7.7 Checkpoint Review

Date: 12/6/2025, 11:31:00 AM

Time Spent: 34:28

Score: 95%

Passing Score: 80%

Question 1 ✓ Correct

You are an IT technician troubleshooting a limited connectivity issue for a single user in an office environment. The user reports that they cannot access the internet but can still access local network resources.

You check the network adapter and see that it has an IP address in the range of 169.254.x.x.

What is the MOST likely cause of the issue, and what should you do to resolve it?

- The user's computer has a faulty network adapter. Replace the network adapter.
- The switch port is misconfigured. Reconfigure the switch port to the correct VLAN.
- **The DHCP server is not assigning an IP address. Manually configure a valid IP address for the user.** ✓ Correct
- The network cable is damaged. Replace the cable with a known good one.

Explanation

When a device has an IP address in the range of 169.254.x.x, it indicates that the device has assigned itself an Automatic Private IP Addressing (APIPA) address because it could not obtain an IP address from a DHCP server. This is a common cause of limited connectivity issues. Manually configuring a valid IP address or troubleshooting the DHCP server to restore automatic IP assignment will resolve the issue.

While a damaged network cable can cause connectivity issues, it would typically result in no connectivity at all, not limited connectivity. The presence of an APIPA address indicates that the physical connection is intact, but the DHCP server is not reachable. Replacing the cable is unnecessary in this scenario.

A faulty network adapter would likely result in no connectivity or the inability to establish a link with the network. Since the user can access local network resources and has an APIPA address, the network adapter is functioning correctly. Replacing it would not resolve the issue.

A misconfigured switch port, such as one assigned to the wrong VLAN, could cause connectivity issues. However, this would typically prevent access to both local and internet resources. The fact that the user can access local resources suggests that the switch port is correctly configured. The issue lies with the DHCP server, not the switch port.

Related Content

7.3.1 Troubleshoot Wired Connectivity

7.3.6 Troubleshoot Limited Connectivity

resources\questions\q_troubleshoot_limited_connectivity_02.question.xml

Question 2 Correct

Which TCP/IP configuration parameter identifies the router that is used to reach hosts on remote networks?

- WINS server address
- Default gateway ✓ Correct
- Subnet mask
- Alternate IP address
- Hostname
- DNS server address

Explanation

The default gateway identifies the router that packets for remote networks are sent to.

The subnet mask identifies which portion of the IP address is the network address.

The WINS server address identifies the WINS server that is used to resolve NetBIOS hostnames to IP addresses.

The DNS server address identifies the DNS server that is used to resolve hostnames to IP addresses.

The alternate IP address identifies IP addressing information to be used in the event that the DHCP server cannot be reached.

The hostname identifies the local system's logical name.

Related Content

6.2.9 IPv4 Forwarding

6.2.11 IPv4 Host Address Configuration

resources\questions\q_ipv4_forwarding_01.question.xml

Question 3 Correct

Which of the following all-in-one security appliance (UTM) functions detects intrusions and alerts the network but does not block traffic?

- Intrusion protection
- Anti-spam
- VPN
- Intrusion detection ✓ Correct

Explanation

Intrusion detection detects intrusions and alerts the network. However, it does not block traffic.

Intrusion protection detects and blocks network traffic that is not recognized by its profile.

Anti-spam is designed to detect and block certain types of email.

A VPN encrypts traffic over a secure network. However, a VPN does not block traffic.

Related Content

resources\questions\q_spam_gateways_and_unified_threat_management_03.question.xml

Question 4 Correct

Which of the following is a benefit of good documentation?

- (●) It saves time and money in troubleshooting problems. ✓ Correct
- ( ) It reduces hardware maintenance.
- ( ) It reduces hardware replacement requirements.
- ( ) It eliminates the need to troubleshoot problems.

Explanation

By keeping adequate documentation, you can reduce the time and money spent troubleshooting.

While documentation can help reduce troubleshooting, it can never completely eliminate it.

Documentation helps you know when regular maintenance of hardware is required but does not eliminate maintenance.

Documentation helps you plan for hardware updates but does not reduce the requirements to replace the hardware.

Related Content

resources\questions\q_verify_and_document_03.question.xml

Question 5 Correct

A SOHO's connection to the internet is through an antenna that sends and receives a microwave signal to the ISP's antenna. There can be no obstacles on the direct path between the two antennae.

Which of the following internet connection types is this?

- Fiber
- Satellite
- WISP ✓ Correct
- DSL

Explanation

A wireless internet service provider (WISP) uses microwave or radio frequency signals between two antennae. The direct path between the antennae cannot be blocked.

A fiber internet connection uses fiber cabling. Transmitted light pulses are carried by the fiber.

Digital subscriber line (DSL) uses a modem that connects to copper telephone lines, allows the use of the internet and phone calls at the same time, and has average download speeds of 3 to 7 Mbps.

Satellite internet connections are made through satellites orbiting the Earth in a geosynchronous orbit. Typically, a roof-mounted satellite dish is aimed at the target satellite, and a transceiver sends and receives data.

Related Content

6.1.7 Fixed Wireless Internet Access
resources\questions\q_fixed_wireless_internet_access_03.question.xml

Question 6 Correct

Which of the following best describes the primary function of Network Monitoring Servers?

- To store, organize, and manage large amounts of structured and unstructured data
- To enable secure communication over the internet using encryption protocols
- To monitor and analyze network traffic to ensure optimal performance and security ✓ Correct
- To provide shared access to disk and print resources

Explanation

Network monitoring servers are tasked with observing and analyzing network traffic to maintain network performance and security.

Providing shared access to disk and print resources describes the function of File/Print Servers, which are responsible for allowing shared access to disk and print resources over a network. Network Monitoring Servers, on the other hand, focus on monitoring network traffic and performance.

Storing, organizing, and managing large amounts of structured and unstructured data pertains to Database Servers, which are designed to handle the storage and management of data. Network Monitoring Servers do not primarily deal with data storage or management but rather with monitoring network activities.

Enabling secure communication over the internet using encryption protocols. Incorrect is the function of servers that implement security protocols like HTTPS, which ensure secure communication over the internet. Network Monitoring Servers are not primarily focused on enabling secure communication but rather on monitoring network traffic and performance.

Related Content

resources\questions\q_network_monitoring_servers_01.question.xml

Question 7 Correct

What is the purpose of using a caddy when installing fixed disks in drive bays?

- To increase the speed of the disk
- To prevent data corruption during operation
- To secure the drive and adapt it to fit different bay sizes ✓ Correct
- To improve the drive's data storage capacity

Explanation

A caddy secures the drive in place within the bay and allows for adaptation to different bay sizes, such as installing a 2.5-inch drive in a 3.5-inch bay. Caddies do not affect the speed or storage capacity of the drive, nor do they specifically prevent data corruption.

Related Content

resources\questions\q_stg_dev_drive_caddy_purpose.question.xml

Question 8 ✓ Correct

What is the primary purpose of escalating an issue during the troubleshooting process?

- (●) To involve senior staff or external resources when the problem cannot be resolved at the current level. ✓ Correct
- ( ) To document the problem for future reference without attempting to resolve it.
- ( ) To skip basic troubleshooting steps and focus on advanced diagnostics.
- ( ) To immediately replace faulty hardware without further testing.

Explanation

The purpose of escalation is to seek assistance from senior staff, subject matter experts, or external resources when the problem cannot be resolved after thorough troubleshooting. Escalation ensures that the issue is addressed efficiently without wasting time or resources.

Replacing hardware without proper testing is not part of the escalation process. Escalation involves seeking additional expertise or resources, not making assumptions about the cause of the problem.

Escalation occurs after basic and intermediate troubleshooting steps have been completed. Skipping steps is not aligned with the systematic approach outlined in the troubleshooting methodology.

While documentation is important, the purpose of escalation is to resolve the issue, not just to record it. Documentation supports the escalation process by providing a clear record of what has been attempted so far.

Related Content

resources\questions\q_establish_a_new_theory_or_escalate_04.question.xml

Question 9 Correct

You decided to upgrade your PC with a faster processor. To do this, you ordered a new motherboard over the internet that supports the processor that you want to use.

When the motherboard arrives, you discover that the motherboard uses the Micro-ATX form factor. Your current case is an ATX mid-tower with a standard ATX motherboard inside.

Which steps must you take for the Micro-ATX motherboard to work in the ATX case?

- (●) No additional steps are necessary. You can install the Micro-ATX motherboard in the ATX case. ✓ Correct
- ( ) Drill new holes in the ATX case to match the mounting hole pattern in the Micro-ATX motherboard.
- ( ) Drill new holes in the Micro-ATX motherboard to match the mounting hole pattern in the ATX case.
- ( ) Return the motherboard and replace it with an ATX form factor motherboard, as the Micro-ATX motherboard does not fit without modifying the case.

Explanation

ATX mid-tower cases support all ATX form factors, including Micro-ATX. The main difference between ATX and Micro-ATX is the number of bus and memory slots on the motherboard.

You do not need to return the motherboard, and drilling holes in the motherboard or case can compromise or damage the integrity of both.

Related Content

2.2.7 Motherboard Form Factors

resources\questions\q_mb_micro_atx_in_atx_pp7.question.xml

Question 10 Correct

Which of the following features is typically included in a datacenter to ensure a high level of availability?

- Gaming equipment
- Basic electrical service
- Retail facilities
- Climate control ✓ Correct

Explanation

Datacenters include climate control to maintain optimal temperatures and protect hardware. Gaming equipment is irrelevant to datacenter operations. Datacenters require dedicated, specialized power solutions instead of basic service. Retail facilities are unrelated to datacenter functions.

Related Content

resources\questions\q_net_type_datacenter_avalability.question.xml

Question 11 Correct

A technician is troubleshooting a projector that keeps randomly shutting down. What is the most likely cause?

- Burned-out bulb
- Overheating ✓ Correct
- Incorrect data source
- Loose cable between the monitor and the display

Explanation

Overheating typically causes intermittent projector shutdown. Check that the projector's fan is working, that the vents are free from dust and obstructions, and that the ambient temperature is not too high.

A completely failed bulb is known as a burned-out bulb. A technician might hear the bulb "pop" and observe scorch marks on the inside or a broken filament.

If the projector is on, but there is no image displayed, the technician should check the cable and connectors between the video card and monitor.

The technician may also need to adjust the image or select the appropriate data source or input channel if no image is displayed.

Related Content

4.3.6 Troubleshoot Missing Video Issues
resources\questions\q_troubleshoot_missing_video_issues_01.question.xml

Question 12 ✓ Correct

You have a motherboard that uses a 24-pin ATX connector.

Which types of power supply could you use with this motherboard? (Select two.)

- [ ] A power supply with a 20-pin ATX connector only
- [x] A power supply with a 24-pin ATX connector only ✓ Correct
- [ ] A power supply with a 20-pin ATX and a 6-pin connector
- [ ] A power supply with a 20-pin ATX and a Molex connector
- [x] A power supply with a 20-pin ATX and a +4-pin connector ✓ Correct

Explanation

In this case, the motherboard needs either a 24-pin ATX connector or a 20-pin ATX and a +4-pin connector.

When selecting a power supply, make sure it includes the necessary connectors for your motherboard. Some motherboards and processors require an extra 4-pin and/or 8-pin connector in addition to the main 20- or 24-pin power connector.

A Molex connector is used by legacy components (such as IDE hard drives and PATA optical drives), case fans, and other accessory devices.

A 6-pin connector is used for video cards.

Related Content

3.1.4 Power Supply Connectors

3.1.5 20-pin to 24-pin Motherboard Adapter

resources\questions\q_pwr_cool_24-pin_atx.question.xml

Question 13 Correct

You are in the process of installing a motherboard in a system case.

Which of the following objects should you place between the motherboard and the system case?

- Passive heat sink
- Support manual
- Fans
- Heat spreaders
- Standoffs ✓ Correct

Explanation

Standoffs go between the motherboard and the case. Standoffs prevent the motherboard circuits from touching the system case and grounding or shorting.

Heat spreaders go on memory modules to help cool them.

Fans are installed in the system case but not between the motherboard and the case.

Passive heat sinks are installed with chipsets and low-performance processors.

The support manual is a booklet that contains information about the motherboard.

Related Content

resources\questions\q_mb_inst_standoffs_pp7.question.xml

Question 14 ✓ Correct

What is the purpose of a screened subnet in a network?

- To facilitate direct communication between employees and external clients without restrictions
- To strictly filter and monitor traffic between the private LAN and the public Internet ✓ Correct
- To allow internal LAN traffic only, without access to external networks
- To allow unrestricted traffic between the private LAN and the public Internet

Explanation

The screened subnet is designed to strictly filter and monitor traffic between the private LAN and the public Internet, creating a secure boundary. This setup protects the LAN from direct exposure to the Internet. Unrestricted traffic would compromise network security. Direct, unrestricted communication is not allowed in a screened subnet as this would also compromise security because filtering and restricting traffic is essential for security. The screened subnet is intended for controlled access to external networks, not for restricting all external access, which is overly protected and would interfere with regular business operations.

Related Content

5.1.1 LANs and WANs

resources\questions\q_net_type_screened_subnet.question.xml

Question 15

Correct

Which of the following best describes the primary purpose of Bluetooth?

- (●) To connect peripheral devices and share data over short distances ✓ Correct
- ( ) To serve as the main technology for wireless Internet access
- ( ) To enable high-speed, long-distance data transmission between buildings
- ( ) To track objects using encoded tags for inventory management

Explanation

Bluetooth is mainly used to connect peripheral devices (like headphones or speakers) to PCs and mobile devices and to share data over short distances. Bluetooth is not designed for long-distance data transmission; that would require different wireless technology. It also doesn't provide Internet access, which Wi-Fi typically handles. Object tracking with encoded tags is performed by RFID, not Bluetooth.

Related Content

5.4.12 Bluetooth, RFID, and NFC

resources\questions\q_wire_net_bluetooth_purpose.question.xml

Question 16 ✓ Correct

Which storage device uses aluminum platters for storing data?

- ○ DVD disc
- ○ CD-ROM disc
- ◉ Hard disk ✓ Correct
- ○ DLT tape
- ○ SD card

Explanation

Hard disks use magnetic disks and platters.

Optical drives, such as DVD or CD-ROM drives, use a reflective surface that is read by an optical reader.

Flash devices, such as SD cards, store information using programmable non-volatile flash memory.

DLT drives use magnetic tape.

Related Content

resources\questions\q_stg_dev_hard_disk_alum_platters.question.xml

Question 17 Correct

A technician is troubleshooting a computer that will not turn on. The technician has verified that the wall socket and devices leading to the computer are working correctly.

What could remain an issue? (Select two.)

- [x] Motherboard ✓ Correct
- [ ] Power grid
- [ ] On-premises distribution circuit
- [x] Power supply unit ✓ Correct

Explanation

Since the technician verified that power was working in the wall socket and verified all other power components between the wall socket and the computer, the motherboard is most likely an issue.

Since the technician verified that power was working in the wall socket and verified all other power components between the wall socket and the computer, a faulty power supply unit is most likely an issue.

An On-premises distribution circuit would stop power from reaching the wall socket. Since the technician verified that power was working in the wall socket, this could not be the issue.

The power grid would not be the issue as the technician verified that power was being delivered from the wall socket to the computer.

Related Content

4.2.1 Troubleshoot Power Issues

4.3.3 Physical Damage

resources\questions\q_troubleshoot_power_issues_01.question.xml

Question 18 ✓ Correct

A user reports that she can't send print jobs to a specific printer. You are able to reproduce the problem on the user's computer.

Which of the following actions should you perform next?

- ○ Establish a plan of action.
- ○ Establish the most probable cause.
- ○ Determine if escalation is necessary.
- ◉ Determine whether anything has changed. ✓ Correct

Explanation

According to the troubleshooting methodology, identifying the problem involves gathering information about recent changes to the system or environment. Changes, such as updates, configuration modifications, or hardware adjustments, are often the root cause of technical issues. By asking whether anything has changed, you can narrow down potential causes and proceed with testing a theory to resolve the issue.

Establishing a plan of action is a step that occurs later in the troubleshooting process, after identifying the problem and determining the probable cause. At this point in the scenario, the problem has been reproduced, but the root cause has not yet been identified. Before creating a plan of action, it is necessary to gather more information, such as determining if any changes have occurred that might explain the issue.

Establishing the most probable cause is an important step in the troubleshooting process, but it comes after gathering sufficient information about the problem. In this scenario, determining whether anything has changed is a prerequisite to identifying the probable cause. Without understanding the context of the issue, it would be premature to establish a probable cause.

Determining if escalation is necessary is a step taken when the problem cannot be resolved or requires additional expertise or resources. In this scenario, escalation is not yet relevant because the problem is still being investigated. The next step is to gather more information (e.g., whether anything has changed) to better understand the issue before considering escalation.

Related Content

resources\questions\q_identify_the_problem_03.question.xml

Question 19 ✓ Correct

A small business is experiencing intermittent internet connectivity issues with their cable modem. Upon investigation, you find that the coaxial cable is securely connected, the RJ45 cable is properly attached to the router, and the modem's power light is on.

However, the modem's connection light is blinking instead of staying solid.

What is the MOST likely cause of the issue?

- The F-type connector on the coaxial cable is overtightened, causing signal interference.
- The modem is incompatible with the router being used.
- The RJ45 cable is faulty and needs to be replaced.
- The cable modem termination system (CMTS) at the service provider's end is experiencing issues. ✓ Correct

Explanation

The CMTS forwards data traffic from the coaxial cable to the ISP's point of presence. A blinking connection light on the modem typically indicates that the modem is unable to establish a stable connection with the service provider's network, which could be due to issues with the CMTS. This is the most logical explanation based on the scenario.

While it is advised not to overtighten the F-type connector, overtightening is unlikely to cause intermittent connectivity issues. The blinking connection light suggests a problem beyond the physical connection, making this answer incorrect.

The RJ45 cable connects the modem to the router, not to the service provider's network. Since the issue is with the modem's connection to the service provider, the RJ45 cable is not the likely cause of the problem.

If the modem were incompatible with the router, the issue would manifest as a failure to connect the local network to the modem, not as a blinking connection light. The problem described in the scenario points to the modem's connection with the service provider, not the router.

Related Content

6.1.3 Cable Modems

resources\questions\q_cable_modems_03.question.xml

Question 20 ✕ Incorrect

Which of the following components is most likely to use a Molex power connector?

- ◯ Case fan or older hard disk drive (HDD) ✓ Correct
- ◉ SATA SSD ✕ Incorrect
- ◯ Monitor
- ◯ USB external hard drive

Explanation

Molex power connectors are commonly used to provide power case fans for older hard disk drive (HDD). Molex connectors are 4-pin power connectors traditionally found in older computer systems. They are often used to power devices such as case fans, optical drives, and older hard disk drives. They provide a reliable power connection but lack the more modern features found in newer power connectors.

A SATA SSD does not use a Molex connector. Instead, it relies on a SATA power connector, which is specifically designed for SATA-based drives and offers a more compact and streamlined design compared to Molex.

A monitor is powered externally through its own dedicated power cable and does not connect directly to the computer's internal power supply.

A USB external hard drive is powered through its USB connection or via an external power adapter.

Related Content

2.1.14 Molex Power Connectors
resources\questions\q_cable_conn_molex_devices.question.xml