MPLS Session:
Tuesday, July 17, 2018 (GMT) - 9:30-12:00 Morning session I
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/) 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

• Face-to-Face meeting chair:
  – Nic was not able to attend
  – Joel Halpern kindly agreed to help chairing the meeting

• Audio Streaming/Recording
  – Please speak only using the microphones
  – Please state your name before speaking

• Data tracker: http://datatracker.ietf.org/wg/mpls/

• Minute takers & Etherpad
  – http://tools.ietf.org/wg/mpls/minutes

• Meet Echo:

• Online Agenda and Slides at:
  – https://datatracker.ietf.org/meeting/102/materials/
## Agenda Bashing – Admin

**Agenda** ([https://datatracker.ietf.org/meeting/102/agenda/mpls](https://datatracker.ietf.org/meeting/102/agenda/mpls)):

<table>
<thead>
<tr>
<th>No.</th>
<th>I-D</th>
<th>Version</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agenda bashing, WG status reports</td>
<td>-</td>
<td>Chairs</td>
</tr>
<tr>
<td>2</td>
<td>draft-ietf-mpls-egress-protection-frame</td>
<td>1</td>
<td>Yimin</td>
</tr>
</tbody>
</table>
| 3   | draft-malis-mpls-sfc-encapsulation, draft-ietf-mpls-sfc | -       | a) Andrew Malis  
|     | a) draft-malis-mpls-sfc-encapsulation    |         | b) Stewart Bryant  
|     | b) compare and contrast the two drafts   |         | c) Adrian Farrel             |
|     | c) draft-ietf-mpls-sfc open issues       |         |                                |
| 4   | draft-li-mpls-path-programming           | 0       | Zhenbin Li                     |
| 5   | draft-ietf-mpls-rsvp-shared-labels       | 2       | Harish Sitaraman / Vishnu Pavan Beeram |
| 6   | draft-chandra-mpls-rsvp-shared-labels-np | 0       | Harish Sitaraman / Vishnu Pavan Beeram |
| 7   | draft-busi-pals-pw-cw-stitching          | 0       | Italo Busi                     |
| 8   | draft-zzhang-mpls-rmr-rsvp-p2mp          | 0       | Jeffrey Zhang                  |
| 9   | draft-zzhang-mpls-rmr-multicast         | 0       | Jeffrey Zhang                  |
| 10  | AUTHORIZATION DON'Ts & Dos               |         | Deborah Brungard               |
| 11  | draft-song-mpls-extension-header-00      | 0       | Haoyu Song                     |
| 12  | draft-nainar-mpls-rfc8287-errata         |         | Faisal Iqbal                   |
|     | draft-iqbal-spring-mpls-ping-algo-00     |         |                                |

MPLS session - Thursday, July 17, 2018 ET - 9:30-12:00 Tuesday Morning session I
Agenda Bashing - Admin

• Fill in the Blue Sheets, and it pass on.

• Return to WG Chairs
Chairs Notes

• MPLS IPR polls
  - We require all authors and contributors to respond to IPR polls
  - There is a mitigation plan

• WG documents progress reports:
  - Reminder to send progress report updates for WG documents that are not presented in WG session to the chairs and copy email list
### WG Status (Errata)

**Status:** Reported (1)

<table>
<thead>
<tr>
<th>RFC Number (Errata ID)</th>
<th>Section</th>
<th>Type</th>
<th>Source of RFC</th>
<th>Submitted By</th>
<th>Date Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFC4928 (5396)</td>
<td>Section 2</td>
<td>Technical</td>
<td>mpls (rtg)</td>
<td>Jitendra Kumar Sharma</td>
<td>2018-06-18</td>
</tr>
</tbody>
</table>

Reported By: Jitendra Kumar Sharma  
Date Reported: 2018-06-18

Section Section 2 says:
A less obvious case is when the packets of a given flow happen to have constant values in the fields upon which IP ECMP would be performed. For example, if an Ethernet frame immediately follows the label and the LSR does ECMP on IPv4, but does not do ECMP on IPv6, then either the first nibble will be 0x4, or it will be something else. If the nibble is not 0x4 then no IP ECMP is performed, but Label ECMP may be performed. If it is 0x4, then the constant values of the MAC addresses overlay the fields that would have been occupied by the source and destination addresses of an IP header. In this case, the input to the ECMP algorithm would be a constant value and thus the algorithm would always return the same result. It should say: <This paragraph should be removed>

**Notes:**
The example stated here seems incorrect. It talks about an L2VPN case where Ethernet frame starts immediately after the last label in the stack. But had it been an IP packet instead, the same initial 12 bytes, which is the place for MAC addresses in an Ethernet Frame, would not be the place of IP addresses, as IP addresses are placed at the end of 20-byte IP header (not start). Hence it would still be subjected to ECMP if precautions (as recommended in this RFC) are not been followed.
WG Status (Liaisons)

- **Liaisons** (since last meeting) – *to/from MPLS*:
  
  None.
Document Status
Since IETF101

*** New RFCs
- RFC8372 - MPLS Flow Identification Considerations

*** Docs in IESG
- draft-ietf-mpls-spring-entropy-label – **Status: Approved** – new I-D posted

*** New WG Docs
- draft-ietf-mpls-sfc
Document Status
Since IETF101

*** Updated WG Docs
- draft-ietf-mpls-egress-protection-framework
- draft-ietf-mpls-ldp-yang
- draft-ietf-mpls-lsp-ping-lag-multipath
- draft-ietf-mpls-mldp-mib
- draft-ietf-mpls-rfc6374-sfl
- draft-ietf-mpls-rsvp-shared-labels
- draft-ietf-mpls-sfc
- draft-ietf-mpls-sfl-framework
- draft-ietf-mpls-summary-frr-rsvpte
- draft-ietf-mpls-ri-rsvp-frr

*** Existing WG Docs
- draft-ietf-mpls-base-yang
- draft-ietf-mpls-rmr
- draft-ietf-mpls-static-yang
*** New Individual Docs
- draft-chandra-mpls-rsvp-shared-labels-np
- draft-iqbal-spring-mpls-ping-algo
- draft-malis-mpls-sfc-encapsulation
- draft-nainar-mpls-rfc8287-errata
- draft-song-mpls-extension-header
- draft-zzhang-mpls-rmr-multicast
- draft-zzhang-mpls-rmr-rsvp-p2mp
Document Status
Since IETF101

*** Updated Individual Docs
- draft-esale-mpls-ldp-rmr-extensions – **Status:** In WG adoption poll
- draft-malis-mpls-sfc-encapsulation
- draft-xu-mpls-sr-over-ip – **Status:** In WG adoption poll
- draft-zheng-mpls-lsp-ping-yang-cfg
Document Status
Since IETF101

*** Existing Individual Docs
- draft-iwijnand-mpls-mldp-multi-topology
- draft-li-mpls-path-programming
- draft-mirsky-mpls-p2mp-bfd
- draft-nslag-mpls-deprecate-md5
- draft-wijnands-mpls-mldp-multi-topology
- draft-xie-mpls-ldp-bier-extension
- draft-xie-mpls-rsvp-bier-extension
Progress Report Update(s)

- **I-D:** `<draft-ietf-mpls-ldp-yang>`
  - IPR responses received
  - *WG Document, being prepared for WGLC, Comments from the YANG doctors are being addressed”*

- **I-D:** `<draft-ietf-mpls-lsp-ping-lag-multipath>`
  - `<draft-ietf-mpls-ri-rsvp-frr>`
  - Waiting for WG chair to do Shepherd Write-Up

- **I-D:** `<draft-ietf-mpls-mldp-mib>`
  - Stalled

- **I-D:** `<draft-ietf-mpls-sfl-framework>` and `<draft-ietf-mpls-rmr>`
  - Reports missing
Progress Report Update(s)

I-D: <draft-ietf-mpls-summary-frr-rsvpte>

• Current status: (revision -01)
  – A revision (-01) was posted in April, changes included
    • Reusing the Extended ASSOCIATION object for to associate LSPs in FRR_ACTIVE state
    • Removing FRR_ACTIVE SUMMARY_FRR_BYPASS object

• Next steps:
  – Solicit more feedback from the WG
  – Ask for WGLC
Progress Report Update(s)

I-D: <draft-ietf-mpls-base-yang>
I-D: <draft-ietf-mpls-static-yang>

• Current status: (revision -06 and -05)
  – Addressing YANG Dr. review comments <Tom Petch>

• Next steps:
  – Design team is resuming efforts on completing this work, expecting updated revision by IETF103 Bangkok
  – Will solicit review and feedback once new revision is posted