IPv6 Mesh over Bluetooth(R) Low Energy using IPSP

draft-ietf-6lo-blemesh-09

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Status (I/II)

• Pre-IESG reviews on -08:
  – RTGDIR
    • Acee Lindem
  – IOTDIR
    • Dominique Barthel
  – GENART
    • Pete Resnick
  – SECDIR
    • Catherine Meadows

• Produced -09 to address the comments (thanks!)
Status (II/II)

• Rev -09 has been reviewed by the IESG

  • 2 DISCUSSes
    – Martin Duke
    – Benjamin Kaduk

  • COMMENTs
    – Benjamin Kaduk
    – Martin Vigoureux
    – Robert Wilton
Martin Duke’s DISCUSS

• Section 3.1. Protocol stack
  – “... this specification allows using different MTUs in different links...”
  – If same MTU needed in all links, new link with smaller MTU might lead to network-wide MTU renegotiation cascade
    • Bad property...

• Authors’ proposal (for -10):
  – “The MTU size in IPv6 mesh over Bluetooth LE is 1280 bytes”
Benjamin Kaduk’s DISCUSS

• Section 3.3.2. Neighbor Discovery
  – “As per RFC 8505, a 6LN MUST NOT register its link-local address”
  – We missed adding “with the 6LBR” at the end...
  – Anyway, registering the 6LN’s LLA with a 6LR would be redundant over BLE link-layer connections

• Authors’ proposal (for -10)
  – Explain that EDAR/EDAC between 6LR/6LBR not needed
  – "By this specification, a 6LN MUST NOT register its link-local address, as the 6LR already ensures link-local address uniqueness as part of Bluetooth LE connection establishment procedures."
Benjamin Kaduk’s COMMENTS (I/II)

• Section 3.3.2. Neighbor Discovery
  – “A Bluetooth LE 6LN SHOULD register its non-link-local addresses...”
  – List of consequences of not registering non-LLAs?
  – Examples of short-lived connections?

• Authors’ proposal (for -10)
  – Main consequences already in the text:
    • 6LN unreachability, and no DAD
  – Examples: sending sensor readings, event detection...
    • Infrequent transmission of packets, no response expected
Benjamin Kaduk’s COMMENTs (II/II)

• Section 3.3.3. Header compression
  – An RA MAY include a 6CO
    • Was a MUST in RFC 7668
  – Not needed when context pre-provisioned, via out-of-band means...
  – Would then the in-band context indication be superfluous?

• Authors’ proposal (for -10)
  – Explicitly state so
Other COMMENTS

• Martin Vigoureux
  – Requirements language
    • RFC 2119 text shown, update to RFC 8174
    • That is, add “NOT RECOMMENDED”

• Robert Wilton
  – Fig. 2:
    • Remove subnet bubble
    • Top left node: a 6LR?
Questions/Comments?

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