

Support for the DejaVu TrueType fonts and Math OpenType font*

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1 Introduction

The DejaVu fonts are modifications of the Bitstream Vera fonts designed for greater coverage of Unicode, as well as providing more styles. The Bitstream Vera family was limited mainly to the characters in the Basic Latin and Latin-1 Supplement portions of Unicode, roughly equivalent to ISO/IEC 8859-15, but was released with a license that permitted changes. The DejaVu fonts project was started with the aim to “provide a wider range of characters ... while maintaining the original look and feel through the process of collaborative development”. The development of the fonts is done by many contributors, and is organized through a wiki and a mailing list. [2]

A brief overview:

- Math fonts: TeXGyre DejaVu Math Regular, created by the Polish T_EX User group GUST.
- Three font families (serif, sans, mono) coming from the original Bitstream Vera.

*Thanks to: Reinhard Kotuch; Lars Madsen; Rolf Niepraschk; Marei Peischl;

The package `dejavu-otf` supports all families with specific optional arguments:

<i>name</i>	<i>value</i>	<i>meaning</i>
mono	true/false	use only the DejaVu Sans Mono
serif	true/false	use only the DejaVu Serif
sans	true/false	use only the DejaVu Sans
math	true/false	use only the T _E X Gyre DejaVu Math
RM	code	options for DejaVu Serif
SS	code	options for DejaVu Sans
TT	code	options for DejaVu Sans Mono
MM	code	options for TeXGyre DejaVu Math
DefaultFeatures	code	for all font styles

Except `math` all fonts are preset with `Scale=0.92`. For this documentation we use instead:

```
\usepackage[TT={Scale=0.88,FakeStretch=0.9},
             SS={Scale=0.9},
             RM={Scale=0.9},
             DefaultFeatures={Ligatures=TeX}]{dejavu-otf} % support opentype DejaVu fonts
```

The standard font families `rm`, `sf`, and `tt` can be used as usual for any L^AT_EX engine. By default the fonts are defined by their symbolic name. As an alternative you can load the package with the option `usefilenames`.

```
\usepackage[usefilenames=true,
             TT={Scale=0.88,FakeStretch=0.9},
             SS={Scale=0.9},
             RM={Scale=0.9},
             DefaultFeatures={Ligatures=TeX}]{dejavu-otf} % supports also opentype math fonts
```

Then all definitions uses the extension `.ttf` (roman, sans serif, mono) and `.otf` (math) for the filenames of the fonts:

```
DejaVuSans-BoldOblique.ttf
DejaVuSans-Bold.ttf
DejaVuSansCondensed-BoldOblique.ttf
DejaVuSansCondensed-Bold.ttf
DejaVuSansCondensed-Oblique.ttf
DejaVuSansCondensed.ttf
DejaVuSans-ExtraLight.ttf
```

DejaVuSansMono-BoldOblique.ttf
 DejaVuSansMono-Bold.ttf
 DejaVuSansMono-Oblique.ttf
 DejaVuSansMono.ttf
 DejaVuSans-Oblique.ttf
 DejaVuSans.ttf
 DejaVuSerif-BoldItalic.ttf
 DejaVuSerif-Bold.ttf
 DejaVuSerifCondensed-BoldItalic.ttf
 DejaVuSerifCondensed-Bold.ttf
 DejaVuSerifCondensed-Italic.ttf
 DejaVuSerifCondensed.ttf
 DejaVuSerif-Italic.ttf
 DejaVuSerif.ttf
 texgyredejavu-math.otf

The condensed and extra-light versions are defined by `\newfontfamily` and can be accessed by the macros:

`\DejaVuSerifCondensed`
`\DejaVuSansCondensed`
`\DejaVuSansLight`

2 Text examples

The DejaVu fonts have no Small Caps and no oldstyle figures!

The basic text family is `DejaVuSerif`, with the usual four variants—regular, italic, bold, and bold italic.

For £45, almost anything can be found floating in fields. DejaVu Serif

ìTHE DAZED BROWN FOX QUICKLY GAVE 12345-67890
 JUMPS! — ïBut aren't Kafka's Schloß and Æsop's Œuvres
 often naïve vis-à-vis the dæmonic phoenix's official rôle in
 fluffy soufflés? Sphinx of black quartz, judge my vow.

For £45, almost anything can be found floating in fields. DejaVu Serif Italic

*ìTHE DAZED BROWN FOX QUICKLY GAVE 12345-67890
 JUMPS! — ïBut aren't Kafka's Schloß and Æsop's Œuvres
 often naïve vis-à-vis the dæmonic phoenix's official rôle in
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DejaVu Serif Bold

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DejaVu Serif BoldItalic

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DejaVu Sans

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DejaVu Sans Italic

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DejaVu Sans Bold

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DejaVu Sans Mono

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DejaVu Sans Mono Italic

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DejaVu Sans Mono Bold

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DejaVu Serif Condensed

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DejaVu Serif Condensed Italic

For £45, almost anything can be found floating in fields. ¡THE DAZED BROWN FOX QUICKLY GAVE 12345-67890 JUMPS! — ¿But aren't Kafka's Schloß and Æsop's Œuvres often naïve vis-à-vis the dæmonic phœnix's official rôle in fluffy soufflés?

DejaVu Serif Condensed Bold

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DejaVu Sans Extra Light

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DejaVu Sans Extra Light Italic

For £45, almost anything can be found floating in fields. iTHE DAZED BROWN FOX QUICKLY GAVE 12345-67890 JUMPS! — ðBut aren't Kafka's Schloß and Æsop's Œuvres often naïve vis-à-vis the dæmonic phœnix's official rôle in fluffy soufflés?

DejaVu Sans Extra Light Bold

For £45, almost anything can be found floating in fields. iTHE DAZED BROWN FOX QUICKLY GAVE 12345-67890 JUMPS! — ðBut aren't Kafka's Schloß and Æsop's Œuvres often naïve vis-à-vis the dæmonic phœnix's official rôle in fluffy soufflés?

DejaVu Sans Extra Light Bold Italic

3 Math examples

There is only the regular version of the math font `\mathnormal`. The bold version is faked by the option `FakeBold`:

```
\setmathfont[\DejaVuMM@features,version=normal]{texgyrejavu-math.otf}
\setmathfont[\DejaVuMM@features,FakeBold=3,version=bold]{texgyrejavu-math.otf}
```

Here's some text. And here's some math:

```
\[
\phi(x)=\int_{-\infty}^x e^{-x^2/2}
\]
```

And now bold math:

```
\boldmath
\[
\phi(x)=\int_{-\infty}^x e^{-x^2/2}
\]
\unboldmath
```

$f(x)=13\int$ **$f(x)=13\int$** \int

Euro and copyright symbols are available: `\texteuro` `\textcopyright`.

Here's some text. And here's some math:

$$\phi(x) = \int_{-\infty}^x e^{-x^2/2}$$

And now bold math:

$$\phi(x) = \int_{-\infty}^x e^{-x^2/2}$$

$f(x) = 13\int$ **$f(x) = 13\int$** \int

Euro and copyright symbols are available: € ©.

4 Closing

The font list of this documentation is:

name	type	encoding	emb	sub	uni	object	ID
LKGW05+DejaVuSerif	CID TrueType	Identity-H	yes	yes	yes	4	0
RGYFML+DejaVuSerif-Bold	CID TrueType	Identity-H	yes	yes	yes	6	0
ADQSZW+DejaVuSerif-Italic	CID TrueType	Identity-H	yes	yes	yes	17	0
QKPHIH+DejaVuSansMono	CID TrueType	Identity-H	yes	yes	yes	19	0

HZBCXM+DejaVuSansMono-Oblique	CID TrueType	Identity-H	yes yes yes	21	0
XTNRKQ+DejaVuSerif-BoldItalic	CID TrueType	Identity-H	yes yes yes	29	0
RDJDXF+DejaVuSans	CID TrueType	Identity-H	yes yes yes	31	0
KFMTYL+DejaVuSans-Oblique	CID TrueType	Identity-H	yes yes yes	33	0
HVEITX+DejaVuSans-Bold	CID TrueType	Identity-H	yes yes yes	35	0
ZCFLWK+DejaVuSans-BoldOblique	CID TrueType	Identity-H	yes yes yes	37	0
QXXGBB+DejaVuSansMono-Bold	CID TrueType	Identity-H	yes yes yes	42	0
CAXNVE+DejaVuSansMono-BoldOblique	CID TrueType	Identity-H	yes yes yes	44	0
WXYBSQ+DejaVuSerifCondensed	CID TrueType	Identity-H	yes yes yes	46	0
RKSNDK+DejaVuSerifCondensed-Italic	CID TrueType	Identity-H	yes yes yes	48	0
MXBDWF+DejaVuSerifCondensed-Bold	CID TrueType	Identity-H	yes yes yes	50	0
KBUOWC+DejaVuSerifCondensed-BoldItalic	CID TrueType	Identity-H	yes yes yes	52	0
WXHJNQ+DejaVuSansCondensed	CID TrueType	Identity-H	yes yes yes	54	0
HMLLYK+DejaVuSansCondensed-Oblique	CID TrueType	Identity-H	yes yes yes	59	0
CTSVEE+DejaVuSansCondensed-Bold	CID TrueType	Identity-H	yes yes yes	61	0
QKMWYD+DejaVuSansCondensed-BoldOblique	CID TrueType	Identity-H	yes yes yes	63	0
KGLISZ+DejaVuSans-ExtraLight	CID TrueType	Identity-H	yes yes yes	65	0
HPCFBC+DejaVuSans-ExtraLight	CID TrueType	Identity-H	yes yes yes	67	0
VLWVVT+DejaVuSans-ExtraLight	CID TrueType	Identity-H	yes yes yes	69	0
AYGLBZ+DejaVuSans-ExtraLight	CID TrueType	Identity-H	yes yes yes	71	0
DWRHKO+TeXGyreDejaVuMath-Regular-Identity-H	CID Type 0C	Identity-H	yes yes yes	76	0
QAYBUL+LinLibertine0-Identity-H	CID Type 0C	Identity-H	yes yes yes	85	0

References

- [1] freedesktop.org. *Fontconfig. A library for configuring and customizing font access.* June 15, 2016. url: <https://www.freedesktop.org/wiki/Software/fontconfig/> (visited on 03/18/2017).
- [2] Štěpán Roh and other. *DejaVu Fonts.* Sept. 29, 2017. url: https://en.wikipedia.org/wiki/DejaVu_fonts.
- [3] unknown. *DejaVu Fonts.* Sept. 29, 2017. url: <https://dejavu-fonts.github.io>.
- [4] WIKIPEDIA. *DejaVu.* Oct. 19, 2016. url: <https://en.wikipedia.org/wiki/Lucida> (visited on 04/03/2017).
- [5] WIKIPEDIA. *List of typographic features.* Feb. 21, 2017. url: https://en.wikipedia.org/wiki/List_of_typographic_features (visited on 03/24/2017).