L2CP Tunneling MEF

This chapter introduces you to L2 Control Protocols (L2CP) tunneling to help initiate control packets from a local (customer-edge) CE device.

L2CP Tunneling

The system supports the following tunnel protocols:

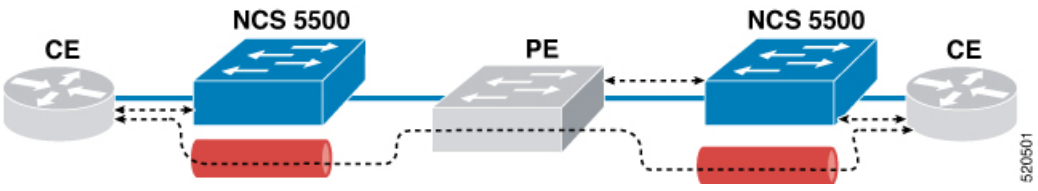
- Link Layer Discovery Protocol (LLDP)
- Link Aggregation Control Protocol (LACP)
- Operation, Administration, Management (OAM)
- Ethernet Local Management Interface (ELMI)
- Cisco Discovery Protocol (CDP)

On a subinterface, when control packets such as LLDP and LACP are tunneled, the system tunnels the same control packets to the main interface.

The LACP packet for VPLS also known as E-LAN service either gets peered or dropped. LACP tunneling is not supported for VPLS service. Tunneling of LACP packets is supported only for VPWS and EVPN-VPWS services.

The router allows to tunnel layer 2 packets between CEs. The following figure depicts Layer 2 Protocol Tunneling. The layer 2 traffic is sent through the S-network, and the S-network switches the traffic from end-to-end. Third-party PE forwards S-tagged frames and peers untagged frames.

Figure 1: L2CP Tunneling



Prerequisites for L2CP Tunneling

A Cisco IOS XR Software that supports Layer 2 Control Protocol Tunneling must be installed previously on the router.

Configure L2CP Tunneling

You do not need to configure L2CP tunneling explicitly. L2CP packets are tunneled over Layer 2 tunnel by default.

Protocol	Packet Type	Action
CDP	Untagged	Peer
LACP	Untagged	Peer
LLDP	Untagged	Peer else Tunnelled
STP	Untagged	Peer
VTP	Untagged	Peer
OAM	Untagged	Peer
BPDU	Untagged	Tunnelled
UDLD	Untagged	Peer
CDP	Tagged	Tunnelled
LACP	Tagged	Tunnelled
LLDP	Tagged	Tunnelled
STP	Tagged	Tunnelled
VTP	Tagged	Tunnelled
BPDU	Tagged	Tunnelled
OAM	Tagged	Tunnelled
ELMI	Tagged	Tunnelled
UDLD	Tagged	Peer