LMA Discovery

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Configuration on the MAG

- Simplest mechanism is to configure the LMA’s IP address on the MAG
- The MAG can be configured to use a particular LMA for the PMIPv6 domain
- The MAG can also be configured to use a particular LMA based on mobile node’s identity
DNS Lookup

- MAG obtains the IP address of the LMA using DNS lookup
- LMA’s FQDN can be configured locally on the MAG
- LMA’s FQDN can also be obtained from the mobile node’s identity
  - If the mobile node presented a NAI, the FQDN can be constructed by concatenating a fixed string with the realm part of the NAI
    - _lma.example-realm.com
- Similar to the MIPv6 bootstrapping split scenario
Integrated Scenario

- LMA information is delivered to the MAG during mobile node access authentication procedure
  - For example, the AAA server can deliver the LMA information to the MAG
  - Either an FQDN or the IP address of the LMA is delivered
  - MAG acts as the NAS

- RADIUS attributes or Diameter AVPs are used to carry the LMA information
  - Diameter extensions are already being considered for adoption in the DIME WG
Based on Service Selection

- In 3GPP architecture the LMA information is determined based on the service the mobile node requests for or is eligible for.
- Mobile Node can indicate the service it wants in the form of a string that can be resolved to a particular LMA.
  - DNS lookup is used for resolving the service name to the LMA.
- The Service Name can also be provided to the MAG during access authentication.
  - Based on the mobile node’s subscription profile.
Handovers

- When the mobile node attaches to another MAG in the PMIPv6 domain, the new MAG must use the same LMA as the old MAG.

- Two possible solutions
  - Context transfer between the MAGs
  - Use of AAA infrastructure
    - Information about the LMA that is being used for a particular mobile node is stored on the AAA server.
    - When the new MAG authenticates the mobile node, it obtains the LMA information from the AAA server.
    - Other policy repositories can also be used.