Practice Test for RCNI Certification Real 2025 Mock Exam [Q14-Q38

Practice Test for RCNI Certification Real 2025 Mock Exam Prepare For Realistic RCNI Dumps PDF - 100% Passing Guarantee Q14. Which three conditions allow an ARP request or response to pass a Dynamic ARP Inspection (DAI) check?

(Choose three.)
* The IP/MAC pair appear in the DHCP binding database.
* A static ARP entry exists for the IP/MAC pair with the inspection flag set.
* Client authenticated using MAC authentication.
* Client authenticated using RADIUS on an 802.1X enabled port.
* Request originated on a trusted port.
* There is a static reservation for the IP/MAC pair in the DHCP pool.

Dynamic ARP Inspection (DAI) is a security feature that intercepts and validates Address Resolution Protocol (ARP) packets in a network. It ensures that only legitimate ARP requests and responses are relayed, preventing ARP spoofing and man-in-the-middle attacks.

Conditions Allowing ARP Packets to Pass DAI Checks:

* IP/MAC Pair in the DHCP Binding Database:

* When DHCP snooping is enabled, the switch maintains a binding table of IP-to-MAC address mappings assigned by the DHCP server.

* DAI uses this database to verify that ARP packets have legitimate IP/MAC address pairs.

* If the ARP packet’s IP/MAC pair matches an entry in the DHCP binding database, it passes the DAI check.

* Static ARP Entry with Inspection Flag Set:

* Administrators can configure static ARP entries for known devices, marking them as trusted for DAI purposes.

* These entries include the IP/MAC pair and are flagged to bypass DAI checks.

* An ARP packet matching a static entry with the inspection flag set will pass the DAI check.

* Request Originated on a Trusted Port:

* Ports can be designated as trusted, typically those connected to other switches or network devices.

* DAI does not inspect ARP packets arriving on trusted ports, assuming they are from legitimate sources.

* Therefore, ARP requests or responses from a trusted port pass the DAI check.

References:

* For more information on configuring DAI and related security features, refer to the RUCKUS FastIron Layer 3 Routing Configuration Guide: Dynamic ARP Inspection overview Implementing DAI with these conditions helps protect the network from ARP-based attacks by ensuring that only validated ARP traffic is permitted.

Q15. Which statement is true about Secure Shell (SSH) functionality in FastIron 08.0.95?
* Default login timeout is 30 seconds.
* Default SSH authentication type is RSA with 2048-bit modulus.
* Server function is disabled by default.
* Outbound SSH sessions are not supported.

Q16. Which command will provide a maximum 15.4W to the connected Power over Ethernet (PoE) device?
* ICX(config-if-e1000-1/1/1)#inline power power-by-class 5
* ICX(config-if-e1000-1/1/1)#inline power power-by-class 2
* ICX(config-if-e1000-1/1/1)#inline power power-by-class 3
* ICX(config-if-e1000-1/1/1)#inline power power-by-class 4

Q17. Which command enables global IPv6 capabilities?
* ipv6 dhcp6-server enable
* ipv6 unicast-routing
* ipv6 multicast
* ipv6 nd proxy

Q18. What are two differences between Class of Service (CoS) and Differentiated Services Code Point (DSCP)?

(Choose two.)

* DSCP defines priority levels and CoS manipulates traffic according to these defined priority levels.
* CoS defines priority levels and DSCP manipulates traffic according to these defined priority levels.
* DSCP operates at Layer 2 in OSI model, whereas CoS operates in Layer 3.
* CoS operates at Layer 2 in OSI model, whereas DSCP operates in Layer 3.
* DSCP is simpler and can scale easily as the network grows. CoS becomes more complex as network demand for prioritized data increase.

Class of Service (CoS) and Differentiated Services Code Point (DSCP) are both mechanisms used to prioritize network traffic, but they function at different layers of the OSI model and have distinct characteristics:

* Operational Layer:

* CoS:

* Operates at Layer 2 (Data Link Layer) of the OSI model.

* Utilizes a 3-bit field within the 802.1Q VLAN tag, known as the Priority Code Point (PCP), to assign priority levels ranging from 0 to 7.

* DSCP:

* Operates at Layer 3 (Network Layer) of the OSI model.

* Uses a 6-bit field in the IP header to assign priority, allowing for up to 64 different values, providing more granularity in traffic classification.

* Scalability and Complexity:

* CoS:

* With only 8 possible priority levels, CoS offers limited granularity.

* As network demands increase, especially with diverse applications requiring different levels of service, managing and differentiating traffic with CoS can become complex due to its limited priority levels.

* DSCP:

* Provides 64 distinct priority levels, allowing for finer differentiation of traffic types.

* This granularity enables easier scalability and more straightforward management of diverse and growing network traffic demands.

References:

* For a detailed comparison between CoS and DSCP, refer to the NetworkLessons Notes on QoS CoS vs DSCP: QoS CoS vs DSCP – NetworkLessons Notes

* For an overview of Differentiated Services and traffic classification, see the article on GeeksforGeeks:

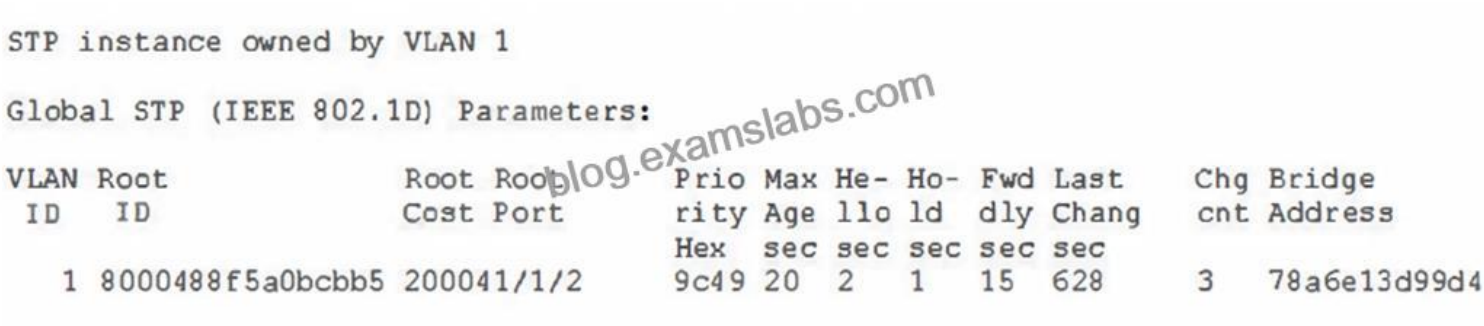
Differentiated Services (DiffServ) and Traffic Classification

Understanding these differences is crucial for network administrators when designing Quality of Service (QoS) policies to ensure

efficient and effective traffic management across the network.

Q19. Which discovery protocol is enabled by default on all RUCKUS ICX platforms?
* JDP
* FDP
* CDP
* LLDP

Q20. In the following output, what is the bridge priority of the root in hex?



* 8000
* 0
* 9c49
* 20009

Q21. A Wi-Fi access point is configured for management traffic on the default VLAN and a guest SSID on VLAN 10. The access point is connected to port 1/1/10.

What is the correct configuration?
* vlan 1

no tagged ethernet 1/1/10

!

vlan 10

untagged ethernet 1/1/10
* vlan 1

no untagged ethernet 1/1/10

!

vlan 10

tagged ethernet 1/1/10
* vlan 10

tagged ethernet 1/1/10
* vlan 10

no untagged ethernet 1/1/10

Q22. When a high CPU alert about an ICX switch is triggered, which command will provide more detail on the processes taking up CPU cycles?
* show cpu histogram
* show cpu tasks
* show cpu
* show process
When a high CPU utilization alert is triggered on a RUCKUS ICX switch, it’s essential to identify the processes consuming excessive CPU resources. The show cpu tasks command provides detailed information about active processes and their CPU usage.

Command Usage:

show cpu tasks

Output Example:

Task Name CPU Time (ms) Invocations Avg Time (us)

—————— ————–
———— ————-

TaskA 5000 1000 5000

TaskB 3000 1500 2000

In this output:

* Task Name lists the names of active processes.

* CPU Time (ms) indicates the total CPU time consumed by each process in milliseconds.

* Invocations shows how many times each process has been called.

* Avg Time (us) represents the average time per invocation in microseconds.

By analyzing this data, administrators can pinpoint processes that are utilizing disproportionate CPU resources, facilitating targeted troubleshooting and optimization.

Q23. What is the maximum number of software images that can be stored simultaneously on an ICX switch?
* 3
* 2
* 1
* 4

Q24. For multicast clients to stop receiving traffic using a leave request, which protocol must run on the local subnet?
* IGMPv2

* IGMPv1
* PIM Dense
* IGMP Snooping

Q25. Which configuration steps will add untagged ethernet ports 1/1/1 and 1/1/2 and tagged ethernet port 1/2/1 to VLAN 10?
* untagged ethernet 1/1/1 to 1/1/2 vlan 10

tagged ethernet 1/2/1 vlan 10
* untagged ethernet 1/1/1 to 1/1/2

tagged ethernet 1/2/1

vlan 10
* vlan 10

no tagged ethernet 1/1/1 to 1/1/2

tagged ethernet 1/2/1
* vlan 10

untagged ethernet 1/1/1 to 1/1/2

tagged ethernet 1/2/1

Q26. What is one advantage of the supportsave command versus the show tech-support command?
* Uses fewer CPU cycles during execution.
* Allows the transfer of collected data to TFTP.
* Uploads directly to RUCKUS support.
* Generates automatically after a system crash.
* Comparison Between supportsave and show tech-support:

* show tech-support: Generates diagnostic information and displays it on the CLI. It does not directly save or transfer the output.

* supportsave: Gathers similar diagnostic data but also allows the data to be transferred to a remote server, such as via TFTP, for easier analysis.

* Why Other Options Don’t Apply:

* A. Uses fewer CPU cycles during execution: Both commands are similar in terms of resource usage.

* C. Uploads directly to RUCKUS support: Data transfer to RUCKUS support requires manual intervention.

* D. Generates automatically after a system crash: Neither command generates data automatically; both require user execution.

References:

* ICX Switch SupportSave Command Guide: RUCKUS Documentation

Q27. Which two Power over Ethernet (PoE) features on the ICX will be enabled by the inline power poe-ha command? (Choose two.)

* power priority
* Fast Boot
* PoE Overdrive
* Perpetual PoE
* power limit

The inline power poe-ha command on RUCKUS ICX switches enables two key Power over Ethernet (PoE) features:

* Fast Boot PoE: This feature ensures that PoE power is delivered to connected devices immediately upon switch startup, without waiting for the entire system to boot up. This is crucial for devices that need to be operational as soon as possible, such as IP phones or security cameras. To enable Fast Boot PoE, enter interface configuration mode and execute the command:

inline power poe-ha

This command ensures that PoE is delivered promptly during the boot process.

* Perpetual PoE: This feature maintains PoE power to connected devices even when the switch undergoes a soft reboot or firmware upgrade. It ensures uninterrupted power delivery, preventing devices from losing power during such events. To enable Perpetual PoE, use the same command in interface configuration mode:

By configuring this command, the switch provides continuous PoE power during reboots.

For more detailed information on these features and their configuration, refer to the RUCKUS Community Forum post titled “Things to consider about PoE at a glance, when deploying.” Ruckus Wireless Community

Q28. Which two processes are used to add a new stack member to an existing stack? (Choose two.)

* stack priority configuration
* interactive setup
* stack switchover
* stack suggested-id
* manual configuration

Adding a new member to an existing RUCKUS ICX switch stack can be accomplished through the following methods:

* Stack Priority Configuration:

* Determine the role of the new switch within the stack hierarchy by setting its priority.

* Access the new switch’s CLI.

* Enter global configuration mode: configure terminal.

* Set the stack unit ID and priority: stack unit [unit_id] priority [priority_value].

* A higher priority value increases the likelihood of the switch becoming the stack master.

* Save the configuration: write memory.

* Manual Configuration:

* Manually configure the new switch to match the existing stack settings.

* Ensure the switch has a clean configuration by resetting it to factory defaults:

* Enter global configuration mode: configure terminal.

* Execute: write erase.

* Reload the switch: reload.

* Enable stacking:

* Enter global configuration mode: configure terminal.

* Execute: stack enable.

* Connect the new switch to the existing stack using appropriate stacking cables.

* On the stack master, use the stack secure-setup command to recognize and add the new member.

* Verify the new member’s addition by executing: show stack.

References:

* For detailed procedures on building an ICX stack, refer to the RUCKUS Community Forums.

Ruckus Wireless Community

Q29. Which command enables global IPv6 capabilities?
* ipv6 dhcp6-server enable
* ipv6 unicast-routing
* ipv6 multicast
* ipv6 nd proxy

To enable IPv6 functionality on a RUCKUS ICX switch, you must activate IPv6 unicast routing globally.

This allows the switch to forward IPv6 packets and participate in IPv6 routing.

Steps to Enable IPv6 Unicast Routing:

* Access the Switch’s Command-Line Interface (CLI):

* Connect to the switch via console, SSH, or Telnet.

* Enter privileged EXEC mode:

plaintext

Copy code

enable

* Enter Global Configuration Mode:

* Switch to global configuration mode:

plaintext

Copy code

configure terminal

* Enable IPv6 Unicast Routing:

* Activate IPv6 unicast routing:

ipv6 unicast-routing

* Configure IPv6 Addresses on Interfaces (Optional):

* Assign IPv6 addresses to the desired interfaces:

interface ethernet 1/1/1

ipv6 address 2001:db8::1/64

* Verify the Configuration:

* Exit to privileged EXEC mode and display the running configuration to confirm:

end

show running-config

References:

* For detailed information on configuring IPv6 addresses, refer to the RUCKUS FastIron Layer 3 Routing Configuration Guide: Configuring a global or site-local IPv6 address with a manually configured interface ID By following these steps, you enable the switch to handle IPv6 traffic, facilitating IPv6 communication within your network.

Q30. At which prompt can the ping command be executed?
* ICX7150-C12 Router(config-if-mgmt-1)#
* ICX7150-C12 Router(config)#
* ICX7150-C12 Router#
* ICX7150-C12 Router(config-if-e1000-1/1/1)#

Q31. In the following output, what is the bridge priority of the root in hex?

```
STP instance owned by VLAN 1

Global STP (IEEE 802.1D) Parameters:

VLAN Root              Root Root      Prio Max He- Ho- Fwd Last    Chg Bridge
 ID   ID               Cost Port      rity Age llo ld  dly Chang   cnt Address
                                      Hex  sec sec sec sec sec
   1 8000488f5a0bcbb5 200041/1/2     9c49 20  2   1   15  628     3   78a6e13d99d4
```


* 8000
* 0
* 9c49
* 20009
* Understanding Bridge Priority:

* The bridge priority in the Spanning Tree Protocol (STP) is represented in hexadecimal format in RUCKUS ICX switches.

* In the output, the bridge priority is a combination of the priority value (default is 32768 or

0x8000 in hex) and the VLAN ID.

* Why It Is 8000:

* Unless explicitly modified, the default bridge priority is 8000 in hexadecimal.

* Why Other Options Don’t Apply:

* B. 0: This value does not align with the default or modified priority values.

* C. 9c49: This might represent a different component of the output, such as MAC address.

* D. 20009: This is an incorrect representation of the bridge priority.

References:

* ICX Spanning Tree Configuration Guide: RUCKUS Documentation

Q32. Which command can be used to identify Cyclic Redundancy Check (CRC) errors on port Ethernet 1/1/1?
* show statistics ethernet 1/1/1
* show interfaces brief ethernet 1/1/1
* show mac-address ethernet 1/1/1
* show port security ethernet 1/1/1

Q33. Which two Power over Ethernet (PoE) features on the ICX will be enabled by the inline power poe-ha command? (Choose two.)
* power priority
* Fast Boot
* PoE Overdrive

* Perpetual PoE
* power limit

Q34. What are two features of Open Shortest Path First (OSPF)? (Choose two.)
* utilizes distance vector
* calculates link cost
* automatic redistribution of routes
* updates routes dynamically
* uses exterior gateway protocols

Open Shortest Path First (OSPF) is a widely used interior gateway protocol (IGP) designed for routing within an autonomous system (AS). It is a link-state routing protocol that offers several key features:

Key Features of OSPF:

* Calculates Link Cost:

* OSPF assigns a cost to each link, representing the overhead required to send packets across that link. The cost is typically based on the link’s bandwidth; higher bandwidth links have lower costs.

* OSPF uses these costs to calculate the shortest path to each network destination, ensuring efficient routing.

* Updates Routes Dynamically:

* OSPF routers exchange link-state advertisements (LSAs) to share information about network topology changes.

* When a change occurs, such as a link failure, OSPF quickly propagates this information, allowing routers to update their routing tables dynamically and converge on a new optimal topology.

Clarifications on Other Options:

* Option A: Utilizes distance vector

* OSPF is a link-state protocol, not a distance vector protocol. Distance vector protocols, like RIP, use different mechanisms for route calculation.

* Option C: Automatic redistribution of routes

* OSPF does not automatically redistribute routes from other routing protocols. Route redistribution between different protocols requires manual configuration.

* Option E: Uses exterior gateway protocols

* OSPF is an interior gateway protocol (IGP) used within a single autonomous system, not an exterior gateway protocol (EGP) like BGP, which is used between autonomous systems.

References:

* OSPF Design Guide

* Understanding OSPF

Q35. In a core/edge network topology, which ports should have Root Guard enabled?
* route-only ports facing the WAN
* edge ports facing the core
* core ports facing the edge
* management ports at the core

Q36. Which command will transfer a code image between flash modules, from the primary partition to the secondary partition?
* copy disk0 flash TNR08095hufi.bin primary
* copy disk0 flash TNR08095hufi.bin secondary
* copy flash flash secondary
* copy flash flash primary

In RUCKUS ICX switches, the copy flash flash command is used to duplicate a firmware image from one flash partition to another. This is useful for maintaining consistent firmware versions across different boot partitions.

Command Syntax:

copy flash flash [primary | secondary]

Parameters:

* primary: Specifies the primary flash partition.

* secondary: Specifies the secondary flash partition.

Q37. Which method is required to install a feature license on an ICX running FastIron 08.0.95?
* USB
* CLI
* TFTP
* FTP

Q38. Which command could be used to find the system name of an attached device?
* show lldp neighbors
* show chassis
* ping
* show inline power