

Representing Multi-Value Time in MANETs

`draft-clausen-manet-timetlv`

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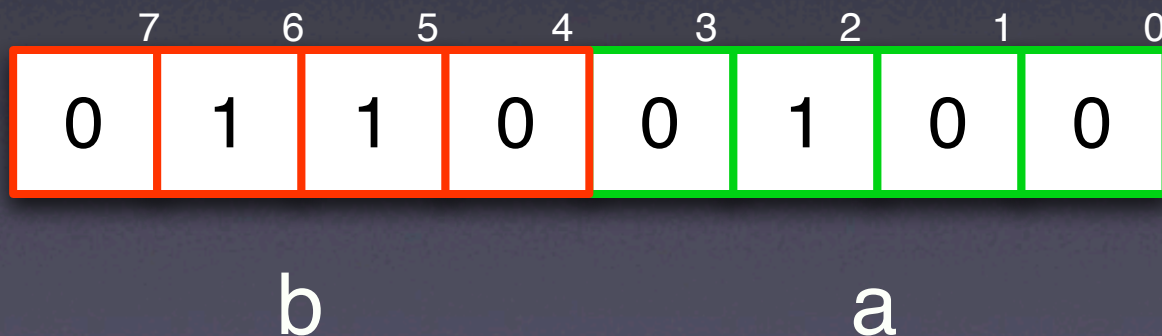
Specifies....

- Single-octet representation of time value
- Multi-value TLV structure
- VALIDITY_TIME TLV
- INTERVAL_TIME TLV

Time Structure

- $t = (1 + a/16) * 2^b * C$
- a & b encoded in one octet as $(16 * b + a)$
- C is a shared constant

Time code for $t=5$ with $c=(1/16)$

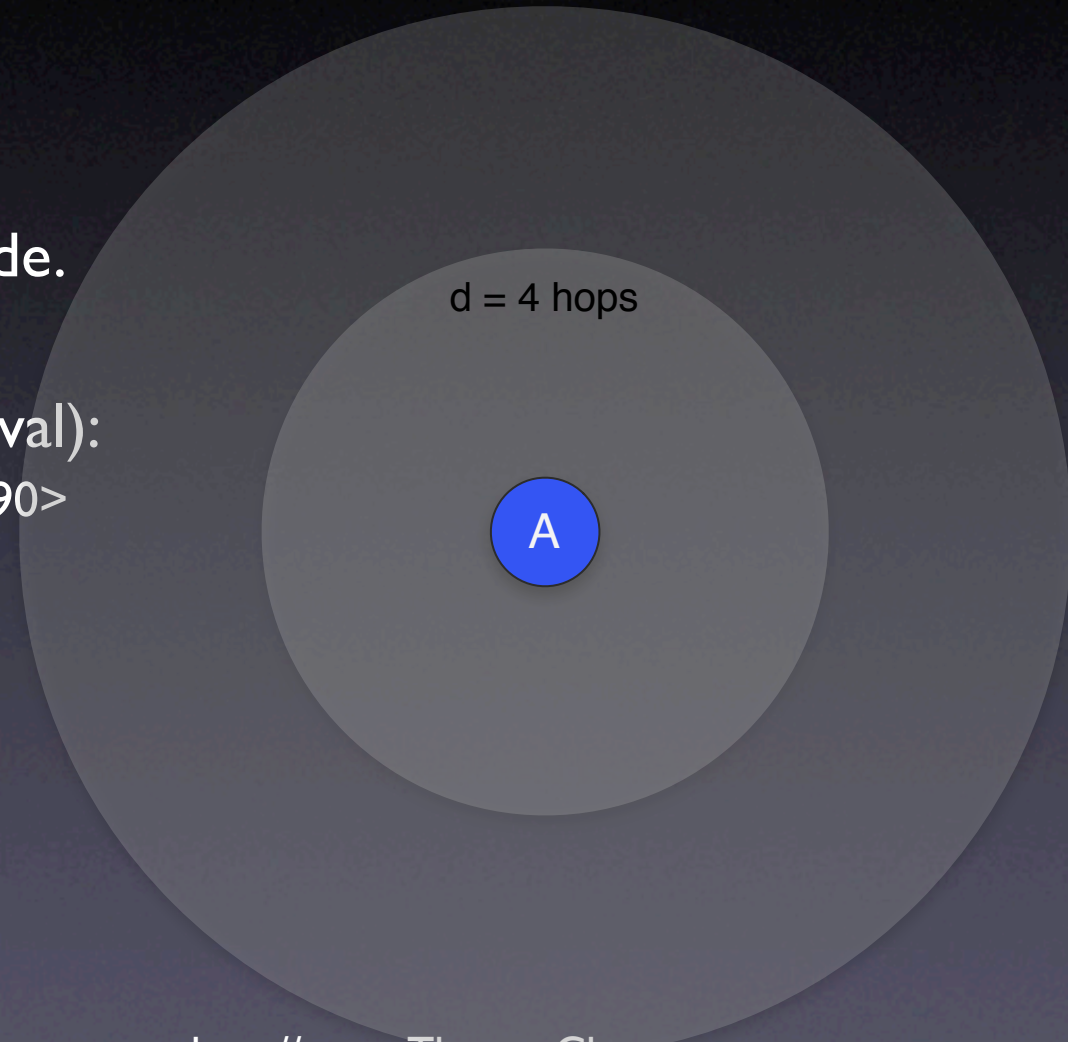


TLV Structure

- Single value:
 - `<t_default>`
- Multi value:
 - `<t_1><d_1><t_2><d_2>...<t_n><d_n><t_default>`

What's it used for?

- Flooding TC messages:
 - each 2 sec. within $d=4$
 - each 30 sec network-wide.
- VALIDITY_TIME (3 x interval):
 - `<t_l=6><d_l=4><t_default=90>`
- Demonstrated use in:
 - FSR, Fuzzy-sighted LS, ...
- Extended from RFC3626



Why a Separate I-D?

- OLSRv2 (multi-hop)
- NHDP (single-hop)
- SMF, DYMO,

- Goal:
 - Issue as WG document;
 - Proceed to WGLC