NetLMM MN-AR Interface draft-ietf-netImm-mn-ar-if-01

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Resolved issues

- #22 Multicast IPv6 ND triggers do not provide MN with confirmation of MAP registration success/failure.
- #24 Setting MN/AR/MAP as DHCPv6 client/relay/server fixes issues #22 and #23
- #25 MN-AR interface specifying REDIRECT behavior
- #26 link-local scoping in a NetLMM domain is undefined
- #27 Broken security procedure for DAD

Issues with pending resolution

- #88 Need to update assumed NETLMM
 protocol
- #89 Discuss per-MN prefix addressing model (e.g. 3GPP)
- #90 Configure DNA default router switching eagerly

Unresolved issues

- #23 Multicast IPv6 ND triggers cause many ARs to send UPDATEs when there are many ARs on the link.
- #28 No generic requirements for MN-AR interface
- #91 Re-establishing MN multicast listener state at new AR
- #92 No TTL decrement for inter-link
 tunneled SEND-protected NA

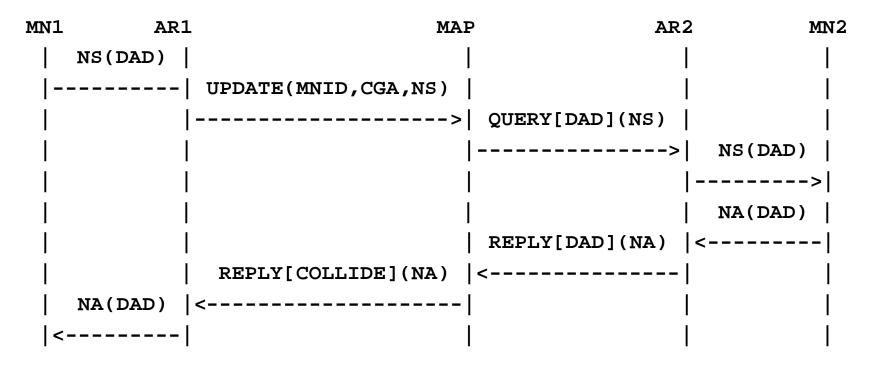
- Issue:
 - Multicast IPv6 ND triggers do not provide MN with confirmation of MAP registration success/failure.
- **Resolution:**
 - No text change
 - Confirmation occurs via reception of RA by MN

- Issue:
 - Setting MN/AR/MAP as DHCPv6 client/relay/server fixes issues #22 and #23
- Resolution:
 - Added triggers based on DHCP
 - Triggers on reception of SOLICITs

- Issue:
 - MN-AR interface specifying REDIRECT behavior
- Resolution:
 - An AR SHOULD NOT send a redirect message unless it can determine that the sending node and better first-hop node reside on the same link and will remain on the same link.

- Issue:
 - Link-local scoping in a NetLMM domain is undefined
- Resolution:
 - an AR MUST NOT forward packets sent by a MN from or to a link-local address (unicast or multicast)

- Issue:
 - Broken security procedure for DAD
- **Resolution:**



- Issue:
 - Need to update assumed NETLMM protocol
- Pending resolution:
 - Will do as soon as WG adopt a protocol draft as a working item

- Issue:
 - Discuss per-MN prefix addressing model (e.g. 3GPP)
- Pending resolution:
 - Will add text describing implications of such model on the MN-AR interface
 - Subnet confined to one link (where MN is)
 - No multi-link subnet issues
 - No DAD relaying required

- Issue:
 - Configure DNA default router switching eagerly
- Pending resolution:
 - There is no such configuration
 - Close the issue

- Issue:
 - Multicast IPv6 ND triggers cause many ARs to send UPDATEs when there are many ARs on the link.
- Three possible resolutions:
 - Synchronize on-link ARs via
 - Variation of DNA FastRA algorithm?
 - AR selection built-in NetLMM protocol?
 - Router redundancy protocol (e.g. VRRP)?
 - More?

- Issue:
 - No generic requirements for MN-AR interface
- Possible resolutions:
 - Requirements mostly security relevant
 - Specify that threats listed in draft-ietf-netImmthreats must be countered ?
 - More?

- Issue:
 - Re-establishing MN multicast listener state at new AR
- **Possible Resolution:**
 - LMA maintains MNs' multicast listener states
 - AR track changes of state:
 - Retrieves state at LMA when new MN attaches
 - Update the LMA with state changes by snooping MLD

- Issue:
 - No TTL decrement for inter-link tunneled SEND-protected NS/NA
- Possible resolution:
 - Include in the NetLMM protocol a facility to tunnel unmodified NS/NA

Questions...