

# Traffic Engineering Database Dissemination for Hierarchical PCE scenarios

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[draft-lopez-pce-hpce-ted-00](#)

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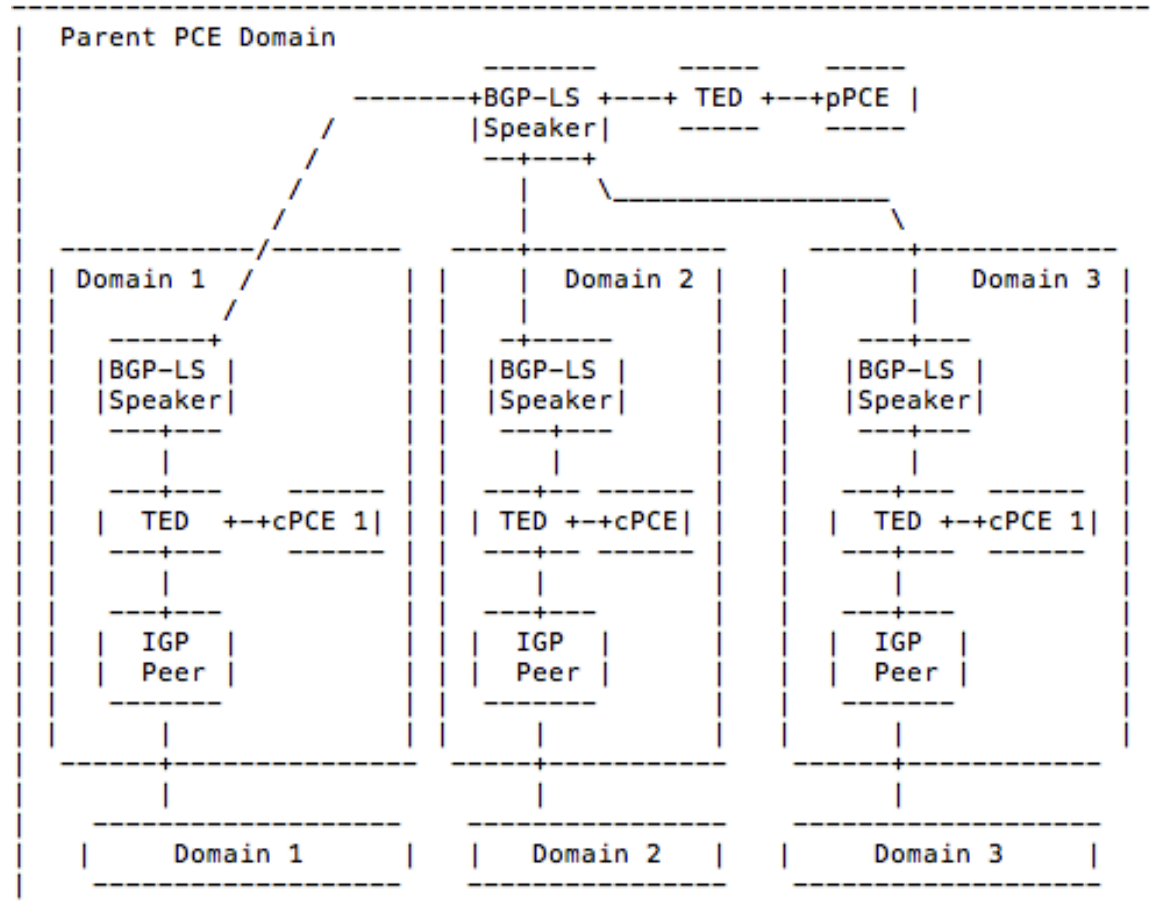
# Motivation

- H-PCE Architecture (RFC6805)
  - Proposal to solve the multi-domain path computation by means of cooperation among different PCEs.
  - Solution draft for H-PCE (draft-ietf-pce-hierarchy-extensions-00)
    - Focus on computation procedures and PCEP protocol extensions.
- Unanswered Questions in the Path Computation Element Architecture (draft-ietf-pce-questions)
- Procedure to build and populate the parent PCE Traffic Engineering Database (TED) is still an open issue.
- Goal of this draft
  - Analyse how topology dissemination mechanisms may be used to provide TE information between Parent and Child PCEs
- Not a goal of this draft
  - Solve the Internet via exposure of all internal domain topologies!

# H-PCE Topology Dissemination Options

- What needs to be provided?
  - Inter-domain links
  - Edge-to-edge "virtual" TE links created out of (potential) LSPs
- How to provide?
  - Static configuration
  - Join an IGP instance
  - Via PCEP Notifications
  - Separate IGP instance
  - Northbound distribution of TE information (BGP-LS)

# H-PCE with BGP-LS architecture



# Open issues

- Is BGP-LS the way forward?
- Mapping of OSPF-TE / IS-IS-TE
- Can Intra-domain links be distributed to parent PCE?

# Next Steps

- Continue to investigate and prototype
- Trigger discussion on which mechanisms should be used and why
  - Application and scenario based?
  - Scalability?
- Receive feedback