

# NTS4PTP

## Network Time Security for the Precision Time Protocol

Status Report

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IETF 116 - NTP working group, March 28, 2023

# NTS4PTP

## very short recap

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- What is NTS4PTP about and what are the objectives?
  - We want a security solution for PTPv2.1
    - Protecting PTP multicast and PTP mixed multicast/unicast → 1:n connections
    - Protecting PTP negotiated unicast → 1:1 connections
  - Using NTS as a basis
    - Advantage: Providing a common security protocol for NTP and PTP

# NTS4PTP

## current status

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- No much progress in 2022
  - Current draft: draft-langer-ntp-nts-for-ntp-05
  - Only small changes
- Reasons
  - Doctoral thesis
  - Analyses and discussions about the protocol merge: NTS4UPTP and NTS4PTP
  - Job change (Ostfalia to PTB)
  - Supervise of a first PoC of NTS4PTP
- Work on NTS4PTP resumed this month
  - Collect and evaluate data
    - Discussions
    - E-Mails and other feedback
    - PoC implementation

# NTS4PTP

## next steps

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- Working on different documents for the NTP working group:
  - [1] a TL;DR/overview version of NTS4PTP (1-2 pages)
    - Describes the current protocol structure and communication flow
    - Key features and design decisions (+ reference to the sections in the requirement document)
  - [2] a requirement document
    - Further and detailed information about the key features and design decisions
    - Discusses and compares alternatives for each property of the NTS4PTP protocol
    - Contains a small vote and discussion section

→ It is easier for you if you want to give some feedback, ideas or votes

- After this, I update the current draft document

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Thank you for your attention!

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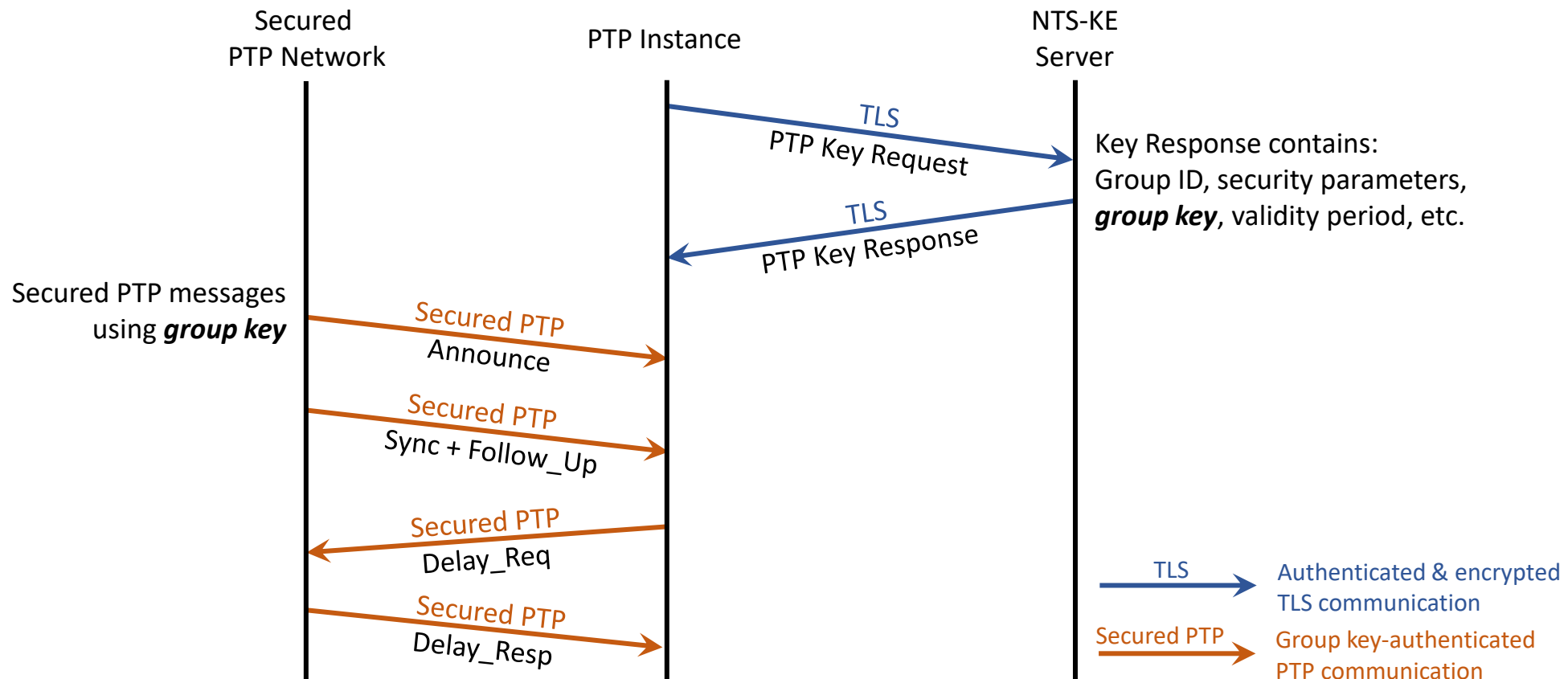
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# NTS4PTP

## Protocol Overview – Group-Based Approach

- Same procedure for every PTP instance of the group



# NTS4PTP

## Protocol Overview – Ticket-Based Approach

