

Encoding Names in LISP

draft-farinacci-lisp-name-encoding-15

IETF Philadelphia LISP WG

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Overview

- We can encode a “distinguished-name” in an EID-record or RLOC-record
- Use AFI=17 and null terminate ASCII string
 - More compact encoding and more general purpose than LCAFs
- Provides for self-documenting mapping database records
- Provides for multi-stage lookups and groupings
- Supported by LISP-DDT with no changes
 - Lookup for **/root/dino/slides/philly**
 - Matches **/root/dino** at DDT-root’s children
 - Where **/root/dino/slides/philly** are registered to Map-Server
- Supported by LISP-Decent with no changes
- Map-Request lookups are typically exact match, but don’t have to be

Example

lispers.net

Scalable Open Overlay Networking

ms1

Site name: `lispers.net`, **EID-prefix: [1] 'g-xtr1'**, registered: **yes**, dynamic

Description:

Last registerer: [0]104.155.143.86, xTR-ID: 0xcd098572b0b0cbf3, site-ID: 0

First registered: 23:38:43, last registered: 0:00:31, auth-type: sha2, registration flags: p-s-I-t-r-m-n

Default registration timeout TTL: 180 seconds

Forcing proxy Map-Reply: yes

Forcing proxy Map-Reply for xTRs behind NATs: yes

Send drop-action proxy Map-Reply to Pitr: no

Proxy Map-Reply action: not configured

Allowed RLOC-set: any

Registered RLOC-set (replacement-semantics):

[0]104.155.143.86, state: up-state, up/uw/mp/mw: 0/0/255/0, **rloc-name: "xtr1"**

[0]10.240.106.249, state: up-state, up/uw/mp/mw: 254/0/255/0, RTR

[0]130.211.169.66, state: up-state, up/uw/mp/mw: 254/0/255/0, RTR

Individual registrations: none

Tue Jun 28 20:10:25 UTC 2016 - Uptime 23:40:47, Version 0.333

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Features/Bugs go to support@lispers.net

List of Use-Cases

`draft-ietf-lisp-ecdsa-auth`

`draft-ietf-lisp-predictive-rlocs`

`draft-farinacci-lisp-geo`

`draft-kowal-lisp-policy-distribution`

`draft-moreno-lisp-uberlay`

`draft-farinacci-lisp-simple-nat`

`draft-kjsun-lisp-dyncast`

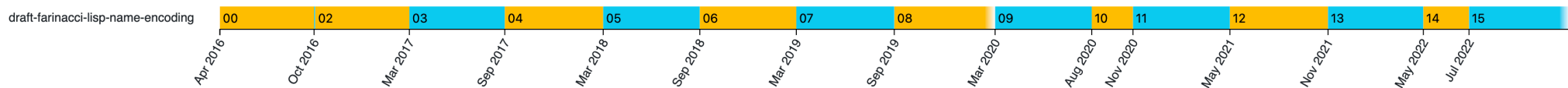
Draft Status

LISP Distinguished Name Encoding draft-farinacci-lisp-name-encoding-15

Status [IESG evaluation record](#) [IESG writeups](#) [Email expansions](#) [History](#)

Versions:

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- Started in April 2016
- Final individual submission last Sunday July 2022
- Many use-cases implemented and deployed

Moving Forward

- Have addressed collision commentary in -15
- Have requested WG document on `lisp@ietf.org`
- Would like to start WG Last Call now