

OSPF Link Overload

draft-hegde-ospf-link-overload-01

IETF-93

Shraddha Hegde

Hannes Gredler

Pushpasis Sarkar

Mohan Nanduri

Luay Jalil

Agenda

- Recap
- Motivation
- OSPF protocol details
- Updates in 01 version
- Conclusion

Problems

- Traffic needs to be diverted away from the overlay links when the underlying network devices go for maintenance.
- It's difficult to manually configure every remote end to divert the traffic when PEs go for maintenance/upgradation

Motivation

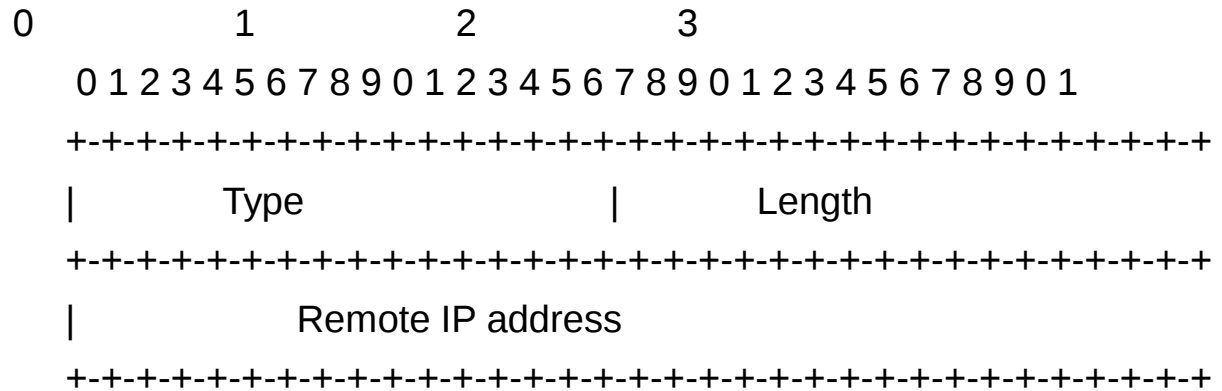
- Ease of maintenance
- Automated upgradation
- Minimized traffic loss

Solution

P2P links

- Advertise a link overload TLV in Extended Link Opaque LSA
- Remote end identifies connecting link
- Increases metric to usable MAX-METRIC (LSInfinity and MAX_TE_METRIC)
- Re-floods Router LSA
- Traffic is diverted away from overloaded link
- Overlay Link is ready for maintenance

TLV details

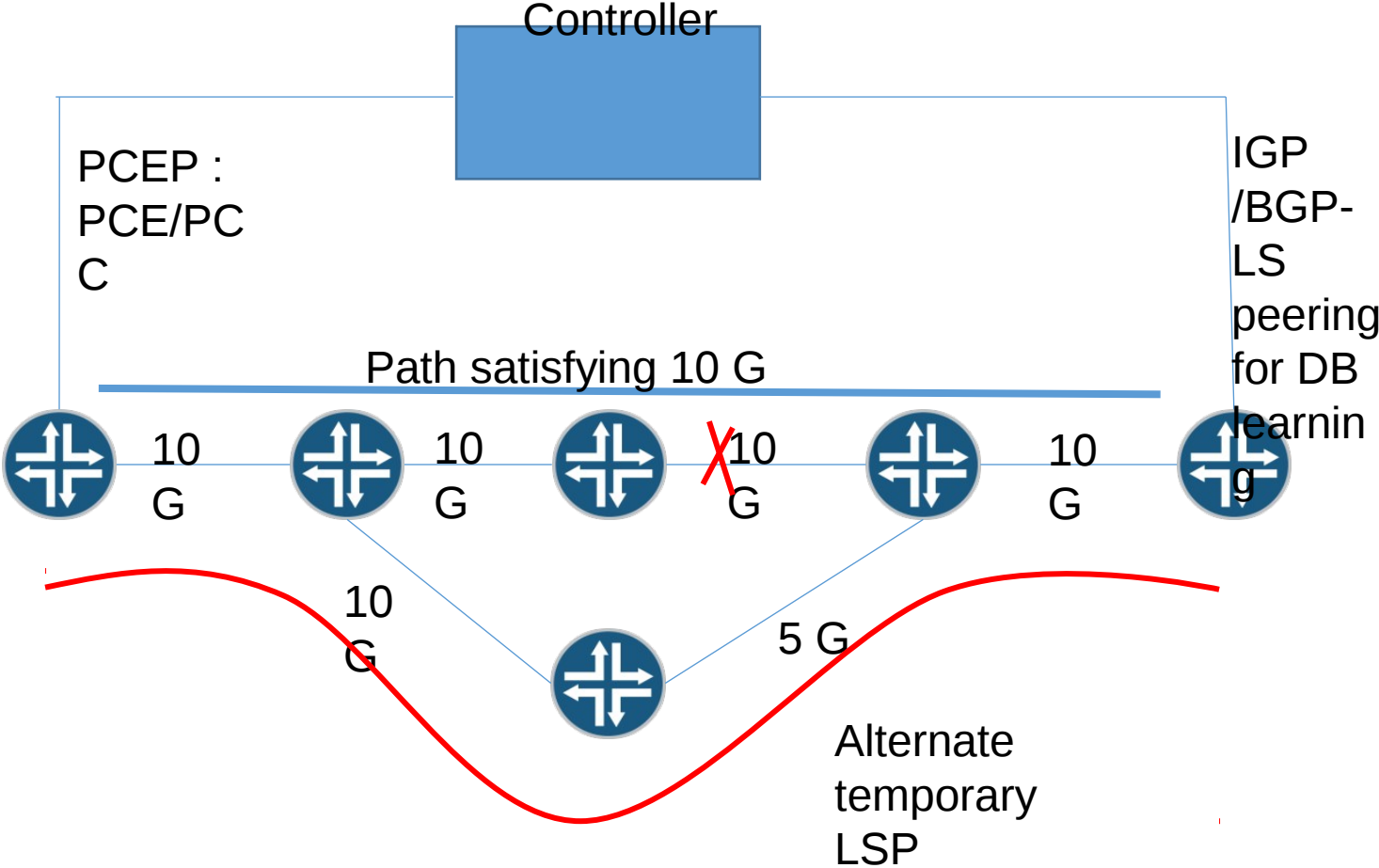


Remote IP address distinguishes the link when there are two parallel links between the nodes.
Remote-IP address is zero in case of broadcast links.

Updates in 01 version

- New co-authors
- Applications added

Controller based traffic engineering



Suggestions and comments

THANKS