Date: 11/2/2019 8:48:42 am
Time Spent: 38:41

Candidate: Garsteck, Matthew
Login: mGarsteck

Overall Performance

Your Score: 36%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Incorrect

You manage the westsim.com domain. All servers run Windows Server, and all workstations run Windows 10. Members of the sales team have been issued laptops that they use both to connect to the local network and dial in when they are on the road. A single DHCP server at the main office assigns IP addresses on the 192.168.1.0/24 subnet.

Your company has just opened a new branch office, which the sales team uses when they are traveling. They can go to the branch office and plug in their laptops for Internet access and to read email. Because the office is small, you decide not to use a DHCP server. You select 10.0.0.0/24 for the network address.

The sales team complains that when they are at the branch office,they are unable to access the Internet through the network. You ask one of them to run **ipconfig**, and you note the IP address is 169.254.12.4.

You want to enable access on both the main office and the branch office. What should you do?

- On each laptop, configure an alternate IP configuration.
- Install a second network card in each laptop. Configure the second network adapter with a static address for the branch office.
- Teach each salesman how to manually configure IP address, mask, and default gateway settings. Instruct them to make the change each time before connecting to a different network.
- ~~Configure a new hardware profile on each laptop. Configure one profile to use DHCP, and configure the other with a static IP address.~~

Explanation

In this scenario, the best option is to configure an alternate IP configuration for each laptop. When the laptop is unable to contact the DHCP server, it will use the alternate configuration. Configure the alternate configuration with settings for the branch office.

Installing a second network card would work (assuming the laptops support additional cards), but would result in an unnecessary cost. Teaching the sales team to reconfigure the network settings is not a good solution, as it requires unnecessary user effort. You cannot use hardware profiles to configure different TCP/IP settings.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 01]

Question 2: Correct

The Large Block Corporation has a network with three subnets. The network has a DNS server that provides name resolution.

Stacy has been asked to implement a DHCP solution for her network. Currently, all hosts use manually-configured static IP addresses. She installs a DHCP server and configures it to deliver IP address, default gateway, and DNS server configuration information.

What must Stacy do at each client to complete the configuration? (Select two.)

- [ ] Enable DHCP proxy services on each client.
- [x] Configure each host to obtain DNS server address automatically.

- [x] Configure each host to obtain an IP address automatically.
- [ ] Configure each host to append parent suffixes of the primary DNS suffix.

Explanation

To complete the configuration:

- Configure each host to obtain an IP address automatically. When you do so, the previous default gateway setting is removed.
- Configure each host to obtain DNS server addresses automatically. When you do so, manually configured DNS server addresses are removed.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 02]

Question 3: Correct

You have a single router with three subnets as follows:

- SubnetA = 50 hosts
- SubnetB = 15 hosts
- SubnetC = 65 hosts

You need to select a subnet mask for each subnet that provides sufficient host addresses without wasting addresses.

Which mask values should you use?

- ( ) SubnetA = 255.255.255.64
  SubnetB = 255.255.255.32
  SubnetC = 255.255.255.64
- ( ) SubnetA = 255.255.255.128
  SubnetB = 255.255.255.240
  SubnetC = 255.255.255.192
- (•) SubnetA = 255.255.255.192
  SubnetB = 255.255.255.224
  SubnetC = 255.255.255.128
- ( ) SubnetA = 255.255.255.224
  SubnetB = 255.255.255.240
  SubnetC = 255.255.255.192

Explanation

- To support 50 hosts, use a mask of 255.255.255.192. This masks 26 bits and provides up to 62 hosts. A mask of 255.255.255.224 only provides 30 host addresses.
- To support 15 hosts, use a mask of 255.255.255.224. This masks 27 bits and provides up to 30 hosts. A mask of 255.255.255.240 would provide only 14 host addresses.
- To support 65 hosts, use a mask of 255.255.255.128. This masks 25 bits and provides for up to 126 hosts. The mask of 255.255.255.192 provides only 62 host addresses.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 03]

Question 4: Correct

You need to design a network that supports 275 hosts. You want to place all hosts in a single broadcast domain, and you want to make sure you do not waste IP addresses.

How should you implement your plan?

- ( ) Use a router to create two subnets, with half of the hosts on each subnet. Use a mask of 255.255.255.0 on each subnet.
- ( ) Use a router to create two subnets. Put 250 hosts on one subnet and 25 hosts on the other subnet.

Use 255.255.255.0 and 255.255.255.224 as subnet masks.

- Place all hosts on the same subnet. Use a mask of 255.255.254.0.
- Connect a router to a switch with a single connection. Create two sub-interfaces on the router. Use a mask of 255.255.255.0 for each sub-interface.
- Use a bridge on a single subnet. Use a mask of 255.255.255.128 for each bridge port.

Explanation

To have all hosts on the same broadcast domain, you will need a single subnet. Use a mask of 255.255.254.0 to support up to 510 hosts. While this method wastes 235 host addresses, it is the only method described that results in a single broadcast domain.

Like physical interfaces, a sub-interface marks the boundary of a subnet and, therefore, a broadcast domain. Both sides of a bridge are on the same subnet, but you do not assign subnet masks to the bridge. Using different network addresses on each side of the bridge would prevent hosts from communicating with each other. Using a mask of 255.255.255.0 would not provide enough addresses, resulting in some hosts sharing an address.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 04]

Question 5: Incorrect

You have a single router with three subnets as follows:

- Subnet A = 60 hosts
- Subnet B = 25 hosts
- Subnet C = 31 hosts

You need to choose subnet addresses and masks for each subnet. Which values would you use?

- A = Subnet address 172.22.19.64 with mask of 255.255.255.192
  B = Subnet address 172.22.19.32 with mask of 255.255.255.224
  C = Subnet address 172.22.19.192 with mask of 255.255.255.192
- A = Subnet address 172.22.19.128 with mask of 255.255.255.192
  B = Subnet address 172.22.19.64 with mask of 255.255.255.224
  C = Subnet address 172.22.19.0 with mask of 255.255.255.224
- ~~A = Subnet address 172.22.19.128 with mask of 255.255.255.192~~
  ~~B = Subnet address 172.22.19.48 with mask of 255.255.255.224~~
  ~~C = Subnet address 172.22.19.64 with mask of 255.255.255.192~~
- A = Subnet address 172.22.19.192 with mask of 255.255.255.192
  B = Subnet address 172.22.19.128 with mask of 255.255.255.224
  C = Subnet address 172.22.19.64 with mask of 255.255.255.224
- A = Subnet address 172.22.19.32 with mask of 255.255.255.192
  B = Subnet address 172.22.19.96 with mask of 255.255.255.224
  C = Subnet address 172.22.19.128 with mask of 255.255.255.192

Explanation

Use the following masks for each subnet:

- Subnet A = 255.255.255.192. This gives you up to 62 hosts.
- Subnet B = 255.255.255.224. This gives you up to 30 hosts.
- Subnet C = 255.255.255.192. You cannot use mask 255.255.255.224 because this mask only allows for up to 30 hosts.

Use the following subnet addresses for each subnet:

- Subnet A = 172.22.19.64. Subnet address 172.22.19.32 is not a valid subnet for a 26-bit mask (valid subnets end in 0, 64, 128, or 192).
- Subnet B = 172.22.19.32. Subnet address 172.22.19.48 is not a valid subnet for a 27-bit mask (valid subnets end in 0, 32, 64, 96, etc.).
- Subnet C = 172.22.19.192. Based on the other reasons listed above, this is the only possible combination of values that does not have a problem.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 05]

Question 6: Correct

You have a server connected to two networks:

- SubnetA uses a 26-bit mask.
- SubnetB uses a 29-bit mask.

Wrk1 is on SubnetA, and Wrk2 is on SubnetB. Wrk1 cannot communicate with Wrk2. You run **ipconfig** on both workstations and see the following information:

Wrk1	**Wrk2**
IPv4 Address . . . .: 192.168.201.135 Subnet Mask. . . . .: 255.255.255.192 Default Gateway. . .: 192.168.201.190	IPv4 Address . . . .: 172.30.199.78 Subnet Mask. . . . .: 255.255.255.248 Default Gateway. . .: 172.30.199.70

Which of the following actions would most likely correct the problem?

- Change the subnet mask used on Wrk2.
- Change the subnet mask used on Wrk1.
- Change the IP address assigned to Wrk2.
- Change the IP address assigned to Wrk1.

Explanation

In this scenario, the IP address for Wrk2 is on the 172.30.199.72 subnet. The default gateway address is on the 172.30.199.64 subnet. Changing the IP address assigned to Wrk2 to an address on the same subnet as the default gateway would most likely correct the problem.

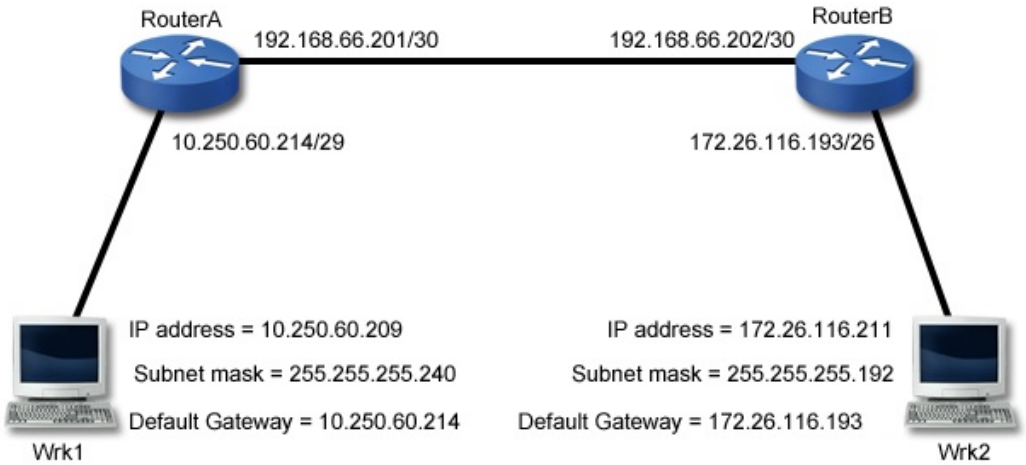
Wrk1 is on the 192.168.201.128 subnet. The valid range of IP addresses is 192.168.201.129 to 192.168.201.190.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 06]

Question 7: Incorrect

This question includes an image to help you answer the question. Close



You have a small network as shown in the image.

You are unable to ping Wrk2 from Wrk1. What should you do to fix the problem?

- Change the IP address assigned to Wrk1.
- Change the IP address assigned to Wrk2.

- ~~Change the subnet mask on Wrk2.~~
- Change the default gateway address on Wrk1.
- Change the subnet mask on Wrk1.
- Change the default gateway address on Wrk2.

Explanation

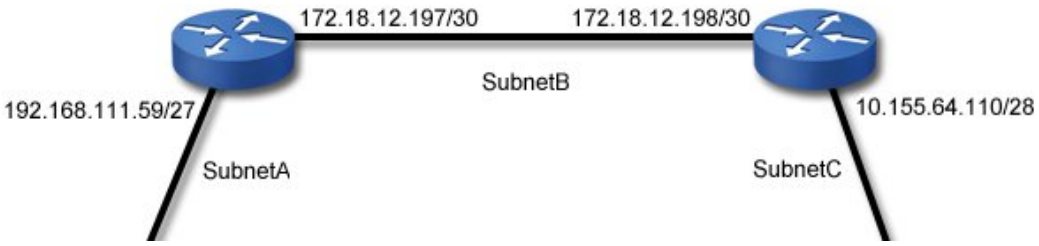
In this scenario, the subnet mask on the workstation is incorrect. The network for Wrk1 and RouterA uses a 29-bit mask. A 29-bit mask has the decimal value of 255.255.255.248.

For RouterA, the LAN connection uses a subnet address of 10.250.60.208. Valid host addresses on this subnet are 10.250.60.209 to 10.250.60.214. For RouterB, the LAN connection uses a subnet address of 172.26.116.192. Valid host addresses are 172.26.116.193 to 172.26.116.254. The default gateway address for a workstation should be the IP address of the router interface connected to the same subnet as the workstation.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 07]

Question 8: Incorrect



You have a small network with three subnets, as shown in the graphic. IP addresses for each router interface are also indicated.

You need to connect Wrk1_A to SubnetA and Wrk5_C to SubnetC. Which IP addresses should you use? (Select two.)

- [x] ~~Wrk1_A = 192.168.111.32~~
- [ ] Wrk1_A = 192.168.111.62
- [ ] Wrk1_A = 192.168.111.65
- [ ] Wrk5_C = 10.155.64.97
- [x] ~~Wrk5_C = 10.155.64.111~~
- [ ] Wrk5_C = 10.155.64.114

Explanation

For Wrk1_A, use 192.168.111.62; for Wrk5_C, use 10.155.64.97.

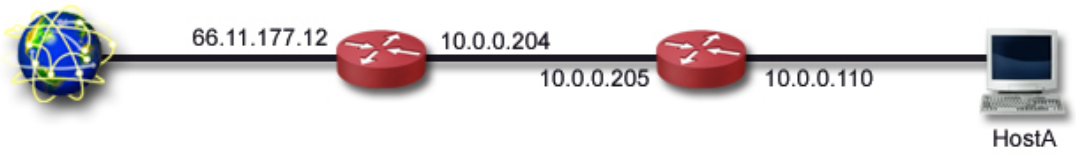
- SubnetA uses a 27-bit mask. The subnet used by the router has a subnet address of 192.168.111.32 with a broadcast address of 192.168.111.63.
- SubnetC uses a 28-bit mask. The subnet used by the router has a subnet address of 10.155.64.96 with a broadcast address of 10.155.64.111.

Hosts on the same subnet must have IP addresses within the subnet range. Neither the subnet address nor the broadcast address can be assigned to hosts.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 08]

Question 9: Incorrect



You manage the small network that is connected to the Internet, as shown in the graphic. You add HostA to the network. All hosts use manually-assigned TCP/IP values. The subnet where HostA resides uses a 28-bit subnet mask.

Which TCP/IP configuration values should you choose for HostA? To answer, drag a value to each TCP/IP parameter shown in the diagram.

IP Address

~~66.11.177.12~~ 10.0.0.97

Subnet Mask

✓ 255.255.255.240

Default Gateway

✓ 10.0.0.110

Explanation

Use the following values:

- IP address = 10.0.0.97. HostA is on subnet 10.0.0.96. Valid host addresses are 10.0.0.97 through 10.0.0.110. 10.0.0.110 cannot be used by HostA because it is used by the router.
- Subnet mask = 255.255.255.240. A 28-bit mask covers an extra 4 bits. The last octet has a value of 11110000, which is 240 in decimal notation.
- Default gateway = 10.0.0.110. The default gateway is the IP address of the router interface that is on the same subnet as HostA.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 09]

Question 10: Incorrect

You manage a Windows computer connected to a business network that uses switches and multiple subnets.

You connect a workstation to the 192.168.1.0/24 subnet.

The 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

What should you do?

- ◯ Edit the IPv4 properties and modify the subnet mask.
- ◯ Edit the IPv4 properties and change the DNS server address.
- ◯

~~Edit the IPv4 properties and modify the IP address.~~

Edit the IPv4 properties and change the 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

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 10]

Question 11: Incorrect

You have a Windows laptop that uses DHCP for IPv4 addressing information.
You need to see the IPv4 address, subnet mask, and DNS server addresses that the network connection is currently using.

What should you do? (Select two. Each choice is a possible solution.)

- [ ] In the Network and Sharing Center, view the full network map. Double-click your device in the map.
- [x] Run the **ipconfig** command.
- [ ] Run the **net config** command.
- [x] ~~Edit the properties for the network connection. Select Internet Protocol Version 4 (TCP/IPv4) and view the properties.~~
- [ ] View the status for the network connection. Click the Details button.

Explanation

To see the current IP addressing information for a computer that is configured to use DHCP, use the following methods:

- Run the **ipconfig** and **ipconfig /all** commands.
- View the status for the network connection. Click the Details button.

If you view the Internet Protocol Version 4 (TCP/IPv4) properties for the connection, you will see that the connection is configured to use DHCP, but you will not see the current IP addressing information. Clicking your device in the network map opens the system properties if you are viewing the local computer. The computer name and other information is shown, but not the IP address. The **net config** command shows running services that can be controlled.

References

LabSim for Server Pro 2016, Section 4.1.
[AllQuestions_ServerPro_2017.exm IPV4 ADDRESS 11]