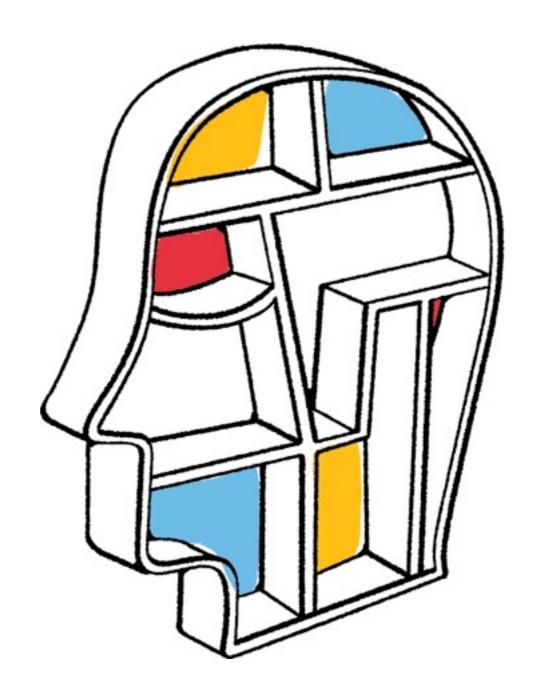




# A Day, in an Editor's Life

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### Overview

- **3530bis**
- Labeled NFS Requirements
- RPCSEC\_GSSv3
- NFSv4.2



## 3530bis - A short history

- Has been in WG Last Call twice
  - April 2011
  - September 2011
- Split into two documents
  - Text: 319 pages
  - -XDR: 38 pages
- Pulled in all outstanding errata
- Main effort was to bring it in line with 5661



## Deltas since September 2011

- Netid discussion pushed to 5665
- Removed UDP
  - For FedFS documents
- Typos
- Error codes on remove
  - RECLAIM\_BAD vs RECLAIM\_CONFLICT vs NO\_GRACE
- client-persistent delegations
- Is a blocker for Charter Re-org
- Needs to enter Last Call



#### Recommendations

- Is a blocker for Charter Re-org
- Needs to enter Last Call



### **Labeled NFS Requirements**

- New draft is available
- Plenty of energy
- Needs reviewers
- Motion to enter Last Call



### RPCSEC\_GSSv3

- Needed for
  - secure Server Side Copy
  - Labeled NFS subject labels
  - Multidomain Access
- Is this true?
  - We have implementations of RPCSEC\_GSSv3.
  - We have implementations of above.
  - We don't have both in the same system.
- Needs a driving force



#### NFSv4.2

- We have consensus on what is in
- Delta from 4.1
  - Not a repeat of everything
    - Clarifications
    - New Content
  - Nothing is mandatory
  - 100 page target versus 660
- Train model
  - Goal is to enter WG Last Call in August
  - Needs an edit cycle to tie it altogether



# **Key differences from NFSv4.0 and NFSv4.1**

- All new features are optional
- New NFSv4.2 server is simple
  - Feature not supported
- Provide features that will compel applications to adopt NFSv4.2
- Bringing local filesystem capabilities to the wire
- Non-posix semantics are creeping in



#### What is in it?

- Clarifications
- Server Side Copy
- Sparse Files
- Seek Hole/Data
- Space Reservations
- Application Data Blocks
- Labeled NFS
- IO ADVISE
- Change Attribute Behavior



### Clarifications

- Address issues that cannot be done in a bis
- Intent is to be focused
- Minor XDR changes



# **Summary of features**

- Clarifications
  - Total geek factor
- Server Side Copy
  - Eliminate one leg of the copy
  - How to authenticate the other server
- Sparse Files
  - Allow holes to go across the network
- Seek Hole/Data
  - Find the next hole
  - Emerging POSIX standard



## Summary of features (cont)

- Space Reservations
  - A file is guaranteed data blocks
- Application Data Blocks
  - Allow applications to impose structure
- Labeled NFS
  - Extend seLinux and Trusted Solaris across the protocol
- IO\_ADVISE
  - Allow client to suggest server caching
- Change Attribute Behavior
  - A clarification



## **Enjoy!**

# Standards Expert



What society thinks I do



What my mom thinks I do



What my colleagues think I do



What my friends think I do



What I think I do



What I actually do