Various Ideas for minorversion2

Sam Falkner
Sun Microsystems

umask Attribute

- Optional write-only attribute used at create time (including the "following setattr" if need be)

- Distinguishes application-requested mode bits from user's umask attribute

- May be ignored at server implementors discretion

umask: Example

- Application: open("foo", O_CREAT | O_WRONLY, 0666)

- With a umask of 022, server sees mode of 0644

- With umask attribute, server sees mode of 0666, and may apply umask of 022

- With an inheritable ACL, server may ignore umask

Server Shutdown Callback

- Server may send shutdown callback to clients to unambiguously warn client of impending server shutdown

- Reminiscent of "rwall" behavior of old

- Client may error, ignore, or attempt an unmount, or show user a dialog, or log the event, etc.

Unambiguous Read-ahead

- A way to distinguish regular reads from client read-ahead

- Server may decide to fulfill if data is in-cache

- If data not in cache, server may schedule the read, or ignore if server is heavily loaded