InterFE LFB

Forwarding and Control Element Separation
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Updates from -01

- Added another example of an arbitrary network service

- More focus on Ethernet level
  - Leave idea to run over IP open
  - Remove focus from proprietary/inter-chip etc

- Use ForCES Redirect header

- Propose fragmentation and re-assembly handling

Message Layout

```
+-- Main ForCES header
|  |
|  +---- msg type = REDIRECT
|  +---- Destination FEID
|  +---- Source FEID
|  +---- NEID (first word of Correlator)
|
+-- T = ExceptionID-TLV
   |  |
   |  +-- +-Exception Data ILV (I = exceptionID , L= length)
   |  |  | |
   |  |  | +----- V= Metadata value
   |  .  |
   |  .  |
   |  .  +-Exception Data ILV
   .
   |
   +-- T = METADATA-TLV
   |  |
   |  +-- +-Meta Data ILV (I = metaid, L= length)
   |  |  | |
   |  |  | +----- V= Metadata value
   |  .  |
   |  .  |
   |  .  +-Meta Data ILV
   .
   +-- T = REDIRECTDATA-TLV
      |
      +--  Redirected packet Data
```

Message Layout: Main header

- Source ID used to identify originating FEID
- Moved suggested tenantid/NEID to the first word of the correlator
  - Default NEID 0

Fragmentation/Assembly

- Common use case:
  - Source FE collects full message and frags
  - Dest FE waits for all
- Use main header leftover correlator word
- Split into two 16 bit fields
- *Frag count* field keeps track of ordering
- *Frag total* tracks of expected frag count