8.10.5 Practice Questions

Candidate: Ethan Bonavida (suborange)
Date: 12/1/2022 10:22:48 pm • **Time Spent:** 00:41

Score: 80% Passing Score: 80%

Question 1: ✔ Correct

A user calls the help desk. Each time he creates a new text file, permissions of 640 are applied to the file, and he must use **chmod** to set them to 644.

What command should you enter in the user's profile to set the default permission for newly created files to 644?

- **umask 640**
- **umask -640**
- **umask 0022** ➡
- **umask 0027**

Explanation

The user currently has an umask value of 0027, which is what is causing the new files to have permissions of 640. Changing this value to 0022 will allow all newly created files to have permissions of 644.

References

8.10.3 The umask Command Facts

q_umask_lp5_01.question.fex

Question 2: ✔ Correct

While reading about file system permissions in Linux, you discover that the default permissions assigned to new files when they are created are *rw-rw-rw-* (666 octal), and new directories are *rwxrwxrwx* (777 octal).

However, when you create a new file in a directory called */data*, the permissions assigned are *rw-r--r--*.

Which of the following BEST explains the results you are seeing?

- ➡ ◉ The umask must be set to 0022 and, therefore, block the write permission for the group owner and everyone else.
- ○ You are logged in as the root user, and all files created by the root user are assigned these permissions. Only normal users get rwxrwxrwx (777 octal) permissions on newly created files.
- ○ Because you are logged in as a normal user and not the root user, all files that you create will be created with a more restrictive set of permissions.
- ○ There are more restrictive permissions assigned to the /data directory, and any new files created inside that directory will inherit the more restrictive permissions.

Explanation

The default permissions for directories are *rwxrwxrwx* (777 octal) and *rw-rw-rw* (666 octal) for files. The way that you override these permissions is by setting the umask to block the permissions that you do not want set. The umask is typically set system-wide for all users, including the root user.

References

8.10.3 The umask Command Facts

q_umask_lp5_02.question.fex

Question 3: ✔ Correct

You need to create a large number of files, and you would like to ensure that you, the user owner, are the only person that has read and write permissions to the files. The files will be located in a number of different directories that already contain other files you don't want modified.

How could you BEST create these files with the correct permissions using the LEAST amount of effort?

- Type **umask 6600** to change your umask.
- Make a list of all the files you created and run *umask 0066* on each of them to change their permissions.
- ➡ Type **umask 0066** to change your umask.
- Run **chmod -R 600** on all of the directories in which you created the new files.

Explanation

A umask of 0066 would block the read and write bits for the group owner and the world/everyone. By setting the umask first, all files created after would have these permissions. The umask command only changes the umask in memory, which affects the creation of new files.

The umask command with 6600 is incorrect because it would block the read and write permissions for the user owner.

Running the chmod command on a directory would change the permissions on all files in that directory.

References

8.10.3 The umask Command Facts

q_umask_lp5_03.question.fex

Question 4: ✔ Correct

What is the typical default umask value?

022

Explanation

The default umask value is typically 022 (but some distributions vary from this standard).

A *umask* changes (removes) the default file and directory permissions. By default, files receive rw-rw-rw- (666) permissions, and directories receive rwxrwxrwx (777) permissions when they are created. In most cases, the default assignment gives excessive permission to files and directories.

References

8.10.3 The umask Command Facts

q_umask_lp5_04.question.fex

Question 5: ✕ Incorrect

For Linux files, the default permission is 666, and the default umask is 022. When a new file is created, it will be assigned 644 (rw-r--r--) permissions.

If the umask is set to 027, what permissions will be assigned for newly created files?

- ➡ 640 (rw-r-----)
- 666 (rw-rw-rw-)
- 660 (rw-rw----)
- ~~644 (rw-r--r--)~~

Explanation

A default file permission of 666 and umask of 027 results in 640 (rw-r-----).

660 (rw-rw----) has a umask of 007.

644 (rw-r--r--) has a umask of 022.
666 (rw-rw-rw-) has a umask of 000.

References

8.10.3 The umask Command Facts

q_umask_lp5_05.question.fex