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 would most likely affect design considerations when building out an IDF?

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

Answer: B

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

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

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

Answer: D

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

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

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

Answer: C

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

NEW QUESTION 6
- (Topic 3)
A 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 7
- (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 8
- (Topic 3)
A company streams video to multiple devices across a campus. When this happens, several users report a degradation of network performance. Which of the following would MOST likely address this issue?

A. Enable IGMP snooping on the switches.
B. Implement another DHCP server.
C. Reconfigure port tagging for the video traffic.
D. Change the SSID of the APs

Answer: A

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

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

Answer: C

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

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

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

Answer: B

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

NEW QUESTION 10
- (Topic 3)
A technician removes an old PC from the network and replaces it with a new PC that is unable to connect to the LAN. Which of the Mowing is MOST likely the cause of the issue?

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

Answer: A

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

NEW QUESTION 14
- (Topic 3)
Which of the following types of attacks can be used to gain credentials by setting up rogue APs with identical corporate SSIDs?

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

Answer: B

NEW QUESTION 19
- (Topic 3)
A network administrator is trying to create a subnet, which is the most efficient size possible, for 31 laptops. Which of the following network subnets would be best in this situation?

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

Answer: D

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

NEW QUESTION 22
- (Topic 3)
A user calls the help desk to report being unable to reach a file server. The technician logs in to the user's computer and verifies that pings fall to respond back when trying to reach the file server. Which of the following would BEST help the technician verify whether the file server is reachable?

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

Answer: D

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

NEW QUESTION 27
- (Topic 3)
A customer is adding fiber connectivity between adjacent buildings. A technician terminates the multimode cable to the fiber patch panel. After the technician connects the fiber patch cable, the indicator light
does not come on. Which of the following should a technician try first to troubleshoot this issue?

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

Answer: A

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

NEW QUESTION 30
- (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 33
- (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 38
- (Topic 3)
Which of the following technologies would MOST likely De used to prevent the loss of connection between a virtual server and network storage devices?

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

Answer: D

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

NEW QUESTION 42

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

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

Answer: C

Explanation:
Using the cloud as a redundant data center means that the company does not need to invest in building and maintaining a physical backup site, which can be costly and time- consuming. Instead, the company can pay for the cloud services as needed, which can reduce the initial capital expenses and operational costs. However, this does not mean that the other options are true. Changing cloud providers may not be easy due to compatibility, contractual, or regulatory issues. Security for company data may not be better in the cloud, depending on the cloud provider's policies and practices. The need for backups is not eliminated, as the cloud data still needs to be protected from loss, corruption, or unauthorized access.
References:
? Part 1 of current page talks about how Bing is your AI-powered copilot for the web and provides various examples of how it can help you with different tasks, such as writing a joke, creating a table, or summarizing research. However, it does not mention anything about using the cloud as a redundant data center.
? Part 2 of current page shows the search results for "ai powered search bing chat", which include web, image, and news results. However, none of these results seem to be relevant to the question, as they are mostly about Bing's features, products, or announcements, not about cloud computing or data centers.
? Therefore, I cannot find the answer or the explanation from the current page. I have to use my own knowledge and information from other sources to verify the answer and provide a short but comprehensive explanation. I will cite these sources using numerical references.
? : CompTIA Network+ Certification Exam Objectives, Version 8.0, Domain 3.0: Network Operations, Objective 3.4: Given a scenario, use appropriate resources to support configuration management, Subobjective 3.4.2: Cloud-based configuration management, https://www.comptia.jp/pdf/comptia-network-n10-008-exam-objectives.pdf
? : Cloud Computing: Concepts, Technology & Architecture, Chapter 9: Fundamental Cloud Security, Section 9.1: Cloud Security Threats, https://ptgmedia.pearsoncmg.com/images/9780133387520/samplepages/9780133 387520.pdf
? : Cloud Computing: Principles and Paradigms, Chapter 19: Data Protection and Disaster Recovery for Cloud Computing, Section 19.1: Introduction, https://onlinelibrary.wiley.com/doi/pdf/10.1002/9780470940105.ch19

NEW QUESTION 43
- (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 44
- (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 48
- (Topic 3)
While troubleshooting a network, a VoIP systems engineer discovers a significant inconsistency in the amount of time required for data to reach its destination and return. Which of the following terms best describes this issue?

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

Answer: C

Explanation:
Jitter is the variation in the delay of data packets over a network. It is caused by factors such as network congestion, routing changes, packet loss, or improper queuing. Jitter affects the quality of VoIP calls because it can cause gaps, distortion, or out-of-order delivery of voice data. Jitter can be measured by the difference

between the expected and actual arrival times of packets2. To reduce jitter, VoIP systems use buffers to store and reorder packets before playing them back. However, too much buffering can also increase latency, which is the total time it takes for data to travel from one point to another3.
References2 - VoIP Troubleshooting: 5 Fixes for Common Connection Issues - Nextiva3 - Troubleshooting VoIP — Is it You or the Network? - PingPlotter

NEW QUESTION 51
- (Topic 3)
A bank installed a new smart TV to stream online video services, but the smart TV was not able to connect to the branch Wi-Fi. The next day. a technician was able to connect the TV to the Wi-Fi, but a bank laptop lost network access at the same time. Which of the following is the MOST likely cause?

A. DHCP scope exhaustion
B. AP configuration reset
C. Hidden SSID
D. Channel overlap

Answer: A

Explanation:
DHCP scope exhaustion is the situation when a DHCP server runs out of available IP addresses to assign to clients. DHCP stands for Dynamic Host Configuration Protocol, which is a network protocol that automatically assigns IP addresses and other configuration parameters to clients on a network. A DHCP scope is a range of IP addresses that a DHCP server can distribute to clients. If the DHCP scope is exhausted, new clients will not be able to obtain an IP address and connect to the network. This can explain why the smart TV was not able to connect to the branch Wi-Fi on the first day, and why the bank laptop lost network access on the next day when the TV was connected. The technician should either increase the size of the DHCP scope or reduce the lease time of the IP addresses to avoid DHCP scope exhaustion. References: [CompTIA Network+ Certification Exam Objectives], DHCP Scope Exhaustion - What Is It? How Do You Fix It?

NEW QUESTION 54
- (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 56
- (Topic 3)
Which of the following is a valid and cost-effective solution to connect a fiber cable into a network switch without available SFP ports?

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

Answer: A

NEW QUESTION 59
- (Topic 3)
Which of the following fiber connector types is the most likely to be used on a network interface card?

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

Answer: A

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

NEW QUESTION 63
- (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 66
- (Topic 3)
Which of the following, in addition to a password, can be asked of a user for MFA?

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

Answer: A

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

NEW QUESTION 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 73
- (Topic 3)
Which of the following architectures would allow the network-forwarding elements to adapt to new business requirements with the least amount of operating effort?

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

Answer: A

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

? Software-Defined Networking – CompTIA Network+ N10-007 – 1.3, video lecture by Professor Messer.

NEW QUESTION 77
- (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 79
- (Topic 3)
A network administrator is adding a new switch to the network. Which of the following network hardening techniques would be BEST to use once the switch is in production?

A. Disable unneeded ports
B. Disable SSH service
C. Disable MAC filtering
D. Disable port security

Answer: A

NEW QUESTION 83
- (Topic 3)
A network architect is developing documentation for an upcoming IPv4/IPv6 dual-stack implementation The architect wants to shorten the following IPv6 address: ef82:0000:00O0:000O:0O00:1ab1:1234:1bc2. Which of the following is the MOST appropriate shortened version?

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

Answer: D

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

NEW QUESTION 86
- (Topic 3)
Which of the following redundant devices creates broadcast storms when connected together on a high-availability network?

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

Answer: A

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

NEW QUESTION 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 91
- (Topic 3)
A user calls the IT department to report being unable to log in after locking the computer The user resets the password, but later in the day the user is again unable to log in after locking the computer Which of the following attacks against the user IS MOST likely taking place?

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

Answer: A

NEW QUESTION 93
- (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 network administrator installed an additional IDF during a building expansion project. Which of the following documents need to be updated to reflect the change? (Select TWO).

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

Answer: AF

NEW QUESTION 97
- (Topic 3)
An IT intern moved the location of a WAP from one conference room to another. The WAP was unable to boot following the move. Which of the following should be used to fix the issue?

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

Answer: D

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

NEW QUESTION 102
- (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 105
- (Topic 3)
Which of the following devices would be used to extend the range of a wireless network?

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

Answer: A

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

NEW QUESTION 110
- (Topic 3)
A wireless technician is working to upgrade the wireless infrastructure for a company. The company currently uses the 802.11g wireless standard on all access points. The company requires backward compatibility and is requesting the least expensive solution. Which of the following should the technician recommend to the company?

A. 802.11a
B. 802.11ac
C. 802Hax
D. 802.11n

Answer: D

Explanation:
* 802.11n is a wireless standard that supports data rates up to 600 Mbps and operates in both 2.4 GHz and 5 GHz frequency bands. 802.11n is backward compatible with 802.11g, which operates only in 2.4 GHz band. 802.11n is the least expensive solution that can upgrade the wireless infrastructure for the company, as it does not require replacing all the access points or wireless devices

NEW QUESTION 112
- (Topic 3)
A network administrator needs to monitor traffic on a specific port on a switch. Which of the following should the administrator configure to accomplish the task?

A. Port security
B. Port tagging
C. Port mirroring
D. Media access control

Answer: C

Explanation:
Port mirroring is a technique that allows a network administrator to monitor the traffic on a specific port on a switch by sending a copy of the packets seen on that port to another port where a monitoring device is connected1. Port mirroring can be used to analyze and debug data, diagnose errors, or perform security audits on the network without affecting the normal operation of the switch

NEW QUESTION 116
- (Topic 3)
Which of the following is the most secure connection used to inspect and provide controlled internet access when remote employees are connected to the corporate network?

A. Site-to-site VPN
B. Full-tunnel VPN
C. Split-tunnel VPN
D. SSH

Answer: B

Explanation:
A full-tunnel VPN is a type of virtual private network (VPN) that encrypts and routes all the traffic from the remote device to the corporate network, regardless of the destination or protocol. This provides a secure connection for the remote employees to access the corporate resources, as well as inspect and control the internet

access through the corporate firewall and proxy servers. A full-tunnel VPN also prevents any leakage of sensitive data or exposure to malicious attacks from the public internet. A full-tunnel VPN is more secure than a split-tunnel VPN, which only encrypts and routes the traffic destined for the corporate network, while allowing the traffic for other destinations to bypass the VPN and use the local internet connection. A site-to-site VPN is a type of VPN that connects two or more networks, such as branch offices or data centers, over the internet. It is not suitable for connecting individual remote employees to the corporate network. SSH stands for Secure Shell, and it is a protocol that allows secure remote login and command execution over an encrypted channel. It is not a type of VPN, and it does not provide
controlled internet access. References: CompTIA Network+ N10-008 Cert Guide, Chapter 5, Section 5.3

NEW QUESTION 121
- (Topic 3)
Which of the following describes traffic going in and out of a data center from the internet?

A. Demarcation point
B. North-South
C. Fibre Channel
D. Spine and leaf

Answer: B

NEW QUESTION 125
- (Topic 3)
A network resource was accessed by an outsider as a result of a successful phishing
campaign. Which of the following strategies should be employed to mitigate the effects of phishing?

A. Multifactor authentication
B. Single sign-on
C. RADIUS
D. VPN

Answer: A

Explanation:
Multifactor authentication is a security measure that requires users to provide multiple pieces of evidence before they can access a network resource. This could include requiring users to enter a username, password, and a code sent to the user's mobile phone before they are allowed access. This ensures that the user is who they say they are, reducing the risk of malicious actors gaining access to network resources as a result of a successful phishing campaign.

NEW QUESTION 129
- (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 134
- (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 137
- (Topic 3)
A network engineer needs to change an entire subnet of SLAAC-configured workstation addresses. Which of the following methods would be the best for the engineer to use?

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

Answer: B

Explanation:

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

NEW QUESTION 142
- (Topic 3)
A security engineer is trying to determine whether an internal server was accessed by hosts on the internet. The internal server was shut down during the investigation Which of the following will the engineer review to determine whether the internal server had an unauthorized access attempt?

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

Answer: A

NEW QUESTION 145
- (Topic 3)
Users are reporting intermittent Wi-Fi connectivity in specific parts of a building. Which of the following should the network administrator check FIRST when troubleshooting this issue? (Select TWO).

A. Site survey
B. EIRP
C. AP placement
D. Captive portal
E. SSID assignment
F. AP association time

Answer: AC

Explanation:
This is a coverage issue. WAP placement and power need to be checked. Site survey should be done NEXT because it takes a while.

NEW QUESTION 146
- (Topic 3)
Which of the following should be used to manage outside cables that need to be routed to various multimode uplinks?

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

Answer: A

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

NEW QUESTION 148
- (Topic 3)
A network administrator is reviewing the following metrics from a network management system regarding a switchport. The administrator suspects an issue because users are calling in regards to the switchport's performance:

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

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

A. The connected device is exceeding the configured MTU.

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

Answer: A

NEW QUESTION 151
- (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)
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 158
- (Topic 3)
A network technician is having issues connecting an IoT sensor to the internet The WLAN settings were enabled via a custom command line, and a proper IP address assignment was received on the wireless interlace. However, when trying to connect to the internet, only HTTP redirections are being received when data Is requested. Which of the following will point to the root cause of the Issue?

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

Answer: C

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

NEW QUESTION 161
- (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 163
- (Topic 3)
A company wants to invest in new hardware for the core network infrastructure. The management team requires that the infrastructure be capable of being repaired in less than 60 minutes if any major part fails. Which of the following metrics is MOST likely associated with this requirement?

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

Answer: B

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

NEW QUESTION 166
- (Topic 3)
An administrator is setting up a multicast server on a network, but the firewall seems to be dropping the traffic. After logging in to the device, me administrator sees me following entries:

Rule	Action	Source	Destination	Port
1	Deny	Any	172.30.10.50	Any
2	Deny	Any	232.1.4.9	Any
3	Deny	Any	242.9.15.4	Any
4	Deny	Any	175.50.10.10	Any

Which of the following firewall rules is MOST likely causing the issue?

A. Rule 1
B. Rule 2
C. Rule 3
D. Rule 4

Answer: A

NEW QUESTION 167
- (Topic 3)
Which of the following disaster recovery metrics describes the average length of time a piece of equipment can be expected to operate normally?

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

Answer: D

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

NEW QUESTION 169
- (Topic 3)
A network administrator is troubleshooting a connectivity performance issue. As part of the troubleshooting process, the administrator performs a traceout from the client to the server, and also from the server to the client. While comparing the outputs, the administrator notes they show different hops between the hosts. Which of the following BEST explains these findings?

A. Asymmetric routing
B. A routing loop
C. A switch loop
D. An incorrect gateway

Answer: C

NEW QUESTION 173
- (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 176
- (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 181
- (Topic 3)
To comply with an industry regulation, all communication destined to a secure server should be logged and archived on a storage device. Which of the Mowing can be configured to fulfill this requirement?

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

Answer: B

NEW QUESTION 186
- (Topic 3)
Which of the following connectors and terminations are required to make a Cat 6 cable that connects from a PC to a non-capable MDIX switch? (Select TWO).

A. T1A-568-A - TIA-568-B
B. TIA-568-B - TIA-568-B
C. RJ11
D. RJ45
E. F-type

Answer: AD

NEW QUESTION 189
- (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 193
- (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 195
- (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 199
- (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 201
- (Topic 3)
A network engineer is installing hardware in a newly renovated data center. Major concerns that were addressed during the renovation induded air circulation, building power redundancy, and the need for continuous monitoring. The network engineer IS creating alerts based on the following operation specifications:

AC input voltage	100 to 240VAC
AC maximum input current	<2.7A at 100V
Redundant power supply	Yes
Operating temperature	32–104°F (0–40°C)
Storage temperature	-4–149°F (-20–65°C)
Operating humidity	10–85%
Storage humidity	5–95%

Which of the following should the network engineer configure?

A. Environmental monitoring alerts for humidity greater than 95%
B. SIEM to parse syslog events for a failed power supply
C. SNMP traps to report when the chassis temperature exceeds 950F (3500)
D. UPS monitoring to report when input voltage drops below 220VAC

Answer: C

Explanation:
The alert that the network engineer should configure based on the operation specifications is SNMP traps to report when the chassis temperature exceeds 95°F (35°C). SNMP (Simple Network Management Protocol) is a protocol that allows network devices to communicate their status and performance information to a central management system, called an SNMP manager. SNMP traps are messages that are sent by network devices to notify the SNMP manager of an event or condition that requires attention, such as an error, a failure, or a threshold violation. In this case, the network engineer should configure SNMP traps on the network devices to send an alert when their chassis temperature exceeds 95°F (35°C), which is the maximum operating temperature specified in the table. This alert would help the network engineer monitor and troubleshoot any overheating issues that could affect the network performance or availability. References: CompTIA Network+ N10-008 Certification Study Guide, page 228; The Official CompTIA Network+ Student Guide (Exam N10-008), page 8-11.

NEW QUESTION 206

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

A. Cat 7
B. Single-mode
C. Multimode
D. Cat 6

Answer: B

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

NEW QUESTION 208
- (Topic 3)
A network administrator received a report staling a critical vulnerability was detected on an application that is exposed to the internet. Which of the following Is the appropriate NEXT step?

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

Answer: A

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

NEW QUESTION 212
- (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 215
- (Topic 3)
A device is connected to a managed Layer 3 network switch. The MAC address of the device is known, but the static IP address assigned to the device is not. Which of the following features of a Layer 3 network switch should be used to determine the IPv4 address of the device?

A. MAC table
B. Neighbor Discovery Protocol
C. ARP table
D. IPConfig
E. ACL table

Answer: C

Explanation:
The ARP table is a database that is used by a device to map MAC addresses to their corresponding IP addresses. When a device sends a packet to another device on the same network, it uses the MAC address of the destination device to deliver the packet. The ARP table allows the device to determine the IP address of the destination device based on its MAC address.

NEW QUESTION 216
- (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 218
- (Topic 3)
Which of the following network types is composed of computers that can all communicate with one another with equal permissions and allows users to directly share what is on or attached to their computers?

A. Local area network
B. Peer-to-peer network
C. Client-server network
D. Personal area network

Answer: B

Explanation:
A peer-to-peer network is a type of network in which each computer (or node) can communicate directly with any other node, without requiring a central server or authority. Each node can act as both a client and a server, and can share its own resources, such as files, printers, or internet connection, with other nodes. A peer-to-peer network allows users to directly access and exchange what is on or attached to their computers, with equal permissions and responsibilities

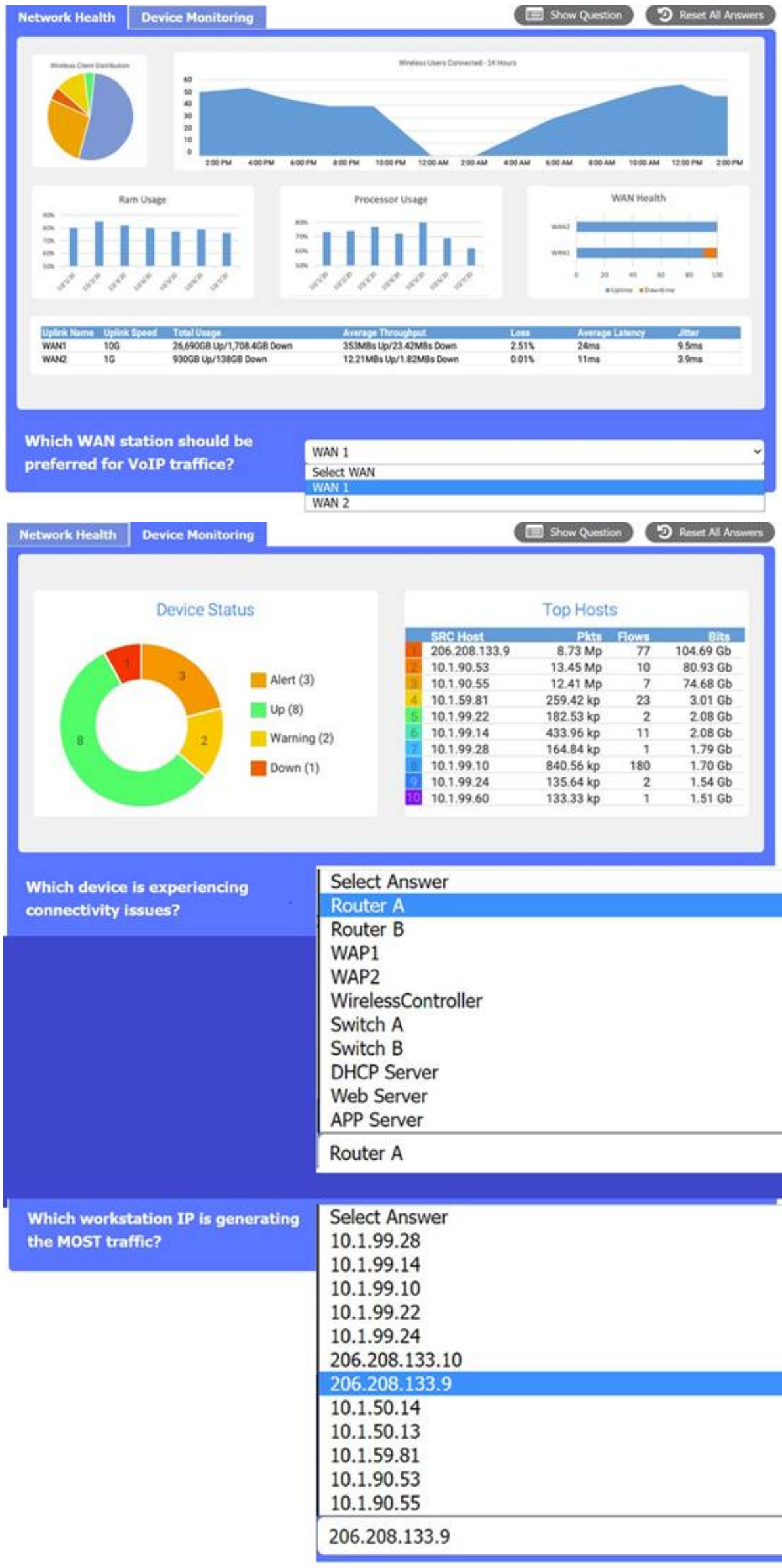
NEW QUESTION 221
- (Topic 3)
A network technician is responding to an issue with a local company. To which of the following documents should the network technician refer to determine the scope of the issue?

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

Answer: D

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

NEW QUESTION 222
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 227
- (Topic 3)
Which of me following security controls indicates unauthorized hardware modifications?

A. Biometric authentication
B. Media device sanitization
C. Change management policy
D. Tamper-evident seals

Answer: A

NEW QUESTION 230
- (Topic 3)

Which of the following describes a network in which users and devices need to mutually authenticate before any network resource can be accessed?

A. Least privilege
B. Local authentication
C. Zero trust
D. Need to know

Answer: C

Explanation:
A zero trust network is a network in which users and devices need to mutually authenticate before any network resource can be accessed. A zero trust network assumes that no one and nothing can be trusted by default, even if they were previously verified or are within the network perimeter. A zero trust network uses various technologies and practices, such as data and log aggregation, cybersecurity analytics, continuous diagnostics and mitigation, user behavior analytics, microsegmentation, and identity and access management, to enforce granular and dynamic policies based on the context and behavior of the users and devices123.
References:
? What is Zero Trust? | Internet of Things | CompTIA3
? The Death of the Perimeter: Zero Trust is (Almost) Here to Stay | Cybersecurity | CompTIA2
? CompTIA Network+ Certification Exam N10-008 Practice Test 17 - ExamCompass1

NEW QUESTION 234
- (Topic 3)
Which of the following steps of the troubleshooting methodology would most likely include checking through each level of the OSI model after the problem has been identified?

A. Establish a theory.
B. Implement the solution.
C. Create a plan of action.
D. Verify functionality.

Answer: C

Explanation:
Creating a plan of action is the step of the troubleshooting methodology that would most likely include checking through each level of the OSI model after the problem has been identified. According to the web search results, the troubleshooting methodology consists of the following steps: 12
? Define the problem: Identify the symptoms and scope of the problem, and gather relevant information from users, devices, and logs.
? Establish a theory: Based on the information collected, hypothesize one or more possible causes of the problem, and rank them in order of probability.
? Test the theory: Test the most probable cause first, and if it is not confirmed, eliminate it and test the next one. Repeat this process until the root cause is found or a new theory is needed.
? Create a plan of action: Based on the confirmed cause, devise a solution that can resolve the problem with minimal impact and risk. The solution may involve checking through each level of the OSI model to ensure that all layers are functioning properly and that there are no configuration errors, physical damages, or logical inconsistencies34
? Implement the solution: Execute the plan of action, and monitor the results. If the problem is not solved, revert to the previous state and create a new plan of action.
? Verify functionality: Confirm that the problem is fully resolved and that the network is restored to normal operation. Perform preventive measures if possible to avoid recurrence of the problem.
? Document the findings: Record the problem description, the solution, and the outcome. Update any relevant documentation, such as network diagrams, policies, or procedures.
References1: Troubleshooting Methods for Cisco IP Networks 2: Troubleshooting Methodologies - CBT IT Certification Training 3: How to use the OSI Model to Troubleshoot Networks 4: How is the OSI model used in troubleshooting? – Sage-Answer

NEW QUESTION 236
- (Topic 3)
A network administrator is configuring a firewall to allow for a new cloud-based email server. The company standard is to use SMTP to route email traffic. Which of the following ports, by default, should be reserved for this purpose?

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

Answer: B

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

NEW QUESTION 241
- (Topic 3)
A technician uses a badge to enter a security checkpoint on a corporate campus. An unknown individual quickly walks in behind the technician without speaking. Which of the following types of attacks did the technician experience?

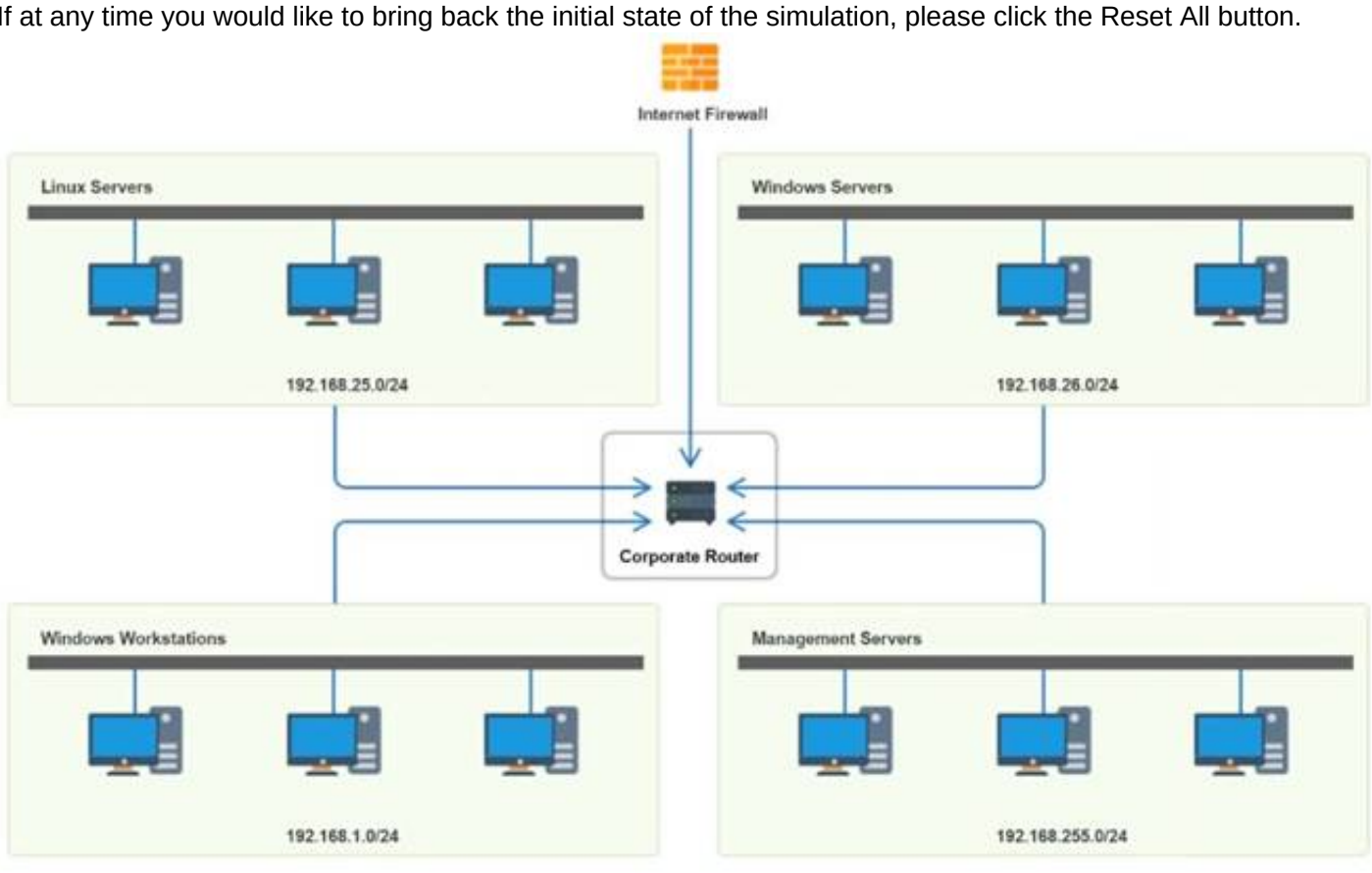
A. Tailgating
B. Evil twin
C. On-path

D. Piggybacking

Answer: A

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

NEW QUESTION 242
SIMULATION - (Topic 3)
You have been tasked with implementing an ACL on the router that will:
* 1. Permit the most commonly used secure remote access technologies from the management network to all other local network segments
* 2. Ensure the user subnet cannot use the most commonly used remote access technologies in the Linux and Windows Server segments.
* 3. Prohibit any traffic that has not been specifically allowed.
INSTRUCTIONS
Use the drop-downs to complete the ACL
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.



Router Access Control List

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

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Router Access Control List

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

NEW QUESTION 246
- (Topic 3)
A desktop support department has observed slow wireless speeds for a new line of laptops using the organization's standard image. No other devices have experienced the same issue. Which of the following should the network administrator recommend troubleshooting FIRST to resolve this issue?

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

Answer: D

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

NEW QUESTION 251
- (Topic 3)
Which of the following is MOST appropriate for enforcing bandwidth limits when the performance of an application is not affected by the use of buffering but is heavily impacted by packet drops?

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

Answer: B

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

NEW QUESTION 254
- (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 255
- (Topic 3)
Which of the following fouling protocols is generally used by major ISPs for handing large- scale internet traffic?

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

Answer: D

NEW QUESTION 256
- (Topic 3)
A PC user who is on a local network reports very slow speeds when accessing files on the network server The user's PC Is connecting, but file downloads are very slow when compared to other users' download speeds The PC's NIC should be capable of Gigabit Ethernet. Which of the following will MOST likely fix the issue?

A. Releasing and renewing the PC's IP address
B. Replacing the patch cable
C. Reseating the NIC inside the PC
D. Flushing the DNS cache

Answer: B

Explanation:
A slow download speed can be caused by a faulty patch cable, which is the cable used to connect the user's PC to the network server. If the patch cable is damaged, the connection will be slower than expected, resulting in slow download speeds. Replacing the patch cable is the most likely solution to this issue, as it will provide a new, reliable connection that should allow for faster download speeds.

NEW QUESTION 259
- (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 263
- (Topic 3)
An engineer is troubleshooting poor performance on the network that occurs during work hours. Which of the following should the engineer do to improve performance?

A. Replace the patch cables.
B. Create link aggregation.
C. Create separation rules on the firewall.
D. Create subinterfaces on the existing port.

Answer: B

Explanation:
Link aggregation is a technique that allows multiple network interfaces to act as a single logical interface, increasing the bandwidth and redundancy of the network connection. Link aggregation can improve the performance of the network by balancing the traffic load across multiple links and providing failover in case one link fails. Link aggregation is also known as port trunking, port channeling, or NIC teaming.
References: CompTIA Network+ N10-008 Cert Guide, Chapter 3, Section 3.3

NEW QUESTION 266
- (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 268
- (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 270
- (Topic 3)
After a firewall replacement, some alarms and metrics related to network availability stopped updating on a monitoring system relying on SNMP. Which of the following should the network
administrator do first?

A. Modify the device's MIB on the monitoring system.
B. Configure syslog to send events to the monitoring system.
C. Use port mirroring to redirect traffic to the monitoring system.
D. Deploy SMB to transfer data to the monitoring syste

Answer: A

Explanation:

SNMP (Simple Network Management Protocol) is a protocol that allows network devices to communicate with a monitoring system and provide information about their status, performance, and configuration. SNMP relies on MIBs (Management Information Bases), which are collections of objects that define the types of information that can be accessed or modified on a device1.
When a firewall replacement occurs, the new firewall may have a different MIB than the old one, which means that the monitoring system may not be able to recognize or interpret the data sent by the new firewall. This can cause some alarms and metrics related to network availability to stop updating on the monitoring system. To fix this, the network administrator should modify the device’s MIB on the monitoring system, so that it matches the MIB of the new firewall and can correctly process the SNMP data2.

The other options are not relevant to the issue. Configuring syslog to send events to the monitoring system would not affect the SNMP data, as syslog is a different protocol that sends log messages from network devices to a central server. Using port mirroring to redirect traffic to the monitoring system would not help, as port mirroring is a technique that copies traffic from one port to another for analysis or troubleshooting purposes, but does not change the format or content of the traffic. Deploying SMB to transfer data to the monitoring system would not work, as SMB is a protocol that allows file sharing and access between network devices, but does not support SNMP data.
ReferencesGrafana & Prometheus SNMP: advanced network monitoring guideConfiguring Windows Systems for Monitoring with SNMP - ScienceLogic

NEW QUESTION 273
- (Topic 3)
Clients have reported slowness between a branch and a hub location. The senior engineer suspects asymmetrical routing is causing the issue. Which of the following should the engineer run on both the source and the destination network devices to validate this theory?

A. traceroute
B. ping
C. route
D. nslookup

Answer: A

Explanation:

Asymmetric routing occurs when traffic does not traverse the same path in both directions of a conversation. This can cause problems when there are stateful devices, such as firewalls or NAT devices, in the path that expect the traffic to be symmetrical. Asymmetric routing can also result in suboptimal TCP performance, as TCP assumes that the SYN and ACK packets take the same path1.
To validate the theory of asymmetric routing, the engineer should run the traceroute command on both the source and the destination network devices. The traceroute command shows the route that packets take to reach a destination, by displaying the IP addresses and hostnames of the routers along the path, as well as the time taken for each hop. By comparing the output of the traceroute command from both ends, the engineer can determine if the traffic is taking different paths in each direction, and identify where the asymmetry occurs2.
The ping command is not sufficient to validate the theory of asymmetric routing, as it only tests the connectivity and latency between two devices, but does not show the intermediate hops or the path taken by the packets. The route command shows the routing table of a device, but does not show the actual path taken by the packets. The nslookup command resolves a hostname to an IP address, or vice versa, but does not show the route or the connectivity between two devices.
ReferencesHow to Find & Fix Asymmetric Routing Issues | AuvikIdentifying and Troubleshooting Asymmetric Routing in WAAS - Cisco Community

NEW QUESTION 277
- (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 279
- (Topic 3)
A network administrator is creating a VLAN that will only allow executives to connect to a data source. Which of the following is this scenario an example of?

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

Answer: B

Explanation:

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

NEW QUESTION 280
- (Topic 3)

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

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

Answer: D

Explanation:

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

NEW QUESTION 283
- (Topic 3)
A technician reviews a network performance report and finds a high level of collisions happening on the network. At which of the following layers of the OSI model would these collisions be found?

A. Layer 1
B. Layer 3
C. Layer 4
D. Layer 7

Answer: A

Explanation:

Collisions occur when two or more devices try to transmit signals on the same physical medium at the same time. This causes interference and data loss. Collisions can only happen at the physical layer of the OSI model, which is responsible for transmitting and receiving raw bits over a physical medium such as a cable or a wireless channel. The physical layer does not have any mechanism to prevent or resolve collisions. Therefore, higher layers of the OSI model, such as the data link layer, need to implement protocols to detect and recover from collisions, such as CSMA/CD for Ethernet networks. ReferencesCollision in computer networkingData Link Layer | Layer 2 | The OSI-Model

NEW QUESTION 284
- (Topic 3)
A network technician is configuring a wireless network that consists of multiple APS for better coverage and allows roaming between the APS. Which of the following types of SSIDs should the technician configure?

A. Basic Service Set
B. Independent Basic Service Set
C. Extended Service Set
D. Distribution System Service

Answer: C

Explanation:
An extended service set (ESS) is a type of SSID that allows multiple access points (APs) to share the same SSID and provide seamless roaming for wireless clients. An ESS consists of two or more basic service sets (BSSs), which are individual APs with their own SSIDs. A distribution system (DS), such as a wired Ethernet LAN, connects the BSSs and enables data transfer between them. A wireless client can associate with any AP in the ESS and move from one BSS to another without losing connectivity or reauthenticating.
References:
? CompTIA Network+ N10-008 Certification Exam Objectives, page 51
? CompTIA Network+ Cert Guide: Wireless Networking, page 12

NEW QUESTION 285
- (Topic 3)
Which of the following ports should a network administrator enable for encrypted log-in to a network switch?

A. 22
B. 23
C. 80
D. 123

Answer: A

Explanation:
Port 22 is used by Secure Shell (SSH), which is a protocol that provides a secure and encrypted method for remote access to hosts by using public-key cryptography and challenge-response authentication. SSH can be used to log in to a network switch and configure it without exposing the credentials or commands to eavesdropping or tampering. Port 23 is used by Telnet, which is an insecure and plaintext protocol for remote access. Port 80 is used by HTTP, which is a protocol for web communication. Port 123 is used by NTP, which is a protocol for time synchronization

NEW QUESTION 289
- (Topic 3)
A medical building offers patients Wi-Fi in the waiting room. Which of the following security features would be the BEST solution to provide secure connections and keep the medical data protected?

A. Isolating the guest network
B. Securing SNMP
C. MAC filtering
D. Disabling unneeded switchports

Answer: A

NEW QUESTION 293
- (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 298
- (Topic 3)
Which of the following would be increased by adding encryption to data communication across the network?

A. Availability
B. Integrity
C. Accountability
D. Confidentiality

Answer: D

Explanation:
Confidentiality is the property of preventing unauthorized access or disclosure of data. Encryption is a method of transforming data into an unreadable format that can only be decrypted by authorized parties who have the correct key. Encryption can increase the confidentiality of data communication across the network by making it harder for attackers to intercept or eavesdrop on the data. References: Network+ Study Guide
Objective 4.1: Summarize the purposes of physical security devices. Subobjective: Encryption.

NEW QUESTION 300
- (Topic 3)
A network technician is implementing a solution that will allow end users to gain access to multiple applications after logging on. Which of the following authentication methods would allow this type of access?

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

Answer: A

NEW QUESTION 304
- (Topic 3)
An organization has experienced an increase in malicious spear-phishing campaigns and wants to mitigate the risk of hyperlinks from inbound emails.
Which of the following appliances would best enable this capability?

A. Email protection gateway
B. DNS server
C. Proxy server
D. Endpoint email client
E. Sandbox

Answer: A

Explanation:
An email protection gateway is an appliance that can filter and block malicious emails and attachments before they reach the recipients. An email protection gateway can mitigate the risk of hyperlinks from inbound emails by scanning the links for malicious content, rewriting the links to point to a safe domain, or blocking the links altogether. An email protection gateway can also perform other functions such as spam filtering, antivirus scanning, encryption, and data loss prevention. A DNS server, a proxy server, an endpoint email client, and a sandbox are not appliances that can enable this capability, as they have different purposes and functions.
References

? 1: CompTIA Network+ N10-008 Certification Study Guide, page 304
? 2: CompTIA Network+ N10-008 Exam Subnetting Quiz, question 15
? 3: CompTIA Network+ N10-008 Certification Practice Test, question 5
? 4: Email Protection Gateway – N10-008 CompTIA Network+ : 3.2

NEW QUESTION 306
- (Topic 3)
A hacker used a packet sniffer on the network to capture the hardware address of the server. Which of the following types of attacks can the hacker perform now?

A. Piggybacking
B. MAC spoofing
C. Evil twin
D. VLAN hopping

Answer: B

Explanation:
MAC spoofing is a technique that allows a hacker to change the media access control (MAC) address of their network interface card (NIC) to impersonate another device on the network. By capturing the hardware address of the server, the hacker can spoof their MAC address to match the server's and bypass any MAC-based security measures, such as MAC filtering or MAC authentication. MAC spoofing can also be used to perform man-in- the-middle attacks, where the hacker intercepts and alters the traffic between two devices on the network. References: CompTIA Network+ N10-008 Cert Guide, Chapter 7, Section 7.3

NEW QUESTION 309
- (Topic 3)
A network engineer is investigating reports of poor network performance. Upon reviewing a report, the engineer finds hundreds of CRC errors on an interface. Which of the following is the MOST likely cause of these errors?

A. A bad wire on the Cat 5e cable
B. The wrong VLAN assignment to the switchport
C. A misconfigured QoS setting on the router
D. Both sides of the switch trunk set to full duplex

Answer: A

NEW QUESTION 313
- (Topic 3)
A company wants to implement a disaster recovery site for non-critical applications, which can tolerate a short period of downtime. Which of the following types of sites should the company implement to achieve this goal?

A. Hot
B. Cold
C. warm
D. Passive

Answer: C

Explanation:
The type of site that the company should implement for non-critical applications that can tolerate a short period of downtime is a warm site. A warm site is a disaster recovery site that has some pre-installed equipment and software, but not as much as a hot site, which is fully operational and ready to take over the primary site's functions in case of a disaster. A warm site requires some time and effort to activate and synchronize with the primary site, but not as much as a cold site, which has no equipment or software installed and requires a lot of configuration and testing. A passive site is not a common term for a disaster recovery site, but it could refer to a site that only receives backups from the primary site and does not actively participate in the network operations. References: CompTIA Network+ N10- 008 Certification Study Guide, page 347; The Official CompTIA Network+ Student Guide (Exam N10-008), page 13-10.

NEW QUESTION 318
- (Topic 3)
A network administrator is reviewing north-south traffic to determine whether a security threat exists. Which of the following explains the type of traffic the administrator is reviewing?

A. Data flowing between application servers
B. Data flowing between the perimeter network and application servers
C. Data flowing in and out of the data center
D. Data flowing between local on-site support and backup servers

Answer: C

Explanation:
North-south traffic is any communication between components of a data center and another system, which is physically out of the boundary of the data center. It is also referred to as client-server traffic, as it usually involves requests from end users or external applications to the data center resources. For example, when a user accesses a web application hosted in a data center, the traffic between the user's browser and the web server is considered north-south traffic.

NEW QUESTION 321
- (Topic 3)
A newly installed VoIP phone is not getting the DHCP IP address it needs to connect to the phone system. Which of the following tasks needs to be completed to allow the phone to operate correctly?

A. Assign the phone's switchport to the correct VLAN
B. Statically assign the phone's gateway address.

C. Configure a route on the VoIP network router.
D. Implement a VoIP gateway

Answer: A

NEW QUESTION 323
- (Topic 3)
A network technician is selecting new network hardware, and availability is the main concern. Which of the following availability concepts should the technician consider?

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

Answer: A

Explanation:
The availability concept that the network technician should consider when selecting new network hardware is RTO (Recovery Time Objective). RTO is a metric that defines the maximum acceptable time for restoring a system or service after a disruption or failure. RTO is based on the impact and cost of downtime for the business and its customers. RTO helps determine the level of redundancy and backup needed for network hardware to ensure high availability and minimize downtime. References: CompTIA Network+ N10-008 Certification Study Guide, page 346; The Official CompTIA Network+ Student Guide (Exam N10-008), page 13-9.

NEW QUESTION 328
- (Topic 3)
Two users on a LAN establish a video call. Which of the following OSI model layers ensures the initiation coordination, and termination of the call?

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

Answer: A

Explanation:
The OSI model layer that ensures the initiation, coordination, and termination of a video call is the session layer. The session layer is responsible for establishing, maintaining, and terminating communication sessions between two devices on a network.

NEW QUESTION 330
- (Topic 3)
A network administrator is testing performance improvements by configuring channel bonding on an 802.Hac AP. Although a site survey detected the majority of the 5GHz frequency spectrum was idle, being used only by the company's WLAN and a nearby government radio system, the AP is not allowing the administrator to manually configure a large portion of the 5GHz frequency range. Which of the following would be BEST to configure for the WLAN being tested?

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

Answer: C

NEW QUESTION 331
- (Topic 3)
Which of the following describes the BEST device to configure as a DHCP relay?

A. Bridge
B. Router
C. Layer 2 switch
D. Hub

Answer: B

Explanation:
Normally, routers do not forward broadcast traffic. This means that each broadcast domain must be served by its own DHCP server. On a large network with multiple subnets, this would mean provisioning and configuring many DHCP servers. To avoid this scenario, a DHCP relay agent can be configured to provide forwarding of DHCP traffic between subnets. Routers that can provide this type of forwarding are described as RFC 1542 compliant. The DHCP relay intercepts broadcast DHCP frames, applies a unicast address for the appropriate DHCP server, and forwards them over the interface for the subnet containing the server. The DHCP server can identify the original IP subnet from the packet and offer a lease from the appropriate scope. The DHCP relay also performs the reverse process of directing responses from the server to the appropriate client subnet.

NEW QUESTION 334
- (Topic 3)
A network security engineer is investigating a potentially malicious Insider on the network. The network security engineer would like to view all traffic coming from the user's PC to the switch without interrupting any traffic or having any downtime. Which of the following should the network security engineer do?

A. Turn on port security.

B. Implement dynamic ARP inspection.
C. Configure 802.1Q.
D. Enable port mirroring.

Answer: D

Explanation:
Port mirroring is a feature that allows a network switch to copy the traffic from one or more ports to another port for monitoring purposes. Port mirroring can be used to analyze the network traffic from a specific source, destination, or protocol without affecting the normal operation of the network. Port mirroring can also help to detect and troubleshoot network problems, such as performance issues, security breaches, or policy violations.
The other options are not correct because they do not meet the requirements of the question. They are:
? Turn on port security. Port security is a feature that restricts the number and type
of devices that can connect to a switch port. Port security can help to prevent unauthorized access, MAC address spoofing, or MAC flooding attacks. However, port security does not allow the network security engineer to view the traffic from the user's PC to the switch.
? Implement dynamic ARP inspection. Dynamic ARP inspection (DAI) is a feature
that validates the ARP packets on a network and prevents ARP spoofing attacks. DAI can help to protect the network from man-in-the-middle, denial-of-service, or data interception attacks. However, DAI does not allow the network security engineer to view the traffic from the user's PC to the switch.
? Configure 802.1Q. 802.1Q is a standard that defines how to create and manage
virtual LANs (VLANs) on a network. VLANs can help to segment the network into logical groups based on function, security, or performance. However, 802.1Q does not allow the network security engineer to view the traffic from the user's PC to the switch.
References1: Port Mirroring - an overview | ScienceDirect Topics2: Network+ (Plus) Certification | CompTIA IT Certifications3: Port Security - an overview | ScienceDirect Topics4: Dynamic ARP Inspection - an overview | ScienceDirect Topics5: 802.1Q - an overview | ScienceDirect Topics

NEW QUESTION 338
- (Topic 3)
Which of the following authentication methods requires a user to enter a password and scan a fingerprint?

A. Single sign-on
B. Kerberos
C. Multifactor
D. Network access control

Answer: C

Explanation:
Multifactor authentication is a method of verifying a user's identity by requiring more than one factor, such as something the user knows, something the user has, or something the user is. A password is something the user knows, and a fingerprint is something the user is. Therefore, a user who needs to enter a password and scan a fingerprint is using multifactor authentication.

NEW QUESTION 339
- (Topic 3)
A network security engineer locates an unapproved wireless bridge connected to the corporate LAN that is broadcasting a hidden SSID, providing unauthenticated access to internal resources. Which of the following types of attacks BEST describes this finding?

A. Rogue access point Most Voted
B. Evil twin
C. ARP spoofing
D. VLAN hopping

Answer: A

Explanation:
A rogue access point is an illegitimate access point plugged into a network to create a bypass from outside into the legitimate network. By contrast, an evil twin is a copy of a legitimate access point.

NEW QUESTION 340
- (Topic 3)
A network administrator is creating a subnet for a remote office that has 53 network devices. An additional requirement is to use the most efficient subnet. Which of the following CIDR notations indicates the appropriate number of IP addresses with the LEAST amount of unused addresses? (Choose Correct option and give explanation directly from CompTIA Network+ Study guide or documents)

A. /24
B. /26
C. /28
D. /32

Answer: B

Explanation:
This CIDR notation indicates that there are 64 IP addresses, of which 62 are usable for network devices. This provides the LEAST amount of unused addresses, making it the most efficient subnet for a remote office with 53 network devices. According to the CompTIA Network+ Study Guide, "Subnetting allows you to divide one large network into smaller, more manageable networks or subnets."

NEW QUESTION 341
- (Topic 3)
A support agent receives a report that a remote user's wired devices are constantly disconnecting and have slow speeds. Upon inspection, the support agent sees that the user's coaxial modem has a signal power of -97dB Which of the following should the support agent recommend to troubleshoot the issue?

A. Removing any splitters connected to the line

B. Switching the devices to wireless
C. Moving the devices closer to the modern
D. Lowering the network speed

Answer: A

Explanation:
A splitter is a device that divides a coaxial cable into two or more branches, allowing multiple devices to share the same cable connection. However, a splitter also reduces the signal strength and quality of the cable, which can affect the performance and reliability of the devices connected to it. A signal power of -97dB is very low and indicates a weak or poor cable signal, which can cause constant disconnections and slow speeds.
The support agent should recommend removing any splitters connected to the line and connecting the coaxial modem directly to the cable outlet. This can help to improve the signal power and quality of the cable, and thus enhance the performance and reliability of the wired devices. Alternatively, the support agent can also suggest using a signal amplifier or booster, which is a device that increases the signal strength and quality of the cable, to compensate for the signal loss caused by the splitter.
The other options are not correct because they are not the best recommendations to troubleshoot the issue. They are:
? Switching the devices to wireless. Switching the devices to wireless may not solve
the issue, as the wireless connection may also depend on the cable signal and quality. Moreover, switching the devices to wireless may introduce other problems, such as interference, security, or compatibility issues, that can affect the performance and reliability of the devices.
? Moving the devices closer to the modem. Moving the devices closer to the modem
may not solve the issue, as the problem is not related to the distance between the devices and the modem, but to the signal power and quality of the cable. Moreover, moving the devices closer to the modem may not be feasible or convenient for the user, depending on the layout and setup of the location.
? Lowering the network speed. Lowering the network speed may not solve the issue,
as the problem is not related to the bandwidth or capacity of the network, but to the signal power and quality of the cable. Moreover, lowering the network speed may degrade the user experience and satisfaction, as the user may not be able to access or use the network services or applications as expected.
References1: Network+ (Plus) Certification | CompTIA IT Certifications2: What is a Coaxial Splitter? - Definition from Techopedia3: What is a Signal Amplifier? - Definition from Techopedia

NEW QUESTION 343
.....

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