Extensions to PCEP for Distributing Label across Domains

draft-chen-pce-label-x-domains-00

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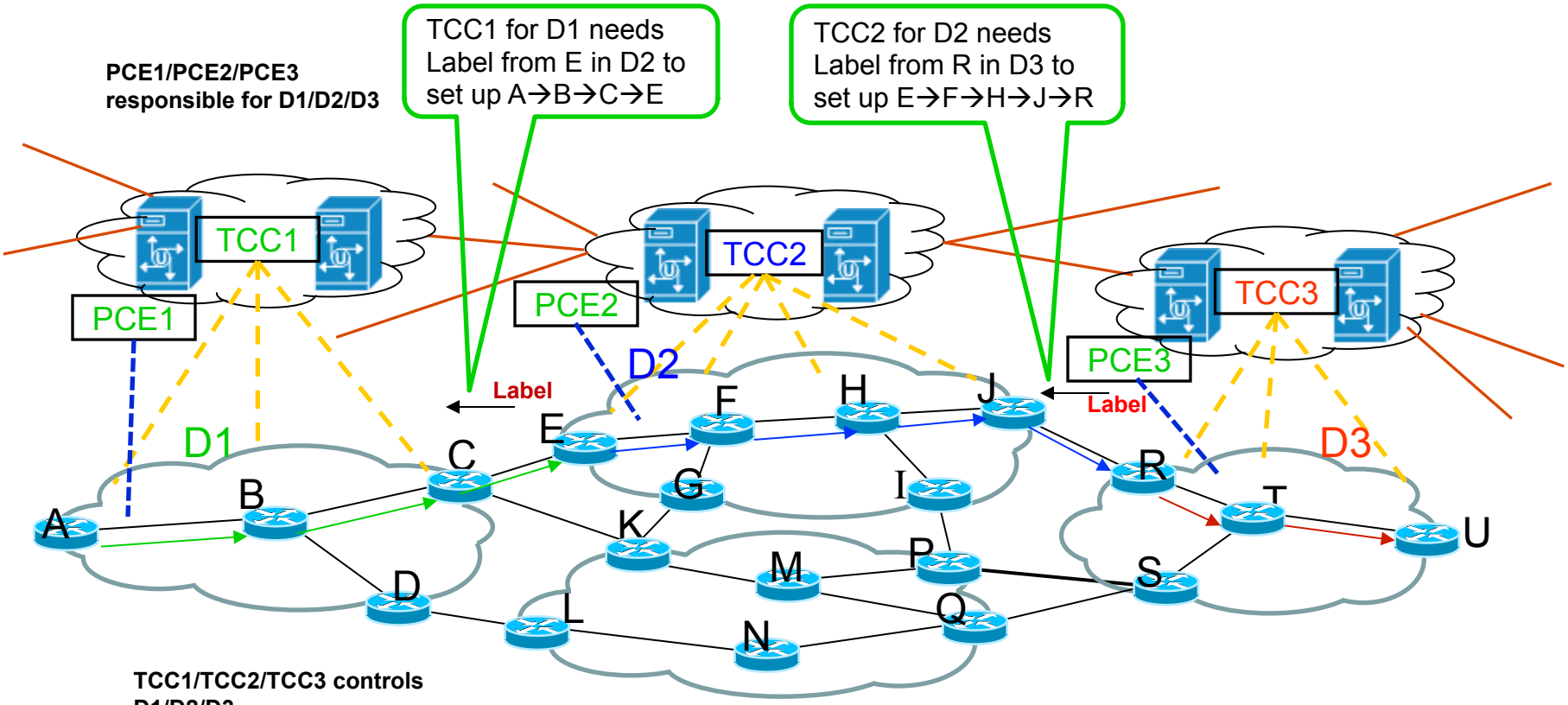
Introduction

- Path for TE LSP crossing domains is computed by PCEs
- LSP is set up along path by multiple Tunnel Central Controllers (TCCs)
- Each TCC controls a domain and sets up segment of LSP in its domain
- TCC needs Label from its next domain for setting up the segment



Extensions to PCEP

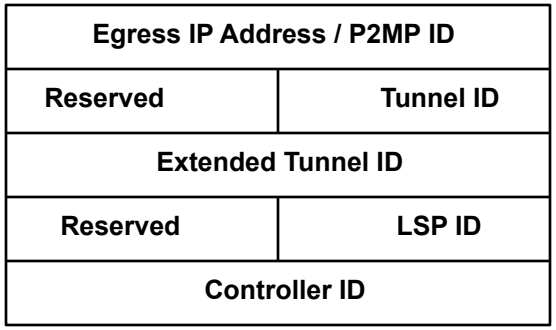
- **2 Bits in RP Object**
  1) L (Label distribution): 1: PCReq or PCRep message for distributing label crossing domains.
  2) C (LSP Creation): 1: PCReq or PCRep message for creating segment of LSP before distributing label

- **Label Object**

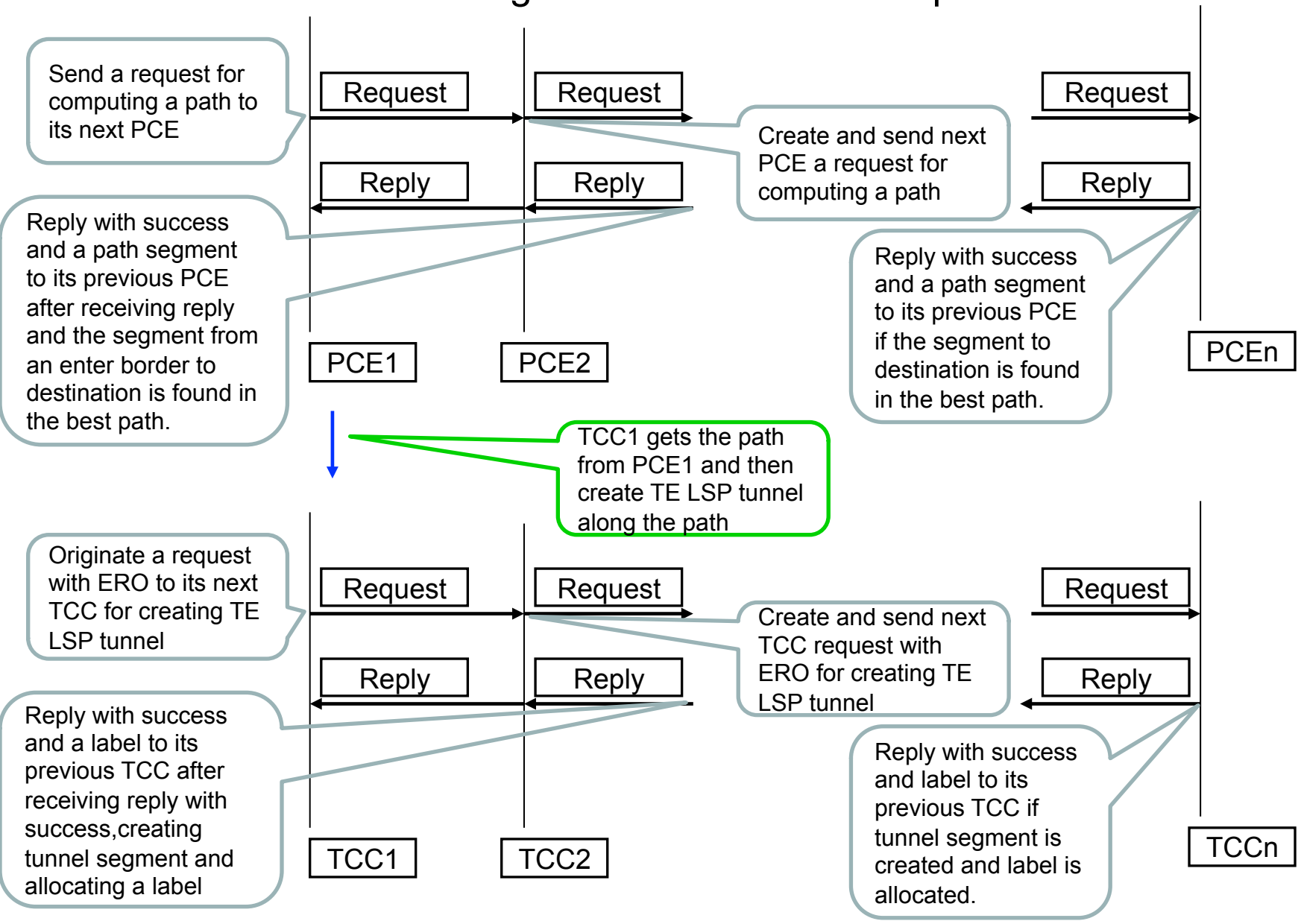
  Containing a Label and a node from which Label is allocated

- **LSP Tunnel Object**

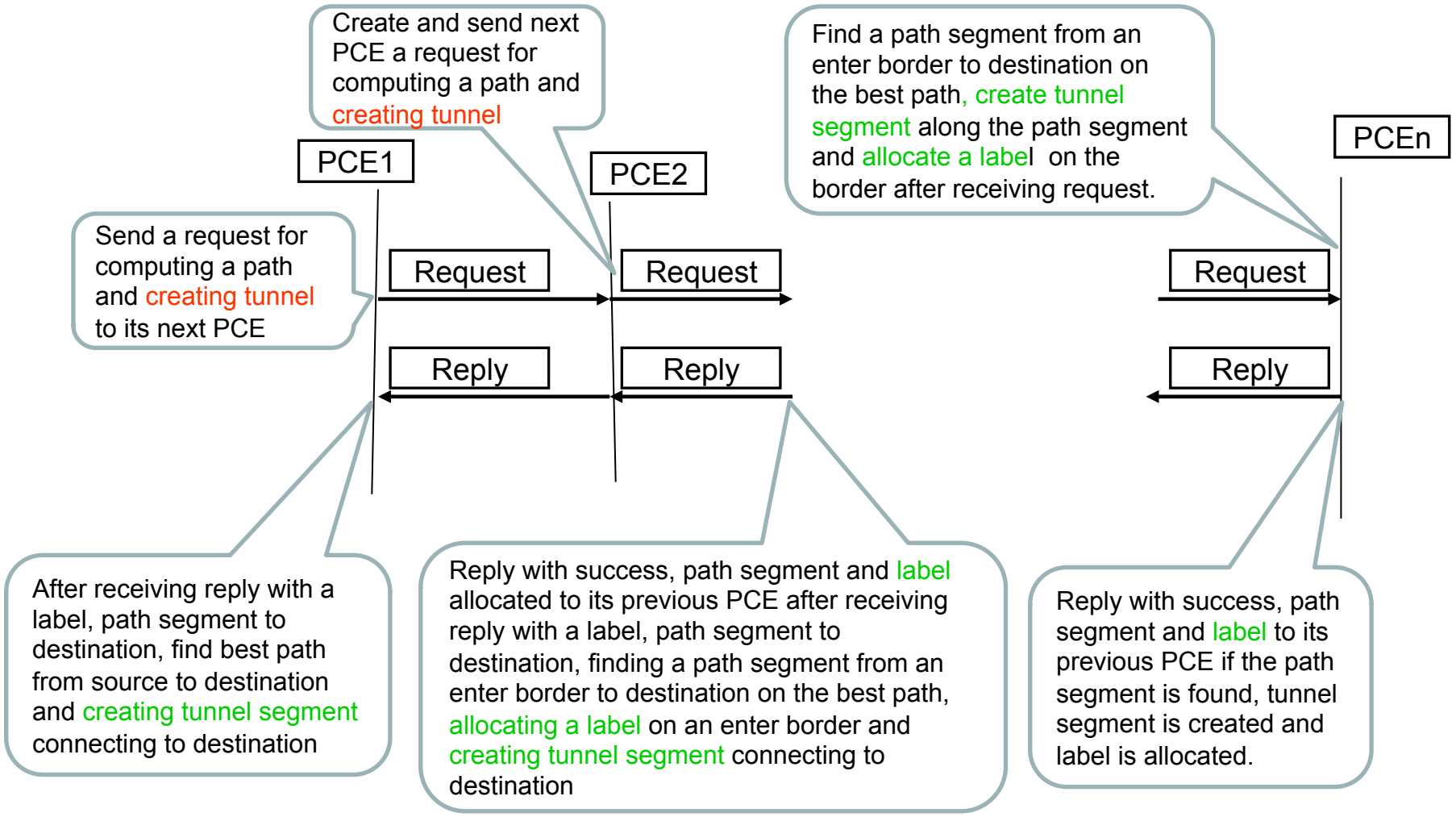
  Containing information identifying an LSP tunnel in multiple controller environment



Procedure 1: Distributing Label in Ordered Setup



Procedure 2: PCEs for Computing Path and Creating LSP



Next Step

- Welcome comments