**NAME**
        debchange − Tool for maintenance of the debian/changelog file in a source package

**SYNOPSIS**
        **debchange** [*options*] [*text ...*]
        **dch** [*options*] [*text ...*]

**DESCRIPTION**
        **debchange** or its alias **dch** will add a new comment line to the Debian changelog in the current source tree.
        This command must be run from within that tree. If the text of the change is given on the command line, if the text of the change is given on the command line,
        **debchange** will run in batch mode and simply add the text, with line breaks as necessary, at the appropriate
        place in *debian/changelog* (or the changelog specified by options, as described below). If the text given on
        the command line is a null string, **debchange** will run in batch mode without adding any text. If the text
        given on the command line is a space string, **debchange** will run in batch mode and add a blank changelog
        entry. If no text is specified then **debchange** will run the editor as determined by **sensible-editor** for you to
        edit the file. (The environment variables **VISUAL** and **EDITOR** are used in this order to determine which
        editor to use.) Editors which understand the +*n* option for starting the editing on a specified line will use
        this to move to the correct line of the file for editing. If the editor is quit without modifying the temporary
        file, **debchange** will exit without touching the existing changelog. **Note that the changelog is assumed to
        be encoded with the UTF-8 encoding. If it is not, problems may occur.** Please see the **iconv**(1) man-
        page to find out how to convert changelogs from legacy encodings. Finally, a *changelog* or *NEWS* file can
        be created from scratch using the **−−create** option described below.

        **debchange** also supports automatically producing bug-closing changelog entries, using the **−−closes** op-
        tion. This will usually query the BTS, the Debian Bug Tracking System (see https://bugs.debian.org/) to
        determine the title of the bug and the package in which it occurs. This behaviour can be stopped by giving
        a **−−noquery** option or by setting the configuration variable **DEBCHANGE_QUERY_BTS** to *no*, as de-
        scribed below. In either case, the editor (as described above) will always be invoked to give an opportunity
        to modify the entries, and the changelog will be accepted whether or not modifications are made. An extra
        changelog entry can be given on the command line in addition to the closes entries.

        At most one of **−−append**, **−−increment**, **−−edit**, **−−release**, and **−−newversion** may be specified as listed
        below. If no options are specified, **debchange** will use heuristics to guess whether or not the package has
        been successfully released, and behave as if **−−increment** had been specified if the package has been re-
        leased, or otherwise as if **−−append** has been specified.

        Two different sets of heuristics can be used, as controlled by the **−−release-heuristic** option or the **DE-
        BCHANGE_RELEASE_HEURISTIC** configuration variable. The default *changelog* heuristic assumes
        the package has been released unless its changelog contains **UNRELEASED** in the distribution field. If this
        heuristic is enabled then the distribution will default to **UNRELEASED** in new changelog entries, and the
        **−−mainttrailer** option described below will be automatically enabled. This can be useful if a package can
        be released by different maintainers, or if you do not keep the upload logs. The alternate *log* heuristic deter-
        mines if a package has been released by looking for an appropriate **dupload**(1) or **dput**(1) log file in the
        parent directory. A warning will be issued if the log file is found but a successful upload is not recorded.
        This may be because the previous upload was performed with a version of **dupload** prior to 2.1 or because
        the upload failed.

        If either **−−increment** or **−−newversion** is used, the name and email for the new version will be deter-
        mined as follows. If the environment variable **DEBFULLNAME** is set, this will be used for the maintainer
        full name; if not, then **NAME** will be checked. If the environment variable **DEBEMAIL** is set, this will be
        used for the email address. If this variable has the form "name <email>", then the maintainer name will
        also be taken from here if neither **DEBFULLNAME** nor **NAME** is set. If this variable is not set, the same
        test is performed on the environment variable **EMAIL**. Next, if the full name has still not been determined,
        then use **getpwuid**(3) to determine the name from the password file. If this fails, use the previous
        changelog entry. For the email address, if it has not been set from **DEBEMAIL** or **EMAIL**, then look in
        */etc/mailname*, then attempt to build it from the username and FQDN, otherwise use the email address in
        the previous changelog entry. In other words, it's a good idea to set **DEBEMAIL** and **DEBFULLNAME**
        when using this script.

Support is included for changelogs that record changes by multiple co-maintainers of a package. If an entry is appended to the current version's entries, and the maintainer is different from the maintainer who is listed as having done the previous entries, then lines will be added to the changelog to tell which maintainers made which changes. Currently only one of the several such styles of recording this information is supported, in which the name of the maintainer who made a set of changes appears on a line before the changes, inside square brackets. This can be switched on and off using the **−−[no]multimaint** option or the **DEBCHANGE_MULTIMAINT** configuration file option; the default is to enable it. Note that if an entry has already been marked in this way, then this option will be silently ignored.

If the directory name of the source tree has the form *package-version*, then **debchange** will also attempt to rename it if the (upstream) version number changes. This can be prevented by using the **−−preserve** command line or configuration file option as described below.

If **−−force−bad−version** or **−−allow−lower−version** is used, **debchange** will not stop if the new version is less than the current one. This is especially useful while doing backports.

## Directory name checking

In common with several other scripts in the **devscripts** package, **debchange** will climb the directory tree until it finds a *debian/changelog* file. As a safeguard against stray files causing potential problems, it will examine the name of the parent directory once it finds the *debian/changelog* file, and check that the directory name corresponds to the package name. Precisely how it does this is controlled by two configuration file variables **DEVSCRIPTS_CHECK_DIRNAME_LEVEL** and **DE-VSCRIPTS_CHECK_DIRNAME_REGEX**, and their corresponding command-line options **−−check-dirname-level** and **−−check-dirname-regex**.

**DEVSCRIPTS_CHECK_DIRNAME_LEVEL** can take the following values:

**0**     Never check the directory name.

**1**     Only check the directory name if we have had to change directory in our search for *debian/changelog*. This is the default behaviour.

**2**     Always check the directory name.

The directory name is checked by testing whether the current directory name (as determined by **pwd**(1)) matches the regex given by the configuration file option **DEVSCRIPTS_CHECK_DIRNAME_REGEX** or by the command line option **−−check-dirname-regex** *regex*. Here *regex* is a Perl regex (see **perlre**(3perl)), which will be anchored at the beginning and the end. If *regex* contains a '*/*', then it must match the full directory path. If not, then it must match the full directory name. If *regex* contains the string ´**PACKAGE**', this will be replaced by the source package name, as determined from the changelog. The default value for the regex is: ´**PACKAGE(-.+)?**', thus matching directory names such as **PACKAGE** and **PACKAGE-***version*.

The default changelog to be edited is *debian/changelog*; however, this can be changed using the **−−changelog** or **−−news** options or the **CHANGELOG** environment variable, as described below.

## OPTIONS

**−−append**, **−a**

Add a new changelog entry at the end of the current version's entries.

**−−increment**, **−i**

Increment either the final component of the Debian release number or, if this is a native Debian package, the version number. On Ubuntu or Tanglu, this will also change the suffix from buildX to ubuntu1/tanglu1. Use **−R**, **−−rebuild** for a no change rebuild increment. This creates a new section at the beginning of the changelog with appropriate headers and footers. Also, if this is a new version of a native Debian package, the directory name is changed to reflect this. If **DE-BCHANGE_RELEASE_HEURISTIC** is *changelog* (default) and the current release is *UNRE-LEASED*, this will only change the version of the current changelog stanza. Otherwise, this will create a new changelog stanza with the new version.

**−−newversion** *version*, **−v** *version*

This specifies the version number (including the Debian release part) explicitly and behaves as the **−−increment** option in other respects. It will also change the directory name if the upstream version number has changed. If **DEBCHANGE_RELEASE_HEURISTIC** is *changelog* (default) and the current release is *UNRELEASED*, this will only change the version of the current changelog stanza. Otherwise, this will create a new changelog stanza with the new version.

**−−edit**, **−e**

Edit the changelog in an editor.

**−−release**, **−r**

Finalize the changelog for a release. Update the changelog timestamp. If the distribution is set to **UNRELEASED**, change it to the distribution from the previous changelog entry (or another distribution as specified by **−−distribution**). If there are no previous changelog entries and an explicit distribution has not been specified, **unstable** will be used.

**−−force−save−on−release**

When **−−release** is used, an editor is opened to allow inspection of the changelog. The user is required to save the file to accept the modified changelog, otherwise the original will be kept (default).

**−−no−force−save−on−release**

Do not do so. Note that a dummy changelog entry may be supplied in order to achieve the same effect - e.g. **debchange −−release ""**. The entry will not be added to the changelog but its presence will suppress the editor.

**−−create**

This will create a new *debian/changelog* file (or *NEWS* if the **−−news** option is used). You must be in the top-level directory to use this; no directory name checking will be performed. The package name and version can either be specified using the **−−package** and **−−newversion** options, determined from the directory name using the **−−fromdirname** option or entered manually into the generated *changelog* file. The maintainer name is determined from the environment if this is possible, and the distribution is specified either using the **−−distribution** option or in the generated *changelog* file.

**−−empty**

When used in combination with **−−create**, suppress the automatic addition of an "**initial release**" changelog entry (so that the next invocation of **debchange** adds the first entry). Note that this will cause a **dpkg−parsechangelog** warning on the next invocation due to the lack of changes.

**−−package** *package*

This specifies the package name to be used in the new changelog; this may only be used in conjunction with the **−−create**, **−−increment** and **−−newversion** options.

**−−nmu**, **−n**

Increment the Debian release number for a non-maintainer upload by either appending a "**.1**" to a non-NMU version number (unless the package is Debian native, in which case "**+nmu1**" is appended) or by incrementing an NMU version number, and add an NMU changelog comment. This happens automatically if the packager is neither in the **Maintainer** nor the **Uploaders** field in *debian/control*, unless **DEBCHANGE_AUTO_NMU** is set to *no* or the **−−no−auto−nmu** option is used.

**−−bin−nmu**

Increment the Debian release number for a binary non-maintainer upload by either appending a "**+b1**" to a non-binNMU version number or by incrementing a binNMU version number, and add a binNMU changelog comment.

**−−qa**, **−q**

Increment the Debian release number for a Debian QA Team upload, and add a **QA upload** changelog comment.

**−−rebuild**, **−R**
> Increment the Debian release number for a no-change rebuild by appending a "build1" or by incre-menting a rebuild version number.

**−−security**, **−s**
> Increment the Debian release number for a Debian Security Team non-maintainer upload, and add a **Security Team upload** changelog comment.

**−−lts**
> Increment the Debian release number for a LTS Security Team non-maintainer upload, and add a **LTS Security Team upload** changelog comment.

**−−team**
> Increment the Debian release number for a team upload, and add a **Team upload** changelog com-ment.

**−−upstream**, **−U**
> Don't append **distro-name1** to the version on a derived distribution. Increment the Debian ver-sion.

**−−bpo**
> Increment the Debian release number for an upload to buster-backports, and add a backport upload changelog comment.

**−−stable**
> Increment the Debian release number for an upload to the current stable release.

**−−local**, **−l***suffix*
> Add a suffix to the Debian version number for a local build.

**−−force−bad−version**, **−b**
> Force a version number to be less than the current one (e.g., when backporting).

**−−allow−lower−version** *pattern*
> Allow a version number to be less than the current one if the new version matches the specified pattern.

**−−force−distribution**
> Force the provided distribution to be used, even if it doesn't match the list of known distributions (e.g. for unofficial distributions).

**−−auto−nmu**
> Attempt to automatically determine whether a change to the changelog represents a Non Main-tainer Upload.  This is the default.

**−−no−auto−nmu**
> Disable automatic NMU detection.  Equivalent to setting **DEBCHANGE_AUTO_NMU** to *no*.

**−−fromdirname**, **−d**
> This will take the upstream version number from the directory name, which should be of the form *package-version*.  If the upstream version number has increased from the most recent changelog entry, then a new entry will be made with version number *version*-**1** (or *version* if the package is Debian native), with the same epoch as the previous package version.  If the upstream version number is the same, this option will behave in the same way as **−i**.

**−−closes** *nnnnn*[**,***nnnnn* ...]
> Add changelog entries to close the specified bug numbers.  Also invoke the editor after adding these entries.  Will generate warnings if the BTS cannot be contacted (and **−−noquery** has not been specified), or if there are problems with the bug report located.

**−−[no]query**
> Should we attempt to query the BTS when generating closes entries?

**−−preserve**, **−p**
> Preserve the source tree directory name if the upstream version number (or the version number of a Debian native package) changes.  See also the configuration variables section below.

**−−no−preserve**, **−−nopreserve**
>    Do not preserve the source tree directory name (default).

**−−vendor** *vendor*
>    Override the distributor ID over the default returned by dpkg-vendor.  This name is used for heuristics applied to new package versions and for sanity checking of the target distribution.

**−−distribution** *dist*, **−D** *dist*
>    Use the specified distribution in the changelog entry being edited, instead of using the previous changelog entry's distribution for new entries or the existing value for existing entries.

**−−urgency** *urgency*, **−u** *urgency*
>    Use the specified urgency in the changelog entry being edited, instead of using the default "**medium**" for new entries or the existing value for existing entries.

**−−changelog** *file*, **−c** *file*
>    This will edit the changelog *file* instead of the standard *debian/changelog*.  This option overrides any **CHANGELOG** environment variable setting.  Also, no directory traversing or checking will be performed when this option is used.

**−−news** [*newsfile*]
>    This will edit *newsfile* (by default, *debian/NEWS*) instead of the regular changelog.  Directory searching will be performed.  The changelog will be examined in order to determine the current package version.

**−−[no]multimaint**
>    Should we indicate that parts of a changelog entry have been made by different maintainers?  Default is yes; see the discussion above and also the **DEBCHANGE_MULTIMAINT** configuration file option below.

**−−[no]multimaint−merge**
>    Should all changes made by the same author be merged into the same changelog section?  Default is no; see the discussion above and also the **DEBCHANGE_MULTIMAINT_MERGE** configuration file option below.

**−−maintmaint**, **−m**
>    Do not modify the maintainer details previously listed in the changelog.  This is useful particularly for sponsors wanting to automatically add a sponsorship message without disrupting the other changelog details.  Note that there may be some interesting interactions if multi-maintainer mode is in use; you will probably wish to check the changelog manually before uploading it in such cases.

**−−controlmaint**, **−M**
>    Use maintainer details from the *debian/control* **Maintainer** field rather than relevant environment variables (**DEBFULLNAME**, **DEBEMAIL**, etc.).  This option might be useful to restore details of the main maintainer in the changelog trailer after a bogus edit (e.g. when **−m** was intended but forgot) or when releasing a package in the name of the main maintainer (e.g. the team).

**−−[no]mainttrailer**, **−t**
>    If **mainttrailer** is set, it will avoid modifying the existing changelog trailer line (i.e. the maintainer and date-stamp details), unless used with options that require the trailer to be modified (e.g. **−−create**, **−−release**, **−i**, **−−qa**, etc.)  This option differs from **−−maintmaint** in that it will use multi-maintainer mode if appropriate, with the exception of editing the trailer. See also the **DEBCHANGE_MAINTTRAILER** configuration file option below.

**−−check-dirname-level** *N*
>    See the above section "**Directory name checking**" for an explanation of this option.

**−−check-dirname-regex** *regex*
>    See the above section "**Directory name checking**" for an explanation of this option.

**−−no-conf**, **−−noconf**
> Do not read any configuration files. This can only be used as the first option given on the command-line.

**−−release−heuristic** *log|changelog*
> Controls how **debchange** determines if a package has been released, when deciding whether to create a new changelog entry or append to an existing changelog entry.

**−−help**, **−h**
> Display a help message and exit successfully.

**−−version**
> Display version and copyright information and exit successfully.

## CONFIGURATION VARIABLES

The two configuration files */etc/devscripts.conf* and *˜/.devscripts* are sourced in that order to set configuration variables. Command line options can be used to override configuration file settings. Environment variable settings are ignored for this purpose. The currently recognised variables are:

**DEBCHANGE_PRESERVE**
> If this is set to *yes*, then it is the same as the **−−preserve** command line parameter being used.

**DEBCHANGE_QUERY_BTS**
> If this is set to *no*, then it is the same as the **−−noquery** command line parameter being used.

**DEVSCRIPTS_CHECK_DIRNAME_LEVEL**, **DEVSCRIPTS_CHECK_DIRNAME_REGEX**
> See the above section "**Directory name checking**" for an explanation of these variables. Note that these are package-wide configuration variables, and will therefore affect all **devscripts** scripts which check their value, as described in their respective manpages and in **devscripts.conf**(5).

**DEBCHANGE_RELEASE_HEURISTIC**
> Controls how **debchange** determines if a package has been released, when deciding whether to create a new changelog entry or append to an existing changelog entry. Can be either *log* or *changelog*.

**DEBCHANGE_MULTIMAINT**
> If set to *no*, **debchange** will not introduce multiple-maintainer distinctions when a different maintainer appends an entry to an existing changelog. See the discussion above. Default is *yes*.

**DEBCHANGE_MULTIMAINT_MERGE**
> If set to *yes*, when adding changes in multiple-maintainer mode **debchange** will check whether previous changes by the current maintainer exist and add the new changes to the existing block rather than creating a new block. Default is *no*.

**DEBCHANGE_MAINTTRAILER**
> If this is set to *no*, then it is the same as the **−−nomainttrailer** command line parameter being used.

**DEBCHANGE_TZ**
> Use this timezone for changelog entries. Default is the user/system timezone as shown by '**date −R**' and affected by the environment variable **TZ**.

**DEBCHANGE_LOWER_VERSION_PATTERN**
> If this is set, then it is the same as the **−−allow−lower−version** command line parameter being used.

**DEBCHANGE_AUTO_NMU**
> If this is set to *no* then **debchange** will not attempt to automatically determine whether the current changelog stanza represents an NMU. The default is *yes*. See the discussion of the **−−nmu** option above.

**DEBCHANGE_FORCE_SAVE_ON_RELEASE**
> If this is set to *no*, then it is the same as the **−−no−force−save−on−release** command line parameter being used.

**DEBCHANGE_VENDOR**
> Use this vendor instead of the default (dpkg-vendor output).  See **−−vendor** for details.

# ENVIRONMENT

**DEBEMAIL**, **EMAIL**, **DEBFULLNAME**, **NAME**
> See the above description of the use of these environment variables.

**CHANGELOG**
> This variable specifies the changelog to edit in place of *debian/changelog*.  No directory traversal or checking is performed when this variable is set.  This variable is overridden by the **−−changelog** command-line setting.

**VISUAL**, **EDITOR**
> These environment variables (in this order) determine the editor used by **sensible-editor**.

# SEE ALSO

**debc**(1), **debclean**(1), **dput**(1), **dupload**(1), **devscripts.conf**(5)

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The original author was Christoph Lameter <clameter@debian.org>.  Many substantial changes and improvements were made by Julian Gilbey <jdg@debian.org>.