

ISIS Link Overload

draft-hegde-isis-link-overload

Shraddha Hegde

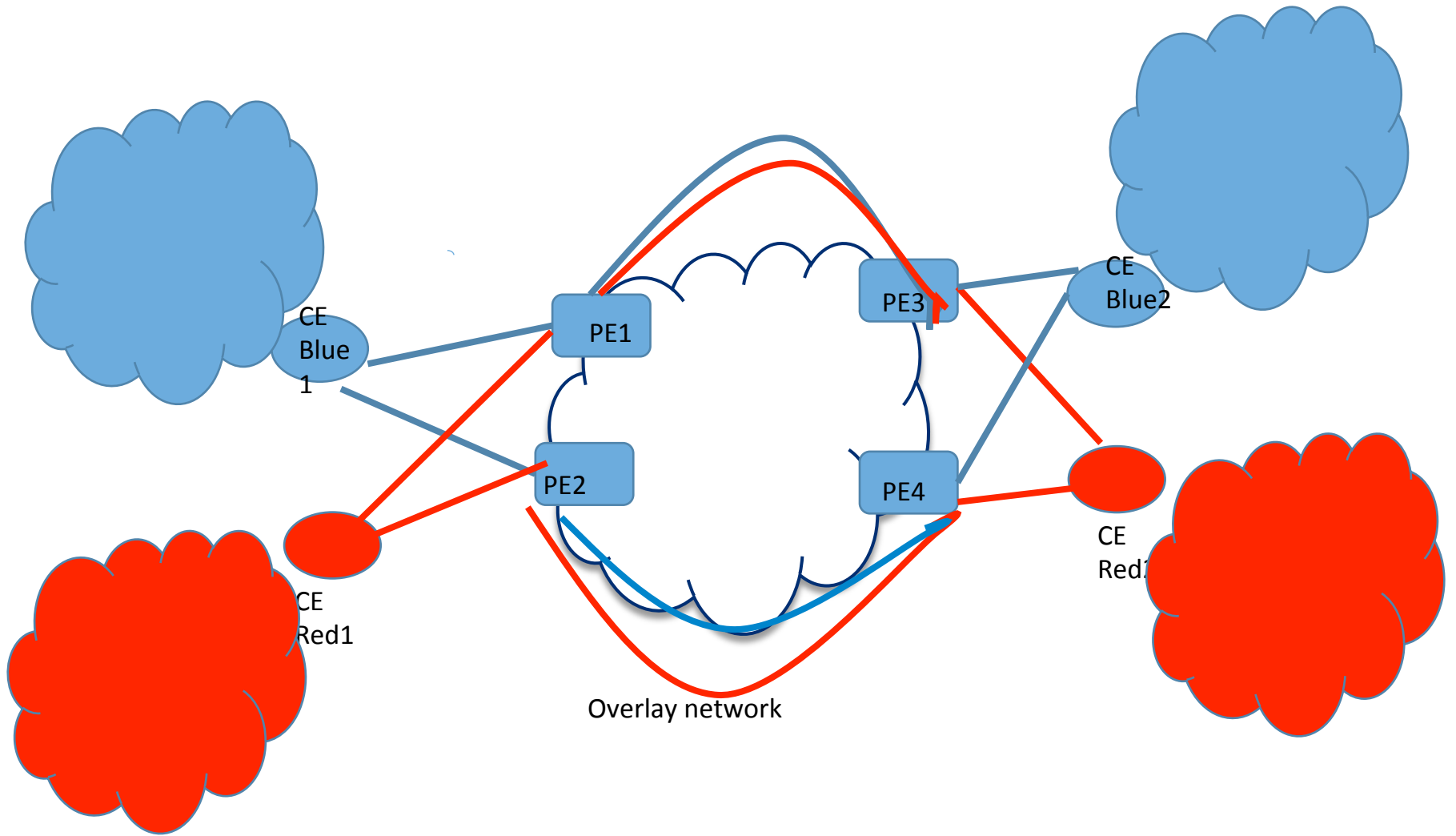
Hannes Gredler

Pushpasis Sarkar

Agenda

- Problem
- Motivation
- Solution
- ISIS protocol details
- Conclusion

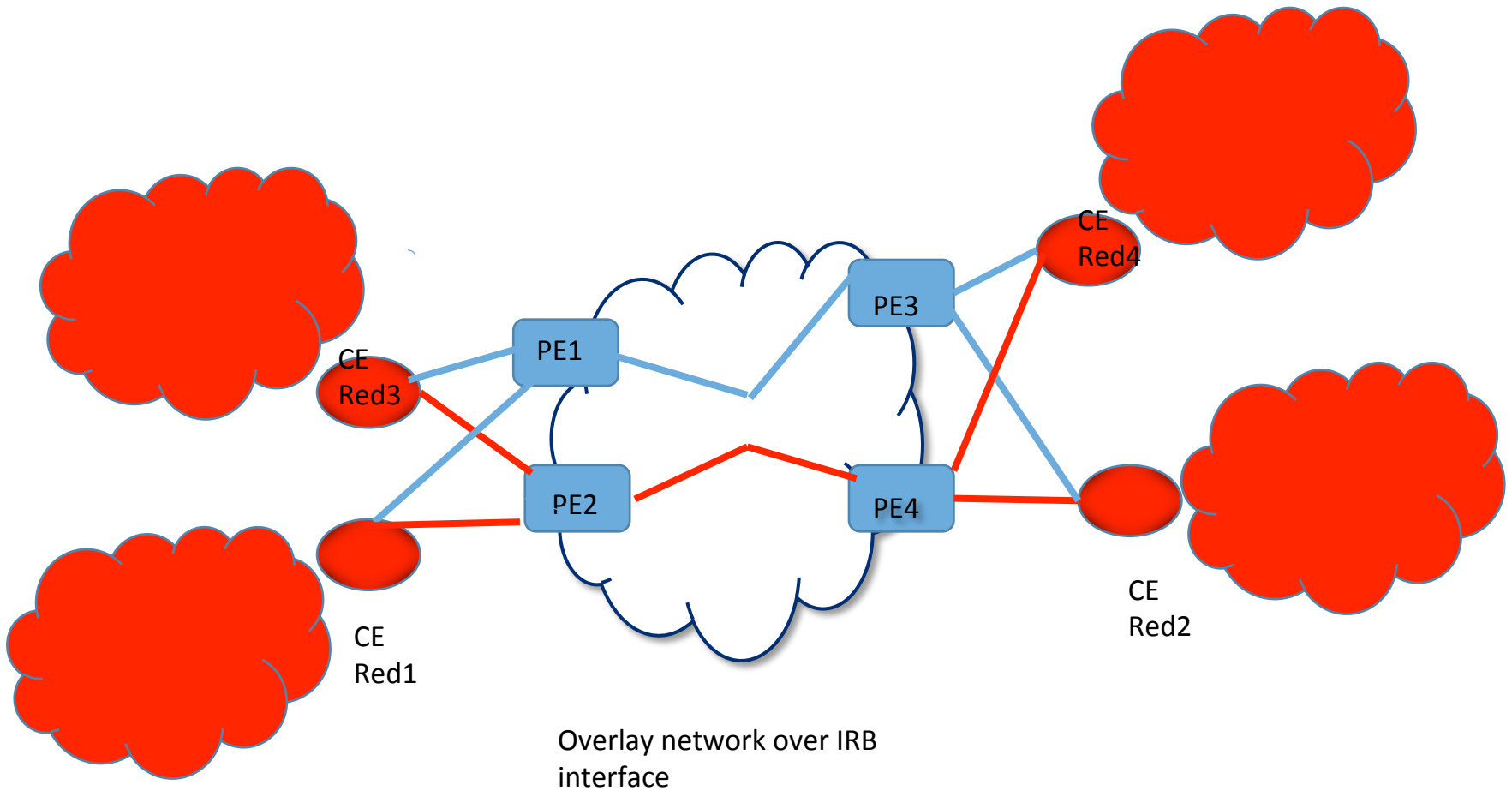
Overlay networks



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

Overlay Broadcast networks



Motivation

- Ease of maintenance
- Automated upgradation
- Minimized traffic loss

Solution

P2P links

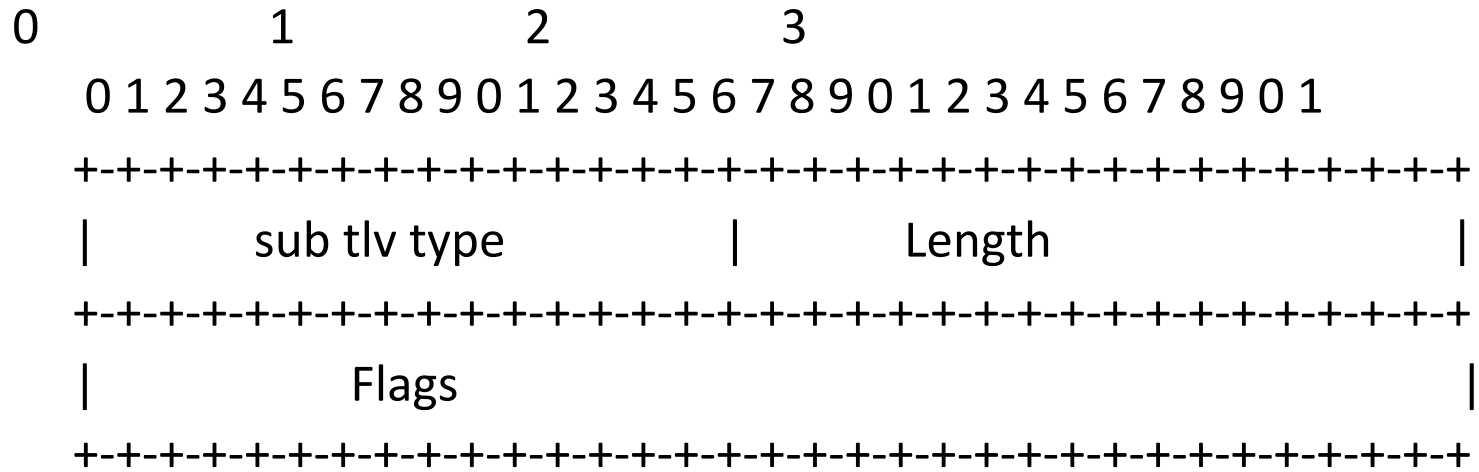
- Advertise a link overload bit in the link attributes sub-TLV (TLV :RFC 5209) carried in TLV 22
- Remote end identifies connecting link
- Increases metric to MAX-METRIC (Usable metric)
- Re-floods the LSP
- Traffic is diverted away from overloaded link
- Link is ready for maintenance

Solution

Broadcast links

- Advertise a link overload bit in the link attributes sub-TLV (TLV :RFC 5209) carried in TLV 22
- DIS for the link recognizes the new TLV
- Sets the metric from pseudo node to the originating node to MAX-METRIC
- Re-floods pseudonode LSP
- Traffic is diverted away from overloaded link
- Link is ready for maintenance

TLV details



Link Overload bit : 0x04

Questions & comments?

THANKS