

Distributed Mobility Management Framework

draft-chan-dmm-framework

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Basic functions

- ◆ Anchoring function: allocation of home network prefix or HoA to an MN that registers with the network;
- ◆ Mobility Router (MR) function: packets interception and forwarding to/from the MN HoA based on the internetwork location information, either to the destination or to some other network element that knows how to forward the packets to their destination;
- ◆ Internetwork Location Management (LM) function: managing and keeping track of the MN internetwork location, which includes a mapping of the HoA to the mobility anchoring point that the MN is anchored to;
- ◆ Location Update (LU) function: provisioning of MN location information to the LM function;

Framework with basic functions

Logical Functions:

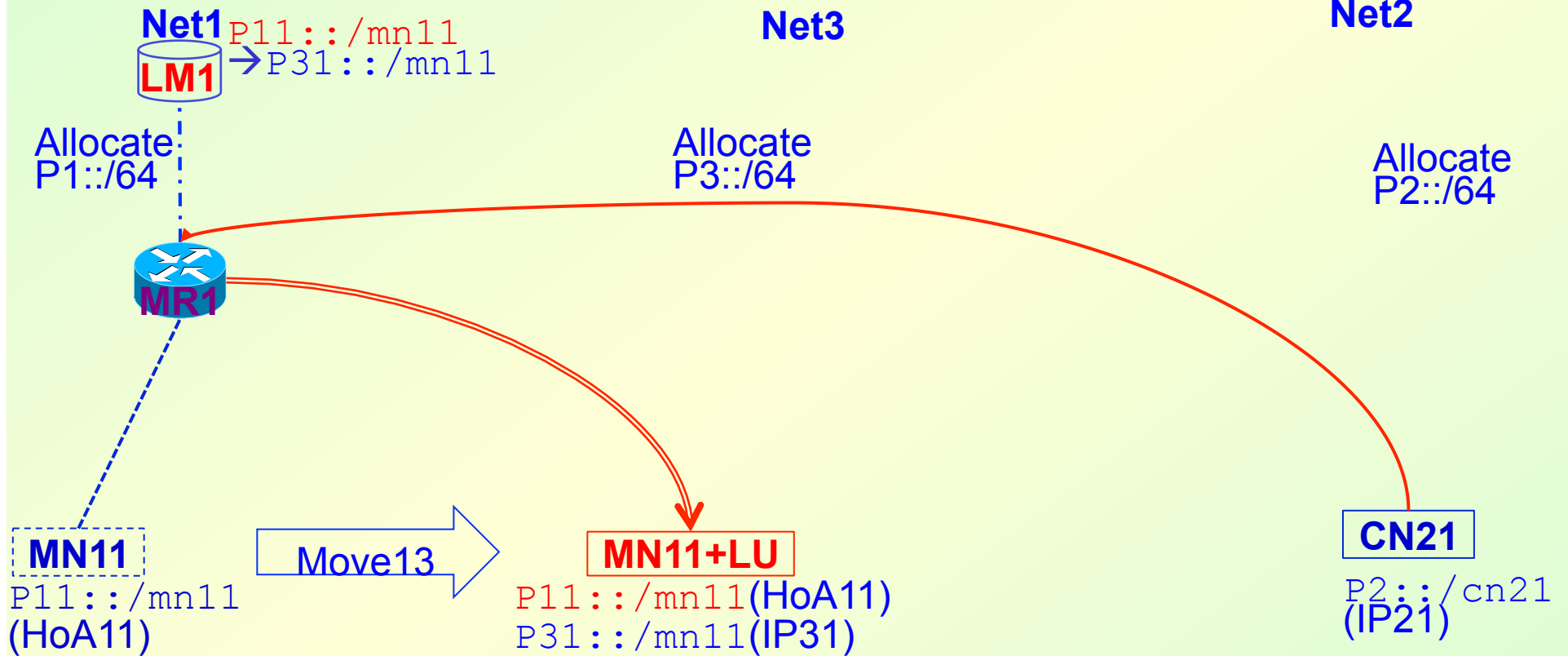
HoA allocation; LM: Location management (control plane); MR: Mobility routing (data plane); LU: location update

- ◆ Configure the logical functions and add feature one step at a time to construct:
- ◆ MIPv6, PMIPv6, hierarchy, Distributing mobility anchors example, DMM example

Existing protocol: MIPv6

Logical Functions:

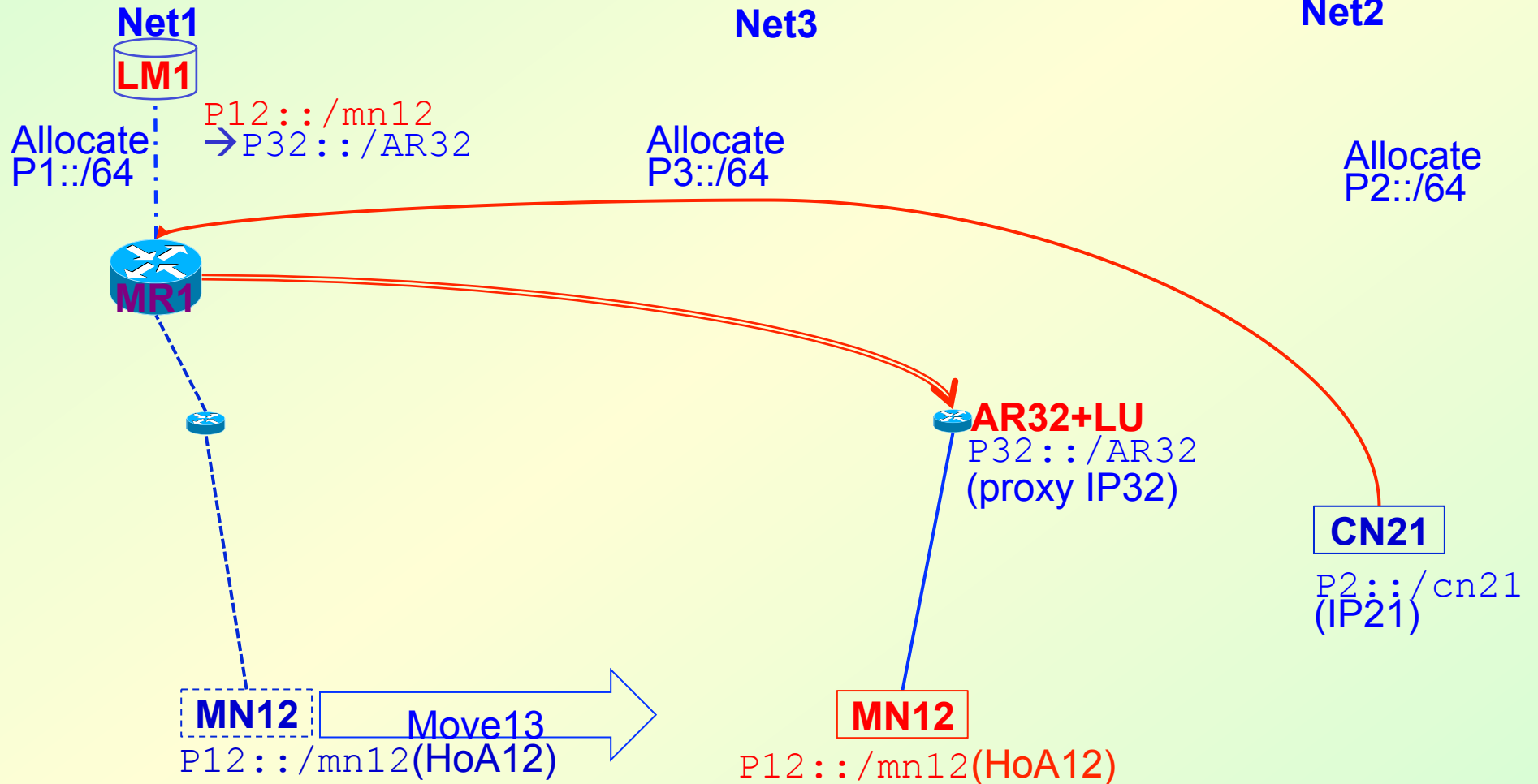
HoA allocation; LM: Location management (control plane); MR: Mobility routing (data plane); LU: location update



Existing protocol: PMIPv6

Logical Functions:

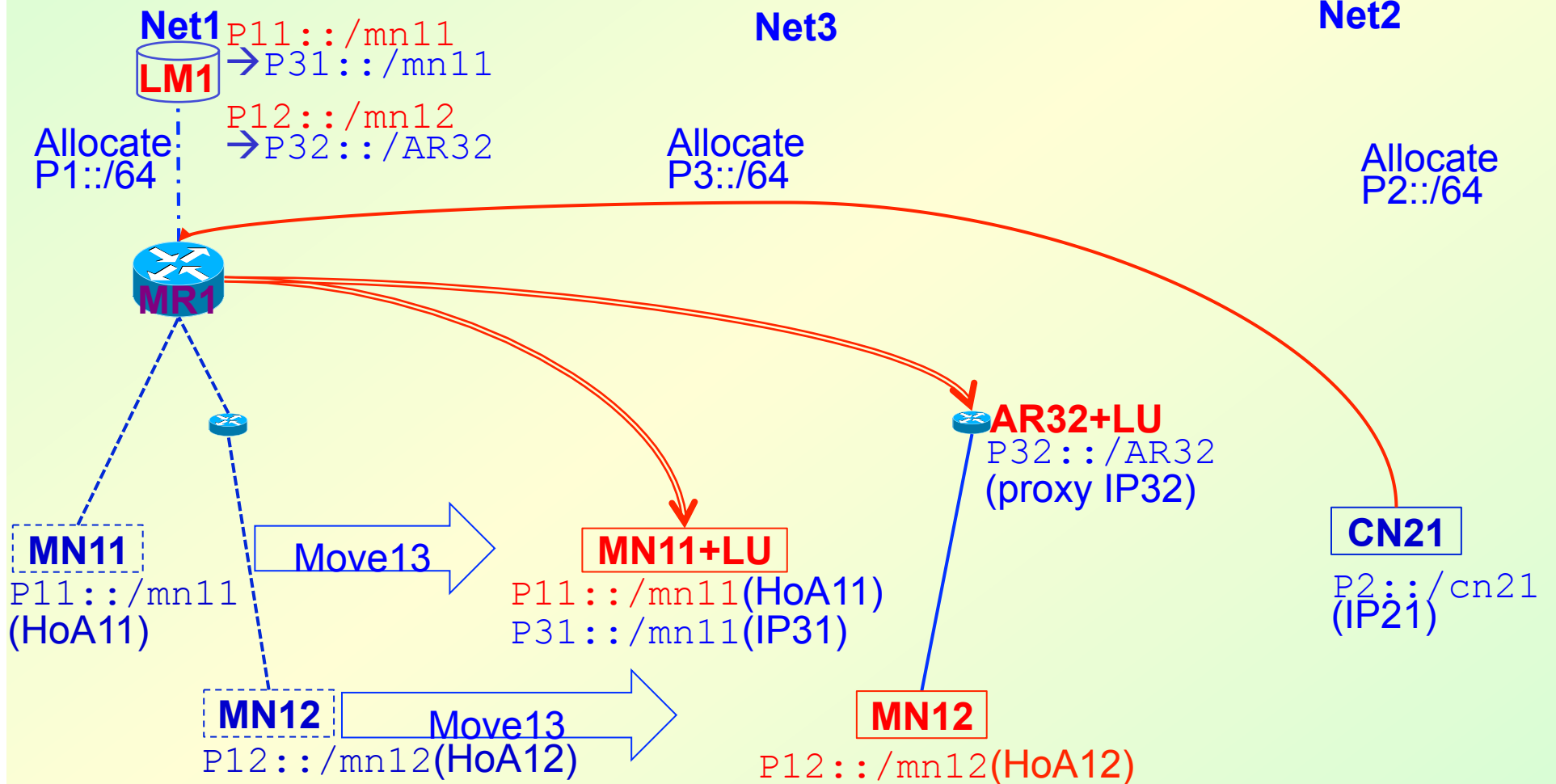
HoA allocation; LM: Location management (control plane); MR: Mobility routing (data plane); LU: location update



MIPv6/PMIPv6

Logical Functions:

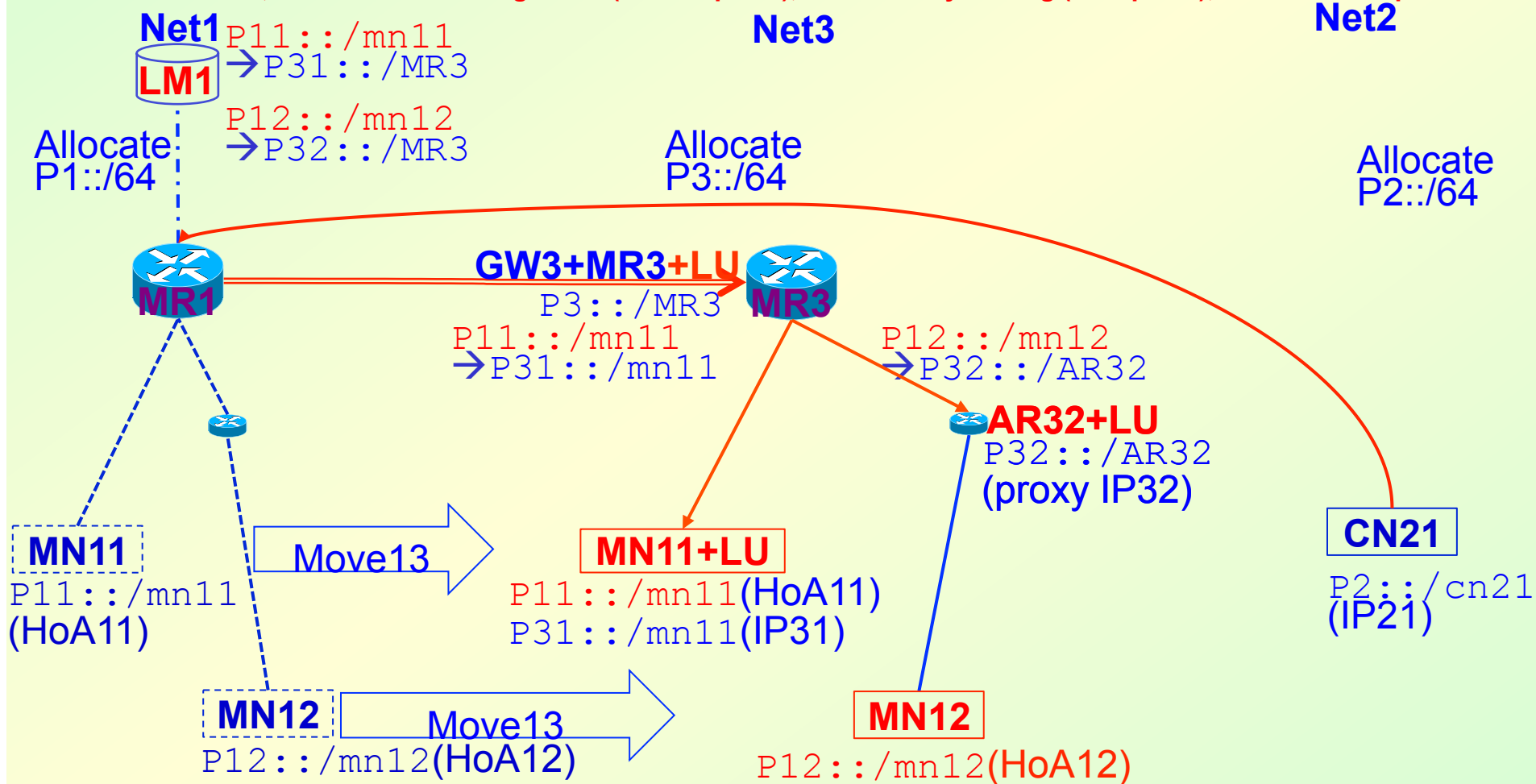
HoA allocation; LM: Location management (control plane); MR: Mobility routing (data plane); LU: location update



Hierarchical

Logical Functions:

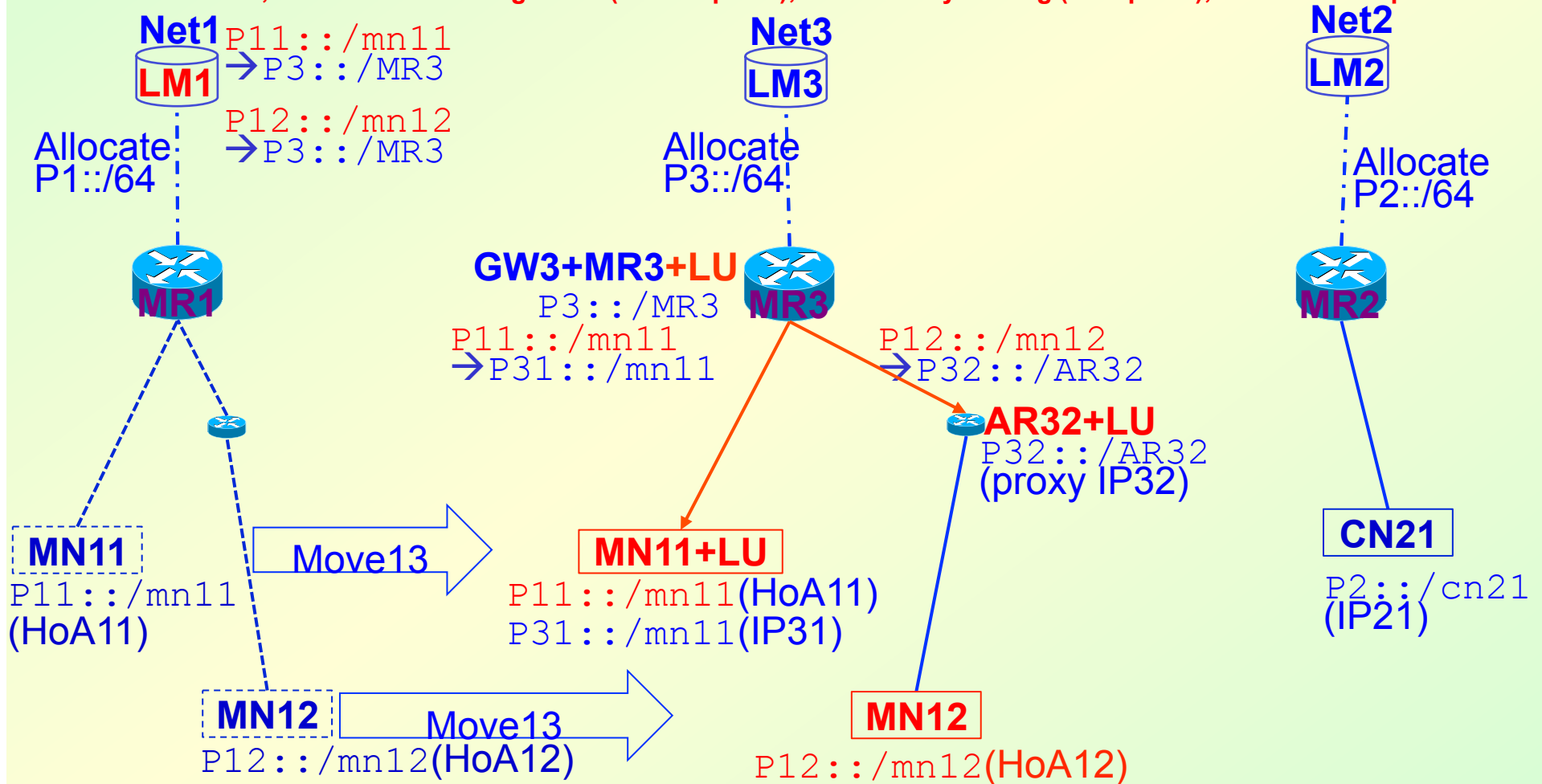
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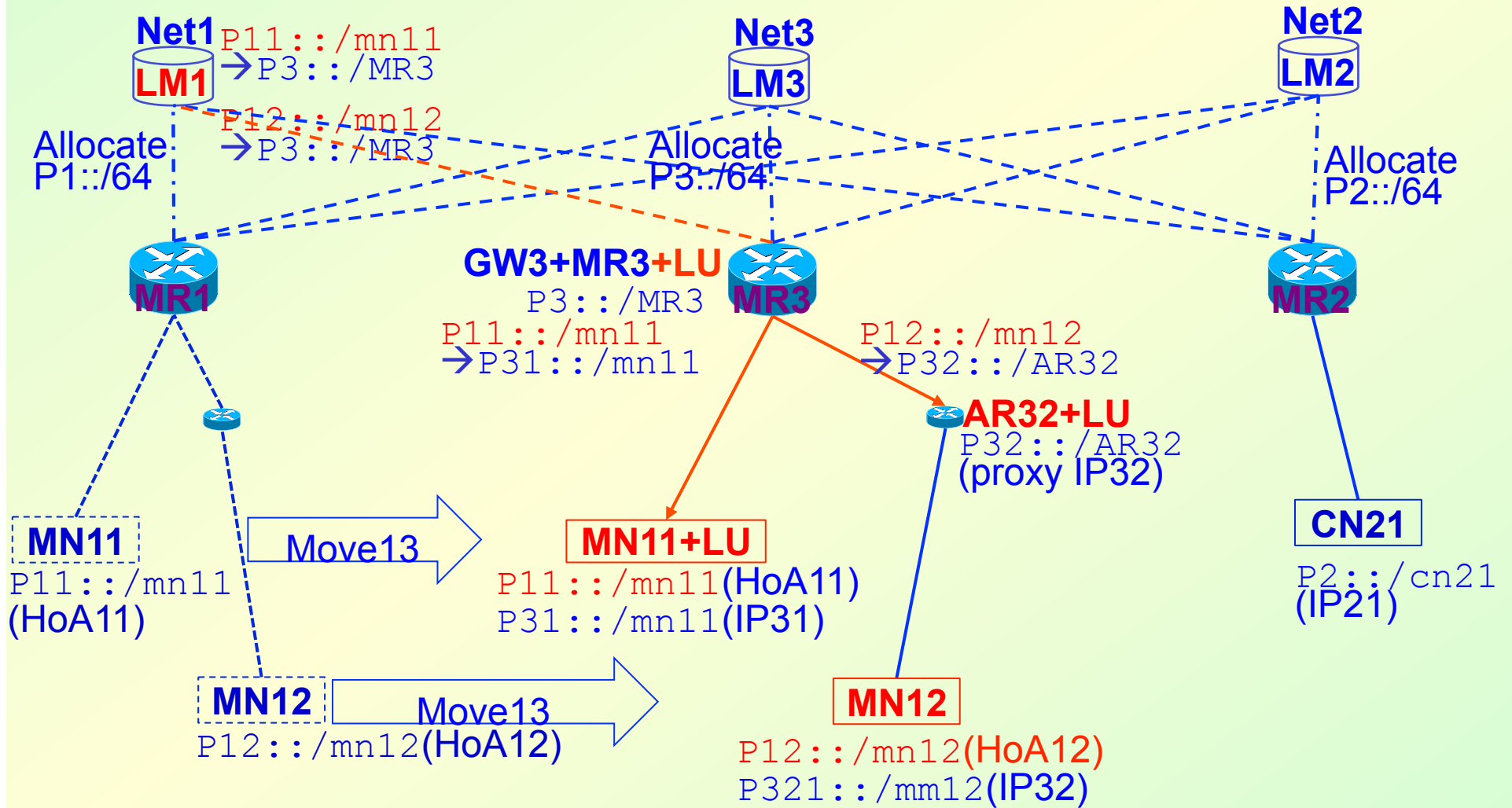
Distributing mobility anchors example

Logical Functions:

HoA allocation; LM: Location management (control plane); MR: Mobility routing (data plane); LU: location update



DMM example



New contributions are welcome

Thank you