≡ CompTIA Linux+ and LPIC Practice Tests

Chapter 2
Linux Installation and Package
Management(Domain 102)

THE FOLLOWING COMPTIA LINUX+/LPIC-1 EXAM OBJECTIVES ARE COVERED IN THIS CHAPTER:

- ✔ **102.1 Design hard disk layout**
- Allocate filesystems and swap space to separate partitions or disks
- Tailor the design to the intended use of the system
- Ensure the /boot partition conforms to the hardware architecture requirements for booting
- Knowledge of basic features of LVM
- The following is a partial list of the used files, terms and utilities:
- /(root) filesystem
- /var filesystem
- /home filesystem
- /boot filesystem
- swap space
- mount points
- partitions
- ✔ **102.2 Install a boot manager**
- Providing alternative boot locations and backup boot options
- Install and configure a boot loader such as GRUB Legacy
- Perform basic configuration changes for GRUB 2
- Interact with the boot loader
- The following is a partial list of the used files, terms, and utilities
- menu.lst, grub.cfg and grub.conf
- grub-install
- grub-mkconfig
- MBR
- ✔ **102.3 Manage shared libraries**
- Identify shared libraries
- Identify the typical locations of system libraries
- Load shared libraries
- The following is a partial list of the used files, terms and utilities
- ldd
- ldconfig
- /etc/ld.so.conf
- LD_LIBRARY_PATH

You have 2 days left in your trial, Gtucker716. Subscribe today. See pricing options.

- Find packages containing specific files or libraries which may or may not be installed
- Obtain package information like version, content, dependencies, package integrity and installation status (whether or not the package is installed)
- The following is a partial list of the used files, terms and utilities:
- /etc/apt/sources.list
- dpkg
- dpkg-reconfigure
- apt-get
- apt-cache
- aptitude
- ✓ **102.5 Use RPM and YUM package management**
- Install, re-install, upgrade and remove packages using RPM and YUM
- Obtain information on RPM packages such as version, status, dependencies, integrity and signatures
- Determine what files a package provides, as well as find which package a specific file comes from
- The following is a partial list of the used files, terms and utilities:
- rpm
- rpm2cpio
- /etc/yum.conf
- /etc/yum.repos.d/
- yum
- yumdownloader

1. 1. When partitioning a disk for a mail server running Postfix, which partition/mounted directory should be the largest in order to allow for mail storage?

   1. `/etc`
   2. `/usr/bin`
   3. `/mail`
   4. `/var`

2. 2. Which option within GRUB Legacy is used to indicate that a root partition contains a non-Linux kernel?

   1. `initrd`
   2. `non-linux`
   3. `rootnoverify`
   4. `root-win`

3. 3. Which option within a partition mounting command will cause the partition to be mounted in such a way as to prevent execution of programs?

   1. `execless`
   2. `stoprun`
   3. `noexec`
   4. `norun`

4. 4. Which command will output a new GRUB 2 configuration file and send the output to the correct location for booting?

   1. `update-grub > /boot/grub/grub.cfg`
   2. `update-grub boot > /boot/grub.cfg`
   3. `grub-rc.d`
   4. `grub-boot`

5. 5. What is the maximum number of primary partitions available on an MBR partitioning system?

1. Two
2. Four
3. One
4. Five

6. <u>6.</u> Which command is used to update the links and cache for shared libraries on the system?

   1. `ldcache`
   2. `cache-update`
   3. `link-update`
   4. `ldconfig`

7. 7. Which command and option are used to update a Debian system to the latest software?

   1. `apt-update`
   2. `apt-get upgrade`
   3. `dpkg -U`
   4. `apt-cache clean`

8. 8. Which option given to a `yum` command will install a given package?

   1. `update`
   2. `configure`
   3. `install`
   4. `get`

9. 9. What is the location of the home directory for the root user?

   1. `/home/root`
   2. `/home/su`
   3. `/root`
   4. `/`

10. 10. When using rpm2cpio, by default, the output is sent to which location?

    1. STDOUT
    2. The file `cpio.out`
    3. The file `a.out`
    4. The file `/tmp/cpi.out`

11. <u>11.</u> When working with partitions on disk, you see the type 0x82. Which type of partition is this?

    1. Linux
    2. Linux swap
    3. NTFS
    4. FAT32

12. <u>12.</u> Which partition or directory structure typically holds most of the programs for a Linux system?

    1. `/etc`
    2. `/usr`
    3. `/home`
    4. `/var`

13. 13. Your GRUB Legacy configuration includes a dual-boot option with Linux listed first and another operating system listed second. Which of the following options will boot to the Linux partition by default?

    1. `default=linux`

    2. `default=0`

    3. `default=1`

    4. `default=other`

14. **14.** Which file should you edit when using GRUB 2 in order to set things like the timeout?

    1. `/etc/default/grub`

    2. `/etc/grub/boot`

    3. `/etc/boot/grub.d`

    4. `/grub.d/boot`

15. **15.** Which `yum` option displays the dependencies for the package specified?

    1. `list`

    2. `deplist`

    3. `dependencies`

    4. `listdeps`

16. **16.** Which options for an `rpm` command will display verbose output for an installation along with progress of the installation?

    1. `-ivh`

    2. `-wvh`

    3. `--avh`

    4. `--ins-verbose`

17. **17.** Which of the following commands adds `/usr/local/lib` to the `LD_LIBRARY_PATH` when using Bash shell?

    1. `set PATH=/usr/local/lib`

    2. `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/lib`

    3. `LD_LIBRARY_PATH=/usr/local/lib`

    4. `connectpath LD_LIBRARY_PATH=/usr/local/lib`

18. **18.** Which command can be used to download an RPM package without installing it?

    1. `yumdl`

    2. `yumdownloadonly`

    3. `yumdown`

    4. `yumdownloader`

19. **19.** Which command will search for a package named `zsh` on a Debian system?

    1. `apt-cache search zsh`

    2. `apt-get search zsh`

    3. `apt-cache locate zsh`

    4. `apt search zsh`

20. **20.** Which option within `/etc/default/grub` is used to configure the default operating system for boot?

    1. `GRUB_OS`

    2. `GRUB_ON`

    3. `GRUB_DEFAULT`

    4. `DEFAULT_OS`

21. **21.** When found in a GRUB configuration file, what does the `ro` option indicate?

    1. Initially mount the root partition as read-only

2. Mount the kernel as read-only

3. Start the `init` program as read-once

4. Mount the root partition in Raised Object mode

22. 22. Within which directory will you find the repositories used by YUM?

1. `/etc/yum.conf`

2. `/etc/repos`

3. `/etc/yum.conf.d`

4. `/etc/yum.repos.d`

23. 23. Which `rpm` option can be used to verify that no files have been altered since installation?

1. `-V`

2. `-v`

3. `--verbose`

4. `--filesum`

24. 24. Which option for the `grub-mkconfig` command sends output to a file instead of STDOUT?

1. `-STDOUT`

2. `--fileout`

3. `-o`

4. `-f`

25. 25. The presence of `menu.lst` within the filesystem typically indicates which condition?

1. GRUB Legacy is in use on the system.

2. GRUB 2 is in use on the system.

3. An error has occurred creating the output to `menu.lst`.

4. The options for rescue boot have been changed.

26. 26. Which command is used to determine the libraries on which a given command depends?

1. `ldconfig`

2. `librarylist`

3. `listdeps`

4. `ldd`

27. 27. Which of the following is true of Linux swap space?

1. Swap is used to hold temporary database tables.

2. Swap is used as additional memory when there is insufficient RAM.

3. Swap is used by the mail server for security.

4. Swap is used to scrub data from the network temporarily.

28. 28. Which of the following is not typically used to store libraries?

1. `/lib`

2. `/etc/lib`

3. `/usr/lib`

4. `/usr/local/lib`

29. 29. Which of the following commands updates the package cache for a Debian system?

1. `apt-get cache-update`

2. `apt-cache update`

3. `apt-get update`

　　　4. `apt-get upgrade`

30. 30. Within which file are details of the current package repositories stored on a Debian system?

    1. `/etc/apt.list`

    2. `/etc/sources.list`

    3. `/etc/apt/sources.list`

    4. `/etc/apt.d/sources.list`

31. 31. Of the following choices, which size would be most appropriate for the /boot partition of a Linux system?

    1. Between 100 MB and 500 MB

    2. Between 1 GB and 10 GB

    3. /boot should not be partitioned separately.

    4. Less than 5 MB

32. 32. Which of the following commands initializes a physical disk partition for use with LVM?

    1. `lvmcreate`

    2. `pvcreate`

    3. `fvcreate`

    4. `lvinit`

33. 33. Which of the following commands installs GRUB into the MBR of the second SATA disk?

    1. `grub-install /dev/hdb2`

    2. `grub-install /dev/sda2`

    3. `grub-config /dev/sda`

    4. `grub-install /dev/sdb`

34. 34. Which command should be used to make changes to the choices made when a Debian package was installed?

    1. `dpkg-reconfigure`

    2. `dpkg -r`

    3. `dpkg --reconf`

    4. `apt-get reinstall`

35. 35. Which command is used to create a logical volume with LVM?

    1. `pvcreate`

    2. `lvmcreate`

    3. `lvcreate`

    4. `volcreate`

36. 36. What is the logical order for creation of an LVM logical volume?

    1. Physical volume creation, volume group creation, logical volume creation

    2. Physical volume creation, logical volume creation, volume group creation

    3. Logical volume creation, physical volume creation, volume group creation

    4. LVM creation, format, partition

37. 37. Which of the Debian package management tools provides a terminal-based interface for management?

    1. `apt-get`

    2. `dpkg`

3. `apt-cache`

4. `aptitude`

38. 38. Which option for `yum` performs a search of the package cache?

1. `seek`

2. `query`

3. `--search`

4. `search`

39. 39. Which command option for `rpm` can be used to show the version of the kernel?

1. `rpm kernel`

2. `rpm -q kernel`

3. `rpm search kernel`

4. `rpm --list kern`

40. 40. Assuming a menu entry of "Debian" in your GRUB configuration, which option in `/etc/default/grub` would set that as the default operating system to boot?

1. `GRUB_OS`

2. `GRUB_OS_DEF`

3. `GRUB_DEFAULT`

4. `GRUB_CONF`

41. 41. Which option in `/etc/yum.conf` is used to ensure that the kernel is not updated when the system is updated?

1. `exclude=kernel*`

2. `exclude-kernel`

3. `updatekernel=false`

4. `include-except=kernel`

42. 42. Which partition type should be created for a Linux system non-swap partition?

1. 82

2. 83

3. 84

4. L

43. 43. Which command should be run after making a change to the `/etc/default/grub` file?

1. `grub`

2. `grub-mkconfig`

3. `grub-inst`

4. `reboot`

44. 44. Which command searches for and provides information on a given package on a Debian system, including whether or not the package is currently installed?

1. `dpkg -i`

2. `dpkg -s`

3. `apt-cache`

4. `apt-info`

45. 45. Which command is used to search for physical volumes for use with LVM?

1. `lvmcreate`

2. `pvcreate`

3. `lvmdiskscan`

4. `lvmscan`

46. **46.** Which option added to `yumdownloader` will also download dependencies?

1. `--deps`

2. `--resolve`

3. `--resdeps`

4. `-d`

47. **47.** Which of the following installs a previously downloaded Debian package?

1. `dpkg -i <package name>`

2. `apt-install <package name>`

3. `apt-slash <package name>`

4. `dpkg -U <package name>`

48. **48.** A hard drive is reported as hd(0,0) by the GRUB Legacy configuration file. To which of the following disks and partitions does this correspond?

1. `/dev/hdb2`

2. `/dev/hda0`

3. `/dev/disk1`

4. `/dev/sda1`