

# PHPWord Beta 0.6.2

## Developers Guide

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# What the hell are twips?

You'll often find the unit twips in this documentation. Twips are the base length unit in Open Office. Twip means "TWentieth of an Inch Point". So 1 twip = 1/1440 inch.

# Set default Font

By default every text appears in Arial font with font size of 10 point. You can alter the default font by using the following two functions:

$PHPWord->setDefaultFontName('Tahoma');

$PHPWord->setDefaultFontSize(12);

# Set document properties

You can set the following document properties:

|  |  |
| --- | --- |
| Name | Type |
| Creator | String |
| Company | String |
| Title | String |
| Description | String |
| Category | String |
| Last modified by | String |
| Created | Datetime |
| Modified | Datetime |
| Subject | String |
| Keywords | String |

To set these properties use the following code:

$properties = $PHPWord->getProperties();

$properties->setCreator('My name');

$properties->setCompany('My factory');

$properties->setTitle('My title');

$properties->setDescription('My description');

$properties->setCategory('My category');

$properties->setLastModifiedBy('My name');

$properties->setCreated( mktime(0, 0, 0, 3, 12, 2010) );

$properties->setModified( mktime(0, 0, 0, 3, 14, 2010) );

$properties->setSubject('My subject');

$properties->setKeywords('my, key, word');

# Sections

## Add a section

Every visible element in word is placed inside of a section. To create a default section use the following code:

$section = $PHPWord->createSection();

The code above creates a default section (portrait oriented) with default margins.

## Style sections

There are two ways to style your sections:

Style with given array:

$sectionStyle = array('orientation' => null,

'marginLeft' => 900,

'marginRight' => 900,

'marginTop' => 900,

'marginBottom' => 900);

$section = $PHPWord->createSection(sectionStyle);

Style after creating the section:

$section = $PHPWord->createSection();

$sectionStyle = $section->getSettings();

$sectionStyle->setLandscape();

$sectionStyle->setPortrait();

$sectionStyle->setMarginLeft(900);

$sectionStyle->setMarginRight(900);

$sectionStyle->setMarginTop(900);

$sectionStyle->setMarginBottom(900);

## Available style properties

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| orientation | Page orientation. Possible values are:   * null (means portrait orientation) * landscape |
| marginTop | Page margin top in twips. |
| marginLeft | Page margin left in twips. |
| marginRight | Page margin right in twips. |
| marginBottom | Page margin bottom in twips. |
| borderTopSize | Border top size in twips. |
| borderTopColor | Border top color in HEX. |
| borderLeftSize | Border left size in twips. |
| borderLeftColor | Border left color in HEX. |
| borderRightSize | Border right size in twips. |
| borderRightColor | Border right color in HEX. |
| borderBottomSize | Border bottom size in twips. |
| borderBottomColor | Border bottom color in HEX. |

The following two properties are automatically set by the use of the orientation property. You can alter them but that's not recommended!

|  |  |
| --- | --- |
| Name | Description |
| pageSizeW | Page width in twips. |
| pageSizeH | Page height in twips. |

# Text Elements

## Add text elements

To add text elements to your word document use the function addText.

$section->addText( $text, [$fontStyle], [$paragraphStyle] );

|  |  |  |
| --- | --- | --- |
| addText() | | |
| Parameters | Type | Description |
| $text | String | Text that appears in the document. |
| $fontStyle | String / Array | Font style of the text. |
| $paragraphStyle | String / Array | Paragraph style of the text. |

## Add textrun elements

A textrun element can contain text or link elements. All elements are placed inside one paragraph with the optionally given paragraph style. To add a textrun use the function createTextrun.

|  |  |  |
| --- | --- | --- |
| createTextRun() | | |
| Parameters | Type | Description |
| $paragraphStyle | String / Array | Paragraph style of the text. |

After creating the textrun you can add text or link elements with individual styles.

$textrun = $section->createTextRun();

$textrun->addText('I am bold', array('bold'=>true));

$textrun->addText('I am italic, array('italic'=>true));

$textrun->addText('I am colored, array('color'=>'AACC00'));

Of course you can use the pre defined paragraph or font styles. See chapter “Style text elements” for more information.

## Style text elements

There are 2 options to style the inserted text elements:

Inline Style:

$fontStyle = array('color'=>'006699', 'size'=>18, 'bold'=>true);

$section->addText('helloWorld', $fontStyle);

$text = $section->addText('helloWorld');

$style = $text->getStyle();

$style->setColor('006699');

$style->setSize(18);

$style->setBold();

Or you can style your text by using a style definition. After defining a style you have to set the second parameter to the name of your style. Use the function addFontStyle:

$PHPWord->addFontStyle( $styleName, $fontStyle);

|  |  |  |
| --- | --- | --- |
| addFontStyle() | | |
| Parameters | Type | Description |
| $styleName | String | Name of the font style. |
| $fontStyle | Array | Font style. |

Example:

$fontStyle = array('color'=>'006699', 'size'=>18, 'bold'=>true);

$PHPWord->addFontStyle('myOwnStyle', $fontStyle);

$text = $section->addText('helloWorld', 'myOwnStyle');

To add a paragraph style definition, use the function addParagraphStyle:

|  |  |  |
| --- | --- | --- |
| addParagraphStyle() | | |
| Parameters | Type | Description |
| $styleName | String | Name of the paragraph style. |
| $paragraphStyle | Array | Paragraph style. |

## Available style properties

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Font Style | |
| Name | Description |
| size | Font size in points. |
| name | Font family |
| bold | Bold |
| italic | Italic |
| superScript | SuperScript |
| subScript | SubScript |
| underline | Use the defined constants: PHPWord\_Style\_Font::UNDERLINE\_... |
| Color | Font color |
| fgColor | Foreground color. You can only use the predefined constants: PHPWord\_Style\_Font::FGCOLOR\_... |

|  |  |
| --- | --- |
| Paragraph Style | |
| Name | Description |
| align | Horizontal alignment. Possible are:   * left * right * center * both / justify |
| spaceBefore | Top margin of the text in twips. |
| spaceAfter | Bottom margin of the text in twips |
| spacing | Margin between the text lines in twips. |

## Add text breaks

To add a text break use the function addTextBreak:

$section->addTextBreak();

If you need more than one text break you can set a multiple text break like this:

$section->addTextBreak(15);

The code above inserts 15 text breaks.

# Add page breaks

To add a manual page break you can use the function addPageBreak:

$section->addPageBreak();

# List elements

## Add list elements

To add a list item use the function addListItem:

$section->addListItem( $text, [$depth], [$styleText], [$styleList], [$styleParagraph] );

|  |  |  |
| --- | --- | --- |
| addListItem() | | |
| Parameters | Type | Description |
| $text | String | Text that appears in the document. |
| $depth | Integer | De |
| $styleText | String / Array | Font style of the current list element. See the chapter "Style text elements" for more information. |
| $styleList | Array | List style of the current element. |
| $styleParagraph | String / Array | Paragraph style of the current list element. See the chapter "Style text elements" for more information. |

## Style list elements

Example of styling list elements:

$listStyle = array('listType' => PHPWord\_Style\_ListItem::TYPE\_NUMBER);

$section->addListItem('Listitem 1', 0, null, $listStyle);

## Available list style properties

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| listType | List point style.  Use the constants in PHPWord\_Style\_ListItem::TYPE\_... |

# Hyperlinks

## Add Hyperlinks

You can add Hyperlinks to the document by using the function addLink:

$section->addLink( $linkSrc, [$linkName], [$styleFont], [$styleParagraph]);

|  |  |  |
| --- | --- | --- |
| addListItem() | | |
| Parameters | Type | Description |
| $linkSrc | String | The URL of the Link. |
| $linkName | String | Placeholder of the URL that appears in the document. |
| $styleFont | String / Array | Style of the Link. See the chapter "Style text elements" for more information. |
| $styleParagraph | String / Array | Paragraph style of the link. See the chapter "Style text elements" for more information. |

## Style Hyperlinks

There are two ways to style a hyperlink.

Inline Style:

$linkStyle = array('color'=>'0000FF',

'underline'=>PHPWord\_Style\_Font::UNDERLINE\_SINGLE);

$section->addLink('http://www.google.de', null, $linkStyle);

Or you can style the hyperlink by using a style definition. After defining a style you have to set the third parameter to the name of your style.

$linkStyle = array('color'=>'0000FF',

'underline'=>PHPWord\_Style\_Font::UNDERLINE\_SINGLE);

$PHPWord->addLinkStyle('myHyperlinkStyle', $linkStyle);

$section->addLink('http://www.google.de', null, 'myHyperlinkStyle');

|  |  |  |
| --- | --- | --- |
| addLinkStyle() | | |
| Parameters | Type | Description |
| $styleName | String | The name of the Link style. |
| $styles | Array | Link style. All font style properties are possible. See the chapter "Style text elements" for more information. |

# Images

## Add images

To add an image use the function addImage:

$section->addImage( $src, [$style] );

|  |  |  |
| --- | --- | --- |
| addImage() | | |
| Parameters | Type | Description |
| $src | String | Path to the image on the web server. The path can be a relative or a absolute path. |
| $style | Array | Image style. |

## Style images

To style an image you can only use an array:

$imageStyle = array('width'=>350, 'height'=>350, 'align'=>'center');

$section->addImage('EARTH.jpg', $imageStyle);

## Available style properties

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| width | Image width in pixel |
| height | Image height in pixel |
| align | Image alignment in the document. Possible are:   * left * right * center |

If no width and height is given, PHPWord tries to detect the width / height properties by using the native PHP function "getimagesize".

PHPWord supports the image types gif, jpeg, png, bmp, tiff.

## Add memory images

You can also add images that have been created by GD. To add an GD image use the function addMemoryImage:

$section->addMemoryImage( $link, [$style] );

|  |  |  |
| --- | --- | --- |
| addMemoryImage() | | |
| Parameters | Type | Description |
| $link | String | The first parameter indicates the source to the PHP File**. Important note: You have to set the source path absolutely (like you are calling the PHP File in your Browser), otherwise PHPWord will throw an error and will not insert the image.** |
| $style | Array | Image style. |

Example:

$section->addMemoryImage('http://localhost/image.php');

You can style the GD images the same way you style native images.

PHPWord supports the GD types png, jpeg, gif.

## Add watermarks

To add a watermark your section needs a header reference. After creating a header, you can use the addWatermark function to add a watermark.

|  |  |  |
| --- | --- | --- |
| addWatermark() | | |
| Parameters | Type | Description |
| $src | String | The source of the watermark image. |
| $style | Array | Image style. |

Because watermarks are always absolute positioned, a watermark has two more style properties:

|  |  |
| --- | --- |
| Name | Description |
| marginLeft | Margin left from Section border in pixel |
| marginTop | Margin top from Section border in pixel |

# Add objects

You can add OLE embeddings to the document by using the function addObject:

$section->addObject( $src, [$style] );

|  |  |  |
| --- | --- | --- |
| addObject() | | |
| Parameters | Type | Description |
| $src | String | Path to the file on the web server. The path can be a relative or a absolute path. |
| $style | Array | Object style. |

There is only one style property for an object:

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| align | Image alignment in the document. Possible are:   * left * right * center |

PHPWord supports the object types XLS, DOC, PPT.

# Add titles

If you want to structure your document, or if you want to build table of contents you need titles. To add a title to the document use the functions addTitleStyle and addTitle:

$PHPWord->addTitleStyle( $titleCount, [$fontStyle] );

|  |  |  |
| --- | --- | --- |
| addTitleStyle() | | |
| Parameters | Type | Description |
| $src | Integer | Layer of the title element. PHPWord supports up to nine layers of titles. |
| $fontStyle | Array | Title font style, every property of PHPWord\_Style\_Font is possible. See the chapter "Style text elements" for more information. |

**Its necessary to add a Title Style to your document because Word otherwise won't detect the title as a real title.**

After defining a title style, adding a title is simple. Use the function addTitle:

$section->addTitle( $text, [$depth] );

|  |  |  |
| --- | --- | --- |
| addTitle() | | |
| Parameters | Type | Description |
| $text | String | Text of the title that appears in the document. |
| $depth | Integer | Depth of the title element. The text will appear in the matching style you have defined by using the function addTitleStyle. |

# Add table-of-contents

To add a table-of-contents you can use the function addTOC:

$styleTOC = array('tabLeader'=>PHPWord\_Style\_TOC::TABLEADER\_DOT);

$styleFont = array('spaceAfter'=>60, 'name'=>'Tahoma', 'size'=>12);

$section->addTOC($styleFont, $styleTOC);

|  |  |  |
| --- | --- | --- |
| addTOC() | | |
| Parameters | Type | Description |
| $styleFont | Array | Font Style of the TOC. Every property of PHPWord\_Style\_Font is possible. See the chapter "Style text elements" for more information. |
| $styleTOC | Array | TOC style. |

The following TOC style properties are available:

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| tabLeader | Fill type between the title text and the page number.  Use the defined constants in PHPWord\_Style\_TOC::TABLEADER\_... |
| tabPos | The position of the tab where the page number appears in twips. |
| Indent | The indent factor of the titles in twips. |

# Tables

## Add tables

To add a table use the function addTable:

$table = $section->addTable( *[$tableStyle]* );

The parameter $tableStyle is optional. See chapter "Style tables" for more information about table styles. **Be sure to save the result of addTable in a local object.** You need a local object to call the following functions:

### Add rows

$table->addRow( *[$height]* );

The height of the row can be set by giving the function the parameter height in twips.

### Add cells

Be sure that you've added a row before you add cells to your table. To add a cell use the function addCell:

$cell = $table->addCell( $width, *[$cellStyle]* );

|  |  |  |
| --- | --- | --- |
| addCell() | | |
| Parameters | Type | Description |
| $width | Integer | Width of the cell in twips. |
| $cellStyle | Array | Cell style. See the chapter "Style cells" for more information. |

**Be sure to save the result of addCell in a local object.** You need a local object to call the following functions:

|  |  |
| --- | --- |
| Name | Description |
| addText | See chapter "Text elements" |
| addTextBreak | See chapter "Text elements" |
| addLink | See chapter "Hyperlinks" |
| addImage | See chapter "Images" |
| addMemoryImage | See chapter "Add Memory images" |
| addListItem | See chapter "ListItems" |
| addObject | See chapter "Objects" |
| addPreserveText | Only available in header / footer. See chapter "footer" or "header". |

Example of a table:

$table = $section->addTable();

$table->addRow();

$cell = $table->addCell(2000);

$cell->addText('Cell 1');

$cell = $table->addCell(2000);

$cell->addText('Cell 2');

$cell = $table->addCell(2000);

$cell->addText('Cell 3');

A shorter version:

$table = $section->addTable();

$table->addRow(400);

$table->addCell(2000)->addText('Cell 1');

$table->addCell(2000)->addText('Cell 2');

$table->addCell(2000)->addText('Cell 3');

$table->addRow(1000);

$table->addCell(2000)->addText('Cell 4');

$table->addCell(2000)->addText('Cell 5');

$table->addCell(2000)->addText('Cell 6');

## Style cells

You can style cells by setting the second parameter in the function addCell.

Example:

$cellStyle = array('textDirection'=>PHPWord\_Style\_Cell::TEXT\_DIR\_BTLR, 'bgColor'=>'C0C0C0');

$table = $section->addTable();

$table->addRow(1000);

$table->addCell(2000, $cellStyle)->addText('Cell 1');

$table->addCell(2000, $cellStyle)->addText('Cell 2');

$table->addCell(2000, $cellStyle)->addText('Cell 3');

$table->addRow();

$table->addCell(2000)->addText('Cell 4');

$table->addCell(2000)->addText('Cell 5');

$table->addCell(2000)->addText('Cell 6');

The following cell style properties are available:

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| valign | Vertical alignment inside the cell. Possible are: left, right, center |
| textDirection | Direction of the Text. Use the predefined constants in PHPWord\_Style\_Cell:: TEXT\_DIR\_... |
| bgColor | Background color in HEX. |
| borderTopSize | Border top size in twips. |
| borderTopColor | Border top color in HEX. |
| borderLeftSize | Border left size in twips. |
| borderLeftColor | Border left color in HEX. |
| borderRightSize | Border right size in twips. |
| borderRightColor | Border right color in HEX. |
| borderBottomSize | Border bottom size in twips. |
| borderBottomColor | Border bottom color in HEX. |

## Style tables

You can style tables by setting the first parameter of the addTable function. The following style properties are available:

**Properties are all case sensitive !**

|  |  |
| --- | --- |
| Name | Description |
| cellMarginTop | Cell margin top in twips. |
| cellMarginLeft | Cell margin left in twips. |
| cellMarginRight | Cell margin right in twips. |
| cellMarginBottom | Cell margin bottom in twips. |

Example:

$tableStyle = array('cellMarginTop'=>80,

'cellMarginLeft'=>80,

'cellMarginRight'=>80,

'cellMarginBottom'=>80);

$table = $section->addTable($tableStyle);

You can define a full table style by using the function addTableStyle:

$PHPWord->addTableStyle($styleName, $styleTable, [$styleFirstRow] );

|  |  |  |
| --- | --- | --- |
| addTableStyle() | | |
| Parameters | Type | Description |
| $styleName | String | Name of the table style |
| $styleTable | Array | Styles of the full table |
| $styleFirstRow | Array | Styles of the first row |

Example:

$styleTable = array('borderColor'=>'006699',

'borderSize'=>6,

'cellMargin'=>50);

$styleFirstRow = array('bgColor'=>'66BBFF');

$PHPWord->addTableStyle('myTable', $styleTable, $styleFirstRow);

$table = $section->addTable('myTable');

$table->addRow(400);

$table->addCell(2000)->addText('Cell 1');

$table->addCell(2000)->addText('Cell 2');

$table->addCell(2000)->addText('Cell 3');

$table->addRow(1000);

$table->addCell(2000)->addText('Cell 4');

$table->addCell(2000)->addText('Cell 5');

$table->addCell(2000)->addText('Cell 6');

The following style properties are available for a full table style:

**Properties are all case sensitive!**

|  |  |
| --- | --- |
| Name | Description |
| cellMarginTop | Cell margin top in twips. |
| cellMarginLeft | Cell margin left in twips. |
| cellMarginRight | Cell margin right in twips. |
| cellMarginBottom | Cell margin bottom in twips. |
| cellMargin | Sets all margins in twips. |
| bgColor | Backgroundcolor of the table in HEX. |
| borderTopSize | Border top size in twips. |
| borderTopColor | Border top color in HEX. |
| borderLeftSize | Border left size in twips. |
| borderLeftColor | Border left color in HEX. |
| borderRightSize | Border right size in twips. |
| borderRightColor | Border right color in HEX. |
| borderBottomSize | Border bottom size in twips. |
| borderBottomColor | Border bottom color in HEX. |
| borderInsideHSize | Border inside-grid horizontal size in twips. |
| borderInsideHColor | Border inside-grid horizontal color in HEX. |
| borderInsideVSize | Border inside-grid vertical size in twips. |
| borderInsideVColor | Border inside-grid vertical color in HEX. |
| borderSize | Sets all border sizes in twips. |
| borderColor | Sets all border colors in HEX. |

# Footer

Each section can have its own footer reference. To create a header use the function createFooter:

$footer = $section->createFooter();

**Be sure to save the result of createFooter in a local object** to call the following functions:

|  |  |
| --- | --- |
| Name | Description |
| addText | See chapter "Text elements" |
| addTextBreak | See chapter "Text elements" |
| addImage | See chapter "Images" |
| addMemoryImage | See chapter "Add Memory images" |
| addListItem | See chapter "ListItems" |
| addPreserveText | Only available in header / footer. See chapter "footer" or "header". |
| addTable | See chapter "Tables" |
| createTextrun | See chapter “Text elements” |

To add a Pagenumber of the Pagecount into the footer (or header) you can use the function addPreserveText:

addPreserveText( $text, [$style] );

|  |  |  |
| --- | --- | --- |
| addPreserveText() | | |
| Parameters | Type | Description |
| $text | String | Text that should be rendered and displayed in the footer (or header). |
| $style | Array | Font style of the text. |

Example:

$footer->addPreserveText('Page {PAGE} of {NUMPAGES}.');

# Header

Each section can have its own header reference. To create a header use the function createHeader:

$header = $section->createHeader();

**Be sure to save the result of createHeader in a local object.** On the header you can call the same functions that are available for the footer. See chapter Footer for more informations.

Only inside of the header reference you can add watermarks.

# Templates

You can create a docx template with included search-patterns that can be replaced by any value you wish. But be careful: **Only single-line values can be replaced**. To load a template file, use the loadTemplate function.

|  |  |  |
| --- | --- | --- |
| loadTemplate() | | |
| Parameters | Type | Description |
| $strFilename | String | Filename of the docx template file. |

After loading the docx template, you can use the setValue function to change the value of a search pattern:

|  |  |  |
| --- | --- | --- |
| setValue() | | |
| Parameters | Type | Description |
| $search | Mixed | Search value |
| $replace | Mixed | Replace value |

$template = $PHPWord->loadTemplate('Template.docx');

$template->setValue('Name', 'Somebody someone');

$template->setValue('Street', 'Coming-Undone-Street 32');

The search-pattern spelling is: **${YOUR\_SEARCH\_PATTERN}**

It is **not possible** to add new PHPWord elements to a loaded template file.