Establish/Maintain a Portal and Distributed Relay

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Agenda

• Initialize a Portal
• Monitor the function port
• Monitor the IPL /Portal System
Initialize a Portal

- Each Portal System configure parameters to it’s “local” managed objects.(6.4)
- Enable DRCP to start Portal System’s DRNI ability notification to each Portal Systems among the Portal
- Portal Systems exchange(Periodic or Event driven) local managed objects if they’re required to be “global” to the Emulated System:
  - Portal ID
  - Portal System Number
  - Aggregator Ports assigned to this Portal
  - Conversation - administrative Gateway list / operational Gateway
  - Conversation - administrative Function Port list / operational Function Port
  - FP algorithm and gateway algorithm
  - MEP-IDs
  - Link Cost ......
Initialize a Portal

• Concerns:
  – Define DRCP structure, define a DRCP_subtype following the Slow_Protocols_Type?
  – Define TLVs for all needed information exchange
  – The logic of transmitting and receiving DRCPDU
  – DRCP state machines and LACP state machines may trigger each other
  – Each operational managed objects synchronize by Events driving
    • LAG entity ready
    • Aggregator port failure/recovery
    • Portal System failure/recovery
Monitor the Aggregation Port

• If one of the Aggregator Port of one DRNI become unavailable, the Portal System need to:
  – Detach the link from the aggregator
  – Switch all the affected conversations to their “next highest priority Aggregator Ports (backup Aggregator Port) ”
  – Trigger the modification of relative operational parameters
Monitor the Aggregation Port

• Concerns:
  – Different conversations may switch to different backup Aggregator Ports
  – Different backup Aggregator Ports may locate on different Portal Systems.
  – How to minimize the interaction between Portal Systems? Consider efficient DRCP TLV design.
  – If the failure Aggregator Port recovers, should conversations be switched back?
  – Need to define DRCPDU TLV structures for the interaction
Monitor the IPL and portal system

- Scenario 1 and Scenario 2 may be the same to maintain a Portal if you reference `<axbq-nfimm-graceful-name-change-0511-v1.pdf>`
- Portal System parameters will Change
- Conversation gateway switch to second Prior Portal System
- Switch conversation to available backup Aggregator Port
- Detach links of the unavailable portal system from the LAG
Proposals

• Complete the draft about the circumstances and scenarios to make it clear to the implementer.
Thank you!