JNCIA-Junos Voucher Assessment Practice Test (Sample)

Study Guide

BY EXAMZIFY

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Questions

1. **Which command should you use to discard all changes made and return to the active configuration in Junos?**

    A. rollback 1

    B. rollback 0

    C. reset configuration

    D. discard changes

2. **What does 'OSPF cost' determine in the protocol's metric?**

    A. The bandwidth of the link

    B. The overhead of using a particular route

    C. The distance to a destination

    D. The reliability of a path

3. **What is a primary function of the PFE?**

    A. To apply stateless firewall filters

    B. To configure routing protocols

    C. To manage the device configuration

    D. To update software releases

4. **Which command allows for a specific number of lines to display in the operational mode of a Junos device?**

    A. set cli screen-length 50

    B. set cli screen-length 40

    C. set cli lines 40

    D. set cli output 40

5. **What is an example of an exterior gateway protocol (EGP)?**

    A. OSPF

    B. EIGRP

    C. BGP

    D. RIP

6. **What command should be executed to upgrade between two different Junos OS releases with no disruption to the control plane?**

   A. request system software upgrade

   B. request system software in-service-upgrade

   C. request system reboot

   D. request system auto-upgrade

7. **What is the J-Web interface in Junos?**

   A. A terminal-based command line interface

   B. A web-based graphical user interface for device management

   C. A mobile application for real-time monitoring

   D. A software development kit for network programming

8. **Which two software versions should you use for an upgrade if you want to include only bug fixes from version 19.1R1? Choose Two.**

   A. 19.1R1-S1

   B. 19.1R1-S2

   C. 19.2R1

   D. 19.3R1-S1

9. **If a BGP route does not match any term in the applied routing policy, what is the action taken by the router?**

   A. It discards the route.

   B. It advertises the route according to BGP rules.

   C. It defaults to the nearest route available.

   D. It sends an alert to the administrator.

10. **What does the term "access control list" refer to in networking?**

   A. A list of network routes.

   B. A list that defines which users can access a system.

   C. A protocol for managing network traffic.

   D. A mechanism to control which packets are allowed or denied.

Answers

1. A
2. B
3. A
4. B
5. C
6. B
7. B
8. B
9. B
10. D

Explanations

1. Which command should you use to discard all changes made and return to the active configuration in Junos?

A. rollback 1

B. rollback 0

C. reset configuration

D. discard changes

The command used to discard all changes made and return to the active configuration in Junos is "rollback 1." This command reverts the configuration to the last committed state, effectively discarding any uncommitted changes that have been made since the last commit. In the Junos operating system, configurations are changed in a candidate mode where modifications can be made without immediately applying them to the active configuration. Using "rollback 1" cancels any such candidate changes and allows the system to revert back to the previously active (committed) configuration. In contrast, the choice of "rollback 0" would revert the configuration to the initial factory-installed configuration, which is generally not what is meant when one wishes to discard the last set of changes. The "reset configuration" command is used for different purposes, such as clearing the entire configuration, which would not only discard changes but potentially erase all settings. Similarly, "discard changes" functions to abandon uncommitted changes but does not specifically revert to the last committed configuration, making "rollback 1" the most precise command for this task.

2. What does 'OSPF cost' determine in the protocol's metric?

A. The bandwidth of the link

B. The overhead of using a particular route

C. The distance to a destination

D. The reliability of a path

In OSPF (Open Shortest Path First), the OSPF cost primarily represents the inverse of the bandwidth of the link. It is calculated based on the link's bandwidth, with higher bandwidth links receiving a lower cost value, thus making them more favorable for routing decisions. The cost metric helps OSPF determine the best path to a destination based on link speed rather than distance in terms of hop count. When OSPF assesses multiple routes to a destination, it will choose the route with the lowest cost, which corresponds to the highest bandwidth link available. While it may seem that the choice regarding the overhead of using a particular route could relate to the OSPF cost, this is not the case as the cost is specifically tied to the bandwidth rather than overhead related to the protocol's operation. Cost in OSPF does not quantify distance in terms of hops or reliability; instead, it focuses directly on the capacity of the communication links. Thus, it is essential to understand that OSPF cost acts as a measure of the effective bandwidth for routing decisions.

3. What is a primary function of the PFE?

A. To apply stateless firewall filters

B. To configure routing protocols

C. To manage the device configuration

D. To update software releases

The primary function of the Packet Forwarding Engine (PFE) is to apply stateless firewall filters. The PFE is a critical hardware component in Juniper devices, responsible for processing and forwarding packets at high speeds while ensuring that the appropriate security policies are enforced. Stateless firewall filters determine whether traffic is allowed or denied based on predefined rules without maintaining the state of the connection, which allows for quick processing of packets as they traverse the network. In the context of network devices, the PFE operates independently of the control plane, which is responsible for routing protocols, device configuration, and software updates. By offloading these tasks to the PFE, Juniper devices can achieve improved performance and lower latency, as packet processing takes place seamlessly. Understanding this role of the PFE is essential for network engineers as it helps them design networks that efficiently manage traffic while maintaining security.

4. Which command allows for a specific number of lines to display in the operational mode of a Junos device?

A. set cli screen-length 50

B. set cli screen-length 40

C. set cli lines 40

D. set cli output 40

The command that allows you to set the number of lines displayed in the operational mode of a Junos device is designed to help manage the output on the screen when viewing command results. By issuing the command "set cli screen-length 40," you are configuring the device to limit the displayed output to 40 lines at a time. This helps in making the output more manageable, especially for commands that produce a large amount of data. Setting the screen length to a specific number ensures that the output is neither too long to scroll through easily nor too short to miss important information. This feature is particularly useful when working in a terminal environment where excessive scrolling can hinder the ability to review the information efficiently. In this context, the number "40" is significant because it defines the exact limit of lines that will appear before further output is paused, allowing you to process the information in a controlled manner.

5. What is an example of an exterior gateway protocol (EGP)?

A. OSPF

B. EIGRP

C. BGP

D. RIP

An example of an exterior gateway protocol (EGP) is BGP (Border Gateway Protocol). BGP is specifically designed to exchange routing information between different autonomous systems (AS) on the Internet, making it the de facto standard for Internet routing. It helps in determining the best paths for data transmission across the diverse networks that exist globally. BGP's ability to handle a vast and complex interconnection of networks is essential for maintaining the stability and efficiency of Internet routing. Unlike interior gateway protocols (IGPs), which operate within a single AS, BGP focuses on routing between multiple ASes, allowing it to manage and optimize the routing decisions for large-scale environments. Its use of path vector technology and policy-based routing attributes further enhances its role in EGP. The other protocols mentioned—OSPF, EIGRP, and RIP—are categorized as interior gateway protocols (IGPs), which are aimed at routing within a single AS rather than between multiple ones. This distinction reinforces why BGP is recognized as an EGP, playing a critical role in the global network architecture.

6. What command should be executed to upgrade between two different Junos OS releases with no disruption to the control plane?

A. request system software upgrade

B. request system software in-service-upgrade

C. request system reboot

D. request system auto-upgrade

To upgrade between two different Junos OS releases with no disruption to the control plane, the appropriate command is to use 'request system software in-service-upgrade'. This command facilitates an in-service upgrade, allowing the control plane to remain operational while the new software version is being installed. It minimizes downtime and is crucial for environments where continuous availability is necessary, such as in production networks. The in-service upgrade process involves careful handling of the system resources, enabling the switch to the new Junos OS version without interrupting ongoing processes or sessions. This method is particularly beneficial for maintaining service continuity, which is often a critical requirement in networking environments. Other commands, while useful in their own contexts, do not provide the same level of service continuity. For instance, upgrading with other commands may result in temporary disruption and affect network services, which is not ideal for situations demanding minimal service interruption.

7. What is the J-Web interface in Junos?

A. A terminal-based command line interface

B. A web-based graphical user interface for device management

C. A mobile application for real-time monitoring

D. A software development kit for network programming

The J-Web interface in Junos is a web-based graphical user interface that allows network administrators to manage and configure Juniper devices through a browser. This interface simplifies the management of network devices by providing an intuitive layout and easy navigation compared to the command line interface, making it accessible for users who may not be as comfortable with command line syntax.   The advantages of using J-Web include the ability to perform tasks such as monitoring device performance, configuring settings, and managing various aspects of the device without the need for specialized knowledge of Junos CLI commands. The graphical interface can present complex configurations in a more user-friendly way, allowing for more visual interaction with the equipment's settings.   Overall, J-Web enhances usability and efficiency in managing Juniper networks, which is why it is recognized as a crucial feature for device management.

8. Which two software versions should you use for an upgrade if you want to include only bug fixes from version 19.1R1? Choose Two.

A. 19.1R1-S1

B. 19.1R1-S2

C. 19.2R1

D. 19.3R1-S1

When considering an upgrade that includes only bug fixes from a specific software version, it's important to understand the naming convention used by Juniper Networks for their software release cycles. The versioning structure provided indicates that both 19.1R1-S1 and 19.1R1-S2 are designed as service pack releases meant to address issues in the base version 19.1R1. These service packs (S1, S2) generally include a collection of bug fixes without introducing new features. Thus, choosing 19.1R1-S2 for the upgrade aligns with the requirement of only needing to include bug fixes. On the other hand, versions 19.2R1 and 19.3R1-S1 represent new major or minor releases that are likely to include additional features and enhancements beyond just bug fixes. This means they would be inappropriate choices if the goal is strictly to maintain stability through bug fixes from the original version. Focusing on the service pack, option B (19.1R1-S2) is an appropriate upgrade choice for achieving the goal of implementing only bug fixes derived from 19.1R1.

9. If a BGP route does not match any term in the applied routing policy, what is the action taken by the router?

A. It discards the route.

B. It advertises the route according to BGP rules.

C. It defaults to the nearest route available.

D. It sends an alert to the administrator.

When a BGP (Border Gateway Protocol) route does not match any term in the applied routing policy, the router will still process the route according to BGP rules, leading to its advertisement. This means that the lack of a specific policy match does not prevent the route from being considered valid within BGP's decision-making process.   In BGP, the routing policy is used to influence the selection and advertisement of routes based on defined criteria, but if there are no matching terms, the protocol's default behavior will apply. This typically results in the route being advertised to peers unless specifically configured to block unmatched routes. This behavior is fundamental to BGP's operation as it maintains continuity in route propagation even when specific filtering or manipulation criteria are not met. Consequently, understanding that the absence of a policy match does not lead to route rejection is essential for effective BGP configuration and management.

10. What does the term "access control list" refer to in networking?

A. A list of network routes.

B. A list that defines which users can access a system.

C. A protocol for managing network traffic.

D. A mechanism to control which packets are allowed or denied.

The term "access control list" (ACL) in networking primarily refers to a mechanism that specifies which packets are permitted to enter or exit a network interface based on defined criteria such as IP address, protocol, or port number. ACLs are essential for implementing security policies by controlling traffic flow and enhancing the protection of network resources.   When an ACL is applied to a network device, it evaluates the incoming or outgoing packets against the rules set forth in the list. If a packet matches an allow rule, it is permitted through; if it matches a deny rule, the packet is dropped. This granular control is vital for managing access and ensuring that only authorized traffic can traverse network segments. Understanding ACLs is fundamental because they play a critical role in network security and traffic management, making them a vital concept in networking courses and certifications like JNCIA-Junos.