

Mac OS X v10.6: Starting up with the 32-bit or 64-bit kernel

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Summary

Mac OS X v10.6 Snow Leopard includes a 64-bit kernel. On hardware that supports the 64-bit kernel, you can choose whether to start up (boot) your Mac using the new 64-bit kernel or the earlier 32-bit kernel.

Products Affected

Mac OS X Server 10.6, Mac OS X 10.6, Mac Pro (Mid 2010)

You can use either of these methods:

Method 1: Startup key combination (for current startup only)

- If your Mac uses the 32-bit kernel by default, but supports the 64-bit kernel, you can start up using the 64-bit kernel by holding the 6 and 4 keys during startup.
- If your Mac uses the 64-bit kernel by default, you can start up with the 32-bit kernel by holding the 3 and 2 keys during startup.

Your Mac will revert to the default kernel the next time you reboot it.

Method 2: On-disk setting (persistent)

To select the 64-bit kernel for the current startup disk, use the following command in Terminal:

```
sudo systemsetup -setkernelbootarchitecture x86_64
```

To select the 32-bit kernel for the current startup disk, use the following command in Terminal:

```
sudo systemsetup -setkernelbootarchitecture i386
```

Note: This setting is stored in the `/Library/Preferences/SystemConfiguration/com.apple.Boot.plist` file and will take effect every time you start up from this disk. If you start up from a different disk, the setting on that disk, or the hardware default, will take effect.

Additional Information

- Keys held during startup (such as 3-2 or 6-4, method 1 above) will override the setting in `com.apple.Boot.plist` (method 2 above).

Note: Learn how to determine whether your Mac can use the 64-bit kernel and which kernel it uses by default.



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