

Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE) 1.2 (CS-SPCORE-5DAYS)

Modality: Virtual Classroom

Duration: 5 Days

CLC: 38 Units

About this course:

With the advent of modern technology ,the rapid adoption of technology by almost all industries has brought the significance of network security to the center stage. A skilled network security engineer is needed by almost all organizations and this demand is only going to increase in the future. A certified CISCO Systems Network Security Engineer is paid up to \$91,175 per year.

This course is spread over a span of 5 days. It is designed to train students in order for them to clear the Cisco CCNP SP certification exam. First it introduces participants to the themes of Multi protocol Label Switching (MPLS). Following the introduction , it goes into detail and discusses how to study using MPLS Traffic Engineering (MPLS-TE) resources which have been built upon the MPLS technology.

This course is specifically constructed to ensure that participants are able to familiarize themselves with the technological components of basic Quality of Service along with Quality of Service with MPLS in order to integrate high-level components and operations.

Chiefly, this course has a laser sharp focus on the technological components of MMPLS and puts forward the most reliable and tried and tested methods to incorporate Quality of Service . This is specifically done from the Service provider's point of view. This course will also help students learn what the methods of setting up a few of these features are with respect to an already existing routed atmosphere.

Audience:

This course is designed to cater to the following audience;

- channel partners
- resellers
- employees
- customers

Prerequisites:

There are no absolute prerequisites to attend this course. However it is highly recommended that prior to starting with this course, participants should complete the PNGNG1, SPNGN2, SPROUTE and SPADVROUTE courses .

Course Outline:

Module 1: Multiprotocol Label Switching

- Lesson 1: Introducing Cisco IP NGN Architecture
- Lesson 2: Introducing MPLS
- Lesson 3: Introducing MPLS Applications
- Lesson 4: Label Distribution Protocol
- Lesson 5: Introducing MPLS Forwarding
- Lesson 6: Operating MPLS Forwarding
- Lesson 7: Implementing MPLS in the Service Provider Core

Module 2: MPLS Traffic Engineering

- Lesson 1: Introducing MPLS Traffic Engineering Components
- Lesson 2: MPLS Traffic Engineering Operations
- Lesson 3: Implementing MPLS TE
- Lesson 4: Protecting MPLS TE Traffic

Module 3: QoS in the Service Provider Network

- Lesson 1: Understanding QoS
- Lesson 2: Implementing QoS in the SP Network
- Hardware Lab 3: The Need for QoS
- Lesson 3: Implementing MPLS Support for QoS

Module 4: QoS Classification and Marking

- Lesson 1: Understanding Classification and Marking
- Lesson 2: Using Modular QoS CLI
- Lesson 3: Implementing Advanced QoS Techniques

Module 5: QoS Congestion Management and Avoidance

- Lesson 1: Managing Congestion
- Lesson 2: Implementing Congestion Avoidance

Module 6: QoS Traffic Policing and Shaping

- Lesson 1: Understanding Traffic Policing and Shaping
- Lesson 2: Implementing Traffic Policing
- Lesson 3: Implementing Traffic Shaping

