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DMM Gap Analysis

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DMM Gap Analysis

- <https://datatracker.ietf.org/doc/draft-zuniga-dmm-gap-analysis/>
- Document analyzes existing practices of IP mobility solution deployments in a DMM environment
- The gap analysis identifies what is missing and what can be achieved with existing solutions in order to meet the DMM requirements identified in [draft-ietf-dmm-requirements]
- Current proposed DMM solutions are **NOT** considered

Changes from version 01 to 02

- One more author (Charlie)
- Addressed comments received from several people on mailing list
 - Konstantinos Pentikousis, Georgios Karagiannis, Jouni Korhonen, Jong-Hyouk Lee, Pierrick Seite...
- Thanks!

Deployment of existing solutions in DMM environment

- Client-based mobility
 - Mobile IPv6 / NEMO
 - Mobile IPv6 Route Optimization
 - Hierarchical Mobile IPv6
 - Home Agent switch
 - Flow Mobility
 - Source Address Selection API

Deployment of existing solutions in DMM environment

- Network-based mobility
 - Proxy Mobile IPv6
 - Local Routing
 - LMA runtime assignment
 - Source Address Selection
 - Multihoming in PMIPv6 (as per RFC 5213)

Requirements (just as a reminder)

- REQ1: Distributed deployment
- REQ2: Transparency to Upper Layers when needed
- REQ3: IPv6 deployment
- REQ4: Compatibility
- REQ5: Existing mobility protocols
- REQ6: Security considerations

Mobility Protocols vs. DMM Requirements

	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 /LIMv4	Yes	Yes	Yes
SAS w/ CB	No	Yes	v6/v4	Yes	Yes	Yes
PMIPv6	No	LIM	v6 /LIMv4	Yes	LIM	Yes
LR	No	LIM	v6 /LIMv4	Yes	Yes	Yes
LMA RA	LIM	LIM	v6 /LIMv4	Yes	Yes	Yes
SAS w/ NB	No	No	v6 /v4	Yes	Yes	Yes
MuHo PMIPv6	No	LIM	v6 /LIMv4	Yes	Yes	Yes

Next Steps

- Address latest comments received on 02 version
 - Elena, Georgios, et al.
 - Add other protocols / options / frameworks?
 - Clean text
 - Revisit some markings on the table
- Request official reviewers?
- WG adoption?