Exam Report: 6.10.6 Practice Questions

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Time Spent: 17:32

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Overall Performance

Your Score: 46%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Correct

After several new computers are connected to a network device, every computer connected to the device begins to experience slow transfer speeds.

Which of the following is the FIRST step in troubleshooting this problem?

- Use a loopback plug to determine whether each port on the network device is good.
- Determine whether the network device is a hub or a switch.
- Use a cable tester to determine whether all cables between each computer and the device are good.
- Use a loopback plug to determine whether the NIC in each computer is good.

Explanation

The problem is, most likely, caused by network contention. The root cause could be too many collisions or a chattering NIC. Most likely, the device is a hub, and the added computers are causing too many collisions and overwhelming the hub. If the device is a switch, it will have monitoring tools to help determine whether one computer has a bad NIC.

The problem is unlikely to be a bad port on the network device, which would only affect one computer.

If the problem is a bad NIC, already knowing whether the network device is a hub or switch would help isolate the problem.

A bad cable would only affect the computer that it was connected to, but all computers are experiencing slow transfer speeds.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_01]

Question 2: Correct

A laptop has a wired connection to the network and is configured with a static IP address. The link light on the NIC is lit, but the laptop can't communicate with any hosts on the local network.

Which of the following is the MOST likely cause of the issue?

- The static IP address and subnet mask are configured with the wrong network address.
- The network settings are configured with the wrong gateway address.
- A low RF signal is being sent from the wireless access point.
- Packet collisions are preventing the laptop from sending or receiving network communications.

Explanation

The network portion of a static IP address must match the other hosts on the local network for proper IP communications. While there may be other root causes for non-communication, this is the only possible cause presented in this scenario.

An incorrect gateway address will not affect communication between hosts on a local network. It is only used when communicating with hosts outside of the local network.

Packet collisions might affect transfer speeds, but will not prevent communications between hosts on a local network.

An RF signal is used for wireless communications. The laptop has a wired connection.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_02]

Question 3: Correct

A laptop has a wired connection to the network and is configured with a static IP address. The link light on the NIC is lit, but the laptop can't communicate with any hosts on the local network.

Which of the following is the MOST likely cause of the issue?

- (selected) The IP address conflicts with another host on the local network.
- The network settings are configured with the wrong gateway address.
- The laptop is connected to a hub instead of a switch.
- Packet collisions are preventing the laptop from sending or receiving network communications.

Explanation

In most cases, when two host on the same local network have the same IP address, neither host will be able to communicate. While there may be other root causes for non-communication, this is the only possible cause presented in this scenario.

An incorrect gateway address will not affect communication between hosts on a local network. It is only used when communicating with hosts outside of the local network.

Packet collisions might affect transfer speeds, but will not prevent communications between hosts on a local network.

In a typical local network, hosts can communicate with each other using either a hub or a switch. The basic difference between a hub and a switch is that when a hub is used, a frame received on one port is flooded to every other port. When a switch is used, the destination MAC address within the frame is examined, and the frame is only sent to the port that is associated with that MAC address. If the MAC address is not associated with a port, the frame is flooded to all other ports.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_03]

Question 4: Incorrect

While investigating a network connectivity issue, a technician finds that the link light on a workstation is not lit, and there is no connectivity after replacing the patch cable with one that is known to be good. The wall jack is not labeled, and within the switch room, none of the cables or patch panel ports are labeled.

Which of the following tools would the technician MOST likely use next?

- (selected) Tone generator
- ~~Cable tester~~
- Crimper
- Punchdown tool

Explanation

A tone generator can be used to identify which port in the patch panel connects to the wall jack. The technician could then investigate further by following the cable from the patch panel to the switch.

A cable tester might be used after the correct cable and patch panel port are identified.

A crimper is used to attach an RJ45 or RJ11 end to a twisted pair cable.

A punchdown tool may be needed later if the identified cable is not attached correctly to either the wall jack or the patch panel. If the cable is not identified, the cable can't be repaired.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_04]

Question 5: Correct

While investigating a network connectivity issue, a technician finds that the link light on a workstation is not lit, and there is no connectivity after replacing the patch cable both between the workstation and the wall jack and between the patch panel and the switch with cables that are known to be good.

If the wall jack and patch panel ports are labeled correctly, which of the following tools would the technician MOST likely use next?

- Tone generator
- Punchdown tool
- Crimper
- Cable tester

Explanation

A cable tester is the BEST choice for determining whether there are problems in the cable between the wall jack and the patch panel.

A tone generator is not needed, since the port on the patch panel that connects to the wall jack is already identified.

After you determine whether the cable is bad between the wall jack and the patch panel, you may need a punchdown tool to repair or replace the cable connectors.

A crimper is used to attach an RJ45 or RJ11 end to a twisted pair cable.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_05]

Question 6: Correct

A user tells a help desk technician that their browser is displaying a message that a site can't be reached. When asked, the user tells the technician that other users in the same office can browse to the site. The technician suspects that the web server's name is not being translated to the correct IP address. The technician asks the user to open a command prompt window.

Which of the following commands would confirm the technician's assumption? (Select TWO).

- **ipconfig**
- **ifconfig**
- **ping**
- **nslookup**
- **netdom**

Explanation

nslookup will show the translation of the web server name to an IP address.

When a web server name is used in a **ping**, a web server name to IP address lookup is performed. The echo request is then made to the corresponding IP address.

ipconfig displays the hosts TCP/IP configuration, but none of the web server information.

netdom allows administrators to manage Active Directory domains. It does not give web server information.

ifconfig is similar to the **ipconfig**, but is used on UNIX, Linux, and Mac OS operating systems.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_06]

Question 7: Incorrect

A technician located at a branch office can't communicate with a company server at the home office.

Which of the following commands could be used to determine where the communication is blocked?

- **nslookup**
- ~~**ping**~~
- **ipconfig**
- **tracert**

Explanation

tracert finds the destination IP address. It also displays the delay between hops.
ping can be used to test the reachability of the server, but will not show where communication is blocked.

ipconfig displays the host's TCP/IP configuration.

nslookup can be used to show the translation of the server name to IP address, but will not show where communication is blocked.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_07]

Question 8: Incorrect

You have had several employees call the help desk where you work, complaining that they are not able to reach the www.widgets.com server. To help troubleshoot this issue, you decide to run a variety of commands.

Which of the following commands is MOST likely to return the IP address of the desired server? (Select THREE).

- [ ] **ipconfig widgets**
- [x] **nslookup www.widgets.com**
- [ ] **ipconfig /all**
- [ ] **tracert www.widgets.com**
- [ ] **ipconfig www.widgets.com**
- [ ]

ping www.widgets.com

Explanation

To get the IP address from a hostname, use the **nslookup** command. You can also try to ping the device using the host name. The first step in the ping test is to find the IP address of the specified host. t**racert** will also display IP addresses it discovers in the route.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_08]

Question 9: Incorrect

You are troubleshooting connectivity between your computer and the www.widgets.com server, whose IP address is 192.168.1.1.

Which of the following commands tests connectivity to the device as well as name resolution?

- **ping www.widgets.com**
- **nslookup www.widgets.com**
- ~~**nslookup 192.168.1.1**~~
- **ping 192.168.1.1**

Explanation

To test both name resolution and communication with the server, use the **ping** command with the hostname. The first step in the ping test is to find the IP address of the specified host. Using **ping** with just the IP address will not test name resolution. Using **nslookup** only tests name resolution; it does not test communication with the end device.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_09]

Question 10: Incorrect

You have just connected a new computer to your network. The network uses static IP addressing. You find that the computer can communicate with hosts on the same subnet, but not with hosts on a different subnet. No other computers are having a problem.

Which of the configuration values would you most likely need to change?

- ~~DNS server~~
- IP address
- Default gateway
- Subnet mask

Explanation

Check the default gateway setting on the computer. The default gateway value is used to send packets to other subnets. If the value is incorrect, then the packets will not be sent to the correct router. In this scenario, the host can communicate with other hosts on the same subnet, meaning that the IP address and subnet mask are correctly configured. The DNS server address probably isn't the problem, as name resolution is not mentioned in the scenario. In addition, if name resolution were a problem, it could affect access to both local and remote hosts.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_10]

Question 11: Incorrect

You manage a network that has multiple internal subnets. You connect a workstation to the 192.168.1.0 subnet, which uses the default subnet mask. This workstation can communicate with some hosts on the private network, but not with other hosts. You run ipconfig /all and see the following:

Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : mydomain.local

Description . . . . . : Broadcom network adapter

Physical Address. . . . . : 00-AA-BB-CC-74-EF
DHCP Enabled . . . . . : No

Autoconfiguration Enabled. . . : Yes

IPv4 Address . . . . . : 192.168.1.102(Preferred)

Subnet Mask. . . . . : 255.255.0.0

Default Gateway . . . . . : 192.168.1.1

DNS Servers . . . . . : 192.168.1.20 192.168.1.27

Which of the following is the MOST likely cause of the problem?

- ~~Incorrect default gateway~~
- Incorrect subnet mask
- Incorrect DNS server address
- Incorrect IP address

Explanation

In this example, the network is using a mask of 255.255.255.0 (24-bits), but the workstation is configured to use a mask of 255.255.0.0.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_12]

Question 12: Incorrect

You manage a network that has multiple internal subnets. You connect a workstation to the 192.168.1.0 subnet using the default subnet mask. This workstation can communicate with some hosts on the private network, but not with other hosts. You run **ipconfig /all** and see the following:

Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : mydomain.local

Description . . . . . : Broadcom network adapter

Physical Address. . . . . : 00-AA-BB-CC-74-EF
DHCP Enabled . . . . . : No

Autoconfiguration Enabled. . . : Yes

IPv4 Address . . . . . : 192.168.1.102(Preferred)

Subnet Mask . . . . . : 255.255.255.0

Default Gateway. . . . . : 192.168.2.1

DNS Servers. . . . . : 192.168.2.20

Which of the following is the MOST likely cause of the problem?

- Incorrect DNS server address
-

~~Incorrect IP address~~

Incorrect subnet mask

Incorrect default gateway

Explanation

In this example, the default gateway address is incorrect. The default gateway address must be on the same subnet as the IP address for the host. The host address is on the 192.168.1.0/24 subnet, but the default gateway address is on the 192.168.2.0 subnet.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_13]

Question 13: Correct

An end user clams they are unable to connect to the internet and has called the company's help desk for a solution. Having been assigned to this issue, you decide to first test whether or not TCP/IP is working correctly on the local computer.

Which of the following is the BEST command to use for this test?

ping -a localhost

netstat

ping 127.0.0.1

nslookup localhost

Explanation

Use **ping 127.0.0.1** to test the TCP/IP configuration of the local system. The special address of 127.0.0.1 is a loopback address that identifies the local host. A successful ping test to the local host identifies that TCP/IP is correctly configured. Use **nslookup** to find the IP address for a given hostname. Use **ping -a** to find the hostname for a given IP address. **Netstat** shows IP-related statistics.

References

TestOut PC Pro - 6.10 Network Troubleshooting
[e_nettrb_pp6.exam.xml Q_TRB_NET_15]