**MacOS X 10.10**

**History**

OS X Yosemite (version 10.10) is the eleventh major release of OS X, Apple Inc.'s desktop and server operating system for Macintosh computers.

OS X Yosemite was announced and released to developers on June 2, 2014 at WWDC 2014 and released to public beta testers on July 24, 2014. Yosemite was released to consumers on October 16, 2014. Following the California landmark-based naming scheme introduced with OS X Mavericks, Yosemite is named after the national park.

**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**

All Macintosh products capable of running OS X Mountain Lion (v10.8.x) are able to run Yosemite as they have the same requirements. However, in order to take full advantage of the Handoff feature, additional minimum system requirements include a Mac with Bluetooth LE (Bluetooth 4.0). As with Mavericks and Mountain Lion, 2 GB of RAM, 8 GB of available storage, and OS X 10.6.8 (Snow Leopard) or later are required.

These are the models that are compatible with OS X Yosemite (with exceptions):

* iMac (Mid 2007 or later)
* MacBook (Aluminum Late 2008 and Early 2009 or later)
* MacBook Pro (13-inch, Mid-2009 or later; 15-inch, Mid/Late 2007 or later; 17-inch, Late 2007 or later)
* MacBook Air (Late 2008 or later)
* Mac Mini (Early 2009 or later)
* Mac Pro (Early 2008 or later) (Can run on a mid-2006 version if one upgrades to a supported graphics chip and utilizes a custom bootloader)
* Xserve (Early 2009)

These are the models that support new features such as Handoff, Instant Hotspot as well as AirDrop between Mac computers and iOS devices:

* MacBook Air (Mid 2012 or later)
* MacBook Pro (Mid 2012 or later)
* iMac (Late 2012 or later)
* Mac Mini (Late 2012 or later)
* Mac Pro (Late 2013 or later)

**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.