

# Stateful PCE - update

draft-ietf-pce-stateful-pce-05

draft-crabbe-pce-pce-initated-lsp-02

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# Common updates to both drafts

- Use a request ID to allow correlation of events and errors
  - Introduction of the SRP (Stateful PCE Request Parameters) Object
  - Specification of procedures for event correlation
- Specify a state cleanup mechanism for removal of PCE state after a PCEP session failure (introduction of the State Timeout Interval)
- Error reporting cleanup to allow easy correlation and communication of RSVP signaling errors

Base draft –  
draft-ietf-pce-stateful-pce-05

# Base draft updates

- Address comments received during the last IETF
  - Very productive meetings in Orlando
- Terminology cleanup
  - Stateful PCE, active, passive, etc
  - LSP-ID renamed PLSP-ID to avoid confusion with RSVP notation
  - Delegation vs re-delegation – to clarify operation after failure

# Base draft updates

- LSP state synchronization PCC-PCE
  - Explicit end of synchronization
  - Support for PCE-requested resynchronization with the PCC
- Clarification of the re-delegation procedures and state cleanup
  - Discussion on operation with redundant PCE and re-delegation
- Description of make-before-break
- Cleanup of error reporting and error generation
- Remove support of path-list in report and update messages

# Base draft updates

- Add the LSP signaling type to the LSP object for extensibility (RSVP is the default)
- Clean up reporting of the operational state
  - Support reporting of multiple operational states
- LSP identifiers TLV move to the base draft – common to both MPLS and GMPLS
- Clean up the LSP error code TLV and RSVP error spec TLVs
  - generic support for both MPLS-TE and GMPLS

# Base draft updates

- General structure
  - Base draft
  - Technology specific drafts
    - GMPLS - draft-zhang-pce-pcep-stateful-pce-gmpls-02
    - MPLS-TE - draft-crabbe-pce-stateful-pce-mpls-te-01. As part of the cleanup of error reporting and making the document generic, the content from this document moved to the base draft – no MPLS-TE specific extensions needed at this point
- Implementation status
  - At least two vendors working on implementations, early versions available in shipping code from at least one vendor.

# Base draft - next steps

- Duplication of use causes some confusion
  - Remove the use cases from the base draft after the adoption of draft-zhang-pce-stateful-pce-app as a working group document
- Incorporate comments received on the list since posting version 05
  - Already in progress
- Please review the changes from the previous versions

PCE-initiated LSP draft –  
draft-crabbe-pce-pce-initiated-lsp-02

# PCE-initiated LSP draft updates

- Rename PCCreate to PCInitiate
- Instantiation and deletion are both handled through PCInitiate messages (instead of PCCreate and PCupd)
- The SRP object is mandatory and provides correlation of events and errors.
- Error handling similar to the base draft
- State cleanup is handled similarly with the base draft (the lsp-cleanup TLV is removed)

## Next steps

- At least two vendors working on implementations
- Multiple drafts depend on this draft
- Please review the updated document