

## Options to Improve Mac OS X Performance

There are many things users can do to increase the speed of their Macintosh. There is, of course, no way to make an older system perform as well as a modern system, but it is possible to optimize the performance of an existing system. Some suggestions include:

- Restart your computer. Mac OS X is a great deal more stable than older versions of the Mac OS and it's not uncommon for people to leave their computers on for days or weeks at a time. Over time, temporary files will build up on the user's hard drive, processes will take and hold sections of RAM and as well as the clogging of other resources. Restarting your computer will free those resources and improve performance. **Note:** *It is possible to set your computer to restart every day at a certain time, say 5 AM, so that it will automatically free those resources.*
- Repair disk permissions. This is especially important to do after the installation of new software, as installation packages flip permissions and sometimes forget to flip them back to factory defaults.
- Make sure your computer has enough built-in RAM. Mac OS X will not tell you when you've run out of built-in RAM. It will use part of your hard drive as temporary RAM, but this is not a good long-term solution since hard drives are much slower than RAM. Although Mac OS X will run on a system with 128 MB of RAM, it is better to have at least 256 MB of RAM and 512 MB if possible for the system's use.
- Make sure that the hard drive where your system files are installed has at least 10% of the hard drive space free. The system needs that much space on the hard drive free in order to do things like automatically defragment large files or for when it uses part of the hard drive for built-in RAM. Having less than 10% tends to slow performance down to a crawl.
- Upgrade the Mac OS. Users who are running Mac OS 10.1.x or 10.2.x should notice an increase in speed if they upgrade to Mac OS 10.3.x, Mac OS 10.4.x or Mac OS 10.5.x. **Note:** *Users are not reporting an increase in speed when upgrading from Mac OS 10.3.x to 10.4.x or Mac OS 10.5.x. Users upgrading from Mac OS 10.1.x and 10.2.x will see an increase in speed when they upgrade to 10.4.x or Mac OS 10.5.x*
- Users of Mac OS 10.4.x and later have access to Widgets via Dashboard. While there is no penalty for having Widgets installed on your computer there is a RAM penalty for having them running. Although RAM-or memory-usage varies from Widget to Widget a typical Widget is using between 4 and

20 MB of memory. Having a lot of Widgets open and available when you press F12 can be a lot of fun but the memory they use can take RAM away from other applications, forcing your computer to use your hard drive. So if you have 256 or 512 MB of RAM then try not to have too many Widgets open.