

The fontaxes package (deprecated)

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Abstract

Deprecated: The fontaxes package simulates multiple independent font selection axes on top of certain single NFSS axes: *base family*, *figure style*, and *figure alignment* on top of *family*; *primary shape* and *secondary shape* on top of *shape*; and *math weight* and *math figure alignment* on top of *math version*.

1 Introduction

When this package was conceived, \LaTeX support for fonts with italic small-caps or *swash capitals* was limited and choosing such a font shape was only possible using the low-level command `\fontshape`. This package simplified access to such shapes by introducing new commands like `\swshape` and making combinations like `\itshape\scshape` work. With \LaTeX release 2020-02-02, that functionality was integrated into the kernel [1], so this package has lost its main *raison d'être*. However, switching between different *figure versions* is still a hassle with \LaTeX 's font selection scheme [2], so all commands defined by fontaxes that deal with figure versions (e.g. `\Infigures` and `\tbfigures`) have been incorporated into a new package called `figureversions`¹, released in April 2025.

For backwards compatibility and for ensuring a smooth transition, the fontaxes package has also been rewritten and is now a thin wrapper around the `figureversions` package, providing additional commands like `\fontprimaryshape`, which have been used in documents and (font) packages in the wild.

2 Migration to figureversions

As a document author, if you have explicitly loaded fontaxes, you can almost surely just replace `\usepackage{fontaxes}` by `\usepackage{figureversions}`. Only if you have used `\fontprimaryshape` or `\fontsecondaryshape` in your document, you need to replace that by the standard \LaTeX command `\fontshape`.

As a font package author, you might have used the command `\fa@naming@exception` to define a new figure version like so:

```
\fa@naming@exception{figures}{\{figurestyle\}\{proportional\}\{suffix1\}}
\fa@naming@exception{figures}{\{figurestyle\}\{tabular\}\{suffix2\}}
```

¹<https://ctan.org/pkg/figureversions>

With the `figureversions` package, you can replace both commands with a single call to `\figureversions_new_figurestyle:nnn`. Since this is a $\LaTeX 3$ command, you need to enter $\LaTeX 3$ mode though:

```
\ExplSyntaxOn
\figureversions_new_figurestyle:nnn{<figurestyle>}{<suffix1>}{<suffix2>}
\ExplSyntaxOff
```

Note that there is no equivalent for other calls to `\fa@naming@exceptions`, which have no effect in this version of `fontaxes` anyway.

References

- [1] \LaTeX News. Issue 31, February 2020. <https://www.latex-project.org/news/latex2e-news/1tnews31.pdf>
- [2] \LaTeX Project Team: $\LaTeX 2_{\epsilon}$ font selection. <https://www.latex-project.org/help/documentation/fntguide.pdf>