Route Target Constraint for BGP Flow Spec(BGP Flow) and BGP Segment Routing Policies(BGP SR-Policy)

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Motivation & Problem Statement

- Controller need to distribute Flow spec rules or SR-policies through the RR to different PEs, all PEs are clients of RR
- Commonly, RR will advertise all routes to all clients, which may cause a waste of bandwidth and event network congestion
- Extend the application scenarios of Route Target Constraints [RFC4684] for BGP Flowspec and BGP SR-Policy
- RR uses BGP Route Target routes to generate egress policies dynamically
- Flowspec-ORF & SR-Policy-ORF
Route Target Membership NLRI Format

- Route Target membership NLRI is defined in Route Target Constraints [RFC4684]
- The route-target field is encoded as a IPv4 Address Specific Extended Community [RFC4360]

- **Sub-Type**: 0x02 Route Target
- **Global Administrator**: router identifier of the node. If set to 0.0.0.0, it means that the peer node accepts all policy rules from the RR
- **Local Administrator**: reserved for future use, MUST be set to 0 upon the sender and MUST be ignored upon the receiver
Next step

• Welcome more comments and discussion

Thank you!