ICN LoWPAN

draft-irtf-icnrg-icnlowpan-06
IETF 106, Singapore

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Draft Update (05 ⇒ 06)

- Fix wrong HopID range: \((1 \ldots 128)\) to \((1 \ldots 127)\) (thanks to Junxiao Shi)
- Fix editorial typos (thanks to Junxiao Shi)
- Reference draft-gundogan-ccnx-timetlv in Sec. 7
Discussion: Stateless Name Compression for NDN and CCNx

▶ Current state: GenericNameComponents only

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▶ Component length is limited to $1 \leq x \leq 15$
▶ Requires 1 octet per 2 components

▶ Alternative: Frequently used component types

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▶ Allows for 4 component types and a component length of up to 63
▶ Requires 1 octet per 1 component
▶ Comments & concerns of Junxiao Shi:

▶ List of frequently used types might change in future and depends on scenario
▶ Make list of types configurable by administrator and exchange via CID
▶ Make number of bits for TYPE and LEN configurable by administrator
Stateless Name Compression Extensibility

- Extension octets allow for extensibility of base dispatch
- Sophisticated compression schemes can be defined in future documents (e.g., dictionary-based)

Name Compression Strategy (NCS)
00: default strategy
01, 10, 11: reserved
Ready for RG last call?