

# HCIP-Datacom-Advanced Routing & Switching Technology V1.0 Exam Outline

Huawei HCIP-Datacom-Advanced Routing & Switching Technology V1.0 Certification Exam

Authentication Name	Exam Code	Exam Name	Language	Exam fee	Exam Duration	Passing Score/Total Score
HCIP-Datacom- Advanced Routing & Switching Technology	H12-831	HCIP-Datacom- Advanced Routing & Switching Technology V1.0	CHS/ENU	180 USD	90min	600/1000

## Exam Content

The HCIP-Datacom-Advanced Routing & Switching Technology V1.0 exam covers advanced routing and switching knowledge in the data communication field, including advanced IGP features, advanced BGP features, IPv6 routing, advanced Ethernet technologies, MPLS technologies, Network O&M, Network Troubleshooting, and Network Cutover.

Percentage of knowledge points

Key Points	Percentage		
Advanced IGP Features	17%		
Advanced BGP Features	10%		
IPv6 Routing	20%		
Advanced Ethernet Technologies	10%		
MPLS Technologies	19%		
Network O&M	7%		
Troubleshooting	10%		
Network Cutover	7%		

**Knowledge Points** 

Advanced IGP Features



- Advanced IGP Features
  - OSPF fast convergence
  - OSPF Route Control
  - Other OSPF Features
  - Advanced IS-IS Features

## **Advanced BGP Features**

- Advanced BGP Features
  - BGP route control
  - BGP Features
  - Networking of BGP RRs

### IPv6 Routing

- IPv6 Routing
  - IPv6 static route
  - OSPFv3 Principles and Configuration
  - IS-IS (IPv6) Principles and Configuration
  - BGP4+ Principles and Configuration

### Advanced Ethernet Technologies

- Advanced Ethernet Technologies
  - Advanced VLAN Technology
  - Ethernet Security

### **MPLS** Technologies

- MPLS Principles and Configuration
  - MPLS Overview
  - MPLS Forwarding
  - Static LSP
- MPLS LDP Principles and Configuration
  - Basic Concepts of LDP
  - Working Principle of LDP
  - Basic LDP Configurations
- MPLS VPN Principles and Configuration
  - MPLS VPN Overview
  - MPLS VPN route exchange
  - MPLS VPN packet forwarding



- MPLS VPN Configuration and Implementation
- MPLS VPN Deployment and Application
  - **Typical Application Scenarios and Deployment of MPLS VPN**
  - OSPF VPN expansion

## Network O&M

- Network O&M
  - Routine Maintenance
  - Information collection tool

## Troubleshooting

- Troubleshooting
  - Structured troubleshooting process
  - Core Ideas and Methods of Network Troubleshooting
  - Troubleshooting Common Network Faults
- Network Cutover
  - Basic Concepts of Cutover
  - Migration Process

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The test content mentioned in this document is only a general test guide for candidates. Other related content that is not mentioned in this document may also appear in the test.

### **Reference Books**

HCIP-Datacom-Advanced Routing & Switching Technology V1.0 training Courses

### **Recommended Training**

HCIP-Datacom-Advanced Routing & Switching Technology V1.0 training