

CISCO 300-510

Cisco CCNP Service Provider Certification Questions & Answers

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300-510

Cisco Certified Specialist Service Provider Advanced Routing Implementation

55-65 Questions Exam – Variable (750-850 / 1000 Approx.) Cut Score – Duration of 90 minutes

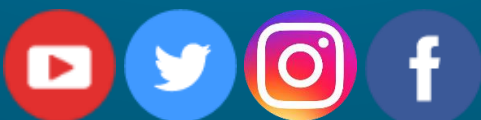


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Discover More about the 300-510 Certification

Are you interested in passing the Cisco 300-510 exam? First discover, who benefits from the 300-510 certification. The 300-510 is suitable for a candidate if he wants to learn about Service Provider. Passing the 300-510 exam earns you the Cisco Certified Specialist Service Provider Advanced Routing Implementation title.

While preparing for the 300-510 exam, many candidates struggle to get the necessary materials. But do not worry; your struggling days are over. The 300-510 PDF contains some of the most valuable preparation tips and the details and instant access to useful [300-510 study materials just at one click](#)

Cisco 300-510 CCNP Service Provider Certification Details:

Exam Name	Implementing Cisco Service Provider Advanced Routing Solutions
Exam Number	300-510 SPRI
Exam Price	\$300 USD
Duration	90 minutes
Number of Questions	55-65
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)
Exam Registration	PEARSON VUE
Sample Questions	Cisco 300-510 Sample Questions
Practice Exam	Cisco Certified Specialist Service Provider Advanced Routing Implementation Practice Test

300-510 Syllabus:

Section	Weight	Objectives
Unicast Routing	35%	<ul style="list-style-type: none"> - Compare OSPF and IS-IS routing protocols - Troubleshoot OSPF multiarea operations (IPv4 and IPv6) <ul style="list-style-type: none"> • Route advertisement

Section	Weight	Objectives
		<ul style="list-style-type: none"> • Summarization - Troubleshoot IS-IS multilevel operations (IPv4 and IPv6) <ul style="list-style-type: none"> • Route advertisement • Summarization - Describe the BGP scalability and performance <ul style="list-style-type: none"> • BGP confederations • Route reflectors - Troubleshoot BGP <ul style="list-style-type: none"> • Route advertisement • Route reflectors • Confederations • Multihoming • TTL security and inter-domain security • Maximum prefix • Route dampening • Dynamic neighbors • Communities - Describe IPv6 tunneling mechanisms <ul style="list-style-type: none"> • Static IPv6-in-IPv4 tunnels • Dynamic 6to4 tunnels • IPv6 provider edge (6PE) - Implement fast convergence <ul style="list-style-type: none"> • Bidirectional forwarding detection • Nonstop Forwarding • NSR • Timers • BGP pic (edge and core) • LFA • BGP additional and backup path
Multicast Routing	15%	- Compare multicast concepts

Section	Weight	Objectives
		<ul style="list-style-type: none"> • Multicast domains, distribution trees, and IGMP operations • Any-Source Multicast (ASM) versus Source Specific Multicast (SSM) • Intra-domain versus inter-domain multicast routing <p>- Describe multicast concepts</p> <ul style="list-style-type: none"> • Mapping of multicast IP addresses to MAC addresses • Multiprotocol BGP for IPv4 and IPv6 • Principles and operations of PIM-SM • Multicast Source Discovery Protocol (MSDP) operations • MLDP/P2MP <p>- Implement PIM-SM operations</p> <ul style="list-style-type: none"> • Auto-RP, PIMv2 BSR, anycast RP • BIDIR-PIM operations • SSM operations • MSDP operations <p>- Troubleshoot multicast routing</p> <ul style="list-style-type: none"> • Single domain • Multidomain
Routing Policy and Manipulation	25%	<p>- Compare routing policy language and route maps</p> <p>- Describe conditional matching</p> <ul style="list-style-type: none"> • Operations • Semantics of policy applications and statements • Regular expressions • Policy sets • Tags • ACLs • Prefix lists and prefix sets

Section	Weight	Objectives
		<ul style="list-style-type: none"> • Route types • BGP attributes and communities • Hierarchical and parameterized structures - Troubleshoot route manipulation for IGP's <ul style="list-style-type: none"> • IS-IS • OSPF - Troubleshoot route manipulation for BGP <ul style="list-style-type: none"> • Route filtering • Traffic steering
MPLS and Segment Routing	25%	<ul style="list-style-type: none"> - Troubleshoot MPLS <ul style="list-style-type: none"> • LDP • LSP • Unified BGP • BGP free core • RSVP TE tunnels - Implement segment routing <ul style="list-style-type: none"> • Routing protocol extensions (OSPF, IS-IS, BGP) • SRGB and SRLB • Topology-Independent Loop-Free Alternate (TI-LFA) • Migration procedures (SR prefer and mapping server) - Describe segment routing traffic engineering <ul style="list-style-type: none"> • Automated steering and coloring • Policies (constraints, metrics, and attributes) • PCE-based path calculation - Describe segment routing v6 (SRv6) <ul style="list-style-type: none"> • Control plane operations • Data plane operations

Broaden Your Knowledge with Cisco 300-510

Sample Questions:

Question: 1

You have configured MSDP peering between two autonomous systems that pass traffic between two sites, but the peering has failed to come up.

Which task do you perform to begin troubleshooting the problem?

- a) Verify that PIM-DM is configured on the source interface
- b) Verify that multicast has been disabled globally
- c) Verify that the two MSDP peers allow asymmetric routing
- d) Verify that both source interfaces are reachable from both peers

Answer: d

Question: 2

You have configured routing policies on a Cisco IOS XR device with routing policy language. Which two statements about the routing policies are true?

(Choose two.)

- a) If you make edits to an existing routing policy without pasting the full policy into the CLI, the previous policy is overwritten
- b) The routing policies are implemented using route maps
- c) The routing policies are implemented in a sequential manner
- d) The routing policies affect BGP-related routes only

Answer: c, d

Question: 3

A network consultant is troubleshooting IS-IS instances to identify why a routing domains is having communication problems between the two instances.

Which description of the possible cause of issues in the routing domain is true?

- a) The same interface cannot be advertised in two different IS-IS instances
- b) The IS-IS "ISP" and "ISP2" instances are unrelated and unable to intercommunicate
- c) The configured IS-IS NSEL value is not allowing the routing systems to establish a neighborship
- d) The interface mode ip router is-is command was not included in the script

Answer: a

Question: 4

An engineer is troubleshooting a connectivity issue across the MPLS network and is verifying the forwarding behavior of packets. Which table does the engineer look at to verify the forwarding behavior of an IP packet as it enters the MPLS network at the ingress LSR?

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

Answer: c**Question: 5**

In a PIM-SM environment, which mechanism determines the traffic that a receiver receives?

- a) The receiver explicitly requests its desired traffic from the RP on the shared tree
- b) The receiver explicitly requests traffic from each desired source, which responds by sending all traffic
- c) The receiver explicitly requests traffic from a single source, which responds by forwarding all traffic
- d) The RP on the shared tree floods traffic out of all PIM configured interfaces

Answer: b**Question: 6**

Which command is used to enable BIDIR-PIM under global configuration mode for Cisco IOS XE Software?

- a) multicast-routing
- b) ipv4 pim bidir-enable
- c) Ip pim bidir-enable
- d) ip pim bidir ip

Answer: c**Question: 7**

For which reason can two BGP peers fail to establish a neighbor relationship?

- a) They are both activated under an IPv4 address family
- b) Their BGP timers are mismatched
- c) Their BGP send-community strings are misconfigured
- d) Their remote-as numbers are misconfigured

Answer: d

Question: 8

What is the role of segment routing mapping server?

- a) It advertises a local SID mapping policy to all the mapping clients
- b) It works with IGP instances to calculate the prefix-SIDs in the absence of a mapping policy
- c) It selects multiple mapping entries to create overlapping active mapping policies
- d) It reads and translates remotely received SIDs from other mapping servers to create SID mapping entries

Answer: a

Question: 9

Which feature is used in multicast routing to prevent loops?

- a) inverse ARP
- b) STP
- c) RPF
- d) split horizon

Answer: c

Question: 10

What can be used to determine a path from the head-end to a tail-end router when implementing SR-TE with a head-end, with little information on the network topology?

- a) traffic controller
- b) path computation engine
- c) tail-end router
- d) SNMP server

Answer: b

Avail the Study Guide to Pass Cisco 300-510 CCNP Service Provider Exam:

- Find out about the 300-510 syllabus topics. Visiting the official site offers an idea about the exam structure and other important study resources. Going through the syllabus topics help to plan the exam in an organized manner.
- Once you are done exploring the [300-510 syllabus](#), it is time to plan for studying and covering the syllabus topics from the core. Chalk out the best plan for yourself to cover each part of the syllabus in a hassle-free manner.

- A study schedule helps you to stay calm throughout your exam preparation. It should contain your materials and thoughts like study hours, number of topics for daily studying mentioned on it. The best bet to clear the exam is to follow your schedule rigorously.
- The candidate should not miss out on the scope to learn from the 300-510 training. Joining the Cisco provided training for 300-510 exam helps a candidate to strengthen his practical knowledge base from the certification.
- Learning about the probable questions and gaining knowledge regarding the exam structure helps a lot. Go through the [300-510 sample questions](#) and boost your knowledge
- Make yourself a pro through online practicing the syllabus topics. 300-510 practice tests would guide you on your strengths and weaknesses regarding the syllabus topics. Through rigorous practicing, you can improve the weaker sections too. Learn well about time management during exam and become confident gradually with practice tests.

Career Benefits:

Passing the 300-510 exam, helps a candidate to prosper highly in his career. Having the certification on the resume adds to the candidate's benefit and helps to get the best opportunities.

Here Is the Trusted Practice Test for the 300-510 Certification

NWExam.com is here with all the necessary details regarding the 300-510 exam. We provide authentic practice tests for the 300-510 exam. What do you gain from these practice tests? You get to experience the real exam-like questions made by industry experts and get a scope to improve your performance in the actual exam. Rely on NWExam.com for rigorous, unlimited two-month attempts on the [300-510 practice tests](#), and gradually build your confidence. Rigorous practice made many aspirants successful and made their journey easy towards grabbing the Cisco Certified Specialist Service Provider Advanced Routing Implementation.

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