Comparison of Windows, macOS, and Linux

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| Feature | Windows | macOS | Linux |
| File & Directory Structure | Uses backslashes C:\Users\Documents | Uses forward slashes /Users/Documents | Uses forward slashes /home/user/Documents |
| Naming Conventions | Not case-sensitive, supports spaces | Case-sensitive by default, supports Unicode | Case-sensitive, uses strict naming rules |
| File Systems | NTFS, FAT32 (FAT used on USBs) | APFS, HFS+ (FAT32 on external drives) | ext4, xfs (FAT used for boot partitions/USBs) |
| Executable File Types | .exe, .bat, .msi | .app, .pkg, shell scripts | .out, .bin, .sh |
| Script Execution Tools | PowerShell, Command Prompt | Terminal (bash/zsh), Automator | Terminal (bash, zsh, etc.), cron jobs |
| Source Type | Proprietary | Proprietary | Open-source |
| Developer | Microsoft | Apple | Linux Foundation |
| File Management | File Explorer (GUI) | Finder (GUI) | File Manager or Terminal |
| Shell Access | CMD / PowerShell | Terminal (zsh, bash) | Terminal (bash, sh, zsh) |
| Used For | Home, Office, Gaming | Design, Multimedia | Development, Servers |