# Fine Tuning MacOS 8.1

ith MacOS 8.1 comes more PowerPC code and more optimizations than any previous Mac OS release. In order for your computer to take full advantage of these changes, you must "fine-tune" the Operating System for increased stability and performance.

MacOS 8.1 runs acceptably on virtually any PowerPC machine. Speeds are enjoyable on a 1st Generation 601 chip to the current 3'rd Generation G3's. One of the largest factors in best performance is having plenty of RAM.

## **RAM**

OS 8 likes at LEAST 24 megabytes of REAL RAM (not virtual memory or Ram Doubler) to run well. For best performance, at least 32 megs of RAM is recommended.

#### Virtual Memory

Believe it for not, Virtual Memory can help you in OS 8.1 instead of hurt you, if used properly. MacOS 8.1's improvement over 8.0 includes the ability to cache frequently used instructions such as application launching, by using small amounts of virtual memory. MacOS 8.1 sets virtual memory on as 1 megabyte over your actual RAM amount. DO NOT turn this off, as this is the optimal setting for best caching. If you do not have enough real RAM to run the OS, you can turn it higher but speed hitches will result. If you have enough real RAM, leave this on as the OS default. For Example:

f I have 80 megabytes of real RAM in my 8500/150, I will leave virtual memory on at 81 megs. This is the optimal setting.

## Ram Doubler 8

After recent reviews of Ram Doubler 8, it is easy to see that this product continues to perform more slowly than Virtual Memory, or real RAM. Tests like the one below show that Virtual Memory continues to be much, much faster than Ram Doubler 8. If you have 16 megs of RAM and want to run OS 8, use Virtual Memory or go buy real RAM before you use Ram Doubler 8. See below for performance comparisons taken from www.macintouch.com:

The 1st number is the first application launch, the 2'nd number is following launches. Nothing means no virtual memory or Ram Doubler.

Method	Netscape 4.05	Word 98	Photoshop 5
Ram Doubler 8	30.4 / 23.7	15.2 / 10.6	31.0 / 26.7
Virtual Memory	15.4 / 8.6	8.9 / 3.1	16.1 / 10.5
Nothing	14.6 / 9.5	7.1 / 4.8	15.4 / 12.0

As you can see, Ram Doubler 8 is a dud, and Apple's Virtual Memory system is the winner. If you look at Virtual Memory and Nothing, you can see the improvement in 2nd launch time (caching) with Virtual Memory set as OS default as mentioned earlier.

## Disk Cache

Besides RAM, Disk Cache is the 2nd biggest factor to your machines

maximum performance. This setting is stored in your 'Memory' control panel. This setting decides how much RAM is used for storing recently used system instructions, similar to RAM.

If you can spare the RAM, crank the numbers up. On a machine with 80 Megabytes of RAM, a 5 megabyte disk cache is optimal. On a machine with 64 megs, a 4 megabyte disk cache may be better. It all matters on how much RAM you want to burn on this. Through testing, we have found that turning this over 5 megs does not appear to improve performance, but rather degrade as the numbers rise.

MacOS 8.1 by default sets your disk cache at 94K. However, this amount is far from optimal, and you will get poor performance from this setting. Do yourself a favor and allot more RAM to your disk cache and you WILL feel the speed increase after you restart. The next Mac OS release, code named "Allegro" (MacOS 8.5, due to ship in September/October), has a unique way to calculate your disk cache for best performance. For now, we will do it the old fashioned way and play with it until it feels best, or until you cannot spare anymore RAM. For Example:

#### enu Blinking

Not considered a real speed improver, but more for the effect of speed increase, "Menu Blinking" can be adjusted to make it seem like your machine is running faster. This option is selected in your General Preferences control panel. See the diagram below:

s you can see, there are a few options for this setting. I personally keep this "off", so that the menu does not blink at all before my selection opens. Most people like this option and leave it on "1". As mentioned earlier, this will not actually speed you up, but only give you the effect as if it was.