Redirect Issues

Forwarding and Control Element Separation
(IETF84 Vancouver, BC, 2012)

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Redirect LFBs: Current

• CE configures other LFBs to connect in a graph to the Redirect
  – Redirect upstreams packet/meta to CE
• CE HA:
  – all redirects to master CE
• Redirects low prio on SCTP TML
  – Work conserving
  – DoS protection excellent
Redirect LFBs: Challenges

• Consider app where 30-40% of traffic involves CE redirects
  – CE updating several FE policies' and re-injecting packets

• Single CE starts hitting MLFR
  – SCTP TML buffer fills up, window closes and (many in this case) end users retransmits

• Want to scale this horizontally
Redirect LFBs: solution 1

• Modify the Redirect LFB for CEHA scenario
  – Introduce scheduling table
    • Metadata based redirects
  – Master CE configures table
    • Backup CEs receive redirects in CEHA
      – Note: events sent to all CEs

• Challenge if we add this to main drafts
  – Will delay publication of both drafts
Redirect LFBs: solution 2

- Leave the Redirect LFBs alone
- Derive a new version with the proper parametrization
  - Write a draft describing things
Redirect LFBs: solution 3

- Punt to FEM level
  - CEHA event redirects are handled by a hard-coded “redirect to all” at TML level
    - Do something like that for redirects
    - So make the parametrization an FEM config option
  - Write a draft