HCIP Routing & Switching IENP

Huawei

- **Nível:**
- **Duração:** 35h

Sobre o curso

With **HCIP-Routing & Switching certification**, you demonstrate a comprehensive and thorough understanding of small and medium-sized networks, including general network technologies, and the ability to design small and medium-sized networks independently and implement the designs using Huawei routing and switching devices.

With engineers who are HCIP-Routing & Switching certified, enterprises are able to construct complete small and medium-sized networks and integrate voice, wireless, cloud, security, and storage technologies into their networks in order to support a variety of applications while providing enhanced security, availability, and reliability.

The HCIP Routing & Switching IENP course is one of the three recommended trainings that prepare you for the HCIP-Routing & Switching certification.

The other 2 recommended courses for this certification are: HCIP Routing & Switching IERS and HCIP Routing & Switching IEEP.

This 5 day course prepares you for the H12-222 exam.

Destinatários

- Those who hope to become a network professional
- Those who hope to obtain HCIP-Routing&Switching certification

Objetivos

On completion of this program, the participants will be able to:

- Describe MPLS/MPLS VPN
- Configure MPLS VPN
- Configure DHCP, Mirroring
- Describe eSight, Agile Controller
- Describe IP QoS end-to-end process
- Describe Information Security Overview and Huawei Firewall Technology Basis
  Configure VRRP, BFD
- Understand SDN, VXLAN, NFV technologies

Pré-requisitos

- HCIA certification or the similar knowledge

Programa

- MPLS
- MPLS VPN
- DHCP
- Mirroring
- eSight
- Agile Controller
- QoS
- Huawei Firewall
- VRRP
- BFD
- SDN
- VXLAN
- NFV

MPLS

- The MPLS working principles
- The MPLS configuration

MPLS VPN

- The traditional VPN models
- The working principles of MPLS VPN
- The basic configuration of MPLS VPN

DHCP

- DHCP principles and configurations
- DHCP relay principles and configurations
- DHCP and corresponding protection mechanisms

Mirroring

- Mirroring principles
- Configure the mirroring function

eSight

- The background about eSight
- eSight installation and uninstallation procedures
- The eSight license application process
- eSight basic functions
- Operations of eSight basic functions

Agile Controller

- Challenges facing traditional networks
- Basic functions and features of the Agile Controller
- Agile Controller configuration process

QoS

- The factors affecting QoS
- QoS service models
- The implementation of the DiffServ model
- The packet classification basis
- The process of packet re-marking
- The configuration of the classification and re-marking
- The implementation of congestion management
- Common queue scheduling algorithms
- The disadvantages and solution of tail drop
- Features of traffic policing and traffic shaping
- The configuration of traffic policing and traffic shaping

Huawei Firewall

- Why we need information security
- How to ensure information security

- Security issues and risks faced by networks
- How to resolve the security issues faced by networks
- Firewall basic knowledge and security policy configuration
- NAT principle and configuration
- Attack defense principle and configuration
- Application behavior control principle and configuration

VRRP

- VRRP principles
- The VRRP active/standby switchover
- VRRP configurations

BFD

- BFD implementation
- BFD configurations in common application scenarios

SDN

- The benefits of SDN
- The SDN concept and architecture
- Ways of SDN evolution for traditional networks

VXLAN

- Challenges facing data center networks
- The basic principles of VXLAN
- Basic configurations of SDN-based VXLAN

NFV

- Basic concepts of NFV
- The NFV architecture
- The relationship between NFV and SDN