

# IPv4 Network Mobility (NEMO) Protocol

(ex-IPv4 NEMO Basic Support)

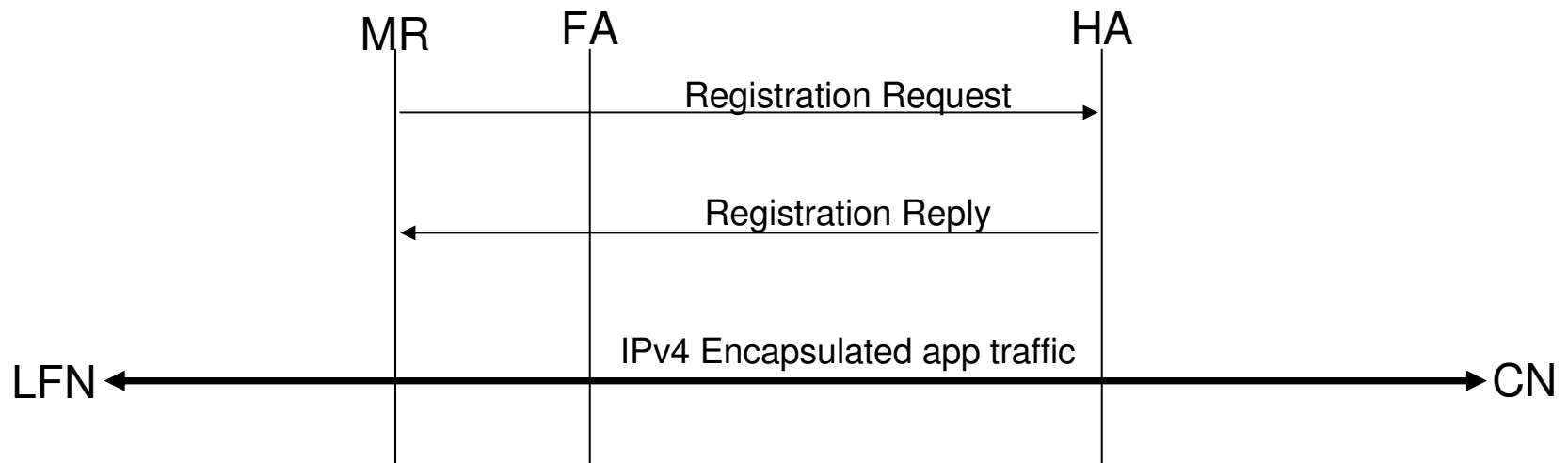
draft-ietf-mip4-nemo-v4-base-00.txt

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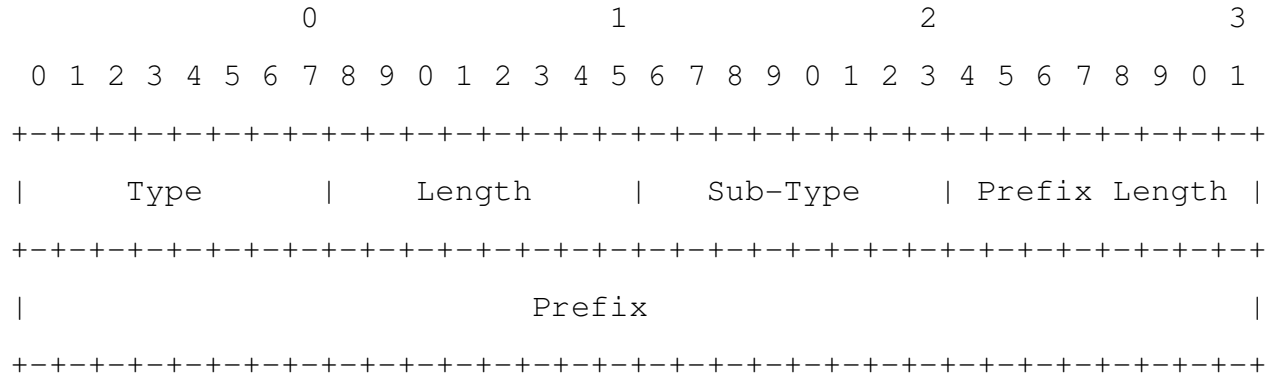
# Protocol Overview

- Operation similar to RFC 3963 (Network Mobility in IPv6).
- Two new extensions to RRQ/RRP defined
  - Used to register IPv4 Mobile Network Prefixes with the Home Agent.
- Prefix Table
- IANA numbers

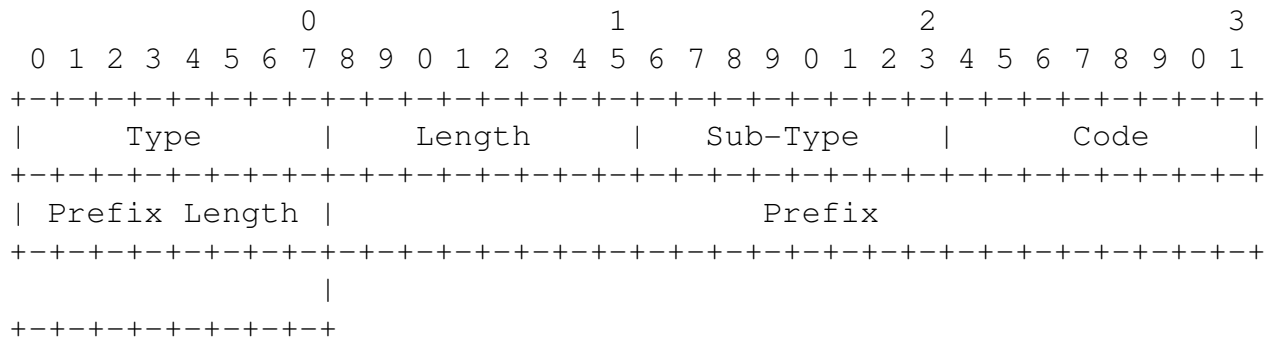


# Message Formats

- RegReq: Mobile Network Request Extension



- RegRep: Mobile Network Acknowledgement Extension



# What happened since San Diego 1/4

FA CoA mode not explained clearly

Removed most FA CoA talk.  
Removed MR-FA-CoA tunnel optimization proposal. Still one issue.

# What happened since San Diego 2/4

Routing Protocol over MR-HA tunnel too briefly

Suggested to describe it better in its own section.

# What happened since San Diego 3/4

MNP “owned” or “served” by a Home Agent?  
(prefixes “served” by HA in RegRep and implicit mode)

Prefixes “for which HA sets up forwarding”

# What happened since San Diego 4/4

Clarified that in Implicit mode *static* configuration at Home Agent provides the routes (rather than “other means”).

Entr(ies) became entry. Not considering multiple HoAs per MR in the Registration Table.

New Title  
IPv4 Network Mobility (NEMO) Protocol

Proposal by WG member: describe MR does DHCP, doesn't care FA/not on link.  
Should I talk DHCP?

Subnet/prefix/mobilenetwork devices/hosts reachability/ingress

# Progressing it

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68<sup>th</sup> IETF  
Prague, Czech Republic

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For traffic to the nodes in the Mobile Network, the Home Agent MUST perform double tunneling of the packet, if the Mobile Router had registered with a Foreign Agent care-of-address. In this case, the Home Agent MUST encapsulate the packet with tunnel header (source IP address set to Home Agent and destination IP address set to Mobile Router's home address) and then encapsulate one more time with tunnel header (source IP address set to Home Agent and destination IP address set to CoA).

For optimization, the Home Agent SHOULD only encapsulate the packet with the tunnel header (source IP address set to Home Agent and destination IP address set to CoA) for Collocated CoA mode.

I propose to remove “if FA CoA” and remove “optimization”

If a dynamic routing protocol is used between the Mobile Router and the Home Agent to propagate the mobile network information into the home network, the routing updates SHOULD be protected with IPsec ESP confidentiality between the Mobile Router and Home Agent, to prevent information about home network topology from being visible to eavesdroppers.

I propose somebody writes that or otherwise I will.