

Virtual interface for supporting multihoming and inter technology handover

draft-trung-netext-virtual-interface-01

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Problem statements

- **Inter-technology handover requirements**
 - Remove all IP address/prefix at the old interface
 - Requires the new interface to use the same network prefix with the old one



- **Problems**
 - Mobility sessions are interrupted
 - Multihoming function is disabled

Proposed solution

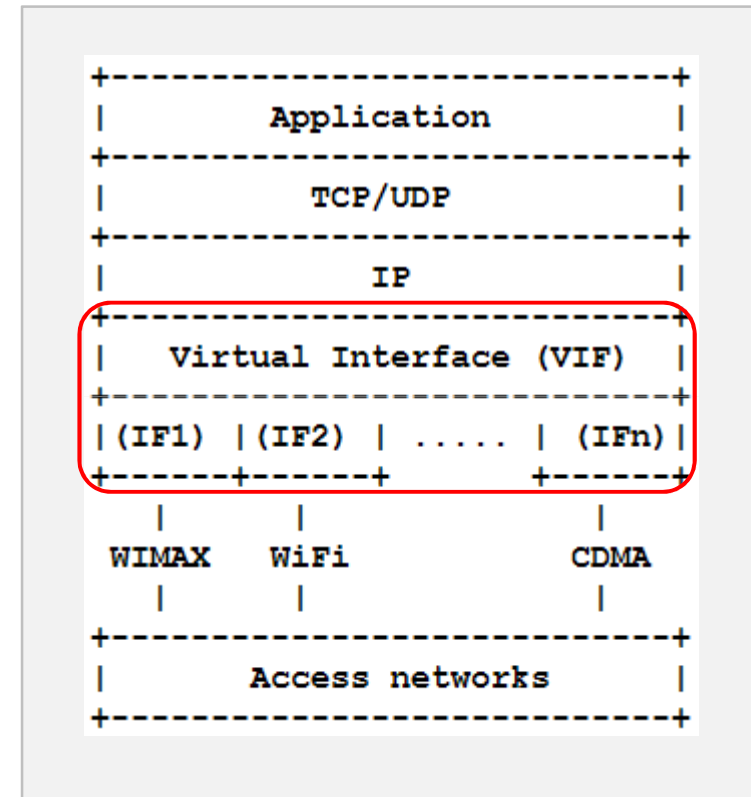
Hide all the changing of physical interfaces from application sessions



Use virtual interface at the mobile node

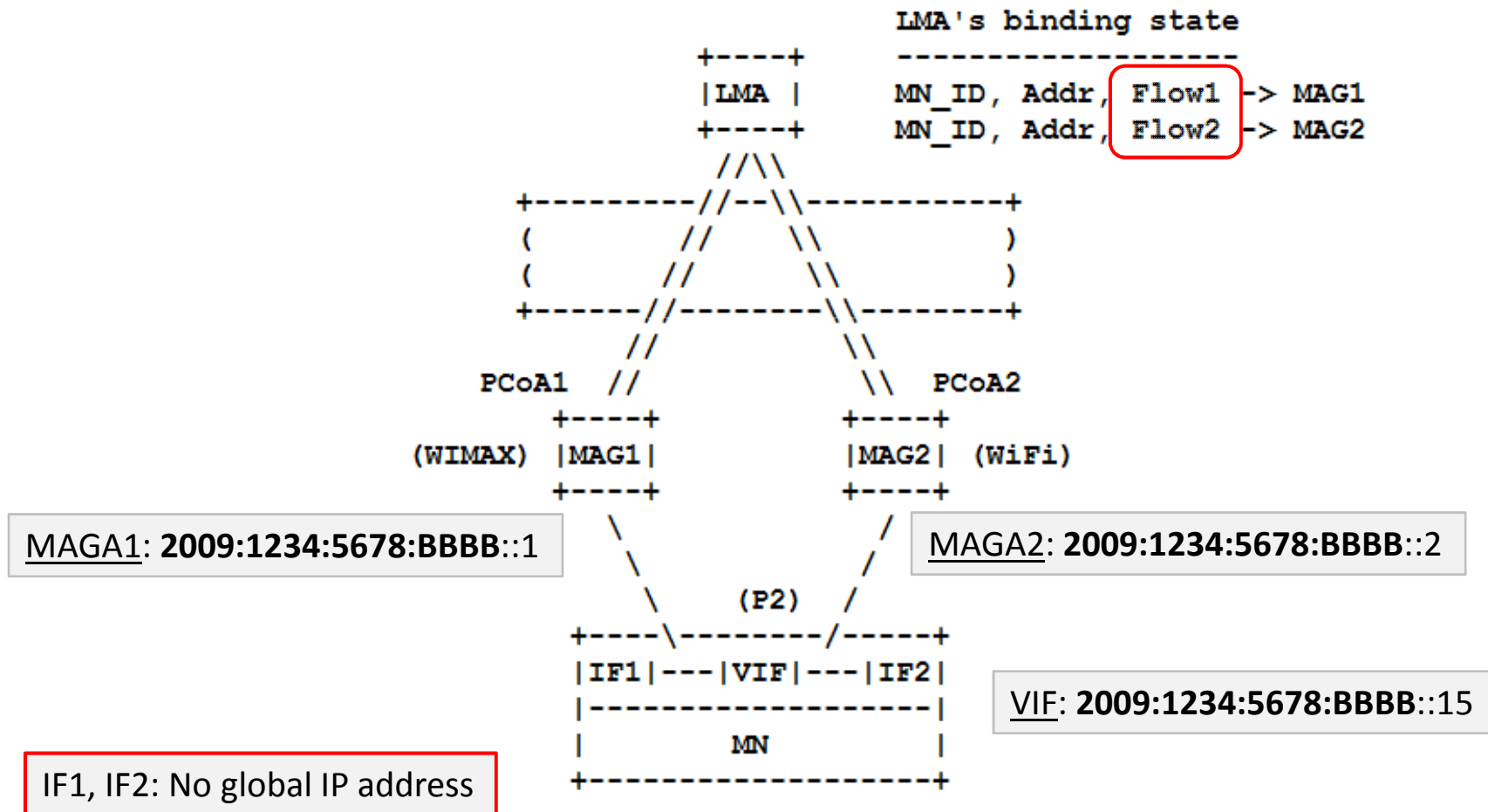


Modify PMIPv6 operations for supporting virtual Interface



ID	Global IP Address
VIF	2009:1234:5678:BBBB::15
IF1	None
IF2	None

PMIPv6 usage scenario with virtual interface at the MN



Necessary changes in MAG operations

- Collects service flow identifier when MN performs attachment via layer 2
- **Binding Update List Entry** should be extended with **Flow-Identifier** field
- **Proxy Binding Update message** should include **Flow-identifier** information

Necessary changes in LMA operations

- Binding Cache Entry Data Structure should be extended with **Flow-Identifier** field
- Binding Cache Entry Lookup using **Flow-Identifier**
- Routing Considerations MUST base on **Flow-Identifier**
 - MN_ID, Address, Flow_ID1 → MAG1
 - MN_ID, Address, Flow_ID2 → MAG2

Questions & Answers

Can virtual interface be adopted
as a WG Item?