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. `\lnfigures` 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 one of the commands `\fa@naming@exception` or the synonymous command `\fontaxes@naming@exception` to define a new figure version like so:

[1] `https://ctan.org/pkg/figureversions`

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

With the figureversions package, you can express both commands with a a single call to `\figureversions_new_figurestyle:nnn`. Since this is a LaTeX3 command, you need to put this after `\ExplSyntaxOn` 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/ltnews31.pdf

[2] LaTeX Project Team: LaTeX 2_ε font selection. https://www.latex-project.org/help/documentation/fntguide.pdf