

NEMO Basic Support Protocol

NEMO Design Team

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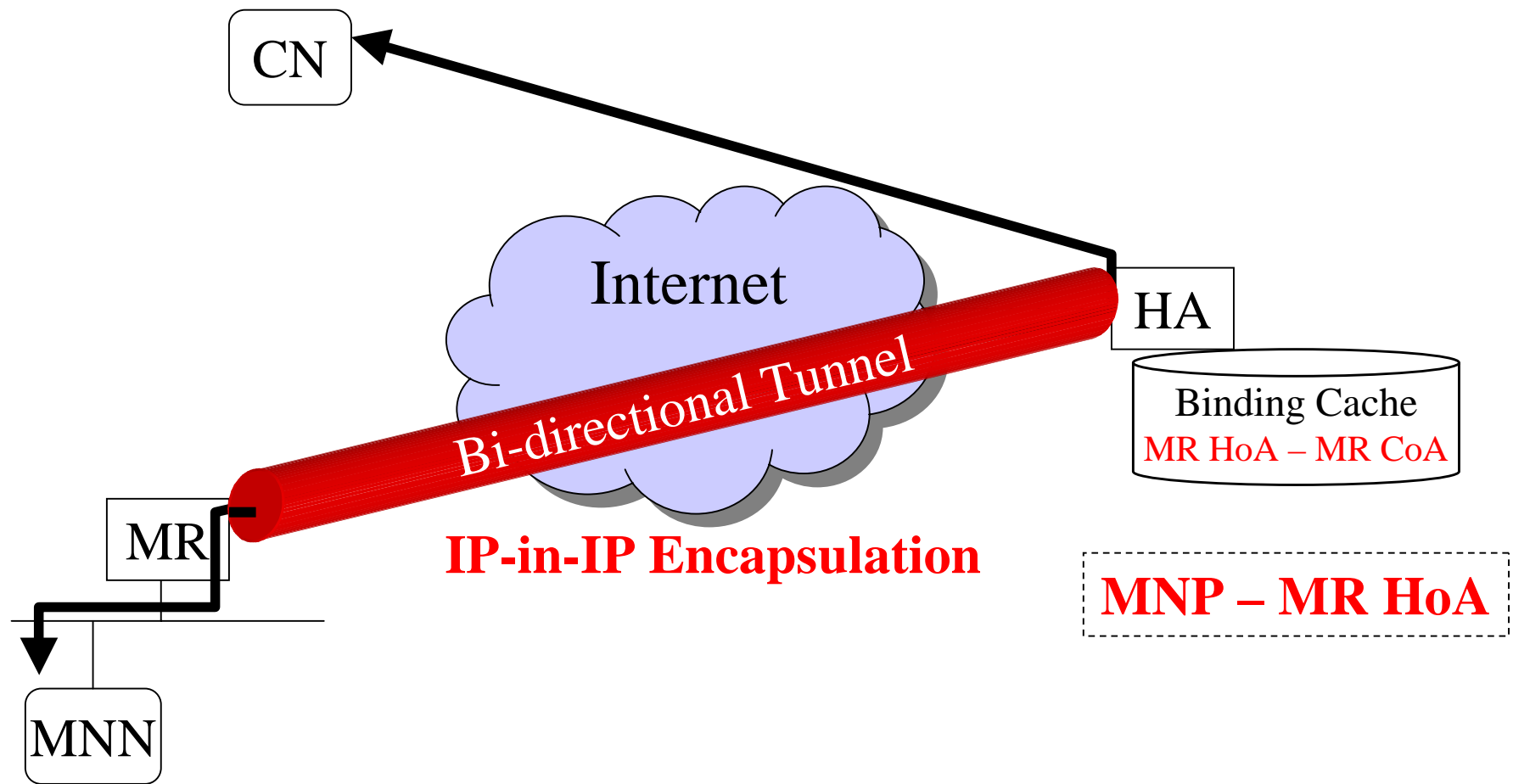
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NEMO Basic Support draft is out

- Design Team was formed after the IETF SF
- Initial draft
 - draft-ietf-nemo-basic-support-00.txt
- Issue list
 - <http://people.nokia.net/vijayd/nemo/issues.html>
- Comments should be posted to
 - nemo ML (nemo@ietf.org)

NEMO Basic Support Protocol



Explicit and Implicit Signaling

Explicit Binding Update

Mobile Network Prefix Option

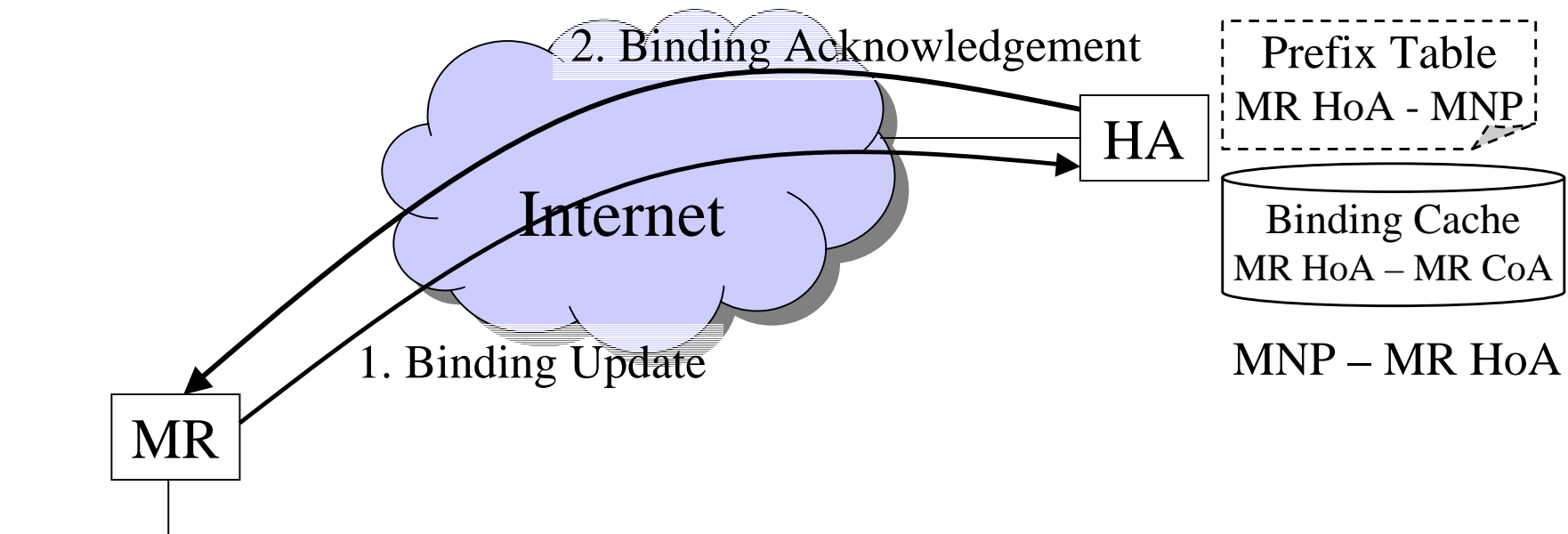
IP header	HoA	IPsec	BU (R)	MNP/len
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Mobile Network Prefix Length Option

IP header	HoA	IPsec	BU (R)	Pfx-len
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Implicit Binding Update

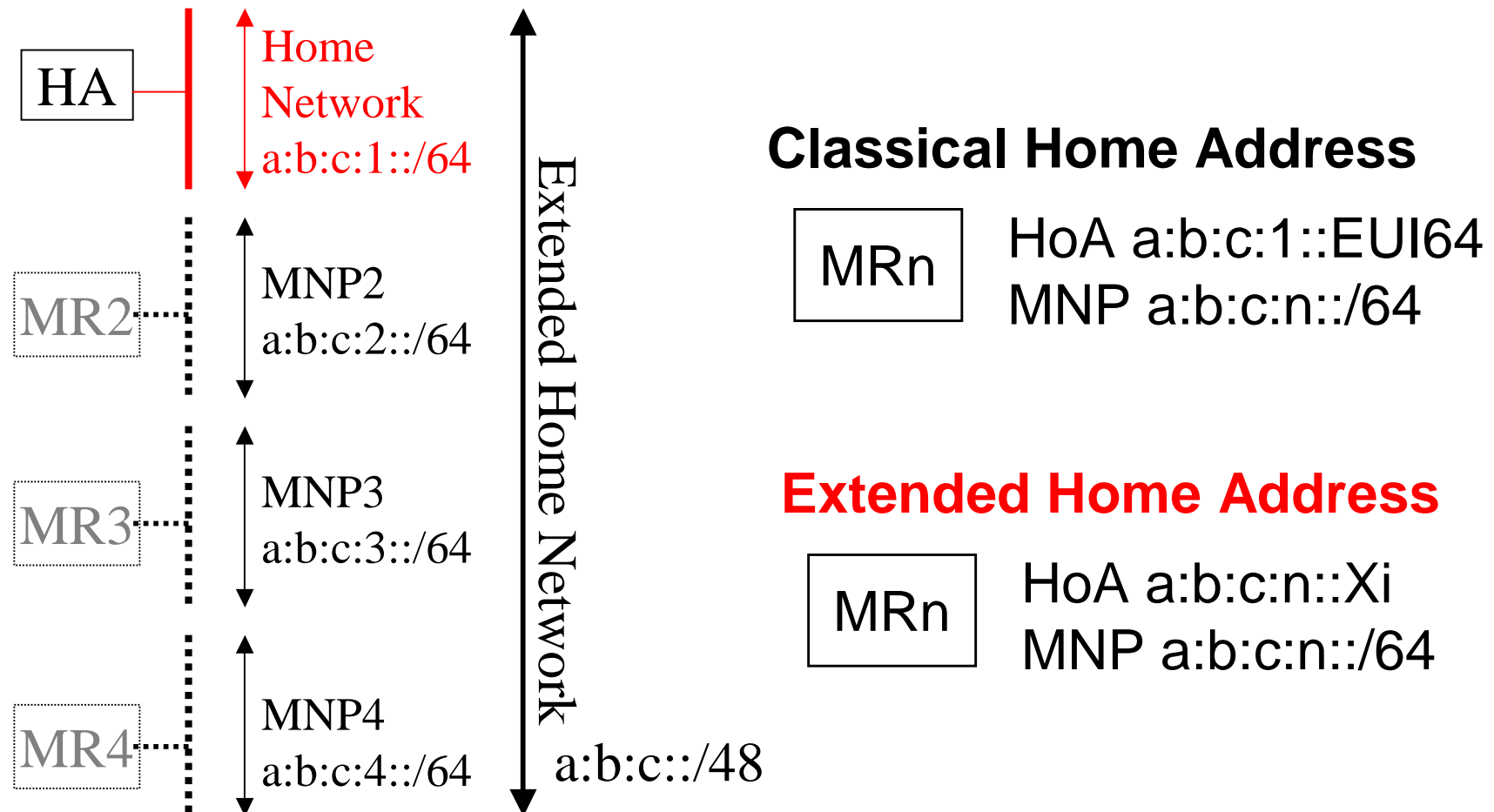
IP header	HoA	IPsec	BU (R)
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Issues Status

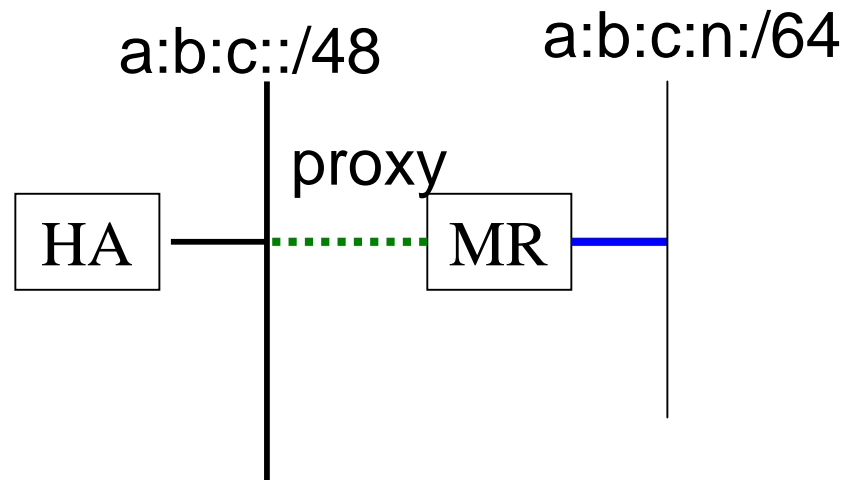
- 6 issues raised (4 accepted, 1 open, 1 rejected)
 - <http://people.nokia.net/vijayd/nemo/issues.html>
- Issue 6
 - How does HA distinguish between implicit mode and dynamic routing protocol
 - An explicit flag in the binding update
 - Resolution
 - No Flag, because it is a matter of configuration on the Home Agent
 - Do we need to check consistency of prefixes between routing protocol and BU signaling
- Issue 3
 - Should HA forward packets for the MNNs to the MR if the 'R' flag was set to 0
 - Resolution
 - No. If R flag was set to 0, the MR wants to to be considered as a mobile host. HA MUST NOT forward
 - Should HA store prefix information in the binding cache entry
 - Resolution
 - Yes. In explicit case, useful for deleting the prefix routes when the binding cache entry is deleted

Extended Home Network (issue 5)

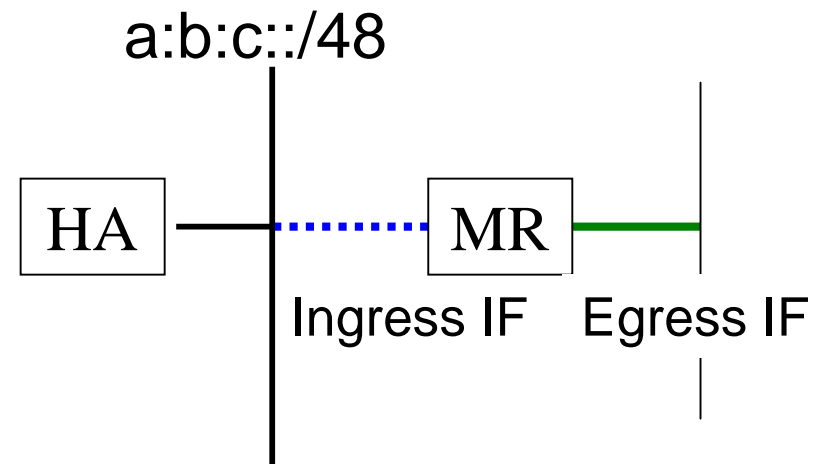


Returning extended home network

Proxy Model



Rocket Model



For example, it is expected that:

- There is a single Home Network and multiple Mobile Networks
- The Home Network and Mobile Network prefixes are tailored to allow for IPv6 Stateless Address Autoconfiguration with typical interface identifier length for the type of interface
- The prefix length of the extended Home Network is shorter than the Home Network and the Mobile Network prefixes, since it is an aggregation
- The Home Agents collectively advertise the extended Home Network aggregation only. The dichotomy of the extended Home Network is kept within the Home Agents and the Mobile Nodes, as opposed to advertised by means of routing protocols to other parties

This specification does not prevent that

- More than one Mobile Network may be connected to a Mobile Router
- A Mobile Network Prefix may be shared between Mobile Routers and registered by some of them
- An Mobile Network Prefix may be registered several times to several Home Agents using different (extended) Home Addresses for each registration

This draft is open to

- Mobile Router autoconfiguring one or several extended Home Address to carry out many registrations in parallel. It owns the full prefix so it may use any address in there for a MNLP based registration, and several of them for multihoming
- Mobile Node autoconfiguring one or several Care-of Addresses from the Mobile Network Prefix
- Mobile Host autoconfiguring one or several Home Addresses from the Home Network

Fin.

ANY QUESTIONS OR
COMMENTS?