

Sheet1

Action	Arch	Red Hat/Fedora	Debian/Ubuntu	SLES/openSUSE	Gentoo
Install a package(s) by name	pacman -S	dnf install	apt install	zypper install zypper in	emerge [-a]
Remove a package(s) by name	pacman -Rs	dnf remove	apt remove	zypper remove zypper rm	emerge -C
Search for package(s) by searching the expression in name, description, short description. What exact fields are being searched by default varies in each tool. Mostly options bring tools on par.	pacman -Ss	dnf search	apt search	zypper search zypper se [-s]	emerge -S
Upgrade Packages - Install packages which have an older version already installed	pacman -Syu	dnf upgrade	apt update && apt upgrade	zypper update zypper up	emerge -u world

Sheet1

Upgrade
Packages -
Another form
of the update
command,
which can
perform more
complex
updates -- like
distribution
upgrades.

When the usual
update
command will
omit package
updates, which
include
changes in
dependencies,
this command
can perform
those updates.

pacman -Syu

dnf distro-sync

apt update &&
apt dist-
upgrade

zypper dup

emerge -uDN
world

Clean up all
local caches.

Options might
limit what is
actually
cleaned.

Autoclean
removes only
unnneeded,
obsolete
information.

pacman -Sc
pacman -Scc

dnf clean all

apt autoclean
apt clean

zypper clean

eclean distfiles

Sheet1

Remove dependencies that are no longer needed, because e.g. the package which needed the dependencies was removed.

pacman -Qdtq | pacman -Rs - dnf autoremove apt autoremove zypper rm -u emerge --depclean

Remove packages no longer included in any repositories.

pacman -Qmq | pacman -Rs - package-cleanup --orphans aptitude purge '~o'

Mark a package previously installed as a dependency as explicitly required.

pacman -D --asexplicit dnf mark install apt-mark manual emerge --select

Install package(s) as dependency / without marking as explicitly required.

pacman -S --asdeps dnf install => dnf mark remove apt-mark auto emerge -1

Only downloads the given package(s) without unpacking or installing them

pacman -Sw dnf download apt install --download-only (into the package cache) apt download (bypass the package cache) zypper --download-only emerge --fetchonly

Sheet1

Start a shell to
enter multiple
commands in
one session

apt-config shell zypper shell

Show a log of
actions taken
by the software
management.

cat
/var/log/pacma
n.log dnf history

cat
/var/log/dpkg.l
og cat
/var/log/zypp/h
istory located in
/var/log/portag
e

Get a dump of
the whole
system
information -
Prints, Saves or
similar the
current state of
the package
management
system.

Preferred
output is text or
XML. (Note:
Why either-or
here? No tool
offers the

option to
choose the
output format.) (see
/var/lib/pacman
/local) (see
/var/lib/rpm/Pa
ckages)

apt-cache stats n/a

emerge --info

e-mail delivery
of package
changes

apt install apt-
listchanges