



# What is LISP?

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# What is LISP?

- Not just a programming language
- LISP (the language) is so cool we bring it to networking
- :-)

# Problem Statement

- Operationally
  - Improve site multihoming
  - Improve ISP Traffic Engineering
  - Reduce site renumbering costs
  - Reduce size of core routing tables
  - PI for all?
  - Some form of mobility?
- Architecturally
  - Create two namespaces: EIDs and Locators

# What Provoked This?

- Stimulated from problem statement effort at the Amsterdam IAB Routing Workshop on October 18/19 2006
  - <http://tools.ietf.org/html/draft-iab-raws-report-01>
- More info on problem statement:
  - <http://www.vaf.net/~vaf/apricot-plenary.pdf>

# We Iterate Again

- IPv6 gives us longer addresses
- IPv4 gives us shorter addresses
- But Routing Architecture is the same!
- IETF
  - Short-term solution (possibly: LISP)
- IRTF RRG
  - Long-term routing architecture change

# What is LISP?

- Locator/ID Separation Protocol
- Network-based solution:
  - Alternative solution to host-based Shim6 and HIP
  - Incrementally deployable (non-starter if not)
- Formal definition for separating an ID and a Locator
  - EIDs are in inner headers
  - Locators are in outer headers
- Procedures for obtaining EID-to-Locator mappings
- Procedures for determining Locator Reachability

# Experiment through Implementation

- Prototype implementation starting unit test by
  - Dave Meyer and Vince Fuller
- Fall '07 we can start pilot deployments

# What we want from you

- **Review** `draft-farinacci-lisp-00.txt`
  - `draft-farinacci-lisp-01.txt` **on its way out**
- **Give us requirements**
- **Keep us practical**
- **Thanks**