

ORACLE®

NFSv4 State Of The Union

IETF nfsv4 Working Group activity in 2016

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Program Agenda

- 1 ➤ RFCs published
- 2 ➤ Working Group activity
- 3 ➤ Personal drafts
- 4 ➤ What's in store

nfsv4 Working Group Charter

NFS Version 4 is the IETF standard for file sharing

- Maintenance of RFCs
- RFC5664bis
- NFSv4.2
- NFSv4 Multi-Domain Access for FedFS



NFS RFCs Published In 2015

NFSv4.0, FedFS, and MAC security

RFCs 7530 and 7531 (March 2015)

NFSv4.0, redux

- These are Proposed Standards that obsolete RFC 3530
 - NFSv4.0 XDR separated from specification text
 - Discussion of multi-server namespace features restructured
 - Internationalization changes
 - LIPKEY and SPKM-3 removed

RFCs 7532 and 7533 (March 2015)

Federated File System

- These are new Proposed Standards
 - NSDB protocol accesses fs_location information in LDAP
 - ADMIN protocol manages junctions stored on file servers

RFC 7569 (July 2015)

IANA registry for MAC security label formats

- This is a new Standards Track document
 - Assists the use of MAC security labels introduced in NFSv4.2
 - IANA now manages a “Security Label Format Selection Registry”

A woman with long brown hair and glasses is sitting at a wooden table in a cafe. She is wearing a brown leather jacket over a blue patterned scarf and a grey knit sweater. She is holding a black smartphone to her ear with her left hand and looking down at a newspaper or magazine on the table with her right hand. The background is a bright, modern cafe with large windows and other people sitting at tables.

nfsv4 Working Group Activity

NFSv4.2, migration, NFS/RDMA

Working Group Documents

Awaiting publication

- In the RFC Editor queue
 - draft-ietf-nfsv4-minorversion2 and -dot-x
 - draft-ietf-nfsv4-rpcsec-gssv3
- Area Director follow-up
 - draft-ietf-nfsv4-rfc3530-migration-update

Working Group Documents

Active documents

- WG consensus
 - draft-ietf-nfsv4-multi-domain-fs-reqs
 - draft-ietf-nfsv4-scsi-layout
- In WG Last Call
 - draft-ietf-nfsv4-flex-files

Working Group Documents

Active documents

- Recently revised
 - draft-ietf-nfsv4-migration-issues
 - draft-ietf-nfsv4-versioning
 - draft-ietf-nfsv4-rfc5666-implementation-issues
 - draft-ietf-nfsv4-rfc5666bis
 - draft-ietf-nfsv4-rpcrdma-bidirection
- Expired
 - draft-ietf-nfsv4-xattrs

A woman with long brown hair and glasses is sitting at a wooden table in a cafe or office setting. She is wearing a brown leather jacket over a blue patterned scarf. She is holding a black smartphone to her ear with her left hand and looking down at a newspaper or magazine on the table with her right hand. The background is slightly blurred, showing other people and large windows.

Personal Internet-Drafts

Personal Internet-Drafts

- Recently revised
 - draft-bfields-nfsv4-umask
- Refresh-only
 - draft-cel-nfsv4-federated-fs-nce
 - draft-cel-nfsv4-federated-fs-security-addendum

A woman with long brown hair and glasses, wearing a brown leather jacket and a blue patterned scarf, is sitting at a wooden table in a cafe. She is talking on a black mobile phone held to her left ear and looking down at an open newspaper on the table. The background is a bright, slightly blurred cafe interior with other tables and chairs.

Looking Ahead

Meetings, expectations

IETF Working Group Meetings

Recent and upcoming

- Meetings in 2015
 - IETF 92, Dallas
 - IETF 93, Prague
 - IETF 94, Yokohama
- Meetings in 2016
 - IETF 95, Buenos Aires
 - IETF 96, Berlin
 - IETF 97, Seoul

IETF Working Group Design Team Meeting

Currently scheduled conference calls

- March 15, 12PM, PT
 - NFS/RDMA standards
- March 29, 12PM, PT
 - NFSv4 versioning

Expected 2016 Activity

- Publication of new RFCs
 - NFSv4.2
 - RPCSEC GSS v3
 - RFC 3530 migration update
 - pNFS SCSI Layout
- Progress on
 - NFSv4 versioning
 - NFS/RDMA-related standards updates

Q & A

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