

# 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:

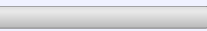
## `<progress>`

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% 

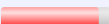
## <meter>

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>
```

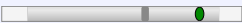
- Meter: full 
- Preferred usage 
- Too much traffic 
- Much too much traffic 

### 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,R0lGODlhEAA0ALMAAAzToeHh0tLS/7LZv/0jvb29t/f3//Ub//ge8
WSLf/rhf/3kdbWlmsbP//mf///yH5BAAAAAALAAAAAAQAA4AAARe8L1Ekyky67QZ1hLnjM5UUde0EC
wLJoExKcppV0aCcGCmTIHEIUEqjga0RCMxIC6e0CcgUw6aFjsVMkkIr7g77ZKPJjPZqIyd7sJAgVGoE
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    | ـءـ    | ـءـ     | هء  |
| U+0622 | آ        | ئآ | آـ    | ـآـ    | ـآـ     | هآ  |
| U+0623 | أ        | ئأ | أـ    | ـأـ    | ـأـ     | هأ  |
| U+0624 | ؤ        | ئؤ | ؤـ    | ـؤـ    | ـؤـ     | هؤ  |
| U+0625 | إ        | ئإ | إـ    | ـإـ    | ـإـ     | هإ  |
| U+0626 | ئ        | ئئ | ئـ    | ـئـ    | ـئـ     | هئ  |
| U+0627 | ا        | ئا | اـ    | ـاـ    | ـاـ     | ها  |
| U+0628 | ب        | ئب | بـ    | ـبـ    | ـبـ     | هب  |
| U+0629 | ة        | ئة | ةـ    | ـةـ    | ـةـ     | هه  |
| U+062A | ت        | ئت | تـ    | ـتـ    | ـتـ     | ته  |
| U+062B | ث        | ئث | ثـ    | ـثـ    | ـثـ     | هث  |
| U+062C | ج        | ئج | جـ    | ـجـ    | ـجـ     | هج  |
| U+062D | ح        | ئح | حـ    | ـحـ    | ـحـ     | هح  |
| U+062E | خ        | ئخ | خـ    | ـخـ    | ـخـ     | هخ  |
| U+062F | د        | ئد | دـ    | ـدـ    | ـدـ     | هد  |
| U+0630 | ذ        | ئذ | ذـ    | ـذـ    | ـذـ     | هذ  |
| U+0631 | ر        | ئر | رـ    | ـرـ    | ـرـ     | هر  |
| U+0632 | ز        | ئز | زـ    | ـزـ    | ـزـ     | hez |
| U+0633 | س        | ئس | سـ    | ـسـ    | ـسـ     | هس  |
| U+0634 | ش        | ئش | شـ    | ـشـ    | ـشـ     | هش  |
| U+0635 | ص        | ئص | صـ    | ـصـ    | ـصـ     | هص  |
| U+0636 | ض        | ئض | ضـ    | ـضـ    | ـضـ     | هض  |
| U+0637 | ط        | ئط | طـ    | ـطـ    | ـطـ     | هط  |
| U+0638 | ظ        | ئظ | ظـ    | ـظـ    | ـظـ     | 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 | ﺀ        | ﺀْ | ﺀ-    | -ﺀ-    | -ﺀ      | هﺀ |
| U+0672 | ﺀ        | ﺀْ | ﺀ-    | -ﺀ-    | -ﺀ      | هﺀ |

|        | Isolated |    | Final | Medial | Initial |    |
|--------|----------|----|-------|--------|---------|----|
| U+0674 | ء        | ئْ | -     | --     | -       | ه  |
| U+0675 | ﺀ        | ﺀْ | ﺀ-    | -ﺀ-    | -ﺀ      | هﺀ |
| U+0676 | ﺀ        | ﺀْ | ﺀ-    | -ﺀ-    | -ﺀ      | هﺀ |
| U+0677 | ﺀ        | ﺀْ | ﺀ-    | -ﺀ-    | -ﺀ      | هﺀ |
| U+0678 | ﺀ        | ﺀْ | ﺀ-    | ئ      | ئ       | ئه |
| U+0679 | ٹ        | ٹْ | ٹ     | ٹ      | ٹ       | ٹه |
| U+067A | ن        | نْ | ن     | ن      | ن       | نه |

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|--------|----------|----|-------|--------|---------|----|
| U+067B | ب        | بْ | بـ    | ـبـ    | بـ      | به |
| U+067C | پ        | پْ | پـ    | ـپـ    | پـ      | په |
| U+067D | ت        | تْ | تـ    | ـتـ    | تـ      | ته |
| U+067E | پ        | پْ | پـ    | ـپـ    | پـ      | په |
| U+067F | ث        | ثْ | ثـ    | ـثـ    | ثـ      | ته |
| U+0680 | ی        | یْ | یـ    | ـیـ    | یـ      | یه |
| U+0681 | ح        | حْ | حـ    | ـحـ    | حـ      | حه |
| U+0682 | خ        | خْ | خـ    | ـخـ    | خـ      | خه |
| U+0683 | ج        | جْ | جـ    | ـجـ    | جـ      | جه |
| U+0684 | چ        | چْ | چـ    | ـچـ    | چـ      | چه |
| U+0685 | ش        | شْ | شـ    | ـشـ    | شـ      | شه |
| U+0686 | چ        | چْ | چـ    | ـچـ    | چـ      | چه |
| U+0687 | چ        | چْ | چـ    | ـچـ    | چـ      | چه |
| U+0688 | ځ        | ځْ | ځـ    | ـځـ    | ځـ      | ځه |
| U+0689 | ډ        | ډْ | ډـ    | ـډـ    | ډـ      | ډه |
| U+068A | ڊ        | ڊْ | ڊـ    | ـڊـ    | ڊـ      | ڊه |
| U+068B | ځ        | ځْ | ځـ    | ـځـ    | ځـ      | ځه |
| U+068C | ڌ        | ڌْ | ڌـ    | ـڌـ    | ڌـ      | ڌه |
| U+068D | ډ        | ډْ | ډـ    | ـډـ    | ډـ      | ډه |
| U+068E | ڏ        | ڏْ | ڏـ    | ـڏـ    | ڏـ      | ڏه |
| U+068F | ڌ        | ڌْ | ڌـ    | ـڌـ    | ڌـ      | ڌه |
| U+0690 | ڌ        | ڌْ | ڌـ    | ـڌـ    | ڌـ      | ڌه |
| U+0691 | ڙ        | ڙْ | ڙـ    | ـڙـ    | ڙـ      | ڙه |
| U+0692 | ڙ        | ڙْ | ڙـ    | ـڙـ    | ڙـ      | ڙه |
| U+0693 | ڻ        | ڻْ | ڻـ    | ـڻـ    | ڻـ      | ڻه |

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| U+0694 | ر        | رْ | -ر    | -ر-    | -ر      | ره |
| U+0695 | ړ        | ړْ | -ړ    | -ړ-    | -ړ      | ړه |
| U+0696 | ز        | زْ | -ز    | -ز-    | -ز      | زه |
| U+0697 | ژ        | ژْ | -ژ    | -ژ-    | -ژ      | ژه |
| U+0698 | ځ        | ځْ | -ځ    | -ځ-    | -ځ      | ځه |
| U+0699 | ښ        | ښْ | -ښ    | -ښ-    | -ښ      | ښه |
| U+069A | پ        | پْ | -پ    | -پ-    | -پ      | په |
| U+069B | پ        | پْ | -پ    | -پ-    | -پ      | په |
| U+069C | پ        | پْ | -پ    | -پ-    | -پ      | په |
| U+069D | ص        | صْ | -ص    | -ص-    | -ص      | صه |
| U+069E | ض        | ضْ | -ض    | -ض-    | -ض      | ضه |
| U+069F | ظ        | ظْ | -ظ    | -ظ-    | -ظ      | ظه |
| U+06A0 | غ        | غْ | -غ    | -غ-    | -غ      | غه |
| U+06A1 | ف        | فْ | -ف    | -ف-    | -ف      | فه |
| U+06A2 | ف        | فْ | -ف    | -ف-    | -ف      | فه |
| U+06A3 | ف        | فْ | -ف    | -ف-    | -ف      | فه |
| U+06A4 | ق        | قْ | -ق    | -ق-    | -ق      | قه |
| U+06A5 | پ        | پْ | -پ    | -پ-    | -پ      | په |
| U+06A6 | ق        | قْ | -ق    | -ق-    | -ق      | قه |
| U+06A7 | ف        | فْ | -ف    | -ف-    | -ف      | فه |
| U+06A8 | ق        | قْ | -ق    | -ق-    | -ق      | قه |
| U+06A9 | ک        | کْ | -ک    | -ک-    | -ک      | که |
| U+06AA | ک        | کْ | -ک    | -ک-    | -ک      | که |
| U+06AB | گ        | گْ | -گ    | -گ-    | -گ      | گه |
| U+06AC | ل        | لْ | -ل    | -ل-    | -ل      | له |

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| U+06AD | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06AE | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06AF | گ        | گ | گ     | گ      | گ       | گه |
| U+06B0 | گ        | گ | گ     | گ      | گ       | گه |
| U+06B1 | گ        | گ | گ     | گ      | گ       | گه |
| U+06B2 | گ        | گ | گ     | گ      | گ       | گه |
| U+06B3 | گ        | گ | گ     | گ      | گ       | گه |
| U+06B4 | گ        | گ | گ     | گ      | گ       | گه |
| U+06B5 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06B6 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06B7 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06B8 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06B9 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BA | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BB | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BC | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BD | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BE | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06BF | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C0 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C1 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C2 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C3 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C4 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |
| U+06C5 | ڙ        | ڙ | ڙ     | ڙ      | ڙ       | ڙه |

|        | Isolated |                | Final | Medial | Initial |    |
|--------|----------|----------------|-------|--------|---------|----|
| U+06C6 | ۆ        | ئۆ             | ۆ-    | -ۆ-    | -ۆ      | هۆ |
| U+06C7 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06C8 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06C9 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06CA | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06CB | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06CC | ى        | ئى             | ى-    | -ى-    | -ى      | هه |
| U+06CD | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06CE | ئ        | ئ              | ئ-    | -ئ-    | -ئ      | هئ |
| U+06CF | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06D0 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06D1 | □        | □ <sup>ء</sup> | □-    | پ-     | -پ      | هپ |
| U+06D2 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |
| U+06D3 | □        | □ <sup>ء</sup> | □-    | -□-    | -□      | ه□ |