NAME

pkg create - a utility for creating software package distributions

SYNOPSIS

pkg create [**-enqv**] [**-f** *format*] [**-l** *level*] [**-o** *outdir*] [**-p** *plist*] [**-r** *rootdir*] [**-t** *timestamp*] **-m** *metadatadir*
pkg create [**-enqv**] [**-f** *format*] [**-l** *level*] [**-o** *outdir*] [**-r** *rootdir*] [**-t** *timestamp*] **-M** *manifest*
pkg create [**-egnqvx**] [**-f** *format*] [**-l** *level*] [**-o** *outdir*] [**-r** *rootdir*] [**-t** *timestamp*] *pkg-name ...*
pkg create [**-enqv**] [**-f** *format*] [**-l** *level*] [**-o** *outdir*] [**-r** *rootdir*] [**-t** *timestamp*] **-a**

pkg create [**--expand-manifest**] [**--no-clobber**] [**--quiet**] [**--verbose**] [**--format** *format*] [**--level** *level*]
[**--out-dir** *outdir*] [**--plist** *plist*] [**--root-dir** *rootdir*] **--metadata** *metadatadir*
pkg create [**--expand-manifest**] [**--no-clobber**] [**--quiet**] [**--verbose**] [**--format** *format*] [**--level** *level*]
[**--out-dir** *outdir*] [**--root-dir** *rootdir*] **--manifest** *manifest*
pkg create [**--expand-manifest**] [**--{glob,no-clobber,regex}**] [**--quiet**] [**--verbose**] [**--format** *format*]
[**--level** *level*] [**--out-dir** *outdir*] [**--root-dir** *rootdir*] *pkg-name ...*
pkg create [**--expand-manifest**] [**--no-clobber**] [**--quiet**] [**--verbose**] [**--format** *format*] [**--level** *level*]
[**--out-dir** *outdir*] [**--root-dir** *rootdir*] **--all**

DESCRIPTION

pkg create is used to create packages from binaries or other files installed on your computer. Package tarballs can be created from the files of a previously installed package using metadata from the local package database. Any number of packages may be created in one invocation of this style.

Alternatively, a single package can be created from an arbitrary selection of files on your system, but this requires a *metadatadir* and optionally *plist* to be supplied. The package name will be derived from the *+MANIFEST* file which must be contained within the *metadatadir*, or passed as the argument to **-M**.

Packages thus created can be distributed and subsequently installed on other machines using the **pkg add** command.

OPTIONS

The following options are supported by **pkg create**:

-a, **--all** Create package tarballs from all packages installed on your system. This option is incompatible with the

-e, **--expand-manifest**
The manifest contained in pkg will be expanded to readable UCL format. **-g**, **-x** or **-m** *metadatadir* options.

-g, **--glob** Interpret *pkg-name* as a shell glob pattern and create package only for installed binaries whose name match this pattern. This option is incompatible with the **-a**, **-x** or **-m** *metadatadir* options.

-x, **--regex** Like **-g**, but interpret *pkg-name* as a regular expression using the "modern" or "extended" syntax described in re_format(7). This option is incompatible with the **-a**, **-g** or **-m** *metadatadir* options.

-f *format*, **--format** *format*

Set *format* as the package output format. It can be one of *tzst*, *txz*, *tbz*, *tgz* or *tar* which are currently the only supported formats. If an invalid or no format is specified *txz* is assumed.

-l *level*, **--level** *level*

Set the compression *level* for created packages. It can be any valid numeric compression level you might specify to the underlying compression *format*. Additionally, *level* may be one of the special words "fast" or "best". If *level* is one of these special words, the fastest or slowest compression level, respectively, for the specified compression format, is used.

-m *metadatadir*, **--metadata** *metadatadir*

Specify the directory containing the package manifest, *+MANIFEST* and optionally three other files; one containing a message to be displayed on package installation, *+DISPLAY*. Another containing the description for the package, *+DESC*. If specified, only a single package will be created. *+DISPLAY* and *+DESC* are not required; the *+MANIFEST* file can contain all the required information needed to build a package. This option is incompatible with the **-M**, **-a**, **-g** or **-x** options.

-M *manifest*, **--manifest** *manifest*

Read all of the package metadata from the *manifest* file. This is exactly the same format as *+MANIFEST* mentioned above, but any file name can be used, and no other file will be used to read package metadata from. If specified, only a single package will be created. This option is incompatible with the **-m**, **-a**, **-g** or **-x** options.

-t *timestamp*, **--timestamp**

Set the timestamp of the files within the archive.

-n, **--no-clobber** Do not overwrite already existing packages.

-o *outdir*, **--out-dir** *outdir*

Set *outdir* as the output directory. If this option is not given, all created packages will be saved in the current directory.

-p *plist*, **--plist** *plist*

Specify some package metadata using the legacy plist format from pkg_add(1), commonly found in *pkg-plist* files in the ports tree. Metadata from the *plist* file, if specified, will take precedence over any equivalents from the *metadatadir*. Only has any effect when used with *metadatadir*. See *PLIST FORMAT* for details.

-q, **--quiet** Force quiet output. This is the default, unless **PKG_CREATE_VERBOSE** is set to *yes* in *pkg.conf*.

-v, **--verbose** Force verbose output, the opposite of **--quiet**.

-r *rootdir*, **--root-dir** *rootdir*

rootdir specifies the top-level directory to be treated as the root of the filesystem hierarchy containing the package files. File paths in generated packages will be relative to *rootdir*. This allows a package to be generated from content offset from its intended final location, which allows a package building without disturbing similar content already on the system. If unspecified, the default is effectively /, the actual root directory.

MANIFEST FILE DETAILS

name *pkg-name*

This entry sets the package's name to *pkg-name*. Among other things, this name is used - with the version and the origin of the concerned package - to identify a dependency.

version *pkg-version*

This entry sets the package's version to *pkg-version*.

origin *pkg-origin*

This entry sets the package's origin to *pkg-origin*. This is a string of the form *category/port-dir* which designates the port this package was built from.

comment *comment-string*

comment-string is a one-line description of this package. It is the equivalent of the COMMENT variable for a port, not a way to put comments in a *+MANIFEST* file.

desc *description*

description is a longer description of the package. It is the equivalent of the *pkg-descr* file for a

port. It may be one to a few paragraphs. For example:

```
desc = <<EOD
  This is a longer description of the package.
  It can span multiple lines.

  It can also span multiple paragraphs.
EOD
```

arch *cpu-type*
: The architecture of the machine the package was built on. *cpu-type* takes values like x86, amd64...

www *url*
: The software's official website.

maintainer *mail-address*
: The maintainer's mail address.

prefix *path-prefix*
: The path where the files contained in this package are installed (usually */usr/local*).

flatsize *size*
: The size that the files contained in this package will occupy on your system once uncompressed. This value does not take into account files stored in the package database.

deps *dep-name dep-origin dep-version*
: Associative array of package dependencies, keyed on *dep-name* and with values **version** *dep-version* and **origin** *dep-origin*. For example:

```
"deps" : {
  "pstree" : {
    "version" : "2.36",
    "origin" : "sysutils/pstree"
  },
  "cdiff" : {
    "version" : "0.9.6.20140711,1",
    "origin" : "textproc/cdiff"
  },
},
```

conflict *pkg-glob*

Flag this package as incompatible with the one designated by *pkg-glob*. Conflicting packages cannot be installed on the same system as they may contain references to the same files.

option *option-name option-value*

Set the option *option-name* to the value *option-value*.

file *sha256-hash path*

file entries list files included in the package. If the file is a regular one, such an entry contains its sha256 digest along with its path. If a packaged file is a link, you must use this entry's other form, as described below.

file - *path*

Same as above but for file links. The sha256 hash is replaced with a - (dash).

dir *path*

Mimics the **file** entry but for directories.

PLIST FORMAT

The following describes the plist format:

The plist is a sequential list of lines which can have keywords prepended. A keyword starts with an '@'. Lines not starting with a keyword are considered as paths to a file. If started with a '/' then it is considered an absolute path. Otherwise the file is considered as relative to PREFIX.

Keyword lines are formed as follows: *@keyword line*

Available keywords are the following:

@cwd [*directory*]

Set the internal directory pointer to point to *directory*. All subsequent filenames will be assumed relative to this directory.

@mode *mode*

Set default permission for all subsequently extracted files to *mode*. Format is the same as that used by the **chmod** command. Use without an arg to set back to default (mode of the file while being packed) permissions.

@owner *user*

Set default ownership for all subsequent files to *user*. Use without an arg to set back to default (root) ownership.

@group *group*

Set default group ownership for all subsequent files to *group*. Use without an arg to set back to default (wheel) group ownership.

@comment *string*

The line will be ignored when packing.

@dir *name*

Declare directory *name* to be deleted at deinstall time. By default, most directories created by a package installation are deleted automatically when the package is deinstalled, so this directive is only needed for empty directories or directories outside of PREFIX. These directives should appear at the end of the package list. If the directory is not empty a warning will be printed, and the directory will not be removed. (Subdirectories should be listed before parent directories.)

@include *name*

Include the *name* plist file to the plist currently being parsed. the *name* will be opened relatively to the main plist file being parsed. Note: only one level of **@include** is allowed

ESCAPE SEQUENCES

ENVIRONMENT

The following environment variables affect the execution of **pkg create**. See pkg.conf(5) for further description.

PKG_DBDIR

PLIST_KEYWORDS_DIR

PORTSDIR

SOURCE_DATE_EPOCH

Set the timestamp for every single file in the archive to the one specified in the environment variable

FILES

See pkg.conf(5).

EXAMPLES

Create package files for installed packages:

```
% pkg create -a -o /usr/ports/packages/All
```

Create package file for pkg:

```
% pkg create -o /usr/ports/packages/All pkg
```

SEE ALSO

pkg_create(3), pkg_printf(3), pkg_repos(3), pkg-keywords(5), pkg-lua-script(5), pkg-repository(5), pkg-script(5), pkg-triggers(5), pkg.conf(5), pkg(8), pkg-add(8), pkg-alias(8), pkg-annotate(8), pkg-audit(8), pkg-autoremove(8), pkg-check(8), pkg-clean(8), pkg-config(8), pkg-delete(8), pkg-fetch(8), pkg-info(8), pkg-install(8), pkg-lock(8), pkg-query(8), pkg-register(8), pkg-repo(8), pkg-rquery(8), pkg-search(8), pkg-set(8), pkg-shell(8), pkg-shlib(8), pkg-ssh(8), pkg-stats(8), pkg-triggers(8), pkg-update(8), pkg-updating(8), pkg-upgrade(8), pkg-version(8), pkg-which(8)