

Change Log

- First presented to IETF in IETF80
- Accepted as WG document after IETF81
- Changed name to ECMP Redirect (many thanks to Jeffrey from Juniper)

PIM ECMP Redirect

- Current ECMP RPF selection is downstream driven using address hashing
 - Does not consider load, cannot handle sticky RPF decisions
 - There is no mechanism in PIM to “Assert” between different paths
- ECMP Redirect message is proposed to improve control of RPF path selection.
 - Sent by upstream routers to “recommend” a different path based on load, administrative preference or other factors
 - Allow downstream routers to use information such as available bandwidth to choose an RPF neighbour

PIM ECMP Redirect

- Key features
 - Triggered by PIM Joins
 - Sent in a different subnet (used to choose a path, instead of an RPF neighbour)
 - Using “non-routing” metric (uptime, bandwidth etc...)
- New PIM Hello Option

Going forward

- IANA numbers requested (not granted yet)
 - ECM Redirect Hello Option: 32 (0x20)
 - ECMP Message Type: 11 (0xB)
 - Revisiting IANA PIM registry requirement?
- Authors would like to request WG Last Call.