

# Mission: Permission Workout Teacher Instructions

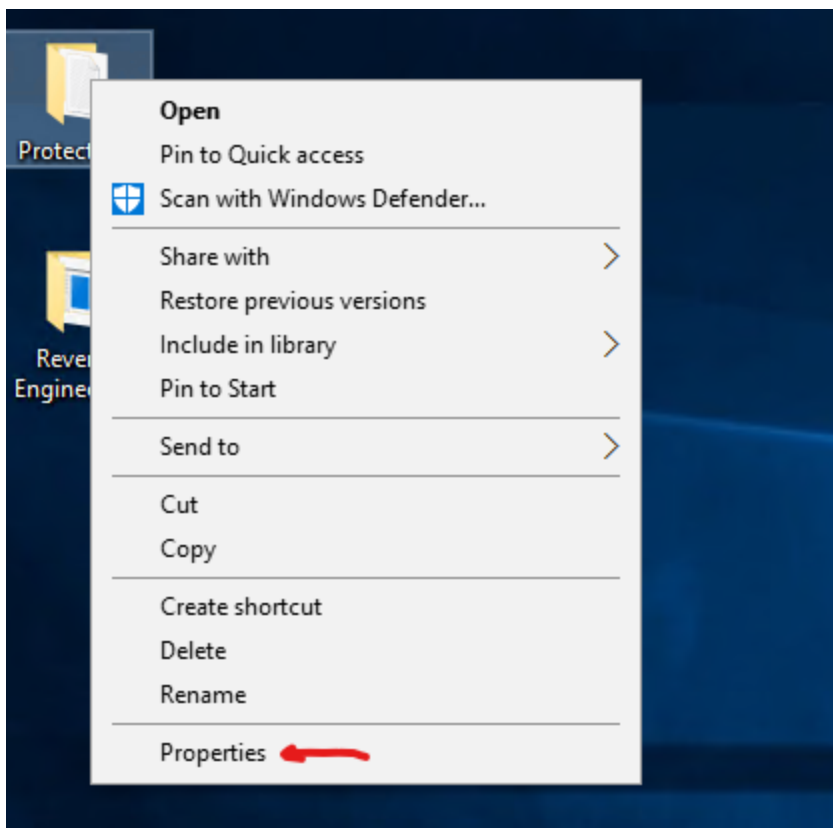
## Introduction:

The purpose of this workout is to introduce students to file security on the Windows file system. We essentially have three basic rules that we can apply to any file and folder in the system: Read, Write, and Execute. These rules can be applied in any combination to broad view such as a group or in a more specific manner as only one user. For example, in every Windows system, there is a folder in the root directory (usually C:\) called *Program Files*. While this folder can be *viewed* by most users on the system, only users existing in the *Administrator* group can modify files in that folder.

## This Mission:

Students are given a top secret folder called *Protect\_Me* that they must assess and adjust the permissions correctly so that only the necessary users and user groups have access to the folder.

To view the permissions set for any folder, just right click on target folder and at the bottom of the drop-down list select *Properties*.

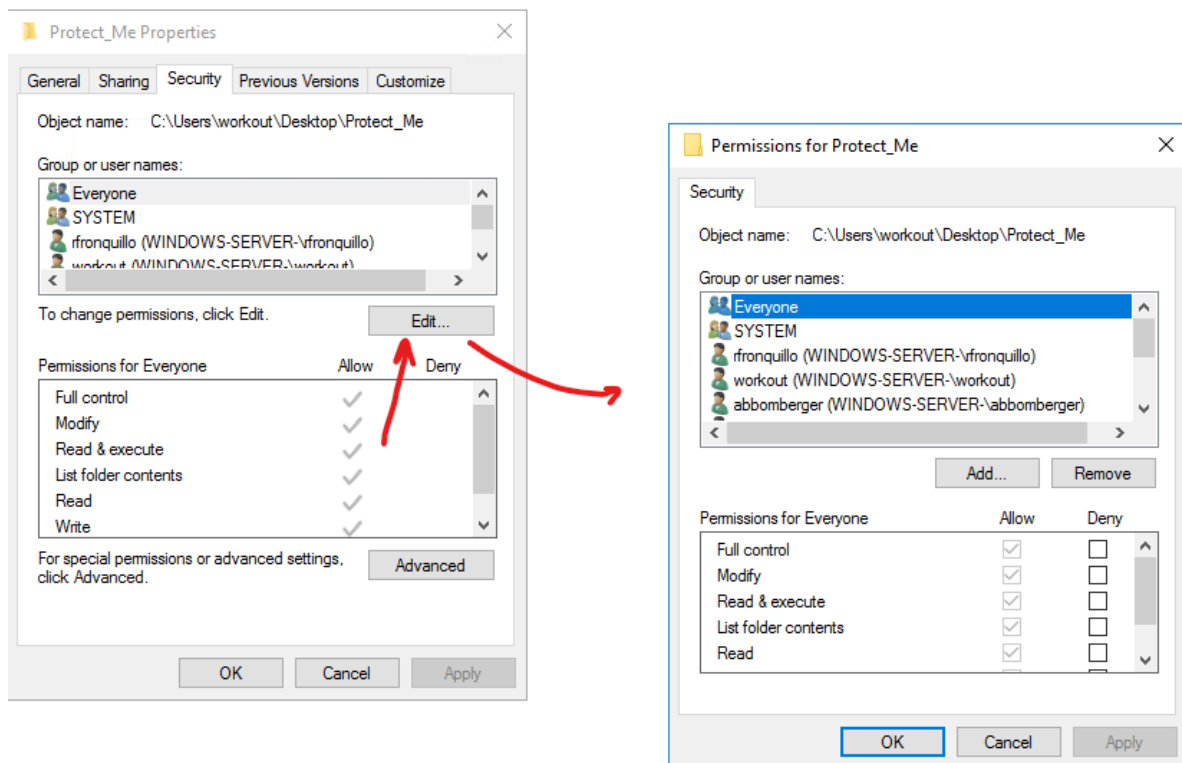


This will bring up a menu that will display file size, sharing rules, and most importantly security options.

Have the students click on the tab labeled Security. This tab will display all the security settings set for existing groups and users on the system. Taking a look at the list of users with access, we can see several permissions that should raise concern.

- User groups Everyone and Guests have Full Control to the file. This means Read, Write, and Execute permissions.
- ANONYMOUS LOGON along with a suspicious user, totally\_not\_spy also have Full Control of the file.

To make it easy, students just have to Deny access to the file for the two users and groups listed above. To do this, click Edit and select the target user or group and in the Permissions list below, select either Allow or Deny for each row.



When everything looks right, click *Apply* and then close the menus.

**For the workout to function properly, students should not touch the permissions for the following groups and users:**

- Windows-Server-\workout
- NT Authority\System
- Windows-Server-\Administrators
- Builtin\Administrators

## Conclusion:

A good thing to consider when configuring permissions for a folder or program is block all users and groups and allow only what is necessary for it to function properly. Like the workout, groups Everyone and Guests should at most have Read access to folders, but almost never Full Control. For the most part Windows does a pretty good job at automating the file security process, but there are times when human intervention is necessary.