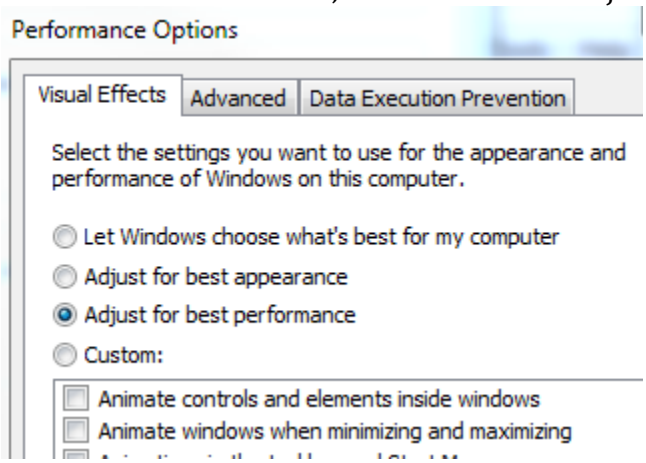
Mike Nelson – SV article

VMware Fusion – More Tips

In my previous article on VMware Fusion Tips for Beginners, I went through my recommendations for a solid Fusion foundation on your MAC, as well as a few tips to get you started. In this article, I'll give a few more tips and performance tweaks that will help you get the most out of our virtual machines. These are the main ones that I use all the time, on all my MACs.

One of the first things that I do when virtualizing a Windows 7 (or Server 2008 R2 if you have the Desktop Experience feature enabled) guest on Fusion is to disable the eye candy. The Aero interface in these operating systems is cool and functional, but having those graphic intensive operations running in a virtual machine just consumes much needed RAM and vCPU power. With that said, if your Windows virtual machine is simply for using Internet Explorer and maybe using Office applications, then you could keep these interfaces enabled successfully, but you will notice an overall performance increase if you disable them.

To disable them in Windows 7, go into Control Panel, click on System, select Advanced System Settings in the left pane, and under Performance, click on Settings. On the Visual Effects tab, make sure that "Adjust for best performance" is selected.



If you are running a Linux guest, I recommend tweaking your X-Windows configuration to suit your needs, since it can be highly customized, both by performance settings and various window managers that could be used. Overall, X-Windows consumes fewer resources than the Windows Aero interface and can be used with more robust features. Consult your flavor of Linux OS guides for more information on tweaking X.

As far as operating systems go for virtual machines, I always try to use the 64bit version of Windows XP or Windows 7. I do have a DOS 6.22 virtual machine that I use to sometimes, mainly for making troubleshooting machine level issues, since in my line of work, you never know if and when you'll need it (Yes, there are still some

very old applications and hardware running out there). I avoid Windows Vista at all costs since it is, well, just a very bad operating system overall. Sometimes using a 64bit operating system isn't very useful though, depending on the nature of your use, as some older 32bit (and even 16bit) applications may not function correctly without using a 32bit OS. The 64 bit Windows OS, whether hosted as a virtual machine or run off of physical hardware, allows for more extensive use of the virtualization technology built into the Intel processor, and therefor will make you virtual machine a bit faster.

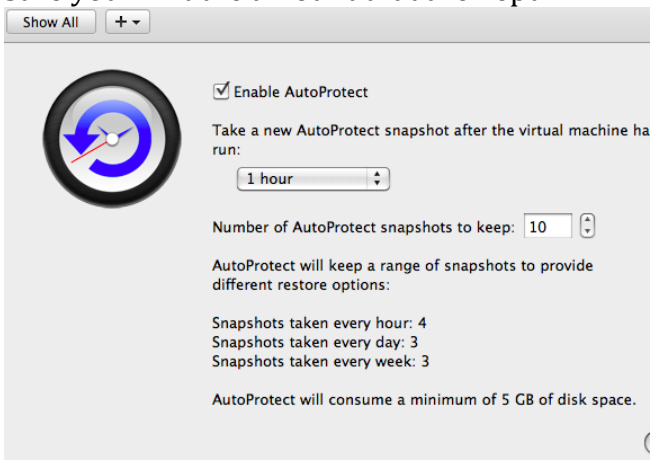
On the virtual machine settings side of things to increase performance, I also use SCSI virtual hard disks instead if IDE. I do see a small increase in IO by doing this, but really only for the more intensive applications I run in the virtual machine. The SCSI virtual driver is more tuned for these operations. You should note that XP by default will not see any available hard disk to install to if you use SCSI, so make sure to use the VMware Easy Install so the proper driver can be "injected" into the installation for you.

And since we are talking about disks, defragmenting you drives also comes into play with virtual machines just as they do with physical ones. I usually try to do this at least once a month, if not sooner. There is a two-step process to get it done right since only doing one won't get you the full impact of the performance increase. Inside of the guest operating system, defragment your drive just as you normally would on a physical machine. Then, open the properties of the virtual machine, select Hard Disks, and then select "Clean Up Disk". What this does is defragment the virtual machine file (or "package" in MAC terms) on the local or attached storage disk. If your virtual machine files are located on a shared network volume that uses HGFS, this isn't really necessary.

Another tip I want to pass on is one that I use quite frequently. If you have ever worked as an I.T. Administration or possibly even an Application Developer, you may find yourself with the need to connect to your Fusion virtual machines console screens remotely. Now, with Windows guests, you could for simplicity sake utilize the Remote Desktop functionality of the OS to accomplish a terminal services session connection to that virtual machine. But, for an actual live remote console, for Windows and non-Windows Operating Systems you may be hosting, the Fusion folks have integrated the popular VNC client into the virtual machines settings for your use. To enable this functionality, you would go into the Settings of the virtual machine, select Advanced, select Other, and click on Remote display over VNC. Enter the username and password, and make sure you have a compatible VNC client on the machine you will be connecting from, and you're good to go.

And, lastly, you really need to take a look at the new(er) feature built into Fusion called AutoProtect. It's basically a to create snapshots of your virtual machines on a timed interval, similar to the Windows OS Shadow Copies. This is a great way to insure your survival if you ever have a virtual machine go bad by having the disk package be corrupted or by having a malfunction of the operating system itself. Do

keep in mind that enabling this feature does consume disk space obviously, so make sure you limit the amount that are kept.



Here are some more great web links for VMware Fusion. I hope you find Fusion as enjoyable and productive as I have, and as I said in my video entry for a Fusion contest back in 2008, “Fusion Rocks!”

Team Fusion Blog - http://blogs.vmware.com/teamfusion/
Big Collection of Fusion Links - http://communities.vmware.com/community/vmtn/desktop/fusion