MPLS Working Group

Chairs:

Tarek Saad

Loa Andersson

Nic Leymann

Secretary:

Mach Chen

MPLS Session:

Monday, November 5, 2021 14:30-15:30 (UTC)

Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/ (Privacy Policy)

I E T F

IETF Guidelines for Conduct

- IETF meetings, virtual meetings, and mailing lists are intended for professional collaboration and networking, as defined in the IETF Guidelines for Conduct (RFC 7154), the IETF Anti-Harassment Policy, and the IETF Anti-Harassment Procedures (RFC 7776). If you have any concerns about observed behavior, please talk to the Ombudsteam, who are available if you need to confidentially raise concerns about harassment or other conduct in the IETF.

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- IETF participants must not engage in harassment while at IETF meetings, virtual meetings, social events, or on mailing lists. Harassment is unwelcome hostile or intimidating behavior -- in particular, speech or behavior that is aggressive or intimidates.

- If you believe you have been harassed, notice that someone else is being harassed, or have any other concerns, you are encouraged to raise your concern in confidence with one of the Ombudspersons.

I E T F

Administrative

- Blue Sheet
  - Blue sheets will be automatically generated when you login into the Meetecho
- Jabber:
  - xmpp:mpls@jabber.ietf.org?join
- Minutes Taking
  - https://codimd.ietf.org/notes-ietf-112-mpls
- Agenda at:
  - https://datatracker.ietf.org/doc/agenda-112-mpls
- Slides at:
  - https://datatracker.ietf.org/meeting/112/session/mpls
- Data tracker:
  - http://datatracker.ietf.org/wg/mpls
- MPLS WG Github repo:
  - https://github.com/ietf-wg-mpls

Agenda Bashing

1. Administrivia

– Presenter: WG Chairs, 5 (mins)

2. WG Status & MPLS Open DT Report

– Presenter: Tarek Saad and Loa Andersson (15 mins)

3. Encapsulation of Simple TWAMP (STAMP) for Pseudowires in MPLS Networks

– Draft: https://datatracker.ietf.org/doc/draft-gandhi-mpls-stamp-pw

– Presenter: Rakesh Gandhi (10 mins)

4. A YANG Model for MPLS MSD

– Draft: https://datatracker.ietf.org/doc/draft-qu-mpls-mpls-msd-yang

– Presenter: Yinzhen Qu (10 mins)

5. New MPLS Headers for DetNet bounded latency/jitter

– Draft: https://datatracker.ietf.org/doc/draft-kompella-mpls-mspl4fa

– Presenter: Toerless ECKERT (10 mins)
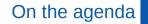
WG Status Report

Document status

Note:

- If you are a co-author, and have something to share about your document that does motivate asking for an agenda slot, please share with the chairs so we can include in the report.

WG Status (Errata)

- [Technical Errata Reported]

- No Errata reported

Document Status
Since IETF111

*** New RFCs

- RFC 9041 (Updating the IANA MPLS LSP Ping Parameters)

*** Docs in RFC Ed

- draft-ietf-mpls-ldp-yang-09 ([AUTH48](#))
- draft-ietf-mpls-rfc6374-sfl (MISSREF) – ***Waiting on I-D.draft-ietf-mpls-sfl-control***

*** Docs in IESG

- draft-ietf-mpls-lsp-ping-ospfv3-codepoint ([Waiting for AD Go-Ahead::Revised I-D Needed](#)). -- ***AD is waiting on authors to respond to their questions***

*** New WG Docs

- draft-ietf-mpls-egress-tlv-for-nil-fec -- (***Early code point allocation requested***)

Document Status
Since IETF110

*** Updated WG Docs

- draft-ietf-mpls-bfd-directed-18
- draft-ietf-mpls-inband-pm-encapsulation-02 – ***Report follows***
- draft-ietf-mpls-rfc6374-sr-04
- draft-ietf-mpls-mldp-yang-08
- draft-ietf-mpls-static-yang-13

*** Alive WG Docs without Update

- draft-ietf-mpls-ri-rsvp-frr-11
- draft-ietf-mpls-sfl-control-01
- draft-ietf-mpls-sr-epe-oam-03

*** Recently Expired

Document Status
Since IETF111

*** New Individual Docs

- draft-bocci-mpls-miad-adi-requirements
- draft-kbbma-mpls-1stnibble

Document Status
Since IETF 111

- **Alive Individual Docs**
    - draft-andersson-mpls-eh-architecture-02
    - draft-andersson-mpls-eh-label-stack-operations-02
    - draft-andersson-mpls-indicators-and-anxillary-data-00
    - draft-andersson-mpls-open-dt-questions-01
    - draft-bocci-mpls-miad-adi-requirements-00
    - draft-bryant-mpls-aux-data-pointer-00
    - draft-decraene-mpls-slid-encoded-entropy-label-id-02
    - draft-gandhi-mpls-ioam-01
    - draft-gandhi-mpls-stamp-pw-00
    - draft-gao-mpls-teas-rsvpte-state-update-03
    - draft-han-mpls-sdi-sr-02
    - draft-kbbma-mpls-1stnibble-00
    - draft-kompella-mpls-larp-10
    - draft-kompella-mpls-mspl4fa-01 (JOINT session)

Document Status
Since IETF 111

- **Alive Individual Docs**
  - draft-kompella-mpls-nffrr-02
  - draft-many-mpls-multiple-gal-01
  - draft-mirsky-mpls-p2mp-bfd-15
  - draft-nainar-mpls-spring-lsp-ping-sr-generic-sid-05
  - draft-ninan-mpls-spring-inter-domain-oam-04
  - draft-qu-mpls-mpls-msd-yang-02
  - draft-song-mpls-eh-indicator-03
  - draft-song-mpls-extension-header-05
  - draft-wijnands-mpls-mldp-multi-topology-03
  - draft-xp-mpls-spring-lsp-ping-path-sid-01
  - draft-xu-mpls-payload-protocol-identifier-09

Update on <I-D.ietf-mpls-inband-pm-encapsulation>

Status:

- -01 version of this document addressed all the comments received during MPLS-RT review.

- -02 version of this document stands as is

Open Issues:

- -02 version Due to the fact that an MPLS Open DT is working on a new method of SPL, there is a chance to reduce Flow-ID Label Indicator from two-label cSPL to one-label bSPL (or bSPL plus Bitmap), that's very helpful to the real deployments of this feature

Next Steps:

- The authors would wait and follow the decision of the MPLS Open DT.

Report from the MPLS Open DT

Like peeling an onion

… and not don't mean that I cry when I see what I find, but that it was much more than I expected!

Origins

- Several application wanting the use the space immediately after the label carrying the BoS.

- This will obviously not work if more than one is present in the same label stack.

- The design team was formed to guarantee that we have a future proof architecture, supporting such applications

MPLS Open DT has discussed and agree on - I

- In scoped its activity to MPLS Indicators and Ancillary Data (MIAD). The MIAD Project.

- Indicators is carried within the MPLS label stack to indicate wanted actions

- Ancillary Data is carried with the packet to support the wanted action

- Ancillary Data may take the following form
  - In Stack Data (ISD)
  - Post Stack Data (PSD)
  - No Data (NoD)

MPLS Open DT has discussed and agree on - II

- Function that are already specified must continue to work.

- There can only be one set of ancillary data after the BoS

- A set of ancillary data might be complex and have structure

- New applications need to resolve how to carry indicators and ancillary data without interfering with existing specifications

MPLS Open DT output (expected)

- MPLS Indicators and Ancillary Data Usecases (draft-dt-mpls-miad-usecases)

- Requirements for MPLS Label Stack Indicators for Ancillary Data (draft-bocci-mpls-miad-adi-requirements)

- MIAD Architecture and Framework (not yet posted)

- Solutions drafts

MPLS Open DT next focus)

- Resolve format and scope of the Indicators
- Specify scope and format of the ancillary data
- Ensure backwards and future compatibility