

# PPID based Fragmentation and Reassembly for SCTP

draft-tuexen-tsvwg-sctp-ppid-frag-00

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# Payload Protocol Identifier

- The Payload Protocol Identifier (PPID) is metadata (32-bit unsigned integer) for a user message, which is transferred from the sender to the receiver unmodified by SCTP.
- Often used to identify the upper layer.
- IANA registry using FCFS.
- The idea of using the PPID for fragmentation and reassembly of large reliable user messages was already described in draft-ietf-rtcweb-data-channel-06 (4 January 2015).

# Procedure

- The sender splits the large ordered reliable user message into multiple user message fragments.
- Use two PPIDs per upper layer instead of one:
  - PPID\_cont for all but the last user message fragment.
  - PPID\_last for the last user message fragment.
- The receiver reconstructs the user message from the user message fragments based on the PPID.

# Use Cases

- Support for large ordered reliable user messages for an SCTP implementation
  - not supporting fragmentation at all (limited by association MTU).
  - not supporting I-DATA chunks (limited by head of line blocking).
- Support for large ordered reliable user message when using DTLS/SCTP as specified in draft-tuexen-tsvwg-rfc6083-bis-04 (limited by the DTLS record size limit).