

Inter Stateful Path Computation Element (PCE) Communication Procedures

draft-ietf-pce-state-sync-07

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PCE WG @ IETF 119

Introduction

- This I-D was last presented at IETF 118
- 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
 - PCC can have PCEP sessions with multiple PCEs
 - PCC synchronizes its state with multiple PCEs
 - PCEs create inter-PCE stateful PCEP session (state-sync) to exchange LSP state
 - Support selection of Primary PCE among a set of PCEs
 - Support for sub-delegation

Recent Changes

- Thanks for the review comments from Andrew Stone
- Add a clarification for the term “computation loop” in the context of this I-D
- Corrected the name of the SPEAKER-ENTITY-ID TLV
- Added text to take care of wrap around in case of LSPDB version number
- Added text to state that there is no mechanism for a PCE to pass information learned via PCC’s open message to another PCE
- Add a separate section for Association Group
- Add error check for PCEP-PATH-VECTOR TLV
- Add text to clarify that examples are for illustrative purpose and the solution is applicable to many other scenarios
- Editorial suggestions and Nits

Open Issue

- Currently, there is no way for a PCE to carry forward any information it receives in the open message from a PCC to another PCE.
- The draft says - "Note that a PCC uses the Open message exchange during PCEP session establishment to inform the PCE about its capabilities and parameters. Currently, there is no mechanism to pass that information to other PCEs via the state-sync session."
- By not forwarding the Open message content, there is a possibility of different knowledge at different PCEs. The draft acknowledges that and leaves it open for future or we need to find a way to solve this in this draft to make progress?

Ready for WGLC?