ROLL Interim - 14th Oct 2019

Discussion Points:

1. Configuration Option Structure
2. Cap unaware 6LR
3. Capabilities Option structure and semantics

Configuration Option freshness

- How to elide?
  - Use counter in Reserved low-4b
  - Lollipop counter
    - Using just 4b might be an issue?
  - Which doc should this go in?
- What should this counter be called?
  - SET (Static info Eliding counTer)
  - Wanted to call it SEAL but could not think of an appropriate full-form

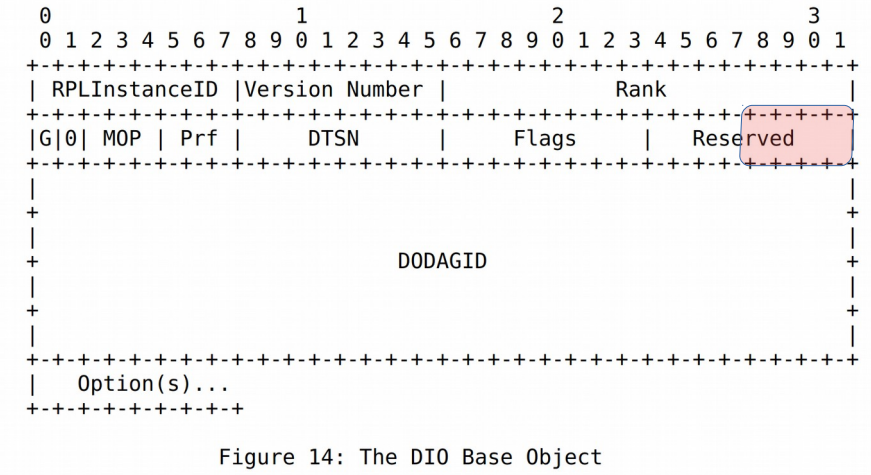


Figure 14: The DIO Base Object

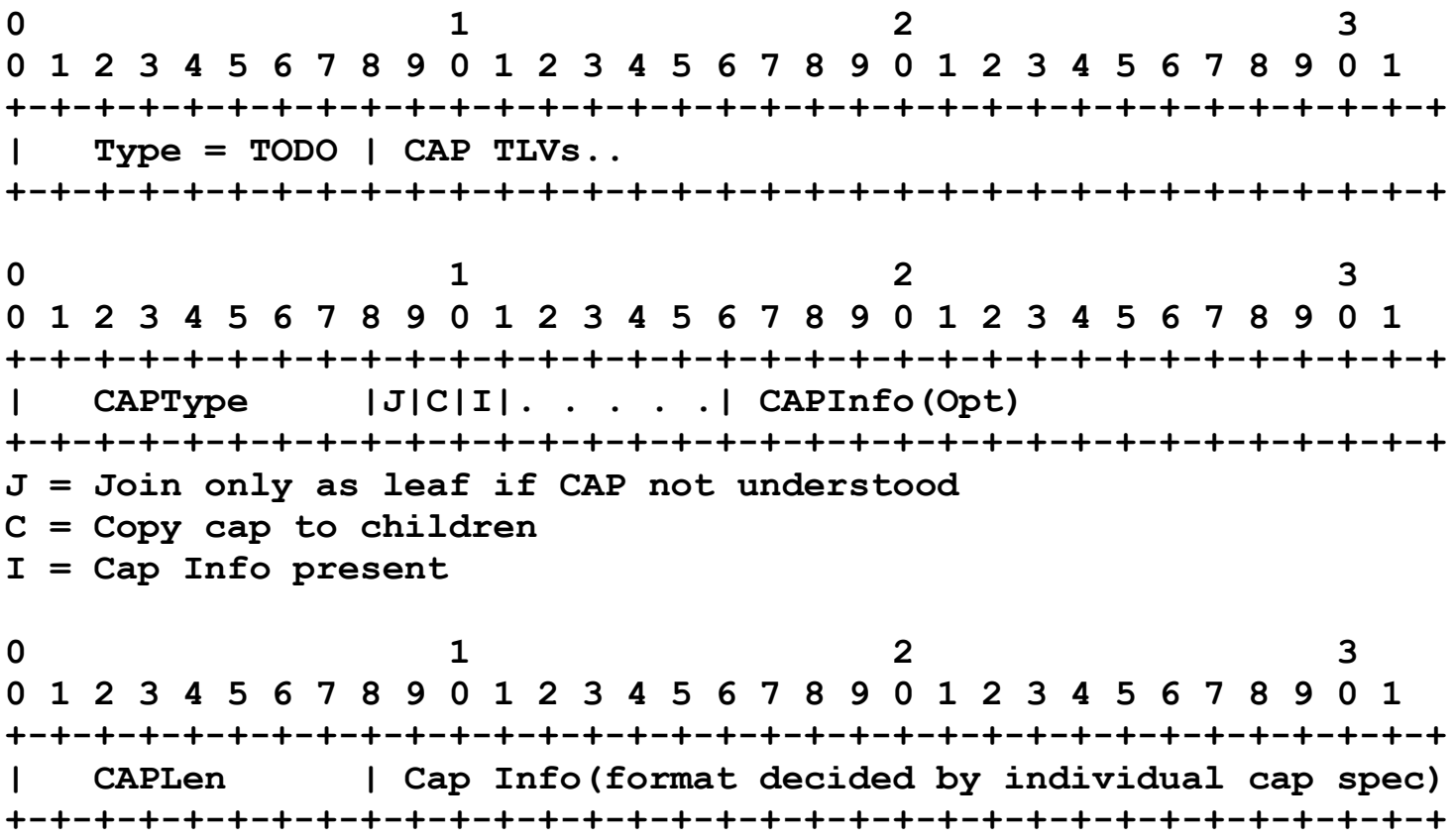
SET counter applicability

- Elide what?
  - Configuration Option
  - Future { Cap Option, MOPex }
  - What else?
    - Prefix Information Option and other options which rarely change
- It is not a problem if different nodes elide different options
  - Since a query will still reveal the complete set of info regardless of what is elided
- Only the root is allowed to change the counter

Capability Option syntax

- Current draft considers CAPs as sequence of bits, but we are moving towards TLV format
- CAP bits
  - Join as router/leaf if cap not understood
  - Copy to children
    - Why do we need such flag? Individual cap spec should define whether the node should copy or not.
  - CAP Info (optional), provides ext info for the CAP

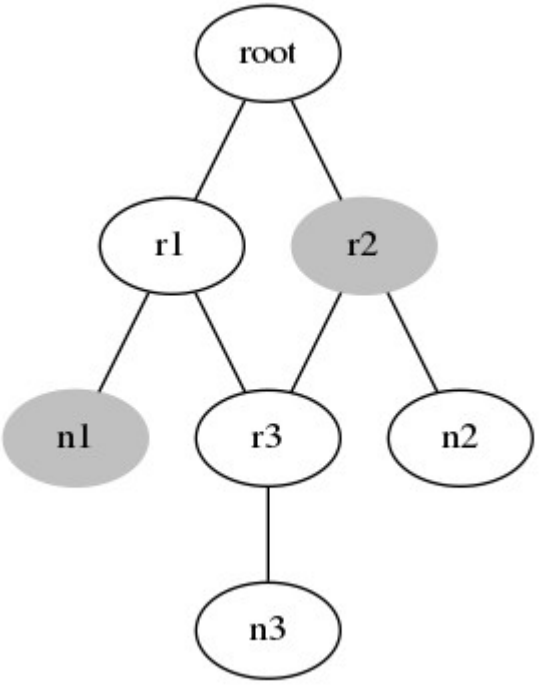
Capability option syntax



Optional, present only if I-bit set

CAP unaware nodes

- CAP unaware node would strip-off the CAP option
- Thus a mandatory CAP may be ignored
- How to handle it?
  - Should we let CAP be used with only newer MOPs?



Other Points

- Where to carry capabilities?
  - Last time we discussed using new messages!
  - Shall we allow the node to proactively update the capability set?
  - If caps are used for parent selection, then it will result in additional messaging post parent selection.