Simple TWAMP (STAMP) Extensions for Segment Routing Networks

draft-ietf-ippm-stamp-srpm-03

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Agenda

- Updates in Revision 03
- STAMP-based Work in other WGs
- Next Steps
Updates in Revision 03

✓ Updated usage of D (Wrong Destination) Flag in Destination Node Address TLV
  ✓ D (Wrong Destination with Reply Required)
  ✓ D (Wrong Destination with No Reply Required)
✓ Added **Structured SRv6 Segment List Sub-TLV** in Return Path TLV
✓ Minor editorial changes
✓ Currently no open issues
Structured SRv6 Segment List Sub-TLV in Return Path TLV

- LB Length: SRv6 SID Locator Block (LB) length in bits.
- LN Length: SRv6 SID Locator Node (LN) length in bits.
- Arg. Length: SRv6 SID Arguments length in bits.

Figure 7: Structured SRv6 Segment List Sub-TLV in Return Path TLV
STAMP-based Work in other WGs

draft-ietf-spring-stamp-srpm
• Performance Measurement Using Simple TWAMP (STAMP) for Segment Routing Networks

draft-ietf-spring-stamp-enhanced-srpm
• Enhanced Performance Measurement Using Simple TWAMP in Segment Routing Networks

draft-gandhi-mpls-stamp-pw
• Encapsulation of Simple TWAMP (STAMP) for Pseudowires in MPLS Networks
Next Steps

- Early IANA codepoint request for TLV Types for Interop
- Welcome your comments and suggestions
Thank you
Backup
STAMP Destination Node Address TLV

Destination Node Address TLV (value TBA1):

- Indicates the address of the intended destination of the Session-Sender test packet
- SHOULD be included when Session-Sender test packet is sent with IPv4 destination address in 127/8 range or with IPv6 address ::1/128 (e.g. sweeping ECMP paths)
- Session-Reflector that supports this TLV, MUST transmit reply test packet with Error D (Wrong Destination) set in the STAMP TLV Flags field if it is not the intended destination of the received Session-Sender test packet or drop the test packet based on the D flag set to 0 or 1 in the received test packet, respectively

Figure: Destination Node Address TLV Format
Return Path TLV (value TBA2) to carry Sub-TLV:

Return Path Sub-TLV Types:

- **Type (value 1):** Return Path Control Code. Reply test packet based on the control code flags:
  - 0x0: No Reply Requested
  - 0x1: Reply Requested on the Same Link
- **Type (value 2):** Return Address. Destination address for the reply; different than the Source Address in the Session-Sender test packet
- **Type (value 3):** SR-MPLS Label Stack of the Return Path
- **Type (value 4):** SRv6 Segment List of the Return Path
- **Type (value 5):** Structured SRv6 Segment List of the Return Path
Thank you