

# NFSv4.2: Third Edition

**Thomas Haynes** 

#### Go further, faster®



© 2011 NetApp. All rights reserved.

Tuesday, March 22, 2011



- Being added to the WG charter
- Must abide by Minor Version rules
- No huge documents
  - -Will not repeat what is in RFC 5661
  - -Will provide
    - New material
    - Deltas
    - Full XDR in nfsv4-minorversion2-dot-x
- Train model
  - -5/6 years down to 1 year
  - Clock starts now

## Entry criteria to NFSv4.2

- Solid proposal exists in an I-D
  - Must be able to finish development by IETF 83
- Sufficient energy exists
  - -Multiple groups are committing to the proposal
  - -Needs a champion/driving force
- Must abide to the Minor Version rules



- If it holds up the train
  - -Feature is bumped to NFSv4.3
  - –NFSv4.2 will not be derailed
- Otherwise we risk a repeat of NFSv4.0 and NFSv4.1



- Bug fixes
  - -LAYOUTRETURN can provide errors to MDS
  - Client can register CB for LEASE\_MOVED
  - Change attribute semantic
- Functional Changes
  - -NFS Server-Side Copy
    - Need to pull in RPCSEC GSS v3
  - Simple and efficient read support for sparse files
  - -NFS space reservation operations

#### Items at the ticket booth

NetApp

- Server side caching of file creation (Myklebust)
- Enterprise Apps (Haynes)
  - Mainly want to leverage synergy with sparse files
- MAC Security Label Support (Myklebust/Faibish)
  - Need to pull in RPCSEC GSS v3



Reuse source model of 5661 and 3530bis

- -Automatically generate XDR document
- -Keeps main document in sync with XDR
- -Works
- Source control
  - Git
  - -git@github.com:loghyr/NFSv4.2.git
  - Drafts at datatracker.ietf.org are authoritative
- Discussion will be on WG alias

## Personal drafts already available

- nfsv4-minorversion2-dot-x
  - --00 is XDR as presented in 5662
    - Will allow us to do diffs
  - --01 has changes per accepted fixes/features
- nfsv4-minorversion2-x
  - - ■64 pages vs 617 in RFC 5661
  - Next drafts will start to reformat sections like previous minorversion documents