Oracle

Exam 1z0-460

Oracle Linux 6 Implementation Essentials

Version: 6.0

[Total Questions: 71]

Question No : 1

Finding a directive issued by your organization listing several important CVEs (Common Vulnerability and Exposures), you find one for Linux OpenSSH (CVE-2006-5764), which might apply to your oracle Linux systems. What command would help ensure that a patch has been applied to close this vulnerability on an Oracle Linux 6 system running OpenSSH server?

A. yum listcves openssh
B. rpm –qa | grep openssh | grep 5794
C. rpm –q - - changelog openssh | grep 5794
D. yum sec – list cves | grep 5794
E. yum sec – list cvesApplied

Answer: C

Explanation: *The command rpm -q --changelog rpm displays a detailed list of information (updates, configuration, modifications, etc.) about a specific package. This example shows information about the package rpm. However, only the last five change entries in the RPM database are listed. All entries (dating back the last two years) are included in the package itself. This query only works if CD 1 is mounted at /media/cdrom:

rpm -qp --changelog /media/cdrom/suse/i586/rpm-3*.rpm

*Is the patch RPM suitable for my system?

To check this, first query the installed version of the package. For pine, this can be done with

rpm -q pine
pine-4.44-188

Question No : 2

Which three parameters of a network interface can you modify by using the NetworkManager tool on your Oracle Linux 6 system?

A. IPv4 settings
B. IPv6 settings

C. Netconsole settings

D. MTU settings

E. IP Proxy settings

Answer: A,B,D

Explanation:

Connection name:	System eth0

☑ Connect automatically

Wired	802.1x Security	IPv4 Settings	IPv6 Settings

MAC address: 52:54:00:26:9E:F1

MTU: automatic ⌃⌄ bytes

☑ Available to all users   Cancel   Apply...

http://dsilas.fedorapeople.org/deployment-guide/html/images/Network_Configuration-NM-Edit_System_eth0-Wired.png

Note:

1Right-click the NetworkManager icon in the notification area at the top-right corner of the Red Hat desktop and click "Edit Connections."

2
Click the "System eth0" connection on the wired tab and click "Edit."

3
Click the "IPv4 Settings" tab.

Question No : 3

Which two statements describe the capabilities used with the Unbreakable Enterprise Kernel?

A. Existing Red Hat Enterprise Linux 5 and 6 customers need to reinstall Oracle Linux to use the Unbreakable Enterprise Kernel.
B. The Unbreakable Enterprise kernel is the default kernel starting with Oracle Linux 5.6.
C. The Unbreakable Enterprise kernel is required when using multithreaded CPUs.
D. Oracle Clusterware, OCFS2, and the Enterprise Manager pack for Linux support are included with Oracle Linux Basic and Premier support.
E. Switching between the Red Hat Compatible kernel and the Unbreakable Enterprise kernel is simple process of changing kernels and glibc.

Answer: D,E

Explanation: *Commercial technical support is available through Oracle's Oracle Linux Support program, which supports Oracle Linux, and existing RHEL or CentOS installations(i.e. without reinstallation).

Note:
*The Unbreakable Enterprise Kernel Release 2 is Oracle's second major release of its heavily tested and optimized operating system kernel for Oracle Linux 5 and Oracle Linux 6.
Unbreakable Enterprise Kernel Release 2 is based on the mainline Linux kernel version 3.0.16 and boasts a wide range of new features and improvements relevant for enterprise workloads.

Incorrect:
Not A, not B:Unbreakable Enterprise Kernel Release 2 can be installed on Oracle Linux 5 Update 8 or newer, as well as on Oracle Linux 6 Update 2 or newer.

Question No : 4

View the exhibits.

```
[root@dbhost ~]# sar -u 2 5
Linux 2.6.39-100.5.1.el6uek.x86_64
x86_64_ (1 CPU)

04:43:21 PM   CPU    %user    %nice    %system    %iowait    %steal    %idle
04:43:23 PM   all    36.82    0.00     50.25      0.00       0.00      12.94
04:43:25 PM   all    34.67    0.00     50.25      0.00       0.00      15.08
04:43:27 PM   all    33.50    0.00     52.00      0.00       0.00      14.50
04:43:29 PM   all    32.16    0.00     52.26      0.00       0.00      15.58
04:43:31 PM   all    31.16    0.00     50.25      0.00       0.00      18.59
Average:      all    33.67    0.00     51.00      0.00       0.00      15.33
[root@dbhost ~]#
```

```
top - 16:39:07 up 1 day,  2:34,  2 users,  load average: 1.41, 0.64, 0.33
Tasks: 140 total,   2 running, 138 sleeping,   0 stopped,   0 zombie
Cpu(s): 36.0%us, 50.7%sy,  0.0%ni, 13.3%id,  0.0%wa,  0.0%hi,  0.0%si,  0.0%st
Mem:   2056568k total,  1635148k used,   421420k free,    41452k buffers
Swap:  4128764k total,        0k used,  4128764k free,   567176k cached

  PID USER      PR  NI  VIRT  RES  SHR S %CPU %MEM    TIME+  COMMAND
 5125 root      20   0 1886m 575m  22m R 73.4 28.6 94:17.31 npviewer.bin
 1942 root      20   0  150m  45m  11m S  6.0  2.2  2:48.36 Xorg
 2326 root       9 -11  495m 5044 3540 S  3.0  0.2 37:44.45 pulseaudio
 5059 root      20   0  879m 171m  29m S  2.7  8.5 10:27.23 firefox
 5113 root      20   0  318m  14m 8368 S  2.0  0.7  7:06.51 plugin-containe
    1 root      20   0 19376 1508 1212 S  0.0  0.1  0:00.62 init
    2 root      20   0     0    0    0 S  0.0  0.0  0:00.00 kthreadd
    3 root      20   0     0    0    0 S  0.0  0.0  0:03.91 ksoftirqd/0
    5 root      20   0     0    0    0 S  0.0  0.0  0:00.00 kworker/u:0
    6 root      RT   0     0    0    0 S  0.0  0.0  0:00.00 migration/0
    7 root      RT   0     0    0    0 S  0.0  0.0  0:01.25 watchdog/0
    8 root       0 -20     0    0    0 S  0.0  0.0  0:00.00 cpuset
```

Examine the output of sar command and the top command in the Exhibits. Which statement is the correct interpretation of this data?

A. The system is running low on swap space and memory.
B. CPU is Idle and the system has plenty of free memory available.
C. The CPU utilization is high and one process is using most of the CPU.
D. The system is idle with very little memory, CPU, and I/O utilization.

Answer: C
Explanation: From the top exhibit we see that npviewer.gin uses 73.4% of the available CPU.

Note:
*sar - Collect, report, or save system activity information.

*The sar command writes to standard output the contents of selected cumulative activity counters in the operating system. The accounting system, based on the values in the count and interval parameters, writes information the specified number of times spaced at the specified intervals in seconds.

*sar –u 2 5
Report CPU utilization for each 2 seconds. 5 lines are displayed.

Question No : 5

Which three steps are involved in the installing Ksplice on servers that will be updated?

A. You have to be logged as user "ksplice" on the server you want to prepare and install Oracle Ksplice on.
B. The Uptrack package needs access directly or through a proxy to the Oracle public yum repository (http://public-yum.oracle.com/) to download the required packages for the uptrack-* utilities to be able to work correctly.
C. Download the install-uptrack script using the "wget –N http://www.ksplice.com/uptrack/install-uptrack" command.
D. You have to be logged in as user "root" on the server you want to prepare and install Oracle ksplice on.
E. The uptrack package will set up a yum repository (/etc/yum.repos.d/ksplice-uptrack.repo) and download the required package for the uptrack-* utilities to be able to work correctly.
F. Download the ksplice ISO image from https://edelivery.oracle.com/linux and then run the "sh install-uptrack" script from the ISO image.

Answer: B,C,D
Explanation: B:Your system must have access to the internet to install Ksplice. If you are using a proxy, set the proxy in your shell:

export http_proxy=http://proxy.company.com:port
export https_proxy=http://proxy.company.com:port

CD:Once you have an access key run the following commands as root, replacing YOUR_ACCESS_KEY with the access key you received upon sign-up:

wget -N https://www.ksplice.com/uptrack/install-uptrack
sh install-uptrack YOUR_ACCESS_KEY

uptrack-upgrade–y

E:If you'd like Ksplice Uptrack to automatically install updates as they become available, run:

sh install-uptrack YOUR_ACCESS_KEY --autoinstall
in place of the above install-uptrack command, or set "autoinstall = yes" in your /etc/uptrack/uptrack.conf after installation.

Reference: Ksplice,Installation instructions

Question No : 6

What happens when the following command is run?

authconfig - - passalgo = md5 - - update

A. It produces the MD5 checksum of the input data.
B. It configures the MD5 checksum for newly authored documents
C. It converts the stdio input to MD5 algorithm.
D. It changes the user password hashing algorithm to MD5.

Answer: D
Explanation: To configure the Linux system to use theMD5algorithm, enter:
authconfig --passalgo=MD5--update

Note: The default algorithm for storing password hashes in /etc/shadow is MD5. I was told to use SHA-512 hashing algorithm. How do I set password hashing using the SHA-256 and SHA-512 under CentOS or Redhat Enterprise Linux 5.4?

You need to use authconfig command to setup SHA-256/512 hashing. This command provides a simple method of configuring /etc/sysconfig/network to handle NIS, as well as /etc/passwd and /etc/shadow, the files used for shadow password support. Basic LDAP, Kerberos 5, and SMB (authentication) client configuration is also provided.

Display Current Hashing Algorithm

Type the following command:
authconfig --test | grep hashing

Sample outputs:

password hashing algorithm is md5
Configure Linux Server To Use The SHA-512

To configure the Linux system to use the SHA-512 algorithm, enter:
authconfig --passalgo=sha512 --update

Question No : 7

As user bob, you have logged in to the system on a terminal and issued the following command to make the top command run in the background.

[bob@host -] top&

You exit from the terminal and log back as bob into the system at the same terminal. How is the background job affected?

A. The background job gets the foreground as soon as bob logs into the system.
B. The background job is suspended temporarily from the job and resumes when user bob logs back in to the system.
C. The background job starts running in the background again as soon as bob logs into the system.
D. The background job will not be affected.
E. The background job is deleted from the job pool and does not get listed using jobs command.

Answer: E

Question No : 8

Which rpm command can be used to find the package that owns the /etc/rsyslog.conf file?

A. rpm –query /etc/rsyslog.conf
B. rpm –gf /etc/rsyslog.conf
C. rpm –q1 /etc/rsyslog.conf
D. rpm –q /etc/rsyslog.conf

Answer: B

Explanation: Package Selection Optionsinclude:

-f <file>

Query package owning <file>

Note:
rpm -q — What does it do?

One of the nice things about using RPM is that the packages you manage don't end up going into some kind of black hole. Nothing would be worse than to install, upgrade, and erase several different packages and not have a clue as to what's on your system. In fact, RPM's query function can help you get out of sticky situations like:

*You're poking around your system, and you come across a file that you just can't identify. Where did it come from?

*Your friend sends you a package file, and you have no idea what the package does, what it installs, or where it originally came from.

*You know that you installed XFree86 a couple months ago, but you don't know what version, and you can't find any documentation on it.

The list could go on, but you get the idea. The rpm -q command is what you need. If you're the kind of person that doesn't like to have more options than you know what to do with, rpm -q might look imposing. But fear not. Once you have a handle on the basic structure of an RPM query, it'll be a piece of cake.

Question No : 9

On your Oracle Linux 6 system, you have to configure the eth0 network interface to 100 MB/sec, half duplex without trying to autonegotiate. Which command will help you configure this requirement?

A. # ifconfig eth0 speed 100 autoneg off duplex half
B. # ethtool interface eth0 speed 100 autoneg off duplex half
C. # ifconfig interface eth0 speed 100 autoneg off duplex half
D. # ethtool –seth0speed 100 autoneg off duplex half

Answer: D

Explanation: When I have a device that is acting up, I tend to run: ethtool ethX, check the Supported link modes, the Link partner advertised link modes and the actual speed and Duplex. If my Supported link mode is set low (say 10/Half for some reason) but my switch supports 1000baseT/Full then I'll use ethtool -s ethX to change my ethernet settings to 1000baseT/Full. Just about anything you see from: ethtool ethX, can be changed with ethtool -S ethX. In this case you would use the following:

ethtool -S eth0 speed 1000 duplex full autoneg on

Question No : 10

DTrace is being ported from Solaris to Oracle Linux. Which three statements are true for the DTrace tool?

A. DTrace allows static and dynamic tracing of your applications and your kernel.
B. DTrace tool is used to compile debug kernel modules and device drivers
C. DTrace allows you to dynamically define probe points on the fly.
D. DTrace probes and probe points are usually defined by the user using scripts written in a language called D.
E. DTrace tool is based on the strace Linux tool and includes both user and kernel strace features.

Answer: A,C,D

Explanation: A:DTrace is a comprehensive dynamic tracing framework created by Sun Microsystems for troubleshooting kernel and application problems on production systems in real time.

C:Key benefits and features of DTrace on Oracle Linux include:

/Designed to work on finding performance bottlenecks

/(C)Dynamically enables the kernel with a number of probe points, improving ability to service software

/Enables maximum resource utilization and application performance

/Fast and easy to use, even on complex systems with multiple layers of software

D:Testers write tracing programs (also referred to as scripts) using the D programming language (not to be confused with other programming languages named "D"). The language, a subset of C, includes added functions and variables specific to tracing. D programs resemble awk programs in structure; they consist of a list of one or more probes (instrumentation points), and each probe is associated with an action. These probes are comparable to a pointcut in aspect-oriented programming.

Question No : 11

Identify the option with two files that are found in the /etc/sysconfig directory.

A. /etc/sysconfig/autofs and/etc/sysconfig/authconfig
B. /etc/sysconfig/ifcfg-eth0 and/etc/sysconfig/atd
C. /etc/sysconfig/resolv.conf and/etc/sysconfig/network
D. /etc/sysconfig/resolv.conf and/etc/sysconfig/grub.conf

Answer: A

Explanation: *The /etc/sysconfig/autofs file defines custom options for the automatic mounting of devices.

*The /etc/sysconfig/authconfig file sets the kind of authorization to be used on the host.

Note:*/etc/sysconfig/network

Used to configure networking options.

Incorrect:

Not C, Not D:

* The program that resolves hostnames to IP addresses reads a file calledresolv.conf.

This file is located in /etc/resolv.confdirectory.

Question No : 12

Which two options can be completed when using the Firewall Configuration Tool, system – config – firewall?

A. Write complex firewall rules for checking, logging, and rejecting inbound and outbound connections
B. Enabling or disabling the firewall entirely
C. Build a filter to obfuscate sensitive data (national ID numbers, Credit Cards, and so on)
D. Select the services that have access to the network resource

Answer: B,C

Explanation: system-config-firewall

The GUI screen to control the firewall is available from the menu (System > Administration > Firewall) or can be started from the command line using the system-config-firewall command.

Once started, the toolbar provides buttons to allow the firewall to be enabled/disabled(B). You can also configure basic trusted services, such as SSH, FTP and HTTP(C), by putting a tick in the appropriate checkbox and clicking the "Apply" button on the toolbar.
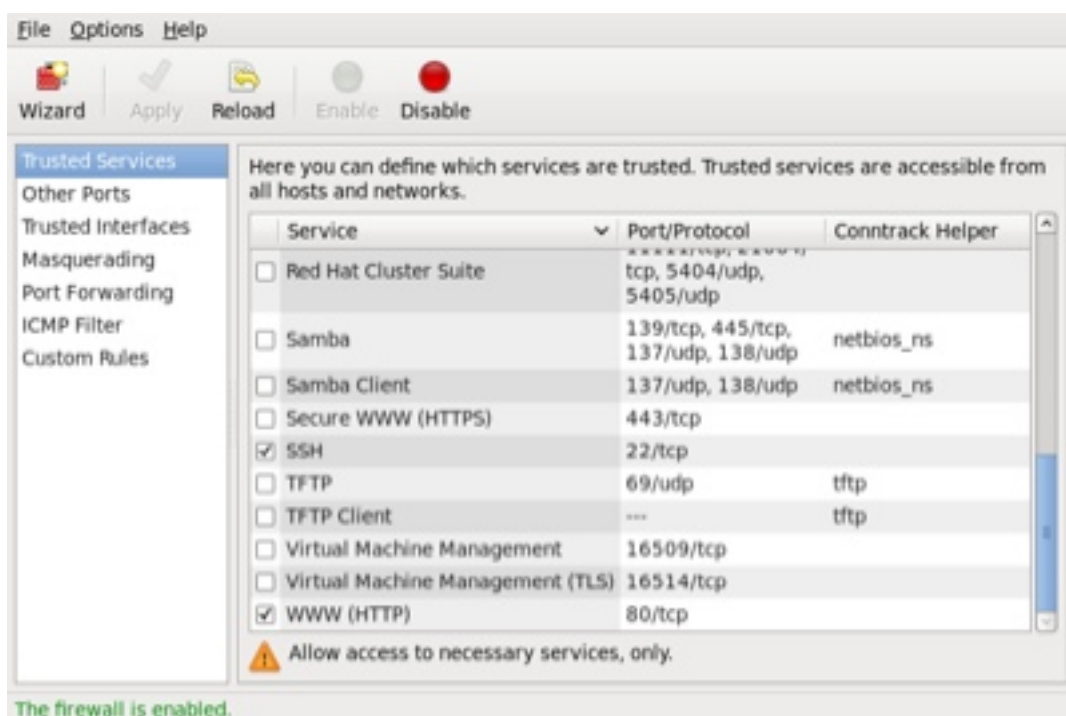
Firewall GUI - Trusted Services

The "Other Ports" section allows you to open ports that are not covered in the "Trusted Services" section.

Question No : 13

Identify the Oracle-supported source for obtaining Oracle Linux

A. From any good Linux distribution
B. From Oracle's eDelivery software delivery cloud
C. From Oracle Metalink Support
D. From Linux vendors such as Red Hat or SUSE
E. From Anaconda Installer

Answer: B

Explanation: *Oracle Software Delivery Cloud. Here you can find downloads for the Oracle Linux Operating System, Oracle VM, and Oracle VM Templates for both Linux and Solaris.

Question No : 14

View the output below. As oracle user, you run the following command on your Oracle Linux 6 system:

[oracle@dbhost ~] $

[oracle@dbhost ~] $ nice - - 10 ./myscript.sh &

[1] 2735

[oracle@dbhost ~] $ nice: cannot set niceness: permission denied

Why is the nice command failing?

A. Shell scripts cannot be assigned a negative nice value.
B. There is already another process running with same niceness value on this system.
C. A negative nice value can be set by the root user.

D. A nice value of -10 is not the permissible niceness range.

Answer: C

Explanation: Only a privileged user may run a process with lower niceness:

$ nice -n -1 nice

nice: cannot set niceness: Permission denied

0

$ sudo nice -n -1 nice

-1

Note:Sudo stands for either "substitute user do" or "super user do" (depending upon how you want to look at it). What sudo does is incredibly important and crucial to many Linux distributions. Effectively, sudo allows a user to run a program as another user (most often the root user).

Question No : 15

You have to mount the Oracle Linux ISO image file OracleLinux –R6 – U2 – Server – X86_64-dvd.iso to the /media/cdrom mount point. Which command will help you mount the Oracle Linux ISO image file?

A. # mount OracleLinux –R6 –U2 –Server X86_64-dvd.iso /media/cdrom
B. # mount –t DVD OracleLinux –R6 –U2-Server-X86_64-DVD.iso/media/cdrom
C. # mount /dvd/OracleLinux -R6 -U2- Server=X86_64-dvd.iso /media/cdrom/OracleLinux-R6-UI-Server-X86_64-dvd.iso
D. # mount – 0 ro, loop oracleLinux –R6 –U2 –Server –X86_64 –dvd.iso /media/cdrom

Answer: D

Explanation: Mount the DVD iso of the desired update of Oracle Linux Release 5.
Use the following command for mounting the DVD media inserted in /dev/cdrom

mount -r -o loop -t iso9660 /dev/cdrom /mnt

Use following command to mount iso image file

mount -o loop <iso image file name> /mnt

Question No : 16

You have to find the default runlevel of your Oracle Linux system.Whichfile will help you find this information?

C./etc/rc.d/rc.sysinit

D./etc/rc.local

E./etc/rc.d/init.d

A. /boot/grub/grub.conf
B. /etc/inittab

Answer: B

Explanation: The default run level is specified in the /etc/inittab file.

Question No : 17

Examine the following commands:

groupadd project

mkdir /usr/share/project

chown –R root.project /usr/share/project

qpasswd –a scott project

qpasswd –a foo project

chmod 2775 /usr/share/project

Based on the commands, which statement is correct?

A. Any new file created in the /usr/share/project folder by user scott will not be possible for foo to modify it.
B. All members of the project group need the administrator's help to change the file permission every time users write new files in the /usr/share/project folder.
C. Files created by all members of the project group in the /usr/share/project folder will get the same group permission as the folder itself.
D. The chmod command can only take a tree-digit argument.

Answer: A

Explanation: *Apermission of "2755" for a directory means that everyone has read and execute permission, while the file owner and members of the file's group additionally have write permission. And any files or subdirectories created in that directory will inherit the parent directory's group id.

Incorrect:
Not D: chmod 2775 is a valid command.

Question No : 18

Which three statements describe the Unbreakable Enterprise Kernel (UEK)?

A. The UEK contains proprietary Linux Kernel enhancements only available to Oracle Linux.
B. The UEK is available for x86 (32 bit), x86-64 (64 bit), ARM 32 bit, and ARM 64 bit servers.
C. Existing applications run unchanged with the UEK in place because all system libraries remain unchanged.
D. The UEK has more recent kernel enhancements for features like power management than the Red Hat Compatible Kernel.
E. The UEK has ASMlib included by default.

Answer: A,C,E

Explanation: A:The Unbreakable Enterprise Kernel Release 2 is Oracle's second major release of its heavily tested and optimized operating system kernel for Oracle Linux 5 and Oracle Linux 6.
C: Oracle claims that the Unbreakable Enterprise Kernel is compatible with RHEL, and Oracle middleware and third-party RHEL-certified applications can be installed and run

unchanged on Unbreakable Enterprise Kernel.

E:Oracle ASMlibisincluded by default

Incorrect:

Not B:Unbreakable Enterprise Kernel is available for x86-64 servers.

Question No : 19

Identify three valid modes for SELinux.

A. Disabled
B. Enforcing
C. Running
D. Permissive
E. Enabled
F. High_level
G. Label_only

Answer: A,B,D

Explanation: SELinux has three modes:

Enforcing: SELinux policy is enforced. SELinux denies access based on SELinux policy rules.

Permissive: SELinux policy is not enforced. SELinux does not deny access, but denials are logged for actions that would have been denied if running in enforcing mode.

Disabled: SELinux is disabled. Only DAC rules are used.

Question No : 20

Which two features are available with the Unbreakable kernel R2, but not with the Red Hat Compatible Kernel?

A. Oracle Clusterware for Linux
B. Up to 4-petabyte cluster volumes with OCFS2
C. Ksplice zero downtime patching
D. Transparent Huge Pages support (that is, 2 MB instead of 4 KB)

Answer: A,B

Explanation: Oracle's Unbreakable Enterprise Kernel
KEY FEATURES:
*Modern kernel based on 2.6.32,
optimized by Oracle for server
deployments
*Includes OCFS(Oracle Cluster File System)2 1.6 for clustered volumes
*Includes OFED 1.5.1
*Advanced NUMA support
*New diagnostic and tracing tools,
including performance counters
*Complete data integrity checking from
application to disk
*Hardware fault management

Question No : 21

You have successfully installed the uptrack tool on servers you will be using ksplice kernel updates. Which two options are correct descriptions of commands you can run?

A. "uptrack-show": list the active Oracle Ksplice updates in your running kernel.
B. "uptrack-upgrade": connect to the Uptrack update server, check and apply new updates when available.
C. "uptrack-upgrade": connect to the Uptrack update server, check and download a new update to the uptrack tool.
D. "uptrack-show <key>": list the servers that have the uptrack tool installed using the current key.

Answer: A,B

Explanation: A:uptrack-show

You can see what updates have been installed by running uptrack-show:

B:uptrack-upgrade

Ksplice updates are the same security and bugfix updates you would get from your Linux vendor, packaged in a special rebootless form. To apply Ksplice updates, just runuptrack-