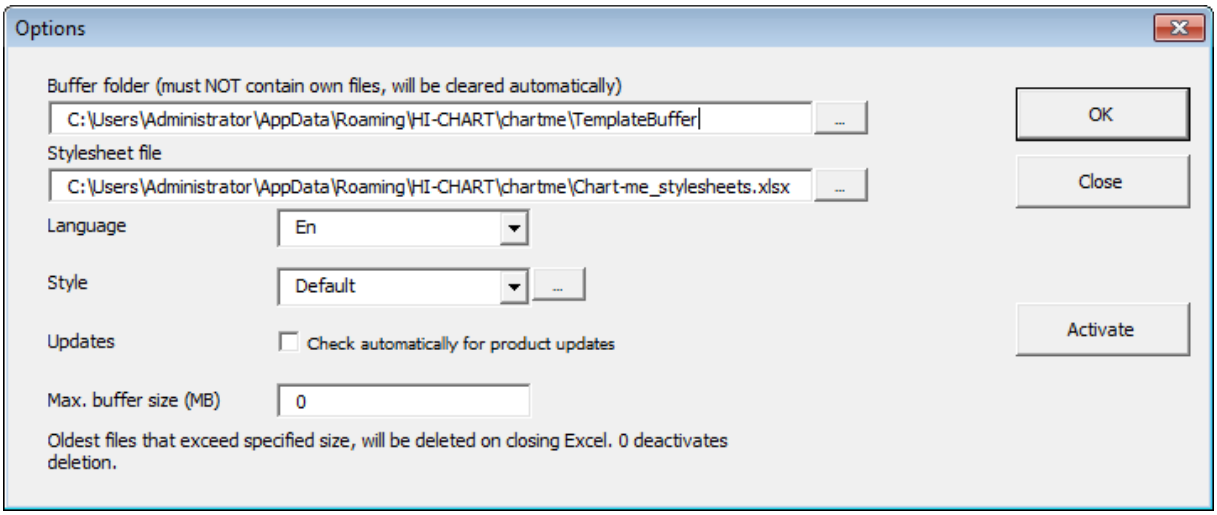


Figure: Options dialog box

The options dialog box allows you to modify path, language, and style settings and activate the license for your copy of *Chart-me XLS*.

The *Master Template Folder* contains the Master Templates, which are applied when inserting new chart templates.

The *Buffer Folder* serves as temporary storage space during the processing and rendering of *Chart-me XLS* objects (please refer to *Background Information* for further details).

NOTE: All content of the buffer folder will be deleted when installing a new version of *Chart-me XLS***! Never save any of your work in this folder!**

The *Stylesheet file* is both the directory path and file name for the *Chart-me* style sheet. During the standard installation, the style sheet file is saved in the user profile. The style sheet can also be saved to a central directory to provide easy access for working groups.

– Change Language

Chart-me XLS supports both German *(De)* and English *(En)* language settings. The language setting affects the *Chart-me XLS* user interface as well as language display on the page layout and chart template worksheets.

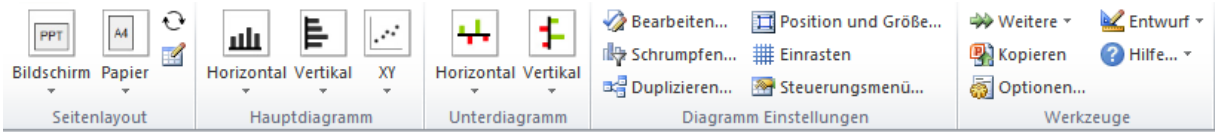


Figure: *Chart-me* menu band in German

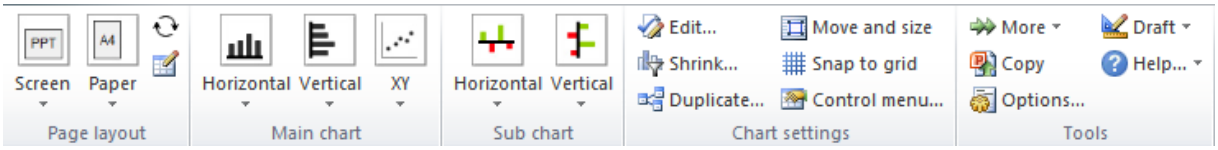
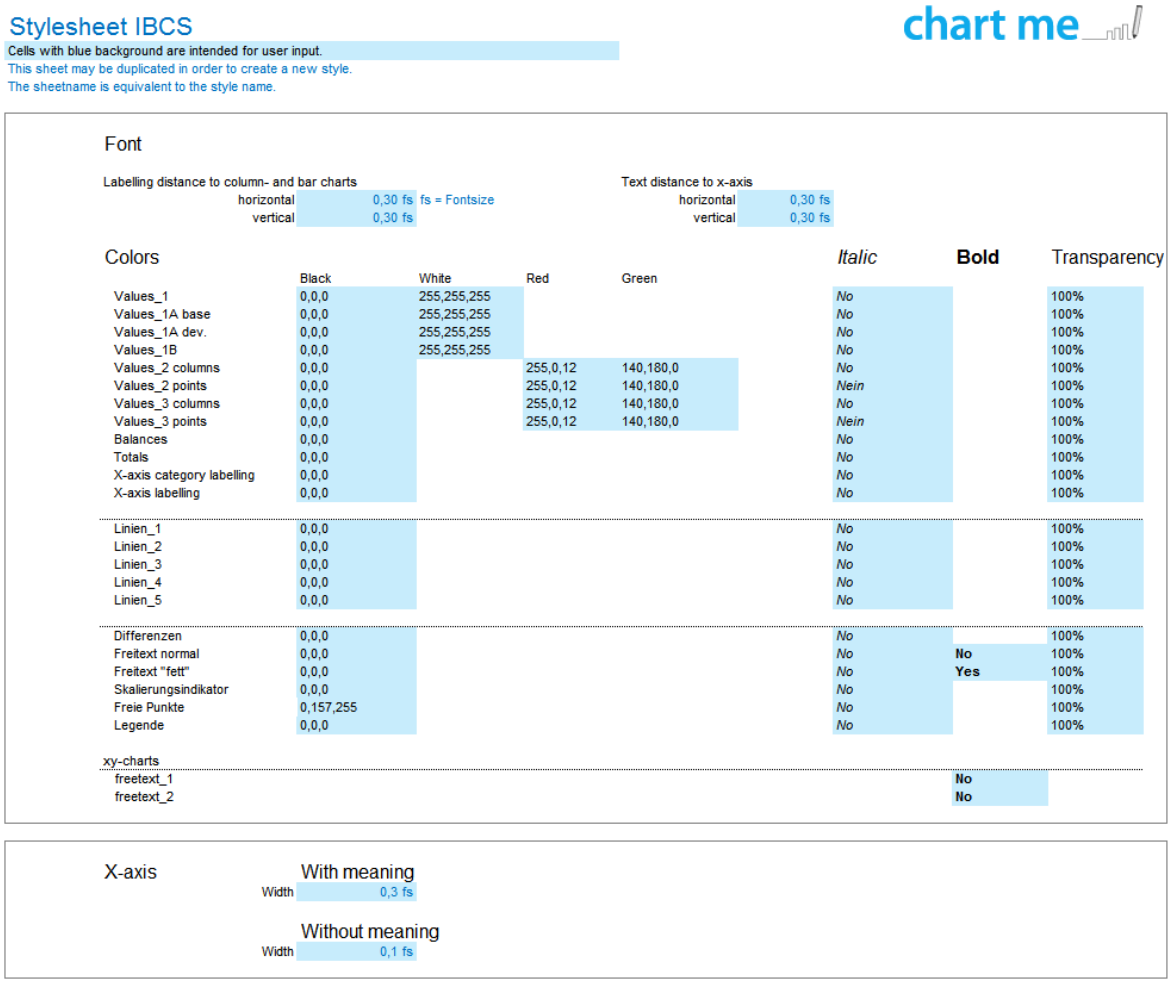


Figure: *Chart-me* menu band in English

– Apply Style

Style denotes a collection of predefined settings for colors, line thickness, category widths, etc., which are applied when inserting a new chart. The basic installation package of *Chart-me XLS* includes the styles *Default* and *IBCS*. You can open (and modify) styles by clicking on „...“ next to the Style dropdown selection box.



Stylesheet IBCS

Cells with blue background are intended for user input.
This sheet may be duplicated in order to create a new style.
The sheetname is equivalent to the style name.

chart me

Font

Labelling distance to column- and bar charts

horizontal	0,30 fs	fs = Fontsize
vertical	0,30 fs	

Text distance to x-axis

horizontal	0,30 fs
vertical	0,30 fs

Colors

	Black	White	Red	Green	*Italic*	**Bold**	Transparency
Values_1	0,0,0	255,255,255			*No*		100%
Values_1A base	0,0,0	255,255,255			*No*		100%
Values_1A dev.	0,0,0	255,255,255			*No*		100%
Values_1B	0,0,0	255,255,255			*No*		100%
Values_2 columns	0,0,0		255,0,12	140,180,0	*No*		100%
Values_2 points	0,0,0		255,0,12	140,180,0	*Nein*		100%
Values_3 columns	0,0,0		255,0,12	140,180,0	*No*		100%
Values_3 points	0,0,0		255,0,12	140,180,0	*Nein*		100%
Balances	0,0,0				*No*		100%
Totals	0,0,0				*No*		100%
X-axis category labelling	0,0,0				*No*		100%
X-axis labelling	0,0,0				*No*		100%
Linien_1	0,0,0				*No*		100%
Linien_2	0,0,0				*No*		100%
Linien_3	0,0,0				*No*		100%
Linien_4	0,0,0				*No*		100%
Linien_5	0,0,0				*No*		100%
Differenzen	0,0,0				*No*		100%
Freitext normal	0,0,0				*No*	**No**	100%
Freitext "fett"	0,0,0				*No*	**Yes**	100%
Skalierungsindikator	0,0,0				*No*		100%
Freie Punkte	0,157,255				*No*		100%
Legende	0,0,0				*No*		100%
xy-charts							
freetext_1						**No**	
freetext_2						**No**	

X-axis

With meaning	
Width	0,3 fs
Without meaning	
Width	0,1 fs

Figure: IBCS style sheet

The style sheet file contains a single worksheet with all settings relevant for chart formatting. The name of the worksheet reflects the style option available in the *Options* dialog box. You can define

new styles by duplicating one of the existing sheets and modifying various settings according to your needs.

The style sheet file is located in the current users profile path:
C:\Users\[user name]\AppData\Roaming\HI-CHART\chartme\Chart-me_stylesheets.xlsx
This is the directory path the way you would see it in *Windows Vista* und *Windows 7*.

NOTE: Only the blue shaded cells of the style sheet may be edited, i.e. overwritten. In order for the style sheet to be interpreted correctly, the structure of the file may not be change, i.e., you cannot add or delete rows or columns or move cell blocks to other positions.

– Updates > Check automatically for product updates

When the box is checked, a notification will pop up on screen whenever an updated product version becomes available.

– Max. buffer size (MB)

In order to prevent the buffer directory from overflowing, the *Max. Buffer size* setting automatically deletes files in the template buffer file when the set buffer size is reached. Least recently used and saved data files are eliminated first. A data value of 0 in the buffer size entry value deactivates the deletion of any files in the buffer directory. Please also refer to *Background Information > File buffering*.

– Activate License

Upon initial installation of *Chart-me XLS* on your personal computer, you obtain a demo license for testing purposes limited to a 30 day period. This testing period begins when you launch MS Excel with the *Chart-me XLS* add-in installed and activate the demo version. The *Chart-me XLS* option on the menu bar will read *Chart-me XLS DEMO.* The *Chart-me* ribbon band will then read Chart-me *DEMO (nn days remaining).*

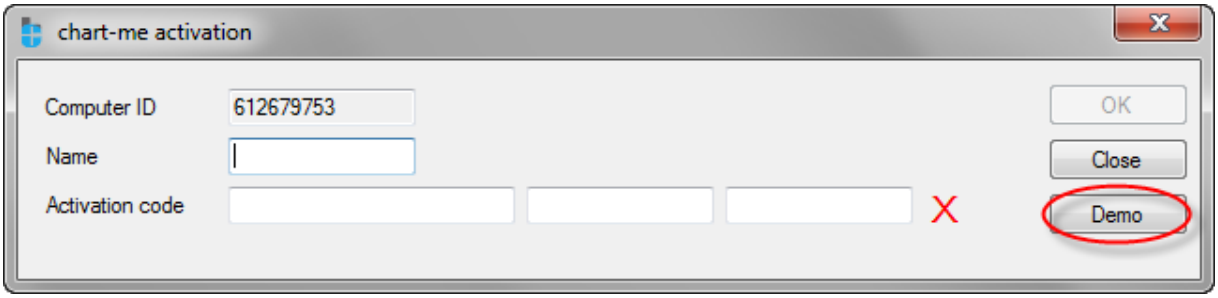


Figure: Activate the 30-day demo license

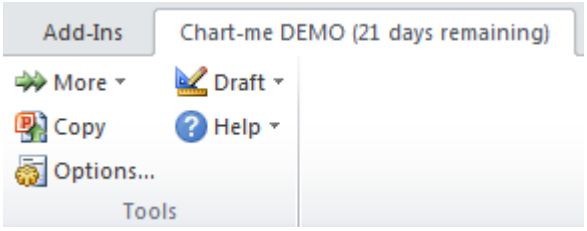


Figure: *Chart-me* Menu ribbon showing the remaining days left for the demo license

During the demo period, *Chart-me XLS* will occasionally remind you about the status and remaining days of the demo license and your option to purchase this useful and very reasonably priced software app. We look forward to welcoming you as a paying member to the *Chart-me* family.

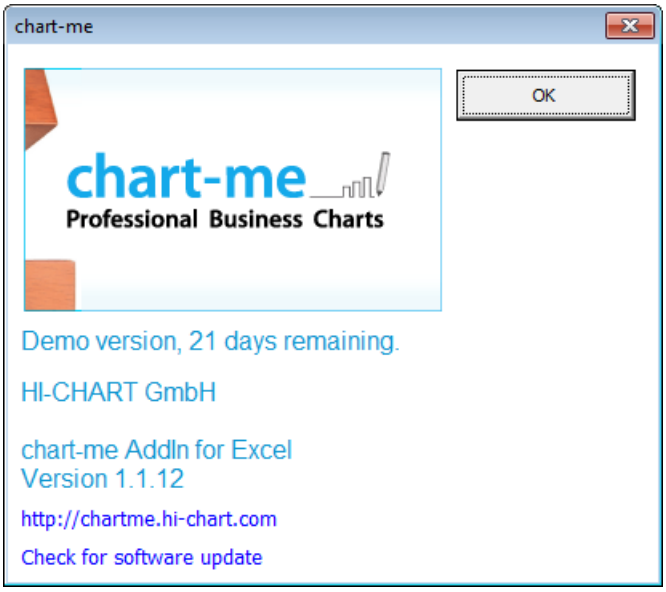


Figure: *Chart-me XLS* demo reminder

Once your demo period has expired, or if you haven't activated the demo period at all, the *Chart-me* menu tab will display an "expired" status:

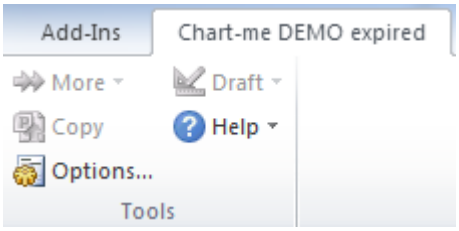


Figure: Deactivated *Chart-me* menu tab

Use the *Activate* button in the *Options* dialog box to activate *Chart-me XLS*. Since the activation process must be executed with the administrator user, the following User Account Control dialog window will pop up under Windows Vista, which you need to confirm with *Yes*.

Figure: User Account Control

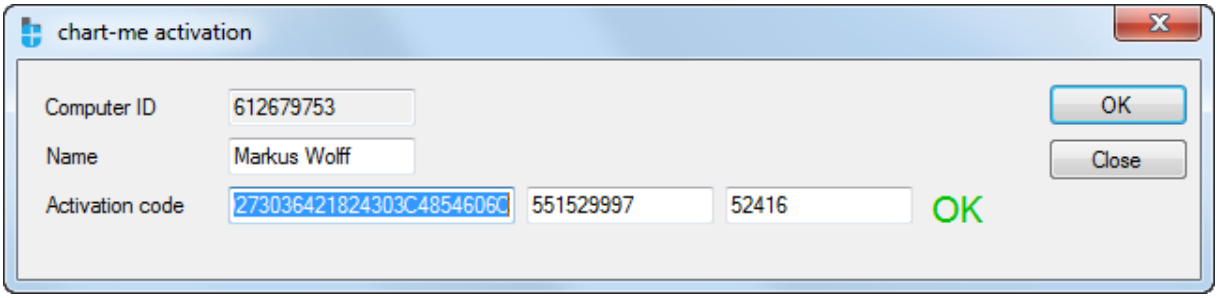
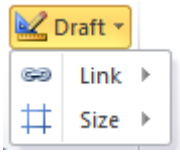


Figure: *Chart-me XLS* activation dialog box

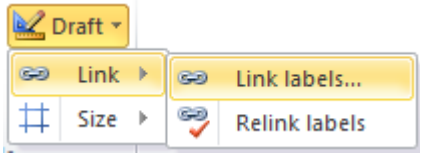
You need to enter your name and the 3 parts of your license code. Once the license code has been accepted, close and re-launch Excel.

Once the demo period has expired, the *Demo* button will no longer be displayed.

Draft functions



– Link



Link labels

The *Link labels* function allows you to customize the data point labels in the charts you create.

In the following example, the labels of the column data points refer to the scaled values represented in the chart, rather than the actual base values.

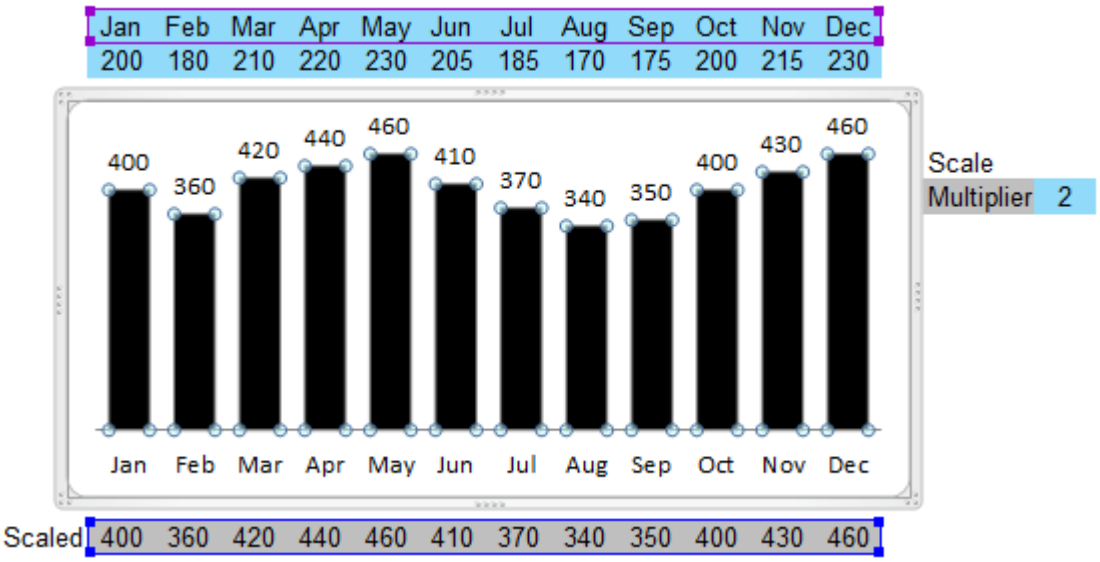


Figure: Self-compiled chart displaying incorrect data labels

Excel 2013 provides functionality allowing you to link the labeling of the data points to a separate cell range. In older versions of Excel, this is also possible, however only by individually relinking every single label of a data point, which can prove to be very time consuming and tedious.

The *Chart-me XLS Link labels* function provides a quick and easy way to speed up that process. Select the data labels series in the chart and navigate to the *Link labels* function.

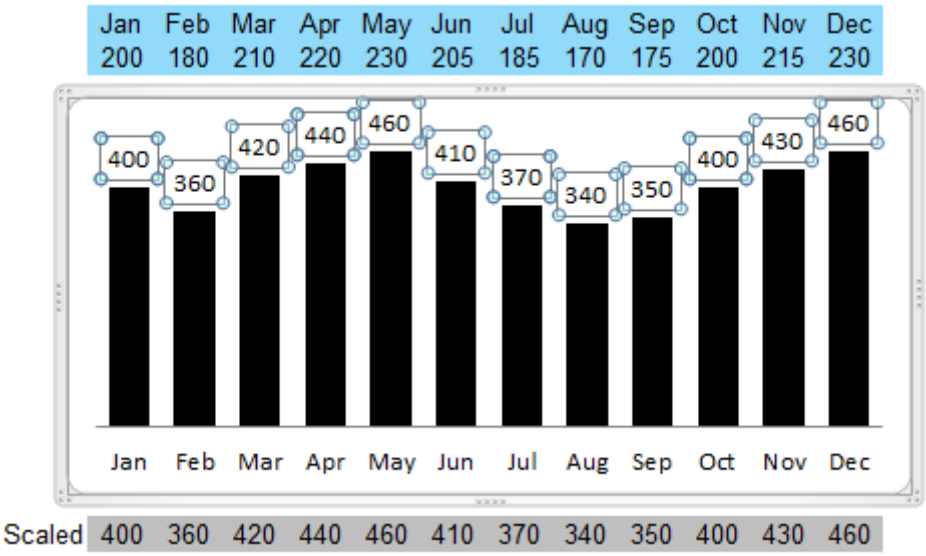


Figure: Data labels are selected

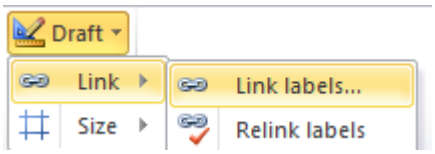


Figure: Choose Draft > Link > Link labels

In the *Link data labels to cells* dialog box, select the appropriate cell range which holds the correct labeling for your data series.

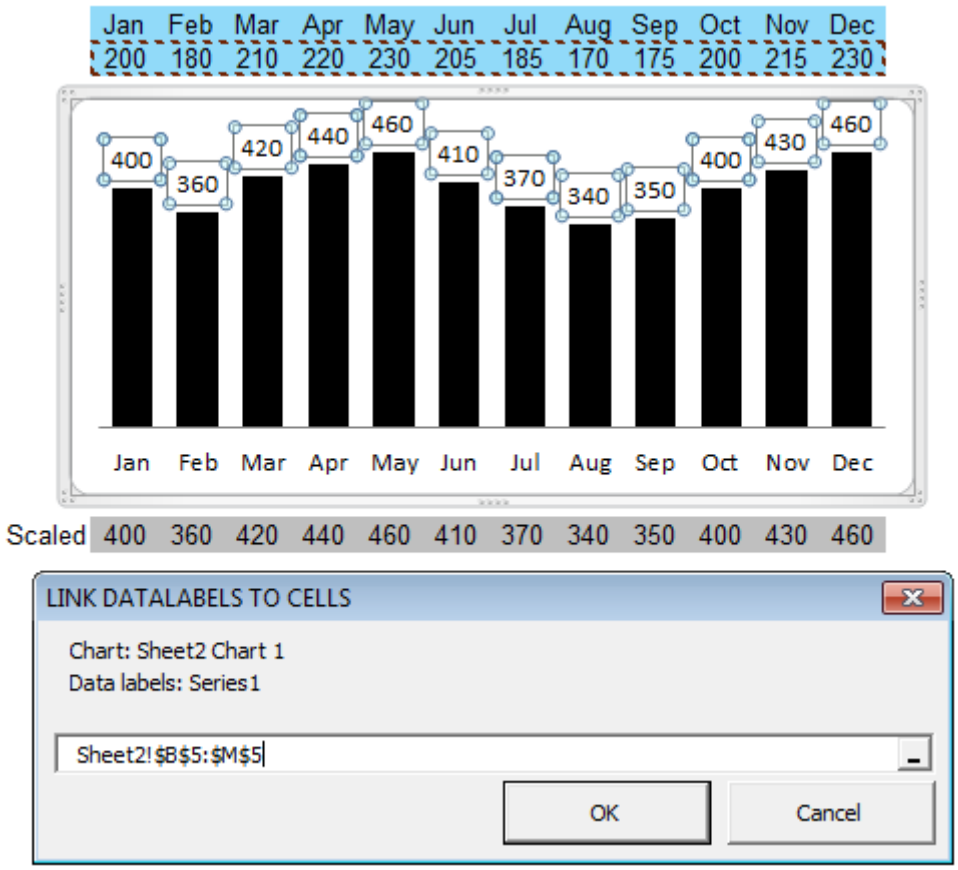


Figure: Highlight data labels cell range

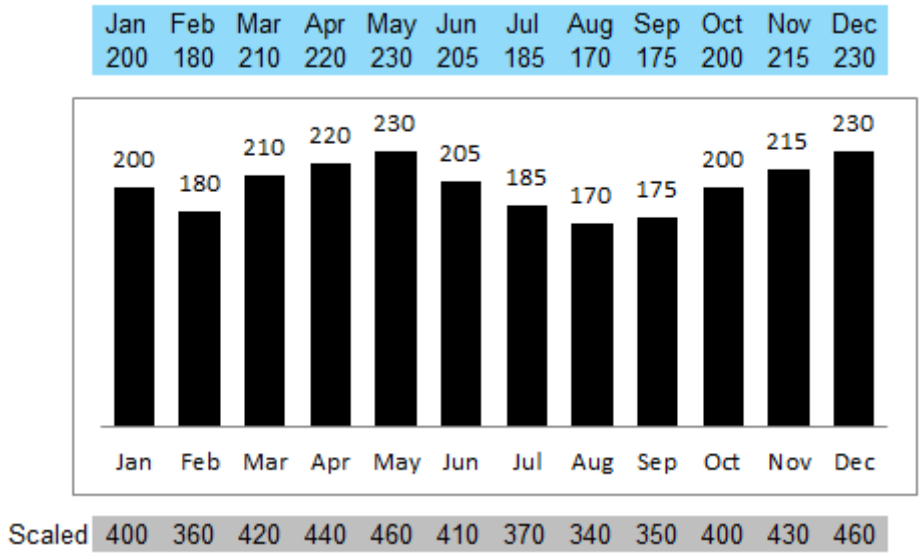


Figure: Results for linked data labels

The chart displays the data labels of the cell range range, to which you established the link.

Relink labels

The *Relink labels* function allows you to update existing data linkages, which you created in the previous steps. This may be useful when the column setup of the data entry range has changed.

STOP! Do not add rows or columns to any *Chart-me XLS* configuration page! You may only add rows and columns to the charts you created without the *Chart-me XLS* application.

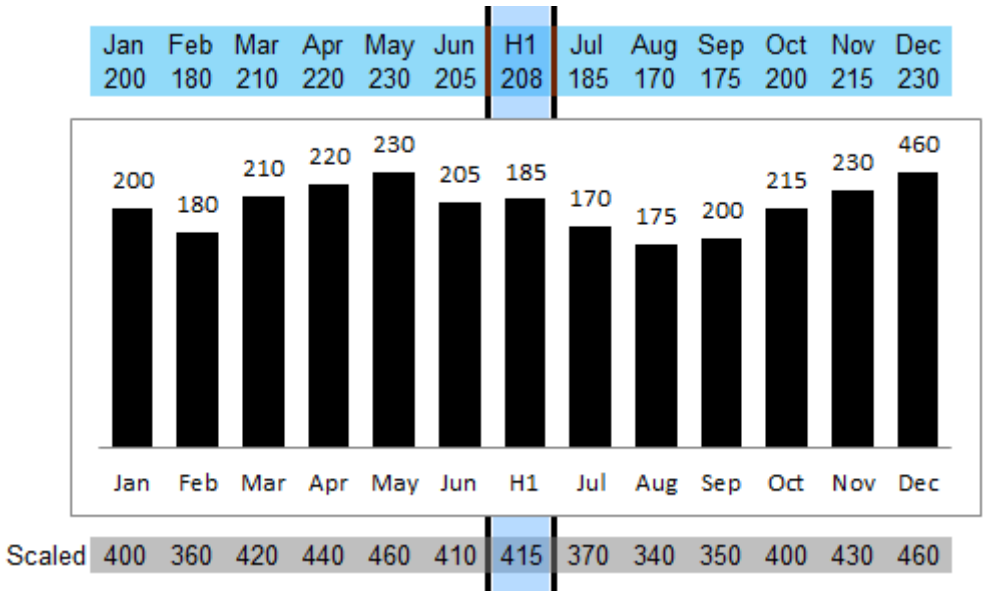


Figure: Additional column inserted

The new column value is automatically displayed in the chart. Fix the labeling by clicking on Draft > Link > Relink labels.

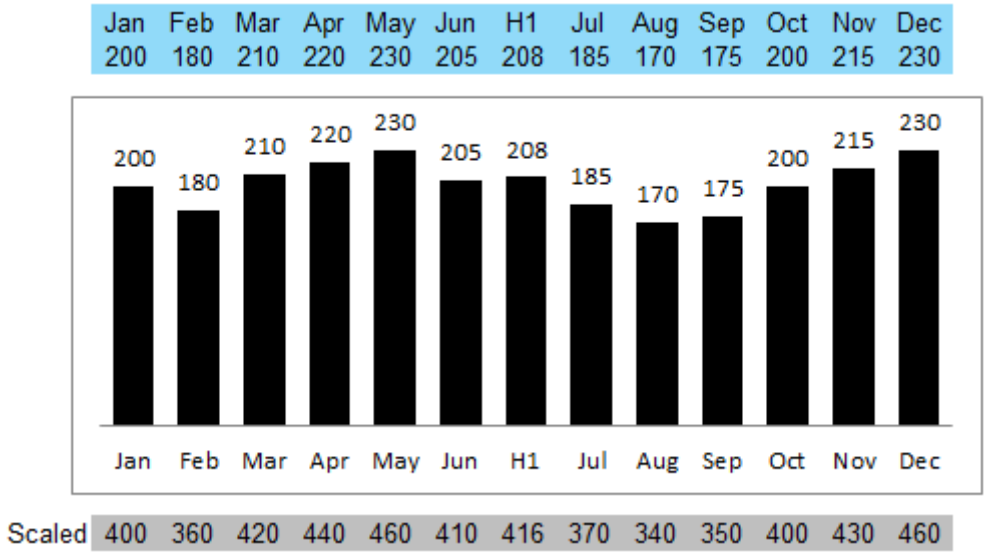
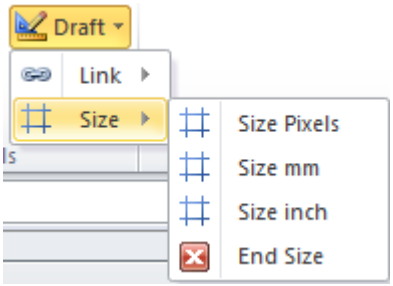


Figure: Data labels have been relinked.

Starting with Excel 2013, the *Chart-me XLS Link labels* feature is also available in standard Excel and handles column inserts automatically. For any chart templates created prior to Excel 2013 and which are now opened in Excel 2013, the *Relink labels* feature will update the linking process to now use the standard Excel 2013 version.

– Size



The *Size* feature helps you to create pixel perfect row and column grids. When using this function, *Chart-me XLS* reserves the first row and first column of a worksheet to hold the row and column specifications for the chart.

Size Pixel

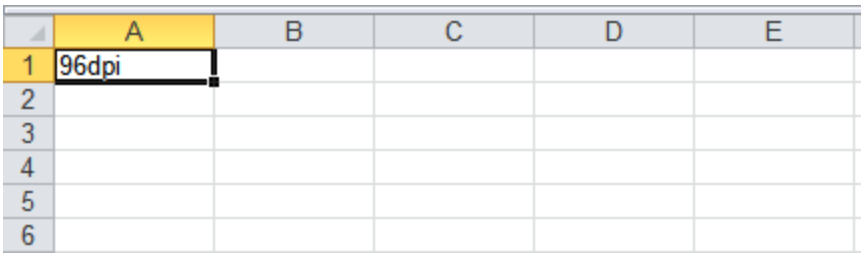


Figure: Size function using pixel

You can activate the *Size Pixel* feature by selecting it from the *Draft* > *Size* menu or entering “x” into cell A1 of the worksheet. Cell A1 then displays the current dpi setting of your computer display.

You can now measure any column width or row height by simply typing “x” into the first row or first column respectively.

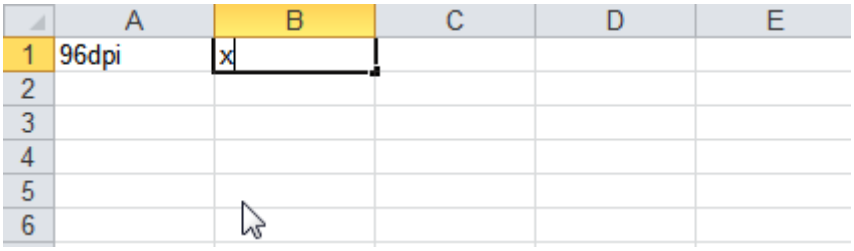


Figure: Measuring width of column B by typing in „x“

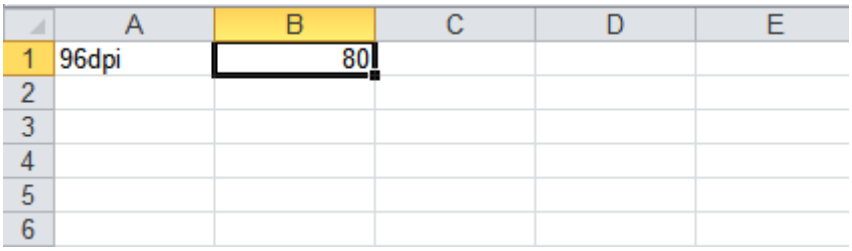


Figure: Column width of column B measured in pixel

	A	B	C	D	E
1	96dpi	80			
2					
3	x				
4					
5					
6					

Figure: Measuring height of row 3 by typing in „x“

	A	B	C	D	E
1	96dpi	80			
2					
3	17				
4					
5					
6					

Figure: Row height of row 3 in pixel

Entering a number in the first row or column of this worksheet will automatically resize that column or row to the number of pixels specified.

	A	B	C	D	E	F	G
1	96dpi	80	60	60	60	60	60
2							
3	17						
4	25						
5	25						
6	25						
7	25						
8	25						
9							

Figure: Modify row height and column width by specifying pixel values in the first column and row of the worksheet

Size mm

Analogous to Size Pixel, measurement unit in millimeter.

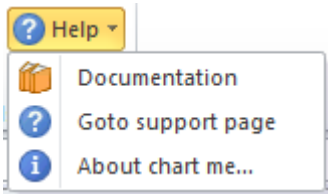
Size inch

Analogous to Size Pixel, measurement unit in inches.

End Size

Turn off the sizing mode by clicking *Draft* > *Size* > *End Size* or deleting the entry in cell A1.

Help menu



Documentation

Opens this document. A PDF viewer is required on your computer.

Goto support-page

Opens the online *Chart-me XLS* support page, where you will find videos, FAQs, and other frequently updated support materials.

About *Chart-me XLS* …

The About *Chart-me XLS* window provides information on the registration status of your copy of *Chart-me XLS*, currently installed version, and a link to the HI-CHART product website.

Click on *Check for software update* to see if new *Chart-me XLS* updates are available.

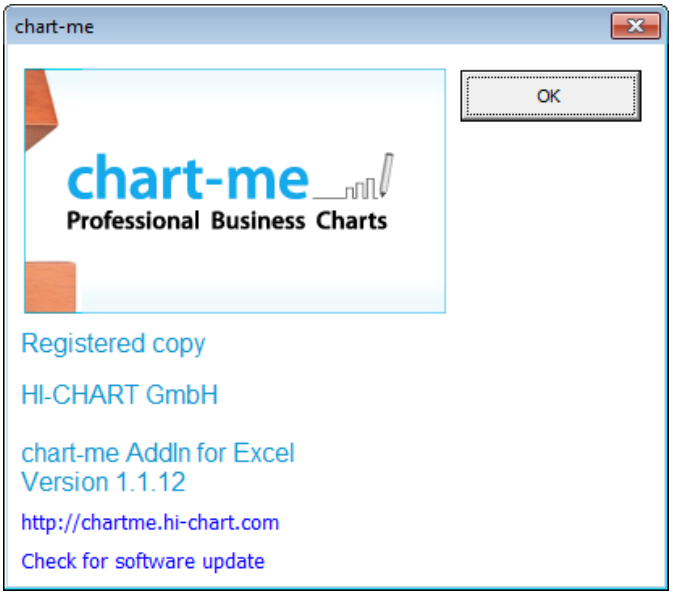


Figure: *Chart-me XLS* Info

Background information

– Master template charts

When creating a chart via the *Chart-me XLS* add-in user interface, *Chart-me XLS* inserts and configures a template chart from the chart master templates (a.k.a. Diagramm-Mastertemplate – DMT). The chart worksheet contains the chart object and its cell ranges for data entry, configuration and control settings. The worksheets are named according to the chart's position on the layout page, e.g., *Chart1, Chart2…*

– File buffering

The rendering of a chart template from the chart master templates is resource intensive. In order to speed up the process, already used chart templates are cached in the *TemplateBuffer* directory.

If a new chart template of the same chart type and settings (same font size, chart size in pixels, and style sheet) is inserted, the applicable template is pulled from the cache rather than drawn from the chart master template files.

If, however, for any reason, you want to ensure that a chart template is created from the chart master template even if a cached version may be available, then the *Rebuild chart* option needs to be checked in the *Insert chart* dialogue box.

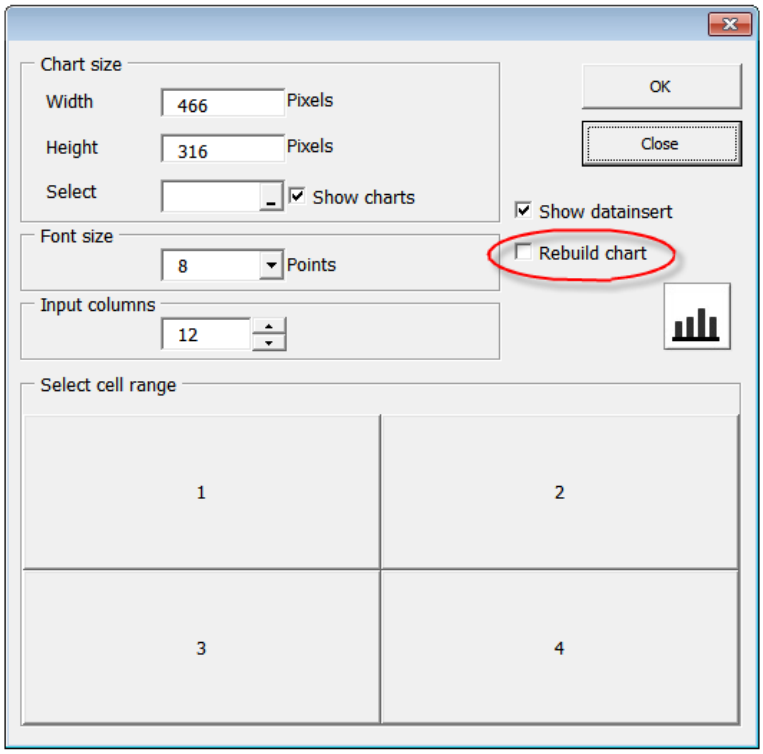


Figure: Option *Rebuild chart*

– X-resolution in column and bar charts

When creating standard column and bar charts with MS Excel, the program is limited to a uniform width display across all columns and bars within a chart. If you want to graph different types of periods within a time series, there must be a way to differentiate graphically between, say, monthly and annual values. Below is a typical example of a differentiated display of various data types.

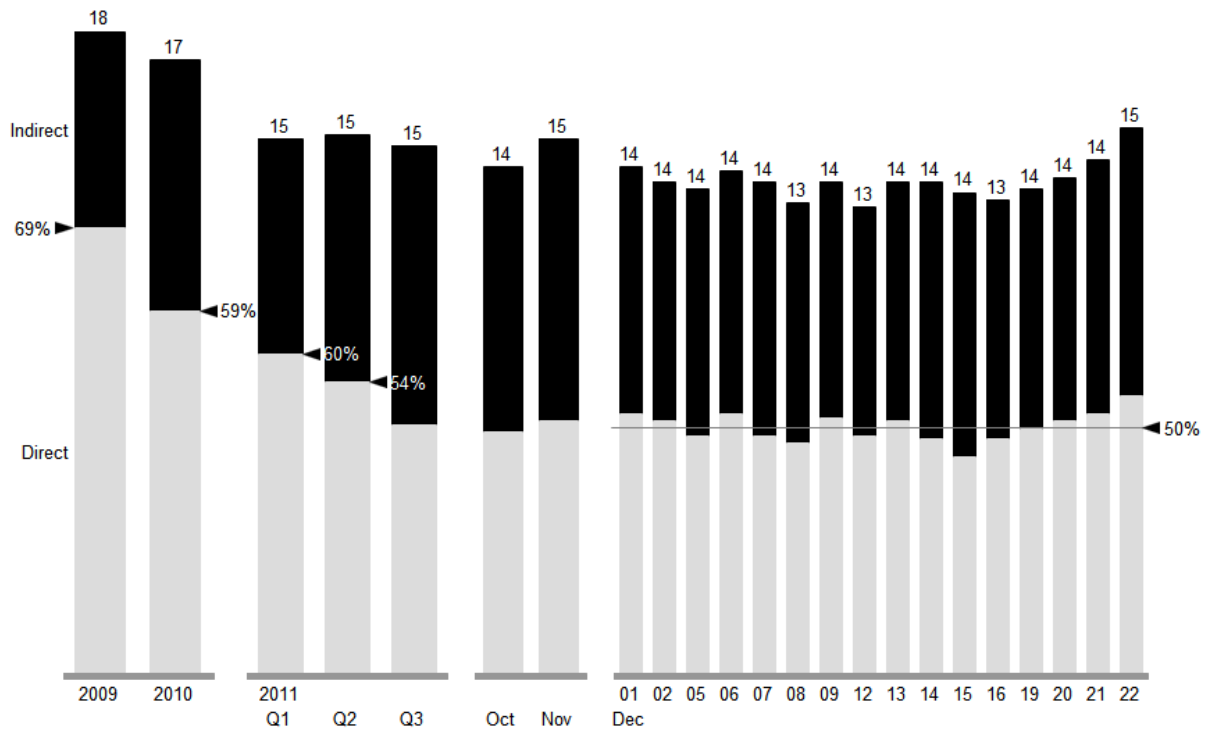


Figure: Time series with varying category widths (year, quarter, month, day)

In order to be able to chart any type of Excel range diagrams, *Chart-me XLS* utilizes the approach of rendering many, many columns (about 1000) across the X-Axis. These columns are wafer-thin and must be rendered exactly where they are needed. Bar charts utilize point diagrams with connecting lines drawn between the appropriate points. Data series with 1000 data points require data configuration ranges with an analogous number of data entry cells. With this many data points, it becomes apparent that the data files will grow very quickly.

The *Chart-me XLS Shrink…* process reduces the number of data points to the actual number utilized in the chart. So, if a chart uses only 400 pixels, shrinking the chart will reduce the number of data points to just these 400 pixels used. If the x-resolution was set to 2, *Chart-me XLS* will reduce the data points further to the corresponding 200 pixels. The x-resolution is an input parameter on the *Shrink…* dialog box.

Automation

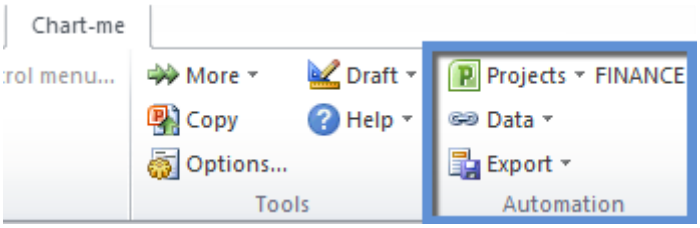
The automation module supports the creation of multipage reports that are published recurring with changed data. The aim is that the recurring effort of data update and output is minimized.

The following output media are supported:

- PDF
- Vector image EMF

Multi-page PDF files can already represent an entire report.

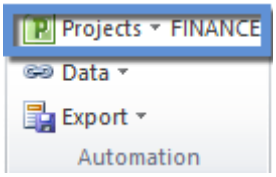
Vector images are suitable for integration into other Office documents in Word, PowerPoint or Excel in itself.



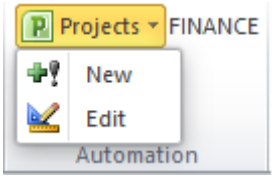
Projects

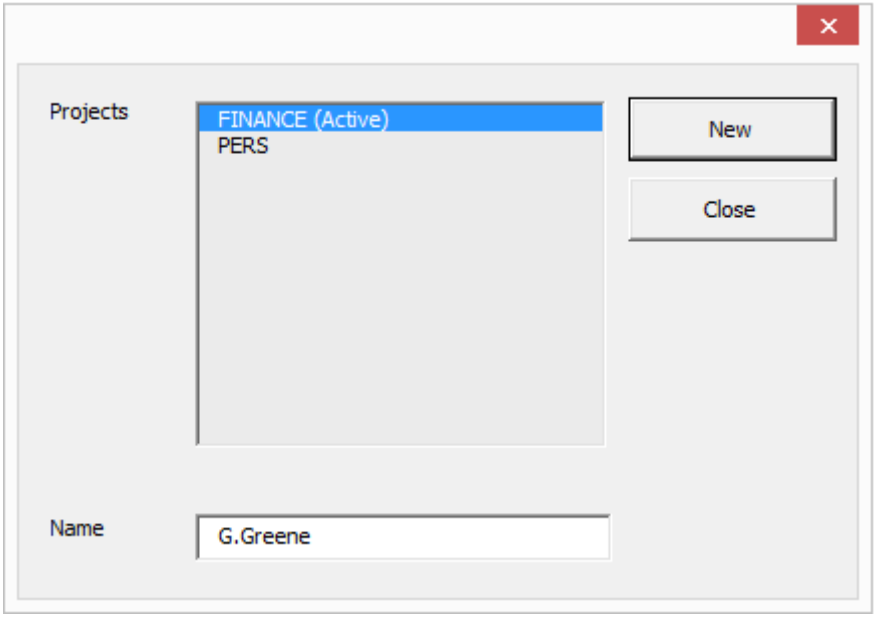
To create a multi-page report, a project can be defined.

The active project is displayed in the Chart-me XLS Excel ribbon menu.

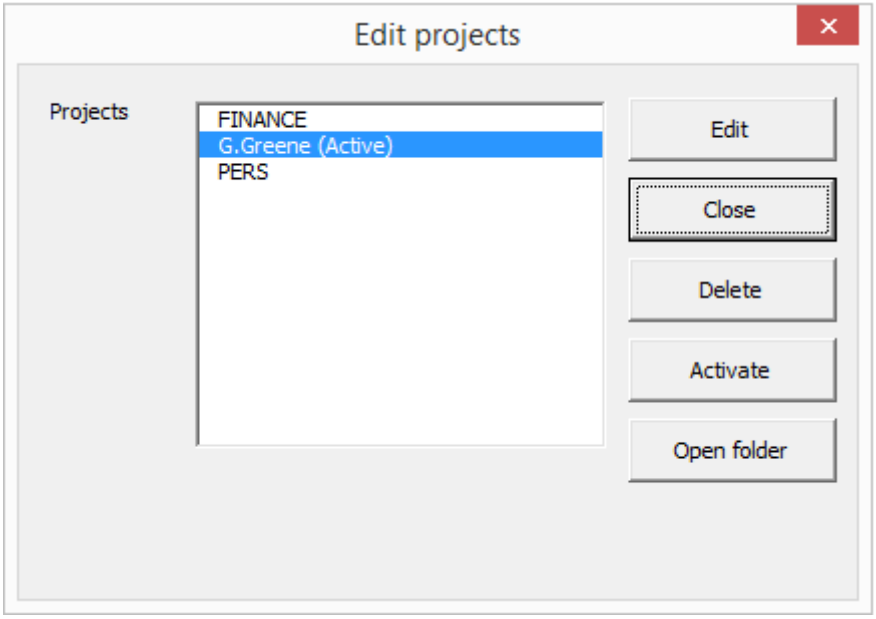


With *Projects – New* a new project can be added.



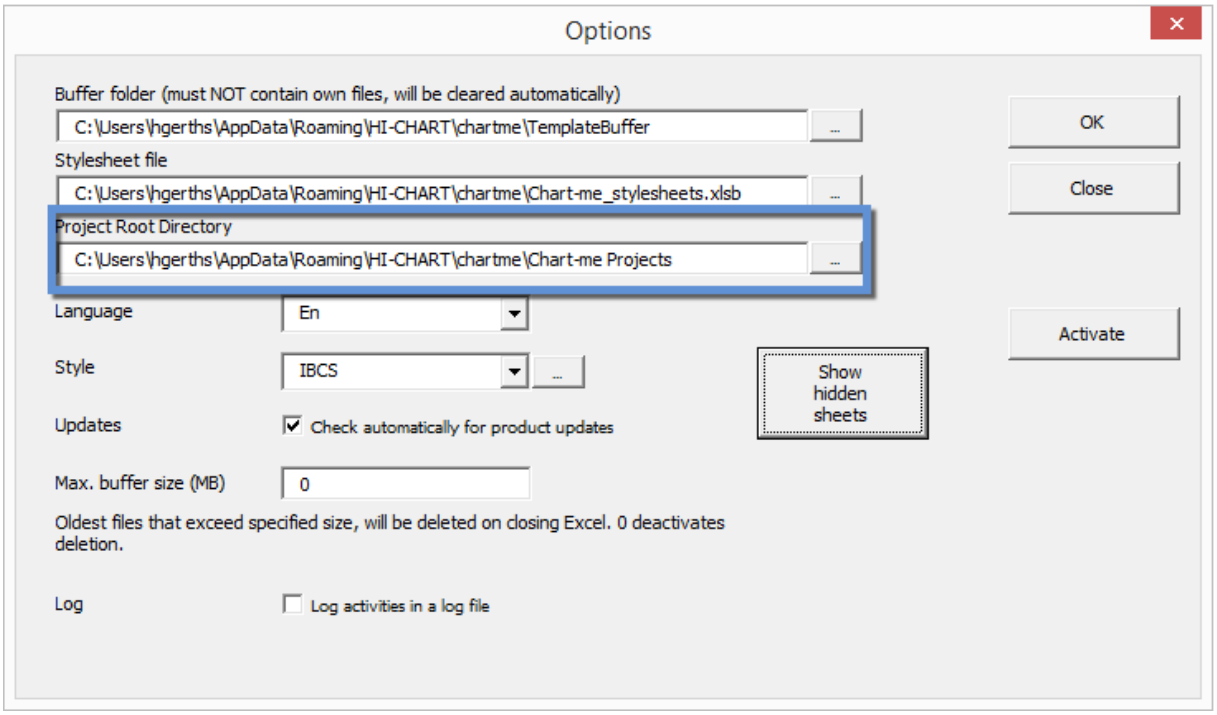


With *Projects – Edit* existing projects are listed and can be edited.

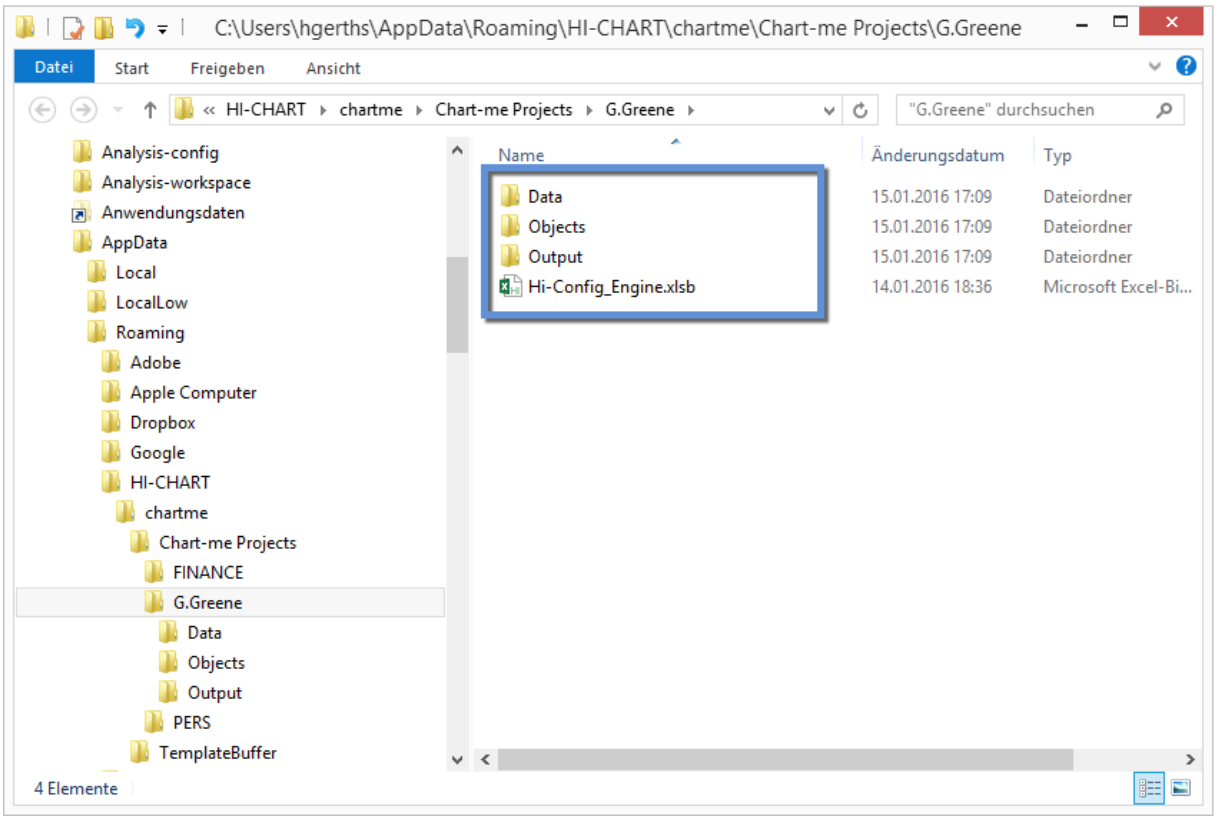


A project consists of a sub folder in the Chart-me XLS project root folder.

The project root folder can be set in Chart-me XLS - Options.



Default is C:\Users\[Username]\AppData\Roaming\HI-CHART\chartme\Chart-me Projects.



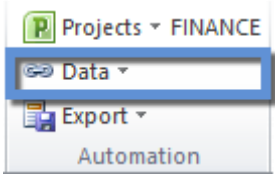
The project folder contains three sub folder

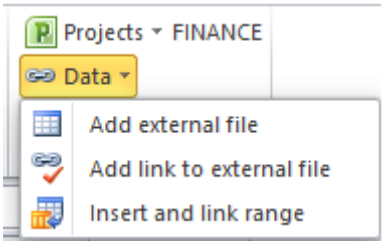
- Data – for external data files
- Objects – for Chart-me XLS Excel-workbooks as the report content
- Output – here PDF and image files are automatically saved.

In addition, the file Hi-Config_Engine.xlsb in the project directory. This file contains the definition of the individual project pages and images.

Data

The section *Data* supports the outsourcing of data into an external Excel workbook. In a multi-page report, which consists of several Excel figure files, you would have normally to open every single file, update the data and then output to the target format. With these functions, the data inputs of several figure workbooks can be outsourced into one (or several) external Excel workbooks with only data. Thus, to update the report, it needs only to replace or update, the (small) data file.

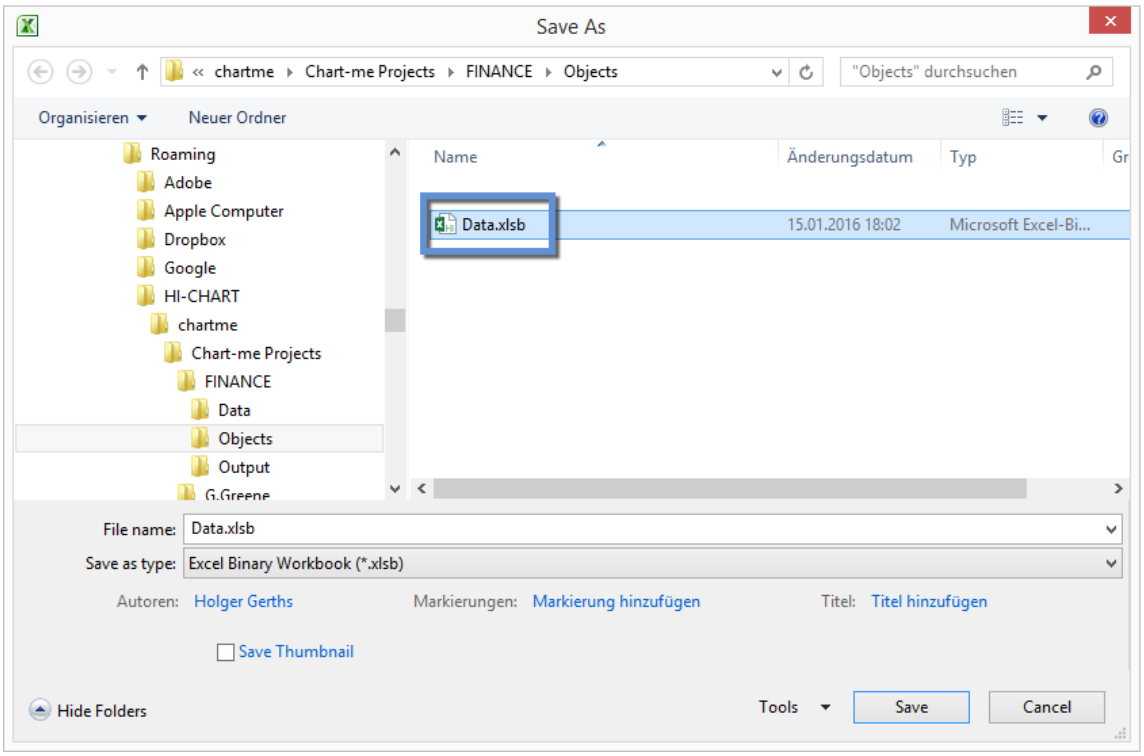




Add external file

First, you add an Excel data workbook file to the project. It is recommended to store them in the project folder under *Data*. But there are also other locations possible. It may be a blank workbook or a workbook that already contains data.

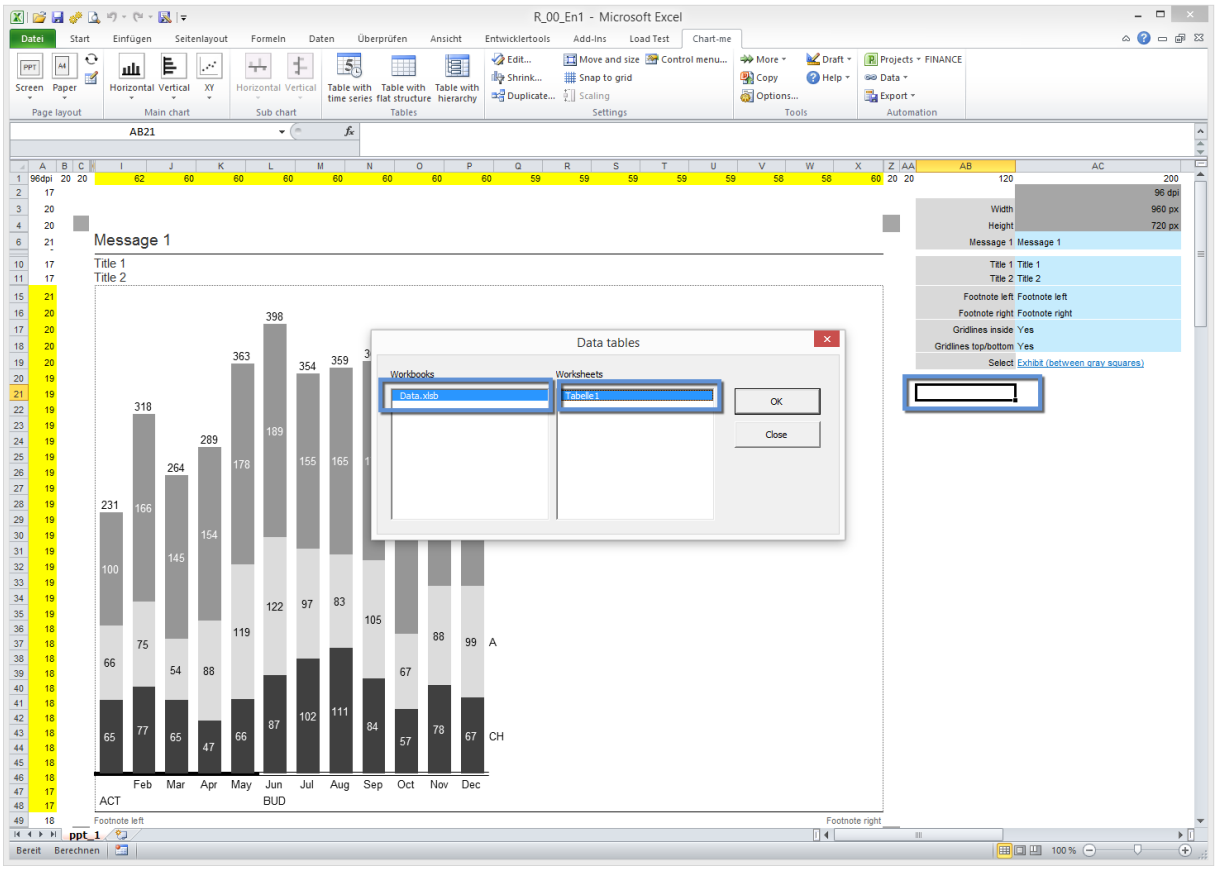
This workbook is first added to a project with *Data – Add External File*. Now the data file can be used to outsource data from figure workbooks.



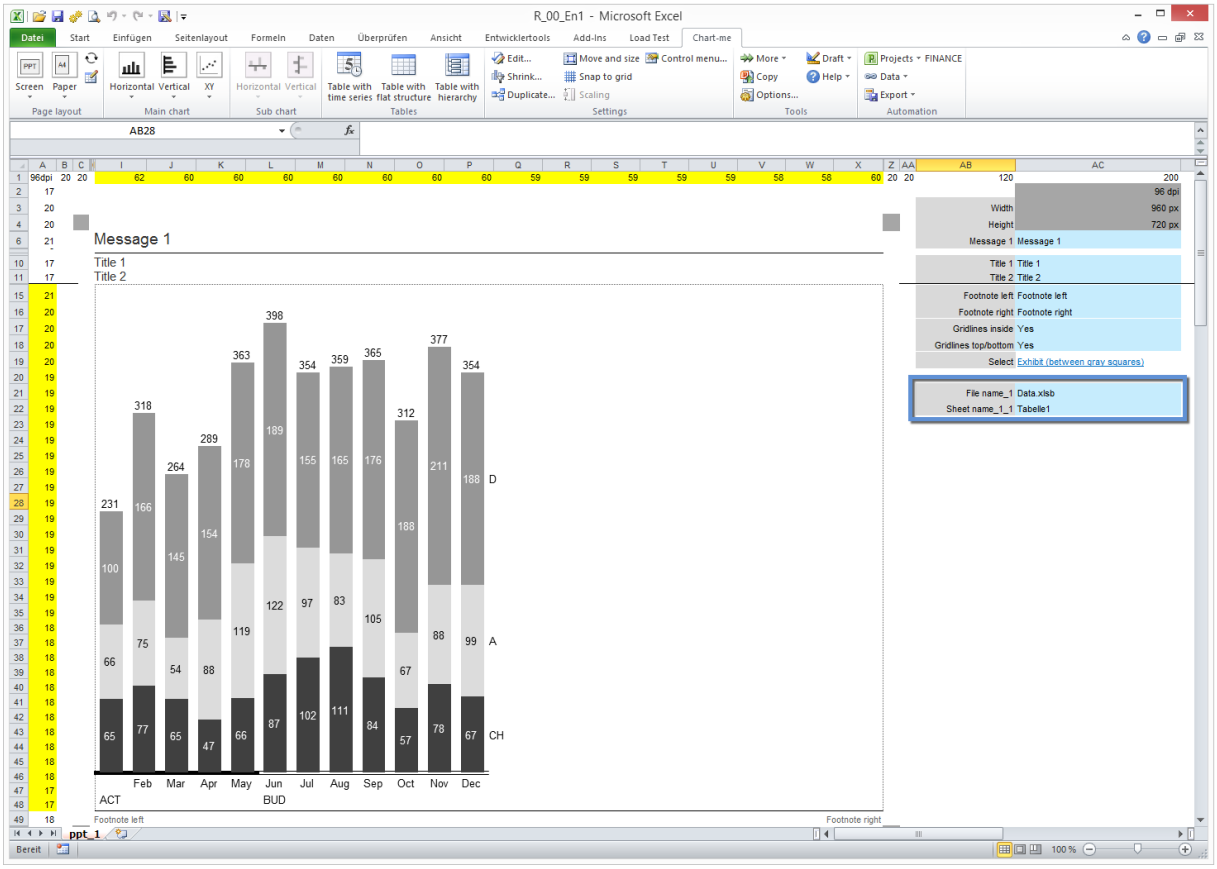
Add link to external file

Open an existing Excel file, which is intended to a be part of your project. It is recommended that this is previously stored in the project directory in the *Objects* folder. Select an empty cell in this file and choose the *Chart-me* menu *Data - Add link to external file*. In the following dialog the data workbook is

displayed, which was added to the project in the previous step. If this is selected in the left list, all worksheets of this file are displayed in the right list.



With OK a 2 x 2 sized cell range is inserted, by means of which the external data shortcut created in the next step can be controlled.



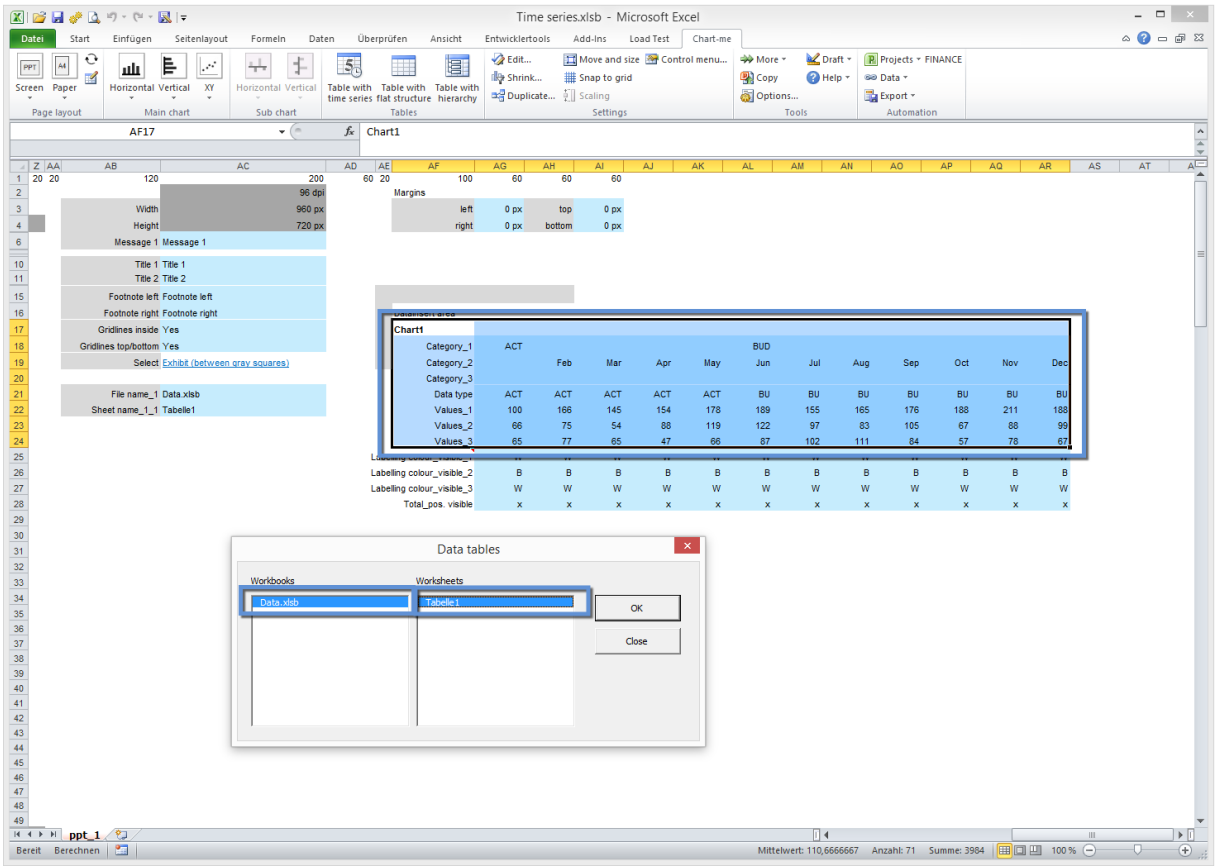
Insert and link range

Now different cell ranges can be outsourced from the report workbook into the data workbook. Outsourced is here that the respective range will be copied from the report workbook in the data workbook and the cell range in the report workbook then gets an external reference to the copied range in the data workbook. File name and sheet name of the external link can be changed if necessary in the two in the previous step created cells. From now on the data workbook must always be opened together with the report workbook so that correct pictures are displayed. As long as Chart-me XLS is running, the data workbook is opened automatically whenever a report workbook is opened.

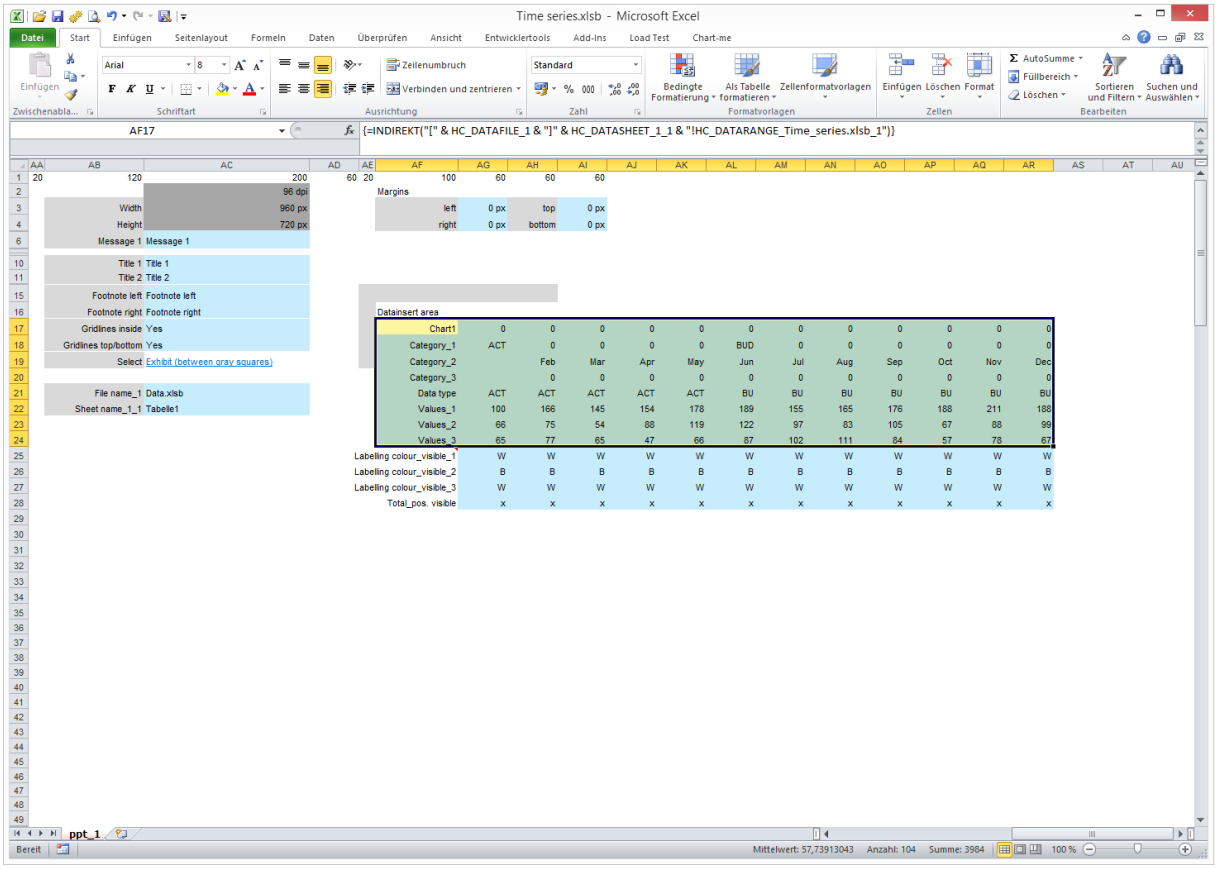
Now the data can be updated or replaced in the (small) data workbook, and the chart will be automatically updated on next usage.

Proceed as follows:

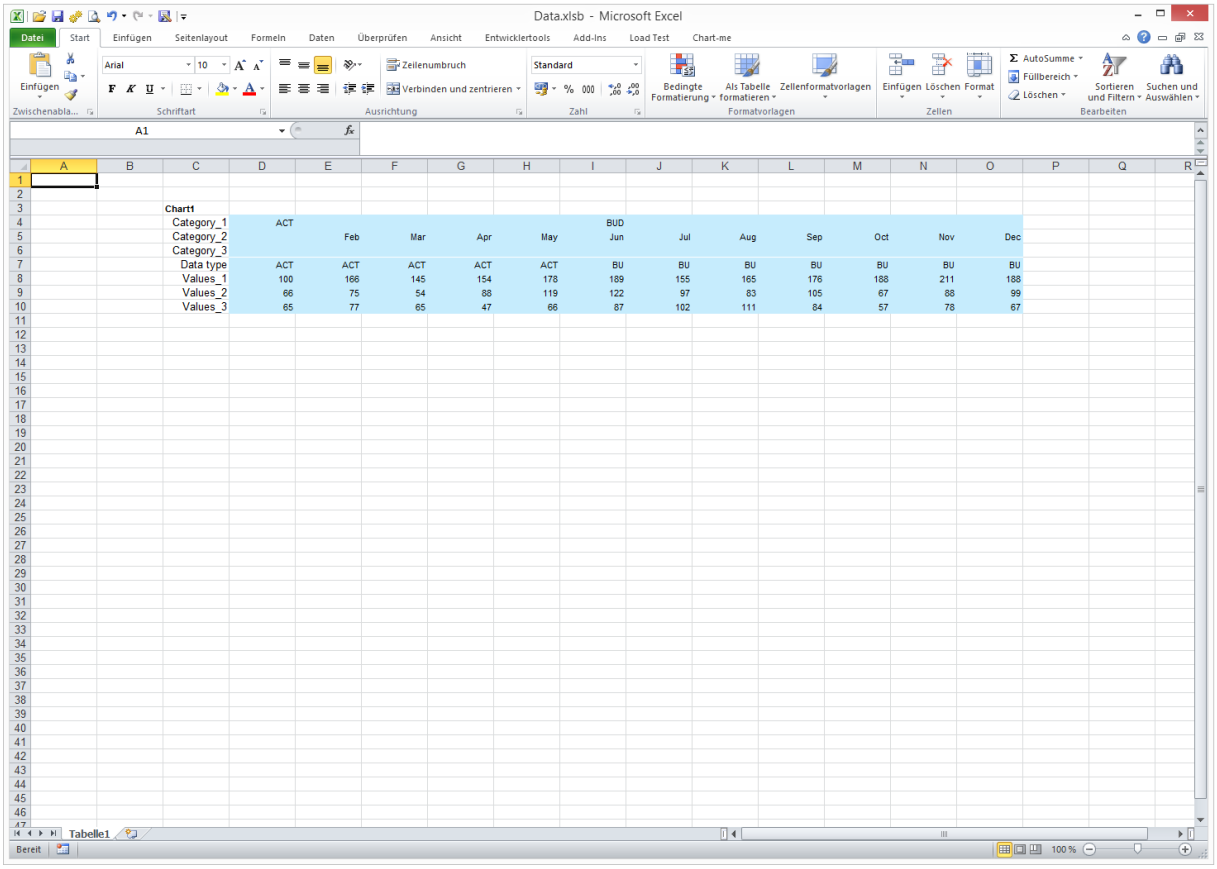
Select the data input cell range in the report workbook to be outsourced in the external data file. Then click *Data – Insert and link range*. In the following dialog select the file name and sheet name of the related data file.



After clicking OK, the selected range of cells appears highlighted.

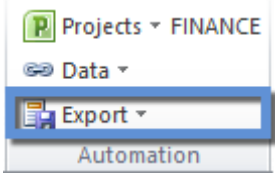


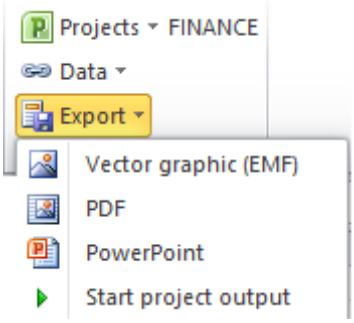
You can (e.g. with CTRL-F6) change to already open data file and see there that the selected data range has been added there. Here database formulas or any other calculations can be inserted. The data file can also be exported from another system with modified data. Once the report workbook is opened, the updated data from the data file will be displayed.



Export

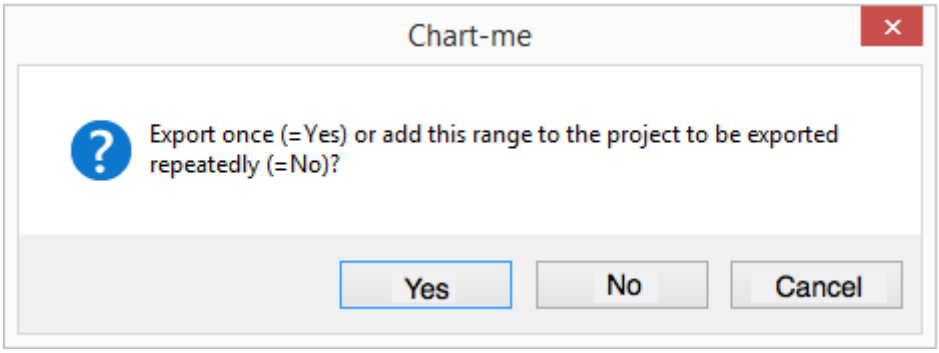
With *Export* Excel ranges can be exported to PDF or EMF vector images, linked with a PowerPoint presentation and a whole project can be processed. In this chapter you learn how to define a project.





Vector graphic (EMF)

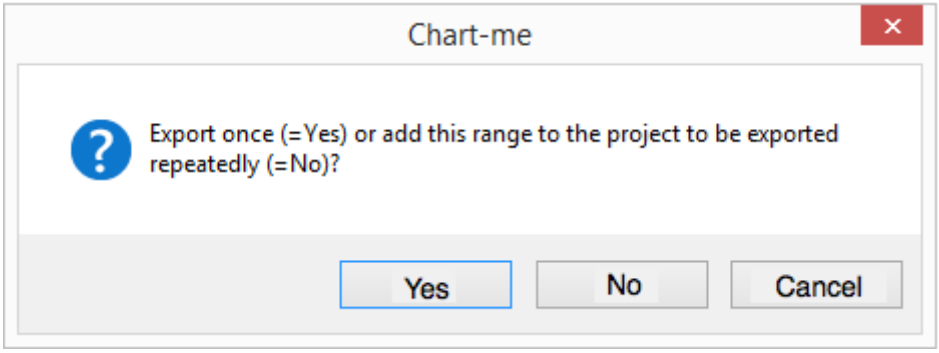
After selecting the function *Export - Vector graphic (EMF)*, the following dialog appears:



As described in the dialog, the selected Excel range can be exported once with "Yes". The image file gets the same name as the source Excel file with the extension "EMF".

PDF

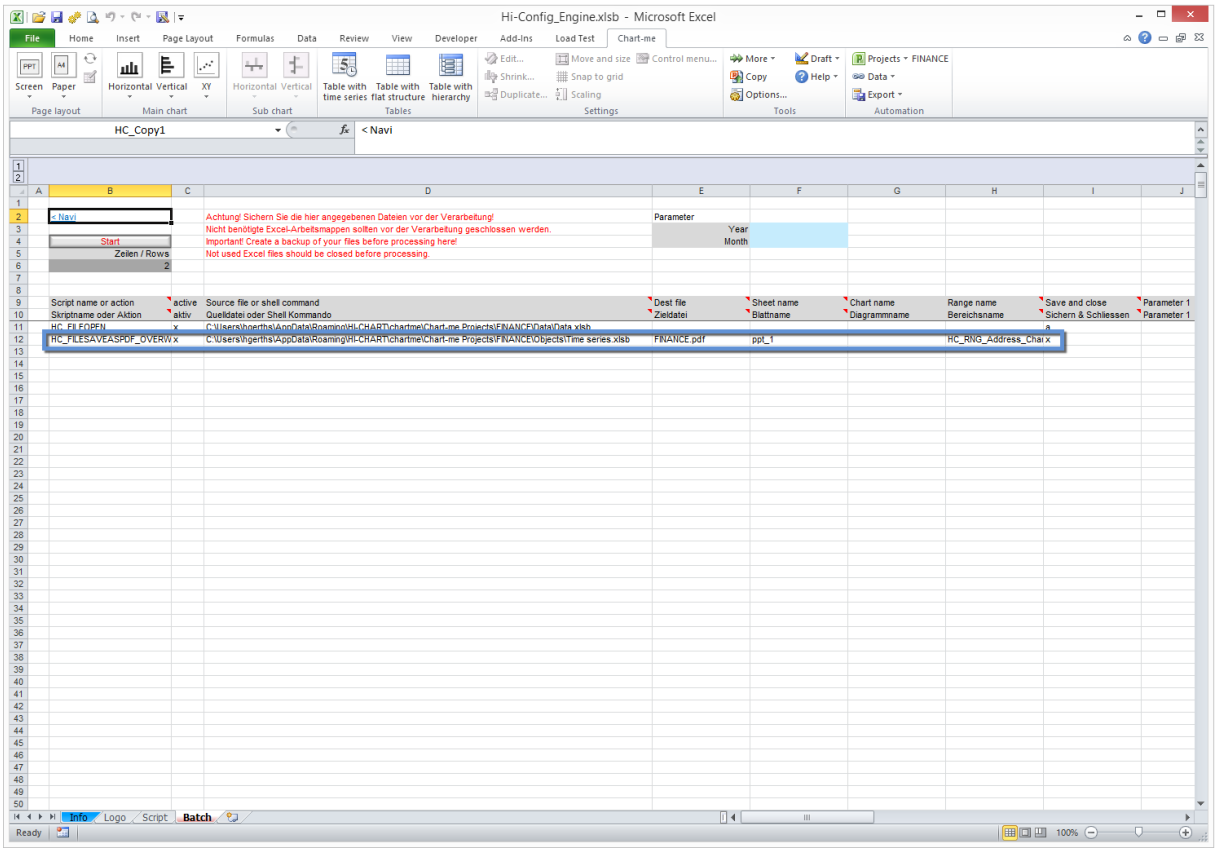
After selecting the function *Export - PDF*, the following dialog appears:



As described in the dialog, the selected Excel range can be exported once with "Yes". The PDF file gets the same name as the source Excel file with the extension "PDF".

If you select "No" for repeated export (no matter if EMF or PDF file) is no file will be exported in the moment, but it is recorded in the project that this area at the next Project Export (with Start project

output, see below) is exported. This action will be visible when the project is opened with *Projects - Edit - Edit*. You can see that the range to be exported appears as a new row in the project list.



The exported files are stored in the project folder in the directory *Output*. If different ranges are stored as EMF images in this way, then the same number of EMF files will be created. If several ranges in PDF format are stored, then a PDF file that contains multiple pages will be created.

PowerPoint

Export - PowerPoint links the current Excel selection to PowerPoint. For this purpose, PowerPoint must be open. The link is created in the current PowerPoint slide and automatically adjusted to 100% size. The PowerPoint links can be updated manually. When you open PowerPoint, a message appears asking if the existing links are to be updated. After linking to PowerPoint, it is advisable not to move or rename the Excel source files.

Start project output

The project list shown above includes all actions that are executed on project output. The data files are always placed at the beginning of the list because they have to be open during processing. The list entries can be changed by moving rows in the order or rows can be deleted as well. Columns should be neither deleted nor moved.

The output can be started via Chart-me menu *Export – Start project output* or in the project file with the button *Start*.