“RDMA Commit” Draft status

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March 31, 2023
draft-talpey-rdma-commit

• Specifies extensions for Flush, Verify and Atomic Write to RDMA protocol RFC5040
• Enhanced placement semantics for RDMA to persistent media
  • E.g. Persistent memory, and other nonvolatile RDMA-addressable devices
  • Also provides remote content verification and a transaction operation
• First published February 2016
  • Updated March 2020, January 2023

https://datatracker.ietf.org/doc/draft-talpey-rdma-commit/
Consider Working Group adoption

• In 2020, rough WG consensus was positive for adoption in NFSv4
  • Discussion of appropriate WG:
    • STORM/RDDP previously closed
    • TSVWG was (perhaps) too broad, and had few RDMA experts
    • NFSv4 was a likely consumer, and RDMA expertise present
  • Comments received from NFSv4 discussion
  • No formal action was taken
• In late 2022/early 2023, draft was refreshed
  • Incorporating previous comments, other updates
  • Ready for consideration
If adopted, there are things to consider

• ~Half the document is informative
  • Is this content still useful? Remove it? Split into two documents?

• Retitle?
  • “Commit” is largely obsolete term
    • Now “flush” commonly used, but is only part of the picture
  • “RDMA Placement Extensions” proposed

• Prototypes have been created, but...
  • They are not publicly shared/sharable
  • Not appropriate to include

• Infiniband Trade Association (IB/RoCE) version 1.6 has since standardized the same extensions
  • IBTA spec is closed and members-only
  • Protocol and Verb (application) semantics are identical to this draft
  • Experimental Linux prototype exists, extends software RoCE “rxe”
  • Are these relevant to IETF work, or to this document?

• Software iWARP (Linux “siw”) implementation
  • …is certainly possible
  • But hasn’t been written yet!
Discussion