Asymmetric IPv6 (update)

draft-jiang-asymmetric-ipv6-02

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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?