

# LISP Multicast Document Status

***LISP WG - IETF Dublin  
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# Agenda

- Standards Track Documents
- WG Documents
- Move the “set-of-3” to last call
- Dino Documents

# Standards Track

[RFC 6831](#)

28 pages 2013-01

Experimental RFC

**The Locator/ID Separation Protocol (LISP) for Multicast Environments**



[draft-farinacci-lisp-rfc6831bis-02](#)

31 pages 2024-05-29 I-D Exists

**The Locator/ID Separation Protocol (LISP) for Multicast Environments**



[draft-ietf-lisp-rfc6831bis-00](#)

31 pages 2024-08-27 I-D Exists

**The Locator/ID Separation Protocol (LISP) for Multicast Environments**

WG Document : Proposed Standard

[RFC 8378](#)

21 pages 2018-05

Experimental RFC

**Signal-Free Locator/ID Separation Protocol (LISP) Multicast**



[draft-farinacci-lisp-rfc8378bis-00](#)

22 pages 2024-05-03 I-D Exists

**Signal-Free Locator/ID Separation Protocol (LISP) Multicast**



[draft-ietf-lisp-rfc8378bis-00](#)

22 pages 2024-08-27 I-D Exists

**Signal-Free Locator/ID Separation Protocol (LISP) Multicast**

WG Document : Proposed Standard

# WG Documents

[draft-vas-lisp-group-mapping-03](#)

LISP Multicast Overlay Group to Underlay RLOC Mappings

10 pages 2024-05-03 I-D Exists



[draft-ietf-lisp-group-mapping-00](#)

LISP Multicast Overlay Group to Underlay RLOC Mappings

10 pages 2024-09-19 I-D Exists  
WG Document

- “set-of-3” is a logical document set which completes the LISP multicast architecture design
- Unidirectional reference to **6831bis** and **8378bis**

Requesting set-of-3 for Last Call now

# Refresher on the "set-of-3"

- **RFC 6831** - The Locator/ID Separation Protocol (LISP) for Multicast Environments
  - Defines how to run overlay multicast on underlay native multicast
  - How LISP uses PIM to build underlay distribution trees
  - Introduces overlay state (EID, G) for the map-cache which maps to (RLOC, G)
- **RFC 8378** - Signal-Free Locator/ID Separation Protocol (LISP) Multicast
  - Defines how to run overlay multicast on BOTH unicast and multicast underlays
  - Designs how to use the LISP mapping system to achieve this
  - Introduces an RLOC-set that may contain both unicast and multicast RLOC addresses for both IPv4 and IPv6 address families

# *draft-ietf-lisp-group-mapping-00*




- This draft formalizes terminology for 2-tuple multicast state for both the overlay and underlay
- Overlay state - (S-EID, G-EID), where:
  - S-EID is the source sending multicast packets
  - G-EID is the group address S-EID is sending to
  - The underlay knows nothing about these addresses (they are EIDs)
  - S-EID and G-EID can be registered as prefixes in the mapping system and used as specific addresses in data packet headers
- RLOC notation - (S-RLOC, U-RLOC) and (S-RLOC, G-RLOC), where:
  - S-RLOC is the encapsulating LISP ITR/RTR routeable address
  - U-RLOC is the outer header destination address (non-multicast underlay)
  - G-RLOC is the outer header destination address (multicast underlay)
  - S-RLOC, U-RLOC, and G-RLOC are specific addresses used in data packet headers

# *draft-ietf-lisp-group-mapping-00*

- This draft specifies how G-EIDs map to G-RLOCs, 2 approaches for xTRs to agree on same G-RLOC
- Hash Based
  - G-EID input to sha256() to produce G-RLOC
  - ETR does hash when processing IGMP/MLD reports or PIM-Join messages for G-EID
  - So all ETRs use the same G-RLOC when joining to the underlay multicast protocol
- Mapping System Based
  - Gives more control to multicast underlay provider
  - Provider registers distinguished name "group-224.1.1.1" where G-EID 224.1.1.1 maps to G-RLOC 225.1.1.1
  - ETRs registers (S-EID, 224.1.1.1) with G-RLOC 225.1.1.1 and joins 225.1.1.1 in the underlay multicast protocol
- ITRs/RTRs in either approach do mapping system lookup to determine RLOC-set for (S-EID, G-EID)
- Note the RLOC-set can contain a mix of U-RLOCs and G-RLOCs for same or different AFs

# Dino Documents

- We have let some time-out, but what remains:

Related Internet-Drafts and RFCs (3 hits)			
<a href="#">draft-farinacci-lisp-satellite-network-05</a>		19 pages	2024-07-31 I-D Exists
<b>LISP for Satellite Networks</b>			
<a href="#">draft-farinacci-lisp-decent-15</a>		17 pages	2024-06-28 I-D Exists
<b>A Decent LISP Mapping System (LISP-Decent)</b>			
<a href="#">draft-farinacci-lisp-lispers-net-nat-08</a>		20 pages	2024-06-17 I-D Exists
<b>lispers.net LISP NAT-Traversal Implementation Report</b>			In ISE Review : Informational

 make informational via ISE

 regular IETF process for experimental status



Thanks for All the Fish!