CompTIA

Exam Questions N10-009

CompTIA Network+ Exam

NEW QUESTION 1
- (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 2
- (Topic 3)
Which of the following compromises internet-connected devices and makes them vulnerable to becoming part of a botnet? (Select TWO).

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

Answer: BE

NEW QUESTION 3
- (Topic 3)
A network administrator is configuring logging on an edge switch. The requirements are to log each time a switch port goes up or down. Which of the following logging levels will provide this information?

A. Warnings
B. Notifications
C. Alert
D. Errors

Answer: B

Explanation:
Notifications are the lowest logging level and will provide the desired information regarding switch port up/down activity. According to the CompTIA Network+ Study Manual, notifications "are used for logging normal activities, such as port up/down events, link changes, and link flaps."

NEW QUESTION 4
- (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 5
- (Topic 3)
An organization has a security requirement that all network connections can be traced back to a user. A network administrator needs to identify a solution to implement on the wireless network. Which of the following is the best solution?

A. Implementing enterprise authentication
B. Requiring the use of PSKs
C. Configuring a captive portal for users
D. Enforcing wired equivalent protection

Answer: A

Explanation:
Enterprise authentication is a method of securing wireless networks that uses an external authentication server, such as RADIUS, to verify the identity of users and devices. Enterprise authentication can provide user traceability by logging the network connections and activities of each authenticated user. This can help the organization meet its security requirement and comply with any regulations or policies that mandate user accountability12.
References:
? CompTIA Network+ N10-008 Certification Exam Objectives, page 83
? CompTIA Network+ Cert Guide: Wireless Networking, page 13

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 network is experiencing extreme latency when accessing a particular website. Which of the following commands will BEST help identify the issue?

A. ipconfig
B. netstat
C. tracert
D. ping

Answer: C

NEW QUESTION 9
- (Topic 3)
A technician is trying to install a VoIP phone, but the phone is not turning on. The technician checks the cable gong from the phone to the switch, and the cable is good. Which of the following actions IS needed for this phone to work?

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

Answer: A

NEW QUESTION 10
- (Topic 3)
A user in a branch office reports that access to all files has been lost after receiving a new PC. All other users in the branch can access fileshares. The IT engineer who is troubleshooting this incident is able to ping the workstation from the branch router, but the machine cannot ping the router. Which of the following is MOST likely the cause of the incident?

A. Incorrect subnet mask
B. Incorrect DNS server
C. Incorrect IP class
D. Incorrect TCP port

Answer: A

NEW QUESTION 10
- (Topic 3)
A user notifies a network administrator about losing access to a remote file server. The network administrator is able to ping the server and verifies the current firewall rules do not block access to the network fileshare. Which of the following tools would help identify which ports are open on the remote file server?

A. dig
B. nmap
C. tracert
D. nslookup

Answer: B

Explanation:
nmap is the tool that would help identify which ports are open on the remote file server. nmap stands for Network Mapper, which is a free and open-source tool that can perform various network scanning and discovery tasks. nmap can help identify which ports are open on a remote device by sending probes or packets to different ports and analyzing the responses. nmap can also provide information about the operating system, services, versions, firewalls, or vulnerabilities of the remote device. nmap can be useful for network administrators, security professionals, or hackers to monitor, audit, or attack network devices. References: [CompTIA Network+ Certification Exam Objectives], Nmap - Free Security Scanner For Network Exploration & Security Audits

NEW QUESTION 14
- (Topic 3)
A technician is monitoring a network interface and notices the device is dropping packets. The cable and interfaces, however, are in working order. Which of the following is MOST likely the cause?

A. OID duplication
B. MIB mismatch
C. CPU usage
D. Encapsulation errors

Answer: C

NEW QUESTION 15
- (Topic 3)
During the troubleshooting of an E1 line, the point-to-point link on the core router was accidentally unplugged and left unconnected for several hours. However, the network management team was not notified. Which of the following could have been configured to allow early detection and possible resolution of the issue?

A. Traps
B. MIB
C. OID
D. Baselines

Answer: A

Explanation:
Traps are unsolicited messages sent by network devices to a network management system (NMS) when an event or a change in status occurs. Traps can help notify the network management team of any issues or problems on the network, such as a link failure or a device reboot. Traps can also trigger actions or alerts on the NMS, such as sending an email or logging the event. MIB stands for Management Information Base and is a database of information that can be accessed and managed by an NMS using SNMP (Simple Network Management Protocol). OID stands for Object Identifier and is a unique name that identifies a specific variable in the MIB. Baselines are measurements of normal network performance and behavior that can be used for comparison and analysis. References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 2.5: Given a scenario, use remote access methods.

NEW QUESTION 16
- (Topic 3)
A network engineer needs to create a subnet that has the capacity for five VLANs. with the following number of clients lo be allowed on each:

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

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

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

Answer: B

NEW QUESTION 19

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

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

Answer: B

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

NEW QUESTION 22
- (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 25
- (Topic 3)
Which of the following is the best action to take before sending a network router to be recycled as electronic waste?

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

Answer: C

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

NEW QUESTION 29
- (Topic 3)
Which of the following protocols is widely used in large-scale enterprise networks to support complex networks with multiple routers and balance traffic load on multiple links?

A. OSPF
B. RIPv2
C. QoS
D. STP

Answer: A

NEW QUESTION 33
- (Topic 3)
A Wi-Fi network was recently deployed in a new, multilevel budding. Several issues are now being reported related to latency and drops in coverage. Which of the following is the FIRST step to troubleshoot the issues?

A. Perform a site survey.
B. Review the AP placement
C. Monitor channel utilization.
D. Test cable attenuation.

Answer: A

NEW QUESTION 37
- (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 38
- (Topic 3)
A technician monitors a switch interface and notices it is not forwarding frames on a trunked port. However, the cable and interfaces are in working order. Which of the following is MOST likely the cause of the issue?

A. STP policy
B. Flow control
C. 802.1Q configuration
D. Frame size

Answer: C

Explanation:
802.1Q configuration is the most likely cause of the issue where a switch interface is not forwarding frames on a trunked port. 802.1Q is a standard that defines how to create and manage virtual LANs (VLANs) on a switched network. VLANs are logical segments of a network that group devices based on criteria such as function, department, or security level. VLANs can improve network performance, security, and manageability by reducing broadcast domains, isolating traffic, and enforcing policies. A trunked port is a switch port that can carry traffic from multiple VLANs over a single physical link by adding a VLAN tag to each frame. A VLAN tag is a 4-byte header that identifies the VLAN ID and priority of each frame. A trunked port requires 802.1Q configuration to specify which VLANs are allowed or disallowed on the port, and which VLAN is the native or untagged VLAN. If the 802.1Q configuration is incorrect or mismatched between switches, frames may be dropped or misrouted on the trunked port. References: [CompTIA Network+ Certification Exam Objectives], VLAN Trunking Protocol (VTP) Explained | NetworkLessons.com

NEW QUESTION 40
- (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 44
- (Topic 3)
A security engineer is trying to connect cameras to a 12-port PoE switch, but only eight cameras turn on. Which of the following should the engineer check first?

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

Answer: B

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

NEW QUESTION 47
- (Topic 3)
Which of the following is most likely to be implemented to actively mitigate intrusions on a host device?

A. HIDS
B. MDS
C. HIPS

D. NIPS

Answer: A

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

NEW QUESTION 51
- (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 55
- (Topic 3)
Which of the following devices Is used to configure and centrally manage access points Installed at different locations?

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

Answer: A

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

NEW QUESTION 59
- (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 60
- (Topic 3)
Which of the following DNS records maps an alias to a true name?

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

Answer: D

Explanation:
A CNAME (Canonical Name) record is a type of DNS (Domain Name System) record that maps an alias name to a canonical or true domain name. For example, a CNAME record can map blog.example.com to example.com, which means that blog.example.com is an alias of example.com. A CNAME record is useful when you want to point multiple subdomains to the same IP address, or when you want to change the IP address of a domain without affecting the subdomains1.

NEW QUESTION 61
- (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 63
- (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 65
- (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 67
- (Topic 3)
A customer connects a firewall to an ISP router that translates traffic destined for the internet. The customer can connect to the internet but not to the remote site. Which of the following will verify the status of NAT?

A. tcpdump
B. nmap
C. ipconfig
D. tracert

Answer: A

Explanation:
tcpdump is a command-line tool that can capture and analyze network traffic on a given interface. tcpdump can verify the status of NAT by showing the source and destination IP addresses of the packets before and after they pass through the ISP router that translates traffic destined for the internet. tcpdump can also show the NAT protocol and port numbers used by the router. nmap, ipconfig, and tracert are not suitable tools for verifying the status of NAT, as they do not show the IP address translation process.
References
? 1: Network Address Translation – N10-008 CompTIA Network+ : 1.4
? 2: CompTIA Network+ N10-008 Certification Study Guide, page 95-96
? 3: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 16
? 4: CompTIA Network+ N10-008 Certification Practice Test, question 7

NEW QUESTION 71
- (Topic 3)
A network technician wants to find the shortest path from one node to every other node in the network. Which of the following algorithms will provide the FASTEST convergence time?

A. A static algorithm
B. A link-state algorithm
C. A distance-vector algorithm
D. A path-vector algorithm

Answer: B

Explanation:
A link-state algorithm is a routing algorithm that uses information about the state of each link in the network to calculate the shortest path from one node to every other node. A link-state algorithm requires each router to maintain a complete map of the network topology and exchange link-state advertisements with its neighbors periodically or when a change occurs. A link-state algorithm uses a mathematical formula called Dijkstra's algorithm to find the shortest path based on the link costs. A link-state algorithm provides the fastest convergence time because it can quickly detect and adapt to network changes. References: [CompTIA Network+ Certification Exam Objectives], [Link-state routing protocol - Wikipedia]

NEW QUESTION 72
- (Topic 3)
Which of the following attacks utilizes a network packet that contains multiple network tags?

A. MAC flooding
B. VLAN hopping
C. DNS spoofing
D. ARP poisoning

Answer: B

NEW QUESTION 73
- (Topic 3)
An ISP is providing Internet to a retail store and has terminated its point of connection using a standard Cat 6 pin-out Which of me following terminations should the technician use when running a cable from the ISP's port lo the front desk?

A. F-type connector
B. TIA/E1A-56S-B
C. LC
D. SC

Answer: B

Explanation:
The termination that the technician should use when running a cable from the ISP's port to the front desk is B. TIA/EIA-568-B. This is a standard pin-out for Cat 6 cables that is used for Ethernet and other network physical layers1. It specifies how to arrange the eight wires in an RJ45 connector, which is a common type of connector for network cables.

NEW QUESTION 76
- (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 78
- (Topic 3)
Which of the following would be used to adjust resources dynamically for a virtual web server under variable loads?

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

Answer: B

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

NEW QUESTION 80
- (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 85
- (Topic 3)
A company has multiple offices around the world. The computer rooms in some office locations are too warm Dedicated sensors are in each room, but the process of checking each sensor takes a long time. Which of the following options can the company put In place to automate temperature readings with internal resources?

A. Implement NetFlow.
B. Hire a programmer to write a script to perform the checks
C. Utilize ping to measure the response.
D. Use SNMP with an existing collector server

Answer: D

Explanation:
SNMP (Simple Network Management Protocol) is a protocol that allows network devices to communicate with a management server. By using SNMP, the company can set up an SNMP agent on each sensor, which will report its temperature readings to an existing collector server. This will enable the company to monitor the temperatures of all their sensors in real-time without the need for manual checks. Additionally, SNMP's scalability means that even if the company adds more rooms or sensors, the existing system can be easily expanded to accommodate them.

NEW QUESTION 88
- (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 92
- (Topic 3)
A technician installed an 8-port switch in a user's office. The user needs to add a second computer in the office, so the technician connects both PCs to the switch and connects the switch to the wall jack. However, the new PC cannot connect to network resources. The technician then observes the following:
• The new computer does not get an IP address on the client's VLAN.
• Both computers have a link light on their NICs.
• The new PC appears to be operating normally except for the network issue.
• The existing computer operates normally.
Which of the following should the technician do NEXT to address the situation?

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

Answer: A

NEW QUESTION 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 95
- (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 96
- (Topic 3)
A VOIP phone is plugged in to a port but cannot receive calls. Which Of the following needs to be done on the port to address the issue?

A. Trunk all VLANs on the port.
B. Configure the native VLAN.
C. Tag the traffic to voice VLAN.
D. Disable VLANs.

Answer: C

Explanation:
To enable a VOIP phone to receive calls on a port, the traffic needs to be tagged to the voice VLAN that is configured on the switch. This allows the phone to communicate with the voice network and the PBX server. Tagging the traffic also separates the voice traffic from the data traffic that may be coming from a computer connected to the phone. The port should be configured to tag the traffic for the voice VLAN and untag the traffic for the data VLAN1. Trunking all VLANs on the port is unnecessary and may cause security issues. Configuring the native VLAN is not relevant for this issue. Disabling VLANs would prevent the phone from working at all.
References:
Optical Fiber Connectors – CompTIA Network+ N10-007 – 2.13
? VoIP and computer on separate VLANs through one cable1

NEW QUESTION 101
- (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 102
- (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 105
- (Topic 3)
Which of the following is the IEEE link cost for a Fast Ethernet interface in STP calculations?

A. 2
B. 4
C. 19
D. 100

Answer: D

Explanation:
The IEEE standard for link cost for a Fast Ethernet interface is 100, and for a Gigabit Ethernet interface is 19. These values are based on the bandwidth of the interface, with lower values indicating a higher-bandwidth interface.

NEW QUESTION 110
- (Topic 3)
A network technician needs to ensure the company's external mail server can pass reverse lookup checks. Which of the following records would the technician MOST likely configure? (Choose Correct option and give explanation directly from CompTIA Network+ Study guide or documents)

A. PTR
B. AAAA
C. SPF
D. CNAME

Answer: A

Explanation:
A PTR (Pointer) record is used to map an IP address to a domain name, which is necessary for reverse lookup checks. Reverse lookup checks are performed by external mail servers to verify the identity of the sender of the email. By configuring a PTR record, the network technician can ensure that the company's external mail server can pass these checks. According to the CompTIA Network+ Study Guide, "A PTR record is used to map an IP address to a domain name, and it is often used for email authentication."

NEW QUESTION 112
- (Topic 3)
A network administrator is preparing new switches that will be deployed to support a network extension project. The lead network engineer has already provided documentation to ensure the switches are set up properly Which of the following did the engineer most likely provide?

A. Physical network diagram
B. Site survey reports
C. Baseline configurations
D. Logical network diagram

Answer: C

Explanation:
Baseline configurations are the standard settings and parameters that are applied to network devices, such as switches, routers, firewalls, etc., to ensure consistent performance, security, and functionality across the network. Baseline configurations can include aspects such as IP addresses, VLANs, passwords, protocols, access lists, firmware versions, etc. Baseline configurations are usually documented and updated regularly to reflect any changes or modifications made to the network devices.
The lead network engineer most likely provided baseline configurations to the network administrator to ensure that the new switches are set up properly and in accordance with the network design and policies. Baseline configurations can help to simplify the deployment process, reduce errors and inconsistencies, and facilitate troubleshooting and maintenance.
The other options are not correct because they are not the most likely documentation that the lead network engineer provided to the network administrator. They are:
? Physical network diagram. A physical network diagram is a graphical representation of the physical layout and connections of the network devices and components, such as cables, ports, switches, routers, servers, etc. A physical network diagram can help to visualize the network topology, identify the locations and distances of the devices, and plan for cabling and power requirements. However, a physical network diagram does not provide the specific settings and parameters that need to be configured on the network devices, such as the switches.
? Site survey reports. A site survey report is a document that summarizes the findings and recommendations of a site survey, which is a process of assessing the suitability and readiness of a location for installing and operating network devices and components. A site survey report can include aspects such as environmental conditions, power and cooling availability, security and safety measures, interference and noise sources, signal coverage and quality, etc. A site survey report can help to identify and resolve any potential issues or challenges that may affect the network performance and reliability. However, a site survey report does not provide the specific settings and parameters that need to be configured on the network devices, such as the switches.
? Logical network diagram. A logical network diagram is a graphical representation of the logical structure and functionality of the network devices and components, such as subnets, IP addresses, VLANs, protocols, routing, firewall rules, etc. A logical network diagram can help to understand the network design, architecture, and policies, as well as the data flow and communication paths between the devices. However, a logical network diagram does not provide the specific settings and parameters that need to be configured on the network devices, such as the switches.
References1: Network+ (Plus) Certification | CompTIA IT Certifications2: What is a Baseline Configuration? - Definition from Techopedia3: What is a Physical Network Diagram? - Definition from Techopedia4: What is a Site Survey? - Definition from Techopedia5: [What is a Logical Network Diagram? - Definition from Techopedia]

NEW QUESTION 116
- (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 121
- (Topic 3)
Which of the following architectures is used for FTP?

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

Answer: A

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

NEW QUESTION 122
- (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 127
- (Topic 3)
Which of the following protocols uses Dijkstra's algorithm to calculate the LOWEST cost between routers?

A. RIP
B. OSPF
C. BGP
D. EIGRP

Answer: B

Explanation:
OSPF stands for Open Shortest Path First and is a link-state routing protocol that uses Dijkstra's algorithm to calculate the lowest cost between routers. OSPF assigns a cost value to each link based on factors such as bandwidth, delay, or reliability, and builds a map of the network topology. OSPF then uses Dijkstra's

algorithm to find the shortest path from each router to every other router in the network1. RIP stands for Routing Information Protocol and is a distance-vector routing protocol that uses hop count as the metric to find the best path. BGP stands for Border Gateway Protocol and is a path-vector routing protocol that uses attributes such as AS path, local preference, or origin to select the best route. EIGRP stands for Enhanced Interior Gateway Routing Protocol and is a hybrid routing protocol that uses a composite metric based on bandwidth, delay, load, and reliability.
References: 1 Dijkstra's algorithm - Wikipedia (https://en.wikipedia.org/wiki/Dijkstra%27s_algorithm)

NEW QUESTION 131
- (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 136
- (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 138
- (Topic 3)
Which of the following ports is a secure protocol?

A. 20
B. 23
C. 443
D. 445

Answer: C

Explanation:
This is the port number for HTTPS, which stands for Hypertext Transfer Protocol Secure. HTTPS is a secure version of HTTP, which is the protocol used to communicate between web browsers and web servers. HTTPS encrypts the data sent and received using SSL/TLS, which are cryptographic protocols that provide authentication, confidentiality, and integrity. HTTPS is commonly used for online transactions, such as banking and shopping, where security and privacy are important

NEW QUESTION 141
- (Topic 3)
A help desk technician is concerned that a client's network cable issues may be causing intermittent connectivity. Which of the following would help the technician determine if this is the issue?

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

Answer: A

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

NEW QUESTION 144
- (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 145
- (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 146
- (Topic 3)
During a risk assessment which of the following should be considered when planning to mitigate high CPU utilization of a firewall?

A. Recovery time objective
B. Uninterruptible power supply
C. NIC teaming
D. Load balancing

Answer: D

Explanation:
The recovery time objective (RTO) is the maximum tolerable length of time that a computer, system, network or application can be down after a failure or disaster occurs. This does nothing to help with CPU utilization. Load balancing does this.

NEW QUESTION 149
- (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 154
- (Topic 3)
Network connectivity in an extensive forest reserve was achieved using fiber optics. A network fault was detected, and now the repair team needs to check the integrity of the fiber cable. Which of me following actions can reduce repair time?

A. Using a tone generator and wire map to determine the fault location
B. Using a multimeter to locate the fault point
C. Using an OTDR In one end of the optic cable to get the liber length information
D. Using a spectrum analyzer and comparing the current wavelength with a working baseline

Answer: C

NEW QUESTION 159
- (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 161
- (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 165
- (Topic 3)
To reduce costs and increase mobility, a Chief Technology Officer (CTO) wants to adopt cloud services for the organization and its affiliates. To reduce the impact for users, the CTO wants key services to run from the on-site data center and enterprise services to run in the cloud. Which of the following deployment models is the best choice for the organization?

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

Answer: B

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

NEW QUESTION 167
- (Topic 3)
A network technician is troubleshooting a connectivity issue. All users within the network report that they are unable to navigate to websites on the internet; however, they can still access local network resources. The technician issues a command and receives the following results:

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

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

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

Answer: D

Explanation:
The users are unable to navigate to websites on the internet but can access local network resources, indicating a possible DNS issue. The ping command result showing “TTL expired in transit” suggests that packets are not reaching their destination due to a DNS misconfiguration that is not resolving website names into IP addresses correctly3. A possible solution is to check and correct the DNS server settings on the network devices4.
References: 3: What does “TTL expired in transit” mean?54: CompTIA Network+ N10-008 Cert Guide - Chapter 14: Network Monitoring2

NEW QUESTION 170
- (Topic 3)
Which of the following topologies requires me MOST connections when designing a network?

A. Mesh
B. Star
C. Bus
D. Ring

Answer: A

NEW QUESTION 172
- (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 176
- (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 178
- (Topic 3)
A network technician needs to use an RFC1918 IP space for a new office that only has a single public IP address. Which of the following subnets should the technician use for the LAN?

A. 10.10.10.0/24
B. 127.16.10.0/24
C. 174.16.10.0/24
D. 198.18.10.0/24

Answer: A

Explanation:
The RFC1918 IP space is a set of private IP addresses that are not routable on the public Internet and can be used for internal networks. The RFC1918 IP space consists of three ranges: 10.0.0.0/8, 172.16.0.0/12, and 192.168.0.0/161 Out of the four options, only A. 10.10.10.0/24 belongs to one of these ranges, specifically the 10.0.0.0/8 range. Therefore, the technician should use this subnet for the LAN.
References1: https://en.wikipedia.org/wiki/Private_network

NEW QUESTION 183
- (Topic 3)
Which of the following layers of the OSI model has new protocols activated when a user moves from a wireless to a wired connection?

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

Answer: A

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

NEW QUESTION 185
- (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 186
- (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 189
- (Topic 3)
Which of the following types of data center architectures will MOST likely be used in a large SDN and can be extended beyond the data center?

A. iSCSI
B. FCoE
C. Three-tiered network
D. Spine and leaf
E. Top-of-rack switching

Answer: D

Explanation:
The type of data center architecture that will most likely be used in a large SDN and can be extended beyond the data center is spine and leaf. Spine and leaf is a network topology that consists of two layers of switches: spine switches and leaf switches. Spine switches are interconnected to each other and form the core of the network, while leaf switches are connected to each spine switch and form the access layer of the network. Spine and leaf topology provides high scalability,

performance, and flexibility for data center networks, especially for SDN (Software Defined Networking) environments that require dynamic traffic flows and virtualization. References: CompTIA Network+ N10-008 Certification Study Guide, page 16; The Official CompTIA Network+ Student Guide (Exam N10-008), page 1-9.

NEW QUESTION 191
- (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 194
- (Topic 3)
Which of the following would be used to enforce and schedule critical updates with supervisory approval and include backup plans in case of failure?

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

Answer: A

NEW QUESTION 198
- (Topic 3)
A customer calls the help desk to report that users are unable to access any network resources_ The issue started earlier in the day when an employee rearranged the wiring closet A technician goes to the site but does not observe any obvious damage. The statistics output on the switch indicates high CPI-J usage, and all the lights on the switch are blinking rapidly in unison_ Which of the following is the most likely explanation for these symptoms?

A. The switch was rebooted and set to run in safe mode.
B. The line between the switch and the upstream router was removed
C. A cable was looped and created a broadcast storm.
D. A Cat 6 cable from the modem to the router was replaced with Cat 5e.

Answer: C

Explanation:
A cable was looped and created a broadcast storm is the most likely explanation for the symptoms of high CPU usage and blinking lights on the switch. A cable loop is a situation where a switch port is connected to another switch port on the same switch or another switch, creating a circular path for network traffic. A cable loop can cause a broadcast storm, which is a network phenomenon where a large number of broadcast or multicast packets are flooded on the network, consuming bandwidth and CPU resources. A broadcast storm can cause network congestion, performance degradation, or failure. A cable loop can occur when an employee rearranges the wiring closet without proper documentation or verification. A cable loop can be prevented or detected by using Spanning Tree Protocol (STP) or loop detection features on the switch. References: [CompTIA Network+ Certification Exam Objectives], What Is a Broadcast Storm? | Definition & Examples | Forcepoint

NEW QUESTION 203
- (Topic 3)
An engineer is using a tool to run an ICMP sweep of a network to find devices that are online. When reviewing the results, the engineer notices a number of workstations that are currently verified as being online are not listed in the report.
The tool was configured to scan using the following information: Network address: 172.28.16.0
CIDR: /22
The engineer collected the following information from the client workstation: IP address: 172.28.17.206
Subnet mask: 255.255.252.0
Which of the following MOST likely explains why the tool is failing to detect some workstations?

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

Answer: C

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

NEW QUESTION 204
- (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 209
- (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 214
- (Topic 3)
A Network engineer is investigating issues on a Layer 2 Switch. The department typically snares a Switchport during meetings for presentations, but atter the first user Shares, no Other users can connect. Which Of the following is MOST likely related to this issue?

A. Spanning Tree Protocol is enabled on the switch.
B. VLAN trunking is enabled on the switch.
C. Port security is configured on the switch.
D. Dynamic ARP inspection is configured on the switch.

Answer: C

NEW QUESTION 216
- (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 221
- (Topic 3)
Which of the following cloud deployment models involves servers that are hosted at a company's property and are only used by that company?

A. Public
B. Private
C. Hybrid

D. Community

Answer: B

Explanation:
A private cloud deployment model involves servers that are hosted at a company's property and are only used by that company. A private cloud provides exclusive access and control over the cloud resources to the company, as well as higher security and privacy. However, a private cloud also requires more investment and maintenance from the company, compared to other cloud deployment models1

NEW QUESTION 225
- (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 226
- (Topic 3)
A network administrator wants to know which systems on the network are at risk of a known vulnerability. Which of the following should the administrator reference?

A. SLA
B. Patch management policy
C. NDA
D. Site survey report
E. CVE

Answer: E

Explanation:
A Common Vulnerabilities and Exposures (CVE) is a publicly available database of known security vulnerabilities and exposures that affect various software and hardware products. A CVE entry provides a standardized identifier, a brief description, and references to related sources of information for each vulnerability or exposure. A network administrator can reference the CVE database to check if any of the systems on the network are affected by a known vulnerability, and if so, what are the potential impacts and mitigations.
A Service Level Agreement (SLA) is a contract between a service provider and a customer that defines the expected level and quality of service, such as availability, performance, and security. An SLA does not provide information on specific vulnerabilities or exposures affecting the systems or services.
A Patch Management Policy is a set of rules and procedures that govern how patches are applied to systems and software to fix bugs, improve functionality, or address security issues. A patch management policy can help prevent or reduce the risk of vulnerabilities or exposures, but it does not provide information on specific vulnerabilities or exposures affecting the systems or software.
A Non-Disclosure Agreement (NDA) is a legal contract between two or more parties that prohibits the disclosure of confidential or proprietary information to unauthorized parties. An NDA does not provide information on specific vulnerabilities or exposures affecting the systems or information.
A Site Survey Report is a document that summarizes the results of a physical inspection and assessment of a network site, such as the layout, infrastructure, equipment, and environmental conditions. A site survey report can help identify and resolve potential network issues, such as interference, signal strength, or coverage, but it does not provide information on specific vulnerabilities or exposures affecting the network devices or software.
References
What is CVE?
What is a Service Level Agreement (SLA)? Guide to Enterprise Patch Management Planning
NDA, MSA, SOW and SLA. Confidentiality agreements when you outsource QA Site Survey Report

NEW QUESTION 230
- (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 232
- (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 233
- (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 235
- (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 239
- (Topic 3)
AGRE tunnel has been configured between two remote sites. Which of the following
features, when configured, ensures me GRE overhead does not affect payload?

A. jumbo frames
B. Auto medium-dependent Interface
C. Interface crossover
D. Collision detection

Answer: A

Explanation:
One of the features that can be configured to ensure that GRE overhead does not affect payload is A. jumbo frames. Jumbo frames are Ethernet frames that have a payload size larger than 1500 bytes, which is the standard maximum transmission unit (MTU) for Ethernet. By using jumbo frames, more data can be sent in each packet, reducing the overhead ratio and improving efficiency.
Auto medium-dependent interface (MDI), interface crossover, and collision detection are features related to Ethernet physical layer connectivity, but they do not affect GRE overhead or payload.

NEW QUESTION 242
- (Topic 3)
Which of the following can be used to identify users after an action has occurred?

A. Access control vestibule
B. Cameras
C. Asset tag
D. Motion detectors

Answer: B

Explanation:
Cameras can be used to identify users after an action has occurred by recording their faces, clothing, or other distinctive features. Cameras are often used as a deterrent and a forensic tool for security purposes. Access control vestibules, asset tags, and motion detectors are not effective in identifying users, but rather in controlling access, tracking assets, and detecting movement.
References:
CompTIA Network+ N10-008 Certification Exam Objectives, Domain 5.0: Network Security, Subobjective 5.1: Summarize the importance of physical security controls, page 231 CompTIA Network+ Certification All-in-One Exam Guide, Eighth Edition (Exam N10-008), Chapter 18: Network Security, Section: Physical Security, page 7372

NEW QUESTION 247
- (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/

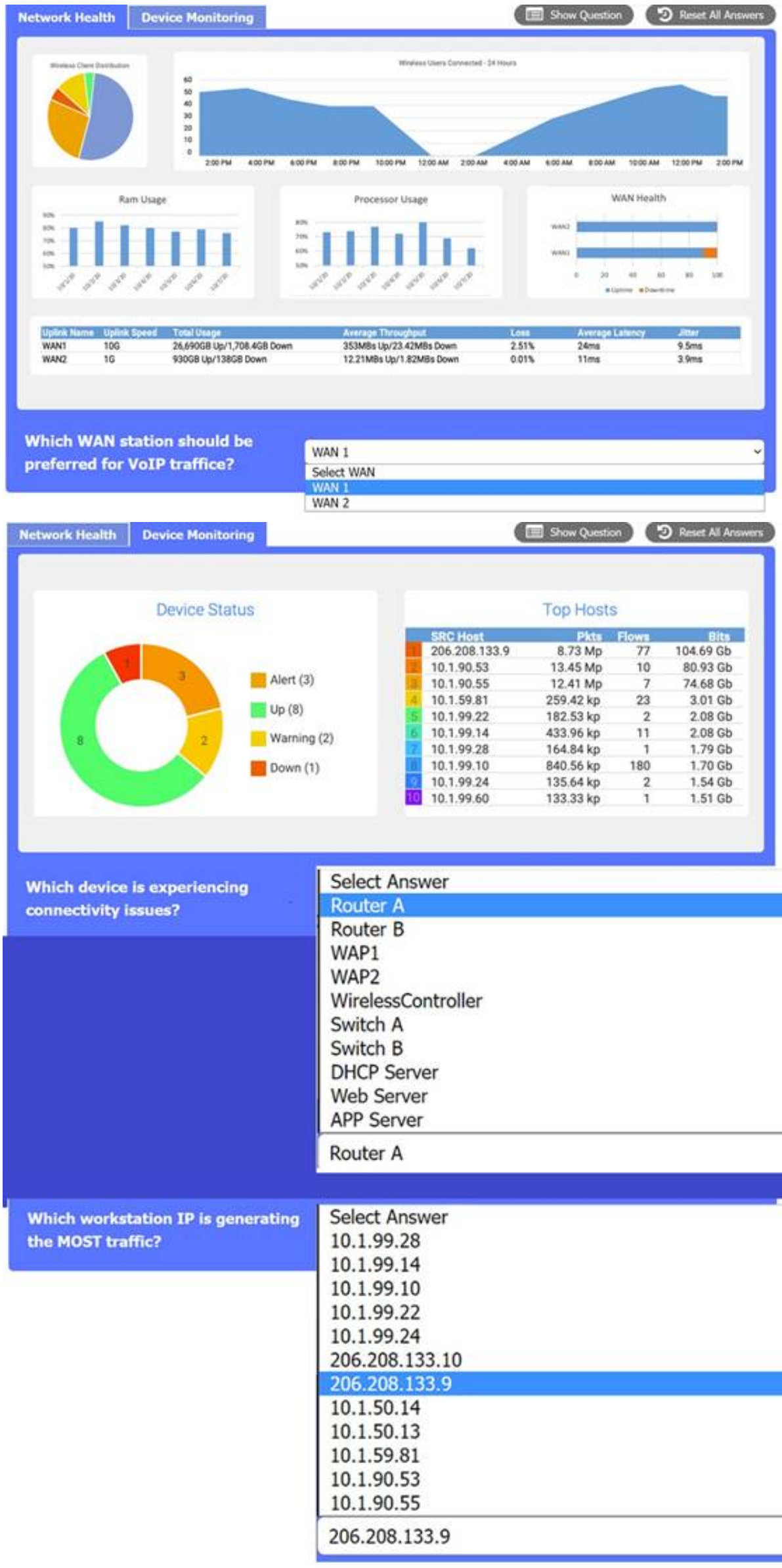
NEW QUESTION 249
- (Topic 3)
A network administrator received complaints of intermittent network connectivity issues. The administrator investigates and finds that the network design contains potential loop scenarios. Which of the following should the administrator do?

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 254
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 256
- (Topic 3)
An ISP is unable to provide services to a user in a remote area through cable and DSL. Which of the following is the NEXT best solution to provide services without adding external infrastructure?

A. Fiber
B. Leased line
C. Satellite
D. Metro optical

Answer: C

Explanation:
If an ISP is unable to provide services to a user in a remote area through cable and DSL, the next best solution to provide services without adding external

infrastructure would likely be satellite. Satellite is a wireless communication technology that uses a network of satellites orbiting the Earth to transmit and receive data. It is well-suited for providing connectivity to remote or rural areas where other types of infrastructure may not be available or may be cost-prohibitive to install.

NEW QUESTION 260
- (Topic 3)
An attacker sends more connection requests than a server can handle, causing the server to crash- Which of the following types of attacks is this an example of?

A. ARP poisoning
B. Denial-of-service
C. MAC flooding
D. On-path

Answer: B

Explanation:
A denial-of-service (DoS) attack is an example of an attack where an attacker sends more connection requests than a server can handle, causing the server to crash. A DoS attack is a type of cyberattack that aims to disrupt the normal functioning of a network service or resource by overwhelming it with excessive or malformed traffic. A DoS attack can prevent legitimate users from accessing the service or resource, resulting in degraded performance, unavailability, or data loss. A DoS attack can target various network layers, protocols, or components, such as servers, routers, firewalls, or applications. References: [CompTIA Network+ Certification Exam Objectives], What Is a Denial-of-Service (DoS) Attack? | Cisco

NEW QUESTION 261
- (Topic 3)
Which of the following describes when an active exploit is used to gain access to a network?

A. Penetration testing
B. Vulnerability testing
C. Risk assessment
D. Posture assessment
E. Baseline testing

Answer: A

Explanation:
Penetration testing is a type of security testing that is used to assess the security of a system or network by actively exploiting known vulnerabilities. It is used to simulate an attack on the system and identify any weaknesses that may be exploited by malicious actors. As stated in the CompTIA Security+ Study Guide, "penetration testing is a type of security assessment that attempts to gain unauthorized access to networks and systems by exploiting security vulnerabilities."

NEW QUESTION 266
- (Topic 3)
A network security engineer is responding to a security incident. The engineer suspects that an attacker used an authorized administrator account to make configuration changes to the boundary firewall. Which of the following should the network security engineer review?

A. Network traffic logs
B. Audit logs
C. Syslogs
D. Event logs

Answer: B

Explanation:
Audit logs are records of the actions performed by users or processes on a system or network device. They can provide information about who made what changes, when, and why. Audit logs are essential for detecting and investigating security incidents, as well as for ensuring compliance with policies and regulations. Audit logs can help the network security engineer to identify the source of the unauthorized configuration changes to the boundary firewall, as well as the scope and impact of the changes.
References1 - Changes to Cyber Essentials requirements – April 2021 update2 - 8 Firewall Best Practices for Securing the Network3 - How to secure your network boundaries with a firewall

NEW QUESTION 270
- (Topic 3)
A network security administrator needs to monitor the contents of data sent between a secure network and the rest of the company. Which of the following monitoring methods will accomplish this task?

A. Port mirroring
B. Flow data
C. Syslog entries
D. SNMP traps

Answer: A

Explanation:
Port mirroring is a method of monitoring network traffic by copying the data packets from one port to another port on the same switch or router. This allows the network security administrator to analyze the contents of the data sent between different networks without affecting the performance or security of the original traffic. Port mirroring can be configured to capture all traffic or only specific types of traffic, such as VLANs, protocols, or IP addresses.
References:
? Port Mirroring - CompTIA Network+ N10-008 Domain 3.1 - YouTube1
? CompTIA Network+ Certification Exam Objectives, page 142

NEW QUESTION 274
- (Topic 3)
A network technician 13 troubleshooting a network issue for employees who have reported Issues with speed when accessing a server in another subnet. The server is in another building that is 410ft (125m) away from the employees' building. The 10GBASE-T connection between the two buildings uses Cat 5e. Which of the following BEST explains the speed issue?

A. The connection type is not rated for that distance
B. A broadcast storm is occurring on the subnet.
C. The cable run has interference on it
D. The connection should be made using a Cat 6 cable

Answer: D

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

NEW QUESTION 275
- (Topic 3)
A network technician receives a report about a performance issue on a client PC that is connected to port 1/3 on a network switch. The technician observes the following configuration output from the switch:

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

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

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

Answer: A

NEW QUESTION 280
- (Topic 3)
A large metropolitan city is looking to standardize the ability tor police department laptops to connect to the city government's VPN The city would like a wireless solution that provides the largest coverage across the city with a minimal number of transmission towers Latency and overall bandwidth needs are not high priorities. Which of the following would BEST meet the city's needs?

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

Answer: B

NEW QUESTION 282
- (Topic 3)
Which of the following most likely occurs when an attacker is between the target and a legitimate server?

A. IP spoofing
B. VLAN hopping
C. Rogue DHCP
D. On-path attack

Answer: D

Explanation:
An on-path attack (also known as a man-in-the-middle attack) is a type of security attack where the attacker places themselves between two devices (often a web browser and a web server) and intercepts or modifies communications between the two1. The attacker can then collect information as well as impersonate either of the two agents. For example, an on-path attacker could capture login credentials, redirect traffic to malicious sites, or inject malware into legitimate web pages.
The other options are not correct because they describe different types of attacks:
•IP spoofing is the practice of forging the source IP address of a packet to make it appear as if it came from a trusted or authorized source2.
•VLAN hopping is a technique that allows an attacker to access a VLAN that they are not authorized to access by sending packets with a modified VLAN tag3.
•Rogue DHCP is a scenario where an unauthorized DHCP server offers IP configuration parameters to clients on a network, potentially causing network disruption or redirection to malicious sites4.
References
2: Understanding Targeted Attacks: What is a Targeted Attack? 3: Types of attacks - Security on the web | MDN
1: What is an on-path attacker? | Cloudflare
4: [What is a Rogue DHCP Server? - Definition from Techopedia]

NEW QUESTION 285
- (Topic 3)

A business purchased redundant internet connectivity from two separate ISPs. Which of the following is the business MOST likely implementing?

A. NIC teaming
B. Hot site
C. Multipathing
D. Load balancing

Answer: C

Explanation:
Multipathing is a technique that allows a device to use more than one path to communicate with another device. This provides redundancy, load balancing, and fault tolerance for network connections. A business that purchased redundant internet connectivity from two separate ISPs is most likely implementing multipathing to ensure continuous access to the internet in case one ISP fails or becomes
congested. References: CompTIA Network+ N10-008 Certification Study Guide, page 437; The Official CompTIA Network+ Student Guide (Exam N10-008), page 16-8.

NEW QUESTION 288
- (Topic 3)
When accessing corporate network resources, users are required to authenticate to each application they try to access. Which of the following concepts does this BEST represent?

A. SSO
B. Zero Trust
C. VPN
D. Role-based access control

Answer: B

NEW QUESTION 289
- (Topic 3)
A network architect needs to create a wireless field network to provide reliable service to public safety vehicles. Which of the following types of networks is the best solution?

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

Answer: A

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

NEW QUESTION 290
- (Topic 3)
An AP uses a 98ft (30m) Cat 6 cable to connect to an access switch. The cable is wired through a duct close to a three-phase motor installation. Anytime the three-phase is turned on, all users connected to the switch experience high latency on the network. Which Of the following is MOST likely the cause Of the issue?

A. Interference
B. Attenuation
C. Open circuit
D. Short circuit

Answer: A

Explanation:
Interference is a phenomenon that occurs when unwanted signals or noise affect the transmission or reception of data signals on a network. Interference can cause network issues such as high latency, low throughput, packet loss, or errors. Interference can be caused by various sources, such as electromagnetic fields, radio waves, power lines, or electrical devices. In this scenario, the three-phase motor installation is a source of interference that affects the Cat 6 cable that connects the AP to the access switch. The cable is wired through a duct close to the motor installation, which exposes it to the electromagnetic fields generated by the motor. Anytime the motor is turned on, the interference causes high latency for all users connected to the switch.

NEW QUESTION 295
- (Topic 3)
A user reports that a crucial fileshare is unreachable following a network upgrade that was completed the night before. A network technician confirms the problem exists. Which of the following
troubleshooting Steps should the network technician perform NEXT?

A. Establish a theory of probable cause.
B. Implement a solution to fix the problem.
C. Create a plan of action to resolve the problem.
D. Document the problem and the solution.

Answer: A

Explanation:
Establishing a theory of probable cause is the third step in the general troubleshooting process, after identifying the problem and gathering information. Establishing a theory of probable cause involves using the information gathered to formulate one or more possible explanations for the problem and testing them to verify or eliminate them. In this scenario, the network technician has confirmed the problem exists
and should proceed to establish a theory of probable cause based on the information available, such as the network upgrade that was completed the night before.
Implementing a solution to fix the problem is the fifth step in the general troubleshooting process, after establishing a plan of action. Implementing a solution involves applying the chosen method or technique to resolve the problem and verifying its effectiveness. In this scenario, the network technician has not established a plan of action yet and should not implement a solution without knowing the cause of the problem.
Creating a plan of action to resolve the problem is the fourth step in the general troubleshooting process, after establishing a theory of probable cause. Creating a plan of action involves selecting the best method or technique to address the problem based on the available resources, constraints, and risks. In this scenario, the network technician has not established a theory of probable cause yet and should not create a plan of action without knowing the cause of the problem.
Documenting the problem and the solution is the seventh and final step in the general troubleshooting process, after implementing preventive measures. Documenting the problem and the solution involves recording the details of the problem, its symptoms, its cause, its solution, and its preventive measures for future reference and improvement. In this scenario, the network technician has not implemented preventive measures yet and should not document the problem and the solution without resolving and preventing it.

NEW QUESTION 296
- (Topic 3)
A user wants to avoid using a password to access a third-party website. Which of the following does the user need in order to allow this type of access to the third-party website?

A. Multifactor
B. RADIUS
C. SSO
D. Local authentication

Answer: C

NEW QUESTION 300
- (Topic 3)
After router and device configurations are applied, internet access is not possible. Which of the following is the most likely cause?

A. The Ethernet interface was configured with an incorrect IP address.
B. The router was configured with an incorrect loopback address.
C. The router was configured with an incorrect default gateway.
D. The serial interface was configured with the incorrect subnet mas

Answer: C

Explanation:

The default gateway is the IP address of the router that connects a network to the internet or another network. The default gateway is usually configured on the devices that need to access the internet or other networks, such as PCs, servers, or routers. If the router was configured with an incorrect default gateway, it would not be able to forward packets to the correct destination, and internet access would not be possible.
The other options are not the most likely causes of the issue. The Ethernet interface is the physical port that connects a device to a network using a cable. If the Ethernet interface was configured with an incorrect IP address, it would cause a problem with the local network connectivity, not the internet access. The loopback address is a special IP address that refers to the device itself, usually used for testing or troubleshooting purposes. If the router was configured with an incorrect loopback address, it would not affect the internet access, as the loopback address is not used for routing packets to other networks. The serial interface is another type of physical port that connects a device to a network using a serial cable, often used for WAN connections. If the serial interface was configured with the incorrect subnet mask, it would cause a problem with the WAN connectivity, not the internet access, as the subnet mask is used to determine the network and host portions of an IP address.
ReferencesWhat is a Default Gateway? | HowStuffWorksWhat is an Ethernet Interface? - Definition from TechopediaWhat is a Loopback Address? - Definition from TechopediaWhat is a Serial Interface? - Definition from Techopedia

NEW QUESTION 301
- (Topic 3)
Users report they cannot reach any websites on the internet. An on-site network engineer is able to duplicate the issue on a different PC. The network engineer then tries to ping a website and receives the following message:
Ping request could not find host www.google.com. Please check the name and try again. Which of the following is the next step the engineer should take?

A. Ping 127. 0. 0. 1 to test local hardware.
B. Test the website from outside the company.
C. Ping internal name server functionality.
D. Check internet firewall logs for blocked DNS traffi

Answer: C

Explanation:

The error message “Ping request could not find host www.google.com” indicates that the network engineer’s PC cannot resolve the hostname www.google.com to its corresponding IP address. This means that there is a problem with the DNS (Domain Name System) service, which is responsible for translating hostnames to IP addresses and vice versa. The DNS service can be provided by internal or external name servers, depending on the network configuration.
The next step the engineer should take is to ping the internal name server functionality, which means to test if the PC can communicate with the name server that is configured in its network settings, and if the name server can resolve internal hostnames, such as those of the company’s servers or devices. To do this, the engineer can use the following commands:
? To find out the IP address of the name server, use ipconfig /all and look for the DNS Servers entry.
? To ping the name server, use ping <name server IP address> and check if the packets are sent and received successfully.
? To test the name resolution, use nslookup <internal hostname> and check if the name server returns the correct IP address.
If the ping or the nslookup commands fail, it means that the internal name server is not working properly, and the engineer should troubleshoot the name server configuration or connectivity. If the ping and the nslookup commands succeed, it means that the internal name server is working properly, but there is a problem with the external name resolution, and the engineer should check the internet firewall logs for blocked DNS traffic, or test the website from outside the company.
ReferencesWindows 10 can’t resolve hostnames - ping with IP works but not with hostnamePing request could not find host xyz.local. Please check the name and try againDNS problem, nslookup works, ping doesn’t Users are connected to a switch on an Ethernet interface of a campus router. The service provider is connected to the serial 1 interface on the router. The output of the interfaces is:
E1/0: 192.168.8.1/24 S1: 192.168.7.252/30

NEW QUESTION 305
- (Topic 3)
A network administrator walks into a data center and notices an unknown person is following closely. The administrator stops and directs the person to the security desk.
Which of the following attacks did the network administrator prevent?

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

Answer: B

Explanation:

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

NEW QUESTION 310
- (Topic 3)
A network engineer has added a new route on a border router and is trying to determine if traffic is using the new route. Which of the following commands should the engineer use?

A. ping
B. arp
C. tracert
D. route

Answer: C

Explanation:

The tracert command is a network diagnostic tool that traces the route of packets from the source host to the destination host. It displays the IP addresses and hostnames of the routers along the path, as well as the time taken for each hop. The tracert command can be used to determine if traffic is using the new route by comparing the output before and after adding the route. If the new route is effective, the tracert command should show a different or shorter path to the destination host.
ReferencesNetworking Commands For Troubleshooting Windows - GeeksforGeeksNine Switch Commands Every Cisco Network Engineer Needs to Know

NEW QUESTION 311
- (Topic 3)
Which of the following passwords would provide the best defense against a brute-force attack?

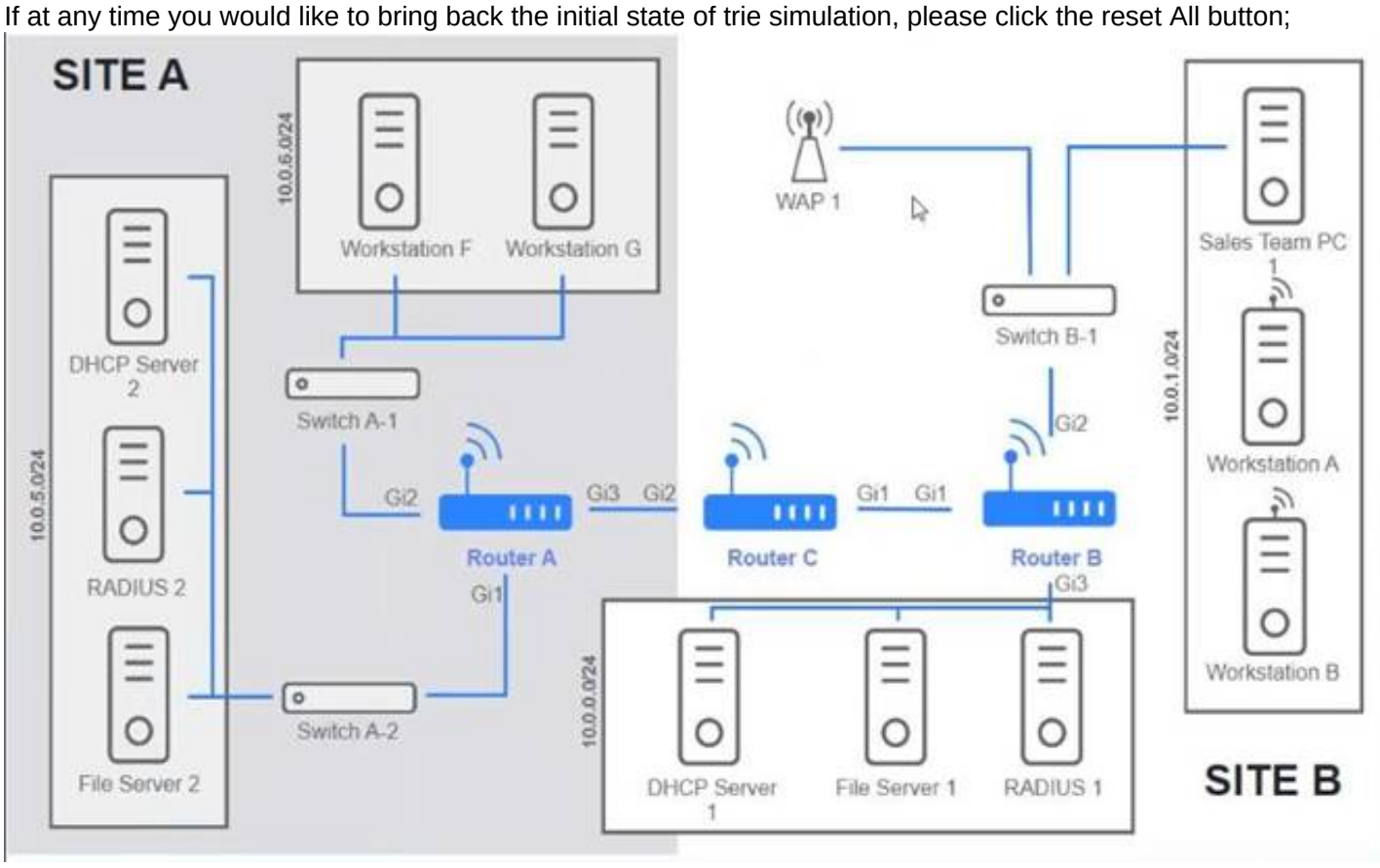
A. ThisIsMyPasswordForWork
B. Qwerty!@#$
C. Password! 1
D. T5!8j5

Answer: D

Explanation:

A brute-force attack is a method of guessing passwords by trying every possible combination of characters until the correct one is found. The longer and more complex the password, the harder it is to crack by brute-force. A password that provides the best defense against a brute-force attack should have a combination of uppercase and lowercase letters, numbers, and special characters, and should be as long as possible. The password T5!8j5 meets these criteria, while the other options are either too short, too simple, or too common.
References:
? Password Attacks – N10-008 CompTIA Network+ : 4.21
? CompTIA Network+ Cert Guide: Security Concepts and Tools, page 25 https://www.pearsonitcertification.com/articles/article.aspx?p=3021579&seqNum=2

NEW QUESTION 314
- (Topic 3)
Users are unable to access files on their department share located on flle_server 2. The network administrator has been tasked with validating routing between networks hosting workstation A and file server 2.
INSTRUCTIONS
Click on each router to review output, identity any Issues, and configure the appropriate solution
If at any time you would like to bring back the initial state of trie simulation, please click the reset All button;



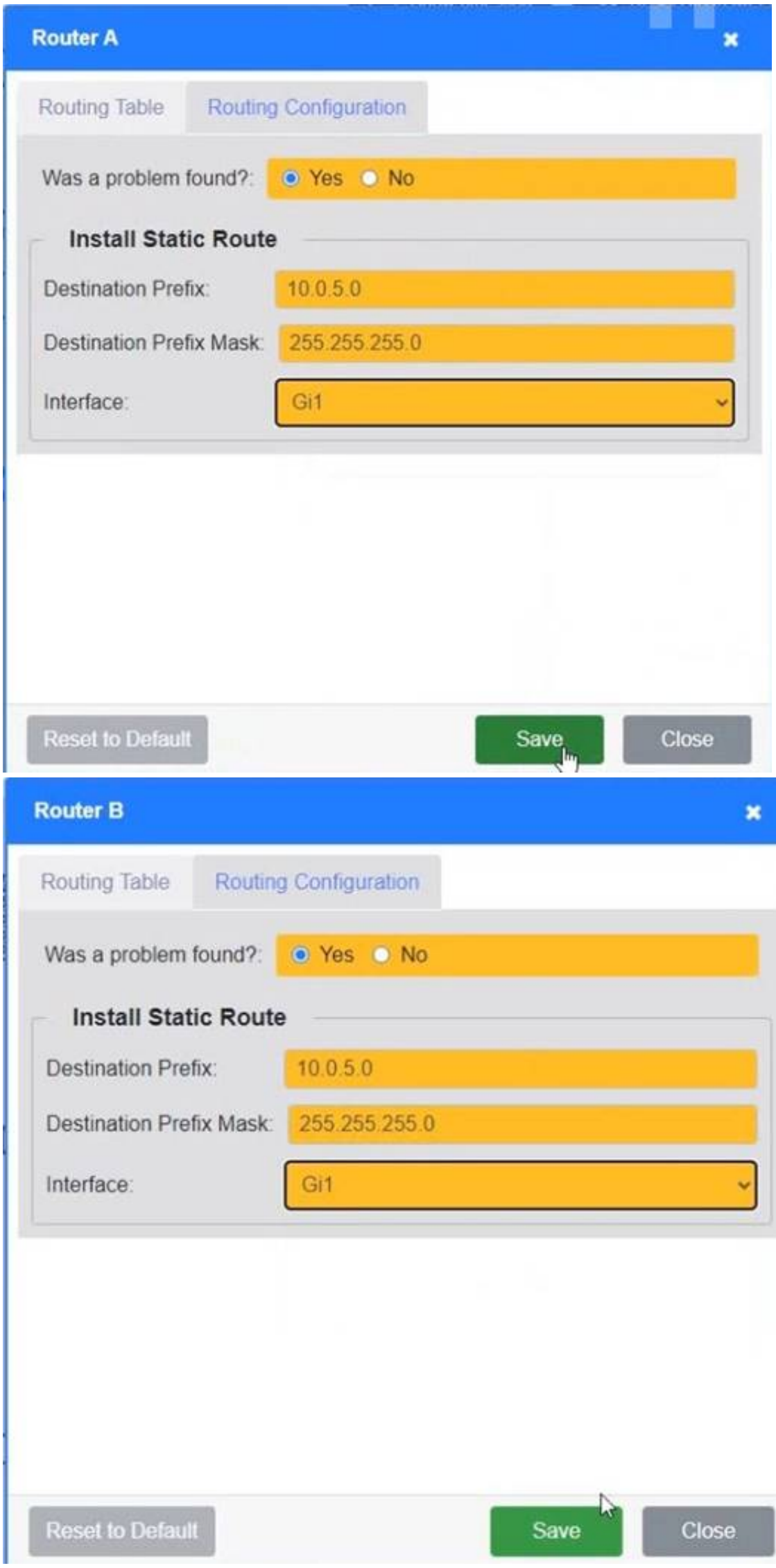
Routing Table | Routing Configuration

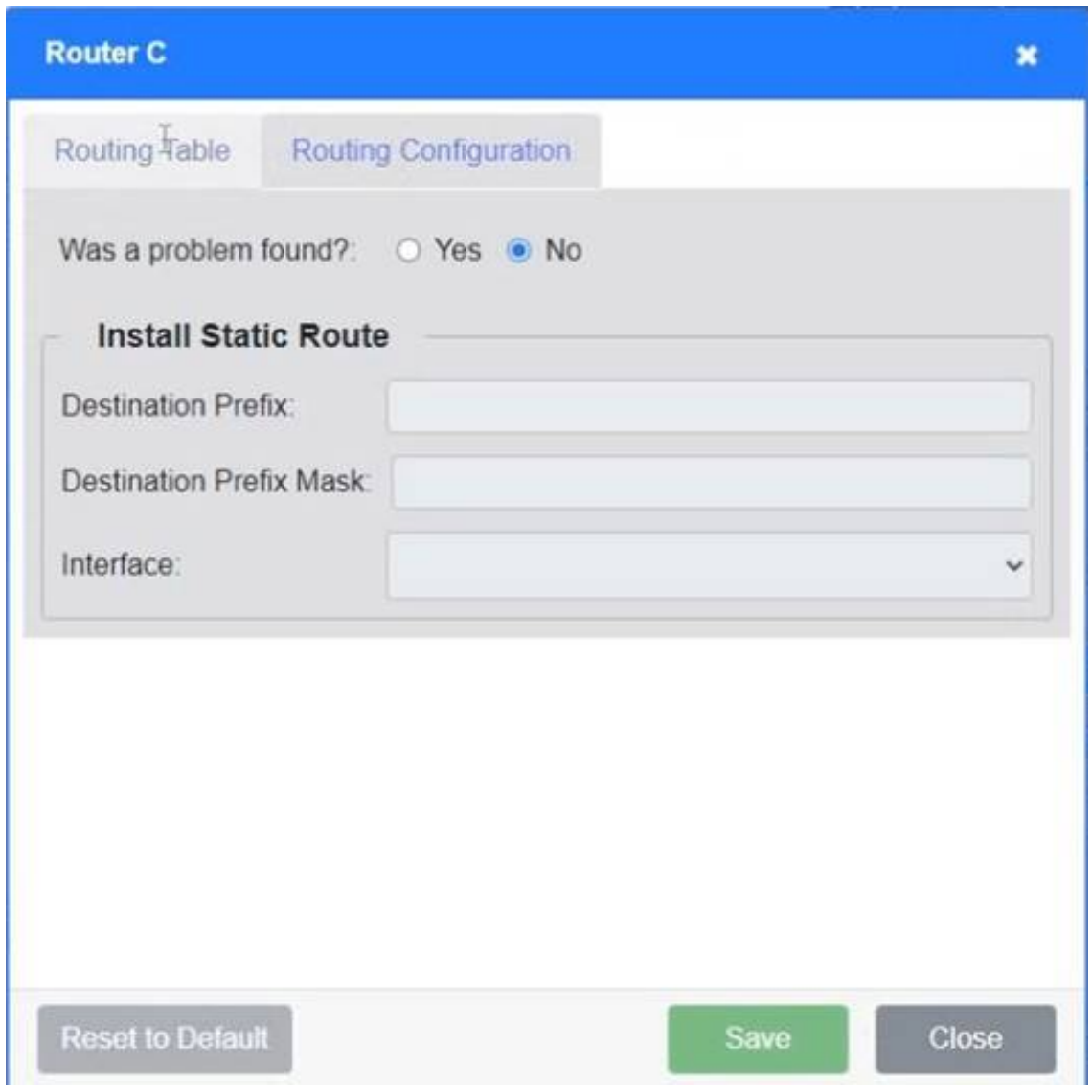
```
Router-B# show ip route

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

Gateway of last resort is 0.0.0.0 to network 0.0.0.0

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

A. Mastered
B. Not Mastered

Answer: A

Explanation:
See the solution configuration below in Explanation.


Router A
Routing Table
Routing Configuration
Was a problem found?: Yes No
Install Static Route
Destination Prefix: 10.0.5.0
Destination Prefix Mask: 255.255.255.0
Interface: Gi1
Reset to Default
Save
Close
Router B
Routing Table
Routing Configuration
Was a problem found?: Yes No
Install Static Route
Destination Prefix: 10.0.5.0
Destination Prefix Mask: 255.255.255.0
Interface: Gi1
Reset to Default
Save
Close



NEW QUESTION 318
- (Topic 3)
A non-employee was able to enter a server room. Which of the following could have prevented this from happening?

A. A security camera
B. A biometric reader
C. OTP key fob
D. Employee training

Answer: B

Explanation:
A biometric reader is a device that scans a person's physical characteristics, such as fingerprints, iris, or face, and compares them to a database of authorized users. A biometric reader can be used to restrict access to a server room and prevent unauthorized entry. A biometric reader provides a high level of security and cannot be easily bypassed or duplicated.
References: Network+ Study Guide Objective 5.1: Summarize the importance of physical security controls.

NEW QUESTION 319
- (Topic 3)
A network administrator needs to create a way to redirect a network resource that has been on the local network but is now hosted as a SaaS solution. Which of the following
records should be used to accomplish the task?

A. TXT
B. AAA
C. PTR
D. CNAME

Answer: D

Explanation:
CNAME stands for Canonical Name, and it is a type of DNS record that creates an alias for another domain name. A CNAME record can be used to redirect a network resource that has been moved to a different location, such as a SaaS solution. For example, if a web server that was previously hosted on the local network with the domain name www.example.com is now hosted by a SaaS provider with the domain name www.saasprovider.com, a CNAME record can be created to point www.example.com to www.saasprovider.com. This way, the users can still access the web server using the original domain name, and the DNS server will resolve it to the new domain name. References
? CNAME is one of the common DNS record types covered in Objective 1.6 of the
CompTIA Network+ N10-008 certification exam1.
? CNAME can be used to redirect a network resource that has been moved to a different location23.
? CNAME creates an alias for another domain name23.
1: CompTIA Network+ Certification Exam Objectives, page 4 2: DNS Record Types – N10- 008 CompTIA Network+ : 1.6 3: The Official CompTIA Network+ Student Guide (Exam N10-008), Chapter 1, page 32

NEW QUESTION 322
- (Topic 3)

A computer engineer needs to ensure that only a specific workstation can connect to port 1 on a switch. Which of the following features should the engineer configure on the switch interface?

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

Answer: B

Explanation:
Port security is a feature that can be configured on a switch interface to limit and identify the MAC addresses of workstations that are allowed to connect to that specific port. This can help ensure that only a specific workstation (or workstations) can connect to the interface. According to the CompTIA Network+ Study Manual, “Port security can be used to specify which MAC addresses are allowed to connect to a particular switch port. If a port security violation is detected, the switch can take a number of different actions, such as shutting down the port, sending an SNMP trap, or sending an email alert.”

NEW QUESTION 326
- (Topic 3)
Which of the following is used when a workstation sends a DHCP broadcast to a server on another LAN?

A. Reservation
B. Dynamic assignment
C. Helper address
D. DHCP offer

Answer: C

Explanation:
A helper address is an IP address that is configured on a router interface to forward DHCP broadcast messages to a DHCP server on another LAN. A DHCP broadcast message is a message that a workstation sends when it needs to obtain an IP address from a DHCP server. Since broadcast messages are not routed across different networks, a helper address is needed to relay the DHCP broadcast message to the DHCP server on another network. References: https://www.comptia.org/training/books/network-n10-008- study-guide (page 199)

NEW QUESTION 331
- (Topic 3)
A network administrator needs to add access points to the network because coverage in some areas is improper. Which of the following should the administrator do first?

A. Interference analysis
B. Wireless survey
C. Traffic analysis
D. Packet capture

Answer: B

Explanation:
A wireless survey is the first step that a network administrator should do before adding access points to the network. A wireless survey is a process of collecting data about the wireless environment, such as signal strength, channel usage, interference, and coverage. A wireless survey can help the network administrator to determine the optimal locations and configurations for the access points to provide the best possible coverage and performance for the wireless network. A wireless survey can also help to identify and troubleshoot any issues that may cause improper coverage in some areas. https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/116057-site-survey-guidelines-wlan-00.html

NEW QUESTION 334
.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

N10-009 Practice Exam Features:

* N10-009 Questions and Answers Updated Frequently

* N10-009 Practice Questions Verified by Expert Senior Certified Staff

* N10-009 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* N10-009 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year