

CompTIA

Exam Questions 220-1201

CompTIA A+ Certification Exam: Core 1



NEW QUESTION 1

- (Topic 1)

Which of the following best represents the purpose of NFC?

- A. Wired connections between several devices
- B. Short-distance wireless connections between two devices
- C. Wireless connections between multiple devices at once
- D. Direct connection of two computers for file sharing

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

NFC (Near-Field Communication) is a subset of RFID technology designed for very short- range wireless communication, typically within a few centimeters. It is primarily used for contactless transactions, like mobile payments, and can also support peer-to-peer data exchanges. NFC operates at 13.56 MHz and enables devices to communicate when placed near each other.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 7, "Wireless and SOHO Networks", page 400.

NEW QUESTION 2

- (Topic 1)

An employee who travels worldwide wants a workstation to perform the same whether the workstation is in the corporate office environment or elsewhere. Which of the following should a technician implement?

- A. Public cloud
- B. VDI
- C. SSH
- D. SaaS

Answer: B

NEW QUESTION 3

- (Topic 1)

A network administrator must ensure that a printer will still be assigned a specific IP address even if all addresses are depleted. Which of the following network configuration concepts is this describing?

- A. VLAN
- B. Lease
- C. Reservation
- D. Exclusion

Answer: C

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A DHCP reservation binds a specific MAC address to an IP address so the device always receives the same IP from the DHCP server. This ensures network devices like printers maintain consistent connectivity and availability even when the IP pool is low.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 18, page 1252.

NEW QUESTION 4

- (Topic 1)

A user joins a conference call with a Bluetooth headset. Which of the following has the user created?

- A. MAN
- B. PAN
- C. SAN
- D. WAN

Answer: B

Explanation:

* B. PAN (Personal Area Network):

A PAN is a network established between devices in close proximity, such as between a smartphone and a Bluetooth headset. Bluetooth technology is specifically designed for short-range communication, making it a type of PAN.

Incorrect Options:

* A. MAN (Metropolitan Area Network): A MAN covers a city or metropolitan area and is not relevant to Bluetooth connections.

* C. SAN (Storage Area Network): A SAN is used for large-scale data storage, unrelated to Bluetooth connections.

* D. WAN (Wide Area Network): A WAN spans large geographical areas (e.g., the internet) and is not relevant to this scenario.

Key Takeaway: Bluetooth connections, such as those between a headset and a device, create a Personal Area Network (PAN).

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 2.1 – Network types and their features.

NEW QUESTION 5

- (Topic 1)

An IT specialist compares Bluetooth and NFC technologies for mobile device connectivity. Which of the following statements accurately describes a key difference between the two?

- A. NFC is faster than Bluetooth when transferring large files between devices.
- B. NFC consumes more power than Bluetooth, making it less suitable for devices in which battery conservation is crucial.

- C. NFC requires pairing with the receiving host, whereas Bluetooth just needs the available connection.
- D. NFC works best within a few centimeters, but Bluetooth can connect devices that are up to 32ft (10m) apart.

Answer: D

Explanation:

Comprehensive and Detailed In-Depth Explanation:

NFC (Near-Field Communication) operates at very short ranges — usually less than 4cm, and is ideal for quick, secure transactions like contactless payments. Bluetooth supports longer ranges (up to 10 meters or 32 feet) and is suited for ongoing connections like wireless headsets or file transfers.

? Option A: Bluetooth is faster for large file transfers.

? Option B: NFC uses less power, not more.

? Option C: NFC does not require pairing — Bluetooth does. CompTIA A+ Core 1 Exam Objective Reference:

? Objective 1.5: Given a scenario, connect and configure accessories and ports of mobile devices.

=====

NEW QUESTION 6

- (Topic 1)

Several storms cause mission-critical servers to go offline unexpectedly. A server also goes offline suddenly due to hardware failure. Upon assessment, the company purchases new UPSs to condition power and allow the OSs to shut down gracefully in the event of a power failure. However, the UPSs are delayed due to supply chain issues. Which of the following can balance a cost-effective solution with uptime requirements?

- A. Purchasing backup generators
- B. Increasing input voltage
- C. Installing redundant PSUs
- D. Activating a hot site

Answer: C

Explanation:

* C. Installing redundant PSUs (Power Supply Units):

Redundant PSUs provide fault tolerance by ensuring that if one power supply fails, another will take over seamlessly.

This is a cost-effective way to increase uptime while waiting for the UPSs to arrive. Incorrect Options:

* A. Purchasing backup generators: Generators are costly and are typically used for long-term outages, not as an immediate or cost-effective solution.

* B. Increasing input voltage: This is not a practical solution to hardware failures or power issues.

* D. Activating a hot site: A hot site is an expensive, fully operational backup facility that would not be a cost-effective solution for this scenario.

Key Takeaway: Installing redundant PSUs is a cost-effective way to balance uptime requirements in case of power or hardware failure.

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 5.3 – Power-related troubleshooting.

NEW QUESTION 7

- (Topic 1)

Which of the following is an advantage of using a hybrid cloud instead of a public cloud?

- A. Ability to reduce management overhead
- B. Ability to use cross-platform virtualization
- C. Ability to meet data residency requirements
- D. Ability to leverage IaaS and PaaS

Answer: C

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A hybrid cloud combines on-premises infrastructure with public cloud services. One significant advantage is that it allows organizations to keep sensitive data in a private environment to meet regulatory or data residency requirements, while still utilizing the scalability and cost-efficiency of the public cloud for other workloads. This ensures compliance with legal mandates about data location.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 8, "Virtualization and Cloud Computing", page 488. Also supported in CompTIA A+ Exam

Objectives 220-1201 under section 4.1.

NEW QUESTION 8

- (Topic 1)

A technician is troubleshooting stylus issues on identical, company-provided tablets. Users can purchase their own accessories. Some users have no issues, but others report that their styluses charge intermittently and die frequently. Which of the following is the most likely cause of this issue?

- A. Certain cases are causing charging issues.
- B. The tablets need to be updated.
- C. Some of the tablets have manufacturing defects.
- D. The malfunctioning styluses need firmware updates.

Answer: A

Explanation:

Comprehensive and Detailed In-Depth Explanation:

The most likely cause is third-party or ill-fitting cases obstructing the contact between the stylus and the tablet charging mechanism. Some cases may not be designed with stylus charging in mind, particularly if users are purchasing their own accessories.

? Option B: A software update might fix OS-related issues, but would not typically affect physical charging.

? Option C: If some devices had defects, the issue would likely be consistent, not isolated to some users.

? Option D: Firmware issues could be a factor but are less likely than physical obstructions when users are using different accessories.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 1.4: Given a scenario, configure settings and use cases for laptops and mobile devices.

NEW QUESTION 9

- (Topic 1)

Which of the following provides electricity to devices through network cables?

- A. Edge router
- B. PoE switch
- C. Access point
- D. Patch panel

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A PoE (Power over Ethernet) switch transmits both data and electrical power over Ethernet cables to devices like wireless access points or VoIP phones. This is especially useful in areas where separate power sources are not available.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 5, pages 319–321.

NEW QUESTION 10

- (Topic 1)

A technician receives a tablet that looks like it has a bulge inside. The bulge is pushing the screen away from the backplate. The tablet still turns on when it is plugged in, but the screen looks damaged and turns off when unplugged. Which of the following is the most likely cause of this issue?

- A. Malfunctioning power supply
- B. Damaged charge port
- C. Swollen battery
- D. Broken screen

Answer: C

Explanation:

The most likely cause is a swollen battery, which occurs when the battery's internal components break down, causing a buildup of gas. This results in:

Physical Symptoms: The battery bulges, pushing the screen away.

Operational Symptoms: The device may still power on when connected to a charger but fails to hold a charge due to battery degradation.

Option A (Malfunctioning power supply): Incorrect. Power supply issues affect charging but do not cause physical bulging.

Option B (Damaged charge port): Incorrect. A damaged port can prevent charging but does not explain the bulge.

Option D (Broken screen): Incorrect. A damaged screen does not cause the device to bulge; it is likely a secondary effect of the swollen battery.

Safety Note: A swollen battery poses a risk of fire or explosion and should be replaced immediately following proper disposal procedures.

References:

CompTIA A+ Core 1 Objectives: 5.5 (Troubleshooting common issues with mobile devices)

NEW QUESTION 10

- (Topic 1)

Which of the following utilizes specialized ports on a laptop to expand the local connection options?

- A. NFC adapter
- B. Docking station
- C. Port replicator
- D. USB dongle

Answer: B

Explanation:

Comprehensive and Detailed In-Depth Explanation:

A docking station connects to a laptop's proprietary port or USB-C/Thunderbolt, providing access to multiple additional ports (USB, Ethernet, video, audio, etc.). It allows users to transform a laptop into a full desktop workstation.

? Option A (NFC adapter): Used for short-range communication, not port expansion.

? Option C (Port replicator): Similar to a dock but usually less powerful and often lacks charging or video output.

? Option D (USB dongle): Adds a single function (like Wi-Fi or storage), not full port expansion.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 1.4: Given a scenario, configure settings and use cases for laptops and mobile devices.

=====

NEW QUESTION 13

- (Topic 1)

Which of the following should a technician use to terminate a Cat 6 cable to a patch panel?

- A. Punchdown tool
- B. Crimper
- C. Toner probe
- D. Network tap

Answer: A

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A punchdown tool is specifically used to insert wires into a punchdown block in patch panels, which is typical for Cat 6 and similar cabling. It ensures a secure and correct connection by pushing the wire into a metal groove that slices the insulation.

Reference: "CompTIA A+ Certification All-in-One Exam Guide" by Mike Meyers – Chapter 18, page 758.

NEW QUESTION 18

- (Topic 1)

A technician is experimenting with network configurations and has connected two laptops to an unmanaged switch. The technician configured one of the laptops with a static IP address of 192.168.1.1 and the other with a static IP address of 192.168.2.2. The laptops are not communicating with each other. Which of the following is the most likely explanation for this issue?

- A. The technician needs to use a hub instead of a switch.
- B. The wireless NICs are malfunctioning.
- C. PoE interferes with intersubnet communication.
- D. The laptops do not have access to a router.

Answer: D

NEW QUESTION 20

- (Topic 1)

A salesperson is unable to use a personal device to access emails and calendar features at a client site but was able to use the device while at the office. Which of the following policies has been enforced on the salesperson's mobile device?

- A. MOW
- B. MAN
- C. MFA
- D. MAM

Answer: D

Explanation:

Mobile Application Management (MAM) enforces policies restricting access to apps and services based on location, ensuring security at external sites.

Why Not A (MOW): "Mobile Only Workplace" (MOW) is not a recognized term in this context.

Why Not B (MAN): Metropolitan Area Network (MAN) is unrelated to mobile device policies. Why Not C (MFA): Multi-Factor Authentication secures user accounts but does not enforce app restrictions.

CompTIA A+ Exam Reference: Core 2 (220-1102), Section 2.7, mobile device security policies.

NEW QUESTION 21

- (Topic 1)

A customer reports a problem connecting to network resources. After asking open-ended questions, the technician determines the issue likely exists on the remote server. Which of the following should the technician do next?

- A. Document the findings.
- B. Test the theory
- C. Gather information
- D. Establish a plan of action

Answer: B

Explanation:

After determining the issue is likely on the remote server, the technician should test the theory to confirm the root cause before proceeding.

Why Not A (Document the findings): Documentation comes after confirming the issue. Why Not C (Gather information): Information gathering is already completed.

Why Not D (Establish a plan of action): This is done after confirming the issue. CompTIA A+ Exam Reference: Core 2 (220-1102), Section 3.1, troubleshooting methodology.

NEW QUESTION 25

- (Topic 1)

A company uses vital legacy software that does not run in the current OS version Which of the following will best support the software while keeping the OS current?

- A. Shared resources
- B. System sandbox
- C. Test development
- D. Application visualization

Answer: D

Explanation:

Application virtualization allows legacy software to run in a virtualized environment while the operating system remains current. It isolates the application from the OS, ensuring compatibility without downgrading the OS.

Why Not A (Shared resources): This relates to resource sharing, not application compatibility.

Why Not B (System sandbox): Sandboxes isolate applications for security testing, not compatibility.

Why Not C (Test development): Test environments are used for development, not running legacy applications.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 4.2, virtualization concepts.

NEW QUESTION 30

- (Topic 1)

When turning on a workstation, a technician observes the following message: "Bootable device not found."

The technician verifies the correct boot order in the BIOS. Which of the following steps should the technician take next?

- A. Reformat the HDD.
- B. Run HDD diagnostics.
- C. Reseat the RAM.

D. Replace the HDD.

Answer: B

Explanation:

Comprehensive and Detailed In-Depth Explanation:

If the system reports "Bootable device not found", and the BIOS is configured correctly, the next step is to run diagnostics on the hard drive to check for physical or logical failure. It could be a sign of a failing drive or corrupt boot sector.

? Option A: Reformatting the drive would erase data — not a diagnostic step.

? Option C: RAM does not affect whether a drive is bootable.

? Option D: Replacing the drive should only be done after diagnostics confirm failure. CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.5: Given a scenario, troubleshoot problems related to storage devices.

NEW QUESTION 33

- (Topic 1)

A technician wants to monitor network statistics for devices communicating with one another on the local subnet. Which of the following devices should the technician install?

- A. Managed switch
- B. Router
- C. Access point
- D. Firewall

Answer: A

Explanation:

A managed switch provides advanced features such as traffic monitoring and VLAN configuration, allowing a technician to view network statistics for devices on the local subnet.

Why Not B (Router): A router connects different networks and directs traffic between them but does not provide detailed subnet-level statistics.

Why Not C (Access point): Access points provide wireless connectivity but lack traffic monitoring features.

Why Not D (Firewall): A firewall filters traffic but is not used for monitoring detailed statistics on a local subnet.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.6, network monitoring tools.

NEW QUESTION 34

- (Topic 1)

Which of the following tools would a technician use to connect wires to an RJ45 connector?

- A. Crimper
- B. Cable stripper
- C. Punchdown
- D. Loopback plug

Answer: A

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A crimper is specifically used to attach RJ45 connectors to the ends of network cables. It presses the connector pins into the cable's wires, establishing a secure electrical

connection. A punchdown tool is used for wiring patch panels or keystone jacks, not for attaching connectors.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 3, "Cables and Connectors", page 162. Also outlined in the 220-1201 objectives under 3.1.

NEW QUESTION 36

- (Topic 1)

A user brings a laptop to work every morning, correctly seats it in the docking station and then opens the laptop to begin work with no issues. After the user left the laptop at home during a two-week vacation, the laptop is no longer working. Upon returning to the office, the user reports that the keyboard and display are no longer working. Which of the following should the technician ask the user to do first?

- A. Ensure the docking station is plugged in.
- B. Press and release the laptop power button.
- C. Plug the laptop in and let it charge overnight.
- D. Connect the laptop directly to the network.

Answer: B

Explanation:

Reasoning: Many docking stations provide power and functionality only when the laptop is properly powered on. If the laptop was powered off (e.g., during the vacation), docking it will not automatically turn it on. The technician should first ensure the laptop is powered on by pressing the power button.

This is a common troubleshooting step when laptops in docking stations appear non-functional.

Relevance to CompTIA A+ Core 1: This falls under Objective 5.2, which covers diagnosing and resolving common laptop and mobile device issues.

Why the Other Options Are Incorrect:

* A. Ensure the docking station is plugged in:

While ensuring power to the docking station is important, the scenario specifies that the issue occurred after a vacation. The likelihood of the docking station losing power coincidentally during the vacation is low. Verifying the laptop's power state should be the first step.

* C. Plug the laptop in and let it charge overnight:

There is no indication the laptop's battery is drained. While charging could resolve a dead battery, the user is more likely experiencing an issue where the laptop is powered off but docked, so charging overnight is not the best first step.

* D. Connect the laptop directly to the network:

A network connection will not resolve the primary issue of the keyboard and display not working. Addressing the laptop's power state is a higher priority.

Practical Example:

If a user returns from a vacation and places a powered-off laptop into a docking station, it may not automatically power on. Pressing the power button ensures the laptop is operational and communicating with the docking station.

CompTIA A+ Exam Objective Alignment:

Objective 5.2: Troubleshooting common laptop issues, including power, display, and peripheral connectivity.

NEW QUESTION 41

- (Topic 1)

A new directive mandates the use of a security component to securely allow users to authenticate to systems, access sensitive data, and enter the office. The component must provide an additional factor of authentication alongside user accounts and cannot be something the user owns. Which of the following components best meets these requirements?

- A. Fingerprint reader
- B. Smart card
- C. Secure token
- D. NFC scanner

Answer: B

Explanation:

A smart card provides an additional factor of authentication by storing secure credentials, such as certificates, that cannot be guessed or replicated. It complements user accounts and is "something you have".

Why Not A (Fingerprint reader): This is "something you are", but the scenario specifically requires a physical token.

Why Not C (Secure token): Secure tokens are also valid but may not integrate as seamlessly into multi-factor authentication for physical and system access.

Why Not D (NFC scanner): An NFC scanner is a device and not a token itself; it reads cards or other credentials.

CompTIA A+ Exam Reference: Core 2 (220-1102), Section 2.5, access controls.

NEW QUESTION 44

- (Topic 1)

Which of the following services is used to allocate IP addresses in an enterprise-wide environment?

- A. DNS
- B. Syslog
- C. Telnet
- D. DHCP

Answer: D

Explanation:

Dynamic Host Configuration Protocol (DHCP) is a network service used to automatically assign IP addresses and other network configuration details (such as subnet masks and default gateways) to devices on an enterprise-wide network.

Why Not A (DNS): DNS resolves domain names to IP addresses but does not allocate IP addresses.

Why Not B (Syslog): Syslog is used for logging system events, not IP address management.

Why Not C (Telnet): Telnet is a protocol for remote access, not for IP allocation. CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.6, DHCP concepts.

NEW QUESTION 49

- (Topic 1)

Which of the following is designed to be used in commercial spaces?

- A. USB 3.1 Gen 2
- B. Straight tip fiber connector
- C. Plenum cabling
- D. Cat 8

Answer: C

Explanation:

Plenum cabling is designed for use in commercial spaces where cables run through air ducts or plenum spaces, as it has fire-resistant properties and emits less toxic smoke.

Why Not A (USB 3.1 Gen 2): USB is for peripheral connections, not large-scale commercial installations.

Why Not B (Straight tip fiber connector): Fiber connectors are for high-speed connections but are not specifically for commercial spaces.

Why Not D (Cat 8): While Cat 8 is high-speed, it is not uniquely suited for commercial spaces like plenum cabling.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 3.1, cabling standards.

NEW QUESTION 54

- (Topic 1)

A customer needs to install a new printer in their network. The customer reports that users had intermittent connectivity issues with previous printers. Which of the following should the technician configure on the new printer to prevent this issue?

- A. Gateway IP address
- B. DHCP IP address
- C. Static IP address
- D. Public IP address

Answer: C

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Intermittent connectivity issues with network printers are commonly caused by changing IP addresses when using DHCP. Assigning a static IP address ensures that the printer is always reachable at the same IP address by client machines.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 4, "Printers and Multifunction Devices", page 241.

NEW QUESTION 58

- (Topic 1)

A customer reports slow network speeds. Which of the following components is most likely failing?

- A. CPU
- B. NIC
- C. HDD
- D. RAM

Answer: B

Explanation:

Comprehensive and Detailed In-Depth Explanation:

A Network Interface Card (NIC) is the hardware responsible for network connectivity. If the NIC is failing or underperforming (e.g., due to a bad driver, hardware fault, or misconfiguration), it can cause slow or unstable network speeds.

? Option A (CPU): A failing CPU affects overall system performance but not specifically network speed.

? Option C (HDD): A slow hard drive causes application lag, but not poor network performance.

? Option D (RAM): Affects multitasking and speed, not network throughput. CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.5: Given a scenario, troubleshoot problems related to wired and wireless networks.

=====

NEW QUESTION 63

- (Topic 1)

Which of the following types of RAM is typically used in servers?

- A. SODIMM
- B. Rambus
- C. DDR3
- D. ECC

Answer: D

Explanation:

ECC (Error-Correcting Code) RAM is commonly used in servers to provide error detection and correction, improving reliability in critical systems. It is designed to detect and correct single-bit errors, ensuring data integrity in environments where stability is paramount. Option A (SODIMM): Incorrect. SODIMM is typically used in laptops, not servers.

Option B (Rambus): Incorrect. Rambus is an outdated RAM type and not commonly used today.

Option C (DDR3): Incorrect. While DDR3 is a type of RAM, it is not specific to servers and does not provide error correction.

References:

CompTIA A+ Core 1 Objectives: 3.2 (RAM types and their uses)

NEW QUESTION 64

- (Topic 1)

Which of the following describes the function of an injector?

- A. To provide only data connectivity
- B. To supply power across a cable
- C. To improve wireless performance
- D. To extend a network connection

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

A PoE injector is used to add power to an Ethernet cable, enabling the cable to deliver both power and data. This is crucial when connecting to PoE-enabled devices like IP cameras or wireless access points that are far from power outlets.

Reference: "CompTIA A+ Complete Practice Tests" by Jeff T. Parker – Chapter 10, Question 77, page 585.

NEW QUESTION 69

- (Topic 1)

A customer is able to print most documents with their USB inkjet printer, but the system is unresponsive when printing a certain report from a custom application. Nothing will print until the computer is restarted and the printer is power cycled. A technician remotes into the PC and confirms that the spooler stops working when this report is sent. After cleaning the spooler and reinstalling the drivers from the manufacturer's website, the issue persists. No other sites using the application report similar issues. Which of the following is most likely causing the issue?

- A. The manufacturer is curating content before it reaches the device to preserve ink.
- B. The application has a bug that the developer needs to address.
- C. The system is using the PostScript language instead of the PCL.
- D. Personal preferences have changed and documents with graphics are now online-only

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

If a print spooler crashes specifically with one application and no issue occurs on other systems, the most likely root cause is a bug within that specific application. Restarting the spooler and reinstalling drivers resolves system-wide or hardware-related issues—not app-specific failures. This indicates the application may be

sending malformed print data. Reference: "CompTIA A+ Certification All-in-One Exam Guide" by Mike Meyers – Chapter 26, page 1144.

NEW QUESTION 70

- (Topic 1)

Which of the following port numbers are associated with email traffic? (Select two).

- A. 23
- B. 25
- C. 67
- D. 110
- E. 137
- F. 443

Answer: BD

Explanation:

Comprehensive and Detailed Step-by-Step Explanation:

To answer this question, we need to identify the port numbers associated with email protocols used in client-server communication.

Port 25 (SMTP - Simple Mail Transfer Protocol):

This port is primarily used for sending emails between mail servers and from mail clients to mail servers (sending outbound mail).

SMTP is an essential protocol for email traffic.

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 2.5 – Explain basic wired and wireless networking concepts, including ports and protocols.

Port 110 (POP3 - Post Office Protocol v3):

POP3 is used for retrieving emails from a mail server. It is commonly used for downloading email messages to a local client, after which the messages are deleted from the server.

While not as commonly used today (due to IMAP being preferred), POP3 is still a recognized email protocol, and its association with port 110 makes it a valid answer.

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 2.5 – Explain basic wired and wireless networking concepts, including ports and protocols.

Incorrect Options:

* A. Port 23: This is the Telnet protocol used for remote terminal access. It is not related to email traffic.

* C. Port 67: This port is associated with the DHCP (Dynamic Host Configuration Protocol) server-to-client communications. It is unrelated to email.

* E. Port 137: This port is part of NetBIOS, used for name resolution in legacy Windows environments. It is not relevant to email traffic.

* F. Port 443: This port is used for HTTPS (secure web traffic) and is unrelated to email protocols.

Key Takeaway: The two correct port numbers associated with email traffic are B. 25 (SMTP) for sending emails and D. 110 (POP3) for retrieving emails.

NEW QUESTION 71

- (Topic 1)

A company needs to keep a record of tasks performed by an application. Which of the following should the company most likely implement as part of a solution?

- A. Fileshare
- B. Syslog
- C. Database
- D. SAN

Answer: B

Explanation:

Syslog is used to log system events and tasks performed by applications, providing a centralized record of activity.

Why Not A (Fileshare): Fileshares store files but are not designed for event logging.

Why Not C (Database): Databases can store logs but are not a logging mechanism themselves.

Why Not D (SAN): A SAN is a storage solution, not a logging tool.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.6, system monitoring and logging.

NEW QUESTION 76

- (Topic 1)

A technician is installing a new high-end graphics card that uses a 12VHPWR connector. Which of the following is the maximum wattage supported by this power connector?

- A. 400W
- B. 600W
- C. 600W
- D. 700W

Answer: C

Explanation:

The 12VHPWR connector can supply up to 600 watts of power, designed for high-end graphics cards.

Why Not A (400W): This is less than the connector's maximum capability. Why Not B (600W): This is an invalid option.

Why Not D (700W): The maximum supported power is 600W.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 3.4, power supply and connectors.

NEW QUESTION 80

- (Topic 1)

A user prints a spreadsheet in duplex mode. The spreadsheet is difficult to read because some of the columns spill onto the second side of the page. Which of the following should the user do to prevent the issue but still print on both sides of the page?

- A. Turn off duplex printing.
- B. Try a smaller font size in the spreadsheet.
- C. Change the page orientation.

D. Use a different print driver.

Answer: C

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Changing the page orientation(e.g., fromportrait to landscape) allows wider columns to fit on one side of the page. This maintains readability while continuing to use duplex printing.

? Option A:Disabling duplex defeats the goal of printing on both sides.

? Option B:May help, but could make the document harder to read if the font is too small.

? Option D:Unlikely to resolve formatting issues related to layout and dimensions. CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.7: Given a scenario, troubleshoot common printer problems.

NEW QUESTION 81

- (Topic 1)

A user reports slow internet browsing. The technician finds high CPU and memory usage, and pop-ups occur every minute. Which of the following should the technician do next?

A. Escalate to the network team to check end-to-end connectivity.

B. Download and install the latest drivers.

C. Update the anti-malware signatures and scan the system.

D. Check the wireless settings and validate the DHCP configuration.

Answer: C

Explanation:

Comprehensive and Detailed In-Depth Explanation:

High resource usage along with frequentpop-upsare strong signs of amalware infection. The next logical step is toudate anti-malware definitionsandrun a full scanto detect and remove threats.

? Option A:Network performance is likely not the root cause — local system behavior points to malware.

? Option B:Drivers affect hardware functionality; they don't resolve malware-related slowness.

? Option D:DHCP issues usually cause IP conflicts or no network access, not CPU spikes or pop-ups.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 4.2: Given a scenario, detect, remove, and prevent malware using appropriate tools and methods.

NEW QUESTION 84

- (Topic 1)

Which of the following technologies best allows a phone to connect to a point-of-sale terminal for wireless payments?

A. Bluetooth

B. NFC

C. Wi-Fi

D. Cellular

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Near-field communication (NFC) is a short-distance wireless communication method widely used in mobile payment systems like Apple Pay and Google Pay. Simply placing the device near a compatible terminal initiates the payment process.

Reference: "Mike Meyers' CompTIA A+ Certification All-in-One Exam Guide" – Chapter 24, page 1022.

NEW QUESTION 89

- (Topic 1)

Which of the following connectors can be used to charge most modern mobile devices and may have the capacity to send data audio and video?

A. Lightning

B. USB-C

C. MicroUSB

D. MiniUSB

Answer: B

Explanation:

* B. USB-C:

USB-C is a versatile connector that supports charging, high-speed data transfer, and the ability to send audio and video signals (e.g., DisplayPort over USB-C). It is used by most modern mobile devices and laptops because of its fast transfer speeds and power delivery capabilities.

Incorrect Options:

* A. Lightning: Lightning is proprietary to Apple devices and does not natively support video output.

* C. MicroUSB: MicroUSB is outdated and does not support video output.

* D. MiniUSB: MiniUSB is an older standard and does not support modern features like video output or fast charging.

Key Takeaway: USB-C is the most versatile connector for charging and transferring data, audio, and video.

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 3.1 – Cable types and features.

NEW QUESTION 91

- (Topic 1)

A customer reports their tablet was recently dropped on the ground. The tablet has a small crack in one corner of the display, and it does not charge when plugged in. Which of the following should a technician do first?

- A. Perform a hard restart.
- B. Replace the battery
- C. Inspect the USB-C port for damage
- D. Run diagnostics on the digitizer

Answer: C

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Physical damage from dropping a tablet may often affect ports or connectors. Before taking deeper diagnostic or replacement steps, it's important to visually inspect the USB-C charging port for damage or debris. If the port is damaged, charging issues can occur regardless of battery health.

Reference: "CompTIA A+ All-in-One Exam Guide, 11th Edition" by Mike Meyers – Chapter 25, "Maintaining and Securing Mobile Devices", page 879.

NEW QUESTION 92

- (Topic 1)

A computer is experiencing random shutdowns. A technician notices that the fans on the computer work but are noisy. The CPU temperature is about 122°F (50°C) when the computer is started but rises to 208°F (98°C) when applications are opened. Which of the following would most likely fix this issue?

- A. Replacing the power supply
- B. Installing a high-performance heat sink
- C. Adjusting the fan settings
- D. Adding more RAM to the computer

Answer: B

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Excessive heat buildup due to insufficient cooling is a primary cause of unexpected shutdowns. A high-performance heat sink improves thermal transfer, dissipates more heat, and helps maintain CPU temperature within safe limits. When CPU temperatures reach levels like 208°F (98°C), the system may shut down to prevent damage.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 1, pages 68–71, discusses CPU cooling and heat sink improvements.

NEW QUESTION 93

- (Topic 1)

Which of the following is a benefit of using a VLAN?

- A. It minimizes collision domains.
- B. It provides private access to cloud resources.
- C. It increases network address space.
- D. It enables secure network segmentation.

Answer: D

Explanation:

A VLAN (Virtual Local Area Network) segments a physical network into separate logical networks, enhancing security by isolating traffic.

Why Not A (Minimizes collision domains): VLANs manage broadcast domains, not collision domains.

Why Not B (Provides private access to cloud resources): VLANs operate within a local network, not cloud-specific.

Why Not C (Increases network address space): VLANs do not affect address space. CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.6, VLAN concepts.

NEW QUESTION 94

- (Topic 1)

A technician is putting RJ45 connectors on Cat 6 cables. Which of the following tools should the technician use to secure the connectors?

- A. Loopback plug
- B. Wire cutters
- C. Punchdown
- D. Crimping

Answer: D

NEW QUESTION 99

- (Topic 1)

A technician has discovered that some users are connected to a network that is not available on the user interface. Which of the following is the most effective tool the technician can use to identify networks that are not broadcasting SSIDs?

- A. Cable tester
- B. Toner probe
- C. Wi-Fi analyzer
- D. Loopback plug

Answer: C

Explanation:

Comprehensive and Detailed Step-by-Step Explanation: Wi-Fi Analyzer:

A Wi-Fi analyzer is a tool used to detect and analyze wireless networks, even those that are not broadcasting their SSIDs (hidden networks).

It provides detailed information about nearby networks, including signal strength, channel usage, and security protocols.

In this case, the Wi-Fi analyzer can identify the hidden networks that users are connected to, which are not visible on the standard user interface.

Incorrect Options:

- * A. Cable tester: A cable tester is used to test the integrity of physical network cables. It does not detect wireless networks or SSIDs.
- * B. Toner probe: A toner probe is used to trace and identify cables within a wiring system. It is not applicable to wireless network analysis.
- * D. Loopback plug: A loopback plug is used to test the functionality of a network port or NIC. It is unrelated to identifying hidden wireless networks.

Key Takeaway:

The most effective tool for identifying hidden wireless networks is a Wi-Fi analyzer, as it can detect networks that are not broadcasting their SSIDs.

Reference: CompTIA A+ Core 1 Exam Objectives (220-1201), Domain 2.5 – Explain basic wired and wireless networking concepts, including Wi-Fi tools and protocols.

NEW QUESTION 104

- (Topic 1)

Which of the following is a Bluetooth network an example of?

- A. PAN
- B. LAN
- C. WAN
- D. SAN

Answer: A

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Bluetooth is a wireless technology designed for short-range communication between devices. It is a classic example of a Personal Area Network (PAN), which supports communication between devices like smartphones, headsets, keyboards, and mice within a few meters. PANs are smaller in scope compared to LANs or WANs.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 5, "Networking Fundamentals", page 275.

NEW QUESTION 106

- (Topic 1)

Which of the following devices is used to implement ACL policies for an environment?

- A. Managed switch
- B. Gateway
- C. Repeater
- D. Firewall

Answer: D

Explanation:

A firewall implements ACLs (Access Control Lists) to filter traffic and enforce policies based on rules such as IP address, port, or protocol.

Why Not A (Managed switch): A managed switch supports VLANs and QoS but does not enforce ACLs at the network perimeter.

Why Not B (Gateway): Gateways connect networks and translate protocols but don't typically implement ACLs.

Why Not C (Repeater): Repeaters extend signal range but don't enforce policies. CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.2, firewall concepts.

NEW QUESTION 109

- (Topic 1)

Which of the following could a user employ to maximize module bandwidth when selecting memory for a high-end gaming computer?

- A. Error correction
- B. RAM voltage
- C. Channel configuration
- D. Physical module size

Answer: C

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Channel configuration (e.g., dual-channel, quad-channel) determines how memory modules communicate with the memory controller. Using matched pairs in dual- or quad-channel setups can significantly increase memory bandwidth, improving performance — especially for gaming and video-intensive tasks.

? Option A (Error correction): ECC RAM is used in servers for reliability, not performance or gaming.

? Option B (RAM voltage): Affects compatibility and overclocking but not bandwidth.

? Option D (Physical size): Refers to module form factor (e.g., DIMM, SO-DIMM) and does not impact bandwidth.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.2: Given a scenario, install RAM types.

NEW QUESTION 114

- (Topic 1)

Which of the following connector types would best suit a company that experiences a large volume of internet traffic?

- A. USB 3.1
- B. Quad-shielded RG11 coax
- C. SATA3.0
- D. Unshielded plenum RJ45

Answer: B

Explanation:

RG11 coaxial cable with quad shielding is designed to handle large volumes of internet traffic, providing excellent resistance to interference and high bandwidth.

capacity.

Why Not A (USB 3.1): USB 3.1 is used for connecting peripherals, not for high-volume internet traffic.

Why Not C (SATA3.0): SATA is used for internal data storage connections, not for network traffic.

Why Not D (Unshielded plenum RJ45): While RJ45 cables are commonly used, unshielded cables are prone to interference and are not ideal for high-volume traffic.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 3.1, cable types and their characteristics.

NEW QUESTION 116

- (Topic 1)

A group of friends is gathering in a room to play video games. One of the friends has a game server. Which of the following network types should the group use so they can all connect to the same server and the internet?

- A. SAN
- B. MAN
- C. LAN
- D. PAN

Answer: C

Explanation:

The appropriate network type for this scenario is a Local Area Network (LAN), which is designed for small, localized networks, such as within a single building or room. LANs are ideal for gaming because they provide high-speed, low-latency connections.

Option A (SAN): Incorrect. A Storage Area Network is used for data storage, not for gaming or general networking.

Option B (MAN): Incorrect. A Metropolitan Area Network covers a city or campus, far exceeding the scope needed for a gaming setup in a single room.

Option D (PAN): Incorrect. A Personal Area Network is designed for a single user, such as Bluetooth devices, and would not support multiple devices connecting to a game server. References:

CompTIA A+ Core 1 Objectives: 2.7 (Compare and contrast network types and features)

NEW QUESTION 118

- (Topic 1)

While reviewing options in the BIOS/UEFI settings page to fix a laptop issue, a support technician notices an option to clear existing TPM keys. Which of the following would most likely happen if the TPM is cleared?

- A. Encrypted hard drives would probably not be accessible.
- B. All security certificates would need to be reinstalled from trusted roots.
- C. The device would need to be reenrolled in the MDM platform
- D. The laptop would need to be registered to the domain as a new client.

Answer: A

Explanation:

The Trusted Platform Module (TPM) is a hardware-based security feature used to store cryptographic keys, such as those used for encryption, authentication, or device identification. It plays a critical role in ensuring secure operations for encrypted drives, BitLocker, and secure boot processes. Clearing TPM keys involves wiping all stored cryptographic data, which can lead to several consequences depending on what the TPM was being used for. Let's break it down:

Correct Answer A. Encrypted hard drives would probably not be accessible. Encrypted hard drives, such as those secured with BitLocker encryption, rely on the cryptographic keys stored in the TPM to unlock data.

Clearing the TPM will erase these keys, making it impossible for the encrypted drive to decrypt its contents unless a recovery key (separate from the TPM) is available. Without this recovery key, the data will likely become inaccessible.

CompTIA A+ Core 1 Exam Objective Reference: This falls under Objective 3.5, which covers understanding BIOS/UEFI configurations, TPM functions, and securing devices.

Why the Other Options Are Incorrect:

* B. All security certificates would need to be reinstalled from trusted roots.

Clearing the TPM does not erase security certificates stored in the operating system or other areas. Certificates are generally managed by the OS or specific applications, not the TPM. Clearing the TPM only affects cryptographic keys and data stored in the TPM chip, so this is incorrect.

* C. The device would need to be reenrolled in the MDM platform.

Mobile Device Management (MDM) enrollment typically does not rely on the TPM. While certain enterprise security configurations may involve the TPM, clearing it does not inherently trigger MDM reenrollment unless specifically tied to the MDM configuration.

* D. The laptop would need to be registered to the domain as a new client.

While domain registrations may sometimes use TPM for authentication or secure operations, clearing the TPM alone does not require re-registering the device to the domain. The domain registration and authentication process rely more on system-level credentials than the TPM itself.

Practical Example:

A user enables BitLocker on their laptop, which relies on the TPM to store the encryption key. Later, if they clear the TPM via BIOS/UEFI without saving the BitLocker recovery key separately, they will not be able to unlock the hard drive, leading to data loss unless the recovery key is available. This is a common issue when technicians or users inadvertently clear the TPM without understanding its role in encryption.

CompTIA A+ Exam Objective Alignment:

Objective 3.5: Given a scenario, install and configure laptop hardware and components, including UEFI/BIOS security settings (TPM, secure boot, etc.).

This question tests understanding of TPM functionality, encryption technologies, and secure device configurations.

NEW QUESTION 120

- (Topic 1)

A computer displays an error message indicating there is insufficient storage when installing applications. The user reports slow application load times. Which of the following replacement components would best resolve this issue?

- A. SSD
- B. USB
- C. HDD
- D. RAM

Answer: A

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Upgrading to a solid-state drive (SSD) provides more storage space and faster read/write speeds, which resolves both the "insufficient storage" error and slow application loads.

? Option B (USB): Not intended for permanent application storage or performance improvements.

? Option C (HDD): Could solve storage capacity but would not improve speed.

? Option D (RAM): Affects multitasking and memory-intensive tasks, not storage capacity directly.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.5: Given a scenario, troubleshoot problems related to storage devices.

NEW QUESTION 122

- (Topic 1)

An end user's domain password expires while they are working from home. The end user tries to reset the password using Ctrl+Alt+Delete and then receives the following message:

Configuration information could not be read from the domain controller, either because the machine is unavailable or because access is denied.

Which of the following will resolve this issue?

- A. Restart the computer.
- B. Connect to the VPN.
- C. Reset the account in Active Directory.
- D. Join the Wi-Fi network.

Answer: B

Explanation:

Comprehensive and Detailed In-Depth Explanation:

To change a domain password from a remote location, the system must communicate with the domain controller. Since the user is working from home, they need to connect to the corporate VPN to establish that secure connection. Without it, the password change cannot be authenticated.

? Option A: Restarting will not resolve the lack of connection to the domain controller.

? Option C: Resetting the password in AD could help, but doesn't let the user reset it themselves.

? Option D: The user may already be on Wi-Fi; the issue is with connecting to the corporate network, not local.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 1.6: Given a scenario, configure basic mobile device network connectivity and application support.

=====

NEW QUESTION 126

- (Topic 1)

A customer reports that the output from their thermal receipt printer has vertical white lines. Which of the following would most likely resolve this issue?

- A. Replacing the ink cartridge
- B. Using the correct paper type
- C. Installing a maintenance kit
- D. Cleaning the heating element

Answer: D

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Thermal printers create images using a heated print head on specially coated thermal paper. Vertical white lines indicate that part of the heating element is dirty or blocked, preventing heat transfer to the paper. Cleaning the print head (heating element) will restore full functionality.

? Option A: Thermal printers do not use ink or toner, so this is not applicable.

? Option B: Wrong paper could cause blank output, but consistent vertical lines point to the print head.

? Option C: Maintenance kits are typically for laser printers, not thermal printers. CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.7: Given a scenario, troubleshoot common printer problems.

NEW QUESTION 127

- (Topic 1)

Which of the following is used primarily for archiving data?

- A. PAN
- B. MAN
- C. SAN
- D. LAN
- E. WAN

Answer: C

Explanation:

A Storage Area Network (SAN) is primarily used for data archiving and large-scale storage. SANs provide high-speed, block-level storage for enterprise environments.

Why Not A (PAN): Personal Area Networks are for connecting personal devices like phones and smartwatches.

Why Not B (MAN): Metropolitan Area Networks are for city-wide data communication, not storage.

Why Not D (LAN): Local Area Networks are for general connectivity, not dedicated storage. Why Not WAN: Wide Area Networks are for connecting geographically dispersed networks, not storage.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.7, network types and purposes.

NEW QUESTION 132

- (Topic 1)

Which of the following network services is used to assign an IP address to a network host?

- A. DHCP
- B. DNS
- C. LDAP
- D. SMTP

Answer: A

Explanation:

DHCP (Dynamic Host Configuration Protocol) is the service used to automatically assign IP addresses to network hosts. It dynamically manages the distribution of IP addresses and configuration details (like subnet mask, gateway, and DNS servers), ensuring no two devices are assigned the same address on the network.

Option B (DNS): Incorrect. DNS translates domain names into IP addresses but does not assign them.

Option C (LDAP): Incorrect. LDAP is a protocol used for accessing and maintaining directory services, such as user information and permissions.

Option D (SMTP): Incorrect. SMTP is used for sending and receiving email, not for IP address assignment.

References:

CompTIA A+ Core 1 Objectives: 2.5 (Network configuration)

NEW QUESTION 136

- (Topic 1)

A customer reports that a text-only document prints with unrecognizable characters. The print preview correctly displays the document. Which of the following is the most likely cause of the issue?

- A. Outdated firmware
- B. Incorrect driver
- C. Bad toner cartridge
- D. Corrupted document file

Answer: B

NEW QUESTION 140

- (Topic 1)

A help desk technician needs to work on a high-volume printer. Users have reported occasional paper jams and smudges appearing on printed documents. Which of the following steps should the technician do next to address these issues?

- A. Perform a full factory reset.
- B. Check and clean the rollers.
- C. Change all the ink or toner cartridges.
- D. Replace the fuser.

Answer: B

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Paper jams and smudging in high-volume printers are often caused by dirty or worn rollers. Rollers are responsible for feeding the paper through the printer. Over time, they accumulate dust, toner residue, or wear out, resulting in misfeeds or jams. Cleaning or replacing them typically resolves this issue.

? Option A (Factory reset): A full reset does not directly address mechanical issues like dirty rollers or smudging. It's a last resort and more relevant to configuration or software-related issues.

? Option C (Change toner cartridges): While toner quality can affect print quality, it won't usually cause jams or widespread smudging unless the cartridge is leaking — which is less likely across multiple users.

? Option D (Replace the fuser): A damaged fuser could cause smudging, but this is typically after extensive use and is not the first thing to check. Fuser issues also usually present more persistent, uniform smudges.

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.7: Given a scenario, troubleshoot common printer problems.

NEW QUESTION 144

- (Topic 1)

When installing a network printer, a technician needs to ensure the printer is available after a network is restarted. Which of the following should the technician set up on the printer to meet this requirement?

- A. Static IP address
- B. Private address
- C. Wi-Fi on the printer
- D. Dynamic addressing

Answer: A

Explanation:

Comprehensive and Detailed In-Depth Explanation:

Assigning a static IP address to a network printer ensures it always retains the same address, allowing users and print servers to consistently reach it even after a reboot or network refresh.

? Option B (Private address): Refers to address ranges (e.g., 192.168.x.x) — doesn't guarantee address persistence.

? Option C (Wi-Fi): Is a connection method, not a method of IP assignment.

? Option D (Dynamic addressing): Via DHCP, which can change over time unless reservations are made (less reliable).

CompTIA A+ Core 1 Exam Objective Reference:

? Objective 3.4: Given a scenario, install and configure printers.

NEW QUESTION 146

- (Topic 1)

A technician is troubleshooting a PoE phone that will not turn on. When a laptop is plugged directly into the switchport for the phone the technician sees a data link LED and activity. Which of the following tools should the technician use to verify PoE availability to the phone?

- A. Network tap
- B. Cable tester
- C. Loopback plug
- D. Toner probe

Answer: B

Explanation:

Reasoning: A cable tester capable of testing Power over Ethernet (PoE) functionality can verify whether the switchport is providing the required power to the phone. This tool measures both the presence of data and the voltage or wattage being provided through the Ethernet cable.

This is the most effective way to confirm that PoE is available on the port.

Why the Other Options Are Incorrect:

* A. Network tap:

A network tap is primarily used to monitor network traffic, not to test for PoE availability. It cannot verify if power is being supplied through the Ethernet cable.

* C. Loopback plug:

A loopback plug is used to test the functionality of a network port by creating a loop for transmitted and received signals. It does not measure or verify PoE availability.

* D. Toner probe:

A toner probe is used for tracing and identifying network cables. It cannot test for PoE functionality.

Practical Example:

A PoE phone might not turn on due to a misconfigured or faulty switchport. Using a cable tester capable of measuring PoE would help the technician determine if the switchport is supplying sufficient power to the phone.

CompTIA A+ Exam Objective Alignment:

Objective 2.1: Identify common networking hardware and tools, including PoE-enabled devices and cable testers.

NEW QUESTION 148

- (Topic 1)

A company deploys server machines in a public cloud. Which of the following cloud service models is this an example of?

- A. Platform as a service
- B. Anything as a service
- C. Infrastructure as a service
- D. Software as a service

Answer: C

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Infrastructure as a Service (IaaS) provides virtualized computing resources over the internet. This includes virtual servers, storage, and networking. Deploying server machines falls under IaaS since the organization is responsible for managing the OS and applications on top of the infrastructure.

Reference: "CompTIA A+ Complete Study Guide" by Quentin Docter – Chapter 8, "Virtualization and Cloud Computing", page 488-490. Also found in the 220-1201 objectives, section 4.1.

NEW QUESTION 151

- (Topic 1)

Which of the following best characterizes the use of a virtual machine as a sandbox?

- A. Run an application on multiple workstations without installation.
- B. Explore how an application behaves in a different environment
- C. Migrate a currently used legacy application from physical to virtual
- D. Create a firewall where the sandbox acts as a perimeter network.

Answer: B

Explanation:

A sandbox in virtualization allows testing an application in an isolated environment to observe its behavior without affecting the host system.

Why Not A (Run an application on multiple workstations): This describes application virtualization, not sandboxing.

Why Not C (Migrate a legacy application): This is about virtualization for legacy support, not testing.

Why Not D (Create a firewall): A firewall does not act as a sandbox for application testing. CompTIA A+ Exam Reference: Core 1 (220-1201), Section 4.2, virtualization and sandboxing.

NEW QUESTION 156

- (Topic 1)

A company wants to save printing costs by restricting network printer use. The company implements a solution that requires employees to authenticate to the printer to release print jobs. Which of the following has the company implemented?

- A. Access control list
- B. Audit logging
- C. Badging
- D. Print server

Answer: C

Explanation:

Badging is a form of authentication that requires employees to use a badge or ID card to release print jobs. This solution reduces unnecessary printing by ensuring

only authorized users print.

Why Not A (Access control list): While ACLs manage permissions, they are not used for physical authentication at printers.

Why Not B (Audit logging): Audit logs track actions but do not restrict printer access. Why Not D (Print server): A print server manages print jobs but doesn't enforce authentication.

CompTIA A+ Exam Reference: Core 2 (220-1102), Section 2.5, authentication mechanisms.

NEW QUESTION 159

- (Topic 1)

Which of the following devices is designed to monitor and filter incoming and outgoing network traffic?

- A. Switch
- B. Access point
- C. Firewall
- D. Hub

Answer: C

Explanation:

A firewall monitors and filters incoming and outgoing network traffic based on security rules, protecting the network from unauthorized access and threats.

Why Not A (Switch): A switch connects devices within a network but does not monitor or filter traffic.

Why Not B (Access point): An access point provides Wi-Fi connectivity but does not filter traffic.

Why Not D (Hub): A hub simply broadcasts data to all connected devices without filtering traffic.

CompTIA A+ Exam Reference: Core 1 (220-1201), Section 2.2, network security concepts.

NEW QUESTION 160

HOTSPOT - (Topic 2)

A customer built a computer for gaming, sourcing individual components and then assembling the system. The OS starts up, but within a few minutes the machine locks up.

The customer brought the computer to a technician to diagnose the issue.

The diagram shows a computer case with the following components labeled:

- Liquid Cooling
- Power Supply
- Motherboard
- Memory
- Video Card
- CPU
- Storage
- BIOS System info

To the right of the case, there are two dropdown menus:

Cause

- Select a cause
- Overheating
- Component incompatibility
- Insufficient power
- Overclocking

Resolution

- Select a resolution
- Replace PSU with higher wattage model
- Update motherboard firmware
- Install larger radiator
- Lower CPU clock speed
- Increase CPU multiplier
- Run CHKDSK on NVMe drive
- Replace thermal paste
- Decrease CPU voltage
- Raise memory frequency
- Switch motherboard for micro-ATX form factor
- Decrease memory module frequency
- Replace GPU with lower performance model

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

correct answer is "Overclocking" and "Reduce CPU Clock speed" CPU is at 4.5 Ghz when normal is 3.2 Ghz. Overclocking too much can cause freezes, and this is a gaming computer so the user probably took it too far. <http://blog.logicalincrements.com/2018/12/4-troubleshooting-tips-overclocking-pc/>

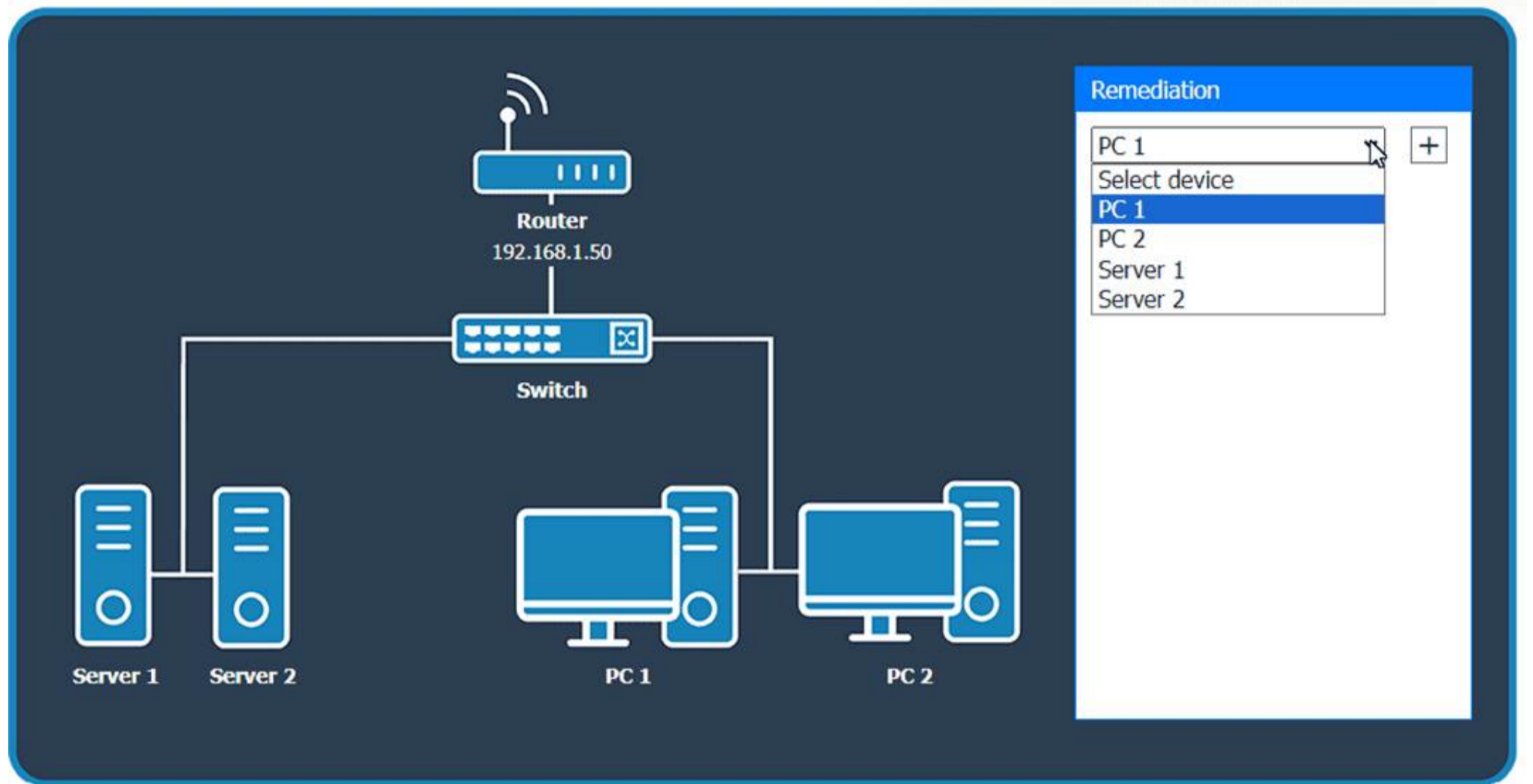
NEW QUESTION 163

SIMULATION - (Topic 2)

A third-party contractor recently installed a new switch, router, and cabling for a small corporate office. After the installation, users started experiencing issues connecting to

resources over the network. INSTRUCTIONS

Click on each PC and server to review outputs. From the remediation section on the right, select an issue and solution for each device.



PC 1



Command terminal

IPv4 properties

Internet protocol version 4 (TCP/IPv4) properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:	192.168.1.1
Subnet mask:	255.255.255.0
Default gateway:	192.168.1.50

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:	192.168.1.1
Alternate DNS server:	192.168.1.50

Validate settings upon exit

Advanced...

PC 1



Command terminal

IPv4 properties

```
ipconfig /all
```

Windows IP Configuration

```
Host Name . . . . . : PC1
Primary Dns Suffix . . . . . :
Node Type . . . . . : Peer-Peer
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : corp.lan
```

Ethernet adapter Ethernet 1:

```
Connection-specific DNS Suffix . : corp.lan
Description . . . . . : Realtek USB GbE Family Controller
Physical Address. . . . . : E1:7C:5C:D4:57:79
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : No
IPv4 Address. . . . . : 192.168.1.1 (Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.50
```

PC 1



Command terminal

IPv4 properties

```
Host Name . . . . . : PC1
Primary Dns Suffix . . . . . :
Node Type . . . . . : Peer-Peer
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : corp.lan
```

Ethernet adapter Ethernet 1:

```
Connection-specific DNS Suffix . : corp.lan
Description . . . . . : Realtek USB GbE Family Controller
Physical Address. . . . . : E1:7C:5C:D4:57:79
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : No
IPv4 Address. . . . . : 192.168.1.1 (Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.50
DNS Servers . . . . . : 192.168.1.1
                        192.168.1.50
NetBIOS over Tcpi . . . . . : Enabled
```

PC 2



Command terminal

IPv4 properties

```

Node Type . . . . . : Peer-Peer
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : corp.lan

Ethernet adapter Ethernet 1:

    Connection-specific DNS Suffix . : corp.lan
    Description . . . . . : Realtek USB GbE Family Controller
    Physical Address. . . . . : 36:9E:94:F0:59:83
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
    IPv4 Address. . . . . : 192.168.1.12 (Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Lease Obtained. . . . . : August 28, 2023 9:07:46 AM
    Lease Expires . . . . . : August 29, 2023 9:07:46 AM
    Default Gateway . . . . . : 192.168.1.50
    DHCP Server . . . . . : 192.168.1.1
    DNS Servers . . . . . : 192.168.1.1
                             192.168.1.50
NetBIOS over Tcpip . . . . . : Enabled
    
```

PC 2



Command terminal

IPv4 properties

Internet protocol version 4 (TCP/IPv4) properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:	192.168.1.2
Subnet mask:	255.255.0.0
Default gateway:	192.168.1.50

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:	192.168.1.1
Alternate DNS server:	192.168.1.50

Validate settings upon exit

Advanced...

Server 1



Command terminal

IPv4 properties

```
Host Name . . . . . : Server1
Primary Dns Suffix . . . . . :
Node Type . . . . . : Peer-Peer
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : corp.lan
```

Ethernet adapter Ethernet 1:

```
Connection-specific DNS Suffix . : corp.lan
Description . . . . . : Realtek USB GbE Family Controller
Physical Address. . . . . : B2:9F:BB:2C:21:74
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : No
IPv4 Address. . . . . : 192.168.1.1 (Preferred)
Subnet Mask . . . . . : 255.255.255.255
Default Gateway . . . . . : 192.168.1.50
DNS Servers . . . . . : 192.168.1.1
                        192.168.1.50
NetBIOS over Tcpi . . . . . : Enabled
```

Server 1



Command terminal

IPv4 properties

Internet protocol version 4 (TCP/IPv4) properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:	192.168.1.1
Subnet mask:	255.255.255.0
Default gateway:	192.168.1.50

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:	192.168.1.1
Alternate DNS server:	192.168.1.50

Validate settings upon exit

Advanced...

Server 2



Command terminal IPv4 properties

```

Host Name . . . . . : Server2
Primary Dns Suffix . . . . . :
Node Type . . . . . : Peer-Peer
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : corp.lan

Ethernet adapter Ethernet 1:

    Connection-specific DNS Suffix . : corp.lan
    Description . . . . . : Realtek USB GbE Family Controller
    Physical Address. . . . . : AC:5D:46:89:72:6D
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : No
    IPv4 Address. . . . . : 192.168.1.2 (Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.5
    DNS Servers . . . . . : 192.168.1.1
                           192.168.1.50
    NetBIOS over Tcpip. . . . . : Enabled
    
```

Server 2
✕

Command terminal

IPv4 properties

Internet protocol version 4 (TCP/IPv4) properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:	192.168.1.2
Subnet mask:	255.255.255.0
Default gateway:	192.168.1.50

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:	192.168.1.1
Alternate DNS server:	192.168.1.50

Validate settings upon exit

Advanced...

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Looking at the network configurations and outputs from both PCs and servers, here are the possible issues and solutions:

* 1. PC 1

Issue: The IP address for PC1 is 192.168.1.1, which conflicts with Server 1 (which also uses 192.168.1.1).

Solution: Change the IP address on PC1 to a unique one within the range, like 192.168.1.3.

* 2. PC 2

Issue: PC 2 is configured with 192.168.1.2, which conflicts with Server 2 that has the same IP address.

Solution: Update the IP address on PC 2 to something unique, like 192.168.1.4.

* 3. Server 1

Issue: The IP address for Server 1 is 192.168.1.1, which conflicts with PC1.

Solution: Since Server 1 and PC1 are using the same IP address, change one of them. For Server 1, you could change the IP address to 192.168.1.5.

* 4. Server 2

Issue: Server 2 is using the IP address 192.168.1.2, which conflicts with PC2. Solution: Update Server 2 to use a different IP address, such as 192.168.1.6.

General Remediation:

The primary problem here is overlapping IP addresses, leading to connectivity issues. Each device on the network must have a unique IP address. After making these changes, ensure that all devices can communicate properly by testing the connection between devices and verifying they can access shared resources.

NEW QUESTION 166

SIMULATION - (Topic 2)

Laura, a customer, has instructed you to configure her home office wireless access point.

She plans to use the wireless network for finances and has requested that the network be setup with the highest encryption possible.

Additionally, Laura knows that her neighbors have wireless networks and wants to ensure that her network is not being interfered with by the other networks.

She requests that the default settings be changed to the following.

Wireless Name: HomeWiFi Shared Key: CompTIA Router Password: Secure\$1

Finally, Laura wants to ensure that only her laptop and Smartphone can connect to the network.

Laptop: IP Address 192.168.1.100 Hardware Address: 00:0A:BF:03:C4:54 Smartphone: IP Address 192.168.1.101 Hardware Address: 09:2C:D0:22:3F:11

INSTRUCTIONS

Configure Laura's wireless network using the network adapter window.

If at any time you would like to bring back the initial state of the situation, please click the Reset All button.

Laura's Wireless Configuration

WIRELESS SETUP
NETWORK FILTER
ADMINISTRATOR TOOLS

Wireless Network Settings

Enable Wireless:

Wireless Network Name: (Also called the SSID)

Wireless Channel:

Disable SSID Broadcast:

802.11g Only Mode:

Wireless Security Mode


Security Mode:




WPA2

Passphrase:

Confirmed Passphrase:

Laura's House



-  Wireless Network Name: **Default**
Security Mode: **Open**
Wireless Channel: **11**
-  Wireless Network Name: **MyWi**
Security Mode: **WEP**
Wireless Channel: **6**
-  Wireless Network Name: **PatsWiFi**
Security Mode: **WEP**
Wireless Channel: **11**

Laura's Wireless Configuration

WIRELESS SETUP
NETWORK FILTER
ADMINISTRATOR TOOLS

Please enter the same password into both boxes for confirmation.

Password:

Verify Password:

Laura's Wireless Configuration

WIRELESS SETUP NETWORK FILTER ADMINISTRATOR TOOLS

Wireless Network Settings

Enable Wireless:

Wireless Network Name: (Also called the SSID)

Wireless Channel:

Disable SSID Broadcast:

802.11g Only Mode:

Wireless Security Mode

Security Mode:

Laura's Wireless Configuration

WIRELESS SETUP NETWORK FILTER ADMINISTRATOR TOOLS

Turn MAC Filtering ON:

<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
solution as

Wireless Configuration

Wireless Setup Network Filter Administrator Tools

WIRELESS NETWORK SETTINGS:

Enable Wireless:

Wireless Network Name: (Also called the SSID)

Wireless Channel:

Disable SSID Broadcast:

802.11g Only Mode:

WIRELESS SECURITY MODE:

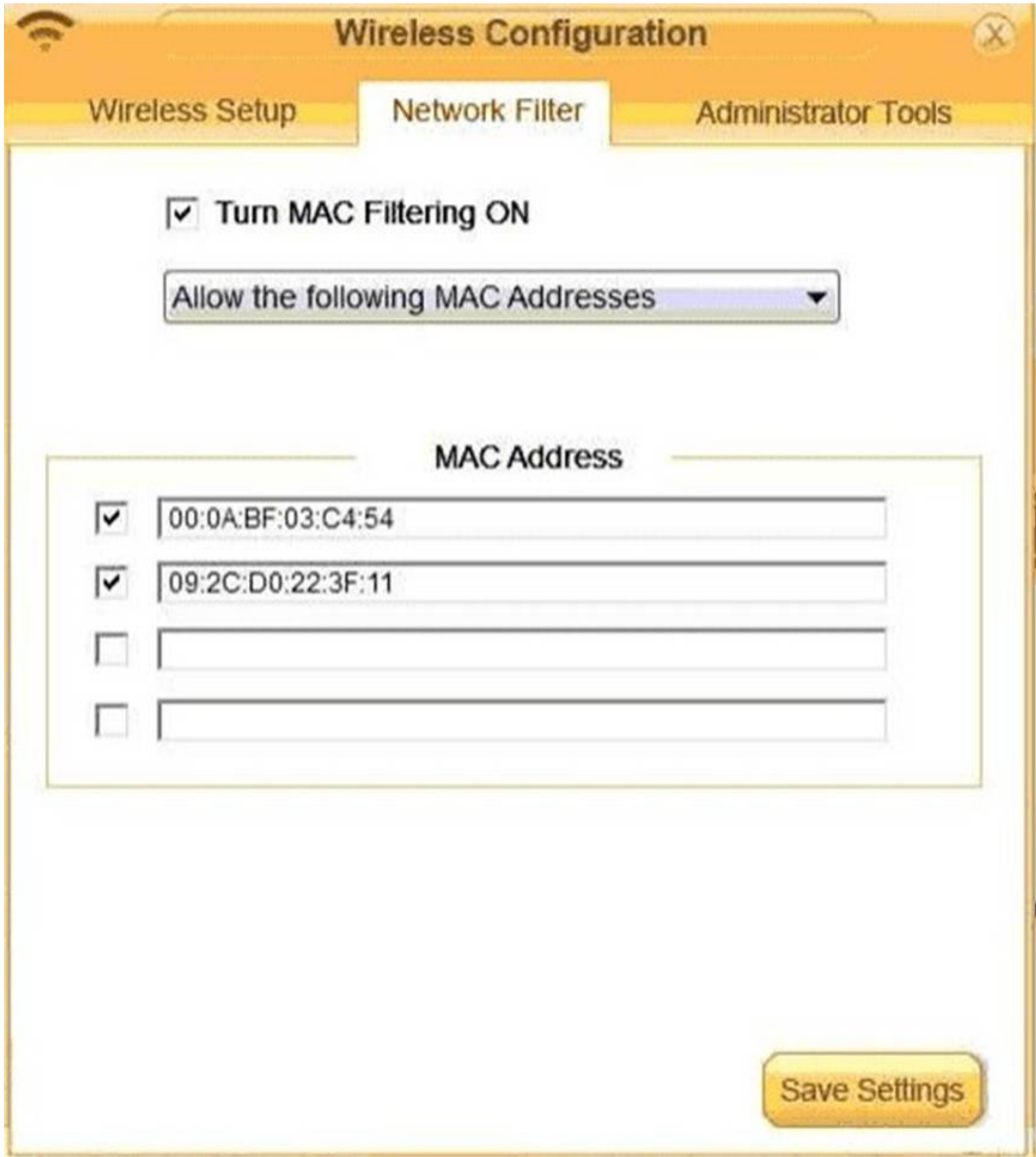
Security Mode:

WPA2:

Passphrase:

Confirmed Passphrase:

A screenshot of a network settings
AI-generated content may be incorrect.



A screenshot of a computer
AI-generated content may be incorrect.



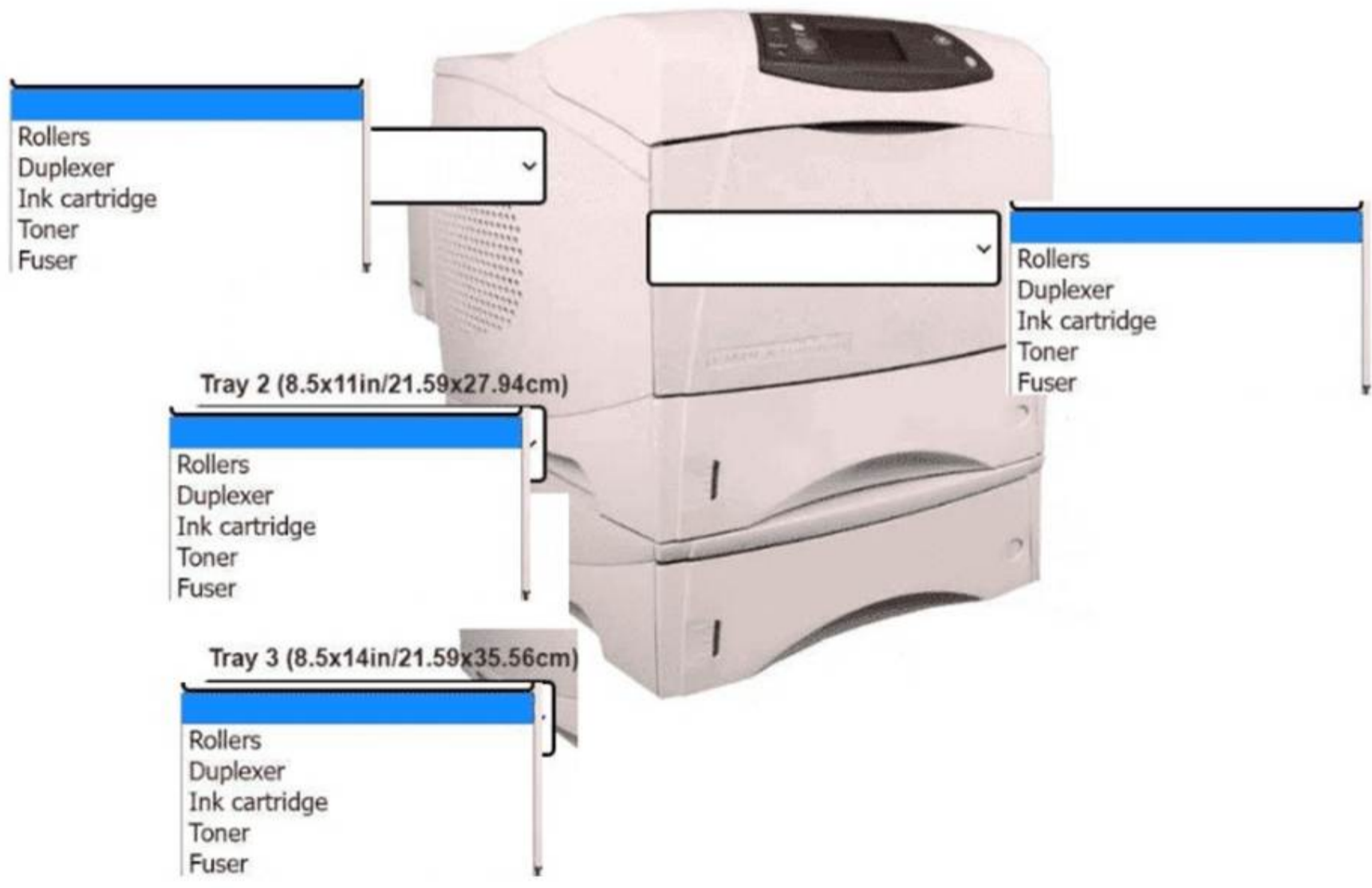
The screenshot shows a web-based configuration interface titled "Wireless Configuration". It has three tabs: "Wireless Setup", "Network Filter", and "Administrator Tools". The "Administrator Tools" tab is active. Below the tabs is a yellow header bar with the text "ADMIN PASSWORD". The main content area contains the instruction: "Please enter the same password into both boxes for confirmation." There are two input fields: "Password:" and "Verify Password:". Both fields contain the text "Secure\$1". At the bottom right of the form is a yellow button labeled "Save Settings".

A screenshot of a computer
 AI-generated content may be incorrect.

NEW QUESTION 168

HOTSPOT - (Topic 2)

An office manager reports that a printer is experiencing performance issues. Printouts are smudging when they are handled, and, recently whenever they need to print legal sized documents, the paper jams before anything is printed on it. The following paper sizes are used: Letter (8.5x11in/21.59x27.94cm) Legal (8.5x14in/21.59x35.56cm) Oversized (11x17in/27.94x43.18cm)



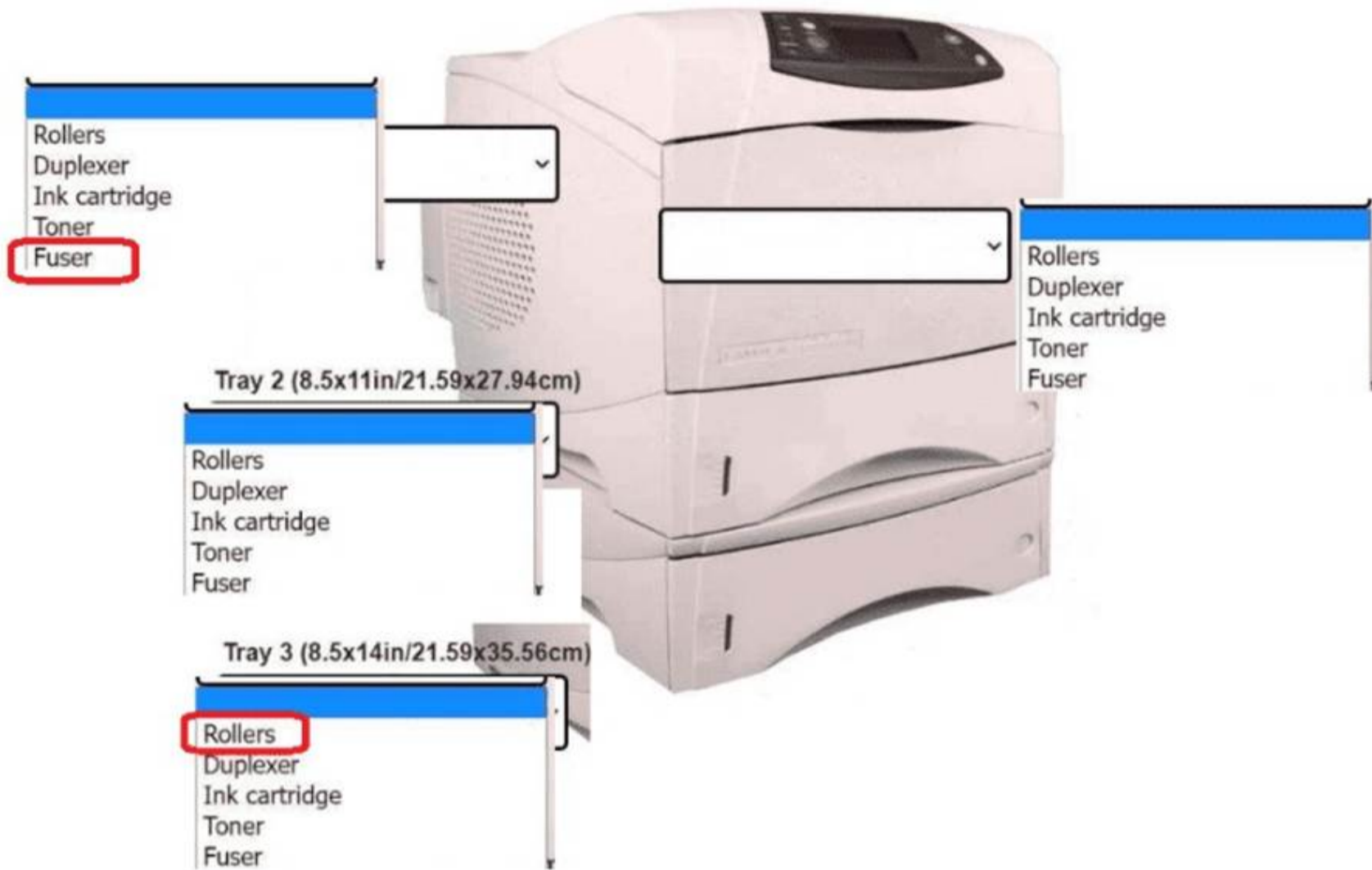
INSTRUCTIONS

Using the dropdown menus, select from the available printer parts to replace only the faulty components on the office printer to resolve the stated issues. 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:



A printer with text boxes
 AI-generated content may be incorrect.

NEW QUESTION 171

SIMULATION - (Topic 2)

A user reports poor performance on the application server.

INSTRUCTIONS

Click on Server 1 and Server 2 and review the information presented in each chart to determine which drives need to be replaced.

Select the appropriate replacement drive that should be used, for the least performance degradation to the server.

If at any time you would like to bring back the initial state of the simulation, please click the

Reset All button.

The diagram shows two server racks. Server 1 has 4 drives in the left column and 3 drives in the right column. Server 2 has 2 drives in the left column and 5 drives in the right column. Below the diagram is a table with the following data:

Status	Name	State	Layout	Bus protocol	Media	Read policy	Write policy	Stripe element size	Disk cache policy
✓	Server 1	Ready	RAID-5	SAS	HDD	No read ahead	Write back	64KB	Disabled
⚠	Server 2	Degraded	RAID-5	SAS	HDD	No read ahead	Write back	64KB	Disabled

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

The degraded status on Server 2 indicates a RAID-5 issue, typically due to a failed or failing drive. In RAID-5 configurations, when one drive fails, the system can still operate but with reduced performance as parity data is used to rebuild missing data on-the-fly. Recommended Replacement Drive:

To minimize performance degradation, the replacement drive should be:

SAS HDD with the same specifications (64KB stripe size, no read-ahead, and write-back policy).

Matching the configuration exactly ensures seamless integration and optimizes recovery speed in the RAID-5 array.

In RAID-5, degraded performance is expected when one drive fails, as parity data needs to rebuild missing information during each read/write process. Replacing the failed drive restores the RAID array to optimal status, reducing the load on existing drives and returning the system to normal read/write performance. The write-back policy and disabled disk cache settings are designed to reduce latency and increase efficiency, essential for handling real-time applications.

A user reports poor performance on the application server.

INSTRUCTIONS

Click on Server 1 and Server 2 and review the information presented in each chart to determine which drives need to be replaced. Select the appropriate replacement drive that should be used, for the least performance degradation to the server.

Status	Name	State	Layout	Bus protocol	Media	Read policy	Write policy	Stripe element size	Disk cache policy
✓	Server 1	Ready	RAID-5	SAS	HDD	No read ahead	Write back	64KB	Disabled
⚠	Server 2	Degraded	RAID-5	SAS	HDD	No read ahead	Write back	64KB	Disabled

A computer server with many black and silver parts
 AI-generated content may be incorrect. A computer server with many black boxes Description automatically generated with medium confidence

Server 1

Status	Name	State	Size	Media	Speed	Failure predicted
✓	Physical disk 1:2	Online	4TB	HDD	15k rpm	Yes
✓	Physical disk 1:3	Online	4TB	HDD	15k rpm	No
✓	Physical disk 1:4	Online	4TB	HDD	15k rpm	No
✓	Physical disk 1:5	Online	4TB	HDD	15k rpm	No


A screen shot of a computer
 AI-generated content may be incorrect. A screen shot of a computer Description automatically generated

Server 1, Drive bay 3

Size	Interface	Rotational speed
4TB v	HDD	15k rpm

A computer screen shot of a computer
 AI-generated content may be incorrect. A computer screen shot of a computer Description automatically generated


Server 1, Drive bay 4 ✕



Size	Interface	Rotational speed
4TB v	HDD	15k rpm

A computer screen shot of a computer
 AI-generated content may be incorrect.A computer screen shot of a computer Description automatically generated


Server 1, Drive bay 5 ✕



Size	Interface	Rotational speed
4TB v	HDD	15k rpm

A computer screen shot of a computer
 AI-generated content may be incorrect.A computer screen shot of a computer Description automatically generated

Server 2, Drive bay 2 ✕




Size	Interface	Rotational speed
2TB v	HDD	7200rpm
8TB	SAS	5400rpm
4TB	SATA	7200rpm
2TB	SATA	SSD

Layout	Bus protocol	Media
RAID-5	SAS	HD
RAID-5	SAS	HD

A screenshot of a computer
 AI-generated content may be incorrect.A screenshot of a computer Description automatically generated

Server 2, Drive bay 3
✕



Size	Interface	Rotational speed
2TB v	HDD	7200rpm
8TB	SAS	5400rpm
4TB	SATA	7200rpm
2TB	SATA	SSD
1TB	SAS	10k rpm
4TB	SAS	15k rpm
4TB	SAS	10k rpm
4TB	SATA	SSD

A screenshot of a computer
 AI-generated content may be incorrect. A screenshot of a computer Description automatically generated

NEW QUESTION 172

.....

Thank You for Trying Our Product

We offer two products:

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

2nd - Questions and Answers in PDF Format

220-1201 Practice Exam Features:

- * 220-1201 Questions and Answers Updated Frequently
- * 220-1201 Practice Questions Verified by Expert Senior Certified Staff
- * 220-1201 Most Realistic Questions that Guarantee you a Pass on Your First Try
- * 220-1201 Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The 220-1201 Practice Test Here](#)