

405235035 資工二 王博輝

- ls

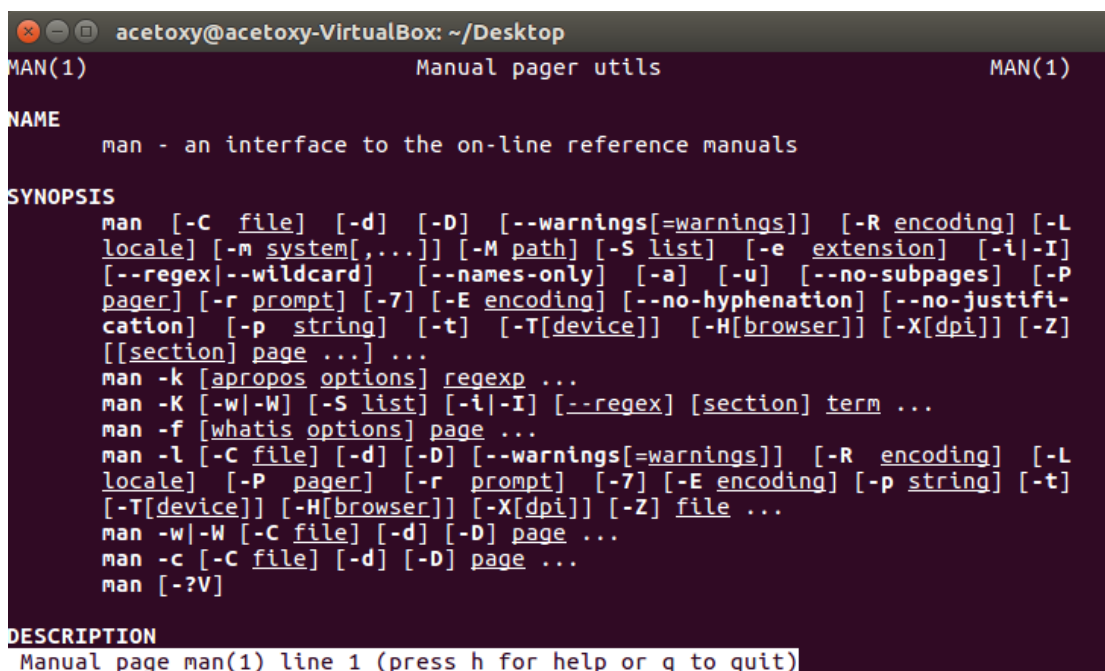
```
acetox@acetox-VirtualBox:~/Desktop$ ls
2018-sp  __MACOSX
```

功能：列出目前所在資料夾中的內容(檔案、資料夾...等等)

用法：直接在欲查詢的資料夾中打入指令

- man

```
acetox@acetox-VirtualBox:~/Desktop$ man man
```

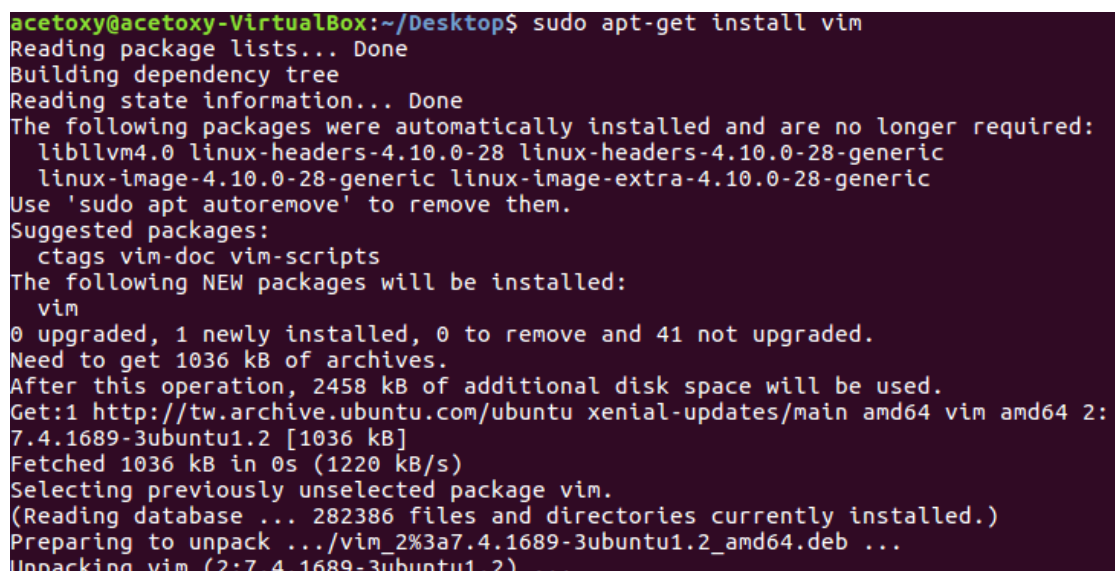


The screenshot shows a terminal window titled 'acetox@acetox-VirtualBox: ~/Desktop'. The command 'man man' has been executed, displaying the manual page for the 'man' utility. The page includes sections for NAME, SYNOPSIS, and DESCRIPTION. The SYNOPSIS section lists various options for the 'man' command, such as [-C file], [-d], [-D], [--warnings=warnings], [-R encoding], [-L locale], [-m system[,...]], [-M path], [-S list], [-e extension], [-i|-I], [--regex|--wildcard], [--names-only], [-a], [-u], [--no-subpages], [-P pager], [-r prompt], [-7], [-E encoding], [--no-hyphenation], [--no-justification], [-p string], [-t], [-T[device]], [-H[browser]], [-X[dpi]], [-Z], and [-Z]. The DESCRIPTION section indicates that the manual page is 'man(1) line 1 (press h for help or q to quit)'.

功能：可以查閱某個 linux 命令的手冊頁

用法：man “欲查詢指令”

- apt-get



The screenshot shows a terminal window titled 'acetox@acetox-VirtualBox:~/Desktop'. The command 'sudo apt-get install vim' has been executed. The output shows the package lists being read, the dependency tree being built, and the state information being read. It then lists packages that were automatically installed and are no longer required: libllvm4.0, linux-headers-4.10.0-28, linux-headers-4.10.0-28-generic, linux-image-4.10.0-28-generic, and linux-image-extra-4.10.0-28-generic. It suggests using 'sudo apt autoremove' to remove them. The suggested packages are ctags, vim-doc, and vim-scripts. The following NEW packages will be installed: vim. It shows that 0 packages are upgraded, 1 is newly installed, 0 are to be removed, and 41 are not upgraded. It indicates that 1036 kB of archives need to be get, and after this operation, 2458 kB of additional disk space will be used. It shows the source of the package: http://tw.archive.ubuntu.com/ubuntu xenial-updates/main amd64 vim amd64 2:7.4.1689-3ubuntu1.2 [1036 kB]. It shows that 1036 kB were fetched in 0s (1220 kB/s). It shows that the previously unselected package vim is being selected. It shows that the database is being read, containing 282386 files and directories currently installed. It shows that the package is being unpacked: vim_2%3a7.4.1689-3ubuntu1.2_amd64.deb. It shows that the package is being unpacked: vim (2:7.4.1689-3ubuntu1.2).

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```
acetox@acetox-VirtualBox:~/Desktop$ sudo apt-get remove vim
[sudo] password for acetox:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libllvm4.0 linux-headers-4.10.0-28 linux-headers-4.10.0-28-generic
  linux-image-4.10.0-28-generic linux-image-extra-4.10.0-28-generic
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  vim
0 upgraded, 0 newly installed, 1 to remove and 41 not upgraded.
After this operation, 2458 kB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 282391 files and directories currently installed.)
Removing vim (2:7.4.1689-3ubuntu1.2) ...
```

```
acetox@acetox-VirtualBox:~/Desktop$ sudo apt-get upgrade vim
```

```
Setting up isc-dhcp-common (4.3.3-5ubuntu12.10) ...
Setting up libapparmor-perl (2.10.95-0ubuntu2.9) ...
Setting up apparmor (2.10.95-0ubuntu2.9) ...
Installing new version of config file /etc/apparmor.d/abstractions/base ...
update-rc.d: warning: start and stop actions are no longer supported; falling ba
ck to defaults
Skipping profile in /etc/apparmor.d/disable: usr.bin.firefox
Skipping profile in /etc/apparmor.d/disable: usr.sbin.rsyslogd
Setting up apt-transport-https (1.2.26) ...
Setting up compiz-core (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up libcompizconfig0:amd64 (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up libdecoration0:amd64 (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up compiz-plugins-default:amd64 (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up compiz-gnome (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up unity-services (7.4.5+16.04.20180221-0ubuntu1) ...
Setting up unity-schemas (7.4.5+16.04.20180221-0ubuntu1) ...
Setting up libunity-core-6.0-9:amd64 (7.4.5+16.04.20180221-0ubuntu1) ...
Setting up compiz (1:0.9.12.3+16.04.20180221-0ubuntu1) ...
Setting up unity (7.4.5+16.04.20180221-0ubuntu1) ...
Setting up libdpg-perl (1.18.4ubuntu1.4) ...
Setting up dpg-dev (1.18.4ubuntu1.4) ...
Setting up libtiff5:amd64 (4.0.6-1ubuntu0.3) ...
Setting up libvorbis0a:amd64 (1.3.5-3ubuntu0.2) ...
Setting up libvorbisfile3:amd64 (1.3.5-3ubuntu0.2) ...
Setting up libvorbisenc2:amd64 (1.3.5-3ubuntu0.2) ...
Setting up python3-gdbm:amd64 (3.6.3-0ubuntu1~16.04.york0) ...
Processing triggers for libc-bin (2.23-0ubuntu10) ...
Processing triggers for initramfs-tools (0.122ubuntu8.11) ...
update-initramfs: Generating /boot/initrd.img-4.13.0-37-generic
```

功能：apt 為軟體包管理器

用法：後面接上 install 可安裝軟體，接上 remove 可移除軟體，接上 update

可升級軟體。

- gcc

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ gcc table.c
```

功能：GNU 編譯器套裝，可用來編譯許多高階程式語言。

用法：gcc “欲編譯檔案”

- chmod

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ chmod 777 a.out
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ ls -al
total 204
drwxr-xr-x  3 acetox acetox  4096  ==  26 21:46 .
drwxr-xr-x 15 acetox acetox  4096  ==  15 14:52 ..
-rw-rw-r--  1 acetox acetox    0  ==  13 15:15 all
-rwxrwxrwx  1 acetox acetox  8928  ==  26 21:46 a.out
```

功能：為可用來更改各用戶對某檔案的權限的命令

用法：chmod xxx "檔案名稱"，每個 x 為各用戶對檔案的權限大小

可寫：+4，可讀：+2，可執行：+1，無權限：0。

- chown

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ sudo chown acetox:777 a.out
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ ls -al
total 204
drwxr-xr-x  3 acetox acetox  4096  ==  26 21:46 .
drwxr-xr-x 15 acetox acetox  4096  ==  15 14:52 ..
-rw-rw-r--  1 acetox acetox    0  ==  13 15:15 all
-rwxrwxrwx  1 acetox  777  8928  ==  26 21:46 a.out
```

功能：為用於設置文件所有者和文件關聯組的命令

用法：chown x : y "檔案名稱"，將檔案的所有者設置成 x，關聯組設置成 y。

- chgrp

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ chgrp acetox a.out
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ ls -al
total 204
drwxr-xr-x  3 acetox acetox  4096  ==  26 21:46 .
drwxr-xr-x 15 acetox acetox  4096  ==  15 14:52 ..
-rw-rw-r--  1 acetox acetox    0  ==  13 15:15 all
-rwxrwxrwx  1 acetox acetox  8928  ==  26 21:46 a.out
```

功能：類似 chown 命令，但允許普通用戶改變檔案的文件關聯組，只要是該

組的一員即可。

用法：chgrp x "檔案名稱"，將關聯組設置成 y，但下命令的人須在 y 關聯組

中。

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- mv

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ mv a.out ~/Desktop
acetox@acetox-VirtualBox:~/Desktop$ ls
2018-sp  a.out  __MACOSX
```

功能：移動檔案至另一個資料夾

用法：mv “檔案名稱” “目的地資料夾”

- ln

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ ln table ~/Desktop
acetox@acetox-VirtualBox:~/Desktop$ ls
2018-sp  a.out  __MACOSX  table
```

功能：建立一個檔案的連結檔，而原檔案不會消失（無加參數為硬鏈結）

用法：ln “檔案名稱” “所建立連結檔目的地”

- mount

```
acetox@acetox-VirtualBox:~/Desktop$ mount
sysfs on /sys type sysfs (rw,nosuid,nodev,noexec,relatime)
proc on /proc type proc (rw,nosuid,nodev,noexec,relatime)
udev on /dev type devtmpfs (rw,nosuid,relatime,size=994444k,nr_inodes=248611,mode=755)
devpts on /dev/pts type devpts (rw,nosuid,noexec,relatime,gid=5,mode=620,ptmxmode=000)
tmpfs on /run type tmpfs (rw,nosuid,noexec,relatime,size=204160k,mode=755)
/dev/sda1 on / type ext4 (rw,relatime,errors=remount-ro,data=ordered)
securityfs on /sys/kernel/security type securityfs (rw,nosuid,nodev,noexec,relatime)
tmpfs on /dev/shm type tmpfs (rw,nosuid,nodev)
tmpfs on /run/lock type tmpfs (rw,nosuid,nodev,noexec,relatime,size=5120k)
tmpfs on /sys/fs/cgroup type tmpfs (ro,nosuid,nodev,noexec,mode=755)
cgroup on /sys/fs/cgroup/systemd type cgroup (rw,nosuid,nodev,noexec,relatime,xattr,release_agent=/lib/systemd/systemd-cgroups-agent,name=systemd)
```

功能：能夠將某一檔案掛載進另一個資料夾內，方便存取使用

用法：mount -t type(檔案格式) device(目標位置) dir(目的位置)

只輸入 mount 的話可查看系統中所有設備掛載的狀況(如圖)

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• tar

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ tar cvf all.tar all
all

acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ ls
all          ~Desktop  pointer    rdtsc.c      table.c
all.tar      gmon.out  pointer1   simple_makefile
callgrind.out.5800  hello    pointer1.c table
clock_gettime  hello.c  pointer.c  table2
clock_gettime.c makefile  rdtsc      table2.c

acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ tar xvf all.tar
all
```

功能：可將檔案打包或解包成一個 tar 檔

用法：tar cvf “包裝的名稱” “想打包的檔案” 即可打包

tar xvf “包裝的名稱” 即可解包

• vim

```
acetox@acetox-VirtualBox:~/Desktop/2018-sp/ch02$ vim hello.c

hello.c (~/Desktop/2018-sp/ch02) - VIM
#include <stdlib.h>
#include <stdio.h>

int main()
{
    printf("hello\n");
}
~
```

功能：為一個文字編輯器，可用來編輯檔案

用法：vim “檔案名稱”