

The changelog Package

Rebecca Turner*

2018-11-06

Abstract

Changelogs are important. Unfortunately, there are few facilities for typesetting changelogs in L^AT_EX. `changelog` defines a `changelog` environment to make changelogs simple and intuitive.

For rationale, read keepachangelog.com.

Note: Browse the sources, contribute, or complain at github.com/9999years/latex-changelog

Contents

1	Intro	2
1.1	Why?	2
1.1.1	What is a changelog?	2
1.1.2	Why keep a changelog?	2
1.1.3	Who needs a changelog?	2
1.2	The competition	2
2	The changelog environment	3
2.1	Helper commands	4
2.2	Customization	4
2.3	Colors	4
2.3.1	Package options	4
2.4	Example changelog	5
3	Changelog	6

*Brandeis University; rebeccaturner@brandeis.edu

1 Intro

1.1 Why?

Read [Olivier Lacan](#)'s lovely site [keepachangelog.com](#). To excerpt:

1.1.1 What is a changelog?

A changelog is a file which contains a curated, chronologically ordered list of notable changes for each version of a project.

1.1.2 Why keep a changelog?

To make it easier for users and contributors to see precisely what notable changes have been made between each release (or version) of the project.

1.1.3 Who needs a changelog?

People do. Whether consumers or developers, the end users of software are human beings who care about what's in the software. When the software changes, people want to know why and how.

1.2 The competition

It's always good to know the competition. Unfortunately, there isn't much here. Know of another package with similar functionality? Drop me a line or open a pull request!

[vhistory](#) provides a decent-looking changelog. However, it's designed for short changes and provides a less-than-elegant interface. Additionally, it's based on the [ltxtable](#) package, meaning it makes restrictions on the contents of version information and writes the table to a file.

[holtxdoc](#) has a decent changelog feature (via Oberdiek's `History` and `Version` environments), but [holtxdoc](#) "contains some private macros and setup for my needs. Thus do not use it." In addition, Oberdiek's changelogs don't support multiple authors.

[gitlog](#) is an interesting idea, but [gitlog](#) "is a proof-of-concept release to allow users an early evaluation. . ."

Also, [friends don't let friends dump git logs into changelogs](#).

2 The changelog environment

`changelog` [*options*]

Wraps `description` while providing the `version` environment and the `\shortversion` command. In addition to the options shown in table 1, *options* may contain any of the options for `version` (see figure 2) as a form of “partial application”; this may be useful if, for example, most of your versions have the same author.

Table 1: Options for the `changelog` environment

<code>section</code>	Insert a <code>\section</code> before the changelog? Default: <code>true</code>
<code>sectioncmd</code>	Which sectioning command to use? Default: <code>\section</code>
<code>title</code>	What to title the changelog section? Default: <code>Changelog</code>
<code>label</code>	What to <code>\label</code> the section? Default: <code>sec:changelog</code>

`version` [*options*]

Gives a single version; wraps `itemize`.

If the `date` option is absent, the date isn’t printed.

If the `v/version` option is absent, the date is used in its place.

If both `version` and `date` are absent, the version is shown as `Unreleased` and `\today` is used for the date. `\today` isn’t ideal (which is to say, not `ISO 8601` compliant) but it’s well-known and easy to redefine.¹

Table 2: Options for the `version` environment

<code>version</code>	The version string for this version
<code>v</code>	An alias for <code>version</code>
<code>author</code>	The author(s) of this version
<code>date</code>	The date of this version’s release
<code>yanked</code>	Indicates that the release was revoked due to a “serious bug or security issue”; prints a visible notice next to the version number

`\shortversion` {*options*}

A short, one-line version. In addition to the options specified in table 2, the following options are available for `\shortversion`:

`changes` The changes to display for this version

¹Try the `datetime2` package or [any of the other solutions here](#).

2.1 Helper commands

The `changelog` package defines several “helper commands,” which are colorized if the `color` package option has been given. See section 2.3 for more information. These commands include a trailing space; `\added a cool feature` will print with a space between “Added” and “a cool feature”.

<code>\added</code>	Prints an <code>\item</code> beginning with “Added”
<code>\changed</code>	Prints an <code>\item</code> beginning with “Changed”
<code>\deprecated</code>	Prints an <code>\item</code> beginning with “Deprecated”
<code>\removed</code>	Prints an <code>\item</code> beginning with “Removed”
<code>\fixed</code>	Prints an <code>\item</code> beginning with “Fixed”
<code>\security</code>	Prints an <code>\item</code> beginning with “Security”

2.2 Customization

The `changelog` environment wraps `description`, and the `version` environment wraps `itemize`. One could customize these in depth with `enumitem`.

`\changelogyanked` Prints the “revoked release” notice: YANKED. See: [yanked releases on keepachangelog.com](#).

2.3 Colors

Colored output is supported by `xcolor`, which defines several named colors (as seen in figure 1); these colors may be redefined as needed. While the `xcolor` documentation goes into great detail, you’ll likely do fine with just e.g. `\colorlet{ChangelogAdded}{magenta}`.

	ChangelogAdded
	ChangelogChanged
	ChangelogDeprecated
	ChangelogRemoved
	ChangelogFixed
	ChangelogSecurity

Figure 1: Colors provided by the `changelog` package

2.3.1 Package options

`color` Makes output more colorful; this is probably not that useful

2.4 Example changelog

Unreleased Rebecca Turner (November 6, 2018)

- **Added** Really cool features

2019-01-23 Rebecca Turner

- A version with only a date

1.1.0 Rebecca Turner

- A version with no date

1.0.1 **YANKED** Rebecca Turner

- A version with a terrible bug

1.0.0 Rebecca Turner (2018-10-26)

- **Added** a cool feature
- **Changed** some API detail
- **Deprecated** something that was a bad idea in the first place
- **Removed** something that was deprecated 3 versions ago
- **Fixed** a bug that would delete files instead of saving them
- **Security** improved with addition of buffer bound checks
- A change that doesn't fit into any other category

0.1.0 Rebecca Turner (2018-10-19) — Initial beta.

Which is produced with:

```
\usepackage[color]{changelog}
%...
\begin{changelog}[author=Rebecca Turner,
  sectioncmd=\subsection,
  title=Example changelog]
\begin{version}
  \added Really cool features
\end{version}

\begin{version}[date=2019-01-23]
  \item A version with only a date
\end{version}

\begin{version}[v=1.1.0]
  \item A version with no date
\end{version}

\begin{version}[v=1.0.1, yanked]
```

```

\item A version with a terrible bug
\end{version}

\begin{version}[v=1.0.0, date=2018-10-26]
\added a cool feature
\changed some \textsc{api} detail
\deprecated something that was a bad idea in the first place
\removed something that was deprecated 3 versions ago
\fixed a bug that would delete files instead of saving them
\security improved with addition of buffer bound checks
\item A change that doesn't fit into any other category
\end{version}
\shortversion{v=0.1.0, date=2018-10-19,
  changes=Initial beta.}
\end{changelog}

```

3 Changelog

This is this package's actual changelog — not an example!

0.3.0 Rebecca Turner (2018-11-06) — Added proper dependencies

0.2.1 Rebecca Turner (2018-10-26) — Documented `yanked` option

0.2.0 Rebecca Turner (2018-10-26) — First stable release

0.1.0 Rebecca Turner (2018-10-25) — Initial beta

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the definition; numbers in *roman* refer to the pages where the entry is used.

A	D	S
\added <u>4</u>	\deprecated <u>4</u>	\security <u>4</u>
C	F	\shortversion <u>3</u>
\changed <u>4</u>	\fixed <u>4</u>	
\changelog <u>3</u>	R	V
\changelogyanked ... <u>4</u>	\removed <u>4</u>	\version <u>3</u>

List of Tables

1	Options for the <code>changelog</code> environment	3
2	Options for the <code>version</code> environment	3