



Multicast Redundant Ingress Router Failover

draft-szcl-mboned-redundant-ingress-failover-02

MBONED WG

IETF113

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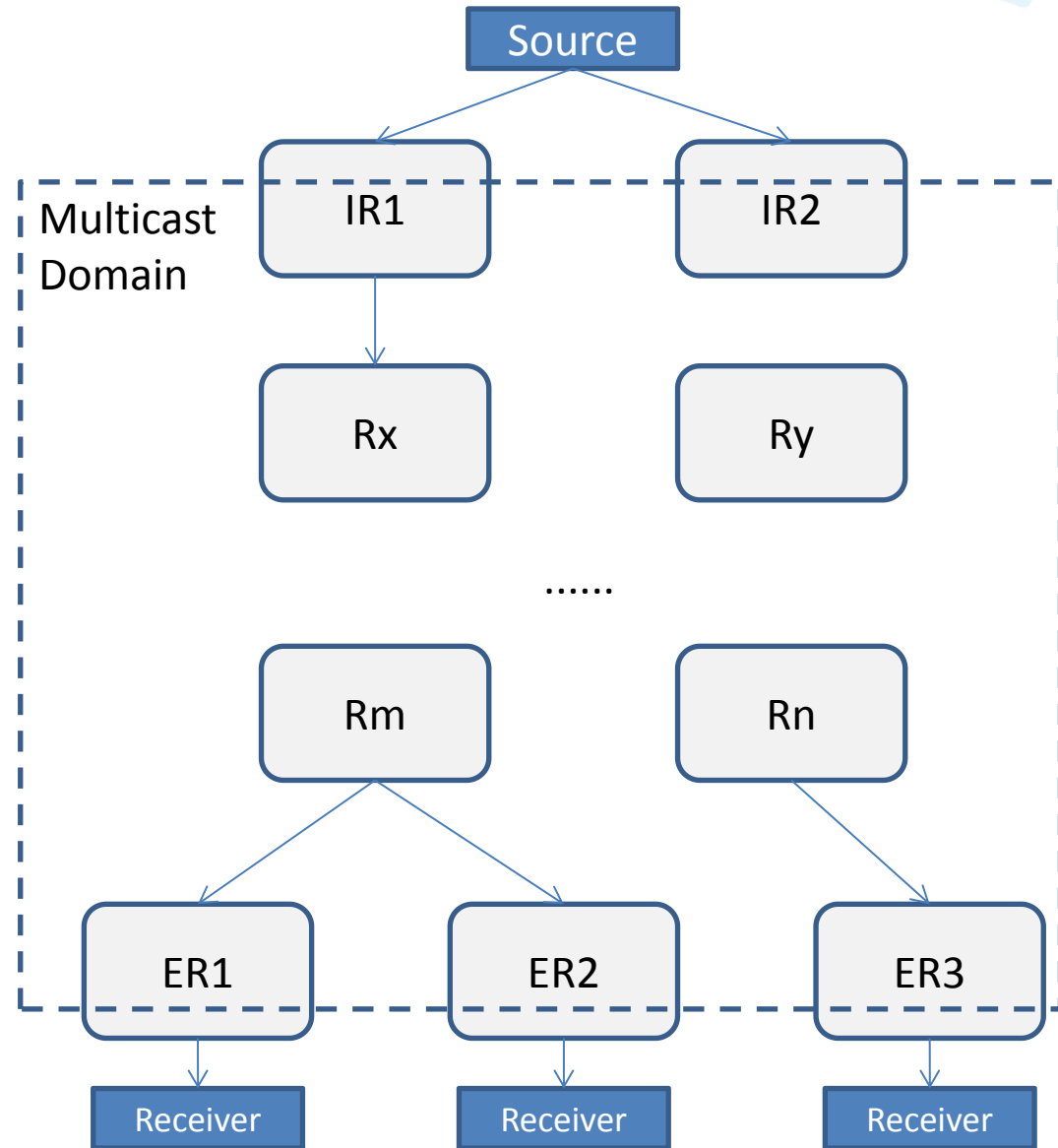
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Brief introduction

- Two IRs are used to avoid single node failure. The two IRs are UMH candidates for ERs.
- For PIM/BIER/P2MP TE tunnel/MLDP, different functions can be used.
- Three standby modes can be deployed for IR switchover in case of IR's failure.
- The cost and influence of the three modes are different. The network administrator should select the appropriate mode.



update of version 02

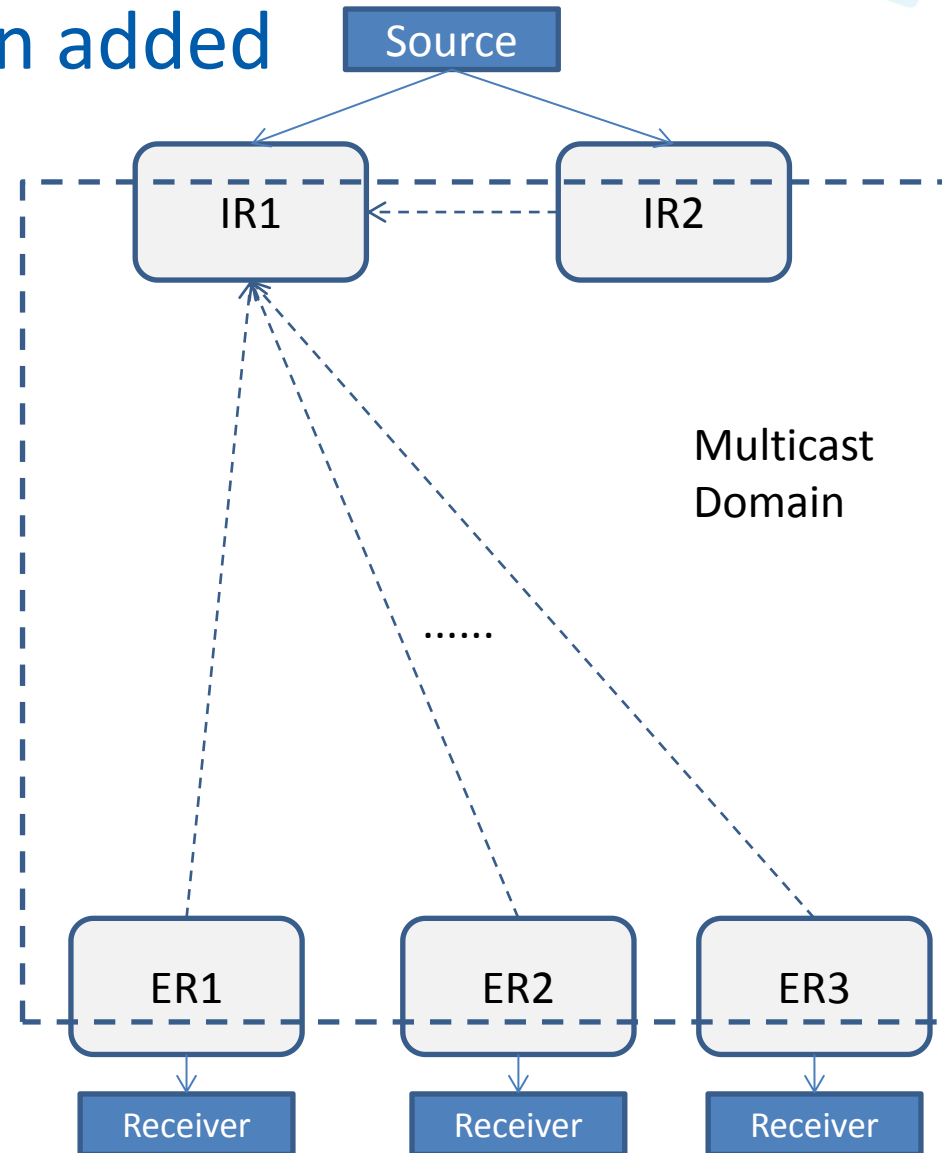
---Failure detection section added

- BFD [RFC5880]
- Multipoint BFD [RFC8562]
- BFD for MPLS LSPs [RFC5884]
- BIER BFD [I-D.ietf-bier-bfd]

- IPv4 PING [RFC0792] and IPv6 PING [RFC4443]
- LSP-Ping [RFC8029]
- BIER PING [I-D.ietf-bier-ping]


When ER detects the failure of SIR, ER must signal to BIR as soon as possible, or get the flow from BIER in advance.

When BIR detects the failure of SIR, BIR forwards flow to ERs. But the mistaken switchover may occurs in case only the path between BIR and SIR fails.





The planned update in future version

- The signaling procedure of the three modes between IR and ER
 - Existed optimization method (e.g. RFC9026) usage in failure detection
 - MVPN and non-MVPN deployment
 - Language improvement
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- Comments are welcomed 😊

Thanks!