BFD Multipoint updates

(draft-ietf-bfd-multipoint-04.txt)

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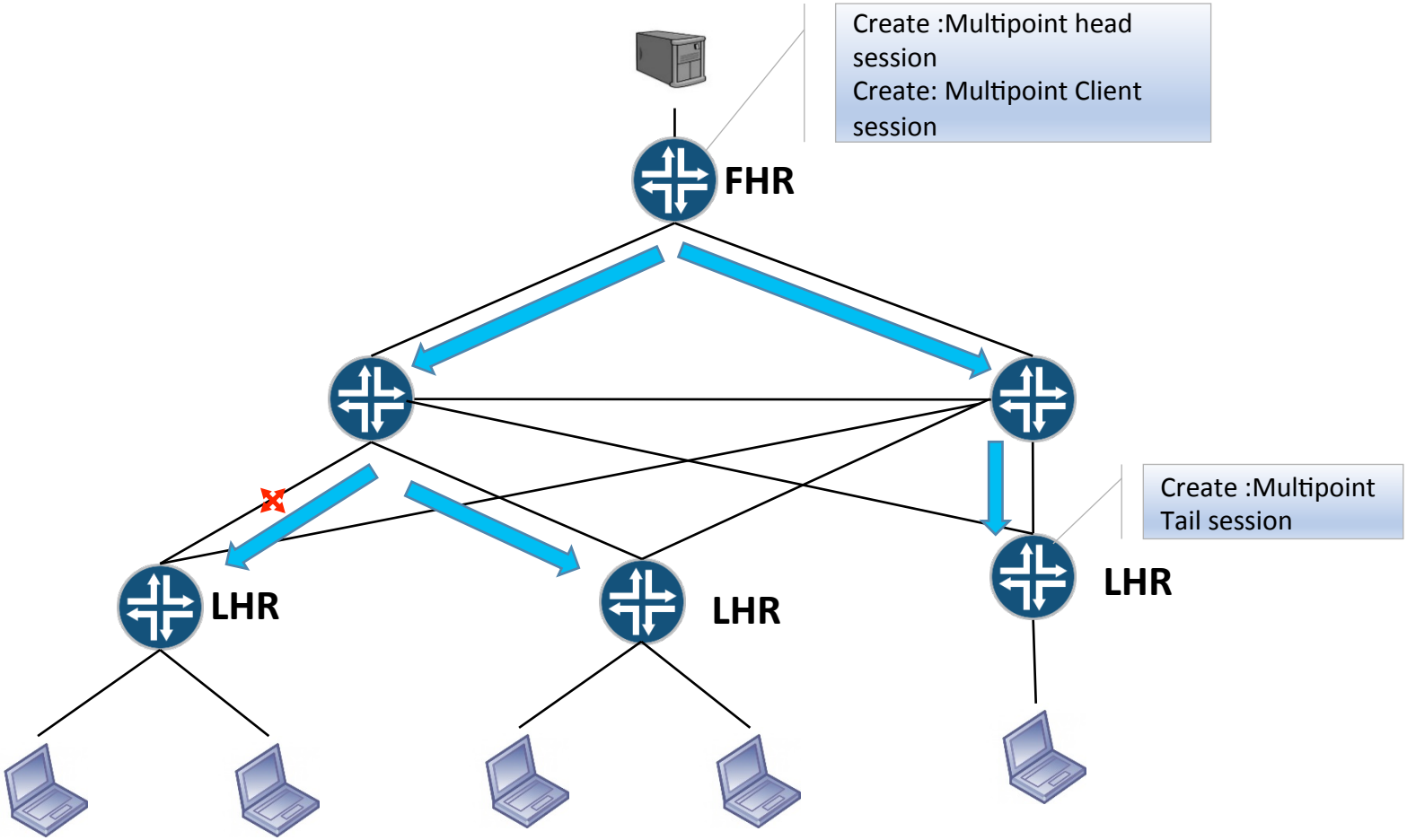
Date Created: 11/2/2014

Date Last Modified: 11/2/2014

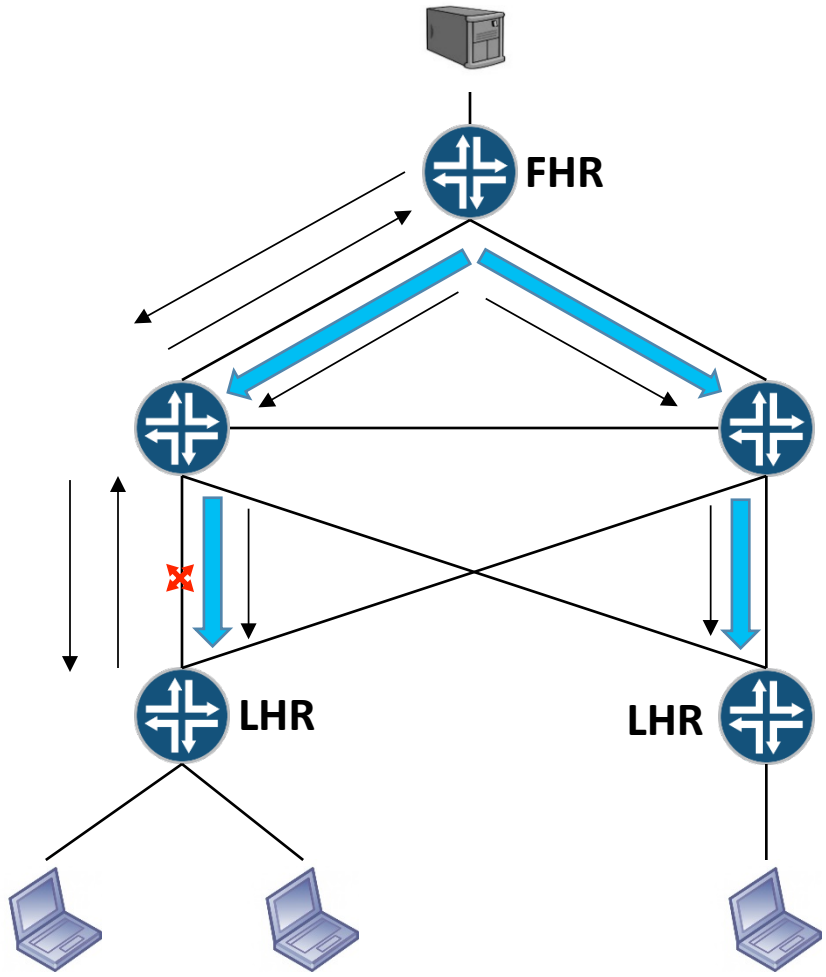
Objective

- Nothing changed from draft-ietf-bfd-multipoint-03.txt.
- Seeking comments on last few open items.
- Push it for RFC by IETF-92.

Quick recap


Create :Multipoint head session
Create: Multipoint Client session
FHR
Create :Multipoint Tail session
LHR
LHR
LHR

Active tail - Theory



a) Unreliable Head Notification
- ✓ Tail notifies head with a unsolicited unicast BFD down packet.
- ✓ Uses reverse unicast path.

b) Semi-reliable Head Notification and Tail Solicitation
- ✓ Head sends in-band multicast Poll.
- ✓ Uses multicast path and reverse unicast path.

c) Reliable Head Notification
- ✓ Head sends in-band and out-of-band poll packets.
- ✓ Uses multicast, forward unicast and reverse unicast path.

Active tail – Where should it be?

- Active tail use cases?
  - ✓There are implementations without active tail.
  - ✓Uses unreliable out of band Poll sequence to track tail.
  - ✓Very minimal use case scenario. Option (c) has no use case scenario.
- What are the options?
  - ✓Keep the scope of the base document as it is.
  - ✓Move active tail to appendix.
  - ✓Move active tail to new draft.

Demux and UDP port

- Section 4.7 hints the need of prior information to bind BFD to multipoint path.
- There is no section about destination UDP port.
  - ✓Dest port may be used to punt packet to RE.
- We need to have clarity. Options we have are.
  - ✓Dump all details in base document?
  - ✓Come up with data plane specific document?

More details?

- Draft talks about Demand mode but not about echo.
  - ✓Echo does not fit in multipoint BFD. Not supported?
- Increasing interval
  - ✓It does not use Poll sequence.
  - ✓Use Poll to indicate receiver change in packet and suppress Final?
- bfd.ReportTailDown
  - ✓How will head direct tail about its interest in Notification? Missing detail?
- How LHR punts packet to RE?
  - ✓Out of scope of this document?

Security consideration

- Drafts says it does not raise additional security issues.
- BFDclient and BFDTail sessions can be dynamically created.
  - ✓Open for DoS attack?
- Any multicast protocol already solves this problem?
- Any Suggestions?

Thank you