PACKAGE MANAGEMENT WITH APT-GET

sudo su
In Linux (and Unix in general), there is a SuperUser named root. The Windows equivalent of root is the Administrators group. The SuperUser can do anything and everything, and thus doing daily work as the SuperUser can be dangerous.

By default, the root account password is locked in Ubuntu. This means that you cannot login as root directly or use the su command to become the root user.

The sudo command stands for "**superuser do**".

```
sudo su
```

It will ask for Linux password.

Apt-Get
The apt-get command is a powerful command-line tool, which works with Ubuntu's Advanced Packaging Tool (APT) performing such functions as installation of new software packages, upgrade of existing software packages, updating of the package list index, and even upgrading the entire Ubuntu system.

Update the Package Index
The APT package index is essentially a database of available packages from the repositories defined in the **/etc/apt/sources.list** file and in the **/etc/apt/sources.list.d** directory. To update the local package index with the latest changes made in the repositories, type the following:

```
sudo apt-get update
```

Upgrade Packages
Over time, updated versions of packages currently installed on your computer may become available from the package repositories (for example security updates). To upgrade your system, first update your package index as outlined above, and then type:

```
sudo apt-get upgrade
```

Find Out Package Name and Description of Software
To find out the package name and with it description before installing, use the 'search' flag. Using "search" with apt-cache will display a list of matched packages with short description. Let's say you would like to find out description of package '**bluefish**', then command would be.

```
apt-cache search bluefish
```

Install a Specific Package
Installation of packages using the apt-get tool is quite simple. For example, to install the Bluefish HTML Editor, type the following:

```
sudo apt-get install bluefish
```

Install multiple packages
You can add more than one package name along with the command in order to install multiple packages at the same time. For example, the following command will install packages 'bluefish' and 'leafpad'.

```
Sudo apt-get install bluefish leafpad
```

Remove a Package
Removal of a package (or packages) is also straightforward. To remove the package installed in the previous example, type the following:

```
sudo apt-get remove bluefish
```

Completely Remove Packages
To remove software packages including their configuration files, use the 'purge' sub command as shown below.

```
sudo apt-get purge filezilla
```

Clean Up Disk Space
The 'clean' command is used to free up the disk space by cleaning retrieved (downloaded) .deb files (packages) from the local repository (/var/cache/apt/archives).

```
sudo apt-get clean
```

Download a Package Without Installing
Using 'download' option, you can download any given package without installing it. For example, the following command will only download 'bluefish' package to current working directory.

```
sudo apt-get bluefish
```

Check Broken Dependencies?
The 'check' command is a diagnostic tool. It used to update package cache and checks for broken dependencies.

```
sudo apt-get check
```

MANUAL INSTALLATION OF APPLICATIONS

Debian/Ubuntu package file have the .deb suffix. Download the package file wish to install and save in home folder.

```
sudo dpkg -i packagename.deb
```

E.g. sudo dpkg -i teamviewer*.deb

If any dependency problem shows, apply force install command:

```
sudo apt-get install -f
```

REFERENCES

Apt-Get
https://help.ubuntu.com/12.04/serverguide/apt-get.html

25 Useful Basic Commands of APT-GET and APT-CACHE for Package Management
http://www.tecmint.com/useful-basic-commands-of-apt-get-and-apt-cache-for-package-management/

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