

MAC Withdraw Signaling for static PW

draft-boutros-l2vpn-mac-wd-02.txt

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Brief History

- This draft was first introduced in 2011
- We are increasingly seeing demand for this solution from the field for static PW deployments (more on this later)
- Reviving this work
- Added a new author

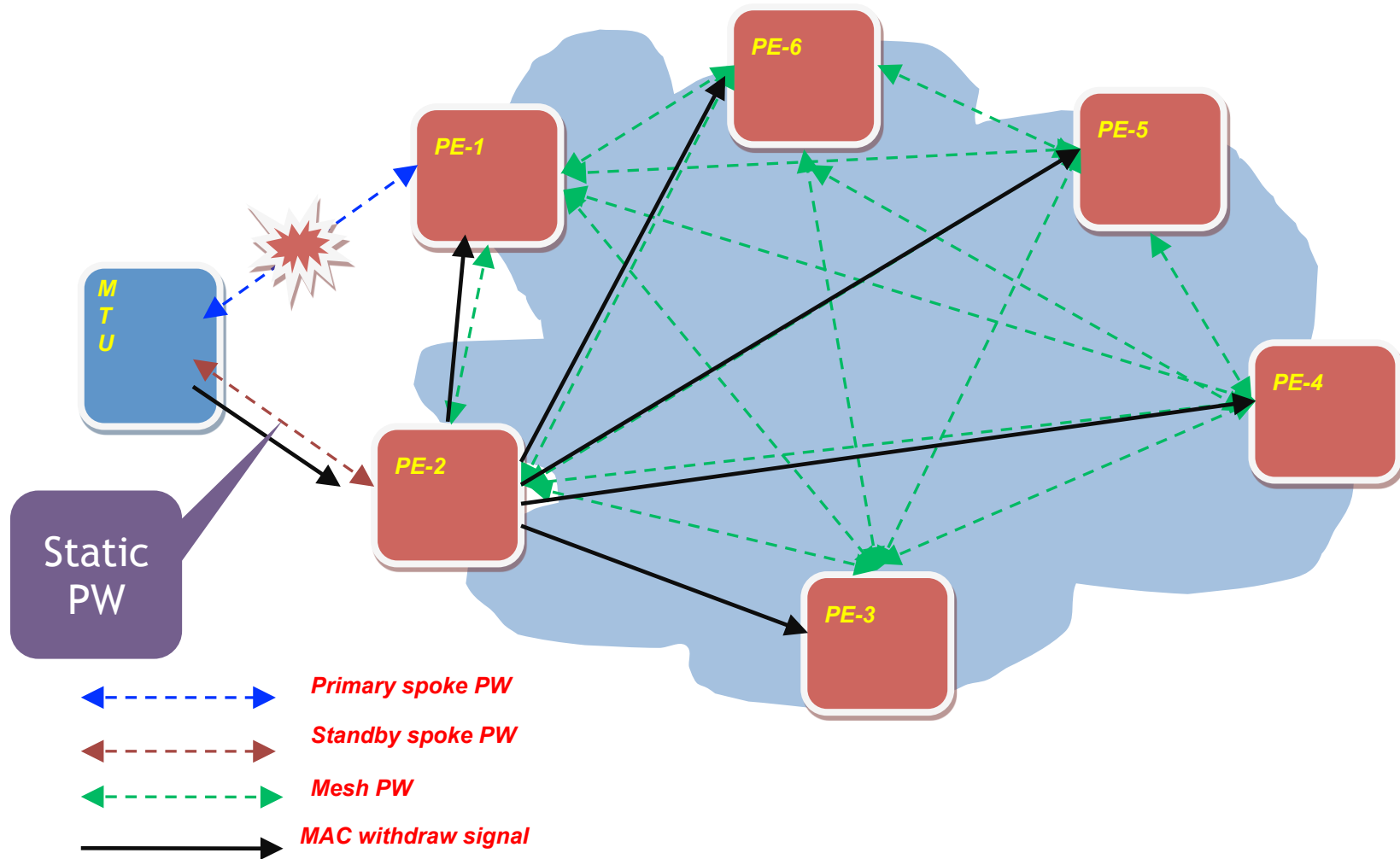
Solution Overview

- MAC withdraw signaling for dynamic PW is described in RFC 4762. It mitigates black holing of the traffic when dual-homed MTU-s switches over to standby PW
- RFC 6478 describes PW status exchange in-band over the OAM channel with acknowledgements from the receiver. The draft uses the similar mechanisms for MAC withdraw signaling.

MAC Withdraw signal

- Sent over OAM channel with sequence number and MAC list TLV as defined in RFC 4762.
- Receiving PE sets the ACK bit in the response
- In absence of ACK, sender retries 3 times at one second interval
- An ACK receipt with higher sequence is implicit ACK for all lower sequence sends
- MAC List Optimization is supported as per <http://tools.ietf.org/html/draft-ietf-l2vpn-vpls-ldp-mac-opt-08>

MAC Withdraw signaling – use case



Use case

- MPLS-TP deployments are taking hold in access networks
- Static provisioning for PWs dovetails to static LSPs
- This necessitates need for PW status (already an RFC) as well as MAC withdraw signaling for H-VPLS deployments with dual-homing

Summary

- Request to adopt as WG document
- Reserve ACH channel type 0x28
- Comments?