IGMP/MLD Extension for Multicast Source Management

[draft-li-pim-igmp-mld-extension-source-management]

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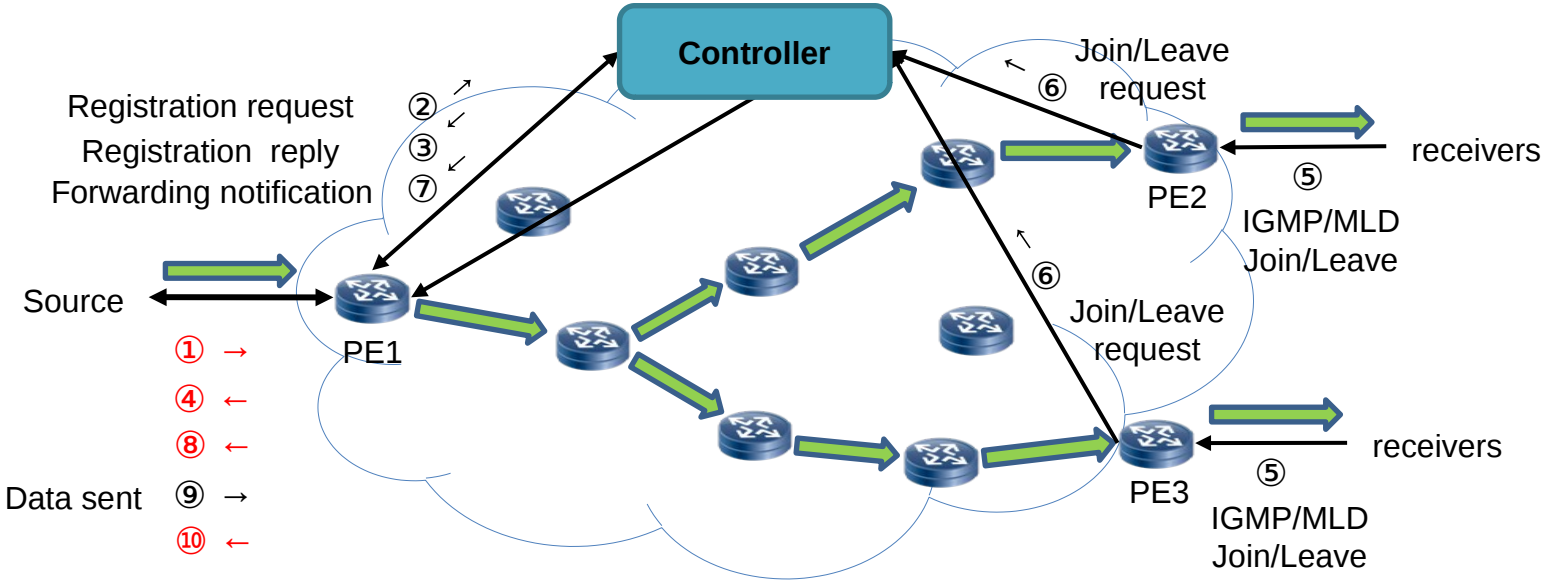
- Overview
- Extensions to IGMP/MLD
- Further Action

Overview of the solution



Purpose: The multicast source is controllable and easy to be managed uniformly.

Main flow of multicast source management

1. Source sends IGMP/MLD message to PE1 requesting to activate the multicast service.
4. PE1 returns the result of the multicast service request to the multicast source.
8. After controller tells PE1 that it can forward data for a particular (S,G) tuple, PE1informs the multicast source that it can send the multicast data.
10. When multicast source starts to send streams, PE1 will regularly synchronize the receiver number of a particular (S,G) tuple to the multicast source, so as to facilitate business statistics.

Extensions for IGMP/MLD messages

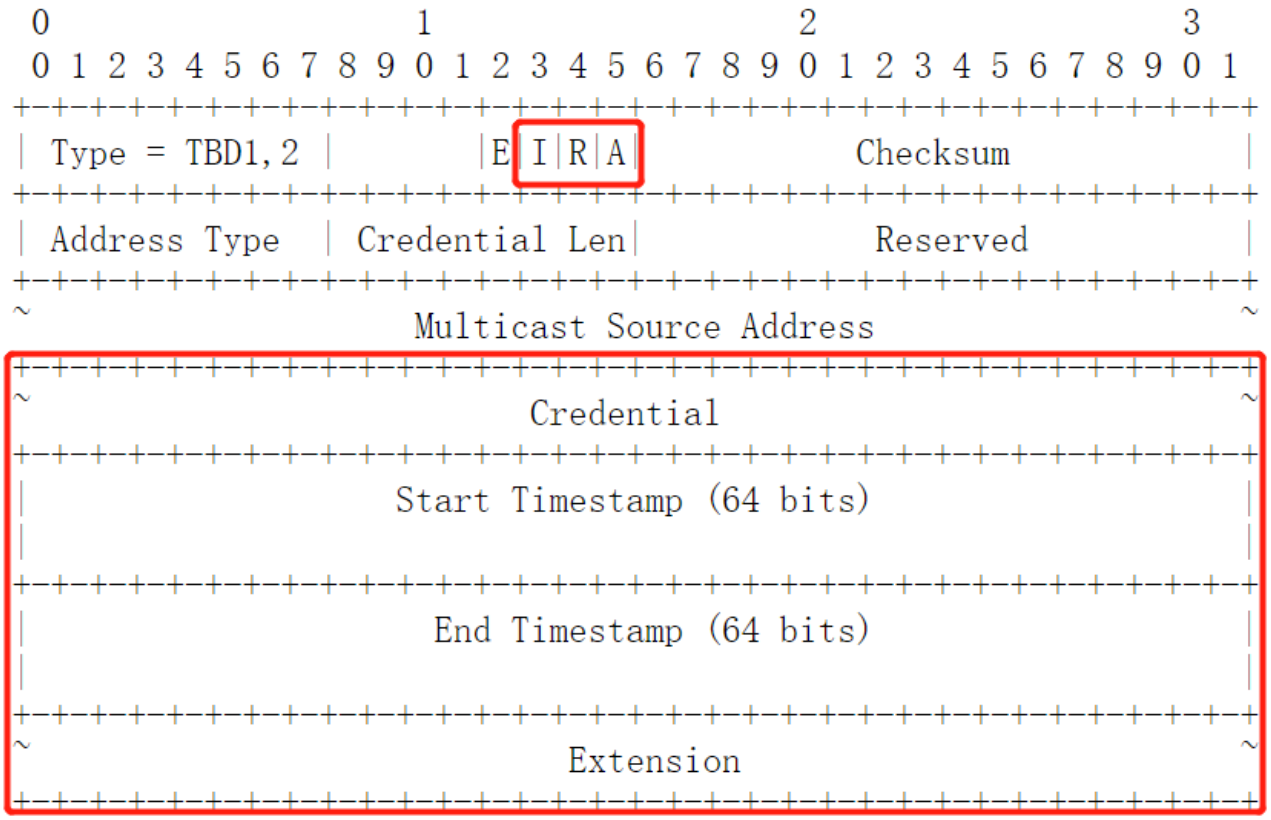


Figure 1: MSR Message Format

- ✓ MSR messages can be sent by either the source or the router.

  Flag “I” bit indicates whether the sender of the message is the source.

  Flag “R” bit indicates whether the action of the message is a multicast service request.

  Flag “A” bit indicates whether the request is successful.

Extensions for IGMP/MLD messages

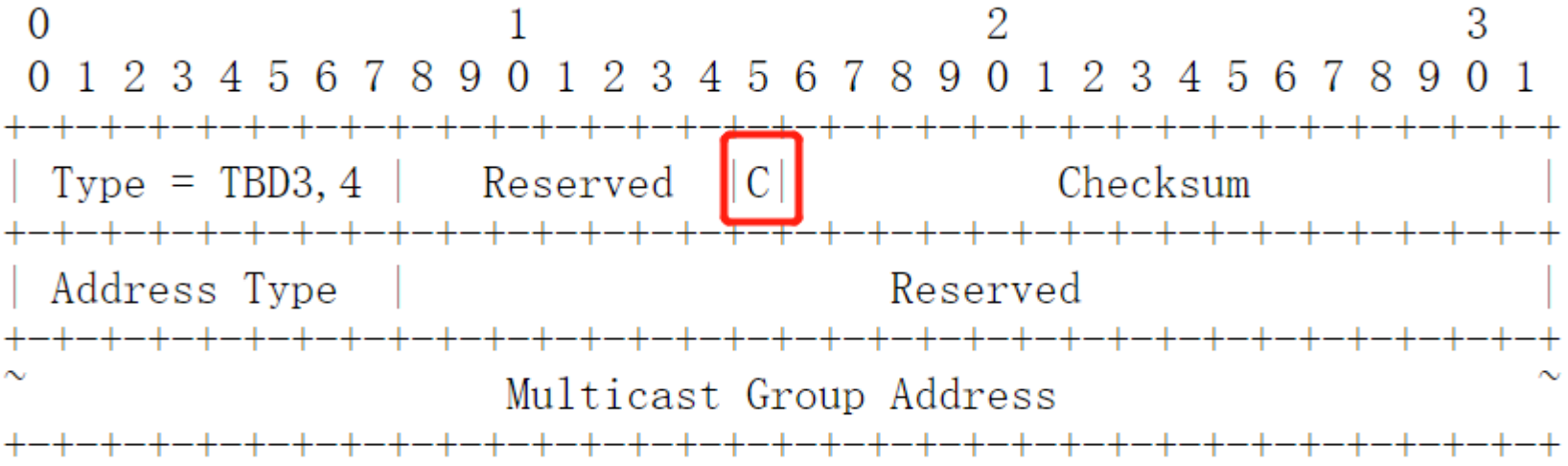


Figure 2: MDN Message Format

- ✓ MDN message should be sent by routers.

  Flag “C” bit indicates whether the sender of the message is the source.

Extensions for IGMP/MLD messages

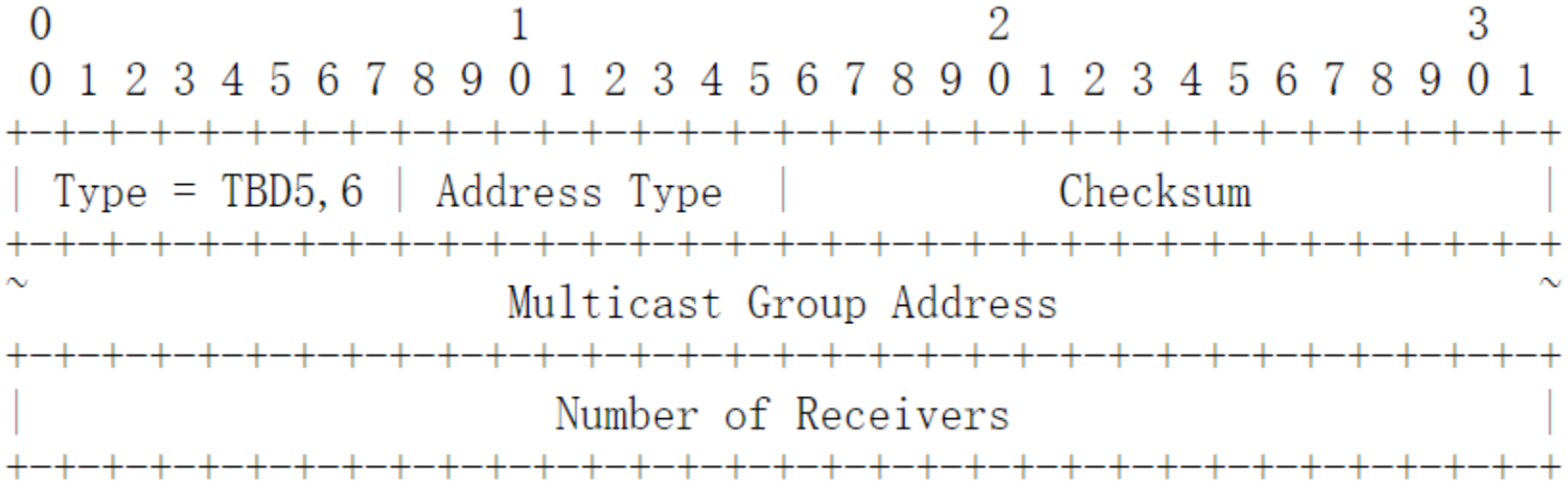


Figure 3: MRS Message Format

- ✓ MRS message should be sent by routers.
- ✓ Information for different groups is maintained separately.

Next Step

- Comments

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