

Working Group Re-charter
Draft Charter Reference Materials

David Noveck
IETF99 at Prague
July 20, 2017

Current Draft Charter Proposal

General Section

- NFS Version 4 is the IETF standard for file sharing.
- To maintain NFS Version 4's utility and currency, the working group is chartered to maintain the existing NFSv4.0, NFSv4.1, and NFSv4.2 protocols and specifications of related ONC components such as those defining RPC, XDR, and RPCSECSS.
- In addition, extensions will be developed, as necessary, to correct problems with the protocols as currently specified, to accommodate needed file system semantics, and to respond to technological developments in the areas of networking and persistent storage/memory.

Current Draft Charter Proposal

Maintenance Section (Slide one of two)

- The working group has found that as NFSv4 implementations mature and deployments continue, clarifications and corrections to existing RFCs are needed.
- These specification updates help vendors in delivering high-quality and interoperable implementations.
- The working group is chartered with the vetting of the issues and determining correctness of submitted errata.
- The working group is also responsible for approving changes to RPC- and NFS-related IANA registries.

Current Draft Charter Proposal

Maintenance Section (Slide two of two)

- In addition, some areas may need more concentrated work to correct the specifications already published, to deal with unanticipated interactions between features, or to respond to changed IESG expectations with regard to areas such as security.
- Since necessary changes in such cases are generally not appropriate for the errata system, the working group will assist in publication of best practices RFCs and of RFCs that provide editorial modification or technical updates to original RFCs.
- Since the new NFSv4 versioning framework has been approved, such technical updates to NFSv4 minor versions could include limited XDR changes.

Current Draft Charter Proposal

Extension Section (Slide one of two)

- The NFSv4 protocol is designed to allow extension by the addition of new operations, new attributes, the creation of minor versions, and the definition of new pNFS layout types.
- Similarly, associated ONC protocol components that have a versioning/extension framework can be incrementally extended, when necessary.
- The working group will discuss proposals for such extensions and assure they have adequate technical review, including discussion of their interaction with existing features, before adopting them as working group items and helping to draft specification documents.

Current Draft Charter Proposal

Extension Section (Slide two of two)

Some likely motivations for such extensions would be to:

- Maximize NFS performance on advanced network fabrics.
- Accommodate new storage technologies.
- Provide facilities useful in management of NFS-accessed storage in large-scale virtualization environments.
- Provide more effective NFS response to security challenges.

Current Draft Milestone Proposal

- Because the previous charter was at variance with the work the group was actually doing, the list of pending milestones that can be determined now is quite limited.
- To accommodate this situation and in light of the fact that maintenance activities are inherently unpredictable, new milestones that fall within the scope specified within the charter can be added after working group consensus on acceptance and approval by the responsible Area Director.

Date

Milestone

March 2018

WGLC for draft-ietf-nfsv4-migration-issues (Informational)