Inter Stateful PCE Communication Procedures.

draft-ietf-pce-state-sync-05
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Summary

This draft was adopted in June 2021 and last presented before adoption

The draft is almost ready for WGLC

What does this draft describe?

• PCC can have PCEP sessions with multiple PCEs
• PCC synchronizes its state with multiple PCEs
• This draft describes the need and mechanism for synchronization between the PCEs themselves.
  • Provide additional resiliency in case of session failure
  • Solves split-brain / computation loops issue
  • Primary and Secondary PCEs / load-balance PCEs
  • Applicable to multi-domain and H-PCE
Quick Recap

Create inter-PCE stateful PCEP session (state-sync)

- Exchange the LSP state between PCEs

Support for Primary / Secondary relationship

- Using priority assign a PCE to elect the Primary PCE responsible for a set of LSPs
- Note that Priority setting is out of the scope of this I-D
- Procedure to sub-delegate
Protocol Extensions

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<th>Capability advertisement</th>
<th>State Synchronization in both directions between PCEs</th>
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<td></td>
<td>• Initial Bulk</td>
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<td>• Incremental Updates</td>
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<tr>
<td>Use of LSPDB version to maintain latest state</td>
<td>Priority</td>
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<td>Maintain LSP State from multiple sources</td>
<td>Sub-delegation</td>
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Ready for WGLC!

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