

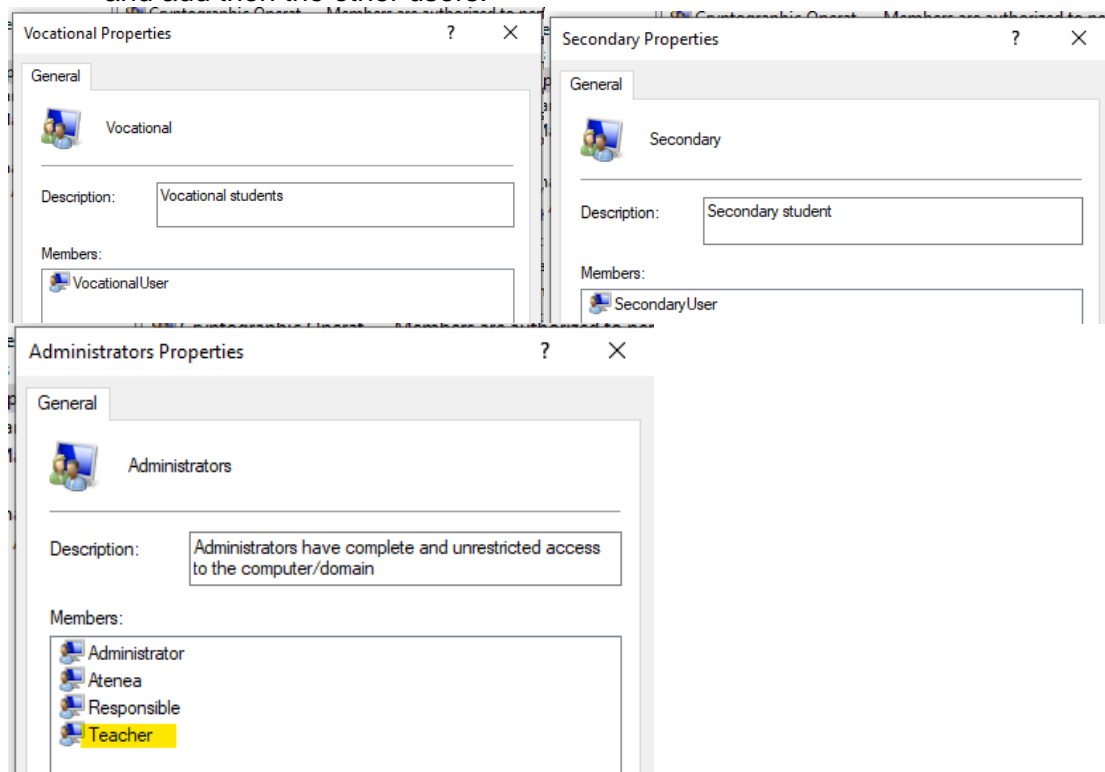
EXERCISE: Users, groups and permissions (III)

We have a PC with Windows 10 that consists of two groups: Vocational and Secondary. The user “VocationalUser” will belong to “Vocational” and the user “SecondaryUser” will belong to “Secondary”. There is also a user called Teacher which belongs to the group Administrators.

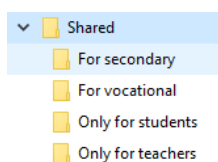
Complete all the exercises considering two scenarios: disabling inheritance and with inheritance.

Create all the users and groups mentioned above.

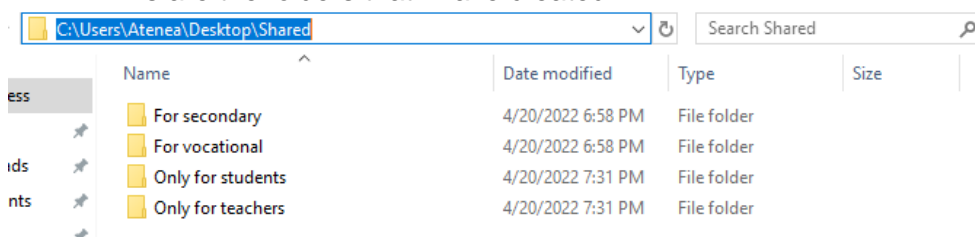
- The results are as follows, once I have created the Groups “Vocational” and “Secondary” and add then the other users:



Create the following directory tree with the permissions below.

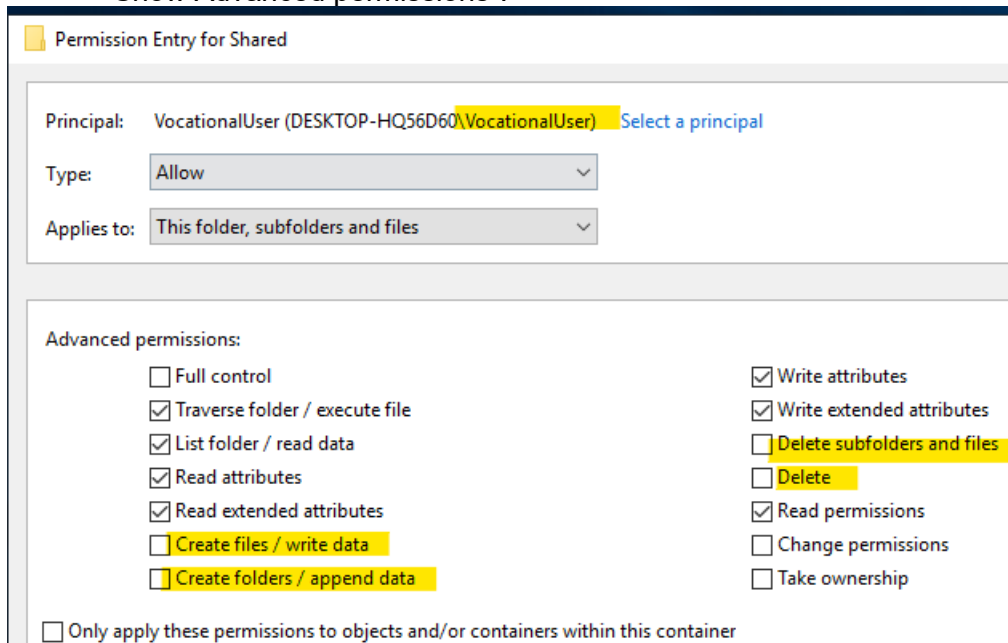


- This are the folders that I have created:

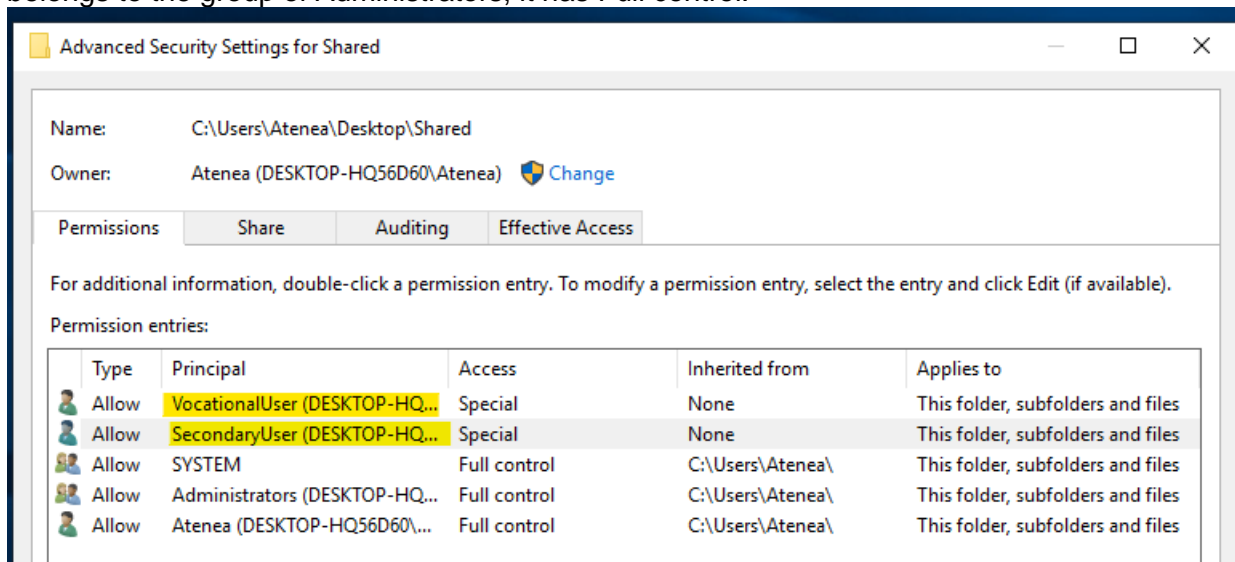


a) The directory known as “Shared” is able to be accessed by two users: “VocationalUser” and “SecondaryUser”, but they cannot delete or create subfolders and files. The user Teacher has Full Control over this directory.

- It's good to consider that, when I create a new directory tree, it inherits from the parent.
- So, in the folder “Shared” permissions, I have to allow the following permissions except Modify and Full Control, because these ones allow the users to delete. Also, I need to uncheck the permissions of *Create files / write Data* and *Create folders / append data*, in “Show Advanced permissions”:



This snapshot also includes the user SecondaryUser, that have the same configuration as VocationalUser. The access will change to “Special”. In the case of the user Teacher, as this user belongs to the group of Administrators, it has Full control:



b) The directory “For secondary” cannot be accessed by the group “Vocational”, while the group “Secondary” is able to do everything except change permissions.

- To do this, I need to disable inheritance first (by choosing the “Remove all inherited permissions from this object” option) and modify the permissions for the group “Secondary”. Then, as Vocational cannot access to the folder, I don't need to add it.

Permission Entry for For secondary

Principal: Secondary (DESKTOP-HQ56D60\Secondary) [Select a principal](#)

Type:

Applies to:

Advanced permissions: [Show basic permissions](#)

<input type="checkbox"/> Full control	<input checked="" type="checkbox"/> Write attributes
<input checked="" type="checkbox"/> Traverse folder / execute file	<input checked="" type="checkbox"/> Write extended attributes
<input checked="" type="checkbox"/> List folder / read data	<input checked="" type="checkbox"/> Delete subfolders and files
<input checked="" type="checkbox"/> Read attributes	<input checked="" type="checkbox"/> Delete
<input checked="" type="checkbox"/> Read extended attributes	<input checked="" type="checkbox"/> Read permissions
<input checked="" type="checkbox"/> Create files / write data	<input type="checkbox"/> Change permissions
<input checked="" type="checkbox"/> Create folders / append data	<input checked="" type="checkbox"/> Take ownership

☐ Only apply these permissions to objects and/or containers within this container

[Clear all](#)

- How much will it change...? With Inheritance: the group “Secondary” will have the “Modify” permission. In this case, I deny the “Read” permission for the group “Vocational”. The explicit permissions will override the inherited ones. It applies to all the exercises. It should be important the deny permission, otherwise the permission cannot be done (due to inheritance).

c) The directory “For vocational” cannot be accessed by the group “Secondary”, while the group “Vocational” is able to do everything except delete this folder and change permissions.

- I must do as before, disabling inheritance and only adding the group “Vocational”, disabling the permissions “Change permissions” and “Delete”.

Permission Entry for For vocational

Principal: Vocational (DESKTOP-HQ56D60\Vocational) [Select a principal](#)

Type:

Applies to:

Advanced permissions:

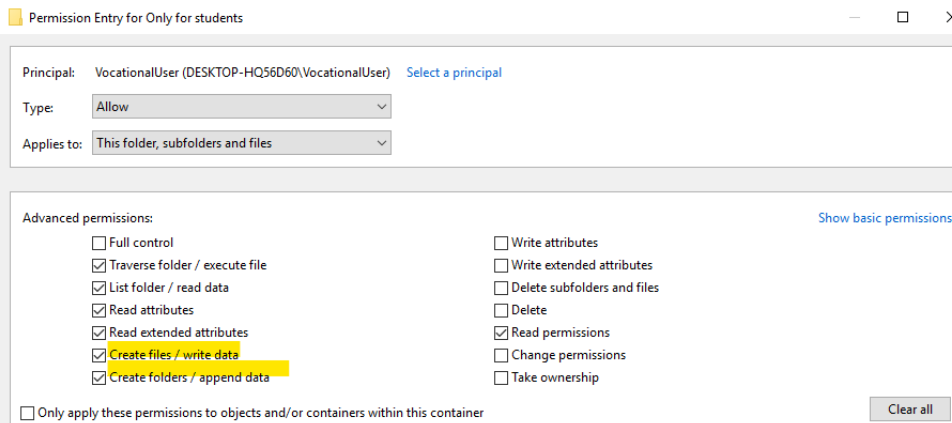
<input type="checkbox"/> Full control	<input checked="" type="checkbox"/> Write attributes
<input checked="" type="checkbox"/> Traverse folder / execute file	<input checked="" type="checkbox"/> Write extended attributes
<input checked="" type="checkbox"/> List folder / read data	<input checked="" type="checkbox"/> Delete subfolders and files
<input checked="" type="checkbox"/> Read attributes	<input type="checkbox"/> Delete
<input checked="" type="checkbox"/> Read extended attributes	<input checked="" type="checkbox"/> Read permissions
<input checked="" type="checkbox"/> Create files / write data	<input type="checkbox"/> Change permissions
<input checked="" type="checkbox"/> Create folders / append data	<input checked="" type="checkbox"/> Take ownership

☐ Only apply these permissions to objects and/or containers within this container

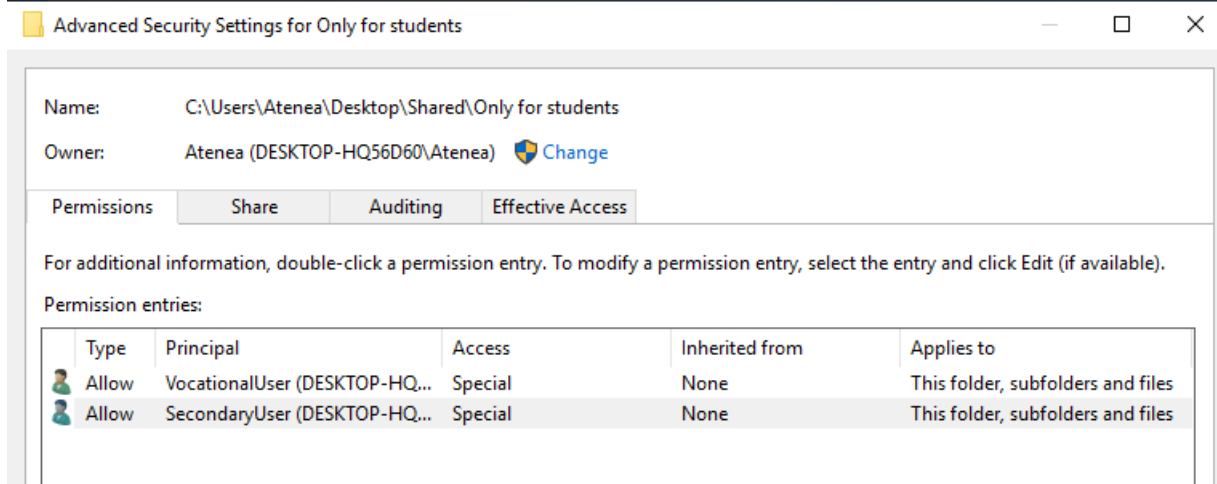
- How much will it change...? With Inheritance: the group “Vocational” will have the “Write” permission. In this case, I deny the “Read” permission for the group “Secondary”.

d) The directory “Only for students” can be accessed exclusively by all students regardless of the group. They will be able to create files within this folder.

- Once I have disabled the inheritance, in Advanced permissions I have to check the “Create files / write data” box and the “Create folders / append data” box. This has to be applied to the users “VocationalUser” and “SecondaryUser”:



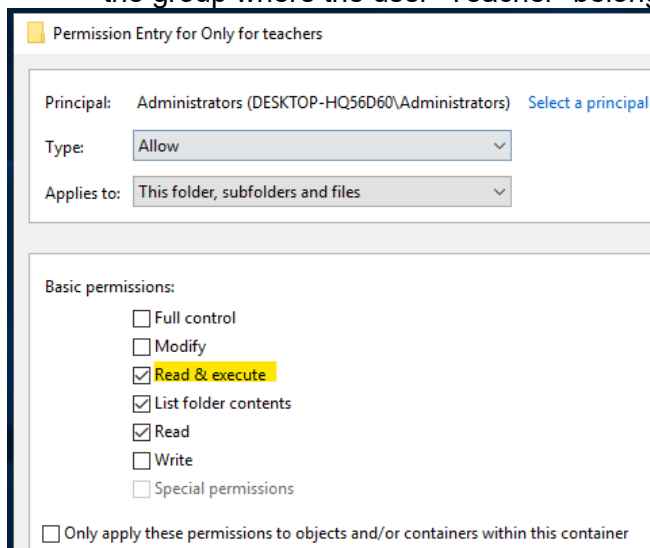
The permissions for these users will change to “Special”:

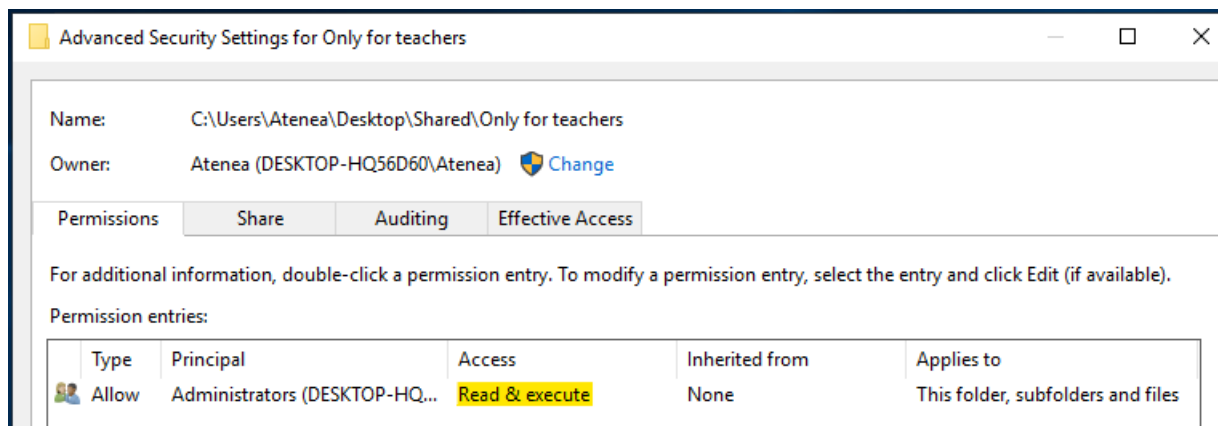


- How much will it change...? With Inheritance: I should deny the “Read” permission for the user “Teacher”. The groups “Vocational” and “Secondary” will have the Write permission (or the special permission “Create files”). Another interesting option could be creating a group “Students” including “VocationalUser” and “SecondaryUser”.

e) The directory “Only for teachers” can be accessed exclusively by all teachers and only with read and execute permissions.

- I must do the same as in the previous exercises, disabling the inheritance first and then adding the basic permissions. In this case, I only need to add the group “Administrators”, the group where the user “Teacher” belongs.





- How much will it change...? With Inheritance: I inherit *Full Control* permissions for Administrations and the user “Teacher”. So, I need to deny all the “Teacher” permissions, except for the “Read”, “Read&Execute” and “List folder contents” permissions. For that purpose, I am required to use “Advanced permissions”. The “Read” permissions for the Vocational and Secondary groups should also be denied.