

# Gentoo Portage

Portage \Por"tage\, v. t. & i. To carry (goods, boats, etc.)  
overland between navigable waters.

Source: Webster's Revised Unabridged Dictionary (1913)

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# Overview - Features

Supports lots architectures

Support for different dependency types

USE flags allows easy customisation

Easy code reuse using libraries (eclasses)

Base configuration defined using profiles

# Package management

Installing a package:

```
paludis --install --pretend python
```

Upgrading package sets:

```
paludis --install --pretend world
```

Other sets includes:

```
everything and security
```

It's possible to have user defined sets

# Package management continued

Uninstalling packages is just as easy:  
paludis --uninstall --pretend python

Uninstall a package and its dependencies:  
paludis --uninstall --with-unused-dependencies

Cleaning out unused dependencies:  
paludis --uninstall-unused --pretend

# Creating and maintaining packages

Portage uses bash scripts known as “ebuilds” for package management

Eclasses are used for code reuse and simplifying ebuilds significantly

Seperate dependency chains for build-time and run-time dependencies

Post dependencies can be used to resolve circular dependencies

Ebuilds can control mirroring

# An example package

```
# Copyright 1999-2006 Gentoo Foundation
# Distributed under the terms of the GNU General Public License v2
# $Header: /var/cvsroot/gentoo-x86/dev-python/clientcookie/clientcookie-1.3.0.ebuild,v 1.1 2006/05/19 07:20:13
# lucass Exp $

inherit distutils

MY_P="ClientCookie-${PV}"
DESCRIPTION="Python module for handling HTTP cookies on the client side"
HOMEPAGE="http://wwwsearch.sourceforge.net/ClientCookie/"
SRC_URI="http://wwwsearch.sourceforge.net/ClientCookie/src/${MY_P}.tar.gz"
LICENSE="BSD"
SLOT="0"
KEYWORDS="~amd64 ~ia64 ~ppc ~x86"
IUSE=""

S="${WORKDIR}/${MY_P}"
DOCS="*.txt"

src_unpack() {
    unpack ${A}
    cd ${S}

    # use distutils instead of setuptools
    sed -e 's/not hasattr(sys, "version_info")/1/' -i setup.py
}

src_install() {
    # remove to prevent distutils_src_install from installing it
    dohtml *.html
    rm README.html*

    distutils_src_install
}
```

# QA checks

Qualudis builds on the paludis library and provides common QA checks for ebuilds

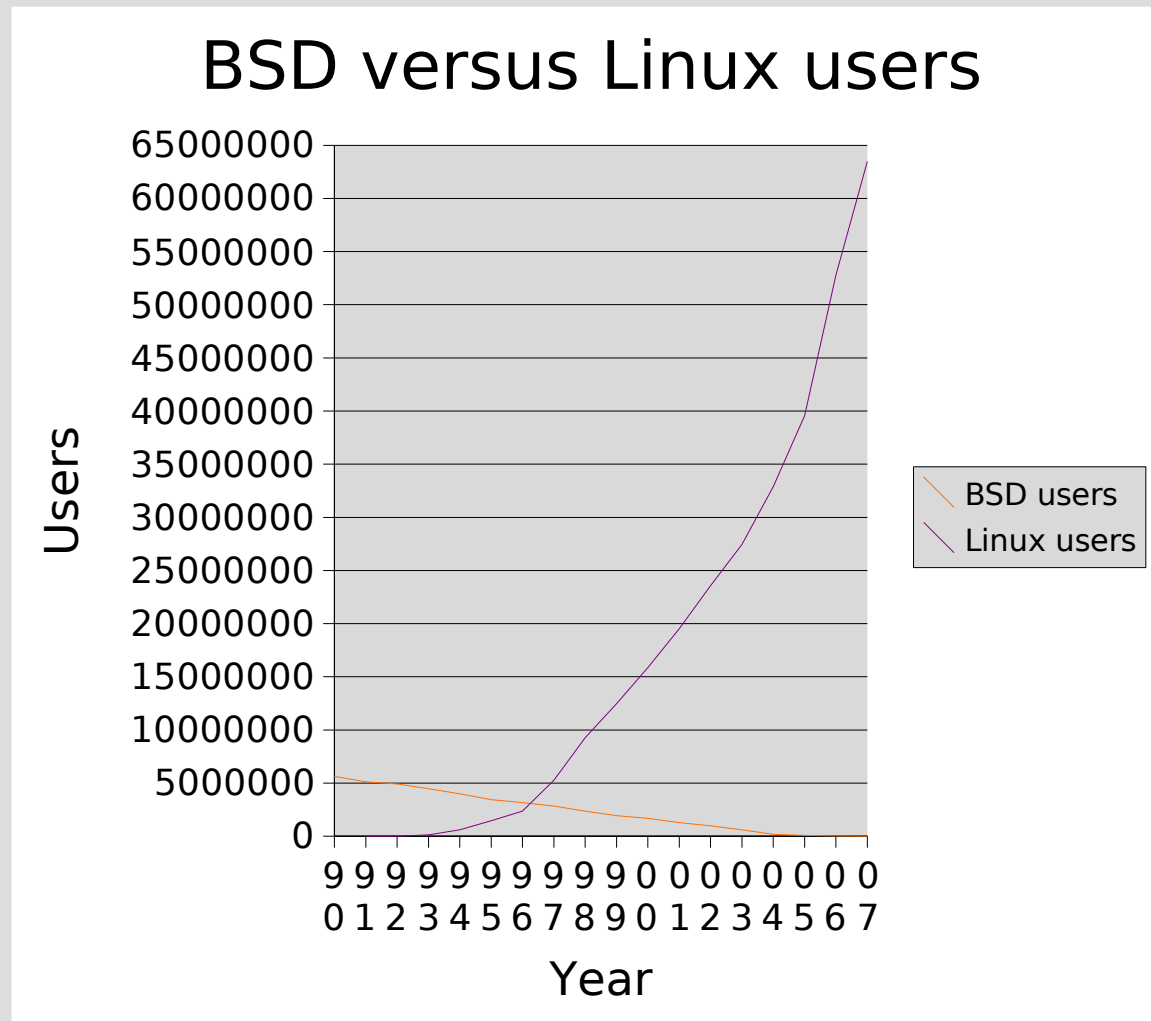
Makes sure all required variables are defined

Checks for invalid dependencies

Bash syntax checking



# How badly BSD sucks



Own research, at least 99.95% accuracy guaranteed