Reporting of Errors via LAYOUTRETURN in NFSv4.2

IETF 116, NFSv4 WG

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Overview

- During file recovery client lacks granularity to specify which mirrors are safe
- Or lacks granularity to specify which mirrors are broken
- Has to not recover file
- MDS has to:
  - Assume all mirrors are broken
  - Pick a subset to resilver file
LAYOUTRETURN with all 0 anonymous stateid

- “Simple” extension to semantics of LAYOUTRETURN allows client granularity to define broken mirrors
- NFSv4.1 or NFSv4.2 which does not support new feature just does not send it in a compound
- NFSv4.1 or NFSv4.2 MDS which does not support it would return NFS4ERR_BAD_STATEID
History

• Introduced in IETF 114 to bring into draft-ietf-nfsv4-delstid
• Decided not to pollute (nor halt) that draft
• Submitted draft-haynes-nfsv4-layrec
• Looking for becoming a WG document