Implementing Cisco Service Provider VPN Services (SPVI)

Description

Why choose the Implementing Cisco Service Provider VPN Services (SPVI) training?

The Implementing Cisco Service Provider VPN Services (SPVI) training prepares you to manage and implement complex VPN services in a service provider environment. Through practical exercises, you will master advanced concepts of MPLS, routing, and the implementation of layer 2 and 3 VPN services. This training is ideal for network professionals looking to deepen their skills in managing VPN networks based on MPLS and preparing for the SPVI exam.

A comprehensive program with sought-after skills

This course offers a complete view of the VPN technologies used in service provider environments. It covers not only the implementation of Layer 3 MPLS VPNs and the management of inter-domain VPNs, but also troubleshooting MPLS networks. With this program, you will be able to provide effective solutions to connectivity problems and improve network performance through optimized bandwidth utilization. This training is a valuable asset to validate your skills by obtaining the Cisco Certified Specialist – Service Provider VPN Services Implementation certification.

Course Content
Module 1: VPN Services Overview

- Basic VPN concepts.
- Operation of the MPLS VPN control plane.
- Troubleshooting MPLS VPN underlay.

Module 2: Troubleshooting IGP and BGP protocols

- Troubleshooting basic IGP (Interior Gateway Protocol).
- Troubleshooting BGP (Border Gateway Protocol).

Module 3: Implementing layer 3 MPLS VPNs

- Multi-protocol BGP (MP-BGP) routing requirements.
- PE-to-CE routing requirements.

- Deploying inter-domain layer 3 MPLS VPNs.
- Inter-autonomous systems (AS) for layer 3 MPLS VPNs.
- Content security and control (CSC) for layer 3 MPLS VPNs.

Module 4: Implementing layer 3 multicast MPLS VPNs

- Basic multicast VPN (MVPN) concepts.
- Implementing an intranet MVPN.

Module 5: Troubleshooting intra-AS layer 3 VPNs

- Troubleshooting PE-to-CE connectivity.
- Troubleshooting PE-to-Route reflector.

Module 6: Implementing layer 2 VPNs

- Layer 2 services architecture.
- Refreshing traditional Ethernet LAN solutions.

Module 7: Troubleshooting layer 2 VPNs

- Troubleshooting traditional Ethernet solutions.
- Troubleshooting native Ethernet VPN (EVPN), EVPN Virtual Private Wire Service (VPWS), and EVPN Integrated Routing and Bridging (IRB).

Module 8: Implementing layer 3 MPLS IPv6 VPNs

- Classic solutions for deploying IPv6 environments over IPv4.
- Using 6VPE to deploy IPv6 connectivity in an MPLS environment.

Module 9: Troubleshooting layer 3 MPLS IPv6 VPNs

- Troubleshooting PE-to-PE connectivity.

Documentation

- Digital course materials included

Exam

- This course prepares you to the 300-515 SPVI Cisco Certified Specialist - Service Provider VPN Services Implementation exam. If you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you.

Participant profiles

- Network administrators.
- Network engineers.
- Network architects.
- Network managers.
- Network designers.

Prerequisites

- Knowledge of MPLS and BGP concepts.

- Understanding of IGP and BGP routing protocols.
- Basic network troubleshooting skills.
- Experience in managing service provider networks.

Objectives

- Décrire les concepts des VPN dans un réseau de fournisseur de services.
- Implémenter des opérations VPN MPLS de couche 3.
- Mettre en œuvre des VPN MPLS inter-domaines.
- Dépanner les VPN MPLS de couche 3 et 2.
- Implémenter des VPN MPLS IPv6.
- Optimiser et sécuriser les services VPN de fournisseur de services.

Description
Implementing Cisco Service Provider VPN Services (SPVI) training
Niveau
Intermédiaire
Classroom Registration Price (CHF)
4350
Virtual Classroom Registration Price (CHF)
4350
Duration (in Days)
5
Reference
SPVI