

# *Encoding Names in LISP*

*draft-farinacci-lisp-name-encoding-11*

***IETF Bangkok (Virtual) LISP WG***

November 2020

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# Overview

- We can encode a “distinguished-name” in an EID-record or RLOC-record with AFI encoding
- 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/bangkok**
  - Matches **/root/dino** at DDT-root’s children
  - Where **/root/dino/slides/bangkok** are registered to Map-Server
- Supported by LISP-Decent with no changes
- Map-Request lookups are exact match typically

# 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](mailto:support@lispers.net)

# Changes to -11

- Describe how lengths are encoded in control message encoding
- Added Use-Case section, references:

`draft-ietf-lisp-ecdsa-auth`

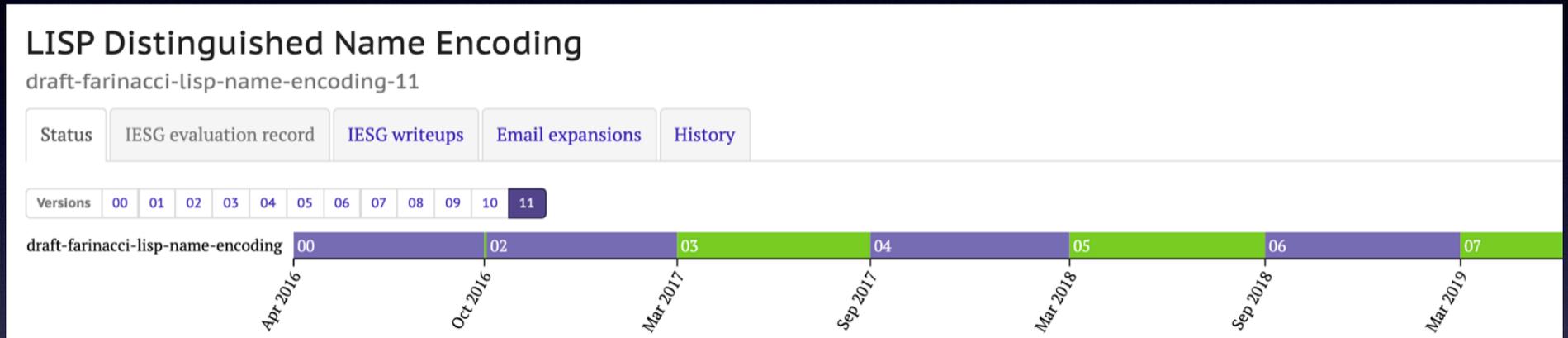
`draft-farinacci-lisp-geo`

`draft-farinacci-lisp-simple-nat`

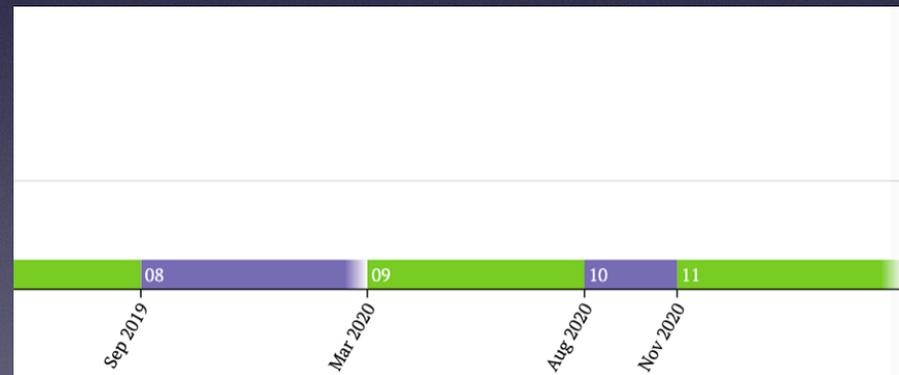
- Added Name Collision Considerations section, references:

`draft-ietf-lisp-rfc6833bis`

# Draft Status



started



now

# Progress Slow

## Appendix B. Document Change Log

- B.1. Changes to draft-farinacci-lisp-name-encoding-11
  - o Submitted November 2020.
  - o Made changes to reflect working group comments.
  - o Update references and document expiry timer.

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- B.2. Changes to draft-farinacci-lisp-name-encoding-10
  - o Submitted August 2020.
  - o Update references and document expiry timer.
- B.3. Changes to draft-farinacci-lisp-name-encoding-09
  - o Submitted March 2020.
  - o Update references and document expiry timer.
- B.4. Changes to draft-farinacci-lisp-name-encoding-08
  - o Submitted September 2019.
  - o Update references and document expiry timer.
- B.5. Changes to draft-farinacci-lisp-name-encoding-07
  - o Submitted March 2019.
  - o Update referenes and document expiry timer.
- B.6. Changes to draft-farinacci-lisp-name-encoding-06
  - o Submitted September 2018.
  - o Update document expiry timer.
- B.7. Changes to draft-farinacci-lisp-name-encoding-05
  - o Submitted March 2018.
  - o Update document expiry timer.
- B.8. Changes to draft-farinacci-lisp-name-encoding-04
  - o Submitted September 2017.
  - o Update document expiry timer.
- B.9. Changes to draft-farinacci-lisp-name-encoding-03
  - o Submitted March 2017.
  - o Update document expiry timer.

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- B.10. Changes to draft-farinacci-lisp-name-encoding-02
  - o Submitted October 2016.
  - o Add a comment that the distinguished-name encoding is restricted to ASCII character encodings only.
- B.11. Changes to draft-farinacci-lisp-name-encoding-01
  - o Submitted October 2016.
  - o Update document timer.
- B.12. Changes to draft-farinacci-lisp-name-encoding-00
  - o Initial draft submitted April 2016.

why?

there is utility

there has been some support

there has been commentary

there has been no strong objections

# How to Move Forward

Third attempt to request WG to accept Draft

Questions/Reactions/Tomatoes?

