CompTIA

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 can have multiple VLAN interfaces?

A. Hub
B. Layer 3 switch
C. Bridge
D. Load balancer

Answer: B

NEW QUESTION 3
- (Topic 3)
Which of the following would most likely affect design considerations when building out an IDF?

A. The source panel amperage
B. The fire suppression system
C. The humidity levels
D. The cable transmission speeds

Answer: B

Explanation:
The fire suppression system is a design consideration when building out an IDF because it can affect the safety and reliability of the network equipment and cabling. A fire suppression system is a system that detects and extinguishes fires in a building, using water, gas, or chemicals. Depending on the type of fire suppression system, it can have different impacts on the IDF design, such as:
? Water-based systems, such as sprinklers, can damage the network equipment and cabling if they are activated by a fire or a false alarm. Therefore, the IDF should be designed to protect the equipment and cabling from water exposure, such as using waterproof cabinets, drip pans, and conduits.
? Gas-based systems, such as clean agent systems, can displace the oxygen in the IDF and cause suffocation for anyone inside. Therefore, the IDF should be designed to allow for ventilation and air circulation, as well as warning signs and alarms to alert anyone in the IDF before the gas is released.
? Chemical-based systems, such as dry chemical systems, can leave a residue on the network equipment and cabling that can affect their performance and lifespan. Therefore, the IDF should be designed to minimize the contact between the chemical and the equipment and cabling, as well as provide a means for cleaning and restoring them after a fire.
The other options are not correct because:
? The source panel amperage is not a design consideration when building out an IDF, as it is determined by the electrical circuit and the power needs of the network equipment and cabling. The source panel amperage does not affect the layout, location, or protection of the IDF.
? The humidity levels are not a design consideration when building out an IDF, as they are controlled by the HVAC system and the ventilation of the IDF. The humidity levels do not affect the layout, location, or protection of the IDF.
? The cable transmission speeds are not a design consideration when building out an IDF, as they are determined by the type and quality of the network cabling and the network equipment. The cable transmission speeds do not affect the layout, location, or protection of the IDF.

NEW QUESTION 4
- (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 5
- (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 6
- (Topic 3)
Which of the following is the MOST appropriate use case for the deployment of a clientless VPN?

A. Secure web access to internal corporate resources.
B. Upgrade security via the use of an NFV technology
C. Connect two data centers across the internet.
D. Increase VPN availability by using a SDWAN technology.

Answer: A

NEW QUESTION 7
- (Topic 3)
A network technician is troubleshooting a port channel issue. When logging in to one of the switches, the technician sees the following information displayed:
Native VLAN mismatch detected on interface g0/1
Which of the following layers of the OSI model is most likely to be where the issue resides?

A. Layer 2
B. Layer 3
C. Layer 5
D. Layer 6

Answer: A

Explanation:
Layer 2 of the OSI model is the data link layer, which is responsible for transferring data between adjacent nodes on a network. It uses protocols such as Ethernet, PPP, and HDLC to encapsulate data into frames and add MAC addresses for source and destination identification. It also uses protocols such as STP, LACP, and CDP to manage the physical links and prevent loops, aggregate bandwidth, and discover neighboring devices12
A native VLAN mismatch is a common Layer 2 issue that occurs when two switches are connected by a trunk port, but have different native VLANs configured on their interfaces. A native VLAN is the VLAN that is assigned to untagged frames on a trunk port. If the native VLANs do not match, the switches will drop the untagged frames and generate an error message. This can cause connectivity problems and security risks on the network345
To resolve a native VLAN mismatch, the network technician should ensure that both switches have the same native VLAN configured on their trunk ports, or use a different port mode such as access or general.

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)
A customer needs six usable IP addresses. Which of the following best meets this requirement?

A. 255.255.255.128
B. 255.255.255.192
C. 255.255.255.224
D. 255.255.255.240

Answer: C

NEW QUESTION 12
- (Topic 3)
A technician removes an old PC from the network and replaces it with a new PC that is unable to connect to the LAN. Which of the Mowing is MOST likely the cause of the issue?

A. Port security
B. Port tagging
C. Port aggregation
D. Port mirroring

Answer: A

Explanation:
It is most likely that the issue is caused by port security, as this is a feature that can prevent new devices from connecting to the LAN. Port tagging, port aggregation, and port mirroring are all features that are used to manage traffic on the network, but they are not related to the connectivity of new devices. If the technician has configured port security on the network and the new PC does not meet the security requirements, it will not be able to connect to the LAN.

NEW QUESTION 14
- (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 19
- (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 21
- (Topic 3)
A user calls the help desk to report being unable to reach a file server. The technician logs in to the user's computer and verifies that pings fall to respond back when trying to reach the file server. Which of the following would BEST help the technician verify whether the file server is reachable?

A. netstat
B. ipconfig
C. nslookup
D. traceroute

Answer: D

Explanation:
Traceroute is a network diagnostic tool that allows you to trace the path that network packets take from one device to another. By running traceroute to the file server, the technician can see the sequence of devices and networks that the packets pass through on their way to the file server. This can help the technician to determine if there is a problem with the network connection between the user's computer and the file server, or if the issue is with the file server itself.

NEW QUESTION 23
- (Topic 3)
A customer is adding fiber connectivity between adjacent buildings. A technician terminates the multimode cable to the fiber patch panel. After the technician connects the fiber patch cable, the indicator light
does not come on. Which of the following should a technician try first to troubleshoot this issue?

A. Reverse the fibers.
B. Reterminate the fibers.
C. Verify the fiber size.
D. Examine the cable runs for visual faults.

Answer: A

Explanation:
One of the most common causes of fiber connectivity issues is the reversal of the fibers. This means that the transmit (TX) and receive (RX) ports on one end of the fiber link are not matched with the corresponding ports on the other end. For example, if the TX port on one device is connected to the TX port on another device, and the same for the RX ports, then the devices will not be able to communicate with each other. This can result in no indicator light, no link, or no data transmission12.
To troubleshoot this issue, the technician should first try to reverse the fibers. This can be done by swapping the connectors at one end of the fiber patch cable, or by using a crossover adapter or cable that reverses the polarity of the fibers. The technician should then check if the indicator light comes on and if the devices can communicate properly12. The other options are not the first steps to troubleshoot this issue. Reterminating the fibers is a time-consuming and costly process that should be done only if there is evidence of physical damage or poor quality of the termination. Verifying the fiber size is not relevant in this scenario, as multimode fiber is compatible with multimode fiber, and any mismatch in core diameter or bandwidth would result in high attenuation, not complete loss of signal. Examining the cable runs for visual faults is a useful technique, but it requires a special tool called a visual fault locator (VFL) that emits a visible red light through the fiber and shows any breaks or bends along the cable. However, a VFL cannot detect polarity issues or connector problems, so it is not sufficient to troubleshoot this issue

NEW QUESTION 27
- (Topic 3)
A network technician 13 troubleshooting a specific port on a switch. Which of the following commands should the technician use to see the port configuration?

A. show route
B. show Interface
C. show arp
D. show port

Answer: B

Explanation:
To see the configuration of a specific port on a switch, the network technician should use the "show interface" command. This command provides detailed information about the interface, including the current configuration, status, and statistics for the interface.

NEW QUESTION 30

- (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 32
- (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 37
- (Topic 3)
Which of the following is an advantage of using the cloud as a redundant data center?

A. The process of changing cloud providers is easy.
B. Better security for company data is provided.
C. The initial capital expenses are lower.
D. The need for backups is eliminated.

Answer: C

Explanation:
Using the cloud as a redundant data center means that the company does not need to invest in building and maintaining a physical backup site, which can be costly and time- consuming. Instead, the company can pay for the cloud services as needed, which can reduce the initial capital expenses and operational costs. However, this does not mean that the other options are true. Changing cloud providers may not be easy due to compatibility, contractual, or regulatory issues. Security for company data may not be better in the cloud, depending on the cloud provider's policies and practices. The need for backups is not eliminated, as the cloud data still needs to be protected from loss, corruption, or unauthorized access.
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 using the cloud as a redundant data center.
? 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 cloud computing or data centers.
? 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 3.0: Network Operations, Objective 3.4: Given a scenario, use appropriate resources to support configuration management, Subobjective 3.4.2: Cloud-based configuration management, https://www.comptia.jp/pdf/comptia-network-n10-008-exam-objectives.pdf
? : Cloud Computing: Concepts, Technology & Architecture, Chapter 9: Fundamental Cloud Security, Section 9.1: Cloud Security Threats, https://ptgmedia.pearsoncmg.com/images/9780133387520/samplepages/9780133 387520.pdf
? : Cloud Computing: Principles and Paradigms, Chapter 19: Data Protection and Disaster Recovery for Cloud Computing, Section 19.1: Introduction, https://onlinelibrary.wiley.com/doi/pdf/10.1002/9780470940105.ch19

NEW QUESTION 42
- (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 47
- (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 50
- (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 53
- (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 57
- (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 60
- (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 65
- (Topic 3)
Which of the following is a valid and cost-effective solution to connect a fiber cable into a network switch without available SFP ports?

A. Use a media converter and a UTP cable
B. Install an additional transceiver module and use GBICs
C. Change the type of connector from SC to F-type
D. Use a loopback adapter to make the connection

Answer: A

NEW QUESTION 67
- (Topic 3)
A network administrator would like to purchase a device that provides access ports to endpoints and has the ability to route between networks. Which of the following would be BEST for the administrator to purchase?

A. An IPS
B. A Layer 3 switch
C. A router
D. A wireless LAN controller

Answer: B

NEW QUESTION 68
- (Topic 3)
A network administrator is reviewing the network device logs on a syslog server. The messages are normal but the stamps on the messages are incorrect. Which of the following actions should the administrator take to ensure the log message time stamps are correct?

A. Change the NTP settings on the network device
B. Change the time on the syslog server
C. Update the network device firmware
D. Adjust the timeout settings on the syslog server
E. Adjust the SSH settings on the network device.

Answer: A

NEW QUESTION 70
- (Topic 3)
Which of the following protocols can be used to change device configurations via encrypted and authenticated sessions? (Select TWO).

A. SNMPv3
B. SSh
C. Telnet
D. IPSec
E. ESP
F. Syslog

Answer: BD

NEW QUESTION 72
- (Topic 3)
Which of the following BEST describes a north-south traffic flow?

A. A public internet user accessing a published web server
B. A database server communicating with another clustered database server
C. A Layer 3 switch advertising routes to a router
D. A management application connecting to managed devices

Answer: A

Explanation:
A north-south traffic flow is a term used to describe the communication between a user or device outside the network and a server or service inside the network. For example, a public internet user accessing a published web server is a north-south traffic flow. This type of traffic flow typically crosses the network perimeter and requires security measures such as firewalls and VPNs. References: CompTIA Network+ N10-008 Certification Study Guide, page 16; The Official CompTIA Network+ Student Guide (Exam N10-008), page 1- 9.
North-south traffic flow refers to the flow of traffic between the internal network of an organization and the external world. This type of traffic typically flows from the internet to the organization's internal network, and back again.
Examples of north-south traffic flow include:
? A public internet user accessing a published web server
? A remote employee connecting to a VPN
? An email client sending email to an external server
? A customer connecting to an e-commerce website
References:
? CompTIA Network+ N10-008 Exam Objectives, Version 5.0, August 2022, page 12
? CompTIA Network+ Certification Study Guide, Seventh Edition, Todd Lammle, Sybex, 2022, page 17

NEW QUESTION 73
- (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 75
- (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 76
- (Topic 3)
A network technician wants to deploy a new wireless access point to reduce user latency. Currently, the organization has the following deployed:
Which of the following channels should the new device broadcast on?

A. Channel 3
B. Channel 9
C. Channel 10
D. Channel 11

Answer: D

Explanation:
The best channel for a new wireless access point is one that does not overlap with the existing channels used by other devices. Overlapping channels can cause interference and degrade the performance of the wireless network. According to the web search results, the 2.4 GHz band has 11 channels in the U.S., but only channels 1, 6, and 11 are non- overlapping. Since the existing devices are using channels 1 and 6, the new device should use channel 11 to avoid adjacent-channel interference12
References1: Why Channels 1, 6 and 11? | MetaGeek 2: How to Choose the Best Wi-Fi Channels for Your Network - Lifewire

NEW QUESTION 80
- (Topic 3)
A customer is hosting an internal database server. None of the users are able to connect to the server, even though it appears to be working properly. Which of the following is the best way to verify traffic to and from the server?

A. Protocol analyzer
B. nmap
C. ipconfig
D. Speed test

Answer: A

Explanation:
A protocol analyzer is the best way to verify traffic to and from the server. A protocol analyzer, also known as a packet sniffer or network analyzer, is a tool that captures and analyzes the network packets that are sent and received by a device. A protocol analyzer can show the source and destination IP addresses, ports, protocols, and payload of each packet, as well as any errors or anomalies in the network communication. A protocol analyzer can help troubleshoot network connectivity issues by identifying the root cause of the problem, such as misconfigured firewall rules, incorrect routing, or faulty network devices12.
To use a protocol analyzer to verify traffic to and from the server, the customer can follow these steps:
? Install a protocol analyzer tool on a device that is connected to the same network
as the server, such as Wireshark3 or Microsoft Network Monitor4.
? Select the network interface that is used to communicate with the server, and start capturing the network traffic.
? Filter the captured traffic by using the IP address or hostname of the server, or by using a specific port or protocol that is used by the database service.
? Analyze the filtered traffic and look for any signs of successful or failed connection attempts, such as TCP SYN, ACK, or RST packets, or ICMP messages.
? If there are no connection attempts to or from the server, then there may be a problem with the network configuration or device settings that prevent the traffic

from reaching the server.
? If there are connection attempts but they are rejected or dropped by the server, then there may be a problem with the server configuration or service settings that prevent the traffic from being accepted by the server.
The other options are not the best ways to verify traffic to and from the server. nmap is a tool that can scan a network and discover hosts and services, but it cannot capture and analyze the network packets in detail. ipconfig is a command that can display and configure the IP settings of a device, but it cannot monitor or test the network communication with another device. Speed test is a tool that can measure the bandwidth and latency of a network connection, but it cannot diagnose or troubleshoot specific network problems.

NEW QUESTION 81
- (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 84
- (Topic 3)
A company is reviewing ways to cut the overall cost of Its IT budget. A network technician suggests removing various computer programs from the IT budget and only providing these
programs on an as-needed basis. Which of the following models would meet this requirement?

A. Multitinency
B. laaS
C. SaaS
D. VPN

Answer: C

Explanation:
SaaS stands for Software as a Service and is a cloud computing model where software applications are hosted and delivered over the internet by a service provider. SaaS can help the company cut the overall cost of its IT budget by eliminating the need to purchase, install, update, and maintain various computer programs on its own devices. The company can access the programs on an as-needed basis and pay only for what it uses. Multitenancy is a feature of cloud computing where multiple customers share the same physical or virtual resources. IaaS stands for Infrastructure as a Service and is a cloud computing model where computing resources such as servers, storage, and networking are provided over the internet by a service provider. VPN stands for Virtual Private Network and is a technology that creates a secure and encrypted connection over a public network.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.9: Compare and contrast common network service types.

NEW QUESTION 87
- (Topic 3)
Which of the following redundant devices creates broadcast storms when connected together on a high-availability network?

A. Switches
B. Routers
C. Access points
D. Servers

Answer: A

Explanation:
Switches are devices that forward data based on MAC addresses. They create separate collision domains for each port, which reduces the chance of collisions on the network. However, if multiple switches are connected together without proper configuration, they can create broadcast storms, which are situations where broadcast frames are endlessly forwarded between switches, consuming network bandwidth and resources. Broadcast storms can be prevented by using protocols such as Spanning Tree Protocol (STP), which eliminates loops in the network topology. References: CompTIA Network+ N10-008 Certification Study Guide, page 67; The Official CompTIA Network+ Student Guide (Exam N10-008), page 2-14.

NEW QUESTION 89
- (Topic 3)
The Chief Executive Officer of a company wants to ensure business operations are not disrupted in the event of a disaster. The solution must have fully redundant equipment, real-time synchronization, and zero data loss. Which Of the following should be prepared?

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

Answer: C

Explanation:
A hot site is a backup site that is fully equipped and ready to take over the operations of the primary site in the event of a disaster. A hot site has real-time synchronization with the primary site and can provide zero data loss. A hot site is the most expensive and reliable option for disaster recovery.
References: Network+ Study Guide Objective 5.3: Explain common scanning, monitoring and patching processes and summarize their expected outputs.

NEW QUESTION 93

- (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 94
- (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 97
- (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 98
- (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 99
- (Topic 3)
A network administrator installed an additional IDF during a building expansion project. Which of the following documents need to be updated to reflect the change? (Select TWO).

A. Data loss prevention policy
B. BYOD policy
C. Acceptable use policy
D. Non-disclosure agreement
E. Disaster recovery plan
F. Physical network diagram

Answer: AF

NEW QUESTION 102
- (Topic 3)
An IT intern moved the location of a WAP from one conference room to another. The WAP was unable to boot following the move. Which of the following should be used to fix the issue?

A. Antenna
B. WLAN controller
C. Media converter
D. PoE injector

Answer: D

Explanation:
A PoE injector is a device that provides power over Ethernet (PoE) to a WAP or other network device that does not have a built-in power supply. A PoE injector connects to a power outlet and an Ethernet cable, and sends both power and data to the WAP. If the WAP was moved to a location where there is no power outlet or PoE switch, it would need
a PoE injector to boot up. References:
? Part 3 of the current page talks about PoE and PoE injectors as a way to power WAPs.
? [This article] explains how PoE injectors work and how to use them.

NEW QUESTION 107
- (Topic 3)
Which of the following topologies is designed to fully support applications hosted in on- premises data centers, public or private clouds, and SaaS services?

A. SDWAN
B. MAN
C. PAN
D. MPLS

Answer: A

NEW QUESTION 109
- (Topic 3)
A network administrator is configuring a new switch and wants to connect two ports to the core switch to ensure redundancy. Which of the following configurations would meet this
requirement?

A. Full duplex
B. 802.1Q tagging
C. Native VLAN
D. Link aggregation

Answer: D

Explanation:
Link aggregation is a technique that allows multiple physical ports to be combined into a single logical channel, which provides increased bandwidth, load balancing, and redundancy. Link aggregation can be configured using protocols such as Link Aggregation Control Protocol (LACP) or static methods.
References
? Link aggregation is one of the common Ethernet switching features covered in Objective 2.3 of the CompTIA Network+ N10-008 certification exam1.
? Link aggregation can be used to connect two ports to the core switch to ensure redundancy23.
? Link aggregation can be configured using LACP or static methods23.
1: CompTIA Network+ Certification Exam Objectives, page 5 2: Interface Configurations – N10-008 CompTIA Network+ : 2.3 3: CompTIA Network+ N10-008 Cert Guide, Chapter 11, page 323

NEW QUESTION 114
- (Topic 3)
Which of the following devices would be used to extend the range of a wireless network?

A. A repeater

B. A media converter
C. A router
D. A switch

Answer: A

Explanation:
A repeater is a device used to extend the range of a wireless network by receiving, amplifying, and retransmitting wireless signals. It is typically used to extend the range of a wireless network in a large area, such as an office building or a campus. Repeaters can also be used to connect multiple wireless networks together, allowing users to move seamlessly between networks. As stated in the CompTIA Network+ Study Manual, "a wireless repeater is used to extend the range of a wireless network by repeating the signal from one access point to another."

NEW QUESTION 117
- (Topic 3)
A technician received a report that some users in a large, 30-floor building are having intermittent connectivity issues. Users on each floor have stable connectivity, but do not have connectivity to other floors. Which of the following devices is MOST likely causing the issue?

A. User devices
B. Edge devices
C. Access switch
D. Core switch

Answer: D

Explanation:
A core switch is the most likely device causing the issue where users on each floor have stable connectivity, but do not have connectivity to other floors. A core switch is a high-performance switch that connects multiple access switches in a network. An access switch is a switch that connects end devices, such as computers and printers, to the network. A core switch acts as the backbone of the network, providing interconnection and routing between different subnets or VLANs. If the core switch is malfunctioning or misconfigured, it can prevent communication between different segments of the network, resulting in intermittent connectivity issues. References: [CompTIA Network+ Certification Exam Objectives], Core Switch vs Access Switch: What Are the Differences?

NEW QUESTION 118
- (Topic 3)
A network technician has determined the cause of a network disruption. Which of the following is the NEXT step for the technician to perform?

A. Validate the findings in a top-to-bottom approach
B. Duplicate the issue, if possible
C. Establish a plan of action to resolve the issue
D. Document the findings and actions

Answer: C

NEW QUESTION 119
- (Topic 3)
A network administrator is working to configure a new device to provide Layer 2 connectivity to various endpoints including several WAPs. Which of the following devices will the administrator MOST likely configure?

A. WLAN controller
B. Cable modem
C. Load balancer
D. Switch
E. Hub

Answer: D

Explanation:
A switch is a device that provides Layer 2 connectivity to various endpoints by forwarding frames based on MAC addresses. A switch can also connect to several WAPs (wireless access points) to provide wireless connectivity to wireless devices.

NEW QUESTION 122
- (Topic 3)
A technician completed troubleshooting and was able to fix an issue. Which of the following is the BEST method the technician can use to pass along the exact steps other technicians should follow in case the issue arises again?

A. Use change management to build a database
B. Send an email stating that the issue is resolved.
C. Document the lessons learned
D. Close the ticket and inform the users.

Answer: C

Explanation:
Documenting the lessons learned is the best method for passing along the exact steps other technicians should follow in case the issue arises again. Lessons learned are the knowledge and experience gained from completing a project or solving a problem. Documenting the lessons learned helps to capture the best practices, challenges, solutions, and recommendations for future reference and improvement. Documenting the lessons learned can also help to update the knowledge base, standard operating procedures, or policies related to the issue. References: [CompTIA Network+ Certification Exam Objectives], Lessons Learned: Definition & Examples for Project Managers

NEW QUESTION 123
- (Topic 3)
A customer needs to distribute Ethernet to multiple computers in an office. The customer would like to use non-proprietary standards. Which of the following blocks does the technician need to install?

A. 110
B. 66
C. Bix
D. Krone

Answer: A

Explanation:
A 110 block is a type of punch-down block that is used to distribute Ethernet to multiple computers in an office. A punch-down block is a device that connects one group of wires to another group of wires by using a special tool that pushes the wires into slots on the block. A 110 block is a non-proprietary standard that supports up to Category 6 cabling and can be used for voice or data applications. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 64)

NEW QUESTION 125
- (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 133
- (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 136
- (Topic 3)
A network technician receives a support ticket concerning multiple users who are unable access the company's shared drive. The switch interface that the shared drive Is connected to is displaying die following:

```
GigabitEthernet0/9 is down, line protocol is down (notconnect)
         Hardware is Gigabit Ethernet, address is C800.84bf.9847 (via c800.84bf.9847)
         MTU 1500 bytes, BW 10000 Kbit/sec, DLY 1000 usec,
         reliability 255/255. txload 1/255. rxload 1/255
         Encapsulation ARPA, loopback not set
```

Which of the following is MOST likely the Issue?

A. The switchport Is shut down
B. The cable Is not plugged In.
C. The loopoack Is not set

D. The bandwidth configuration is incorrect.

Answer: A

Explanation:
The switchport is shut down, which means it is administratively disabled and cannot forward traffic. The image shows that the switchport status is “down” and the protocol status is “down”, indicating that there is no physical or logical connection. The cable is plugged in, as shown by the “connected” message under the interface name. The loopback is not set, as shown by the “loopback not set” message under the encapsulation type. The bandwidth configuration is correct, as shown by the “BW 10000 Kbit/sec” message under the MTU size. References: [CompTIA Network+ Certification Exam Objectives], Domain 3.0 Infrastructure, Objective 3.1: Given a scenario, use appropriate networking tools, Subobjective: Command line tools (ping, netstat, tracert, etc.)

NEW QUESTION 141
- (Topic 3)
A network engineer needs to change an entire subnet of SLAAC-configured workstation addresses. Which of the following methods would be the best for the engineer to use?

A. Change the address prefix in ARP in order for the workstations to retrieve their new addresses.
B. Change the address prefix in a router in order for the router to advertise the new prefix with an ND.
C. Change the address prefix scope in a DHCP server in order for the workstations to retrieve their new addresses.
D. Change the workstations' address prefix manually because an automated method does not exist.

Answer: B

Explanation:
SLAAC (Stateless Address Autoconfiguration) is a mechanism that enables each host on the network to auto-configure a unique IPv6 address without any device keeping track of which address is assigned to which node12. SLAAC uses link-local addresses and the interface’s MAC address or a random number to generate the host portion of the IPv6 address2. SLAAC also relies on Router Solicitation (RS) and Router Advertisement (RA) messages to obtain the network prefix and other information from a router12. Therefore, to change an entire subnet of SLAAC-configured workstation addresses, the network engineer needs to change the address prefix in a router and let the router advertise the new prefix with an ND (Neighbor Discovery) message. This way, the workstations will receive the new prefix and update their IPv6 addresses accordingly3.
References1 - IPv6 Stateless Address Auto-configuration (SLAAC) | NetworkAcademy.io2 - IPv6 SLAAC – Stateless Address Autoconfiguration - Study-CCNA3 - Mastering IPv6
SLAAC Concepts and Configuration - Cisco Press

NEW QUESTION 146
- (Topic 3)
A security engineer is trying to determine whether an internal server was accessed by hosts on the internet. The internal server was shut down during the investigation Which of the following will the engineer review to determine whether the internal server had an unauthorized access attempt?

A. The server's syslog
B. The NetFlow statistics
C. The firewall logs
D. The audit logs on the core switch

Answer: A

NEW QUESTION 150
- (Topic 3)
Which of the following should a network administrator configure when adding OT devices to an organization's architecture?

A. Honeynet
B. Data-at-rest encryption
C. Time-based authentication
D. Network segmentation

Answer: D

Explanation:
Network segmentation is the process of dividing a network into smaller subnets or segments, each with its own security policies and access controls. This can help isolate OT devices from IT devices, guest networks, and other potential threats, as well as improve network performance and efficiency. Network segmentation is a recommended security practice for OT environments, as it can limit the attack surface, contain the damage of a breach, and comply with regulatory standards.
https://sectrio.com/complete-guide-to-ot-network-segmentation/

NEW QUESTION 154
- (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 156
- (Topic 3)
Which of the following should be used to manage outside cables that need to be routed to various multimode uplinks?

A. Fiber distribution panel
B. 110 punchdown block
C. PDU
D. TIA/EIA-568A patch bay
E. Cat 6 patch panel

Answer: A

Explanation:
A fiber distribution panel is a device that provides a central location for connecting and managing fiber optic cables and optical modules. It can support various types and speeds of fiber optic links, including multimode uplinks. Therefore, a fiber distribution panel should be used to manage outside cables that need to be routed to various multimode uplinks.

NEW QUESTION 157
- (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 159
- (Topic 3)
Which of the following network cables involves bouncing light off of protective cladding?

A. Twinaxial
B. Coaxial
C. Single-mode
D. Multimode

Answer: D

Explanation:
Multimode fiber optic cables use multiple paths of light that bounce off the cladding, which is a layer of glass or plastic that surrounds the core of the cable.
https://www.explainthatstuff.com/fiberoptics.html

NEW QUESTION 163
- (Topic 3)
A Chief Executive Officer and a network administrator came to an agreement With a vendor to purchase new equipment for the data center A document was drafted so all parties would be Informed about the scope of the project before It started. Which of the following terms BEST describes the document used?

A. Contract
B. Project charter
C. Memorandum of understanding
D. Non-disclosure agreement

Answer: B

Explanation:
The document used to inform all parties about the scope of the project before it starts is likely a project charter.
A project charter is a document that outlines the key aspects of a project, including the project's objectives, scope, stakeholders, and resources. It serves as a formal agreement between the project team and the stakeholders, and helps to define the project's goals and constraints.
A project charter typically includes information about the project's scope, including the specific deliverables that are expected and any constraints or limitations that may impact the project. It may also include details about the project team and stakeholders, the project schedule and budget, and the roles and responsibilities of each party.
By creating a project charter, the Chief Executive Officer and the network administrator can ensure that all parties involved in the project have a clear understanding of the project's goals and objectives, and can help to prevent misunderstandings or miscommunications during the project.
What is in a project charter?
A project charter is a formal short document that states a project exists and provides project managers with written authority to begin work. A project charter document describes a project to create a shared understanding of its goals, objectives and resource requirements before the project is scoped out in detail.
What are the 5 elements of the project charter?
What Are the Contents of a Project Charter? A project charter should always include an overview, an outline of scope, an approximate schedule, a budget estimate, anticipated risks, and key stakeholders

NEW QUESTION 167
- (Topic 3)
A network technician is attempting to increase throughput by configuring link port aggregation between a Gigabit Ethernet distribution switch and a Fast Ethernet access switch. Which of the following is the BEST choice concerning speed and duplex for all interfaces that are participating in the link aggregation?

A. Half duplex and 1GB speed
B. Full duplex and 1GB speed
C. Half duplex and 10OMB speed
D. Full duplex and 100MB speed

Answer: B

Explanation:
The best choice for configuring link port aggregation between a Gigabit Ethernet distribution switch and a Fast Ethernet access switch is to use full duplex and 1GB speed for all interfaces that are participating in the link aggregation. This will allow for maximum throughput, as the full duplex connection will enable simultaneous sending and receiving of data, and the 1GB speed will ensure that the data is transferred quickly. According to the CompTIA Network+ Study Guide, “Full-duplex Ethernet allows the network adapter to transmit and receive data simultaneously, which can result in double the bandwidth of half-duplex Ethernet.” Additionally, the official text states, “Ethernet and Fast Ethernet use different speeds for data transmission, with Ethernet being 1,000 megabits (1 gigabit) per second and Fast Ethernet being 100 megabits per second.”

NEW QUESTION 171
- (Topic 3)
A user took a laptop on a trip and made changes to the network parameters while at the airport. The user can access all internet websites but not corporate intranet websites. Which of the following is the most likely cause of the issue?

A. Duplicate IP address
B. Duplicate SSID
C. Incorrect DNS
D. Incorrect subnet mask

Answer: C

Explanation:
DNS (Domain Name System) is a service that translates domain names into IP addresses. Corporate intranet websites are usually hosted on private IP addresses that are not accessible from the public internet. Therefore, the user’s laptop needs to use the correct DNS server that can resolve the intranet domain names to the private IP addresses. If the user changed the network parameters at the airport and did not revert them back, the laptop might be using a public DNS server that does not have the records for the intranet websites. This would cause the user to access all internet websites but not corporate intranet websites.
References:
? An Overview of DNS - N10-008 CompTIA Network+ : 1.61
? DNS Configuration – CompTIA A+ 220-11012
? CompTIA Network+ Certification Exam Objectives, page 53

NEW QUESTION 176
- (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 181

- (Topic 3)
The lack of a formal process to grant network permissions to different profiles of employees and contractors is leading to an increasing number of security incidents Non-uniform and overly permissive network accesses are being granted. Which of the following would be the MOST appropriate method to improve the security of the environment?

A. Change the default permissions to implicit deny
B. Configure uniform ACLs to employees and NAC for contractors.
C. Deploy an RDP server to centralize the access to the network
D. Implement role-based access control

Answer: D

Explanation:
The most appropriate method to improve the security of the environment would be to implement role-based access control (RBAC). With RBAC, users are granted access to the network based on their role within the organization. This allows for more granular access control, as different roles may require different levels of access. Additionally, this ensures that users only have access to the resources they need and no more. This helps to reduce the risk of unauthorized access or misuse of the network. References and further information can be found in the CompTIA Network+ Study Manual, Chapter 8, Access Control.
RBAC is a method of restricting network access based on the roles of individual users within the organization. With RBAC, users are granted access only to the resources they need to perform their specific job functions. This approach reduces the risk of unauthorized access, provides greater visibility into user activity, and simplifies network management. Changing the default permissions to implicit deny may improve security, but it could also cause issues for legitimate users who require access to specific resources. Configuring uniform ACLs and NAC for contractors is a step in the right direction, but it may not be enough to address the overall lack of a formal process for granting network permissions. Deploying an RDP server to centralize access to the network is not a viable solution, as it would not address the root cause of the security incidents.
Therefore, the most appropriate option is to implement role-based access control. Reference: CompTIA Network+ Study Guide, Fourth Edition, Chapter 7, section 7.4.

NEW QUESTION 184
- (Topic 3)
A network technician is having issues connecting an IoT 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 187
- (Topic 3)
A network client is trying to connect to the wrong TCP port. Which of the following responses would the client MOST likely receive?

A. RST
B. FIN
C. ICMP Time Exceeded
D. Redirect

Answer: A

NEW QUESTION 192
- (Topic 3)
A network administrator wants to test the throughput of a new metro Ethernet circuit to verify that its performance matches the requirements specified m the SLA. Which of the following would BEST help measure the throughput?

A. iPerf
B. Ping
C. NetFlow
D. Netstat

Answer: A

NEW QUESTION 193
- (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 197
- (Topic 3)
A technician was cleaning a storage closet and found a box of transceivers labeled 8Gbps. Which of the following protocols uses those transceivers?

A. Coaxial over Ethernet
B. Internet Small Computer Systems Interface
C. Fibre Channel
D. Gigabit interface converter

Answer: C

Explanation:
The transceivers labeled 8Gbps are likely to be used with the Fibre Channel protocol. Fibre Channel is a high-speed networking technology that is primarily used to connect storage devices to servers in storage area networks (SANs). It is capable of transmitting data at speeds of up to 8 Gbps (gigabits per second), and uses specialized transceivers to transmit and receive data over fiber optic cables.
Coaxial over Ethernet (CoE) is a networking technology that uses coaxial cables to transmit data, and is not related to the transceivers in question. Internet Small Computer Systems Interface (iSCSI) is a protocol that allows devices to communicate over a network using the SCSI protocol, and does not typically use specialized transceivers. Gigabit interface converter (GBIC) is a type of transceiver used to transmit and receive data over fiber optic cables, but it is not capable of transmitting data at 8 Gbps.

NEW QUESTION 202
- (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 203
- (Topic 3)
A company wants to invest in new hardware for the core network infrastructure. The management team requires that the infrastructure be capable of being repaired in less than 60 minutes if any major part fails. Which of the following metrics is MOST likely associated with this requirement?

A. RPO
B. MTTR
C. FHRP
D. MTBF

Answer: B

Explanation:
MTTR is directly related to how quickly a system can be repaired if any major part fails3. The management team requires that the infrastructure be capable of being repaired in less than 60 minutes, which means they have a low MTTR requirement.
MTTR stands for Mean Time To Repair and is a metric used to measure the average amount of time it takes to repair a failed component or system. In this case, the requirement is for the infrastructure to be capable of being repaired in less than 60 minutes if any major part fails, which means the MTTR should be less than 60 minutes.

NEW QUESTION 204
- (Topic 3)
Which of the following would be the BEST choice to connect branch sites to a main office securely?

A. VPN headend
B. Proxy server
C. Bridge
D. Load balancer

Answer: A

Explanation:
Host-to-Site, or Client-to-Site, VPN allows for remote servers, clients, and other hosts to establish tunnels through a VPN gateway (or VPN headend) via a private network. The tunnel between the headend and the client host encapsulates and encrypts data.

NEW QUESTION 208
- (Topic 3)
A technician is setting up DNS records on local servers for the company's cloud DNS to enable access by hostname. Which of the following records should be used?

A. A
B. MX
C. CNAME
D. NS

Answer: A

Explanation:
An A record, also known as an address record, is a type of DNS record that maps a hostname to an IPv4 address. An A record is used to resolve a domain name to an IP address, so that clients can connect to the server or service by using the domain name instead of the IP address. For example, an A record can map www.example.com to 192.0.2.1.
An A record is the most common type of DNS record for cloud DNS, as it allows the company to use a custom domain name for their cloud services, such as web hosting, email, or storage. An A record can also be used to create subdomains, such as blog.example.com or mail.example.com, that point to different IP addresses or servers. The other options are not correct because they are not the best type of DNS record for cloud DNS. They are:
? MX. MX stands for mail exchange, and it is a type of DNS record that specifies the
mail servers that are responsible for receiving and delivering email messages for a domain name. MX records are used for email services, but they are not sufficient for cloud DNS, as they do not map a hostname to an IP address.
? CNAME. CNAME stands for canonical name, and it is a type of DNS record that specifies an alias name for another domain name. CNAME records are used to create multiple names for the same IP address or server, such as www.example.com and example.com. CNAME records are useful for cloud DNS, but they are not the best type, as they depend on another A record to resolve the IP address.
? NS. NS stands for name server, and it is a type of DNS record that delegates a DNS zone to an authoritative server. NS records are used to specify which DNS servers are responsible for answering queries for a domain name or a subdomain. NS records are essential for cloud DNS, but they are not the best type, as they do not map a hostname to an IP address.
References1: DNS records overview | Google Cloud2: Network+ (Plus) Certification | CompTIA IT Certifications3: ClouDNS: What is a DNS record?

NEW QUESTION 209
- (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 211
- (Topic 3)
A network team is getting reports that air conditioning is out in an IDF. The team would like to determine whether additional network issues are occurring. Which of the following should the network team do?

A. Confirm that memory usage on the network devices in the IDF is normal.
B. Access network baseline data for references to an air conditioning issue.
C. Verify severity levels on the corporate syslog server.
D. Check for SNMP traps from a network device in the IDF.
E. Review interface statistics looking for cyclic redundancy errors.

Answer: D

Explanation:
"Baselines play an integral part in network documentation because they let you monitor the network's overall performance. In simple terms, a baseline is a measure of performance that indicates how hard the network is working and where network resources are spent. The purpose of a baseline is to provide a basis of comparison. For example, you can compare the network's performance results taken in March to results taken in June, or from one year to the next. More commonly, you would compare the baseline information at a time when the network is having a problem to information recorded when the network was operating with greater efficiency. Such comparisons help you determine whether there has been a problem with the network, how significant that problem is, and even where the problem lies."

NEW QUESTION 215
- (Topic 3)
Which of the following disaster recovery metrics describes the average length of time a piece of equipment can be expected to operate normally?

A. RPO
B. RTO
C. MTTR
D. MTBF

Answer: D

Explanation:

MTBF is the disaster recovery metric that describes the average length of time a piece of equipment can be expected to operate normally. MTBF stands for mean time between failures, which is a measure of the reliability and availability of a device or system. MTBF is calculated by dividing the total operating time by the number of failures that occurred during that time. MTBF indicates how often a device or system fails and how long it can run without interruption. A higher MTBF means a lower failure rate and a longer operational life span. References: [CompTIA Network+ Certification Exam Objectives], What Is Mean Time Between Failures (MTBF)? | Definition & Examples | Forcepoint

NEW QUESTION 218
- (Topic 3)
A company has wireless APS that were deployed with 802.11g. A network engineer has noticed more frequent reports of wireless performance issues during the lunch hour in comparison to the rest of the day. The engineer thinks bandwidth consumption will increase while users are on their breaks, but network utilization logs do not show increased bandwidth numbers. Which Of the following would MOST likely resolve this issue?

A. Adding more wireless APS
B. Increasing power settings to expand coverage
C. Configuring the APS to be compatible with 802.1la
D. Changing the wireless channel used

Answer: C

Explanation:
* 802.11g is an older wireless standard that operates in the 2.4 GHz frequency band and has a maximum data rate of 54 Mbps. 802.11a is a newer wireless standard that operates in the 5 GHz frequency band and has a maximum data rate of 54 Mbps. By configuring the APS to be compatible with 802.11a, the network engineer can reduce interference and congestion in the 2.4 GHz band and improve wireless performance.
References: Network+ Study Guide Objective 2.5: Implement network troubleshooting methodologies

NEW QUESTION 222
- (Topic 3)
A company has a geographically remote office. In order to connect to the internet, the company has decided to use a satellite WAN link. Which of the following is the GREATEST concern for this type of connection?

A. Duplex
B. Collisions
C. Jitter
D. Encapsulation

Answer: C

Explanation:
itter is the variation in latency or delay of packets in a network. Satellite WAN links have high latency and are prone to jitter, which can affect the quality of voice and video applications. Jitter is the greatest concern for this type of connection

NEW QUESTION 224
- (Topic 3)
An organization would like to implement a disaster recovery strategy that does not require a facility agreement or idle hardware. Which of the following strategies MOST likely meets the organization's requirements?

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

Answer: A

Explanation:
A cloud site is a type of disaster recovery site that uses cloud computing services to provide backup and recovery of data and applications in the event of a disaster1. A cloud site does not require a facility agreement or idle hardware, as the cloud provider manages the infrastructure and resources on demand. A cloud site can also offer scalability, flexibility, and cost-effectiveness compared to other types of disaster recovery sites.

NEW QUESTION 227
- (Topic 3)
To comply with an industry regulation, all communication destined to a secure server should be logged and archived on a storage device. Which of the Mowing can be configured to fulfill this requirement?

A. QoS traffic classification
B. Port mirroring
C. Flow control
D. Link Aggregation Control Protocol

Answer: B

NEW QUESTION 228
- (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 232
- (Topic 3)
A security team would like to use a system in an isolated network to record the actions of potential attackers. Which of the following solutions is the security team implementing?

A. Perimeter network
B. Honeypot
C. Zero trust infrastructure
D. Network segmentation

Answer: B

Explanation:
The solution that the security team is implementing to record the actions of potential attackers in an isolated network is a honeypot. A honeypot is a decoy system that simulates a real network or service, but has no actual value or function. A honeypot is designed to attract and trap attackers who try to infiltrate or compromise the network, and then monitor and analyze their behavior and techniques. A honeypot can help the security team learn about the attackers' motives, methods, and tools, and improve their defense
strategies accordingly. References: CompTIA Network+ N10-008 Certification Study Guide, page 358; The Official CompTIA Network+ Student Guide (Exam N10-008), page 14-1.

NEW QUESTION 236
- (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 240
- (Topic 3)
A network administrator requires redundant routers on the network, but only one default gateway is configurable on a workstation. Which of the following will allow for redundant routers with a single IP address?

A. EIGRP
B. VRRP
C. MPLS
D. STP

Answer: B

Explanation:
Virtual Router Redundancy Protocol (VRRP) is a protocol that allows for redundant routers on the network with a single IP address. VRRP works by creating a virtual router that consists of one master router and one or more backup routers. The virtual router has its own IP address and MAC address that are shared among the routers in the group. The master router responds to traffic sent to the virtual router's IP address, while the backup routers monitor the master router's status. If the master router fails, one of the backup routers takes over as the new master router and continues to respond to traffic. This way, VRRP provides high availability and fault tolerance for the network. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 230)

NEW QUESTION 243
- (Topic 3)
A network administrator is setting up a web-based application for a company. The application needs to be continually accessible to all end users.
Which of the following would best ensure this need is fulfilled?

A. NIC teaming
B. Cold site
C. Snapshots

D. High availability

Answer: D

Explanation:
High availability is a quality of a system or component that assures a high level of operational performance for a given period of time. High availability means that an IT system, component, or application can operate at a high level, continuously, without intervention, for a given time period. High-availability infrastructure is configured to deliver quality performance and handle different loads and failures with minimal or zero downtime. High availability is important for web-based applications, as it ensures that the application is always accessible to the end users, even in the event of a server or component failure. High availability can be achieved by eliminating single points of failure, implementing redundancy, load balancing, and failover mechanisms.

NEW QUESTION 248
- (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 253
- (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 258
- (Topic 3)
During a recent security audit, a contracted penetration tester discovered the organization uses a number of insecure protocols. Which of the following ports should be disallowed so only encrypted protocols are allowed? (Select TWO).

A. 22
B. 23
C. 69
D. 443
E. 587
F. 8080

Answer: BC

NEW QUESTION 262
- (Topic 3)
An infrastructure company is implementing a cabling solution to connect sites on multiple continents. Which of the following cable types should the company use for this project?

A. Cat 7
B. Single-mode

C. Multimode
D. Cat 6

Answer: B

Explanation:
Single-mode fiber is a type of optical fiber that has a small core diameter and allows only one mode of light to propagate. This reduces signal attenuation and increases transmission distance, making it suitable for long-distance communication networks.
Single-mode fiber can carry data over thousands of kilometers without requiring repeaters or amplifiers. Single-mode fiber is also immune to electromagnetic interference and has a higher bandwidth than multimode fiber. Therefore, single-mode fiber is the best cable type for connecting sites on multiple continents.
References: [CompTIA Network+ Certification Exam Objectives], [Single-mode optical fiber - Wikipedia]
Single-mode fiber optic cable uses a single ray of light to transmit data. This allows it to achieve very low attenuation and high bandwidth.
Multimode fiber optic cable uses multiple rays of light to transmit data. This results in higher attenuation and lower bandwidth than single-mode cable.
Twisted pair copper cable uses two insulated copper wires to transmit data. It is less expensive than fiber optic cable, but it has higher attenuation and lower bandwidth. When choosing a cable type for a long-distance application, it is important to consider the following factors:
? Attenuation: The amount of signal loss that occurs over the length of the cable.
? Bandwidth: The amount of data that can be transmitted over the cable per second.
? Cost: The cost of the cable and installation.
Single-mode fiber optic cable is the best choice for long-distance applications because it
has the lowest attenuation and highest bandwidth of any cable type. However, it is also the most expensive cable type.

NEW QUESTION 263
- (Topic 3)
An engineer needs to verity the external record tor SMTP traffic. The engineer logged in to the server and entered the nslookup command. Which of the following commands should the engineer send before entering the DNS name?

A. set type=A
B. is -d company-mail.com
C. set domain=company.mail.com
D. set querytype=Mx

Answer: D

NEW QUESTION 265
- (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 269
- (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 270
- (Topic 3)
A network deployment engineer is deploying a new single-channel 10G optical connection. Which of the following optics should the engineer MOST likely use to satisfy this requirement?

A. QSFP
B. QSFP+

C. SFP
D. SFP+

Answer: D

Explanation:
SFP+ is a type of optical transceiver that supports 10G single-channel transmission over fiber optic cables. SFP+ stands for small form-factor pluggable plus, and it is compatible with SFP slots on switches and routers.

NEW QUESTION 271
- (Topic 3)
A security vendor needs to add a note to the DNS to validate the ownership of a company domain before services begin. Which of the following records did the security company MOST likely ask the company to configure?

A. TXT
B. AAAA
C. CNAME
D. SRV

Answer: A

Explanation:
TXT stands for Text and is a type of DNS record that can store arbitrary text data associated with a domain name. TXT records can be used for various purposes, such as verifying the ownership of a domain, providing information about a domain, or implementing security mechanisms such as SPF (Sender Policy Framework) or DKIM (DomainKeys Identified Mail). In this scenario, the security company most likely asked the company to configure a TXT record with a specific value that can prove the ownership of the domain. AAAA stands for IPv6 Address and is a type of DNS record that maps a domain name to an IPv6 address. CNAME stands for Canonical Name and is a type of DNS record that maps an alias name to another name. SRV stands for Service and is a type of DNS record that specifies the location of a service on a network.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.8: Explain the purposes and use cases for advanced networking devices.

NEW QUESTION 272
- (Topic 3)
Which of the following is a valid alternative to maintain a deployed proxy technology while saving physical space in the data center by moving the network service to the virtualization infrastructure?

A. NFV
B. SDWAN
C. Networking as code
D. VIP

Answer: A

Explanation:
The valid alternative to maintain a deployed proxy technology while saving physical space in the data center by moving the network service to the virtualization infrastructure is NFV (Network Function Virtualization). NFV is a technique that allows network functions, such as proxies, firewalls, routers, or load balancers, to be implemented as software applications running on virtual machines or containers. NFV reduces the need for dedicated hardware devices and improves scalability and flexibility of network
services. References: CompTIA Network+ N10-008 Certification Study Guide, page 440; The Official CompTIA Network+ Student Guide (Exam N10-008), page 16-11.
NFV can be used to virtualize a wide variety of network functions, including proxy servers. By virtualizing proxy servers, organizations can save physical space in the data center and
improve the scalability and efficiency of their networks.
To virtualize a proxy server using NFV, an organization would need to deploy a virtualization platform, such as VMware ESXi or Microsoft Hyper-V. The organization would then need to install a virtual proxy server appliance on the virtualization platform.
Once the virtual proxy server appliance is installed, it can be configured and used just like a physical proxy server.
NFV is a relatively new technology, but it is quickly gaining popularity as organizations look for ways to improve the efficiency and scalability of their networks.

NEW QUESTION 274
- (Topic 3)
A technician is concerned about unauthorized personnel moving assets that are installed in a data center server rack. The technician installs a networked sensor that sends an alert when the server rack door is opened. Which of the following did the technician install?

A. Cipher lock
B. Asset tags
C. Access control vestibule
D. Tamper detection

Answer: D

Explanation:
Tamper detection is a physical security feature that can alert the technician when someone opens the server rack door without authorization. Tamper detection sensors can be installed inside the equipment or on the rack itself, and they can send an alert via email, SMS, or other methods. Tamper detection can help prevent unauthorized access, theft, or damage to the network assets.
References:
? Physical Security – N10-008 CompTIA Network+ : 4.51

NEW QUESTION 278
- (Topic 3)

A technician is consolidating a topology with multiple SSIDs into one unique SSiD deployment. Which of the following features will be possible after this new configuration?

A. Seamless roaming
B. Basic service set
C. WPA
D. MU-MIMO

Answer: A

NEW QUESTION 280
- (Topic 3)
A network engineer is concerned about VLAN hopping happening on the network. Which of the following should the engineer do to address this concern?

A. Configure private VLANS.
B. Change the default VLAN.
C. Implement ACLs on the VLAN.
D. Enable dynamic ARP inspection.

Answer: B

Explanation:
VLAN hopping is a type of attack that allows an attacker to access or manipulate traffic on a different VLAN than the one they are connected to. One way to prevent VLAN hopping is to change the default VLAN on a switch. The default VLAN is the VLAN that is assigned to all ports on a switch by default, usually VLAN 1. If an attacker connects to an unused port on a switch that has not been configured with a specific VLAN, they can access or spoof traffic on the default VLAN. By changing the default VLAN to an unused or isolated VLAN, the network administrator can prevent unauthorized access or interference with legitimate traffic on other VLANs. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 308)

NEW QUESTION 283
- (Topic 3)
Following the implementation of a BYOO policy. some users in a high-density environment report slowness over the wireless connection. Some wireless controller reports indicate high latency and airtime contention. Which of the following is the most probable root cause?

A. The AP is configured with 2.4GHz frequency, which the new personal devices do not support.
B. The AP is configured with 2.4GHz frequency without band-steering capabilities.
C. The AP is configured with 5Ghz frequency with band-steering capabiäties.
D. The AP is configured with 5Ghz frequenc
E. which the new personal devices do not support

Answer: B

Explanation:
Band-steering is a feature that allows an AP to steer dual-band capable clients to the less congested 5GHz frequency, leaving the 2.4GHz frequency for legacy clients. Without band- steering, the AP may have more clients competing for the same channel on the 2.4GHz frequency, resulting in high latency and airtime contention.
References:
? According to the CompTIA Network+ Certification Exam Objectives, one of the topics covered in the exam is “Given a scenario, use appropriate wireless technologies and configurations”. One of the subtopics is “Band steering” 1.
? According to the PoliFi: Airtime Policy Enforcement for WiFi paper, “Band steering allows the access point to disable the 2.4 GHz band from probing the client device, so it responds only to the 5 GHz band, reducing the congestion on the 2.4 GHz band while taking advantage of the faster 5GHz band to improve user’s network experience.” 2.
? According to the Aruba Air Slice Tech Brief, “Air Slice minimizes airtime contention and efficiently groups Wi-Fi 6 and non-Wi-Fi 6 client devices to guarantee bit rate, and provide bounded latency and jitter simultaneously.” 3.

NEW QUESTION 288
- (Topic 3)
A technician is configuring a static IP address on a new device in a newly created subnet. The work order specifies the following requirements:
• The IP address should use the highest address available in the subnet.
• The default gateway needs to be set to 172.28.85.94.
• The subnet mask needs to be 255.255.255.224.
Which of the following addresses should the engineer apply to the device?

A. 172.28.85.93
B. 172.28.85.95
C. 172.28.85.254
D. 172.28.85.255

Answer: A

Explanation:
https://www.tunnelsup.com/subnet-calculator/
IP Address: 172.28.85.95/27 Netmask: 255.255.255.224
Network Address: 172.28.85.64
Usable Host Range: 172.28.85.65 - 172.28.85.94
Broadcast Address: 172.28.85.95

NEW QUESTION 293
- (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 294
- (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 295
- (Topic 3)
Which of the following is most likely to have the HIGHEST latency while being the most accessible?

A. Satellite
B. DSL
C. Cable
D. 4G

Answer: A

NEW QUESTION 297
- (Topic 3)
A network technician is investigating why a core switch is logging excessive amounts of data to the syslog server. The running configuration of the switch showed the following logging information:
ip ssh logging events logging level debugging logging host 192.168.1.100 logging synchronous
Which of the following changes should the technician make to best fix the issue?

A. Update the logging host IP.
B. Change to asynchronous logging.
C. Stop logging SSH events.
D. Adjust the logging level.

Answer: D

Explanation:
The logging level debugging is the highest level of logging, which means that the switch will log every possible event, including low-priority and verbose messages. This can result in excessive amounts of data being sent to the syslog server, which can affect the performance and storage of the server. To fix the issue, the technician should adjust the logging level to a lower value, such as informational, warning, or error, depending on the desired level of detail and severity. This will reduce the amount of log data generated by the switch and only send the relevant and necessary messages to the syslog server.
https://betterstack.com/community/guides/logging/log-levels-explained/

NEW QUESTION 301
- (Topic 3)
A network administrator received complaints of intermittent network connectivity issues. The administrator investigates and finds that the network design contains potential loop scenarios. Which of the following should the administrator do?

A. Enable spanning tree.
B. Configure port security.
C. Change switch port speed limits.

D. Enforce 802. IQ tagging.

Answer: A

Explanation:
Spanning tree is a protocol that prevents network loops by dynamically disabling or enabling switch ports based on the network topology. Network loops can cause intermittent connectivity issues, such as broadcast storms, MAC address table instability, and multiple frame transmission. By enabling spanning tree, the network administrator can ensure that there is only one active path between any two network devices at any given time. References:
? CompTIA Network+ N10-008 Certification Exam Objectives, page 91
? CompTIA Network+ Cert Guide: Switching and Virtual LANs, page 172

NEW QUESTION 302
- (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 303
- (Topic 3)
A technician is equipped with a tablet, a smartphone, and a laptop to troubleshoot a switch with the help of support over the phone. However, the technician is having issues interconnecting all these tools in troubleshooting the switch. Which Of the following should the technician use to gain connectivity?

A. PAN
B. WAN
C. LAN
D. MAN

Answer: A

Explanation:
A PAN stands for Personal Area Network and it is a type of network that connects devices within a small range, such as a few meters. A PAN can use wireless technologies such as Bluetooth or Wi-Fi to interconnect devices such as tablets, smartphones, and laptops. A technician can use a PAN to gain connectivity among these tools and troubleshoot the switch.
References: Network+ Study Guide Objective 1.2: Explain devices, applications, protocols and services at their appropriate OSI layers.

NEW QUESTION 306
- (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?

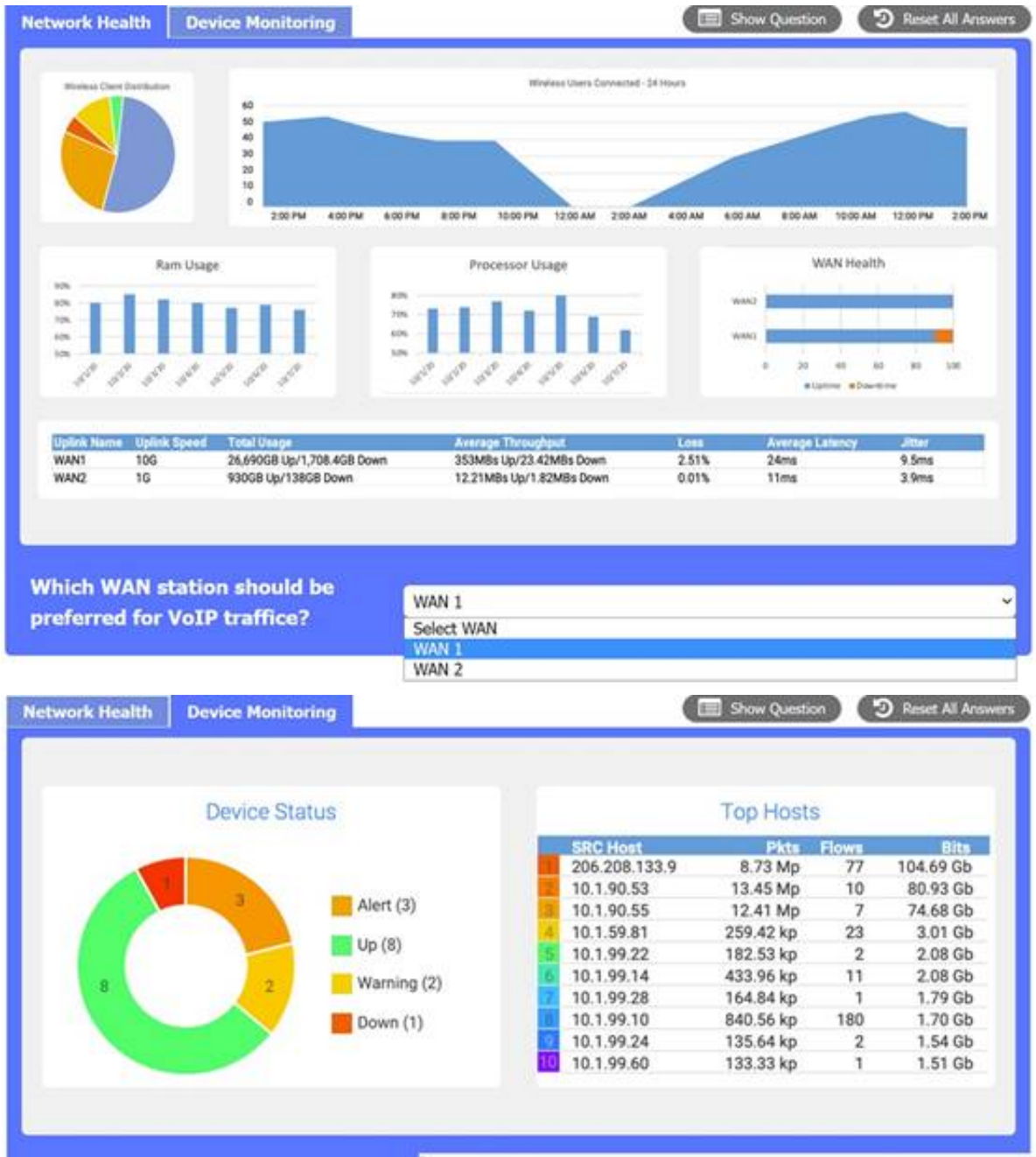
A. MTTR
B. MOU
C. NDA
D. SLA

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 309

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.

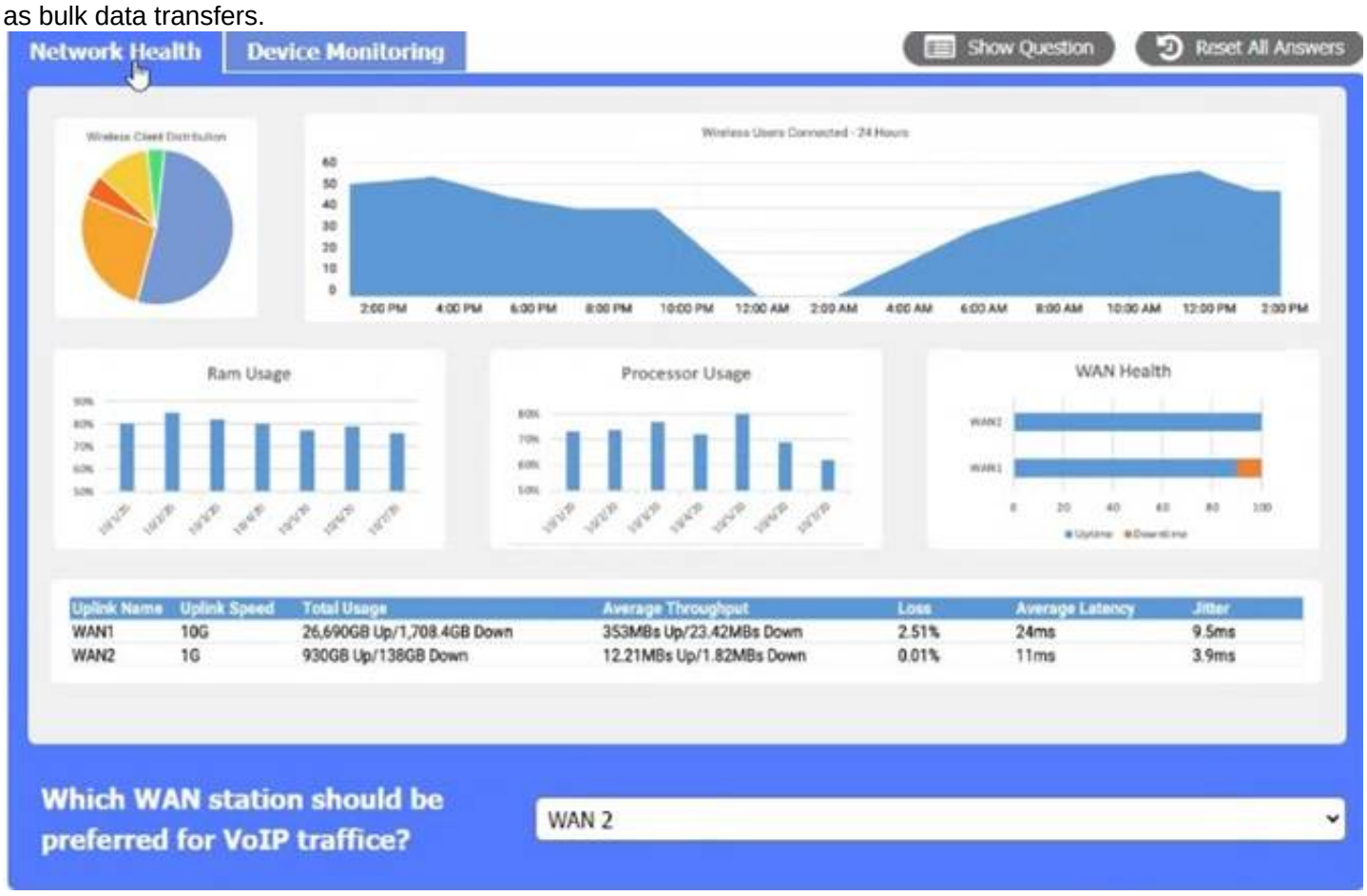


A. Mastered
B. Not Mastered

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.



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.

A screenshot of a computer
Description automatically generated

NEW QUESTION 312
- (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 317
- (Topic 3)
A technician uses a badge to enter a security checkpoint on a corporate campus. An unknown individual quickly walks in behind the technician without speaking. Which of the following types of attacks did the technician experience?

A. Tailgating
B. Evil twin
C. On-path
D. Piggybacking

Answer: A

Explanation:
Tailgating is a type of physical security attack where an unauthorized person follows an authorized person into a restricted area without their consent or knowledge. Tailgating can allow an attacker to bypass security measures and gain access to sensitive information or resources. In this scenario, the technician experienced tailgating when the unknown individual walked in behind the technician without speaking. Piggybacking is similar to tailgating, but it involves the consent or cooperation of the authorized person. Evil twin is a type of wireless network attack where an attacker sets up a rogue access point that mimics a legitimate one. On-path is a type of network attack where an attacker intercepts and modifies traffic between two parties.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 3.2: Given a scenario, use appropriate network hardening techniques.

NEW QUESTION 319
- (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 321
- (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 323
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