

# Standard Document Classes and Packages

## A Cook's Tour of what is available in the basic system

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### Abstract

This article describes the Document Classes and Packages that are available or will be available shortly for use with  $\text{\LaTeX}2_{\epsilon}$ . The number of available Packages and Classes will obviously change once  $\text{\LaTeX}2_{\epsilon}$  is the 'official'  $\text{\LaTeX}$ .

## 1 Filenames

When we<sup>1</sup> decided that we wanted to produce an intermediate version of  $\text{\LaTeX}$  after all, we also thought that it was a good idea to introduce a number of new file extensions to the  $\text{\LaTeX}$  world. The reason for this choice was to make it easy to distinguish between files that contain a Document Class, files that contain an external option to a Document Class and files that contain Packages. In table 1 you can find an overview of the extensions we have introduced. We would welcome it if you would stick to the same set of extensions when you upgrade your old `.sty` files.

## 2 What is available?

In the following sections an overview is given of the Document Classes and Packages that are currently available or that will become available shortly. First we focus on the files that are (will be) part of the standard  $\text{\LaTeX}2_{\epsilon}$  distribution.

### 2.1 Document Classes in the $\text{\LaTeX}2_{\epsilon}$ distribution

In table 2 an overview is given of the Document Classes that are available when you get the standard distribution of  $\text{\LaTeX}2_{\epsilon}$ .

Most of these will be familiar to you, they are the successors of their  $\text{\LaTeX}$  2.09 counterparts. Basically these Document Classes behave like the old document styles. But there are a few changes:

- The options `openbib` and `twocolumn` are now internal options, the files `openbib.sty` and `twocolumn.sty` do not exist any more.
- A number of new options are implemented; supporting a range of paper sizes. Currently implemented are `a4paper`, `a5paper`, `b5paper`, `letterpaper`, `legalpaper` and `executivepaper`. The Document Class `proc` does not support `a5paper`. Besides these papersize options there is also the option `landscape` (which is not supported by the `letter` Document Class).
- The Document Class `slide` can now be used with  $\text{\LaTeX}$ ,  $\text{\SLiTeX}$  does not exist as a separate format any

longer.

Two column slides are not supported.

When  $\text{\LaTeX}$  finds the file `sfonts.cfg` it will load it. This file can be used to customize the fonts used for making slides.

- The former `option proc.sty` has now been turned into a separate Document Class, which is implemented by building on `article` using the `\LoadClass` command. This Class does not allow the options `a5paper`, `b5paper` and `onecolumn`.

The Document Class `ltxdoc` is new. It is used in the documentation of all the  $\text{\LaTeX}2_{\epsilon}$  source code. The Document Class is built upon the `article` class and also loads the `doc` package.

It defines the command `\DocInclude` which works like the `\include` command from  $\text{\LaTeX}$ , but setting things up for formatting documented source code.

The formatting of the source code can be customized by creating the file `ltxdoc.cfg`. Such a file could for instance select your favorite paper size. This can be done by entering the following command in `ltxdoc.cfg`:

```
\PassOptionsToClass{a4paper}{article}
```

Selecting `a5paper` is not allowed; the source listings wouldn't fit.

Another command defined by this Document Class is `\GetFileInfo`. It tries to retrieve the date, version and description information from the optional argument to any `\Provides...` command.

<sup>1</sup> 'We' are the  $\text{\LaTeX}3$  project Team

## 2.2 Packages in the L<sup>A</sup>T<sub>E</sub>X<sub>2 $\epsilon$</sub> distribution

Table 3 lists the packages that are contained in the L<sup>A</sup>T<sub>E</sub>X<sub>2 $\epsilon$</sub>  distribution.

All the packages in table 3, except `shortvrb` are described in ‘The L<sup>A</sup>T<sub>E</sub>X Companion’<sup>2</sup>.

The `ifthen` (which used to be `ifthen.sty` has been enhanced and now also defines `\newboolean`, `\setboolean` and `\boolean{...}` to provide a L<sup>A</sup>T<sub>E</sub>X interface to T<sub>E</sub>X’s switches. Other new commands are `\lengthtest` and `\ifodd`.

The package `shortvrb` has only recently been introduced. It contains the definitions of the commands `\MakeShortVerb` and `\DeleteShortVerb` from the `doc` package. By providing this package those commands can also be used in other documents besides L<sup>A</sup>T<sub>E</sub>X source

code documentation.

The `varioref` package wasn’t distributed with earlier versions of L<sup>A</sup>T<sub>E</sub>X, unlike most of the other packages, which all were part of either the L<sup>A</sup>T<sub>E</sub>X distribution or the `doc` and `NFSS` packages.

## 2.3 Other Classes and Packages

Table 4 lists the Packages and Document Classes that are available on CTAN at the time of the writing of this article.

The Document Classes from the NTG family are compatible with the standard Document Classes, but provide a different layout. They also provide a few extra options and a possibility to easily change the fonts used for headings.

In table 5 a few packages are listed of which the author is aware that they will appear on CTAN within the next months.

<code>dtx</code>	Documented source code
<code>fdd</code>	Documented source code for <code>.fd</code> files
<code>fd</code>	A font definition file
<code>ins</code>	DOCSTRIP instructions to unpack a <code>.dtx</code> file
<code>cls</code>	A stripped file containing a Document Class
<code>clo</code>	A stripped file containing an external option for a Document Class
<code>cfg</code>	An optional file that is looked for at runtime and which can contain customization code
<code>sty</code>	A stripped file that contains a (part of) a Package
<code>ltx</code>	A stripped file used when building the L <sup>A</sup> T <sub>E</sub> X <sub>2<math>\epsilon</math></sub> format
<code>def</code>	A stripped file containing definitions that will be read in at runtime.

**Table 1:** Extensions for L<sup>A</sup>T<sub>E</sub>X<sub>2 $\epsilon$</sub>  files

<code>article</code>	produced from <code>classes.dtx</code>
<code>report</code>	produced from <code>classes.dtx</code>
<code>book</code>	produced from <code>classes.dtx</code>
<code>letter</code>	produced from <code>letter.dtx</code>
<code>slides</code>	produced from <code>slides.dtx</code>
<code>proc</code>	produced from <code>proc.dtx</code>
<code>ltxdoc</code>	produced from <code>ltxdoc.dtx</code>

**Table 2:** Available document classes that are part of L<sup>A</sup>T<sub>E</sub>X<sub>2 $\epsilon$</sub>

<sup>2</sup>by Goossens, Mittelbach and Samarin; published by Addison-Wesley, ISBN 0–201–54199–8

ifthen	produced from ifthen.dtx
makeidx	produced from makeindx.dtx
showidx	produced from makeindx.dtx
doc	produced from doc.dtx
shortvrb	produced from doc.dtx
newlfont	produced from newlfont.dtx
oldlfont	produced from oldlfont.dtx
latexsym	produced from .dtx
exscale	produced from .dtx
eufrak	produced from eufrak.dtx
euscript	produced from euscript.dtx
oldgerm	produced from oldgerm.dtx
pandora	produced from pandora.dtx
syntonly	produced from syntonly.dtx
tracefnt	produced from tracefnt.dtx
varioref	produced from varioref.dtx

**Table 3:** Available document packages that are part of  $\text{\LaTeX}2\epsilon$

a4	for typesetting on A4 pages, provides the option <code>widemargins</code>
artikel1	NTG family Document Class
artikel2	NTG family Document Class
artikel3	NTG family Document Class
boek	NTG family Document Class
boek3	NTG family Document Class
epsfig	a combination of <code>espf.sty</code> and <code>psfig.sty</code>
exams	for typesetting examination papers with questions and answers
labels	for printing labels
layout	a complete rewrite of Kent McPhersons <code>layout.sty</code>
rapport1	NTG family Document Class
rapport3	NTG family Document Class
subeqnarray	allows ‘sub-numbering’ for the <code>eqnarray</code> environment
psnfss	makes lots of PostScript fonts available to $\text{\LaTeX}$
textfit	fits text in a certain amount of space

**Table 4:** Packages and Document Classes available for  $\text{\LaTeX}2\epsilon$  on CTAN on march 19, 1994.

array	Reimplementation of the <code>array</code> environment
babel	Support for many languages
brief	NTG family Document Class
changebar	Typesets change bars using <code>\special</code> commands
ftnright	Prints the footnotes of a page in the rightmost column
ltugboat	Document Class for TUGboat
multicol	Typeset in many columns
supertabular	For <code>tabular</code> environments that need many pages
theorem	A reimplementation of the <code>theorem</code> environment
verbatim	A reimplementation of the <code>verbatim</code> environment

**Table 5:** Packages and Document Classes to be made available for  $\text{\LaTeX}2\epsilon$