BIER IPv6 Requirements draft-ietf-bier-ipv6-requirements-03

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Since last ietf:

- Continued developing the requirements section.
- https://github.com/mmcbride7/bier-v6-requirements
- Removed solutions pro's/con's wording.

For next rev:

- Remove all reverences to SRv6 Tony
- Move solutions summaries to appendix Rajiv
- Modify reg's per feedback from today

Draft Purpose

- Specify the requirements for transporting packets, with bier headers, in an IPv6 environment.
- Summarize solutions (in appendix).
- Help the BIER WG come to a conclusion, outside the draft, on which solution(s) to rally behind and adopt.

Requirements

- 4.1. Agnostic to the underlying L2 data link type
- 4.2. Should not require hop-by-hop modification of the IP SA field. Should use an IPv6 unicast address in the DA
- 4.3. Should not require the BFRs to inspect or change layer 4.
- 4.4. Should not allow a multicast address to be put in the IP SA field
- 4.5. Should not assume that bits never get set incorrectly
- 4.6. Should not require changes in SA filtering procedures
- 4.7. Should be possible to support the entire BIER architecture
- 4.8. Should avoid requiring different encapsulation types
- 4.9. Should process and forward BIER packets in hardware fast path
- 4.10. Must conform to the IPv6 specification as described in RFC8200
- 4.11. Must support fragmentation
- 4.12. Should support IPv6 security including AH/ESP extension headers

Summary

- Not quite ready for wglc, will be by 107
- Please continue commenting on the draft