OSPFv3 Extended LSA Update IETF 92, Dallas
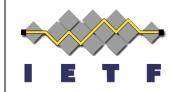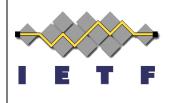
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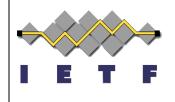
Agenda

- Draft Status

- Prefix Options Updates

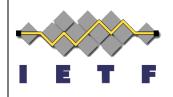- New compatibility mode proposal

Draft Status

- Lots of good review

- Mechanisms Stable – only clarifications and minor revisions in last couple versions.

- Need implementation momentum

- Proposal to lower the bar for initial implementation.
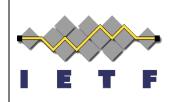
Prefix Options Updates

- LA-bit (local address) applicable to Inter-Area-Prefix TLVs and External-Prefix-TLVs.
  - Allows stable local address to be advertised without loopback in every area.
- N-bit defined – very similar to LA-bit with following differences:
  - N-bit setting for local /128 prefixes under admin control (may not be set)
  - Propagated in Inter-Area-Prefix LSAs and translated External-LSAs.

Limited Deployment Mode

- Allow usage of OSPFv3 Extended LSAs for new functionality

- Get some implementation experience.

- OSPFv3 routers advertise non-support of OSPFv3 Extended LSAs – LSAs never used for base SPF.

- OSPFv3 Extended LSAs only originated with the TLVs supporting advanced functions

  - For example, Extended-Router-LSAs would only have links with extended attributes.

Limited Deployment Mode (Continued)

- Backward compatibility must be specified in the features that utilize the Extended LSAs.

- Downside of limited deployment:

  - Misses main benefit of OSPFv3 Extended LSAs of consolidated advertisement

  - Development done to correlate existing and extended LSAs – could have been applied to providing full support.

  - Would allow standardization