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Data Center, Associate (JNCIA-DC)

Earn an associate-level certification that demonstrates competency with data center technologies, configuration, and troubleshooting skills.

One of four certifications in the Data Center track, JNCIA-DC, Associate, is designed for data center networking professionals with introductory-level knowledge of Juniper Networks® Junos® software and data center devices. During the written exam, you will verify your understanding of data center technologies, related platform configuration, and troubleshooting skills.

Exam Preparation

We recommend the following resources to help you prepare for your exam. However, these resources aren't required, and using them doesn't guarantee you'll pass the exam.

Recommended Training
- Introduction to Juniper Data Center Networking

Exam Resources
- Industry/product knowledge
- Juniper TechLibrary

Additional Preparation
- Juniper Learning Portal

Exam Objectives

Here is a high-level view of the skillset required to successfully complete the JNCIA-DC certification exam.

Data Center Architectures

Identify concepts and general features of data center architectures:

- Traditional architectures (multitier)
- IP fabric architectures (spine/leaf)
- Layer 2 and Layer 3 strategies
- Overlay network vs. underlay network
- Ethernet VPN–Virtual Extensible LAN (EVPN-VXLAN) basics/purpose

Layer 2 Switching and VLANs

Identify the concepts, operations, or functionalities of Layer 2 switching for Junos OS:

- Ethernet switching/bridging concepts and operations

Identify the concepts, benefits, or functionalities of VLANs:

- Port modes
- VLAN tagging
- Integrated Routing and Bridging (IRB)

Identify the concepts, benefits, or functionalities of VLANs:

- Ethernet switching/bridging
- VLANs

Protocol-Independent Routing

Identify the concepts, operations, or functionalities of various protocol-independent routing components:

- Static, aggregate, and generated routes
- Martian addresses
- Routing instances, including Routing Information Base (RIB) groups
- Load balancing
- Filter-based forwarding

Describe how to configure, monitor, or troubleshoot various protocol-independent routing components:

- Static, aggregate, and generated routes
- Load balancing

Data Center Routing Protocols BGP/OSPF

Identify the concepts, operation, or functionality of OSPF:

- Link-state database
- OSPF packet types
- Router ID
- Adjacencies and neighbors

- Designated router (DR) and backup designated router (BDR)
- OSPF area and router types
- Link State Advertisement (LSA) packet types

Describe how to configure, monitor, or troubleshoot OSPF:

- Areas, interfaces, and neighbors
- Additional basic options
- Routing policy application
- Troubleshooting tools

Identify the concepts, operation, or functionality of BGP:

- BGP basic operation
- BGP message types
- Attributes
- Route/path selection process
- IBGP and EBGP functionality and interaction

Describe how to configure, monitor, or troubleshoot BGP:

- Groups and peers
- Additional basic options
- Routing policy application

High Availability

Identify the concepts, benefits, applications, or requirements of high availability (HA):

- Link aggregation groups (LAG)
- Graceful restart (GR)
- Bidirectional Forwarding Detection (BFD)
- Virtual Chassis

Describe how to configure, monitor, or troubleshoot high availability components:

- LAG
- GR
- BFD

Exam Details

Exam questions are derived from the recommended training and the exam resources listed above. Pass/fail status is available immediately after taking the exam. The exam is only provided in English.

Exam Code

JN0-281

Prerequisite Certification

None

Delivered by

Pearson VUE

Exam Length

90 minutes

Exam Type

65 multiple-choice questions

Recertification

Juniper certifications are valid for three years. For more information, see Recertification.

About Juniper Networks

Juniper Networks believes that connectivity is not the same as experiencing a great connection. Juniper's AI-Native Networking Platform is built from the ground up to leverage AI to deliver exceptional, highly secure, and sustainable user experiences from the edge to the data center and cloud. Additional information can be found at juniper.net or connect with Juniper on X (formerly Twitter), LinkedIn, and Facebook.

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