**MacOS X 10.9**

**History**

OS X Mavericks (version 10.9) is the tenth major release of OS X, Apple Inc.'s desktop and server operating system for Macintosh computers. OS X Mavericks was announced on June 10, 2013, at WWDC 2013, and was released on October 22, 2013, as a free upgrade through the Mac App Store worldwide.

The update emphasized battery life, Finder improvements, other improvements for power users, and continued iCloud integration, as well as bringing more of Apple's iOS apps to OS X. Mavericks, which was named after the surfing location in California, was the first in the series of OS X releases named for places in Apple's home state; earlier releases used the names of big cats.

**Function and features**

The menu bar and the Dock are available on each display. Additionally, AirPlay compatible displays such as the Apple TV can be used as an external display. Mission Control has been updated to organize and switch between Desktop workspaces independently between multiple displays.

OS X Mavericks introduced App Nap, which sleeps apps that are not currently visible. Any app running on Mavericks can be eligible for this feature by default.

Compressed Memory is a virtual memory compression system which automatically compresses data from inactive apps when approaching maximum memory capacity.

Timer coalescing is a feature that enhances energy efficiency by reducing CPU usage by up to 72 percent. This allows MacBooks to run for longer periods of time and desktop Macs to run cooler.

Apple now supports OpenGL 4.1 Core Profile and OpenCL 1.2. Server Message Block version 2 (SMB2) is now the default protocol for sharing files instead of AFP. This is to increase performance and cross-platform compatibility.

Some skeuomorphs, such as the leather texture in Calendar, the legal pad theme of Notes, and the book-like appearance of Contacts, have been removed from the UI.

iCloud Keychain stores a user's usernames, passwords and Wi-Fi passwords to allow the user to fill this information into forms when needed.

The system has native LinkedIn sharing integration.

IPoTB (Internet Protocol over Thunderbolt Bridge) Thunderbolt networking is supported in Mavericks. This feature allows the user to quickly transfer a large amount of data between two Macs.

Notification Center allows the user to reply to notifications instantly, allow websites to send notifications, and the user returns to a Mac in a sleep state, the user will see a summary of missed notifications. Some system alerts, such as low battery, removal of drives without ejecting, and a failed Time Machine backup have been moved to Notification Center.

The "traffic light" close, minimize, and maximize window buttons have appeared somewhat brighter.

**System requirements**

OS X Mavericks can run on any Mac that can run OS X Mountain Lion; as with Mountain Lion, 2 GB of RAM, 8 GB of available storage, and OS X 10.6.8 (Snow Leopard) or later are required. Mavericks and later versions are all available for free.

The full list of compatible models:

* iMac (Mid-2007 or later)
* MacBook (13-inch Aluminum, Late 2008), (13-inch Polycarbonate, Early 2009 or later)
* MacBook Pro (13-inch, Mid-2009 or later), (15-inch or 17-inch, Mid/Late 2007 or later)
* MacBook Air (Late 2008 or later)
* Mac Mini (Early 2009 or later)
* Mac Pro (Early 2008 or later)
* Xserve (Early 2009)

**Advantages**

1. Simple but powerful user interface: Both macOS and Windows have easy-to-use graphical user interface or GUI. But OS X offers a more straightforward approach to computing. Those who are accustomed with the GUI of iOS found in iPhone and iPad will find macOS somewhat familiar.

2. Fewer viruses and other security issues: One of the advantages of macOS is that it is considerably safer than Windows. Of course, some Apple loyalists would argue that Macs are completely invincible from viruses or malware. This is no longer true.

3. Seamless integration between OS and hardware: Apple is both a software developer and a device manufacturer. This means that they have optimised the macOS to work seamlessly with all of the hardware components of a Mac device. It also ensures that all hardware components work hand-in-hand.

4. Comes preloaded with productivity apps: Standard Windows OS usually does not come with Microsoft Office Suite. Both are sold separately most of the time. In addition, new Windows-based laptop and desktop computers come with random software or apps that merely bloat the entire system and external storage.

5. Effective and unparalleled multitasking feature: Multitasking is another notable advantage of macOS. Mac computers have hardware specifications designed for multitasking. And because macOS integrates seamlessly with Mac hardware components, the overall operation is smooth and responsive.

6. Integration with other Apple products: One of the strengths of Apple is that most of the products under the brand are completely integrated. The iPhone or iPad works best with a Mac computer. This advantage of macOS is exclusive for Apple users—or those individuals with several Apple devices.

**Disadvantages**

1. Mac computers are considerably expensive: The fact remains that Apple sells expensive computers whether it is the new MacBook Pro with Retina or a Mac Mini. This is more noticeable when comparing the price point of Mac computers with their Windows counterpart.

2. Inflexible when it comes to hardware upgrades: A standard Mac computer cannot be upgraded easily because most of its hardware components are integrated both at a design and engineering levels. This is a macOS disadvantage that is unacceptable for hobbyists.

3. Lack of game titles and advanced gaming experience: There are more game titles available for Windows than in macOS. This is another noteworthy disadvantage of macOS. Some titles from independent producers that have gained large following are unavailable for Mac computers.

4. App ecosystem is still lacklustre: Windows has more software or applications. Developers, especially small and independent software companies, often consider building software for Windows first because of greater reach.