

LISP Mobile-Node

`draft-meyer-lisp-mn-16`

*LISP Working Group - Chicago IETF
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Spec Highlights

- First opportunity for a LISP xTR in a end-node
- Describes how an EID is assigned on a loopback interface and RLOCs to the radio interfaces
- Describes when a LISP-MN moves to a LISP site how the RLOCs are EIDs of the site's LISP network
- Describes how LISP-MN talks to:
 - Another LISP-MN
 - Another EID in a LISP site
 - A non-EID in a non-LISP site

LISP-MN in a Nutshell



RLOC:att

RLOC:ietf-wifi



This phone can
run server apps!



Connections stay up!

DNS-name:dino.com, EID:2001:0005::dfdf

LISP-MN Features

- Allows mobile-node to be multi-homed
 - Can have IPv4/IPv6 EIDs over IPv4 RLOCs
 - Can run IPv4/IPv6 multicast over IPv4 unicast RLOCs
 - Allows network-layer to tell remote encapsulators which radio to use
- Allows mobile-node to run server apps since DNS name and EID do not change during movement
- Transport session survivability

New LISP Features

- LISP-MN was included in new LISP features that came after it:
 - NAT-traversal
 - LISP-TE
 - Signal-Free Multicast

LISP-MN Implementation

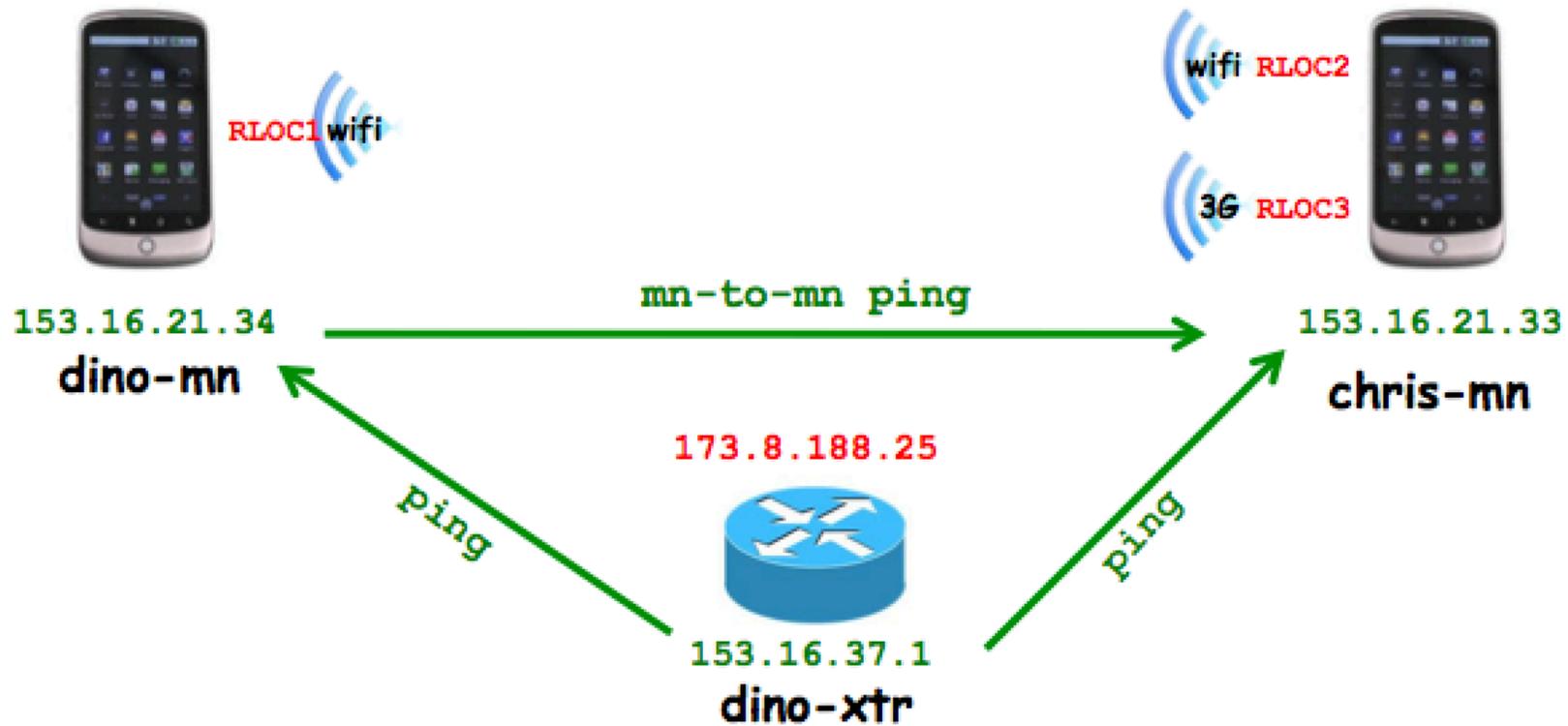
- Long standing implementation in **lispmob**

`https://github.com/LISPmob/lispmob`

- Was presented to **Google** (Vint Cerf) in 2011 on Android Phone
- Demo'ed at **ciscoLive** 2012 (encap to data center LISP router)
- LISP-MN now in **OOR**

`https://github.com/OpenOverlayRouter/oor`

LISP-MN Demo



Overall LISP Architecture

- Describes EID mobility in two forms:

- Co-located EID & RLOC

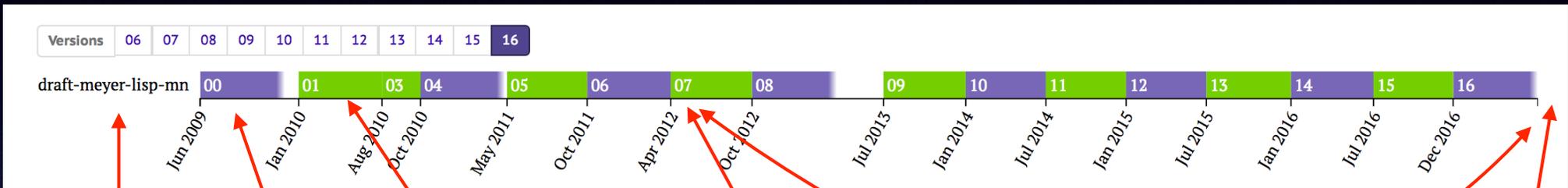
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- Separated EID & RLOC

`draft-portoles-eid-mobility-01`

- Referenced in RFC 6830bis and RFC 6833bis

Document History



LISP WG formed
Apr 2009

LISP-MN initial draft
Jun 2009

Edits for
“Handling Unidirectional Traffic”,
“Mobile Node's RLOC is an EID”

Edits for
“LISP Mobile Nodes
behind NAT Devices”

No changes
for **5 years!**

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Request for Working Group Document

