Exam Report: 6.6.7 Practice Questions

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Overall Performance

Your Score: 15%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Incorrect

You have a user who takes his laptop home every day after work. When he's working in the office, the laptop must get an IP address from the DHCP server so you configure it to obtain IP and DNS information automatically. When he's working from home, the laptop must use IP and DNS information that connects with his home network.

Which IP addressing method can you use to make sure he gets a network connection at home?

- Link-local addressing
- APIPA IP addressing
- Alternate IP configuration
- ~~Dynamic IP addressing~~
- Static IP addressing

Explanation

With an alternate IP addressing configuration, the system's IPv4 Properties are configured on the General tab to use DHCP to automatically obtain TCP/IP configuration information. If a DHCP server cannot be contacted, the static IP configuration information on the IPv4 Properties' Alternate Configuration tab is used.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_ALTERNATE_IP]

Question 2: Incorrect

A Windows workstation is configured to receive its IP configuration information from a DHCP server on the company network. The user at the workstation reports that she cannot use email and is unable to reach the internet. Using the **ipconfig** command, you see that the workstation has been assigned the following special IP configuration:

- IP address: **169.254.0.1**
- Subnet mask: **255.255.0.0**

What is this special IP configuration called?

Static IP Addressing

Automatic Private IP Addressing (APIPA)

Why did the workstation receive this type of configuration?

The workstation was unable to contact the DHCP se

Explanation

If a Windows client is configured to receive an IP address from a DHCP server but cannot contact a DHCP server, it will automatically assign itself an IP address within the range of 169.254.0.1 to 169.254.255.254 with the subnet mask 255.255.0.0. You can use APIPA instead of a DHCP server, but it should only be used on a small network that does not need default gateway or DNS server settings configured.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_APIPA]

Question 3: Incorrect

Which of the following IP address ranges is reserved for Automatic Private IP Addressing?

- 192.168.0.1 - 192.168.254.255
- 169.168.0.1 - 169.168.255.255
- 169.254.0.1 - 169.254.255.254
- ~~192.168.0.0 - 192.168.255.254~~
- 169.192.0.0 - 169.192.254.255

Explanation

The Internet Assigned Numbers Authority (IANA) has reserved 169.254.0.1 through 169.254.255.254 for Automatic Private IP Addressing (APIPA). APIPA also sets the subnet mask on the network to 255.255.0.0.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_APIPA_02]

Question 4: Incorrect

Given that your Windows workstation has Automatic Private IP Addressing (APIPA) implemented using default settings, which of the following TCP/IP addresses could be automatically assigned to the system should your DHCP server go down or become inaccessible?

- 172.16.1.26
- 168.254.10.25
- ~~192.168.1.22~~
- 10.0.0.65
- 169.254.1.26
- 169.198.1.23

Explanation

In the event that a DCHP server is not available, Windows workstations can use APIPA to automatically provide themselves with an IP address. The default address range used by APIPA is 169.254.0.1 to 169.254.255.254. Of the options presented, only 169.254.1.26 falls within this range.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_APIPA_03]

Question 5: Correct

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

WINS server address

Hostname

Default gateway

Alternate IP address

DNS server address

Subnet mask

Explanation

The default gateway identifies the router to which packets for remote networks are sent. 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 host names to IP addresses. The DNS server address identifies the DNS server that is used to resolve host names to IP addresses. The alternate IP address identifies IP addressing information to be used in the event the DHCP server can't be reached. The host name identifies the logical name of the local system.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_DEFAULT_GATEWAY_01]

Question 6: Incorrect

Which of the following statements about the Dynamic Host Configuration Protocol (DHCP) are true? (Select TWO.)

- [ ] A workstation must request addressing information from a DHCP server.
- [ ] It can only deliver IP addresses to hosts.
- [x] ~~It cannot be configured to assign the same IP address to the same host each time it boots.~~
- [ ] It can deliver a DNS server address in addition to the host IP address.
- [x] ~~The DHCP server detects workstations when they attach to the network and automatically delivers IP addressing information to them.~~

Explanation

DHCP servers deliver IP addresses as well as other host configuration information to network hosts. DHCP can be configured to assign any available address to a host, or it can assign a specific address to a specific host. DHCP clients, typically workstations, must send a request to a DHCP server before it will send IP addressing information to them.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_DHCP_01]

Question 7: Incorrect

You are setting up a small network in your office with one Windows server and 50 Windows workstations. You want to spend as little time as possible configuring the workstations with IP addressing information. What should you do?

Install and configure the DHCP service on your server.

Install the DHCP service on each workstation.

~~Install the WINS service on your server.~~

Assign each user an IP address and instruct the user to enter the IP address in his or her computer.

Explanation

The DHCP protocol allows you to assign IP addresses automatically. In this scenario, you should configure the DHCP service to run on the network server. The DHCP client on each workstation can then contact the DHCP server when the workstations connect to the network to be automatically assigned IP addressing information. You could instruct each user to manually enter IP addressing information, but this creates a higher chance of error and will likely require more administrative overhead.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_DHCP_02]

Question 8: Incorrect

As the IT technician for your company, you need to ensure that IP addresses are automatically assigned to hosts while at the same time preventing the same address from being assigned twice.

Which of the following services would be BEST to use?

- TCP
- DHCP
- ~~ICMP~~
- IGMP

Explanation

You can use the Dynamic Host Configuration Protocol (DHCP) to set up a DHCP server that will assign IP addresses to network hosts automatically. DHCP servers will not assign the same IP address to two different hosts. ICMP is chiefly used by networked computers' operating systems to send error messages. The Transmission Control Protocol (TCP) is one of the core protocols of the internet protocol suite. The Internet Group Management Protocol (IGMP) is a communications protocol used to manage the membership of Internet Protocol multicast groups.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_DHCP_03]

Question 9: Incorrect

You are the IT technician for your company.

Which of the following mechanisms would BEST allow you to resolve a hostname into its associated IP address? (Select TWO).

- [ ] hosts file
- [ ] FTP
- [x] ~~BOOTP~~
- [ ] DHCP
- [ ] DNS

Explanation

You can use the Domain Name System (DNS) to get the IP address from a given host name. You can also use the local hosts file to map host names into IP addresses. On Windows systems, this file is located in C:\Windows\system32\drivers\etc\. You can use either the DHCP protocol or the BOOTP protocol to assign IP address and other configuration information to hosts automatically. Use FTP to transfer files.

References

TestOut PC Pro - 6.6 IP Configuration

[e_ip_pp6.exam.xml Q_IP_CONF_NAME_RESOLUTION_01]

Question 10: Correct

Nate, an employee in your organization, has started to work from home two days a week. Nate uses the same company laptop while working in the office and working at home.

Nate's laptop automatically connects to the wireless network in the office, but does not automatically connect to his home wireless network. Nate would like the laptop to connect automatically at home and at work.

Which of the following would BEST allows this to happen?

- Configure a static IP address for the general TCP/IP configuration that is compatible with the office network and another static IP address for the alternate TCP/IPv4 configuration that is compatible with the home network.
- Configure an alternate TCP/IP configuration on the laptop's wireless adapter to use a static IP address that is compatible with the home network.
- Configure a static IP address that works for both the office and the home wireless networks.
- Configure automatic private IPv4 addressing.

Explanation

Since the employee is able to connect in the office, you only need to configure an alternate TCP/IP configuration on the laptop's wireless adapter to use a static IP address. If the home wireless network used DHCP, an alternate static configuration would not be necessary. But since the employee does not obtain an automatic connection, DHCP must not be available on the home wireless router.

There is no need to change the configuration that the laptop uses in the office. An automatic private IPv4 address (APIPA) will not enable the employee to connect to the internet either in the office or at home. There is no static IP configuration that could work in both locations.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_PCPRO_IP_ADDRESS]

Question 11: Incorrect

A host on your network that provides a service that requires the server to always use the same IP address. Which IP addressing method can you use to manually assign the specific IP address?

- APIPA IP addressing
- Alternate IP configuration
- Static IP addressing
- Link-local addressing
- ~~Dynamic IP addressing~~

Explanation

Static IP addressing allows you to manually assign all configuration values. Static addressing is prone to error and should only be used under the following conditions:

- The network has a small number of hosts.
- The network will not change or grow.
- You have some hosts that must always use the same IP address.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_STATIC_IP]

Question 12: Incorrect

While setting up a home office, a technician disables the DHCP service on the office router, but does not want to rely on link-local addressing.

Which of the following IP addressing methods should be used?

- Alternate
- Static
- Dynamic
- ~~APIPA~~

Explanation

Without DCHP, many network hosts assign their own non-routable link-local IP address. To avoid link-local addresses when DHCP addressing is unavailable, static addresses should be assigned to all devices that will communicate on the local network.

Dynamic addressing automatically assigns IP addresses using DHCP.

Automatic Private IP Addressing (APIPA) is Microsoft's name for auto-configuring link-local addresses.

Alternate IP addressing is a way to assign a second IP address to a host.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_TCPIP_PROPERTIES_01]

Question 13: Incorrect

A technician is configuring the static TCP/IP settings on a client computer.

Which of the following configurations are needed for internet communications? (Select THREE.)

- [x] IP address including a subnet mask (IPv4) or subnet prefix length (IPv6)
- [x] Default gateway address
- [ ] DHCP server address
- [x] DNS server address
- [ ] APIPA address
- [x] ~~WINS address~~
- [ ] Alternate IP address

Explanation

At a minimum, three TCP/IP settings must be configured properly for a client to communicate with the internet: an IP address (including a subnet mask), a gateway, and a DNS server.

A DHCP server address is not configured on a client.

An APIPA address is only assigned if a DHCP does not assign an IP address or there is not static address assigned.

An alternate IP address is not required in this scenario.

A WINS server supports NetBIOS over TCP/IP (NetBT), which is not used for internet communications.

References

TestOut PC Pro - 6.6 IP Configuration
[e_ip_pp6.exam.xml Q_IP_CONF_TCPIP_PROPERTIES_02]