PMIPv6 and Network Mobility
Problem Statement
draft-bernardos-netext-pmipv6-nemo-ps-02

Carlos J. Bernardos – Universidad Carlos III de Madrid

Paris, NETEXT WG, 2012-03-28
Motivation

• There are some scenarios / use cases involving:
  • the need for a network-based localized mobility management,
  • the need for attachment points to the infrastructure also be mobile

• Examples of these scenarios are:
  • The provision of Internet access in airports where we want to keep the service while changing terminal buildings and moving within a train
  • The provision of Internet access in public transportation systems (both at the stations and while moving in a bus/train/car)

• Supporting these use cases cannot be done with current standards
Motivation. Use case example
Motivation

- Supporting these use cases cannot be done with current standards
  - RFC5213 (Proxy Mobile IPv6) only provides support to an MN roaming among stationary MAGs
  - RFC3963 (NEMO Basic Support) only provides support for network mobility (within the Internet)
    - An MN roaming between a NEMO MR and an AR would need to change its IPv6 address
  - draft-ietf-netext-pd-pmip-02 (Prefix Delegation for Proxy Mobile IPv6) only provides support for network mobility (within a PMIPv6 domain)
    - An MN roaming between a NEMO and a MAG would need to change its IPv6 address
Problem statement

MN 3 keeps its IP address while moving within the PMIPv6 domain.
Problem statement

MN 3 keeps its IP address while moving within the PMIPv6 domain.
Problem statement

MN 3 keeps its IP address while moving within the PMIPv6 domain.
Questions to the WG

- Do you think these use cases are interesting?
- Do you think we should work on extending PMIPv6 to support this problem?
- Who would be willing to work on this?

- If there is interest, what would be the next step?
  - Should we work more on the problem statement and publish it as informational?
  - Should we work on a solution for this?