



Linux Services and Basic Command

Starting and stopping daemon services

The **init** program of Linux (also known as process control initialization) is in charge of starting all the normal and authorized processes that need to run at boot time on your system. These may include the APACHE daemons, NETWORK daemons, and anything else that must be running when your machine boots. Each of these processes has a script under “/etc/rc.d/init.d/” directory written to accept an argument, which can be “start”, “stop” and “restart”. You can execute those scripts by hand in fact with a command:

For example:

To start the httpd Web Server manually under Linux.

```
[root@deep /]# /etc/rc.d/init.d/httpd start
```

Starting httpd:

[OK]

To stop the httpd Web Server manually under Linux.

```
[root@deep /]# /etc/rc.d/init.d/httpd stop
```

Shutting down http:

[OK]

To restart the httpd Web Server manually under Linux.

```
[root@deep /]# /etc/rc.d/init.d/httpd restart
```

Shutting down http:

[OK]

Starting httpd:

[OK]

Check inside your “/etc/rc.d/init.d/” directory for services available and use command start | stop | restart to work around.

Editing files with the vi editor tool

The vi program is a text editor that you can use to edit any text and particularly programs. During installation of software, the user will often have to edit text files, like Makefiles or configuration files. The following are some of the more important keystroke commands to get around in vi. I decided to introduce the vi commands now since it is necessary to use vi.

Command Result

```
=====
i ----- Notifies vi to insert text before the cursor
a ----- Notifies vi to append text after the cursor
dd ----- Notifies vi to delete the current line
x ----- Notifies vi to delete the current character
Esc ----- Notifies vi to end the insert or append mode
u ----- Notifies vi to undo the last command
Ctrl+f ----- Scroll up one page
Ctrl+b ----- Scroll down one page
/string ----- Search forward for string
:f ----- Display filename and current line number
:q ----- Quit editor
:q! ----- Quit editor without saving changes
:wq ----- Save changes and exit editor
=====
```

Partitions Strategy

For performance, stability and security reasons you must create something like the following partitions listed below on your computer. We suppose for this partition configuration the fact that you have a SCSI hard drive of 9.1 GB with 256 MB of physical RAM. Of course you will need to adjust the partition sizes and swap space according to your own needs and disk size.

Minimal recommended partitions that must be created on your system:

This is the minimum number of partitions we recommend creating whatever you want to setup it for, a Web Server, Mail Server, Gateway or something else.

/boot	5 MB All Kernel images are kept here.
<Swap>	12 MB Our swap partition. The virtual memory of the Linux operating system.
/	256 MB Our root partition.
/usr	512 MB Must be large, since many Linux binaries programs are installed here.
/home	5700 MB Proportional to the number of users you intend to host. (i.e. 100 MB per users * by the number of users 57 = 5700 MB)
/var	256 MB Contains files that change when the system run normally (i.e. Log files).
/tmp	329 MB Our temporary files partition (must always reside on its own partition).

Additional or optional partitions that can be created on your system:

Depending on what services the Linux system will be assigned to serve or the specific software requirements, there can be some special partitions you can add to the minimum partitions we recommend. You can create as many partitions as you want to fit you needs. What we show you below are partitions related to programs we describe in the book.

/chroot	256 MB If you want to install programs in chroot jail environment (i.e. DNS, Apache).
/var/lib	1000 MB Partition to handle SQL or Proxy Database Server files (i.e. MySQL, Squid).

Shutting Down

To shut down Linux, issue the shutdown command. You can read the shutdown man page for complete details, but the two most common usages are:

```
shutdown -h now
shutdown -r now
```

Each will cleanly shutdown the system. After shutting everything down, the -h option will halt the machine, and the -r option will reboot.

Although the reboot and halt commands are now "smart" enough to invoke shutdown if run while the system is in runlevels 1-5, it is a bad habit to get into, as not all Linux-like operating systems have this feature.

Linux Basic Command

Ms. Dos Command

Dir
Copy
Rename
Chakdsk
Md
Del
Deltree
Cd

Linux Command

ls
cp
mv
df -h
mkdir
rm
rm -rf
cd

Example

- | | | |
|----|---|----------------------|
| 1. | Change directory etc folder | : cd /etc |
| 2. | Delete the file name abc.txt | : rm abc.txt |
| 3. | Copy the file name abc.txt to tmp folder | : cp abc.txt /tmp |
| 4. | Copy the hole directory abc to tmp folder | : cp -rf abc /tmp |
| 5. | Rename the file name abc.txt to cde.txt | : mv abc.txt cde.txt |
| 6. | Make a directory ABC | : mkdir ABC |
| 7. | Removed the directory ABC | : rm -rf ABC |

Add Users for Linux Server

To add user name call canon into Linux server please enter the command :
adduser canon

To removed the user name canon from Linux Server please enter the command :
userdel -r canon

To add user for file server please enter the command : *smbpasswd -a canon*

To change the user canon password please enter the command : *passwd canon*

To change file server user canon password please enter the command : *smbpasswd canon*

To access to Linux Server Web Management Console please type the
URL : <http://192.168.0.150:10000>