RootACK

- Roll Interim (25th May 2020)
Motivation for Storing-Root-ACK

• End to end path establishment indication
  • Node can initiate app traffic
• Query target node’s capabilities
K flag in TIO

• K flag is set by the target node in the TIO
  • used by the root to send the RootAck
  • Ideally the node may set the K flag only once after startup
  • RootAck may be sent asyncly by the root without any K flag too
    • useful for cap query

• Intermediate 6LRs: K flag handling
  • DAO is regenerated on 6LRs on behalf of target node
  • K flag has to be stored in context to the target. Similar to E flag.
  • When the intermediate nodes see the K flag disabled from the target
    the K flag could be reset
RULs with RootACK

- Send NA to RUL only when E2E path is established
  - Send NA in response to RootACK
- Note that for external targets DAO is directly addressed to Root even in storing MOP
  - Implies source routed data path for external targets
  - Similar to unaware-leaves
- For external targets, the RootACK needs to carry the Target Option
Handling Capability Query

- Root sends async RootACK to query caps
  - Capability Query Option needed
    - Already pending work item in cap draft
- Target responds with DAO with caps
  - No Target/TIO Option needed, since DAO addressed directly to Root

Diagram:
- Root
- A
- B
- C
- 1. Async RootACK (cap_query option)
- 2. DAO (caps)