Application Aware LDP Targeted session

draft-esale-mpls-appl-aware-ldp-targeted-session-00

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Agenda

- Background
- Problem and Solution
- Use cases
- Protocol extensions

Background

- LDP uses extended discovery to establish a targeted adjacency and subsequent session.

- An LSR initiates extended discovery by sending the targeted hello to a remote peer address.

- The remote LSR decides either to accept or ignore the hello based on local configuration only.

- For an application such as FEC 128 pseudowire and LDP over RSVP tunneling, the remote LSR is configured with the source LSR address.

Problem

- Applications such as remote LFA and FEC 129 pseudowire automatically initiate asymmetric extended discovery to any LSR in the core network based on local state only.

- Remote LSR responds or ignores all such LDP hello packet.

- Lack of administrative control over Targeted LDP session.

- Unnecessary advertisement of FEC-Label bindings over Targeted LDP session.

Solution

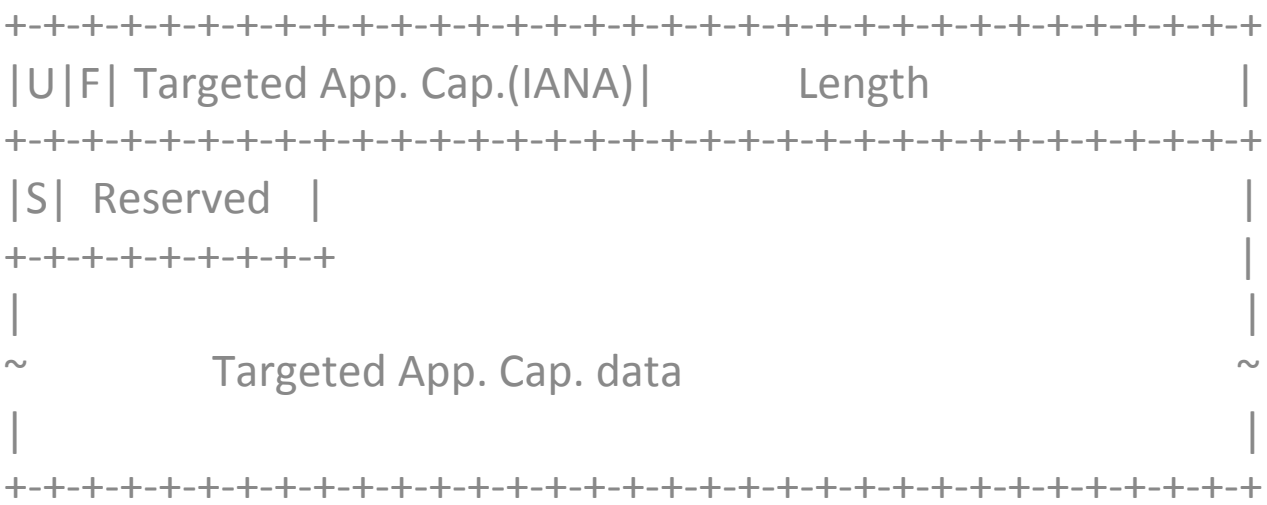
- Advertise and negotiate targeted application list during initialization of a targeted session.

- Targeted application is mapped to LDP FEC elements to advertise only necessary LDP FEC label bindings over the session.

Use cases

1. Remote LFA
2. FEC 129
3. LDP over RSVP tunneling

Protocol Extensions



Refer to the draft for details.

Next Steps

Authors would like to request WG feedback.