

NTPv5 Requirements

NTP WG IETF 112

Changes since -02

- Added initial threat model
- Added NAT requirements
- Changes to timestamping requirements
- Nits, spelling mistakes etc

NTP Dependencies

- As of 2021-10, over 80 RFCs reference RFC 5905
- 10 are other NTP WG docs (Autokey, NTS, etc)
- Most are informational references where time dependency exists
 - e.g current UTC time for X.509 notBefore & notAfter
- Others with normative references:
 - Data Formats & Epoch
 - Metadata & Identifiers
 - Service Discovery

Data Formats & Epoch (RFC 5905 § 6)

- Heavily used in media (SDP, RTSP etc)
- Also used in packet timestamping protocols
- Changing either format or epoch may impact other protocol implementers
 - May also impact potential adoption of the protocol

WG will have to consider impact of any changes vs potential benefits

Metadata & Identifiers

- YANG related documents
- RFC 8520 - Manufacturer Usage Description

No notable concerns observed in either for WG

Service Discovery

- DHCPv6 (RFC 5908)
- DHCPv4 only specifies Time (RFC 868)
- No existing ICMPv6 Neighbor Discovery Option for NTP

Unsure if WG should assign new DHCP options for NTPv5 in future

Remaining work

- More work on threat model
- Rate limiting
- Data minimisation
- ... anything else I have missed?