

Prelim 2 Review

Ari Rabkin

Disks

- Request ordering
- RAID:
 - Striping, mirroring, ECC, byte striping +parity, block striped parity, interleaved parity blocks, extra parity disk...
- 0+1 is mirrored stripes, 1+0 is stripe of mirrors

Files

- Need FS to manage storage in device-independent way.
- Can be networked, distributed, in-RAM, etc; not just on disks.
- But mostly optimized for disks.
- Know Unix FS (inodes, superblock, directories)

Networks

- Link layer (ethernet)
- Network layer (IP)
- Transport Layer (TCP)

Security

- “Gold standard” is Authentication, Authorization, and Audit.
- Authenticate with what you know / have / are.
- Auth. matrix: ACLs versus Capabilities (Pay attention to policy vs mechanism)
- Threats: Buffer overflows, worms / viruses, DOS

Dist. Sys

- DNS (root servers, TTLs, hierarchy...)
- RPCs (failure modes? Interface?)