xlsLib

A library for dynamically generating Excel(TM) spreadsheets

PHP Extension's

Quick Reference Guide

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Workbook Operations

workbook is the base object of the library. All other objects are generated in it, and it controls the streaming of the generated file.

Instantiation: $wb_obj = new workbook;

Usage: $retval = wb_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)		Return Value		Description
Stroke	string	Name	none		Sends the spreadsheet held by the workbook object to the client. The file gets the name set by the 'Name' argument.
Dump	string	Name	none		Writes the spreadsheet held by the workbook to a file 'Name'. Only recommended when the script is called from the Command Line.
Disposition	constant	{STK_INLINE, STK_ATTACHMENT}	none		Defines the way the file will be managed by the client (if it is supported)'. i.e. STK_INLINE will automatically open the default application.
sheet	string	NameSheet	worksheet	object	Creates a worksheet in the current workbook assigning the name passed as argument.
xformat	none		xf_t	object	Creates a customizable extended format object that can be passed as an argument to any cell element. All format objects used by the workbook's elements have to be generated with this operation.
font	string	Font name	font_t	object	Creates a customizable font object that can be passed as an argument to a format object element. All font objects used by the workbook's elements have to be generated with this operation.

Worksheet Operations

The worksheet object handles a logical sheet-unit. It is the source of cell-objects , and it controls general cell sizing and merging.

Instantiation: $ws_obj = $wb_obj->worksheet("Name");

Usage: $retval = $ws_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)		Return Value		Description
blank	integer unsigned16	row	cell_t	object	Adds a blank cell to the current worksheet at the (row,col) position.
	integer unsigned16	col			
	xf_t	object			
label	integer unsigned16	row	cell_t	object	Adds a label cell to the current worksheet at the (row,col) position using'label_text' as the text of the label. NOTE: Due format specifications, text inside a label cannot be longer than 255 chars; if a longer input is used, the text is truncated with...
	integer unsigned16	col			
	string	label_text			
	xf_t	object			
number	integer unsigned16	row	cell_t	object	Adds a number cell to the current worksheet at the (row,col) position usinga format_number_t constant to format number's display
	integer unsigned16	col			
	double	number			
	constant	format_number_t (See the table of values in the appendixes)			
	xf_t	object			
rowheight	integer unsigned16	row_num	none		Sets the height size of the 'row_num' row in twips (= 1/20th of a point). You may use the provided TWIPS #define to convert values in unit [point] to unit [twip].
	integer unsigned16	height			
colwidth	integer unsigned16	col_num	none		Sets the width size of the 'col_num' column in 1/256 * the width of the "0" character.
	integer unsigned16	width			
merge	integer unsigned16	col_1	none		Merges the given range of cells in to one. The format used to display the cell's valueis the top-left most of the range.
	integer unsigned16	row_1			
	integer unsigned16	col_2			
	integer unsigned16	row_2			
rangegroup	integer unsigned16	col_1	range	object	Returns an object that handles a group of cells given by the range defined with the arguments. This range object can be seen and modified as a cell unit and all format setting (including borders) will apply to all of the cells inside the range.
	integer unsigned16	row_1			
	integer unsigned16	col_2			
	integer unsigned16	row_2			

Cell Operations

Any cell-type (blank, label, number) falls into this category and these operations can be applied to them. Standard format and font manipulation can be performed on any cell.

Instantiation: $cell_obj = $wb_obj-><blank|label|number>(args);
Usage: $retval = cell_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)		Return Value	Description
Cell Formatting				
font	font_t	object	none	It assigns a font object to the cell. The font object full-defines the font to be used by the cell. Its use is recommended for defining the same font style to multiple cells. For discrete font settings, use of the following operations are recommended.
format	format_number_t	constant	none	It assigns a formatting number to the cell (it will be used only if the cell contains a number). See the appendixes for a detailed list of format constants
halign	halign_option_t	constant (see the appendixes for a detailed constant list)	none	Sets the horizontal alignment of the the text inside the cell.
valign	valign_option_t	constant (see the appendixes for a detailed constant list)	none	Sets the vertical alignment of the the text inside the cell.
orientation	txtori_option_t	constant (see the appendixes for a detailed constant list)	none	Sets the text orientation of the cell.
fillfgcolor	color_name_t	constant (see the appendixes for a detailed color constant list)	none	Sets the foreground color of the cell.
fillbgcolor	color_name_t	constant (see the appendixes for a detailed color constant list)	none	Sets the background color of the cell.
fillstyle	color_name_t	constant (see the appendixes for a detailed fill-pattern constant list)	none	Sets the fill-pattern of the cell.Back/fore-ground colors are related to these patterns.
wrap	boolean	1/0	none	If set, text inside the cell is wrapped in the current cell's size.
borderstyle	border_side_t	constant	none	Sets the border selected by border_side_t to the border_style_t style andcolor_name_t color. All standard styles and colors are supported. See the appendixes for a full list of available constants.
	border_style_t	constant		
	color_name_t	constant		
locked	boolean	1/0	none	If set, the cell is locked. Currently it has no effect, since worksheet protection is not implemented yet.
hidden	boolean	1/0	none	If set, the cell is hidden. Currently it has no effect, since worksheet protection is not implemented yet.
Cell Font Style				
fontname	string	name	none	Sets font's name to be used by the cell. You can pass any string, but in in order to have any effect, is has to be the name of a font supported by your *.xls file reader. When a non supported font is passed, the behavior when opening the file will depe...
fontheight	number (unsigned16)	fntheight	none	Sets the height of the cell's font. The height is set in 1/20th of point: i.e fontheight=200 sets the font's height to 10.
fontbold	boldness_option_t	constant	none	Sets the boldness of the cell's font according to the font_boldness_t constant. See the appendixes for a detailed list of available constants.
fontunderline	underline_option_t	constant	none	Sets the underline style of the cell's font according to the font_underline_t constant. See the appendixes for a detailed list of available constants.
fontscript	script_option_t	{SCRIPT_NONE, SCRIPT_SUPER, SCRIPT_SUB}	none	Sets the script style (super/under-script) of the cell's font according to the font_underline_t constant.
fontcolor	color_name_t	constant	none	Sets the color of the cell's font according to the font_underline_t constant See the appendixes for a detailed list of available color constants.
fontitalic	boolean	0/1	none	If set, the cell's font is shown italic shaped.
fontstrikeout	boolean	0/1	none	If set, the cell's font is shown strike-out shaped.
fontshadow	boolean	0/1	none	If set, the cell's font is shown with shadow (if supported).
Other Operations				
GetRow	none		integer unsigned16	Returns the cell's row number (0-index based) of the current cell.
GetCol	none		integer unsigned16	Returns the cell's column number (0-index based) of the current cell.
SetXF	xf_t	object	none	Sets the cell's format to the one passed as argument. The xf_t object has to be previously generated with the wb_obj->xformat()
GetXF	none		xf_t object	Gets the format object assigned to the cell.

Range Operations

A range can be seen as a cell. The same operations of a cell apply to a range. Note that for border settings, borders are set to each member of the range.

Besides cell operations, the following table shows some extra operations, specific to range objects.

Instantiation: $range_obj = $wb_obj->ramge(row1, col1, row2, col2);

Usage: $retval = range_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)	Return Value	Description
cellcolor	color_name_t constant	none	Sets the background color of each cell inside the range. This is a wrapper function to an operation that involves changing the fill-pattern and color of each cell.

Format Object Operations

An xf_t object can be discretely set using these low level operations.Changing format's settings to an already used format object using these operations will affect to all cells currently using the format.

Instantiation: $xf_obj = $wb_obj->xformat();

Usage: $retval = $xf_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)		Return Value		Description
SetFont	font_t	object	none		Sets the font attached to the format. The font_t object has to be generated with the workbook's font operation.
GetFont	none		font_t	object	Retrieves the font attached to the format.
GetFormat	none		format_number_t	constant	Sets the format for display numbers in the cell. See the appendixes for a detailed list of choices.
SetFormat	format_number_t	constant	none		Gets the format number of the format object
SetHalign	halign_option_t	constant	none		Sets the text horizontal alignment of the cell. See the appendixes for a detailed list of available options.
SetValign	valign_option_t	constant	none		Sets the text vertical alignment of the cell. See the appendixes for a detailed list of available options.
SetTxtOrientation	txtori_option_t	constant	none		Sets the text orientation of the cell. See the appendixes for a detailed list of available options.
SetFillFGColor	color_name_t	constant	none		Sets the filling pattern foreground color. See the appendixes for a detailed list of available options.
SetFillBGColor	color_name_t	constant	none		Sets the filling pattern background color. See the appendixes for a detailed list of available options.
SetFillStyle	fill_option_t	constant	none		Sets the cell's fill pattern style. See the appendixes for a detailed list of available options.
SetWrap	boolean	0/1	none		If set, the cell that has this format will wrap its text inside to the boundaries of the cell.
SetBorderStyle	border_side_t	constant	none		Sets the border shape (border_style_t) and color (color_name_t) of the specified side of the cell (border_side_t).See the appendixes for a detailed list of available options.
	border_style_t	constant			
	color_name_t	constant			
SetLocked	boolean	0/1	none		Set the cell as locked. Currently protected workbooks are not supported. so there is no visible effect with this operation.
SetHidden	boolean	0/1	none		Set the cell as Hidden. Currently protected workbooks are not supported. so there is no visible effect with this operation.

Font Object Operations

A font_t object can be discretely set using these low level operations.Changing font's settings to an already used font object using these operations will affect to all cells currently using the font.

Instantiation: $xf_obj = $wb_obj->xformat();
Usage: $retval = $xf_obj->operation([$arg1[,$arg2[, ...]]],;

Operation	Argument(s)		Return Value	Description
SetName	string	name	none	Sets the name of the font (i.e. "Arial"). You can use any string and the effect will depend on the *.xls file reader, most readers will use a default font if the name is not found to be an installed font.
SetHeight	integer unsigned16	fntheight	none	Sets the height of the font in 1/20th of point units
SetBoldStyle	boldness_option_t	constant	none	Sets the boldness of the font. See the available constant choices in the appendixes.
SetUnderlineStyle	underline_option_t	constant	none	Sets the underline style of the font. See the available constant choices in the appendixes.
SetScriptStyle	script_option_t	constant	none	Sets the script style of the font. See the available constant choices in the appendixes.
SetColor	color_name_t	constant	none	Sets the color of the font. See the available constant choices in the appendixes.
SetStrikeout	boolean	0/1	none	If set, the font is strike-out.
SetShadow	boolean	0/1	none	If set, the font is shadowed.

Appendix A. Color Constants.

Color constants Either the numeric value or the constant itself can be used in operation calls.

color_name_t		
Value	**Constant**	**Description**
0	COLOR_BLACK	black
1	COLOR_DARK_RED	dark red
2	COLOR_RED	red
3	COLOR_FUCSIA	fucsia
4	COLOR_COMBINED01	combined 01
5	COLOR_COMBINED02	combined 02
6	COLOR_COMBINED03	combined 03
7	COLOR_COMBINED04	combined 04
8	COLOR_COMBINED05	combined 05
9	COLOR_COMBINED06	combined 06
10	COLOR_OLIVE	olive
11	COLOR_DARK_YELLOW	dark yellow
12	COLOR_COMBINED07	combined 07
13	COLOR_YELLOW	yellow
14	COLOR_LIGHT_YELLOW	light yellow
15	COLOR_DARK_GREEN	dark green
16	COLOR_GREEN	green
17	COLOR_COMBINED08	combined 08
18	COLOR_LIVING_GREEN	living green
19	COLOR_LIGHT_GREEN	light green
20	COLOR_COMBINED09	combined 09
21	COLOR_BLUE_GREEN	blue green
22	COLOR_AQUAMARINA	aquamarine
23	COLOR_TURQOISE	turquoise
24	COLOR_COMBINED10	combined 10
25	COLOR_DARK_BLUE	dark blue
26	COLOR_BLUE	blue
27	COLOR_LIGHT_BLUE	blue
28	COLOR_SKY_BLUE	sky blue
29	COLOR_COMBINED11	combined 11
30	COLOR_INDIGO	indigo
31	COLOR_BLUE_GRAY	blue gray
32	COLOR_VIOLET	violet
33	COLOR_PLUM	plum
34	COLOR_LAVANDER	lavender
35	COLOR_COMBINED12	combined 12
36	COLOR_GRAY50	gray50
37	COLOR_GRAY40	gray40
38	COLOR_GRAY25	gray25
39	COLOR_WHITE	white

Appendix B. Border constants

Either the numeric value or the constant itself can be used in operation calls.

border_style_t

Value	Constant	Description
0	BORDER_NONE	none
1	BORDER_THIN	thin
2	BORDER_MEDIUM	medium
3	BORDER_DASHED	dashed
4	BORDER_DOTTED	dotted
5	BORDER_THICK	thick
6	BORDER_DOUBLE	double
7	BORDER_HAIR	hair

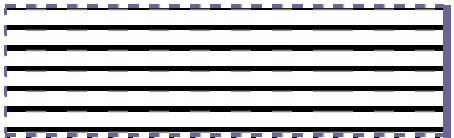
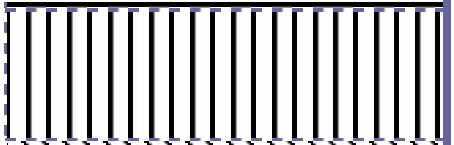
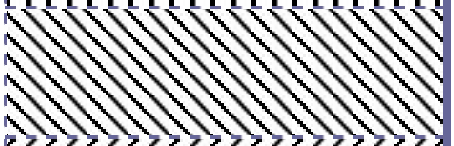
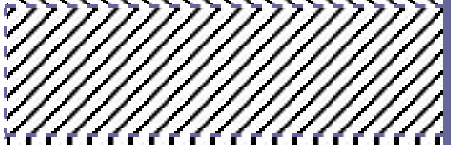
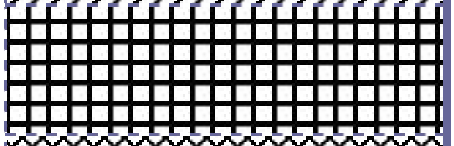
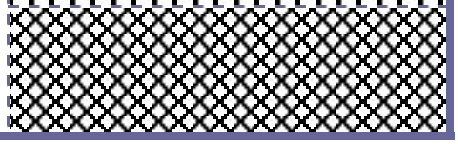
border_side_t

Value	Constant	Description
0	BORDER_BOTTOM	Bottom side
1	BORDER_TOP	Top side
2	BORDER_LEFT	Left side
3	BORDER_RIGHT	Right side

Appendix C. Fill Pattern Constants.

Cell fill pattern constants. Either the numeric value or the constant itself can be used in operation calls.

fill_option_t			
Value	**Constant**	**Description**	**Sample**
0	FILL_NONE	No fill	
1	FILL_SOLID	Solid	
2	FILL_ATEN75	75% attenuation	
3	FILL_ATEN50	50% attenuation	
4	FILL_ATEN25	25% attenuation	
5	FILL_ATEN12	12% attenuation	
6	FILL_ATEN06	6% attenuation	
7	FILL_HORIZ_LIN	Horizontal lines	
8	FILL_VERTICAL_LIN	Vertical lines	
9	FILL_DIAG	Diagonal lines	
10	FILL_INV_DIAG	Inverted diagonal lines	
11	FILL_INTER_DIAG	Diagonal interlaced lines	
12	FILL_DIAG_THICK_INTER	Diagonal interlaced thick lines	

13	FILL_HORIZ_LINES_THIN	Horizontal thin lines	
14	FILL_VERTICAL_LINES_THIN	Vertical thin lines	
15	FILL_DIAG_THIN	Diagonal thin lines.	
16	FILL_INV_DIAG_THIN	Inverted diagonal thin lines	
17	FILL_HORIZ_INT_THIN	Horizontal interlaced thin lines	
18	FILL_HORIZ_INTER_THICK	Horizontal interlaced thick lines	

Appendix D. Text Alignment Constants.

Cell horizontal/vertical text alignment constants. Either the numeric value or the constant itself can be used in operation calls.

halign_option_t		
Value	**Constant**	**Description**
0	HALIGN_GENERAL	General horizontal alignment
1	HALIGN_LEFT	Left horizontal alignment
2	HALIGN_CENTER	Center horizontal alignment
3	HALIGN_RIGHT	Right horizontal alignment
4	HALIGN_FILL	Fill horizontal alignment
5	HALIGN_JUSTIFY	Justify horizontal alignment sample - Justify horizontal alignment sample - Justify horizontal alignment sample
6	HALIGN_CENTERACROSS	Center-across horizontal alignment

valign_option_t		
Value	**Constant**	**Description**
0	VALIGN_TOP	Top vertical alignment
1	VALIGN_CENTER	Center vertical alignment
2	VALIGN_BOTTOM	Bottom vertical alignment
3	VALIGN_JUSTIFY	Justify vertical alignment - Justify vertical alignment - Justify vertical alignment - Justify vertical alignment

txtori_option_t		
Value	**Constant**	**Description**

0	ORI_NONE	Default text orientation
1	ORI_TOPBOTTOMTXT	Top-bottom text
2	ORI_90NOCLOCKTXT	90 deg. clockwise text orientation
3	ORI_90CLOCKTXT	90 deg. counterclockwise text orientation

Appendix D. Text Style Constants.

Text style (bold, underline, script) constants. Either the numeric value or the constant itself can be used in operation calls.

boldness_option_t		
Value	**Constant**	**Description**
0	BOLDNESS_BOLD	**Yeico**
1	BOLDNESS_HALF	**Yeico**
2	BOLDNESS_NORMAL	Yeico
3	BOLDNESS_DOUBLE	**Yeico**

script_option_t		
Value	**Constant**	**Description**
0	SCRIPT_NONE	Yeico
1	SCRIPT_SUPER	Yeico
2	SCRIPT_SUB	Yeico

underline_option_t		
Value	**Constant**	**Description**
0	UNDERLINE_NONE	Yeico
1	UNDERLINE_SINGLE	Yeico
2	UNDERLINE_DOUBLE	Yeico
3	UNDERLINE_SINGLEACC	Yeico
4	UNDERLINE_DOUBLEACC	Yeico

Appendix D. Text Alignment Constants.

Number formatting. Either the numeric value or the constant itself can be used in operation calls.

format_number_t			
Value	**Constant**	**Sample**	
0	FMT_GENERAL	12345.12345 =	12345.12345
1	FMT_NUMBER1	12345.12345 =	12345
2	FMT_NUMBER2	12345.12345 =	12345.12
3	FMT_NUMBER3	12345.12345 =	12345
4	FMT_NUMBER4	12345.12345 =	12345.12
5	FMT_CURRENCY1	12345.12345 =	$12345
6	FMT_CURRENCY2	12345.12345 =	$12345
7	FMT_CURRENCY3	12345.12345 =	$12345.12
8	FMT_CURRENCY4	12345.12345 =	$12345.12
9	FMT_PERCENT1	12345.12345 =	1234512%
10	FMT_PERCENT2	12345.12345 =	1234512.35%
11	FMT_SCIENTIFIC1	12345.12345 =	1.23E+04
12	FMT_FRACTION1	12345.12345 =	12345 1/8
13	FMT_FRACTION2	12345.12345 =	12345 10/81
14	FMT_DATE1	12345 =	19-10-1937
15	FMT_DATE2	12345 =	19-Oct-37
16	FMT_DATE3	12345 =	19-Oct
17	FMT_DATE4	12345 =	Oct-37
18	FMT_HOUR1	12345 =	12:00 AM
19	FMT_HOUR2	12345 =	12:00:00 AM
20	FMT_HOUR3	12345 =	00:00
21	FMT_HOUR4	12345 =	00:00:00
22	FMT_HOURDATE	12345 =	19-10-1937 00:00
23	FMT_NUMBER5	12345.12345 =	12345
24	FMT_NUMBER6	12345.12345 =	12345
25	FMT_NUMBER7	12345.12345 =	12345.12
26	FMT_NUMBER8	12345.12345 =	12345.12

27	FMT_ACCOUNTING1	12345.12345 =	12345
28	FMT_ACCOUNTING2	12345.12345 =	$ 12345
29	FMT_ACCOUNTING3	12345.12345 =	12345.12
30	FMT_ACCOUNTING4	12345.12345 =	$ 12345.12
31	FMT_HOUR5	12345 =	00:00
32	FMT_HOUR6	12345 =	296280:00:00
33	FMT_HOUR7	12345 =	00:00.0
34	FMT_SCIENTIFIC2	12345 =	12.3E+3
35	FMT_TEXT	12345 =	12345

Appendix G. Sample Fonts.

Some font samples. These are only the default installed fonts of MS Excel (TM) (and most of the xls-spreadsheet readers). The name of the font can be plainly used when assigning the font name (any string is valid).

Note that using non-default fonts is not recommended, since there is no guarantee that the font will be installed in the client's PC.

Fonts
Arial
Arial Black
Arial Narrow
Arial Narrow
Bookman Old Style
Courier
Garamond
Helvetica
Impact
Σψμβολ
Tahoma
Times
Test