

**XK0-004.29q**

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

**XK0-004**



**Website:** <https://vceplus.com>  
**VCE to PDF Converter:** <https://vceplus.com/vce-to-pdf/>  
**Facebook:** <https://www.facebook.com/VCE.For.All.VN/>  
**Twitter :** [https://twitter.com/VCE\\_Plus](https://twitter.com/VCE_Plus)

<https://vceplus.com/>

**CompTIA Linux+ Certification Exam**

**Exam A**

**QUESTION 1**

<https://vceplus.com/>

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 2

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?



<https://vceplus.com/>

- A. 1. CTRL-C
- 2. `bg`
- 3. `watch df /var`

<https://vceplus.com/>

- 4. CTRL-C5. fg
  - 6. CTRL-Z
- B.**
- 1. CTRL-C
  - 2. fg
  - 3. watch df /var
  - 4. CTRL-Z5. bg
  - 6. CTRL-Z
- C.**
- 1. CTRL-Z
  - 2. bg
  - 3. watch df /var
  - 4. CTRL-C5. fg
  - 6. CTRL-C
- D.**
- 1. CTRL-Z
  - 2. bg
  - 3. watch df /var
  - 4. CTRL-Z5. fg
  - 6. CTRL-C

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### QUESTION 3

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 4**

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 5**

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 6

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 7

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 8

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](https://en.wikipedia.org/wiki/X_Window_System)

#### QUESTION 9

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 10**

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. rmmmod
- 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](https://access.redhat.com/documentation/en-US/Red_Hat_Enterprise_Linux/7/html/Kernel_Administration_Guide/sec-Unloading_a_Module.html)

**QUESTION 11**

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 12

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 text-based 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 13

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 14



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 15

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 16

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 17

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?



<https://vceplus.com/>

- 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 "rmod bluetooth" > /etc/modprobe.d/rmod-bluetooth`

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://vceplus.com/>

### QUESTION 18

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
```



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

- Install the application, as the system meets the application requirements
- Procure new equipment that matches the recommended specifications
- 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 19

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 20

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 21

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 22

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 23

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 24

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 25

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 26

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 27**

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-- 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/sdal	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 28**

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 29**

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:**



<https://vceplus.com/>



<https://vceplus.com/>