

Network Administration/System

Administration Homework #5

System Administration 1

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1.

apt-get update: 根據/etc/apt/sources.list中的設定去更新package的資料庫

apt-get upgrade: 如果安裝的package有新版的話，會更新package（只有沒有相依性問題的package才會被更新）

apt-get dist-upgrade: 除了upgrade之外，還會自動解決package相依性的問題

REFERENCE:

(1) [<https://b9532026.wordpress.com/2010/03/30/apt-get-指令一覽-2/>]

(2) [https://blog.longwin.com.tw/2008/03/debian_ubuntu_apt_dist_upgrade_difference_2008/]

(3) [https://debian-administration.org/article/69/Some_upgrades_show_packages_being_kept_back]

2.

apt-get remove: 移除package，但留下設定檔

apt-get autoremove: 移除package和與此package具有相依性的package

apt-get purge: 移除package，連設定檔也移除

REFERENCE:

(1) [<http://www.adj.idv.tw/html/53/t-132453.html>]

(2) [<http://chentunglee.blogspot.tw/2009/12/apt-get.html>]

(3) [<https://b9532026.wordpress.com/2010/03/30/apt-get-指令一覽-2/>]

(4) [<http://blog.lyhdev.com/2013/11/ubuntu-linux-apt-get-purge.html>]

[以下都在**sudo**的權限下進行]

3.

`apt-cache search perl --names-only` 或 `aptitude search perl` 或 `apt-cache pkgnames perl`

(但會有不太一樣的結果，aptitude會連not available的都顯示出來。另外apt-cache search --names-only的可能有bug，因為他會連Provides有perl的都會顯示出來，並不是只出現在names裡，然後apt-cache pkgnames只會顯示perl開頭的)

REFERENCE:

- (1) [<https://b9532026.wordpress.com/2010/03/30/apt-get-指令一覽-2/>]
- (2) [<http://www.arthurtoday.com/2010/11/apt-package.html>]
- (3) CLASSMATE: 宋子維

4.

```
`dpkg -S /usr/bin/ncat`
```

REFERENCE:

- (1) [<http://askubuntu.com/questions/481/how-do-i-find-the-package-that-provides-a-file>]

5.

```
`apt-mark showauto | grep -x gcc`
```

REFERENCE:

- (1) [<http://askubuntu.com/questions/355070/is-it-possible-to-know-from-apt-if-the-package-was-installed-explicitly-or-as-a>]
- (2) [<http://www.adj.idv.tw/html/53/t-132453.html>]
- (3) [<http://askubuntu.com/questions/80655/how-can-i-check-dependency-list-for-a-deb-package>]
- (4) [<http://wiki.ubuntu-tw.org/index.php?title=Aptitude>]
- (5) [<http://unix.stackexchange.com/questions/3595/list-explicitly-installed-packages>]

6.

```
`apt-mark manual gcc`
```

REFERENCE:

- (1) [<http://askubuntu.com/questions/313696/apt-get-does-not-install-dependencies>]
- (2) [<http://www.arthurtoday.com/2015/05/ubuntu-apt-mark-how-to.html>]

7.

```
`gpg --gen-key` >>> generate a key called $keyid, then run  
`dpkg-sig -k $keyid --sign builder nasa-meta.deb`
```

REFERENCE:

- (1) [<http://blog.packagecloud.io/eng/2014/10/28/howto-gpg-sign-verify-deb-packages-apt-repositories/>]
- (2) [<https://help.ubuntu.com/community/CreateAuthenticatedRepository>]

- (3) [<http://stackoverflow.com/questions/11708334/pgp-asymmetric-not-enough-random-bytes-available-please-do-some-other-work-to>]
(4) CLASSMATE: 宋子維

8.

```
`gpg --armor --export $keyid | apt-key add -`
```

REFERENCE:

- (1) [<http://chentunglee.blogspot.tw/2009/12/apt-key.html>]
(2) [<https://help.ubuntu.com/community/CreateAuthenticatedRepository>]

9.

```
`mkdir -p /srv/repo`  
`cp nasa-meta.deb /srv/repo/`  
`cd /srv/repo/`  
`echo "deb file:///srv/repo /" >> /etc/apt/sources.list`  
`apt-get update`
```

Package:

```
`apt-ftparchive packages . > Packages`  
`gzip -c Packages > Packages.gz`
```

Release:

```
`apt-ftparchive release . > Release`
```

InRelease:

```
`gpg --default-key $keyid --clearsign -o InRelease Release`
```

Release.gpg:

```
`gpg --default-key $keyid -ab -o Release.gpg Release`
```

REFERENCE:

- (1) [<https://help.ubuntu.com/community/CreateAuthenticatedRepository>]
(2) [<http://man.he.net/man1/apt-ftparchive>]
(3) [https://wiki.debian.org/RepositoryFormat#A.22Release.22_files]
(4) [http://blog.sina.com.cn/s/blog_49b2f03a0100o6qa.html]