NFSv4 Replication and Migration

• Since IETF53:

- More design team meetings:
- > 3rd party control out of scope user control should be via SNMP or CIM/WBEM
- > FS subsets out of scope server can change fsid/fh for file tree
- Kept lock state transfer, sparse extents in scope (for now)
- Talked about how to express attributes (profiles)
- Have an Internet Draft:

http://www.ietf.org/internet-drafts/draft-thurlow-nfsv4-repl-mig-design-00.txt

Replication/Migration issues

• Open issues:

- Do we need per-message security, or is TLS enough?
- Compression do we need this? Prior IETF work includes VCDIFF (RFC 3284), plus various takes on IP payload compression (RFCs 2394, 2395, 3051, 3173).
- Other bandwidth reduction ideas, e.g. Duplicate block recognition.
- Base NFSv4 protocol changes
 - Could do better migration referral by letting client know what was negotiated.