Redirect Issues

Forwarding and Control Element Separation
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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