

Welcome to

OpenBSD Packages

- The Best Package Management Ever

EuroBSDCon2007 deathmatch

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What is OpenBSD



The OpenBSD project produces a **FREE**, multi-platform 4.4BSD-based UNIX-like operating system. Our efforts emphasize portability, standardization, correctness, proactive security and integrated cryptography. OpenBSD supports binary emulation of most programs from SVR4 (Solaris), FreeBSD, Linux, BSD/OS, SunOS and HP-UX.

You can download for free but only get stickers when you buy, so go to Wim and buy some :-)

What is OpenBSD packages

OpenBSD packages are ready-to-install binary packages

These packages contain third party applications which can be installed, upgraded and uninstalled on OpenBSD

Source for most of this presentation is experience and:

15 - The OpenBSD packages and ports system

<http://www.openbsd.org/faq/faq15.html> The OpenBSD ports tree is based on a concept originally borrowed from FreeBSD - but improved of course :-)

A lot of packages are announced with other OpenBSD news at:

<http://undeadly.org>

Binary Packages are the product



Most packages are ready-to-install binary packages and this is the considered end-user product

The goal of the developers are not to make a great ports-tree, but to make great packages

The patches and packaging of packages are not meant for end-users, but some packages need special consideration

Don't waste your time building packages again and again, like Gentoo

Of course as a result the ports tree is great too :-)

Sometime a few packages need to be built:

Java - due to license issues with sourcecode, requires download with click-through license

Flavors, sometimes you want an application configured exactly like you like it. Not all flavors are built by the OpenBSD project

```
hlk@pumba:all$ pwd
/userdata/OpenBSD/packages/amd64/all
hlk@pumba:all$ sudo pkg_add nsping-0.8.tgz
nsping-0.8: complete
```

Main commands are:

- `pkg_add` install packages
- `pkg_delete` remove installed packages
- `pkg_info` display information about installed packages

Deleting all packages can be done with:

```
pkg_delete -q /var/db/pkg/*
```

Getting the packages installed requires access to the package file

`pkg_add` command understand URL notation, so you don't need to copy all package files to a server!

The command can be used with files or URL referring to other locations such as:

- FTP good ole File Transfer Protocol
- HTTP Hyper Text Transfer Protocol - easy distribution
- HTTPS or Secure Copy Protocol (SCP) - secure distribution

Valid commands:

```
pkg_add -v ftp://ftp.openbsd.org/pub/OpenBSD/2.7/packages/i386/m4-1.4.tgz
pkg_add -v scp://login@host/usr/ports/packages/sparc/all/tcl-8.4.7.tgz
```

Adding packages from URL

```
hlk@pumba:hlk$ sudo pkg_add \  
ftp://ftp.se.openbsd.org/pub/OpenBSD/4.1/packages/amd64/zsh-4.2.6p2.tgz  
Shell /usr/local/bin/zsh appended to /etc/shells  
zsh-4.2.6p2|*****| 81%
```

then a few seconds more and:

```
Shell /usr/local/bin/zsh appended to /etc/shells  
zsh-4.2.6p2: complete
```


PKG_ADD(1)

OpenBSD Reference Manual

PKG_ADD(1)

NAME

`pkg_add` - install software package distributions

...

`-i` Switch on interactive mode. `pkg_add` may ask questions to the user if faced with difficult decisions.

...

`-u` Update the given `pkgname(s)`, and anything it depends upon. If no `pkgname` is given, `pkg_add` will update all installed packages. This relies on `PKG_PATH` to figure out the new package names.

New option `-u` for package upgrades

Just go into a directory with new package files and upgrade

```
hlk@laura:all$ pwd
/userdata/OpenBSD/packages/amd64/all
hlk@laura:all$ sudo pkg_add -ui

(go to movie)
```

OpenBSD has three flavors for the Base Operating System:

- -release: The version of OpenBSD shipped every six months on CD.
- -stable: Release, plus patches considered critical to security and reliability.
- -current: Where new development work is presently being done, and eventually, it will turn into the next release.

But OpenBSD also extends this to the packages, so OpenBSD has

- -stable packages
- -current packages

So if you want to run a stable and secure server you can follow the stable branch for ports!

For the i386 and amd64 architectures you can also find updated packages at:

<http://www.openbsd.org/pkg-stable.html>

Complete OpenBSD server upgrade

No matter if you want to run -stable or snapshots of -current (or build OS and ports yourself) you can upgrade a server easily:

- 1) Upload files to your server
- 2) Replace kernel /bsd
- 3) Reboot
- 4) Upgrade system
- 5) Upgrade packages
- 6) Drink beer!

If files are placed on a server the upgrade can be done in about 1 hour - including packages!

OpenBSD Release Cycle



A new OpenBSD version is released twice a year

Next one is The OpenBSD 4.2 Release

To be released Nov 1, 2007

Last two releases are supported with security fixes, so you can decide to upgrade once a year or twice a year

I recommend upgrading with each new release, since they always include a lot of great new stuff!

See more on: <http://www.openbsd.org/42.html>



Remember:

OpenBSD provides a secure foundation for your applications

OpenBSD packages makes it easy to install applications

OpenBSD has a predictable release cycle

OpenBSD has the easiest upgrade for both base and packages

Theo is always right and OpenBSD is free :-)

Questions?

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You are always welcome to send me questions later via email