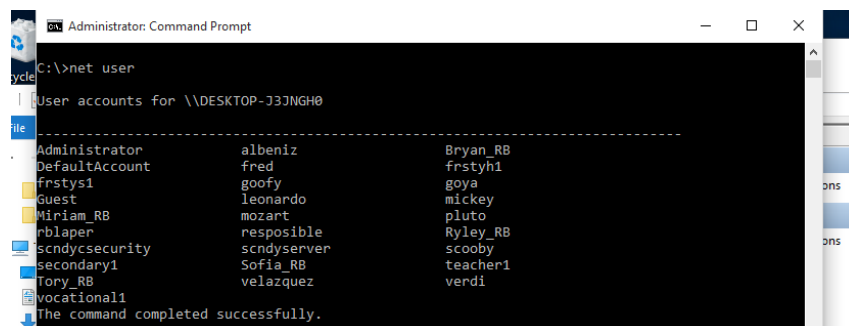


STATEMENT**OS Windows 10 x64**

Configure a computer for a wine distributor company. The company needs to create the following users:

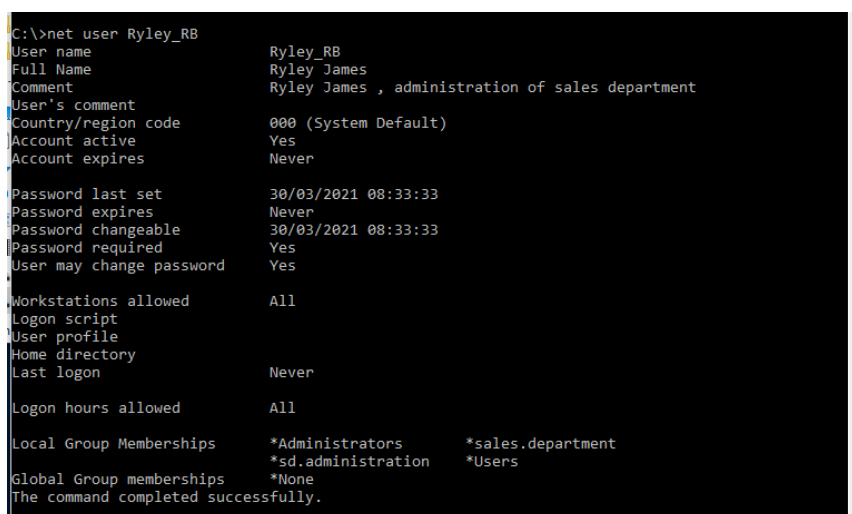
- An administrator called Ryley James, whose password never expires. He belongs to the sales department.
- Three standard users that cannot change their password:
 - MJ Bryant, who belongs to the sales department.
 - Sofia Lawrence and Miriam Cassel, who belong to the training department.
- A guest user from the training department named Tori Williamson, but initially disabled. She will have to change the password at next login.
- All the users must have a name, full name and description. For example, for Ryley James we can assign the username "Ryley_SBF", the full name "Ryley James" and the description "Ryley James, administrator of sales department".

Users Accounts


```
Administrator: Command Prompt
C:\>net user

User accounts for \\DESKTOP-J3JNGH0

-----
Administrator      albeniz             Bryan_RB
DefaultAccount      fred                frstyh1
frstys1             goofy              goya
Guest               leonardo            mickey
Miriam_RB           mozart              pluto
rblaper             responsible         Ryley_RB
scndycsecurity      scndyserver        scooby
secondary1          Sofia_RB            teacher1
Tory_RB             velazquez           verdi
vocationall1
The command completed successfully.
```

User account properties


```
C:\>net user Ryley_RB
User name                Ryley_RB
Full Name                Ryley James
Comment                  Ryley James , administration of sales department
User's comment
Country/region code      000 (System Default)
Account active            Yes
Account expires           Never

Password last set        30/03/2021 08:33:33
Password expires          Never
Password changeable       30/03/2021 08:33:33
Password required          Yes
User may change password  Yes

Workstations allowed      All
Logon script
User profile
Home directory
Last logon                Never

Logon hours allowed       All

Local Group Memberships   *Administrators      *sales.department
                        *sd.administration  *Users
Global Group memberships *None
The command completed successfully.
```

```
C:\>net user Bryan_RB
User name           Bryan_RB
Full Name           Bryan MJ
Comment             Bryan MJ, Sales Department
User's comment
Country/region code 000 (System Default)
Account active       Yes
Account expires      Never
Password last set    30/03/2021 08:35:15
Password expires     11/05/2021 08:35:15
Password changeable  30/03/2021 08:35:15
Password required    Yes
User may change password No
Workstations allowed All
Logon script
User profile
Home directory
Last logon           Never
Logon hours allowed  All
Local Group Memberships *sales.department *Users
Global Group memberships *None
The command completed successfully.
```

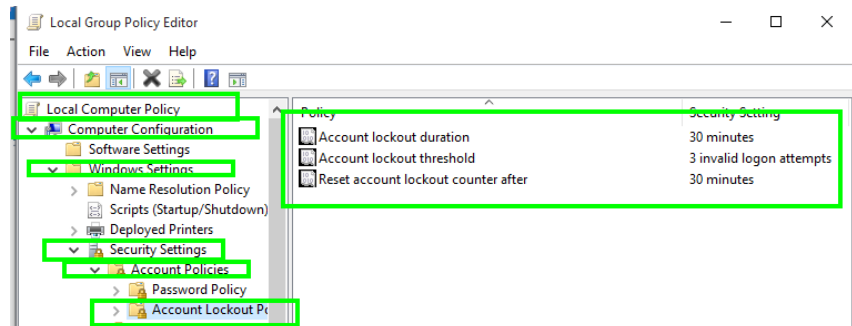
```
C:\>net user Miriam_RB
User name           Miriam_RB
Full Name           Miriam Cassel
Comment             Miriam Cassel, Training Department
User's comment
Country/region code 000 (System Default)
Account active       Yes
Account expires      Never
Password last set    30/03/2021 08:37:39
Password expires     11/05/2021 08:37:39
Password changeable  30/03/2021 08:37:39
Password required    Yes
User may change password No
Workstations allowed All
Logon script
User profile
Home directory
Last logon           Never
Logon hours allowed  All
Local Group Memberships *training.department *Users
Global Group memberships *None
The command completed successfully.
```

Tori Williamson, initially disabled

```
C:\>net user Tory_RB
User name           Tory_RB
Full Name           Tory Williamsons
Comment             Tory Williamsons. Training Department's guest account
User's comment
Country/region code 000 (System Default)
Account active       No
Account expires      Never
Password last set    30/03/2021 12:56:40
Password expires     11/05/2021 12:56:40
Password changeable  30/03/2021 12:56:40
Password required    Yes
User may change password Yes
Workstations allowed All
Logon script
User profile
Home directory
Last logon           Never
Logon hours allowed  All
Local Group Memberships *Guests *training.department
Global Group memberships *None
The command completed successfully.
```

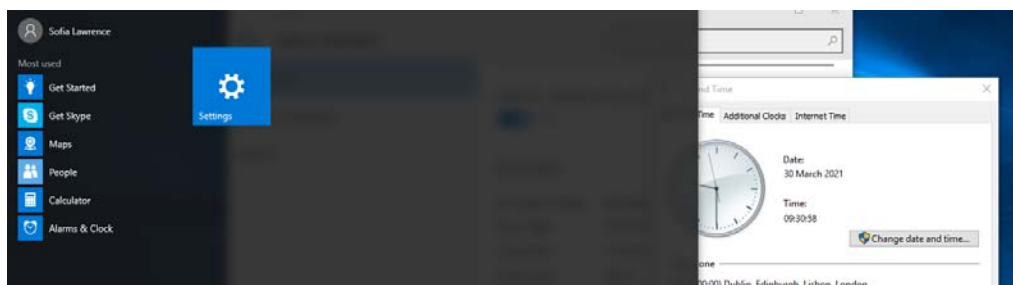
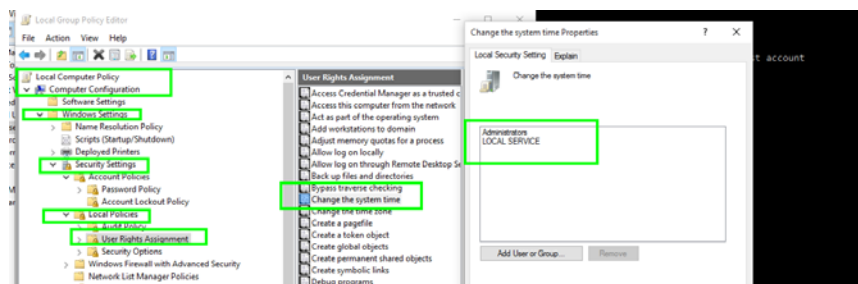
Account policies

Each user account will be locked after 3 failed attempts to login, although they will become unlocked after 30 minutes, unless Ryley unlocks them before.



Set time policy

As Ryley belongs to administrators group is the only one that is able to change the date and time.



User's folders creation

There is a hard drive in the volume C:\ where we want to create the following folders according to the criteria below:

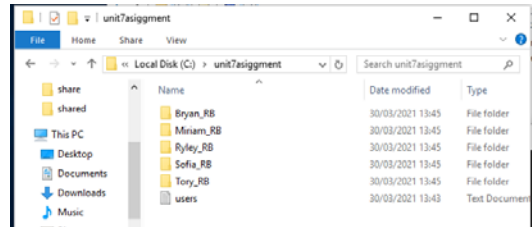
- A personal folder for each user, where only the corresponding user can do everything except change permissions and take ownership. This folder will be different from the default Windows profile folder.
- A folder for the entire company, where everybody can copy or create files, but only Ryley can delete them.
- A folder for the sales department into the folder for the entire company, where the employees from this department only have read permissions, while the other employees cannot see the content. Complete this part disabling the inheritance.
- A folder named "Key accounts" into the folder for the entire company, where the employees from the sales department are able to copy files, while the other departments will only have read permission. Ryley will inherit the permissions from the parent folder. However, Miriam cannot access this folder because she is always in trouble. Explain how to complete this part with inheritance and disabling inheritance. Then, decide the most efficient.

Finally, there is a file named "confidential.xlsx" in the folder "Key accounts" that the training department employees cannot access, while the permissions for the sales department will be the same as in the "Key accounts" folder. Complete this part with

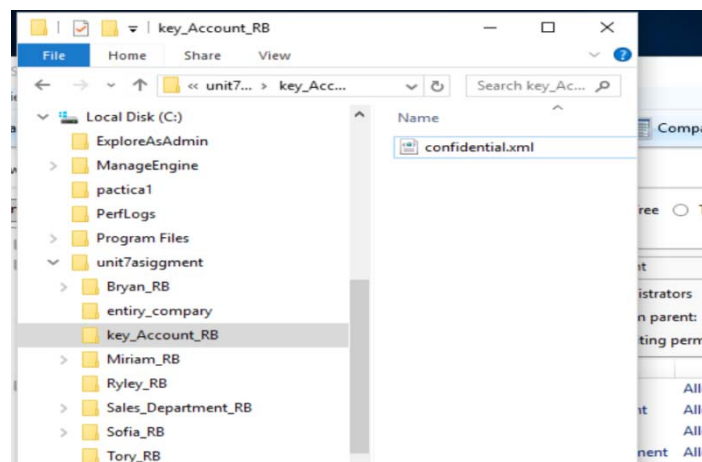
Cmd

for /F %i in (users.txt) do md %i

```
P:\C:\unit7assignment>for /F %i in (users.txt) do md %i
C:\unit7assignment>md Bryan_RB
C:\unit7assignment>md Miriam_RB
C:\unit7assignment>md Ryley_RB
C:\unit7assignment>md Sofia_RB
C:\unit7assignment>md Tory_RB
```



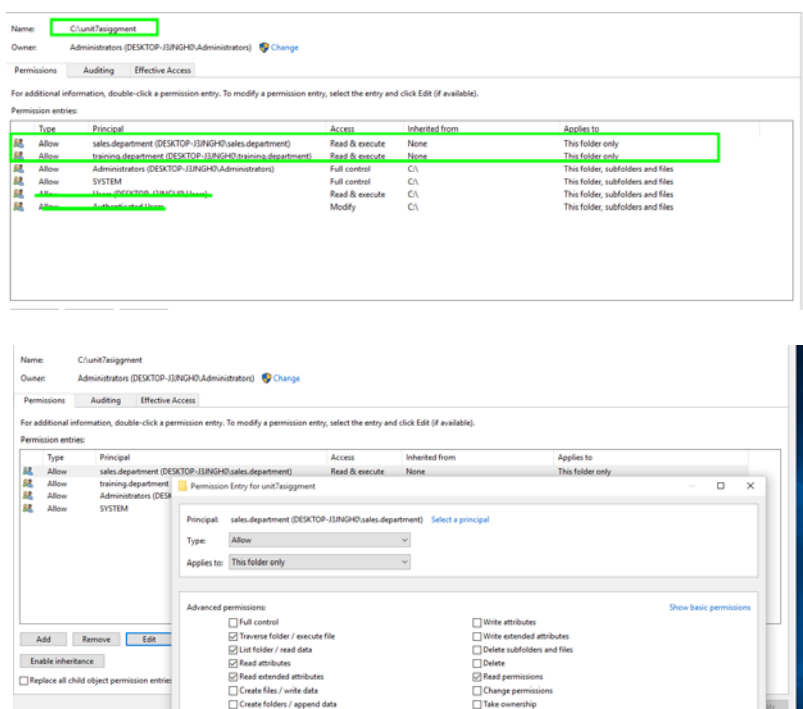
Tree directory



Permissions

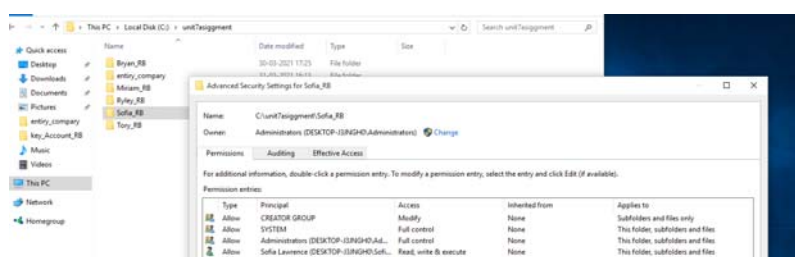
Root folder

Disabling inheritance to remove users and authenticated. Adding sales and training with only read permission to access to this folder. Users cannot rename or delete root folder.



Personal_folder for each user

- A personal folder for each user, where only the corresponding user can do everything except change permissions and take ownership. This folder will be different from the default Windows profile folder.

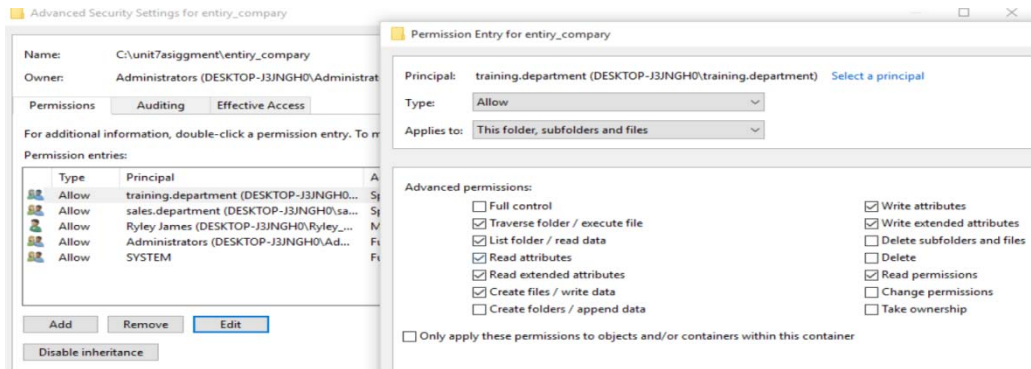


entry_company folder

- A folder for the entire company, where everybody can copy or create files, but only Ryley can delete them.

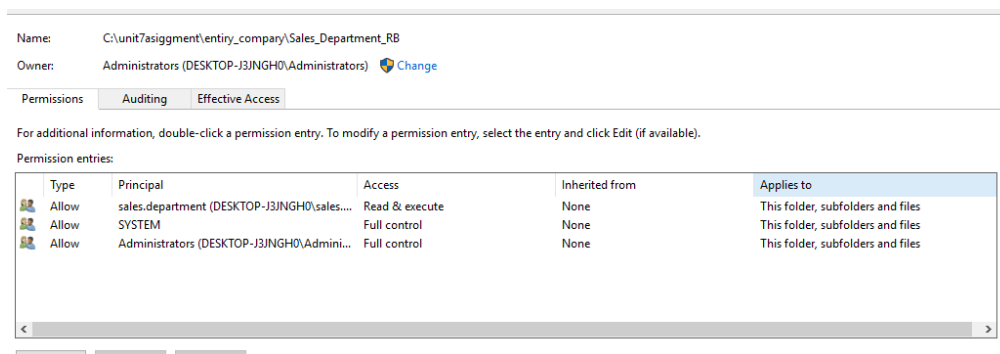
Although users can create and copy files, they cannot delete (delete *sensu stricto* or renamed). They can copy files from their directories into entry_company (create) and copy and paste files inside entry_company. Users cannot rename or delete entry_company folder.

Although Ryley belong to administrators group but it should be given modify permission .



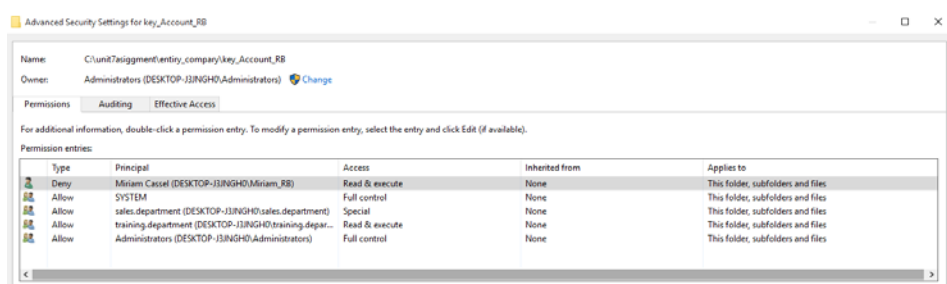
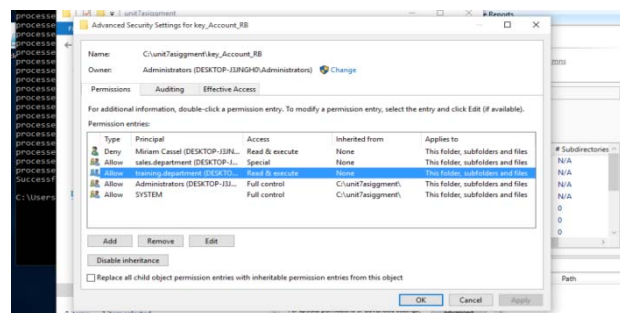
Sales_department

- A folder for the sales department into the folder for the entire company, where the employees from this department only have read permissions, while the other employees cannot see the content. Complete this part disabling the inheritance.

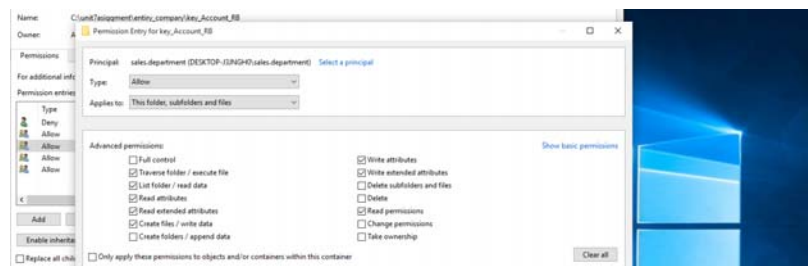


Key_accounts

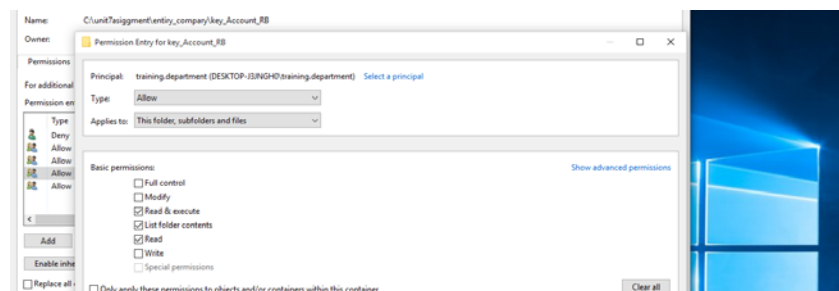
- A folder named "Key accounts" into the folder for the entire company, where the employees from the sales department are able to copy files, while the other departments will only have read permission. Ryley will inherit the permissions from the parent folder. However, Miriam cannot access this folder because she is always in trouble. Explain how to complete this part with inheritance and disabling inheritance. Then, decide the most efficient.



Sales.department users can create files and copy files, although they cannot rename files,



Training.department users only can read



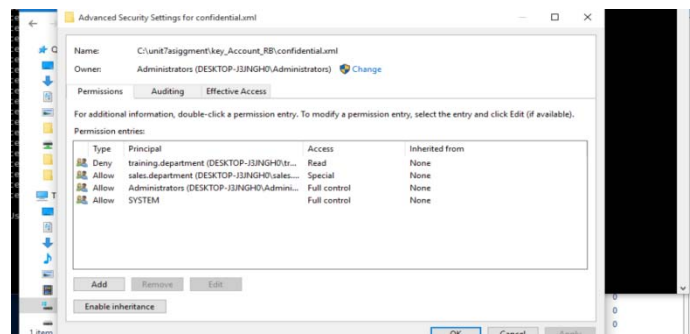
Miriam

Denying Miriam reading this folder, subfolders and files (maybe it is enough only applying this permission to this folder).

Name: C:\Unit7assignment\entity_company\key_Account_RB				
Owner: Administrators (DESKTOP-JJNGH40\Administrators) Change				
Permissions 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	Miriam Cassel (DESKTOP-JJNGH40\Miriam_RB)	Read & execute	None	This folder, subfolders and files
Allow	SYSTEM	Full control	None	This folder, subfolders and files

confidential.xlsx

In the folder “Key accounts”_that the training department employees cannot access, while the permissions for the sales department will be the same as in the “Key accounts” folder. Complete this part with the inheritance options you consider more efficient.



Saving and Formatting ACLS

Save ACLs to a file:

```
icacls c:\unit7assignment /save unit7assignment_N_perms.txt /t /c
```

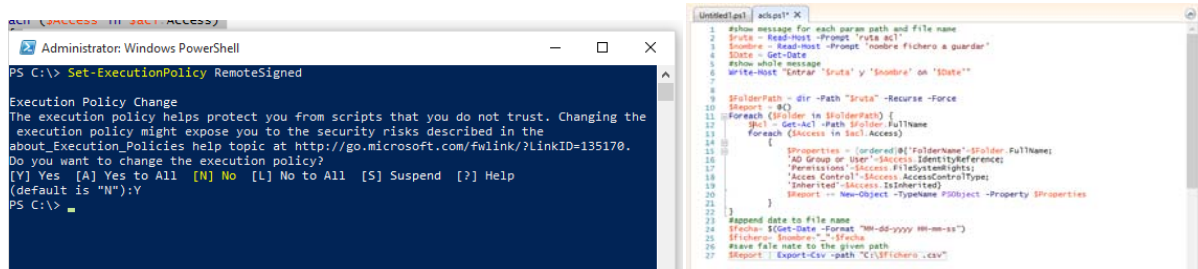
Restore ACLs from a file:

```
icacls c: /restore unit7assignment_N_perms.txt /t /c
```

Print ACL to a file .csv

Allowing run scripts in power shell isa

```
Set-ExecutionPolicy RemoteSigned
```



Script to get the ACL of the directory tree

```
#show message for each param path and file name
$ruta = Read-Host -Prompt 'ruta acl'
$nombre = Read-Host -Prompt 'nombre fichero a guardar'
$Date = Get-Date
#show whole message
Write-Host "Entrar '$ruta' y '$nombre' on '$Date'"

$FolderPath = dir -Path "$ruta" -Recurse -Force
$Report = @()
Foreach ($Folder in $FolderPath) {
    $Acl = Get-Acl -Path $Folder.FullName
    foreach ($Access in $Acl.Access)
    {
        $Properties = [ordered]@{'FolderName'=$Folder.FullName;
        'AD Group or User'=$Access.IdentityReference;
        'Permissions'=$Access.FileSystemRights;
        'Access Control'=$Access.AccessControlType;
        'Inherited'=$Access.IsInherited}
        $Report += New-Object -TypeName PSObject -Property $Properties
    }
}
#append date to file name
$fecha= $(Get-Date -Format "MM-dd-yyyy HH-mm-ss")
$fichero= $nombre+"_"+$fecha
#save file name to the given path
$Report | Export-Csv -path "C:\$fichero.csv"
```

References

- [https://petri.com/list all users and groups in domain](https://petri.com/list-all-users-and-groups-in-domain)
- <https://social.technet.microsoft.com/Forums/ie/en-US/0e2347e4-15ba-449f-b119-4d1bb836f717/powershell-getacl-formatting?forum=winservergen>
- <https://social.technet.microsoft.com/Forums/en-US/4375ba22-e758-42f9-a7ec-7f2abfaa2574/using-getacl-to-view-the-advanced-permissions-of-a-folder?forum=ITCG>
- <https://tecadmin.net/powershell-running-scripts-is-disabled-system/>
- <http://woshub.com/how-to-backup-and-restore-ntfs-permissions-using-icacls/>

ANEXE I

FolderName	AD Group or User	AC	Permissions	Inh
C:\unit7asiggment\Bryan_RB	CREATOR GROUP	Allow	Modify, Synchronize	False
C:\unit7asiggment\Bryan_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False
C:\unit7asiggment\Bryan_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Bryan_RB	DESKTOP-J3JNGH0\Bryan_RB	Allow	Write, ReadAndExecute, Synchronize	False
C:\unit7asiggment\Miriam_RB	CREATOR GROUP	Allow	Modify, Synchronize	False
C:\unit7asiggment\Miriam_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False
C:\unit7asiggment\Miriam_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Miriam_RB	DESKTOP-J3JNGH0\Miriam_RB	Allow	Write, ReadAndExecute, Synchronize	False
C:\unit7asiggment\Riley_RB	CREATOR GROUP	Allow	Modify, Synchronize	False
C:\unit7asiggment\Riley_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False
C:\unit7asiggment\Riley_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Riley_RB	DESKTOP-J3JNGH0\Riley_RB	Allow	Write, ReadAndExecute, Synchronize	False
C:\unit7asiggment\Sofia_RB	CREATOR GROUP	Allow	Modify, Synchronize	False
C:\unit7asiggment\Sofia_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False
C:\unit7asiggment\Sofia_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Sofia_RB	DESKTOP-J3JNGH0\Sofia_RB	Allow	Write, ReadAndExecute, Synchronize	False
C:\unit7asiggment\Tory_RB	CREATOR GROUP	Allow	Modify, Synchronize	False
C:\unit7asiggment\Tory_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False
C:\unit7asiggment\Tory_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Tory_RB	DESKTOP-J3JNGH0\Tory_RB	Allow	Write, ReadAndExecute, Synchronize	False
C:\unit7asiggment\entiry_comparry	DESKTOP-J3JNGH0\Riley_RB	Allow	Modify, Synchronize	False
C:\unit7asiggment\entiry_comparry	DESKTOP-J3JNGH0\sales.department	Allow	CreateFiles, WriteExtendedAttributes, WriteAttributes, ReadAndExecute, Synchronize	False
C:\unit7asiggment\entiry_comparry	DESKTOP-J3JNGH0\training.department	Allow	CreateFiles, WriteExtendedAttributes, WriteAttributes, ReadAndExecute, Synchronize	False
C:\unit7asiggment\entiry_comparry	BUILTIN\Administrators	Allow	FullControl	True
C:\unit7asiggment\entiry_comparry	NT AUTHORITY\SYSTEM	Allow	FullControl	True
C:\unit7asiggment\Sales_Department_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	False

Unit 7 Assignment

Computer systems

C:\unit7asiggment\Sales_Department_RB	BUILTIN\Administrators	Allow	FullControl	False
C:\unit7asiggment\Sales_Department_RB	DESKTOP-J3JNGH0\sales.department	Allow	ReadAndExecute, Synchronize	False
C:\unit7asiggment\key_Account_RB	DESKTOP-J3JNGH0\Miriam_RB	Deny	ReadAndExecute	False
C:\unit7asiggment\key_Account_RB	DESKTOP-J3JNGH0\sales.department	Allow	CreateFiles, WriteExtendedAttributes, WriteAttributes, ReadAndExecute, Synchronize	False
C:\unit7asiggment\key_Account_RB	DESKTOP-J3JNGH0\training.department	Allow	ReadAndExecute, Synchronize	False
C:\unit7asiggment\key_Account_RB	BUILTIN\Administrators	Allow	FullControl	True
C:\unit7asiggment\key_Account_RB	NT AUTHORITY\SYSTEM	Allow	FullControl	True
C:\unit7asiggment\key_Account_RB\confidential.xml	DESKTOP-J3JNGH0\training.department	Deny	Read	False
C:\unit7asiggment\key_Account_RB\confidential.xml	DESKTOP-J3JNGH0\Miriam_RB	Deny	ReadAndExecute	True
C:\unit7asiggment\key_Account_RB\confidential.xml	DESKTOP-J3JNGH0\sales.department	Allow	CreateFiles, WriteExtendedAttributes, WriteAttributes, ReadAndExecute, Synchronize	True
C:\unit7asiggment\key_Account_RB\confidential.xml	DESKTOP-J3JNGH0\training.department	Allow	ReadAndExecute, Synchronize	True
C:\unit7asiggment\key_Account_RB\confidential.xml	BUILTIN\Administrators	Allow	FullControl	True
C:\unit7asiggment\key_Account_RB\confidential.xml	NT AUTHORITY\SYSTEM	Allow	FullControl	True