Implementing Cisco Service Provider Advanced Routing Solutions v1.1

The **Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)** course teaches you theories and practices to integrate advanced routing technologies including routing protocols, multicast routing, policy language, Multiprotocol Label Switching (MPLS), and segment routing, expanding your knowledge and skills in service provider core networks.

This course prepares you for the **300-510** Implementing Cisco® Service Provider Advanced Routing Solutions (SPRI) exam.

Pay with CLC points.:

Cisco Learning Credits accepted : 43 Credits

Details and registration on the provider's website:

https://learninglocator.cloudapps.cisco.com/#/home

The Cisco Continuing Education program is a flexible offering dedicated to all active individuals holding certifications at the Associate, Specialist, Professional, and Expert levels.

Learn more about how you can recertify through CE to maintain your certification status.

Cisco Continuing Education Program - CE

Participation in authorized training allows you to earn additional points needed to maintain your certification.

SPRI: 37 points CE

Odbiorcy szkolenia

This course is for professionals who need knowledge about implementing various Service Provider core technologies and advanced routing technologies.

- Network administrators
- System engineers
- Project managers
- Network designers

Korzyści

This course will help you:

- Gain the high-demand skills to maintain and operate advanced technologies related to Service Provider core networks
- Increase your knowledge and skills for implementing Service Provider core advanced technologies though hands-on application and practical instruction
- Prepare to take the **300-510 SPRI** exam

Program szkolenia

Outline

- Implementing and Verifying Open Shortest Path First Multiarea Networks
- Implementing and Verifying Intermediate System to Intermediate System Multilevel Networks
- Introducing Routing Protocol Tools, Route Maps, and Routing Policy Language
- Implementing Route Redistribution
- Influencing Border Gateway Protocol Route Selection
- Scaling BGP in Service Provider Networks
- Securing BGP in Service Provider Networks
- Improving BGP Convergence and Implementing Advanced Operations
- Troubleshooting Routing Protocols
- Implementing and Verifying MPLS
- Implementing Cisco MPLS Traffic Engineering
- Implementing Segment Routing
- Describing Segment Routing Traffic Engineering (SR TE)
- Deploying IPv6 Tunneling Mechanisms
- Implementing IP Multicast Concepts and Technologies
- Implementing PIM-SM Protocol

- Implementing PIM-SM Enhancements
- Implementing Interdomain IP Multicast
- Implementing Distributed Rendezvous Point Solution in Multicast Network

Lab outline

- Implement OSPF Special Area Types (IPv4 and IPv6)
- Implement Multiarea IS-IS
- Implement Route Redistribution
- Influence BGP Route Selection
- Implement BGP Route Reflectors
- Implement BGP Security Options
- Troubleshoot Routing Protocols
- Implement MPLS in the Service Provider Core
- Implement Cisco MPLS TE
- Configure and Verify Interior Gateway Protocol (IGP) Segment Routing
- Implement Tunnels for IPv6
- Enable and Optimize PIM-SM
- Implement PIM-SM Enhancements
- Implement Rendezvous Point Distribution

Oczekiwane przygotowanie uczestnika

Before taking this course, you should have the following knowledge and skills:

- Intermediate to advanced knowledge of Cisco Internetwork Operating System (Cisco IOS®) or IOS XE and Cisco IOS XR Software configuration
- Knowledge of IPv4 and IPv6 TCP/IP networking
- Intermediate knowledge of BGP, OSPF, and ISIS routing protocols
- Understanding of MPLS technologies
- Understanding of multicast technologies
- Familiarity with segment routing

The following Cisco courses can help you gain the knowledge you need to prepare for this course:

- **Building Cisco Service Provider Next-Generation Networks Part 1 (SPNGN1)**
- **Building Cisco Service Provider Next-Generation Networks Part 2 (SPNGN2)**
- **Deploying Cisco Service Provider Network Routing (SPROUTE)**
- **Implementing and Administering Cisco Solutions (CCNA®)**
- **Understanding Cisco Service Provider Network Foundations (SPFNDU)**
- **Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR)**

Szkolenie obejmuje

5 days in the classroom with hands-on lab practice

Język

- Szkolenie: polski
- Materiały: angielski

Czas trwania

5 dni / 35 godzin

Opis egzaminu

Szkolenie przygotowuje do egzaminu 300-510 SPRI, który można zdawać za dodatkową opłata w centrum PearsonVUE. Egzamin można również zdawać w formule on-line. Szczegóły dostępne są na stronie: https://home.pearsonvue.com/cisco/onvue