



642-887

Implementing Cisco Service Provider Next-
Generation Core Network Services

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SUCCESS GUIDE TO CISCO CERTIFICATION

Exam Summary – Syllabus – Questions

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Introduction to 642-887 Exam on Implementing Cisco Service Provider Next-Generation Core Network Services

A great way to start the Cisco Certified Network Professional Service Provider (SPCORE) preparation is to begin by properly appreciating the role that syllabus and study guide play in the Cisco 642-887 certification exam. This study guide is an instrument to get you on the same page with Cisco and understand the nature of the Cisco CCNP Service Provider exam.

Our team of experts has composed this Cisco 642-887 exam preparation guide to provide the overview about Cisco Implementing Cisco Service Provider Next-Generation Core Network Services exam, study material, sample questions, practice exam and ways to interpret the exam objectives to help you assess your readiness for the Cisco SPCORE exam by identifying prerequisite areas of knowledge. We recommend you to refer the simulation questions and practice test listed in this guide to determine what type of questions will be asked and the level of difficulty that could be tested in the Cisco CCNP Service Provider certification exam.

Cisco 642-887 Certification Details:

Exam Name	Implementing Cisco Service Provider Next-Generation Core Network Services
Exam Number	642-887 SPCORE
Exam Price	\$300 USD
Duration	90 minutes
Number of Questions	65-75
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE)
Exam Registration	PEARSON VUE
Sample Questions	Cisco 642-887 Sample Questions
Practice Exam	Cisco Certified Network Professional Service Provider Practice Test

Cisco 642-887 Exam Syllabus:

Section	Weight	Objectives
QoS in a Service Provider IP NGN Environment	38%	<ol style="list-style-type: none"> 1 Describe the DiffServ and IntServ QoS models 2 Describe the QoS mechanisms (classification and marking, congestion management and avoidance, traffic policing and shaping) 3 Describe IPv6 Flow Label 4 Describe trust boundaries in enterprise and SP environments 5 Describe Cisco MQC for QoS configurations 6 Describe hierarchical QoS configurations 7 Describe the Cisco NBAR feature for discovering network protocols and for packets classifications 8 Describe the typical Edge PE routers and Core P routers QoS requirements 9 Implement classification and marking in an inter-domain network using QPPB on Cisco IOS-XR and IOS-XE 10 Implement class-based markings on Cisco IOS-XR and IOS-XE 11 Implement QoS pre-classify on tunnel interface on Cisco IOS-XR and IOS-XE 12 Implement CB-WFQ on Cisco IOS-XR and IOS-XE 13 Implement LLQ on Cisco IOS-XR and IOS-XE 14 Implement WRED on Cisco IOS-XR and IOS-XE 15 Implement traffic policing on Cisco IOS-XR and IOS-XE 16 Implement traffic shaping on Cisco IOS-XR and IOS-XE 17 Describe LPTS and hardware rate limiters on Cisco IOS-XR routers 18 Describe MPLS EXP bits

Section	Weight	Objectives
		<p>19 Describe MPLS QoS implementation concepts and models</p> <p>20 Implement MPLS DiffServ tunneling on Cisco IOS-XR and IOS-XE</p> <p>21 Troubleshoot QoS IOS-XR and IOS-XE configuration errors</p>
MPLS/LDP in a Service Provider IP NGN Environment	32%	<p>1 Describe the CEF, FIB, LFIB and LIB tables on Cisco routers</p> <p>2 Describe MPLS labels and label stack operations on Cisco routers</p> <p>3 Describe LDP operations in Cisco routers</p> <p>4 Describe MPLS OAM (MPLS LSP ping and MPLS traceroute)</p> <p>5 Describe MPLS applications in service provider environment</p> <p>6 Implement LDP on Cisco IOS-XR and IOS-XE</p> <p>7 Implement LDP high availability features on Cisco IOS-XR and IOS-XE</p> <p>8 Troubleshoot LDP on IOS-XR and IOS-XE configuration errors</p>
MPLS/LDP in a Service Provider IP NGN Environment	22%	<p>1 Describe MPLS traffic engineering (TE) concepts</p> <p>2 Describe MPLS TE constraint-based path computations</p> <p>3 Describe the details of MPLS TE tunnels, including path setup procedures and path maintenance</p> <p>4 Describe methods of assigning traffic into MPLS TE tunnels</p> <p>5 Implement MPLS TE tunnels on Cisco IOS-XR and IOS-XE</p> <p>6 Implement MPLS TE bandwidth control on Cisco IOS-XR and IOS-XE</p> <p>7 Implement MPLS TE link and node protections on Cisco IOS-XR and IOS-XE</p>

Section	Weight	Objectives
Transport Technologies	8%	1 Describe the SP core transition from ATM/SONET/SDH based backbone to packet based IP/MPLS backbone 2 Implement 10/40/100 Gigabit Ethernet Interfaces on Cisco IOS-XR routers 3 Describe DWDM, IPoDWDM and ROADM 4 Implement IPoDWDM controller/interface on Cisco IOS-XR routers

642-887 Sample Questions:

01. What are three foundations of traditional IP routing?

(Choose three)

- a) Routing protocols are used on all devices to distribute routing information.
- b) Regardless of protocol, routers always forward packets based on the IP destination address only (except for using PBR).
- c) Routing lookups are performed on every router.
- d) Routing is performed by assigning a label to an IP destination.

02. When an IP packet is to be label-switched as it traverses an MPLS network, which table is used to perform the label switching?

- a) LIB
- b) FIB
- c) FLIB
- d) LFIB

03. Which statement is correct?

- a) An IP forwarding table resides on the data plane; LDP runs on the control plane; and an IP routing table resides on the data plane.
- b) An IP forwarding table resides on the data plane; LDP runs on the control plane; and an IP routing table resides on the control plane.
- c) An IP forwarding table resides on the control plane; LDP runs on the control plane; and an IP routing table resides on the data plane.
- d) An IP forwarding table resides on the control plane; LDP runs on the control plane; and an IP routing table resides on the control plane.

04. Which two statements are true regarding RSVP?

(Choose two)

- a) RSVP is used to create an LSP tunnel.
- b) RSVP propagates labels for TE tunnels.
- c) RSVP assigns labels for TE tunnels.
- d) RSVP is not used to create an LSP tunnel.

05. The MPLS label field consists of how many bits?

- a) 64 bits
- b) 32 bits
- c) 16 bits
- d) 8 bits

06. Which two statements are true regarding interactions between MPLS applications?

(Choose two)

- a) The forwarding plane is the same for all applications.
- b) Differences exist in the forwarding plane depending on the MPLS application.
- c) The control plane is the same for all applications.
- d) Differences exist in the control plane depending on the MPLS application.

07. Which two statements are correct?

(Choose two)

- a) LSPs are bidirectional.
- b) LSPs are unidirectional.
- c) LDP advertises labels for the entire LSP.
- d) LDP advertises labels only for individual segments in the LSP.

08. Upon a link failure, which three tables are updated to reflect the failed link?

(Choose three)

- a) LIB
- b) LFIB
- c) FIB
- d) FLIB

09. Which of the following statements best describes convergence in MPLS network after a link failure has occurred and been restored?

- a) MPLS convergence occurs after IGP convergence.
- b) MPLS convergence occurs before IGP convergence peer to peer.
- c) If a failure occurs with the IGP, MPLS convergence is not affected.
- d) If a failure occurs with the IGP, MPLS will not be able to converge after the IGP failure has been corrected unless the MPLS process is bounced.

10. What is another name for topology-driven switching?

- a) CEF
- b) Fast switching
- c) Cache switching
- d) Process switching

Answers to 642-887 Exam Questions:

Question: 01 Answer: a, b, c	Question: 02 Answer: d	Question: 03 Answer: b	Question: 04 Answer: a, b	Question: 05 Answer: b
Question: 06 Answer: a, d	Question: 07 Answer: b, d	Question: 08 Answer: a, b, c	Question: 09 Answer: a	Question: 10 Answer: a

Note: If you find any typo or data entry error in these sample questions, we request you to update us by commenting on this page or write an email on feedback@nwexam.com