Protection

File systems implement a protection system

- Who can access a file
- How they can access it

➡ A protection system dictates whether a given action performed by a given subject on a given object should be allowed

- You can read and/or write your files, but others cannot
- You can read "`/etc/motd`", but you cannot write it

Representing Protection

Access Control Lists (ACL)
For each object, maintain a list of subjects and their permitted actions

Capabilities
For each subject, maintain a list of objects and their permitted actions