IETF 114 MPLS WG Status Update
IETF 114 (Philadelphia & Online) – July 2022

WG Chairs:
- Tarek Saad
- Loa Andersson
- Nic Leymann

Secretary:
- Mach Chen

This session is being recorded
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.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam ([https://www.ietf.org/contact/ombudsteam/](https://www.ietf.org/contact/ombudsteam)) if you have questions or concerns about this.

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)
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-114-mpls

- **MPLS Session Agenda at:**
  - https://datatracker.ietf.org/doc/agenda-114-mpls

- **Materials/Slides at:**
  - https://datatracker.ietf.org/meeting/114/session/mpls

- **Data tracker:**
  - http://datatracker.ietf.org/wg/mpls

- **MPLS WG Wiki:**
  - https://trac.ietf.org/trac/mpls/wiki

- **MPLS WG Github:**
  - https://github.com/ietf-wg-mpls/drafts
1. Chairs Intro (Agenda Bashing) - Start Time: 13:30  
   - Duration: 5 mins  
   - WG Chairs

2. MPLS Data Plane Encapsulation for In-situ OAM Data - Start Time: 13:40  
   - ID: https://datatracker.ietf.org/doc/draft-gandhi-mpls-ioam/  
   - Duration: 10 mins  
   - Presenter: Rakesh

3. mLDP Extensions for Multi-Topology Routing: 13:50  
   - Duration: 5 mins  
   - Presenter: Mankamana

4. Deprecating the Use of Router Alert in LSP Ping - Start Time: 13:55  
   - ID: https://datatracker.ietf.org/doc/draft-kompella-mpls-lspping-norao/  
   - Duration: 10 mins  
   - Presenter: Kireeti Kompella
5. IANA Registry for the First Nibble Following a Label Stack: 14:05
   ○ ID ➤ https://datatracker.ietf.org/doc/draft-kbbma-mpls-1stnibble/
   ○ Duration: 10 mins
   ○ Presenter: Kireeti Kompella

   ○ Duration: 10 mins
   ○ Presenter: Jie Dong/Shuanglong Chen
To report whether bandwidth and/or node protection are provided as requested, we define two new flags in the RRO IPv4 sub-object.

---

**Notes**
Forgotten IPv6 sub-object. The title of the section implies the usage of both versions of IP protocol. Later in this section (and the document), both sub-objects are also referred to.
[Technical Errata Reported][6450], reported by: Duane L. Anderson
RFC3031,
✓ Major issues
  The mix-use of L1, L2, L3… to represent layers (Layer 1, 2, 3…) and labels (Label 1, Label 2)…

✓ Notes
  My rational for highlighting (no pun intended) these problems is that the overloading of the L2, L3 abbreviations layer 2 and layer 3, with the names L1, L2, L3 and L for labels, plus the use of L1 and L2 as indexed names for the ordinal position of a label prefixed to a payload, then to use L2 and L3 as to actually mean layer 2 and layer is uh … sloppy.
  ...

...
Document Status
(Since IETF113)

- *** New RFCs
  - RFC 9214 (OSPFv3 Code Point for MPLS LSP Ping)

- *** Docs in RFC Ed
  - draft-ietf-mpls-rfc6374-sfl-10 (MISSREF) Waiting on I-D.draft-ietf-mpls-sfl-control

- *** Docs in IESG
  - None

- *** New WG Docs
  - draft-ietf-mpls-mldp-multi-topology-00
  - draft-ietf-mpls-mna-usecases-00
  - draft-ietf-mpls-mna-requirements-01 (Joint Session)
  - draft-andersson-mpls-mna-fwk
Document Status
(Since IETF113)

- **Updated WG Docs**
  - draft-ietf-mpls-inband-pm-encapsulation-03
  - draft-ietf-mpls-ri-rsvp-frr-13 (on track – tentative ETA for LC mid August)
  - draft-ietf-mpls-spring-inter-domain-oam-03
  - draft-ietf-mpls-sr-epe-oam-05 (in Shepherd review)

- **Recently Expired**
  - draft-ietf-mpls-static-yang-13 (co-authors expect to refresh this soon)
  - draft-ietf-mpls-mldp-yang-10 (Needs input from authors)

- **Alive WG Docs without Update**
  - draft-ietf-mpls-bfd-directed-19
  - draft-ietf-mpls-egress-tlv-for-nil-fec-03
  - draft-ietf-mpls-rfc6374-sr-05
  - draft-ietf-mpls-sfl-control-02
  - draft-ietf-mpls-p2mp-bfd-01

On the agenda
Document Status
(Since IETF113)

- *** New Individual Docs (Open DT outputs)***
  - draft-jags-mpls-mna-hdr *(Joint Session)* Replace draft-jags-mpls-ext-hdr-00
  - draft-li-mpls-entropy-01
  - draft-li-mpls-gip6-mpls-00 (Will be discussed in DT)
  - draft-li-mpls-redefining-eli-00 (Will be allowed to expire)
  - draft-liu-mpls-lsp-ping-nrp-00 (will be discussed in DT)
  - draft-liu-mpls-nas-combination-00 (will be discussed in DT)
  - draft-raszuk-mpls-raf-fwk-00
Document Status
(Since IETF113)

- **Alive Individual Docs**
  - draft-andersson-mpls-eh-architecture-03
  - draft-andersson-mpls-eh-label-stack-operations-03
  - draft-bryant-mpls-dev-primer-02
  - draft-decraine-mpls-slid-encoded-entropy-label-id-04
  - draft-gandhi-mpls-ioam-05
  - draft-gandhi-mpls-stamp-pw-02
  - draft-gao-mpls-teas-rsvpte-state-update-04
  - draft-han-mpls-sdi-sr-03
  - draft-kbbma-mpls-1stnibble-02
  - draft-kompella-mpls-mspl4fa-03 *(Joint Session)*
  - draft-kompella-mpls-nffrr-03 *(Joint Session)*
Document Status
(Since IETF113)

- **Alive Individual Docs**
  - draft-li-mpls-enhanced-vpn-vtn-id-02
  - draft-lm-mpls-sfc-path-verification-03
  - draft-nainar-mpls-lsp-ping-yang-02
  - draft-qu-mpls-mpls-msd-yang-03
  - draft-song-mpls-eh-indicator-05
  - draft-song-mpls-extension-header-07 *(Joint Session)*
  - draft-xp-mpls-spring-lsp-ping-path-sid-04
MPLS Open Design Team (Open DT) Overview

- Joint activity between MPLS, PALS and DETNET working groups.
- The chairs coordinate agendas and discussion
  - Meeting on Tuesdays as needed
- Weekly Open DT meeting
  - Thursdays (11:00 AM ET)
- Participation Around 15-20 participants per week
MNA Documents Update (since IETF113)
WG Adopted Documents

- Adopted as Working Group Documents
  - Use Cases for MPLS Network Action Indicators and MPLS Ancillary Data (draft-ietf-mpls-mna-usecases)
  - Requirements for MPLS Network Action Indicators and MPLS Ancillary Data (draft-ietf-mpls-mna-requirements)
  - MPLS Network Actions Framework (draft-andersson-mpls-mna-fwk)

- Focus for the period before IETF 115
  - Solutions document
    - Approximately 10-12 documents
  - Applications
    - Approximately 4 documents
MNA Polls

- Two polls
  - Can we use “In Stack Data (ISD)”, “Post Stack Data” and “No Data”
    - The outcome was that we can use all three.
  - Should re-purpose existing bSPLSs?
    - The outcome was we will not do this for MNA.