

## Support for Multiprotocol Label Switching and Internet Protocol Version 6 with Cisco Catalyst 6500 Virtual Switching System 1440

Cisco announces the support for Multiprotocol Label Switching (MPLS) and Internet Protocol Version 6 (IPv6) with the Cisco Catalyst 6500 Virtual Switching System 1440. With Cisco IOS Software Release 12.2(33)SX12, Cisco now offers complete MPLS and IPv6 feature parity with standalone Cisco Catalyst 6500 systems.

### IPv6

IPv6 was designed to increase Internet global address space to accommodate the rapidly increasing numbers of users and applications that require unique global IP addresses and help enable a global environment where the addressing rules of the network are again transparent to applications. As an early pioneer in IPv6 technology since its inception, Cisco has been a driving force in developing IPv6 standards through various standards bodies, including the Internet Engineering Task Force, and has been shipping a wide variety of end-to-end IPv6 product and solutions.

With Cisco IOS Software Release 12.2(33)SX12, virtual switching provides the ability to enable IPv6 deployments with higher performance, scalability, and resiliency while simplifying operational manageability.

### MPLS

Cisco enterprise customers typically use MPLS for creating Layer 2 and Layer 3 VPNs. Ethernet over MPLS (EoMPLS) and Virtual Private LAN Service (VPLS) are two technical alternatives to providing Layer 2 VPN services, whereas MPLS VPN, by combining the use of Virtual Routing and Forwarding (VRF) and MPLS, allows for the creation of Layer 3 VPNs.

With Cisco IOS Software Release 12.2(33)SX12, virtual switching provides the ability to

- Layer 2 VPNs (EoMPLS): Eliminate the need for pseudowire redundancy because the virtual switch pair looks like a single device, removing all of the issues related to the possible creation of Spanning Tree Protocol loops when extending Layer 2 between remote locations.
- Layer 3 VPNs (MPLS VPN): Reduce in half the number of provider edge (PE) devices to be configured on the network, thereby increasing the overall scalability and manageability of the solution.

### Product Management Contact

For more information on Cisco Catalyst 6500 Virtual Switching System 1440 support for these features, send an email message to Sudeep Goswami at [sugoswam@cisco.com](mailto:sugoswam@cisco.com).

### For More Information

For more information about the Cisco Catalyst 6500 Virtual Switching System 1440, visit <http://www.cisco.com/go/vss>.



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