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

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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?