

INGÉ1 - UNIX

LAB 5 – Access Rights/User Management

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Exercise 1 : Permissions

- Q1.** Create the **permissions** directory in the user's home folder. Go to the **permissions** directory and create the **userfichier** file
- Q2.** Copy the **/etc/hosts** file to the current directory. Who is the owner of this file?
- Q3.** Log in as **root** and create the **rootfile** file in the **permissions** directory
- Q4.** Return to the user account, who owns the file created by **root**?
- Q5.** Open **rootfile** with a text editor and try to modify its content. Why is this operation not possible?
- Q6.** Can the user be the owner of **rootfile**? What are the two solutions in this case?
- Q7.** Write the command that grants all rights to the user on the contents of the **permissions** folder and allows only read access for other users.
- Q8.** What are the rights assigned by the following numerical representations: **751**, **521**, **214**, **150**, **0**, **2**?
- Q9.** What is the numerical code for each of the following permissions: **"rwxrwx--"**, **"r-xr-xr-"**, **"r-----"**, **"-x-wx-w-"**?
- Q10.** What are the rights assigned by the following symbolic forms: **"ugo-xrw"**, **"a=rwx"**, **"0"**, **"a+rwx"**, **"a="**, **"go+r"**, **"="**, **"ou-xw"**, **"gu="**, **"og-x"**, **"oug="**, **"uo+wr"**?
- Q11.** Remove all access rights for the hosts file. Can the user read this file? How can we display its content without adding read permission?

Exercise 2: User/Group Management

Q1. Log in as **root** and create two users **user1** and **user2** with passwords identical to the usernames.

Q2. What are the group names of each of the two users created previously?

Q3. Create a new user group called **students** and add **user1** and **user2** to this new group. Verify the result.

Q4. Log in as **user1** and try to create the **user1file** file. Why is it not allowed to create **user1file** in a user directory other than **user1**'s home directory? What is the solution to this problem?

Q5. Once **user1file** is created, who is its owner? Change the owner of **user1file** to **user1**. Verify the result.

Q6. Log in as **user2** and try to write to **user1file**. Why can't user **user2** write to **user1file**? How can **user2** modify the content of **user1file** without going through **root** or belonging to the administrators group?

Q7. Change the password of **user2** and grant administrative rights to **user1**.

Q8. Remove the membership of **user1** and **user2** from the **students** group. Then, delete the **students** group and finally delete the users **user1** and **user2** as well as their home directories.