

# LISP Update

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# Agenda

- Spec Status
- Implementation Status
- Experiment Status
  - Some lessons learned
- Pilot Status
- What's Next

# Spec Status

- **Current Specs**

draft-farinacci-lisp-05.txt

06

draft-fuller-lisp-alt-02.txt

draft-lewis-lisp-interworking-00.txt

- **Inactive Specs**

draft-meyer-lisp-cons-03.txt

03

draft-lear-lisp-nerd-02.txt

draft-curran-lisp-emacs-00.txt

- **New Specs**

draft-brim-lisp-analysis-00.txt

draft-mathy-lisp-dht-00.txt

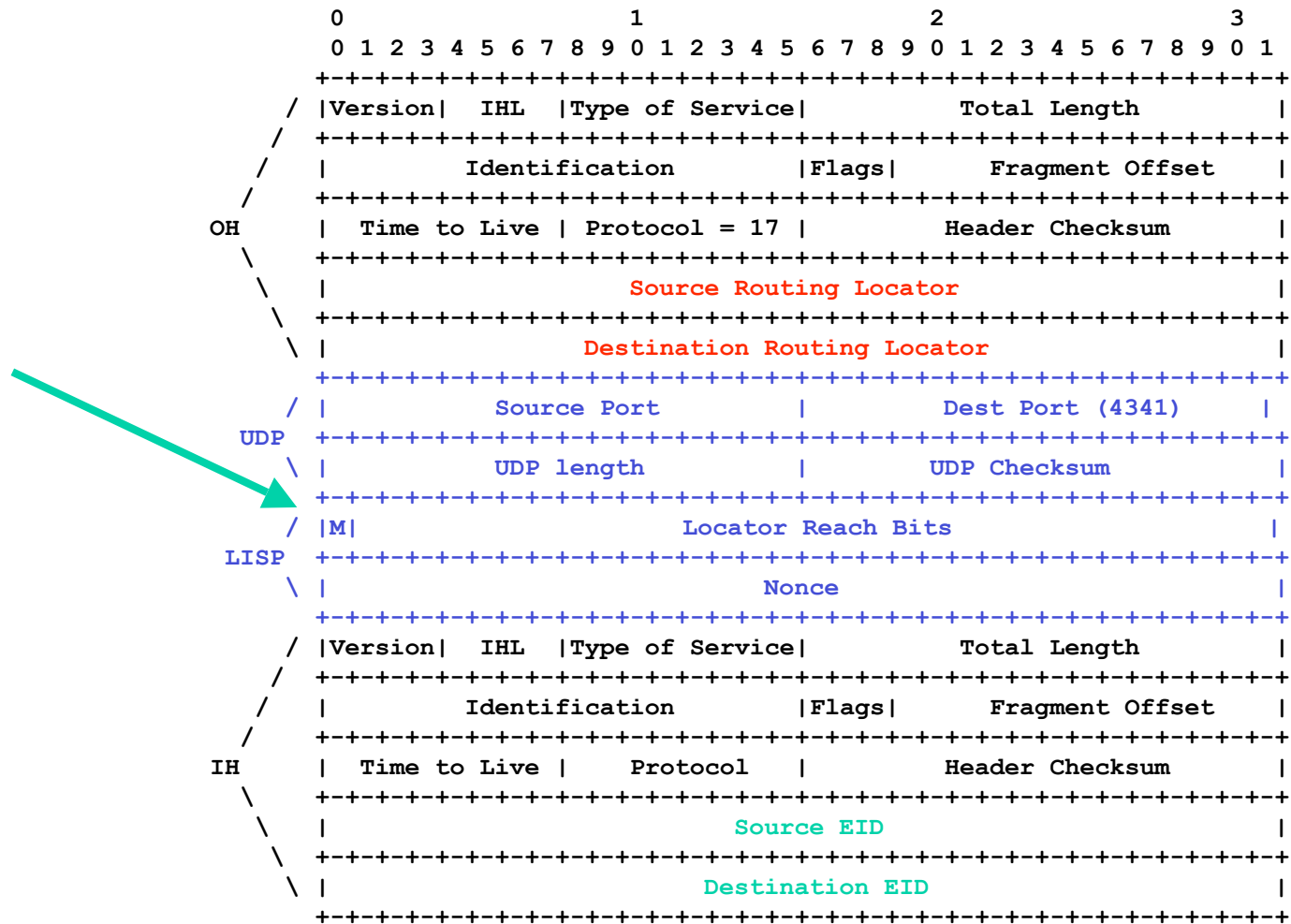
draft-iannone-openlisp-implementation-00.txt

draft-meyer-lisp-eid-block-00.txt

draft-farinacci-lisp-06.txt

- Add more verbiage on MTU issues
  - Fragment before Encapsulate
    - When data + encap headers exceed architectural constant
- Add "More" bit to loc-reach-bits so there can be more than 32 RLOCs

# draft-farinacci-lisp-06.txt



draft-lear-lisp-nerd-03.txt

- Use domain name for database name
  - Was URN
- Clarify use of X.509 subject
- Open questions moved to section 9

# Spec Status

- Plans to:
  - Update LISP-ALT spec
  - Update Interworking spec
  - Write LISP-Multicast spec
  - Making final updates of LISP-NERD spec

# Implementation Status

- Added features to prototype
  - Send Data Probe and Map-Request on LAT
  - Low OpEx xTR (no BGP)
  - Non-LISP site detection via LAT
  - Use IGP and admin-down indicators to detect other xTRs down in site
  - Support for
    - `draft-lewis-lisp-interworking-00.txt`



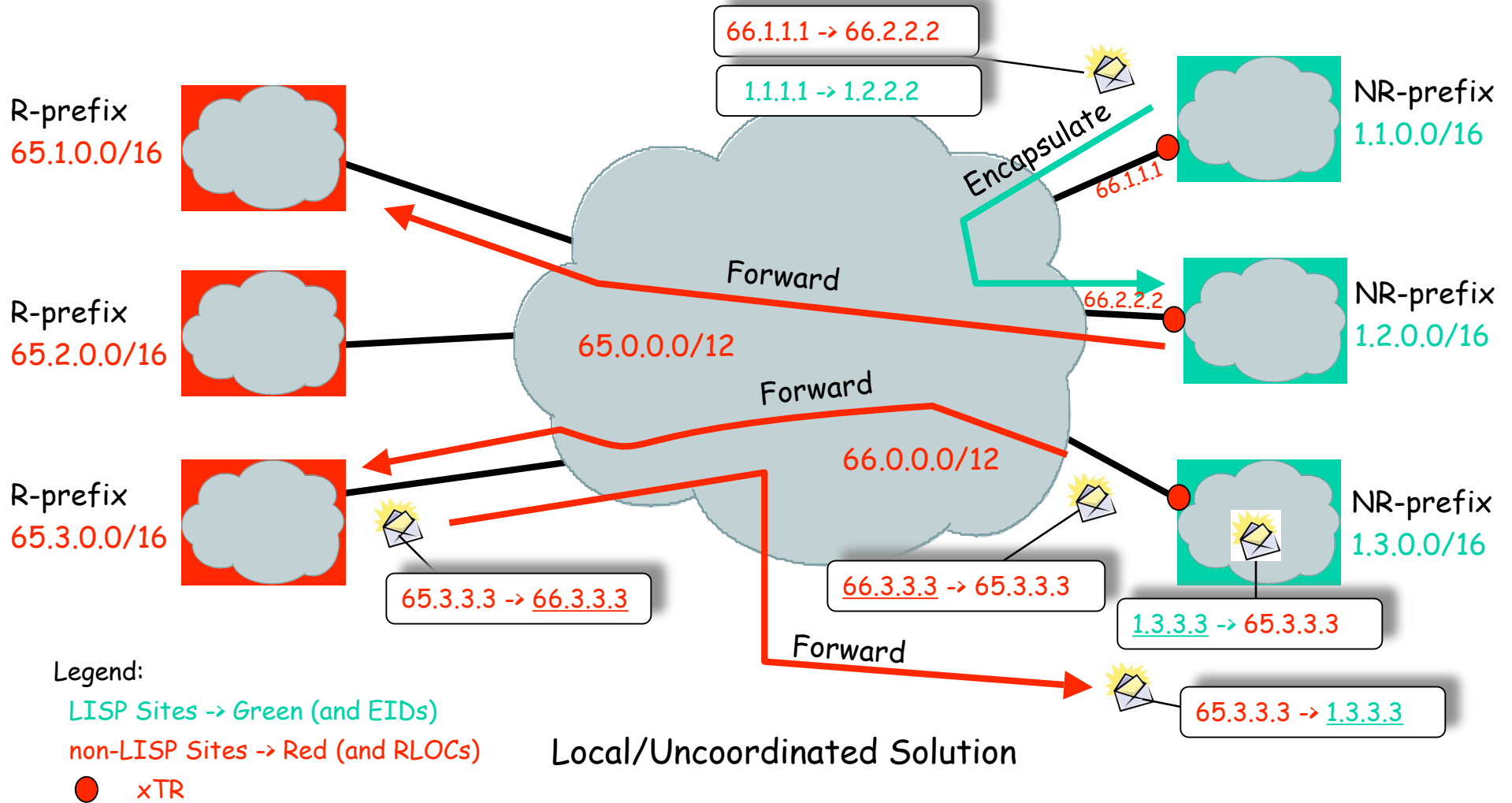
# Experiment Status

- LISP-ALT router that gets Map-Request shouldn't reply for it's site
- Loc-reach-bits of 0 can source quench DOSing host at source site
- Found a mechanism to update mapping changes
- Need negative Map-Reply from LISP-ALT routers
- Need ITR to replicate "above and below" for corner cases - only needed if Data Probing

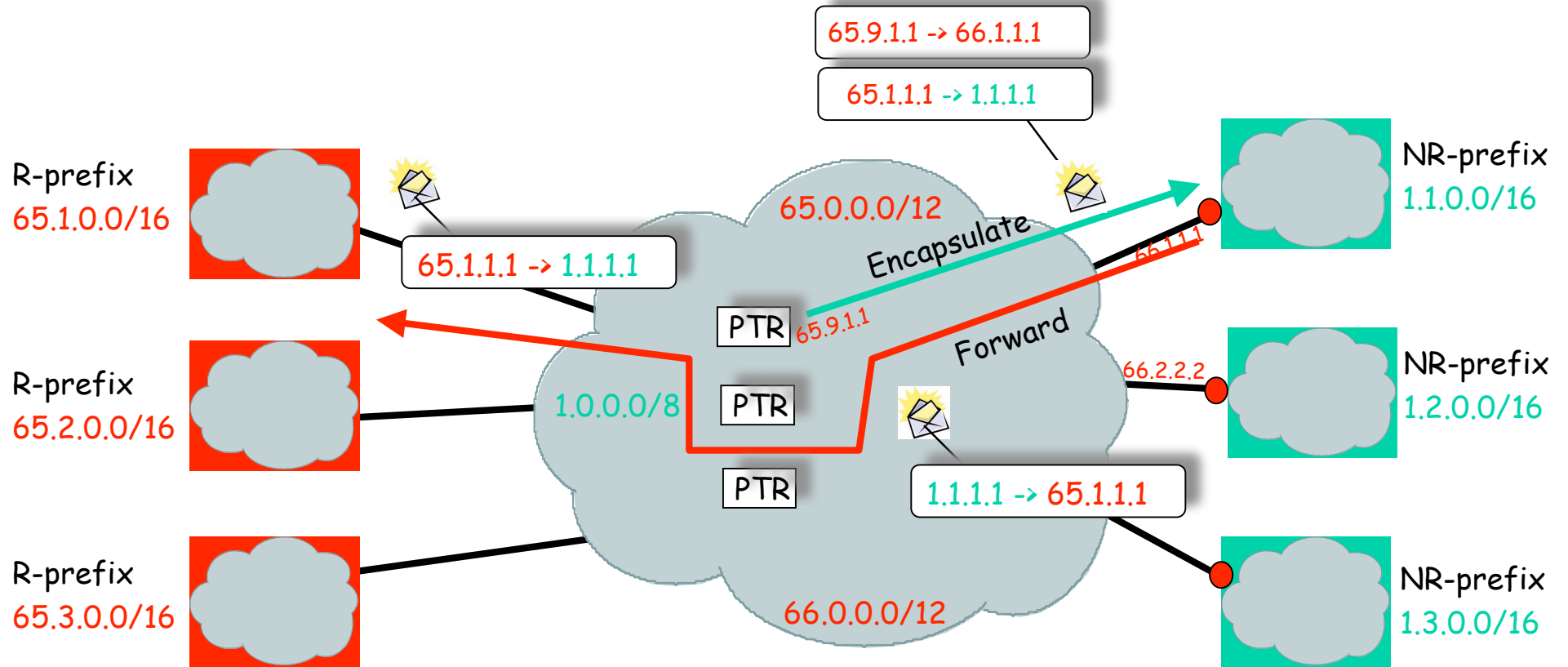
# Experiment Status

- Can implement shortest path to sub EID-prefix by changing priorities
  - Locators included in all Map-Replies
  - Modify priority based on source of Map-Request

# Interworking Experiment



# Interworking Experiment



## Infrastructure Solution

Legend:

LISP Sites -> Green (and EIDs)  
non-LISP Sites -> Red (and RLOCs)

● xTR

Slide 12

# Pilot Status

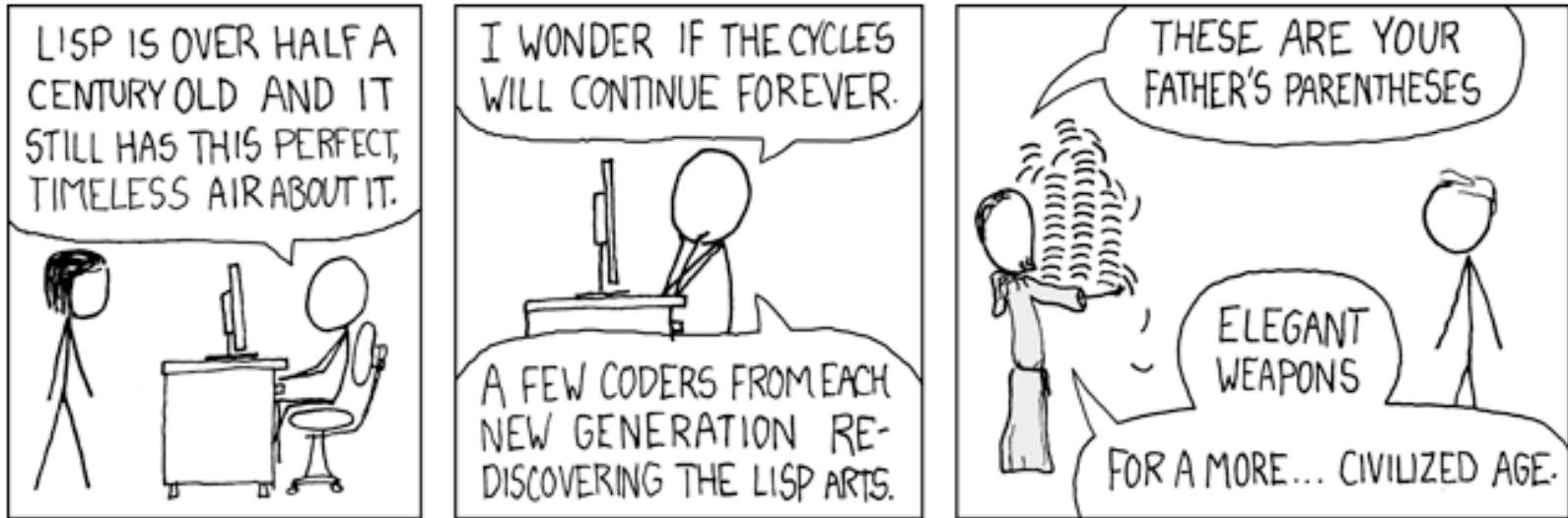
- We have started shipping some units
  - To people who have committed time to the project
- Planning to build-out a dual-stack LISP-ALT infrastructure
- Hope to test multiple implementations
- Will report on Pilot at next IETF



# What's Next

- Run multiple multi-AF applications on new pilot testbed
- Consider LISP-DHT
- Release OpenLISP
- Interoperability testing prototype with OpenLISP
- Implement:
  - `draft-farinacci-lisp-multicast-00.txt`
- We have requested a LISP BOF

## LISP - the language



## LISP - the protocol

(IP (UDP (LISP (IP (UDP (LISP (☎))))))))

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