**MacOS X 10.11**

**History**

OS X El Capitan el-kap-?-tahn) (version 10.11) is the twelfth major release of OS X, Apple Inc.'s desktop and server operating system for Macintosh computers. It is the successor to OS X Yosemite and focuses mainly on performance, stability and security. Following the California landmark-based naming scheme introduced with OS X Mavericks, El Capitan was named after a rock formation in Yosemite National Park, signifying its goal to be a refined version of Yosemite. El Capitan is the final version to be released under the name OS X; its successor, Sierra, was announced as MacOS Sierra.

The first beta of OS X El Capitan was released to developers shortly following the 2015 WWDC keynote on June 8, 2015. The first public beta was made available on July 9, 2015. There were multiple betas released after the keynote. OS X El Capitan was released to end users on September 30, 2015, as a free upgrade through the Mac App Store.

**Function and features**

OS X El Capitan includes features to improve the security, performance, design and usability of OS X. Compared to OS X Yosemite, Apple says that opening PDFs is four times faster, app switching and viewing messages in Mail is twice as fast and launching apps is 40% faster. The maximum amount of memory that could be allocated to the graphics processor has been increased from 1024 MB to 1536 MB on Macs with an Intel HD 4000 GPU. OS X El Capitan supports Metal, Apple's graphics API introduced in iOS 8 to speed up performance in games and professional applications.

*Window management*

An example of the split screen view in OS X El Capitan

OS X El Capitan introduces support for snapping two windows side by side to create a split view pressing the green button on left upper corner of the window, similar to the snap-assist feature in Windows 7 (and later) and several Linux desktop environments, such as GNOME. OS X El Capitan improves Mission Control to incorporate this feature across multiple spaces. It also enables users to spot the pointer more easily by enlarging it by shaking the mouse or swiping a finger back and forth on the trackpad.

*Applications*

*Messages and Mail*

OS X El Capitan adds multi-touch gestures to applications like Mail and Messages that allow a user to delete or mark emails or conversations by swiping a finger on a multi-touch device, such as a trackpad.

*Maps*

Apple Maps in El Capitan shows public transit information similar to Maps in iOS 9.

*Notes*

The Notes application receives an overhaul, similar to Notes in iOS 9. Both applications have more powerful text-processing capabilities, such as to-do lists (like in the Reminders application), inline webpage previews, photos and videos, digital sketches, map locations and other documents and media types. Notes replaces traditional IMAP-based syncing with iCloud, which offers better end-to-end encryption and faster syncing.

*Safari*

Safari in El Capitan lets users pin tabs for frequently accessed websites to the tab bar, similar to Firefox and Google Chrome. Users are able to quickly identify and mute tabs that play audio without having to search for individual tabs. Safari supports AirPlay video streaming to an Apple TV without the need to broadcast the entire webpage. Safari extensions are now hosted and signed by Apple as part of the updated Apple Developer program and they received native support for content blocking, allowing developers to block website components (such as advertisements) without JavaScript injection.

*Spotlight*

Spotlight is improved with more contextual information such as the weather, stocks, news and sports scores. It is also able to process queries in natural language. For example, users can type "Show me pictures that I took in Yosemite National Park in July 2014" and Spotlight will use that request to bring up the corresponding info. The app could now be resized and moved across the screen.

*Photos*

Photos introduced editing extensions which allows Photos to use editing tools from other apps.

**System requirements**

All Macintosh computers that can run Mountain Lion, Mavericks, or Yosemite can run El Capitan, although not all of its features will work on older computers. For example, Apple notes that the newly available Metal API is available on "all Macs since 2012".

These computers can run El Capitan, provided they have at least 2GB of RAM:

* iMac: Mid 2007 or newer
* MacBook Aluminum: Late 2008
* MacBook White/Black: Early 2009 or newer
* MacBook Retina: All
* MacBook Air: Late 2008 or newer
* MacBook Pro 13-inch: Mid 2009 or newer
* MacBook Pro 15-inch: Mid 2007 or newer
* MacBook Pro 17-inch: Late 2007 or newer
* Mac Mini: Early 2009 or newer
* Mac Pro: Early 2008 or newer
* Xserve: Early 2009

Of these computers, the following five models were equipped with 1GB RAM as the standard option on the base model when they were shipped originally. They can only run OS X El Capitan if they have at least 2GB of RAM.

* iMac: Mid 2007
* iMac: Early 2008
* Mac Mini: Early 2009
* The following computers support features such as Handoff, Instant Hotspot, AirDrop between Mac computers and iOS devices, as well as the new Metal API:
* iMac: Late 2012 or newer
* MacBook: Early 2015 or newer
* MacBook Air: Mid 2012 or newer
* MacBook Pro: Mid 2012 or newer
* Mac Mini: Late 2012 or newer
* Mac Pro: Late 2013 or newer

The upgrade varies in size depending upon which Apple Mac computer it is being installed on, in most scenarios it will require about 6 GB of disk space.

**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.