1.Distribution

LINUX: Redhat Centos Fedora Suse Opensuse Debian Ubuntu Gentoo

Archlinux slackware

UNIX: FreeBSD OpenBSD Solaris

2.device file

terminal: /dev/ttyn /dev/vt/n (:m) /dev/pts/n (:m)

disk/partition: /dev/hdxy /dev/sdxy /dev/srx /dev/mdxpy

/dev/vg_name/lv_namepx /dev/dsk/c#t#d#p#(controller target disk partition)

rpool/path (ZFS)

3.access system

1 identiry/permission

owner group others - r4 w2 x1

regular - 1 read-only: r 2 read and write: rw | execute: x

directory - 1 list files only: r 2 access files: rx 3 create and delete files: rwx

(2)SELinux

domain type

 \mathfrak{J} architecture

system process: identity/domain

file system: permission/type

4.process tree

init(root) -> daemon (stand alone, xinetd based) -> dependency

daemon type: listen by self or by xinetd, listen function configured in conf file

init adopt orphan process automatically

init reap zombie(address space release, process table left) child process automatically

process system call:

fork()&exec() - fork child process

exit()&SIGCLD - release address space, send signal

wait() - destroy zombie data structure

5.X window system

X client – xdm(gdm/kdm) -> xwm(gnome/kde) -> app(vmware)

X server – X / xming

Soft: xorg-x11, xorg-x11-server, gnome

6. inode/block

Inode table - inode num, access permission, uid, gid, access time, modify time, change time

Block - regular file: binary directory: list(name <-> inode) symbolic link: path

Hard link - different name -> one inode

Soft link - different name -> different inode, symbolic link record path

Mount/nfs - name -> another inode