# Exam Questions XK0-004

CompTIA Linux+ Certification Exam

**https://www.2passeasy.com/dumps/XK0-004/**

**NEW QUESTION 1**
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

**Answer:** C


**NEW QUESTION 2**
A Linux administrator has installed a web application firewall in front of a web server running on HTTP port 8080 and successfully started the HTTP server. However, after opening the application URL in an Internet browser, the administrator discovered that the application does not work. The administrator performed the following diagnostic steps:
Output of sysctl -a command:

```
kernel.sched_child_runs_first = 0
kernel.panic = 0
kernel.ftrace_enabled = 1
kernel.sysrq = 1
net.ipv4.icmp_echo_ignore_all = 0
```

Output of iptables -L command:

```
ChainINPUT (policyACCEPT)


target    prot    opt    source      destination
ACCEPT    tcp     --     anywhere    anywhere        tcp dpt:webcache

Chain FORWARD (policy ACCEPT)


target    prot    opt    source      destination
ACCEPT    tcp     --     anywhere    anywhere        dpt:webcache

Chain OUTPUT (policy ACCEPT)


target    prot    opt    source      destination
```

Output of netstat –nltop | grep "8080":

```
tcp    0.0.0.0:8080      0.0.0.0*     Listen     12801/httpd
```

Which of the following is the NEXT step the administrator should perform to permanently fix the issue at the kernel level?

A. sysctl -w net.ipv4.ip_forward=1 then run sysctl -w /etc/sysctl.conf to enable the change
B. Edit /etc/sysctl.conf file and add net.ipv4.ip_forward = 1 then run sysctl -p /etc/ sysctl.conf to enable the change
C. Add iptables rule iptables -A INPUT -m state --state NEW -p tcp --dport 8080 -j then restart httpd daemon
D. Add iptables rule iptables -A FORWARD-m state --state NEW -p tcp --dport 8080 –j ACCEPT then restart httpd daemon

**Answer:** D


**NEW QUESTION 3**
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 &

**Answer:** C


**NEW QUESTION 4**
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

**Answer:** C


**NEW QUESTION 5**
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; resizelv /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

**Answer:** D


**NEW 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

**Answer:** BD


**NEW QUESTION 7**
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

**Answer:** A


**NEW QUESTION 8**
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

**Answer:** C


**NEW QUESTION 9**
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

**Answer:** D


**NEW QUESTION 10**
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

**Answer:** A


**NEW QUESTION 10**

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

**Answer:** A

**NEW QUESTION 12**
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.

**Answer:** A

**NEW QUESTION 17**
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

**Answer:** A

**NEW QUESTION 20**
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

**Answer:** E

**NEW 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

**Answer:** D

**NEW QUESTION 25**
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

**Answer:** A

**NEW QUESTION 27**

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

**Answer:** C


**NEW QUESTION 32**
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

**Answer:** A


**NEW QUESTION 33**
Which of the following will provide a list of all flash, external, internal, and SSD drives?

A. lspci
B. lsmod
C. lsblk
D. lsusb

**Answer:** C


**NEW QUESTION 37**
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

**Answer:** D


**NEW QUESTION 41**
An analyst is trying to determine which public IP addresses are managed by Company A, but the script is not working correctly.

```
for ip in $(cat ip-list.txt)
do whois $ip | grep "Company A" > /dev/null
        if [ $? -ne 0 ]
                then echo "$ip"
        fi
done
```

Which of the following explains what is wrong with the script?

A. $(cat ip-list.txt) should be changed to `cat ip-list.txt` in the for statement.
B. The for should be changed to while in the loop.
C. The > should be changed to 2> in the do statement.
D. The -ne flag should be changed to -eq in the if statement.

**Answer:** A


**NEW QUESTION 42**
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

**Answer:** A


**NEW QUESTION 43**
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 -1

**Answer:** C

**NEW QUESTION 47**
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

**Answer:** B

**NEW QUESTION 52**
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
```

B.
```
# mkdir /mnt/testvol

# mount testhost:/testvolume /mnt/testbol
```

C.
```
# mkdir testhost:/testvolume at /mnt/testvol

# mount -a
```

D.
```
# mkdir /mnt/testvol

# echo "testhost:/testvolume /mnt/testvol" >> /mnt/mnttab

# mount -a
```

**Answer:** C

**NEW QUESTION 53**
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

**Answer:** A

**NEW QUESTION 57**
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

**Answer:** B

**NEW QUESTION 59**
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/modprbe-bluetooth
D. echo "rmod bluetooth" > /etc/modprobe.d/rmmod-bluetooth

**Answer:** C


## NEW QUESTION 64

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>

**Answer:** A


## NEW QUESTION 69

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

**Answer:** C


## NEW QUESTION 72

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

**Answer:** C


## NEW QUESTION 75

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

**Answer:** C


## NEW QUESTION 80

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

**Answer:** D


## NEW QUESTION 81

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

**Answer:** C


**NEW QUESTION 86**
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

**Answer:** B


**NEW QUESTION 89**
After installing a new web server, you are unable to browse to the default web page. INSTRUCTIONS
Review all the command output and select the command needed to remediate the issue.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

**Commands**

```
[root@webserver log]# getenforce
[root@webserver log]# getsebool -a | grep httpd
[root@webserver log]# netstat -antp
[root@webserver log]# ss -antp
[root@webserver log]# ps -ef | grep nginx
[root@webserver log]# grep avc /var/log/audit/audit.log
[root@webserver log]# more /var/log/web/access_log
[root@webserver log]# more /var/log/web/error_log
[root@webserver log]# ls -la
[root@webserver log]# journalctl -u nginx -l
[root@webserver log]# systemctl status webserver
[root@webserver log]# sealer
```

**Answer**

```
[root@webserver log]#


                                                                    ▼

systemctl restart nginx
setsebool -P httpd_read_user_content =1
restorecon -rv /home/comptia/html
kill -HUP 3431
sysctl -w net.ipv4 ip_forward = 1
chown -R comptia: /home/comptia/html/
firewall-cmd --zone=public --service=http --permanent
chmod 777 /home/comptia/html/
setfacl -m g:comptia:rwx /home/comptia/html/
cp -R /home/comptia/html /var/www/html
```

**Output**

A. Mastered
B. Not Mastered

**Answer:** A

**Explanation:**

**Commands**

```
[root@webserver log]# getenforce
[root@webserver log]# getsebool -a | grep httpd
[root@webserver log]# netstat -antp
[root@webserver log]# ss -antp
[root@webserver log]# ps -ef | grep nginx
[root@webserver log]# grep avc /var/log/audit/audit.log
[root@webserver log]# more /var/log/web/access_log
[root@webserver log]# more /var/log/web/error_log
[root@webserver log]# ls -la
[root@webserver log]# journalctl -u nginx -l
[root@webserver log]# systemctl status webserver
[root@webserver log]# sealer
```

**Answer**

```
[root@webserver log]#
```

```
systemctl restart nginx
setsebool -P httpd_read_user_content =1
restorecon -rv /home/comptia/html
kill -HUP 3431
sysctl -w net.ipv4 ip_forward = 1
chown -R comptia: /home/comptia/html/
firewall-cmd --zone=public --service=http --permanent
chmod 777 /home/comptia/html/
setfacl -m g:comptia:rwx /home/comptia/html/
cp -R /home/comptia/html /var/www/html
```

**Output**

**NEW QUESTION 93**
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/meninfo ; swapon / swapfile

**Answer:** A

**NEW QUESTION 98**
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' -eg 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.

**Answer:** B

**NEW QUESTION 100**
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

**Answer:** A

**NEW QUESTION 101**
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

**Answer:** D

**NEW QUESTION 104**
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

**Answer:** C

**NEW QUESTION 105**
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.



```
lvextend -L +10GB              pvcreate /dev/sdd
/dev/mapper/vgdata-data

resize2fs /dev/mapper/vgdata-   vgextend vgdata /dev/sdd
data
```

A. Mastered
B. Not Mastered

**Answer:** A

**Explanation:**



**NEW QUESTION 110**

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: 127.1.1.1 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.

**Answer:** D

**NEW QUESTION 114**
......