

State Synchronization Between Stateful PCE

PCE WG, IETF105, Montreal, Canada

draft-litkowski-pce-state-sync-06

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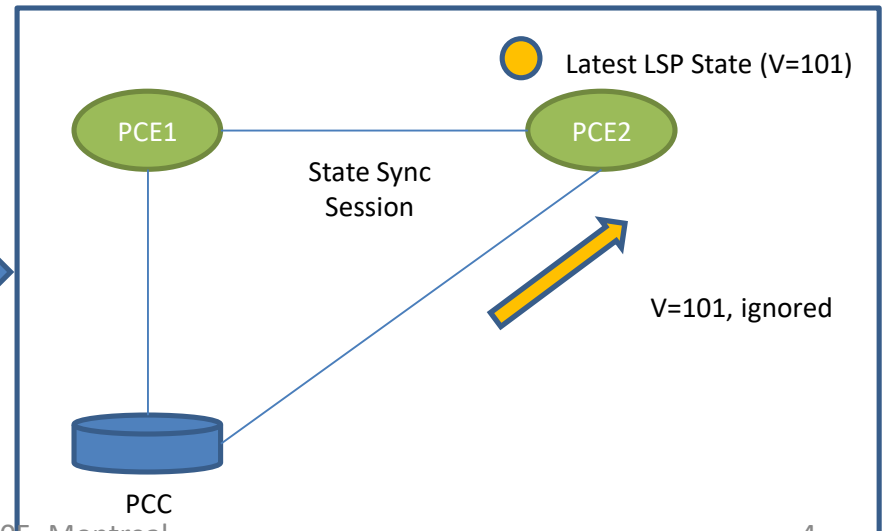
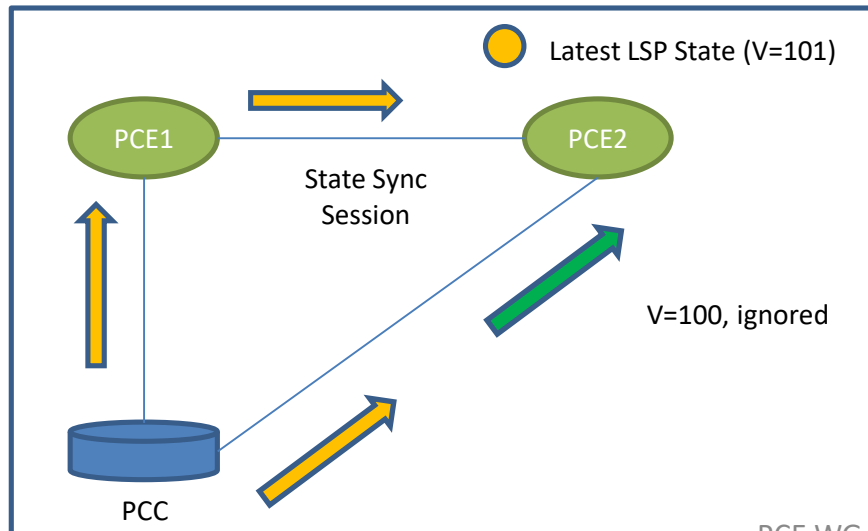
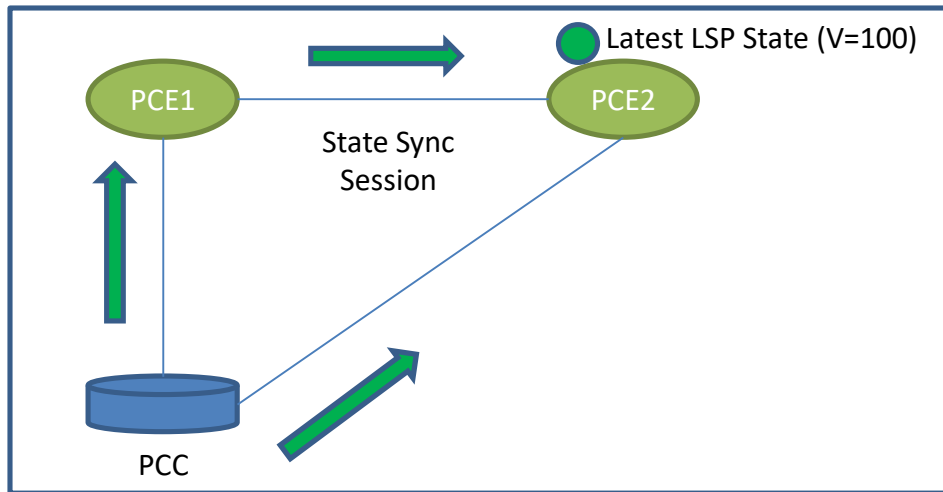
Draft Re-Cap

- Procedure for Inter-Stateful PCE communications
 - Making PCE deployments more resilient
 - Solve computation loop/optimality issues for dependent path computations (for e.g. diversity)
- Scenarios include:
 - ✓ Redundant PCEs (backup or load-balance)
 - ✓ Inter-domain PCEs / H-PCEs
- Discussed previously in IETF 100

Key Concepts

- A PCEP session between stateful PCEs (state-sync session)
- Synchronize LSP state between Stateful PCEs
 - Initial State synchronization in both directions
 - Incremental state - any state change received from PCC is forwarded to other 'state-sync' PCEs
- Master/Slave
 - For a set of LSPs (or all LSPs) one PCE becomes 'Master'
 - LSPs can be sub-delegated to 'Master'
- Other
 - Use of DB version to maintain the latest change
 - Maintain LSP state from multiple sources

Sync-up Example



Status & Next Step

- Comments clarified during IETF 100;
- Draft aligned with other stateful PCE and H-PCE work
- Important work for multiple PCE in deployment
- Request WG adoption

THANK YOU!