

**pkg\_add** install a package, and all required dependencies, i.e: `pkg_add -v firefox`

**pkg\_delete** uninstall a package, i.e. to delete a package and all its useless dependencies: `pkg_delete -R firefox`

**pkg\_info** display informations about a package, for example: `pkg_info firefox`

**pkg\_tarup** create from installed packages in our LOCALBASE a .tgz binary package, for example: `pkg_tarup -a firefox`

## src part

### Available targets

**clean** delete the current package's WRKDIR

**clean-depends** delete all the WRKDIR of the current package's dependencies

**deinstall** delete a package, to delete the useless dependencies too: `make DEINSTALLDEPENDS=1 deinstall`

**fetch** fetch the *distfile* from repositories

**fetch-list** like *fetch* but fetch the dependencies too, you might use it in this way: `make fetch-list | sh`

**help** display a useful help about a pkgsrc topic, i.e. `make help topic=DEINSTALLDEPENDS`

**install** install the package and its dependencies into our LOCALBASE, i.e. `cd www/elinks && make install`

**update** update a package and dependencies

**show-depends** display all the dependencies of a package

**show-var** show a pkgsrc's variable, for example: `make show-var VARNAME=MAINTAINER`

## Various tools

**pkgclean** like *clean*'s target but smarter

**pkgfind** tools useful to find packages, for example `pkgfind -C video`

## Other operations

`shutdown(8)`

- To reboot a machine: `shutdown -r now`
- To shutdown a NetBSD machine you might use `shutdown(8)`, i.e. `shutdown -p 5 "Hurry up!"`

## Kernel

- To obtain information about selected options in the kernel you might use `config(1)`, i.e.: `config -x /netbsd`
- To obtain or set kernel states you might use `sysctl(8)`, i.e.: `sysctl -w security.curtain=1`

## Testing

- To run the automated tests: `cd /usr/tests && atf-run | atf-report`
- To configure the testing framework, edit the files in `/etc/atf`.



# NetBSD reference card

The NetBSD community

## Useful links

**Official site:** <http://www.netbsd.org/>

**Man pages:** <http://man.netbsd.org/>

**Pkgsrc.se:** <http://www.pkgsrc.se/>

**ISO:** <ftp://iso.netbsd.org/pub/NetBSD/iso/>

**Binary packages:** [ftp://ftp.NetBSD.org/pub/NetBSD/packages/current-packages/NetBSD/\\${uname -p}/\\${uname -r}/All](ftp://ftp.NetBSD.org/pub/NetBSD/packages/current-packages/NetBSD/${uname -p}/${uname -r}/All)

**NetBSD Wiki:** <http://wiki.netbsd.org/>

## Obtaining the sources

- To obtain the sources we should set various useful variables for `cvs(1)`: `CVS_RSH="ssh"`  
`CVSRROOT="anoncvs@anoncvs.NetBSD.org:/cvsroot"`  
`export CVS_RSH CVSRROOT`
- Now we choose a directory for the sources: `cd /usr`
- To obtain the sources (in this case the 6.1.4):  
`cvs co -r netbsd-6-1-4-RELEASE -P src`
- To obtain pkgsrc (i.e. the 2014Q2 release):  
`cvs co -r pkgsrc-2014Q2 -P pkgsrc`

## Configuration and useful commands

### Audio

- To record audio (i.e. with a microphone) you can use `audiorecord(1)`:  
`audiorecord -p mic myrec.wav`
- To play an audio file, recorded for example with `audiorecord(1)` you might use `audioplay(1)`:  
`audioplay myrec.wav`
- To turn up or down the volume you can use `mixerctl(1)`, the increment and decrement operators are supported: `mixerctl -w outputs.master++` For a list of all possible variables: `mixerctl -a`

### Localization

- To set your favourite language and/or charset you might use `export` (or `setenv` on the `cs(1)`) and the valid variables, for example for the Italian language and UTF-8: `export LANG="it_IT.UTF-8"`  
`export LC_ALL="it_IT.UTF-8"`
- To print the current settings: `locale`
- To print all available settings you might use: `locale -a`

### Managing users and groups

- To add a user:  
`useradd -m -s /bin/ksh -G wheel user` where `/bin/ksh` is a shell and `wheel` is a secondary group.
- To change some user's options, i.e add him/her to a group: `usermod -G group user`
- To delete a user: `userdel user`

### Monitoring the system

- To monitor various informations of your NetBSD box you might use the `systat(1)` tool (which uses `curses(3)`): `systat all` When you're on `systat` you can move on another displays with `:display`, i.e. `:ps` or `:net`, for a list of all the available displays: `:help`

- With `envstat(4)` you might obtain the sensor(s) informations, for example: `envstat -i 2`
- To obtain the pid of a process you might use `pgrep(1)`: `pgrep envstat`
- To *kill* a process without knowing its pid you might use: `pkill gimp`
- To change the priority of a process you can use `prenice(8)`: `prenice 6 vi`

### rc.d

**rc.conf** The synopsis of `rc.conf` file is:  
`daemon|option=yes|no|value`

**auto\_ifconfig** automatically starts the network interfaces (please see `ifconfig_if`) (*boolean*)

**defaultroute** set the default gateway, i.e.  
`defaultroute=192.168.1.1`

**dhclient** configure the network using DHCP (`auto_ifconfig` and `ifconfig_if` not needed) (*boolean*)

**hostname** set the hostname, i.e. `hostname=foobar`

**ifconfig\_if** assigns an IP or other on that network interface, i.e. `ifconfig_rtk0="inet 192.168.1.4"`

**mixerctl** automatically starts the `mixerctl` configuration (*boolean*)

**postfix** starts Postfix (*boolean*)

**sshd** starts the OpenSSH server (*boolean*)

### Start and stop services and other operations

- To start a service only one time, i.e. the `sshd` daemon: `/etc/rc.d/sshd onestart`
- To stop a service (for example `sshd`):  
`/etc/rc.d/sshd stop`
- To restart a service (for example `network`):  
`/etc/rc.d/network restart`

### wscons

- To set the keyboard's layout, i.e. the Dvorak's layout: `wsconsctl -w encoding=us.dvorak`
- To turn off the pc speaker:  
`wsconsctl -w bell.volume=0`
- To see all available variables: `wsconsctl -a`, and display's options: `wsconsctl -ad`

### Pkgsrc

#### mk.conf

The `mk.conf` synopsis is: `option = values` or for concatenating values: `option += values`. Put a `-` as a prefix if you'd like to disable a option.

**ACCEPTABLE\_LICENSES** not free software or OSI licenses that we accept, i.e.:  
`ACCEPTABLE_LICENSES += vim-license`

**CFLAGS** flag passed to the compiler, i.e.  
`CFLAGS += -march=pentium-m`

**FAILOVER\_FETCH** if the distfile's checksum doesn't match, download again the distfile,  
`FAILOVER_FETCH = yes`

**FETCH\_CMD** tool to use on the *fetch* phase, i.e.:  
`FETCH_CMD = curl`

**PKG\_DEFAULT\_OPTIONS** options used by all packages, for example:  
`PKG_DEFAULT_OPTIONS += mmx -nas`

**PKG\_OPTIONS.package** options used by a package, for example in the `www/elinks` case:  
`PKG_OPTIONS.elinks += nntp`

**X11\_TYPE** option useful to set the X11 type, for modular X.org: `X11_TYPE = modular`

#### pkg part

**pkg\_admin audit** show all the vulnerabilities of installed packages

**pkg\_admin fetch-pkg-vulnerabilities** download the vulnerability list