



Basic BASH and Linux commands

Some useful Linux BASH, vi and other
commands

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ls, find and grep

`ls -al` **list hidden files**

`grep -RHI "pattern" .`

search for pattern recursively, ignoring binary files and printing filenames

`find . -type f -name "*-eabi-gcc"`

Finds filenames with the pattern



vi or vim (1)

Designed for touch typing and very fast:

\$ **end of line**

v **select text for**

d **cut**

y **copy**

p **paste**

V **select whole lines**

:split <filename> **vertical split**

^w^w **to move between split screen**



Tags in vi

```
sudo apt-get install ctags      install it  
ctags -R *                      to build a tags file  
^]                               to find tags for the symbol you are over  
^t                               to go back a level of stack tags  
g^]                             to list all tags
```



Tmux (1)

`Sudo apt-get install tmux` **install it**

tmux commands

`^b %` **split horizontal**

`^b "` **split vertical**

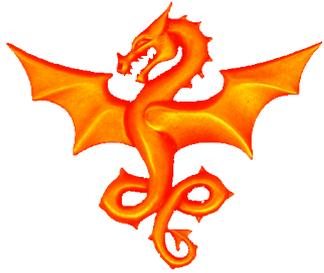
`^b arrows` **move to the pane indicated**

`^b o` **move to next pane**

`^b ;` **move to previous active pane**

`^b x` **kill pane**

`^b &` **kill window (all tmux panes)**



Tmux (2)

<code>^b pageup</code>	enters scroll mode and does a scroll up
<code>ESC</code>	to exit scroll mode.
<code>arrows</code>	to move about
<code>exit</code>	end this pane



apt-get

```
sudo apt-get ctags
```

installs a package

```
sudo apt-get update
```

updates the package list

```
sudo apt-get upgrade
```

upgrades all installed packages

```
sudo apt-get dist-upgrade
```

upgrades your distribution (E.g. Debian)



odds

`lsusb`

lists all usb devices

`.bashrc`

**the resource file for BASH runs
when each BASH shell is reated**

`alias dir='ls -al'`

creates a shortcut command

`dmesg`

here what the kernel has to say



Linux Versions

Linux kernel version

```
uname -r
```

or

```
cat /proc/version
```

or look in

```
dmesg
```



redirection

Linux output redirection: Send everything to file

```
&> file
```

Send stderr to stdout

```
2>&1
```

Send stderr to file

```
2> file
```



Making sd card images

**to make a copy of an SD card (to a file "img"):
to copy to a file**

```
dd if=/dev/sdb of=img
```

to do the reverse

```
dd if=img of=/dev/sdb
```



tar

TAR ing (detar and tar):

To extract a tar file to current directory

```
tar xzf CodeSourcery.tgz
```

And to create a tar file from a directory:

```
tar czf filename.tgz dir_to_compress/
```



Using SD cards

Find which device my usb stick is loaded as

```
ll /dev/disk/by-label/
```

Mount/unmount USB stick

```
sync
```

```
sudo mount /dev/sdc1 /mnt/tmp
```

```
sudo umount /mnt/tmp
```

List mounted devices

```
mount -v (shows filesystem and r/w attributes)
```

```
df -h (shows how much free space you have)
```

To check fs on the sd card (must be unmounted)

```
sudo e2fsck /dev/sdb2 -y
```



Questions