Static pseudowire configuration checking using Generic Associated Channel (G-ACh) Advertisement Protocol

PWE3 IETF83

draft-jc-pwe3-mpls-tp-static-checking-00

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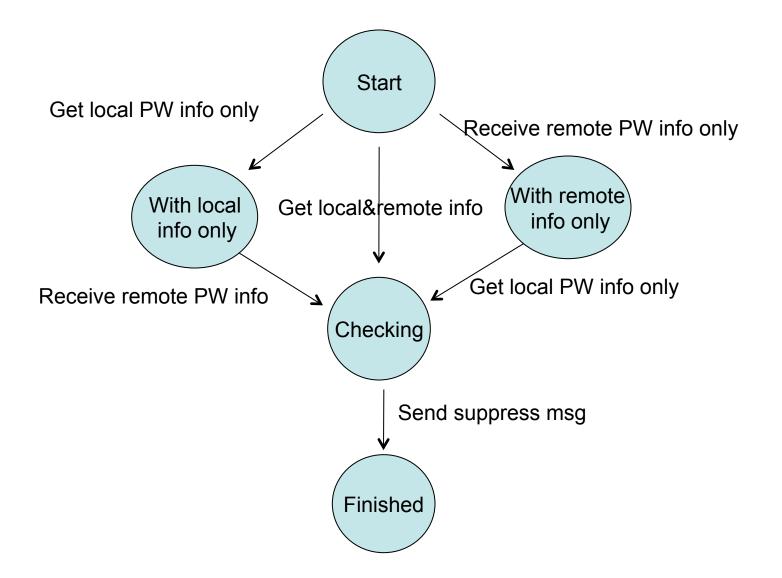
Motivation

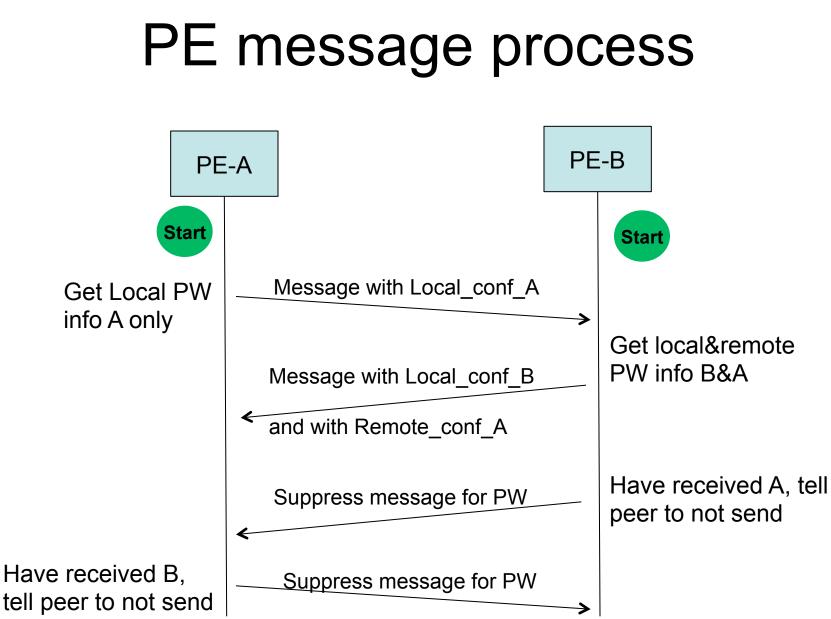
- Manual configuration of static PW in MPLS-TP:
 - Requires configuring many parameters at two PE sides, and parameters should be consistent, to make PW be operational.
- If parameters mis-match at two PE sides, it is difficult for operators to do trouble shooting.
- To ease trouble shooting:
 - Introduces an application of GAP, to transfer PW configuration parameters through underlying PSN Tunnel.
- With this new feature, PE is able to check PW configuration parameters automatically to figure out parameter mismatching.

Extensions to GAP

- New GAP application "static PW checking" is defined.
- Define "local static PW element" to report local configuration,
- Define "remote static PW element" to echo back received remote configuration.
- Define static PW suppressing message to stop checking process.

PE processing step





Configuration Check Process

- Parameters to be checked
 - Check control word, if both sides have same capability.
 - Check PW type, if both sides have the same
 - Check and negotiate interface parameters as specified in [RFC4447].
 - Check In&Out PW label.
- If mis-match, report the corresponding mis-match parameters

Label auto-configuration

- The mechanism could also be used as label auto-configuration:
 - The received in_label could be used as local out_label.
 - Then the static PW is allowed to configure only in_label, instead of both in&out label.

Some comments received

- Is it an alternative to LDP signaling?
 - No!
 - This is a checking tool, and only applied to static PW.
- Management system could do that, why we need it?
 - Sometimes management system does not exist
 - Management system could not do label auto configuration
- Why we use the corresponding PNS Tunnel?
 - Only when its corresponding PNS Tunnel is UP, the PW could be UP.

Next steps

- Need further comments from working group
- Refine the draft to avoid misunderstanding.

Thank you