AAA Support for PMIP6 mobility entities authorization and Discovery during localized routing

draft-ietf-dime-pmip6-lr-00

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Status

- Presented in IETF 76, adopted as WG item based on feedback from the Group

- Changes in this initial version WG draft
  - Combine draft-wu-dime-pmip6-lr and draft-liebsch-dime-pmip6-lmaresolve-01
  - Remove interaction between MAG1 and the AAA server
  - Allocate new value in the Mobility Capability Registry for use with MIP6-Feature-Vector instead of defining new value for service type
Issues #1: Merging with Liebsch’s work

• Add authorization with multiple AAA servers extracted from draft-liebsch-dime-pmip6-lmaresolve-01
• Remove interaction between MAG1 and the AAA server
• Discovery takes place as a side-effect of authorization, coupling the query to localized routing authorization is a good choice
Issue #2: Allocate new bits/flag in the MIP6-Feature-Vector

• The requesting peer sets this flag if LR feature/capability is supported/desired.
• The answering/authorizing peer sets the same flag in the response
  – if a) it was in the request
  – and b) authorization for the requested feature/capability succeeds & exists.
Issue #3: More flexible extension for increased applicability?

• Proposal for more flexibility: According to Slide 3
• Extension applicable to more use cases
  – Add one new use case on LMA resolution as further example
• Clarification with the DIME WG:
  – The NetExt WG has not arrived at consensus on a solution for multi-LMA support for Localized Routing
  – But: Increasing flexibility with the proposed Diameter extension allows application to different LR use cases
Proposal 1 from Editors

• To make protocol operation more generic, change figure 2 in I-D.ietf-dime-pmip6-lr as follows:

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| MN1 | MAG1 | LMA1 | AAA | LMA2 | MAG2 | MN2 |
+-----+-----+-----+-----+-----+-----+-----+-----+

| Anchored | | | Anchored |

o---------------------------o | o---------------------------o

Data[MN1->MN2] |

|------------------|

| LRREQ(MN2) |

|------------------|

| AAR(MN2,MFV) |

|------------------|

| AAA(LMA2) |

|------------------|

| LORSP(LMA2) |

|------------------|
```

Figure 2: MAG-initiated Localized Routing Authorization
Proposal 1 from Editors

- Also Change figure 3 in I-D.ietf-dime-pmip6-lr as follows:

```plaintext
+-----+-----+-----+-----+-----+-----+-----+-----+
| MN1 | MAG1 | LMA1 | AAA | LMA2 | MAG2 | MN2 |
+-----+-----+-----+-----+-----+-----+-----+
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          Anchored |     |     |     | Anchored |
          o-------------o     | o-------------o
          Data[MN2->MN1]     |
          |----------------------|
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          AAR(MN2,MFV)     |
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          AAA(LMA2)     |
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          <----------|     |     |     |     |     |
          LROREQ(MN2,LMA2)  |
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          |     |     |     |     |     |     |
          LRO_RSP(Succ)    |
          |                 |
          |------------------|
```

Figure 3: LMA-initiated Localized Routing Authorization
Proposal 2 from other author
(Marco)

• Add one new use case that the LMA resolution can be used
Proposal 3 from other author (Marco)

- Figure 1 in the I-D.ietf-dime-pmip6-lr should not list a. and b. as steps, as it may confuse the reader to think both steps are mandatory, suggest to reword as:

  "The interaction of the MAG and the LMA with the AAA server according to the extension specified in this document considers the following features
  "

3/24/10
Moving Forward

• Request WG to make decision on these three proposals?

• Encourage more review of draft and early feedback