mPDF Version 3.0

New Features

Page background

The background colour can now be set by CSS styles on the <body> tag. This will set the background for the whole page. In this document, the background has been set as a gradient (see below).

Background Gradients

Background can be set as a linear or radial gradient between two colours. The background has been set on this element to a linear gradient. CSS style used here is:

```
background-gradient: linear #c7cdde #f0f2ff 0 1 0 0.5;
```

The four numbers are coordinates in the form (x1, y1, x2, y2) which defines the gradient vector. x and y are values from 0 to 1, where 1 represents the height or width of the box as it is printed.

Background gradients can be set on all block elements e.g. P, DIV, H1-H6, as well as on BODY.

The background has been set on this element to a radial gradient. CSS style used here is:

```
background-gradient: radial #00FFFF #FFFF00 0.5 0.5 0.5 0.5 0.65;
```

The five numbers are coordinates in the form (x1, y1, x2, y2, r) where (x1, y1) is the starting point of the gradient with color1, (x2, y2) is the center of the circle with color2, and r is the radius of the circle. (x1, y1) should be inside the circle, otherwise some areas will not be defined.

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Background Images

The CSS properties background-image, background-position, and background-repeat are supported as defined in CSS2, as well as the shorthand form "background".
The background has been set on this element to:

```
background: transparent url('bg.jpg') repeat fixed right top;
```

Background gradients can be set on all block elements e.g. P, DIV, H1-H6, as well as on BODY.

Rounded Borders

Rounded corners to borders can be added using border-radius as defined in the draft spec. of CSS3.
The two length values of the border-*-radius properties define the radii of a quarter ellipse that defines the shape of the corner of the outer border edge. The first value is the horizontal radius.
`border-top-left-radius: 55pt 25pt;` 55pt is radius of curve from top end of left border starting to go round to the top.
If the second length is omitted it is equal to the first (and the corner is thus a quarter circle). If either length is zero, the corner is square, not rounded.
The border-radius shorthand sets all four border-*-radius properties. If values are given before and after a slash, then the values before the slash set the horizontal radius and the values after the slash set the vertical radius. If there is no slash, then the values set both radii equally. The four values for each radii are given in the order top-left, top-right, bottom-right, bottom-left. If bottom-left is omitted it is the same as top-right. If bottom-right is omitted it is the same as top-left. If top-right is omitted it is the same as top-left.

```
border-radius: 4em;
```
would be equivalent to
```
border-top-left-radius: 4em;
border-top-right-radius: 4em;
border-bottom-right-radius: 4em;
border-bottom-left-radius: 4em;
```

and
```
border-radius: 2em 1em 4em / 0.5em 3em;
```
would be equivalent to
```
border-top-left-radius: 2em 0.5em;
border-top-right-radius: 1em 3em;
border-bottom-right-radius: 4em 0.5em;
border-bottom-left-radius: 1em 3em;
```

Interlaced and alpha-channel-set PNG images supported

Prior to version 3.0, mPDF has not supported PNG images which are interlaced, or images with transparency - now it does.

With a blue background-color set, this PNG image with transparency appears like this:



With a different background-color set, the same image appears like this:



This will not work with background-gradient or background-image (the background-color is used to paint the transparent parts of the image).

CSS "Float"

Block elements can be positioned alongside each other using the CSS property float: left or right. The clear

property can also be used, set as left|right|both. Float is only supported on block elements (i.e. not SPAN etc.) and is not fully compliant with the CSS specification. Float only works properly if a width is set for the float, otherwise the width is set to the maximum available (full width, or less if floats already set).
Margin-right can still be set for a float:right and vice-versa.
A block element next to a float has the padding adjusted so that content fits in the remaining width. Text next to a float should wrap correctly, but backgrounds and borders will overlap and/or lie under the floats in a mess.
NB The width that is set defines the width of the content-box. So if you have two floats with width=50% and either of them has padding, margin or border, they will not fit together on the page.

This is text in a element that is set to float:left and width:54%.

This is text in a element that is set to float:right and width:28%.

This is text that follows a element that is set to clear:both.

HTML Headers now support hyperlinks

Hyperlinks can now be included in HTML headers and footers. See the link to the documentation manual in the footer of this document.

contd...

Resetting Page Numbering

Page numbers can now be reset to any value (rather than just 1) during the document i.e. in any function/tag that supports resetting the numbering: AddPage(), <pagebreak> etc.
Note that the page number has been reset to 20 from this page.

Page Numbering - additional text

Text can be defined to appear before and after page numbers ($pagenumPrefix; $pagenumSuffix; $nbpgPrefix; $nbpgSuffix;)
This document has a non-HTML header defined with the right content as '{PAGENO}{nbpg}'.
The following values have been set:

```
$mpdf->pagenumPrefix = 'Page ';
$mpdf->pagenumSuffix = '';
$mpdf->nbpgPrefix = ' of ';
$mpdf->nbpgSuffix = ' pages.';
```

This is only recommended in non-HTML headers and footers. Although the text is added correctly in HTML headers & footers, the text alignment is not readjusted after substitution e.g. if it used in the right margin.

Other New features

```
- internal links supported in Indexes (parameter added to CreateIndex() and CreateReference()
    $useLinking=true;)
- improved handling of <br>, block elements, and text lines inside tables
- borders of block-level elements & table cell borders supported (partially) in columns
- optional error reporting for problems with Images ($showImageErrors=true;)
- ToC will word-wrap long entries
- internal links (Bookmarks, IndexEntry and ToCEntry) rewritten to give more accurate positioning
    (when used as <tag>)
- autofont algorithm improved for CJK languages
```

All SVG color keywords supported

This table provides a list of all the named colors supported by mPDF. The list is precisely the same as the SVG 1.0 color keyword names. The two color swatches on the left illustrate setting the background color of a table cell in two ways: The first column uses the named color value, and the second column uses the respective numeric color value.

Named	Numeric	Color name	Hex rgb	Decimal
		aliceblue	#F0F8FF	240,248,255
		antiquewhite	#FAEBD7	250,235,215
		aqua	#00FFFF	0,255,255
		aquamarine	#7FFFD4	127,255,212
		azure	#F0FFFF	240,255,255
		beige	#F5F5DC	245,245,220
		bisque	#FFE4C4	255,228,196
		black	#000000	0,0,0
		blanchedalmond	#FFEBCD	255,235,205
		blue	#0000FF	0,0,255
		blueviolet	#8A2BE2	138,43,226

brown	#A52A2A	165,42,42
burlywood	#DEB887	222,184,135
cadetblue	#5F9EA0	95,158,160
chartreuse	#7FFF00	127,255,0
chocolate	#D2691E	210,105,30
coral	#FF7F50	255,127,80
cornflowerblue	#6495ED	100,149,237
cornsilk	#FFF8DC	255,248,220
crimson	#DC143C	220,20,60
cyan	#00FFFF	0,255,255
darkblue	#00008B	0,0,139
darkcyan	#008B8B	0,139,139
darkgoldenrod	#B8860B	184,134,11
darkgray	#A9A9A9	169,169,169
darkgreen	#006400	0,100,0
darkgrey	#A9A9A9	169,169,169
darkkhaki	#BDB76B	189,183,107
darkmagenta	#8B008B	139,0,139
darkolivegreen	#556B2F	85,107,47
darkorange	#FF8C00	255,140,0
darkorchid	#9932CC	153,50,204
darkred	#8B0000	139,0,0
darksalmon	#E9967A	233,150,122
darkseagreen	#8FBC8F	143,188,143
darkslateblue	#483D8B	72,61,139
darkslategray	#2F4F4F	47,79,79
darkslategrey	#2F4F4F	47,79,79
darkturquoise	#00CED1	0,206,209
darkviolet	#9400D3	148,0,211
deeppink	#FF1493	255,20,147
deepskyblue	#00BFFF	0,191,255
dimgray	#696969	105,105,105
dimgrey	#696969	105,105,105
dodgerblue	#1E90FF	30,144,255
firebrick	#B22222	178,34,34
floralwhite	#FFFAF0	255,250,240
forestgreen	#228B22	34,139,34
fuchsia	#FF00FF	255,0,255
gainsboro	#DCDCDC	220,220,220
ghostwhite	#F8F8FF	248,248,255
gold	#FFD700	255,215,0
goldenrod	#DAA520	218,165,32
gray	#808080	128,128,128

green	#008000	0,128,0
greenyellow	#ADFF2F	173,255,47
grey	#808080	128,128,128
honeydew	#F0FFF0	240,255,240
hotpink	#FF69B4	255,105,180
indianred	#CD5C5C	205,92,92
indigo	#4B0082	75,0,130
ivory	#FFFFF0	255,255,240
khaki	#F0E68C	240,230,140
lavender	#E6E6FA	230,230,250
lavenderblush	#FFF0F5	255,240,245
lawngreen	#7CFC00	124,252,0
lemonchiffon	#FFFACD	255,250,205
lightblue	#ADD8E6	173,216,230
lightcoral	#F08080	240,128,128
lightcyan	#E0FFFF	224,255,255
lightgoldenrodyellow	#FAFAD2	250,250,210
lightgray	#D3D3D3	211,211,211
lightgreen	#90EE90	144,238,144
lightgrey	#D3D3D3	211,211,211
lightpink	#FFB6C1	255,182,193
lightsalmon	#FFA07A	255,160,122
lightseagreen	#20B2AA	32,178,170
lightskyblue	#87CEFA	135,206,250
lightslategray	#778899	119,136,153
lightslategrey	#778899	119,136,153
lightsteelblue	#B0C4DE	176,196,222
lightyellow	#FFFFE0	255,255,224
lime	#00FF00	0,255,0
limegreen	#32CD32	50,205,50
linen	#FAF0E6	250,240,230
magenta	#FF00FF	255,0,255
maroon	#800000	128,0,0
mediumaquamarine	#66CDAA	102,205,170
mediumblue	#0000CD	0,0,205
mediumorchid	#BA55D3	186,85,211
mediumpurple	#9370DB	147,112,219
mediumseagreen	#3CB371	60,179,113
mediumslateblue	#7B68EE	123,104,238
mediumspringgreen	#00FA9A	0,250,154
mediumturquoise	#48D1CC	72,209,204
mediumvioletred	#C71585	199,21,133
midnightblue	#191970	25,25,112

mintcream	#F5FFFA	245,255,250
mistyrose	#FFE4E1	255,228,225
moccasin	#FFE4B5	255,228,181
navajowhite	#FFDEAD	255,222,173
navy	#000080	0,0,128
oldlace	#FDF5E6	253,245,230
olive	#808000	128,128,0
olivedrab	#6B8E23	107,142,35
orange	#FFA500	255,165,0
orangered	#FF4500	255,69,0
orchid	#DA70D6	218,112,214
palegoldenrod	#EEE8AA	238,232,170
palegreen	#98FB98	152,251,152
paleturquoise	#AFEEEE	175,238,238
palevioletred	#DB7093	219,112,147
papayawhip	#FFEFD5	255,239,213
peachpuff	#FFDAB9	255,218,185
peru	#CD853F	205,133,63
pink	#FFC0CB	255,192,203
plum	#DDA0DD	221,160,221
powderblue	#B0E0E6	176,224,230
purple	#800080	128,0,128
red	#FF0000	255,0,0
rosybrown	#BC8F8F	188,143,143
royalblue	#4169E1	65,105,225
saddlebrown	#8B4513	139,69,19
salmon	#FA8072	250,128,114
sandybrown	#F4A460	244,164,96
seagreen	#2E8B57	46,139,87
seashell	#FFF5EE	255,245,238
sienna	#A0522D	160,82,45
silver	#C0C0C0	192,192,192
skyblue	#87CEEB	135,206,235
slateblue	#6A5ACD	106,90,205
slategray	#708090	112,128,144
slategrey	#708090	112,128,144
snow	#FFFAFA	255,250,250
springgreen	#00FF7F	0,255,127
steelblue	#4682B4	70,130,180
tan	#D2B48C	210,180,140
teal	#008080	0,128,128
thistle	#D8BFD8	216,191,216
tomato	#FF6347	255,99,71

	turquoise	#40E0D0	64,224,208
	violet	#EE82EE	238,130,238
	wheat	#F5DEB3	245,222,179
	white	#FFFFFF	255,255,255
	whitesmoke	#F5F5F5	245,245,245
	yellow	#FFFF00	255,255,0
	yellowgreen	#9ACD32	154,205,50