

# The `changelog` Package

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## Abstract

Changelogs are important. Unfortunately, there are few facilities for typesetting changelogs in  $\text{\LaTeX}$ . `changelog` defines a `changelog` environment to make changelogs simple and intuitive.

For rationale, read [keepachangelog.com](http://keepachangelog.com).

**NOTE** Browse the sources, contribute, or complain at [github.com/9999years/latex-changelog](https://github.com/9999years/latex-changelog)

## Contents

<b>1</b>	<b>I don't want to read this documentation</b>	<b>2</b>
<b>2</b>	<b>Intro</b>	<b>2</b>
2.1	Why? . . . . .	2
2.2	The competition . . . . .	3
<b>3</b>	<b>The <code>changelog</code> environment</b>	<b>3</b>
3.1	Helper commands . . . . .	4
3.2	Customization . . . . .	5
<b>4</b>	<b>Changelog</b>	<b>5</b>

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# 1 I don't want to read this documentation

Perfectly understandable. `changelog` comes in a “simple” flavor:

<b>Changelog</b>
<b>1.0.0</b> Rebecca Turner (2018-12-28)
<ul style="list-style-type: none"><li>• Cool features</li><li>• Bug fixes</li></ul>
<b>0.1.0</b> Rebecca Turner (2018-10-25) — Initial beta

```
\begin{changelog}[author=Rebecca
  Turner, simple,
  sectioncmd=\section*]
\begin{version}[v=1.0.0,
  date=2018-12-28]
  \item Cool features
  \item Bug fixes
\end{version}
\shortversion{v=0.1.0,
  date=2018-10-25,
  changes=Initial beta}
\end{changelog}
```

And a more organized variant based on [keepachangelog.com](http://keepachangelog.com):

<b>Changelog</b>
<b>1.0.0</b> Rebecca Turner (2018-12-28)
<b>Added</b>
<ul style="list-style-type: none"><li>• Cool features</li></ul>
<b>Fixed</b>
<ul style="list-style-type: none"><li>• Bug fixes</li></ul>
<b>0.1.0</b> Rebecca Turner (2018-10-25) — Initial beta

```
\begin{changelog}[author=Rebecca
  Turner, sectioncmd=\section*]
\begin{version}[v=1.0.0,
  date=2018-12-28]
  \added
  \item Cool features
  \fixed
  \item Bug fixes
\end{version}
\shortversion{v=0.1.0,
  date=2018-10-25,
  changes=Initial beta}
\end{changelog}
```

## 2 Intro

### 2.1 Why?

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

#### 2.1.1 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.

#### 2.1.2 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.

### 2.1.3 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.

## 2.2 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](#).

## 3 The changelog environment

```
\begin{changelog}[options]\dots\end{changelog}
```

Wraps description while providing the version environment and the `\shortversion` command. In addition to the options shown below, *options* may contain any of the options for `version` as a form of "partial application"; this may be useful if, for example, most of your versions have the same author.

<b>section</b> = <i>&lt;true false&gt;</i>	<code>true</code>
Insert a <code>\section</code> before the changelog?	
<b>sectioncmd</b> = <i>&lt;command&gt;</i>	<code>\section</code>
Which sectioning command to use?	
<b>title</b> = <i>&lt;txt&gt;</i>	<code>Changelog</code>
What to title the changelog section?	
<b>label</b> = <i>&lt;label&gt;</i>	<code>sec:changelog</code>
What to <code>\label</code> the section?	

```
\begin{version}[options]\dots\end{version}
```

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.<sup>1</sup>

`<options>` may include:

**version**=`<version string>`

The version string for this version

**v**=`<version string>`

An alias for `version`

**author**=`<author(s)>`

The author(s) of this version

**date**=`<date string>`

The date of this version's release

**yanked**=`<true|false>` false

Indicates that the release was revoked due to a "serious bug or security issue"; prints a visible notice next to the version number

**simple**=`<true|false>` false

Indicates this version isn't split up into `\added`, `\changed`, etc. categories; if this option is given, a version environment acts like a plain `itemize`

**short**=`<true|false>` false

Renders a short version, like `\shortversion's changes` option; useful if you need to put verbatim material in the changes which would otherwise cause an error due to being used in an argument.

`\shortversion{<options>}`

A short, one-line version. In addition to `version's` options, the following options are available for `\shortversion`:

**changes**=`<change text>`

The changes to display for this version

### 3.1 Helper commands

The `changelog` package defines several "helper commands." These commands introduce a *set* of changes within the version. There must be at least one `\item` between one of these commands and the end of the `version` environment.

Note that these commands are *only* available when not using the `simple` option!

`\added`

Introduces a list of `\items` that represent added features

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<sup>1</sup>Try the [datet ime2](#) package or [any of the other solutions here](#).

`\changed`

Introduces a list of `\items` that represent changed features

`\deprecated`

Introduces a list of `\items` that represent deprecated features

`\removed`

Introduces a list of `\items` that represent features which have been removed

`\fixed`

Introduces a list of `\items` that represent bug fixes

`\security`

Introduces a list of `\items` that represent security-fixes and closed security holes

### 3.2 Customization

The changelog environment wraps `changelogdescription` (which is defined by default to be just the `description` environment), and the `version` environment wraps `changelogitemize`. One could customize these in depth with `enumitem`, as in:

```
\usepackage{enumitem}
\renewenvironment{changelogitemize}
  {\begin{itemize}[label=---]}
  {\end{itemize}}
```

`\changelogyanked`

Prints the “revoked release” notice: `YANKED`. See: [yanked releases on keepachangelog.com](http://yanked.releases.onkeepachangelog.com).

## 4 Changelog

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

**2.0.0** Rebecca Turner (2019-04-15)

#### Added

- Better error handling; more informative messages for empty `version` or `changelog` environments.
- `short` option in versions.

#### Removed

- Removed color package option.

### **Fixed**

- Added dependencies for [xparse](#) and [xkeyval](#), which had erroneously been excluded from the package.

**1.0.0** Rebecca Turner (2018-12-28)

### **Added**

- The “simple” option for changelogs which aren’t split up into sections of added, changed, removed, etc. features

### **Changed**

- Instead of commands like `\added` introducing an item, they introduce a list of items; this is what [keepachangelog.com](#) actually intended; previous implementations were incorrect to display an “Added” (or whatever) marker next to each item.

**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