HCIP-Datacom-WAN Planning and Deployment
Course Duration: 40 Hours (5 Days)

Overview

The HCIP-Datacom-WAN Planning and Deployment course is a comprehensive program designed to equip learners with the knowledge and skills required to plan and deploy wide area networks (WAN) for enterprises. The course covers a range of topics, from the basics of Enterprise WAN IP bearer networks to advanced technologies like MPLS TE, Segment Routing, and SRv6. HCIP-Datacom professionals will learn about Huawei's CloudWAN solution, including its architecture, key technologies, operation, maintenance, and troubleshooting. By delving into various VPN technologies and Network optimization strategies, learners can ensure efficient and reliable network performance. The course also includes practical design practice tailored to industry-specific scenarios, such as financial services, to ensure that participants can apply their knowledge in real-world contexts. This training is instrumental for those looking to gain expertise in WAN planning and deployment, particularly using Huawei's technologies.

Audience Profile

The HCIP-Datacom-WAN Planning and Deployment course is designed for IT professionals specializing in WAN technologies and solutions.

- Network Engineers and Architects
- Systems Engineers specializing in WAN technologies
- IT Professionals involved in Datacom operations
- Network Operations Personnel
- Network Designers and Planners
- Technical Support Engineers focused on WAN Infrastructure
- IT Consultants specializing in network solutions
- Network Managers and Administrators
- Professionals working with Huawei networking solutions
- Individuals pursuing HCIP certification in Datacom

Course Syllabus

Enterprise Bearer WAN Solution

- Overview of Enterprise WAN IP Bearer Networks
- CloudWAN Solution Overview
- Typical Application Scenarios for the CloudWAN Solution

Enterprise Bearer WAN Architecture and Key Technologies

- Enterprise Bearer WAN Architecture
- Fundamentals of Bearer WAN
- VPN Services

- Network Traffic Optimization
- Service Level Agreements (SLA)
- Network Reliability
- Network Management and Operations & Maintenance (O&M)

WAN VPN Technologies

- Overview of WAN VPN
- MP-BGP Overview
- WAN VPN Architecture, Principles, and Technology Evolution

MPLS TE Fundamentals and Configuration

- Overview of MPLS Traffic Engineering (TE)
- Working Principles of MPLS TE
- MPLS TE Reliability
- Advanced Features of MPLS TE

Segment Routing

- Segment Routing Overview
- Technical Principles of Segment Routing
- Tunnel Protection and Detection in Segment Routing
- Typical Application Scenarios of Segment Routing
- Basic Configuration for Segment Routing

SRv6 Overview

- Introduction to Segment Routing over IPv6 (SRv6)
- SRv6 Network Programming
- Overview of SRv6 Policies
- Typical Use Cases for SRv6
- Basic SRv6 Configuration

Huawei CloudWAN Solution Architecture and Fundamentals

- Overview of Huawei CloudWAN Solution
- Network Management Features
- Network Traffic Control
- Network Performance Analysis

Huawei CloudWAN Solution O&M and Troubleshooting

- Introduction to the Huawei CloudWAN Solution Controller
- Service Operations and Maintenance (O&M)
- Troubleshooting Common Basic Faults

Huawei CloudWAN Solution Design Practice (Financial Scenario)

- Background of the Financial Industry
- Design of the Financial Cloud Backbone Network
- Case Studies in Financial Cloud Backbone Network Design