

IPv6 Mesh over Bluetooth(R) Low Energy
using IPSP

draft-ietf-6lo-blemesh-01

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Status

- draft-ietf-6lo-blemesh-00
 - Presented in IETF 97 (Seoul)

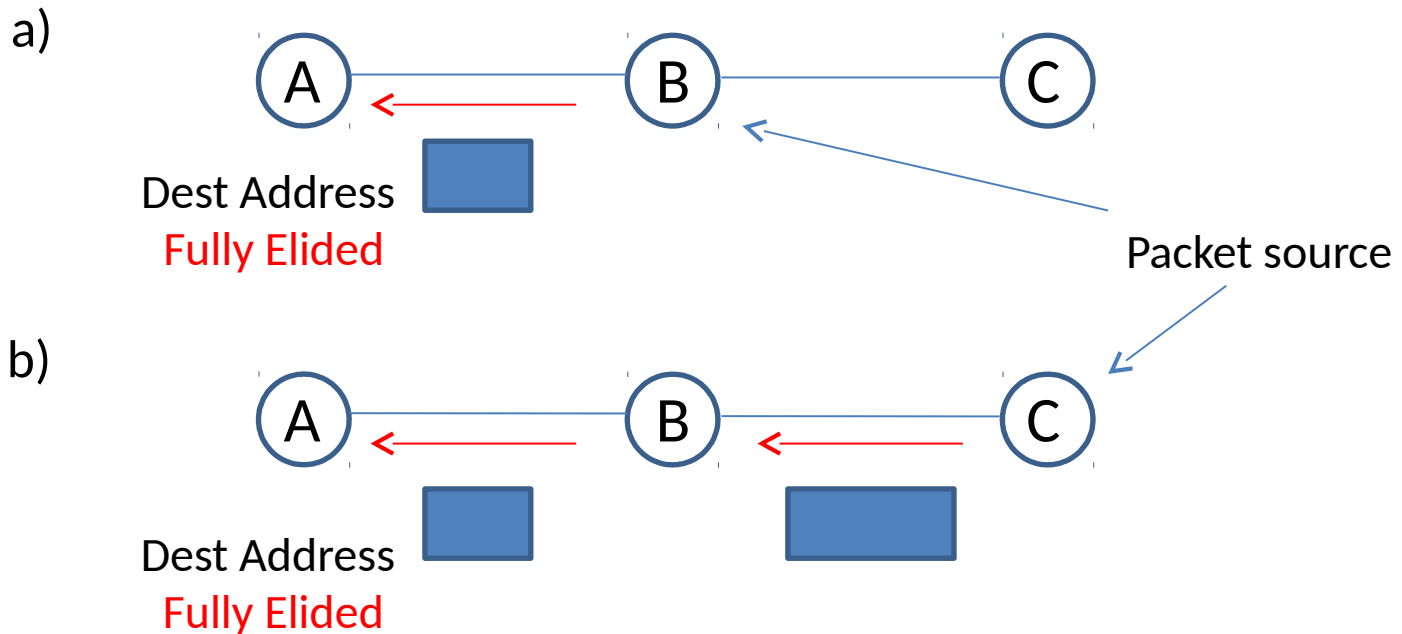
- draft-ietf-6lo-blemesh-01
 - Last revision
 - Minor changes, stable
 - Implementation plan

Updates (I/II)

- 3.3.2. Neighbor discovery
 - Remove ambiguity of 6LN
 - Can be a host or a router
 - 1. Non-link-local address registration
 - OLD: 6LN
 - NEW: host
 - 2. Sending RSs / Processing RAs
 - OLD: 6LN
 - NEW: host
 - Rules for routers already present in items 3 and 4

Updates (II/II)

- 3.3.3. Header compression
 - Clarified that HC optimization can be applied for “packets transmitted (but not necessarily originated) by the neighbor of a 6LN to that 6LN”



Implementation plan (I/II)

Function	Same as RFC 7668?	Comment
Stateless address autoconfiguration	Yes	IID can be based on Bluetooth device address for simplicity
Neighbor discovery	No	6LR needed Multi-hop DAD needed Prefix/context dist needed
Header Compression	No	Source address (6LN sending) or destination address (6LN receiving) fully elided if 6LN is the source or the destination, respectively
Multicast mapping	Yes	

Implementation plan (II/II)

- Platforms
 - PC + BLE dongles (at least 4.1)
 - Raspberry Pi
- Software
 - Linux kernel 3.18 or subsequent (IPSP support)
 - Kernel libraries
 - BlueZ (Linux BLE protocol stack)
 - radvd
 - libcap
 - Kernel modules
 - kmod-6lowpan (has services for 15.4 and BLE)
 - kmod-bluetooth
 - kmod-bluetooth_6lowpan
 - bluetooth_6lowpand

Please implement the draft as well!

Questions?