

Documents that are Part of rfc5661bis Effort

Current Status and expected next steps

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Document Overview

Statuses known and unknown

- Internationalization (Slides 3 through 5)
 - Has been a working group document
 - No objections/issues ☐; No discussion ☐
- Rfc5661bis (Slides 6 through 10)
 - Adoption completed and -00 posted 3/16.
- Security (Slides 11 through 13)
 - Needs to proceed with adoption process
- Rfc5662bis (Slides 14 through 15)
 - Needs to start adoption process

Internationalization

Motivation

- Need to fix Internationalization in RFCs 5661/8881
 - Was based on Internationalization in RFC3530
 - Never implemented
 - Basically unimplementable
 - Need to start with internationalization as described in RFC7530
- Since this is the same in all minor versions, best done in a single document.
- As pointed out by N. Williams,
 - No existing guidance for internationalized case-insensitive fs handling

Internationalization

Next steps

- Document needs further review
 - Since it probably isn't perfect
 - Little working group interest in this area ☐
- Troubling experience w review by internationalization team
 - Issues we asked for guidance about were not addressed
 - Review was mostly an unimplementable counter-proposal
 - Some issues with case-insensitive fs's were raised
- Need to get a meaningful review ([Next Slide](#))

Internationalization

Getting a Meaningful/Useful Review

- Worries:
 - Experience last time ☐
 - General focus of internationalization review group is in application area.
 - Nico W's desire to turn internationalization into a working group
 - Fervent opposition to that approach
- Is there a way to do better this time?
 - There had better be; seems unavoidable
 - Not clear who is effectively in charge there; we need to know.

Rfc5661bis

Motivation

- Address errata reports
 - Including some REJECTED ones WG is agreed upon.
- Accommodate NFSv4-wide documents
 - RFC 8178
 - New Internationalization document
 - New security document
- Get rid of other documents which update RFCs 5661/8881
 - E.g. RFC 8434

Rfc5661bis

Changes in -00 (Relative to RFC8881)

- Changes to correct errata report issues
 - A few still left
- Changes to adapt to new document structure
 - Most are done but there are unresolved issues about pNFS security.
- New appendices describing progress of work and things to be discussed

Rfc5661bis

Changes in -00 (Relative to last -dnoveck draft)

- Corrections of typo's
- Moved discussion of work's progress to appendices
- Some replacement of "encryption" by "confidentiality"
 - Suggested by C. Lever by we still don't fully agree.

Rfc5661bis

Possible Controversies to Resolve

- Where is security for pNFS data servers best addressed?
 - Current answer: in rfc5661bis, since NFS security in new document is RPC-based
 - Alternative is security document
 - In either case, data server security for many mapping types is very different from that for metadata server.
- Some remnants of “confidentiality”/“encryption” debate.
 - Combined with disagreement about proper role of RPC with TLS

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Further work that needs to be done

- Need to get working group consensus on changes made.
 - Summarized in appendices.
- Issues outlined in Appendix C
 - Proper use of RFC2119 terms
 - Handling of aborts including violations of existing spec
 - Updating discussion of directory delegation.

Security Document

Motivation

- Lack of Threat Analysis in any existing Security Considerations section.
- No attention to security problems in AUTH_SYS
- Approach to confidentiality as OPTIONAL extra

Security Document Status

- Adoption call started in 10/2022
- Still hasn't completed.
- Situation needs to be corrected soon

Security Document

Likely issues/controversies to resolve

- How to accommodate existing implementations
 - They cannot be made non-compliant
 - But their security characteristics have to be described accurately.
- How to address current handling of ACLs
 - Currently Leaves far too much to server choices
 - Ill-judged MAYs and hard-to-understand SHOULDs
 - Makes the writing of compliant clients essentially impossible.

Rfc5662bis

Motivation

- Tradition of matching version specs and XDR documents
 - Might not be enough but ...
- Also needs changes derived from errata reports
 - Reports were not explicitly about RFC5662 but were needed nevertheless

Rfc5662bis

Status

- Was supposed to go through adoption process
- But somehow got lost.
- Need to correct now.

Document Summary

Table of Documents

Document	Latest Title	Status	Work to do (whom)
Internationalization	Draft-ietf-nfsv4-internationalization-03	Working group document that needs further review.	<ul style="list-style-type: none">• Needs to be refreshed soon. (DN)• Need a plan for outside review (chairs, AD)
rfc5661bis	Draft-ietf-nfsv4-rfc5661bis-00	Adopted document that needs further discussion.	<ul style="list-style-type: none">• Needs a plan for further review (DN)• Needs follow in interim meetings (WG)
security	Draft-dnoveck-nfsv4-security-05	Document which needs to be adopted (or not).	<ul style="list-style-type: none">• Needs to complete adoption process by end of April (chairs)
rfc5662bis	Draft-dnoveck-nfsv4-rfc5662bis-00	Document which needs to go through adoption process.	<ul style="list-style-type: none">• Needs plan for adoption process (chairs)