Simultaneous location in home and foreign network

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## Overview of Returning home

- Objective of Monami6 WG
  - To produce the solution allowing MN to utilize multiple interfaces simultaneously.
    - → draft-ietf-monami6-multiplecoa-01
- How to do for simultaneous home and foreign case
  - Solution1:
    - Using the prefix advertised in home link as foreign prefix also.
  - Solution2:
    - Using another prefix other than home prefix advertised by home agent.

## Comparison

Solution for simultaneous case	Solution A (comments from Keigo)	Solution B (Operational solution)
The number of Prefix advertised by HA in home link	1	2
Meaning of prefix	One prefix is used as both home prefix and foreign prefix.	One is used as home prefix, another is used as foreign prefix.
RFC3775 definition	In RFC3775, MN doesn't use the address created from home prefix as care-of address.	RFC3775 doesn't prohibit HA from advertising foreign prefix.
Involved Nodes	Mobile Node (MH,MR)	Mobile Node (MH,MR) Home Agent Other Nodes in home link
MCoA MN	Create a care-of address(Home-CoA) from advertised prefix (which is used as foreign prefix)	Create a care-of address from foreign prefix
Legacy MN	Not affected	Not affected - But If MN knows only own HA's address, it has to distinguish home prefix and foreign prefix when creating home address in home link.
Legacy MN (which has different home network)	Not affected	One prefix is needless for Legacy MN and also for MCoA MN which doesn't want to return home.
НА	May not be affected depending on implementation.  - Implementation should check whole address thereby no recursive problem.	Have to advertise and manage foreign prefix other than home prefix  - If other default router exists in home link, it has to be managed by HA.