What is this document for?

The same instructions that you will read here have already been explained, and even better, by many articles online and excellent videos on YouTube.

However, this is not a simple repetition of what others have written, but a checklist that collects all the operations to be done in a single list and in the correct order.



A checklist is useful to avoid the risk of skipping any steps.

If you need more detailed and specific instructions, we recommend you follow the excellent videos of "Gentiluomo Digitale" that you can find in <u>this page</u>.

Sharing folders on local network

Sharing folders between all PCs on the local network is very useful for those who regularly use multiple PCs at home or in a small business or laboratory. But not everyone is interested in this option and it is a rather complex topic.

Are there any dangers?

If you share folders between PCs on your local network, they will all become like one PC, and then one PC will just get a virus and it will easily spread to all the others. So the right answer depends on the context.

- I have several PCs at home + lab and I use them for various purposes, one for the milling machine, one for the oscilloscope, another is the main computer on which I write and read, one I use in the evening to watch YouTube videos, then I have a portable Tablet and there is the PC that my partner uses for payments and I can trust that she does not go around downloading viruses. So even if these computers are interconnected without a password they do not create any danger for me.
- But if you find yourself in a company with werewolves around, or with children who download everything they see and the more colorful it is, the more they click on it... then be careful.

However, you could also take a middle ground and keep some PCs isolated.

DISCLAIMER

Whether you decide to share folders or not, always be very careful about everything you download. Before running it, test it with one or more utilities on the Internet, for example *VirusTotal* And *VirusScan* and do not use any antivirus other than Defender, read why in *this page*.

To share folders the network must be "Private"

- Right-click on the network symbol (WiFi / Ethernet) at the bottom right
- Select "Network & Internet Settings"
- At the top click on the words "Properties"
- Scroll up and choose "Private network" (this way you will avoid polluting the "Public network" option with various access permissions that the various applications will inevitably ask you for over time)
- Close the panel and you're done (but if you change WiFi network you'll have to do it again)

Be aware that the network may become public again on its own.

This can happen whenever you press "Connect to a network" or when certain Windows updates arrive.

If this happens, the first symptom is that folder sharing no longer works, but you might not even notice. So check often by going to "Properties" and then "Network and Internet".

Why you should set your network to private

Unless you are at the airport, or bar, or hospital, or similar, the network must always be set to "Private".

Setting your network to private isn't just for sharing folders. Always do this otherwise the following will happen to you:

- You are working quietly in your home or in your laboratory and you think you are in a Private Network
- Every now and then a program asks you to allow it to do something on the network.
- You allow them to do so thinking that you are safe in the Private Network
- In reality, you are giving that concession to the "Public Networks"

So after a while you will have the "Public Network" which is a sieve.

And if by chance you happen to go to a "Public Network", for example to a bar, an airport or a hospital, what do you do? Do you set the public network that is full of permissions and does not protect you anymore?

Share folders between PCs

These sharing operations, and those on the following pages, must be performed on all the PCs in your network. The PCs on which you do not perform these operations will remain isolated, will not be seen by the other PCs, and will not be able to access the folders of the other PCs.

- Open Control Panel
- Select "Network and Sharing Center"
- Check that the connection is "Private network"
- On the left, choose "Change advanced sharing settings"
- Enable "File and Printer Sharing"
- Go down and open "All Networks"
- Enable "Public Folder Sharing"
- Turn off "Password Protected Sharing"
- Close everything

Create a folder on C drive and share it

- Open "File Explorer" and open the C drive
- Create a folder directly in C and call it for example: C:\YourName

This folder should be the same on all your PCs. This way you will have all your files and applications in one place and it will be easy to transfer them from one PC to another or to a spare HardDisk.

- Always with "File Explorer" select your folder with the right button
- Select "Properties"
- Click on "Share" at the top
- Press the "Share..." button
- Click on the arrow in the top box and choose "Everyone"
- Press the "Add" button
- Go to the Everyone line and select "Read/Write"
- Press the "Share" button below
- Press "Operation completed"
- Press the "Close" button at the bottom and close the panel

Check folder sharing

- Open "Network"
- Double-click on the icon with the name of a PC
- Some Windows 11 are satisfied with what we have done so far, so that the shared folders of that PC will be seen
- But if you get the message "Network Error Unable to log you in..." or a message asking for your account and password, then you will need to run the following script

Run the "EnableGuestLogons" script

You will find the script in the file Windows11_Apps.zip

- Right-click on "EnableGuestLogons_EXEC_AS_ADMIN_.bat"
- Choose "Run as administrator"
- Consent to execution
- Press a key to continue, and then to end the script
- Wait about ten seconds for all three commands to be executed.
- Double check that you can access shared folders, between one PC and another and vice versa.

Remove changes made by the script

If you want to restore a PC to its previous state and prevent it from accessing the folders of other PCs, you can run the reverse script called "DisableGuestLogons"

You will also find this script in the file Windows11_Apps.zip

- Right-click on "DisableGuestLogons_EXEC_AS_ADMIN_.bat"
- Choose "Run as administrator"
- Consent the execution
- Press a key to continue, and then to end the script
- Wait about ten seconds for all three commands to be executed

On Windows 11 that didn't need the script, even disabling it doesn't change anything.

On Windows 11 that needed it, disabling the script would prevent this PC from accessing other PCs' folders, but it would not prevent other PCs from continuing to access this PC's folders. So if you want to isolate them completely, you'll need to do this on all PCs.

But it would be even better to go to "All networks" and re-enable "Password protected sharing" which would certainly work on all Windows 11.

What the script does

Not all Windows 11s require this script to be run. Microsoft probably blocked Guest Logon and then, seeing that no one could share folders anymore, changed their minds and unblocked it again.

However, this script does not increase the risks but simply validates the option you have already chosen by disabling "Password protected sharing".

In other words this script does not introduce a new risk regarding the decision to disable password sharing but only allows your choice to take effect.

The script commands

The script contains the following three lines that allow sharing without a password.

powershell.exe -Command "Set-SmbClientConfiguration -EnableInsecureGuestLogons \$true -Force" powershell.exe -Command "Set-SmbClientConfiguration -RequireSecuritySignature \$false -Force" powershell.exe -Command "Set-SmbServerConfiguration -RequireSecuritySignature \$false -Force"

- The first line configures the *client* SMB (Server Message Block, the protocol used for sharing files and printers over a network) to allow unauthenticated guest access. By setting-EnableInsecureGuestLogons to \$true, allows the system to connect to shared folders that do not require authentication. The option -Force is used to suppress any confirmation requests.
- The second line always at the level of *client* SMB disables the security signature requirement. Security signature adds a layer of integrity to SMB packets to prevent tampering during transmission. Disabling it can make it easier to connect to systems that do not support or require signatures. Again, -Force suppresses confirmations.
- The third line configure the server SMB on your PC, which is the part that manages shared folders. Again, disable the security signature requirement for shares hosted on your computer. The option -Force has the same function.

In <u>this page</u> and in <u>this second page</u> you can read the Microsoft's official explanations on the commands "EnableInsecureGuestLogons" And "RequireSecuritySignature".