

Extensions to the PCEP for Associated Bidirectional LSP

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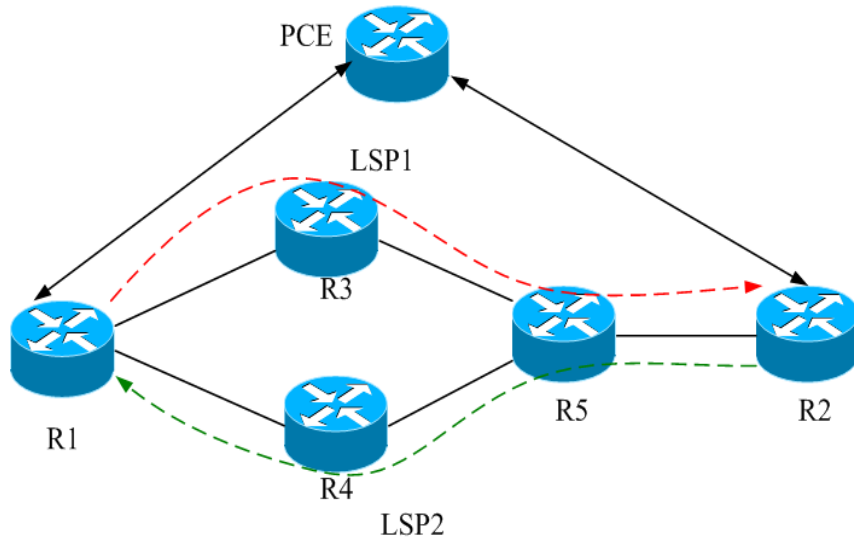
[draft-he-pce-pcep-associated-lsp-extensions-01](#)

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Motivation

- Requirements
 - RFC5654:MPLS-TP MUST support associated bidirectional LSP.
 - [draft-ietf-ccamp-mpls-tp-rsvpte-ext-associated-lsp](#) describes the signaling of the associated bidirectional LSP.
- PCE can be used for path computation of an associated bidirectional LSP.

Associated bidirectional LSP



An example of associated bidirectional LSP

- **Concurrent Computation**

- The head-end submits the computation request for both two directional LSPs concurrently.
- Applicable to The Single Sided Provisioning model

Successive Computation

- The head-end and the tail-end send the forward LSP and backward LSP computation requests separately.
- Applicable to both the Single Sided Provisioning model and the Double Sided Provisioning model

Procedure

1. Concurrent Computation

- SVEC object can be used to synchronize the request about the forward and backward LSPs.

2. Successive Computation

- The stateful PCE can coordinate the two reverse LSPs to get the optimal path for the associated bidirectional LSP through the ASSOCIATION object.

Protocol Extensions

Extended ASSOCIATION Object

- to associate the two reverse LSPs, which form an associated bidirectional LSP.
- Be identical in encoding to the contents of the RSVP-TE Extended ASSOCIATION Object.

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Next Steps

➤ Comments/Feedback?