



[user cp](#)
[register](#)
[calendar](#)
[members](#)
[irc chat](#)
[f.a.q.](#)
[search](#)
[home](#)
[log out](#)

[Mauisun's LivingRoom](#) > [The Musicians Corner](#) > [The Musicians Studio](#) > **Windows XP Optimizations for Audio Workstations**
[◀ Last Thread](#) [Next Thread ▶](#)

Author	Thread
<p>audio assasin Moderator</p>  <p>Registered: Dec 2002 Location: bonny scotland Posts: 1393</p>	<div style="text-align: right;">  new thread  post reply </div> <p> Windows XP Optimizations for Audio Workstations</p> <p>Windows XP Optimizations for Audio Workstations</p> <p>Well it's been out for a while and since many DAW users will want to use Microsoft's latest a list of the recommended and possible optimizations is appropriate. I have included a set of basic optimizations and also the possible deep tweaks for those who want to really strip down their systems to achieve the best possible performance. Workstation users, both audio and video, are reporting that Windows XP is a winner performance-wise so it may be worth considering the upgrade. People purchasing new computers will be getting Windows XP pre-installed and they will be wanting to know how to set it up properly as well. It is worth noting that There are two versions of XP, the Pro and the Home versions. XP Home does not support dual CPU operation or Remote Options. XP Home also has limited network options. Otherwise the versions are the same operational-wise. www.microsoft.com or a dealer can give you details about the differences to help you decide which is best for you.</p> <p>I always recommend a clean install of the OS to a formatted drive with only the graphics card plugged in. This will give you the most control over the setup and also will tell you what is causing any problems or conflicts as soon as they come up. It will give you a clean Registry and a fresh install seems to work best when setting things up. If you are setting up a pre-configured computer this will allow you get rid of all the stuff that really doesn't belong in a DAW system. I'm referring to anti-virus programs, office suites etc. Optimum performance of a DAW implies that it just that and nothing else.</p> <p>Before booting from the XP CDROM you should enter the BIOS Setup for your motherboard and make the following settings. These are general guidelines so you should read the manual for the motherboard.</p> <p>Set virus detection to "Disabled" Set all Shadowing•Efeatures to "Disabled•E/li> Set "AGP•Eto "Boot VGA•Eassuming you are using an AGP graphics card Disable any ports which you will not be using such as COM+ or USB this will free up more IRQ's. You can enable ports later as needed. Check that drives are auto-detected correctly Check that processor speed, system buss speed and RAM amount are correctly recognized Windows XP has reinstated the msconfig GUI which Windows 98/ME had. This can be very useful for removing programs from the Startup Folder. If you have installed a program which has the annoying of habit of loading during startup you can now disable it easily and you can decide when you want it to run. Roxio Easy CD Creator was guilty of this behaviour for example. To use this feature click Start->Run and type msconfig. You will then click the Startup Tab and uncheck any programs which you do not want in the startup.</p> <p>Windows XP has also included the System Restore feature which first appeared in WindowsME. XP has refined this service and now it has additional features such as the ability to "roll back•E a specific driver from the Device Manager if you find that a previous version worked better. You can change a variety of options for System Restore. You can Right-click on My Computer, click Properties, and choose the System Restore tab. In this window you can completely disable system restore as well as change settings for specific drives. Obviously System Restore will be</p>

extremely useful to the DAW user and will aid in troubleshooting the system should any problems arise from driver updates or software installations and updates.

ACPI yes or no?

The question of whether to install Windows with ACPI enabled depends on the hardware which will be in the system. Users of Dual CPU systems do not need to be concerned with the issue in most cases since XP with multiprocessor systems will give an extended number of interrupts and conflicts will usually not be a problem. Systems which have APIC support in the chipset will also benefit from this. My first installation of XP was on a dual CPU Dell 420 workstation and I encountered no problem with hardware conflicts after a standard install of the OS and drivers. It is only necessary to disable ACPI for a single CPU PC if conflicts and IRQ sharing are encountered. This will depend on the hardware and the chipset for the motherboard. It does appear that XP has ironed out some of the Plug-n-Play issues that Windows 2000 presented like putting all the PCI devices on IRQ 9 so chances are that you will have a stable system with a straight installation of XP. If you have shared interrupts and instability then you must reinstall with ACPI disabled and this can be done two ways. You can disable ACPI in the BIOS or you can use F5 during the install like with Windows 2000. If using either method you will need to manually assign the IRQ's in the BIOS. You need to be familiar with the BIOS setup program for your motherboard to do this.

NTFS yes or no?

Before the OS is installed you will need to format the hard drive. You have the option to use FAT32 or NTFS, which is better? FAT32 is the format used by Win98, WinME and Win2k and it is also supported in WinXP. FAT 32 can be fast and efficient but it lacks the file protection features of NTFS. NTFS is also fast and seems to work quite well so I prefer to use this format. Be aware that you cannot read a drive formatted NTFS on a Win98/ME.

Hard Drive Mode Settings

This will be familiar to most of you but for those just getting started it is an important system tweak. DMA, Direct Memory Access, must be set for hard drives which are on the Primary and Secondary IDE channels of the motherboard. It is done on a per channel basis and therefore all devices on the channel must be DMA capable. Some CDROMS and CDRW's are not, and this by the way is why it is not advisable to have a CD device on the same channel as a hard drive, especially a drive dedicated to audio data. To enable DMA, right click My Computer and choose Properties, click on the Hardware tab and then click on Device Manager, click on Devices such as "IDE ATA/ATAPI controllers." Double-click on the controller you want to enable, and in the properties window that appears, click the Advanced Settings tab. Each device has a "Transfer Mode" that you can change to "DMA if available." Choose that setting to enable DMA. Go back to devices and change any other ones available and then Click Ok & reboot your system for the changes to take effect.

The Standard Tweaks

Some of the optimizations below have been common to Win98, WinME, and Win2k. They are also useful for optimizing performance with WinXP.

Got to Start/My Computer and right click, click on "Properties" Advanced/start up and recovery settings and uncheck "Automatically Reboot" /li>

Got to Start/My Computer and right click, click on "Properties" Advanced/performance settings/visual effects tab, check "adjust for best performance" /li>

Got to Start right click on My Computer and click on "Properties" Advanced/performance settings, set processor scheduling to "Background Services" /li>

Uncheck "Autohide Taskbar" /li>

Uncheck "Hide Inactive Icons" /li>

Start Windows Messenger, close the Passport window when it opens, then go to Tools/Options/Preferences and Uncheck Everything, close the window and it will not start anymore.

Control Panel/Sounds & Audio Devices/ Sounds Tab/ Sounds Scheme, set to "No Sounds" /li>

Right click on the Desktop and go to "Properties" Screensaver Tab, set to "None" E go to Power Tab and set "Turn off Hard Disks" E and "Turn Off Monitor" E to "Never" /li>

To optimize Windows performance for programs go to Control Panel -> System -> Advanced and select Best performance for Programs it is not recommended to alter the performance options program-by-program as this has been known to cause problems.

Administrative Services Adjustment

The default services that Windows XP installs loads many services that are unnecessary for a DAW system. You can easily change these settings to trim a lot of fat off the OS and free up resources. This will give you the added benefit of a faster bootup You must log on as Administrator to make these changes and when you select a service to edit you will be given an explanation of the service which will help you decide whether you need it or not. To edit the Administrative Services you can either go to Start > Settings > Control Panel > Administrative Tools > Services or Start > Programs > Administrative Tools > Services. The second path is available if you have enabled Administrative Tools to be displayed in the Start Menu. You can also access the program via Start > Run, type services.msc in the Run window and clicking "OK" E Lastly click Start > Run and type msconfig click "OK" E and then look in the Services Tab . Now you will see a list of services, if you click on the extended tab before you click on a service you will see a description on the left side of the GUI. Notice the "Status" E column. There are three modes Disabled, Automatic, or Manual.

Disabled will prevent the service from starting when XP loads. If you have disabled an essential service which prevents the OS from loading you will be asked to change the status during boot and you will need to reboot. Disabling unneeded services will speed up the boot time.

Automatic will load the service during the boot up. Services necessary to the OS must be set top Automatic for the system to boot.

Manual will prevent the service from starting during boot up but the service can be started if needed. In most cases this is the best mode for services which you will not use.

Changing the Mode of a service is done by right clicking on a Service and selecting Properties from the drop down menu, from the Startup Type you then can select the mode for the service.

Now you can start turning off unneeded services.

Let's start with some services which can be disabled:

Human Interface Device Access
Routing and Remote Access
Universal Plug and Play Device Host
Now the list of services which can be set to Manual:

Alerter
Application Layer
Gateway Service
Application manager
Automatic updates
Background Intelligence Transfer service
Clip Book
COM+ Event System
Com+ System Application
Computer Browser
DHCP Client
Distributed Link Tracking client
Distributed Transaction Coordinator
Fast user Switching Compatibility
Help & Support Indexing Service
Logical Disk Manager
Administrative Service
Messenger
Net Meeting*
Remote Network Connections*
Network DDE*
Network DDE DSDM*
Network Location Awareness*
NT LM Security Support Provider
NVIDIA Driver Helper
Performance Logs & Alerts
QoS RSVP
Remote Access Auto Connect Mgr.*
Remote Desktop Help Session Connect Mgr.*
Remote Procedure Call*
Remote Registry*
Removable Storage**
Server
SMART Card
Smart Card Helper
SSDP Discovery Service
System Event Notification
Task Scheduler
TCP/IP**
NetBIOS Helper*
Telephony
Telnet
Terminal Services
Uninterruptible Power Supply
Upload Manager
Volume Shadow Copy
Windows Image Acquisition
Windows Installer
Windows Time
Workstation

* denotes a service which is required if the computer is connected to a network

** denotes services required for internet connection

All other services are set to Automatic. Now is a good time to restart your computer and when you look at the services again you can see if any services which you have set to manual are loaded anyway. Services which load in spite of a manual setting are needed by the system in the configuration which you are using. It is advisable to change these needed services back to Automatic since it will speed up the boot. This is because XP loads the Automatic services and then it must look at each Manual service to decide if it must load it.

Deep Tweaks for Geeks

It is possible to boost overall system performance by increasing the IRQ priority of the CMOS real-time clock with the following Registry change.
copy this:

```
REGEDIT4 [HKEY_LOCAL_MACHINESystemCurrentControlSetControlP  
riorityControl] "IRQ8Priority"=dword:00000001
```

Paste it into a text editor such as Notepad or Wordpad. Save the file as whatever name you want, perhaps boost_irq_priority with a .reg file extension e.g. boost_irq_priority.reg - you can now close the text-editor and simply double-click on the file you just created to enter the information into the registry. To undo this tweak, repeat the procedure but copy this instead into the text file: [HKEY_LOCAL_MACHINESystemCurrentControlSetControlP
riorityControl] "IRQ8Priority"=dword:00000000

You should find that your overall system performance increases from this tweak.

Go to Start->Run and type system.ini - a notepad will be launched containing the system.ini file. Adding the following line to your system.ini file makes the system use RAM more often rather than the virtual memory:
After the [386 Enh] tag add ConservativeSwapfileUsage=1 It should look like this:

```
[386 Enh] tag add ConservativeSwapfileUsage=1
```

This improves system performance since RAM is much faster than the hard-disk. (note: do not use this option if you

have less than 128MB of RAM installed) By the way if you DO have less than 128MB of RAM you shouldn't even be here. The first thing you should do in order to optimize the performance of your computer is have at least 256MB.

Well it's a considerable list and it gives you a good idea how much of Windows XP is not needed for DAW operation. Trimming all this will certainly make your DAW a lot leaner and should help performance significantly.

[Report this post to a moderator](#) | IP: [Logged](#)

05-20-2003 16:16

[V](#) [profile](#) [pm](#) [email](#) [www](#)
[search](#) [buddy](#)

[edit](#) [quote](#)

urkinjerk
Made It In Past
The Outer Reef



That was useful as hell, thank you so much

Registered: Nov 2002
Location: st louis, mo
Posts: 25

[Report this post to a moderator](#) | IP: [Logged](#)

05-26-2003 15:41

[V](#) [profile](#) [pm](#) [email](#) [search](#)
[buddy](#)

[edit](#) [quote](#)

All times are GMT -8 hours. The time now is 18:06.

[new thread](#) [post reply](#)

[←](#) [Last Thread](#) [Next Thread](#) [→](#)

Post Quick Reply

Your Quick Reply:

[check message length]

[Show Printable Version](#) | [Email this Page](#) | [Subscribe to this Thread](#)

Forum Jump:

Forum Rules:

You **may** post new threads
You **may** post replies
You **may** post attachments
You **may** edit your posts

HTML code is **OFF**
vB code is **ON**
Smilies are **ON**
[IMG] code is **ON**

Admin Options:

[Search The Internet](#)



GUEST BOOK



For Low Cost QUALITY Web Site Hosting There Is No better Then These Folks. If You Want WebSite Hosting, Want It To be Low-Cost With The best Support Anywhere I Only Give mY Personal Thumbs Up To These Folks! Starting At 7.95 A Month Wit A Ton Of Space To Start With, Trust Me Folks, Use These People To Host Your WebSite, I Proudly Do! Use The Link Below To Check Them Out For Yourself. 5 Stars From Mauisun For This Host!!!

[LunarPages Hosting Services](#)

[< Contact Us - Home Of Mauisun >](#)

Powered by: vBulletin Version 2.3.0
Copyright ©2000, 2001, Jelsoft Enterprises Limited.
mauisun.org copyright