

NTPv4 Protocol Specification WG Last Call Changes

Jim Martin

Review Process

- Received comments during WGLC
- Compiled comments and resolutions based on mailing list discussion
- Made extensive typographical changes (not detailed here, ask if you *really* want to know)
- Generated candidate -07 version based on substantive comments

Updated Documents

- www.innovationslab.net/ntp/
 - draft-ietf-ntp4-proto-07.txt
 - Latest *candidate* draft
 - ntpv4-06-comments.pdf
 - Explicit changelog based on WGLC comments

Steve Allen (June 8th)

- Insufficient definition of UTC
 - Accepted suggested text and references

Steve Chen (June 12th)

- Confusion over Poll Interval relation to loop time constant
 - No change
 - Explanation provided to mailing list by Mills

Yakov Stein (June 20th)

- Unit of frequency
 - Added proposed text to end of Introduction
- UTC source
 - Added modified version of suggested text
- Many minor typographical changes
(Thanks Yakov!)

Danny Mayer (June 22nd)

- Clarified min/max TTL values
- Explicitly chose to not disallow fast polling
- No change on use of IP address as refid
- Added text to require explicit (MUST) actions upon receipt of Kiss codes

Danny Mayer (June 22nd)

- Eviscerated extension field format
- Added explanation of why TCP is bad
- Numerous minor issues cleaned up

Laurent Montini (June 25th)

- Clarified on-wire protocol figure (later updated by Mills' block replacement of corresponding text)
- No concise definition of "Packet Mode"
 - NEED NTP EXPERT INPUT

Stewart Bryant (June 26th)

- Minor typographical errors
- Specifically allowed alternative algorithms under specific circumstances
 - Black box equivalent
 - Private networks
- Moved SNTP section to end of document
 - Clarifies variable definitions in other sections
- Extended Security Considerations to discuss client request replay attack

Stewart Bryant (June 26th)

- Explicitly defined NTP to run over UDP
- Added references for ASCII to clarify refid conversion
- Explicitly allow flexibility in timestamp generation for hardware assist
- Clarified which headers are protected by the MAC
- Added IANA registry for KoD codes

Dave Mills (June 28th)

- Replaced On-Wire protocol figure and associated text
- Numerous clarifications on last call comments

Next Steps

- Reviewers - PLEASE review candidate draft THIS WEEK
- WG Chairs - Request Security Considerations review by Pat Cain
- Submit candidate draft to I-D editor by Friday (July 27th)
- Advance draft to IESG