

# Loc-RIB and Adj-RIB-Out Extensions to BMP

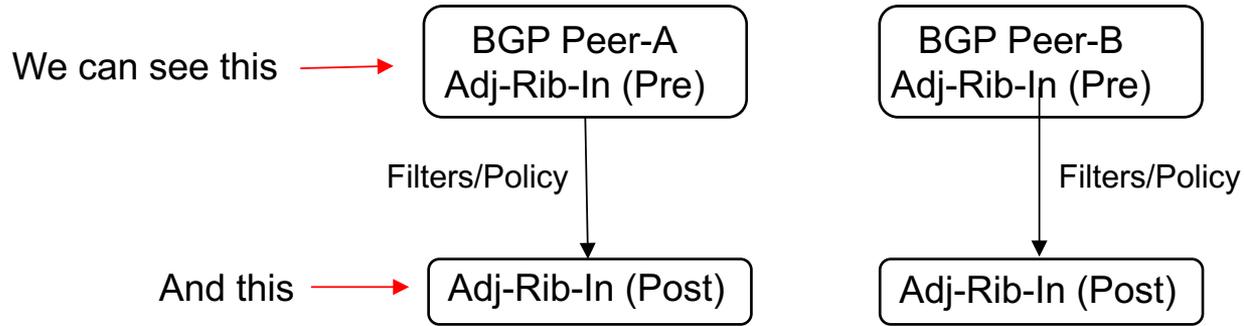
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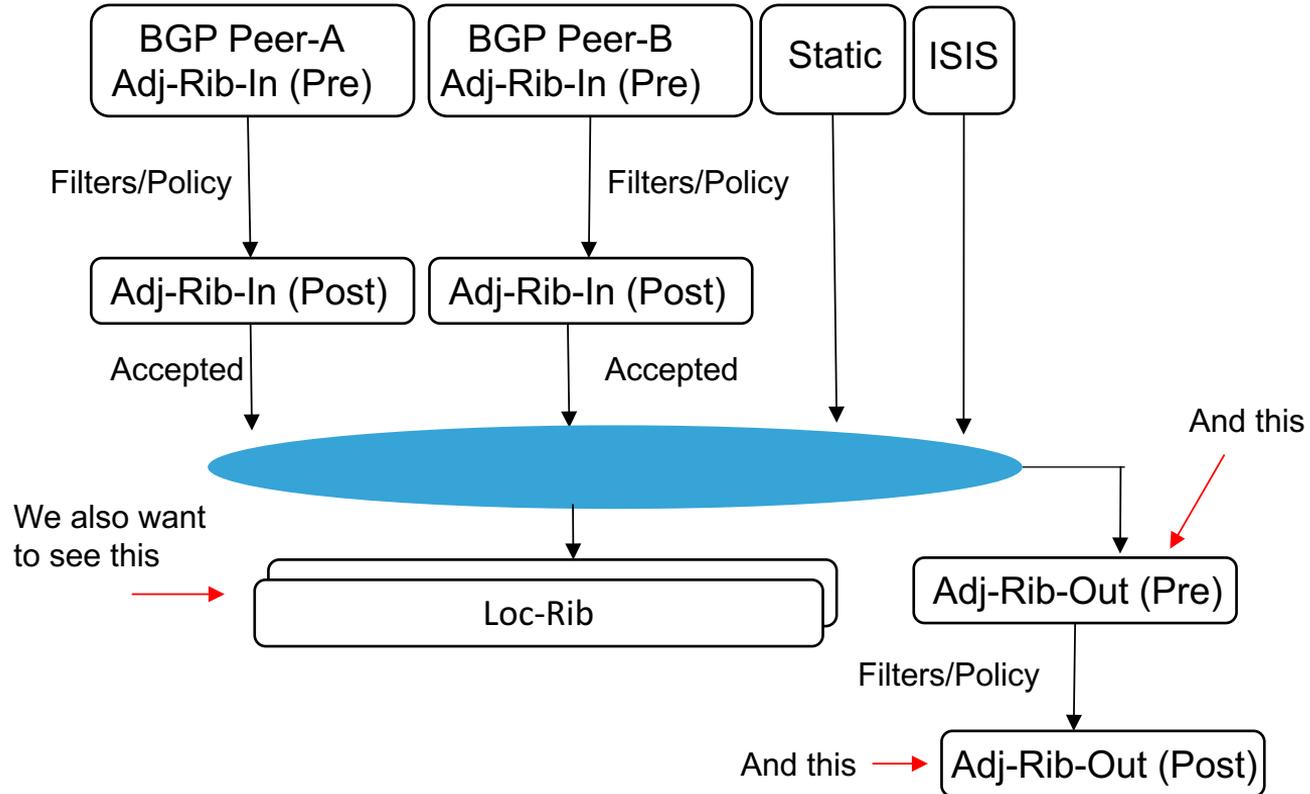
IETF, GROW Working Group Presentation

# Current State

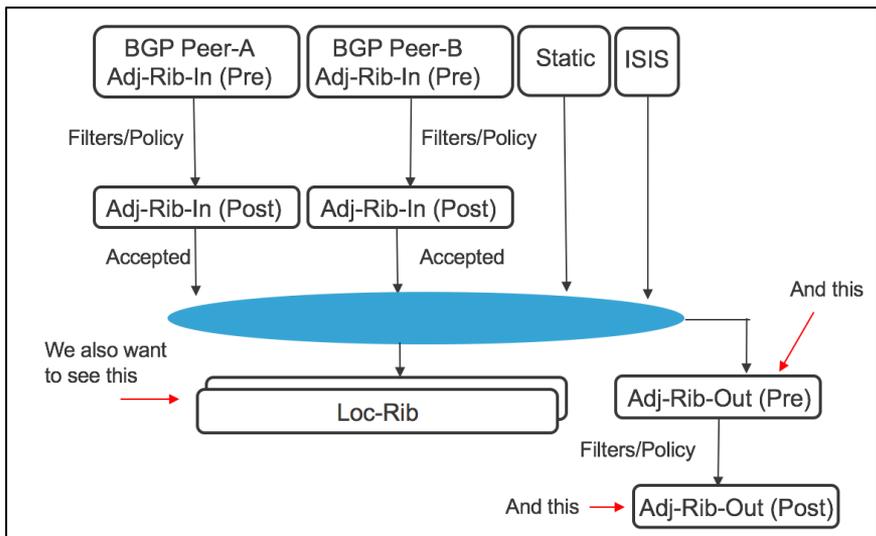
- RFC 7854 defines access to Adj-RIB-In only



# Proposal: Extend access to Adj-RIB-Out and Loc-RIB



# Use Cases



## Local-RIB

- Monitor routes selected and used by the router
- ECMP
- Correlation with netflow/ipfix
- Next hop preservation
- Monitor locally originated and BGP routes without requiring peering
- Policy verification

## Adj-RIB-Out

- Monitor routes advertised to peers
- Policy verification

# Extensions to RFC 7854

## Local-RIB

- New Peer Type 3
  - Supports backwards capability
- Flags are specific to Peer Type
- New F Flag: indicates filtered
- Using existing Stats
- Replaces “Locally Originated Routes” specified in Section 8.2
- Peer Up Info TLV Type 3 : vrf name

## Adj-RIB-Out

- New per peer header O flag to indicate Adj-RIB-In or Adj-RIB-Out
- Added statistics Types 14-17
  - 14 = Adj-RIB-Out pre-policy
  - 15 = Adj-RIB-Out post-policy
  - 16 = Adj-RIB-Out pre-policy per AFI/SAFI
  - 17 = Adj-RIB-Out post-policy per AFI/SAFI