PCEP Extensions for LSP scheduling with stateful PCE

draft-zhuang-pce-stateful-pce-lsp-scheduling-05

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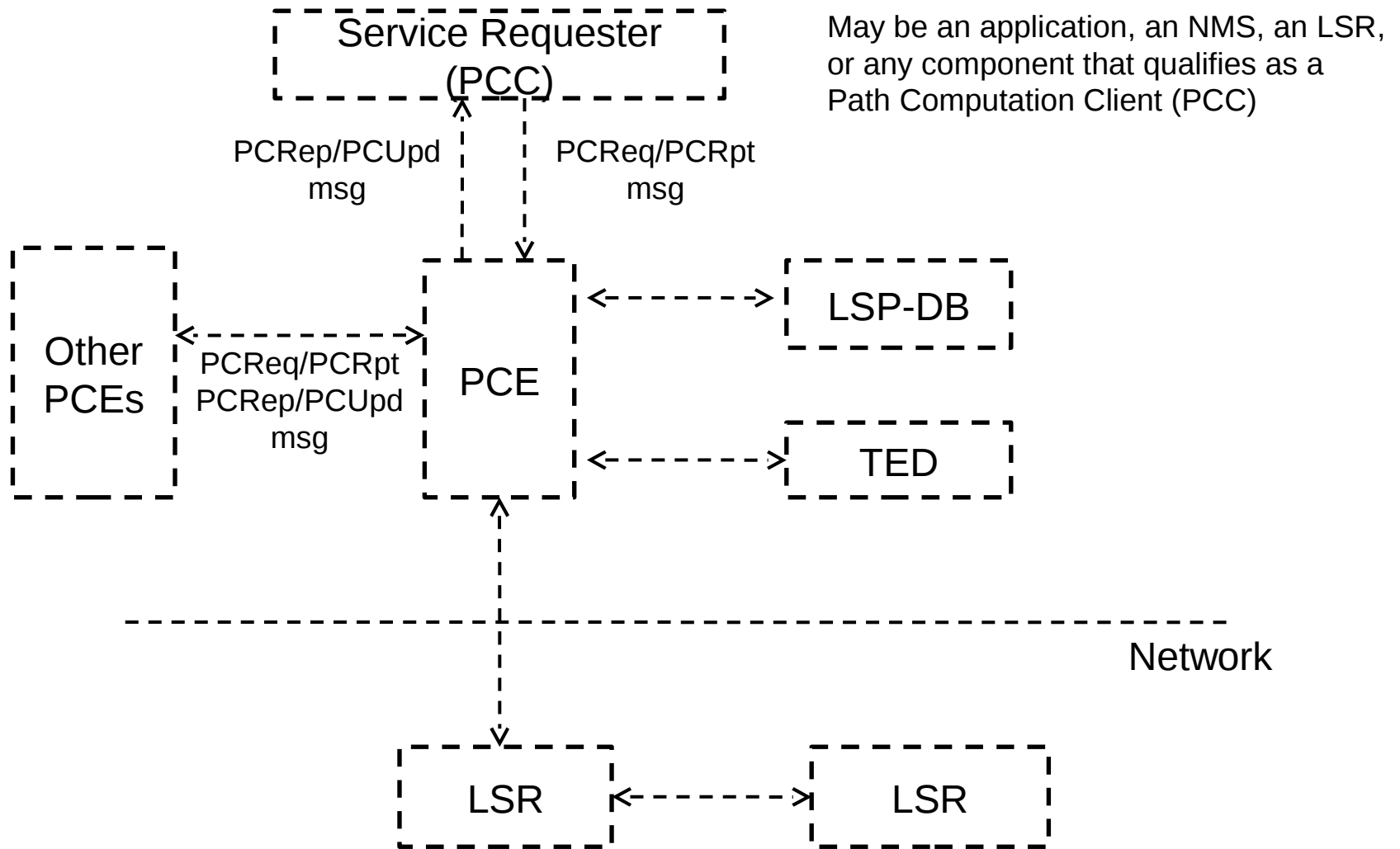Daniele Ceccarelli (daniele.ceccarelli@ericsson.com)

Resolve comments in IETF 93

- **Motivation, requirements and use cases**
  - Stated and discussed in draft-ietf-teas-scheduled-resources-02
  - Get consensus on the problem and the architectural conclusion is that scheduling state should be held centrally at the point of use and not in the network devices.
- **How the PCC "schedule" will be synchronized between PCEs other PCCs**
  - PCE is asked to synchronize the scheduled LSP with other PCEs by using PCReq/PCUpd message.
- **Address overlap with the Temporal LSP proposal** :
  - Merged to a single solution document.

Updates in revision -05

- **Merge with draft-chen-pce-tts:**
  - Incorporate content from draft-chen-pce-tts
- **Add Periodical LSP scheduling as a special case of LSP scheduling**
  - A new flag (PD-LSP-CAPABLITY bit) in STATEFUL-PCE-CAPABILITY TLV to indicate its support of Periodical LSP scheduling
  - A new SCHED-PD-LSP-ATTRIBUTE TLV to express attributes for periodical scheduled LSP.
  - Add graceful period and elastic time interval for scheduling
- **Add a new section for "Scheduled LSP Updates"**
- **Editorial changes.**
- **Generate -05 version.**

PCEP extension for LSP scheduling

Service Requester (PCC)

May be an application, an NMS, an LSR, or any component that qualifies as a Path Computation Client (PCC)

PCRep/PCUpd msg

PCReq/PCRpt msg

Other PCEs

PCReq/PCRpt PCRep/PCUpd msg

PCE

LSP-DB

TED

Network

LSR

LSR

Note: the architecture is from I-D. draft-ietf-teas-scheduled-resources-02

4

Next Step

- This is PECP extensions for architecture work in TEAS
- There has been interested demonstrated through two I-Ds
- Ready for adoption by the WG
  - What do the chairs recommend?