

Linux Commands

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Linux Commands

----> root user

\$ ---> normal user

#whoami ---> for curr. user

#who

#date

#pwd ---> print working dir

#cal

#cal 2017

#cal may 2016

#clear

to get Host (Server) Name:

#hostname (short hostname)

#hostname -f (fully qualified hostname)

to get IP Address:

#hostname -i (or)

#ip a (or)

#ifconfig

to get Memory details:

#free -m (RAM)

#df (HDD)

#df -h (Human Readable Format)

#df -m (File System in MB)

#du (dir usage)

process management:

#ps

#ps -ef

#ps -ef | grep 'java'

#ps -ef | grep 'mysql'

#top

to kill a process:

Syntax:

```
#kill <pid>
```

Ex:

```
#kill 1277
```

```
#kill -9 3456 (force kill)
```

to kill a process by Name:

Syntax:

```
#pkill <pname>
```

Ex:

```
#pkill java
```

```
#pkill tomcat
```

file Management:

#touch demo.txt ---> to create an empty file

#touch file{1..100}

#cat > demo.txt ---> to insert data

Hello world

good day

bye

[ctrl + d]

#cat demo.txt

#cat demo.txt > sample ---> to copy data

#cat devops >> sample ---> to append data

to List files:

#ls

#ls -i (to list inode values)

#ls -r (to list in reverse order)

#ls -t (to list by time of modify)

#ls -s (to list by size)

#ls -a (to list hidden files)

#ls -l (for long list)

#cp demo.txt sample --> to copy data

#rm demo.txt --> to remove files

#ls -l

- rwx rwx rwx 1 root root 38 Aug 19 02:04 Demo.txt

file type owner permi. group permi. others perm. no.of links owner (or) user group size modified date & time file name

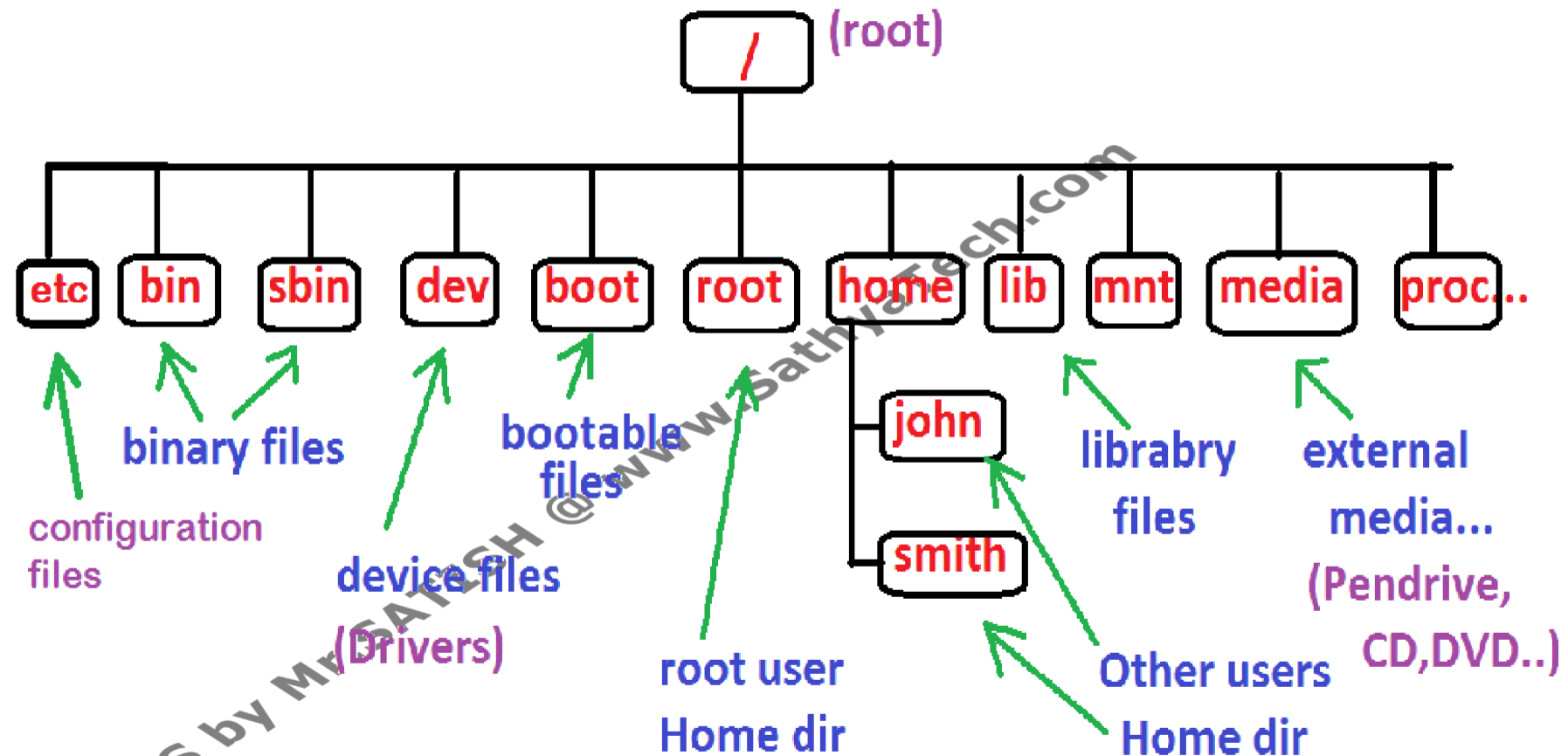
File type:

- --> Regular file(txt,images,docs...)
- d --> Directory
- l --> Link File
- s --> Socket File
- c --> Char Special File
- b --> Block Special File

Permissions

- r --> Read permi.
- w --> Write permi.
- x --> Execute permi.
- --> no. permission

Linux directory Structure



to Manage directries:

```
#mkdir mydir
```

```
#mkdir dir{1..100}
```

```
#cp sample mydir/
```

```
#cd mydir
```

```
#cd ..    ---> to move to parent dir
```

```
#cd /     ---> to move to root dir
```

```
#cd ~     ---> to move to home dir
```

```
#cd       ---> to move to home dir
```

```
#cd -     ---> to move to previous working dir.
```

```
#rmdir dir1
```

```
#rm -rf mydir
```

```
#rm -rf *
```

Linux Package Installation

Redhat , C entos , Fedora , SuSE , Ubuntu ,
Debian , Oracle Enterprise Linux , Slackwar,
Gentoo, Mandark ,

RedHat / CentOS :

- * rpm (Redhat package Manager)
- * yum

Ubuntu / Debian :

- * apt
- * apt-get

To Download Packages:

#Syntax:

```
#wget <Package Name >
```

Ex:

```
#wget http://downloads/jdk8.....tar.gz
```

To manage Packages using RPM:

```
#rpm -ivh httpd_package (package installation)
```

```
#rpm -uvh httpd_package (package Update)
```

```
#rpm -e httpd_package (to remove a package)
```

```
#rpm -q httpd_package (to Query a package)
```

Yum:

#yum install tree -y

#yum install net-tools -y

#yum remove tree -y

#yum remove curl -y

#yum list installed ---> to list installed packages

#yum list installed | grep java

#yum list available

#yum list available | grep tomcat

#yum list all ----> to list all the packages

#yum update ----> to update all the packages

apt / apt-get:

```
#apt-get install openjdk-7-jdk -y
```

```
#apt-get install tomcat7 -y
```

```
#apt-get install apache2 -y
```

```
#apt-get remove tomcat7 -y
```

```
#apt-get remove apache2 -y
```

```
#apt-get purge tomcat7 -y (to delete the files)
```

```
#apt-get purge apache2 -y
```

```
#apt-get autoremove -y (to delete all the  
unused files)
```

To Update Packages:

for Redhat :

```
#yum update -y
```

for Ubuntu :

```
#apt-get update
```

To Install packages:

for Redhat :

```
#yum install net-tools tree -y
```

for Ubuntu :

```
#apt-get install wget curl -y
```

To Install Java :

for Redhat :

```
#yum install java -y
```

```
#java -version
```

for Ubuntu :

```
#apt-get install openjdk-7-jdk -y
```

```
#apt-get install openjdk-6-jdk -y
```

JDK1.8

```
#sudo add-apt-repository ppa:openjdk-r/ppa
```

```
#sudo apt-get update
```

```
#sudo apt-get install openjdk-8-jdk
```


to Manage Services:

for Redhat7 / Centos7 :

```
#systemctl start tomcat
```

```
#systemctl enable tomcat
```

```
#systemctl stop tomcat
```

for Ubuntu / Debian :

```
#service tomcat7 start
```

```
#service tomcat7 stop
```

```
#service tomcat7 restart
```

Web Server and App Server

Web Server:

- * to deploy static web pages (.html files)
- * Ex: apache, nginx
- * default port : 80
- * default deployment path : /var/www/html

App Server:

- * to deploy static & dynamic web pages (.war,.jar)
- * Ex: tomcat , weblogic , JBoss , websphere
- * default port for tomcat : 8080
- * default deployment path for tomcat:
 - for Redhat : /var/lib/tomcat/webapps
 - for Ubuntu : /var/lib/tomcat7/webapps

Web Server and App Server

to Install Web-Server:

for Redhat7 :

```
#yum install httpd -y
```

```
#systemctl start httpd (to start services)
```

```
#yum install net-tools -y
```

```
#netstat -lntp
```

for Ubuntu :

```
#apt-get install apache2 -y
```

```
#service apache2 start
```

```
#service apache2 stop (to stop service)
```

Web Server and App Server

to deploy web-pages of Web Server:

```
#cd /var/www/html
```

```
#vi index.html
```

```
<h1> Hello from Web-Server </h1>
```

```
[press 'Esc']
```

```
:wq ---> write and quit
```

Browser ---> <http://<Public IP Address>>

Web Server and App Server

to Install App-Server (tomcat) :

for Redhat7 :

```
#yum install tomcat -y
#systemctl start tomcat
#systemctl enable tomcat
#netstat -lntp
#ps -ef (to list processes)
#ps -ef | grep 'java'
```

for Ubuntu :

```
#apt-get install tomcat7-y
#service tomcat7 start
#service tomcat7 restart
#ps -ef | grep 'tomcat'
```

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Web Server and App Server

to deploy static web-page for Tomcat:

```
#cd /var/lib/tomcat7/webapps/ROOT/
```

```
#mv index.html index.html.bkp
```

```
#vi index.html
```

```
<h1> Hello from App-Server </h1>
```

```
[press 'Esc']
```

```
:wq ---> write and quit
```

```
Browser ---> http://<public ip>:8080
```

Web Server and App Server

to deploy Dynamic web-page for Tomcat:

```
#cd /var/lib/tomcat7/webapps
```

```
#wget http://sample.war....
```

```
#service tomcat7 restart
```

Browser ---> <http://<Public IP>:8080/sample>

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