

Migration/Replication/Referral in V4.x (for $0 \leq x \leq 2$)

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November 8, 2005

Summary

- draft-ietf-nfsv4-referrals-00.txt
 - Implementation/Testing
- draft-noveck-nfsv4-migrep-00.txt
- Group decisions
 - What should go into v4.1?
 - Direction for inter-vendor migration protocol
 - (bury it, revive it, possible change in direction)

draft-ietf-nfsv4-referrals-00.txt

- Implementation guide to referrals
 - Ambiguities and contradictions in RFC3530
 - Attempt to resolve
 - How-to guide
- Includes previous feedback
- Not much comment on list. Reasons?
 - Document perfect?
 - Not must interest?

Referral implementation/testing

- AIX client and server
- Netapp server
- Tested:
 - AIX client referred by AIX server to another AIX server
 - AIX client referred by Netapp server to another Netapp server
 - AIX client referred by Netapp server to AIX server
- Prototype code
- Other testing?

draft-noveck-nfsv4-migrep-00.txt

- Future of this area in v4
 - Things to clarify in spec, v4.1 opportunity
 - Some referrals-based (but v4.1 gives more scope)
 - Other ambiguities and contradictions as well
 - Additional recommended attributes for v4.x
 - For $x \geq 1$
 - Issue of the migration protocol
 - Alternate approach to this issue

Additional attributes

- fs_absent
 - Simple attribute for fs presence/absence
- fs_location_info (See next slide)
- fh_replacement
 - Avoids issues with volatile filehandles
- fs_status
 - Complement to fs_location_info
 - Status information on current fs instance

fs_location_info

- Everything we needed in fs_locations
 - But weren't smart enough to ask to ask for
- Help for replica choice
 - Choosing a better replica or server's choice
- Attribute continuity
 - Many ways to migrate.
 - Differences matter to clients
- Attribute continuity to the max
 - Cluster fs support
 - Multiple paths to the same fs

Issue of Migration Protocol

- No current interest or volunteers
- Should we just forget it about it?
- Is there a better/simpler way?
 - No separate protocol
 - Extensions to v4
 - Much less work
 - But certainly not zero
- Is there interest in this approach?

For group discussion and decision

- What should go into v4.1?
 - Cleanup of RFC3530 issues (I think so)
 - Explicit discussion of referrals (ditto)
 - Additional attributes (Maybe)
- Future of migration protocol
 - Maybe it was just a bad idea
 - Maybe somebody just has to do it.
 - Maybe v4.x extensions (for $x \geq 2$) is the answer.