

Szymon Werema

1. Budowa pakietu

1.1. Generowanie klucza gpg

```
Plik Działania Edycja Widok Pomoc

(kali@kali)-[~/Pobrane/gparted-1.4.0]
$ gpg --gen-key
gpg (GnuPG) 2.2.35; Copyright (C) 2022 g10 Code GmbH
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

gpg: keybox ,/home/kali/.gnupg/pubring.kbx'' utworzony
Uwaga: pełną funkcjonalność generowania klucza można uzyskać przez ,,gpg --full-generate-key''.

GnuPG musi utworzyć identyfikator użytkownika do identyfikacji klucza.

Imię i nazwisko: Szymon Werema
Adres poczty elektronicznej: szymon.werema99@gmail.com
Twój identyfikator użytkownika będzie wyglądał tak:
"Szymon Werema <szymon.werema99@gmail.com>"

Zmienić (I)mię/nazwisko, adres (E)mail, przejść (D)alej,
czy (W)yjść z programu? d
Musimy wygenerować dużo losowych bajtów. Dobrym pomysłem aby pomóc komputerowi
podczas generowania liczb pierwszych jest wykonywanie w tym czasie innych
działań (pisanie na klawiaturze, poruszanie myszką, odwołanie się do dysków);
dzięki temu generator liczb losowych ma możliwość zebrania odpowiedniej ilości
entropii.
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dzięki temu generator liczb losowych ma możliwość zebrania odpowiedniej ilości
entropii.
gpg: /home/kali/.gnupg/trustdb.gpg: baza zaufania utworzona
gpg: katalog ,/home/kali/.gnupg/openpgp-revocs.d'' utworzony
gpg: certyfikat unieważnienia został zapisany jako ,/home/kali/.gnupg/openpgp-revocs.d/9EC7F1181C0E56ACC1F43FDF85350AAAC4137C95.rev'
klucz publiczny i prywatny (tajny) zostały utworzone i podpisane.

pub  rsa3072 2022-06-22 [SC] [wygasa: 2024-06-21]
    9EC7F1181C0E56ACC1F43FDF85350AAAC4137C95
uid                               Szymon Werema <szymon.werema99@gmail.com>
sub  rsa3072 2022-06-22 [E] [wygasa: 2024-06-21]
```

1.2. Tworzenie struktury katalogów oraz przekopiowanie i rozpakowanie archiwum

```
(kali@kali)-[~/]
$ cd ~

(kali@kali)-[~/]
$ mkdir -p build/gparted/1.4.0

(kali@kali)-[~/]
$ cp Pobrane/gparted-1.4.0.tar.gz build/gparted/1.4.0

(kali@kali)-[~/]
$ cd build/gparted/1.4.0

(kali@kali)-[~/build/gparted/1.4.0]
$ tar -xvf gparted-1.4.0.tar.gz

(kali@kali)-[~/build/gparted/1.4.0]
$ ls
gparted-1.4.0  gparted-1.4.0.tar.gz

(kali@kali)-[~/build/gparted/1.4.0]
$
```

1.3. Przygotowanie struktury pakietu

```
(kali@kali)-[~/build/gparted/1.4.0/gparted-1.4.0]
$ dh_make -e szymon.werema99@gmail.com -f ../gparted-1.4.0.tar.gz
Type of package: (single, indep, library, python)
[s/i/l/p]?
Maintainer Name      : kali
Email-Address        : szymon.werema99@gmail.com
Date                 : Thu, 23 Jun 2022 21:23:39 +0200
Package Name         : gparted
Version              : 1.4.0
License              : blank
Package Type         : single
Are the details correct? [Y/n/q]
Done. Please edit the files in the debian/ subdirectory now.

(kali@kali)-[~/build/gparted/1.4.0/gparted-1.4.0]
```

1.4. Wyszukanie zależności wymaganych do instalacji pakietu

```
(kali@kali)-[~/build/gparted/1.4.0/gparted-1.4.0]
$ dpkg-depcheck -d ./configure
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether make supports nested variables... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking for g++... g++
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 we are using the GNU C++ compiler... yes
checking whether g++ accepts -g... yes
checking whether make supports the include directive... yes (GNU style)
checking dependency style of g++... gcc3
checking for gcc... gcc
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking whether gcc understands -c and -o together... yes
checking dependency style of gcc... gcc3
checking build system type... x86_64-pc-linux-gnu
checking host system type... x86_64-pc-linux-gnu
checking how to print strings... printf
checking for a sed that does not truncate output... /usr/bin/sed
checking for grep that handles long lines and -e... /usr/bin/grep
checking for egrep... /usr/bin/grep -E
checking for fgrep... /usr/bin/grep -F
checking for ld used by gcc... /usr/bin/ld
checking if the linker (/usr/bin/ld) is GNU ld... yes
checking for BSD- or MS-compatible name lister (nm)... /usr/bin/nm -B
checking the name lister (/usr/bin/nm -B) interface... BSD nm
checking whether ln -s works... yes
checking the maximum length of command line arguments... 1572864
checking how to convert x86_64-pc-linux-gnu file names to x86_64-pc-linux-gnu format... func_convert_file_noop
checking how to convert x86_64-pc-linux-gnu file names to toolchain format... func_convert_file_noop
checking for /usr/bin/ld option to reload object files... -r
checking for objdump... objdump
checking how to recognize dependent libraries... pass_all
checking for dlltool... no
checking how to associate runtime and link libraries... printf %s\n
checking for ar... ar
checking for archiver @FILE support... @
checking for strip... strip
checking for ranlib... ranlib
checking command to parse /usr/bin/nm -B output from gcc object... ok
checking for sysroot... no
checking for a working dd... /usr/bin/dd
checking how to truncate binary pipes... /usr/bin/dd bs=4096 count=1
checking for mt... mt
checking if mt is a manifest tool... no
checking how to run the C preprocessor... gcc -E
checking for ANSI C header files... yes
checking for sys/types.h... yes
checking for sys/stat.h... yes
```

```
libatspi2.0-dev:amd64
intltool
libmagic1:amd64
libxdamage-dev:amd64
libxinerama-dev:amd64
libxcb1-dev:amd64
libxfixes-dev:amd64
libbsd0:amd64
libfribidi-dev:amd64
libxcb-render0-dev:amd64
libjpeg62-turbo-dev:amd64
libgtkmm-3.0-dev:amd64
libsigsegv2:amd64
libpangomm-1.4-dev:amd64
libxcursor-dev:amd64
gawk
pkg-config
libwayland-dev:amd64
libpixmap-1-dev:amd64
libxdmcp-dev:amd64
libpango1.0-dev:amd64
libfontconfig-dev:amd64
libglib2.0-dev:amd64
libselinux1-dev:amd64
libibus-1.0-dev:amd64
libllvm13:amd64
libz3-4:amd64
libunistring2:amd64
libcairo2-dev:amd64
libffi-dev:amd64
libmagic-mgc
file
libgtk-3-dev:amd64
libmount-dev:amd64
mailcap
libfakeroot:amd64
oracle-instantclient-basic
libxml2:amd64
libdatrie-dev:amd64
libparted-dev:amd64
libpng-dev:amd64
libcups2:amd64
libxext-dev:amd64
libgtk-3-bin
libperl5.34:amd64
libglibmm-2.4-dev:amd64
libatk-bridge2.0-dev:amd64
libxrandr-dev:amd64
libedit2:amd64
libsepol-dev:amd64
libpolkit-agent-1-0:amd64
libxrender-dev:amd64
libthai-dev:amd64
libsigc++-2.0-dev:amd64
libatkmm-1.6-dev:amd64
libharfbuzz-dev:amd64
libcairomm-1.0-dev:amd64
```

```
—(kali@kali)~[~/build/gparted/1.4.0/gparted-1.4.0]
```

```
—$ █
```


1.5. Edycja pliku control

```
GNU nano 6.3                debian/control
Source: gparted
Section: unknown
Priority: optional
Maintainer: kali <szymon.werema99@gmail.com>
Rules-Requires-Root: no
Build-Depends: debhelper-compat (>= 13), autotools-dev, oracle-instantclient-basic, libglbmm-2.4-dev:amd64, libxrandr-dev:amd64, pkg-config,
gettext, liblvm13:amd64, libharfbuzz-dev:amd64, shared-mime-info, libdbus-1-dev:amd64, libmagic1:amd64, libatspi2.0-dev:amd64,
libc7u1:amd64, libdatrie-dev:amd64, libxdmcp-dev:amd64, libexpat1-dev:amd64, libxcb-render0-dev:amd64, libgtk-3-dev:amd64, libfreetype-dev:amd64,
libbsd0:amd64, libatk1.0-dev:amd64, libparted-dev:amd64, libunistring2:amd64, libblkid-dev:amd64, libxcb1-dev:amd64, llvm-13-linker-tools,
polkitd, libxkbcommon-dev:amd64, libxext-dev:amd64, libxi-dev:amd64, gawk, libmagic-mgc, libgtkmm-3.0-dev:amd64,
libglib2.0-0:amd64, libxfixes-dev:amd64, libc6-1386, libpcre3-dev:amd64, libmount-dev:amd64, libtiff-dev:amd64, libpolkit-agent-1.0:amd64,
libxdamage-dev:amd64, libsigsegv2-dev:amd64, libfribidi-dev:amd64, libgraphite2-dev:amd64, libffi-dev:amd64, libglb2.0-dev:amd64, libffi8:amd64,
libmd0:amd64, libatk-bridge2.0-dev:amd64, libgl-dev:amd64, perl-modules-5.36, libpcre2-dev:amd64, libfakeroot:amd64, libselinux1-dev:amd64,
libgdk-pixbuf-2.0-dev:amd64, libsepol-dev:amd64, intltool, libedit2:amd64, libxrender-dev:amd64, libx11-dev:amd64, libz3-4:amd64,
libpixman-1-dev:amd64, libxinerama-dev:amd64, libfontconfig-dev:amd64, libthai-dev:amd64, libbrotli-dev:amd64, libxcb-shm0-dev:amd64, zlib1g-dev:amd64,
file, libxcursor-dev:amd64, libpangomm-1.4-dev:amd64, libxft-dev:amd64, libxml-parser-perl:amd64, libcairo-mm-1.0-dev:amd64, libgtk-3-bin,
libxml2:amd64, libepoxy-dev:amd64, libxau-dev:amd64, libpango1.0-dev:amd64, libegl-dev:amd64, libperl5.34:amd64, libibus-1.0-dev:amd64,
libcairo2-dev:amd64, mailcap, libwayland-dev:amd64, uuid-dev:amd64, libpng-dev:amd64, libxtst-dev:amd64,
libsigc++-2.0-dev:amd64, libxcomposite-dev:amd64, libpolkit-gobject-1.0:amd64, libatkmm-1.6-dev:amd64, libjpeg62-turbo-dev:amd64, x11proto-dev

Standards-Version: 4.6.1
Homepage: <insert the upstream URL, if relevant>
#Vcs-Browser: https://salsa.debian.org/debian/gparted
#Vcs-Git: https://salsa.debian.org/debian/gparted.git

Package: gparted
Architecture: any
Depends:
 ${shlibs:Depends},
 ${misc:Depends},
Description: GParted is a free partition editor for graphically managing your disk partitions.
 GParted is free software. You have the freedom to run, copy, distribute, study, change, and improve GParted. You do not have to pay money to use GParted.
```

1.6. Budowanie pakietu

```
(kali@kali)~[/build/gparted/1.4.0/gparted-1.4.0]
$ sudo dpkg-buildpackage -rfakeroot
dpkg-buildpackage: info: pakiet źródłowy gparted
dpkg-buildpackage: info: wersja pakietu źródłowego 1.4.0-1
dpkg-buildpackage: info: dystrybucja źródła UNRELEASED
dpkg-buildpackage: info: źródła zmienione przez kali <szymon.werema99@gmail.com>
dpkg-buildpackage: info: architektura gościa amd64
dpkg-source --before-build .
dpkg-buildpackage: info: architekturze gościa amd64
dh clean
dh_auto_clean
make -j16 distclean
make[1]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0'
Making distclean in data
make[2]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data'
Making distclean in icons
make[3]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data/icons'
rm -rf .libs _libs
rm -f *.lo
test -z "" || rm -f
test . = "." || test -z "" || rm -f
rm -f Makefile
make[3]: Opuszczenie katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data/icons'
make[3]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data'
rm -rf .libs _libs
rm -f *.lo
test -z "" || rm -f
rm -f TAGS ID GTAGS GRTAGS GSYMS GPATH tags
test . = "." || test -z "" || rm -f
make[3]: Opuszczenie katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data'
rm -f Makefile
make[2]: Opuszczenie katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/data'
Making distclean in doc
make[2]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/doc'
rm -rf .libs _libs
rm -f *.lo
test -z "" || rm -f
test . = "." || test -z "" || rm -f
rm -f Makefile
make[2]: Opuszczenie katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/doc'
Making distclean in include
make[2]: Wejście do katalogu '/home/kali/build/gparted/1.4.0/gparted-1.4.0/include'
rm -rf .libs _libs
```

```
Normalized debian/gparted/usr/share/locale/lv/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/oc/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/nn/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/hr/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/pl/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/pt/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/mk/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/uk/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/th/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/it/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/bs/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/gl/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/ko/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/zh_TW/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/sl/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/fa/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/et/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/kk/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/da/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/hu/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/el/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/fr/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/gd/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/ca/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/rw/LC_MESSAGES/gparted.mo
Normalized debian/gparted/usr/share/locale/ar/LC_MESSAGES/gparted.mo
dh_compress
dh_fixperms
dh_missing
dh_dwz -a
dh_strip -a
dh_makeshlibs -a
dh_shlibdeps -a
dh_installdeb
dh_gencontrol
dh_md5sums
dh_builddeb
dpkg-deb: budowanie pakietu "gparted-dbgsym" w "../gparted-dbgsym_1.4.0-1_amd64.deb".
dpkg-deb: budowanie pakietu "gparted" w "../gparted_1.4.0-1_amd64.deb".
dpkg-genbuildinfo -O../gparted_1.4.0-1_amd64.buildinfo
dpkg-genchanges -O../gparted_1.4.0-1_amd64.changes
dpkg-genchanges: info: dołączanie pełnych kodów źródłowych do wydania
dpkg-source --after-build .
```


2. Instalacja i uruchomienie pakietu

The screenshot shows a Kali Linux terminal window at the top and the GParted application window at the bottom. The terminal shows the installation of the 'gparted' package using 'sudo apt install gparted' and 'sudo dpkg -i gparted_1.4.0-1_amd64.deb'. It also shows the command 'gparted' being run, which displays the version '1.4.0' and configuration options. The GParted window shows a disk with several partitions, including EFI, Microsoft reserved, Basic data, and Linux swap.

```
(kali@kali)~[/build/gparted/1.4.0]
$ gparted
Command 'gparted' not found, but can be installed with:
sudo apt install gparted
Do you want to install it? (N/y)n

(kali@kali)~[/build/gparted/1.4.0]
$ sudo dpkg -i gparted_1.4.0-1_amd64.deb
Wybieranie wcześniej niewybranego pakietu gparted.
(Odczytywanie bazy danych ... 361004 pliki i katalogi obecnie zainstalowane.)
Przygotowywanie do rozpakowania pakietu gparted_1.4.0-1_amd64.deb ...
Rozpakowywanie pakietu gparted (1.4.0-1) ...
Konfigurowanie pakietu gparted (1.4.0-1) ...
Przetwarzanie wyzwalaczy pakietu kali-menu (2022.3.0) ...
Przetwarzanie wyzwalaczy pakietu desktop-file-utils (0.26-1) ...
Przetwarzanie wyzwalaczy pakietu mailcap (3.78+nmul) ...
Przetwarzanie wyzwalaczy pakietu ncolor-icon-theme (0.17-2) ...
Przetwarzanie wyzwalaczy pakietu man-db (2.10.2-1) ...

(kali@kali)~[/build/gparted/1.4.0]
$ gparted
GParted 1.4.0
configuration --enable-online-resize
libparted 3.5
```

The GParted window shows the disk /dev/nvme0n1 (476.94 GiB) with the following partitions:

Partycja	Nazwa	System plików	Punkt montowania	Rozmiar	Zajęte
/dev/nvme0n1p1	EFI system partition	fat32	/boot/efi	100.00 MiB	31.43 MiB
/dev/nvme0n1p2	Microsoft reserved partition	nieznane		16.00 MiB	--
/dev/nvme0n1p3	Basic data partition	ntfs		116.35 GiB	92.67 GiB
/dev/nvme0n1p4		ntfs		614.00 MiB	524.80 MiB
nieprzydzielone	nieprzydzielone			1.00 MiB	--
/dev/nvme0n1p5		ntfs		509.00 MiB	421.18 MiB
nieprzydzielone	nieprzydzielone			1.00 MiB	--
/dev/nvme0n1p6	Basic data partition	ntfs		308.62 GiB	184.25 GiB
/dev/nvme0n1p7		ext4	/	49.80 GiB	22.05 GiB
/dev/nvme0n1p8		linux-swap		976.00 MiB	0.00 MiB

3. Wnioski

W moim przypadku wszystko poszło sprawnie i bez problemu. Sam proces tworzenia pakietu jest bardzo prosty.