Multicast BABEL Extension draft-zhang-pim-babel-ext-01

BABEL WG
IETF98# Chicago

Problem

- If multicast is needed in small networks?
- In case you say "Yes" to the above question, then how to implement it?
- If the control plane should be simple?
- How to simple the network deployment?
- It is a good choice to choose BIER in forwarding plane. What about BIER overlay?
- Without MLD, how to advertise the multicast information?

Solution

Use Babel to build BIER multicast forwarding plane.

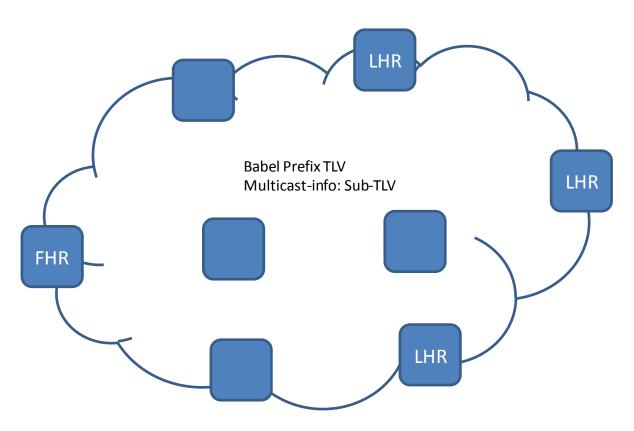


Use Babel to advertise multicast information at the same time.

- LHR leverages Babel extension to send multicast request.
- FHR collects the requirement of LHRs, builds mapping relationship between multicast flow and BIER destination BitString.
- Multicast information is encoded as sub-TLV of Babel prefix TLV.

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5	
Sub-type Flag	Length
Sub-sub-type	Length
Group Address (Encoded-Group format)	
Src Address (Encoded-Unicast format)	

Multicast Babel Extension



- The Multicast SG information can be carried in Babel update message.
- The prefix MUST NOT be summarized and the according sub-TLV MUST be treated as optional and transitive.

Multicast Babel Extension

Any comments are welcome ©