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?