

NTFS Exercises (IV)

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Fill in the following folder and file permissions tables based on the following criteria:





- We have two groups: **painters** and **musicians**
- The users named **goya**, **velazquez** and **leonardo** belong to the group **painters**, among others.
- The users named **verdi**, **mozart** and **albeniz** belong to the group **musicians**, among others.
- Only the painters can access the folder **canvas** to create and delete files. The remaining users cannot enter into it.
- Only the musicians can access the folder **hall** to create and delete files. The remaining users cannot enter into it.
- The user **leonardo** cannot access the folder **prado**
- The folder **louvre** can be accessed exclusively by **goya** and **velazquez**, but only with the read permission
- The user **albeniz** cannot access the folder **opera**
- The file **donjuan.wav** can be accessed exclusively by **mozart**.
- The file **lasmeninas.jpg** into **prado** can be opened by all the **painters** except **goya**

Directory tree

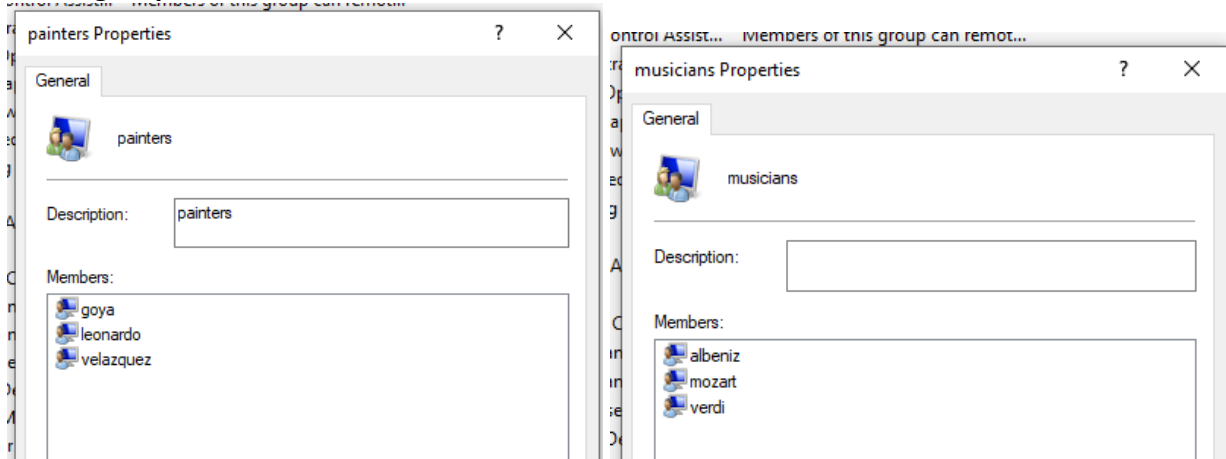
- canvas
 - louvre
 - prado
 - lasmeninas.jpg
- hall
 - opera
 - donjuan.wav

For each folder, create a table similar to the one below in which you will include all the necessary user and groups. Consider two scenarios: inheritance and non-inheritance.

Administrators are irrelevant. Suppose they have Full Control over all the files and folders.

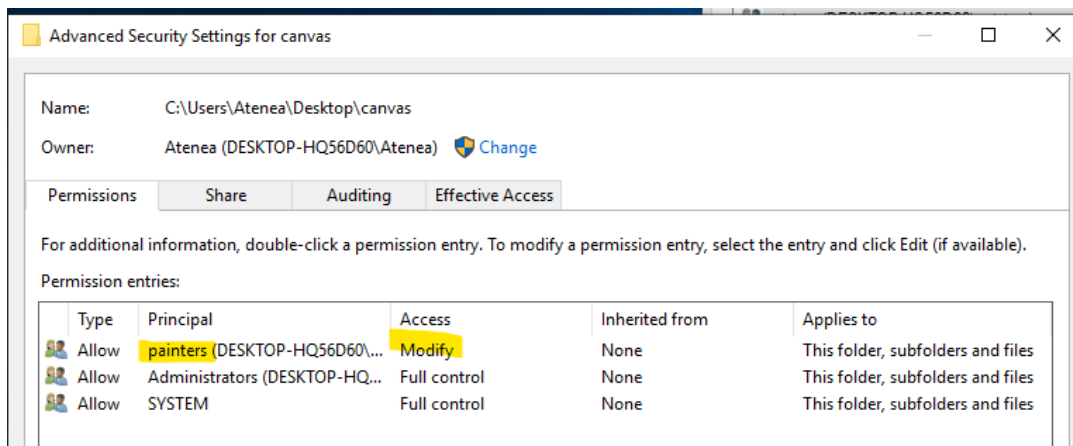
Type	Principal	Access	Inherited from	Applies to
 Deny	leonardo (DESKTOP-NDBUMV...	Read & execute	None	This folder, subfolders and files
 Allow	Administrators (DESKTOP-ND...	Full control	C:\canvas\	This folder, subfolders and files
 Allow	SYSTEM	Full control	C:\canvas\	This folder, subfolders and files
 Allow	painters (DESKTOP-NDBUMV...	Modify	C:\canvas\	This folder, subfolders and files

The groups and users:



Permission table – canvas folder permissions

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Painters (EXPLICIT)		X	X	X	X					



Permission table – prado folder permissions (the same without inheritance, although painters has explicit permissions)

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Painters (INHERITED)			X	X						
Leonardo (EXPLICIT)								X	X	


Permission entries:

Type	Principal	Access	Inherited from	Applies to
Deny	leonardo (DESKTOP-HQ56D60\...)	Read & execute	None	This folder, subfolders and files
Allow	painters (DESKTOP-HQ56D60\...)	Modify	None	This folder, subfolders and files
Allow	Administrators (DESKTOP-HQ56D60\...)	Full control	None	This folder, subfolders and files
Allow	SYSTEM	Full control	None	This folder, subfolders and files

Permission table – louvre(1) folder permissions (disable inheritance to delete the inherited group “painters”)

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Goya (EXPLICIT)			X	X						
Velazquez (EXPLICIT)			X	X						





Name: C:\Users\Atenea\Desktop\canvas\louvre

Owner: Atenea (DESKTOP-HQ56D60\Atenea)  [Change](#)

Permissions Share Auditing Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).











Permission entries:

Type	Principal	Access	Inherited from	Applies to
 Allow	goya (DESKTOP-HQ56D60\go...	Read & execute	None	This folder, subfolders and files
 Allow	Administrators (DESKTOP-HQ...	Full control	None	This folder, subfolders and files
 Allow	SYSTEM	Full control	None	This folder, subfolders and files
 Allow	velazquez (DESKTOP-HQ56D6...	Read & execute	None	This folder, subfolders and files

Permission table – louvre(2) folder permissions. It's NOT POSSIBLE WITH INHERITANCE. The only possibilities are:

1. Denying permission from painters. As a result, goya and velazquez would not be able to access the folder.

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
painters (INHERITED)		X	X	X	X					
Leonardo (INHERITED)									X	
painters (EXPLICIT)							X	X	X	X
goya (EXPLICIT)			X	X						
velazquez (EXPLICIT)			X	X						

Type	Principal	Access	Inherited from	Applies to
 Deny	painters (DESKTOP-HQ56D60...	Modify	None	This folder, subfolders and files
 Deny	leonardo (DESKTOP-HQ56D6...	Read	None	This folder, subfolders and files
 Allow	Administrators (DESKTOP-H...	Full control	None	This folder, subfolders and files
 Allow	SYSTEM	Full control	None	This folder, subfolders and files
 Allow	goya (DESKTOP-HQ56D60\g...	Read & execute	None	This folder, subfolders and files
 Allow	velazquez (DESKTOP-HQ56D...	Read & execute	None	This folder, subfolders and files
 Allow	painters (DESKTOP-HQ56D60...	Modify	C:\Users\Atenea\Desk...	This folder, subfolders and files
 Allow	Administrators (DESKTOP-H...	Full control	C:\Users\Atenea\Desk...	This folder, subfolders and files
 Allow	SYSTEM	Full control	C:\Users\Atenea\Desk...	This folder, subfolders and files
 Allow	Atenea (DESKTOP-HQ56D60\...	Full control	C:\Users\Atenea\	This folder, subfolders and files

2. Not denying permission from painters. As a result, all the users belonging to painters (except for leonardo) could access the folder.

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
painters (INHERITED)		X	X	X	X					
leonardo (INHERITED)									X	
goya (EXPLICIT)			X	X						
velazquez (EXPLICIT)			X	X						

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).

Permission entries:

Type	Principal	Access	Inherited from	Applies to
Allow	Administrators (DESKTOP-HQ...	Full control	None	This folder, subfolders and files
Allow	Administrators (DESKTOP-HQ...	Full control	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	Atenea (DESKTOP-HQ56D60\...	Full control	C:\Users\Atenea\	This folder, subfolders and files
Allow	goya (DESKTOP-HQ56D60\go...	Read & execute	None	This folder, subfolders and files
Deny	leonardo (DESKTOP-HQ56D60...	Read	None	This folder, subfolders and files
Allow	painters (DESKTOP-HQ56D60\...	Modify	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	SYSTEM	Full control	None	This folder, subfolders and files
Allow	SYSTEM	Full control	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	velazquez (DESKTOP-HQ56D6...	Read & execute	None	This folder, subfolders and files

3. Only denying write and modify permissions from painters. As a result, all the painters at least have read permissions.

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
painters (INHERITED)		X	X	X	X					
leonardo (INHERITED)									X	
painters (EXPLICIT)							X			X
goya (EXPLICIT)			X	X						
velazquez (EXPLICIT)			X	X						

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).


Permission entries:

Type	Principal	Access	Inherited from	Applies to
Allow	Administrators (DESKTOP-HQ...	Full control	None	This folder, subfolders and files
Allow	Administrators (DESKTOP-HQ...	Full control	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	Atenea (DESKTOP-HQ56D60\...	Full control	C:\Users\Atenea\	This folder, subfolders and files
Allow	goya (DESKTOP-HQ56D60\go...	Read & execute	None	This folder, subfolders and files
Deny	leonardo (DESKTOP-HQ56D60...	Read	None	This folder, subfolders and files
Deny	painters (DESKTOP-HQ56D60\...	Special	None	This folder, subfolders and files
Allow	painters (DESKTOP-HQ56D60\...	Modify	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	SYSTEM	Full control	None	This folder, subfolders and files
Allow	SYSTEM	Full control	C:\Users\Atenea\Deskt...	This folder, subfolders and files
Allow	velazquez (DESKTOP-HQ56D6...	Read & execute	None	This folder, subfolders and files

Permission table – lasmeninas.jpg permissions (the same WITHOUT inheritance, but the inherited permissions would be explicit ones)

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Painters (INHERITED)		X	X	X	X					
Leonardo (INHERITED)									X	
Goya (EXPLICIT)									X	

Name: C:\Users\Atenea\Desktop\canvas\prado\lasmeninas.jpg







Owner: Atenea (DESKTOP-HQ56D60\Atenea)  Change

Resource Properties 

Permissions Share Auditing Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).


Permission entries:

Type	Principal	Access	Inherited from
 Deny	goya (DESKTOP-HQ56D60\goya)	Read & execute	None
 Deny	leonardo (DESKTOP-HQ56D60\leonardo)	Read & execute	C:\Users\Atenea\Desktop\canvas\prado\
 Allow	painters (DESKTOP-HQ56D60\painters)	Modify	C:\Users\Atenea\Desktop\canvas\prado\
 Allow	Administrators (DESKTOP-HQ56D60\Admin...	Full control	C:\Users\Atenea\Desktop\canvas\prado\
 Allow	SYSTEM	Full control	C:\Users\Atenea\Desktop\canvas\prado\
 Allow	Atenea (DESKTOP-HQ56D60\Atenea)	Full control	C:\Users\Atenea\Desktop\canvas\prado\

Permission table – opera folder permissions (the same without inheritance, but the inherited permissions would be explicit ones)

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Musicians (INHERITED)		X	X	X	X					
Albeniz (EXPLICIT)									X	






Name: C:\Users\Atenea\Desktop\hall\opera

Owner: Atenea (DESKTOP-HQ56D60\Atenea)  Change

Permissions Share Auditing Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).

Permission entries:

Type	Principal	Access	Inherited from	Applies to
 Deny	albeniz (DESKTOP-HQ56D60\...	Read	None	This folder, subfolders and files
 Allow	musicians (DESKTOP-HQ56D6...	Modify	None	This folder, subfolders and files
 Allow	SYSTEM	Full control	C:\Users\Atenea\	This folder, subfolders and files
 Allow	Administrators (DESKTOP-HQ...	Full control	C:\Users\Atenea\	This folder, subfolders and files
 Allow	Atenea (DESKTOP-HQ56D60\...	Full control	C:\Users\Atenea\	This folder, subfolders and files

Permission table – donjuan.wav permissions

Notes: it's needed to "Disable inheritance" so that only *mozart* accesses the file. Nobody will be able to delete the file except the administrator, who has Full Control over the parent folder. It is not possible again to complete this part with inheritance. It's required to deny the permission from musicians, which takes precedence over the inherited "allow" permissions.

User/Group	Allow					Deny				
	Full Control	Modify	Read & Execute	Read	Write	Full Control	Modify	Read & Execute	Read	Write
Mozart (EXPLICIT)			X	X						

