PCEP Extensions for Associated Bidirectional SR Paths

draft-ietf-pce-sr-bidir-path-02

Cheng Li (chengli13@huawei.com)
Mach(Guoyi) Chen (Mach.chen@huawei.com)
Weiqiang Cheng (chengweiqiang@chinamobile.com)
Rakesh Gandhi (rgandhi@cisco.com) - Presenter
Quan Xiong (xiong.quan@zte.com.cn)
Agenda

• Requirements and Scope
• Double-sided Associated Bidirectional with Reverse LSP
• PCEP Object Definitions
• Next Steps
Requirements and Scope

Requirements:
- Packet transport networks deploying bidirectional SR Paths
- Co-routed and non-co-routed forward and reverse SR Paths

Scope:
- Associated bidirectional SR Paths
- PCE-Initiated LSPs
- PCC-Initiated LSPs
- Stateless PCE (e.g. for co-routed path computation requests)

Not in Scope:
- Associating a bidirectional SR Path with an RSVP-TE LSP
Double-sided Associated Bidirectional **with Reverse LSP**

- **PCE Initiated LSPs**
- Association initiated by PCE or PCC
- Co-routed or non-co-routed
- B flag in RP object
Double-sided Associated Bidirectional **with Reverse LSP**

- **PCC Initiated LSPs**
- Association initiated by PCE or PCC
- Co-routed or non-co-routed
- B flag in RP object
PCEP Association Object

- Association Type (TBD1) = Double-sided Bidirectional **with Reverse** LSP Association Group
- The Association Object Populated using the procedure defined in [draft-ietf-pce-association-bidir]
Error Handling (PCErr Error-Type 26 - Association Error)

- PCErr defined in [draft-ietf-pce-association-bidir] are applicable to SR Paths

Specifically –

1. Both forward and reverse LSPs MUST belong to the same bidirectional TE tunnel [RFC3209].
   - Error-Value = Bidirectional LSP Association - Tunnel mismatch
2. LSP (forward or reverse) cannot be part of more than one Bidirectional LSP Association Group.
   - Error-Value = Bidirectional LSP Association - Group Mismatch
3. If a PCEP speaker receives a different PST value for Bidirectional LSP association group and it does not support.
   - Error-Value = Bidirectional LSP Association - Path Setup Type Not Supported
Next Steps

- Welcome your review comments and suggestions
Thank you