The **changelog** Package

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2.5.0 (2023/02/16)

Abstract

Changelogs are important. Unfortunately, there are few facilities for typesetting changelogs in \LaTeX. **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

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1 I don’t want to read this documentation

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

<table>
<thead>
<tr>
<th>Changelog</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0.0</strong> Rebecca Turner (2018-12-28)</td>
</tr>
<tr>
<td>• Cool features</td>
</tr>
<tr>
<td>• Bug fixes</td>
</tr>
<tr>
<td><strong>0.1.0</strong> Rebecca Turner (2018-10-25) — Initial beta</td>
</tr>
</tbody>
</table>

And a more organized variant based on keepachangelog.com:

<table>
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</tr>
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<tr>
<td><strong>1.0.0</strong> Rebecca Turner (2018-12-28)</td>
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<td>Added</td>
</tr>
<tr>
<td>• Cool features</td>
</tr>
<tr>
<td>Fixed</td>
</tr>
<tr>
<td>• Bug fixes</td>
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</tr>
</tbody>
</table>

2 Intro

2.1 Why?

Read Olivier Lacan’s lovely site 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!

\texttt{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 \texttt{ltxtable} package, meaning it makes restrictions on the contents of version information and writes the table to a file.

\texttt{holtxdoc} has a decent changelog feature (via Oberdiek’s \texttt{History} and \texttt{Version} environments), but \texttt{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.

\texttt{gitlog} is an interesting idea, but \texttt{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 \texttt{changelog} environment

\begin{changelog}\[⟨options⟩]\end{changelog}

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

\texttt{section}=(true|false) \hfill true

Insert a \texttt{section} before the changelog?

\texttt{sectioncmd}=(command) \hfill \texttt{\section}

Which sectioning command to use?

\texttt{title}=(txt) \hfill \texttt{Changelog}

What to title the changelog section?

\texttt{label}=(label) \hfill \texttt{sec:changelog}

What to \texttt{\label} the section?
\begin{version}[⟨options⟩]...
\end{version}

Gives a single version; wraps \texttt{itemize}.
If the \texttt{date} option is absent, the date isn’t printed.
If the \texttt{v/version} option is absent, the date is used in its place.
If both \texttt{version} and \texttt{date} are absent, the version is shown as \texttt{Unreleased} and \texttt{\today} is used for the date. \texttt{\today} isn’t ideal (which is to say, not \texttt{iso 8601} compliant) but it’s well-known and easy to redefine.\footnote{Try the \texttt{datetime2} package or any of the other solutions here.}

⟨options⟩ may include:

\texttt{version}=(version string)
The version string for this version

\texttt{v}=(version string)
An alias for \texttt{version}

\texttt{author}=(author(s))
The author(s) of this version

\texttt{date}=(date string)
The date of this version’s release

\texttt{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

\texttt{remark}=(remark)
Adds a remark in the style of the \texttt{yanked} key.

\texttt{remarks}=(comma-separated list of remarks)
Adds multiple remarks in the style of the \texttt{yanked} key.

\texttt{simple}=(true|false) false
Indicates this version isn’t split up into \texttt{\added}, \texttt{\changed}, etc. categories; if this option is given, a \texttt{version} environment acts like a plain \texttt{itemize}

\texttt{short}=(true|false) false
 Renders a short version, like \texttt{\shortversion}’s \texttt{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.

\begin{shortversion}[⟨options⟩]
A short, one-line version. In addition to \texttt{version}’s options, the following options are available for \texttt{\shortversion}:

\texttt{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

\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

\newchangelogsection{(command)\{(description)\)}

Creates a new command like \added, \changed, etc., that can be used in the version environment.

1.0.0 (2023-02-16)

Critical

• Features!

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: \textbf{YANKED} See: yanked releases on keepachangelog.com.

\changelogremark{⟨remark⟩}

Prints a “remark.” This is used to implement \changelogyanked and the remark and remarks keys of the version environment.

## 4 Translations

Want to use \texttt{changelog} in a non-English document? Great! \texttt{changelog} comes with translations for English, German, Spanish, French, and Japanese, as well as support for adding new translations (see section \ref{5} below for translation credits). To use built-in translations, simply load \texttt{babel} with the desired language:

% In the preamble:
% \usepackage[german]{babel}

\begin{changelog}[section=false, author=Holger Schieferdecker]
\begin{version}[v=1.0.0]
\added
\item Features!
\end{version}
\end{changelog}

### 4.1 Creating new translations

\texttt{changelog} uses the \texttt{translations} package to provide translations, and a complete translation looks like this:

\documentclass{article}
\usepackage[english]{babel}
\usepackage{translations}
\DeclareTranslation{English}{changelog-Added}{Added}
\DeclareTranslation{English}{changelog-Changed}{Changed}
\DeclareTranslation{English}{changelog-Deprecated}{Deprecated}
\DeclareTranslation{English}{changelog-Removed}{Removed}
\DeclareTranslation{English}{changelog-Fixed}{Fixed}
\DeclareTranslation{English}{changelog-Security}{Security}
\DeclareTranslation{English}{changelog-Miscellaneous}{Miscellaneous}
\DeclareTranslation{English}{changelog-Unreleased}{Unreleased}
\DeclareTranslation{English}{changelog-Yanked}{YANKED}
Refer to the `translations` package documentation and the `babel` package documentation for more information.

If you create a translation, please send me an email and I'll incorporate the translation into `changelog`'s next release!

5 Contributors

**Rebecca Turner**  Original implementation.

**Holger Schieferdecker**  Internationalization support and German translations.

**David Arnold**  Support for translating the changelog's section title and Spanish translations.

**Damien Calesse**  French translations.

**cmplstofB**  Japanese translations.

6 Changelog

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

2.5.0  Rebecca Turner  `<rbt@sent.as>`  (2023-02-16)

Added

- Added the `\newchangelogsection` command to support custom sections.
- Added the `remark` and `remarks` keys to support custom remarks (like “YANKED”) on versions.
- Added the `\changelogremark` command, which renders the “YANKED” remark and other custom remarks.

2.4.1  Rebecca Turner  `<rbt@sent.as>`  (2023-02-14)

Changed

- Converted the `changelog.sty` implementation to use the `expl3` package. `expl3` provides a reasonable and well-defined programming environment. I believe `expl3` is the future of programming in \LaTeX{}, despite its verbosity.

2.4.0  cmplstofB  `<github.com/cmplstofB>`  (2020-09-02)

Added

- Japanese translations.

2.3.0  Damien Calesse  `<github.com/kranack>`  (2020-08-26)

Added

- French translations.

2.2.0  David Arnold  `<dar@xoe.solutions>`  (2020-04-23)

Added
• Support for translating the changelog’s section title with \DeclareTranslation{Language}{changelog}{...}.
• Spanish translations.

2.1.0 Holger Schieferdecker (2019-06-29)

Added

• Internationalization support.
• German translations.

2.0.0 Rebecca Turner <rbt@sent.as> (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 <rbt@sent.as> (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 <rbt@sent.as> (2018-10-26) — Documented yanked option

0.2.0 Rebecca Turner <rbt@sent.as> (2018-10-26) — First stable release

0.1.0 Rebecca Turner <rbt@sent.as> (2018-10-25) — Initial beta