

Exam Report: 12.2.12 Practice Questions

Date: 4/28/2020 10:50:53 am
Time Spent: 2:12

Candidate: Garsteck, Matthew
Login: mGarsteck

Overall Performance

Your Score: 27%



View results by: ☐ Objective Analysis ☒ Individual Responses

Individual Responses

▼ Question 1: Correct

You have a TCP/IP network with 50 hosts. There have been inconsistent communication problems between hosts. You run a protocol analyzer and discover that two hosts are assigned the same IP address.

Which protocol can you implement on your network to help prevent problems such as this?

- ➡ ☒ DHCP
- ☐ ICMP
- ☐ SNMP
- ☐ IGMP
- ☐ TCP
- ☐ IP

Explanation

You can use the Dynamic Host Configuration Protocol (DHCP) to set up a DHCP server that will assign IP addresses automatically to network hosts. DHCP servers will not assign the same IP address to two different hosts.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_IP_ASMT2_LP5_01]

▼ Question 2: Incorrect

You need to temporarily change the IP address of the network interface (enp2s0) to 192.168.1.50. The network interface's IP address is currently set to 10.0.1.50.

Which of the following commands would achieve the desired result?

- ☐ `/etc/init.d/network enp2s0 192.168.1.50`
- ☒ ~~`echo "IPADDR=192.168.1.50" >> /etc/sysconfig/network-scripts/ifcfg-enp2s0`~~
- ☐ `ifconfig enp2s0:1 192.168.1.50`
- ➡ ☐ `ifconfig enp2s0 192.168.1.50`

Explanation

`ifconfig enp2s0 192.168.1.50` is correct because it is setting the IP address to enp2s0 interface. This is only set in memory. A reboot or restart of the network service will revert to what is saved in the config file (usually `/etc/sysconfig/network-scripts/ifcfg-enp2s0`) or what is given out by a DHCP server.

echo "IPADDR=192.168.1.50" >> /etc/sysconfig/network-scripts/ifcfg-enp2s0 is incorrect because it would preserve the IP address change across reboots or network service restarts. Additionally, the IP address would not change until the network service was restarted.

/etc/init.d/network enp2s0 182.168.1.50 is incorrect because it would not change the IP address. The init process use the scripts in /etc/init.d to start and stop services. This command is also incorrect because eth0 and an IP address are incorrect options for the network init script. Init scripts usually accept options such as start, stop, restart, and status.

ifconfig enp2s0:1 192.168.1.50 is incorrect because it would not change the IP address of enp2s0, but create an alias (secondary IP address) on enp2s0 called enp2s0:1.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_01]

▼ Question 3: Incorrect

If you are managing a systemd-based Linux system, which of the following commands cannot be used to bring the enp2s0 interface down?

☒ ~~ifdown enp2s0~~

➡ ☐ /etc/init.d/network stop

➡ ☐ /etc/sysconfig/network-scripts/ifcfg-enp2s0 down

☒ ~~ip link set enp2s0 down~~

☐ ifconfig enp2s0 down

Explanation

/etc/sysconfig/network-scripts/ifcfg-enp2s0 down and **/etc/init.d/network stop** will not bring enp2s0 down.

The ifcfg-* files in /etc/sysconfig/network-scripts are for configuration only, and are not intended to be executed. A systemd-based system does not use the init.d daemon to stop and start services.

The **ifup** and **ifdown** commands bring the network interfaces up and down. The **ifconfig** and **ip link set** commands can also bring network interfaces up and down when provided with the name of the device and the **up** and **down** options.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_02]

▼ Question 4: Incorrect

You need to set an IP address for enp2s0 to 192.168.15.2 with a subnet mask of 255.255.255.0.

Which commands are correct? (Select TWO).

☐ ifconfig enp2s0:1 192.168.15.2 netmask 255.255.255.0

➡ ☐ ip addr add 192.168.15.2/24 dev enp2s0

☐ ipconfig enp2s0 192.168.15.2 255.255.255.0

➡ ☒ ifconfig enp2s0 192.168.15.2 netmask 255.255.255.0

☐ ifconfig enp2s0 192.168.15.2 255.255.255.0

☐ ipconfig enp2s0 192.168.15.2 netmask 255.255.255.0

Explanation

The commands **ifconfig enp2s0 192.168.15.2 netmask 255.255.255.0** and **ip addr add 192.168.15.2/24 dev enp2s0** are correct.

If you use **ip addr add 192.168.15.2/24 dev enp2s0**, this address and subnet mask will be added to any other addresses already assigned to enp2s0. If you want this to be the only IP address assignment on this interface, you can use the **ip addr del** command to delete any unwanted addresses.

ipconfig is incorrect for Linux because this is a Windows command. **ifconfig enp2s0 192.168.15.2 255.255.255.0** is incorrect because it is missing the **netmask** statement. **ifconfig enp2s0:1 192.168.15.2 netmask 255.255.255.0** is a correct Linux command, but sets an alias IP address for enp2s0 rather than the primary IP address.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_03]

▼ Question 5:

Incorrect

The enp2s0 network interface has already been assigned the IP configuration 172.16.1.123/16.

Which command would you use to temporarily configure a second IP address of 192.168.0.123/24 for this network interface?

☐ ~~ipconfig enp2s0 192.168.0.123/24~~

☐ ifconfig enp2s0 192.168.0.123/24

➡ ☐ **ip addr add 192.168.0.123/24 dev enp2s0**

☐ ipconfig enp2s1 192.168.0.123/24

Explanation

Use the **ip addr add** command to configure a temporary second IP address for a network interface on a Linux system. The **ifconfig** command will temporarily replace the current IP address for a network interface on a Linux system.

ipconfig is a similar utility for the Windows environment.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_04]

▼ Question 6:

Incorrect

Which commands display the IP address and subnet mask values configured on a workstation? (Select TWO).

☐ route

➡ ☐ **ifconfig**

☐ arp

➡ ☒ **ip addr show**

☐ netstat

Explanation

When used without parameters, the **ifconfig** utility displays the IP configuration settings. The **ip addr** command, with or without the **show** option, will also display the IP configuration of each installed network interface. Use the **ip addr show ifname** command to only display the IP configuration of a specific network interface.

The **netstat** utility shows which ports/sockets are open for networking. **route** shows the routing table.

arp displays the address resolution table.

References

Linux Pro - 12.2 Network Interface Configuration

[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_05]

▼ Question 7:

Correct

The enp2s0 interface is currently down. What can you enter at the command line to start the enp2s0 interface?



Explanation

ifup enp2s0 or **ip link set enp2s0 up** starts the enp2s0 network device.

References

Linux Pro - 12.2 Network Interface Configuration

[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_06]

▼ Question 8:

Incorrect

You have just made IP configuration changes in the ifcfg-enp2s1 file. You do not want to restart the Linux system or restart the network service to put these changes into effect. There are two **ip** commands you can use to put these changes into effect.

What is the first **ip** command you enter at the command line to put these changes into effect?

ip link set enp2s1 down

What is the second **ip** command you enter at the command line to put these changes into effect?

ip link set enp2s1 up

Explanation

To put the changes made in the ifcfg-enp2s1 file into effect you can enter two **ip** commands:

- **ip link set enp2s1 down**
- **ip link set enp2s1 up**

References

Linux Pro - 12.2 Network Interface Configuration

[e_ifcfg_lp5.exam.xml Q_NETCFG_LP5_07]

▼ Question 9:

Incorrect

When configuring bonding on two network interfaces, the technician wants to configure one interface to take over if the other interface fails.

Which of the following bonding modes should be used to provide a hot standby?

☐ 802.3ad, or mode 4

☐ balance-xor, or mode 2

☒ ~~balance-rr, or mode 0~~

➡ ☐ active-backup, or mode 1

Explanation

active-backup, or mode 1, is configured so that only one slave in the bond is active. A different slave (passive) only becomes active if the active slave fails. This mode provides a hot standby, not load balancing.

balance-rr, or mode 0, provides round robin for load balancing and fault tolerance.

balance-xor, or mode 2, transmits packets based on a hash of the packet's source and destination.

802.3ad, or mode 4, is dynamic link aggregation, and all slaves are active.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_BONDING_LP5_ACTIVE_PASSIVE]

▼ Question 10: Incorrect

Which of the following describes network interface bonding?

- ☐ Bonding allows network interface cards inserted into expansion slots to fully replace the onboard network ports.
- ☐ Bonding provides the network interface card with the ability to utilize IPv6 addresses.
- ☒ ~~Bonding prefixes a 64-bit address to the network interface card MAC address, allowing the address to aggregate a network interface from a remote server to provide load balancing.~~
- ➡ ☐ Multiple network interface cards are aggregated into a single bonded interface.

Explanation

Multiple network interface cards are aggregated into a single bonded interface that provides increased throughput by increasing bandwidth and traffic load sharing.

Bonding does not provide the network interface card with the ability to utilize IPv6 addresses.

Replacing onboard NICs is not a function of bonding.

Bonding does not utilize a 64-bit prefix address nor connect with a remote NIC for load balancing.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_BONDING_LP5_AGGREGATION]

▼ Question 11: Correct

A technician is configuring a server with four network interface cards to use a round robin scheduling algorithm. This algorithm transmits packets on the first available network interface.

Which of the following is provided by this configuration?

- ➡ ☒ load balancing
- ☐ hot swap
- ☐ downdelay
- ☐ updelay

Explanation

A round robin or using mode 0 (balance-rr) provides load balancing and fault tolerance.
Hot swap provides just fault tolerance.

updelay is a bonding option that specifies the time, in milliseconds, to wait before enabling a slave after a link recovery has been detected.

downdelay is a bonding option that specifies the time, in milliseconds, to wait before disabling a slave after a link failure has been detected.

References

Linux Pro - 12.2 Network Interface Configuration
[e_ifcfg_lp5.exam.xml Q_BONDING_LP5_LOAD_BALANCING]