

# L<sup>A</sup>T<sub>E</sub>X support for Comfortaa

## Version 3.0

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## 1 Introduction

Comfortaa is a rounded geometric sans-serif type designed by Johan Aakerlund [1]. The font, which includes three weights, is available on Johan's deviantArt web page [2] as TTF-flavored OpenType files licensed under the OFL version 1.1 [3].

This package provides support for this font family in L<sup>A</sup>T<sub>E</sub>X, including X<sub>Y</sub>L<sup>A</sup>T<sub>E</sub>X and LuaL<sup>A</sup>T<sub>E</sub>X. It includes the original OpenType fonts, as

well as Type 1 versions, converted for this package using FontForge [4] for full support with L<sup>A</sup>T<sub>E</sub>X and Dvips.

## 2 Installation

These directions assume that your T<sub>E</sub>X distribution is TDS-compliant. Once the `comfortaa.zip` archive extracted:

1. Copy `doc/`, `fonts/`, and `tex/` directories to your `texmf/` directory (either your local or global `texmf/` directory)
2. Run `mktexlsr` to refresh the file name database and make T<sub>E</sub>X aware of the new files
3. Run `updmap-user --enable Map comfortaa.map`<sup>1</sup> to make Dvips, dvipdf and T<sub>E</sub>X aware of the new fonts

Note that this package requires the following packages to work:

- `fontspec` (for X<sub>Y</sub>L<sup>A</sup>T<sub>E</sub>X/LuaL<sup>A</sup>T<sub>E</sub>X support)
- `ifluatex`
- `ifxetex`
- `xkeyval`

## 3 Usage

### 3.1 Calling Comfortaa

You can use the Comfortaa font family in a L<sup>A</sup>T<sub>E</sub>X document by adding the command

```
\usepackage{comfortaa}
```

to the preamble. The package supplies the `\comfortaa` command to switch the current font to Comfortaa.

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<sup>1</sup>Use the `updmap-sys` command instead for a global installation.

## 3.2 Options

### 3.2.1 Comfortaa as default (sans-serif) font

You can set  $\text{\LaTeX}$  to use Comfortaa as standard font throughout the whole document by passing the `default` option to the package:

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

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

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

### 3.2.2 OpenType vs. Type 1

Depending on the  $\text{\LaTeX}$  rendering engine used, the package will automatically use:

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

The package was written to provide same features whatever the  $\text{\TeX}$  rendering engine used. Notice that OpenType fonts supply more typographic features like stylistic alternatives. The table 1 describes all OpenType features supported by the Comfortaa font family. Please refer to the `fontspec` package documentation to enable such features in your documents with  $\text{\XeLaTeX}$  or  $\text{\LuaLaTeX}$ .

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

### 3.2.3 Font scaling

The font can be up- and downscaled by any factor. This can be used to make Comfortaa 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]{comfortaa}
```

Feature	Description	fontspec option
aalt	Access All Alternates	Unsupported
ccmp	Glyph Composition/Decomposition	Unsupported
dnom	Denominators	VerticalPosition=Denominator
frac	Fractions	Fractions=On
kern	Kerning	Kerning=On
liga	Standard Ligatures	Ligatures=Common
mark	Mark Positioning	Diacritics=MarkToBase
mkmk	Mark to Mark Positioning	Diacritics=MarkToMark
numr	Numerators	VerticalPosition=Numerator
ordn	Ordinals	VerticalPosition=Ordinal
salt	Stylistic Alternates	Style=Alternate
ss01	Stylistic Set 1	Alternate=1
sup	Superscript	VerticalPosition=Superior

Table 1: OpenType font features supported by Comfortaa fonts

OT1-encoded	To Ta Té
T1-encoded	To Ta Té

Table 2: Kerning with OT1 and T1 encodings

### 3.2.4 Encodings

The following  $\LaTeX$  encodings are supported:

Latin OT1, T1, TS1 (partial)

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{comfortaa}
```

As usual with OT1 encoded fonts, kerning with accented characters is treated poorly, if at all. Note difference in kerning between these two encoding in table 2. It is therefore advised to always use the Comfortaa font family in any encoding than OT1 when typing diacritics.

Font	Series	Shape	OpenType font file
Comfortaa Light	l	n	Comfortaa-Light.ttf
Comfortaa Regular	m	n	Comfortaa-Regular.ttf
<b>Comfortaa Bold</b>	b (bx)	n	Comfortaa-Bold.ttf

Table 3: Available font styles

### 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. The package also defines the `comfortaa` NFSS family.

Notice that Comfortaa doesn't come with italic shapes. *Fake slanted shapes are provided instead.*

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

## 4 Known bugs and improvements

Please send bug reports and suggestions about the Comfortaa  $\LaTeX$  support to [Mohamed El Morabity](#).

### 4.1 Compatibility with previous versions

#### 4.1.1 Legacy `fco` family

Previous versions of the package used to provide `fco` as default NFSS family for Comfortaa, and the corresponding `\fcofamily` switch command. Such family and macro are still available in newer package versions. In particular, the `fco` family is now an alias for the `comfortaa` one.

#### 4.1.2 Smallcaps

Since the Comfortaa font family doesn't provide yet "real" smallcaps, faked ones were supplied by previous versions of the `comfortaa` 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 3.0 of the `comfortaa` package. Anyway  $\LaTeX$  should automatically substitute missing smallcap shapes by normal ones.

## 5 License

This package is released under the L<sup>A</sup>T<sub>E</sub>X project public license, either version 1.3c or above [5]. Anyway both OpenType and Type 1 files are delivered under the Open Font License version 1.1 [3].

## References

- [1] <https://www.deviantart.com/aajohan>
- [2] <https://www.deviantart.com/aajohan/art/Comfortaa-font-105395949>
- [3] [http://scripts.sil.org/OFL\\_web](http://scripts.sil.org/OFL_web)
- [4] <https://fontforge.github.io/>
- [5] <http://www.latex-project.org/lppl/lppl-1-3c.html>