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

①identiry/permission

owner group others - r4 w2 x1

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

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

②SELinux

domain type

③architecture

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

shell – fork(),exec(),wait() shell & - fork(),exec() system() – fork(),exec(),wait()

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