Exam Report: 2.10.6 Practice Questions

Date: 2/22/2020 7:20:36 pm
Time Spent: 6:58

Candidate: Garsteck, Matthew
Login: mGarsteck

Overall Performance

Your Score: 67%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Correct

The **ls** command in the current working directory gives the following listing:

lrwxrwxrwx 1 root root 4 2010-11-05 mydata -> shantsgems
-rwxr-xr-x 1 root root 382 2010-10-05 shantsgems

Which of the following is true of the files in this listing?

- The mydata file is a symbolic link to the shantsgems file.
- The shantsgems file is a link to the mydata file.
- The mydata file is a hard link to the shantsgems file.
- The shantsgems file is a backup of the mydata file.

Explanation

The "lrwxrwxrwx 1 root root 4 2010-11-05 mydata -> shantsgems" listing indicates that mydata is a symbolic link to the shantsgems file.

A hard link will have a dash as the first letter of the permission string.

A backup file is identified by a tilde following the file name.

The mydata file is a symbolic link to the shantsgems file, not the other way around.

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_01]

Question 2: Incorrect

Ted, a Linux user, creates symbolic links in his home directory to a set of files in their **/data** directory using the **ln -s** command. Later, a system administrator deletes the files in the /data directory.

What happens to the symbolic links that Ted created?

- The links in Ted's home directory are automatically removed when the administrator deletes the files.
- The symbolic links still exist in Ted's home directory, but they are useless because the link has been broken.
- ~~Ted can still access the files until the system is rebooted even though they are deleted because the links point to a cached copy of the files in memory.~~
- The files would is not deleted because duplicate files were created when Ted created the links.

Explanation

When a symbolic link is created, a new entry is created in the file system. If the original file is deleted, the link still exists, but is broken.

No duplicate files are created when symbolic links are created.

Symbolic links are stored in the file system, not in memory.

Deleting a file will not automatically delete symbolic links that point to the file.

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_02]

Question 3: Correct

Drag the permission string on the left to the category on the right. Some permission strings will not be used.

Symbolic link

✓ lrwxrwxrwx

Hard link

✓ -rwxr-xr-x

Explanation

The first character in the permission string determines the category as follows:

l = symbolic link

d = directory

- = hard link (or original file)

s = socket

p = pipe

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_03]

Question 4: Correct

Which of the following is a characteristic of a hard link?

- ○ Distinct (non-duplicate) inode.
- ○ Lowercase L (l) as the first character in the permission string.
- ➡ ◉ Valid inode for the file data even if the original file is deleted.
- ○ Works across volumes and file systems.

Explanation

A hard link maintains a valid inode for the file data even if the original file is deleted.

A hard link has a duplicate inode.

A hard link must be on the same partition and do not work across volumes and file systems.

A hard links has a dash as the first character in the permission string (example: -rwxrwxrwx).

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_04]

Question 5: Correct

Which of the following is a characteristic of a symbolic link?

- Distinct (non-duplicate) inode.
- Dash (-) as the first character in the permission string.
- Valid pointer to the linked file's data even if the original linked file is deleted.
- Indistinguishable from the original linked file.

Explanation

A symbolic link has a distinct inode. However, this inode specifies where the link physically exists on a disk, not where the data for the linked file exists.

The pointer in a symbolic link is broken when the original linked file is deleted.

A symbolic link has a lower case L (l) as the first character in the permission string. For example, lrwxrwxrwx.

A symbolic link is only a pointer to a linked file and can be distinguished by both a lower case l as the first character in the permission string and also by the (->) characters that follow the symbolic link name when the **ls -l** command is run.

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_05]

Question 6: Incorrect

Leroy tries to copy some files to an ext3 volume and received the following error:

"No space left on device."

Leroy executes the **df** command and determines that there is sufficient space to copy the files. He also verifies that he has permission to copy the files.

Which of the following BEST describes Leroy's problem?

- The File Allocation Table is full.
- The files have the immutable attribute set, so they cannot be copied to the destination.
- ~~The destination directory is set to read-only.~~
- The number of inodes has been exhausted.

Explanation

Even though there is sufficient space on the storage device, the error indicates that the system has run out of inodes. An inode is required for every file and folder stored on the system.

File Allocation Tables (FAT) are not used on ext3 file systems.

Having the immutable attribute on the source files would not cause the copy to fail.

Leroy had verified the permissions, and that is not the cause of the error.

References

Linux Pro - 2.10 Links
[e_link_lp5.exam.xml Q_LN_LP5_INODES]