

Package Management in Linux

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Overview

- What is package management
- Pro's
- Con's
- Main types of packages
- rpm (.rpm packages)
- dpkg (.deb packages)
- apt-get

Package Management

- A way for an operating system to manage software that is already installed or that can be installed.

Pro's

- Simple
 - install
 - remove
 - information

Con's

- Dependencies
- Binary format

Main Types

- .tgz packages
 - typically used in Slackware
- .rpm packages
 - originally used in Red Hat
- .deb packages
 - originally used in Debian

Basic Slackware tgz commands

- `installpkg package-name`
 - installs package-name
- `removepkg package-name`
 - removes package-name
- `cat /var/log/packages/package-name`
 - lists information about package-name
- `ls /var/log/packages`
 - lists all of the installed packages

Basic RPM commands

- `rpm -i package-name`
 - installs package-name
- `rpm -e package-name`
 - removes package-name
- `rpm -qa`
 - lists all of the installed packages
- `rpm -qi package-name`
 - lists information about package-name

Basic dpkg commands

- dpkg is used in Debian based Linux systems.
- dpkg --install package-name
 - installs package-name
- dpkg -r package-name
 - removes package-name
- dpkg -l
 - lists all installed packages
- dpkg --info package-name
 - lists information about package-name

apt-get

- A program used to install, remove, and upgrade packages.
- Provides a central repository for users to download packages.
 - Repositories can be specified in a sources.list file.
- Solved most dependency problems
 - installed packages that a package depends on.
- Debian Linux roots.

Basic apt-get commands

- `apt-get install package-name`
 - installs package-name
- `apt-get remove package-name`
 - removes package-name
- `apt-cache search keyword`
 - searches for packages with keyword in either the name or the description.
- `apt-cache show package-name`
 - lists information about package-name
- `apt-get update`
 - updates the list of available packages
- `apt-get upgrade`
 - upgrades currently installed packages

References

- <http://www.linuxplanet.com/linuxplanet/print/4161/>
- http://en.wikipedia.org/wiki/Package_management_system