

8. Disk space

- Files are taking space on disk
- Space occupied by a directory
 - `du`
 - `du *`
 - `du -s`
 - `du -s *`
 - `du -s -k *`
 - What about hard links ?
 - counted once
 - What about Symbolic links
 - RTFM `du`
 - handling of symlink loops !
- Disk space used by a user
 - `du ?`
 - quota (if enabled - wait 3-Bin course)
- Disk space used on a partition
 - `df`
 - `df -k`
 - `df -h` (--human-readable)
 - `df -H` (--si)
 - `df -P` (--portability)
 - `df -t hfs`

9. Finding files

- find (pathname expression)
 - type f, d, l, p, c, b, s
 - In ~home
 - find . -type f
 - find * -type f -ls
 - find * -type d -ls
 - In /dev
 - find . -type d
 - find . -type p -ls
 - find . -type s -ls
 - perm mode, -mode, +mode with negation (!)
 - In ~home
 - find . -perm 0600 -ls
 - find . \! -type d -perm 644 -ls
 - find . \! -type d -perm 111 -ls
 - find . \! -type d -perm -111 -ls
 - find . \! -type d -perm +111 -ls
 - mtime/atime/ctime
- - In ~home
 - find . -type f -mtime -2
 - find . -type f -atime -2
 - find . -type f -mtime +1200
 - size
 - In ~home
 - find . -type f -size +120000k -ls
 - name
 - path
 - In ~home
 - find . -type f -name *dir*
 - find . -type f -path *dir*
 - user (nouser)
 - In ~psp
 - find . -nouser -ls
 - group (nogroup)
- locate
 - run periodically
 - on sync with delete (on good UNIX implementation).
- Advanced find
 - Find -name *.gz -mtime +7 -size +500M -size -1G -ls
 - find . -name *.gz -mtime +7 -size +500M -size -1G -exec rm -f {} \;
 - find . -name *.gz -mtime +7 -size +500M -size -1G -delete
 - find . -name *.gz -mtime +7 -size +500M -size -1G -execdir gzip {} \;

10. Files comparison

- Diff
- diff -C
- patch

11. Files archives / compression

- tar
- compress
- gzip

12. Process management

- finding processes
 - ps
 - ps u
 - ps xu
 - (x = proc without terminals)
 - ps aux
 - ps auxw
 - ps auxww
 - ps alx
- On a system V UNIX
 - ps -ef
 - PATH=/usr/ucb:\$PATH
- top
 - nProc & MultiThread (1)
- States & Priorities
 - R, S, W, D(U), N, <
- nice, renice
- /proc
 - environ
 - fd
 - cpuinfo
 - sys
 - meminfo
- lsof