

81st IETF - Quebec, Canada

draft-wijnands-pim-neighbor-reduction-01

IJsbrand Wijnands

ice@cisco.com

Yiqun cai

ycai@cisco.com

History

- 76rd IETF - Hiroshima, Japan
 - Initial draft
- 78rd IETF - Maastricht, Netherlands
 - Added PIM hello suppression

Problem statement

- PIM creates a neighbor relationship by default.
- On a LAN we'll see as many PIM neighbors as there are PIM enabled routers connected.
- LANs that connected a large number of PIM enabled routers potentially create a large PIM neighbor list. For example a Multi-PMSI in L3VPN.

Proposal

- Limit the number of PIM neighbors to the PIM routers that are a target upstream for either the RP or Source(s).
- PIM routers do not send out PIM hello's by default.
- PIM neighbor adjacency is requested by a special 'Hello request bit' in the J/P header.

Proposal (cont)

- There is a one-way adjacency with the target upstream PIM router.
- As long as the upstream router has downstream interest, it keeps sending out PIM hello's.
- Note, this solution benefits networks where the Sources are mostly co-located in few sites. Which is a typical deployment in L3VPN.

- Authors like to get more feedback from the WG.
- We like to ask for WG adoption.

Questions?