

COMMAND		Description	Example
L3 VPN COMMANDS			
Show commands			
show route table vpn-a	detail	shows this particular VRF table, containing * all routes learned from CE * all routes imported from l3vpn.bgp table coming from other PEs	watch for the inner (VPN) & outer (LSP) labels
show route table vpn-a hidden		If LSP is missing between PEs, VPN IPv4 routes will be visible but with and invalid NH	
show route forwarding-table vpn vpn-a		shows a VRF forwarding table (note the double push operation)	
ping x.x.x.x routing-instance vpn-a		ping using a particular VRF table	
traceroute x.x.x.x routing-instance vpn-a		traceroute using a particular VRF table	
telnet x.x.x.x routing-instance vpn-a		telnet using a particular VRF table	
ping mpls l3vpn vpn-a prefix 172.20.4/24		checks if route at destination VRF exists and reachability to it	no need for 127.0.0.1 in Io0
show route table bgp.l3vpn.0		houses all VPN IPv4 routes learned from all PEs DEFAULT: only store routes with a matched RT "keep all" knob: store all MBGP routes even if there is no matched RT	
show route advertising-protocol bgp x.x.x.x		view routes sent to other PEs	
show route receive-protocol bgp x.x.x.x		view routes received from other PEs	
show arp		displays ARP entries in both inet.0 and VRF tables	
clear arp vpn vpn-a		clears ARP entries off the VRP table	
OSPF VPN commands			
show ospf interface instance vpn-a		displays all configured OSPF interfaces on this VRF	
show ospf neighbor instance vpn-a		displays all OSPF neighbors on this VRF	
show ospf database instance vpn-a		displays the LSDB for this particular VRF	
L2 VPN COMMANDS			
Kompella Show commands			
show l2vpn connections	extensive	shows states of layer 2 vpns connections (site to site)	
show route table vpn-a	detail	shows contents of a VFT, including * local site L2 NLRIs advertised to other PEs [L2VPN] * remote site L2 NLRIs coming from other PEs [BGP]	L2 NLRI = RD + Site ID + label offset
show route table bgp.l2vpn.0		houses all L2 VPN NLRIs with at least one matching RT	
show route advertising-protocol bgp x.x.x.x		view L2 VPN NLRIs sent to other PEs	
show route receive-protocol bgp x.x.x.x		view L2 VPN NLRIs received from other PEs	
show route table mpls.o	detail	shows MPLS switching table entries for L2 VPNs (displays VRF interfaces to label -double push operation- mappings) (which VRF interface is mapped to which LSP))	
show route forwarding-table family mpls		view FT entries for L2 VPN connections	
ping mpls l2vpn instance vpn-a remote-site-id 2 local-site-id 1		test the l2vpn connection site to site (PE to PE)	
ping mpls l2vpn interface fe-0/0/0.512		test the l2vpn local interface	
Martini Show commands			
show l2circuit connections	extensive	shows states of layer 2 circuits connections (site to site)	
show ldp neighbor detail		check if neighbor relationship is successful between PEs (use of extended neighbor discovery has worked)	
show ldp database	detail	check the presence of a FEC associated with the l2circuit	