

PORT(1)

BSD General Commands Manual

PORT(1)

NAME

port -- operate on individual or multiple Mac ports

SYNOPSIS

```
port [-vdqfonRusbckixpt] [-D portdir] [-F cmdfile] [action] [actionflags]
  [[portname | pseudo-portname | port-url]]
  [[@version] [+/-variant ...] ... [option=value ...]]
```

DESCRIPTION

port is designed to operate on individual or multiple Mac ports, optionally within a single call, based on the requested action. If no portdir or portname is specified, the current working directory is assumed; if no action is specified the port command enters interactive mode, in which commands are read via stdin. Batch commands may be passed via a cmdfile. Port options are passed as key=value pairs and take precedence over individual portname options as specified in its Portfile and system-wide settings.

Port variants can be specified as +name, which indicates the variant is desired, or -name, indicating the contrary. In case of ambiguities, a port can be fully specified with the @version_revision+variants format.

Installed ports can be activated or deactivated without being uninstalled. A port can be installed if all other version/variant(s) combinations installed at any given moment are deactivated.

The port command knows various pseudo-portnames that will expand to the specified set of ports from the available ports tree(s). These may be used in place of a portname. Common options are:

- o all: all the ports in each ports tree listed in sources.conf
- o current: the port in the current working directory.
- o active: set of installed and active ports.
- o inactive: set of installed but inactive ports.
- o installed: set of all installed ports.
- o uninstalled: ports in the ports tree(s) that aren't installed.
- o outdated: installed ports that are out of date with respect to their current version/revision in the ports tree(s)

Other options, also known as pseudo-portname selectors, matching the most common keys used in a Portfile are also accepted, in both singular and plural form where applicable. These are:

- o name
- o version
- o revision
- o epoch
- o variant
- o variants
- o category
- o categories
- o maintainer
- o maintainers
- o platform
- o platforms
- o description
- o long_description
- o homepage
- o portdir

Search strings that will expand to a set of matching ports can be constructed based on the "pseudo-portname selector":regex combination used. portnames containing valid

UNIX glob patterns will also expand to the set of matching ports. Any action passed to port will be invoked on each of them. For example:

```
port list variant:no_ssl
port uninstall name:sql
port echo apache*
```

Logical operators "and", "or", "not", "!", "(" and ")" may be used to combine individual portnames, port glob patterns and/or pseudo-portnames to construct complex port expressions that expand to the set of matching ports. For example:

```
port upgrade installed and apache*
port echo maintainer:jberry and uninstalled and \( category:java and not
commons* \)
```

The port command also recognizes several command line flags and targets:

OPTIONS

- v verbose mode (generate verbose messages)
- d debug mode (generate debugging messages, implies -v)
- q quiet mode (suppress messages)
- n don't follow dependencies in upgrade (only for upgrading)
- R also upgrade dependents (only for upgrading)
- u uninstall non-active ports when upgrading and uninstalling
- f force mode (ignore state file)
- o honor state files older than Portfile
- s source-only mode (build and install from source, ignore all binary archives, do not create/recreate binary archives) (only applies when archive mode is enabled)
- b binary-only mode (build and install from binary archives, ignore source, abort if no archive present; do not create/recreate binary archives from source) (only applies when archive mode is enabled)
- c autoclean mode (execute clean after install)
- k keep mode (don't autoclean after install)
- D specify portdir
- F Read and process the file of commands specified by the argument. If the argument is '-', then read commands from stdin. If the option is given multiple times, then multiple files will be read.
- i Read commands from stdin. Short for -F -
- x In batch and interactive mode, exit on the first error encountered. Otherwise, errors during batch execution are simply reported.
- p Despite any errors encountered, proceed to process multiple ports and commands.
- t enable trace mode debug facilities on platforms that support it (Mac OS X). This feature is two-folded. It consists in automatically detecting and reporting undeclared dependencies based on what files the port reads or what programs the port executes. In verbose mode, it will also report unused dependencies for each stage of the port installation. It also consists in forbidding and reporting file creation and file writes outside allowed directories (temporary directories and \${workpath}).

USER TARGETS

Targets most commonly used by regular MacPorts users are:

search

Search for an available port whose name matches a regular expression. For example:

```
port search vim
```

info

Displays all the meta-information available for portname. Specific meta-information may be requested through an option such as `--maintainer` or `--category` (recognized field names are those from the PortIndex). If the global option `-q` is in effect, the meta-info fields will not be labeled. If the option `--line` is provided, all such data will be consolidated into a single line per port, suitable for processing in a pipe of commands. If the option `--index` is provided, the information will be pulled from the PortIndex rather than from the Portfile (in this case variant information, such as dependencies, will not affect the output).

For example:

```
port info vim +ruby
port info --category --name apache*
port -q info --category --name --version category:java
port info --line --category --name all
port info --index python24
```

variants

Lists the build variants available for portname.

deps

Lists the other ports that are required to build and run portname.

dependents

Lists the installed ports that depend on the port portname.

install

Install and activate portname.

uninstall

Deactivate and uninstall portname. To uninstall all installed but inactive ports, use `-u`. To recursively uninstall all dependents of this port, use `--follow-dependents`.

For example:

```
port uninstall vim
port -u uninstall
port uninstall --follow-dependents python24
```

activate

Activate the installed portname.

deactivate

Deactivate the installed portname.

installed

List all installed ports.

location

Print the install location of a given port.

contents

Lists the files installed by portname.

provides

Determines which port owns a given file and can take either a relative or absolute path. For example:

```
port provides /opt/local/etc/irssi.conf
port provides include/tiff.h
```

sync

Performs a sync operation only on the ports tree of a MacPorts installation, pulling in the latest revision available of the Portfiles from the MacPorts rsync server. To update you would normally do:

```
sudo port -d sync
```

If any of the ports tree(s) uses a file: URL that points to a local subversion working copy, sync will perform an svn update on the working copy with the user set to the owner of the working copy.

outdated

List the installed ports that need upgrading.

upgrade

The upgrade target works on a port and its dependencies. If you want to change this behaviour, look at the switches for n (no dependencies) and R (dependents) below.

Upgrade the installed portname. For example:

```
port upgrade vim
```

To upgrade all installed ports:

```
port upgrade installed
```

To upgrade portname and the ports that depend on it:

```
port -R upgrade libiconv
```

To force an upgrade (rebuild) use:

```
port -f upgrade vim
```

To upgrade portname without following its dependencies, use -n. For example:

```
port -n upgrade wireshark
```

clean

Clean the files used for building portname. To just remove the work files, use the `--work` actionflag. To remove the distribution files (tarballs, etc), specify `--dist`. To remove the archive(s) for the current version of a port, pass `--archive`. To remove the work files, distribution files and archives, pass `--all`. For example:

```
port clean --dist vim
port clean --archive vim
```

To remove only certain version(s) of a port's archives (version is any valid UNIX glob pattern), you can use:

```
port clean --archive vim 6.2.114
```

or:

```
port clean --archive vim '6.*'
```

echo

Writes to stdout the arguments passed to port. This follows the expansion of pseudo-portnames, portname glob patterns, pseudo-portname selectors and the evaluation of port expressions. echo may be used to determine the exact set of ports to which a given string of arguments will expand, without performing any further operations on them. For example:

```
port echo category:net
port echo maintainer:jmpp and name:netw
port echo maintainer:jmpp and \( net* or category:text \)
```

list

If no argument is given, display a list of the latest version of all available ports. If portname(s) are given as arguments, display a list of the latest version of each

port.

version

Display the release number of the installed MacPorts infrastructure.

platform

Display the platform information for the current system.

selfupdate

Updates the MacPorts system, ports tree(s) and base tools if needed, from the MacPorts rsync server, installing the newest infrastructure available. To update you would typically do:

```
sudo port -d selfupdate
```

See sync for more information about updating ports tree(s).

help

Displays a summary of all available actions and port command syntax on stdout.

DEVELOPER TARGETS

The targets that are often used by Port developers are intended to provide access to the different phases of a Port's build process:

dir

Displays the path to the directory containing portname.

file

Displays the path to the Portfile for portname.

cat

Concatenates and prints the contents of Portfile on stdout.

edit

Opens Portfile with your default editor specified in your shell's environment variable. Alias ed also invokes this command.

You can also use the --editor flag on the command line to specify an alternative editor. For example:

```
port edit --editor nano apache2
```

unarchive

Unpack the port from a pre-built binary archive. When archive mode is enabled, this command is called automatically, prior to fetch, to check for an existing binary archive to unpack. If found, it is unpacked and all stages up to install are then skipped.

fetch

Fetches the distribution files required to build portname.

checksum

Compute the checksums of the distribution files for portname, and compare them to the checksums listed in Portfile.

extract

Extracts the distribution files for portname.

patch

Applies any required patches to portname's extracted distribution files.

configure

Runs any configure process for portname.

build

Build portname.

destroot

Installs portname to a temporary directory.

test

Tests portname.

lint

Verifies Portfile for portname. To nitpick about whitespace and patchfile names, use `--nitpick`.

archive

Archive the port for a later unarchive. When archive mode is enabled, binary archives will be created automatically whenever an install is performed, or when the archive target is called explicitly.

distcheck

Check if the distfiles haven't changed and can be fetched.

distfiles

Display each distfile, its checksums, and the URLs used to fetch it.

livecheck

Check if the software hasn't been updated since the Portfile was last modified.

PACKAGING TARGETS

There are also targets for producing installable packages of ports:

pkg

Creates an OS X installer package of portname.

mpkg

Creates an OS X installer metapackage of portname and its dependencies.

dmg

Creates an internet-enabled disk image containing an OS X package of portname.

mdmg

Creates an internet-enabled disk image containing an OS X metapackage of portname and its dependencies.

rpm

Creates an RPM binary package of portname, similar to a tgz "archive".

srpm

Creates a SRPM source package of portname, similar to a xar "portpkg".

dpkg

Creates a DEB binary package of portname.

EXAMPLES

The following demonstrates invoking port with the extract target on portdir "textproc/figlet" and extract.suffix set to ".tgz":

```
port extract -D textproc/figlet extract.suffix=.tgz
```

FILES

`${prefix}/etc/macports/macports.conf`

Global configuration file for the MacPorts system.

`${prefix}/etc/macports/sources.conf`

Global listing of the ports trees used by MacPorts. This file also enables rsync synchronization.

`${prefix}/etc/macports/variants.conf`

Global variants used when a port is installed.

`~/.macports/macports.conf`

User configuration file for the MacPorts system. It overrides the global macports.conf file.

DIAGNOSTICS

The port utility exits 0 on success, and >0 if an error occurs.

SEE ALSO

`macports.conf(5)`, `portfile(7)`, `portgroup(7)`, `portstyle(7)`, `porthier(7)`

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