RootACK

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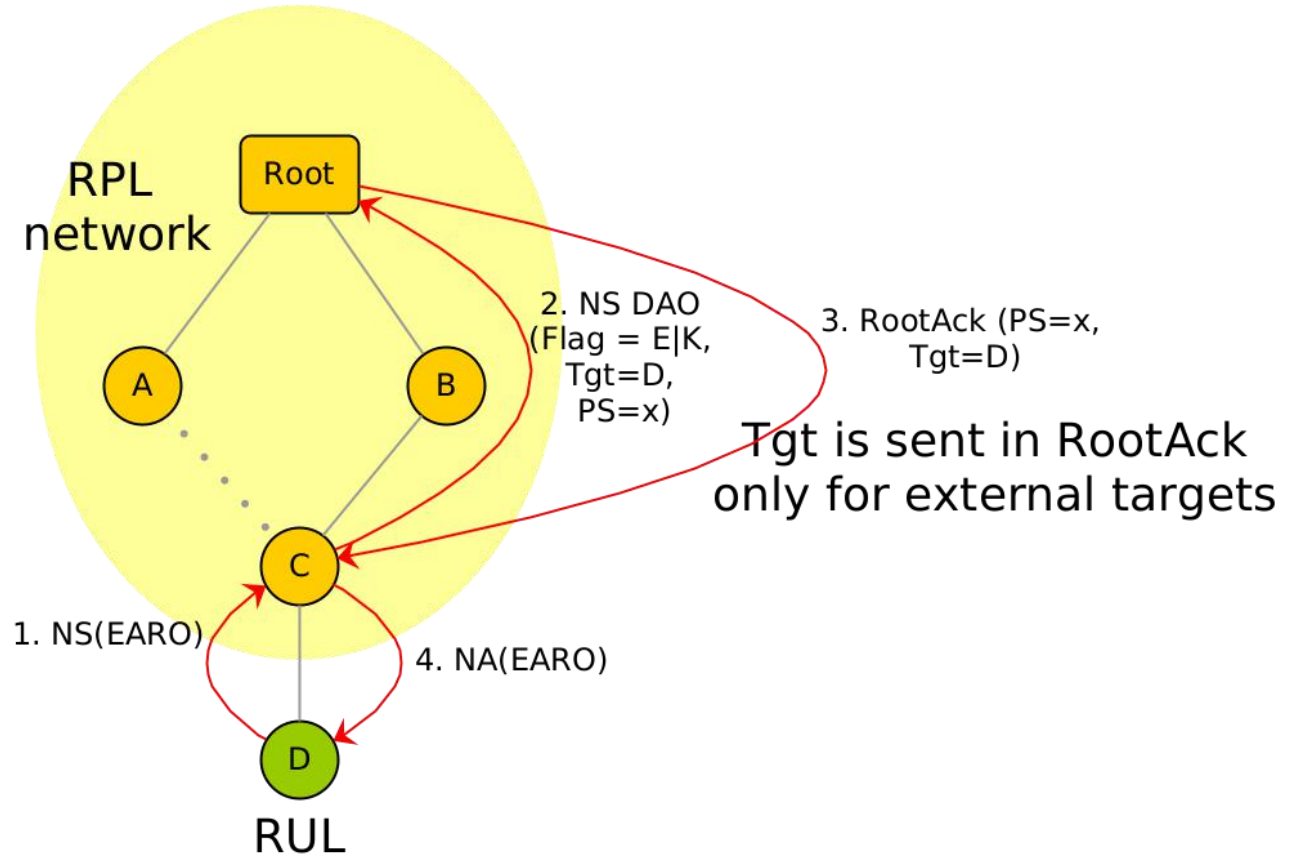
Motivation for Storing-Root-ACK

- 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