Exam Questions N10-009

CompTIA Network+ Exam

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NEW QUESTION 1
- (Topic 3)
A network technician is attempting to harden a commercial switch that was recently purchased. Which of the following hardening techniques best mitigates the use of publicly available information?

A. Changing the default password
B. Blocking inbound SSH connections
C. Removing the gateway from the network configuration
D. Restricting physical access to the switch

Answer: A

Explanation:
Changing the default password is a hardening technique that best mitigates the use of publicly available information, such as vendor documentation, online forums, or hacking tools, that may reveal the default credentials of a commercial switch. By changing the default password to a strong and unique one, the network technician can prevent unauthorized access to the switch configuration and management. References:
? Network Hardening - N10-008 CompTIA Network+ : 4.3 - YouTube1
? CompTIA Network+ Certification Exam Objectives, page 151

NEW QUESTION 2
- (Topic 3)
Which of the following compromises internet-connected devices and makes them vulnerable to becoming part of a botnet? (Select TWO).

A. Deauthentication attack
B. Malware infection
C. IP spoofing
D. Firmware corruption
E. Use of default credentials
F. Dictionary attack

Answer: BE

NEW QUESTION 3
- (Topic 3)
During an incident, an analyst sends reports regularly to the investigation and leadership teams. Which of the following best describes how Pll should be safeguarded during an incident?

A. Implement data encryption and store the data so only the company has access.
B. Ensure permissions are limited to the investigation team and encrypt the data.
C. Implement data encryption and create a standardized procedure for deleting data that is no longer needed.
D. Ensure the permissions are open only to the company.

Answer: C

Explanation:
PII stands for Personally Identifiable Information, which is any data that can be used to identify, contact, or locate a specific individual, such as name, address, phone number, email, social security number, and so on. PII should be safeguarded during an incident to protect the privacy and security of the individuals involved, and to comply with the legal and ethical obligations of the organization. One way to safeguard PII during an incident is to implement data encryption, which is a process of transforming data into an unreadable format that can only be accessed by authorized parties who have the decryption key. Data encryption can prevent unauthorized access, modification, or disclosure of PII by malicious actors or third parties. Another way to safeguard PII during an incident is to create a standardized procedure for deleting data that is no longer needed, such as after the incident is resolved or the investigation is completed. Deleting data that is no longer needed can reduce the risk of data breaches, data leaks, or data theft, and can also save storage space and resources. A standardized procedure for deleting data can ensure that the data is erased securely and completely, and that the deletion process is documented and audited.
References
? 1: CompTIA Network+ N10-008 Certification Study Guide, page 304-305
? 2: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 13
? 3: CompTIA Network+ N10-008 Certification Practice Test, question 5
? 4: Data Encryption – N10-008 CompTIA Network+ : 3.1

NEW QUESTION 4
- (Topic 3)
A PC and a network server have no network connectivity, and a help desk technician is attempting to resolve the issue. The technician plans to run a constant ping command from a Windows workstation while testing various possible reasons for the connectivity issue. Which of the following should the technician use?

A. ping —w
B. ping -i
C. ping —s
D. ping —t

Answer: D

Explanation:
ping -t is an option for the ping command in Windows that allows the user to send continuous ping requests to a target until stopped by pressing Ctrl-C. This can help the technician run a constant ping command while testing various possible reasons for the connectivity issue. ping -w is an option for the ping command in Windows that allows the user to specify a timeout value in milliseconds for each ping request. ping -i is an option for the ping command in Linux that allows the user to specify the time interval in seconds between each ping request. ping -s is an option for the ping command in Linux that allows the user to specify the size of the data payload in bytes for each ping request.
References: How to Use the Ping Command in Windows - Lifewire (https://www.lifewire.com/ping-command-2618099)

NEW QUESTION 5
- (Topic 3)
Which of the following protocols can be routed?

A. FCoE
B. Fibre Channel
C. iSCSI
D. NetBEUI

Answer: C

Explanation:
iSCSI (Internet Small Computer System Interface) is a protocol that allows SCSI commands to be transported over IP networks1. iSCSI can be routed because it contains a network address and a device address, as required by a routable protocol2. iSCSI can be used to access block-level storage devices over a network, such as SAN (Storage Area Network).
FCoE (Fibre Channel over Ethernet) is a protocol that allows Fibre Channel frames to be encapsulated and transported over Ethernet networks1. FCoE cannot be routed because it does not contain a network address, only a device address. FCoE operates at the data link layer and requires special switches and adapters to support it. FCoE can also be used to access block-level storage devices over a network, such as SAN.
Fibre Channel is a protocol that provides high-speed and low-latency communication between servers and storage devices1. Fibre Channel cannot be routed because it does not use IP networks, but rather its own dedicated network infrastructure. Fibre Channel operates at the physical layer and the data link layer and requires special cables, switches, and adapters to support it. Fibre Channel can also be used to access block-level storage devices over a network, such as SAN.
NetBEUI (NetBIOS Extended User Interface) is an old protocol that provides session-level communication between devices on a local network1. NetBEUI cannot be routed because it does not contain a network address, only a device address. NetBEUI operates at the transport layer and relies on NetBIOS for name resolution. NetBEUI is obsolete and has been replaced by other protocols, such as TCP/IP.

NEW QUESTION 6
- (Topic 3)
A Chief Information Officer wants to monitor network breaching in a passive, controlled manner. Which of the following would be best to implement?

A. Honeypot
B. Perimeter network
C. Intrusion prevention system
D. Port security

Answer: A

Explanation:
A honeypot is a decoy system that is designed to attract and trap hackers who attempt to breach the network. A honeypot mimics a real system or network, but contains fake or non- sensitive data and applications. A honeypot can be used to monitor network breaching in a passive, controlled manner, as it allows the network administrator to observe the hacker’s behavior, techniques, and tools without compromising the actual network or data. A honeypot can also help to divert the hacker’s attention from the real targets and collect forensic evidence for further analysis or prosecution.

NEW QUESTION 7
- (Topic 3)
A technician is trying to install a VolP phone, but the phone is not turning on. The technician checks the cable gong from the phone to the switch, and the cable is good. Which of the following actions IS needed for this phone to work?

A. Add a POE injector
B. Enable MDIX.
C. Use a crossover cable.
D. Reconfigure the port.

Answer: A

NEW QUESTION 8
- (Topic 3)
A company is moving to a new building designed with a guest waiting area that has existing network ports. Which of the following practices would BEST secure the network?

A. Ensure all guests sign an NDA.
B. Disable unneeded switchports in the area.
C. Lower the radio strength to reduce Wi-Fi coverage in the waiting area.
D. Enable MAC filtering to block unknown hardware addresses.

Answer: B

Explanation:
One of the best practices to secure the network would be to disable unneeded switchports in the guest waiting area. This will prevent unauthorized users from connecting to the network through these ports. It's important to identify which switchports are not in use and disable them, as this will prevent unauthorized access to the network. Other practices such as ensuring all guests sign an NDA, lowering the radio strength to reduce Wi-Fi coverage in the waiting area and enabling MAC filtering to block unknown hardware addresses are not as effective in securing the network as disabling unneeded switchports. Enforcing an NDA with guests may not stop a malicious user from attempting to access the network, reducing the radio strength only limits the Wi-Fi coverage, and MAC filtering can be easily bypassed by hackers.

NEW QUESTION 9
- (Topic 3)
Which of the following IP packet header fields is the mechanism for ending loops at Layer 3?

A. Checksum
B. Type
C. Time-to-live
D. Protocol

Answer: C

Explanation:
The time-to-live (TTL) field is the mechanism for ending loops at Layer 3, which is the network layer of the OSI model. The TTL field is an 8-bit field that indicates the maximum time or number of hops that an IP packet can travel before it is discarded. Every time an IP packet passes through a router, the router decrements the TTL value by one. If the TTL value reaches zero, the router drops the packet and sends an ICMP message back to the source, informing that the packet has expired. This way, the TTL field prevents an IP packet from looping endlessly in a network with routing errors or cycles123.
The other options are not mechanisms for ending loops at Layer 3. The checksum field is a 16-bit field that is used to verify the integrity of the IP header. The checksum field is calculated by adding all the 16-bit words in the header and taking the one's complement of the result. If the checksum field does not match the calculated value, the IP packet is considered corrupted and discarded12. The type field, also known as the type of service (TOS) or differentiated services code point (DSCP) field, is an 8-bit field that is used to specify the quality of service (QoS) or priority of the IP packet. The type field can indicate how the packet should be handled in terms of delay, throughput, reliability, or cost12. The protocol field is an 8-bit field that is used to identify the transport layer protocol that is encapsulated in the IP packet. The protocol field can indicate whether the payload is a TCP segment, a UDP datagram, an ICMP message, or another protocol12.

NEW QUESTION 10
- (Topic 3)
A network technician is investigating a trouble ticket for a user who does not have network connectivity. All patch cables between the wall jacks and computers in the building were upgraded over the weekend from Cat 5 to Cat 6. The newly installed cable is crimped with a TIA/EIA 568A on one end and a TIA/EIA 568B on the other end.
Which of the following should the technician do to MOST likely fix the issue?

A. Ensure the switchport has PoE enabled.
B. Crimp the cable as a straight-through cable.
C. Ensure the switchport has STP enabled.
D. Crimp the cable as a rollover cable.

Answer: B

Explanation:
A straight-through cable is a type of twisted pair cable that has the same wiring standard (TIA/EIA 568A or 568B) on both ends. This is the most common type of cable used for connecting devices of different types, such as a computer and a switch. A cable that has different wiring standards on each end (TIA/EIA 568A on one end and 568B on the other) is called a crossover cable, which is used for connecting devices of the same type, such as two computers or two switches. Therefore, the technician should crimp the cable as a straight-through cable to fix the issue.

NEW QUESTION 10
- (Topic 3)
Which of the following types of attacks can be used to gain credentials by setting up rogue APs with identical corporate SSIDs?

A. VLAN hopping
B. Evil twin
C. DNS poisoning
D. Social engineering

Answer: B

NEW QUESTION 14
- (Topic 3)
A technician is expanding a wireless network and adding new access points. The company requires that each access point broadcast the same SSID. Which of the following should the technician implement for this requirement?

A. MIMO
B. Roaming
C. Channel bonding
D. Extended service set

Answer: D

Explanation:
An extended service set (ESS) is a wireless network that consists of two or more access points (APs) that share the same SSID and are connected by a distribution system, such as a switch or a router. An ESS allows wireless clients to roam seamlessly between different APs without losing connectivity or changing network settings. An ESS can also increase the coverage area and capacity of a wireless network

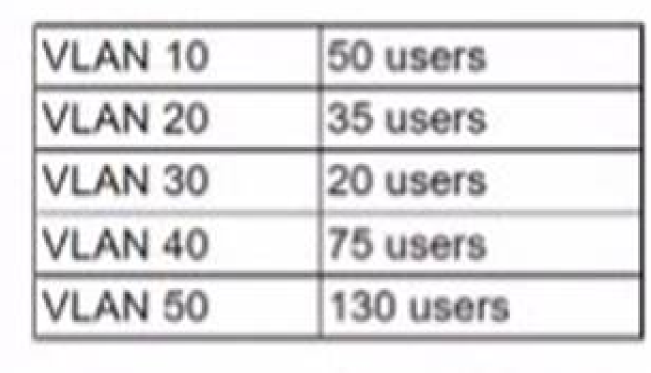
NEW QUESTION 17
- (Topic 3)
A network administrator is trying to create a subnet, which is the most efficient size possible, for 31 laptops. Which of the following network subnets would be best in this situation?

A. 10.10.10.0/24
B. 10.10.10.0/25
C. 10.10.10.0/26
D. 10.10.10.0/27

Answer: D

Explanation:
A /27 subnet mask has 32 IP addresses, of which 30 are usable for hosts. This is the smallest subnet that can accommodate 31 laptops, as the other options have either too few or too many IP addresses. A /27 subnet mask is equivalent to 255.255.255.224 in decimal notation, and has a wildcard mask of 0.0.0.31. The network address is 10.10.10.0, and the broadcast address is 10.10.10.31. The usable host range is 10.10.10.1 to 10.10.10.30.
References
1: Subnet Cheat Sheet – 24 Subnet Mask, 30, 26, 27, 29, and other IP Address CIDR Network References
2: IP Subnet Calculator

NEW QUESTION 19
- (Topic 3)
A network engineer needs to create a subnet that has the capacity for five VLANs. with the following number of clients lo be allowed on each:



VLAN 10	50 users
VLAN 20	35 users
VLAN 30	20 users
VLAN 40	75 users
VLAN 50	130 users

Which of the following is the SMALLEST subnet capable of this setup that also has the capacity to double the number of clients in the future?

A. 10.0.0.0/21
B. 10.0.0.0/22
C. 10.0.0.0/23
D. 10.0.0.0/24

Answer: B

NEW QUESTION 22
- (Topic 3)
A company receives a cease-and-desist order from its ISP regarding prohibited torrent activity. Which of the following should be implemented to comply with the cease-and-desist order?

A. MAC security
B. Content filtering
C. Screened subnet
D. Perimeter network

Answer: B

Explanation:
Content filtering is a technique that blocks or allows access to certain types of web content, based on predefined criteria or policies. Content filtering can be used to comply with the cease-and-desist order by preventing users from accessing torrent sites or downloading torrent files, which are often used for illegal file sharing or piracy. Content filtering can also protect the network from malware, phishing, or inappropriate content. References: CompTIA Network+ N10-008 Cert Guide - O'Reilly Media, Chapter 14: Securing a Basic Network, page 520

NEW QUESTION 23
- (Topic 3)
A technician discovered that some information on the local database server was changed during a tile transfer to a remote server. Which of the following should concern the technician the MOST?

A. Confidentiality
B. Integrity
C. DDoS
D. On-path attack

Answer: B

Explanation:
The technician should be most concerned about data integrity and security. If information on the local database server was changed during a file transfer to a remote server, it could indicate that unauthorized access or modifications were made to the data. It could also indicate a failure in the file transfer process, which could result in data loss or corruption. The technician should investigate the cause of the changes and take steps to prevent it from happening again in the future. Additionally, they should verify the integrity of the data and restore it from a backup if necessary to ensure that the correct and complete data is available. The technician should also take appropriate actions such as notifying the system administrator and management of the incident, and following the incident management process to minimize the damage caused by the incident.

NEW QUESTION 27
- (Topic 3)
Which of the following is the best action to take before sending a network router to be recycled as electronic waste?

A. Turn on port security.
B. Shred the switch hard drive.
C. Back up and erase the configuration.
D. Remove the company asset ID tag.

Answer: C

Explanation:
Before disposing of a network router, it is important to back up and erase the configuration to prevent unauthorized access to sensitive data and network settings. A network router may contain information such as passwords, IP addresses, firewall rules, VPN settings, and other network parameters that could be exploited by hackers or malicious users. By backing up the configuration, you can preserve the network settings for future reference or reuse. By erasing the configuration, you can wipe out the data and restore the router to its factory default state.

NEW QUESTION 28
- (Topic 3)
A technician is troubleshooting network connectivity from a wall jack. Readings from a multimeter indicate extremely low ohmic values instead of the rated impedance from the switchport. Which of the following is the MOST likely cause of this issue?

A. Incorrect transceivers
B. Faulty LED
C. Short circuit
D. Upgraded OS version on switch

Answer: C

Explanation:
A short circuit is a condition where two conductors in a circuit are connected unintentionally, creating a low resistance path for the current. This causes the voltage to drop and the current to increase, which can damage the circuit or cause a fire. A multimeter can measure the resistance or impedance of a circuit, and if it shows extremely low values, it indicates a short circuit.

NEW QUESTION 29
- (Topic 3)
Which of the following technologies would MOST likely De used to prevent the loss of connection between a virtual server and network storage devices?

A. Multipathing
B. VRRP
C. Port aggregation
D. NIC teaming

Answer: D

Explanation:
NIC teaming is a technology that allows multiple network interface cards (NICs) to work together as a single logical interface, providing redundancy and load balancing. This can prevent the loss of connection between a virtual server and network storage devices if one of the NICs fails or becomes disconnected.
References: [CompTIA Network+ Certification Exam Objectives], Domain 2.0 Networking Concepts, Objective 2.5: Explain the purposes and use cases for advanced networking devices, Subobjective: NIC bonding/teaming

NEW QUESTION 32
- (Topic 3)
Which of the following documents is MOST likely to be associated with identifying and documenting critical applications?

A. Software development life-cycle policy
B. User acceptance testing plan
C. Change management policy
D. Business continuity plan

Answer: D

Explanation:
A business continuity plan (BCP) is a document that outlines the procedures and strategies to ensure the continuity of critical business functions in the event of a disaster or disruption. A BCP is most likely to be associated with identifying and documenting critical applications that are essential for the organization’s operations and recovery. A BCP also defines the roles and responsibilities of the staff, the backup and restore processes, the communication channels, and the testing and maintenance schedules.
References: Network+ Study Guide Objective 5.2: Explain disaster recovery and business continuity concepts.

NEW QUESTION 33
- (Topic 3)
Which of the following records can be used to track the number of changes on a DNS zone?

A. SOA
B. SRV
C. PTR
D. NS

Answer: A

Explanation:
The DNS ‘start of authority’ (SOA) record stores important information about a domain or zone such as the email address of the administrator, when the domain was last updated, and how long the server should wait between refreshes. All DNS zones need an SOA record in order to conform to IETF standards. SOA records are also important for zone transfers.

NEW QUESTION 34

- (Topic 3)
A security engineer is trying to connect cameras to a 12-port PoE switch, but only eight cameras turn on. Which of the following should the engineer check first?

A. Ethernet cable type
B. Voltage
C. Transceiver compatibility
D. DHCP addressing

Answer: B

Explanation:
The most likely reason why only eight cameras turn on is that the PoE switch does not have enough power budget to supply all 12 cameras. The engineer should check the voltage and wattage ratings of the PoE switch and the cameras, and make sure they are compatible and sufficient. The Ethernet cable type, transceiver compatibility, and DHCP addressing are less likely to cause this problem, as they would affect the data transmission rather than the power delivery.
References:
? CompTIA Network+ N10-008 Certification Study Guide, page 181
? CompTIA Network+ N10-008 Cert Guide, Deluxe Edition, page 352
? PoE Troubleshooting: The Common PoE Errors and Solutions3

NEW QUESTION 37
- (Topic 3)
While troubleshooting a network, a VoIP systems engineer discovers a significant inconsistency in the amount of time required for data to reach its destination and return. Which of the following terms best describes this issue?

A. Bandwidth
B. Latency
C. Jitter
D. Throughput

Answer: C

Explanation:
Jitter is the variation in the delay of data packets over a network. It is caused by factors such as network congestion, routing changes, packet loss, or improper queuing. Jitter affects the quality of VoIP calls because it can cause gaps, distortion, or out-of-order delivery of voice data. Jitter can be measured by the difference between the expected and actual arrival times of packets2. To reduce jitter, VoIP systems use buffers to store and reorder packets before playing them back. However, too much buffering can also increase latency, which is the total time it takes for data to travel from one point to another3.
References2 - VoIP Troubleshooting: 5 Fixes for Common Connection Issues - Nextiva3 - Troubleshooting VoIP — Is it You or the Network? - PingPlotter

NEW QUESTION 41
- (Topic 3)
Which of the following is most likely to be implemented to actively mitigate intrusions on a host device?

A. HIDS
B. MDS
C. HIPS
D. NIPS

Answer: A

Explanation:
HIDS (host-based intrusion detection system) is a type of security software that monitors and analyzes the activity on a host device, such as a computer or a server. HIDS can detect and alert on intrusions, such as malware infections, unauthorized access, configuration changes, or policy violations. HIDS can also actively mitigate intrusions by blocking or quarantining malicious processes, files, or network connections1.
HIPS (host-based intrusion prevention system) is similar to HIDS, but it can also prevent intrusions from happening in the first place by enforcing security policies and rules on the host device2. MDS (multilayer switch) is a network device that combines the functions of a switch and a router, and it does not directly protect a host device from intrusions3. NIPS (network-based intrusion prevention system) is a network device that monitors and blocks malicious traffic on the network level, and it does not operate on the host device level4.

NEW QUESTION 42
- (Topic 3)
Which of the following is used to elect an STP root?

A. A bridge ID
B. A bridge protocol data unit
C. Interface port priority
D. A switch's root port

Answer: B

Explanation:
"Using special STP frames known as bridge protocol data units (BPDUs), switches communicate with other switches to prevent loops from happening in the first place. Configuration BPDUs establish the topology, where one switch is elected root bridge and acts as the center of the STP universe. Each switch then uses the root bridge as a reference point to maintain a loop-free topology."

NEW QUESTION 44
- (Topic 3)
An engineer recently decided to upgrade the firmware on a router. During the upgrade, the help desk received calls about a network outage, and a critical ticket was opened. The network manager would like to create a policy to prevent this from happening in the future. Which of the following documents should the

manager create?

A. Change management
B. incident response
C. Standard operating procedure
D. System life cycle

Answer: A

NEW QUESTION 49
- (Topic 3)
Which of the following combinations of single cables and transceivers will allow a server to have 40GB of network throughput? (Select two).

A. SFP+
B. SFP
C. QSFP+
D. Multimode
E. Cat 6a
F. Cat5e

Answer: CD

Explanation:
QSFP+ is a type of transceiver that supports 40 gigabit Ethernet (40GbE) over four lanes of 10 gigabit Ethernet (10GbE) each. QSFP+ stands for quad small form-factor pluggable plus, and it is a compact and hot-swappable module that plugs into a QSFP+ port on a network device. QSFP+ transceivers can support various types of cables and connectors, such as direct attach copper (DAC), active optical cable (AOC), or fiber optic cable. Multimode is a type of fiber optic cable that supports multiple modes of light propagation within the core. Multimode fiber optic cable can carry higher bandwidth and data rates than single-mode fiber optic cable, but over shorter distances. Multimode fiber optic cable is commonly used for short-reach applications, such as within a data center or a campus network. Multimode fiber optic cable can be paired with QSFP+ transceivers to achieve 40GbE connectivity.
The other options are not correct because they do not support 40GbE. They are:
? SFP+. SFP+ is a type of transceiver that supports 10 gigabit Ethernet (10GbE) over a single lane. SFP+ stands for small form-factor pluggable plus, and it is a compact and hot-swappable module that plugs into an SFP+ port on a network device. SFP+ transceivers can support various types of cables and connectors, such as direct attach copper (DAC), active optical cable (AOC), or fiber optic cable. However, SFP+ transceivers cannot support 40GbE by themselves, unless they are used in a breakout configuration with a QSFP+ transceiver.
? SFP. SFP is a type of transceiver that supports 1 gigabit Ethernet (1GbE) over a single lane. SFP stands for small form-factor pluggable, and it is a compact and hot-swappable module that plugs into an SFP port on a network device. SFP transceivers can support various types of cables and connectors, such as twisted-pair copper, coaxial cable, or fiber optic cable. However, SFP transceivers cannot
support 40GbE by themselves, unless they are used in a breakout configuration with a QSFP+ transceiver.
? Cat 6a. Cat 6a is a type of twisted-pair copper cable that supports 10 gigabit
Ethernet (10GbE) over distances up to 100 meters. Cat 6a stands for category 6 augmented, and it is an enhanced version of Cat 6 cable that offers better performance and reduced crosstalk. Cat 6a cable can be paired with 10Gbase-T transceivers to achieve 10GbE connectivity. However, Cat 6a cable cannot support 40GbE by itself, unless it is used in a breakout configuration with a QSFP+ transceiver.
? Cat 5e. Cat 5e is a type of twisted-pair copper cable that supports 1 gigabit
Ethernet (1GbE) over distances up to 100 meters. Cat 5e stands for category 5 enhanced, and it is an improved version of Cat 5 cable that offers better performance and reduced crosstalk. Cat 5e cable can be paired with 1000base-T transceivers to achieve 1GbE connectivity. However, Cat 5e cable cannot support 40GbE by itself, unless it is used in a breakout configuration with a QSFP+ transceiver.
References1: QSFP+ - an overview | ScienceDirect Topics2: Multimode Fiber - an overview | ScienceDirect Topics3: Network+ (Plus) Certification | CompTIA IT Certifications4: SFP+ - an overview | ScienceDirect Topics5: SFP - an overview | ScienceDirect Topics6: Cat 6a - an overview | ScienceDirect Topics7: [Cat 5e - an overview | ScienceDirect Topics]

NEW QUESTION 51
- (Topic 3)
Which of the following devices Is used to configure and centrally manage access points Installed at different locations?

A. Wireless controller
B. Load balancer
C. Proxy server
D. VPN concentrator

Answer: A

Explanation:
Access points (APs) can be configured and centrally managed using a wireless LAN controller (WLC). A WLC is a device that connects to multiple APs and provides centralized management and control of those APs. The WLC can be used to configure settings such as wireless network parameters, security settings, and quality of service (QoS) policies. Additionally, the WLC can be used to monitor the status of connected APs, track client connections, and gather statistics on network usage. Some vendors such as Cisco, Aruba, Ruckus, etc. provide wireless LAN controllers as part of their wireless networking solutions.

NEW QUESTION 52
- (Topic 3)
Users in a branch can access an In-house database server, but II is taking too long to fetch records. The analyst does not know whether the Issue is being caused by network latency. Which of the following will the analyst MOST likely use to retrieve the metrics that are needed to resolve this issue?

A. SNMP
B. Link state
C. Syslog
D. QoS
E. Traffic shaping

Answer: A

NEW QUESTION 54
- (Topic 3)
Which of the following fiber connector types is the most likely to be used on a network interface card?

A. LC
B. SC
C. ST
D. MPO

Answer: A

Explanation:
LC (local connector) is the most likely fiber connector type to be used on a network interface card, because it is a small form factor connector that can fit more interfaces on a single card. LC connectors use square connectors that have a locking mechanism on the top, similar to an RJ45 copper connector. LC connectors are also compatible with SFP (small form-factor pluggable) modules that are often used to link a gigabit Ethernet port with a fiber network12.
References:
? Optical Fiber Connectors – CompTIA Network+ N10-007 – 2.11
? CompTIA Network+ Certification Exam Objectives2

NEW QUESTION 58
- (Topic 3)
Which of the following is the most accurate NTP time source that is capable of being accessed across a network connection?

A. Stratum 0 device
B. Stratum 1 device
C. Stratum 7 device
D. Stratum 16 device

Answer: B

Explanation:
NTP (Network Time Protocol) is a protocol that synchronizes the clocks of network devices with a reference time source. NTP uses a hierarchical system of time sources, called strata, to distribute the time information. A stratum 0 device is the most accurate time source, such as an atomic clock or a GPS receiver, but it is not directly accessible across a network connection. A stratum 1 device is a network device that is directly connected to a stratum 0 device, such as a dedicated NTP server or a router with a GPS antenna, and it acts as a primary time server for other network devices. A stratum 2 device is a network device that synchronizes its time with a stratum 1 device, and so on. The higher the stratum number, the lower the accuracy and reliability of the time source. A stratum 16 device is a network device that has no valid time source and is considered unsynchronized.
References:
? Part 1 of current page talks about how Bing is your AI-powered copilot for the web and provides various examples of how it can help you with different tasks, such as writing a joke, creating a table, or summarizing research. However, it does not mention anything about NTP or time sources.
? Part 2 of current page shows the search results for “ai powered search bing chat”, which include web, image, and news results. However, none of these results seem to be relevant to the question, as they are mostly about Bing’s features, products, or announcements, not about NTP or time sources.
? Therefore, I cannot find the answer or the explanation from the current page. I have to use my own knowledge and information from other sources to verify the answer and provide a short but comprehensive explanation. I will cite these sources using numerical references.
? : CompTIA Network+ Certification Exam Objectives, Version 8.0, Domain 2.0: Infrastructure, Objective 2.5: Given a scenario, implement network time synchronization, Subobjective 2.5.1: NTP, https://www.comptia.jp/pdf/comptia- network-n10-008-exam-objectives.pdf
? : Network Time Protocol (NTP), https://www.cisco.com/c/en/us/about/press/internet-protocol-journal/back- issues/table-contents-58/154-ntp.html
? : How NTP Works, https://www.meinbergglobal.com/english/info/ntp.htm

NEW QUESTION 61
- (Topic 3)
A customer reports there is no access to resources following the replacement of switches. A technician goes to the site to examine the configuration and discovers redundant links between two switches. Which of the following is the reason the network is not functional?

A. The ARP cache has become corrupt.
B. CSMA/CD protocols have failed.
C. STP is not configured.
D. The switches are incompatible models

Answer: C

Explanation:
The reason the network is not functional is that STP (Spanning Tree Protocol) is not configured on the switches. STP is a protocol that prevents loops in a network topology by blocking redundant links between switches. If STP is not enabled, the switches will forward broadcast frames endlessly, creating a broadcast storm that consumes network resources and disrupts communication. References: CompTIA Network+ N10-008 Certification Study Guide, page 67; The Official CompTIA Network+ Student Guide (Exam N10-008), page 2-14.

NEW QUESTION 64
- (Topic 3)
Which of the following, in addition to a password, can be asked of a user for MFA?

A. PIN
B. Favorite color
C. Hard token
D. Mother's maiden name

Answer: A

Explanation:
MFA stands for Multi-Factor Authentication, which is a method of verifying the identity of a user by requiring two or more pieces of evidence that belong to different

categories: something the user knows, something the user has, or something the user is. A password is something the user knows, and it is usually combined with another factor such as a PIN (Personal Identification Number) or a hard token (a physical device that generates a one- time code) that the user has. A favorite color or a mother's maiden name are not suitable for MFA, as they are also something the user knows and can be easily guessed or compromised.
References
? 1: Multi-Factor Authentication – N10-008 CompTIA Network+ : 3.1
? 2: CompTIA Network+ Certification Exam Objectives, page 13
? 3: CompTIA Network+ N10-008 Certification Study Guide, page 250
? 4: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 14

NEW QUESTION 67
- (Topic 3)
Which of the following architectures would allow the network-forwarding elements to adapt to new business requirements with the least amount of operating effort?

A. Software-defined network
B. Spine and leaf
C. Three-tier
D. Backbone

Answer: A

Explanation:
Software-defined network (SDN) is a network architecture that allows the network- forwarding elements to be controlled by a centralized software application. This enables the network to adapt to new business requirements with the least amount of operating effort, as the network administrator can configure and manage the network from a single console, without having to manually configure each device individually. SDN also provides more flexibility, agility, and scalability for the network, as it can dynamically adjust the network resources and policies based on the application needs and traffic conditions.
References:
? CompTIA Network+ Certification Exam Objectives, page 5, section 1.3: "Explain the concepts and characteristics of routing and switching."
? Software-Defined Networking – CompTIA Network+ N10-007 – 1.3, video lecture by Professor Messer.

NEW QUESTION 68
- (Topic 3)
Users are reporting poor wireless performance in some areas of an industrial plant The wireless controller is measuring a tow EIRP value compared to me recommendations noted on me most recent site survey. Which of the following should be verified or replaced for the EIRP value to meet the site survey's specifications? (Select TWO).

A. AP transmit power
B. Channel utilization
C. Signal loss
D. Update ARP tables
E. Antenna gain
F. AP association time

Answer: AE

Explanation:
? AP transmit power: You should check if your APs have sufficient power output and adjust them if needed. You should also make sure they are not exceeding regulatory limits for your region.
? Antenna gain: You should check if your antennas have adequate gain for your coverage area and replace them if needed. You should also make sure they are aligned properly and not obstructed by any objects.
In the scenario described, the wireless controller is measuring a low EIRP value compared to the recommendations noted in the most recent site survey. EIRP is the combination of the power transmitted by the access point and the antenna gain. Therefore, to increase the EIRP value to meet the site survey's specifications, the administrator should verify or replace the AP transmit power (option A) and the antenna gain (option E). This can be achieved by adjusting the transmit power settings on the AP or by replacing the AP's antenna with one that has a higher gain

NEW QUESTION 72
- (Topic 3)
Which of the following would be used to adjust resources dynamically for a virtual web server under variable loads?

A. Elastic computing
B. Scalable networking
C. Hybrid deployment
D. Multitenant hosting

Answer: B

Explanation:
A technique used to adjust resources dynamically for a virtual web server under variable loads is called auto-scaling. Auto-scaling automatically increases or decreases the number of instances of a virtual web server in response to changes in demand, ensuring that the right amount of resources are available to handle incoming traffic. This can help to improve the availability and performance of a web application, as well as reduce costs by avoiding the need to provision and maintain excess capacity.

NEW QUESTION 76
- (Topic 3)
A network administrator is adding a new switch to the network. Which of the following network hardening techniques would be BEST to use once the switch is in production?

A. Disable unneeded ports
B. Disable SSH service
C. Disable MAC filtering

D. Disable port security

Answer: A

NEW QUESTION 79
- (Topic 3)
A network technician needs to ensure that all files on a company's network can be moved in a safe and protected manner without interception from someone who is not the intended recipient. Which of the following would allow the network technician to meet these requirements?

A. FTP
B. TFTP
C. SMTP
D. SFTP

Answer: D

NEW QUESTION 80
- (Topic 3)
A network architect is developing documentation for an upcoming IPv4/IPv6 dual-stack implementation The architect wants to shorten the following IPv6 address: ef82:0000:00O0:000O:0O00:1ab1:1234:1bc2. Which of the following is the MOST appropriate shortened version?

A. ef82:0:lab1:1234:1bc2
B. ef82:0:;1ab1:1234:1bc2
C. ef82:0:0:0:0:1ab1:1234:1bc2
D. ef82::1ab1:1234:1bc2

Answer: D

Explanation:
The most appropriate shortened version of the IPv6 address ef82:0000:00O0:000O:0O00:1ab1:1234:1bc2 is ef82::1ab1:1234:1bc2. IPv6 addresses are 128-bit hexadecimal values that are divided into eight groups of 16 bits each, separated by colons. IPv6 addresses can be shortened by using two rules: omitting leading zeros within each group, and replacing one or more consecutive groups of zeros with a double colon (::). Only one double colon can be used in an address. Applying these rules to the given address results in ef82::1ab1:1234:1bc2. References: CompTIA Network+ N10-008 Certification Study Guide, page 114; The Official CompTIA Network+ Student Guide (Exam N10-008), page 5-7.

NEW QUESTION 81
- (Topic 3)
The power company notifies a network administrator that it will be turning off the power to the building over the weekend. Which of the following is the BEST solution to prevent the servers from going down?

A. Redundant power supplies
B. Uninterruptible power supply
C. Generator
D. Power distribution unit

Answer: A

NEW QUESTION 86
- (Topic 3)
A user calls the IT department to report being unable to log in after locking the computer The user resets the password, but later in the day the user is again unable to log in after locking the computer Which of the following attacks against the user IS MOST likely taking place?

A. Brute-force
B. On-path
C. Deauthentication
D. Phishing

Answer: A

NEW QUESTION 90
- (Topic 3)
In which of the following components do routing protocols belong in a software-defined network?

A. Infrastructure layer
B. Control layer
C. Application layer
D. Management plane

Answer: B

Explanation:
A software-defined network (SDN) is a network architecture that decouples the control plane from the data plane and centralizes the network intelligence in a software controller. The control plane is the part of the network that makes decisions about how to route traffic, while the data plane is the part of the network that forwards traffic based on the control plane’s instructions. The control layer is the layer in an SDN that contains the controller and the routing protocols that communicate with the network devices. The control layer is responsible for managing and configuring the network devices and providing them with the necessary information to forward traffic. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 378)

NEW QUESTION 95
- (Topic 3)
A technician installed an 8-port switch in a user's office. The user needs to add a second computer in the office, so the technician connects both PCs to the switch and connects the switch to the wall jack. However, the new PC cannot connect to network resources. The technician then observes the following:
• The new computer does not get an IP address on the client's VLAN.
• Both computers have a link light on their NICs.
• The new PC appears to be operating normally except for the network issue.
• The existing computer operates normally.
Which of the following should the technician do NEXT to address the situation?

A. Contact the network team to resolve the port security issue.
B. Contact the server team to have a record created in DNS for the new PC.
C. Contact the security team to review the logs on the company's SIEM.
D. Contact the application team to check NetFlow data from the connected switch.

Answer: A

NEW QUESTION 99
- (Topic 3)
Due to space constraints in an IDF, a network administrator can only a do a single switch to
accommodate three data networks. The administrator needs a configuration that will allow each device to access its expected network without additional connections. The configuration must also allow each device to access the rest of the network. Which of the following should the administrator do to meet these requirements? (Select TWO).

A. Untag the three VLANs across the uplink
B. Tag an individual VLAN across the uplink
C. Untag an individual VLAN per device port
D. Tag an individual VLAN per device port
E. Tag the three VLANs across the uplink.
F. Tag the three VLANs per device port.

Answer: AC

Explanation:
To achieve this, you should do two things:
? Tag the three VLANs across the uplink port that connects to another switch or router. This will allow data packets from different VLANs to cross over into other networks.
? Untag an individual VLAN per device port that connects to an end device. This will assign each device to its expected network without additional connections.

NEW QUESTION 100
- (Topic 3)
A technician is troubleshooting reports that a networked printer is unavailable. The printer's IP address is configured with a DHCP reservation, but the address cannot be pinged from the print server in the same subnet. Which of the following is MOST likely the cause of me connectivity failure?

A. Incorrect VLAN
B. DNS failure
C. DHCP scope exhaustion
D. Incorrect gateway

Answer: D

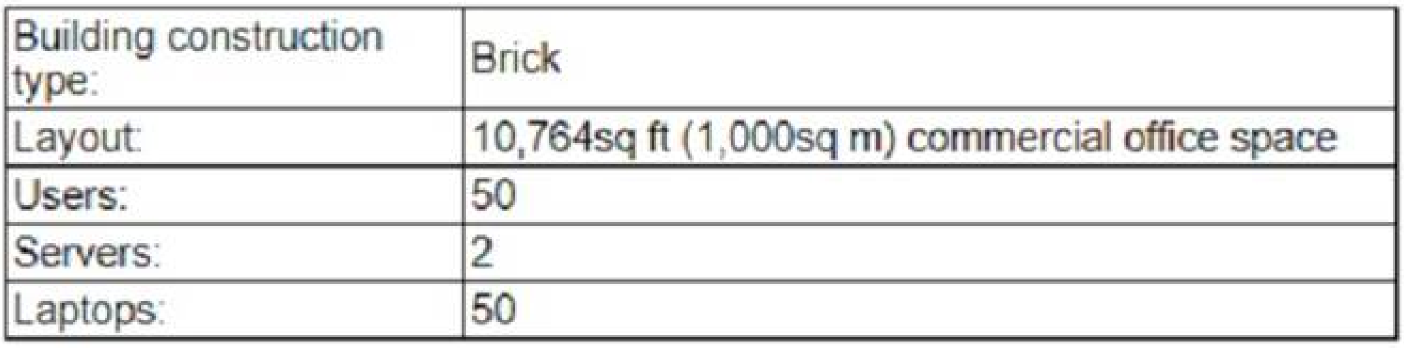
NEW QUESTION 105
- (Topic 3)
A network administrator is investigating a performance issue on a dual-link connection—VPN and MPLS—to a partner network. The MPLS is the primary path, and the VPN is used as a backup. While communicating, the delay is measured at 18ms, which is higher than the 6ms expected when the MPLS link is operational but lower than the 30ms expected tor the VPN connection. Which of the following will MOST likely point to the root cause of the Issue?

A. Checking the routing tables on both sides to ensure there is no asymmetric routing
B. Checking on the partner network for a missing route pointing to the VPN connection
C. Running iPerf on both sides to confirm the delay that Is measured is accurate
D. Checking for an incorrect VLAN assignment affecting the MPLS traffic

Answer: A

Explanation:
Asymmetric routing can occur when two routers have different paths for the same two hosts, resulting in increased latency and possible packet loss. According to the CompTIA Network+ Study Manual, “If the path from the source to the destination is not the same in both directions, the packets will take different routes and the latency can increase significantly.” To confirm this, the network administrator should check the routing tables on both sides of the connection and ensure that the same path is used in both directions.

NEW QUESTION 109
- (Topic 3)
A network engineer designed and implemented a new office space with the following characteristics:



Building construction type:	Brick
Layout:	10,764sq ft (1,000sq m) commercial office space
Users:	50
Servers:	2
Laptops:	50

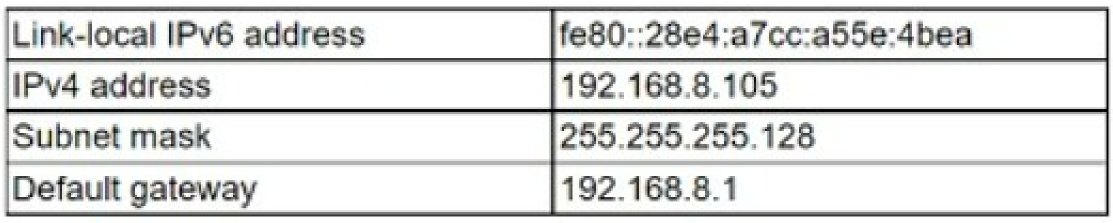
One month after the office space was implemented, users began reporting dropped signals when entering another room and overall poor connections to the 5GHz network. 'which of the following should the engineer do to best resolve the issue?

A. use non-overlapping channels
B. Reconfigure the network to support 2.4GHz_
C. Upgrade to WPA3.
D. Change to directional antennas-

Answer: D

Explanation:
The best solution to resolve the issue of dropped signals and poor connections to the 5GHz network is to change to directional antennas. Directional antennas are antennas that focus the wireless signal in a specific direction, increasing the range and strength of the signal. Directional antennas are suitable for environments where there are obstacles or interference that can weaken or block the wireless signal. In the image, the office space has several walls and doors that can reduce the signal quality of the 5GHz network, which has a shorter wavelength and higher frequency than the 2.4GHz network. By using directional antennas, the network engineer can aim the wireless signal towards the desired areas and avoid the signal loss caused by the walls and doors. References: CompTIA Network+ N10-008 Certification Study Guide, page 76; The Official CompTIA Network+ Student Guide (Exam N10-008), page 2-19.

NEW QUESTION 113
- (Topic 3)
A technician is investigating why a PC cannot reach a file server with the IP address 192.168.8.129. Given the following TCP/IP network configuration:



Link-local IPv6 address	fe80::28e4:a7cc:a55e:4bea
IPv4 address	192.168.8.105
Subnet mask	255.255.255.128
Default gateway	192.168.8.1

Which of the following configurations on the PC is incorrect?

A. Subnet mask
B. IPv4 address
C. Default gateway
D. IPv6 address

Answer: C

Explanation:
The default gateway is the IP address of the router that connects the PC to other networks. The default gateway should be on the same subnet as the PC's IPv4 address. However, in this case, the default gateway is 192.168.9.1, which is on a different subnet than the PC's IPv4 address of 192.168.8.15. Therefore, the default gateway configuration on the PC is incorrect and prevents the PC from reaching the file server on another subnet.

NEW QUESTION 118
- (Topic 3)
Which of the following architectures is used for FTP?

A. Client-server
B. Service-oriented
C. Connection-oriented
D. Data-centric

Answer: A

Explanation:
FTP (File Transfer Protocol) is a client-server based protocol, meaning that the two computers involved communicate with each other in a request-response pattern. The client sends a request to the server and the server responds with the requested data. This type of architecture is known as client-server, and it is used for many different types of applications, including FTP. Other architectures, such as service-oriented, connection- oriented, and data-centric, are not used for FTP.

NEW QUESTION 123
- (Topic 3)
A WAN technician reviews activity and identifies newly installed hardware that is causing outages over an eight-hour period. Which of the following should be considered FIRST?

A. Network performance baselines
B. VLAN assignments
C. Routing table
D. Device configuration review

Answer: D

Explanation:
The most likely cause of outages due to newly installed hardware is a misconfiguration of the device settings. Therefore, the first step should be to review the device configuration and check for any errors or inconsistencies that might affect the WAN connectivity. References: Network+ Study Guide Objective 2.1: Explain the importance of network documentation.

NEW QUESTION 128
- (Topic 3)
A company's web server is hosted at a local ISP. This is an example of:

A. allocation.
B. an on-premises data center.
C. a branch office.
D. a cloud provider.

Answer: D

NEW QUESTION 132
- (Topic 3)
A technician is deploying a new SSID for an industrial control system. The control devices require the network to use encryption that employs TKIP and a symmetrical password to connect. Which of the following should the technician configure to ensure compatibility with the control devices?

A. WPA2-Enterprise
B. WPA-Enterprise
C. WPA-PSK
D. WPA2-PSK

Answer: C

Explanation:
"WPA uses Temporal Key Integrity Protocol (TKIP) for enhanced encryption. TKIP uses RC4 for the encryption algorithm, and the CompTIA Network+ exam may reference TKIP-RC4 in a discussion of wireless."
" WPA2 uses Counter Mode with Cipher Block Chaining Message Authentication Code Protocol (CCMP) for integrity checking and Advanced Encryption Standard (AES) for encryption. On the Network+ exam, you might find this referenced as simply CCMP-AES"

NEW QUESTION 133
- (Topic 3)
To access production applications and data, developers must first connect remotely to a different server From there, the developers are able to access production data Which of the following does this BEST represent?

A. A management plane
B. A proxy server
C. An out-of-band management device
D. A site-to-site VPN
E. A jump box

Answer: E

NEW QUESTION 136
- (Topic 3)
A help desk technician is concerned that a client's network cable issues may be causing intermittent connectivity. Which of the following would help the technician determine if this is the issue?

A. Run the show interface command on the switch
B. Run the tracerouute command on the server
C. Run iperf on the technician's desktop
D. Ping the client's computer from the router
E. Run a port scanner on the client's IP address

Answer: A

Explanation:
To determine if a client's network cable issues may be causing intermittent connectivity, the help desk technician can run the show interface command on the switch.
This command allows the technician to view the status and statistics of the various interfaces on the switch, including the physical link status and the number of transmitted and received packets. If the interface is experiencing a large number of errors or dropped packets, this could indicate a problem with the network cable or with the connection between the client's device and the switch.
"Cisco routers and switches have a show interfaces IOS command that provides interface statistics/status information, including link state (up/down), speed/duplex, send/receive traffic, cyclic redundancy checks (CRCs), and protocol packet and byte counts."

NEW QUESTION 137
- (Topic 3)
After installing a new wireless access point, an engineer tests the device and sees that it is not performing at the rated speeds. Which of the following should the engineer do to troubleshoot the issue? (Select two).

A. Ensure a bottleneck is not coming from other devices on the network.
B. Install the latest firmware for the device.

C. Create a new VLAN for the access point.
D. Make sure the SSID is not longer than 16 characters.
E. Configure the AP in autonomous mode.
F. Install a wireless LAN controller.

Answer: AB

Explanation:
One possible cause of poor wireless performance is a bottleneck in the network, which means that other devices or applications are consuming too much bandwidth or resources and limiting the speed of the wireless access point. To troubleshoot this issue, the engineer should ensure that there is no congestion or interference from other devices on the network, such as wired clients, servers, routers, switches, or other wireless access points. The engineer can use tools such as network analyzers, bandwidth monitors, or ping tests to check the network traffic and latency12.
Another possible cause of poor wireless performance is outdated firmware on the device, which may contain bugs or vulnerabilities that affect the functionality or security of the wireless access point. To troubleshoot this issue, the engineer should install the latest firmware for the device from the manufacturer's website or support portal. The engineer should follow the instructions carefully and backup the configuration before updating the firmware. The engineer can also check the release notes or changelog of the firmware to see if there are any improvements or fixes related to the wireless performance3 .
The other options are not relevant to troubleshooting poor wireless performance. Creating a new VLAN for the access point may help with network segmentation or security, but it will not improve the speed of the wireless connection. Making sure the SSID is not longer than 16 characters may help with compatibility or readability, but it will not affect the wireless performance. Configuring the AP in autonomous mode may give more control or flexibility to the engineer, but it will not enhance the wireless speed. Installing a wireless LAN controller may help with managing multiple access points or deploying advanced features, but it will not increase the wireless performance.

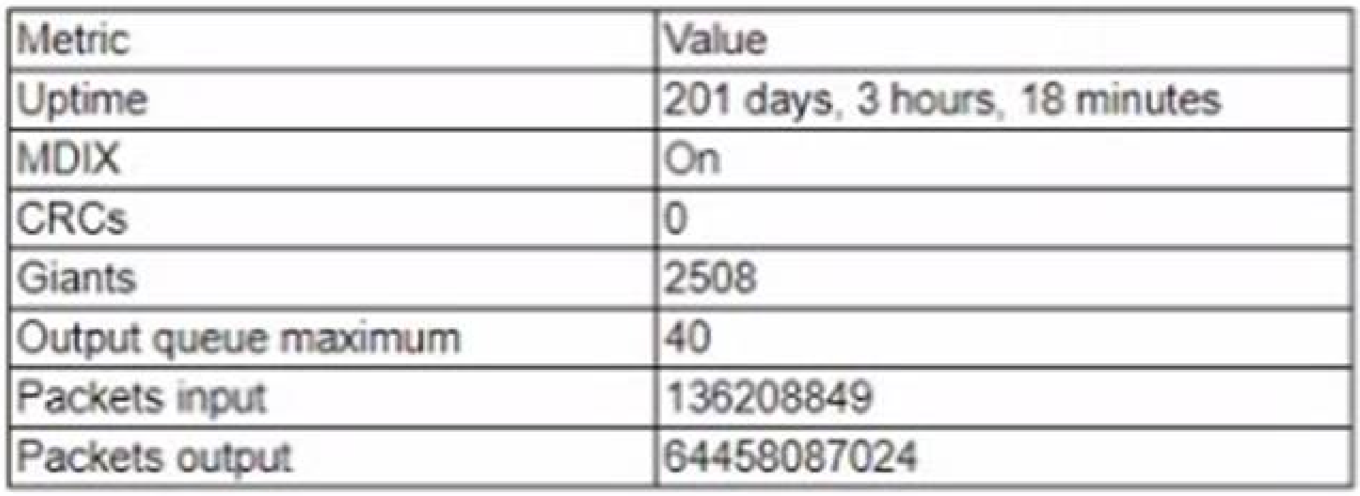
NEW QUESTION 142
- (Topic 3)
A company is designing a SAN and would like to use STP as its medium for communication. Which of the following protocols would BEST suit me company's needs?

A. SFTP
B. Fibre Channel
C. iSCSI
D. FTP

Answer: B

Explanation:
A SAN also employs a series of protocols enabling software to communicate or prepare data for storage. The most common protocol is the Fibre Channel Protocol (FCP), which maps SCSI commands over FC technology. The iSCSI SANs will employ an iSCSI protocol that maps SCSI commands over TCP/IP.
STP (Spanning Tree Protocol) is a protocol used to prevent loops in Ethernet networks, and it is not a medium for communication in a storage area network (SAN). However, Fibre Channel is a protocol that is specifically designed for high-speed data transfer in SAN environments. It is a dedicated channel technology that provides high throughput and low latency, making it ideal for SANs. Therefore, Fibre Channel would be the best protocol for the company to use for its SAN. SFTP (Secure File Transfer Protocol), iSCSI (Internet Small Computer System Interface), and FTP (File Transfer Protocol) are protocols used for transferring files over a network and are not suitable for use in a SAN environment.

NEW QUESTION 145
- (Topic 3)
A network administrator is reviewing the following metrics from a network management system regarding a switchport. The administrator suspects an issue because users are calling in regards to the switchport's performance:



Metric	Value
Uptime	201 days, 3 hours, 18 minutes
MDIX	On
CRCs	0
Giants	2508
Output queue maximum	40
Packets input	136208849
Packets output	64458087024

Based on the information in the chart above, which of the following fs the cause of these performance issues?

A. The connected device is exceeding the configured MTU.
B. The connected device is sending too many packets
C. The switchport has been up for too long
D. The connected device is receiving too many packets.
E. The switchport does not have enough CRCs

Answer: A

NEW QUESTION 147
- (Topic 3)
Network connectivity in an extensive forest reserve was achieved using fiber optics. A network fault was detected, and now the repair team needs to check the integrity of the fiber cable. Which of me following actions can reduce repair time?

A. Using a tone generator and wire map to determine the fault location
B. Using a multimeter to locate the fault point

C. Using an OTDR In one end of the optic cable to get the liber length information
D. Using a spectrum analyzer and comparing the current wavelength with a working baseline

Answer: C

NEW QUESTION 148
- (Topic 3)
A network technician recently installed 35 additional workstations. After installation, some users are unable to access network resources. Many of the original workstations that are experiencing the network access issue were offline when the new workstations were turned on. Which of the following is the MOST likely cause of this issue?

A. Incorrect VLAN setting
B. Insufficient DHCP scope
C. Improper NIC setting
D. Duplicate IP address

Answer: B

NEW QUESTION 150
- (Topic 3)
To reduce costs and increase mobility, a Chief Technology Officer (CTO) wants to adopt cloud services for the organization and its affiliates. To reduce the impact for users, the CTO wants key services to run from the on-site data center and enterprise services to run in the cloud. Which of the following deployment models is the best choice for the organization?

A. Public
B. Hybrid
C. SaaS
D. Private

Answer: B

Explanation:
A hybrid cloud deployment model is a combination of on-premise and cloud solutions, where some resources are hosted in-house and some are hosted by a cloud provider. A hybrid cloud model can offer the benefits of both public and private clouds, such as scalability, cost-efficiency, security, and control12. A hybrid cloud model can also reduce the impact for users, as they can access the key services from the on-site data center and the enterprise services from the cloud

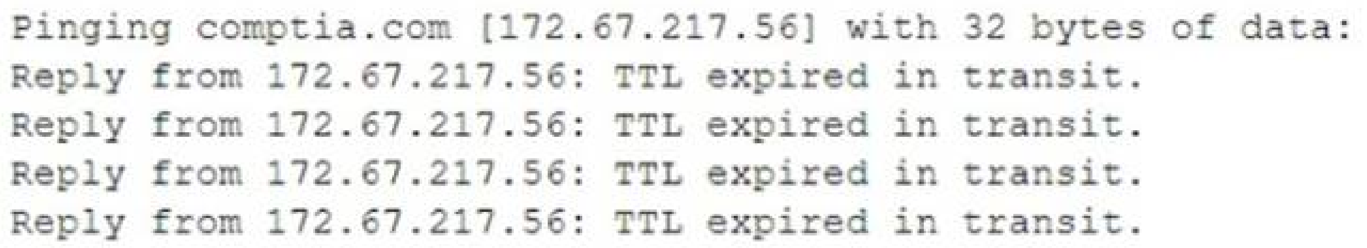
NEW QUESTION 154
- (Topic 3)
A network technician is having issues connecting an loT sensor to the internet The WLAN settings were enabled via a custom command line, and a proper IP address assignment was received on the wireless interlace. However, when trying to connect to the internet, only HTTP redirections are being received when data Is requested. Which of the following will point to the root cause of the Issue?

A. Verifying if an encryption protocol mismatch exists.
B. Verifying If a captive portal is active for the WLAN.
C. Verifying the minimum RSSI for operation in the device's documentation
D. Verifying EIRP power settings on the access point.

Answer: C

Explanation:
A captive portal is a web page that is displayed to a user before they can access the internet or other network resources. This is often used in public or guest networks to present users with a login or terms and conditions page before they can access the internet. If a captive portal is active on the WLAN, it would explain why the IoT sensor is only receiving HTTP redirections when trying to connect to the internet.

NEW QUESTION 155
- (Topic 3)
A network technician is troubleshooting a connectivity issue. All users within the network report that they are unable to navigate to websites on the internet; however, they can still access local network resources. The technician issues a command and receives the following results:



```
Pinging comptia.com [172.67.217.56] with 32 bytes of data:
Reply from 172.67.217.56: TTL expired in transit.
Reply from 172.67.217.56: TTL expired in transit.
Reply from 172.67.217.56: TTL expired in transit.
Reply from 172.67.217.56: TTL expired in transit.
```

Which of the following best explains the result of this command?

A. Incorrect VLAN settings
B. Upstream routing loop
C. Network collisions
D. DNS misconfiguration

Answer: D

Explanation:
The users are unable to navigate to websites on the internet but can access local network resources, indicating a possible DNS issue. The ping command result showing “TTL expired in transit” suggests that packets are not reaching their destination due to a DNS misconfiguration that is not resolving website names into IP

addresses correctly3. A possible solution is to check and correct the DNS server settings on the network devices4.
References: 3: What does “TTL expired in transit” mean?54: CompTIA Network+ N10-008 Cert Guide - Chapter 14: Network Monitoring2

NEW QUESTION 158
- (Topic 3)
A firewall administrator observes log entries of traffic being allowed to a web server on port 80 and port 443. The policy for this server is to only allow traffic on port 443. The firewall administrator needs to investigate how this change occurred to prevent a reoccurrence. Which of the following should the firewall administrator do next?

A. Consult the firewall audit logs.
B. Change the policy to allow port 80.
C. Remove the server object from the firewall policy.
D. Check the network baseline.

Answer: A

Explanation:
Firewall audit logs are records of the changes made to the firewall configuration, policies, and rules. They can help the firewall administrator to track who, when, and what changes were made to the firewall, and identify any unauthorized or erroneous modifications that could cause security issues or network outages. By consulting the firewall audit logs, the firewall administrator can investigate how the change that allowed traffic on port 80 to the web server occurred, and prevent it from happening again

NEW QUESTION 161
- (Topic 3)
An employee working in a warehouse facility is experiencing interruptions in mobile applications while walking around the facility. According to a recent site survey, the WLAN comprises autonomous APs that are directly connected to the internet, providing adequate signal coverage. Which of the following is the BEST solution to improve network stability?

A. Implement client roaming using an extended service deployment employing a wireless controller.
B. Remove omnidirectional antennas and adopt a directional bridge.
C. Ensure all APs of the warehouse support MIMO and Wi-Fi 4.
D. Verify that the level of EIRP power settings is set to the maximum permitted by regulations.

Answer: A

Explanation:
Client roaming refers to the ability of a wireless device to seamlessly connect to a different access point (AP) as the user moves around the facility. This can help to improve network stability and reduce interruptions in mobile applications. An extended service deployment is a type of wireless network configuration that uses multiple APs to cover a large area, such as a warehouse facility. By using a wireless controller to manage the APs, the network can be better optimized for client roaming, which can improve network stability.
"Roaming With multiple WAPs in an ESS, clients will connect to whichever WAP has the strongest signal. As clients move through the space covered by the broadcast area, they will change WAP connections seamlessly, a process called roaming."

NEW QUESTION 163
- (Topic 3)
A network administrator is decommissioning a server. Which of the following will the network administrator MOST likely consult?

A. Onboarding and off boarding policies
B. Business continuity plan
C. Password requirements
D. Change management documentation

Answer: D

NEW QUESTION 165
- (Topic 3)
Which of the following layers of the OSI model has new protocols activated when a user moves from a wireless to a wired connection?

A. Data link
B. Network
C. Transport
D. Session

Answer: A

Explanation:
"The Data Link layer also determines how data is placed on the wire by using an access method. The wired access method, carrier-sense multiple access with collision detection (CSMA/CD), was once used by all wired Ethernet networks, but is automatically disabled on switched full-duplex links, which have been the norm for decades. Carrier- sense multiple access with collision avoidance (CSMA/CA) is used by wireless networks, in a similar fashion."

NEW QUESTION 169
- (Topic 3)
Which of the following cloud components can filter inbound and outbound traffic between cloud resources?

A. NAT gateways
B. Service endpoints
C. Network security groups
D. Virtual private cloud

Answer: C

Explanation:
Network security groups are cloud components that can filter inbound and outbound traffic between cloud resources based on rules and priorities. Network security groups can be applied to virtual machines, subnets, or network interfaces to control the network access and security. Network security groups can allow or deny traffic based on the source, destination, port, and protocol of the packets. Network security groups are different from NAT gateways, service endpoints, and virtual private clouds, which are other cloud components that have different functions and purposes.
References
? 1: Network Security Groups – N10-008 CompTIA Network+ : 3.2
? 2: CompTIA Network+ N10-008 Certification Study Guide, page 329-330
? 3: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 17
? 4: CompTIA Network+ N10-008 Certification Practice Test, question 10

NEW QUESTION 171
- (Topic 3)
Which of the following would be used to enforce and schedule critical updates with supervisory approval and include backup plans in case of failure?

A. Business continuity plan
B. Onboarding and offboarding policies
C. Acceptable use policy
D. System life cycle
E. Change management

Answer: A

NEW QUESTION 172
- (Topic 3)
An engineer is using a tool to run an ICMP sweep of a network to find devices that are online. When reviewing the results, the engineer notices a number of workstations that are currently verified as being online are not listed in the report.
The tool was configured to scan using the following information: Network address: 172.28.16.0
CIDR: /22
The engineer collected the following information from the client workstation: IP address: 172.28.17.206
Subnet mask: 255.255.252.0
Which of the following MOST likely explains why the tool is failing to detect some workstations?

A. The scanned network range is incorrect.
B. The subnet mask on the client is misconfigured.
C. The workstation has a firewall enabled.
D. The tool is unable to scan remote networks.

Answer: C

Explanation:
A firewall is a device or software that filters and controls the incoming and outgoing network traffic based on predefined rules. A firewall can block ICMP packets, which are used for ping and other diagnostic tools. If the workstation has a firewall enabled, it may not respond to the ICMP sweep and appear as offline. The engineer should check the firewall settings on the workstation and allow ICMP traffic if needed.
References: Network+ Study Guide Objective 4.1: Given a scenario, use the appropriate tool.

NEW QUESTION 176
- (Topic 3)
A network administrator is in the process of installing 35 PoE security cameras. After the administrator installed and tested the new cables, the administrator installed the cameras. However, a small number of the cameras do not work. Which of the following is the most likely reason?

A. Incorrect wiring standard
B. Power budget exceeded
C. Signal attenuation
D. Wrong voltage

Answer: B

Explanation:
The power budget is the total amount of power that a PoE switch or injector can provide to the connected PoE devices. If the power budget is exceeded, some of the PoE devices may not receive enough power to function properly. To troubleshoot this issue, the network administrator should check the power consumption of each PoE device and the power capacity of the PoE switch or injector.
References:
? PoE Troubleshooting: The Common PoE Errors and Solutions1
? Security Camera Won’t Work - Top 10 Solutions to Fix2
? CompTIA Network+ N10-008 Exam Objectives https://www.comptia.org/certifications/network#examdetails

NEW QUESTION 177
- (Topic 3)
Which of the following allows for an devices within a network to share a highly reliable time source?

A. NTP
B. SNMP
C. SIP
D. DNS

Answer: A

Explanation:
Network Time Protocol (NTP) is a protocol used to maintain a highly accurate and reliable clock time on all devices within a network. NTP works by synchronizing the time of all the devices within a network to a single, highly accurate time source. This allows for the time of all the devices to be kept in sync with each other, ensuring a consistent and reliable time source for all devices within the network.

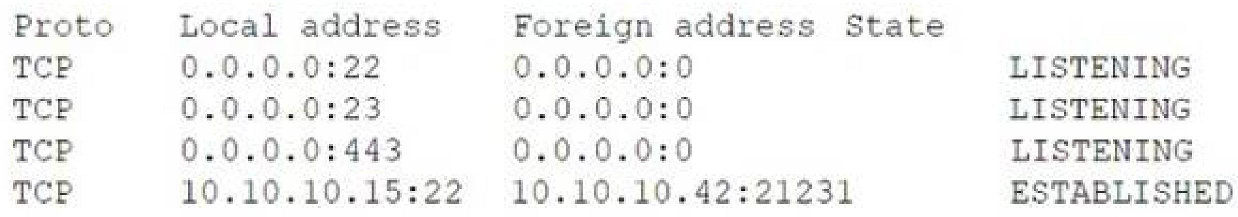
NEW QUESTION 182
- (Topic 3)
After upgrading to a SOHO router that supports Wi-Fi 6, the user determines throughput has not increased. Which of the following is the MOST likely cause of the issue?

A. The wireless router is using an incorrect antenna type.
B. The user's workstation does not support 802.11 ax.
C. The encryption protocol is mismatched
D. The network is experiencing interference.

Answer: B

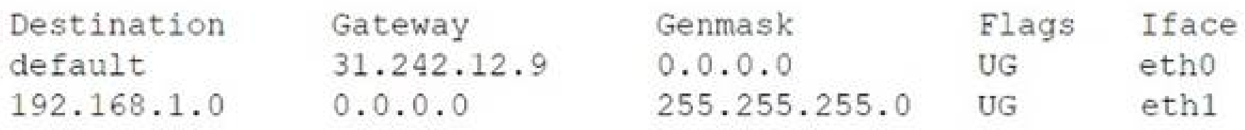
Explanation:
The user’s workstation does not support 802.11 ax, which is the technical name for Wi-Fi 6. Wi-Fi 6 is a new wireless standard that offers faster speeds, higher capacity, and lower latency than previous standards. However, to take advantage of these benefits, both the router and the workstation need to support Wi-Fi 6. If the workstation only supports an older standard, such as 802.11 ac or Wi-Fi 5, then the throughput will not increase even if the router supports Wi-Fi 6. References: [CompTIA Network+ Certification Exam Objectives], What is Wi-Fi 6? Here’s what you need to know | PCWorld

NEW QUESTION 183
- (Topic 3)
A network technician is troubleshooting an issue that involves connecting to a server via SSH. The server has one network interface that does not support subinterfaces. The technician runs a command on the server and receives the following output:



```
Proto   Local address     Foreign address  State
TCP     0.0.0.0:22        0.0.0.0:0                 LISTENING
TCP     0.0.0.0:23        0.0.0.0:0                 LISTENING
TCP     0.0.0.0:443       0.0.0.0:0                 LISTENING
TCP     10.10.10.15:22    10.10.10.42:21231         ESTABLISHED
```

On the host, the technician runs another command and receives the following:



```
Destination     Gateway        Genmask          Flags   Iface
default         31.242.12.9    0.0.0.0          UG      eth0
192.168.1.0     0.0.0.0        255.255.255.0    UG      eth1
```

Which of the following best explains the issue?

A. A firewall is blocking access to the server.
B. The server is plugged into a trunk port.
C. The host does not have a route to the server.
D. The server is not running the SSH daemon.

Answer: C

NEW QUESTION 188
- (Topic 3)
Which of the following can be used to limit the ability of devices to perform only HTTPS connections to an internet update server without exposing the devices to the public internet?

A. Allow connections only to an internal proxy server.
B. Deploy an IDS system and place it in line with the traffic.
C. Create a screened network and move the devices to it.
D. Use a host-based network firewall on each device.

Answer: A

Explanation:
An internal proxy server is a server that acts as an intermediary between internal devices and external servers on the internet. An internal proxy server can be used to limit the ability of devices to perform only HTTPS connections to an internet update server by filtering and forwarding the requests and responses based on predefined rules or policies. An internal proxy server can also prevent the devices from being exposed to the public internet by hiding their IP addresses and providing a layer of security and privacy.

NEW QUESTION 191
- (Topic 3)
A network administrator is setting up a new phone system and needs to define the location where VoIP phones can download configuration files. Which of the following DHCP services can be used to accomplish this task?

A. Scope options
B. Exclusion ranges
C. Lease time

D. Relay

Answer: A

Explanation:
To define the location where VoIP phones can download configuration files, the network administrator can use scope options within the Dynamic Host Configuration Protocol (DHCP) service. Scope options are a set of values that can be configured within a DHCP scope, which defines a range of IP addresses that can be leased to clients on a network. One of the scope options that can be configured is the option for the location of the configuration file server, which specifies the URL or IP address of the server where the configuration files can be downloaded.
https://pbxbook.com/voip/dhcpcfg.html

NEW QUESTION 195
- (Topic 3)
A network administrator received a report staling a critical vulnerability was detected on an application that is exposed to the internet. Which of the following Is the appropriate NEXT step?

A. Check for the existence of a known exploit in order to assess the risk
B. Immediately shut down the vulnerable application server.
C. Install a network access control agent on the server.
D. Deploy a new server to host the application.

Answer: A

Explanation:
The appropriate next step in this situation would be to check for the existence of a known exploit in order to assess the risk. This is important because it will help the network administrator determine the severity of the vulnerability and the potential impact it could have on the organization. Once the network administrator has assessed the risk, they can then take appropriate action to address the vulnerability. This might include patching the application, deploying a new server to host the application, or implementing other security measures to mitigate the risk. It is generally not advisable to immediately shut down the vulnerable application server, as this could disrupt business operations and cause significant downtime. Similarly, installing a network access control agent on the server may not be the most effective solution, as it would not address the underlying vulnerability.

NEW QUESTION 197
- (Topic 3)
Which of the following is a requirement when certifying a network cabling as Cat 7?

A. Ensure the patch panel is certified for the same category.
B. Limit 10Gb transmissions to 180ft (55m).
C. Use F-type connectors on the network terminations.
D. Ensure the termination standard is TIA/EIA-568-A.

Answer: D

Explanation:
Category 7 (Cat 7) is a cabling standard that supports 10GBASE-T Ethernet connections up to 100 meters (328 feet). In order for a cabling system to be certified as Cat 7, all components, including the patch panel, must meet the TIA/EIA-568-A standard. This standard requires the use of shielded cables with F-type connectors for the network terminations. Reference: CompTIA Network+ Study Manual, 8th Edition, page 158.

NEW QUESTION 201
- (Topic 3)
A network administrator installed a new data and VoIP network. Users are now experiencing poor call quality when making calls. Which of the following should the administrator do to increase VoIP performance?

A. Configure a voice VLAN.
B. Configure LACP on all VoIP phones.
C. Configure PoE on the network.
D. Configure jumbo frames on the network.

Answer: A

Explanation:
"Benefits of Voice VLAN
It ensures that your VoIP (Voice over Internet Phone) devices do not have to contend directly with all the broadcasts and other traffic from the data VLAN. A voice VLAN can simplify network configuration in some circumstances."
https://community.fs.com/blog/auto-voip-vs-voice-vlan-what-s-the-difference.html Jumbo Frames
"When jumbo frames on a VoIP/UC network are enabled, it can cause the same kind of
delay to your network transmissions."
"VoIP uses will always not benefit from jumbo frame, as VoIP like gaming, is latency and time sensitive. Jumbo Frame for Internet Purpose: You will not see any performance boost as the files that came across the internet does not support jumbo frame."
https://www.ankmax.com/newsinfo/1358641.html#:~:text=VoIP%20uses%20will%20always
%20not,does%20not%20support%20jumbo%20frame.
"To summarize this general best practice guide, you should NOT enable jumbo frame feature as a general home user."

NEW QUESTION 205
- (Topic 3)
Which of the following can be used to aggregate logs from different devices and would make analysis less difficult?

A. Syslog
B. SIEM
C. Event logs

D. NetFlow

Answer: B

Explanation:
SIEM stands for Security Information and Event Management, and it is a system that collects, normalizes, and analyzes log data from different sources in a centralized platform. SIEM can help identify security incidents, monitor network performance, and generate reports and alerts. SIEM can make log analysis less difficult by providing a unified view of the log data, correlating events across different devices, and applying rules and filters to detect anomalies and patterns12.
References: 1: CompTIA Network+ N10-008 Cert Guide - Chapter 14: Network Monitoring32: Log Aggregation: What It Is & How It Works | Datadog4

NEW QUESTION 208
- (Topic 3)
A user stores large graphic files. The lime required to transfer the files to the server is excessive due to network congestion. The user's budget does not allow for the current switches to be replaced. Which of the following can be used to provide FASTER transfer times?

A. Half duplex
B. Jumbo frames
C. LACP
D. 802.1Q

Answer: B

Explanation:
Jumbo frames are Ethernet frames that can carry more than 1500 bytes of payload data. Jumbo frames can reduce the overhead and improve the throughput of large file transfers, as fewer frames are needed to send the same amount of data. Jumbo frames can be used to provide faster transfer times, as long as the network devices support them

NEW QUESTION 212
- (Topic 3)
Which of the following situations would require an engineer to configure subinterfaces?

A. In a router-on-a-stick deployment with multiple VLANs
B. In order to enable inter-VLAN routing on a multilayer switch
C. When configuring VLAN trunk links between switches
D. After connecting a router that does not support 802.1Q VLAN tags

Answer: A

Explanation:
A router-on-a-stick is a configuration that allows a single router interface to route traffic between multiple VLANs on a network1. A router-on-a-stick requires sub-interfaces to be configured on the router interface, one for each VLAN. Each sub-interface is assigned a VLAN ID and an IP address that belongs to the corresponding VLAN subnet. The router interface is connected to a switch port that is configured as a trunk port, which allows traffic from multiple VLANs to pass through. The router then performs inter-VLAN routing by forwarding packets between the sub-interfaces based on their destination IP addresses. Inter-VLAN routing is a process that allows devices on different VLANs to communicate with each other. Inter-VLAN routing can be performed by a router-on-a-stick configuration, as explained above, or by a multilayer switch that has routing capabilities. A multilayer switch does not require sub-interfaces to be configured for inter-VLAN routing; instead, it uses switch virtual interfaces (SVIs) that are associated with each VLAN. An SVI is a logical interface that represents a VLAN on a switch and has an IP address that belongs to the VLAN subnet. The switch then performs inter-VLAN routing by forwarding packets between the SVIs based on their destination IP addresses.
VLAN trunking is a method that allows traffic from multiple VLANs to be carried over a single link between switches or routers. VLAN trunking requires the use of a tagging protocol, such as 802.1Q, that adds a header to each frame that identifies its VLAN ID. VLAN trunking does not require sub-interfaces to be configured on the switches or routers; instead, it uses trunk ports that are configured to allow or deny traffic from specific VLANs. The switches or routers then forward packets between the trunk ports based on their VLAN IDs.
* 802.1Q is a standard that defines how VLAN tagging and trunking are performed on Ethernet networks.
* 802.1Q adds a 4-byte header to each frame that contains a 12-bit field for the VLAN ID and a 3-bit field for the priority level. 802.1Q does not require sub-interfaces to be configured on the switches or routers; instead, it uses trunk ports that are configured to support 802.1Q tagging and untagging. The switches or routers then forward packets between the trunk ports based on their VLAN IDs and priority levels.

NEW QUESTION 213
- (Topic 3)
A network technician is responding to an issue with a local company. To which of the following documents should the network technician refer to determine the scope of the issue?

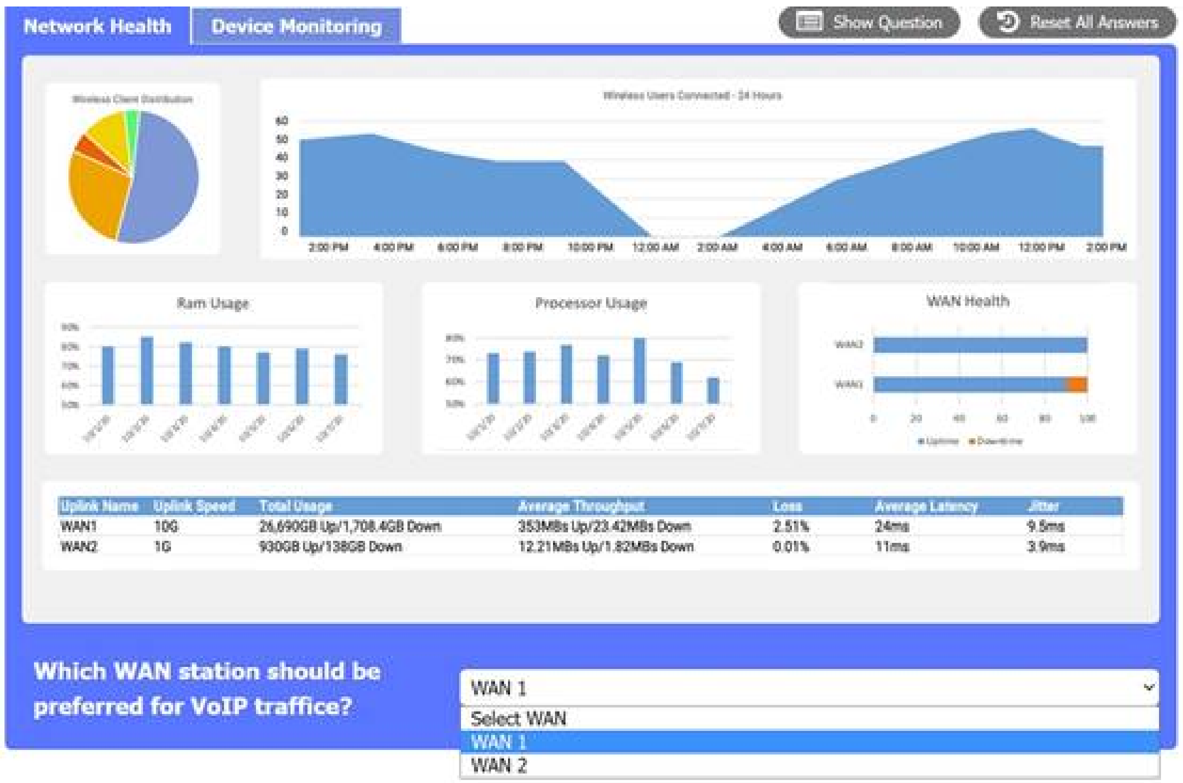
A. MTTR
B. MOU
C. NDA
D. SLA

Answer: D

Explanation:
SLA stands for Service Level Agreement, and it is a contract that defines the expectations and responsibilities between a service provider and a customer. SLA can specify the quality, availability, and performance metrics of the service, as well as the penalties for non-compliance and the procedures for resolving issues. SLA can help the network technician determine the scope of the issue by providing the baseline and target values for the service, the escalation process and contacts, and the service credits or remedies for the customer45.
CompTIA Network+ N10-008 Cert Guide - Chapter 15: Network Troubleshooting Methodology35: What is a Service Level Agreement (SLA)? | ITIL | AXELOS

NEW QUESTION 216
SIMULATION - (Topic 3)
After a recent power outage, users are reporting performance issues accessing the application servers. Wireless users are also reporting intermittent Internet

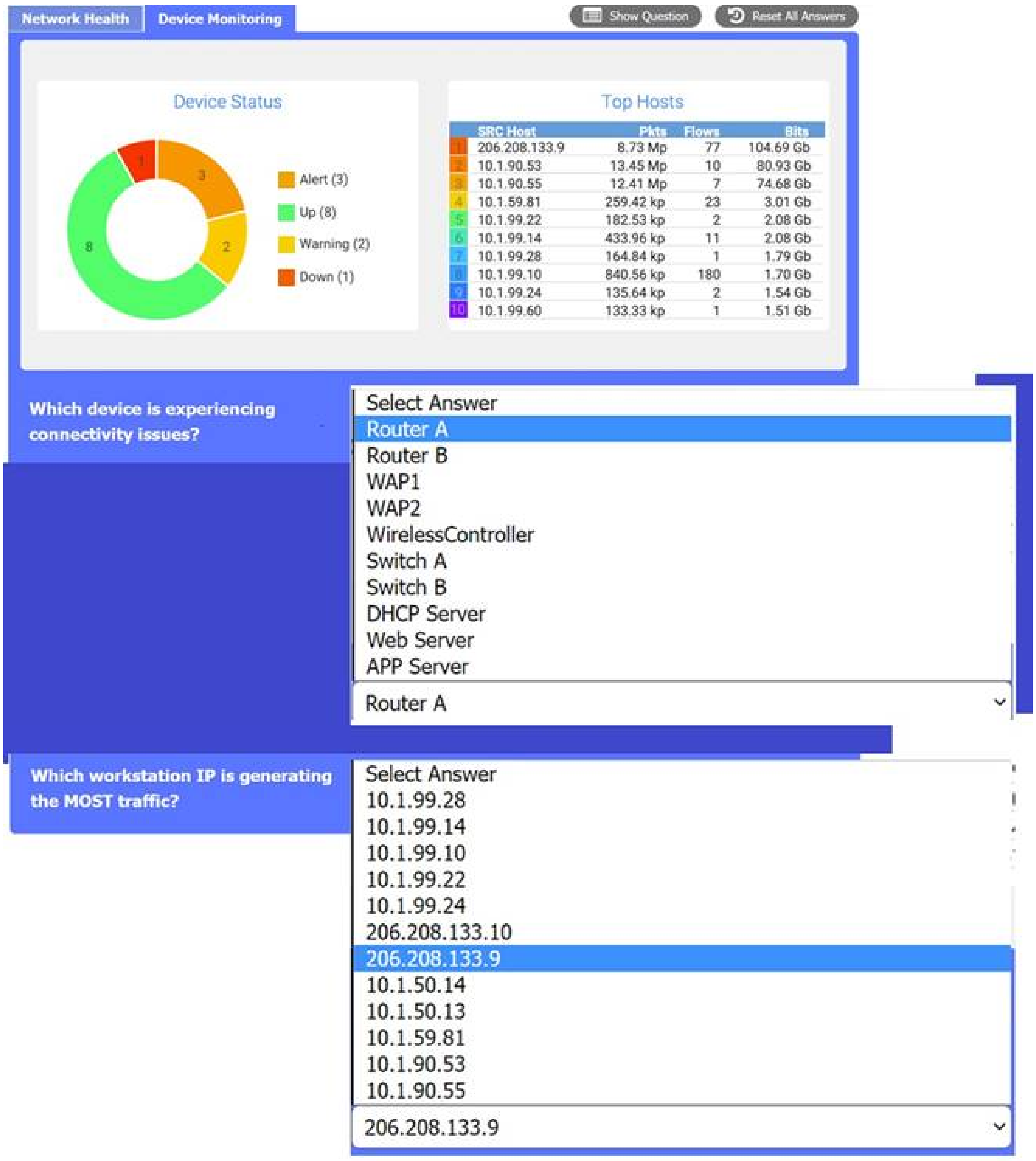
issues.
INSTRUCTIONS
Click on each tab at the top of the screen. Select a widget to view information, then
use the drop-down menus to answer the associated questions. If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.



Uplink Name	Uplink Speed	Total Usage	Average Throughput	Loss	Average Latency	Jitter
WAN1	10G	26,690GB Up/1,708.4GB Down	353MBs Up/23.42MBs Down	2.51%	24ms	9.5ms
WAN2	1G	930GB Up/138GB Down	12.21MBs Up/1.82MBs Down	0.01%	11ms	3.9ms

Which WAN station should be preferred for VoIP traffice?

WAN 1



	SRC Host	Pkts	Flows	Bits
1	206.208.133.9	8.73 Mp	77	104.69 Gb
2	10.1.90.53	13.45 Mp	10	80.93 Gb
3	10.1.90.55	12.41 Mp	7	74.68 Gb
4	10.1.59.81	259.42 kp	23	3.01 Gb
5	10.1.99.22	182.53 kp	2	2.08 Gb
6	10.1.99.14	433.96 kp	11	2.08 Gb
7	10.1.99.28	164.84 kp	1	1.79 Gb
8	10.1.99.10	840.56 kp	180	1.70 Gb
9	10.1.99.24	135.64 kp	2	1.54 Gb
10	10.1.99.60	133.33 kp	1	1.51 Gb

Which device is experiencing connectivity issues?

Router A

Which workstation IP is generating the MOST traffic?

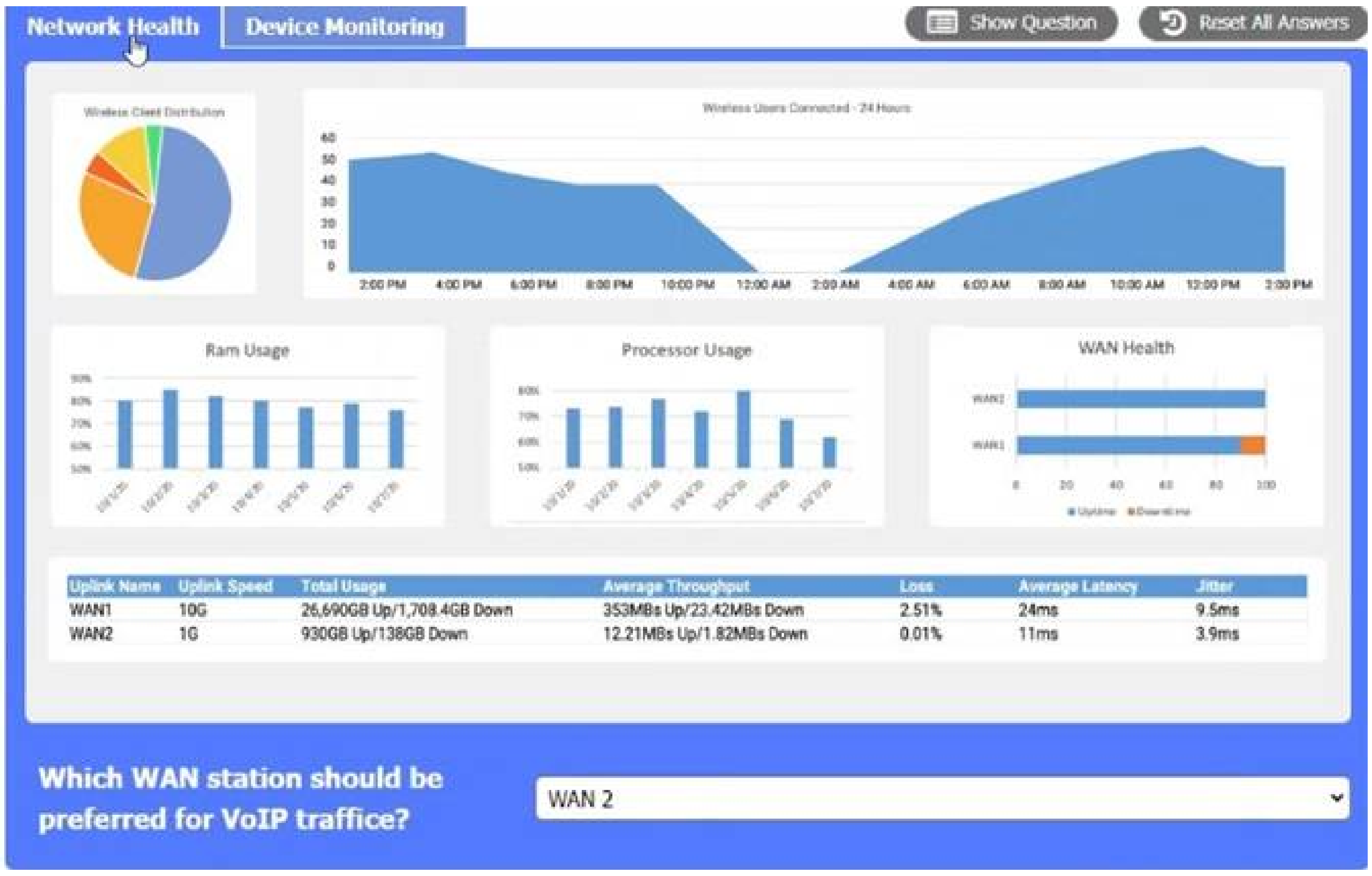
206.208.133.9

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Network Health:
WAN 2 appears to have a lower average latency and loss percentage, which would make it the preferred WAN station for VoIP traffic. VoIP traffic requires low latency and packet loss to ensure good voice quality and reliability. WAN 1 seems to have higher RAM and processor usage, which could also affect the performance of VoIP traffic.
Here's the summary of the key metrics for WAN 1 and WAN 2 from the image provided:
? WAN 1:
? WAN 2:
For VoIP traffic, low latency and jitter are particularly important to ensure voice quality. While WAN 1 has higher bandwidth and throughput, it also has higher latency and jitter
compared to WAN 2. However, WAN 2 has much lower loss, lower latency, and lower jitter, which are more favorable for VoIP traffic that is sensitive to delays and variation in packet arrival times.
Given this information, WAN 2 would generally be preferred for VoIP traffic due to its lower latency, lower jitter, and significantly lower loss percentage, despite its lower bandwidth compared to WAN 1. The high bandwidth of WAN 1 may be more suitable for other types of traffic that are less sensitive to latency and jitter, such as bulk data transfers.



Uplink Name	Uplink Speed	Total Usage	Average Throughput	Loss	Average Latency	Jitter
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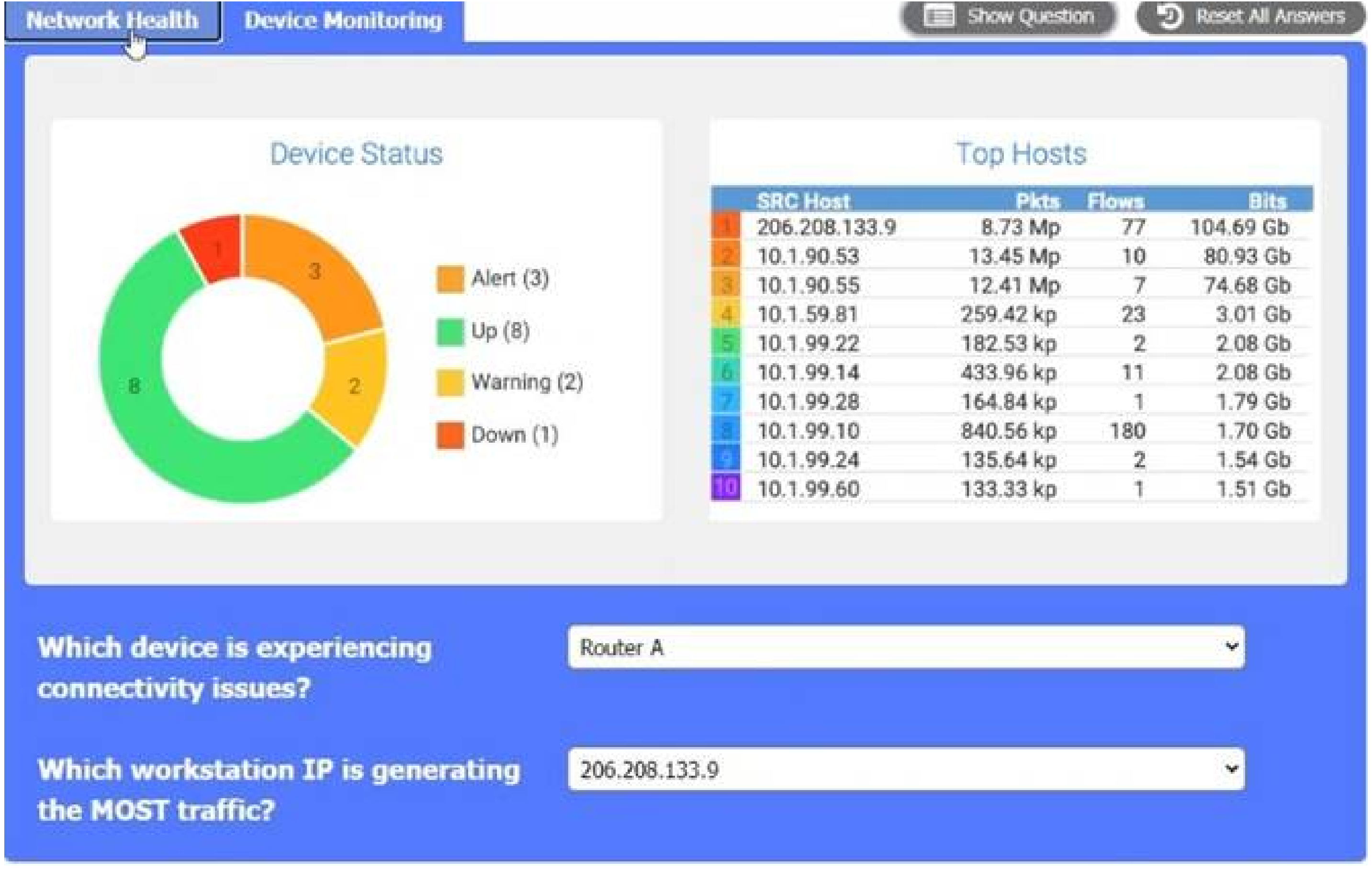
WAN2	1G	930GB Up/138GB Down	12.21MBs Up/1.82MBs Down	0.01%	11ms	3.9ms

Which WAN station should be preferred for VoIP traffice?
WAN 2

Device Monitoring:
the device that is experiencing connectivity issues is the APP Server or Router 1, which has a status of Down. This means that the server is not responding to network requests or sending any data. You may want to check the physical connection, power supply, and configuration of the APP Server to troubleshoot the problem.



	SRC Host	Pkts	Flows	Bits
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5	10.1.99.22	182.53 kp	2	2.08 Gb
6	10.1.99.14	433.96 kp	11	2.08 Gb
7	10.1.99.28	164.84 kp	1	1.79 Gb
8	10.1.99.10	840.56 kp	180	1.70 Gb
9	10.1.99.24	135.64 kp	2	1.54 Gb
10	10.1.99.60	133.33 kp	1	1.51 Gb

Which device is experiencing connectivity issues?
Router A

Which workstation IP is generating the MOST traffic?
206.208.133.9

A screenshot of a computer
Description automatically generated

NEW QUESTION 217
- (Topic 3)
A company has been added to an unapproved list because of spam. The network administrator confirmed that a workstation was infected by malware. Which of the following processes did the administrator use to identify the root cause?

A. Traffic analysis
B. Availability monitoring
C. Baseline metrics
D. Network discovery

Answer: A

Explanation:
One possible process that the administrator used to identify the root cause of the spam issue is traffic analysis. Traffic analysis is a technique that monitors and analyzes the network traffic that flows between devices or applications. Traffic analysis can help troubleshoot network problems by identifying the source, destination, volume, frequency, and content of the network packets12.
To use traffic analysis to identify the root cause of the spam issue, the administrator could follow these steps:
? Install a traffic analysis tool on the server or a device that is connected to the same
network as the server, such as Wireshark3, tcpdump4, or Microsoft Network Monitor5.
? Start capturing the network traffic and filter it by using the IP address or hostname
of the server, or by using a specific port or protocol that is used by the email service, such as SMTP (port 25), POP3 (port 110), or IMAP (port 143).
? Analyze the filtered traffic and look for any signs of abnormal or malicious activity, such as high volume of outgoing emails, unknown recipients, suspicious attachments, or spam keywords.
? Trace back the source of the spam emails to the infected workstation by using its IP address or MAC address.
? Isolate and clean up the infected workstation by using an antivirus or malware removal tool.
The other options are not processes that the administrator used to identify the root cause of the spam issue. Availability monitoring is a technique that measures and reports the uptime and downtime of a network device or service. Availability monitoring can help troubleshoot network problems by detecting any failures or outages that affect the network performance. Baseline metrics are a set of standard measurements that establish the normal behavior or performance of a network device or service. Baseline metrics can help troubleshoot network problems by comparing the current state of the network with the expected state and identifying any deviations or anomalies. Network discovery is a technique that scans and maps the network devices and services that are connected to a network. Network discovery can help troubleshoot network problems by providing a comprehensive and updated view of the network topology and configuration.

NEW QUESTION 220
- (Topic 3)
Which of the following protocols should be used when Layer 3 availability is of the highest concern?

A. LACP
B. LDAP
C. FHRP
D. DHCP

Answer: C

Explanation:
FHRP stands for First Hop Redundancy Protocol, which is a group of protocols that allow routers or switches to provide backup or failover for the default gateway in a network. FHRP ensures that the network traffic can reach its destination even if the primary gateway fails or becomes unavailable. Some examples of FHRP protocols are HSRP, VRRP, and GLBP.
References
? 1: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 18
? 2: CompTIA Network+ N10-008 Certification Practice Test, question 9
? 3: CompTIA Network+ Study Guide: Exam N10-008, 5th Edition, page 263
? 4: CompTIA Network+ (N10-008) Practice Exam w/PBQ & Solution, question 5
? 5: What’s on the CompTIA Network+ 008 certification? | CompTIA, section 3.1

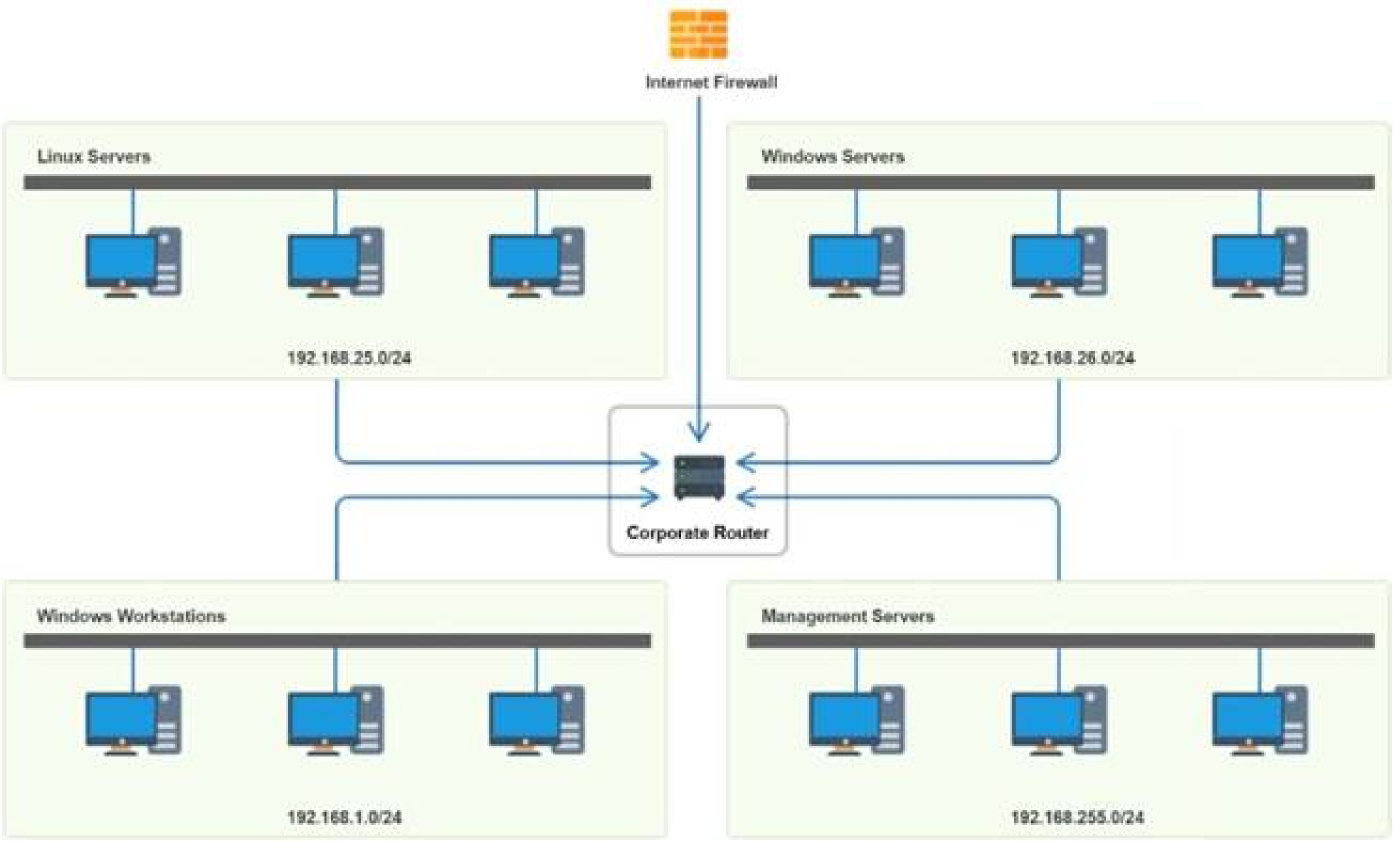
NEW QUESTION 225
- (Topic 3)
A network administrator is configuring a firewall to allow for a new cloud-based email server. The company standard is to use SMTP to route email traffic. Which of the following ports, by default, should be reserved for this purpose?

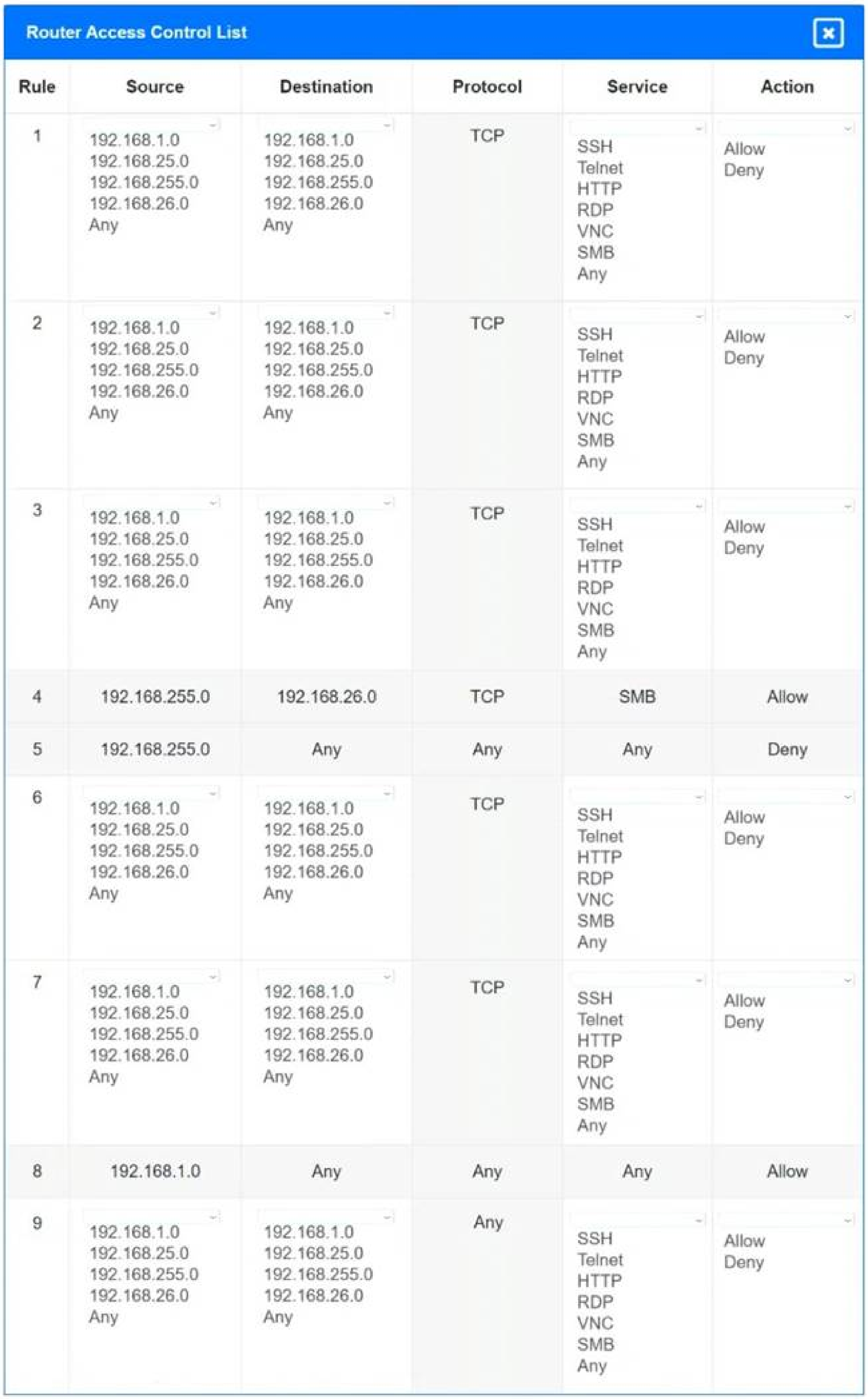
A. 23
B. 25
C. 53
D. 110

Answer: B

Explanation:
Port 25, by default, should be reserved for SMTP traffic to allow for a new cloud-based email server. SMTP stands for Simple Mail Transfer Protocol, which is a network protocol that enables email communication between mail servers and clients. SMTP uses port 25 as its default port for sending and receiving email messages over TCP/IP networks. A cloud-based email server is an email server that is hosted on a cloud service provider’s infrastructure, rather than on-premise or in-house. A cloud-based email server can offer advantages such as scalability, reliability, security, and cost-effectiveness. To allow for a new cloud-based email server, a firewall should be configured to open port 25 for SMTP traffic. References: [CompTIA Network+ Certification Exam Objectives], What Is SMTP? | Mailtrap Blog, Cloud Email Server: What Is It & How Does It Work? | Zoho Mail

NEW QUESTION 227
SIMULATION - (Topic 3)
You have been tasked with implementing an ACL on the router that will:
* 1. Permit the most commonly used secure remote access technologies from the management network to all other local network segments
* 2. Ensure the user subnet cannot use the most commonly used remote access technologies in the Linux and Windows Server segments.
* 3. Prohibit any traffic that has not been specifically allowed.
INSTRUCTIONS
Use the drop-downs to complete the ACL
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.


Internet Firewall
Linux Servers
192.168.25.0/24
Windows Servers
192.168.26.0/24
Corporate Router
Windows Workstations
192.168.1.0/24
Management Servers
192.168.255.0/24



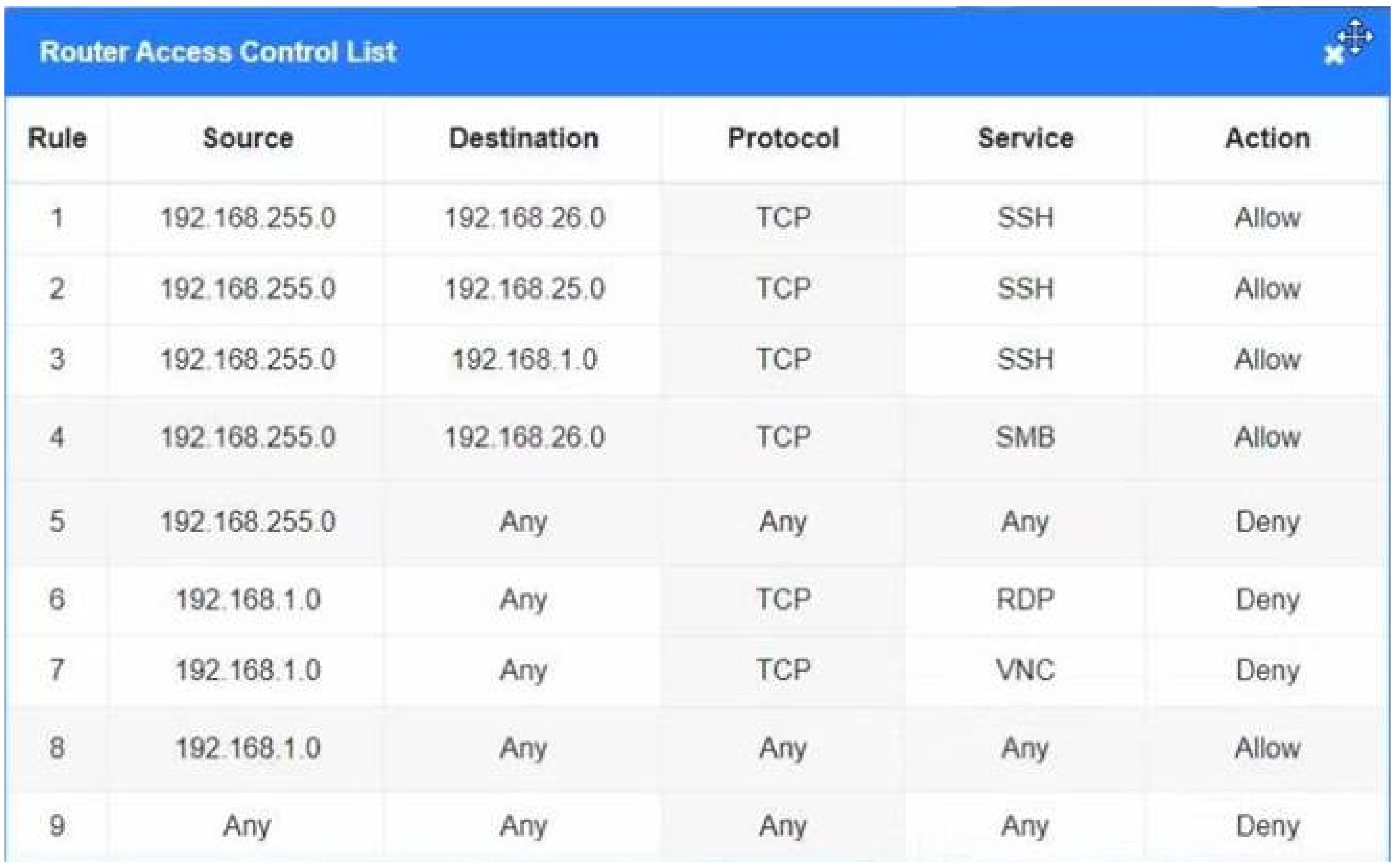
Router Access Control List

Rule	Source	Destination	Protocol	Service	Action
1	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	TCP	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny
2	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	TCP	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny
3	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	TCP	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny
4	192.168.255.0	192.168.26.0	TCP	SMB	Allow
5	192.168.255.0	Any	Any	Any	Deny
6	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	TCP	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny
7	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	TCP	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny
8	192.168.1.0	Any	Any	Any	Allow
9	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	192.168.1.0 192.168.25.0 192.168.255.0 192.168.26.0 Any	Any	SSH Telnet HTTP RDP VNC SMB Any	Allow Deny

A. Mastered
B. Not Mastered

Answer: A

Explanation:



Router Access Control List

Rule	Source	Destination	Protocol	Service	Action
1	192.168.255.0	192.168.26.0	TCP	SSH	Allow
2	192.168.255.0	192.168.25.0	TCP	SSH	Allow
3	192.168.255.0	192.168.1.0	TCP	SSH	Allow
4	192.168.255.0	192.168.26.0	TCP	SMB	Allow
5	192.168.255.0	Any	Any	Any	Deny
6	192.168.1.0	Any	TCP	RDP	Deny
7	192.168.1.0	Any	TCP	VNC	Deny
8	192.168.1.0	Any	Any	Any	Allow
9	Any	Any	Any	Any	Deny

NEW QUESTION 230
- (Topic 3)
A desktop support department has observed slow wireless speeds for a new line of laptops using the organization's standard image. No other devices have experienced the same issue. Which of the following should the network administrator recommend troubleshooting FIRST to resolve this issue?

A. Increasing wireless signal power
B. Installing a new WAP
C. Changing the protocol associated to the SSID
D. Updating the device wireless drivers

Answer: D

Explanation:
Wireless drivers can affect the performance and compatibility of your wireless connection5. If only a new line of laptops using the organization’s standard image has experienced slow wireless speeds, it could be that their wireless drivers are outdated or incompatible with the network. Updating the device wireless drivers could resolve this issue.
Wireless drivers play an important role in the performance of a wireless connection, as they control how the device interacts with the wireless network. If the laptops in question are using an outdated version of the wireless driver, it could be causing the slow speeds. The network administrator should recommend updating the device wireless drivers first to see if this resolves the issue.

NEW QUESTION 235
- (Topic 3)
Which of the following is MOST appropriate for enforcing bandwidth limits when the performance of an application is not affected by the use of buffering but is heavily impacted by packet drops?

A. Traffic shaping
B. Traffic policing
C. Traffic marking
D. Traffic classification

Answer: B

Explanation:
Traffic policing is a mechanism that monitors the traffic in any network and enforces a bandwidth limit by discarding packets that exceed a certain rate1. This can reduce congestion and ensure fair allocation of bandwidth among different applications or users. However, discarding packets can also affect the performance and quality of some applications, especially those that are sensitive to packet loss, such as voice or video. Traffic shaping is a congestion control mechanism that delays packets that exceed a certain rate instead of discarding them1. This can smooth out traffic bursts and avoid packet loss, but it also introduces latency and jitter. Traffic shaping can be beneficial for applications that can tolerate some delay but not packet loss, such as file transfers or streaming.
Traffic marking is a mechanism that assigns different priority levels to packets based on their type, source, destination, or other criteria2. This can help to differentiate between different classes of service and apply different policies or treatments to them. However, traffic marking does not enforce bandwidth limits by itself; it only provides information for other mechanisms to act upon.
Traffic classification is a process that identifies and categorizes packets based on their characteristics, such as protocol, port number, payload, or behavior. This can help to distinguish between different types of traffic and apply appropriate policies or actions to them. However, traffic classification does not enforce bandwidth limits by itself; it only provides input for other mechanisms to use.

NEW QUESTION 240
- (Topic 3)
A network technician 13 troubleshooting a network issue for employees who have reported Issues with speed when accessing a server in another subnet. The server is in another building that is 410ft (125m) away from the employees' building. The 10GBASE-T connection between the two buildings uses Cat 5e. Which of the following BEST explains the speed issue?

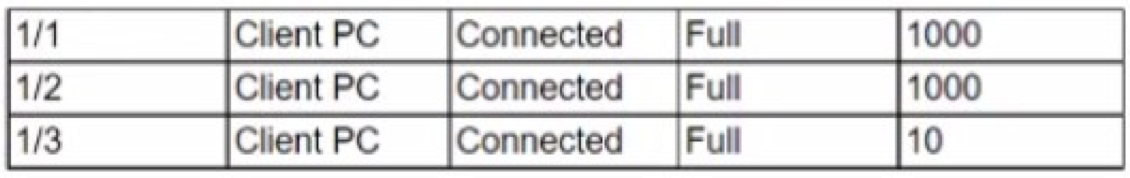
A. The connection type is not rated for that distance
B. A broadcast storm is occurring on the subnet.

C. The cable run has interference on it
D. The connection should be made using a Cat 6 cable

Answer: D

Explanation:
The 10GBASE-T connection between the two buildings uses Cat 5e, which is not rated for a distance of 410ft (125m). According to the CompTIA Network+ Study Manual, for 10GBASE-T connections, "Cat 5e is rated for up to 55m, Cat 6a is rated for 100m, and Cat 7 is rated for 150m." Therefore, the speed issue is likely due to the fact that the connection type is not rated for the distance between the two buildings. To resolve the issue, the technician should consider using a Cat 6a or Cat 7 cable to increase the distance the connection is rated for.

NEW QUESTION 243
- (Topic 3)
A network technician receives a report about a performance issue on a client PC that is connected to port 1/3 on a network switch. The technician observes the following configuration output from the switch:



1/1	Client PC	Connected	Full	1000
1/2	Client PC	Connected	Full	1000
1/3	Client PC	Connected	Full	10

Which of the following is a cause of the issue on port 1/3?

A. Speed
B. Duplex
C. Errors
D. VLAN

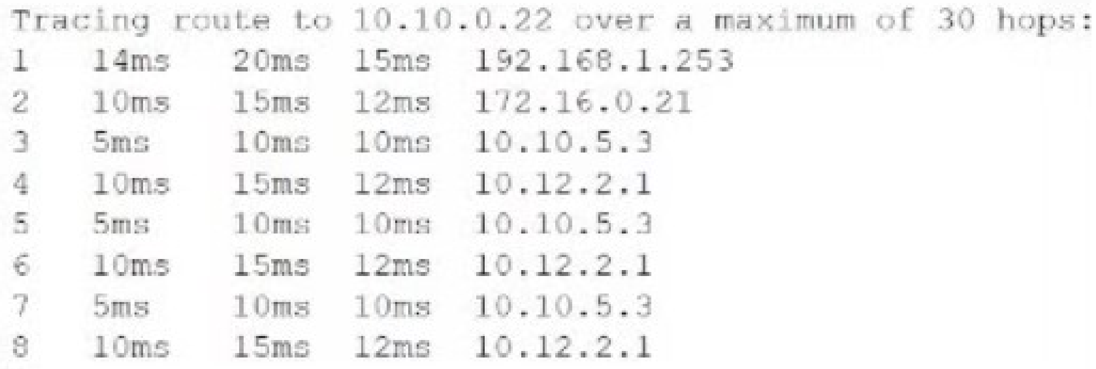
Answer: A

NEW QUESTION 245
- (Topic 3)
A large metropolitan city is looking to standardize the ability tor police department laptops to connect to the city government's VPN The city would like a wireless solution that provides the largest coverage across the city with a minimal number of transmission towers Latency and overall bandwidth needs are not high priorities. Which of the following would BEST meet the city's needs?

A. 5G
B. LTE
C. Wi-Fi 4
D. Wi-Fi 5
E. Wi-Fi 6

Answer: B

NEW QUESTION 250
- (Topic 3)
A network administrator is troubleshooting a connection to a remote site. The administrator runs a command and sees the following output:



```
Tracing route to 10.10.0.22 over a maximum of 30 hops:
1   14ms    20ms   15ms   192.168.1.253
2   10ms    15ms   12ms   172.16.0.21
3   5ms     10ms   10ms   10.10.5.3
4   10ms    15ms   12ms   10.12.2.1
5   5ms     10ms   10ms   10.10.5.3
6   10ms    15ms   12ms   10.12.2.1
7   5ms     10ms   10ms   10.10.5.3
8   10ms    15ms   12ms   10.12.2.1
```

Which of the following is the cause of the connection issue?

A. Routing loop
B. Asymmetrical routing
C. Broadcast storm
D. Switching loop

Answer: A

Explanation:
The cause of the connection issue is a routing loop. A routing loop is a situation where a packet is forwarded in circles between routers, never reaching its destination. A routing loop can be caused by misconfigured or inconsistent routing tables, or by routing protocols that do not update their information properly. A routing loop can be detected by using the traceroute command, which shows the path taken by a packet from the source to the destination. The traceroute output in the image shows that the packet is bouncing back and forth between two routers, 10.12.2.1 and 10.12.2.2, indicating a routing loop. References: CompTIA Network+ N10-008 Certification Study Guide, page 181; The Official CompTIA Network+ Student Guide (Exam N10-008), page 7-9.

NEW QUESTION 253
- (Topic 3)
A customer has an attached USB printer that needs to be shared with other users. The desktop team set up printer sharing. Now, the network technician needs to obtain the necessary information about the PC and share it with other users so they can connect to the printer. Which of the following commands should the technician use to get the required information? (Select TWO).

A. arp
B. route
C. netstat
D. tcpdump
E. hostname
F. ipconfig

Answer: EF

Explanation:
The hostname and ipconfig commands should be used to get the required information about the PC and share it with other users so they can connect to the printer. The hostname command displays the name of the computer on a network. The ipconfig command displays the IP configuration of the computer, including its IP address, subnet mask, default gateway, and DNS servers. These information are necessary for other users to locate and connect to the shared printer on the network. For example, other users can use the UNC path \\hostname\printername or \\ipaddress\printername to access the shared printer. References: [CompTIA Network+ Certification Exam Objectives], How to Share a Printer in Windows 10

NEW QUESTION 256
- (Topic 3)
A network administrator is looking for a solution to extend Layer 2 capabilities and replicate backups between sites. Which of the following is the best solution?

A. Security Service Edge
B. Data center interconnect
C. Infrastructure as code
D. Zero trust architecture

Answer: B

Explanation:
Data center interconnect (DCI) is a solution that allows Layer 2 connectivity and data replication between geographically dispersed data centers. DCI can be implemented using various technologies, such as optical networks, MPLS, VPNs, or Ethernet. DCI can provide benefits such as improved disaster recovery, load balancing, resource pooling, and cloud services.
References:
? Data Center Interconnect - CompTIA Network+ N10-008 Domain 1.4 - YouTube1
? CompTIA Network+ Certification Exam Objectives, page 92

NEW QUESTION 260
- (Topic 3)
A network architect needs to create a wireless field network to provide reliable service to public safety vehicles. Which of the following types of networks is the best solution?

A. Mesh
B. Ad hoc
C. Point-to-point
D. Infrastructure

Answer: A

Explanation:
A mesh network is the best solution for creating a wireless field network to provide reliable service to public safety vehicles. A mesh network is a type of wireless network that consists of multiple nodes that communicate with each other directly or through intermediate nodes, forming a web-like topology. A mesh network does not rely on a central access point or router, but rather on the cooperation and coordination of the nodes themselves. A mesh network has several advantages for public safety applications, such as12:
? High availability and resilience: A mesh network can automatically route around failures or congestion, ensuring that the network remains operational even if some nodes are damaged or disconnected. A mesh network can also self-heal and self- configure, adapting to changes in the network topology or environment.
? Extended coverage and scalability: A mesh network can extend the wireless signal beyond the range of a single node, by using other nodes as relays or repeaters. A mesh network can also accommodate more nodes and devices, by adding more links and paths between them.
? Low cost and easy deployment: A mesh network can reduce the cost and complexity of installing and maintaining a wireless infrastructure, by eliminating the need for expensive cabling, towers, or antennas. A mesh network can also be deployed quickly and flexibly, by simply adding or removing nodes as needed.
A mesh network is especially suitable for public safety vehicles, because it can provide reliable wireless communication in challenging scenarios, such as12:
? Disaster response: A mesh network can be deployed rapidly in areas where the existing wireless infrastructure is damaged or unavailable, such as after an earthquake, flood, or fire. A mesh network can also support emergency services, such as fire fighting, search and rescue, or medical assistance, by enabling data, voice, and video transmission among the responders and command centers.
? Mobile surveillance: A mesh network can enable real-time monitoring and control of public safety vehicles, such as police cars, ambulances, or drones, by providing high-bandwidth and low-latency wireless connectivity. A mesh network can also support video streaming, location tracking, remote sensing, or analytics applications for public safety purposes.
? Event management: A mesh network can enhance the security and efficiency of large-scale events, such as concerts, festivals, or parades, by providing wireless coverage and capacity for the event organizers and participants. A mesh network can also support crowd management, traffic control, or public announcement applications for event management.
The other options are not the best solutions for creating a wireless field network to provide reliable service to public safety vehicles. An ad hoc network is a type of wireless network that consists of devices that communicate with each other directly without any central coordination or infrastructure. An ad hoc network is simple and flexible, but it has limited scalability and performance3. A point-to-point network is a type of wireless network that consists of two devices that communicate with each other over a single link. A point-to- point network is fast and secure, but it has limited coverage and functionality. An infrastructure network is a type of wireless network that consists of devices that communicate with each other through an access point or router. An infrastructure network is stable and robust, but it has high cost and complexity.

NEW QUESTION 262
- (Topic 3)
A divide-and-conquer approach is a troubleshooting method that involves breaking a complex problem into smaller and more manageable parts, and then testing each part to isolate the cause of the problem. In this scenario, the technician is using a divide-and- conquer approach by pinging the default gateway and DNS server of the workstation, which are two possible sources of connectivity issues. By pinging these devices, the technician can determine if the problem is related to

the local network or the external network.
Which of the following most likely requires the use of subinterfaces?

A. A router with only one available LAN port
B. A firewall performing deep packet inspection
C. A hub utilizing jumbo frames
D. A switch using Spanning Tree Protocol

Answer: A

Explanation:

Subinterfaces are logical divisions of a physical interface that allow a router to communicate with multiple networks using a single LAN port. Subinterfaces can have different IP addresses, VLANs, and routing protocols. They are useful for reducing the number of physical interfaces and cables needed, as well as improving network performance and security.
References:
? Subinterfaces - CompTIA Network+ N10-008 Domain 1.21 - YouTube1
? CompTIA Network+ Certification Exam Objectives, page 92

NEW QUESTION 263
- (Topic 3)
Which of the following use cases would justify the deployment of an mGRE hub-and-spoke topology?

A. An increase in network security using encryption and packet encapsulation
B. A network expansion caused by an increase in the number of branch locations to the headquarters
C. A mandatory requirement to increase the deployment of an SDWAN network
D. An improvement in network efficiency by increasing the useful packet payload

Answer: B

Explanation:

mGRE (Multipoint GRE) is a type of GRE (Generic Routing Encapsulation) tunnel that allows a single interface to support multiple tunnel endpoints, instead of having to configure a separate point-to-point tunnel for each destination. mGRE simplifies the configuration and management of large-scale VPN networks, such as DMVPN (Dynamic Multipoint VPN), which is a Cisco technology that uses mGRE, NHRP (Next Hop Resolution Protocol), and IPsec to create secure and dynamic VPN connections between a hub and multiple spokes1.
A network expansion caused by an increase in the number of branch locations to the headquarters would justify the deployment of an mGRE hub-and-spoke topology, because it would reduce the complexity and overhead of configuring and maintaining multiple point- to-point tunnels between the hub and each spoke. mGRE would also enable spoke-to- spoke communication without having to go through the hub, which would improve the network performance and efficiency23.
The other options are not directly related to the use case of mGRE hub-and-spoke topology. An increase in network security using encryption and packet encapsulation can be achieved by using IPsec, which is a separate protocol that can be applied to any type of GRE tunnel, not just mGRE. A mandatory requirement to increase the deployment of an SDWAN network can be met by using various technologies and vendors, not necessarily mGRE or DMVPN. An improvement in network efficiency by increasing the useful packet payload can be achieved by using various techniques, such as compression, fragmentation, or QoS, not specifically mGRE.
ReferencesUnderstanding Cisco Dynamic Multipoint VPN - DMVPN, mGRE, NHRPMGRE Easy Steps - Cisco CommunityWhat is DMVPN (Dynamic Multipoint VPN), NHRP, mGRE and How to configu - Cisco Community

NEW QUESTION 266
- (Topic 3)
Which of the following is most closely associated with attempting to actively prevent network intrusion?

A. IDS
B. Firewall
C. IPS
D. VPN

Answer: C

Explanation:

An intrusion prevention system (IPS) is a network security tool that continuously monitors network traffic for malicious activity and takes action to prevent it, such as reporting, blocking, or dropping it. An IPS is different from an intrusion detection system (IDS), which only detects and alerts about threats, but does not stop them. A firewall is a device or software that filters network traffic based on predefined rules, but it does not analyze the traffic for anomalies or signatures of known attacks. A VPN is a virtual private network that creates a secure tunnel between two endpoints, but it does not prevent intrusions from within the network or from compromised endpoints.
ReferencesWhat is an Intrusion Prevention System (IPS)? | FortinetWhat is an Intrusion Prevention System? - Palo Alto Networks

NEW QUESTION 269
- (Topic 3)
A network administrator walks into a data center and notices an unknown person is following closely. The administrator stops and directs the person to the security desk.
Which of the following attacks did the network administrator prevent?

A. Evil twin
B. Tailgating
C. Piggybacking
D. Shoulder surfing

Answer: B

Explanation:

Tailgating is a type of physical security attack in which an unauthorized person follows an authorized person into a restricted area, such as a data center, without proper identification or authentication. Tailgating can allow attackers to access sensitive data, equipment, or network resources, or to plant malicious devices or software. The network administrator prevented tailgating by stopping and directing the unknown person to the security desk, where they would have to verify their identity and purpose.
ReferencesDigital Threats and Cyberattacks at the Network LevelNetwork attacks and how to prevent them

NEW QUESTION 271
- (Topic 3)
A network administrator is creating a VLAN that will only allow executives to connect to a data source. Which of the following is this scenario an example of?

A. Availability
B. Confidentiality
C. Internal threat
D. External threat
E. Integrity

Answer: B

Explanation:

Confidentiality is the principle of preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information1. By creating a VLAN that will only allow executives to connect to a data source, the network administrator is implementing a form of network segmentation that enhances the confidentiality of the data. This prevents unauthorized users or processes from accessing or modifying the data, which could compromise its integrity or availability. Confidentiality is one of the components of the CIA triad, a widely used information security model that guides the efforts and policies aimed at keeping data secure234.
ReferencesDefending Your Network: A Comprehensive Guide to VLAN Hopping AttacksThe CIA triad: Definition, components and examples | CSO OnlineExecutive Summary — NIST SP 1800-25 documentationThe CIA Triad — Confidentiality, Integrity, and Availability ExplainedConfidentiality, Integrity and Availability - DevQA.io

NEW QUESTION 275
- (Topic 3)
A user cannot connect to the network, although others in the office are unaffected. The network technician sees that the link lights on the NIC are not on. The technician needs to check which switchport the user is connected to, but the cabling is not labeled. Which of the following is the best way for the technician to find where the computer is connected?

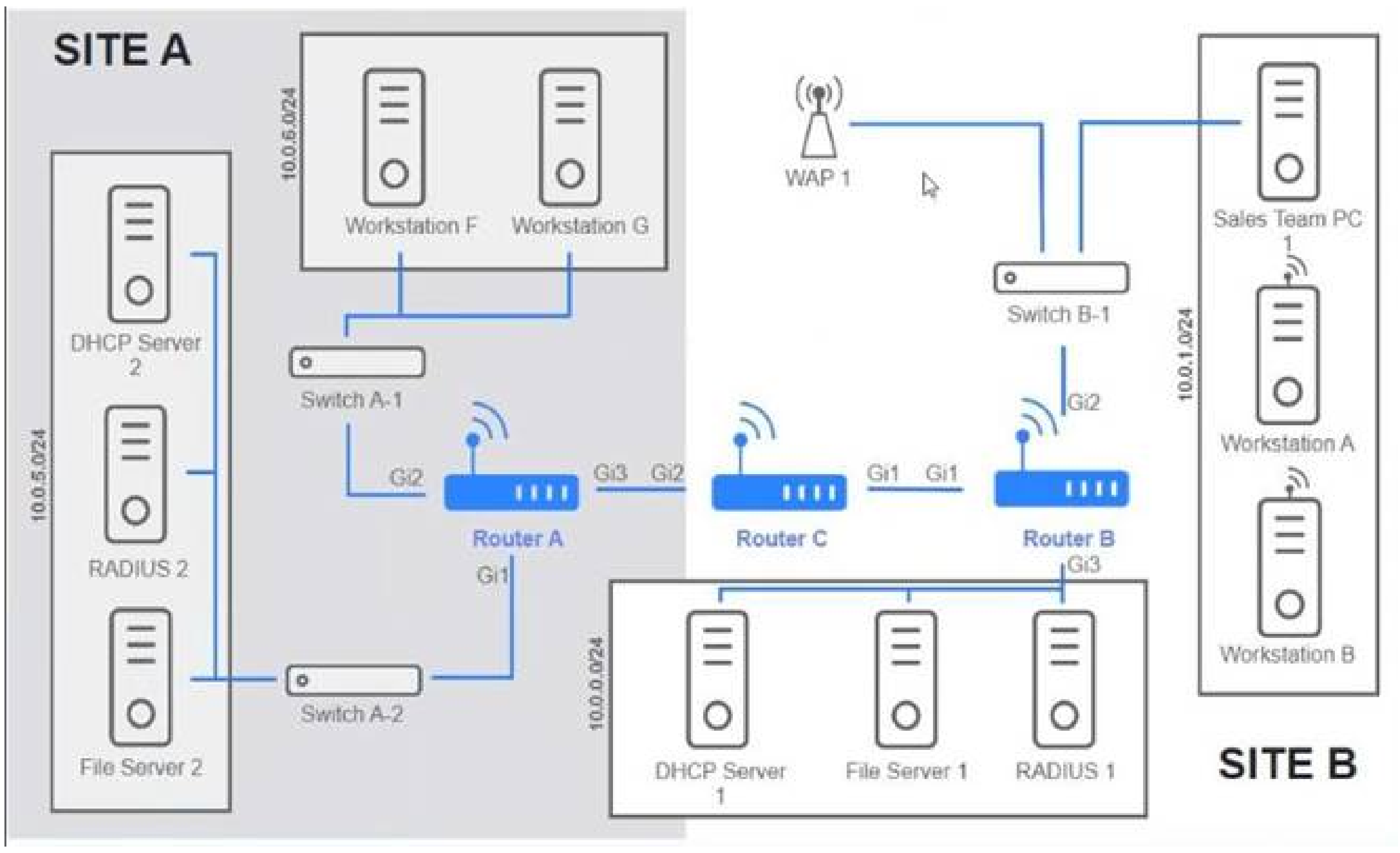
A. Look up the computer's IP address in the switch ARP table.
B. Use a cable tester to trace the cable.
C. Look up the computer's MAC address in the switch CAM table.
D. Use a tone generator to trace the cable.

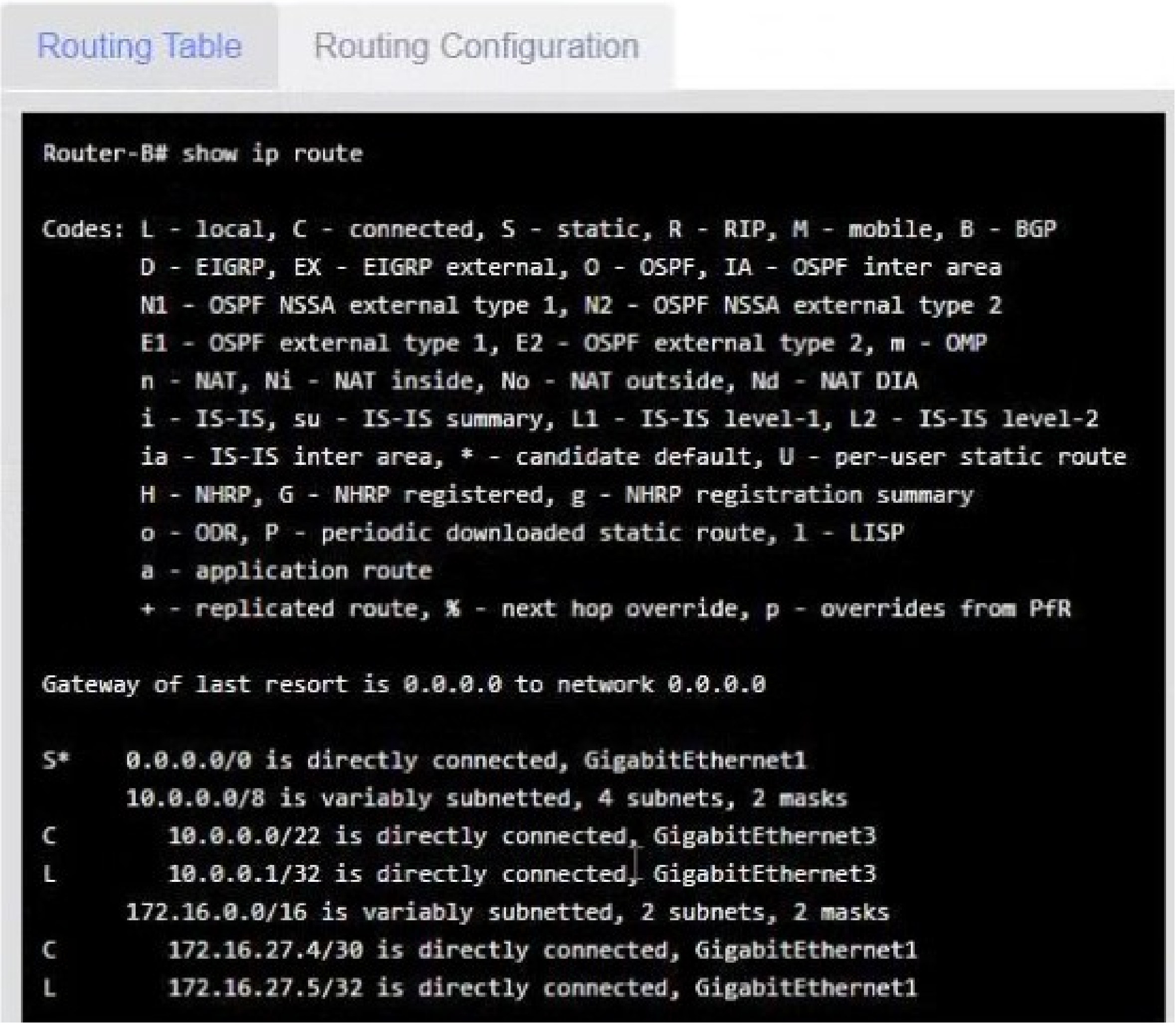
Answer: D

Explanation:

A tone generator is a device that emits an audible signal on a wire. A tone probe is a device that detects the signal on the wire. By attaching the tone generator to one end of the cable and using the tone probe to scan the other end, the technician can identify which switchport the cable is connected to. This method does not require any knowledge of the computer’s IP or MAC address, or access to the switch configuration. It is also faster and more reliable than physically tracing the cable or disconnecting the cable and looking for the link light to go out on the switch.
ReferencesHow to find what port im connected to on a switch from my PC?Switch Port Monitoring Guide - ComparitechFinding Out Which Network Switch Port My Computer is Connected

NEW QUESTION 276
- (Topic 3)
Users are unable to access files on their department share located on flle_server 2. The network administrator has been tasked with validating routing between networks hosting workstation A and file server 2.
INSTRUCTIONS
Click on each router to review output, identity any Issues, and configure the appropriate solution
If at any time you would like to bring back the initial state of trie simulation, please click the reset All button;



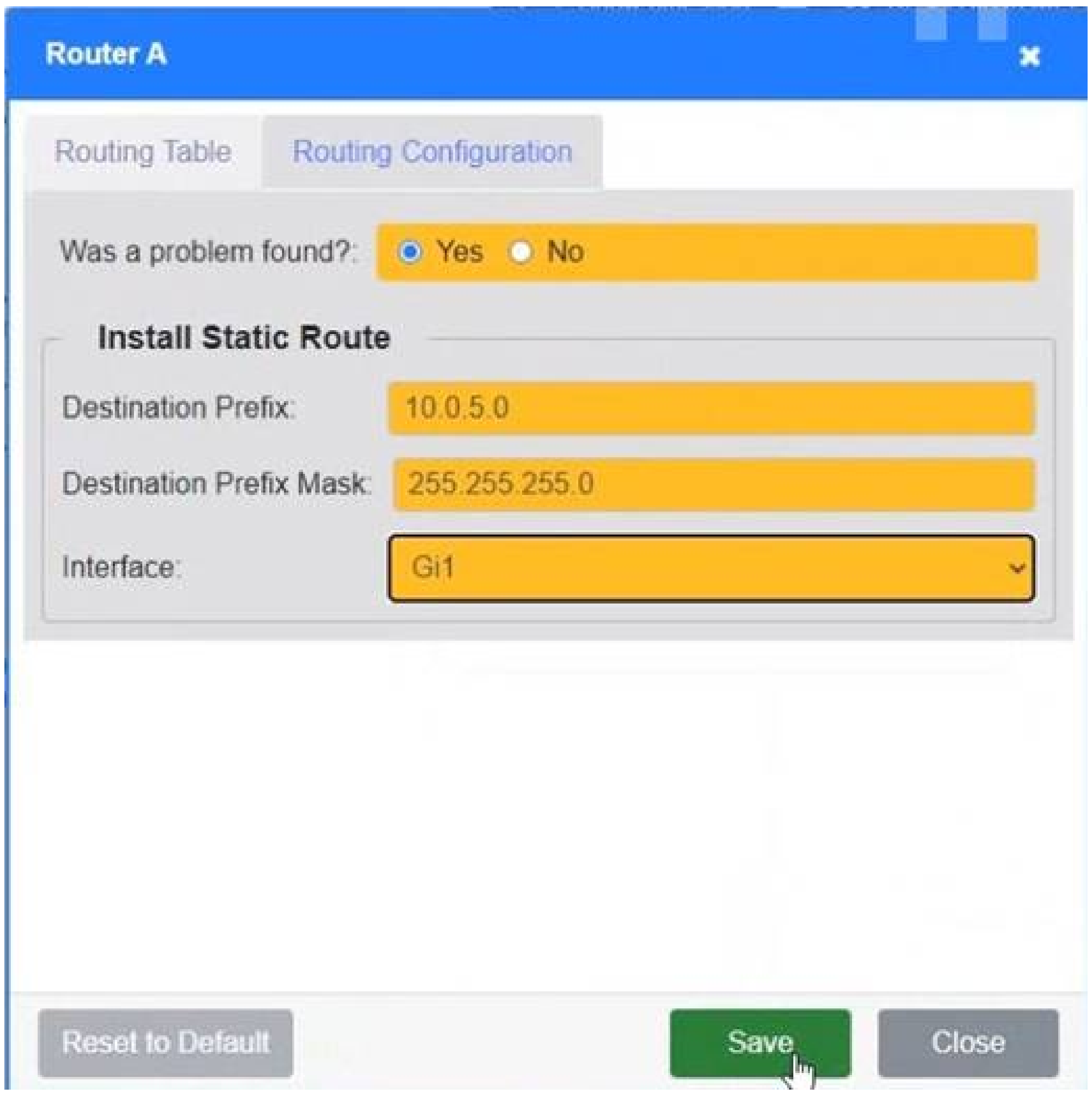


```
Router-B# show ip route

Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR

Gateway of last resort is 0.0.0.0 to network 0.0.0.0

S*    0.0.0.0/0 is directly connected, GigabitEthernet1
      10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C        10.0.0.0/22 is directly connected, GigabitEthernet3
L        10.0.0.1/32 is directly connected, GigabitEthernet3
      172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C        172.16.27.4/30 is directly connected, GigabitEthernet1
L        172.16.27.5/32 is directly connected, GigabitEthernet1
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
See the solution configuration below in Explanation.



Router A

Routing Table | Routing Configuration

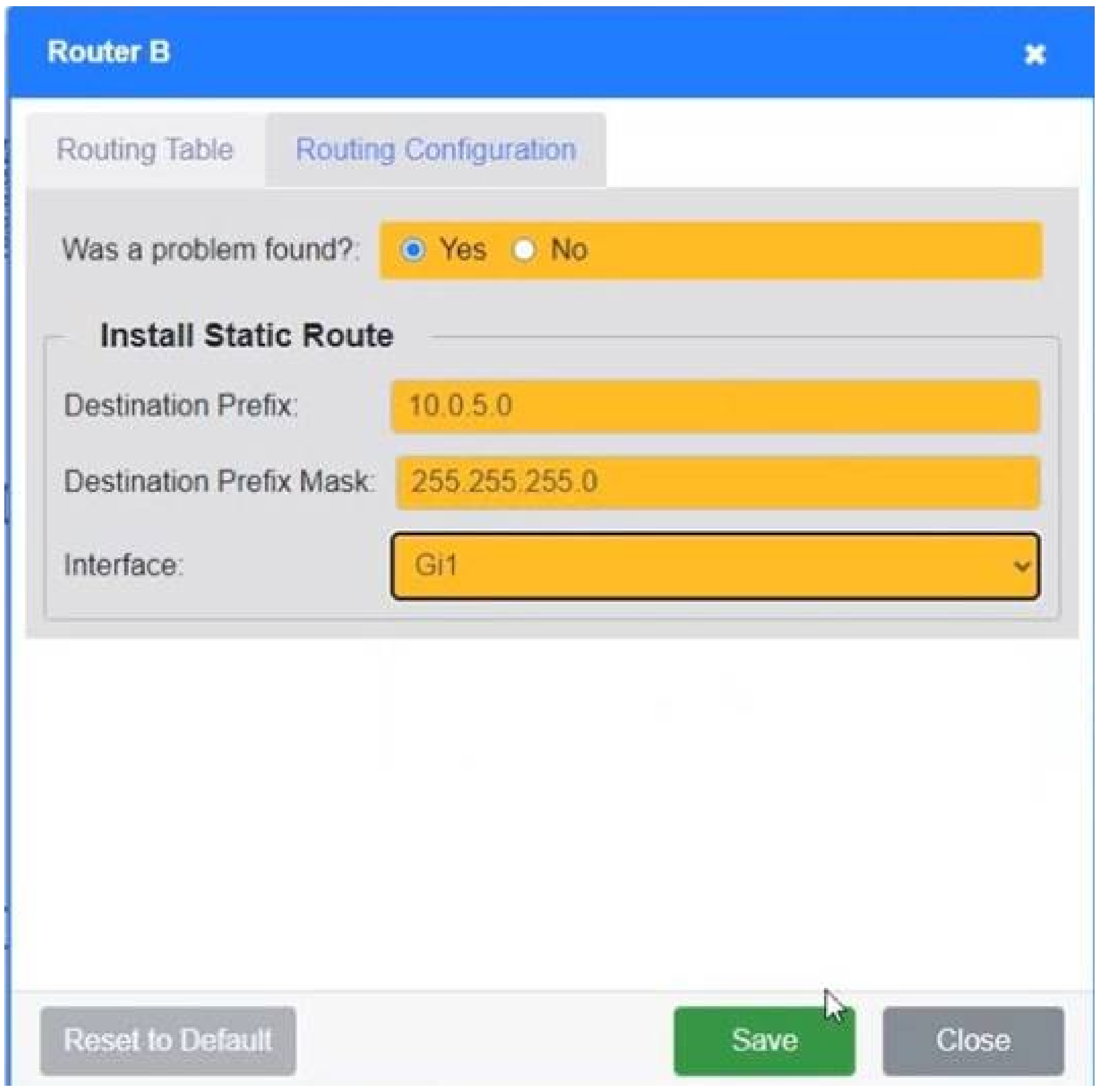
Was a problem found?: ● Yes ○ No

Install Static Route

Destination Prefix: 10.0.5.0

Destination Prefix Mask: 255.255.255.0

Interface: Gi1



Router B

Routing Table | Routing Configuration

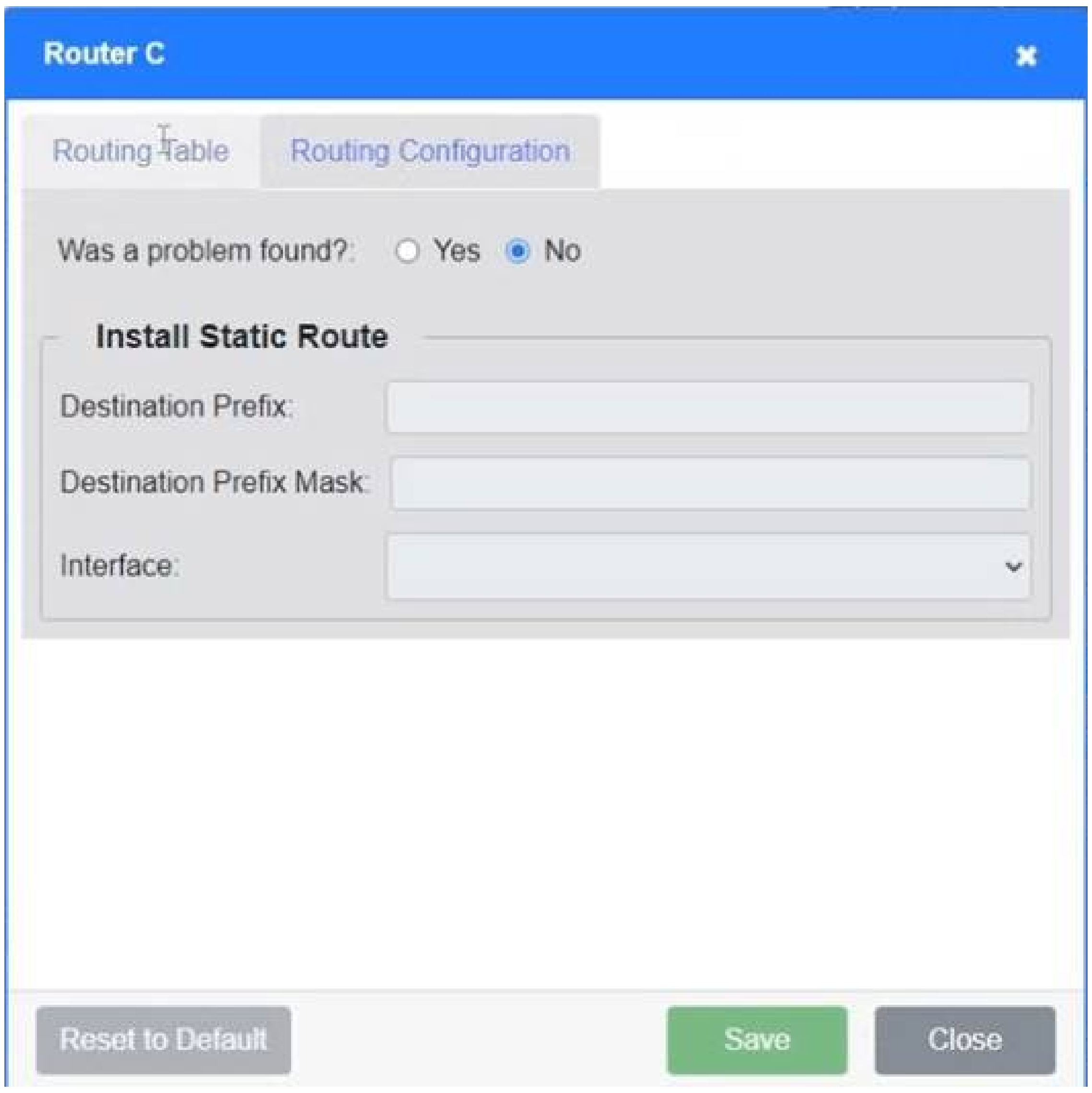
Was a problem found?: ● Yes ○ No

Install Static Route

Destination Prefix: 10.0.5.0

Destination Prefix Mask: 255.255.255.0

Interface: Gi1



Router C

Was a problem found?: ○ Yes ● No

Install Static Route

Destination Prefix:

Destination Prefix Mask:

Interface:

NEW QUESTION 280
- (Topic 3)
A network administrator is deploying a new switch and wants to make sure that the default priority value was set for a spanning tree. Which of the following values would the network administrator expect to see?

A. 4096
B. 8192
C. 32768
D. 36684

Answer: C

Explanation:
The default priority value for spanning tree is 32768, regardless of the STP version (legacy STP, RSTP, MSTP, Per-VLAN STP, Per-VLAN RSTP). This value can be modified by the network administrator to influence the root bridge election. The priority value must be set in increments of 4096, which is the minimum unit of change for the priority value. https://community.cisco.com/t5/switching/spanning-tree-default-priorities/td-p/3304365

NEW QUESTION 282
- (Topic 3)
A network technician is implementing a solution that will allow end users to gain access to multiple applications after logging on. Which of the following authentication methods would allow this type of access?

A. SSO
B. LDAP
C. EAP
D. TACACS+

Answer: A

NEW QUESTION 287
- (Topic 3)
An international company is transferring its IT assets including a number of WAPs from the United States to an office in Europe for deployment. Which of the following considerations should the company research before Implementing the wireless hardware?

A. WPA2 cipher
B. Regulatory Impacts
C. CDMA configuration
D. 802.11 standards

Answer: B

Explanation:
When transferring IT assets, including wireless access points (WAPs), from one country to another, it's important to research the regulatory impacts of the move. Different countries have different regulations and compliance requirements for wireless devices, such as frequency bands, power levels, and encryption standards. Failing to comply with these regulations can result in fines or other penalties.

NEW QUESTION 289
- (Topic 3)
A network administrator needs to set up a file server to allow user access. The organization uses DHCP to assign IP addresses. Which of the following is the best solution for the administrator to set up?

A. A separate scope for the file server using a 132 subnet
B. A reservation for the server based on the MAC address
C. A static IP address within the DHCP IP range
D. A SLAAC for the server

Answer: B

Explanation:
A reservation for the server based on the MAC address means that the DHCP server will assign a specific IP address to the file server every time it requests one, based on its MAC address. This way, the file server will have a consistent IP address that users can access, without the need to manually configure it or use a separate scope. A reservation also ensures that the IP address of the file server will not be given to any other device by the DHCP server

NEW QUESTION 290
- (Topic 3)
A company is utilizing multifactor authentication for data center access. Which of the following is the MOST effective security mechanism against physical intrusions due to stolen credentials?

A. Biometrics security hardware
B. Access card readers
C. Access control vestibule
D. Motion detection cameras

Answer: C

NEW QUESTION 295
- (Topic 3)
A technician is troubleshooting a user's connectivity issues and finds that the computer's IP address was changed to 169.254.0.1.
Which of the following is the most likely reason?

A. Two or more computers have the same IP address in the ARP table.
B. The computer automatically set this address because the DHCP was not available.
C. The computer was set up to perform as an NTP server.
D. The computer is on a VPN and is the first to obtain a different IP address in that network.

Answer: B

Explanation:
IP addresses beginning with 169.254. are called link-local addresses or APIPA (Automatic Private IP Addressing)1. They are assigned by the computer itself when it cannot reach a DHCP server to obtain a valid IP address from the network2. This can happen for several reasons, such as a faulty router, a misconfigured network, or a disconnected cable3.
To troubleshoot this issue, the technician should check the network settings, the router configuration, and the physical connection of the computer. The technician should also try to renew the IP address by using the command ipconfig /renew in Windows or dhclient in Linux. If the problem persists, the technician may need to contact the network administrator or the ISP for further assistance.

NEW QUESTION 297
- (Topic 3)
A newly installed VoIP phone is not getting the DHCP IP address it needs to connect to the phone system. Which of the following tasks needs to be completed to allow the phone to operate correctly?

A. Assign the phone's switchport to the correct VLAN
B. Statically assign the phone's gateway address.
C. Configure a route on the VoIP network router.
D. Implement a VoIP gateway

Answer: A

NEW QUESTION 300
- (Topic 3)
Many IP security cameras use RTSP to control media playback. Which of the following default transport layer port numbers does RTSP use?

A. 445
B. 554
C. 587
D. 5060

Answer: B

Explanation:
RTSP stands for Real Time Streaming Protocol and is an application-level network protocol designed for controlling media playback on streaming media servers. RTSP uses the default transport layer port number 554 for both TCP and UDP1. Port 445 is used for SMB (Server Message Block), a protocol for file and printer sharing. Port 587 is used for SMTP (Simple Mail Transfer Protocol), a protocol for sending email messages. Port 5060 is used for SIP (Session Initiation Protocol), a protocol for initiating and managing multimedia sessions.
References: 1 Real Time Streaming Protocol - Wikipedia (https://en.wikipedia.org/wiki/Real_Time_Streaming_Protocol)

NEW QUESTION 301
- (Topic 3)
Which of the following would be the MOST cost-effective recovery solution for a company's lower-priority applications?

A. Warm site
B. Cloud site
C. Hot site
D. Cold site

Answer: C

NEW QUESTION 304
- (Topic 3)
An auditor assessing network best practices was able to connect a rogue switch into a network Jack and get network connectivity. Which of the following controls would BEST address this risk?

A. Activate port security on the switchports providing end user access.
B. Deactivate Spanning Tree Protocol on network interfaces that are facing public areas.
C. Disable Neighbor Resolution Protocol in the Layer 2 devices.
D. Ensure port tagging is in place for network interfaces in guest areas

Answer: A

NEW QUESTION 308
- (Topic 3)
A network administrator is testing performance improvements by configuring channel bonding on an 802.Hac AP. Although a site survey detected the majority of the 5GHz frequency spectrum was idle, being used only by the company's WLAN and a nearby government radio system, the AP is not allowing the administrator to manually configure a large portion of the 5GHz frequency range. Which of the following would be BEST to configure for the WLAN being tested?

A. Upgrade the equipment to an AP that supports manual configuration of the ElRP power settings.
B. Switch to 802.11
C. disable channel auto-selection, and enforce channel bonding on the configuration.
D. Set up the AP to perform a dynamic selection of the frequency according to regulatory requirements.
E. Deactivate the band 5GHz to avoid Interference with the government radio

Answer: C

NEW QUESTION 313
- (Topic 3)
Which of the following OSI model layers would allow a user to access and download files from a remote computer?

A. Session
B. Presentation
C. Network
D. Application

Answer: D

Explanation:
The application layer of the OSI model (Open Systems Interconnection) is responsible for providing services to applications that allow users to access and download files from a remote computer. These services include file transfer, email, and web access, as well as other related services. In order for a user to access and download files from a remote computer, the application layer must provide the necessary services that allow the user to interact with the remote computer.

NEW QUESTION 317
- (Topic 3)
Which of the following is a document that states what the minimum performance expectations are within a network?

A. Memorandum of understanding
B. Service-level agreement
C. Non-disclosure agreement
D. Baseline metrics

Answer: B

Explanation:
A service-level agreement (SLA) is a document that states what the minimum performance expectations are within a network, such as uptime, throughput, latency, and security. An SLA is usually signed between a service provider and a customer, and it specifies the penalties or remedies if the service level is not met

NEW QUESTION 319
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