North-Bound Distribution of Link-State and TE Information using BGP

draft-gredler-idr-ls-distribution-01

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Motivation

- Look across the "fence"
  - "Fence" being IGP area/level or AS boundary
- Gain visibility for application(s) which need ***complete*** topology data

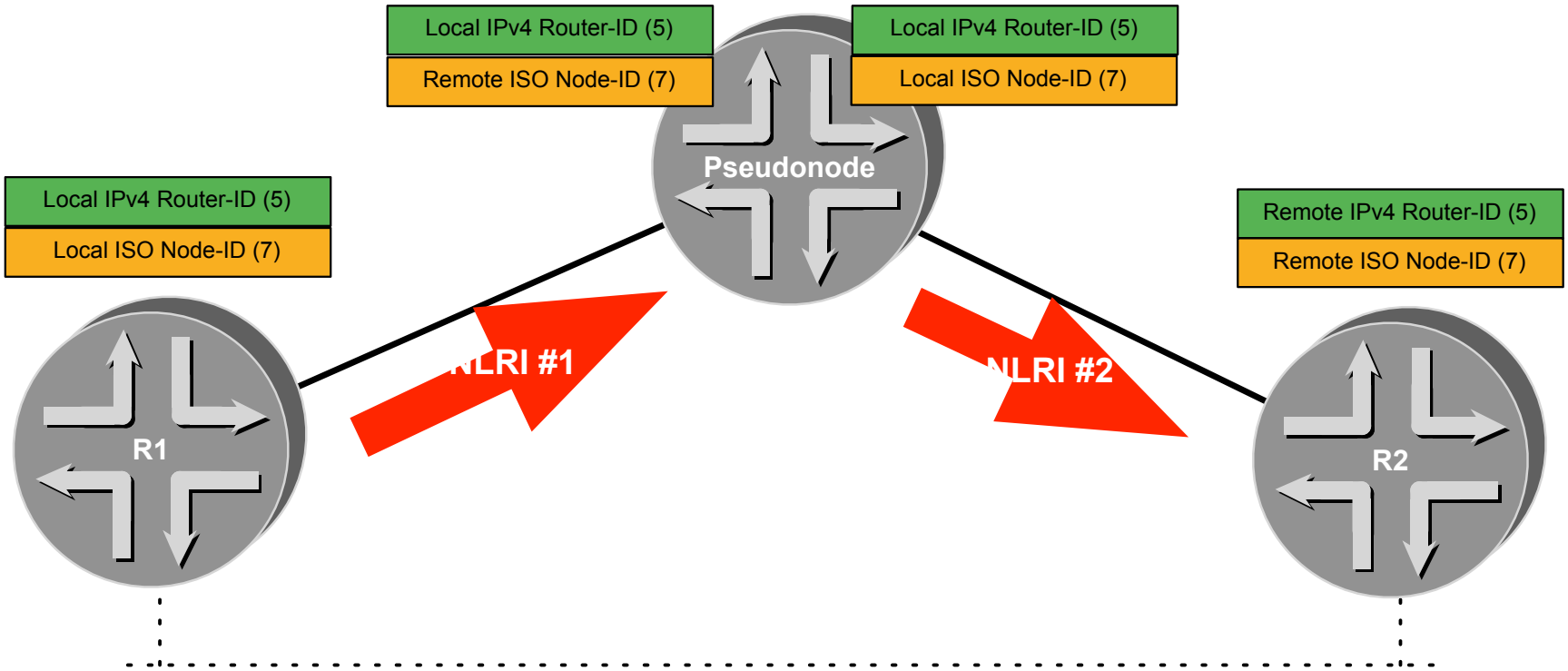
Major Changes since IETF82

- Add Support for Protocol source (direct/static)
- Add Pseudonode byte to IPv4/IPv6 router-IDs
- Clarify Scaling and Deployment Considerations
  - Cost of FIB less BGP update
  - Dedicated RR plane
- Error cleanup (conflicting code points in text and figures)

Protocol Sources

- Goal: advertise concurrent (even conflicting) information for a single link
- Sources
  - Direct
  - Static
  - OSPF
  - IS-IS L1
  - IS-IS L2

Pseudonode byte for IPv4/IPv6 router IDs



Scaling and Deployment consideration

- Cost of BGP update for SAFI N != cost of BGP update for SAFI M
- What matters is RIB size, but first and foremost if this causes a FIB update
  - FIB update means pan-system load on a router
- Use dedicated Router Reflector plane for lsdist SAFI

Next steps

- Feedback ?
- Accept as a WG item ?