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# Improving Enterprise Network Performance (HCIP-R&S-IENP)

- **Formato do curso:** Presencial
- **Localidade:** Porto
- **Data:** 25 Mai. 2020 a 29 Mai. 2020
- **Preço:** 1500€
- **Horário:** Laboral - das 09h00 às 17h00
- **Duração:** 35 horas

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

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 other 2 recommended courses for this certification are: Implementing Enterprise Routing and Switching Network (HCIP-R&S-IERS) and Implementing Enterprise Network Engineering Project (HCIP-R&S-IEEP).

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## Destinatários

- Those who hope to become a network professional
- Those who hope to obtain HCIP-Routing&Switching V2.0 certificate

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## Pré-requisitos

- [HCIA](#) certification or the similar knowledge

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## 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
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## Programa

### **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