Use dpkg command, which is package manager for Debian. Suppose you want to find out package apache-perl or sudo is installed or not, type command:

**dpkg -s apache-perl**

Use file **/var/lib/dpkg/available** to find out all package names available to you. Or you can use following command (list all packages in /var/lib/dpkg/status):

**$ dpkg-query -l**

Some the most commonly used dpkg commands along with their usages are listed here:

**1. Install a Package**

For installing an “.deb” package, use the command with “-i” option. For example, to install an “.deb” package called “flashpluginnonfree\_2.8.2+squeeze1\_i386.deb” use the following command.

[root@tecmint~]# **dpkg -i flashpluginnonfree\_2.8.2+squeeze1\_i386.deb**

Selecting previously unselected package flashplugin-nonfree.

(Reading database ... 465729 files and directories currently installed.)

Unpacking flashplugin-nonfree (from flashplugin-nonfree\_3.2\_i386.deb) ...

Setting up flashplugin-nonfree (1:3.2) ...

--2013-10-01 16:23:40-- http://fpdownload.macromedia.com/get/flashplayer/pdc/11.2.202.310/install\_flash\_player\_11\_linux.i386.tar.gz

Resolving fpdownload.macromedia.com (fpdownload.macromedia.com)... 23.64.66.70

Connecting to fpdownload.macromedia.com (fpdownload.macromedia.com)|23.64.66.70|:80... connected.

HTTP request sent, awaiting response... 200 OK

Length: 6923724 (6.6M) [application/x-gzip]

Saving to: ‘/tmp/flashplugin-nonfree.FPxQ4l02fL/install\_flash\_player\_11\_linux.i386.tar.gz’

**2. List all the installed Packages**

To view and list all the installed packages, use the “-l” option along with the command.

[root@tecmint~]# **dpkg -l**

Desired=Unknown/Install/Remove/Purge/Hold

| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-pend

|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)

||/ Name Version Architecture Description

+++-======================================-========================-===============================================================================

ii accerciser 3.8.0-0ubuntu1 all interactive Python accessibility explorer for the GNOME desktop

ii account-plugin-aim 3.6.4-0ubuntu4.1 i386 Messaging account plugin for AIM

ii account-plugin-facebook 0.10bzr13.03.26-0ubuntu1 i386 GNOME Control Center account plugin for single signon - facebook

ii account-plugin-flickr 0.10bzr13.03.26-0ubuntu1 i386 GNOME Control Center account plugin for single signon - flickr

ii account-plugin-generic-oauth 0.10bzr13.03.26-0ubuntu1 i386 GNOME Control Center account plugin for single signon - generic OAuth

ii account-plugin-google 0.10bzr13.03.26-0ubuntu1 i386 GNOME Control Center account plugin for single signon

rc account-plugin-identica 0.10bzr13.03.26-0ubuntu1 i386 GNOME Control Center account plugin for single signon - identica

ii account-plugin-jabber 3.6.4-0ubuntu4.1 i386 Messaging account plugin for Jabber/XMPP

....

To view a specific package installed or not use the option “-l” along with package-name. For example, check whether apache2 package installed or not.

[root@tecmint~]# dpkg -l apache2

Desired=Unknown/Install/Remove/Purge/Hold

| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-pend

|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)

||/ Name Version Architecture Description

+++-======================================-========================-==============================================

ii apache2 2.2.22-6ubuntu5.1 i386 Apache HTTP Server metapackage

**3. Remove a Package**

To remove the **“.deb”** package, we must specify the package name “flashpluginnonfree“, not the original name “flashplugin-nonfree\_3.2\_i386.deb“. The “-r” option is used to remove/uninstall a package.

[root@tecmint~]# **dpkg -r flashpluginnonfree**

(Reading database ... 142891 files and directories currently installed.)

Removing flashpluginnonfree ...

Processing triggers for man-db ...

Processing triggers for menu ...

Processing triggers for desktop-file-utils ...

Processing triggers for gnome-menus ...

You can also use ‘p‘ option in place of ‘r’ which will remove the package along with configuration file. The ‘r‘ option will only remove the package and not configuration files.

[root@tecmint~]# dpkg -p flashpluginnonfree

**4. View the Content of a Package**

To view the content of a particular package, use the “-c” option as shown. The command will display the contents of a “.deb” package in long-list format.

[root@tecmint~]# **dpkg -c flashplugin-nonfree\_3.2\_i386.deb**

drwxr-xr-x root/root 0 2012-12-14 22:54 ./

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/bin/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/lib/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/lib/mozilla/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/lib/mozilla/plugins/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/lib/flashplugin-nonfree/

-rw-r--r-- root/root 3920 2009-09-09 22:51 ./usr/lib/flashplugin-nonfree/pubkey.asc

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/man/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/man/man8/

-rw-r--r-- root/root 716 2012-12-14 22:54 ./usr/share/man/man8/update-flashplugin-nonfree.8.gz

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/applications/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/icons/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/icons/hicolor/

drwxr-xr-x root/root 0 2012-12-14 22:54 ./usr/share/icons/hicolor/24x24/

....

**5. Check a Package is installed or not**

Using “-s” option with package name, will display whether an deb package installed or not.

[root@tecmint~]# **dpkg -s flashplugin-nonfree**

Package: flashplugin-nonfree

Status: install ok installed

Priority: optional

Section: contrib/web

Installed-Size: 177

Maintainer: Bart Martens <bartm@debian.org>

Architecture: i386

Version: 1:3.2

Replaces: flashplugin (<< 6)

Depends: debconf | debconf-2.0, wget, gnupg, libatk1.0-0, libcairo2, libfontconfig1, libfreetype6, libgcc1, libglib2.0-0, libgtk2.0-0 (>= 2.14), libnspr4, libnss3, libpango1.0-0, libstdc++6, libx11-6, libxext6, libxt6, libcurl3-gnutls, binutils

Suggests: iceweasel, konqueror-nsplugins, ttf-mscorefonts-installer, ttf-dejavu, ttf-xfree86-nonfree, flashplugin-nonfree-extrasound, hal

Conflicts: flashplayer-mozilla, flashplugin (<< 6), libflash-mozplugin, xfs (<< 1:1.0.1-5)

Description: Adobe Flash Player - browser plugin

...

**6. Check the location of Packages installed**

To list location of files to be installed to your system from package-name.

[root@tecmint~]# **dpkg -L flashplugin-nonfree**

/.

/usr

/usr/bin

/usr/lib

/usr/lib/mozilla

/usr/lib/mozilla/plugins

/usr/lib/flashplugin-nonfree

/usr/lib/flashplugin-nonfree/pubkey.asc

/usr/share

/usr/share/man

/usr/share/man/man8

/usr/share/man/man8/update-flashplugin-nonfree.8.gz

/usr/share/applications

/usr/share/icons

/usr/share/icons/hicolor

...

**7. Install all Packages from a Directory**

Recursively, install all the regular files matching pattern “\*.deb” found at specified directories and all of its subdirectories. This can be used with “-R” and “–install” options. For example, I will install all the “.deb” packages from the directory called “debpackages“.

[root@tecmint~]# **dpkg -R --install debpackages/**

(Reading database ... 465836 files and directories currently installed.)

Preparing to replace flashplugin-nonfree 1:3.2 (using .../flashplugin-nonfree\_3.2\_i386.deb) ...

Unpacking replacement flashplugin-nonfree ...

Setting up flashplugin-nonfree (1:3.2) ...

Processing triggers for man-db ...

Processing triggers for bamfdaemon ...

Rebuilding /usr/share/applications/bamf-2.index...

Processing triggers for gnome-menus ...

8. Unpack the Package but dont’ Configure

Using action “–unpack” will unpack the package, but it will don’t install or configure it.

[root@tecmint~]# dpkg --unpack flashplugin-nonfree\_3.2\_i386.deb

(Reading database ... 465836 files and directories currently installed.)

Preparing to replace flashplugin-nonfree 1:3.2 (using flashplugin-nonfree\_3.2\_i386.deb) ...

Unpacking replacement flashplugin-nonfree ...

Processing triggers for man-db ...

Processing triggers for bamfdaemon ...

Rebuilding /usr/share/applications/bamf-2.index...

Processing triggers for gnome-menus ...

**9. Reconfigure a Unpacked Package**

The option “–configure” will reconfigure a already unpacked package.

[root@tecmint~]# **dpkg --configure flashplugin-nonfree**

Setting up flashplugin-nonfree (1:3.2) ...

10. Replace available Package information

The “–-update-avail” option replace the old information with the available information in the Packages file.

[root@tecmint~]# dpkg –-update-avail package\_name

**11. Erase Existing Available information of Package**

The action “–clear-avaial” will erase the current information about what packages are available.

[root@tecmint~]# **dpkg –-clear-avail**

**12. Forget Uninstalled and Unavailable Packages**

The dpkg command with option “–forget-old-unavail” will automatically forget uninstalled and unavailable packages .

[root@tecmint~]# **dpkg --forget-old-unavail**

**13. Display dpkg Licence**

[root@tecmint~]# **dpkg --licence**

**14. Display dpkg Version**

The “–version” argument will display dpkg version information.

[root@tecmint~]# **dpkg –version**

Debian `dpkg' package management program version 1.16.10 (i386).

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later for copying conditions. There is NO warranty.

**15. Get all the Help about dpkg**

The “–help” option will display a list of available options of dpkg command.

[root@tecmint~]# **dpkg –help**

Usage: dpkg [<option> ...] <command>

Commands:

-i|--install <.deb file name> ... | -R|--recursive <directory> ...

--unpack <.deb file name> ... | -R|--recursive <directory> ...

-A|--record-avail <.deb file name> ... | -R|--recursive <directory> ...

--configure <package> ... | -a|--pending

--triggers-only <package> ... | -a|--pending

-r|--remove <package> ... | -a|--pending

-P|--purge <package> ... | -a|--pending

--get-selections [<pattern> ...] Get list of selections to stdout.

--set-selections Set package selections from stdin.

--clear-selections Deselect every non-essential package.

--update-avail <Packages-file> Replace available packages info.

--merge-avail <Packages-file> Merge with info from file.

--clear-avail Erase existing available info.

--forget-old-unavail Forget uninstalled unavailable pkgs.

-s|--status <package> ... Display package status details.

...

That’s all for now. I’ll soon be here again with another interesting article. If I’ve missed any command in the list do let me know via comments. Till then, Stay tuned and Keep connected to Tecmint. Like and share us and help us spread. Don’t forget to mention your valuable thoughts in comment.

Share

25

227

109

12

6 comments