

NTPv4 Requirements

draft-ietf-ntp-reqs

Network Time Protocol Working Group
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NTPv4 Requirements

- draft-ietf-ntp-reqs-00
 - Available also at:
 - <http://net.doit.wisc.edu/~plonka/ntp-reqs/>
 - Outlined, but lots of “FIXMEs”
- FIXMEs
- Open Issues
- Call for author/contributors

NTPv4 Reqs: FIXMEs

- Algorithm Requirements
 - What are the required values or ranges for compile-time and initial run-time variables such as MAXSTRAT, MAXSKEW, MAXDISP, MINCLOCK, MAXCLOCK?
 - Is just interoperability the rationale for such requirements?
 - Jitter – no text currently
 - Wander – no text currently

NTPv4 Reqs: FIXMEs

- Protocol Requirements
 - Configuration Requirements
 - Manual Configuration – no text currently
 - Automatic, Autonomous Configuration
 - Discuss multicast-based config with crypto-secure source discovery
 - Vendor Pre-configuration
 - Take from BCP 105?
 - Administrative Domains – no text currently
 - Key Distribution – no text currently
 - System Performance
 - no intro text currently

NTPv4 Reqs: FIXMEs

- Protocol Requirements
 - System Performance
 - Scalability
 - How many servers/peers can be configured?
 - How many strata?
 - Client Performance Requirements – no text currently
 - Server Performance Requirements – no text currently
 - Security Requirements
 - Add details re: “Autokey” protocol
 - Robustness – no text currently

NTPv4 Reqs: FIXMEs

- Protocol Requirements
 - Longevity, Persistence
 - no into text currently
 - Reconfiguration – needs text re: re-resolving DNS, etc.
- Simple Network Time Protocol Requirements
 - Be sure expired draft “rfc-xxxx” improvements are included
- Operational Requirements
 - e.g. Stratum 1 must be synch'ed to a non-NTP time standard

NTPv4 Reqs: Open Issues

- How can we best address SNTP?
 - This is also pertinent to the protocol draft
 - SNTP is important because it will have many unique implementations
 - In reqs-00 draft, SNTP has its own section but some points are interleaved amongst other NTP requirements
 - Breaking-out SNTP reqs may make more sense than just Client and Server Reqs

NTPv4 Reqs: Open Issues

- Should “operational” requirements be included?
 - Usually only addressed as a BCP issue, but NTP's public server infrastructure is a special case(?)

NTPv4 Reqs: Open Issues

- Algorithm Requirements
 - I really don't know this topic
 - Please suggest existing documents that contain pertinent text, or put me in contact with contributing experts on this matter

NTPv4 Reqs: Open Issues

- Other author/contributors for requirements draft?
 - Remember: the requirements document is a prerequisite for consideration for publication of the protocol as a standards-track RFC.
 - email Dave Plonka <plonka@doit.wisc.edu>