Receive Rules

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Issues with Clause 6 Rx Rules

- Confusing definition of EdgeOfRing
- FrameReceive Function / Rx Table is not consistent with Edge Wrapping
- Incorrect definition of discardWrongRI function
- Some corner cases missing or incorrect
- Attempt to incorporate a filter function as a separate instance from the route state
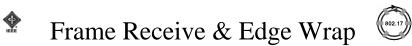
Edge of Ring

- The description is confusing
- Center wrap systems
  - both receive instances are on the edge of the ring
- Edge wrap and steering systems
  - the receive instance that is on the ring is the edge
  - the receive instance that is attached to the break is not the edge

Frame Receive & Edge Wrap

- Current definition of the frame receive function and receive state table do not show a method to receive a frame from the wrap path
  - This could be "inherent" or needs to be called out explicitly
  - Edge wrap systems require a mux since it is required to receive frames from both the PHY (topology packets) and the wrap path

Discard Wrong RI function

- For wrapping rings, packets with wrong RI are a normal part of protection.
- Context containment of packets with wrong RI must occur prior to unwrapping the rings
- There is a corner case where a frame is launched on the wrong RI (and the ring in not wrapped)
- The method was agreed to in Dallas

Discard Wrong RI function

- Current draft attempts to integrate the state machine for controlling the discard into the Rx state machine
  - however it did not work
- Proposed machine has 4 states
  - START – wait for either a protection event or a frame with wrong RI
  - DCNT – now that a frame with wrong RI has arrived, count down to determine if it is the error case or a precursor to wrapping
  - PROT – we are in the protection state so wait for containment
  - DISC – we are in the discard state, count down until containment is done for either case

Corner Cases Missing

- Missing checks for center wrap cases
- Missing checks for early wrap

Filter Function

- Attempt to incorporate a filter function as a separate instance from the route state
- Based on discussion ongoing in the BAH

How To Proceed

- Ad-hoc meeting during the next 2 days to cover the submission
- Check its correctness
  - Already reviewed by a few people
  - Make other changes
  - Present to CRG as basis for resolving any number of comments.