Different filesystem and the directory

sys directory:

sys is the directory where the HAL(hardwere abstraction layer) keeps all the information (databases) of the hardwere that is connected with the computer

if you go to the sys directory you will see there is some catagory in the directory

block directory:

if you go to the sys directory then the block directory you will find different devices

like loop1,loop2,loop3,loop4

and the most important directory its the databases of your harddriveit sprocess and so many things

bus directory:

its an interesting directory its contain your pci express directory mmc,serial.gpio ,firewere etc

usb sub directory:

just like the name it contain the information about the different.usb its version usb devices and its driver application etc.

Pci sub directory:

it contains the device info drivers etc for the pci card

proc filesystem(directory):

first thing the proc file system is temporary.it is created when in ram when the computer is booted.kernel store its running command in the proc directory.you can read and write kernel configuration .you can change it no problem with that but the main thing is that whatever you do is temporary after the computer booting these file will be distroyed .and configuration will be reset.

Now the question what does is contain??

well first of all it contain the mount point swaps,user info,filesystem info,io ports keys console

one more thing you have to be root to access

now if you go to the proc file syste you will see so many numbers folder.it is the process id.different process

running on a computer has a process id.even for console also .

there is a file call ‘cpuinfo’ if you see with the cat command you will see the hardwere and the vendor the model processor core ram powerdevice etc etc.
Then we go to the mounts file and the the mount point like dev/loop1-10 etc

there is also a folder called sys.if you go there and another sub directory call fs(file system) go to the directory and if you see the

“file-max”=====> cat file-max

it will return a number may be a big number depending on your laptop or anything .it actually shows that how many files you can open at a time .now lets think it gives you 5000 number.but you use a databeses and you need more file open at the same time.you can change it.as i told before it is changable.
How di i change it?
Its simple [echo your number >file-max]
but remember it is temporary

now it is a very very important folder i will talk about it is

lets go to the net directory in the *proc/*sys/net

then if you go to the ipv4 directory we will get the ip configuration in the computer.lets talk about the NAT in the net working we know that an local ip address can not pass the gateway and go to the wan if he want to go to the wan it must forward its ip to a public ip address and the server have to translate the address to a public address,that ehat NAT do,natwork addrss translator.it forward the addrss with a new address.

Now in the net directory then ipv4 sub directory if you go there you will see there is a file called “ip_forward” if you see

this file you will see the file acctually has a value 0.that means it will not do nat operation and do not forward the ip address.but if you want to do that you will change it to 1.and then it starts ip forwarding .but it is also temporary.