

# Asymmetric IPv6 (update)

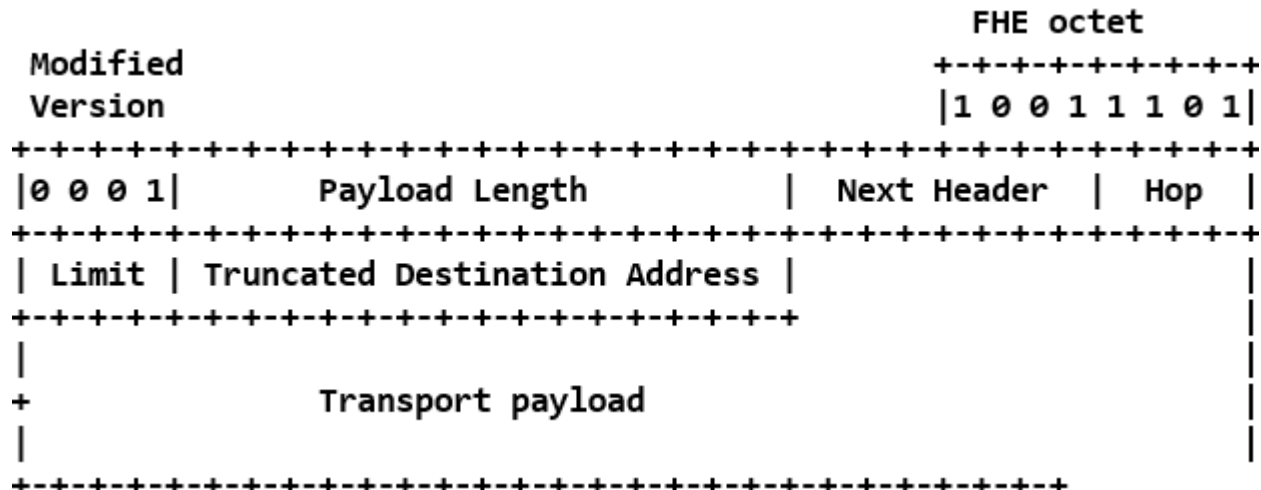
**draft-jiang-asymmetric-ipv6-02**

*Sheng Jiang, Brian Carpenter, Guangpeng Li  
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# Reminder

- Allow shortened addresses inside IPv6 packets
  - Define address length  $N$  within a domain
  - All addresses inside the domain are assumed to have a common prefix of  $(128-N)$  bits
  - Route on shortened addresses
- Unnecessary header bytes are elided
- Version number (4 bits) replaced by 12 encoding bits

# Simplified example



- Many more details in the draft

# Relationship to SCHC

- Static Context Header Compression (SCHC) [draft-ietf-lpwan-ipv6-static-context-hc] reduces IoT packet size.
- It could express Asymmetric IPv6 compression.
- However, it is *static*
  - After a context is established the fields to be compressed *do not change*
  - Asymmetric IPv6 offers dynamic choice of the fields to be compressed, since the coding bits are included in every packet.
  - For example, mix short and long addresses.

# Discussion

- Comments? Questions?