

# Path Computation Element (PCE) Protocol Extensions for Stateful PCE Usage in GMPLS- controlled Networks

draft-ietf-pce-pcep-stateful-pce-gmpls-08

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# Changes from the last versions

- Major Editorial Clean-ups.
- Section 2 – Context added to explain this draft's relationship with other drafts.
- Section 4.3.3 – B Bit added to indicate a bidirectional co-routed LSP in SRP Object.
- Section 4.3.2 – Modification for Route Exclusion, replaced P-LSP ID to Symbolic Path Name TLV to be more general.

# Section 2 Context

This document is built on the basis of Stateful PCE [RFC8231] and PCEP for GMPLS [PCEP-GMPLS].

There are two types of LSP operation for Stateful PCE.

- For Active Stateful PCE, PCUpd message is sent from PCE to PCC to update the LSP state for the LSP delegated to PCE. Any changes to the delegated LSPs generate a PCRpt message by the PCC to PCE to convey the changes of the LSP. Any modifications to the Objects/TLVs that are identified in this document to support GMPLS technology-specific attributes will be carried in the PCRpt and PCUpd messages.
- For Passive Stateful PCE where PCReq/PCRep messages are used to convey path computation instruction. As GMPLS-technology specific Objects/TLVs are defined in [PCEP-GMPLS], this document just points to the work in [PCEP-GMPLS] and add only the stateful PCE aspect only if applicable. Passive Stateful PCE makes use of PCRpt messages when reporting LSP State changes sent by PCC to PCEs. Any modifications to the Objects/TLVs that are identified in this document to support GMPLS technology-specific attributes will be carried in the PCRpt message.



# Next Steps

- Dependency on PCEP for Stateless GMPLS:  
<https://tools.ietf.org/wg/pce/draft-ietf-pce-gmpls-pcep-extensions/>
- Once PCEP for Stateless GMPLS is updated, this draft will be stable with some minor update and be ready for WG LC.