

I E T F[®]

Proxy Mobile IPv6 extensions for Distributed Mobility Management

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Outline

- History & Status
- Overview
- Network-based DMM
- Next Steps

History & Status

- Adopted as WG document after London
- -01 version addressed all the comments received during the WG adoption call
- -02 addressed Lyle's review comments
- -03 (current) Danny's review comments

Overview

- Network based DMM approach
 - Based on Proxy Mobile IPv6 (RFC 5213)
- Mobility management pushed to the edge
 - Access router level
- Partially distributed solution
 - Centralized control plane
 - A central node (kind-of LMA) stores mobility sessions of MNs
 - Distributed data plane
 - Only the edge routers handle the data forwarding

Changes since IETF102

-02 (mainly addressing Lyle's review)

- Improved terminology
- Added text about de-registration
- Lots of clarifying text added

-03 (mainly addressing Danny's review)

- Lots of text improvements
- Some procedures (with figures) described differently to improve readability

Next steps

- Document has been improved and it is stable now
- Go WGLC?

BACKUP

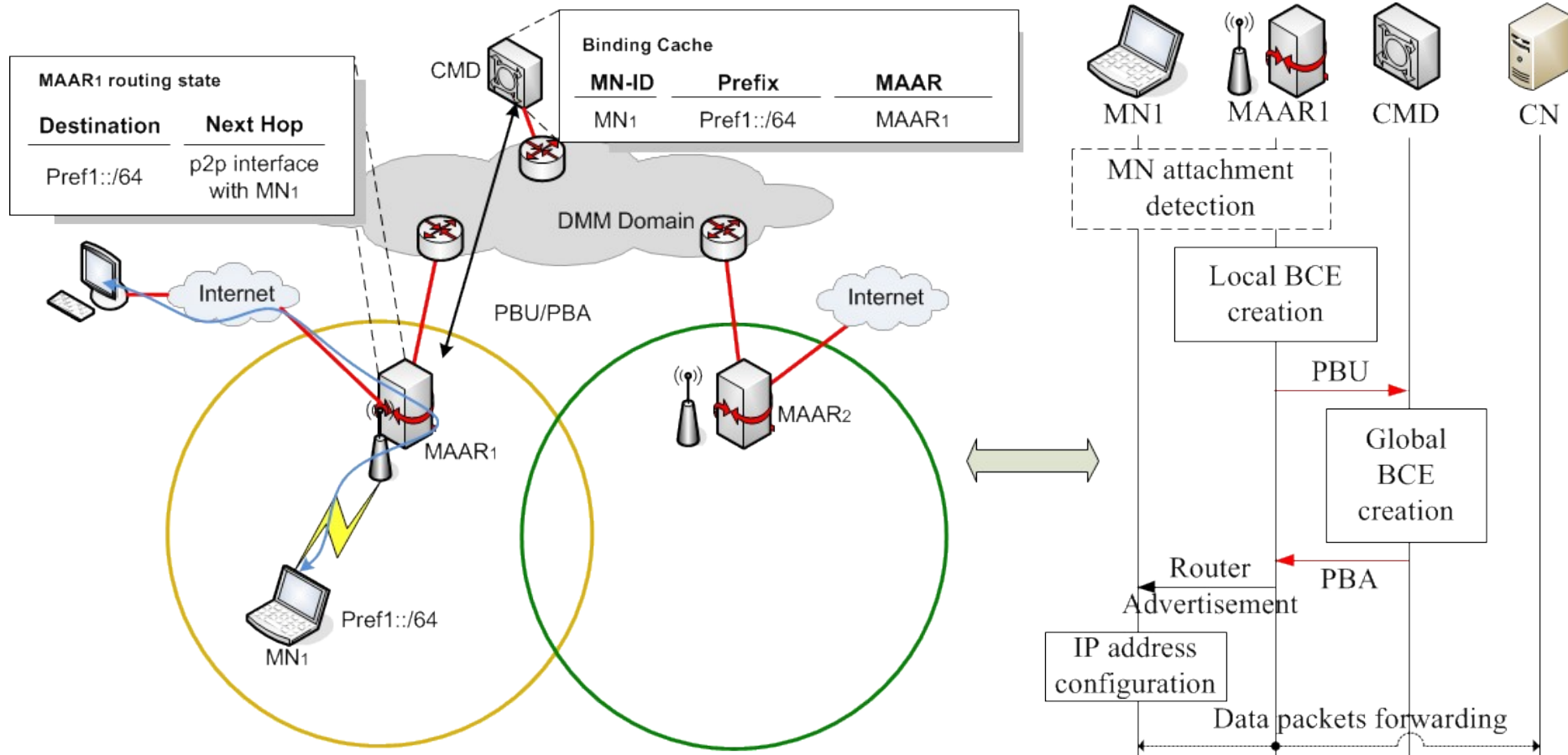
Network-based DMM: Entities

- Mobility Anchor and Access Router (MAAR)
 - One IP hop distance from the MN
 - Concentrates AR, LMA & MAG functions per-MN, per-prefix
 - Access-DPN, Home-DPA and Access-CPN
 - Delegates and anchors an IP prefix to each MN attached
 - Serving MAAR (S-MAAR)
 - Anchor MAAR (A-MAAR)
 - Forwards data packets to/from IP networks
- Central Mobility Database (CMD)
 - Central node storing the BCEs of all the MNs in the domain
 - H-CPA
 - It plays the role of the LMA for the control plane

Network-based DMM

Operations: initial registration

- The S-MAAR registers the MN at the CMD through a PBU/PBA handshake



Network-based DMM

CMD as PBU/PBA proxy

- The CMD receives a PBU from the new S-MAAR announcing the MN attachment
- The CMD sends instructions to the S-MAAR and A-MAAR(s) on how to establish the proper routing configuration

