

Linux Access Control

The goal of this homework is to better understand how Linux access control works. Naturally, you need to use a Linux machine to solve this problem. First, you need to download and install the VM environment that is set up for the homework exercises. Remember that the login and root password is “student”. Once the VM is ready, download the ‘Ecorp.py’ script. It provides a command-line interface for interacting with the problem. You should not modify this script.

New IT manager

You are the new IT manager of a big company called E corp. Your boss, Phillip Price, just sent you an email. In this email you will find the first task that is assigned to you. You can easily access your mailbox using the ‘get-email’ command of the ‘Ecorp.py’ script as seen bellow. Your email password is your sciper. Be careful to enter it correctly otherwise you cannot pass the homework.

```
$ python3 Ecorp.py get-email $SCIPER
```

The task is simple. You must create a folder called fiveNine and you will have to assign the access rights to the employees of the company. For a precise description of your task, please read the email sent by Mr. Price. This email specifies the owners, owners’ departments, and names of all files you need to create to complete your task. The content of the files does not matter but make sure that the access rights and file names are exact matches (case sensitive) of the specification. Moreover, the fiveNine folder should not contain any files besides the ones you have just created. You should get a result similar to the one in the picture below.

Once you are done, you can run the ‘Ecorp.py’ script with the ‘share’ command as seen bellow to make the fiveNine folder available to all your colleagues. If access rights are correct, you will receive a grade token which you can submit to our site and pass the exercise. Grade tokens are non-transferable.

```
$ python3 Ecorp.py share
```

```
com301@com301-VirtualBox: ~/Desktop/dist
com301@com301-VirtualBox:~/Desktop/dist$ tree
├── fiveNine
│   ├── hidden-pr0cess.axx
│   ├── handshake
│   ├── mirr0ring.qt
│   ├── m4ster-slave.aes
│   ├── stage3.torrent
│   └── whiter0se.m4v
├── mailbox
├── mail.txt
└── share

2 directories, 8 files
com301@com301-VirtualBox:~/Desktop/dist$ ls fiveNine/ -l
total 4
---x-rwx--x 1 leon    ecorp    0 Sep 18 16:28 hidden-pr0cess.axx
drwxr-xrw- 2 dom     fbi      4096 Sep 18 16:25 handshake
----wS--x 1 tyrell  allsafe  0 Sep 18 16:28 mirr0ring.qt
--x-wxrwX 1 giddeon fbi      0 Sep 18 16:30 m4ster-slave.aes
-rwx----- 1 irving  allsafe  0 Sep 18 16:28 stage3.torrent
--wx--S--x 1 shayla  ecorp    0 Sep 18 16:28 whiter0se.m4v
```

Figure 1: An example of result when the command `ls -l` is run in the `fiveNine` folder