

Capabilities & MOPex

draft-ietf-roll-capabilities

draft-ietf-roll-mopex

Updates

- Splitup between Capabilities and MOPex
- Capabilities draft update
 - Recommendations for adding new caps
- Specific capability instances added
 - For 6LoRH
 - For PDAO (DAO projection)
- Security Considerations
 - Still needs more work
- Added Rabi as co-author (thanks to his contributions on defining new instances)
- References fixed

MOPex

- Problem statement and requirement was already discussed on WG
 - MOPs exhausted
 - Reserving MOP=7
- Minimal document with clear motivation/proposition
- Working group adopted

RPL2: New Options and backward compatibility

- Every time a new draft introduces a new option, we have backward compatibility issue
- Problem stems from the fact that legacy nodes will strip off this new unknown option
- This is true for: Enrollment-priority, Eliding-options, NSA extensions
- Solution
 - Handle this in MOPex
 - Option type with MSB set MUST be copied. Applicable to DIO/DAO.
 - 0 to 127 → Regular Options (strip off if not understood)
 - 127 to 255 → Options to copy forward if not understood.
 - Enrollment-priority could be Option Type 127
- Does not incur any new overhead

Capabilities Updates

- How are capabilities different?
 - Compared to MOP, Configuration Option or Routing Metrics/Constraints
- Guidelines towards defining new capabilities
 - How to set Global/Info/Join-as-leaf flags?
 - How should a node handle the capability it does not support?
 - Before or After joining the instance
 - When to use and when not to use caps.

