

## Windows Directory structure

In computing, a directory structure is the way an operating system's file system and its files are displayed to the user. Files are typically displayed in a hierarchical tree structure.

### File names and extensions

A filename is a string used to uniquely identify a file stored on the file system of a computer. Before the advent of 32-bit operating systems, file names were typically limited to short names (6 to 14 characters in size). Modern operating systems now typically allow much longer filenames (more than 250 characters per pathname element).

### Windows, DOS and OS/2

In DOS, Windows, and OS/2, the root directory is "drive:\", for example, the root directory is usually "C:\". The directory separator is usually a "\", but the operating system also internally recognizes a "/". Physical and virtual drives are named by a drive letter, as opposed to being combined as one. This means that there is no "formal" root directory, but rather that there are independent root directories on each drive. However, it is possible to combine two drives into one virtual drive letter, by setting a hard drive into a RAID setting of 0. For Windows 10, the following folders may appear in the root of a boot partition.

| Folder                            | Description  |
|-----------------------------------|--|
| \PerfLogs (Hidden)                | May hold Windows performance logs.   |
| \Program Files                    | 32-bit architecture: All apps (both 16-bit and 32-bit) are installed in this folder.<br>64-bit architecture: 64-bit apps are installed in this folder.   |
| \Program Files (x86)              | Appears on 64-bit editions of Windows. 32-bit and 16-bit apps are by default installed in this folder.   |
| \ProgramData                      | Contains program data that are expected to be accessed by computer programs regardless of the user account in the context of which they run.   |
| \Users                            | User profile folders. This folder contains one subfolder for each user that has logged onto the system at least once.  |
| \Public                           | This folder serves as a buffer for users of a computer to share files.   |
| [username]\AppData                | This folder stores per-user application data and settings. The folder contains three subfolders: Roaming, Local, and LocalLow.   |
| \Windows                          | Windows itself is installed into this folder.  |
| \System<br>\System32<br>\SysWOW64 | These folders store dynamic-link library (DLL) files that implement the core features of Windows and Windows API. Any time a program asks Windows to load a DLL file and do not specify a path, these folders are searched after app's own folder is searched. |
| \WinSxS                           | This folder is officially called "Windows component store" and constitutes the majority of Windows. A copy of all Windows components, as well as all Windows updates and service packs is stored in this folder.   |