

Pseudowire Communities

[draft-pkwok-pwe3-pw-communities-01](#)

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Objectives

- Generic method to simplify provisioning dynamic Pseudowires.
- Aid in policy administration during dynamic multi-segment pseudowire (Dyn MS-PW) set-up across various S-PEs with minimal overhead.

Problem Statement

- Dyn MS-PW spans across multiple administrative domains. For security reasons strict access control is required at S-PEs. One way is to define policies at S-PEs based on SAII/TAII but adds complexity, administrative overheads, configuration mistakes.
- Dyn MS-PW requires each S-PE to choose a unidirectional PSN tunnel to bind to a PW. T-PEs may require to signal the preference of PSN tunnels at S-PEs. Signaling each of the various types of PSN tunnel selection criteria adds significant burden to LDP messaging procedures.

Solution

- A “PW community” attribute as a 32 bit identifier carried in an Interface Parameters Sub-TLV.
- A PW community represents a template that has set of rules defined locally by a T-PE or S-PE.
- Each T-PE or S-PE can define its own set of rules and it is upto the administrative domain(s) to maintain congruities among PW community rules.

Solution contd..

- Very generic method and any complex rules can be mapped to specific PW communities.
- Can be considered as “Coloring” of PWs so that PW set-up decisions can be based on identity of the group.
- Concept is different from PW Grouping ID . It is not necessary that PW Grouping and PW communities be correlated.

Next Steps

- Request discussions/feedbacks in mailing list.
- WG Status?