

BGP-LS Extensions for PCE Discovery

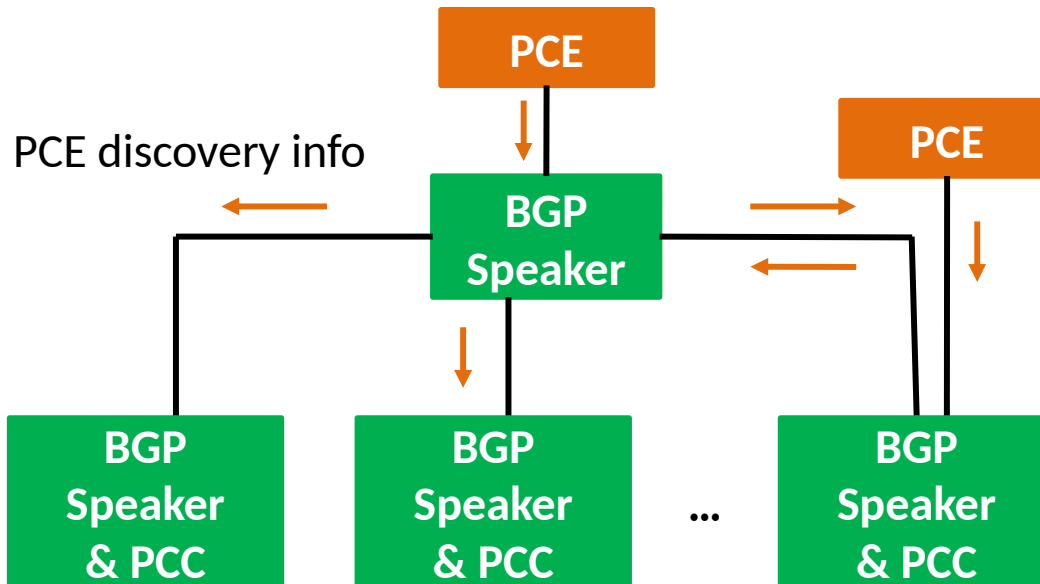
draft-dong-pce-discovery-proto-bgp-05

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Motivation

- PCCs & PCEs need to automatically discover the address and characteristic of PCEs
- IGP based PCE discovery is not applicable when PCEs do not participate in IGP directly
 - Cooperative Inter-domain path computation
 - Hierarchical PCEs
 - Using BGP-LS for routing information collection
 - PCE for VPN path computation
- When BGP-LS is used for routing information distribution to PCE, the same BGP sessions can be **re-used** for PCE discovery

Solution Overview



- PCE discovery info is provided to BGP speakers
- BGP distributes the PCE discovery info according to policy

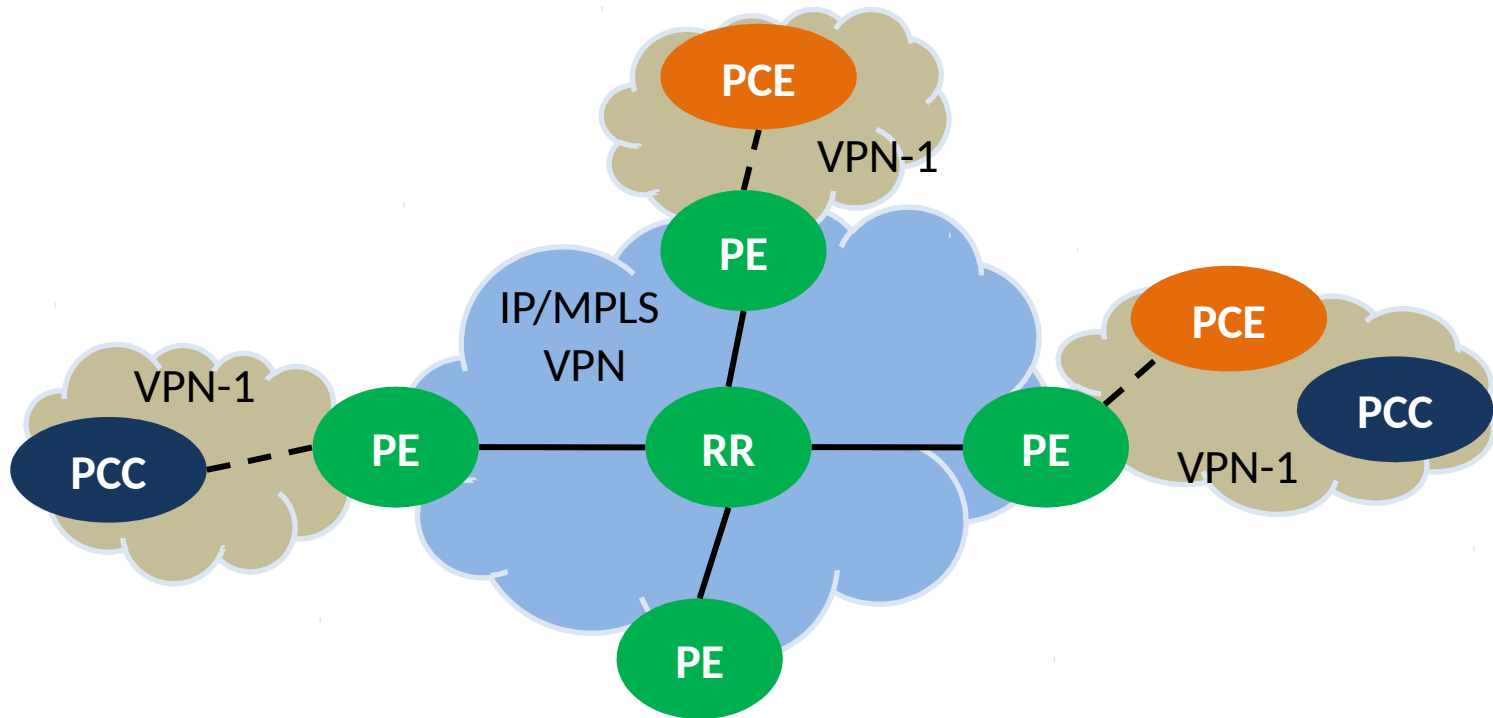
Updates in -04

- Improve the description of BGP based discovery use cases
- Clarify the Protocol-ID value for PCE discovery NLRI
- Improve the operational considerations
- Editorial changes

Updates in -05

- Added the use case of PCE discovery for VPN
- Specify the AFI/SAFI value for both the public and VPN cases
- New coauthors and contributors from KDDI

PCE Discovery for VPN Use Case



- PCCs in one VPN site needs to discover the PCEs located in other sites for CE-to-CE path computation

Conclusions

- BGP-LS based PCE discovery is useful in many use cases
- Operators interested and get involved
- Draft is getting stable
- Ready for WG adoption?

Thank You