

Options for Session ID and Control Code for STAMP Message Format

draft-gandhi-spring-twamp-srpm-07
draft-ietf-ippm-stamp-option-tlv-03

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TWAMP Light and STAMP Control Code Field

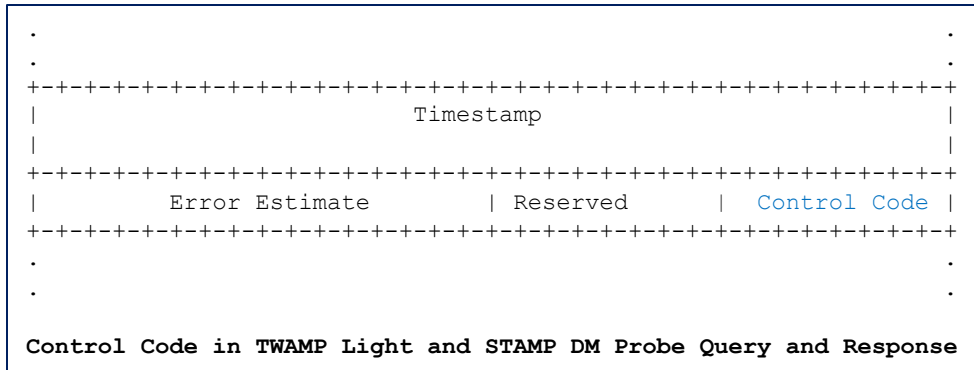
For a Query:

0x0: Out-of-band Response Requested.

This is also the default behavior.

0x1: In-band Response Requested.

Indicates that this query has been sent over a bidirectional path and the probe response is required over the same path in the reverse direction. The bidirectional path does not have to be an SR path.



For a Response -> Need to return Errors

0x1: Error - Invalid Message.

Indicates that the operation failed because the received query message could not be processed.

0xN: Additional Error will be defined in future

Consistency across TWAMP Light and STAMP DM and LM messages

Option 1: Variable Length Session ID Part of Existing Sequence Number

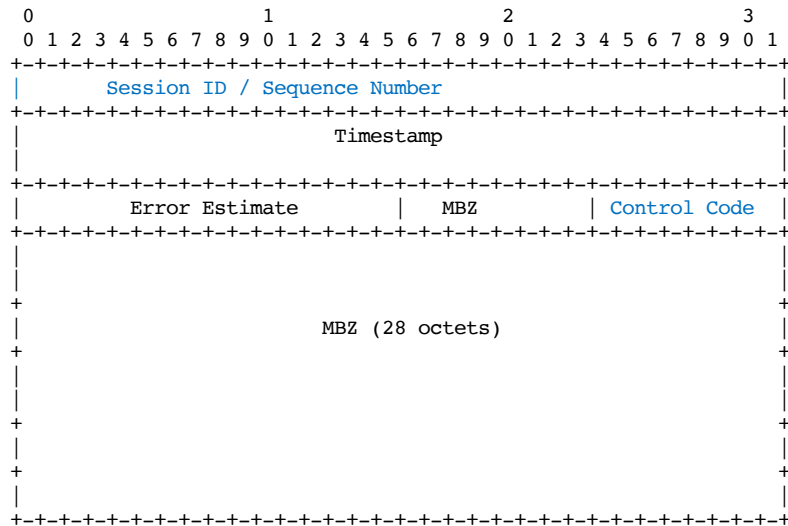


Figure: Sender Message Format in STAMP

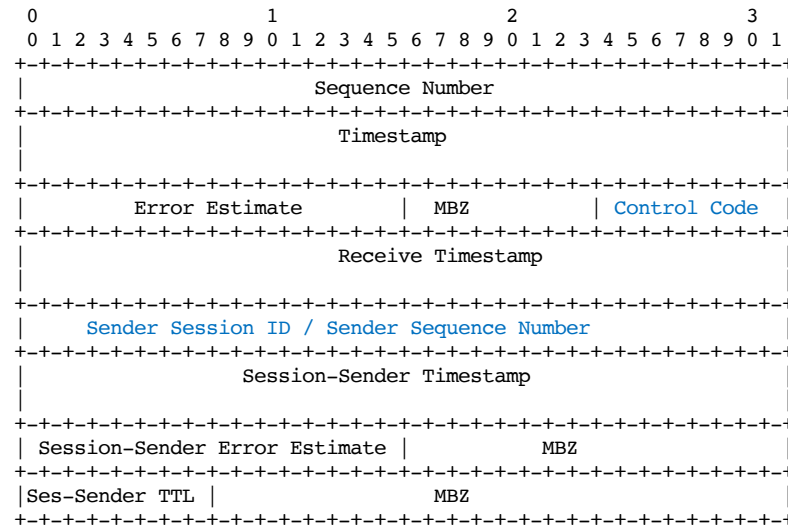


Figure: Reflector Message Format in STAMP

- ✓ Control Code compatible with TWAMP Light message format
- ✓ No change for Session ID in both message formats – STAMP and TWAMP Light

Option 2: 24-Bit Session ID Field

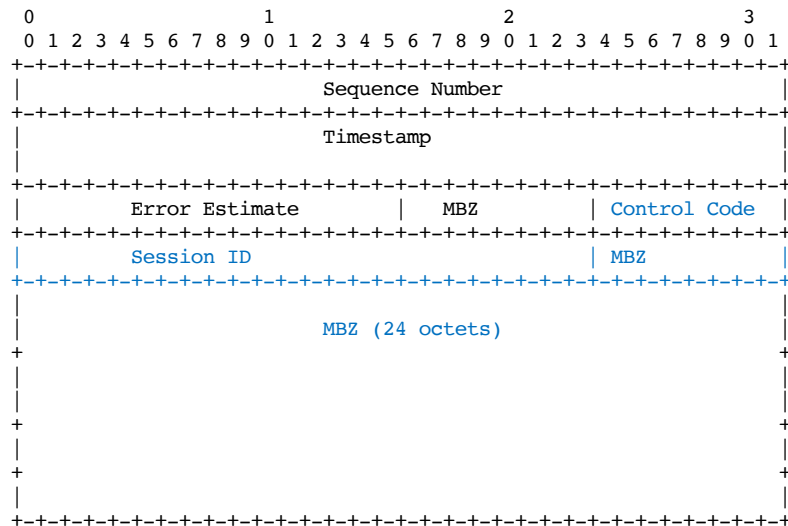


Figure: Sender Message Format in STAMP

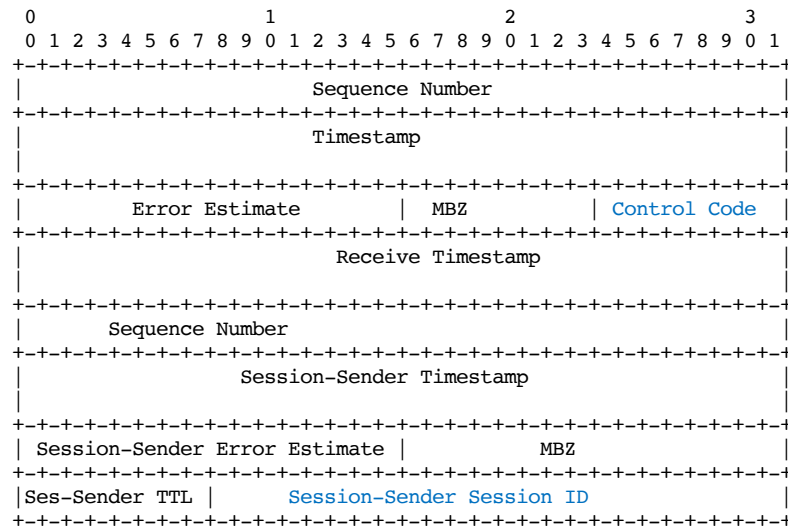


Figure: Reflector Message Format in STAMP

- ✓ Control Code compatible with TWAMP Light message format
- ✓ Session ID has 24-bits which is good

Option 3: 32-bit Session ID in TLV

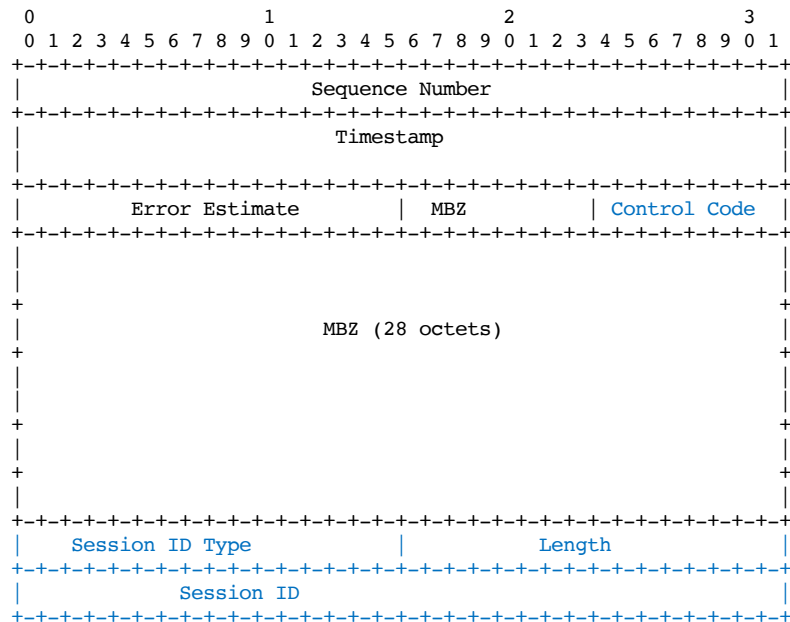


Figure: Sender Message Format in STAMP

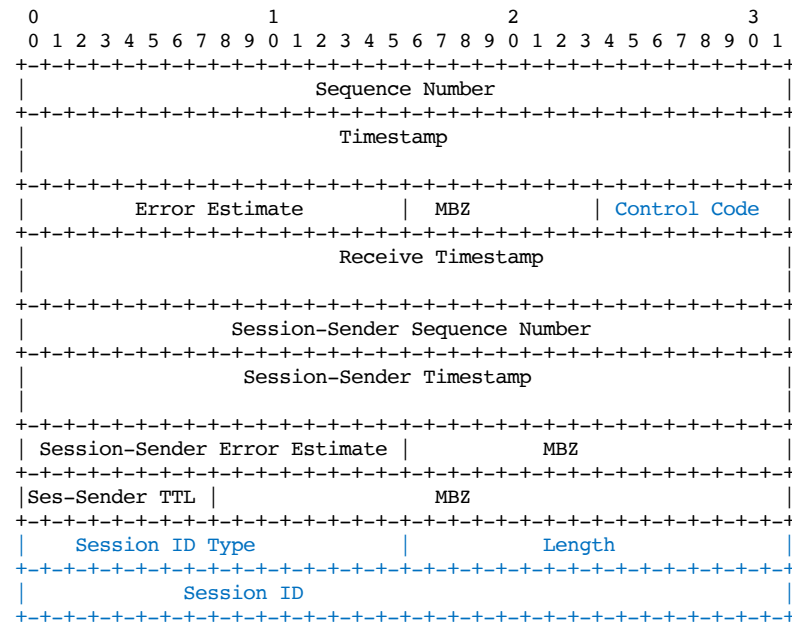
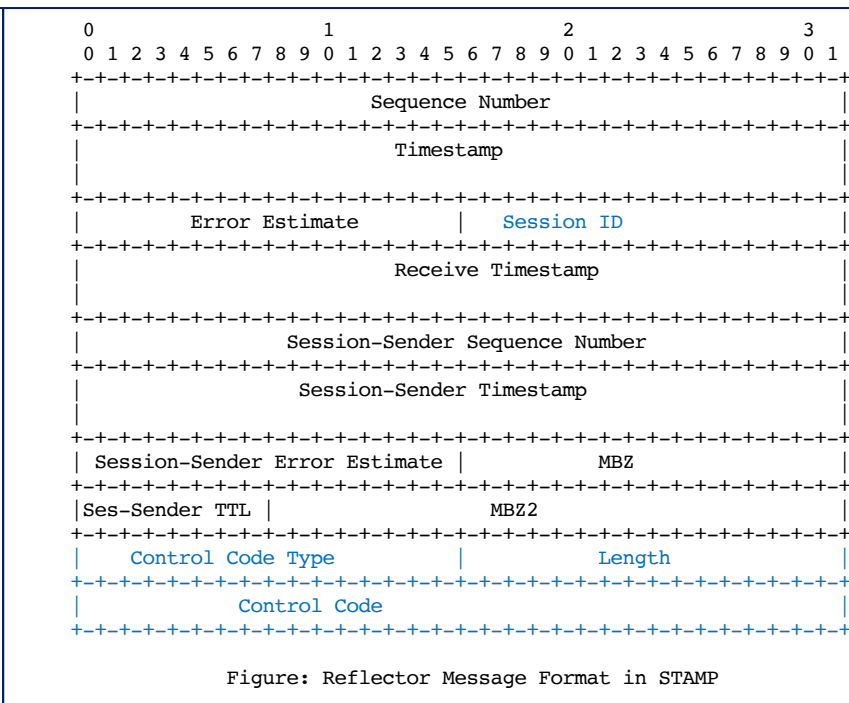
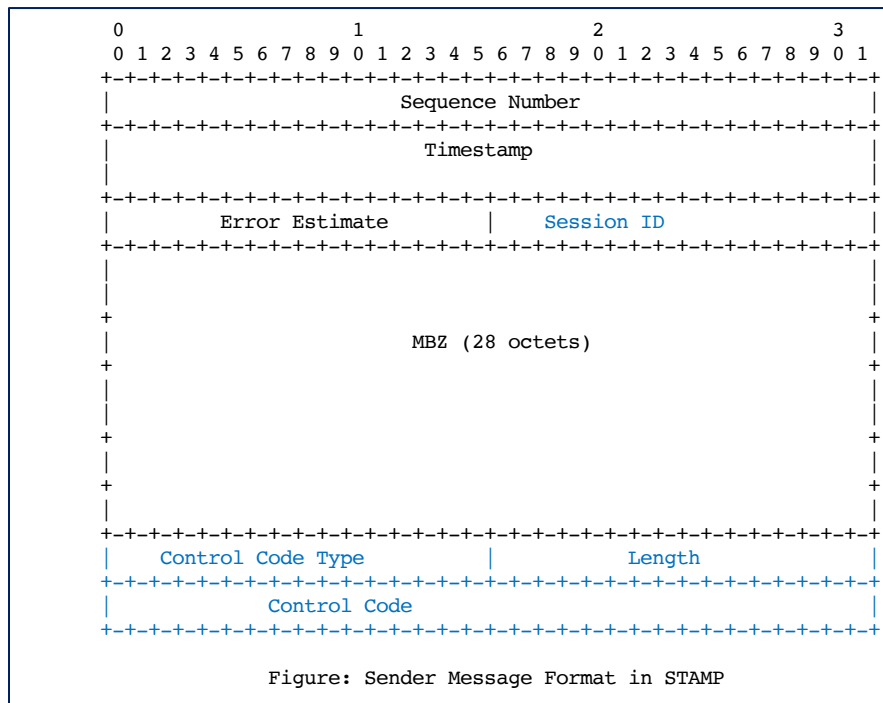


Figure: Reflector Message Format in STAMP

- ✓ Control Code compatible with TWAMP Light message format
- ✓ Session ID has 32-bits which is good
- ✓ Session ID is not needed for TWAMP Light, so this option is also fine

Option 4: 16-bit Session ID



- ✓ Control Code NOT compatible with TWAMP Light message format
- ✓ Session ID has only 16-bits
- ✓ Message formats for TWAMP Light and STAMP diverge – TWAMP Light also needs Control Code
- ✓ This option may be least favorable

Next Steps

- Converge on an option suitable for both TWAMP Light and STAMP
 - Keep the two message formats compatible as much as possible (excluding trailing padding)
- Update both drafts with the agreed option

Thank you