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Mac OS X version 10.6 Snow Leopard build 10A432 Developer Seed Note

Mac OS X 10.6 Snow Leopard is the next major release of Mac OS X.

This Snow Leopard Developer Preview Update includes general operating system fixes for stability, compatibility, and security.

As this is a pre-release build, it is not advisable to use this software on a production system with information on it that you depend on for your business.

Please be aware that you will not be able to revert back to your previous system after updating. Please install this update on a system you are prepared to erase if necessary.

Installation Instructions

IMPORTANT: Always back-up your system before installing pre-release software seeds.

A. Install Snow Leopard using hard disk partitions:

Requirements:

Three hard disk partitions internal or external (you could use 2 but 3 recommended)

Hard disk partitions setup:

Partition 1 - download Snow Leopard disk image [here](#)

Partition 2 - restore disk image onto this partition

Partition 3 - partition to install Snow Leopard on

(Partition 3 is optional, you can install onto Partition 1 if you only have 2 partitions)

Procedure:

1. Boot off partition 1, using Disk Utility, restore the Snow Leopard DVD Disk Image onto partition 2

2. Boot off partition 2 and install Snow Leopard onto partition 3

OR if you only have 2 partitions:

2. Boot off partition 2 and install Snow Leopard onto partition 1

Note: Use System Preferences : Startup Disk to pick startup volume

OR

B. Burn bootable DVD for installation:

Requirements:

1. A DVD drive capable of burning double-layer DVDs

Here's how to check to see if you have such a drive:

- Launch "Systems Profiler"

- Under Hardware, click on "Disc Burning"

- Under "DVD-Write", if "+R DL" is listed then your machine has the ability to burn double layer DVD discs.

2. A blank DVD+R DL media

Procedure:

1. Launch Disk Utility

2. Click the Burn button in the Toolbar

3. Navigate to and select the downloaded DVD disk image then click the Open button

4. Insert a blank DVD+R DL disc into your DVD burner

5. Click the Burn button

After burning, install Snow Leopard from the burned DVD.

Developer Notes

64-bit

We strongly encourage you to start developing and testing 64-bit versions of your KEXTs. To help you along we've included the 64-bit transition guide with the seed.

- Launch Xcode in Snow Leopard
- Go to Help menu
- Select Documentation Viewer
- Search for "64-bit Transition Guide"

Or use the following link to access the guide in the Apple Developer Connection documentation library:

<http://developer.apple.com/snowleopard/library/documentation/Darwin/Conceptual/64bitPorting/intro/intro.html>

The 64-bit kernel can be tested on the following configurations:

Machine	Model name	K64 status
Early 2008 Mac Pro	MacPro3,1	Capable
Early 2008 Xserve	Xserve2,1	Default
MacBook Pro 15/17	MacBookPro4,1	Capable
iMac	iMac8,1	Capable
UniBody MacBook Pro 15	MacBookPro5,1	Capable
UniBody MacBook Pro 17	MacBookPro5,2	Capable
Mac Pro	MacPro4,1	Capable
iMac	iMac9,1	Capable
Early 2009 Xserve	Xserve3,1	Default

Using this seed and one of the K64-capable machines listed above, simply boot the Mac with the '6' and '4' keys held down to use the 64-bit kernel. Observe that uname -v reports RELEASE_X86_64. Machines listed as "Default" and all Server installs will run K64 automatically when loaded with 10A402.

You can also set arch=x86_64 in your boot-args NVRAM variable, using nvram(8). When you're done, you can remove the boot-arg, or if you can no longer boot into an OS to unset it, hold command-option-P-R to zap NVRAM.

If you just want one partition to boot x86_64, edit the file /Library/Preferences/SystemConfiguration/com.apple.Boot.plist and add arch=x86_64 to the kernel flags.

If some functionality is not working and you must revert to using the 32-bit kernel, you can either reboot with the '3' and '2' keys held down or set arch=i386 in your boot-args.

Kernel Debug Kit

A Kernel Debug Kit is also seeded along side this Snow Leopard seed. This package contains debug versions of the Mac OS X kernel and many I/O Kit families for use with GDB remote (two-machine) kernel debugging. These files contain full symbolic information, unlike the equivalent files in a normal Mac OS X installation. Also included are GDB macros useful for kernel debugging, a DEBUG kernel built without compiler optimizations, and a script for simplifying the creation of symbol files.

Bug Reporting

This build is being provided to you for testing and development purposes. Should you encounter any problems, please submit a bug report using the online Bug Reporter at <http://bugreporter.apple.com/>. Please make sure to include "10.6 (10A432)" in the bug title and description. This information will ensure that your bug is processed quickly.

When submitting a bug report, please make sure to include a Summary, Steps to Reproduce, Actual Results, Expected Results, the System Profile Report, and any other relevant information that is necessary to process the report.

IMPORTANT: Engineering requires additional information for crashing bugs, kernel panics, and hanging issues.

Crashing Bugs: Crash logs are required for crashing bugs. Crash logs can be located in ~/Library/Logs/CrashReporter

Kernel Panics: Backtraces, which contain vital information for investigating kernel panics, are required for kernel panic issues. Backtraces can be saved to nvram on restart shutdown, then copied to the panic.log file on restart. The panic.log file can be found in /Library/Logs/PanicReporter.

Hanging Issues: When an application is hung, a Sample should be provided. This can be done using the Activity Monitor (/Applications/Utilities/). To generate a Sample using this utility, click on the hung application name, then from the View Menu select "Sample Process".

For complete instructions on submitting bug reports, please visit the Bug Reporting page at <http://developer.apple.com/bugreporter/>

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