

## **MPLS Forwarding PE-CE**

Based on routing information in the VRF IP routing table, the router forwards packets to their destination using MPLS.

A PE router binds a label to each customer prefix that is learned from a CE router and includes the label in the network reachability information for the prefix that it advertises to other PE routers.

When a PE router forwards a packet that it received from a CE router across the provider network, it labels the packet with the label learned from the destination PE router.

When the destination PE router receives the labeled packet, it removes the label and uses it to direct the packet to the correct CE router. Label forwarding across the provider backbone is based on either dynamic label switching or traffic engineered paths.

A customer data packet carries two levels of labels when it traverses the backbone:

- The top label directs the packet to the correct PE router.
- The second label indicates how that PE router should forward the packet to the CE router.