LISP Canonical Address Formats

draft-ietf-lisp-lcaf-00

Atlanta IETF
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Agenda

- Discuss `draft-farinacci-lisp-lcaf-\{00-10\}`
- Renamed `draft-farinacci-lisp-lcaf-10 -> draft-ietf-lisp-lcaf-00`
• Became WG document August 2012

• Thank you LISP working group!

• 11 individual submission led up to WG draft
• Initial draft submitted April 2010

• Requested IANA for AFI = 16387
  • Hiroshima IETF - ~November 2009
  • Thanks Terry Manderson!

• Every LISP control-plane packet uses AFI encodings for EIDs & RLOCs

• Idea is to add use-cases:
  • Without packet format changes
  • Without changes to any mapping database system
16-bit AFI followed by variable length address, typically used AFIs:

- **AFI 0**: Null address
- **AFI 1**: IPv4
- **AFI 2**: IPv6
- **AFI 6**: IEEE MAC address
- **AFI 16387**: LCAF encodings
-01 through -06

- Occurred 2010-2011, changes included:
  - Editorial fixes
  - Addition of Multicast Info Type
  - Addition of Explicit Locator Path Type
  - Addition of Security Key Type
  - Added multiple NTR RLOC addresses to NAT-Traversal Type
  - Added section to bind addresses for possible IPv4/IPv6 address translation
-07 through -10

• Occurred 2010-2011, presented at Vancouver IETF - changes:

  • IID mask length for LISP-DDT
  • Add Altitude to Geo-Coordinate Type
  • draft-ermagan-lisp-nat-traversal-01
  • draft-farinacci-lisp-mr-signaling-00
  • ELP Type changes for draft-farinacci-lisp-te-01
  • Security Key Type changes for LISP-DDT-SEC
  • Compatibility for new LCAF Types - to skip over by older parsers
Type 0: Null Body Type
Type 1: AFI List Type
Type 2: Instance ID Type
Type 3: AS Number Type
Type 4: Application Data Type
Type 5: Geo Coordinate Type
Type 6: Opaque Key Type
Type 7: NAT-Traversals Type
Type 8: Nonce Locator Type
Type 9: Multicast Info Type
Type 10: Explicit Locator Path Type
Type 11: Security Key Type
Type 12: Source/Dest Key Type
• draft-ietf-lisp-mib-07 should (and does) reference draft-ietf-lisp-lcaf-00

• ADs working LispAddressType issue now with LISP MIB authors