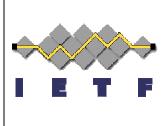
MIP4 WG IETF-75

MIP4 Delivery and Handling of MCBC



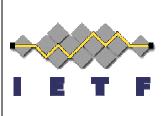
draft-chakrabarti-mip4-mcbc-04



Background

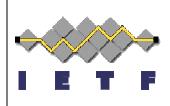
- RFC3024 provides two alternatives for reverse tunneling (direct versus encapsulating)
- However, multicast/broadcast support requires the encapsulating delivery style.
- If using encapsulating delivery style, *all* traffic (even unicast) must be encapsulated from the MN to the FA.
- Current mechanism couples the delivery of MCBC & unicast packets which unnecessarily causes huge overhead for the far common unicast traffic.
- A fundamental solution for the delivery of MCBC is needed.

Proposal



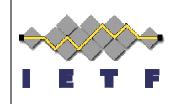
- Multicast-Broadcast Encapsulating Delivery (MBED) style
 - Encapsulates MC/BC packets from MN to FA for reverse tunnelling to HA
 - Unicast packets are direct delivered between MN and FA, NO overhead!
- MBED style extends RFC3024 encapsulating delivery style
- Link-layer assisted delivery style for links of a point-to-point nature can be used.
- MBED encapsulating extension
 - TLV structure; allows different delivery styles
 - Backward Compatible with RFC3024 encapsulating Delivery Style.
- Provide a solution for MIP4 WG Charter work item #4.

Multicast-Broadcast Encapsulating Delivery extension

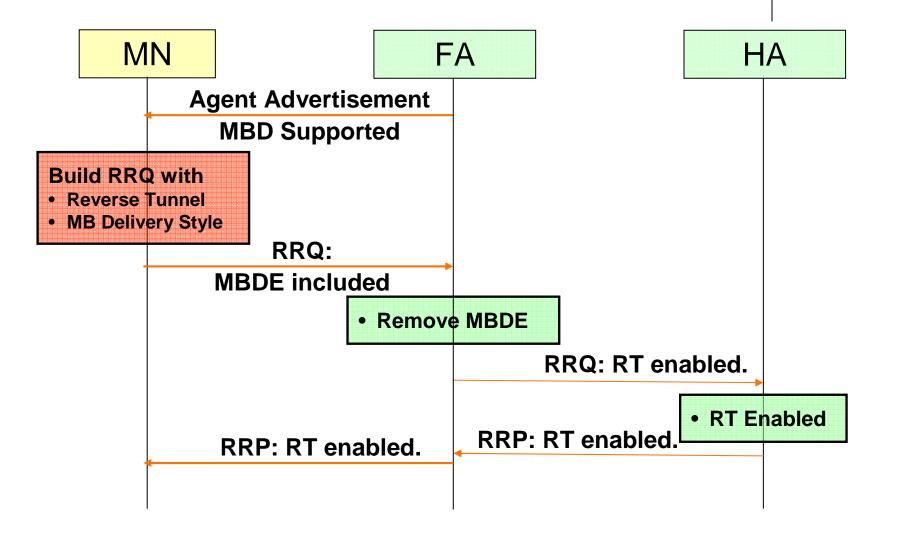


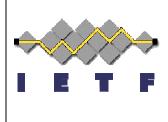
- FA advertises MBED support in its Agent Advertisement
- MN negotiates use of MBED extension in Registration Request

TypeSkipable, TBDLength2Bit FieldValue : 0, 1, 2Valuex0001 : same as RFC3024 encapsulating delivery style
x0002 : Multicast-broadcast encapsulating delivery style
x0004 : Link-layer assisted delivery style for local network



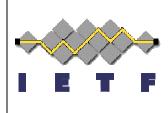
MIP4 MCBC Delivery Negotiation



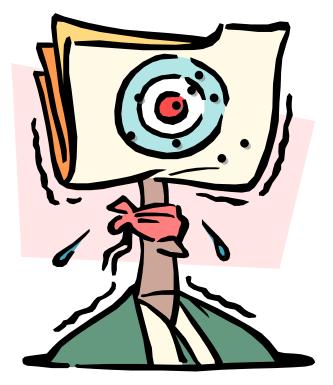


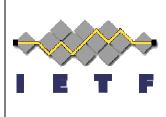
Question to WG

- This I-D solves a problem
- Is the WG interested in enhancing RFC3024 with the extension proposed in this I-D?



Questions & Comments?





What is Next?

 Adopt draft-chakrabarti-mip4-mcbc-04 as a work item for MIP4 WG charter item # 4