

# LSP-Ping extensions for MPLS-TP

**draft-nitinb-mpls-tp-on-demand-cv and  
draft-ietf-mpls-tp-on-demand-cv**

Nitin Bahadur  
Rahul Aggarwal

Sami Boutros  
Eric Gray

MPLS WG  
IETF 78, Maastricht

# Background

- At IETF 77, Anaheim, CA, we talked about how the draft:
  - Described using LSP-Ping to meet the Connectivity Verification and Route Tracing requirements specified in what was then [draft-ietf-mpls-tp-oam-requirements](#) (now [RFC 5860](#)).
  - Described procedures for both IP and non-IP encapsulated LSP-Ping OAM packets.
  - Specified extensions to LSP-Ping,
    - referenced defined extensions for carrying LSP-Ping in G-ACh
    - extensions necessary when IP encapsulation is not used.
  - Described Target FEC-Stack extensions for performing on-demand OAM on statically configured LSPs and PWs using LSP-Ping.
- Since then, the following changes have been made:
  - The name of the draft was changed to [draft-nitinb-mpls-tp-on-demand-cv](#)
  - Boiler-plate and draft/RFC reference updates
  - The working group was polled for making this draft an MPLS working group draft
    - Poll ran from 21 June through 6 July
    - Result was rough consensus to adopt the draft as a working group draft
    - Authors were instructed to post the draft as draft-ietf-mpls-tp-on-demand-cv (-00)
  - The working group version did not make the -00 cut-off
    - Posted 26 July, as the earliest available date post-cut-off

# Next Steps

- Address the several good comments that were made during the poll to accept the draft as a WG draft
  - Clarify exactly how the draft addresses the requirements for on-demand CV OAM support for the transport environment
  - Provide some additional clarification and normative references on the use of G-ACh
  - Other minor clarifications
- May consider the following additional changes:
  - Possibly allowing inclusion of both source and destination maintenance entity identifiers
  - Clarify support of on-demand CV OAM for control/management handoff as (and if) needed
- Poll for further comments and/or questions.
- Check with the working group for opinion(s) on maturity of this draft and readiness for WG Last Call – possibly by IETF 79.

# Backup

- On Demand OAM requirements per RFC 5860:
  - CV on demand requirements
    - This function SHOULD be performed on-demand between End Points and Intermediate Points of PWs and LSPs, and between End Points of PWs, LSPs, and Sections.
    - For the on-demand OAM functions, the result of which may vary depending on packet size, it SHOULD be possible to perform these functions using different packet sizes.
    - The protocol solution(s) developed to perform this function on-demand MAY also apply to point-to-point associated bidirectional LSPs, to point-to-point unidirectional LSPs, and point-to-multipoint LSPs in case a return path exists.
  - Route Tracing on demand requirements
    - The MPLS-TP OAM toolset MUST provide functionality to enable an End Point to discover the Intermediate (if any) and End Point(s) along a PW, LSP, or Section, and more generally to trace the route of a PW, LSP, or Section. The information collected MUST include identifiers related to the nodes and interfaces composing that route.
    - This function SHOULD be performed on-demand.
    - This function SHOULD be performed between End Points and Intermediate Points of PWs and LSPs, and between End Points of PWs, LSPs, and Sections.
    - The protocol solution(s) developed to perform this function MAY also apply to point-to-point associated bidirectional LSPs, to point-to-point unidirectional LSPs, and point-to-multipoint LSPs in case a return path exists.