

# New Features in mPDF v5.6

## HTML5 tags

New tags introduced in HTML5 now have basic support in mPDF, and will thus support CSS style references.

The following are treated as block elements similar to `<div>`:

```
<article> <aside> <details> <figure> <figcaption> <footer> <header> <hgroup>  
<nav> <section> <summary>
```

The following are treated as in-line elements:

```
<time> <mark>
```

Mark is set by default to highlight in yellow in config.php using `$defaultCSS` e.g. `mark`

Progress and meter are discussed below:

## `<progress>`

Progress: accepts the attributes `value` and `max`. A progress element without a value is called an indeterminate progress bar. Text between the opening and closing tags is not displayed.

CSS styles properties can be applied: `display`, `visibility`, `margin`, `padding`, `border`, `vertical-align`, `width`, `height` and `opacity`. HTML attributes `width` and `height` are supported, although not officially part of the spec.

Example:

```
<progress value="5" max="10">50%</progress>
```

- Indeterminate
- Progress: 0%
- Progress: 100%
- Progress: 57%

## <meter>

Meter: accepts the attributes min, max, value, optimum, low, and high. Text between the opening and closing tags is not displayed.

CSS styles properties can be applied: display, visibility, margin, padding, border, vertical-align, width, height and opacity. HTML attributes width and height are supported, although not officially part of the spec.

Example:

```
<meter value="5" max="10" min="1" low="2" high="8" optimum="5.6">5</meter>
```

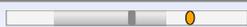
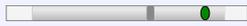
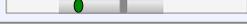
- Meter: full 
- Preferred usage 
- Too much traffic 
- Much too much traffic 

### Custom appearances for <meter> and <progress>

Meter (and to a lesser extent progress) can be used with custom appearances e.g. by using optimum to display the average, and low/high to indicate 90th centiles

Custom appearances can be written by editing the script in classes/meter.php - Use a custom attribute of type="anyname" which is passed to the class as a variable e.g.

```
<meter type="2" value="612.7" optimum="580.4" min="517.0" max="642.7" low="542" high="600">612.7</meter>
```

Domain	Indicator	LHB number	LHB Indicator value	Wales average	Wales range	Comparison
Deaths	Death Rates per 100,000 population	3046	<b>612.7</b>	580.4	517.0 - 642.7	
	Death Rates per 100,000 from cancer	789	<b>178.2</b>	172.7	159.5 - 182.2	
	Death Rates per 100,000 from respiratory disease	505	<b>60.5</b>	72.11	54.41 - 95.5	
	Death Rates per 100,000 from cardiovascular disease	913	<b>178.2</b>	165.0	151.8 - 179.9	

## Fieldset and Legend

Fieldset and legend

Support for fieldset and legend was introduced in mPDF v5.5. Consider it experimental!

Username:

E-mail:

## CSS styles

*min-height*, *min-width*, *max-height* and *max-width* are now supported in CSS style sheets for `<img>` (only).

`background: url(data:image/gif;base64,...)` is now supported in CSS style sheets (gif, png and jpeg).

This `<div>` has the folder icon set as an embedded image in the CSS

```
div.folder { background:
url(data:image/gif;base64,R0lGODlhEAA0ALMAA0azToeHh0tLS/7LZv/0jvb29t/f3//Ub//ge8
WSLf/rhf/3kdbWlmxsbP//mf///yH5BAAAAAALAAAAAAQAA4AAARe8L1Ekyky67QZ1hLnjM5UUde0EC
wLJoExKcppV0aCcGCmTIHEIUEqjga0RCMxIC6e0CcgUwW6aFjsVMkkIr7g77ZKPJjPZqIyd7sJAgVGoE
Gv2xsBxqNgYPj/gAwXEQA7) no-repeat 4px center; padding: 5px 0 5px 25px; border:
1px solid #000000; }
```

## Arabic text

The script handling Arabic text (RTL) was rewritten in mPDF 5.5 with improved support for Pashto/Sindhi/Urdu/Kurdish, especially for joining characters and added new presentation forms.

Some characters in Pashto/Sindhi/Urdu/Kurdish do not have Unicode values for the final/initial/medial forms of the characters. However, some fonts include glyphs for these characters "un-mapped" to Unicode (including XB Zar and XB Riyaz, which are bundled with mPDF).

By editing `config_fonts.php` and adding:

```
'unAGlyphs' => true,
```

to appropriate fonts, this will force mPDF to use unmapped glyphs. It requires the font file to include a Format 2.0 POST table which references the glyphs by name as e.g. `uni067C.med` or `uni067C.medi`

XB Riyaz, XB Zar, Arabic Typesetting (MS), Arial (MS) all contain this table. NB If you want to know if a font file is suitable, you can open a `.ttf` file in a text editor and search for `"uni067C.med"` - if it exists, it may work!

Using `"unAGlyphs"` forces subsetting of fonts, and will not work with SIP/SMP fonts (using characters beyond the Unicode BMP Plane).

mPDF maps these characters to part of the Private Use Area allocated by Unicode `U+F500-F7FF`. This could interfere with correct use if the font already utilises these codes (unlikely).

Using Arial MS font:

	Isolated		Final	Medial	Initial	
U+0621	ء	ئء	ءـ	ءـ	ءـ	هء
U+0622	آ	ئآ	آـ	آـ	آـ	هآ
U+0623	أ	ئأ	أـ	أـ	أـ	هأ
U+0624	ؤ	ئؤ	ؤـ	ؤـ	ؤـ	هؤ
U+0625	إ	ئإ	إـ	إـ	إـ	هإ
U+0626	ئ	ئئ	ئـ	ئـ	ئـ	هئ
U+0627	ا	ئا	اـ	اـ	اـ	ها
U+0628	ب	ئب	بـ	بـ	بـ	هب
U+0629	ة	ئة	ةـ	ةـ	ةـ	هه
U+062A	ت	ئت	تـ	تـ	تـ	هت
U+062B	ث	ئث	ثـ	ثـ	ثـ	هث
U+062C	ج	ئج	جـ	جـ	جـ	هج
U+062D	ح	ئح	حـ	حـ	حـ	هح
U+062E	خ	ئخ	خـ	خـ	خـ	هخ
U+062F	د	ئد	دـ	دـ	دـ	هد
U+0630	ذ	ئذ	ذـ	ذـ	ذـ	هذ
U+0631	ر	ئر	رـ	رـ	رـ	هر
U+0632	ز	ئز	زـ	زـ	زـ	hez
U+0633	س	ئس	سـ	سـ	سـ	هس
U+0634	ش	ئش	شـ	شـ	شـ	هش
U+0635	ص	ئص	صـ	صـ	صـ	هص
U+0636	ض	ئض	ضـ	ضـ	ضـ	هض
U+0637	ط	ئط	طـ	طـ	طـ	هط
U+0638	ظ	ئظ	ظـ	ظـ	ظـ	هظ

	Isolated		Final	Medial	Initial	
U+0639	ع	عْ	ع	ع	ع	عه
U+063A	غ	غْ	غ	غ	غ	غه

	Isolated		Final	Medial	Initial	
U+0640	-	رْ	-	-	-	ه
U+0641	ف	فْ	ف	ف	ف	فه
U+0642	ق	قْ	ق	ق	ق	قه
U+0643	ك	كْ	ك	ك	ك	كه
U+0644	ل	لْ	ل	ل	ل	له
U+0645	م	مْ	م	م	م	مه
U+0646	ن	نْ	ن	ن	ن	نه
U+0647	ه	هْ	ه	ه	ه	هه
U+0648	و	وْ	و	و	و	وه
U+0649	ي	يْ	ي	ي	ي	يه
U+064A	ي	يْ	ي	ي	ي	يه

	Isolated		Final	Medial	Initial	
U+0671	◻	رْ◻	◻-	-◻-	-◻	ه◻
U+0672	◻	رْ◻	◻-	-◻-	-◻	ه◻

	Isolated		Final	Medial	Initial	
U+0674	ء	ئْ	ء	ء	ء	هء
U+0675	◻	رْ◻	◻-	-◻-	-◻	ه◻
U+0676	◻	رْ◻	◻-	-◻-	-◻	ه◻
U+0677	◻	رْ◻	◻-	-◻-	-◻	ه◻
U+0678	◻	رْ◻	◻-	ئ	رْ	ئه
U+0679	ط	طْ	ط	ط	ط	طه
U+067A	ث	ثْ	ث	ث	ث	ثه

	Isolated		Final	Medial	Initial	
U+067B	ب̣	ب̣̣	ب̣-	-ب̣-	ب̣	به
U+067C	پ̣	پ̣̣	پ̣-	-پ̣-	پ̣	په
U+067D	ت̣	ت̣̣	ت̣-	-ت̣-	ت̣	ته
U+067E	پ̣̣	پ̣̣̣	پ̣̣-	-پ̣̣-	پ̣̣	په
U+067F	ث̣	ث̣̣	ث̣-	-ث̣-	ث̣	ته
U+0680	پ̣̣	پ̣̣̣	پ̣̣-	-پ̣̣-	پ̣̣	په
U+0681	ح̣	ح̣̣	ح̣-	-ح̣-	ح̣	حه
U+0682	خ̣	خ̣̣	خ̣-	-خ̣-	خ̣	خه
U+0683	ج̣	ج̣̣	ج̣-	-ج̣-	ج̣	جه
U+0684	چ̣	چ̣̣	چ̣-	-چ̣-	چ̣	چه
U+0685	خ̣̣	خ̣̣̣	خ̣̣-	-خ̣̣-	خ̣̣	خه
U+0686	چ̣̣	چ̣̣̣	چ̣̣-	-چ̣̣-	چ̣̣	چه
U+0687	چ̣̣̣	چ̣̣̣̣	چ̣̣̣-	-چ̣̣̣-	چ̣̣̣	چه
U+0688	ڙ̣	ڙ̣̣	ڙ̣-	-ڙ̣-	ڙ̣	ڙه
U+0689	ڙ̣̣	ڙ̣̣̣	ڙ̣̣-	-ڙ̣̣-	ڙ̣̣	ڙه
U+068A	ڙ̣̣̣	ڙ̣̣̣̣	ڙ̣̣̣-	-ڙ̣̣̣-	ڙ̣̣̣	ڙه
U+068B	ڙ̣̣̣̣	ڙ̣̣̣̣̣	ڙ̣̣̣̣-	-ڙ̣̣̣̣-	ڙ̣̣̣̣	ڙه
U+068C	ڙ̣̣̣̣̣	ڙ̣̣̣̣̣̣	ڙ̣̣̣̣̣-	-ڙ̣̣̣̣̣-	ڙ̣̣̣̣̣	ڙه
U+068D	ڙ̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣	ڙه
U+068E	ڙ̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣	ڙه
U+068F	ڙ̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣̣	ڙه
U+0690	ڙ̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣̣̣	ڙه
U+0691	ڙ̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣̣̣̣	ڙه
U+0692	ڙ̣̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣̣̣̣̣	ڙه
U+0693	ڙ̣̣̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣̣̣̣	ڙ̣̣̣̣̣̣̣̣̣̣̣̣-	-ڙ̣̣̣̣̣̣̣̣̣̣̣̣-	ڙ̣̣̣̣̣̣̣̣̣̣̣̣	ڙه

	Isolated		Final	Medial	Initial	
U+0694	ر	رُ	-ر	-ر-	ر-	رہ
U+0695	ړ	ړُ	-ړ	-ړ-	ړ-	ړہ
U+0696	ز	زُ	-ز	-ز-	ز-	زہ
U+0697	ژ	ژُ	-ژ	-ژ-	ژ-	ژہ
U+0698	ڙ	ڙُ	-ڙ	-ڙ-	ڙ-	ڙہ
U+0699	ڙ	ڙُ	-ڙ	-ڙ-	ڙ-	ڙہ
U+069A	بب	بُب	-بب	-بب-	بب-	ببہ
U+069B	پپ	پُپ	-پپ	-پپ-	پپ-	پپہ
U+069C	پپ	پُپ	-پپ	-پپ-	پپ-	پپہ
U+069D	صص	صُص	-صص	-صص-	صص-	صصہ
U+069E	ضض	ضُض	-ضض	-ضض-	ضض-	ضضہ
U+069F	ظظ	ظُظ	-ظظ	-ظظ-	ظظ-	ظظہ
U+06A0	غغ	غُغ	-غغ	-غغ-	غغ-	غغہ
U+06A1	فف	فُف	-فف	-فف-	فف-	ففہ
U+06A2	فب	فُب	-فب	-فب-	فب-	فبہ
U+06A3	فب	فُب	-فب	-فب-	فب-	فبہ
U+06A4	فث	فُث	-فث	-فث-	فث-	فثہ
U+06A5	فپ	فُپ	-فپ	-فپ-	فپ-	فپہ
U+06A6	فق	فُق	-فق	-فق-	فق-	فقہ
U+06A7	فف	فُف	-فف	-فف-	فف-	ففہ
U+06A8	فق	قُق	-قق	-قق-	قق-	ققہ
U+06A9	کک	کُک	-کک	-کک-	کک-	ککہ
U+06AA	کک	کُک	-کک	-کک-	کک-	ککہ
U+06AB	گگ	گُگ	-گگ	-گگ-	گگ-	گگہ
U+06AC	گگ	گُگ	-گگ	-گگ-	گگ-	گگہ

	Isolated		Final	Medial	Initial	
U+06AD	ث	ث	ث	ث	ث	هث
U+06AE	ظ	ظ	ظ	ظ	ظ	هظ
U+06AF	گ	گ	گ	گ	گ	هگ
U+06B0	گھ	گھ	گھ	گھ	گھ	هگھ
U+06B1	گی	گی	گی	گی	گی	هگی
U+06B2	گی	گی	گی	گی	گی	هگی
U+06B3	گی	گی	گی	گی	گی	هگی
U+06B4	گی	گی	گی	گی	گی	هگی
U+06B5	ج	ج	ج	ج	ج	هج
U+06B6	ج	ج	ج	ج	ج	هج
U+06B7	ج	ج	ج	ج	ج	هج
U+06B8	چ	چ	چ	چ	چ	هچ
U+06B9	ن	ن	ن	ن	ن	هن
U+06BA	س	س	س	س	س	هس
U+06BB	ط	ط	ط	ط	ط	هط
U+06BC	ن	ن	ن	ن	ن	هن
U+06BD	ث	ث	ث	ث	ث	هث
U+06BE	ھ	ھ	ھ	ھ	ھ	هھ
U+06BF	چ	چ	چ	چ	چ	هچ
U+06C0	□	□	□	□	□	ه□
U+06C1	□	□	□	□	□	ه□
U+06C2	□	□	□	□	□	ه□
U+06C3	□	□	□	□	□	ه□
U+06C4	□	□	□	□	□	ه□
U+06C5	□	□	□	□	□	ه□

	Isolated		Final	Medial	Initial	
U+06C6	ؤ	ؤء	ؤ-	-ؤ-	-ؤ	هؤ
U+06C7	□	□ء	□-	-□-	-□	ه□
U+06C8	□	□ء	□-	-□-	-□	ه□
U+06C9	□	□ء	□-	-□-	-□	ه□
U+06CA	□	□ء	□-	-□-	-□	ه□
U+06CB	□	□ء	□-	-□-	-□	ه□
U+06CC	ي	ئي	ي-	-ي-	-ي	يه
U+06CD	□	□ء	□-	-□-	-□	ه□
U+06CE	ئ	ئي	ئ-	-ئ-	-ئ	هئ
U+06CF	□	□ء	□-	-□-	-□	ه□
U+06D0	□	□ء	□-	-□-	-□	ه□
U+06D1	□	□ء	□-	پ-	-پ	په
U+06D2	□	□ء	□-	-□-	-□	ه□
U+06D3	□	□ء	□-	-□-	-□	ه□