

L^AT_EX support for Open Sans

Version 2.0

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1 Introduction

Open Sans is a humanist sans serif typeface designed by Steve Matteson. Open Sans was designed with an upright stress, open forms and a neutral, yet friendly appearance. It was optimized for print, web, and mobile interfaces, and has excellent legibility characteristics in its letterforms.

The font family is available from the Google Font Directory [1] as TTF-flavored TrueType files licensed under the Apache License version 2.0 [2].

This package provides support for Open Sans in \LaTeX , including \XeLaTeX and \LuaTeX . It includes the original OpenType fonts, as well as Type 1 versions, converted for this package using FontForge [3] for full support with \LaTeX and Dvips.

2 Installation

These directions assume that your \TeX distribution is TDS-compliant.

Once the `opensans.zip` archive extracted:

1. Copy `doc/`, `fonts/`, and `tex/` directories to your `texmf/` directory (either your local or global `texmf/` directory)
2. Run `mktxlsr` to refresh the file name database and make \TeX aware of the new files
3. Run `updmap-user --enable Map opensans.map1` to make Dvips, `dvipdf` and \TeX aware of the new fonts

Note that this package requires the following packages to work:

- `fontaxes`
- `fontspec` (for \XeLaTeX / \LuaTeX support)
- `ifluatex`
- `ifxetex`
- `xkeyval`

3 Usage

3.1 Calling Open Sans

You can use the Open Sans font in a \LaTeX document by adding the command

```
\usepackage{opensans}
```

to the preamble. The package supplies the `\opensans` command to switch the current font to Open Sans.

¹Use the `updmap-sys` command instead for a global installation.

Feature	Description	fontspec option
<code>liga</code>	Standard Ligatures	<code>Ligatures=Common</code>
<code>lnum</code>	Lining Figures	<code>Numbers=Uppercase</code>
<code>onum</code>	Oldstyle Figures	<code>Numbers=Lowercase</code>
<code>pnum</code>	Proportional Figures	<code>Numbers=Proportional</code>
<code>salt</code>	Stylistic Alternates	<code>Style=Alternate</code>
<code>ss01</code>	Stylistic Set 1	<code>Alternate=1</code>
<code>ss02</code>	Stylistic Set 2	<code>Alternate=2</code>
<code>ss03</code>	Stylistic Set 3	<code>Alternate=3</code>
<code>tnum</code>	Tabular Figures	<code>Numbers=Monospaced</code>

Table 1: OpenType font features supported by Open Sans fonts

3.2 Options

3.2.1 Open Sans as default (sans-serif) font

You can set \LaTeX to use Open Sans as standard font throughout the whole document by passing the `default` option to the package:

```
\usepackage[default]{opensans}
```

To set Open Sans as default sans-serif only, use the `defaultsans` option:

```
\usepackage[defaultsans]{opensans}
```

3.2.2 OpenType vs. Type 1

Depending on the \LaTeX rendering engine used, the package will automatically use:

- OpenType fonts with X_{\LaTeX} and $\text{Lua}\LaTeX$ (the `fontspec` package will be therefore loaded)
- Type 1 fonts with all other \LaTeX rendering engines (especially $\text{pdf}\LaTeX$)

The package was written to provide same features whatever the $\text{T}_{\text{E}}\text{X}$ rendering engine used. Notice that OpenType fonts supply more typographic features like stylistic alternatives. The table 1 describes all OpenType features supported by the Open Sans font family. Please refer to the `fontspec` package documentation to enable such features in your documents with X_{\LaTeX} or $\text{Lua}\LaTeX$.

To force Type 1 fonts with X_{\LaTeX} or $\text{Lua}\LaTeX$, use the `type1` option. This may be useful to avoid loading the `fontspec` package.

	Lining figures	Old style figures
Tabular figures	+142 521 458.11 € -21 173.91 \$	+142 521 458.11 € -21 173.91 \$
Proportional figures	+142 521 458.11 € -21 173.91 \$	+142 521 458.11 € -21 173.91 \$

Table 2: Figure styles

3.2.3 Font scaling

The font can be up- and downscaled by any factor. This can be used to make Open Sans more friendly when used in company with other type faces, e.g., to adapt the x-height. The package option `scale=ratio` (or `scaled=ratio`) will scale the font according to *ratio* (1.0 by default), for example:

```
\usepackage[scale=0.95]{opensans}
```

3.2.4 Figure versions

Open Sans provides two figure styles (see table 2):

- *Lining figures*, designed to match the uppercase letters in size and color
- *Old style figures* (also known as text figures), designed to match lower-case letters

The `opensans` package uses lining figures by default (`lining` option). To select old style figures, use the `oldstyle` option.

Two figure widths are also available:

- *Tabular figures*, which each have the same width
- *Proportional figures*, which vary in width according to their shape

The `opensans` package uses tabular figures by default (`tabular` option). To select proportional figures, use the `proportional` option.

Notice that tabular oldstyle figures are not available; when requesting such a combination, proportional oldstyle figures are provided as a fallback.

The package also supports and loads the `fontaxes` [4] package. This package supplies macros to individually select figure style and width locally.

3.2.5 Encodings

The following \LaTeX encodings are supported:

Latin OT1, T1, TS1 (partial)

Font	Series	Shape	OpenType font file
Open Sans Light	l	n	OpenSans-Light.ttf
<i>Open Sans Light Italic</i>	l	it (sl)	OpenSans-LightItalic.ttf
Open Sans Condensed Light	lc	n	OpenSansCondensed-Light.ttf
<i>Open Sans Condensed Light Italic</i>	lc	it (sl)	OpenSansCondensed-LightItalic.ttf
Open Sans Regular	m	n	OpenSans-Regular.ttf
<i>Open Sans Italic</i>	m	it (sl)	OpenSans-Italic.ttf
Open Sans SemiBold	sb	n	OpenSans-SemiBold.ttf
<i>Open Sans SemiBold Italic</i>	sb	it (sl)	OpenSans-SemiBoldItalic.ttf
Open Sans Bold	b (bx)	n	OpenSans-Bold.ttf
<i>Open Sans Bold Italic</i>	b (bx)	it (sl)	OpenSans-BoldItalic.ttf
Open Sans Condensed Bold	bc	n	OpenSansCondensed-Bold.ttf
Open Sans ExtraBold	eb	n	OpenSans-ExtraBold.ttf
<i>Open Sans ExtraBold Italic</i>	eb	it (sl)	OpenSans-ExtraBoldItalic.ttf

Table 3: Available font styles

	Lining figures	Old style figures
Tabular figures	opensans-TLF	opensans-T0sF
Proportional figures	opensans-LF	opensans-0sF

Table 4: Available NFSS families

Cyrillic T2A, T2B, T2C, X2

Greek LGR (monotonic only)

To use one or another encoding, give the \LaTeX name to the fontenc package as usual, as in

```
\usepackage[T1]{fontenc}
\usepackage{opensans}
```

3.3 Available weights, shapes and variants

Table 3 lists the available font series and shapes with their NFSS classification. Parenthesized combinations are provided via substitutions.

In addition, each font variant combination (figure width/figure style) corresponds to a NFSS family (see table 4).

Samples of the font are available in the [opensans-samples.pdf](#) file.

3.4 Math support

The opensans package doesn't provide math support. However the mdsymbol1 package [5] provides mathematical symbol fonts which fit very well with Open

Sans. In addition, the `mathspec` [6] package (for \LaTeX or \Lua\TeX engines) or the `mathastext` [7]² package (for other \TeX engines) can be called to use Open Sans as math font.

4 Known bugs and improvements

Please send bug reports and suggestions about the Open Sans \TeX support to [Mohamed El Morabity](#).

4.1 Compatibility with previous versions

4.1.1 Legacy fos family

Previous versions of the package used to provide `fos` as default NFSS family for Open Sans, and the corresponding `\fosfamily` switch command. Such family and macro are still available in newer package versions. In particular, the `fos` family is now an alias for the `opensans-TLF` one.

4.1.2 Smallcaps

Since the Open Sans font family doesn't provide yet "real" smallcaps, faked ones were supplied by previous versions of the `opensans` package (by scaling down uppercase letters), with a very poor result. Furthermore, there's no convenient way to generate fake smallcaps with \XeTeX or \LuaTeX engines and native OpenType fonts.

For these reasons, faked small caps are no longer provided, starting with version 2.0 of the `opensans` package. Anyway \TeX should automatically substitute missing smallcap shapes by normal ones.

5 License

This package is released under the \TeX project public license, either version 1.3c or above [8]. Anyway both the TrueType and Type 1 files are delivered under the Apache License version 2.0 [2].

References

- [1] <http://code.google.com/webfonts/family?family=Open+Sans>
- [2] <http://www.apache.org/licenses/LICENSE-2.0>
- [3] <https://fontforge.github.io/>

²In particular with the `LGR` option to get Greek letters from the Open Sans fonts

- [4] <https://www.ctan.org/pkg/fontaxes>
- [5] <https://www.ctan.org/pkg/mdsymbol>
- [6] <https://www.ctan.org/pkg/mathspec>
- [7] <https://www.ctan.org/pkg/mathastext>
- [8] <http://www.latex-project.org/lppl/lppl-1-3c.html>