



# Panduan BlackArch Linux

<https://www.blackarch.org/>

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# Chapter 1

## Introduction

### 1.1 Overview

Panduan BlackArch Linux dibagi menjadi beberapa bagian:

- Pendahuluan - Memberikan pandangan luas, pendahuluan dan informasi tambahan seputar proyek
- Panduan Pengguna - Segala sesuatu yang perlu diketahui oleh pengguna untuk menggunakan BlackArch secara efektif
- Panduan Pengembang - Panduan cara memulai mengembangkan dan berkontribusi pada BlackArch
- Panduan Tool - Detail tool mendalam beserta contoh penggunaan(WIP)

### 1.2 Apa itu BlackArch Linux?

BlackArch adalah distro Linux lengkap untuk penetration tester dan security researchers. BlackArch berasal dari [ArchLinux](#) dan pengguna dapat install komponen-komponen BlackArch secara masing-masing atau dalam kelompok langsung di atasnya.

Toolset didistribusikan sebagai Arch Linux [unofficial user repository](#) sehingga Anda dapat menginstal BlackArch di atas instalasi Arch Linux yang ada. Paket dapat diinstal secara individual atau dengan kategori.

Repositori yang terus berkembang saat ini mencakup lebih dari [2600](#) alat. Semua alat diuji secara menyeluruh sebelum ditambahkan ke basis kode untuk menjaga kualitas repositori.

### 1.3 Sejarah BlackArch Linux

Segera...



## 1.4 Platform yang didukung

Segera...

## 1.5 Terlibat

Anda dapat menghubungi tim BlackArch menggunakan jalur berikut:

Website: <https://www.blackarch.org/>

Mail: [team@blackarch.org](mailto:team@blackarch.org)

IRC: <irc://irc.freenode.net/blackarch>

Twitter: <https://twitter.com/blackarchlinux>

Github: <https://github.com/Blackarch/>

Discord: <https://discord.com/invite/xMht8dW>

## Chapter 2

# Panduan Pengguna

### 2.1 Instalasi

Bagian ini akan menunjukkan kepada Anda cara mempersiapkan repositori BlackArch dan instalasi paket. BlackArch mendukung keduanya, instalasi dari repositori menggunakan paket biner serta kompilasi dan instalasi dari source.

BlackArch kompatibel dengan instalasi Arch normal. Itu bertindak sebagai repositori pengguna tidak resmi. Jika anda menginginkan ISO, lihat bagian [ISOs](#).

#### 2.1.1 Instalasi di atas ArchLinux

Jalankan [strap.sh](#) sebagai root dan ikuti perintah-perintah. Lihat conth berikut.

```
curl -O https://blackarch.org/strap.sh
sha1sum strap.sh # should match: d062038042c5f141755ea39dbd615e6ff9e23121
sudo chmod +x strap.sh
sudo ./strap.sh
```

Sekarang unduh salinan baru dari daftar paket master dan sinkronisasi paket:

```
sudo pacman -Syyu
```

#### 2.1.2 Instalasi paket

Anda sekarang dapat menginstal alat dari repositori BlackArch.

1. Untuk melihat daftar semua alat yang tersedia, jalankan

```
pacman -Sgg | grep blackarch | cut -d' ' -f2 | sort -u
```

2. Untuk instalasi semua alat, jalankan

```
pacman -S blackarch
```

3. Untuk instalasi alat berdasarkan kategori, jalankan



```
pacman -S blackarch-<category>
```

4. Untuk melihat kategori blackarch, jalankan

```
pacman -Sg | grep blackarch
```

### 2.1.3 Menginstal paket dari sumber

Sebagai bagian dari metode instalasi alternatif, Anda dapat membangun BlackArch paket dari sumber. Anda dapat menemukan PKGBUILD di [github](#). Untuk membangun seluruh repo, Anda dapat menggunakan [Blackman](#) alat.

- Pertama, Anda harus menginstal Blackman. Jika repositori paket BlackArch sudah diatur pada mesin Anda, Anda dapat menginstal Blackman:

```
pacman -S blackman
```

- Anda dapat membangun dan menginstal Blackman dari sumber:

```
mkdir blackman
cd blackman
wget https://raw2.github.com/BlackArch/blackarch/master/packages/blackman/PKGBUILD
# Pastikan PKGBUILD tidak dirusak dengan maksud jahat.
makepkg -s
```

- Atau Anda dapat menginstal Blackman dari AUR:

```
<apa pun penolong AUR yang Anda gunakan> -S blackman
```

### 2.1.4 Penggunaan dasar Blackman

Blackman sangat mudah digunakan, meskipun benderanya berbeda dari Anda biasanya diharapkan dari sesuatu seperti pacman. Penggunaan dasar telah diuraikan di bawah ini.

- Unduh, kompilasi, dan instal paket:

```
sudo blackman -i paket
```

- Unduh, kompilasi, dan instal seluruh kategori:

```
sudo blackman -g kelompok
```

- Unduh, kompilasi, dan instal semua alat BlackArch:

```
sudo blackman -a
```

- Untuk membuat daftar kategori blackarch:

```
blackman -l
```

- Untuk membuat daftar alat katagori:

```
blackman -p kategori
```



## 2.1.5 Menginstal dari full-, netinstall- ISO atau ArchLinux

Anda dapat menginstal Blackarch Linux dari salah satu live- atau netinstall-ISO kami.

See <https://www.blackarch.org/download.html#iso>. Langkah-langkah berikut diperlukan setelah ISO boot.

- Install blackarch-installer package:

```
sudo pacman -S blackarch-installer
```

- Run

```
sudo blackarch-install
```

# Chapter 3

## Developer Guide

### 3.1 Arch's Build System and Repositories

PKGBUILD files are build scripts. Each one tells `makepkg(1)` how to create a package. PKGBUILD files are written in Bash.

For more information, read (or skim through) the following:

- [Arch Wiki: Creating Packages](#)
- [Arch Wiki: makepkg](#)
- [Arch Wiki: PKGBUILD](#)
- [Arch Wiki: Arch Packaging Standards](#)

### 3.2 Blackarch PKGBUILD standards

For the sake of simplicity, our PKGBUILDs are similar to that of the AUR ones, with a few small differences outlined below. Every package must belong to blackarch at the minimum, there will also be a lot of crossover with multiple packages belonging to multiple groups.

#### 3.2.1 Groups

To allow users to install a specific range of packages quickly and easily, packages have been separated into groups. Groups allow users to simply go "`pacman -S <group name>`" in order to pull a lot of packages.

##### 3.2.1.1 blackarch

The blackarch group is the base group that all packages must belong too. This allows users to install every package with ease.

What should be in here: Everything.



### **3.2.1.2 blackarch-anti-forensic**

Packages that are used for countering forensic activities, including encryption, steganography, and anything that modifies files/file attributes. This all includes tools to work with anything in general that makes changes to a system for the purposes of hiding information.

Examples: luks, TrueCrypt, Timestomp, dd, ropeadope, secure-delete

### **3.2.1.3 blackarch-automation**

Packages that are used for tool or workflow automation.

Examples: blueranger, tiger, wiffy

### **3.2.1.4 blackarch-backdoor**

Packages that exploit or open backdoors on already vulnerable systems.

Examples: backdoor-factory, rrs, weevily

### **3.2.1.5 blackarch-binary**

Packages that operate on binary files in some form.

Examples: binwally, packerid

### **3.2.1.6 blackarch-bluetooth**

Packages that exploit anything concerning the Bluetooth standard (802.15.1).

Examples: ubertooth, tbear, redfang

### **3.2.1.7 blackarch-code-audit**

Packages that audit existing source code for vulnerability analysis.

Examples: flawfinder, pscan

### **3.2.1.8 blackarch-cracker**

Packages used for cracking cryptographic functions, ie hashes.

Examples: hashcat, john, crunch

### **3.2.1.9 blackarch-crypto**

Packages that work with cryptography, with the exception of cracking.

Examples: ciphertest, xortool, sbd



### **3.2.1.10 blackarch-database**

Packages that involve database exploitations on any level.

Examples: metacoretex, blindsql

### **3.2.1.11 blackarch-debugger**

Packages that allow the user to view what a particular program is "doing" in realtime.

Examples: radare2, shellnoob

### **3.2.1.12 blackarch-decompiler**

Packages that attempt to reverse a compiled program into source code.

Examples: flasm, jd-gui

### **3.2.1.13 blackarch-defensive**

Packages that are used to protect a user from malware & attacks from other users.

Examples: arpon, chkrootkit, sniffjoke

### **3.2.1.14 blackarch-disassembler**

This is similar to blackarch-decompiler, and there will probably be a lot of programs that fall into both, however these packages produce assembly output rather than the raw source code.

Examples: inguma, radare2

### **3.2.1.15 blackarch-dos**

Packages that use DoS (Denial of Service) attacks.

Examples: 42zip, nkiller2

### **3.2.1.16 blackarch-drone**

Packages that are used for managing physically engineered drones.

Examples: meshdeck, skyjack

### **3.2.1.17 blackarch-exploitation**

Packages that takes advantages of exploits in other programs or services.

Examples: armitage, metasploit, zarp



### **3.2.1.18 blackarch-fingerprint**

Packages that exploit fingerprint biometric equipment.

Examples: dns-map, p0f, httpprint

### **3.2.1.19 blackarch-firmware**

Packages that exploit vulnerabilities in firmware

Examples: None yet, amend asap.

### **3.2.1.20 blackarch-forensic**

Packages that are used to find data on physical disks or embedded memory.

Examples: aesfix, nfex, wyd

### **3.2.1.21 blackarch-fuzzer**

Packages that use the fuzz testing principle, ie "throwing" random inputs at the subject to see what happens.

Examples: msf, mdk3, wfuzz

### **3.2.1.22 blackarch-hardware**

Packages that exploit or manage anything to do with physical hardware.

Examples: arduino, smali

### **3.2.1.23 blackarch-honeypot**

Packages that act as "honeypots", ie programs that appear to be vulnerable services used to attract hackers into a trap.

Examples: artillery, bluepot, wifi-honey

### **3.2.1.24 blackarch-keylogger**

Packages that record and retain keystrokes on another system.

Examples: None yet, amend asap.

### **3.2.1.25 blackarch-malware**

Packages that count as any type of malicious software or malware detection.

Examples: malwaredetect, peepdf, yara



### 3.2.1.26 **blackarch-misc**

Packages that don't particularly fit into any categories.

Examples: oh-my-zsh-git, winexe, stompy

### 3.2.1.27 **blackarch-mobile**

Packages that manipulate mobile platforms.

Examples: android-sdk-platform-tools, android-udev-rules

### 3.2.1.28 **blackarch-networking**

Package that involve IP networking.

Examples: Anything pretty much

### 3.2.1.29 **blackarch-nfc**

Packages that use nfc (near-field communications).

Examples: nfcutils

### 3.2.1.30 **blackarch-packer**

Packages that operate on or involve packers.

*packers are programs that embed malware within other executables.*

Examples: packerid

### 3.2.1.31 **blackarch-proxy**

Packages that acts as a proxy, ie redirecting traffic through another node on the internet.

Examples: burpsuite, ratproxy, sslnuke

### 3.2.1.32 **blackarch-recon**

Packages that actively seeks vulnerable exploits in the wild. More of an umbrella group for similar packages.

Examples: canri, dnsrecon, netmask

### 3.2.1.33 **blackarch-reversing**

This is an umbrella group for any decompiler, disassembler or any similar program.

Examples: capstone, radare2, zerowine



### **3.2.1.34 blackarch-scanner**

Packages that scan selected systems for vulnerabilities.

Examples: scanssh, tiger, zmap

### **3.2.1.35 blackarch-sniffer**

Packages that involve analyzing network traffic.

Examples: hexinject, pytactile, xspy

### **3.2.1.36 blackarch-social**

Packages that primarily attack social networking sites.

Examples: jigsaw, websploit

### **3.2.1.37 blackarch-spoof**

Packages that attempt to spoof the attacker such, in that the attacker doesn't show up as an attacker to the victim.

Examples: arpoison, lans, netcommander

### **3.2.1.38 blackarch-threat-model**

Packages that would be used for reporting/recording the threat model outlined in a particular scenario.

Examples: magictree

### **3.2.1.39 blackarch-tunnel**

Packages that are used to tunnel network traffic on a given network.

Examples: ctunnel, iodine, ptunnel

### **3.2.1.40 blackarch-unpacker**

Packages that are used to extract pre-packed malware from an executable.

Examples: js-beautify

### **3.2.1.41 blackarch-voip**

Packages that operate on voip programs and protocols.

Examples: iaxflood, rtp-flood, teardown



#### 3.2.1.42 blackarch-webapp

Packages that operate on internet-facing applications.

Examples: metoscan, whatweb, zaproxy

#### 3.2.1.43 blackarch-windows

This group is for any native Windows package that runs via wine.

Examples: 3proxy-win32, pwdump, winexe

#### 3.2.1.44 blackarch-wireless

Packages that operates on wireless networks on any level.

Examples: airpwn, mdk3, wiffy

### 3.3 Repository structure

You can find the main BlackArch git repo here: <https://github.com/BlackArch/blackarch>. There are also several secondary repos here: <https://github.com/BlackArch>.

Within the main git repo, there are three important directories:

- docs - Documentation.
- packages - PKGBUILD files.
- scripts - Useful little scripts.

#### 3.3.1 Scripts

Here is a reference for scripts in the scripts/ directory:

- baaur - Soon, this will upload packages to the AUR.
- babuild - Build a package.
- bachroot - Manage a chroot for testing.
- baclean - Clean old .pkg.tar.xz files from the package repo.
- baconflict - Soon this will replace scripts/conflicts.
- bad-files - Find bad files in built packages.
- balock - Obtain or release the package repo lock.
- banotify - Notify IRC about package pushes.



- barelease - Release packages to the package repo.
- baright - Print the BlackArch copyright info.
- basign - Sign packages.
- basign-key - Sign a key.
- blackman - This behaves sort of like pacman but builds from git (not to be confused with nrz's Blackman).
- check-groups - Check groups.
- checkpkgs - Check packages for errors.
- conflicts - Check for file conflicts.
- dbmod - Modify a package database.
- depth-list - Create a list sorted by dependency depth.
- deptree - Create a dependency tree, listing only blackarch-provided packages.
- get-blackarch-deps - Get a list of blackarch dependencies for a package.
- get-official - Get official packages for release.
- list-loose-packages - List packages that are not in groups and are not dependencies for other packages.
- list-needed - List missing dependencies.
- list-removed - List packages that are in the package repo but not in git.
- list-tools - List tools.
- outdated - Look for packages that are out-dated in the package repo relative to the git repo.
- pkgmod - Modify a build package.
- pkgrel - Increment pkgrel in a package.
- prep - Clean up a PKGBUILD file's style and find errors.
- sitesync - Sync between a local copy of the package repo and a remote copy.
- size-hunt - Hunt for large packages.
- source-backup - Backup package source files.

### 3.4 Contributing to repository

This section shows you how to contribute to the BlackArch Linux project. We accept pull requests of all sizes, from tiny typo fixes to new packages.

For help, suggestions, or questions feel free to contact us.

Everyone is welcome to contribute. All contributions are appreciated.



### 3.4.1 Required tutorials

Please read the following tutorials before contributing:

- [Arch Packaging Standards](#)
- [Creating Packages](#)
- [PKGBUILD](#)
- [Makepkg](#)

### 3.4.2 Steps for contributing

In order to submit your changes to the BlackArchLinux project, follow these steps:

1. Fork the repository from <https://github.com/BlackArch/blackarch>
2. Hack the necessary files, (e.g. PKGBUILD, .patch files, etc).
3. Commit your changes.
4. Push your changes.
5. Ask us to merge in your changes, preferably through a pull request.

### 3.4.3 Example

The following example demonstrates submitting a new package to the BlackArch project. We use [yaourt](#) (you can use [pacaur](#) as well) to fetch a pre-existing PKGBUILD file for **nfsshell** from the [AUR](#) and adjust it according to our needs.

#### 3.4.3.1 Fetch PKGBUILD

Fetch the *PKGBUILD* file using *yaourt* or *pacaur*:

```
user@blackarchlinux $ yaourt -G nfsshell
==> Download nfsshell sources
x LICENSE
x PKGBUILD
x gcc.patch
user@blackarchlinux $ cd nfsshell/
```

#### 3.4.3.2 Clean up PKGBUILD

Clean up the *PKGBUILD* file and save some time:



```
user@blackarchlinux nfsshell $ ./blackarch/scripts/prep PKGBUILD
cleaning 'PKGBUILD'...
expanding tabs...
removing vim modeline...
removing id comment...
removing contributor and maintainer comments...
squeezing extra blank lines...
removing '|| return'...
removing leading blank line...
removing $pkgname...
removing trailing whitespace...
```

### 3.4.3.3 Adjust PKGBUILD

Adjust the *PKGBUILD* file:

```
user@blackarchlinux nfsshell $ vi PKGBUILD
```

### 3.4.3.4 Build the package

Build the package:

```
==> Making package: nfsshell 19980519-1 (Mon Dec  2 17:23:51 CET 2013)
==> Checking runtime dependencies...
==> Checking buildtime dependencies...
==> Retrieving sources...
-> Downloading nfsshell.tar.gz...
% Total    % Received % Xferd  Average Speed   Time    Time     Time
CurrentDload  Upload    Total   Spent    Left  Speed100 29213  100 29213   0
0 48150      0 --:--:-- --:--:-- --:--:-- 48206
-> Found gcc.patch
-> Found LICENSE
...
<lots of build process and compiler output here>
...
==> Leaving fakeroot environment.
==> Finished making: nfsshell 19980519-1 (Mon Dec  2 17:23:53 CET 2013)
```

### 3.4.3.5 Install and test the package

Install and test the package:

```
user@blackarchlinux nfsshell $ pacman -U nfsshell-19980519-1-x86_64.pkg.tar.xz
user@blackarchlinux nfsshell $ nfsshell # test it
```

### 3.4.3.6 Add, commit and push package

Add, commit and push the package

```
user@blackarchlinux ~/blackarchlinux/packages $ mv ~/nfsshell .
user@blackarchlinux ~/blackarchlinux/packages $ git commit -am nfsshell && git push
```



### 3.4.3.7 Create a pull request

Create a pull request on [github.com](https://github.com)

```
firefox https://github.com/<contributor>/blackarchlinux
```

### 3.4.3.8 Adding a remote for upstream

A smart thing to do if you're working upstream and on a fork is to pull your own fork and add the main ba repo as a remote

```
user@blackarchlinux ~/blackarchlinux $ git remote -v
origin <the url of your fork> (fetch)
origin <the url of your fork> (push)
user@blackarchlinux ~/blackarchlinux $ git remote add upstream https://github.com/blackarch/blackarch
user@blackarchlinux ~/blackarchlinux $ git remote -v
origin <the url of your fork> (fetch)
origin <the url of your fork> (push)
upstream https://github.com/blackarch/blackarch (fetch)
upstream https://github.com/blackarch/blackarch (push)
```

By default, git should push straight to origin, but make sure your git config is configured correctly. This won't be an issue unless you have commit rights as you won't be able to push upstream without them.

If you do have the ability to commit, you might have more success using `git@github.com:blackarch/blackarch.git` but it's up to you.

## 3.4.4 Requests

1. Don't add **Maintainer** or **Contributor** comments to *PKGBUILD* files. Add maintainer and contributor names to the AUTHORS section of BlackArch guide.
2. For the sake of consistency, please follow the general style of the other *PKGBUILD* files in the repo and use two-space indentation.

## 3.4.5 General tips

`namcap` can check packages for errors.

## **Chapter 4**

# **Tools Guide**

Coming soon...

### **4.1 Coming Soon**

Coming soon...

# Appendix A

## Apéndice

### A.1 FAQ's

### A.2 AUTORES

Las siguientes personas han colaborado directamente en BlackArch:

- Tyler Bennnett (tylerb@trix2voip.com)
- fnord0 (fnord0@riseup.net)
- nrz (nrz@nullsecurity.net)
- Ellis Kenyo (elken.tdos@gmail.com)
- CaledoniaProject (the.warl0ck.1989@gmail.com)
- sudokode (sudokode@gmail.com)
- Valentin Churavy (v.churavy@gmail.com)
- Boy Sandy Gladies Arriezona (reno.esper@gmail.com)
- Mathias Nyman
- Johannes Löthberg (demizide@gmail.com)
- Thiago da Silva Teixeira (teixeira.zeus@gmail.com)

Las siguientes personas han colaborado directamente en ArchPwn, y se han unido a BlackArch:

- Francesco Piccinno (stack.box@gmail.com)
- jensp (jens@jenux.homelinux.org)
- Valentin Churavy (v.churavy@gmail.com)

Hemos tomado build code de las siguientes personas:



- 3ED (krzysztof1987@gmail.com)
- AUR Perl (aurperl@juster.info)
- Aaron Griffin (aaron@archlinux.org)
- Abakus (java5@arcor.de)
- Adam Wolk (netprobe@gmail.com)
- Aleix Pol (aleixpol@kde.org)
- Aleshus (aleshusi@gmail.com)
- Alessandro Pazzaglia (jackdroido@gmail.com)
- Alessandro Sagratini (ale\_sagra@hotmail.com)
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