PC File Share Reservations

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What is a Share?

◆ Allow shared or exclusive access to files

◆ MS-DOS/Windows Standard

◆ Orthogonal to record locks

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Unix Has No Equivalent Functionality

- ◆ Wabi, SoftWindows, Merge need it
- ◆ Part of NLM 3 & 4 Protocols

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Solution

◆ fcntl(2) interface to advisory share reservations

```
fcntl(fd, F_SHARE, struct fshare *arg);
fcntl(fd, F_UNSHARE, struct fshare *arg);

struct fshare {
    short f_access;
    short f_deny;
    long f_id;
} fshare_t;
```

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Results

- ◆ Eliminates need to contact local lock manager
- ◆ Supports all filesystems
- ◆ Higher performance
- ◆ Used by all PC emulation products

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