



## Configuring VPLS MAC Address Withdrawal

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### VPLS MAC Address Withdrawal

The VPLS MAC Address Withdrawal feature provides faster convergence by removing (or unlearning) MAC addresses that have been dynamically learned. A Label Distribution Protocol (LDP)-based MAC address withdrawal message is used for this purpose. A MAC list Type Length Value (TLV) is part of the MAC address withdrawal message.

The **debug mpls ldp messages** and **debug mpls ldp session io** commands support monitoring of MAC address withdrawal messages being exchanged between LDP peers. Any Transport over Multiprotocol Label Switching (AToM) might provide other means to display or monitor MAC address withdrawal messages. The Tag Distribution Protocol (TDP) is not supported because AToM uses only LDP for the MAC address withdrawal message.

PE devices learn the remote MAC addresses and directly attached MAC addresses on customer-facing ports by deriving the topology and forwarding information from packets originating at customer sites. To display the number of MAC address withdrawal messages, enter the **show mpls l2transport vc detail** command, as shown in the following example:

```
Device# show mpls l2transport vc detail

Local interface: VFI TEST VFI up
MPLS VC type is VFI, interworking type is Ethernet
Destination address: 10.1.1.1, VC ID: 1000, VC status: up
  Output interface: Se2/0, imposed label stack {17}
  Preferred path: not configured
  Default path: active
  Next hop: point2point
Create time: 00:04:34, last status change time: 00:04:15
Signaling protocol: LDP, peer 10.1.1.1:0 up
Targeted Hello: 10.1.1.1(LDP Id) -> 10.1.1.1
MPLS VC labels: local 16, remote 17
Group ID: local 0, remote 0
MTU: local 1500, remote 1500
Remote interface description:
MAC Withdraw: sent 5, received 3
Sequencing: receive disabled, send disabled
VC statistics:
  packet totals: receive 0, send 0
```

```
byte totals:  receive 0, send 0
packet drops: receive 0, send 0
```

## Feature Information for VPLS MAC Address Withdrawal

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

*Table 1: Feature Information for VPLS MAC Address Withdrawal*

Feature Name	Releases	Feature Information
VPLS MAC Address Withdrawal	Cisco IOS XE Gibraltar 16.11.1	The VPLS MAC Address Withdrawal feature provides faster convergence by removing (or unlearning) MAC addresses that have been dynamically learned. This feature was introduced on Cisco Catalyst 9600 Series Switches.