



**N I C
F N D
S U S
T R E
R E N
C E**

NFS Version 4

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NFSv4 WG Charter

www.ietf.org/html.charters/nfsv4-charter.html

- Maintenance of the protocol
- Replication / Migration
- Management
- Minor Versions
- RDMA / RDDP



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IETF NFSv4 meetings (recent / upcoming)

- June Interim meeting in Ann Arbor
- July regular meeting in Vienna
- November meeting will be in Minneapolis



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WG Housekeeping

- Transfer RPC numbering to IANA
- Updates of XDR and RPC RFCs
- Minor versioning procedures



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SECINFO for 4.1

- Addresses oversights in 4.0
- SECINFO used to negotiate security mechanisms
- 4.0 does not allow parent directory to be queried
- Ambiguities in errors with PUTFH and crossing security boundaries



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CCM

- Introduces new GSS mechanisms
- RPCSEC_GSS incurs security overhead on each RPC
- Allows for use of underlying protection like IPSEC and reduce cost at RPCSEC_GSS level



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Replication & Migration

- Server to server protocol for copy or movement of filesystems
- Design principles available
- Draft protocol has been posted
- No prototype work done to date



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NFSv4 MIBs

- WG charter item
- Outstanding draft but lot of work needs to be done
- Issues of how NFSv4 MIBs relate to other management frameworks
- What about CIM/WBEM, SMI-S?



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Directory Delegations

- Idea floated at the interim meeting
- Need to back off and identify requirements
- Addressing the client's desire to reduce interaction with server on 'read-mostly' directories
- Build on file delegation support



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NFSv4 and RDMA

- Chartered to produce problem statement and requirements for use by RDDP working group
- Problem statement is in I-D
- Requirements still being worked
- Sun and Netapp have posted individual I-Ds for RPC/RDMA



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Namespace

- Idea introduced at interim meeting
- Companion work to repl/migr
- Not specifically in WG charter but could be included in minor version work item
- Need to identify requirements and have additional discussions



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ACL mappings

- NFSv4 presents a “windows-like” ACL attribute
- Most unix environments have support for posix-draft ACLs
- I-D identifies a mapping and desired behaviors
- Providing implementation guidance



Owner & Group Mapping

- NFSv4 presents owner/group in string format
- Protocol just defines protocol representation but does not provide mapping guidance
- I-D outlines a methodology for mapping of users at the server



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Summary

- October NFSv4 Bakeathon
- www.nfsv4.org
- www.ietf.org