OSPF IBGP
Peer Discovery
IETF 98, Chicago

Acee Lindem, Cisco
Keyur Patel, Arrcus
Shawn Zandi, Linkedin
Robert Raszuk, Bloomberg
BGP Router-Reflector and iBGP Peer Discovery

• Allow BGP Router-Reflectors to advertise their capability and peering addresses throughout an OSPF Routing Domain
  ➢ Allows dynamic discovery of route reflectors by clients

• Allow iBGP Peers to advertise this capability and peering addresses throughout an OSPF Routing Domain
  ➢ Allows a full mesh of iBGP peer sessions to be established.
Proposed OSPF Solution

• Advertise using in OSPF Router-Information LSA
  ➢ OSPFv2 Opaque Router-Information (RI) LSA
  ➢ OSPFv3 Router-Information (RI) LSA
  ➢ Can be area or domain-wide scope

• RI LSA BGP Peer TLV
  ➢ Route-Reflector Capability
  ➢ Local AS
  ➢ Peering Address and AFI/SAFI Tuples (wildcard for all MP BGP negotiated AFI/SAFIs)
  ➢ Multiple TLVs can be advertised with different peering addresses
  ➢ Local matter how to handle multiple peering addresses for the same AFI/SAFI

• Receiving Router can establish BGP sessions with all IBGP peers or only router-reflectors (local matter)
Next Steps

- Discussion and Gauge Interest
- Progress based on interest