

# In-band Performance Measurement Using UDP Path for Segment Routing Networks

*draft-gandhi-spring-rfc6374-srpm-udp-00*

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# Agenda

- Requirements and Scope
- Updates Since IETF-103
- Next Steps

# Requirements and Scope

## Requirements:

- Delay and Loss Performance Measurement (PM) for SR links and end-to-end P2P/ P2MP SR Policies
  - ✓ Applicable to SR-MPLS/SRv6 data planes
- No need to bootstrap PM session (e.g. to negotiate UDP port) - spirit of SR
  - ✓ Stateless on egress node - spirit of SR
- One-way and two-way measurements
- Handle ECMP for SR Policies

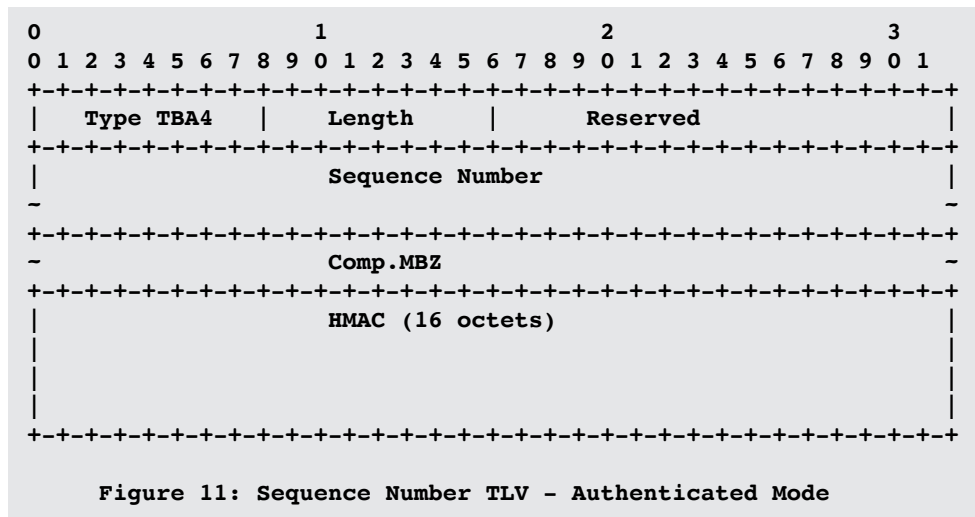
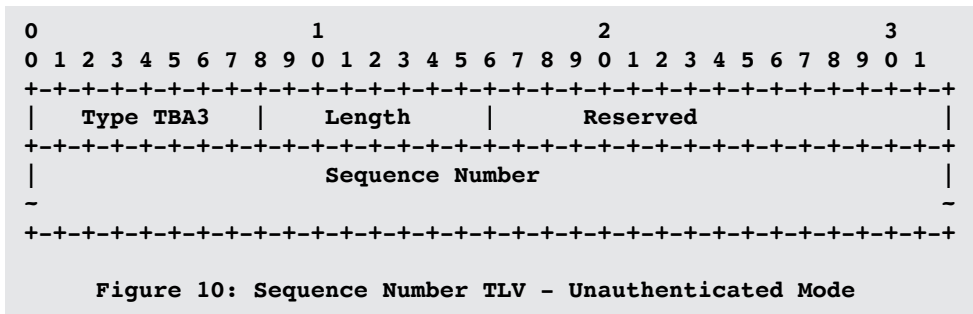
## Scope:

- Use RFC 6374 defined probe message formats
- Use RFC 7876 (IP/UDP OOB return path) defined probe response messages
- **User defined** IP/UDP path for PM probe messages

# Updates Since IETF-103

1. Rename draft from *spring-udp-pm* to *spring-rfc6374-srpm-udp* to reflect RFC 6374 scope
2. User-configured UDP ports (previously IANA allocated ports) to identify DM/LM messages
  - Need multiple UDP ports to handle various packet formats
  - Make it consistent with using TWAMP/STAMP for Segment Routing
3. For SRv6 Policies, using END.OTP (for DM)/ END.OP (for LM) to punt probe packets
4. Update TLV structure for Return Path (align with BFD Return Path TLV)
5. Clarify Sequence Number TLV usage compared to existing Sequence Number in RFC 6374
6. Add Authenticated mode (using Sequence number TLV)
7. Update Security section
8. Elaborate on in-band performance measurement
9. Various editorial changes to address review comments

# Authenticated Mode



# Next Steps

- Welcome your comments and suggestions
- Multiple implementations of RFC 6374 and RFC 7876 already exist
- Like to request for WG adoption

Thank you