

# LISP WG

Routing Area Open IETF 119, 18 March 2024

WG chairs

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Internet Engineering Task Force

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**I E T F**®

# Locator Identifier Separation Protocol WG

- Refresher of Locator and Identifier Separation Protocol:
  - Is an overlay routing architecture that decouples the routing locators (IP) and endpoint identifiers (EID)
  - Is a map and encap/decap protocol
  - The map-server is responsible for mapping the EIDs to RLOC(s)
  - The scope of the LISP technology is potentially applicable to have a large span
- The WG's new charter was approved 25 January 2024

# Charter Work Items























- Moving to Standard Track: The core specifications of LISP have been published as “Standard Track” ([RFC9300], [RFC9301]). The WG will continue the work of moving select specifications to “Standard Track” (e.g., LISP Canonical Address Format [RFC8060], LISP Multicast [RFC6831][RFC8378], etc).
- Map Server Reliable Transport: LISP control plane messages are transported over UDP, however, in some cases, the use of a reliable transport protocol is a better fit, since it actually helps reduce periodic signaling.
- Yang Models: The management of LISP protocol and deployments include data models, OAM, as well as allowing for programmable management interfaces.
- LISP for Traffic Engineering: Specifics on how to do traffic engineering on LISP deployments. For instance, encode in a mapping not only the routing locators associated to EIDs, but also an ordered set of re-encapsulating tunnel routers (RTRs) used to specify a path.







# Charter Work Items

- **NAT-Traversal:** Support for NAT-traversal solution in deployments where LISP tunnel routers are separated from correspondent tunnel routers by a NAT (e.g., LISP mobile node).
- **Privacy and Security:** The WG will work on EID anonymity, VPN segmentation leveraging the Instance ID, and traffic anonymization. The reuse of existing mechanisms will be prioritized.
- **LISP External Connectivity:** [RFC6832] defines the Proxy ETR element, to be used to connect LISP sites with non-LISP sites. However, LISP deployments could benefit from more advanced interworking, for instance by defining mechanisms to discover such external connectivity.
- **Mobility:** Some LISP deployment scenarios include endpoints that move across different LISP xTRs and/or LISP xTRs that are themselves mobile, hence, support needs to be provided in order to achieve seamless connectivity.
- **LISP Applicability:** In time, LISP has proved to be a very flexible protocol that can be used in various use-cases not even considered during its design phase. [RFC7215], while remaining a good source of information, covers one single use case, which is not

# WG Update @ IETF 119

## Active Internet-Drafts (13 hits)







<a href="#">draft-ietf-lisp-ecdsa-auth-12</a> LISP Control-Plane ECDSA Authentication and Authorization	18 pages	2024-02-19	I-D Exists WG Document	
<a href="#">draft-ietf-lisp-eid-anonymity-16</a> LISP EID Anonymity	12 pages	2024-02-19	I-D Exists WG Document	
<a href="#">draft-ietf-lisp-predictive-rlocs-14</a> LISP Predictive RLOCs	16 pages	2024-02-19	I-D Exists WG Document	
 <a href="#">draft-ietf-lisp-te-14</a> LISP Traffic Engineering Use-Cases	20 pages	2024-02-19	I-D Exists WG Document	
<a href="#">draft-ietf-lisp-mn-15</a> LISP Mobile Node	26 pages	2024-01-14	I-D Exists WG Document	
 <a href="#">draft-ietf-lisp-name-encoding-05</a> LISP Distinguished Name Encoding	10 pages	2023-12-28	I-D Exists WG Consensus: Waiting for Write-Up Review:  <b>rtgdir Early</b>	<a href="#">Alberto Rodriguez-Natal</a> 
 <a href="#">draft-ietf-lisp-nexagon-52</a> Network-Hexagons:Geolocation Mapping Network Based On H3 and LISP	32 pages	2023-12-24	I-D Exists WG Document : Informational Review:  <b>secdir Early</b>	<a href="#">Jim Guichard</a>  <a href="#">Luigi Iannone</a> 
<a href="#">draft-ietf-lisp-geo-03</a> LISP Geo-Coordinate Use-Cases	14 pages	2023-11-26	I-D Exists WG Document	
<a href="#">draft-ietf-lisp-eid-mobility-13</a> LISP L2/L3 EID Mobility Using a Unified Control Plane	30 pages	2023-11-06	I-D Exists WG Document	
 <a href="#">draft-ietf-lisp-map-server-reliable-transport-03</a> LISP Map Server Reliable Transport	21 pages	2023-10-20	I-D Exists WG Document	
 <a href="#">draft-ietf-lisp-yang-20</a> LISP YANG Model	82 pages	2023-10-10	I-D Exists WG Document Reviews:  <b>yangdoctors Early</b>  <b>yangdoctors Early</b>	 
<a href="#">draft-jain-lisp-site-external-connectivity-09</a> LISP Site External Connectivity	7 pages	2023-09-26	I-D Exists  <b>Expires soon</b> Adopted by a WG	
<a href="#">draft-ietf-lisp-vpn-12</a> LISP Virtual Private Networks (VPNs)	17 pages	2023-09-19	I-D Exists  <b>Expires soon</b> WG Document	

-  Docs in RFC Editor Queue
-  Docs Past WG LC
-  Close to WG LC
-  On Hold / Issues
-  IPR
-  Need to Address Feedback

# WG Update @ IETF 119

## Related Internet-Drafts and RFCs (6 hits)

<a href="#">draft-farinacci-lisp-mobile-network-18</a> <b>LISP for the Mobile Network</b>	26 pages	2024-02-19	I-D Exists
<a href="#">draft-farinacci-lisp-satellite-network-04</a> <b>LISP for Satellite Networks</b>	19 pages	2024-02-04	I-D Exists
<a href="#">draft-farinacci-lisp-lispers-net-nat-07</a> <b>lispers.net LISP NAT-Traversal Implementation Report</b>	20 pages	2023-12-22	I-D Exists In ISE Review : Informational
<a href="#">draft-farinacci-lisp-telemetry-11</a> <b>LISP Data-Plane Telemetry</b>	10 pages	2023-10-23	I-D Exists
<a href="#">draft-farinacci-lisp-decent-13</a> <b>A Decent LISP Mapping System (LISP-Decent)</b>	16 pages	2023-10-16	I-D Exists Call For Adoption By WG Issued
<a href="#">draft-vdas-lisp-group-mapping-01</a> <b>LISP Multicast Overlay Group to Underlay RLOC Mappings</b>	9 pages	2023-10-16	I-D Exists

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# Charter Milestones

1. November 2023: Submit LISP Name Encoding document to the IESG for consideration [EXP]
2. March 2024: Submit LISP Reliable Transport document to the IESG for consideration [STD]
3. March 2024: Submit LISP Yang model document to the IESG for consideration [EXP]
4. March 2024: Submit LISP Traffic Engineering document to the IESG for consideration [EXP]
5. June 2024: Submit LISP Geo-Coordinates document to the IESG for consideration [EXP]
6. November 2024: Submit LISP NAT Traversal document to the IESG for consideration [STD]
7. November 2024: Submit LISP DDT bis document to the IESG for consideration [STD]
8. November 2024: Submit LISP LCAF bis document to the IESG for consideration [STD]
9. March 2025: Submit LISP Privacy and Security document(s) to the IESG for consideration [EXP]
10. March 2025: Submit LISP External Connectivity document(s) to the IESG for consideration [EXP]