NFSv4 ACLs

Recent proposals and their impact on minorversion1
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Our Goals for ACLs in minorversion 1

- Clarification of the semantics of ACLs as introduced in RFC 3530

- Compatibility with NFSv4 clients

  - v4.0 clients just as capable as v4.1

- ACL attribute is the authority for security

  - Nothing outside the ACL defines permissions

- Have predictable, reliable behavior when modes interact with ACLs

ACL Model in Current minorversion1 Draft

- First introduced late last year as draft-ietf-falkner-acl-00.txt

- Currently in minorversion1 draft

- Implemented in Solaris 10 Update 2 and Solaris Express

New Proposal

- Proposed by Andreas Gruenbacher

- Not yet fully specified

- Not yet implemented
  - But a prototype is promised

Key Differences

- POSIX requires a concept of a mask

  - Current proposal uses existing file attributes (DENY ACEs in ACLs)

  - Andreas' proposal would use new file attributes

- Need to come to consensus on POSIX categorization

  - e.g. alternate vs. additional file access controls, etc.

Goals

- ACL summit, possibly in person
  - Possibly at Bakeathon, preferably earlier
- Attain rough consensus on these questions
  - Is the current proposal acceptable?
  - Is Andreas' proposal acceptable?
  - If both are acceptable, is one sufficiently better to displace the other?
- Report back to NFSv4 WG ASAP