

Budowanie pakietu git z źródeł

Dmytro Nimchynskyi

Najpierw utworzymy klucz GPG w celu podpisania wygenerowanej paczki deb poleceniem **gpg --gen-key**.



```
nimchynskyi@debian:~$ gpg --gen-key
gpg (GnuPG) 2.2.27; Copyright (C) 2021 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Note: Use 'gpg --full-generate-key' for a full featured key generation dialog.

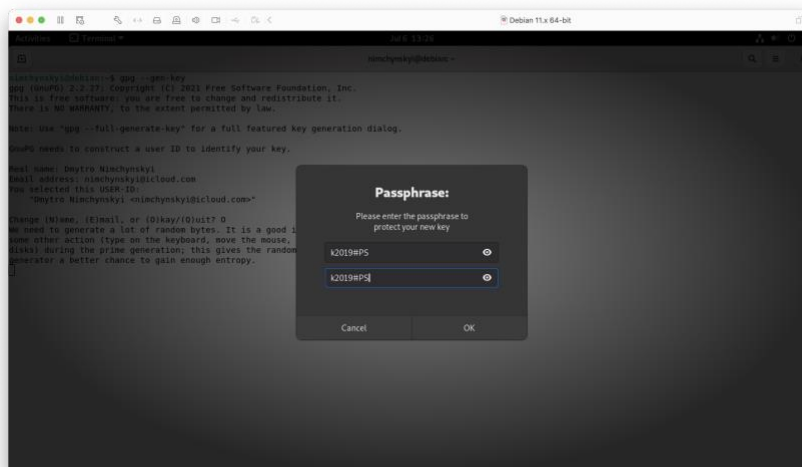
GnuPG needs to construct a user ID to identify your key.

Real name: Dmytro Nimchynskyi
Email address: nimchynskyi@icloud.com
You selected this USER-ID:
  "Dmytro Nimchynskyi <nimchynskyi@icloud.com>"

Change (N)ame, (E)mail, or (O)kay/(Q)uit? O
We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.
We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.
gpg: key 4724AC0AE5E5CC6F marked as ultimately trusted
gpg: directory '/home/nimchynskyi/.gnupg/openpgp-revocs.d' created
gpg: revocation certificate stored as '/home/nimchynskyi/.gnupg/openpgp-revocs.d/85726CE35D034ACC0807498E4724AC0AE5E5CC6F.rev'
public and secret key created and signed.

pub  rsa3072 2022-07-06 [SC] [expires: 2024-07-05]
     85726CE35D034ACC0807498E4724AC0AE5E5CC6F
uid          Dmytro Nimchynskyi <nimchynskyi@icloud.com>
sub  rsa3072 2022-07-06 [E] [expires: 2024-07-05]

nimchynskyi@debian:~$
```



```
nimchynskyi@debian:~$ gpg --gen-key
gpg (GnuPG) 2.2.27; Copyright (C) 2021 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Note: Use 'gpg --full-generate-key' for a full featured key generation dialog.

GnuPG needs to construct a user ID to identify your key.

Real name: Dmytro Nimchynskyi
Email address: nimchynskyi@icloud.com
You selected this USER-ID:
  "Dmytro Nimchynskyi <nimchynskyi@icloud.com>"

Change (N)ame, (E)mail, or (O)kay/(Q)uit? O
We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.

Passphrase:
Please enter the passphrase to
protect your new key

k2019#PS
k2019#PS

Cancel OK
```



```
nimchynskyi@debian:~$ gpg --a --output ~/.gnupg/Dmytro.Nimchynskyi.gpg --export 'Dmytro Nimchynskyi'
nimchynskyi@debian:~$ gpg --import ~/.gnupg/Dmytro.Nimchynskyi.gpg
gpg: key 4724AC0AE5E5CC6F: "Dmytro Nimchynskyi <nimchynskyi@icloud.com>" not changed
gpg: Total number processed: 1
gpg:   unchanged: 1
nimchynskyi@debian:~$
```

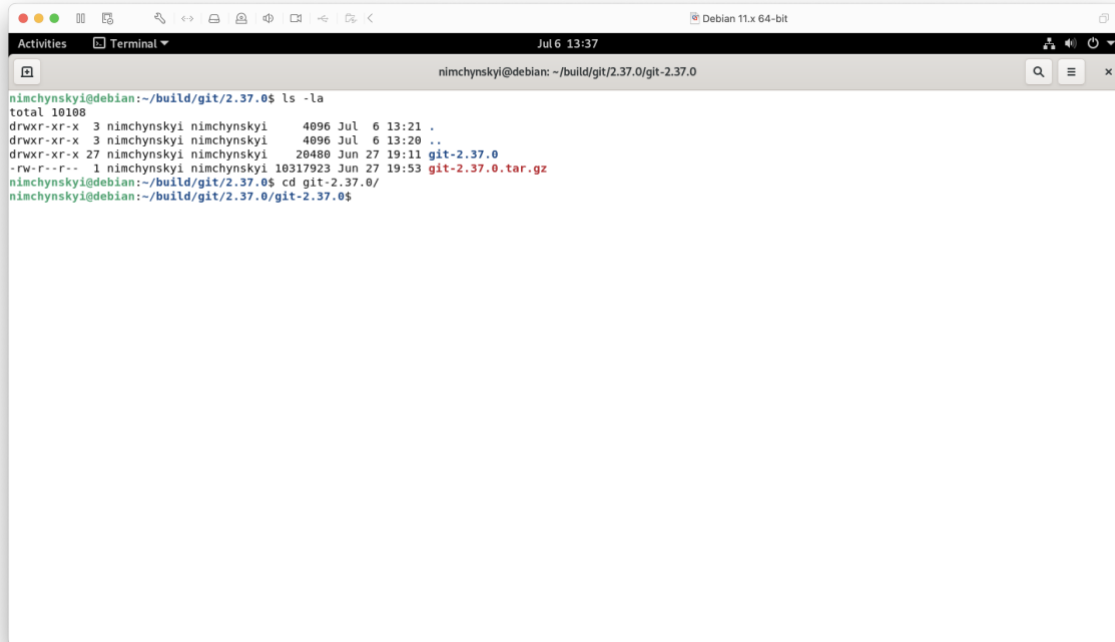
Dalej trzeba zainstalować wymagane do budowania pakiety.

```
Activities Terminal Jul 6 13:32
nimchynskyi@debian:~$ sudo apt-get install build-essential autoconf automake autotools-dev dh-make debhelper devscripts fakeroot xutils lintian pbuilder
[sudo] password for nimchynskyi:
```

```
Activities Terminal Jul 6 13:32
nimchynskyi@debian:~$
libwant-perl libdeltat libxml-libxml-perl libxml-namespacesupport-perl libxml-sax-base-perl libxml-sax-expat-perl libxml-sax-perl libxmlrpc-lite-perl
libyaml-libyaml-perl licensecheck lzip lzop patchutils pbzip2 pixz po-debconf pristine-tar python3-gpg python3-magic python3-unidiff strace tlutils wdifff
xdelta xdelta3
Suggested packages:
debtagst ubuntu-archive-keyring squid-deb-proxy-client adequate at autopkgtest bls-standalone bsd-mailx | mailx check-all-the-things cvs-buildpackage
devscripts-el diffoscope disorders dose-extra duck faketime gnuplot how-can-i-help libddp-gp-perl libnet-smtps-perl libterm-size-perl libyaml-syck-perl
mmdesktop mozilla-devscripts mutt piuparts postgresql-client pristine-lfs quilt ratt reprotest svn-buildpackage w3m mini-dinstall rsync git-daemon-run
| git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn uuid libscalar-number-perl libapache2-mod-perl2
libmime-lite-perl libnet-jabber-perl libbareword-filehandles-perl libindirect-perl libmultidimensional-perl libdevel-lexicalas-perl libxml-sax-expatxs-perl
binutils-multiarch libtext-template-perl cpan2perl gdebi-core libmail-box-perl wdifff-doc x11-xfs-utils
The following NEW packages will be installed:
arch-test dctrl-tools debhelper debian-keyring debotstrap devscripts dh-make dh-strip-nondeterminism diffstat dpkg eatmydata equivs git git-man
inttool-debian libaliased-perl libapt-pkg-perl libarchive-cpio-perl libarchive-zip-perl libarray-intspan-perl libb-hooks-endofscope-perl
libb-hooks-op-check-perl libcapture-tiny-perl libclass-data-inheritable-perl libclass-inspector-perl libclass-method-modifiers-perl
libclass-xsaccessor-perl libcommon-sense-perl libconfig-tiny-perl libconst-fast-perl libcontextual-return-perl libconvert-binhex-perl
libcpanel-json-xs-perl libdata-dpath-perl libdata-messagepack-perl libdata-optlist-perl libdata-validate-domain-perl libdevel-callchecker-perl
libdevel-size-perl libdevel-stacktrace-perl libdistro-info-perl libdynaloder-functions-perl libeatmydata libemail-address-xs-perl liberror-perl
libexception-class-perl libexporter-tiny-perl libfcgi-bin libfcgi-perl libfcgi0ldbl libfile-chdir-perl libfile-dirlist-perl libfile-find-rule-perl
libfile-homedir-perl libfile-stripnondeterminism-perl libfile-touch-perl libfile-which-perl libfont-ttf-perl libgetopt-long-descriptive-perl
libgit-wrapper-perl libgitlab-api-v4-perl libhash-fieldhash-perl libhtml-entities-perl libhttp-tiny-multipart-perl libimport-info-perl
libio-prompter-perl libio-pty-perl libio-sessiondata-perl libio-string-perl libipc-run-perl libipc-run3-perl libiterator-perl libiterator-util-perl
libjson-maybex-perl libjson-perl libjson-xs-perl liblist-compare-perl liblist-moreutils-perl liblist-moreutils-xs-perl liblist-someutils-perl
liblist-someutils-xs-perl liblist-utilperl-perl liblog-any-adapter-screen-perl liblog-any-perl libmail-sendmail-perl libmarkdown2 libmime-tools-perl
libmodule-implementation-perl libmodule-runtime-perl libmoose-perl libmoose-aliases-perl libmoose-struct-perl libmoose-perl libnamespace-autoclean-perl
libnamespace-clean-perl libnet-domain-tld-perl libnumber-compare-perl libnumber-range-perl libobject-id-perl libossp-uuid-perl libossp-uuid6
libpackage-stash-perl libpackage-stash-xs-perl libparams-classify-perl libparams-util-perl libparams-validate-perl libpath-iterator-rule-perl
libpath-tiny-perl libperl-io-gzip-perl libpod-constants-perl libpod-parser-perl libproc-processable-perl libre-engine-re2-perl libre2-9 libreadonly-perl
libref-util-perl libref-util-xs-perl libregexp-pattern-license-perl libregexp-pattern-perl librole-tiny-perl libserial-decoder-perl libserial-encoder-perl
libsoap-lite-perl libsort-key-perl libsort-versions-perl libstructures-perl libstring-copyright-perl libstring-escape-perl libstring-shellquote-perl
libsub-exporter-perl libsub-exporter-progressive-perl libsub-identify-perl libsub-install-perl libsub-name-perl libsub-override-perl libsub-quote-perl
libsys-queuefinity-perl libsys-hostname-long-perl libtask-weaken-perl libterm-readkey-perl libtext-glob-perl libtext-levenshteinxs-perl
libtext-markdown-discount-perl libtext-xslate-perl libtime-duration-perl libtime-moment-perl libtype-tiny-perl libtype-tiny-xs-perl
libtypes-serialiser-perl libunicode-utf8-perl libvariable-magic-perl libwant-perl libxdeltat libxml-libxml-perl libxml-namespacesupport-perl
libxml-sax-base-perl libxml-sax-expat-perl libxml-sax-perl libxmlrpc-lite-perl libyaml-libyaml-perl licensecheck lintian lzip lzop patchutils pbuilder
pbzip2 pixz po-debconf pristine-tar python3-gpg python3-magic python3-unidiff strace tlutils wdifff xdelta xdelta3 xutils
0 upgraded, 188 newly installed, 0 to remove and 0 not upgraded.
Need to get 51.5 MB of archives.
After this operation, 109 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

```
Activities Terminal Jul 6 13:34
nimchynskyi@debian:~$
update-perl-sax-parsers: Registering Perl SAX parser XML::SAX::Expat with priority 50...
update-perl-sax-parsers: Updating overall Perl SAX parser modules info file...
Replacing config file /etc/perl/XML/SAX/ParserDetails.ini with new version
Setting up dh-strip-nondeterminism (1.12.0-1) ...
Setting up libgit-wrapper-perl (0.648-1) ...
Setting up pristine-tar (1.49) ...
Setting up libsub-exporter-perl (0.987-1) ...
Setting up libiterator-perl (0.03+ds1-1.1) ...
Setting up libsoap-lite-perl (1.27-1) ...
Setting up libiterator-util-perl (0.02+ds1-1.1) ...
Setting up libparams-classify-perl (0.015-1+b3) ...
Setting up debhelper (13.3.4) ...
Setting up libmodule-runtime-perl (0.016-1) ...
Setting up dh-make (2.202003) ...
Setting up equivs (2.3-1) ...
Setting up libconst-fast-perl (0.014-1.1) ...
Setting up libxmlrpc-lite-perl (0.717-4) ...
Setting up libdata-dpath-perl (0.58-1) ...
Setting up libmodule-implementation-perl (0.09-1.1) ...
Setting up libpackage-stash-perl (0.39-1) ...
Setting up libimport-info-perl (1.002005-1) ...
Setting up libmoose-perl (2.004004-1) ...
Setting up liblist-someutils-perl (0.58-1) ...
Setting up liblist-someutils-xs-perl (0.58-2+b1) ...
Setting up devscripts (2.21.3+deb11u1) ...
Setting up libmoose-aliases-perl (0.001000-1.1) ...
Setting up libparams-validate-perl:amd64 (1.30-1+b1) ...
Setting up libb-hooks-endofscope-perl (0.24-1.1) ...
Setting up libnamespace-clean-perl (0.27-1) ...
Setting up libgetopt-long-descriptive-perl (0.105-1) ...
Setting up libnamespace-autoclean-perl (0.29-1) ...
Setting up libgitlab-api-v4-perl (0.26-1) ...
Setting up libmoose-struct-perl (0.020-1) ...
Setting up lintian (2.104.0) ...
Setting up licensecheck (3.1.1-2) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for install-info (6.7.0.dfsg.2-6) ...
Processing triggers for libc-bin (2.31-13+deb11u3) ...
nimchynskyi@debian:~$
```

Po zainstalowaniu pakietów przechodzę do katalogu z rozpakowanymi plikami źródłowymi git jaki przygotowałem wcześniej.

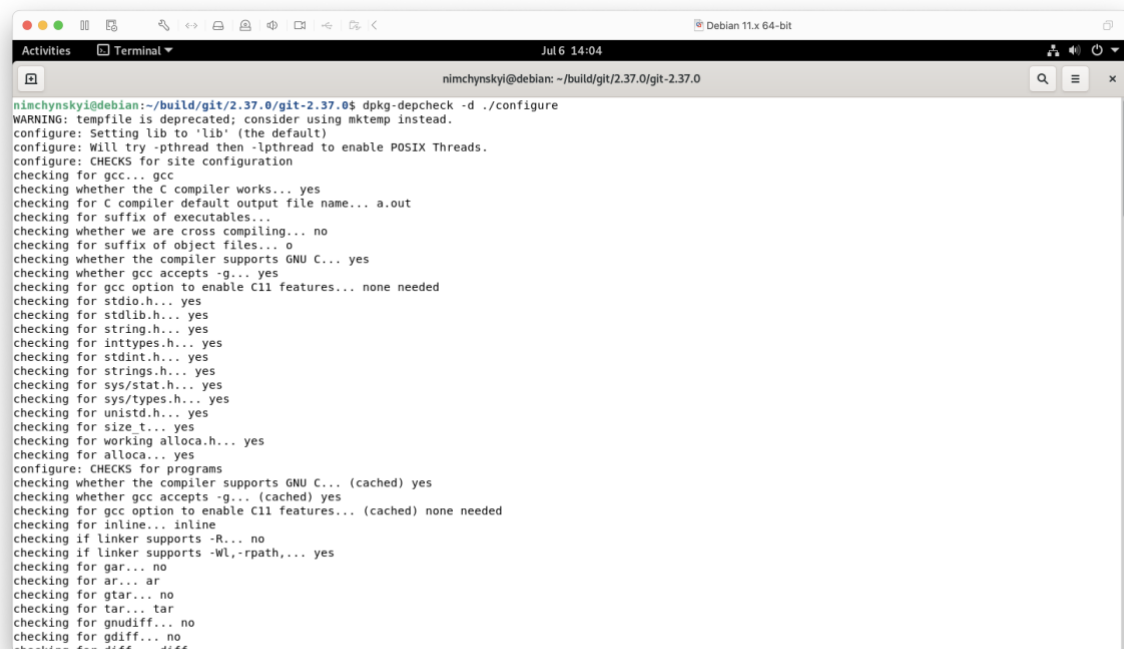
A terminal window titled 'Debian 11.x 64-bit' with the prompt 'nimchynskyi@debian: ~/build/git/2.37.0/git-2.37.0'. The user has run the command 'ls -la', which displays the following output:

```
total 10108
drwxr-xr-x 3 nimchynskyi nimchynskyi 4096 Jul 6 13:21 .
drwxr-xr-x 3 nimchynskyi nimchynskyi 4096 Jul 6 13:20 ..
drwxr-xr-x 27 nimchynskyi nimchynskyi 20480 Jun 27 19:11 git-2.37.0
-rw-r--r-- 1 nimchynskyi nimchynskyi 10317923 Jun 27 19:53 git-2.37.0.tar.gz
nimchynskyi@debian:~/build/git/2.37.0$ cd git-2.37.0/
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$
```

A terminal window titled 'Debian 11.x 64-bit' with the prompt 'nimchynskyi@debian: ~/build/git/2.37.0/git-2.37.0'. The user has run the command 'dh_make -e nimchynskyi@icloud.com -f ../git-2.37.0.tar.gz'. The output shows the package details and a confirmation prompt:

```
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$ dh_make -e nimchynskyi@icloud.com -f ../git-2.37.0.tar.gz
Type of package: (single, indep, library, python)
[s/i/l/p]?
Maintainer Name      : nimchynskyi
Email-Address        : nimchynskyi@icloud.com
Date                 : Wed, 06 Jul 2022 14:03:20 +0200
Package Name         : git
Version              : 2.37.0
License              : blank
Package Type         : single
Are the details correct? [Y/n/q]
You already have a debian/ subdirectory in the sourcetree.
dh_make will not try to overwrite anything.
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$
```

Następny krok to edycja informacji o pakiecie (plik control). Najpierw poleceniem **dpkg-depcheck -d ./configure** wyszukuję zależności wymagane do instalacji pakietu.



```
nimchynskyi@debian: ~/build/git/2.37.0/git-2.37.0
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$ dpkg-depcheck -d ./configure
WARNING: tempfile is deprecated; consider using mktemp instead.
configure: Setting lib to 'lib' (the default)
configure: Will try -pthread then -lpthread to enable POSIX Threads.
configure: CHECKS for site configuration
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether the compiler supports GNU C... yes
checking whether gcc accepts -g... yes
checking for gcc option to enable C11 features... none needed
checking for stdio.h... yes
checking for stdlib.h... yes
checking for string.h... yes
checking for inttypes.h... yes
checking for stdint.h... yes
checking for strings.h... yes
checking for sys/stat.h... yes
checking for sys/types.h... yes
checking forunistd.h... yes
checking for size_t... yes
checking for working alloca.h... yes
checking for alloca... yes
configure: CHECKS for programs
checking whether the compiler supports GNU C... (cached) yes
checking whether gcc accepts -g... (cached) yes
checking for gcc option to enable C11 features... (cached) none needed
checking for inline... inline
checking if linker supports -R... no
checking if linker supports -Wl,-rpath,... yes
checking for gar... no
checking for ar... ar
checking for gtar... no
checking for tar... tar
checking for gnuiff... no
checking for gdiff... no
checking for diff... diff
```



```
/usr/bin/rmdir
/usr/bin/rm
/usr/lib/x86_64-linux-gnu/libpthread-2.31.so
/usr/lib/x86_64-linux-gnu/ld-2.31.so
/usr/bin/bash
/usr/lib/x86_64-linux-gnu/libgpg-error.so.0.29.0
/usr/bin/uname
/usr/lib/x86_64-linux-gnu/libpcre.so.3.13.3
/usr/bin/ls
/usr/lib/x86_64-linux-gnu/libgcc_s.so.1
/usr/lib/x86_64-linux-gnu/libm-2.31.so
/usr/bin/grep
/usr/bin/mv
/usr/lib/x86_64-linux-gnu/libc-2.31.so
/usr/bin/mktemp
/usr/lib/x86_64-linux-gnu/libexpat.so.1.6.12
/usr/lib/x86_64-linux-gnu/libz.so.1.2.11
Packages needed:
libidn2-0:amd64
libffi7:amd64
libbrotli1:amd64
librtmp1:amd64
mawk
libfakeroot:amd64
libssh2-1:amd64
libcurl4-gnutls-dev:amd64
zlibg-dev:amd64
libldap-2.4-2:amd64
libcurl3-gnutls:amd64
libp11-kit0:amd64
libunistring2:amd64
libnettle8:amd64
libhogweed6:amd64
libpsl5:amd64
libgnutls30:amd64
libtasn1-6:amd64
libtasn1-2:amd64
libnghttp2-14:amd64
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$
```

Jak widać mam wypisane wszystkie pakiety które potrzebuję.

Teraz poleceniem **nano debian/control** otwieram plik **control**.



```
nimchynskyi@debian: ~/build/git/2.37.0/git-2.37.0/debian
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0$ cd debian/
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0/debian$ ls
changelog  copyright  git.doc-base.EX  manpage.1.ex  manpage.xml.ex  postrm.ex  prerm.ex  README.source  salsa-ci.yml.ex  watch.ex
control    git.cron.d.ex  git-docs.docs    manpage.sgml.ex  postinst.ex     preinst.ex  README.Debian  rules           source
nimchynskyi@debian:~/build/git/2.37.0/git-2.37.0/debian$
```



```
GNU nano 5.4 control
Source: git
Section: unknown
Priority: optional
Maintainer: nimchynskyi <nimchynskyi@icloud.com>
Build-Depends: debhelper-compat (= 13), autotools-dev
Standards-Version: 4.5.1
Homepage: <insert the upstream URL, if relevant>
#Vcs-Browser: https://salsa.debian.org/debian/git
#Vcs-Git: https://salsa.debian.org/debian/git.git
Rules-Requires-Root: no

Package: git
Architecture: any
Depends: ${shlibs:Depends}, ${misc:Depends}
Description: <insert up to 60 chars description>
<insert long description, indented with spaces>
```

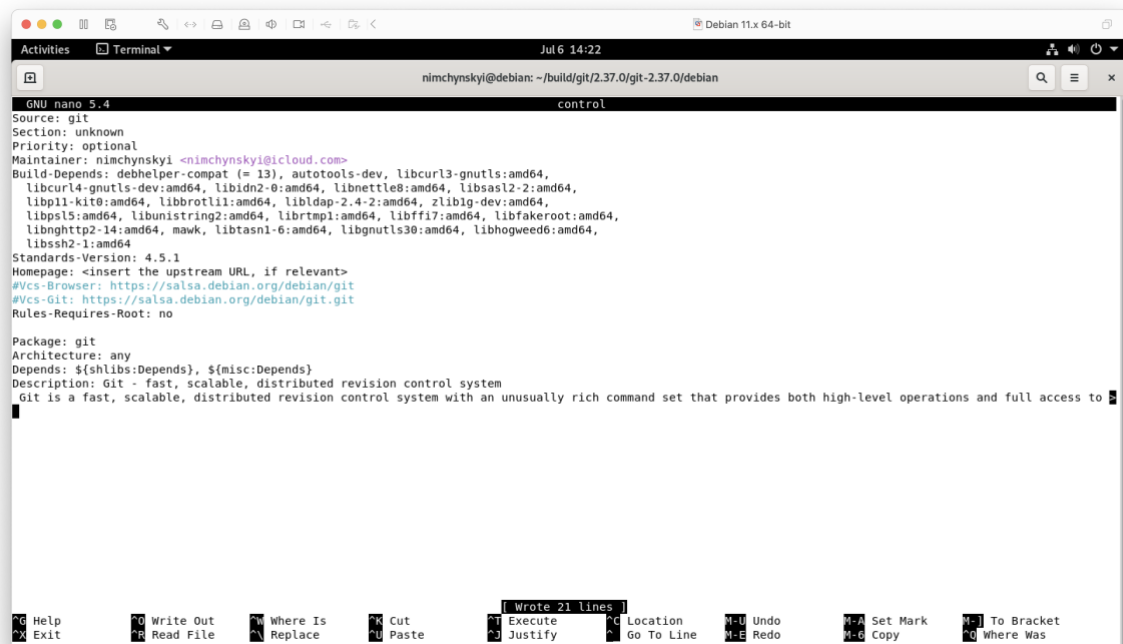
Wpisuję wszystkie zależności



```
control
Source: git
Section: unknown
Priority: optional
Maintainer: nimchynskiy <nimchynskiy@icloud.com>
Build-Depends: debhelper-compat (= 13), autotools-dev, libcurl3-gnutls:amd64,
  libcurl4-gnutls-dev:amd64, libidn2-0:amd64, libnettle8:amd64, libsasl2-2:amd64,
  libp11-kit0:amd64, libbrotli1:amd64, libldap-2.4-2:amd64, zlib1g-dev:amd64,
  libpsl5:amd64, libunistring2:amd64, librtmp1:amd64, libffi7:amd64, libfakeroot:amd64,
  libnghttp2-14:amd64, mawk, libtasn1-6:amd64, libgnutls30:amd64, libhogweed6:amd64,
  libssh2-1:amd64
Standards-Version: 4.5.1
Homepage: <insert the upstream URL, if relevant>
#Vcs-Browser: https://salsa.debian.org/debian/git
#Vcs-Git: https://salsa.debian.org/debian/git.git
Rules-Requires-Root: no

Package: git
Architecture: any
Depends: ${shlibs:Depends}, ${misc:Depends}
Description: <insert up to 60 chars description>
  <insert long description, indented with spaces>
```

Wpisuję opis



```
control
Source: git
Section: unknown
Priority: optional
Maintainer: nimchynskiy <nimchynskiy@icloud.com>
Build-Depends: debhelper-compat (= 13), autotools-dev, libcurl3-gnutls:amd64,
  libcurl4-gnutls-dev:amd64, libidn2-0:amd64, libnettle8:amd64, libsasl2-2:amd64,
  libp11-kit0:amd64, libbrotli1:amd64, libldap-2.4-2:amd64, zlib1g-dev:amd64,
  libpsl5:amd64, libunistring2:amd64, librtmp1:amd64, libffi7:amd64, libfakeroot:amd64,
  libnghttp2-14:amd64, mawk, libtasn1-6:amd64, libgnutls30:amd64, libhogweed6:amd64,
  libssh2-1:amd64
Standards-Version: 4.5.1
Homepage: <insert the upstream URL, if relevant>
#Vcs-Browser: https://salsa.debian.org/debian/git
#Vcs-Git: https://salsa.debian.org/debian/git.git
Rules-Requires-Root: no

Package: git
Architecture: any
Depends: ${shlibs:Depends}, ${misc:Depends}
Description: Git - fast, scalable, distributed revision control system
  Git is a fast, scalable, distributed revision control system with an unusually rich command set that provides both high-level operations and full access to
```

I zachowuję wszystkie zmiany.

Sprawdzam czy w pliku **debian/changelog** wpisany poprawny adres email.



```
GNU nano 5.4 changelog
git (2.37.0-1) unstable; urgency=medium

* Initial release (Closes: #nnnn) <nnnn is the bug number of your ITP>

-- nimchynskiy <nimchynskiy@icloud.com> Wed, 06 Jul 2022 13:41:44 +0200
```

I zakomentuję te linijki w pliku **debian/copyright** żeby użyć licencji GPL.



```
GNU nano 5.4 copyright
Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: git
Upstream-Contact: <preferred name and address to reach the upstream project>
Source: <url://example.com>

Files: *
Copyright: <years> <put author's name and email here>
          <years> <likewise for another author>
License: <special license>
        <Put the license of the package here indented by 1 space>
        <This follows the format of Description: lines in control file>
        .
        <Including paragraphs>

# If you want to use GPL v2 or later for the /debian/* files use
# the following clauses, or change it to suit. Delete these two lines
# Files: debian/
# Copyright: 2022 nimchynskiy <nimchynskiy@icloud.com>
license: GPL-2+

This package is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.

.
This package is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License
along with this program. If not, see <https://www.gnu.org/licenses/>

.
On Debian systems, the complete text of the GNU General
Public License version 2 can be found in "/usr/share/common-licenses/GPL-2".
```

Zachowuję zmiany w tych dwóch plikach.

Poleceniem **dpkg-buildpackage -rfakeroot** zaczynam budować pakiet

```
nimchynskiy@debian: ~/build/git/2.37.0/git-2.37.0$ dpkg-buildpackage -rfakeroot
dpkg-buildpackage: info: source package git
dpkg-buildpackage: info: source version 2.37.0-1
dpkg-buildpackage: info: source distribution unstable
dpkg-buildpackage: info: source changed by nimchynskiy <nimchynskiy@icloud.com>
dpkg-source --before-build .
dpkg-buildpackage: info: host architecture amd64
debian/rules clean
dh_clean
dh_auto_clean
make -j2 distclean
make[1]: Entering directory '/home/nimchynskiy/build/git/2.37.0/git-2.37.0'
rm -f /home/nimchynskiy/build/git/2.37.0/git-2.37.0/./*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/builtin/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/linux/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/simple-ipc/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/contrib/scalar/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/ewah/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/negotiator/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/refs/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/refable/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/t/helper/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/trace2/*.*gda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/xdiff/*.*gda
rm -f /*.*gda builtin/*.*gda compat/*.*gda compat/linux/*.*gda compat/simple-ipc/*.*gda contrib/scalar/*.*gda ewah/*.*gda negotiator/*.*gda refs/*.*gda reftable/*.*gda sha256/block/*.*gda t/helper/*.*gda trace2/*.*gda xdiff/*.*gda
rm -f contrib/coccinelle/*.*coccipatch*
rm -f coverage-untested-functions
rm -f -r cover db/
rm -f -r cover db.html/
rm -f coverage-test.made
rm -f /*.*gda builtin/*.*gda compat/*.*gda compat/linux/*.*gda compat/simple-ipc/*.*gda contrib/scalar/*.*gda ewah/*.*gda negotiator/*.*gda refs/*.*gda reftable/*.*gda sha256/block/*.*gda t/helper/*.*gda trace2/*.*gda xdiff/*.*gda
rm -f po/git.pot po/git-core.pot
rm -f *.res
rm -f abspath.o add-interactive.o add-patch.o advice.o alias.o alloc.o apply.o archive-tar.o archive-zip.o archive.o attr.o base85.o bisect.o blame.o blob.o blob.o branch.o bulk-checkin.o bundle.o cache-tree.o chrtree.o chdir-notifv.o checkout.o chunk-format.o color.o column.o combine-diff.o commit-graph.o commit-o
```

```
nimchynskiy@debian: ~/build/git/2.37.0/git-2.37.0$
not ok 2 - am with format=flowed
#
#       git am <"$TEST_DIRECTORY/t4256/1/patch" 2>stderr &&
#       test !l8ngrep "warning: Patch sent with format=flowed" stderr &&
#       test_cmp "$TEST_DIRECTORY/t4256/1/mailinfo.c" mailinfo.c
#
# failed 2 among 2 test(s)
1..2
make[3]: *** [Makefile:60: t4256-am-format-flowed.sh] Error 1
make[3]: *** Waiting for unfinished jobs....
ok 17 - am_3way: replace tracked file with submodule creates empty directory
ok 18 - am_3way: replace directory with submodule
ok 19 - am_3way: removed submodule leaves submodule directory and its contents in place
ok 20 - am_3way: removed submodule leaves submodule containing a .git directory alone
not ok 21 - am_3way: replace submodule with a directory must fail # TODO known breakage
not ok 22 - am_3way: replace submodule containing a .git directory with a directory must fail # TODO known breakage
not ok 23 - am_3way: replace submodule with a file must fail # TODO known breakage
not ok 24 - am_3way: replace submodule containing a .git directory with a file must fail # TODO known breakage
ok 25 - am_3way: modified submodule does not update submodule work tree
ok 26 - am_3way: modified submodule does not update submodule work tree to invalid commit
ok 27 - am_3way: modified submodule does not update submodule work tree from invalid commit
ok 28 - am_3way: added submodule doesn't remove untracked unignored file with same name
ok 29 - setup diff.submodule
ok 30 - diff.submodule unset
ok 31 - diff.submodule unset with extra file
ok 32 - diff.submodule=log
ok 33 - diff.submodule=log with extra file
# still have 6 known breakage(s)
# passed all remaining 27 test(s)
1..33
make[2]: *** [Makefile:47: test] Error 2
make[3]: Leaving directory '/home/nimchynskiy/build/git/2.37.0/git-2.37.0/t'
make[2]: Leaving directory '/home/nimchynskiy/build/git/2.37.0/git-2.37.0/t'
make[1]: *** [Makefile:3065: test] Error 2
make[1]: Leaving directory '/home/nimchynskiy/build/git/2.37.0/git-2.37.0'
dh_auto_test: error: make -j2 test VERBOSE=1 returned exit code 2
make: *** [debian/rules:18: binary] Error 255
dpkg-buildpackage: error: debian/rules binary subprocess returned exit status 2
nimchynskiy@debian: ~/build/git/2.37.0/git-2.37.0$
```

Jak widać proces budowania zakończył się błędem. Niestety nie udało mi się zbudować pakiet, nie znalazłem błędu. Próbowałem zbudować również z opcją -b, czyli **dpkg-buildpackage -rfakeroot -b**.

Spróbuj zbudować pakiet bez testów.

```
nimchynskiy@debian: ~/build/git/2.37.0/git-2.37.0$ sudo DEB_BUILD_OPTIONS=nocheck dpkg-buildpackage -rfakeroot
dpkg-buildpackage: info: source package git
dpkg-buildpackage: info: source version 2.37.0-1
dpkg-buildpackage: info: source distribution stable
dpkg-buildpackage: info: source changed by nimchynskiy <nimchynskiy@icloud.com>
dpkg-buildpackage: info: host architecture amd64
dpkg-source --before-build .
debian/rules clean
dh clean
dh_auto clean
make -j2 distclean
make[1]: Entering directory '/home/nimchynskiy/build/git/2.37.0/git-2.37.0'
rm -f /home/nimchynskiy/build/git/2.37.0/./*.*.gcda /home/nimchynskiy/build/git/2.37.0/built/*.*.gcda /home/nimchynskiy/build/git/2.37.0/g
it-2.37.0/compat/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/linux/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/simple-ipc/*.*.gc
da /home/nimchynskiy/build/git/2.37.0/git-2.37.0/contrib/scalar/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/ewah/*.*.gcda /home/nimchynskiy/build/git/2
.37.0/git-2.37.0/negotiator/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/refs/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/reftable/*.*.gcda /ho
me/nimchynskiy/build/git/2.37.0/git-2.37.0/shadlc/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/sha256/block/*.*.gcda /home/nimchynskiy/build/git/2.37.0/g
it-2.37.0/t/helper/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/trace2/*.*.gcda /home/nimchynskiy/build/git/2.37.0/git-2.37.0/xdiff/*.*.gcda
rm -f ./.*.gcov builtin/*.*.gcov compat/*.*.gcov compat/linux/*.*.gcov compat/simple-ipc/*.*.gcov contrib/scalar/*.*.gcov ewah/*.*.gcov negotiator/*.*.gcov refs/*.*.gcov refta
ble/*.*.gcov shadlc/*.*.gcov sha256/block/*.*.gcov t/helper/*.*.gcov trace2/*.*.gcov xdiff/*.*.gcov
rm -f /home/nimchynskiy/build/git/2.37.0/./*.*.gcno /home/nimchynskiy/build/git/2.37.0/built/*.*.gcno /home/nimchynskiy/build/git/2.37.0/g
it-2.37.0/compat/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/linux/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/compat/simple-ipc/*.*.gc
no /home/nimchynskiy/build/git/2.37.0/git-2.37.0/contrib/scalar/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/ewah/*.*.gcno /home/nimchynskiy/build/git/2
.37.0/git-2.37.0/negotiator/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/refs/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/reftable/*.*.gcno /ho
me/nimchynskiy/build/git/2.37.0/git-2.37.0/shadlc/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/sha256/block/*.*.gcno /home/nimchynskiy/build/git/2.37.0/g
it-2.37.0/t/helper/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/trace2/*.*.gcno /home/nimchynskiy/build/git/2.37.0/git-2.37.0/xdiff/*.*.gcno
rm -f ./.*.gcda builtin/*.*.gcda compat/*.*.gcda compat/linux/*.*.gcda compat/simple-ipc/*.*.gcda contrib/scalar/*.*.gcda ewah/*.*.gcda negotiator/*.*.gcda refs/*.*.gcda refta
ble/*.*.gcda shadlc/*.*.gcda sha256/block/*.*.gcda t/helper/*.*.gcda trace2/*.*.gcda xdiff/*.*.gcda
rm -f contrib/coccinelle/*.*.coccipatch*
rm -f coverage-untested-functions
rm -f -r cover.db/
rm -f -r cover.db.html/
rm -f coverage-test.made
rm -f ./.*.gcno builtin/*.*.gcno compat/*.*.gcno compat/linux/*.*.gcno compat/simple-ipc/*.*.gcno contrib/scalar/*.*.gcno ewah/*.*.gcno negotiator/*.*.gcno refs/*.*.gcno refta
ble/*.*.gcno shadlc/*.*.gcno sha256/block/*.*.gcno t/helper/*.*.gcno trace2/*.*.gcno xdiff/*.*.gcno
rm -f -r .build
rm -f po/git.pot po/git-core.pot
rm -f *.res
rm -f abspath.o add-interactive.o add-patch.o advice.o alias.o alloc.o apply.o archive-tar.o archive-zip.o archive.o attr.o base85.o bisect.o blame.o blob.o b
loom.o branch.o bulk-checkin.o bundle.o cache-tree.o chrtree.o chdir-notifv.o checkout.o chunk-format.o color.o column.o combine-diff.o commit-graph.o commit-r
```

```
Normalized debian/git/usr/share/locale/id/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/it/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/zh_CN/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/pl/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/vi/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/sv/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/de/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/tr/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/pt_PT/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/zh_TW/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/ru/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/ko/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/is/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/fr/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/es/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/bg/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/ca/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/el/LC_MESSAGES/git.mo
dh_compress
dh_fixperms
dh_missing
dh_dwz -a
dh_strip -a
dh_makeshlibs -a
dh_shlibdeps -a
dh_installdes
dh_gencontrol
dpkg-gencontrol: warning: package git: substitution variable ${perl:Depends} unused, but is defined
dpkg-gencontrol: warning: package git: substitution variable ${perl:Depends} unused, but is defined
dh_md5sums
dh_builddeb
dpkg-deb: building package 'git-dbg' in './git-dbg_2.37.0-1_amd64.deb'.
dpkg-deb: building package 'git' in './git_2.37.0-1_amd64.deb'.
dpkg-genbuildinfo
dpkg-genchanges ->../git_2.37.0-1_amd64.changes
dpkg-genchanges: info: including full source code in upload
dpkg-source --after-build .
dpkg-buildpackage: info: full upload (original source is included)
nimchynskiy@debian: ~/build/git/2.37.0/git-2.37.0$
```

Sukces!

Jak widać mam pakiety z rozszerzeniem .deb

```
Normalized debian/git/usr/share/locale/bg/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/ca/LC_MESSAGES/git.mo
Normalized debian/git/usr/share/locale/el/LC_MESSAGES/git.mo
dh_compress
dh_fixperms
dh_missing
dh_dwz -a
dh_strip -a
dh_makeshlibs -a
dh_shlibdeps -a
dh_installdeb
dh_gencontrol
dpkg-gencontrol: warning: package git: substitution variable ${perl:Depends} unused, but is defined
dpkg-gencontrol: warning: package git: substitution variable ${perl:Depends} unused, but is defined
dh_md5sums
dh_builddeb
dpkg-deb: building package 'git-dbg' in './git-dbg_2.37.0-1_amd64.deb'.
dpkg-deb: building package 'git' in './git_2.37.0-1_amd64.deb'.
dpkg-genbuildinfo
dpkg-genchangelog > ./git_2.37.0-1_amd64.changes
dpkg-genchanges: info: including full source code in upload
dpkg-source --after-build .
dpkg-buildpackage: info: full upload (original source is included)
nimchynskyi@debian:~/build/git/2.37.0$ cd ..
nimchynskyi@debian:~/build/git/2.37.0$ ls -la
total 53052
drwxr-xr-x 3 nimchynskyi nimchynskyi 4096 Jul 6 16:13 .
drwxr-xr-x 3 nimchynskyi nimchynskyi 4096 Jul 6 13:20 ..
drwxr-xr-x 31 nimchynskyi nimchynskyi 36864 Jul 6 16:13 git-2.37.0
-rw-r--r-- 1 root root 54938 Jul 6 15:12 git_2.37.0-1_amd64.build
-rw-r--r-- 1 root root 6905 Jul 6 16:13 git_2.37.0-1_amd64.buildinfo
-rw-r--r-- 1 root root 2039 Jul 6 16:13 git_2.37.0-1_amd64.changes
-rw-r--r-- 1 root root 4983572 Jul 6 16:13 git_2.37.0-1_amd64.deb
-rw-r--r-- 1 nimchynskyi nimchynskyi 8092 Jul 6 16:11 git_2.37.0-1.debian.tar.xz
-rw-r--r-- 1 nimchynskyi nimchynskyi 1188 Jul 6 16:11 git_2.37.0-1.dsc
-rw-r--r-- 1 nimchynskyi nimchynskyi 10317923 Jun 27 19:53 git_2.37.0.orig.tar.gz
-rw-r--r-- 1 nimchynskyi nimchynskyi 10317923 Jun 27 19:53 git_2.37.0.tar.gz
-rw-r--r-- 1 root root 28562360 Jul 6 16:13 git-dbg_2.37.0-1_amd64.deb
nimchynskyi@debian:~/build/git/2.37.0$
```