* + 1. **CC-TYPE 4 over PW configuration Objective:**

Objective of this section is to provide a breakdown of step by step configuration on each node that needs to be performed to enable CC-TYPE 4, CC-TYPE 1 messages.

**Prerequisite**

Forwarding domain, flow points configuration

* IP interfaces configuration
* IGP such as ISIS or OSPF configuration (we are using OSPF for our test purpose)
* LDP & MPLS configuration
* Targeted LDP and pseudo wire configuration
* L2VPN service creation, associating it to attachment circuit & pseudowire
* Attachment circuit creation to transmit CE traffic over L2VPN infrastructure

***Topology***

**FAT enabled PW with no Control word**

**PE1 PE 2**



**5171-8**

**5171-9**

***Procedure:***

***5171-08 (PE) Node PW configuration:***

***Note:*** Considering here interfaces, MPLS enabled on interfaces, IGP and LDP is also running. By Default cw-negotiation non-preferred and PW automatically negotiated with CC-Type 4 We can set or unset CC-Types.

**AC config for PE1:**

**===================**

classifiers classifier class\_801 filter-entry vtag-stack vtags 1 vlan-id 801 fds fd ac\_vc\_fd\_801 mode vpls

fps fp ac\_fp\_801 fd-name ac\_vc\_fd\_801 logical-port 10 classifier-list class\_801

fps fp ac\_fp\_801 fd-name ac\_vc\_fd\_801 egress-l2-transform push-vid-801 vlan-stack 1 push-tpid tpid-8100 push-vid 801

**# VPlS Dynamic PW**

pseudowires

pseudowire pe1\_pe2\_spoke\_pw1

cw-negotiation non-preferred *2*

cc-types cctype-4 mode mesh

pw-loadbalance fat-pw fat-capability tx-rx configured-pw

pw-id 4

peer-ip 192.168.20.3

exit exit exit

**# UNI Port# Classifier**

classifiers classifier vlan103 filter-entry vtag-stack vtags 1 vlan-id 103

**# FD**

fds fd AC\_UNI\_FD1 mode vpls

**# FP**

fps

fp AC\_UNI\_FP1 stats-collection on fd-name AC\_UNI\_FD1 logical-port 10

mtu-size 2000

cos-to-frame-map default-c2f frame-to-cos-map default-f2c classifier-list-precedence 103 classifier-list vlan103

exit exit

**# L2VPN Service**

l2vpn-services l2vpn L1 forwarding-domain AC\_UNI\_FD1 pseudowire pe1\_pe2\_spoke\_pw1 service-type vlan

signaling-type ldp mtu 1500

exit exit

**Note: Make sure both end of PW we have same CC-TYPE and control word setting**

**AC config for PE2:**

**===================**

classifiers classifier class\_801 filter-entry vtag-stack vtags 1 vlan-id 801 fds fd ac\_vc\_fd\_801 mode vpls

fps fp ac\_fp\_801 fd-name ac\_vc\_fd\_801 logical-port 10 classifier-list class\_801

fps fp ac\_fp\_801 fd-name ac\_vc\_fd\_801 egress-l2-transform push-vid-801 vlan-stack 1 push-tpid tpid-8100 push-vid 801

**# VPlS Dynamic PW**

pseudowires

pseudowire pe1\_pe2\_spoke\_pw1

cw-negotiation non-preferred *2*

cc-types cctype-4 mode mesh

pw-loadbalance fat-pw fat-capability tx-rx configured-pw

pw-id 4

peer-ip 192.168.20.4 exit

exit exit

**# UNI Port# Classifier**

classifiers classifier vlan103 filter-entry vtag-stack vtags 1 vlan-id 103

**# FD**

fds fd AC\_UNI\_FD1 mode vpls

**# FP**

fps

fp AC\_UNI\_FP1 stats-collection on fd-name AC\_UNI\_FD1 logical-port 10

mtu-size 2000

cos-to-frame-map default-c2f frame-to-cos-map default-f2c classifier-list-precedence 103 classifier-list vlan103

exit exit

**# L2VPN Service**

l2vpn-services l2vpn L1 forwarding-domain AC\_UNI\_FD1 pseudowire pe1\_pe2\_spoke\_pw1 service-type vlan

signaling-type ldp mtu 1500

exit exit