**MacOS X 10.6**

**History**

Snow Leopard was publicly unveiled on June 8, 2009 at the Apple Worldwide Developers Conference. On August 28, 2009, it was released worldwide, and was made available for purchase from Apple's website and its retail stores for a single-user license. As a result of the low price, initial sales of Snow Leopard were significantly higher than that of its predecessors. The release of Snow Leopard came nearly two years after the introduction of Mac OS X Leopard, the second longest time span between successive Mac OS X releases (the time span between Tiger and Leopard was the longest).

Unlike those of previous versions of Mac OS X, the goals of Snow Leopard were improved performance, greater efficiency and the reduction of its overall memory footprint. Addition of new end-user features was not a primary consideration: its name signified its goal to be a refinement of the previous OS X version, Leopard. Much of the software in Mac OS X was extensively rewritten for this release in order to take advantage fully of modern Macintosh hardware. New programming frameworks, such as OpenCL, were created, allowing software developers to use graphics cards in their applications. This is also the first Mac OS release since System 7.1.1 that does not support Macs using PowerPC processors, as Apple now intends to focus on its current line of Intel-based products.

**Function and features**

Mac OS X Snow Leopard is intended to be a release aimed to refine the existing feature set, expand the technological capabilities of the operating system, and improve application efficiency. Many of the changes involve how the system works in the background and are not intended to be seen by the user. For example, the Finder application was completely rewritten in the Cocoa application programming interface. Despite significant changes in the software, users will experience almost no changes in the user interface. Snow Leopard includes the following changes:

* Mac App Store – An application store built in the image of the iOS App Store. Released on version 10.6.6.
* Boot Camp now allows Windows partitions to read and copy files from HFS+ partitions. The new version also adds support for advanced features on Cinema Displays and a new command-line version of the Startup Disk Control Panel.
* The Finder has been completely rewritten in Cocoa to take advantage of the new technologies introduced in Snow Leopard.
* A much smaller OS footprint, taking up about 7 GB less space than Mac OS X Leopard. Some of the recovered disk space (~250 MB) is because printer drivers are now downloaded or installed only as needed, rather than being pre-installed.
* iChat enhancements include greater resolution video chats in iChat Theater and lowered upload bandwidth requirements.
* Microsoft Exchange support is now integrated into the Mail, Address Book, and iCal applications. However, only Microsoft Exchange 2007 is supported and customers using prior versions of Exchange must either upgrade or use Microsoft Entourage.
* Full multi-touch trackpad support has been added to notebooks prior to those introduced in October 2008. While the original MacBook Air and other early multi-touch trackpad enabled notebooks had support for some gestures, they were unable to use four-finger gestures.
* Preview can infer the structure of a paragraph in a PDF document.
* QuickTime X, the next version of QuickTime player and multimedia framework, has been completely rewritten into a full 64-bit Cocoa application and builds on the media technologies in Mac OS X, such as Core Audio, Core Video, and Core Animation, to deliver playback. Apple has redesigned the QuickTime user interface to resemble the full-screen QuickTime view in prior versions, where the entire window displays the video. The title bar and playback controls fade in and out as needed. QuickTime X also supports HTTP live streaming and takes advantage of ColorSync to provide high-quality color reproduction.
* Safari 4 features Top Sites, Cover Flow, VoiceOver, expanded standards support, and built-in crash resistance, which prevents browser crashes caused by plug-ins by running them in separate processes.
* Time Machine connection establishment and backups are now much faster.
* VoiceOver has also been greatly enhanced in Snow Leopard. Reading of web pages is improved with Auto Web Spots — areas of a page automatically designated for quick access. On newer Apple portables, trackpad gestures can be used to control VoiceOver functions, including the "rotor" gesture first seen in VoiceOver for the iPhone 3GS, allowing for the changing of certain VoiceOver navigation options by rotating fingers on the trackpad. Braille Display support is also improved, with Bluetooth displays supported for the first time.
* The 10.6.6 update introduced support for the Mac App Store, Apple's digital distribution platform for OS X applications.

**System requirements**

* Mac computer with an Intel processor (IA-32). "Yonah" processors such as Core Solo and Core Duo can run only 32-bit applications; later x86-64 architecture processors such as Core 2 Duo, Core i5 and i7 are also able to run 64-bit applications.
* 1 GB of RAM
* 5 GB of free disk space
* DVD drive (also accessible via Remote Disc) or external USB or FireWire DVD drive for installation
* Additional requirements to use certain features:
* QuickTime H.264 hardware acceleration support, requires an Nvidia GeForce 9400M, 320M, or GT 330M graphics card
* OpenCL, requires a supported Nvidia or ATI graphics card
* Snow Leopard does not support PowerPC-based Macs (e.g., Power Macs, PowerBooks, iBooks, iMacs (G3-G5), all eMacs, plus pre-February 2006 Mac minis and the Power Mac G4 Cube), although PowerPC applications are supported via Rosetta, which is now an optional install.

**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.