

NUD is too impatient

draft-ietf-6man-impatient-nud-01.txt

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Overview (same as two IETF's ago)

- Add implementation flexibility
 - Don't mandate 3 NUD transmissions 1 second apart
 - Require preserving failover behavior when there are alternates (multiple default routers)
 - Require detecting L2 address change
- Suggest binary exponential backoff retransmissions
 - But merely a suggestion

Details (also same as before)

- Introduce an UNREACHABLE state in NUD state machine
 - Allows current logic to prefer alternative, reachable default routers
 - While keeping L2 address in Neighbor Cache
- In UNREACHABLE state
 - Continue to send to unicast address in NCE
 - Send multicast NS messages (discovers MAC address change)
 - Recommend binary exponential backoff

Changes since WG draft

- Added a (non-normative) example algorithm (section 4)
 - Based on example in draft-gashinsky-v6nd-enhance-00, which was not carried forward into draft-ietf-v6ops-v6nd-problems-05
 - Extended to have a MARK_UNREACHABLE tunable to decide when to failover to alternatives, and switch from unicast to multicast NUD probes
- Minor editorial changes

Next Steps

- No open issues – is there anything controversial about this draft or can we just move ahead?
- Does the WG think it is ready for WG last call?