IETF Hackathon
IPv6 IOAM

IETF 109
November 9-13, 2020
Online

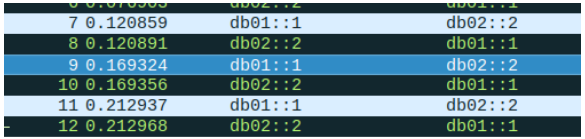
Hackathon Plan

- Improve kernel implementation
- Update VPP implementation
  - draft-ietf-ippm-ioam-ipv6-options
  - draft-ietf-ippm-ioam-data
- Kernel/VPP interoperability testing
- Implement draft-herbert-6man-eh-attrib to allow in-flight insertion/removal of EHs

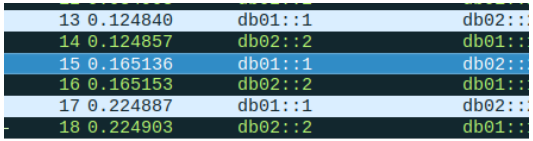
What got done

- No interop testing yet
- Implementations are going well
- The implementation of draft-herbert-6man-eh-attrib looks promising

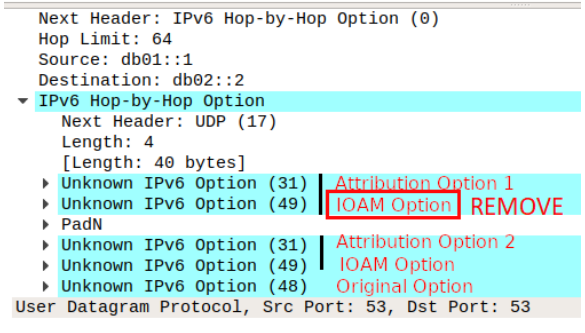
What got done

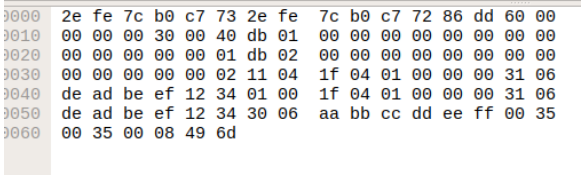


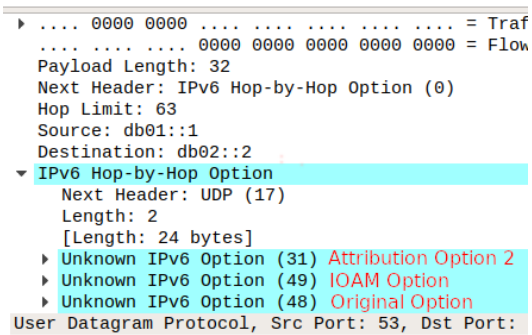
7	0.120859	db01::1	db02::2
8	0.120891	db02::2	db01::1
9	0.169324	db01::1	db02::2
10	0.169356	db02::2	db01::1
11	0.212937	db01::1	db02::2
12	0.212968	db02::2	db01::1

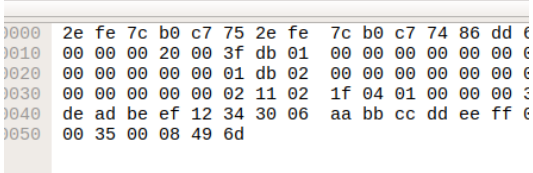


13	0.124840	db01::1	db02::1
14	0.124857	db02::2	db01::1
15	0.165136	db01::1	db02::1
16	0.165153	db02::2	db01::1
17	0.224887	db01::1	db02::1
18	0.224903	db02::2	db01::1









What we learned

- The IPv6 encapsulation solution is RFC8200 compliant
- BUT it brings several problems:
  - Destination address?
  - Anonymous decap → security?
  - Same path?

- Will make a few suggestions to IPPM for draft-ietf-ippm-ioam-ipv6-options
- Draft-herbert-6man-eh-attrib could be a solution, push for WG adoption (6man)

Wrap Up

Team members:

Justin Iurman

Tom Herbert

First timers @ IETF/Hackathon:

Mauricio Solis

Jérôme Bayaux

https://github.com/iurmanj/ipv6-attribution-option