



NTP Virtual Interim Meeting

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Note Well

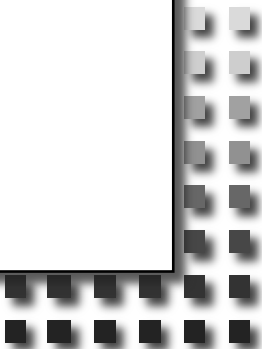
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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)



Agenda

1. Administrative and Agenda Bashing
Minute taker?
2. NTP/TICTOC WG Document Status Review/Update
3. Update – Status of Roughtime drafts
4. Updates – NTPv5 Discussions
Update NTPv5 use cases and requirements
Inconsistencies between NTPv5 requirements and proposal (Arnold)
5. NTS for PTP security
NTS for PTP (Arnold)
draft-langer-ntp-nts-for-ntp-01
draft-gerstung-nts4untp/
6. Update of NTP charter
7. AOB (Any Other Business?)

NTP and TICTOC Document Status

DONE!!!

<https://datatracker.ietf.org/doc/draft-ietf-ntp-port-randomization/>

AD Followup

<https://datatracker.ietf.org/doc/draft-ietf-ntp-mode-6-cmds/>

<https://datatracker.ietf.org/doc/draft-ietf-ntp-yang-data-model/>

<https://datatracker.ietf.org/doc/draft-ietf-ntp-interleaved-modes/> (***)

Waiting for Shepherd Writeup (TICTOC)

<https://datatracker.ietf.org/doc/draft-ietf-tictoc-ntp-enterprise-profile/>





NTP and TICTOC Document Status (cont)

WGLC (Open)

<https://datatracker.ietf.org/doc/draft-ietf-ntp-alternative-port/>

WG Call for Adoption (Open)

<https://datatracker.ietf.org/doc/draft-rsalz-update-registries/>

No Recent Activity

<https://datatracker.ietf.org/doc/draft-ietf-ntp-chronos/>



Draft WG Charter

Good quality time is a key component of all modern systems, devices, and applications. This quality time requires reliable and accurate network time synchronization over modern IP based networks. The Network Time Protocols working group is focused on enhancing existing network time synchronisation protocols such as the Network Time Protocol (NTP) and specifying new network time related protocols for purposes which the existing protocols are not well suited to address.

NTPv4 (RFC 5905) was published in 2010 following three previous versions of NTP. Today it is the most widely used time synchronization protocol for the synchronization of clocks of various digital systems including computers, networks, and a myriad of devices. Despite NTP's wide-spread success it has become apparent that it needs further development in order to adequately meet the modern requirements of time synchronization protocols and to meet the increasing security threats of the Internet.



Draft WG Charter (cont)

Despite its increasing importance, NTP remains vulnerable to many types of attacks. Therefore, in 2020 the working group published Network Time Security (NTS) as RFC 8915. NTS extends NTP with an authentication approach to ensure authenticity of NTP time servers and protects the integrity of exchanged NTP packets.

The working group will continue to address the maintenance of NTPv4 including extensions and corrections. This includes the introduction of an interleave mode in order to enhance the accuracy of the network time synchronization and the introduction of alternative selection algorithms in order to enhance robustness against delay attacks.



Draft WG Charter (cont)

The working group shall also develop an updated version of NTP addressing a number of identified weaknesses. The new specification shall comprise of a set of documents, in order to distinguish between the on-wire protocol engine and the timing engine of NTP clients and servers. The updated version of NTP will address the security requirements specified in RFC 7384 and leverage the work completed in RFC 8915.

Finally, the working group, will address other network time related protocols in the IETF (e.g. Roughtime).



Next Steps

- **Rechartering**
- **IETF 111**