

# Basic practices for DMM deployment

draft-seite-dmm-dma

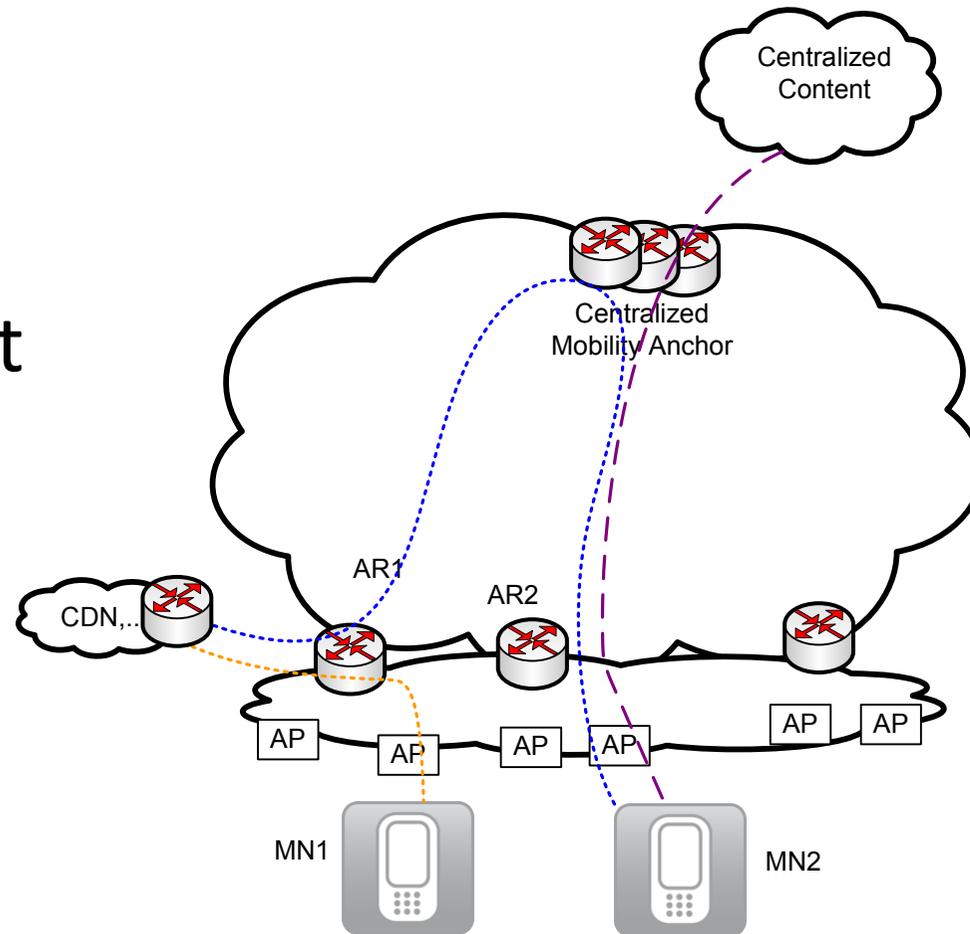
IETF85, Atlanta

DMM WG

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# Use-Case for DMM

Motivation: bring mobility support to distributed content



Guidelines:

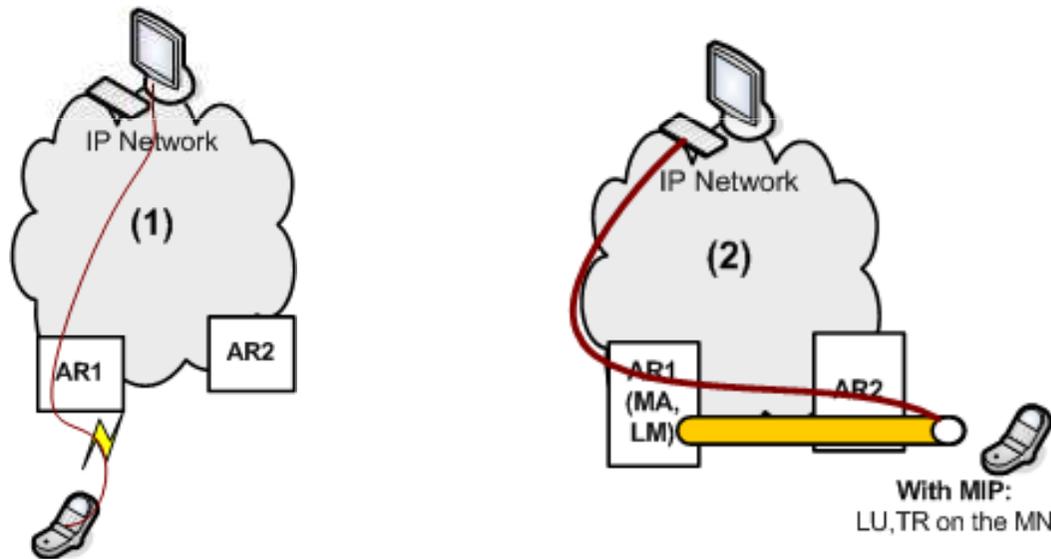
- Distribute Mobility Anchoring closer to MN/CDN
- Reuse, as much as possible, existing mobility protocols

# Functional description

- Description based on generic mobility functions
  - Location update (LU)
  - Location management (LM)
  - Mobility Anchoring (MA)
  - Termination of mobility Redirection (TR)
- Application to PMIP/MIP based design is considered

# Basic DMM implementation

- Distribute MA (e.g HA/LMA) in access routers
- Dynamic mobility management
  - MM functions come into play after handover

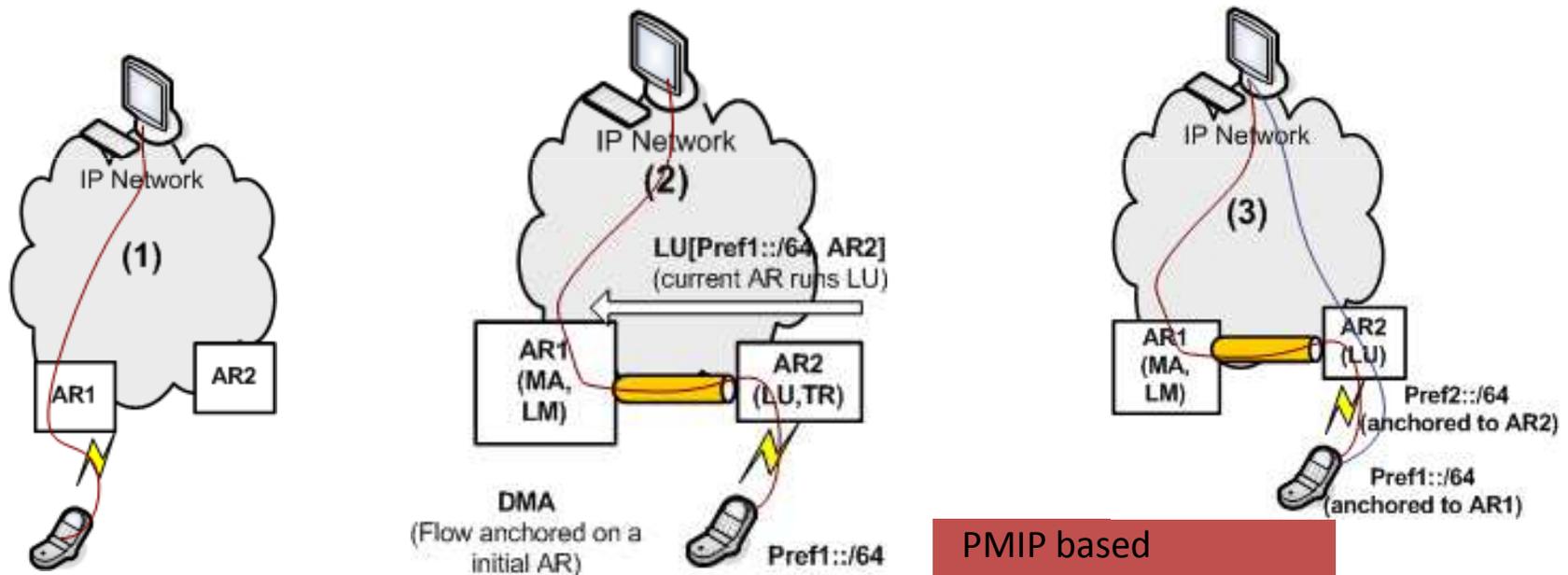


MIP based  
(HA in AR)

- No issue, a priori...

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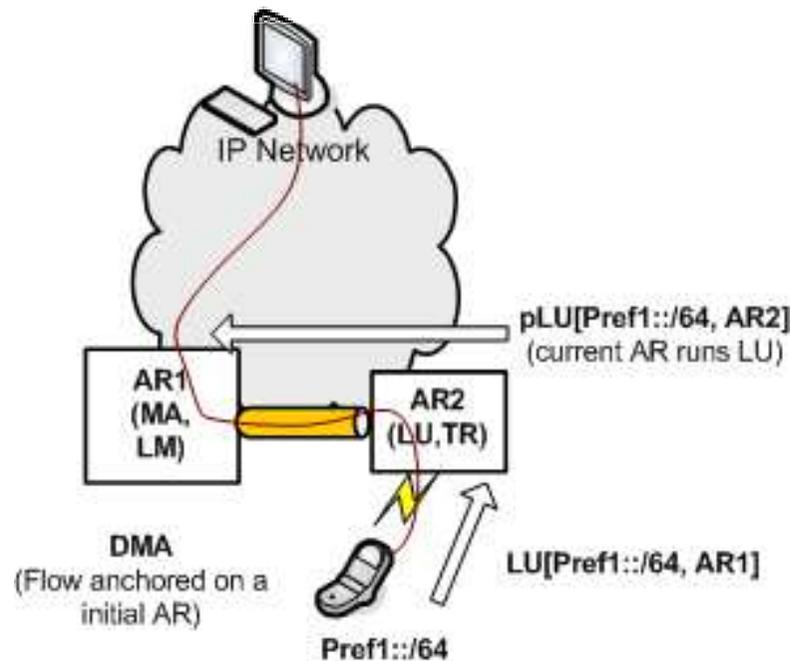


PMIP based  
(HA and MAG in ARs)

- Issue with distribution of MA with PMIP:
  - how does the LU (in AR2) know the mobility anchor for pref#1?  
i.e. how LU get location of the LM?

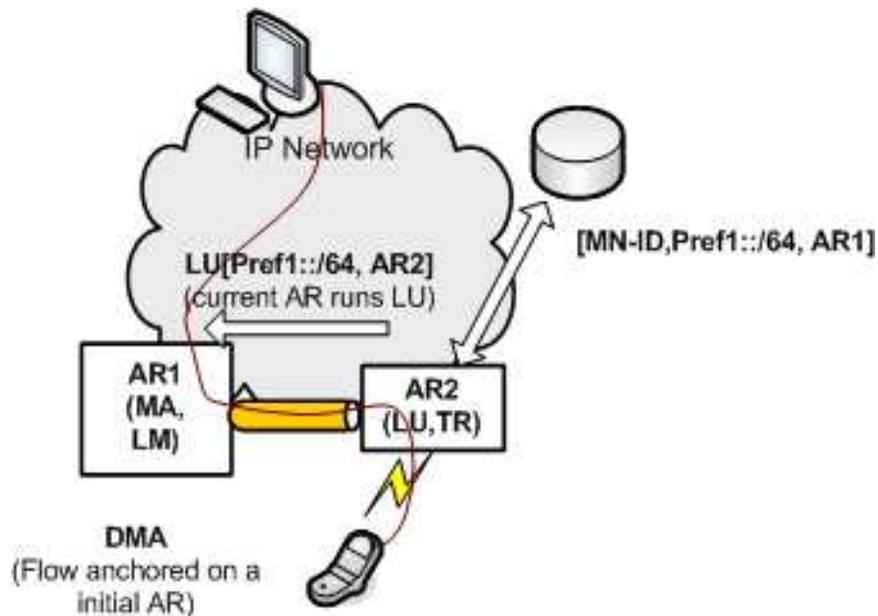
# Host based DMM

- The MN sends anchoring information to the current AR (i.e. to the LU)
  - Difference with MIP based DMM: LU and TR separation
  - new piece of protocol on the MN/AR interface, or information provided in the RS...



# Network based DMM

- The LU function retrieves per-MN anchoring information without the help of the MN
  - E.g. relying on an anchoring location database



- If using a Location DB:
  - A DMM specific entity or DMM extension to the PMIP policy store
  - AR/DB protocol
    - AR request request information
    - maintain mobility states: DB updated when AR allocates a prefix

# Conclusions

- We suggest to consider Distributed and Dynamic Mobility Anchoring as the basic practice for DMM
  - Do the gap analysis on DMA
  - For both host-based and network-based mobility management