**Lab 04. Access Control**

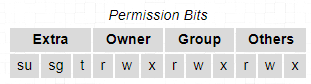
Access control refers to the ability of a user to access a particular object and possibly modify it. In terms of operating systems, access control refers to the ability of a user to read, write or execute a certain file or folder. In this lab, you shall study the access control framework for Microsoft Windows and UNIX-based platforms.

**Submission:**

You will compose a lab report that documents each step you take, including screenshots to illustrate the effects of commands you type, and describing your observations. Simply attaching code without any explanation will not receive credits

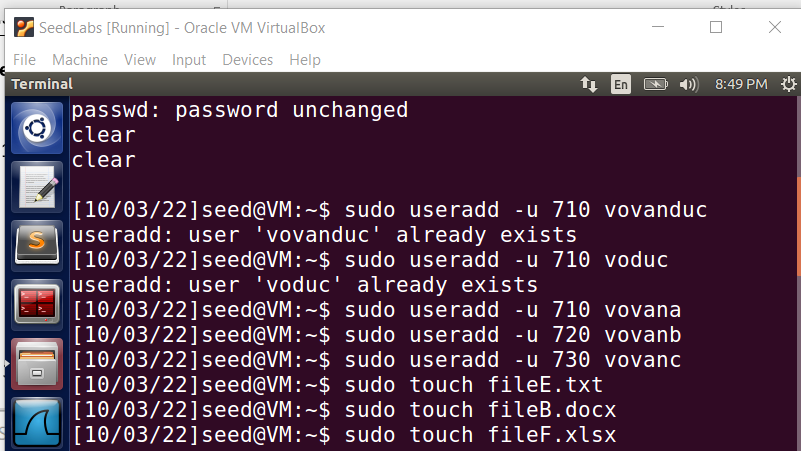
**Time duration:** 1 week

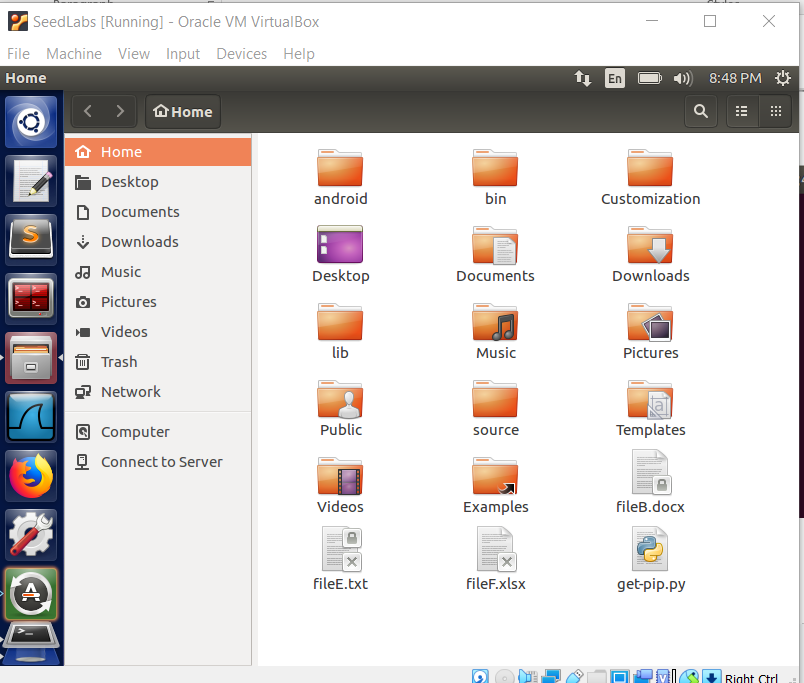
1. Use the **chmod** command on Linux

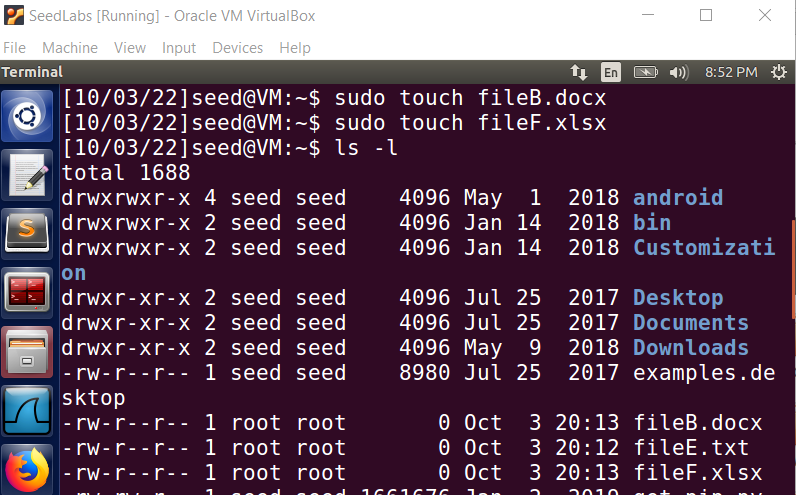


su: Set-UID, sg: Set-GID, t: sticky

Tạo 3 user và 3 file: fileE.txt; fileB.docx; fileF.xlsx



* 



fileB.docx, fileE.txt, fileF.xlsx => rw-r--r-- : permission user: read and write; group: read; other: read

* Some options of the chmod command:

$chmod u+w = add write to \*user\*

$chmod g-rw = remove read and write from \*group\*

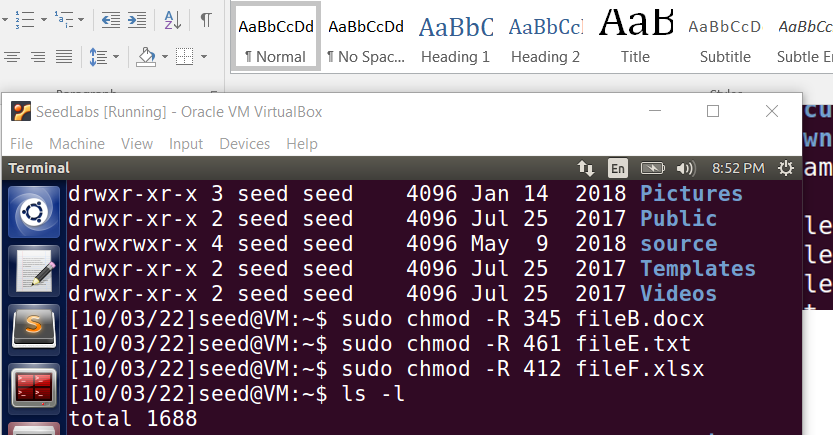
$chmod o-rwx = remove read, write and execute from \*other\*

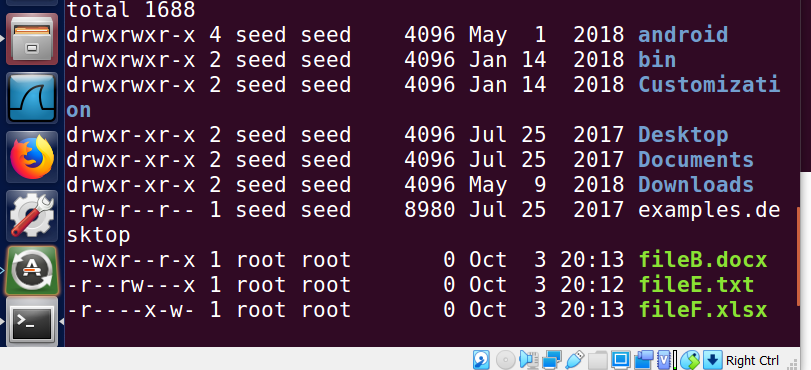
$chmod a+w = add write to \*all\*

$chmod a-wx = remove write and execute from \*all\*

$ chmod **-R** 755 myfolder

Note: **-R** . It allows you to modify objects **recursively**, changing permissions on all objects in a directory and its subdirectories





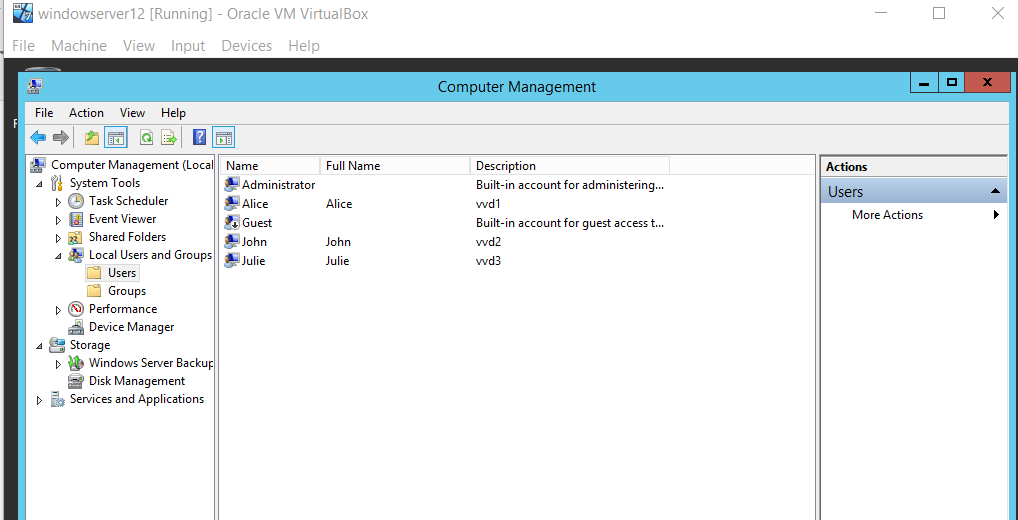
fileB.docx : -wx r-- r-x, => write and execute for user; read for Group; read end execute for other

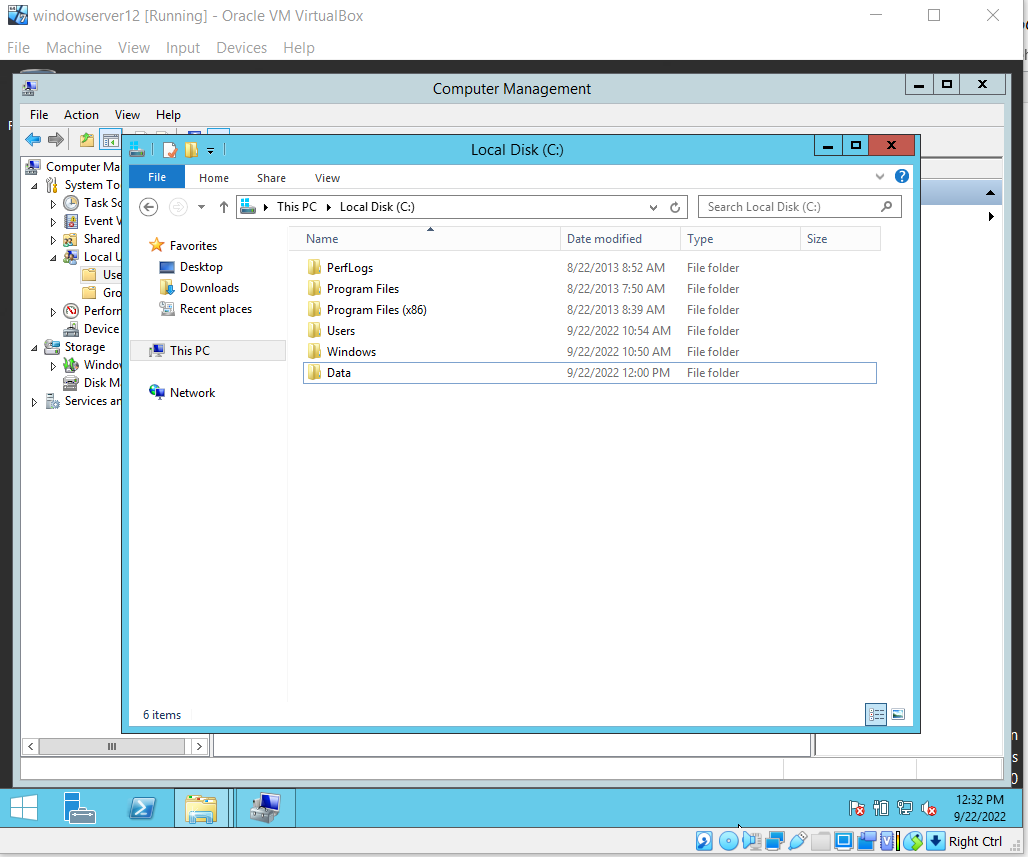
fileE.txt : , r-- rw- --x => read for user; read and execute for group; execute for other

fileF.xlsx : r-- --x -w- => read for user; execute for group; write for other

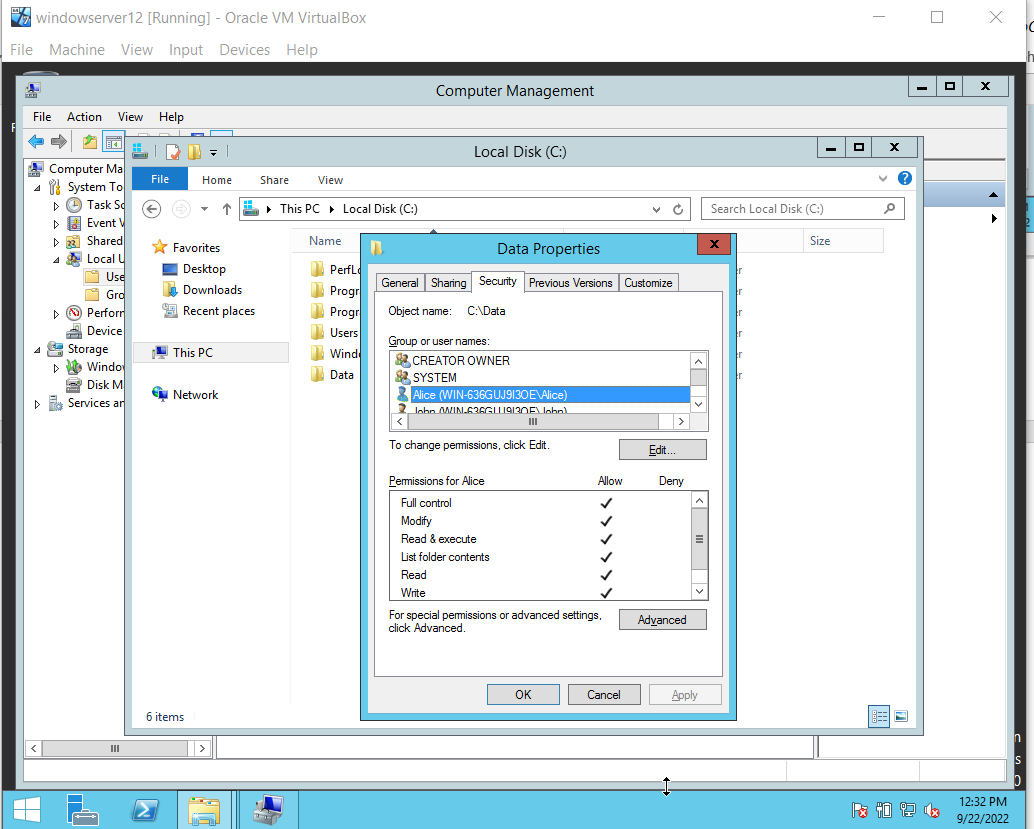
* Linux file system permissions:
  + Create 3 users
  + Create 3 (files or folders)
  + Use the chmod command to change the permissions on these files or folders

1. Use the **NTFS permission** on Windows

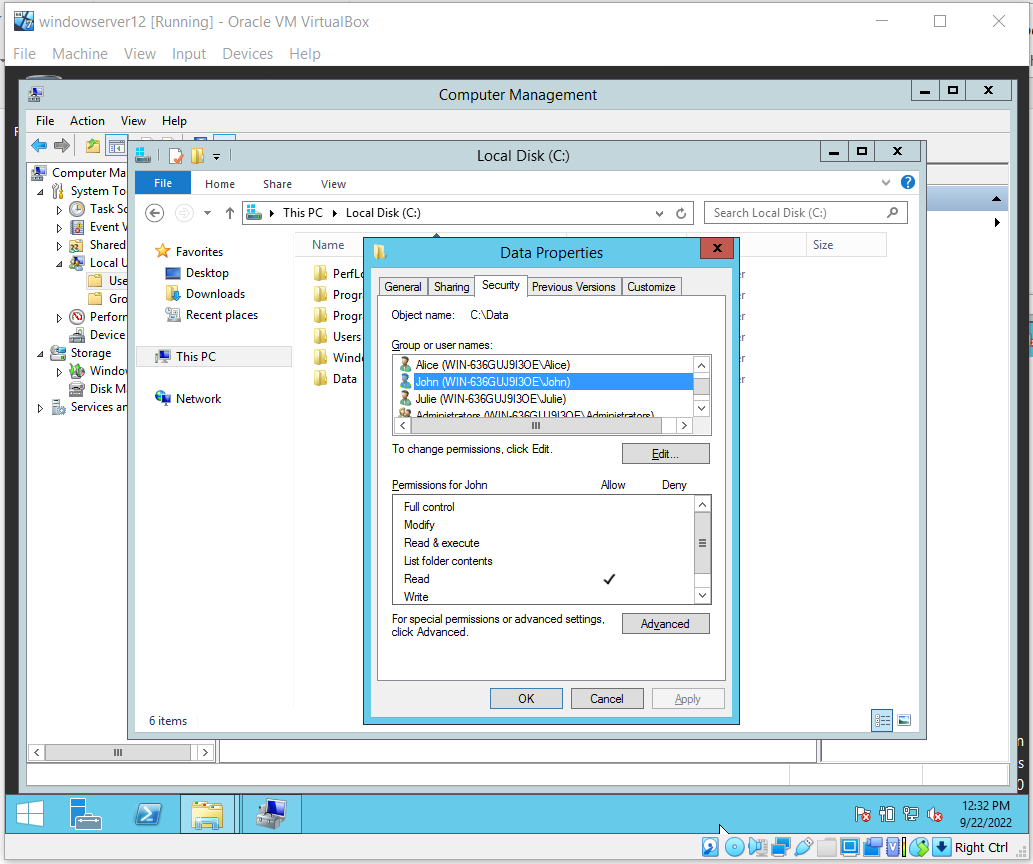
* Create 3 users: Alice, John, Julie
* 
* Create folder: Data



* Permissions:
  + Alice has full permissions on the folder Data



* + John has only read permissions on the folder Data



* + Julie has no permissions on the folder Data

