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Technical Support (420-1N6-AB) Permissions, User Profiles, Registries and Maintenance

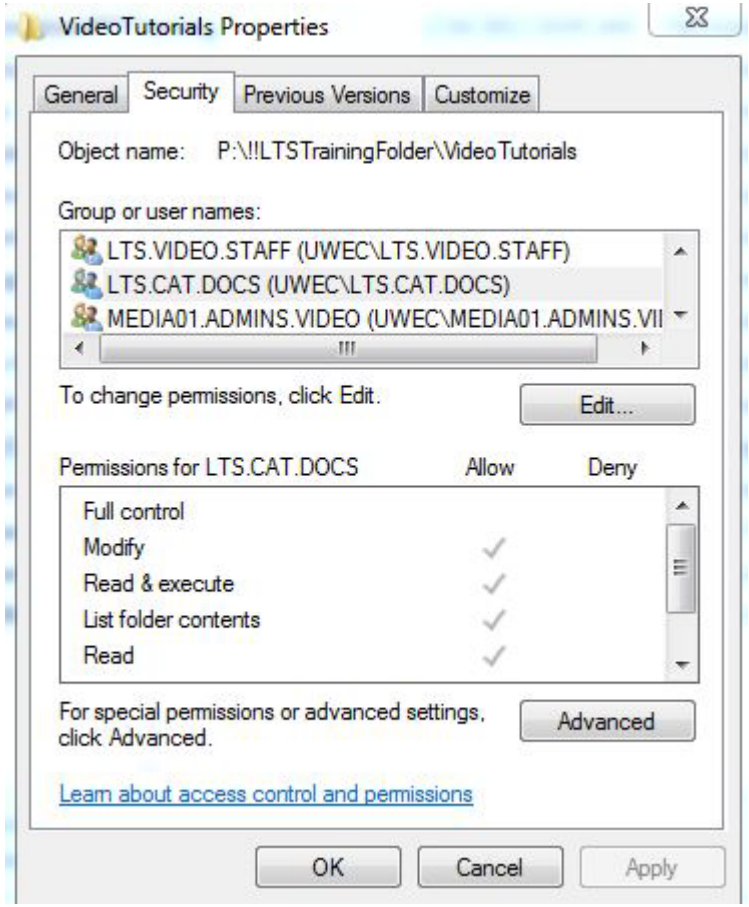
Fall 2022

Adapted for Fall 2025

File Permissions

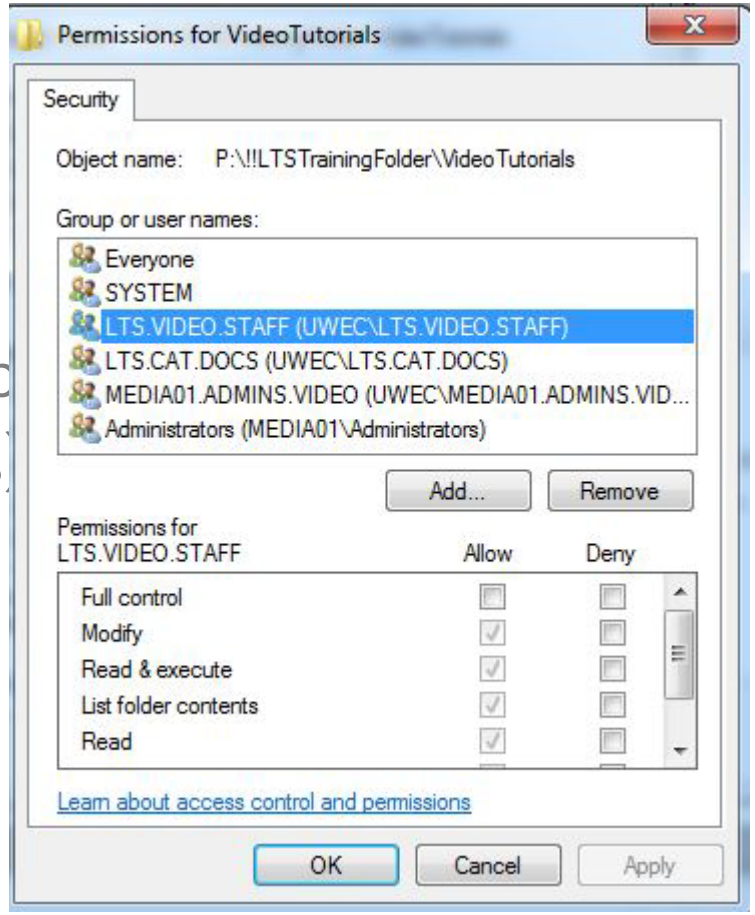
File Permissions

- The properties tab of files and folders in Windows allows you to configure various permissions for the different users or groups of users



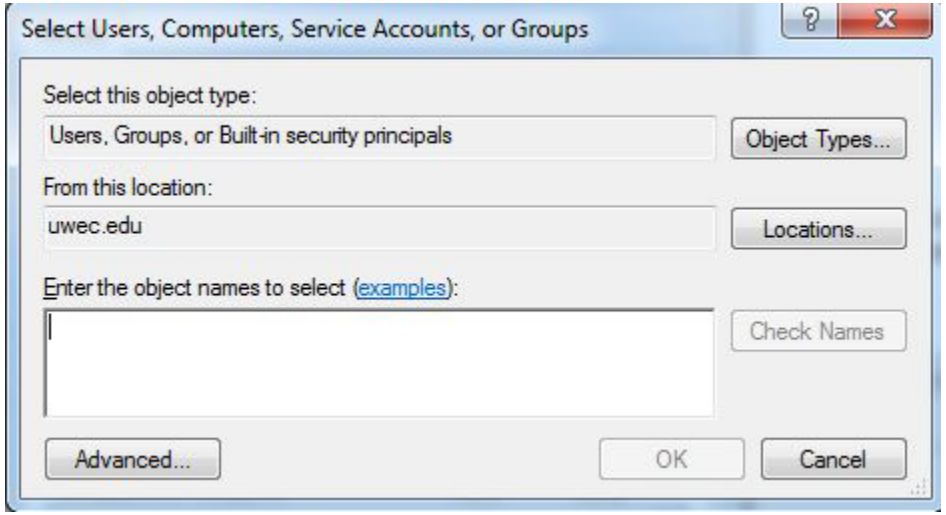
File permissions

- You may Edit permission:
- These are the NTFS permissions:
  - **Full Control** (includes everything)
  - **Modify** (does not include taking ownership)
  - **Read and Execute** (view files and run apps)
  - **List Folder contents** (view folders but not access files
  - **Read** (open and view files)
  - **Write** (create folder and files and edit them)



File permissions – Add a user

- Click the Edit button, this opens a new window
- Click the Add button, you may type the name of the user: FrenchUser or Click on Advanced > Add to add the user.



Installing Applications

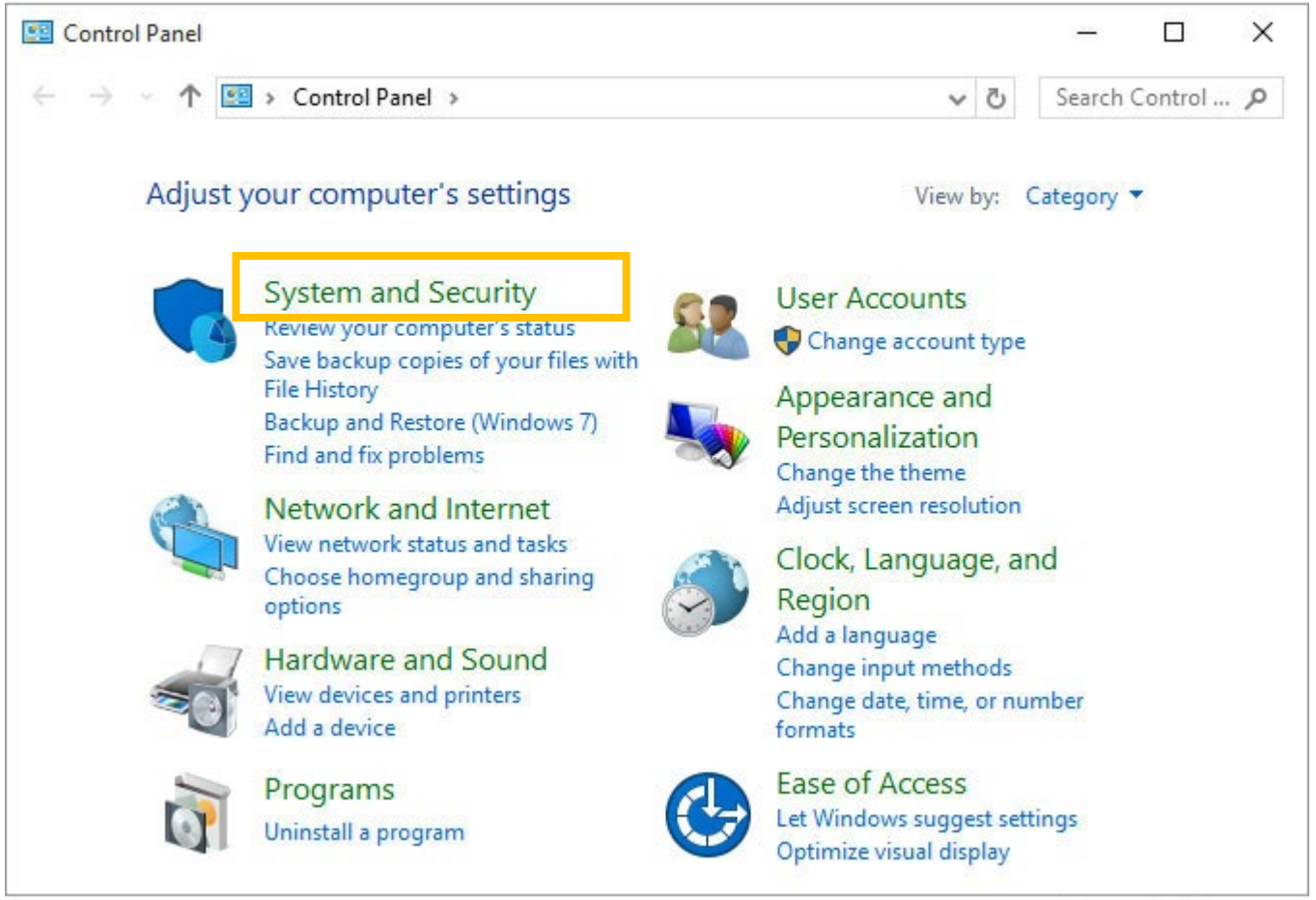
Control Panel

- In the search box next to Start on the taskbar, type **control panel**. Select **Control Panel** from the list of results.
- The control panel is a component of Windows since Windows 1.0
- It provides the functionality to view and modify the system settings
- Microsoft is progressively migrating its functionalities into **Settings,** but it remains a central location to find all possible system settings.

The features you should know about

- System and Security:
  - Allows you to enable/disabled Windows defender firewall.
  - Block certain apps from accessing your device
  - Allowing certain apps only when you are connected on a private network, etc.

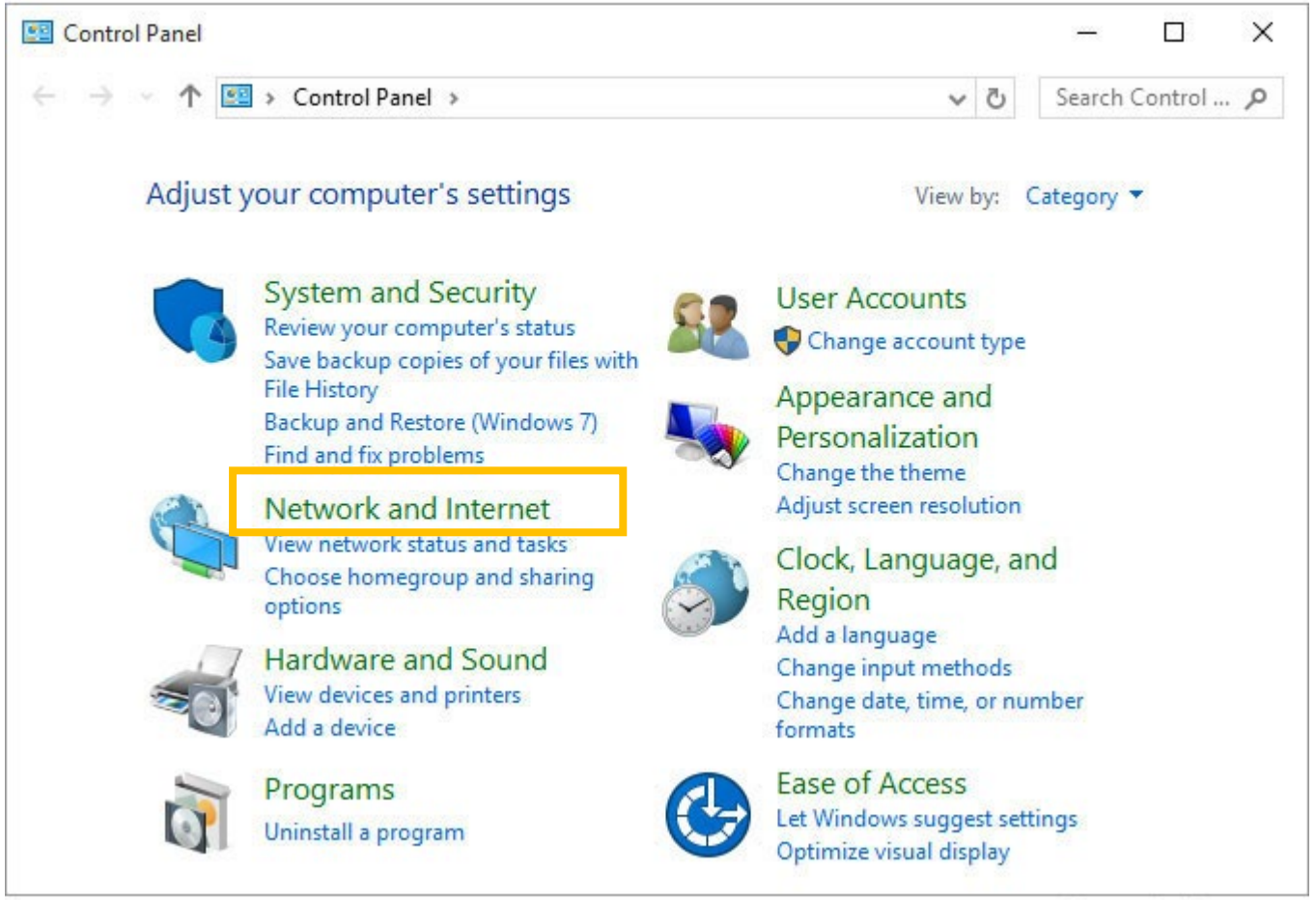
Windows 10 Control Panel



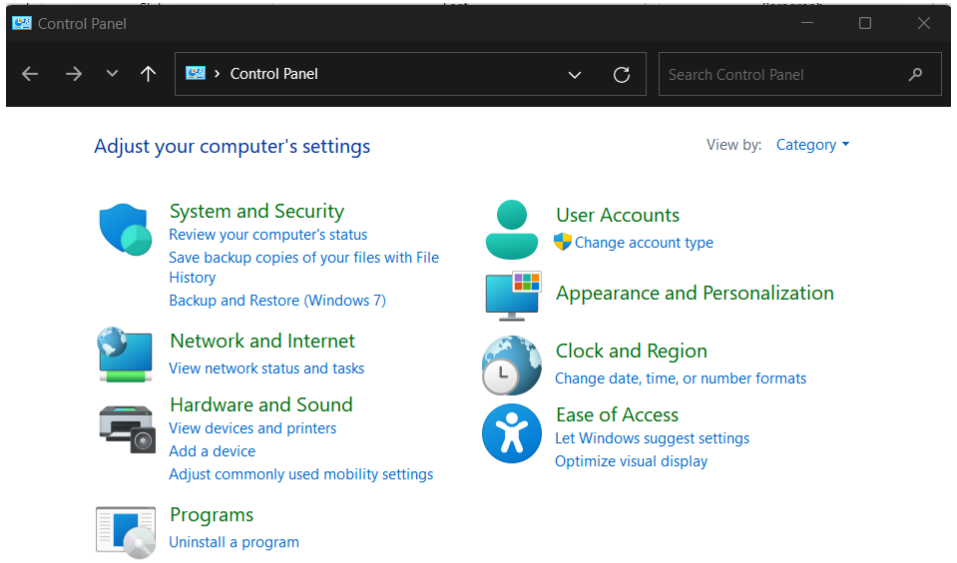
The features you should know about

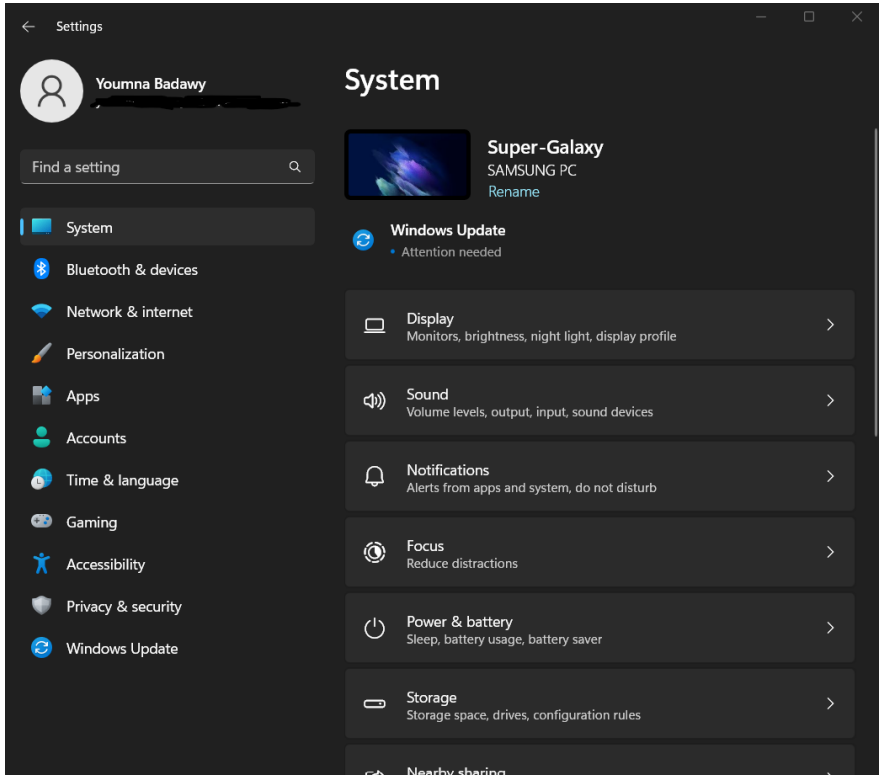
- Network and Internet:
  - Allows you to view and modify your network settings namely your adapter settings
  - You can view your Ip address and modify it
  - The Ip address is what identifies you on a network.

Windows 10 Control Panel



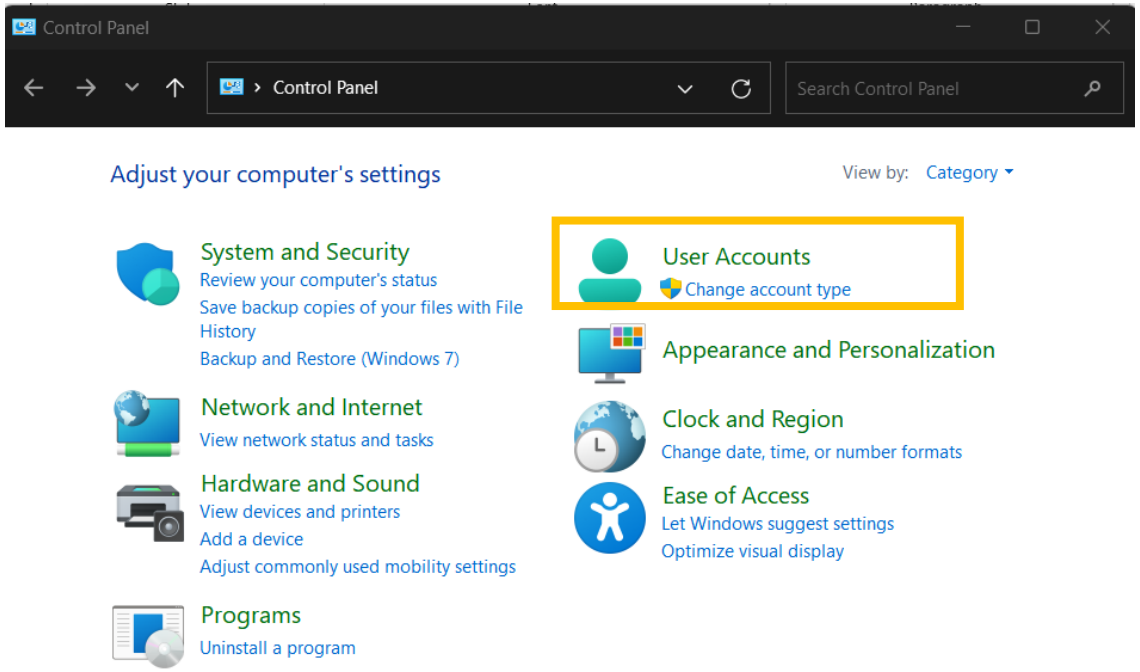
Control Panel vs Settings

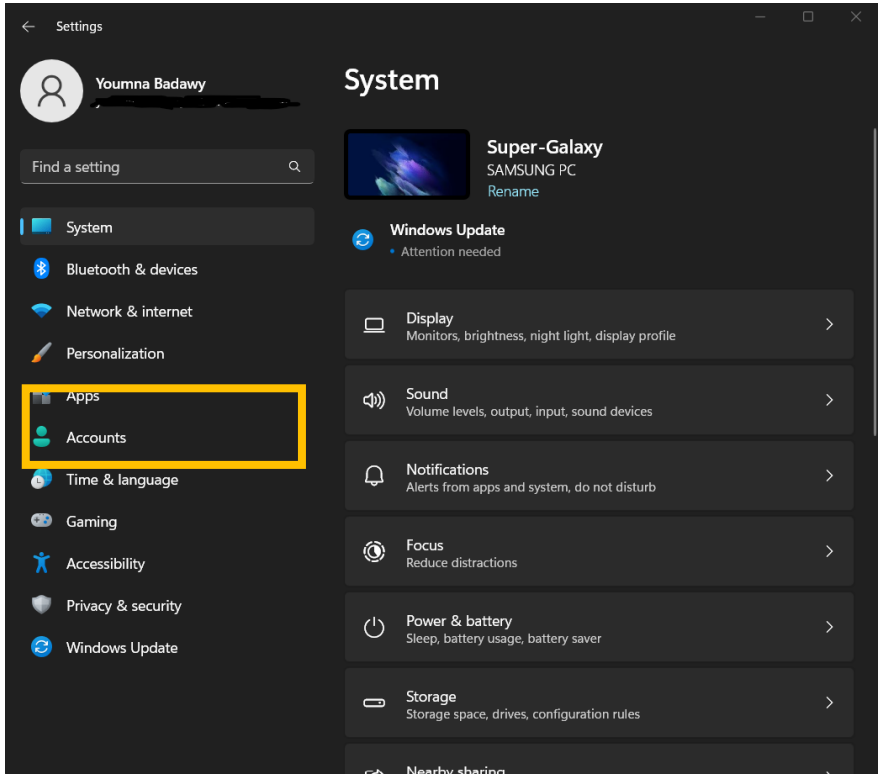




- Windows 11: Functionalities of the Control Panel have been reduced
- Microsoft is slowly eliminating the control panel and its functionalities in the Settings and *other places*

The functions you should know about

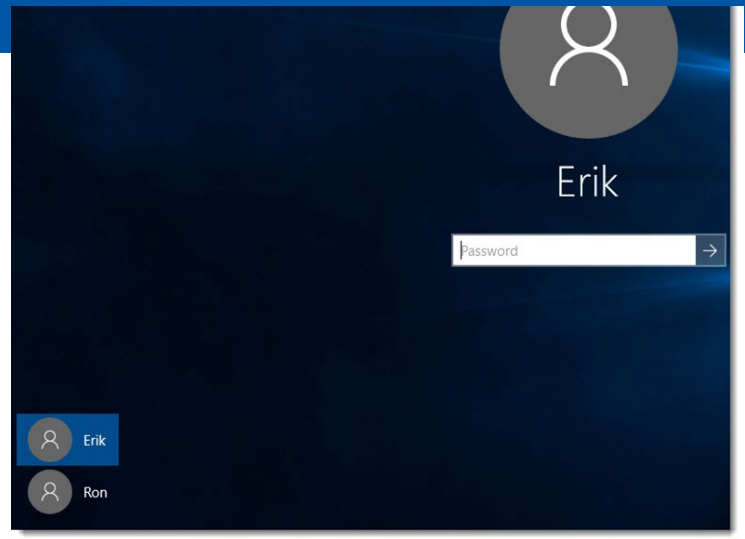


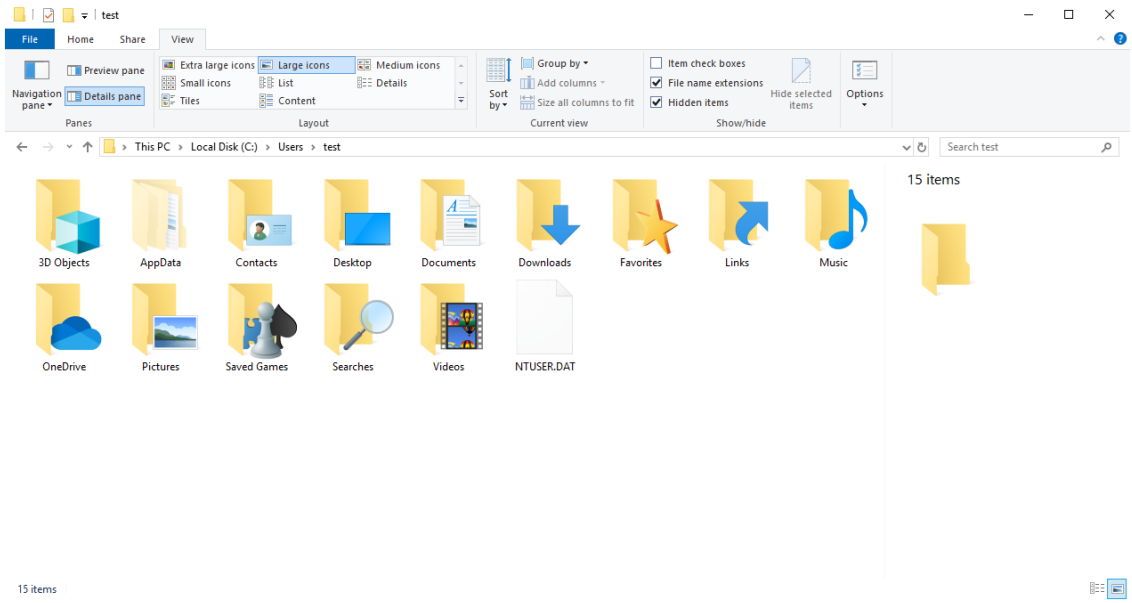


User Profiles

User Profiles

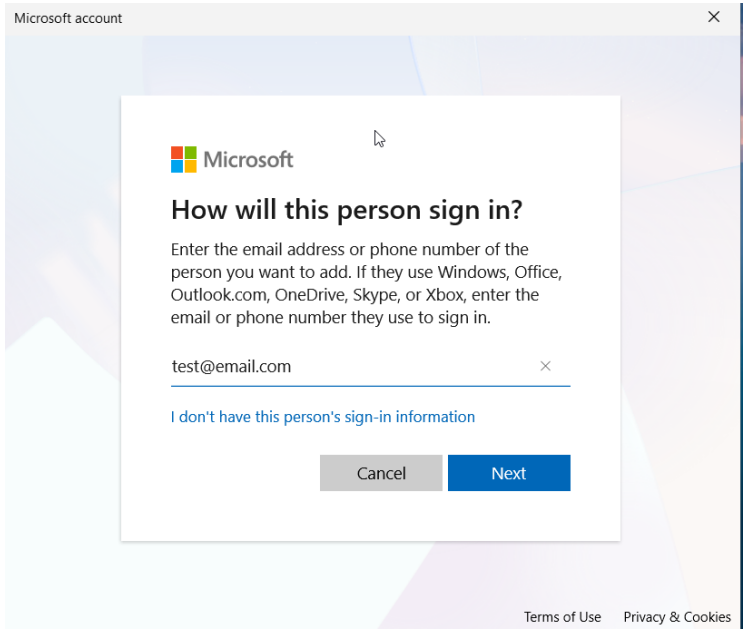
- A user profile is created the first time a user logs into a computer.
- During subsequent logins, the **system loads** the user's profile and configures the computer environment according to the information stored in the user profile.

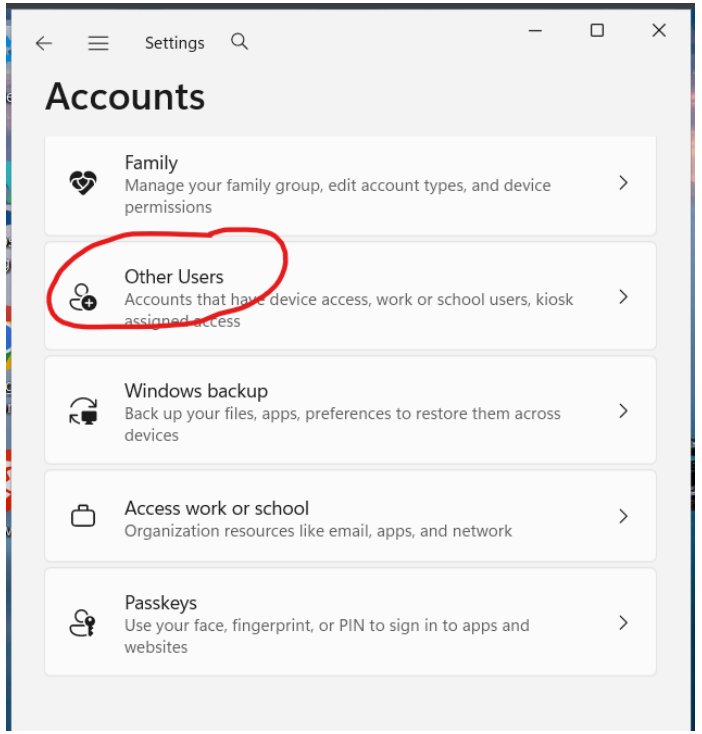




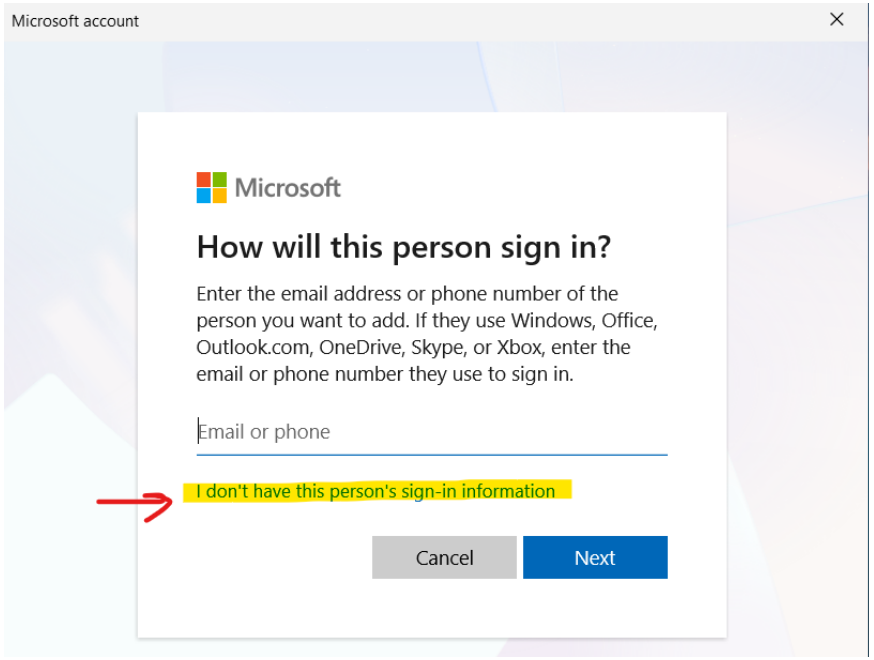
Adding another user on Windows 11

With a Microsoft Account



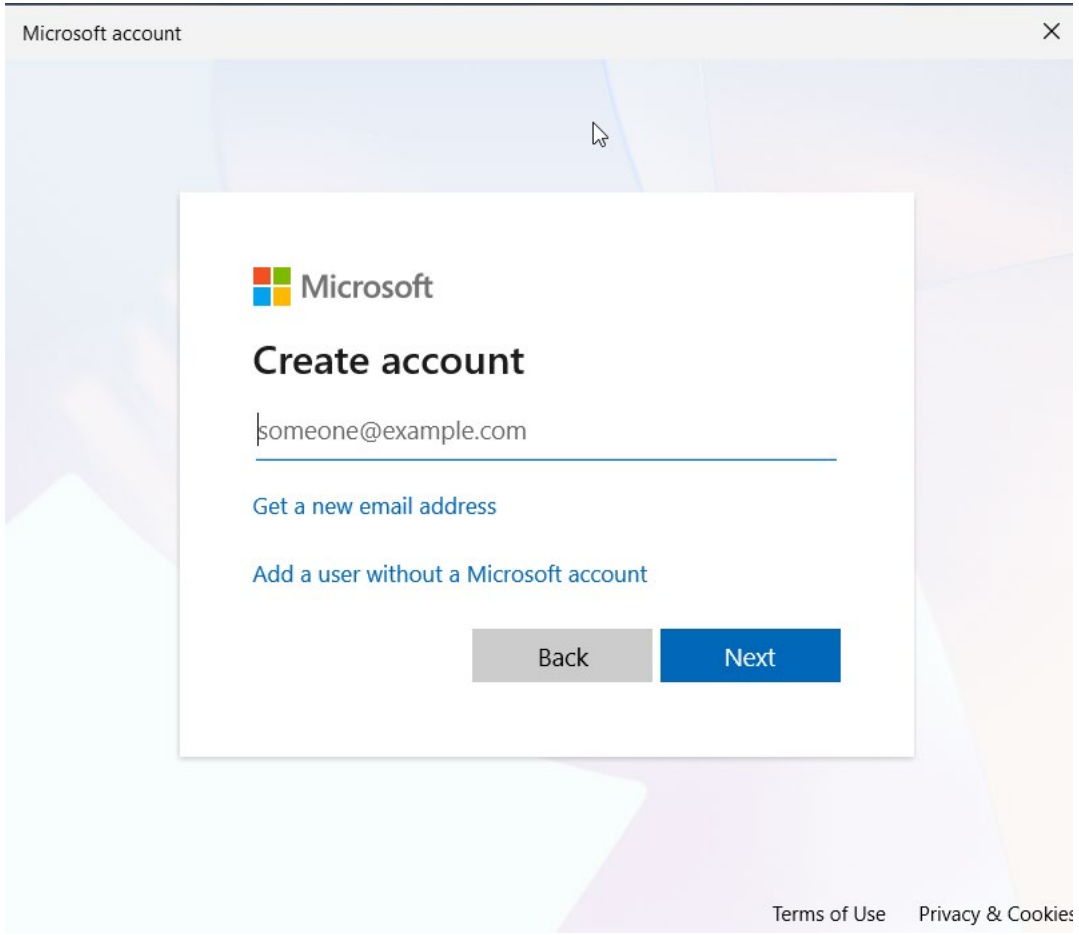


Without a Microsoft Account



Adding User account with Microsoft Account

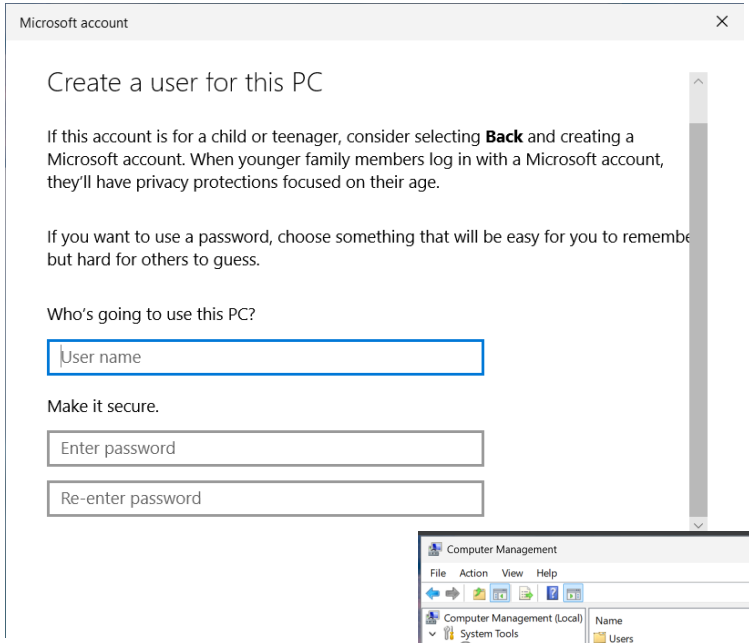
- Uses features such as synchronization across devices
- Offers access to Microsoft services such as Office 360 Pro, Onedrive, etc.
- Requires Internet Access

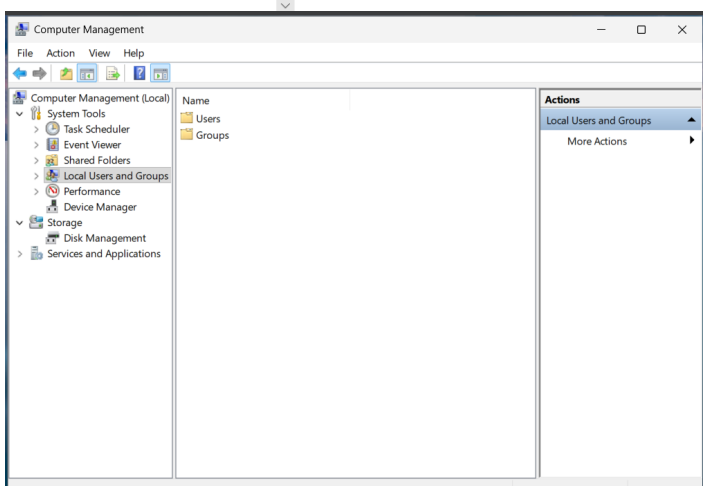


Adding Local User account (Without Microsoft Account)

- Creates a User account **only on this particular machine**
- All windows machines have a built-in local administrator account used for troubleshooting
- This can also be done via
- *Computer Management* (Win + R, type comp management.msc)
- This can be done via cmd:

```
net user <username>
<password> /add
```





Activity on VM: Adding Local User Profile

- Start > Control Panel
- User Accounts > Manage Other Account
- Add a user account: *French User*
  - Using Microsoft Account
  - Without a Microsoft Account
- Add a second user account: *Big Boss:*
  - Without Microsoft Account
- Select the newly created account and change account type:
  - Local Administrator

User Account Types

Administrator

Administrators are “Super users” of a computer and have full control of a computer. They can install or modify software and access any file.

They **can add other users** and change their user types.

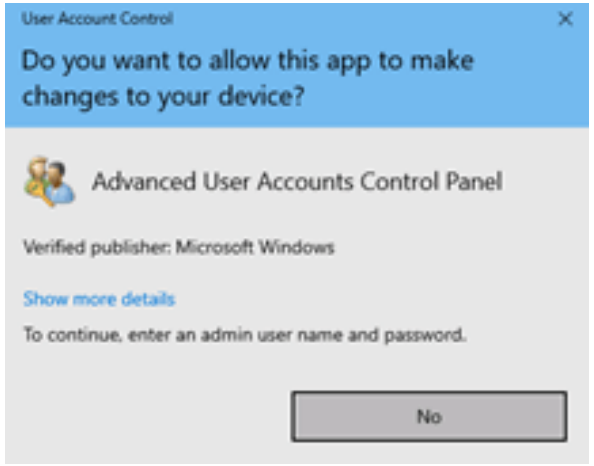
Standard

Have partial control over a computer. For example, they can only install apps and software within their local user directory.

They cannot install system wide applications or access other users’ files.

Administrator account required

When I am an Admin….



When I am not an Admin…

What's a User Profiles made up of?

Types of User profiles

Localized to this specific machine

Local Profile

Roaming Profile

Example your John Abbott
School account.
It downloads the settings from the main server into any PC logged into within the nextwork

Mandatory Profile

Temporary Profile

Types of User profiles

Local Profile

Roaming Profile

Mandatory Profile

Temporary Profile

Administrators can create mandatory user profiles with settings for users.

A temporary profile is created if an error prevents user profile from loading.

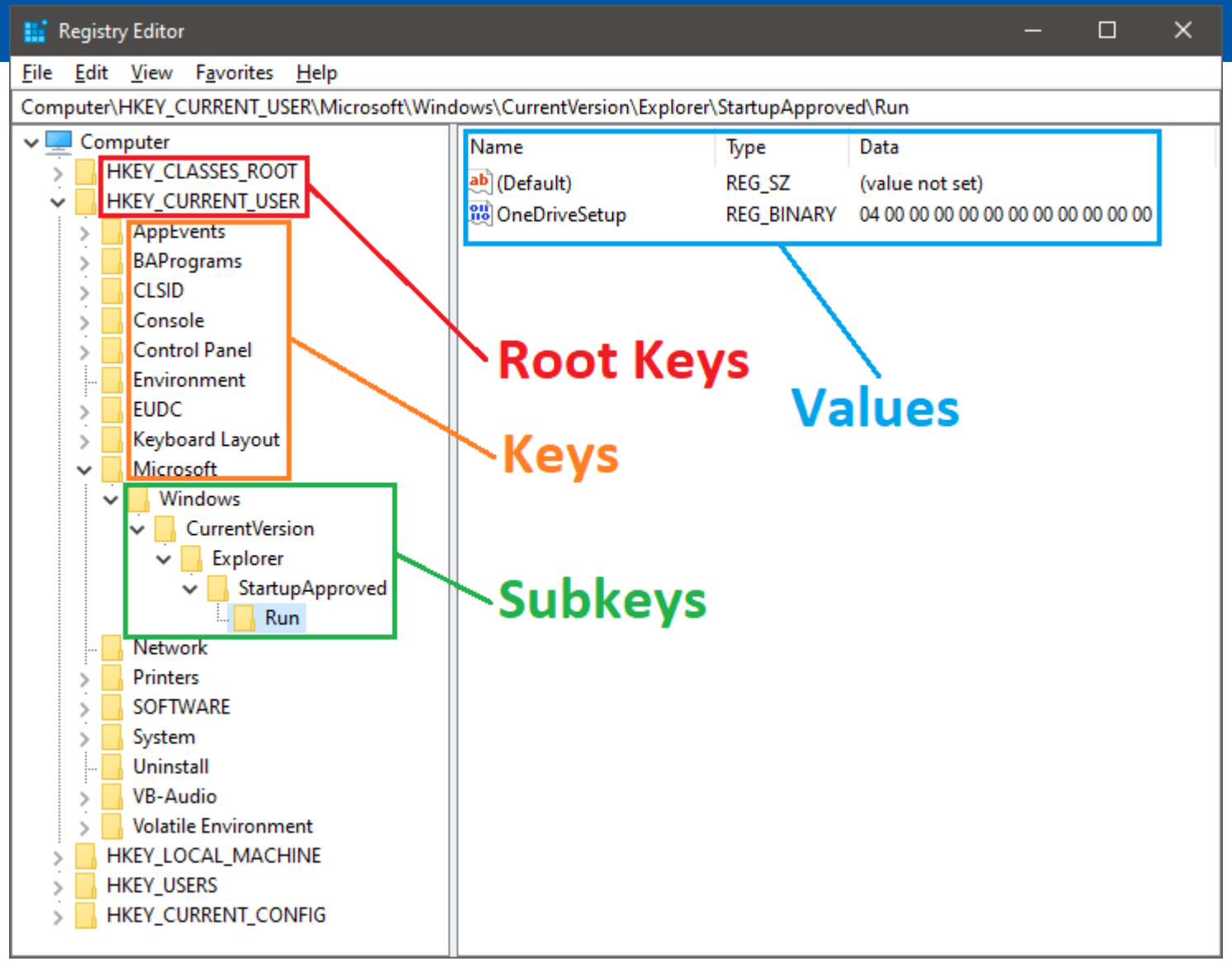
These profiles are deleted automatically at the end of each session.

Example: Account at a computer in a Public Library

Registries

Registries

The **Windows registry** is a hierarchical database that stores configuration settings and options for the Microsoft Windows operating system and installed applications.



Windows Registry

Computer technicians should:

- Understand basic Registry components,
- Know how to edit the Registry manually,
- Know the best way to locate a particular setting.

Accessing Registry

- To access the Registry, type “regedit” in the Start ⊞ Win, Search bar.
- The Registry is organized in a tree structure similar to the folders in a file system.
- It shows keys (or subkeys) on the left and values on the right.

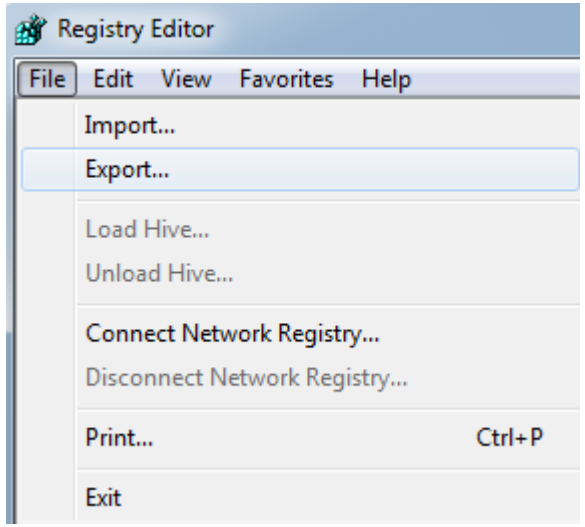
Activity VM: Five main subgroups or root keys

HKEY_CLASSES_ROOT	Historically this root key defined the standard class objects used by Windows. Now this root key provides backwards compatibility for older applications.
HKEY_CURRENT_USER HKEY_USERS	These store personalized information for each user that has an account on the system such as desktop colours, screensavers and desktop contents.
HKEY_LOCAL_MACHINE	Contains all the data for a system's non-user-specific configurations. This encompasses every device and every program in your computer.
HKEY_CURRENT_CONFIG	If the values in HKEY_LOCAL_MACHINE have more than one value, e.g. two different monitors, this root key defines which one is currently being used.

Using Registry Editor

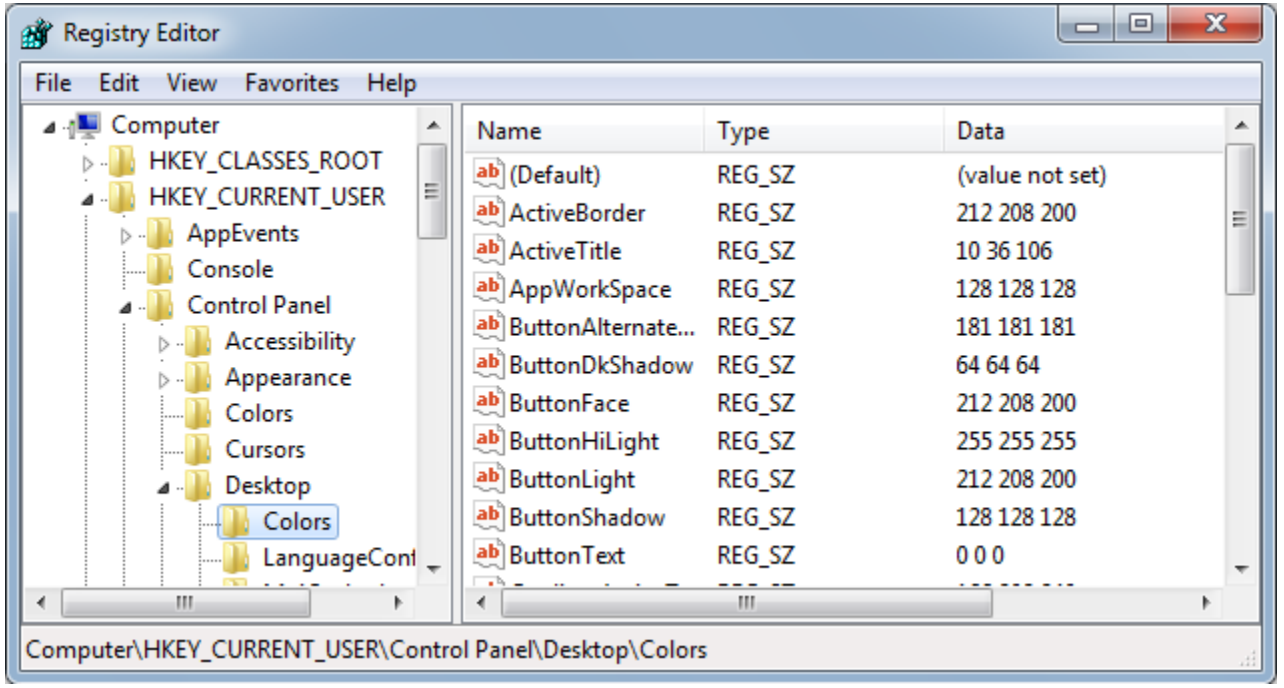
- When you use the Registry Editor to access the Registry, you risk breaking things.
- Applications might not start, utilities may not work, or your computer may not boot.
- **Always make a backup of the Registry** (preferably into a thumb drive) before you change anything. After you make the change, reboot the system to see if it had the desired effect. If not, restore the old Registry settings from your backup.

Activity VM: Using Registry Editor



- To save a copy of the Registry,
  - Export the full registry or a single key or subkey (with all subkeys and values under it) using File → Export.
- Saved with the extension .reg
- To restore a set of backed up registry keys,
  - Use File → Import or right-click on the icon and select Merge.

Activity VM: Using Registry Editor



Activity VM: Change highlight color

1. Press the Windows key + R to open the Run dialog box.
2. Type "regedit" (without quotes) and press Enter to open the Registry Editor.
3. Navigate to HKEY_CURRENT_USER\Control Panel\Colors.
4. Look for the "Hilight" value in the right-hand pane. This is the value that controls the highlight color of selected items.
5. Double-click on "Hilight" to open its properties.
6. In the "Value data" field, enter the RGB value of the color you want to use. For example, if you want to use a light blue color, you can enter "192 217 255" (without quotes).
7. Click OK to save the changes.
8. Close the Registry Editor.

- More registries hacks: https://www.minitool.com/backup-tips/windows-10-registry-hacks.html

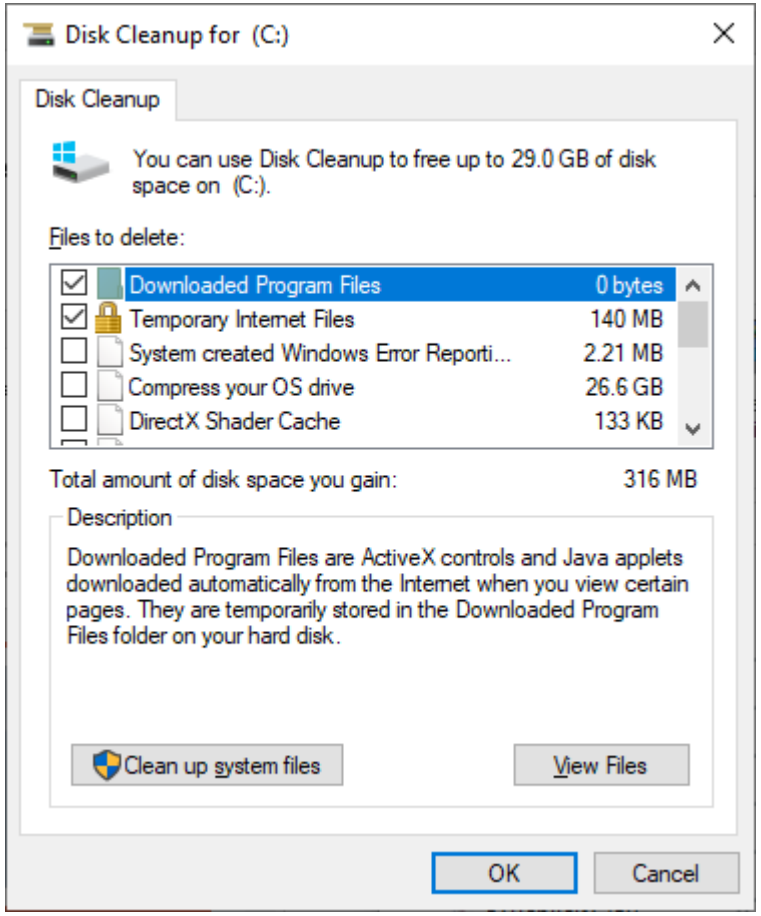
OS Maintenance

Preventative Maintenance Tasks

- Disk cleanup.
- Disk defragmentation.
- Hard drive error checking.
- Updates to OS (e.g. service packs) and applications.
- Updates to antivirus and other protective software.

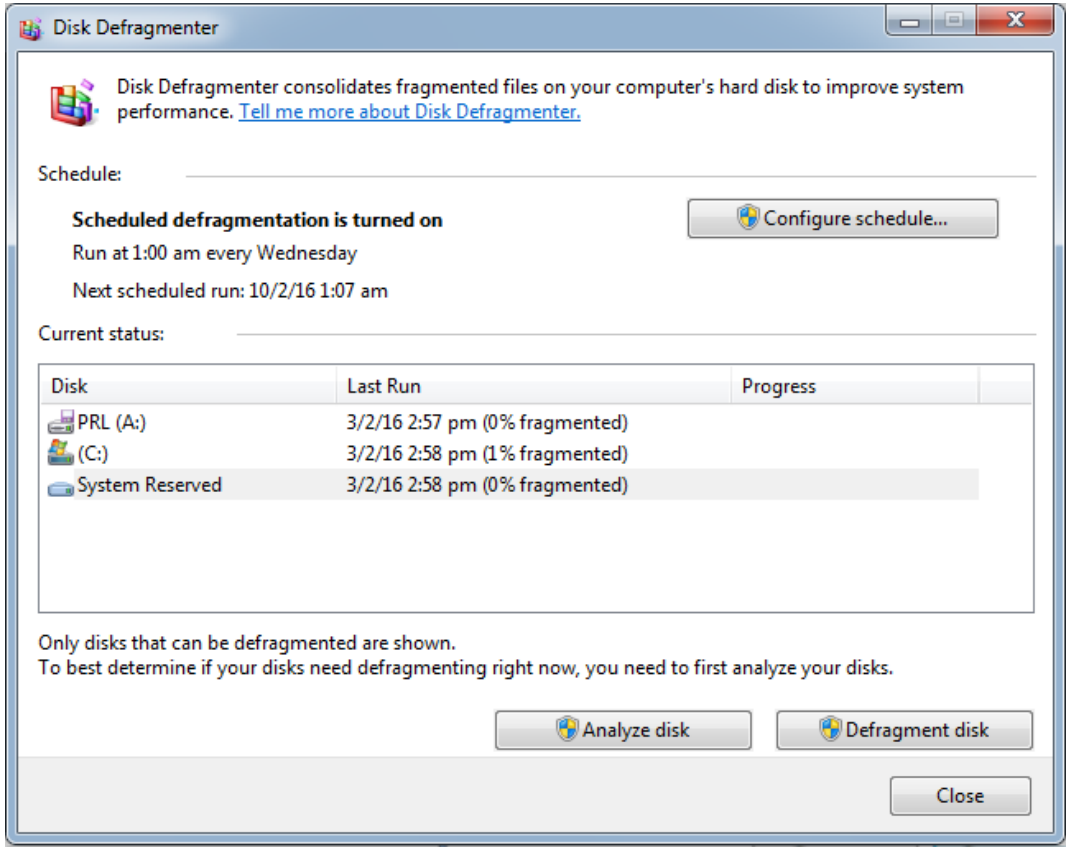
Disk Cleanup

- Removes unneeded files
  e.g.
  - Temporary internet files
  - Files downloaded to install programs
  - Files in the recycle bin
  - Log files
  - Temporary files
  - Thumbnails
- Admin can also clean up system files.



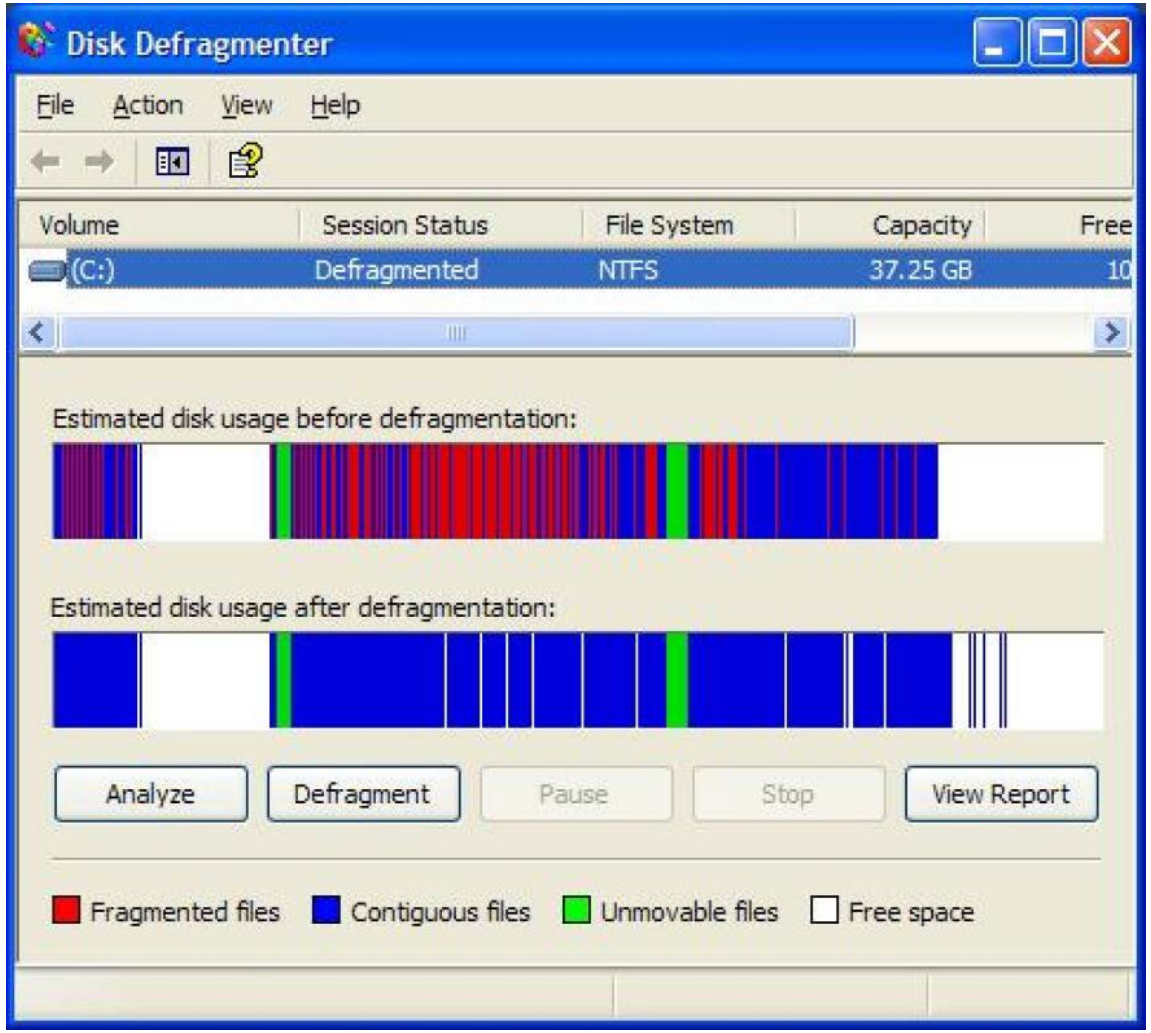
Disk Defragmentation

- If a storage device is fragmented, it can slow down your computer.
- A disk can become fragmented very quickly if it is used heavily and data is written to it often.
- Disk defragmenter typically runs on a schedule but you can analyze and defrag manually.



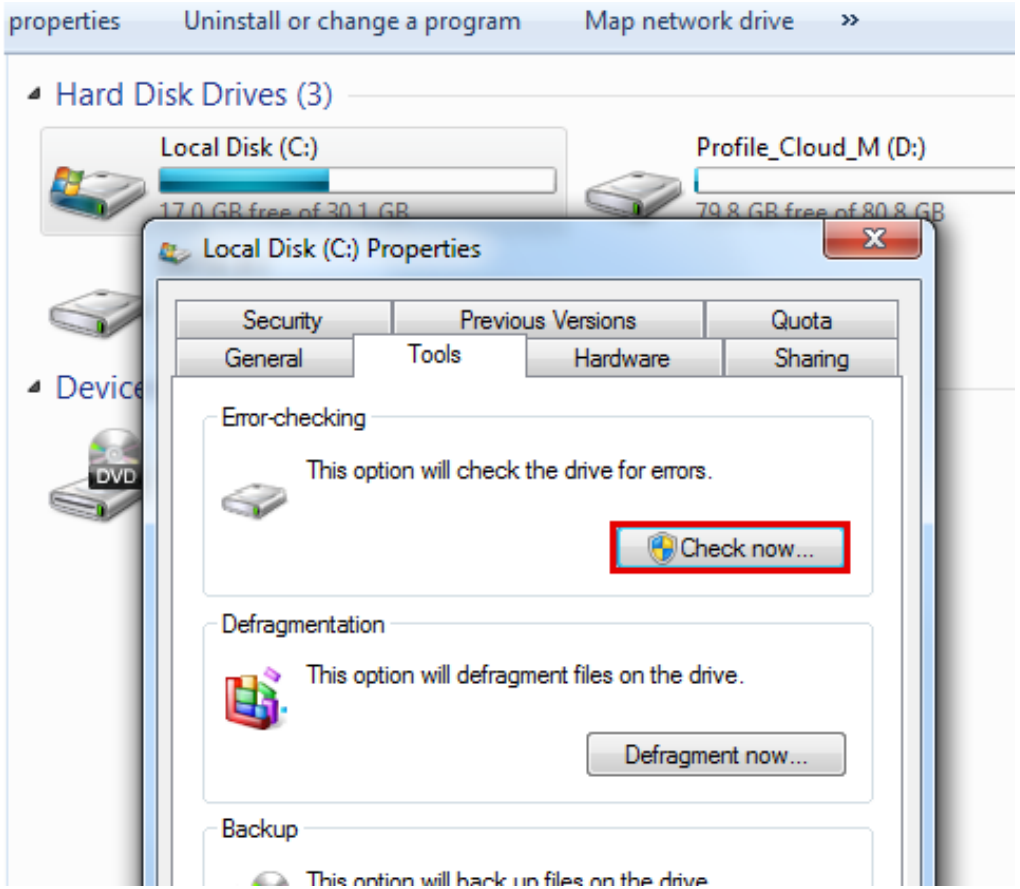
Disk Defragmentation

- On older versions of Windows, the defragmenter came with a visualization tool..



Hard Drive Error Checking

- The Disk Check tool in Windows can find and repair file system errors on:
  - Local hard drives.
  - Removable media such as USB flash drives or memory cards.



OS Maintenance – OS updates

Updates to OS and applications

- A service pack is a collection of updates, fixes or enhancements to a software program, delivered in the form of a single installable package. They may introduce new features to an OS as well as bug fixes, security enhancements, etc.

- It is common to have service packs issued within the first two years of release of a product, and they are usually numbered, e.g. SP1, SP2.

- Note: Microsoft recommends that you never be more than two service packs behind.

Q & A