# Topic 102: (12) Linux Installation and Package Management

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# 102.1 (2) Design hard disk layout

# **Question: 28**

102.1 Design hard disk layout

What can the Logical Volume Manager (LVM) be used for? (Choose THREE correct answers.)

- A. To create RAID 9 arrays.
- B. To dynamically change the size of logical volumes.
- C. To encrypt logical volumes.
- D. To create snapshots.
- E. To dynamically create or delete logical volumes.

**Answer: B,D,E** 

#### **Question: 33**

102.1 Design hard disk layout

Which of the following is correct when talking about mount points?

- A. Every existing directory can be used as a mount point.
- B. Only empty directories can be used as a mount point.
- C. Directories need to have the SetUID flag set to be used as a mount point.
- D. Files within a directory are deleted when the directory is used as a mount point.

Answer: A

#### **Question: 36**

102.1 Design hard disk layout

Which world-writable directory should be placed on a separate partition in order to prevent users from being able to fill up the / filesystem? (Specify the full path to the directory.)

Answer: /tmp, tmp,/var/tmp, /tmp/, /var/tmp/

#### **Question: 43**

102.1 Design hard disk layout

Which command will disable swapping on a device? (Specify ONLY the command without any path or parameters.)

Answer: swapoff, /sbin/swapoff

## **Question: 48**

#### 102.1 Design hard disk layout

To prevent users from being able to fill up the / partition, the \_\_\_\_\_\_ directory should be on a separate partition if possible because it is world writeable.

Answer: /tmp, tmp

## **Question: 54**

#### 102.1 Design hard disk layout

Typically, which top level system directory is used for files and data that change regularly while the system is running and are to be kept between reboots? (Specify only the top level directory)

Answer: /var, /var/, var, var/

# **Question: 171**

#### 102.1 Design hard disk layout

Which of the following partition types is used for Linux swap spaces when partitioning hard disk drives?

A. 82

B. 83

C. 8e

D. fd

E. 7

Answer: A

#### **Question: 173**

#### 102.1 Design hard disk layout

When planning a partition scheme, which of the following directories could be considered for separate partitions? (Choose three.)

A. /etc

B. /home

C. /var

D. /lib

E. /opt

Answer: B,C

## **Question: 174**

102.1 Design hard disk layout

How can the list of files that would be installed by the RPM package file apache-xml.rpm be previewed?

- A. rpm -qp apache-xml.rpm
- B. rpm -qv apache-xml.rpm
- C. rpm -ql apache-xml.rpm
- D. rpm -qpl apache-xml.rpm

**Answer: D** 

# **Question: 218**

102.1 Design hard disk layout

What is contained on the EFI System Partition?

- A. The Linux root file system
- B. The first stage boot loader
- C. The default swap space file
- D. The Linux default shell binaries
- E. The user home directories

Answer: B

# 102.2 (2) Install a boot manager

# **Question: 24**

#### 102.2 Install a boot manager

After modifying GNU GRUB's configuration file, which command must be run for the changes to take effect?

- A. kill -HUP \$(pidof grub)
- B. grub-install
- C . gr ub
- D. No action is required

Answer: D

## **Question: 27**

#### 102.2 Install a boot manager

Which of the following options is used in a GRUB Legacy configuration file to define the amount of time that the GRUB menu will be shown to the user?

- A. hide menu
- B. splash
- C. timeout
- D. showmenu

**Answer: C** 

## **Question: 39**

#### 102.2 Install a boot manager

What is the name of the main configuration file for GNU GRUB? (Specify the file name only without any path.)

Answer: menu.lst, grub.conf, grub.cfg

#### **Question: 45**

#### 102.2 Install a boot manager

Which of the following commands overwrites the bootloader located on /dev/sda without overwriting the partition table or any data following it?

A. dd if=/dev/zero of=/dev/sda bs=512

- B. dd if=/dev/zero of=/dev/sda bs=512 count=1
- C. dd if=/dev/zero of=/dev/sda bs=440 count=1
- D. dd if=/dev/zero of=/dev/sda bs=440

**Answer: C** 

# **Question: 168**

102.2 Install a boot manager

What does the command grub-install /dev/sda do?

- A. GRUB creates partitions on the device/dev/sdato be used with Linux.
- B. GRUB sets the default BIOS boot device to/dev/sda.
- C. GRUB installs all required files and configures the boot loader on device/dev/sda.
- D. GRUB recompiles the Linux Kernel and installs it on the Master Boot Record of device/dev/sda.

**Answer: C** 

#### **Question: 169**

102.2 Install a boot manager

Which of the following statements describes a difference between GNU GRUB Legacy and GRUB 2?

- A. GRUB 2 no longer requires a configuration file.
- B. Partition numbers start at 0 in GRUB Legacy and 1 in GRUB 2.
- C. grub-mkconfigonly works with GRUB Legacy if the--version 1 option is used.
- D. The configuration filemenu.lst(andgrub.conf) have been replaced withgrub.config.

**Answer: B** 

#### **Question: 220**

102.2 Install a boot manager

Which of the following files exist in a standard GRUB 2 installation? (Choose two.)

- A. /boot/grub/stages/stage0
- B. /boot/grub/i386-pc/1vm.mod
- C. /boot/grub/fstab
- D. /boot/grub/grub.cfg
- E. /boot/grub/linux/vmlinuz

Answer: B,D

# **Question: 223**

102.2 Install a boot manager

Which of the following commands installs GRUB 2 into the master boot record on the third hard disk?

- A. grub2 install /dev/sdc
- B. grub-mkrescue /dev/sdc
- C. grub-mbrinstall /dev/sdc
- D. grub-setup /dev/sdc E. grub-install /dev/sdc

**Answer: E** 

# 102.3 (1) Manage shared libraries

# **Question: 29**

102.3 Manage shared libraries

Which of the following commands updates the linker cache of shared libraries?

- A. mkcache
- B. soconfig
- C. mkldconfig
- D. Iddconfig
- E. ldconfig

**Answer: E** 

## **Question: 35**

102.3 Manage shared libraries

Which of the following environment variables overrides or extends the list of directories holding shared libraries?

A. LD\_LOAD\_PATH

B. LD\_LIB\_PATH

C. LD\_LIBRARY\_PATH

D. LD\_SHARE\_PATH

E. LD\_RUN\_PATH

**Answer: C** 

#### **Question: 47**

102.3 Manage shared libraries

To what environment variable will you assign or append a value if you need to tell the dynamic linker to look in a build directory for some of a program's shared libraries?

A. LD LOAD PATH

B. LD LIB PATH

C. LD LIBRARY PATH

D. LD\_SHARE\_PATH

E. LD RUN PATH

**Answer: C** 

**Question: 177** 

## 102.3 Manage shared libraries

Which command shows all shared libraries required by a binary executable or another shared library? (Specify ONLY the command without any path or parameters.)

**Answer: ldd** 

# **Question: 219**

## 102.3 Manage shared libraries

Which of the following directories on a 64 bit Linux system typically contain shared libraries? (Choose two.)

- A. ~/.lib64/
- B. /usr/lib64/
- C. /var/lib64/
- D. /lib64/
- E. /opt/lib64/

Answer: B,D

# 102.4 (3) Use Debian package management

## **Question: 25**

102.4 Use Debian package management

Which of the following commands is used to update the list of available packages when using dpkg based package management?

- A. apt-get update
- B. apt-get upgrade
- C. apt-cache update
- D. apt-get refresh
- E. apt-cache upgrade

Answer: A

# **Question: 26**

102.4 Use Debian package management

Which of the following commands lists the dependencies of a given dpkg package?

- A. apt-cache depends-onpackage
- B. apt-cache dependencies package
- C. apt-cache depends package
- D. apt-cache requires package

Answer: C

# **Question: 40**

102.4 Use Debian package management

When removing a package, which of the following dpkg options will completely remove the files including configuration files?

- A. --clean
- B. --delete
- C. --purge
- D. -remove

**Answer: C** 

# **Question: 41**

102.4 Use Debian package management

Which file should be edited to select the network locations from which Debian installation package files are loaded?

- A. /etc/dpkg/dpkg.cfg
- B. /etc/apt/apt.conf
- C. /etc/apt/apt.conf.d
- D. /etc/apt/sources.list
- E. /etc/dpkg/dselect.cfg

Answer: D

#### **Question: 44**

102.4 Use Debian package management

Which Debian package management tool asks the configuration questions for a specific already installed package just as if the package were being installed for the first time? (Specify ONLY the command without any path or parameters.)

Answer: dpkg-reconfigure

## **Question: 46**

102.4 Use Debian package management

Which of the following commands can be used to perform a full text search on all available packages on a Debian system?

A. a pt

B. apt-cache

C. apt-get

D. apt-search

E . dpkg

**Answer: B** 

#### **Question: 50**

102.4 Use Debian package management

The dpkg-\_\_\_ command will ask configuration questions for a specified package, just as if the package were being installed for the first time.

**Answer: reconfigure** 

**Question: 51** 

#### 102.4 Use Debian package management

Which of the following apt-get commands will install the newest versions of all currently installed packages without removing any packages or installing new packages that are not already installed?

- A. auto-update
- B. upgrade
- C. dist-upgrade
- D. install
- E. update

**Answer: B** 

# **Question: 52**

102.4 Use Debian package management

What is the difference between the --remove and the --purge action with the dpkg command?

- A. --remove removes the program, --purge also removes the config files
- B. --remove only removes the program, --purge only removes the config files
- C. --remove removes a package, --purge also removes all packages dependent on it
- D. --remove removes only the package file itself, --purge removes all files related to the package

Answer: A

# **Question: 175**

102.4 Use Debian package management

Which command will uninstall a package but leave its configuration files in case the package is reinstalled?

- A. dpk g s pkgname
- B. dpk g L pkgname
- C. dpk g P pkgname
- D. dpkg -r pkgname

**Answer: D** 

## **Question: 176**

102.4 Use Debian package management

Which command is used to query information about the available packages on a Debian system?

- A. apt-cache
- B. apt-get
- C. apt-search
- D. dpkg
- E. dpkg-search

Answer: A

# **Question: 178**

#### 102.4 Use Debian package management

Which of the following apt-get commands will install the newest versions of all currently installed packages?

- A. auto-update
- B. full-upgrade
- C. dist-upgrade
- D. install
- E. update

**Answer: C** 

# **Question: 217**

#### 102.4 Use Debian package management

A Debian package creates several files during its installation. Which of the following commands searches for packages owning the file /etc/debian version?

- A. apt-get search /etc/debian version
- B. apt -r /etc/debian version
- C. find /etc/debian version -dpkg
- D. dpkg -S /etc/debian\_version
- E. apt-file /etc/debian\_version

**Answer: D** 

# 102.5 (3) Use RPM and YUM package management

# **Question: 30**

102.5 Use RPM and YUM package management

Which of the following commands lists all currently installed packages when using RPM package management?

```
A. yum --query --all
```

B. yum --list --installed

C. rpm --query --a 11

D. rpm --list -installed

**Answer: C** 

# **Question: 31**

102.5 Use RPM and YUM package management

Which of the following commands can be used to download the RPM package kernel without installing it?

A. yum download --no-install kernel

B. yumdownloader kernel

C. rpm --download --package kernel

D. rpmdownload kernel

**Answer: B** 

#### **Ouestion: 32**

102.5 Use RPM and YUM package management

When using rpm --verify to check files created during the installation of RPM packages, which of the following information is taken into consideration? (Choose THREE correct answers.)

- A. Timestamps
- B. MD5 checksums
- ${\bf C}$  . Inodes
- D. File sizes
- E. GnuPG signatures

Answer: A,B,D

**Question: 37** 

#### 102.5 Use RPM and YUM package management

Which RPM command will output the name of the package which supplied the file /etc/exports?

- A. rpm -F /etc/exports
- B. rpm -qf/etc/exports
- C. rpm -Kl /etc/exports
- D. rpm -qp /etc/exports
- E. rpm -qi/etc/exports

**Answer: B** 

## **Question: 38**

102.5 Use RPM and YUM package management

In which directory must definition files be placed to add additional repositories to yum?

Answer: /etc/yum.repos.d, /etc/yum.repos.d/, yum.repos.d/

#### **Question: 42**

102.5 Use RPM and YUM package management

Which option to the yum command will update the entire system? (Specify ONLY the option name without any additional parameters.)

Answer: update, upgrade

#### **Question: 53**

102.5 Use RPM and YUM package management

You want to preview where the package file, apache-xml.i386.rpm, will install its files before installing it. What command do you issue?

- A. rpm -qp apache-xml.i386.rpm
- B. rpm -qv apache-xml.i386.rpm
- C. rpm -ql apache-xml.i386.rpm
- D. rpm -qpl apache-xml.i386.rpm

**Answer: D** 

#### **Question: 170**

102.5 Use RPM and YUM package management

Which of the following commands updates the already installed RPM package rpm name?

- A. rpm --update rpmname
- B. rpm U rpmname
- C. rpm q rpmname

D. rpm --force rpmname

E . rpm - u rpmname

**Answer: B** 

# **Question: 172**

#### 102.5 Use RPM and YUM package management

Which of the following commands prints a list of available package updates when using RPM-based package management?

- A. dpkg list
- B. yum list
- C. dpkg check-update
- D. yum check-update
- E. yum list-update

**Answer: D** 

# **Question: 221**

#### 102.5 Use RPM and YUM package management

Which of the following commands installs all packages with a name ending with the string foo?

- A. zypper get "\*foo"
- B. zypper update "foo?"
- C. zypper force "foo\*"
- D. zypper install "\*foo"
- E. zypper add ".\*foo"

**Answer: D** 

# 102.6 (1) Linux as a virtualization guest

# **Question: 34**

102.6 Linux as a virtualization guest

Which function key is used to start Safe Mode in Windows NT?

- A. F10
- B . F8
- C . F6
- D. Windows NT does not support Safe Mode

**Answer: D** 

# **Question: 222**

102.6 Linux as a virtualization guest

Which of the following properties of a Linux system should be changed when a virtual machine is cloned? (Choose two.)

- A. The partitioning scheme
- B. The file system
- C. The D-Bus Machine ID
- D. The permissions of /root/
- E. The SSH host keys

**Answer: D,E**