The changelog Package

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Abstract

Changelogs are important. Unfortunately, there are few facilities for typesetting changelogs in *MI_EX*. changelog defines a changelog environment to make changelogs simple and intuitive.

For rationale, read keepachangelog.com.

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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:

```
\begin{changelog}[author=Rebecca
                                            Turner, simple,
Changelog
                                            sectioncmd=\section*]
                                        \begin{version}[v=1.0.0,
1.0.0 Rebecca Turner (2018-12-28)
                                            date=2018-12-28]
                                          \item Cool features

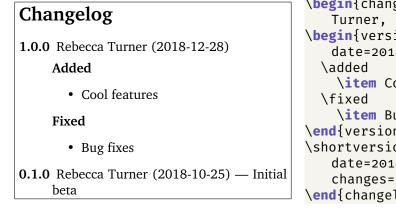
    Cool features

                                          \item Bug fixes

    Bug fixes

                                        \end{version}
                                        \shortversion{v=0.1.0,
0.1.0 Rebecca Turner (2018-10-25) — Initial
                                            date=2018-10-25,
    beta
                                            changes=Initial beta}
                                        \end{changelog}
```

And a more organized variant based on keepachangelog.com:



\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'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!

- **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)]...\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.

| section =(true false) | true |
|---|--------------------------|
| Insert a \section before the changelog? | |
| <pre>sectioncmd=(command)</pre> | \section |
| Which sectioning command to use? | |
| title = $\langle txt \rangle$ | Changelog |
| What to title the changelog section? | |
| label =(<i>label</i>) | <pre>sec:changelog</pre> |
| What to \label the section? | |
| | |

\begin{version}[(options)]...\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.¹

(options) may include:

¹Try the datetime2 package or any of the other solutions here.

```
version=(version string)
```

The version string for this version

 $v = \langle version \ string \rangle$

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)

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

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)

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.

$\ \$

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

\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.

4 Translations

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

1.0.0 Holger Schieferdecker Hinzugefügt

• Features!

% 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

changelog uses the 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}
\begin{document}
% ...
```

```
\end{document}
```

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 <dar@xoe.solutions> Support for translating the changelog's section title and Spanish translations.

Damien Calesse <github.com/kranack> French translations.

6 Changelog

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

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