

XK0-004.premium.115q - DEMO

Number: XK0-004
Passing Score: 800
Time Limit: 120 min



XK0-004

CompTIA Linux+ Certification Exam



Exam A**QUESTION 1**

Which of the following would be the BEST solution for a systems administrator to access the graphical user environment of a Linux machine remotely?

- A. VNC
- B. KDE
- C. X11
- D. RPC

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.sfu.ca/computing/about/support/tips/remote-to-linux-with-gui.html>

QUESTION 2

A technical support engineer receives a ticket from a user who is trying to create a 1KB file in the `/tmp` directory and is getting the following error `No space left on device`. The support engineer checks the `/tmp` directory, and it has 20GB of free space.

Which of the following BEST describes a possible cause for this error?

- A. The `/tmp` directory is not mounted.
- B. The filesystem is formatted with a 4MB block size.
- C. the filesystem ran out of inodes.
- D. The `/tmp` directory has been set with an immutable attribute.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.maketecheasier.com/fix-linux-no-space-left-on-device-error/>

QUESTION 3 Which of the following is the BEST reason for not storing database files in the `/var` directory?

- A. The `/var` filesystem is not fast enough for database files.
- B. The number of files in `/var` is limited by the available inodes.
- C. Files in `/var` do not have strict file permissions.
- D. If log files fill up `/var`, it might corrupt the database.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4**SIMULATION**

A junior system administrator had trouble installing and running an Apache web server on a Linux server. You have been tasked with installing the Apache web server on the Linux server and resolving the issue that prevented the junior administrator from running Apache.

INSTRUCTIONS

Install Apache and start the service. Verify that the Apache service is running with the defaults. Typing “help” in the terminal will show a list of relevant commands.

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

CentOS Command Prompt

```
[root@centos7]#
```

Correct Answer: See explanation below

Section: (none)

Explanation

Explanation/Reference:

Explanation:

```

[root@tecmin ~]#
[root@tecmin ~]# yum install httpd
Loaded plugins: fastestmirror, refresh-packagekit
Setting up Install Process
Loading mirror speeds from cached hostfile
 * base: centos.excellmedia.net
 * epel: epel.scopesky.iq
 * extras: centos.excellmedia.net
 * updates: centos-hn.viettelidc.com.vn
Resolving Dependencies
There are unfinished transactions remaining. You might consider running yum-comp
lete-transaction first to finish them.
-

[root@tecmin ~]#
[root@tecmin ~]# systemctl start httpd
[root@tecmin ~]#
[root@tecmin ~]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/ht
[root@tecmin ~]#
[root@tecmin ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Tue 2017-06-27 06:51:35 EDT; 14s ago
     Docs: man:httpd(8)
           man:apachectl(8)
  Main PID: 17981 (httpd)
    Status: "Total requests: 0; Current requests/sec: 0; Current traffic:  0 B/sec"
    CGroup: /system.slice/httpd.service
            └─17981 /usr/sbin/httpd -DFOREGROUND
              └─17982 /usr/sbin/httpd -DFOREGROUND
                └─17983 /usr/sbin/httpd -DFOREGROUND
                  └─17984 /usr/sbin/httpd -DFOREGROUND
                    └─17985 /usr/sbin/httpd -DFOREGROUND
                      └─17986 /usr/sbin/httpd -DFOREGROUND

Jun 27 06:51:35 tecmint systemd[1]: Starting The Apache HTTP Server...
Jun 27 06:51:35 tecmint httpd[17981]: AH00558: httpd: Could not reliably determine the server's fully qualifi
Jun 27 06:51:35 tecmint systemd[1]: Started The Apache HTTP Server.
[root@tecmin ~]# █

```

QUESTION 5**DRAG DROP**

The lead Linux has added a disk, /dev/sdd, to a VM that is running out of disk space. Place the following steps in the correct order from first (1) to last (4) to add the disk to the existing LVM.

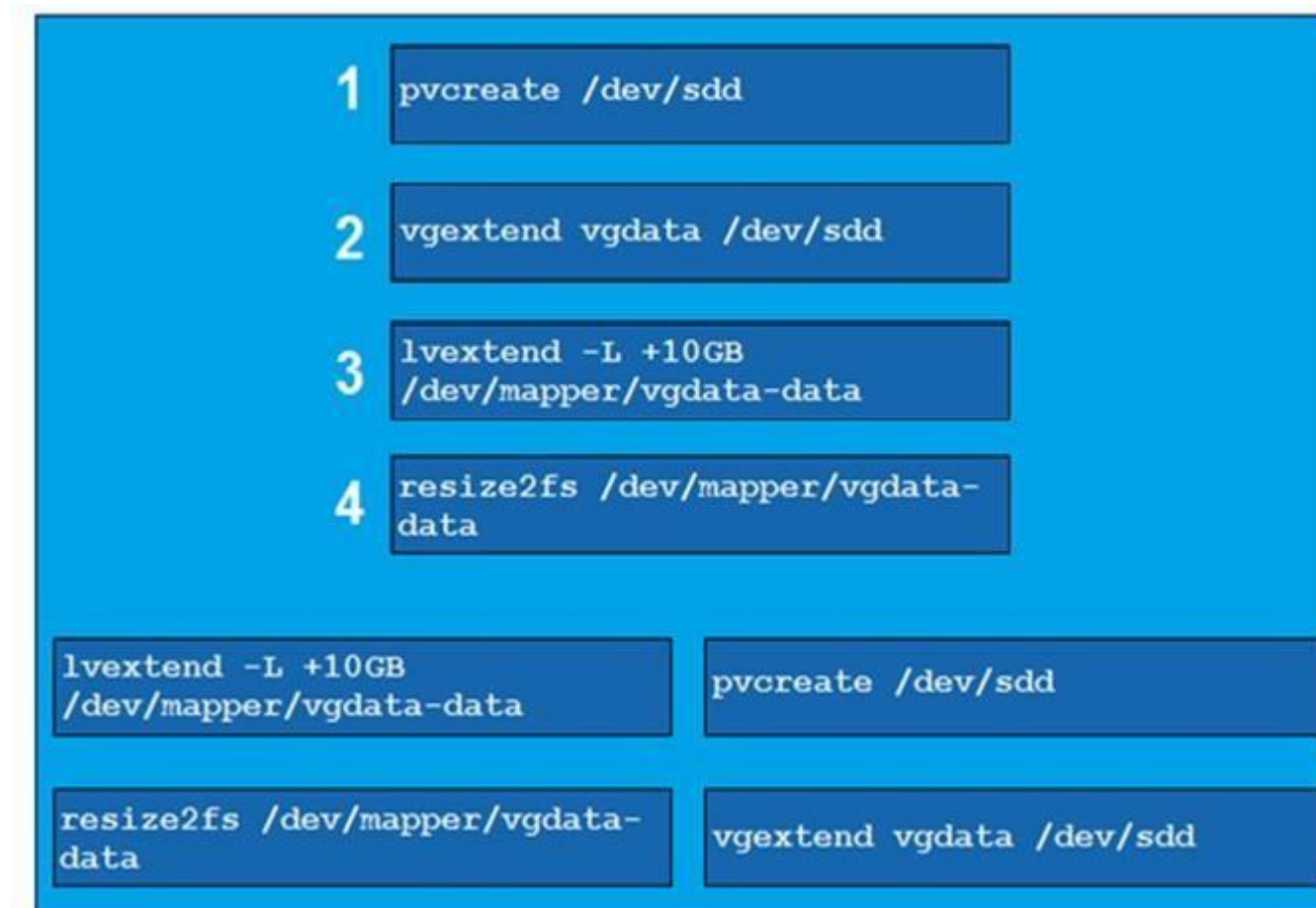
Select and Place:

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>

<code>lvextend -L +10GB /dev/mapper/vgdata-data</code>	<code>pvccreate /dev/sdd</code>
<code>resize2fs /dev/mapper/vgdata- data</code>	<code>vgextend vgdata /dev/sdd</code>

VCEUp

Correct Answer:



VCEUp

Section: (none)**Explanation****Explanation/Reference:**Reference: <https://www.rootusers.com/how-to-increase-the-size-of-a-linux-lvm-by-expanding-the-virtual-machine-disk/>**QUESTION 6**

An administrator receives a warning about a file system filling up, and then identifies a large file located at `/tmp/largelogfile`. The administrator deletes the file, but no space is recovered on the file system.

Which of the following commands would BEST assist the administrator in identifying the problem?

- A. `lsof | grep largelogfile`
- B. `pkill /tmp/largelogfile`
- C. `pgrep largelogfile`
- D. `ps -ef | grep largelogfile`

Correct Answer: A**Section: (none)****Explanation****Explanation/Reference:**Reference: <https://access.redhat.com/solutions/2316>**QUESTION 7**

Which of the following can be used to boot a DVD from a remote device to initialize a Linux system setup on bare metal hardware as if it is a local DVD?

- A. UEFI
- B. PXE C. NFS

D. GRUB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/installation_guide/ch-boot-x86

QUESTION 8

After starting a long-running script, a systems administrator needs to verify the frequency of what is filling up the /var partition and kill it because it is consuming too much space.

Which of the following is the correct sequence given only a terminal is available?

- A. 1. CTRL-C
 2. bg
 3. watch df /var
 4. CTRL-C
 5. fg
 6. CTRL-Z
 B. 1. CTRL-C
 2. fg
 3. watch df /var
 4. CTRL-Z
 5. bg
 6. CTRL-Z
 C. 1. CTRL-Z
 2. bg
 3. watch df /var
 4. CTRL-C
 5. fg
 6. CTRL-C
 D. 1. CTRL-Z
 2. bg
 3. watch df /var
 4. CTRL-Z
 5. fg
 6. CTRL-C

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 9

A Linux administrator must identify a user with high disk usage. The administrator runs the # du -s /home/* command and gets the following output:

```
43    /home/User1
2701  /home/User2
133089 /home/User3
3611  /home/User4
```

Based on the output, User3 has the largest amount of disk space used. To clean up the file space, the administrator needs to find out more information about the specific files that are using the most disk space.

Which of the following commands will accomplish this task?

- A. df -k /home/User/files.txt

- B. `du -a /home/User3/*`
- C. `du -sh /home/User/`
- D. `find . -name /home/User3 -print`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://unix.stackexchange.com/questions/37221/finding-files-that-use-the-most-disk-space>

QUESTION 10 A Linux server has multiple IPs. A Linux administrator needs to verify if the HTTP server port is bound to the correct IP.

Which of the following commands would BEST accomplish this task?

- A. `route`
- B. `host`
- C. `nslookup`
- D. `netstat`
- E. `ip`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.tecmint.com/find-listening-ports-linux/>

QUESTION 11

A systems administrator needs to append output of `ls -lha /opt` command to the contents of a `test.txt` file. Which of the following commands will accomplish this?

- A. `ls -lha /opt > test.txt`
- B. `ls -lha /opt < test.txt`
- C. `ls -lha /opt >> test.txt`
- D. `ls -lha /opt << test.txt`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cyberciti.biz/faq/linux-append-text-to-end-of-file/>

QUESTION 12 A Linux administrator needs to remotely update the contents of the `www.comptia.org/contacts` URL.

Which of the following commands would allow the administrator to download the current contents of the URL before updating?

- A. `curl www.comptia.org/contacts`
- B. `dig www.comptia.org/contacts`
- C. `apt-get www.comptia.org/contacts`
- D. `yum list www.comptia.org/contacts`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.thegeekstuff.com/2012/04/curl-examples/>

QUESTION 13 Which of the following BEST describes running on a Linux system?

- A. Containers only need the namespaces functionality to run on a Linux system available since kernel 2.6.
- B. Containers need a hypervisor to run a Linux system. Cgroups namespaces are functionalities used for the kernel but not for running containers.
- C. Containers only need the cgroups functionality for running on a Linux system. Namespaces is not a Linux kernel functionality needed for creating and managing containers.
- D. Containers use the cgroups and namespaces functionalities to isolate processes and assign hardware resources to each of those isolated processes.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linuxjournal.com/content/everything-you-need-know-about-linux-containers-part-ii-working-linux-containers-lxc>

QUESTION 14 A networked has been crashing intermittently. A Linux administrator would like to write a shell script that will attempt to ping the server and email an alert if the server fails to respond. The script will later be scheduled via cron job.

Which of the following scripts would BEST accomplish this task? A.

```
SERVER='192.168.1.50'
RESULT='ping -C 2 $SERVER'
if [ ! $RESULT ]; then
    echo "Server is down" | mail -s "Server down" admin@email_address.com
fi

SERVER="192.168.1.50"
ping -c 2 $SERVER >/dev/null 2>/dev/null
if [ $? -ge 1 ]; then
    echo "Server is down" | mail -s "Server down" admin@email_address.com
fi

SERVER="192.168.1.50"
RESULT='ping -c 2 $SERVER >/dev/null 2>/dev/null'
while [ $RESULT != 1 ];
do
    echo "Server is down" | mail -s "Server down" admin@email_address.com
done

SERVER="192.168.1.50"
ping -c 2 $SERVER >/dev/null 2>/tmp/fail.log
if [ -f /tmp/fail/log ]; then
    echo "Server is down" | mail -s "Server down" admin@email_address.com
fi
```

B.

C.

D.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 15

A Linux administrator is testing connectivity to a remote host on a shared terminal. The administrator wants to allow other users to access the terminal while the command is executing.

Which of the following commands should the administrator use?

- A. `bg ping remotehost`
- B. `fg ping remotehost`
- C. `ping remotehost < results`
- D. `ping remotehost &`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 16

A Linux administrator needs to switch from text mode to GUI. Which of the following runlevels will start the GUI by default?

- A. Runlevel 3
- B. Runlevel 4
- C. Runlevel 5
- D. Runlevel 6

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: http://www.linfo.org/runlevel_def.html

QUESTION 17

A junior systems is configuring localization option environment variables. The administrator is given a checklist of tasks with the following requirements:

- View current settings of the `LC_ALL` environment variable only. ▪

Modify the `LANG` environment variable to US English Unicode.

Given this scenario, which of the following should be performed to meet these requirements? (Choose two.)

- A. `echo $LC_ALL`
- B. `locale`
- C. `cat $LC_ALL`
- D. `export LANG = en_US.UTF-8`
- E. `export $LANG = en_US.UTF`
- F. `stty`

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.tecmint.com/set-system-locales-in-linux/>

QUESTION 18

An administrator needs to change the IP address on a server remotely. After updating the configuration files, a network restart is needed. However, the administrator fears that when the network connection drops, the network restart script will be killed before the new IP address has been set.

Which of the following commands would prevent the script from being killed?

- A. `nohup service network restart`
- B. `service network restart &`
- C. `echo "service network restart" | at now`
- D. `dg service network restart`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

A Linux administrator is testing a new web application on a local laptop and consistently shows the following 403 errors in the laptop's logs

```
type=AVC msg=audit(126552035:37232) :avc:denied [read] for pid=24941 com=nginx
nme="/home/user1" /dev/sda1 ino=2 scontext=unconfined_u:system_r:httpd_t:s0
tcontext=sysetm_u:object_r:httpd_sys_content:s0
```

The web server starts properly, but an error is generated in the audit log. Which of the following settings should be enabled to prevent this audit message?

- A. `httpd_can_network_connect = 1`
- B. `httpd_enable_scripting = 1`
- C. `httpd_enable_homedirs = 1`
- D. `httpd_enable_cgi = 1`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 20 Which of the following BEST describes the purpose of the X11 system?

- A. X11 provides graphical display capabilities
- B. X11 provides command line capabilities
- C. X11 provides networking capabilities
- D. X11 provides telephony capabilities.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: https://en.wikipedia.org/wiki/X_Window_System

QUESTION 21 An administrator is analyzing a Linux server which was recently hacked.

Which of the following will the administrator use to find all unsuccessful login attempts?

- A. `nsswitch`
- B. `faillock`
- C. `pam_tally2`
- D. `passwd`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 22 A junior administrator needs to unload an older video kernel module.

Which of the following commands would BEST accomplish this task?

- A. `modprobe`
- B. `insmod`
- C. `rmmod`
- D. `chmod`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-US/Red_Hat_Enterprise_Linux/7/html/Kernel_Administration_Guide/sec-Unloading_a_Module.html

QUESTION 23

An administrator is attempting to block SSH connections to 192.168.10.24 using the Linux firewall. After implementing a rule, a connection refused error is displayed when attempting to SSH to 192.168.10.24.

Which of the following rules was MOST likely implemented?

- A. `iptables -A -p tcp -d 192.168.10.24 -dropt 22 -j REJECT`
- B. `iptables -A -p tcp -d 192.168.10.24 -dropt 22 -j DROP`
- C. `iptables -A -p tcp -d 192.168.10.24 -dropt 22 -j FORWARD`
- D. `iptables -A -p tcp -d 192.168.10.24 -dropt 22 -j REFUSE`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.golinuxhub.com/2014/03/how-to-allowblock-ssh-connection-from.html>

QUESTION 24

A junior Linux administrator is setting up system-wide configuration settings. The goal is to ensure the PATH environment variable includes the following locations for all users who log into a Linux system.

`/usr/local/bin`

`/usr/local/sbin`

The administrator issues the following commands at the terminal:

```
echo $PATH
cat /etc/profile
```

Respectively, the output of these commands is as follows:

```
/usr/bin:/usr/sbin:/sbin:/bin

# /etc/profile: system-wide .profile file for the Bourne shell (sh(1))
# and Bourne compatible shells (bash(1), ksh(1), ash(1), ...).

if [ `id -u` -eq 0 ]; then
PATH="/usr/bin:/usr/sbin:/sbin:/bin"
else
PATH="/usr/local/games"
fi
export PATH
```

Given this output, which of the following would be the BEST action for the administrator to perform to address this issue?

- A. Update the `/etc/profile.d` file using a text editor, navigate to the PATH element add the missing locations, and run the `bash_completion.sh` script to update the changes.
- B. Update the `/etc/profile` file using a text editor, navigate to the PATH element, add the missing locations and run the `./etc/profile` command to update the changes.
- C. Update the `/etc/profile.d` file using a text editor, navigate to the PATH element, add the missing locations, and reboot to update the changes.
- D. Update the `/etc/profile` file using a text editor navigate to the PATH element, add the missing locations, and restart the bash process to update the changes.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 25

A Linux systems administrator needs to provision multiple web servers into separate regional datacenters. The systems architect has instructed the administrator to define the server infrastructure using a specific tool that consumes a textbased file.

Which of the following is the BEST reason to do this?

- A. To document the infrastructure so it can be included in the system security plan
- B. To ensure the administrator follows the planning phase of the system development life cycle
- C. To define the infrastructure so it can be provisioned consistently with minimal manual tasks
- D. To validate user requirements have been met within each regional datacenter for compliance

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 26 A Linux systems administrator needs to set permissions on an application with the following parameters:

- The owner of the application should be able to read, write, and execute the application.
 - Members of the group should be able to read and execute the application. ▪
- Everyone else should not have access to the application.

Which of the following commands would BEST accomplish these tasks?

- A. `chmod 710 <application name>`
- B. `chmod 730 <application name>`
- C. `chmod 750 <application name>`
- D. `chmod 760 <application name>`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 27

A junior Linux administrator is trying to verify connectivity to the remote host `host1` and display round-trip statistics for ten ICMP.

Which of the following commands should the administrator execute?

- A. `ping -c 10 host1`
- B. `traceroute -c 10 host1`
- C. `netstat host1`
- D. `pathping -c 10 host1`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://shapeshed.com/unix-ping/>

QUESTION 28

A junior Linux administrator is updating local name resolution to support IPv6. The administrator issues the command `cat /etc/hosts` and receives the following output:

```
127.0.0.1      localhost
```

Which of the following actions should the administrator perform to accomplish this task?

- A. Modify the `/etc/hosts` file, and add the `ipv6 localhost` entry to the file.
- B. Modify the `/etc/hosts` file, and add the `:::1 localhost` entry to the file.
- C. Modify the `/etc/hosts` file, and add the `ipv4 localhost` entry to the file.
- D. Modify the `/etc/hosts` file, and add the `0.0.0.0 localhost` entry to the file.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 29

A Linux systems administrator needs to copy the contents of a directory named “working” on the local working system to a folder `/var/www/html` on a server named “corporate-web”.

Which of the following commands will allow the administrator to copy all the contents to the web server?

- A. `scp -r working/* webuser@corporate-web:/var/www/html`
- B. `tar working/* webuser@corporate-web:/var/www/html`
- C. `cp -r working/* webuser@corporate-web:/var/www/html`
- D. `mv working webuser@corporate-web:/var/www/html`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://unix.stackexchange.com/questions/232946/how-to-copy-all-files-from-a-directory-to-a-remote-directory-using-scp>

QUESTION 30

A systems administrator has received reports of intermittent network connectivity to a particular website. Which of the following is the BEST command to use to characterize the location and type of failure over the course of several minutes?

- A. `mtr www.comptia.org`
- B. `tracert www.comptia.org`
- C. `ping www.comptia.org`
- D. `netstat www.comptia.org`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.lifewire.com/traceroute-linux-command-4092586>

QUESTION 31

A Linux administrator has configured a Linux system to be used as a router. The administrator confirms that two network adapters are properly installed and functioning correctly. In addition, the output of the `iptables -L` command appears to contain a complete firewall configuration.

Which of the following commands does the administrator need to issue for the router to be fully functional?

- A. `echo "1" > /proc/sys/net/ipv4/ip_forward`
- B. `echo "0" > /proc/sys/net/ipv4/tcp_abort_on_overflow`
- C. `echo "0" > /proc/sys/net/ipv4/max_connections`
- D. `echo "1" > /proc/sys/net/ipv4/ip_default_ttl`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 32

A systems administration team has decided to their systems as immutable instances. They keep the desired state of each of their systems in version control and apply automation whenever they provision a new instance. If there is an issue with one of their servers, instead of troubleshooting the issue they terminate the instance and rebuild it using automation.

Which of the following is this an example of?

- A. Inventory
- B. Orchestration
- C. Infrastructure as code

D. Agentless deployment

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 33 A systems administrator wants to deploy several applications to the same server quickly. Each application should be abstracted from the host with its own dependencies and libraries and utilize a minimal footprint.

Which of the following would be BEST in this scenario?

- A. Virtual machines
- B. Type 2 hypervisor
- C. Chroot jails
- D. Containers

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 34 An operator finds a user is having issues with opening certain files.

Which of the following commands would allow the security administrator to list and check the SELinux context?

- A. `ls -D`
- B. `ls -a`
- C. `ls -Z`
- D. `ls -l`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/security-enhanced_linux/sect-security-enhanced_linux-working_with_selinux-selinux_contexts_labeling_files

QUESTION 35

A new corporate policy states that Bluetooth should be disabled on all company laptops. Which of the following commands would disable the use of Bluetooth?

- A. `echo "blacklist bluetooth" > /etc/modprobe.d/blacklist-bluetooth`
- B. `echo "kill bluetooth" > /etc/modprobe.d/kill-bluetooth`
- C. `echo "modprobe bluetooth" > /etc/modprobe.d/modprobe-bluetooth`
- D. `echo "rmmod bluetooth" > /etc/modprobe.d/rmmod-bluetooth`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 36

A junior Linux administrator is installing a new application with CPU architecture requirements that have the following specifications:

- x64 bit
- 3.0GHz speed
- Minimum quad core

The administrator wants to leverage existing equipment but is unsure whether the requirements of these systems are adequate. The administrator issues the following command `cat /proc/cpuinfo`. The output of the command is as follows:

```
processor:      0
vendor_id:     GenuineIntel
cpu_family:    x64
model:         58
model name:    Intel (R) Core(TM) i7-3687U @2.10 GHz
stepping:      9
microcode:     0x1c
cpu MHz:       2593.84
cache size:    4096KB
siblings:      1
core id:       0
cpd cores:     4
```

VCEUp

Which of the following is the recommended course of action the administrator should take based on this output?

- A. Install the application, as the system meets the application requirements B.
- Procure new equipment that matches the recommended specifications
- C. Recompile the Linux kernel to support the installation.
- D. Reconfigure `lib` modules to support the new application.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37 A Linux systems administrator wants the ability to access systems remotely over SSH using RSA authentication. to which of the following files should the RSA token be added to allow this access?

- A. `authorized_keys`
- B. `~/.ssh/ssh_config`
- C. `id_rsa.pub`
- D. `known_hosts`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.digitalocean.com/community/tutorials/how-to-configure-ssh-key-based-authentication-on-a-linux-server>

QUESTION 38 A Linux server needs to be accessed, but the root password is not available.

Which of the following would BEST allow an administrator to regain access and set a new known password at the same time?

- A. Boot into a single-user mode and reset the password via the `passwd` command.
- B. Boot into a single-user mode and reset the password by editing the `/etc/passwd` file.
- C. Boot into a single-user mode and reset the password by editing the `/etc/shadow` file.
- D. Boot into a single-user mode and reset the password via the `chage` command.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://phoenixnap.com/kb/how-to-change-root-password-linux>

QUESTION 39 A Linux administrator wants to fetch a Git repository from a remote Git server.

Which of the following is the BEST command to perform this task?

- A. `git checkout`
- B. `git clone`
- C. `git merge`
- D. `git config`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://git-scm.com/book/en/v2/Git-Basics-Working-with-Remotes>

QUESTION 40

An administrator needs to create a shared directory in which all users are able, write, and execute its content but none of the regular users are able to delete any content.

Which of the following permissions should be applied to this shared directory?

- A. `rwxrwxrwt`
- B. `rwxrwxrws`
- C. `rwxrwxrwx`
- D. `rwxrwxrw*`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 41 A systems administrator has finished building a new feature for the monitoring software in a separate Git branch.

Which of the following is the BEST method for adding the new feature to the software's master branch? A.

Merge the changes from the feature branch to the master branch.

B. Save the changes to the master branch automatically with each Git commit.

C. Clone the feature branch into the master branch.

D. Pull the changes from the feature branch into the master branch.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://git-scm.com/book/en/v2/Git-Branching-Basic-Branching-and-Merging>

QUESTION 42 Which of the following will provide a list of all flash, external, internal, and SSD drives?

A. lspci

B. lsmod

C. lsblk

D. lsusb

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linux.com/learn/intro-to-linux/2017/3/how-format-storage-devices-linux>

QUESTION 43 Which of the following configuration management tools is considered agentless?

A. Puppet B.

Salt

C. Ansible

D. Chef

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.intigua.com/blog/puppet-vs.-chef-vs.-ansible-vs.-saltstack>

QUESTION 44

An administrator reviews the following configuration file provided by a DevOps engineer:

Tasks:

```
- name: Install php-fpm from repo
  yum:
    name: php-fpm
    state: present
- name: Install mysql from repo
  yum:
    name: mysql-server
    state: present
```

Which of the following would the application parsing this file MOST likely have to support?

- A. YAML
- B. AJAX
- C. JSON
- D. SOAP

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 45 Which of the following is a difference between YAML and JSON?

- A. Users can comment in YAML but not in JSON
- B. JSON only curly brackets, while YAML only uses square brackets
- C. JSON is used in web development, while YAML is used solely in back-end systems.
- D. YAML has been deprecated for JSON.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.json2yaml.com/yaml-vs-json>

QUESTION 46

A junior administrator of a physical server receives log messages indicating the out-of-memory killer has been active. All memory slots are in use on the motherboard, but additional disk space is available. Space has been allocated for a swap file.

Which of the following should the administrator use to reduce the output of memory messages?

- A. `free : swapoff / swapfile ; swapon -a`
- B. `mkswap /swapfile; swapon -a`
- C. `fallocate -l 2G /swapfile && swapon -a`
- D. `echo "1" > /proc/meminfo ; swapon / swapfile`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 47**

A junior Linux administrator is optimizing a system in which an application needs to take priority 0 when running the process. The administrator runs the ps command and receives the following output:

PID	PPID	TTY	Time	CMD
8481	2	pts/17	16:40:00	app
9854	0	pts/17	16:40:00	ps

Given this scenario, which of the following steps will address this issue?

- A. Issue the command `ronice -n 0 -p 8481`
- B. Issue the command `renice -p 8481`
- C. Issue the command `renice -p 0 ~n 8481`
- D. Issue the command `renice -n 8481`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 48**

An administrator needs to mount the shared NFS file system `testhost:/testvolume` to mount point `/mnt/testvol` and make the mount persistent after reboot.

Which of the following BEST demonstrates the commands necessary to accomplish this task? A.

```
# mkdir -p /mnt/testvol
# echo "testhost:/testvolume /mnt/testvol nfs defaults 0 0" >> /etc/fstab
# mount -a
# mkdir /mnt/testvol
# mount testhost:/testvolume /mnt/testbol
# mkdir testhost:/testvolume at /mnt/testvol
# mount -a
# mkdir /mnt/testvol
# echo "testhost:/testvolume /mnt/testvol" >> /mnt/mnttab
# mount -a
```

B.

C.

D.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 49

A system administrator has deployed a Linux server based on an Anaconda process with all packages and custom configurations necessary to install a web server role.

Which of the following could be used to install more Linux servers with the same characteristics?

- A. `/etc/sysconfig/anaconda/cfg`
- B. `/root/anaconda.auto`
- C. `/root/anaconda-ks.cfg`
- D. `/etc/sysconfig/installation.cfg`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/installation_guide/sn-automating-installation

QUESTION 50

A Linux administration is using a Linux system as a router. During the tests, the administrator discovers that IP packets are not being sent between the configured interfaces.

Which of the following commands enables this feature for IPv4 networks?

- A. `cat /proc/sys/net/ipv4/ip_route > 1`
- B. `echo "1" > /proc/sys/net/ipv4/ip_forward`
- C. `echo "1" > /proc/sys/net/ipv4/ip_route`
- D. `echo "1" > /proc/sys/net/ipv4/ip_net`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 51

A systems administrator wants to know the current status of a series of `dd` jobs that were started in the background three hours ago.

Which of the following commands will achieve this task?

- A. `sudo killall -HUP dd`
- B. `sudo killall dd`
- C. `sudo killall -TERM dd`
- D. `sudo killall -USR1 dd`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://askubuntu.com/questions/215505/how-do-you-monitor-the-progress-of-dd>

QUESTION 52 A Linux administrator needs the “tech” account to have the option to run elevated commands as root.

Which of the following commands would BEST meet this goal?

- A. `$ su - tech -c "/bin/bash"`
- B. `# usermod -aG wheel tech`
- C. `# sudo -I tech`
- D. `# groupadd -u tech -g root`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 53 Which of the following is the purpose of the `vmlinux` file on a Linux system?

- A. To prevent a Linux kernel panic
- B. To start a Linux virtual machine
- C. To provide the executable kernel for the system
- D. To enable resource access to the network

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://en.wikipedia.org/wiki/Vmlinux>

QUESTION 54

Ann, a junior systems administrator, is required to add a line to the `/etc/yum.conf` file. However, she receives the following error message when she tries to add the line:

```
root@comptia:~# echo "line" > /etc/yum.conf
-su: /etc/yum.conf: Operation not permitted
```

Ann performs some diagnostics to attempt to find the root cause:


```
root@comptia:~# ls -l /etc/yum.conf
-rw-r--r-- 1 root root 970 Jan 30 2018 /etc/yum.conf
```

```
root@comptia:~# lsattr /etc/yum.conf
----i-----e-- /etc/yum.conf
```

```
root@comptia:~# df -i /etc/yum/conf
Filesystem      Inodes    IUsed    IFree    IUse% Mounted on
/dev/sda1       524288    192861   331427    37%   /
```

Which of the following commands should Ann execute to write content to `/etc/yum`?

- A. `chmod 755 /etc/yum.conf`
- B. `setfacl -m m:rw /etc/yum.conf`
- C. `chattr -I /etc/yum.conf`
- D. `setenforce 0`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 55 A Linux administrator needs to take stock of USB devices attached to the system.

Which of the following commands would be BEST to complete this task?

- A. `lspci`
- B. `lsusb`
- C. `cat /proc/USB`
- D. `modprobe --usb`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://linuxhint.com/list-usb-devices-linux/>

QUESTION 56

Given the output below:

```
drwxr-xr-x. 4096 user1 user1 Documents
drwxr-xr-x. 4096 user1 user1 Music
lrwxrwxrwx. 1 root root MyPhoto.jpg ->/Pictures/photo.jpg
drwxr-xr-x. 4096 user1 user1 Pictures
-rw-r--r--. 256 user1 user1 text.txt
-rw-r--r--. 35 user1 user1 tmp.tmp
```

Which of the following commands can be used to remove `MyPhoto.jpg` from the current directory?

- A. `unlink ./MyPhoto.jpg`
- B. `del Pictures/photo.jpg`
- C. `rm -rf ./Pictures`
- D. `rm -f MyPhoto.jpg`
- E. `ln -rm ./Pictures/photo.jpg`

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 57 Which of the following server roles would assign a host IP address?

- A. DHCP
- B. NTP
- C. DNS
- D. SSH

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 58 Which of the following commands would show the default printer on a Linux system?

- A. `lpr`
- B. `lpq`
- C. `lpstat`
- D. `lspci`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://superuser.com/questions/123576/show-default-linux-printer>

QUESTION 59 A system administrator has set up third-party log aggregation agents across several cloud instances. The systems administrator wants to create a dashboard of failed SSH attempts and the usernames used.

Which of the following files should be watched by the agents?

- A. /var/log/audit/audit.log
- B. /var/log/kern.log C. /var/log/monitor
- D. /etc/rsyslog.conf

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 60

A systems administrator must clean up all application files in the directory /var/log/app. However, the company's security policy requires the files to be kept on the backup server for one year. The Linux server has only the tar and bzip2 packages installed.

Which of the following commands will package and compress the files?

- A. tar -zcvf applicationfiles.tar.bz2 /var/log/app/*
- B. tar -jcvf applicationfiles.tar.bz2 /var/log/app/*
- C. tar -cvf applicationfiles.tar.bz2 /var/log/app/*
- D. tar -xvf applicationfiles.tar.bz2 /var/log/app/*

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 61

In order to comply with new security policies, an administrator needs to prevent the SSH server from using insecure algorithms.

Which of the following files should be edited to accomplish this?

- A. /etc/ssh/sshd_config
- B. /etc/ssh/ssh_config
- C. ~/.ssh/ssh_config
- D. /etc/ssh/known_hosts

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 62 Which of the following configuration files should be modified to disable Ctrl-Alt-Del in Linux?

- A. /etc/inittab
- B. ~/.bash_profile
- C. /etc/securetty
- D. /etc/security/limits.conf

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linuxtechi.com/disable-reboot-using-ctrl-alt-del-keys/>

QUESTION 63 Joe, a user, is unable to log in to the server and contracts the systems administrator to look into the issue. The administrator examines the `/etc/passwd` file and discovers the following entry:

```
joe:x:505:505::/home/joe:/bin/false
```

Which of the following commands should the administrator execute to resolve the problem?

- A. `usermod -s /bin/bash joe`
- B. `passwd -u joe`
- C. `useradd -s /bin/bash joe`
- D. `chage -E -1 joe`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://doc.lagout.org/security/McGraw-Hill%20-%20Hacking%20Exposed%2C%203rd%20Ed%20-%20Hacking%20Exposed%20Win2.pdf> (303)

QUESTION 64

A server is almost out of free memory and is becoming unresponsive. Which of the following sets of commands will BEST mitigate the issue?

- A. `free`, `fack`, `partprobe`
- B. `lsof`, `lvcreate`, `mdadm`
- C. `df`, `du`, `rmmod`
- D. `fdisk`, `mkswap`, `swapon -a`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://vitux.com/7-commands-to-check-swap-space-in-debian-10/>

QUESTION 65

A Linux administrator is using a public cloud provider to host servers for a company's website. Using the provider's tools, the administrator wrote a JSON file to define how to deploy the servers. Which of the following techniques did the administrator use?

- A. Infrastructure as code
- B. Build automation
- C. Platform as a service
- D. Automated configuration

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://cloud.google.com/cloud-build/docs/build-config>

QUESTION 66

A Linux system is running normally when the systems administrator receives an alert that one application spawned many processes. The application is consuming a lot of memory, and it will soon cause the machine to become unresponsive. Which of the following commands will stop each application process?

- A. kill `pidof application`
- B. killall application
- C. kill -9 `ps -aux | grep application`
- D. pkill -9 application

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.tecmint.com/how-to-kill-a-process-in-linux/>

QUESTION 67 A systems administrator configured a new kernel module, but it stopped working after reboot. Which of the following will allow the systems administrator to check for module problems during server startup?

- A. lsmod
- B. modprobe
- C. modinfo
- D. dmesg

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/deployment_guide/sec-displaying_information_about_a_module

QUESTION 68

A junior Linux administrator is installing patches using YUM. The administrator issues the following command:

```
yum list installed
```

The output of the command is as follows:

```
Loaded plugins: fastmirror, langpacks
Existing lock /var/run/yum.pid: another copy is running as pid 5180.
Another app is currently holding the yum lock; waiting for it to exit...
The other application is yum
Memory: 26 M RSS (r415 MB VSZ)
Started: Fri Jun 15 08:05:15 2018 - 2:18:48 ago
State: Traced/Stopped pid: 5180
```

Given this scenario and the output, which of the following should the administrator do to address this issue?

- A. renice -n 9 -p 5180
- B. killall yum
- C. ps -ef | grep yum
- D. top | grep yum

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.thegeekdiary.com/yum-command-fails-with-another-app-is-currently-holding-the-yum-lock-in-centos-rhel-7/>

QUESTION 69

A systems administrator needs to retrieve specific fields from a csv file. Which of the following tools would accomplish this task?

- A. `awk`
- B. `sort`
- C. `print`
- D. `echo`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://stackoverflow.com/questions/19602181/how-to-extract-one-column-of-a-csv-file>

QUESTION 70 Two specific users need access to a directory owned by root where backups are located. Which of the following commands would BEST ensure the specified users can access the backup files?

- A. `umask` B. `chcon`
- C. `chmod`
- D. `setfacl`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 71 Which of the following is the purpose of the monitoring server role?

- A. To aggregate web traffic to watch which websites employees are visiting
- B. To collect status and performance information about the servers in an environment
- C. To provide user authentication services to a network
- D. To provide real-time analysis of potential threats to the organization

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 72

A junior administrator is migrating a virtual machine from a Type 1 hypervisor to a Type 2 hypervisor. To ensure portability, which of the following formats should the administrator export from the Type 1 hypervisor to ensure compatibility?

- A. `OWASP`
- B. `VDI`
- C. `VMDK`

D. OVA

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://docs.vmware.com/en/VMware-Fusion/11/com.vmware.fusion.using.doc/GUID-16E390B1-829D-4289-8442-270A474C106A.html>

QUESTION 73

A junior systems administrator is upgrading a package that was installed on a Red Hat-based system. The administrator is tasked with the following: ▪ Update and install the new package.

- Verify the new package version is installed.

Which of the following should be done to BEST accomplish these task? (Choose two.)

- A. `yum install <package name>`
- B. `yum upgrade`
- C. `rpm -e <package name>`
- D. `rpm -qa`
- E. `apt-get <package name>`
- F. `apt-get upgrade`

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/deployment_guide/ch-yum

QUESTION 74 Which of the following is the template for the `grub.cfg` file?

- A. `/etc/default/grub`
- B. `/etc/grub2.cfg`
- C. `/etc/sysctl.conf`
- D. `/boot/efi`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://geek-university.com/linux/grub-version-2/>

QUESTION 75

A Linux administrator implemented a new HTTP server using the default configuration. None of the users on the network can access the server. If there is no problem on the network or with the users' workstations, which of the following steps will BEST analyze and resolve the issue?

- A. Run `netstat` to ensure the port is correctly bound, and configure the firewall to allow access on ports 80 and 443
- B. Run `route` to ensure the port is correctly bound, and configure the firewall to allow access on ports 80 and 443
- C. Run `netcat` to ensure the port is correctly bound, and configure a static route to the web to allow access on ports 80 and 443
- D. Run `route` to ensure the port is correctly bound, and configure SELinux to allow access on ports 80 and 443

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.varonis.com/blog/netcat-commands/>

QUESTION 76

A Linux storage administrator wants to create a logical volume group. Which of the following commands is required to start the process?

- A. pvcreate
- B. vgcreate
- C. lvcreate
- D. mkfs.xfs

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.thegeekstuff.com/2010/08/how-to-create-lvm/>

QUESTION 77

A Linux administrator built a GitLab server. Later that day, a software engineer tried to access the server to upload the repository during the final step of installation. The software engineer could not access the website. Which of the following firewall rules would allow access to this site?

- A. `iptables -A INPUT -p tcp -m multiport --dports 80,443 -m conntrack -cstate NEW, ESTABLISHED -j ACCEPT`
- B. `iptables -A INPUT -p tcp -m multiport --dports 80,443 -m conntrack -cstate ESTABLISHED -j ACCEPT`
- C. `iptables -A INPUT -p tcp -m multiport --dports 80,443 -m conntrack -cstate RELATED, ESTABLISHED -j ACCEPT`
- D. `iptables -A INPUT -p tcp -m multiport --dports 80,443 -m conntrack -cstate NEW, ESTABLISHED -j REJECT`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://serverfault.com/questions/578730/when-using-iptables-firewall-rules-why-assert-new-state-on-all-allowed-ports>

QUESTION 78

While creating a file on a volume, the Linux administrator receives the following message: No space left on device. Running the `df -m` command, the administrator notes there is still 50% of usage left. Which of the following is the NEXT step the administrator should take to analyze the issue without losing data?

- A. Run the `df -i` command and notice the inode exhaustion
- B. Run the `df -h` command and notice the space exhaustion
- C. Run the `df -B` command and notice the block size
- D. Run the `df -k` command and notice the storage exhaustion

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.tecmint.com/how-to-check-disk-space-in-linux/>

QUESTION 79

A user attempts to use the `mount -a` command but gets the following error:

```
mount: mount point /mnt/test does not exist
```


Which of the following commands best describes the action the Linux administrator should take NEXT?

- A. `mount -a /mnt/test` B.
- `mkdir -p /mnt/test`
- C. `mdadm -p /mnt/test`
- D. `mkfs /mnt/test`
- E. `touch /mnt/test`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://serverfault.com/questions/751113/mount-point-does-not-exist-despite-creating-it>

QUESTION 80 Which of the following is modified to reconfigure the boot environment?

- A. `grub-mkconfig`
- B. `grub.cfg`
- C. `update-grub`
- D. `grub2-mkconfig`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://tipsonubuntu.com/2016/07/20/grub2-boot-order-ubuntu-16-04/>

VCEUp

QUESTION 81

A company wants to ensure that all newly created files can be modified only by their owners and that all new directory content can be changed only by the creator of the directory. Which of the following commands will help achieve this task?

- A. `umask 0022`
- B. `umask 0012`
- C. `chmod -R 0644 /`
- D. `chmod -R 0755 /`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.computerhope.com/unix/uumask.htm>

QUESTION 82

A Linux administrator needs to back up the folder `/usr/domain`, and the output must be a gzip compressed tar. Which of the following commands should be used?

- A. `tar -cv domain.tar.gz /usr/domain`
- B. `tar -cvf /usr/domain domain.tar.gz`
- C. `tar -czvf domain.tar.gz /usr/domain`
- D. `tar -cxzv /usr/domain domain.tar.gz`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://help.ubuntu.com/community/BackupYourSystem/TAR>

QUESTION 83 A Linux administrator needs every new file created on a directory to maintain the group permissions of the same directory. Which of the following commands would satisfy this requirement?

- A. `chmod o+s <directory>`
- B. `chmod u+s <directory>` C. `chmod +s <directory>`
- D. `chmod g+s <directory>`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://unix.stackexchange.com/questions/115631/getting-new-files-to-inherit-group-permissions-on-linux>

QUESTION 84

Which of the following statements BEST represents what the term “agentless” means regarding orchestration?

- A. Installation of a tool is not required on the remote system to perform orchestration tasks
- B. It facilitates version control when using infrastructure as code during orchestration
- C. It automatically removes malware from the remote system during orchestration
- D. A tool can only be accessed remotely to perform orchestration tasks

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://whatis.techtarget.com/definition/agentless>

QUESTION 85 Given that a company’s policy states that users cannot install third-party tools on Window servers, which of the following protocols will allow a Linux GUI to connect to a Windows server?

- A. VNC B. NX
- C. RDP
- D. X11

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://phoenixnap.com/kb/ssh-to-connect-to-remote-server-linux-or-windows>

QUESTION 86

Ann, a junior Linux administrator, needs to copy software from her local machine to assist in developing a software application on a remote machine with the IP address 192.168.3.22. The file needs to be placed on the `/tmp` directory. After downloading the RPM to the local machine, which of the following commands would be BEST to use to copy the software?

- A. `scp ~/software.rpm USER@192.168.3.22:/tmp`
- B. `scp ~/software.rpm USER@192.168.3.22: /tmp`
- C. `wget USER@192.168.3.22:/tmp -f ~/software.rpm`
- D. `scp USER@192.168.3.22 ~/software.rpm :/tmp`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://linuxize.com/post/wget-command-examples/>

QUESTION 87

An administrator is tasked with increasing the size of the volume `/dev/vg/lv` to 20GB. Which of the following BEST illustrates the steps the administrator should take?

- A. `vgextend -L20G /dev/vg/lv; resize2fs /dev/vg/lv`
- B. `parted -L20G /dev/vg/lv; remount /dev/vg/lv`
- C. `mkfs -L20G /dev/vg/lv; tune2fs /dev/vg/lv`
- D. `lvextend -L20G /dev/vg/lv; resize2fs /dev/vg/lv`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 88 A systems administrator observes high latency values when reaching a remote web server. Which of the following commands will help determine and isolate issues on the network side?

- A. `mtr`
- B. `dig`
- C. `netstat`
- D. `route`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.keycdn.com/support/what-is-latency>

QUESTION 89

A Linux administrator wants to obtain a list of files and subdirectories in the `/etc` directory that contain the word “services”. Once the files and subdirectories are discovered, they should be listed alphabetically in the `/var/tmp/foundservices` file. Which of the following shell scripts will accomplish this task?

- A. `#!/bin/bash find /etc -name services | sort > /var/tmp/foundservices`
- B. `#!/bin/bash locate /etc -sort -name services > /var/tmp/foundservices`
- C. `#!/bin/bash find -name services -sort </var/tmp/foundservices`
- D. `#!/bin/bash find /etc -name services -sort > /var/tmp/foundservices`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 90

A systems administrator is enabling quotas on the `/home` directory of a Linux server. The administrator makes the appropriate edits to the `/etc/fstab` file and attempts to issue the commands to enable quotas on the desired directory. However, the administrator receives an error message stating the filesystem does not support quotas. Which of the following commands should the administrator perform to proceed?

- A. `mount -o remount /home`
- B. `quotacheck -cg`
- C. `edquota /home`
- D. `quotaon /home`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.tecmint.com/set-file-system-disk-quotas-on-ubuntu/>

QUESTION 91

A systems administrator needs to install a new piece of hardware that requires a new driver. The driver should be manually installed. Which of the following describes the order of commands required to obtain module information, install the module, and check the log for any errors during module installation?

- A. `lsmod, modprobe, modinfo`
- B. `modinfo, insmod, modprobe`
- C. `modinfo, insmod, dmesg`
- D. `lsmod, insmod, dmesg`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

A new HTTPS web service is being deployed on a server. Which of the following commands should the Linux administrator use to ensure traffic is able to flow through the system firewall to the new service?

- A. `iptables -I OUTPUT -p tcp --sport 443 -j ACCEPT`
- B. `iptables -A INPUT -p tcp --dport 443 -j ACCEPT`
- C. `iptables -I INPUT --dport 443 -j ACCEPT`
- D. `iptables -A OUTPUT -p tcp --dport 443 -j ACCEPT`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linode.com/docs/security/firewalls/control-network-traffic-with-iptables/>

QUESTION 93 An administrator has modified the configuration file for a service. The service is still running but is not using the new configured values. Which of the following will BEST remediate this issue?

- A. `kill -HUP`
- B. `init 0`
- C. `service start`
- D. `renice -10`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 94**

An administrator needs to see a list of the system user's encrypted passwords. Which of the following Linux files does the administrator need to read?

- A. /etc/shadow
- B. /etc/skel
- C. /etc/passwd
- D. /etc/pw

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cyberciti.biz/faq/where-are-the-passwords-of-the-users-located-in-linux/>

QUESTION 95

A Linux administrator is setting up a testing environment and needs to connect to a separate testing server using the production server name. The administrator needs to override the hostname that the DNS is returning in order to use the test environment. Which of the following commands should be run on each of the testing systems to BEST meet this goal?

- A. # hostnamectl set-hostname "192.168.1.100 production.company.com"
- B. # grep -i IP "\${ip addr show} production.company.com" > /etc/resolv.conf
- C. # ip addr add 192.168.1.100/24 dev eth0 && rndc reload production.company.com D. # echo "192.168.1.100 production.company.com" >> /etc/hosts

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/7/html/networking_guide/sec_configuring_host_names_using_hostnamectl

QUESTION 96

A Linux administrator opens a ticket to have an external hard drive mounted. As a security policy, external storage kernel modules are disabled.

Which of the following is the BEST command for adding the proper kernel module to enable external storage modules?

- A. rmmod /lib/modules/3.6.12-100-generic/kernel/drivers/usb/storage/usb-storage.ko
- B. modinfo /lib/modules/3.6.12-100-generic/kernel/drivers/usb/storage/usb-storage.ko
- C. depmod /lib/modules/3.6.12-100-generic/kernel/drivers/usb/storage/usb-storage.ko
- D. insmod /lib/modules/3.6.12-100-generic/kernel/drivers/usb/storage/usb-storage.ko

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cyberciti.biz/faq/linux-how-to-load-a-kernel-module-automatically-at-boot-time/>

QUESTION 97 Which of the following are Linux desktop managers? (Choose two.)

- A. KDE
- B. GNOME

- C. GUI
- D. VNC
- E. X11
- F. SPICE

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 98

A systems administrator is configuring options on a newly installed Linux VM that will be deployed to the Pacific time zone. Which of the following sets of commands should the administrator execute to accurately configure the correct time settings?

- A. `cd /etc ln -s /usr/share/zoneinfo/US/Pacific localtime` B. `cd /usr/local ln -s /usr/share/zoneinfo/US/Pacific zoneinfo` C. `cd /etc/local ln -s /usr/share/zoneinfo/US/Pacific localtime` D. `cd /usr/share/local ln -s /usr/share/zoneinfo/US/Pacific localectl`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99 A user has connected a Bluetooth mouse to a computer, but it is not working properly. Which of the following commands should the systems administrator use to fix the issue?

- A. `lsmod -i bluetooth`
B. `insmod bluetooth`
C. `modprobe -r bluetooth`
D. `depmod -i bluetooth`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

An administrator notices that a long-running script, `/home/user/script.sh`, is taking up a large number of system resources. The administrator does not know the script's function. Which of the following commands should the administrator use to minimize the script's impact on system resources?

- A. `renice`
B. `kill`
C. `bg`
D. `nohup`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101 An administrator needs to deploy 100 identical CentOS workstations via PXE boot. Which of the following should the administrator use to minimize the amount of interaction with the consoles needed?

- A. Kickstart script
- B. Ghost image on a distribution server
- C. Hard disk duplicator
- D. Hard disk duplicator
- E. Ubiquity script

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 102**

A user, jsmith, needs access to database files located on a server. Which of the following will add jsmith to the “dba” group and preserve existing group memberships?

- A. `usermod -a -G dba jsmith`
- B. `usermod -g dba jsmith`
- C. `useradd -g dba jsmith`
- D. `groupmod dba -u jsmith`

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

According to the reference given below. Both AC is correct. Reference:

<https://www.cyberciti.biz/faq/howto-linux-add-user-to-group/>

QUESTION 103

A Linux administrator installed a new network adapter and temporarily disabled the network service from starting on boot. The partial output of `chkconfig` is as follows:

```
network 0:off 1:off 2:off 3:off 4:off 5:off 6:off
```

Which of the following commands BEST describes how the administrator should re-enable the network service?

- A. `chkconfig --level 0 network on`
- B. `chkconfig --level 0-6 network on`
- C. `chkconfig --level 6 network on`
- D. `chkconfig --level 12 network on`
- E. `chkconfig --level 345 network on`

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.thegeekdiary.com/how-to-enable-or-disable-service-on-boot-with-chkconfig/>

QUESTION 104

An engineer is working on a production application deployment that requires changing a web application property file called `server.property` that is managed by the Git version control system. A cloned copy of the remote repository in which the `server.property` file exists is on the local desktop computer. The engineer makes appropriate changes to the files, saves it as `server.property`, and executes `git commit -m "changed the property file"` `server.property`. Which of the following commands did the engineer fail to perform?

- A. `git init server.property`
- B. `git merge server.property`
- C. `git add server.property`
- D. `git push server.property`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.earthdatascience.org/workshops/intro-version-control-git/basic-git-commands/>

QUESTION 105

A Linux administrator retrieved a repository of files from a Git server using `git clone`. The administrator wants to see if a configuration file was added to the repository. Which of the following Git arguments should be used to see the recent modifications?

- A. `fetch`
- B. `log`
- C. `init`
- D. `pull`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 106

A systems administrator is unable to reach other devices on the network and the Internet. The server is configured with the IP address 192.169.1.50/24 on `eth0`. The server's router is 192.168.1.1. The administrator reviews the output of `route -n`:

```
Kernel IP routing table

```

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
0.0.0.0	192.168.2.1	0.0.0.0	UG	1024	0	0	eth0
192.168.1.0	0.0.0.0	255.255.255.0	U	0	0	0	eth0

Which of the following commands should the administrator run to correct the issue?

- A. `route del default gw 192.168.2.1 eth0; route add default gw 192.168.1.1 eth0`
- B. `route add -net 192.168.10.0 netmask 255.255.255.0 gw 192.168.2.1 eth0`
- C. `route add 192.168.1.1 default 192.168.1.50 eth0`
- D. `route host gw 192.168.1.1 eth0`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 107

A junior Linux administrator needs to access production servers using a secure SSH protocol. Which of the following files should contain the public key to gain remote access to the server?

- A. `~/ssh/authorized-keys`
- B. `/etc/authorized_keys`
- C. `/etc/sshd/ssh.conf`
- D. `~/.ssh/authorized_keys`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linode.com/docs/security/securing-your-server/>

QUESTION 108

An administrator needs to see the type of CPU that a server is running. Which of the following files contains this information?

- A. `/proc/cpuinfo`
- B. `/etc/devices/info.conf`
- C. `/dev/proc/cpu`
- D. `/sys/dev/cpuinfo`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.binarytides.com/linux-cpu-information/>

QUESTION 109

A junior systems administrator is creating a cron job. The cron job requirements are as follows:

- Run the `hello.sh` script every hour (24 times in one day).
- Run it on Monday only.

Given this scenario, which of the following crontab options should be configured to meet these requirements?

- A. `0 *** 1 hello.sh`
- B. `0 24 ** Monday hello.sh`
- C. `24 *** Monday hello.sh`
- D. `1 *** 0 hello.sh`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.debian.org/doc/manuals/system-administrator/ch-sysadmin-time.html>

QUESTION 110

A Linux systems administrator is setting up SSH access with PKI for several using their newly created RSA keys. Which of the following MOST securely achieves this task?

- A. Use `curl` to copy each user's public key file to the respective system
- B. Use `cp` to copy each user's public key file to the respective system
- C. Use `ssh-copy-id` to copy each user's public key file to the respective system
- D. Use `ssh-copy-id` to copy each user's private key file to the respective system

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.linode.com/docs/security/authentication/use-public-key-authentication-with-ssh/>

QUESTION 111

The development team has automated their software build process so each time a change is submitted to the source code repository, a new software build is compiled. They are requesting that the Linux operations team look into automating the deployment of the software build into the test environment. Which of the following is the benefit to the development team for implementing deployment automation?

- A. To ensure the build commits are also deployed to the test environment
- B. To enable notifications when builds are deployed to the test environment
- C. To ensure software builds in test are not accidentally deployed to production
- D. To streamline the deployment process for deploying builds into test environments

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

A Linux administrator needs to schedule a cron job to run at 1:15 p.m. every Friday to report the amount of free disk space on the system and to send the output to a file named "freespace". Which of the following would meet this requirement?

- A. 13 15 * * 5 df > /freespace
- B. 15 13 * * 5 df > /freespace
- C. 15 1 * * 6 df > /freespace
- D. 15 13 6 * * df > /freespace

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

A technician wants to secure a sensitive workstation by ensuring network traffic is kept within the local subnet. To accomplish this task, the technician executes the following command:

```
echo 0 > /proc/sys/net/ipv4/ip_default_ttl
```

Which of the following commands can the technician use to confirm the expected results? (Choose two.)

- A. tcpdump
- B. traceroute
- C. route
- D. iperf
- E. ip
- F. arp

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 114

A junior Linux administrator needs to ensure a service will start on system boot. Which of the following commands should be used to accomplish this task?

- A. `chkconfig <service> on`
- B. `systemctl <service> bootup`
- C. `service <service> enable`
- D. `crontab install <service>`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://geekflare.com/how-to-auto-start-services-on-boot-in-linux/>

QUESTION 115

SIMULATION

Find the file named `core` and remove it from the system.

INSTRUCTIONS

Type “help” to display a list of available commands.

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

```
[comptia@localhost ~]$
```

VCEUp

Correct Answer: See explanation below.

Section: (none)

Explanation

Explanation/Reference:

Explanation:

```
root@tryit-sought:~# find . -type f -name "FILE-TO-FIND" -exec rm -f {} \;  
root@tryit-sought:~# find . -type f -core "FILE-TO-FIND" -exec rm -f {} \;
```

Reference: <https://www.cyberciti.biz/faq/linux-unix-how-to-find-and-remove-files/>

VCEUp