

# Distributed Mobility Management: Current Practices and Gap Analysis

draft-ietf-dmm-best-practices-gap-analysis-00

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# Current Status

- In the last IETF meeting, there were two practice & gap analysis drafts presented.
  - draft-liu-dmm-of-deployment-00
  - draft-zuniga-dmm-gap-analysis-03
- The authors decide to merge those two drafts according to the chairs suggestion.
  - draft-ietf-dmm-best-practices-gap-analysis-00

# Progress

- Progress:
  - Initial proposal for the structure of the draft.
  - WG draft has been submitted.
  - Still need work on the content.
- This meeting:
  - Confirm with the group regarding the draft structure.
- Next step:
  - Mature the content based on the agreed structure, get some WG cycles to review it.

# Outline of the Draft

## 1. Introduction

## 2. Conventions and terminologies

## 3. Functions of existing mobility protocols

- Description of mobility functions that will be used to give practices (e.g. traffic anchoring, address allocation, location update, traffic redirection,...).

## 4. DMM practices and application to existing mobility architectures

- The section gives basics of DMM, i.e. how to distribute network based and client based protocols. Then the section covers application in existing Architectures, for examples 3GPP/SIPTO, Wi-Fi. This section apply principles from above discussing what can/could be done today without any protocol modification

## 5. Analysis:

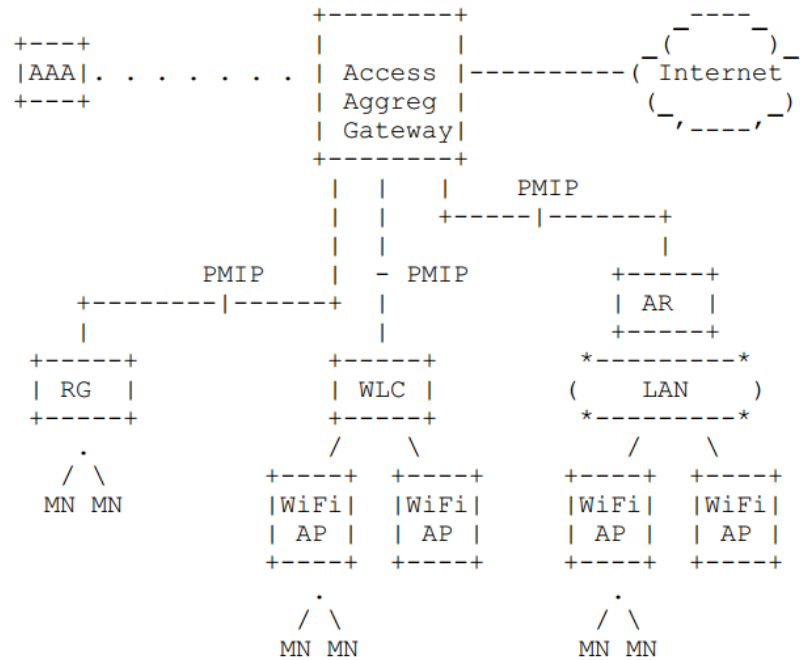
- How distributed architectures meets DMM requirements

## 6. Conclusions

# Current IP Mobility Protocol Analysis

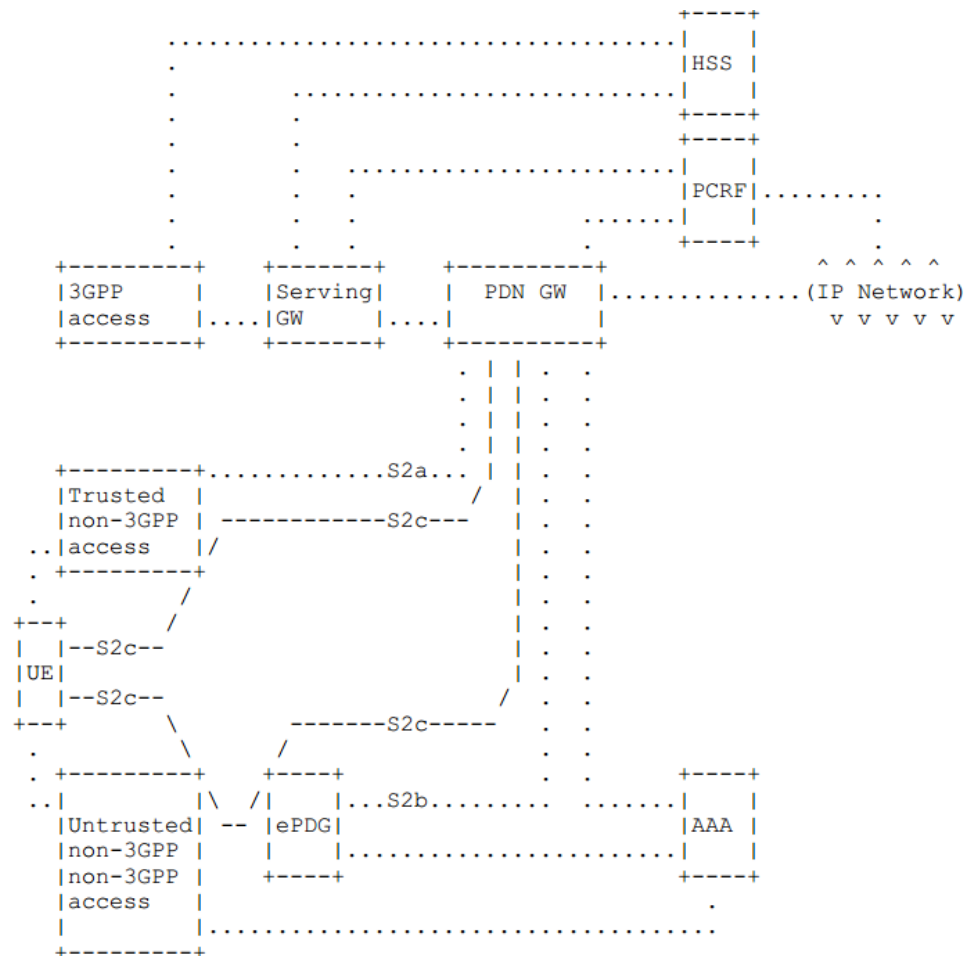
- Functional analysis of current IP mobility protocol
  - MIP
  - PMIP

# Current practice of IP mobility protocols



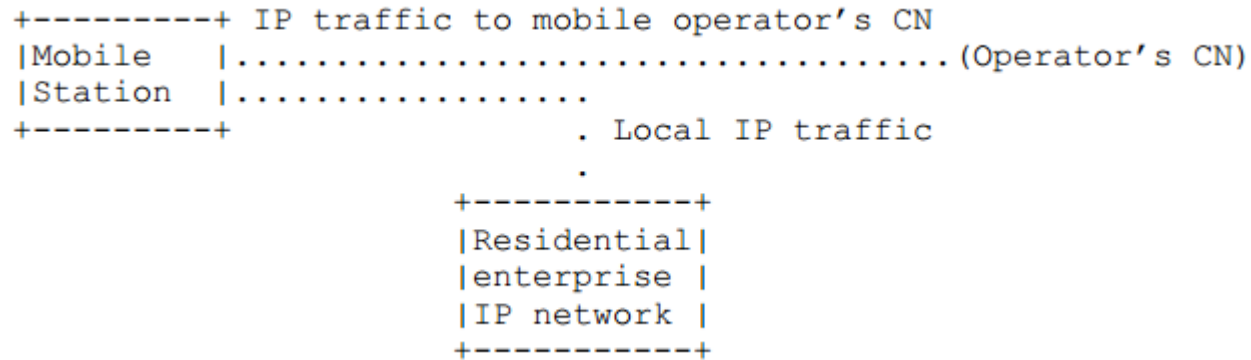
IP Mobility Deployment in Wi-Fi Network

# Current practice of IP mobility protocols (Cont.)

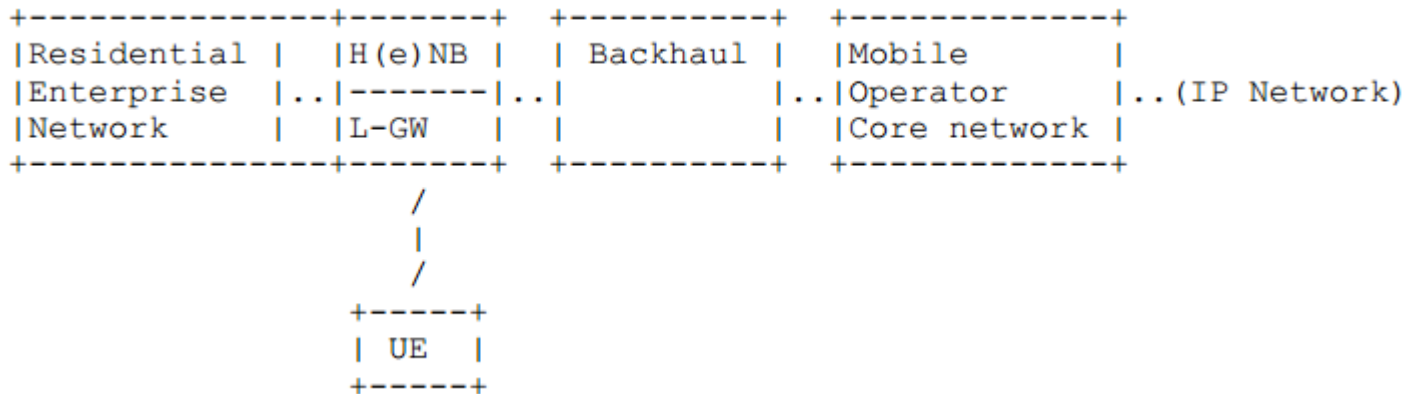


IP Mobility in 3GPP

# Current practice of IP mobility protocols (Cont.)



## LIPA Scenario



## LIPA Architecture



# Gap Analysis

	REQ1	REQ2	REQ3	REQ4	REQ5	REQ6
MIPv6/NEMO	NO	LIM	v6/v4	YES	LIM	YES
MIPv6 RO	NO	YES	v6	YES	LIM	YES
HMIPv6	NO	YES	v6	YES	LIM	YES
HA switch	NO	NO	v6	YES	YES	YES
FlowMob	NO	YES	v6/LIM v4	YES	YES	YES
SAS w/ CB	NO	YES	v6/v4	YES	YES	YES
PMIPv6	NO	LIM	v6/LIM v4	YES	LIM	YES
LR	NO	LIM	v6/LIM v4	YES	YES	YES
LMA RA	LIM	LIM	v6/LIM v4	YES	YES	YES
SAS w/ NB	NO	NO	v6/v4	YES	YES	YES
MuHo PMIPv6	NO	LIM	v6/LIM v4	YES	YES	YES

# Gap Analysis (cont)

- LIPA/SIPTO Mobility
  - From the real deployment perspective, it need to be noted that in 3GPP LIPA/SIPTO scenario, there is no mobility support when handover between local gateways.
  - There is no current IP mobility protocol can be used to solve this problem currently.
  - DMM may provide a solution for this scenario.

- Comments?