

OSPF Extensions for BIER-TE

draft-ietf-bier-te-ospf-07

OSPFv3 Extensions for BIER-TE

draft-ietf-bier-te-ospfv3-06

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Overview

Thank people below for their comments and suggestions

- Acee Lindem
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- Toerless Eckert

Updates to previous version

- Merged two documents into one:
draft-ietf-bier-te-ospf-07
- Some Editorial Changes

Merged Document

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Next Steps

- Comments
- WGLC

BIER-TE for Broadcast Link

draft-chen-bier-te-lan-08

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Overview

Thank people below for their comments

- Greg Shepherd
- Sandy Zhang

Updates to previous versions

- Added reasons for duplicated packets
- Some Editorial Changes

Reasons for Duplicated Packets (1/2)

➤ A **bit position** is **local** to a node (i.e., for a link connected to the node).

Every node X processes only the bit positions in a packet that are local to node X (i.e., the bit positions for the links connected to node X). E.g.,

1): A processes only BP 2' for link from A to B. A removes 2' and sends packet to B according to 2'.

2): B processes only BPs 4' and 6' for links from B to G and C. B removes 4' and 6' and sends packet to G and C according to 4' and 6' respectively.

3): G processes only BPs 14' and 19' for links from G to K and H. G removes 14' and 19' and sends packet to K and H according to 14' and 19' respectively. NOTE: H receives packet once.

6): C processes only BPs 12' and 19' for links from C to F and H. C removes 12' and 19' and sends packet to F and H according to 12' and 19' respectively. NOTE: H receives packet again.

Path A to K, H, F: {2',4',6',12',14',19',2,4,6}

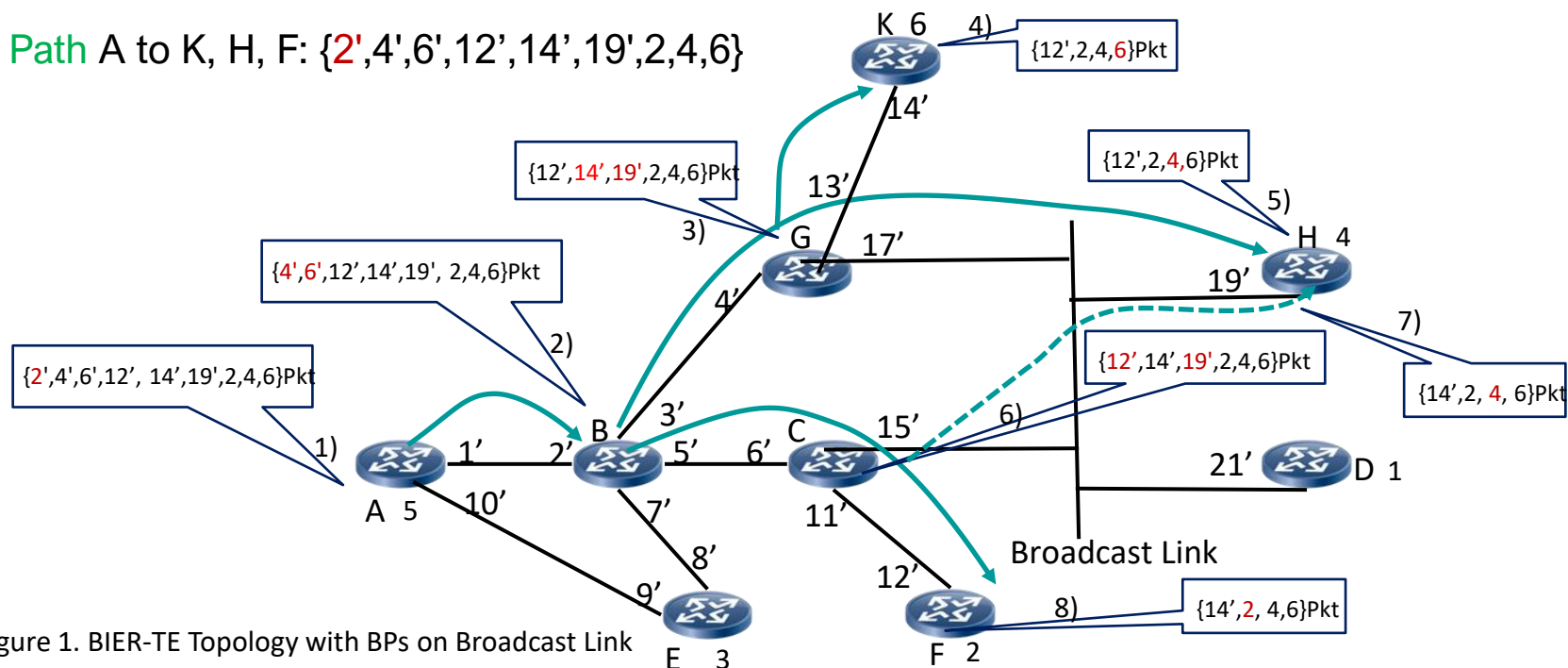


Figure 1. BIER-TE Topology with BPs on Broadcast Link

Reasons for Duplicated Packets (2/2)

➤ **Missing or no enough information** for broadcast link (LAN).

There is a **pseudo node** for a LAN in IGP (DR in OSPF and DIS in IS-IS) and the pseudo node is connected to each of the nodes on the LAN. The bit positions for these links are missing.

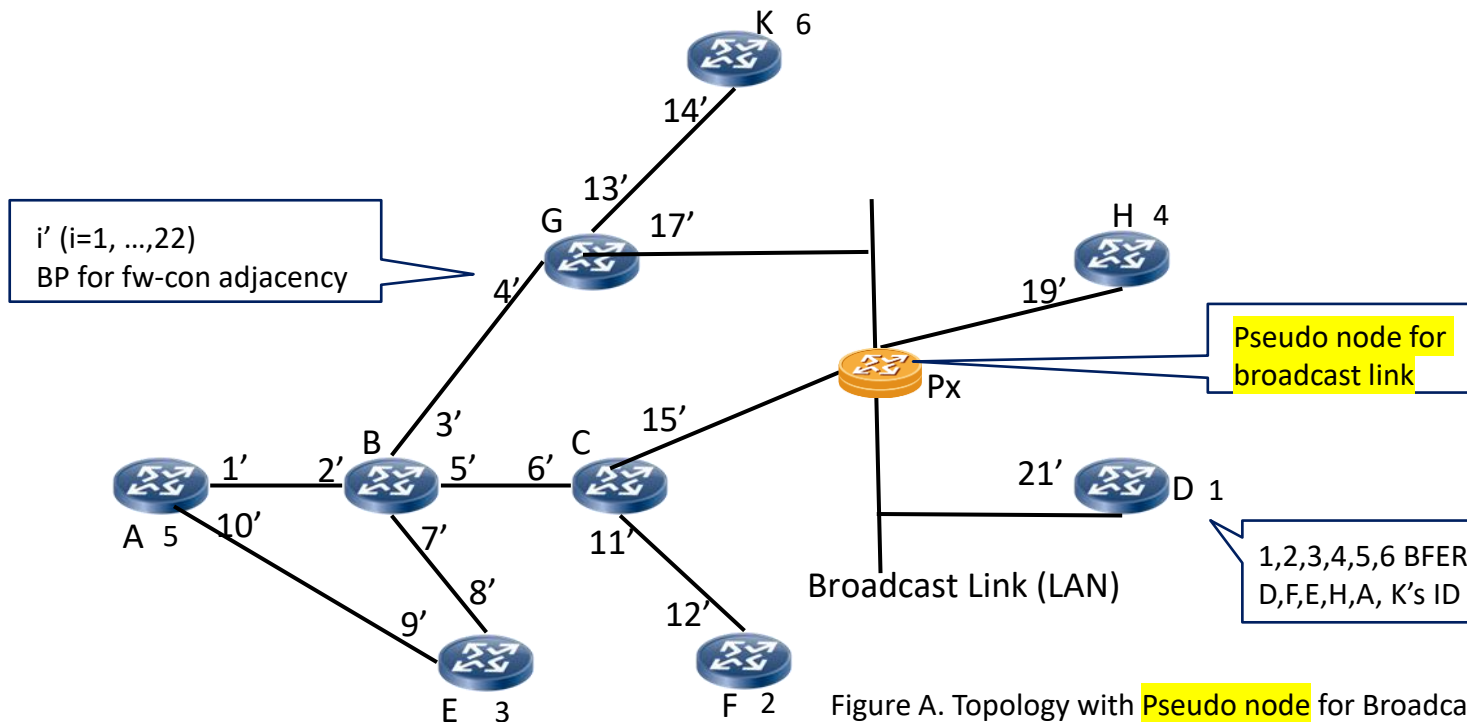
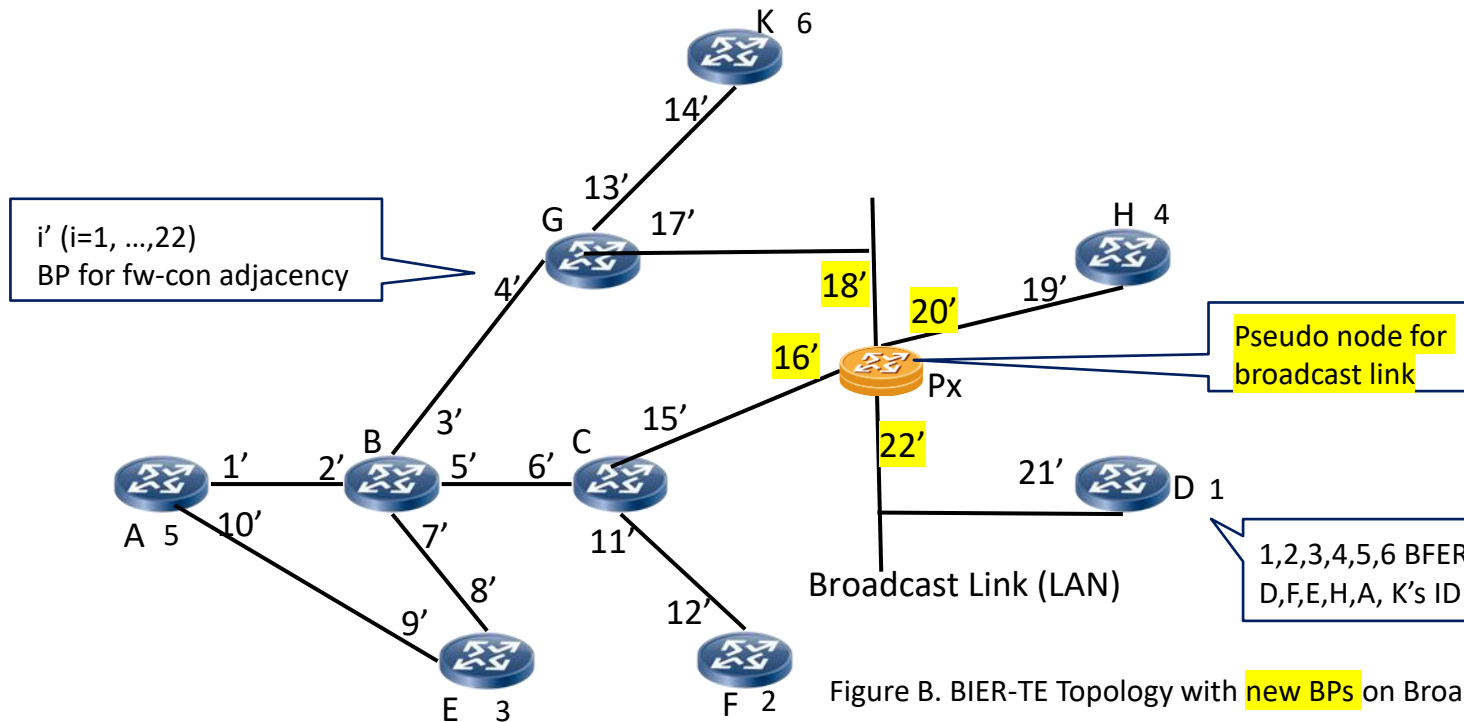


Figure A. Topology with **Pseudo node** for Broadcast Link (LAN)

New BP Assignments for Broadcast Link (LAN)

- For a broadcast link connecting X_1, X_2, \dots, X_m , assuming they are connected a **pseudo node P_x** (e.g., DR in OSPF or DIS in IS-IS).
- For connection between P_x and X_1, X_2, \dots, X_m , two BPs are assigned.
 - One is for **lan-connected** adjacency from X_i ($i=1, 2, \dots, m$) to P_x ,
 - the other is for forward connected adjacency from P_x to X_i .



Next Steps

- Comments
- Adoption