

Report out from informal  
1588 and NTP discussion

# IEEE 1588 Activities of interest to NTP

- IEEE Std 1588d-2023 has been published
  - GDOI (Group Domain of Interpretation) Key Management
  - Updates IEEE Std 1588-2019
- Security discussions on vulnerabilities of PTP
- New PAR approved
  - 1588.1 Client Server PTP
  - <https://standards.ieee.org/ieee/1588.1/11644/>

# Joint informal discussion on PTP

- Informal meeting held 16 July 2024
- Notes will be sent to both IEEE 1588 and IETF NTP summarizing the discussion and next steps
- Active relevant documents in both groups:
  - Security flaws in the PTP authentication mechanism
  - NTS4PTP - Key Management System for the Precision Time Protocol Based on the Network Time Security Protocol  
<https://datatracker.ietf.org/doc/draft-langer-ntp-nts-for-ntp/>

## Reference Documents

- RFC 7384 Security Requirements of Time Protocols in Packet Switched Networks (<https://datatracker.ietf.org/doc/rfc7384/>)
- RFC 8915 Network Time Security for the Network Time Protocol (<https://datatracker.ietf.org/doc/rfc8915/>)
- IEEE Std 1588-2019  
IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems
  - In particular, section 16.14 PTP integrated security mechanism and Annex P Security
- IEEE Std 1588d-2023  
Amendment 4: GDOI (Group Domain of Interpretation) Key Management

# Next Steps

- Report back to both IEEE 1588 and IETF NTP groups.
- Schedule a follow up informal discussion in September to see what progress has been made and what the next steps are.
- Establish a more formal liaison if needed.