

# Route Optimization for Proxy MIPv6

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# Background

- Proxy MIPv6 relocates mobility control from client (MN) to network (AR)
- MIPv6 supports route optimization
  - Designed for end-to-end optimization
  - Implies end-to-end signaling
  - Implies RR-Tests to support some level of authentication
- Relocation of MIPv6 RO Control to AR works, but...

# Some thoughts...

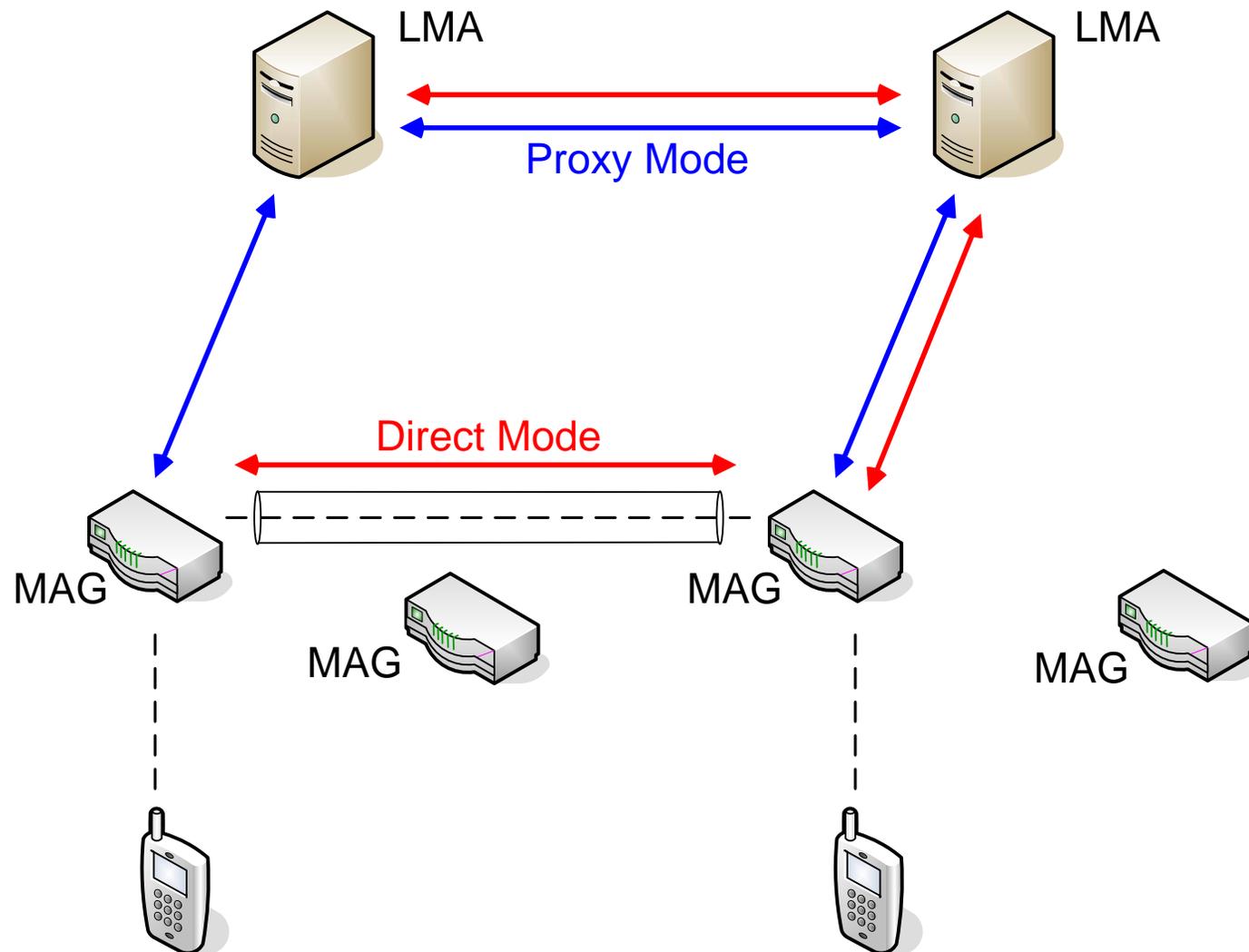
- RR-Tests really needed in Proxy MIPv6?
- Key netlmm scenario
  - Local RO between (MAGs of) two MNs
- What about RO between MAG and client MN?
  - Operator policy issues
  - Privacy issues
- Other means to secure and authenticate RO signaling more appropriate (exploit existing SAs)
- Solution should support multiple LMA topology!
- MAG-based control not sufficiently stable

# Some ideas...

- Give some control for RO to LMA(s)
- Select one of a relevant pair of LMAs as active RO Controller
- Allow reuse of (P)MIPv6 control messages
- Support different modes for RO setup
  - **Direct Mode** (MAGs mutually share an SA)
  - **Proxy Mode** (MAGs share an SA only with LMAs)
- Protocol draft in

draft-abeille-netlmm-proxymip6ro-00.txt

# Protocol Modes and Interfaces



# More extensions...

- Flush mechanism proposed in  
draft-jaehwoon-netlmm-flush-00.txt
- Identifies and solves reordering issues