

Gimme More!

You may have heard of the proverb, 'if it ain't broken, don't fix it'. But who can resist bending Windows just a wee bit to make it a little faster?

HATIM KANTAWALLA

Try as you might to resist the temptation, one day you will definitely go under the Windows hood and see whether changing a few settings will improve performance. And then you will be surprised at the amount of tweaking and the difference in speeds that's possible. After that, there'll be no stopping you as you realise the feeling of power and control over what seemed an unmitigated disaster in operating systems.

So here are a few 'must do' tips for those who love to tweak. But remember, don't go overboard and install just about every available tweaking software—keep within safe limits.

Faster startups

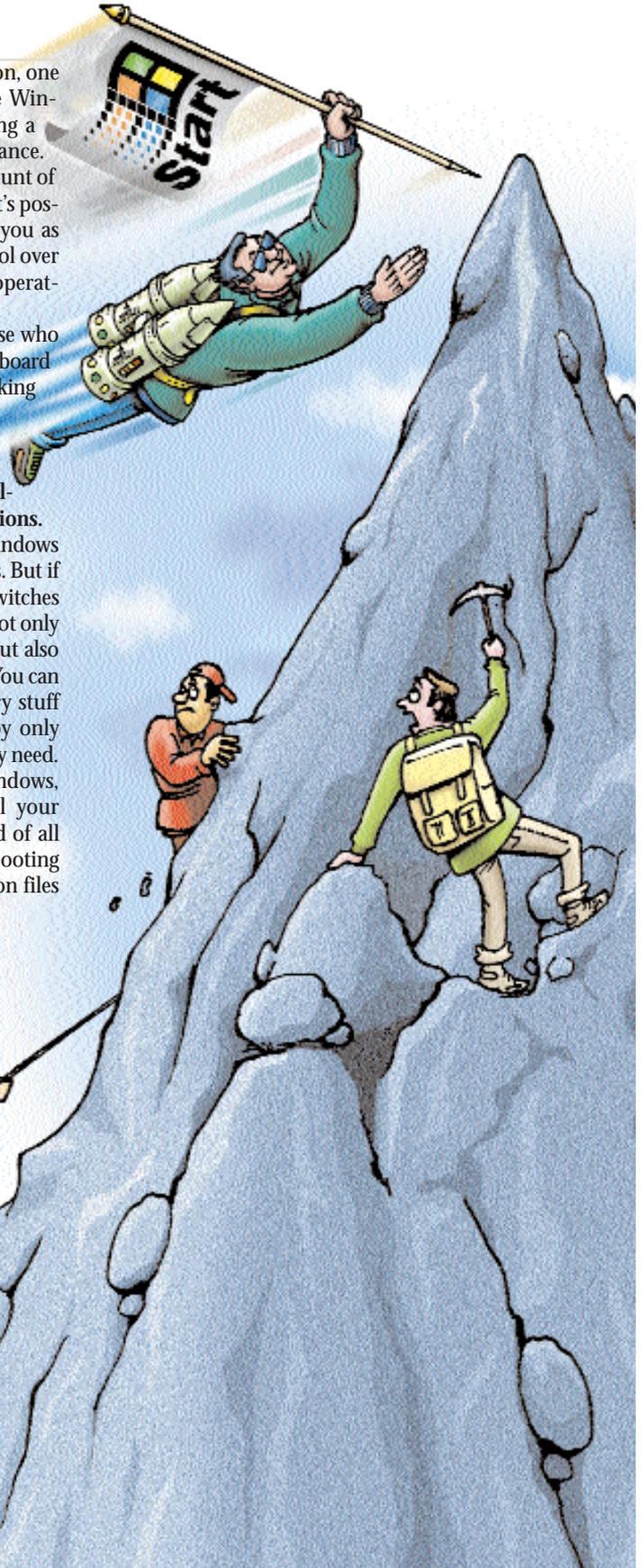
You can boot faster by changing the installation parameters as also the startup options.

Installation: Installing and configuring Windows is considered to be a relatively easy process. But if used in conjunction with a few special switches (see *Tips and Tricks, CHIP, October 2000*) not only can it make your Windows install faster but also be better aligned towards your hardware. You can also get rid of a whole lot of unnecessary stuff from Windows right at the beginning by only adding those components that you actually need.

Modifying DOS files: After installing Windows, once you are through with loading all your favourite applications, you should get rid of all the unnecessary junk while the system is booting up. You can modify the DOS configuration files for this.

For the most part, system files like Autoexec.bat and Config.sys no longer play an important role in the system's boot-up. These files should be kept empty, unless you are loading a legacy sound-card driver.

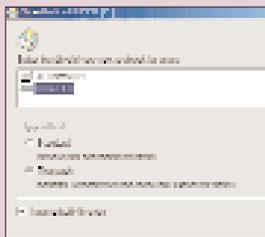
If you are using Windows 98 SE, just by adding the `Stacks=0,0` line to the Config.sys file, it's possible to speed up the core kernel.



Don't Forget the Basics

Everything tends to become slow over a period of time. If you want to keep your PC in tip-top condition, remember the three golden tips—ScanDisk, Defrag and Backup.

ScanDisk: Run ScanDisk often to check your drive for both physical and file errors. Though there are loads of feature-laden commercial programs that do the same thing, ScanDisk does a competent job of finding and



rectifying most disk errors.

Defragmenter: Using Disk Defragmenter will speed up access to your hard disk. It

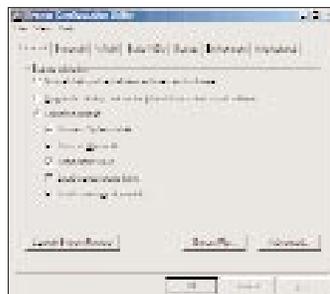


rearranges files and unused space on your hard disk so that programs run faster. Run Disk Defragmenter by clicking **Start > Programs > Accessories > System Tools** and then clicking Disk Defragmenter.

Backup: We are not referring specifically to Microsoft Backup, which is included with Windows 98. We are talking about general data backups. Though one can use Microsoft Backup, it has one major disadvantage over the previous version (available with Windows 95)—it has a low compression rate. The newest version of MS Backup, however, has support for Zip disks, which Windows 95 does not.

System configuration: You can use the System Configuration Utility to remove a whole lot of clutter that slows down the startup process. To access this utility, click the Start button, choose Run and type `msconfig`. From the various configurable options, leave the General tab alone. You probably shouldn't alter anything here unless you know what you are doing. Click the Advanced button for more options.

It's recommended that you check the box 'Disable Scandisk after bad shutdown' to turn off Scandisk's auto-run feature. If your system fails to shutdown properly, try checking the 'Disable fast shutdown' box. You can right-click an option and choose 'What's This?' for a small description. The Startup tab presents a list of all the programs that launch automatically when your system is started. It's better that you disable any software that you won't use every day. Disabling programs such as RealPlayer, Microsoft Office Find Fast, Scheduling Agent, chat software like ICQ or MSN Messenger will free up valuable system



Click the Advanced tab to configure startup options

memory and speed up the boot-up process. By removing these startup items, the System Tray is kept as empty as possible. If you can manage to keep only the Volume icon in the System Tray, then nothing like it. All other applications can be manually started.

Once you have removed all the unnecessary programs that start with Windows, your boot-up time should improve considerably. You should now concentrate on getting applications inside Windows run much faster and smoother.

Performance boosters

Changing some of the basic Windows settings can enhance performance to a great extent. For instance, changing the role of the computer is a simple, yet efficient method to boost speed. Most people forget this setting; if set in a proper manner, it can easily yield up to 15 per cent increase in performance. To change the setting, right-click on the My Computer icon, click Properties, go to Performance and choose the File System tab.

If your system is a little low on RAM, you will see a lot more increase in performance just by changing your computer's role from a typical 'Desktop Computer' to 'Network Server'.

The reasons for this are quite obvious. While

using the Desktop Computer setting, Windows allocates memory for the 32 most recently used or accessed folders and 677 most recently accessed files. This puts a total overhead of about 10 KB of memory.

But when you use the Network Server setting, Windows allocates memory to record the 64 most recently accessed folders and 2729 most recently accessed files. This definitely puts more overhead and consumes approximately 40 KB of memory.

The extra load on a system having just 16 MB RAM may seem to hamper performance, but it works in the reverse way. The extra memory space occupied gives a much smoother desktop experience and file managers such as Windows Explorer run more freely.

Optimising Virtual Memory: One of the more important steps toward making your PC faster and more responsive is to customise the swap file settings. Right-click on the My Computer icon and select Properties. Click on the Performance tab of the System Properties window. Now click the Virtual Memory button and select 'Let me specify my own virtual memory settings'. Try and keep the swap file on a partition that does not contain Windows.

Size considerations can vary from person to person. A 150 MB permanent swap file (minimum and maximum set to the same amount) will keep most systems happy.

The swap file is one of the most used files on your hard drive because programs are constantly accessing it. As Windows does not handle this file very efficiently, controlling the swap file could prove beneficial. It is generally recommended that you defrag your hard disk drive before creating a permanent swap file. Remember, if you keep this file on the last partition, you might see less drive thrashing.

Memory management

Windows generally splits the total available memory into two distinct sections, the cache section and the executable section. The cache stores information about the files that you have loaded so that if you reuse them they will run faster. As Windows does not manage the cache very well, we recommend that you manually adjust this setting.

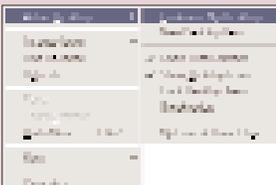
Go to **Start > Run** and type `sysedit`. Select the System.ini file. Find the `[vcache]` header (it will generally be empty) and insert these three lines
`ChunkSize=512`
`MinFileCache=8192`
`MaxFileCache=8192`

FileCache settings stop the cache from growing too large and slowing down the system. Users with 32 MB or less may want to use a setting that is slightly lower (4096). Power users (those with 128 MB or more) may get better results with



Desktop Tweaks

Several tweaks can also be performed within Display properties. Setting the desktop background to a colour rather than an image will save a lot of RAM. To do this, right-click on the desktop and click on Properties. Click on the Background tab and select None under Wallpaper options. In the Effects tab, disable all the visual effects except 'Show icons using all possible



Change the display parameters by clicking on display properties on the desktop

colours'. In the Web tab, make sure that Active Desktop is disabled, if you haven't done so already.

The Windows Active Desktop can be quite a pain. Even though it offers some nifty features, it is definitely not worth enabling. Apart from disabling Active Desktop from the display settings, you can also totally rip apart the Active Desktop feature from the system shell itself. This is the recommended procedure, but as it involves tweaking with the registry, it is recommended to use a third-party program that does it for you.

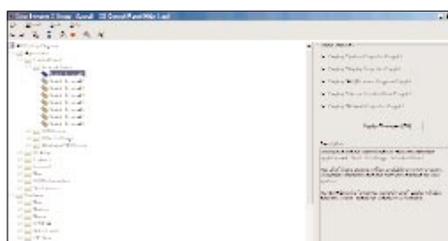
Third-party Utilities

There are a number of third-party utilities that can pretty much do the same task of Windows optimisation. Some of these software such as Tweak UI, X-Setup and PowerStrip can give much more control over how Windows handles various internal applets.

Tweak UI is one of the best tweaking programs available. It provides simple access to various hidden settings. Since it only modifies the system registry, it does not add any overhead to the system. Also, as it is a product of Microsoft's very own development team, it is extremely safe and stable. X-Setup, on the other hand, is much more powerful. It offers a lot more tweaks and has a unique record feature that enables you to create custom registry files. You can save these files so that you don't have to go through the entire process of tweaking over and over again. Just one click and your system is fully tweaked. Let's take a look at exactly how X-Setup works.

Installation

After installing the software, a screen will pop-up where you can read various advanced documents about how to configure and run X-Setup. From there



The X-setup feature list

settings of 12288 or 16384. ChunkSize allocates the smallest amount of space that a program can take up in the cache. If a program takes up too many chunks, the system performance will definitely drop, but if the chunks are made too large then a lot of RAM is wasted.

Hence, a compromise is required. A setting of 512 is acceptable for most users. Consider changing this if you have large amounts of RAM (256 MB or more) or if you deal with very small files.

Older DOS tweaks: Some old DOS-based memory tweaks still hold true. EMM386.exe can still improve performance in Windows 98, though it does not show much difference in Windows Me.

If you have the entry 'EMM386.EXE ram' or 'EMM386.EXE noems' in your Config.sys file, it will enable you to load the drivers after that in the Upper Memory block, instead of Conventional Memory.

These should be used only if you have a lot of DOS-based drivers such as drivers for your soundcard, CD-ROM drive, etc, running in the background.

you can switch to each feature and when the plugin for that particular tweak loads, the right side of the panel will show you various options where you can enable or disable various settings related to it. The basic X-Setup screen looks very similar to the way Registry Editor looks, with headings and parameters in the tree structure similar to the 'hives' in Registry Editor.

Configuration

X-Setup will also show you a warning whenever some very advanced tweaks will be applied. Remember to apply the changes in that particular module itself by pressing F9. You can also use the record key to save it as a registry file.

With control over aspects such as Appearance, Hardware devices, Control Panel, Internet settings, Network, Program Options and other System settings, the software practically covers each and every known tweak.



X-Setup lets you control various devices

DMA tweaks: Enabling the Direct Memory Access (DMA) option for each of the IDE devices is of utmost importance. Not only does it instantly show a performance increase, but it is also required while playing DVDs and other bandwidth-hungry applications. The DMA option should be enabled for both the hard disk and the CD-ROM drive.

For this, right-click on the My Computer icon and select Properties. Click on the Device Manager tab and select Disk Drives. Double click on Type 47 or the name of your hard drive if specified and then click the Settings tab. Ensure that the DMA option is turned on.

But first, check that your hard drive supports DMA before turning on this option (most hard disks that are less than two-three years old support DMA).

If you cannot reboot into Windows after changing this setting, restart into Safe Mode and revert to the older setting. For motherboards using VIA chipsets, download the latest VIA drivers and use the VIA DMA utility to turn the DMA on for the hard drive. ❖

Photograph: Rahul Sharma Imaging: Neeta Wadiker



Proud new owner of an MP3 player? Here's a step-by-step guide to help you get that baby up and crooning

MARCO D'SOUZA

Remember those days when the Walkman was the hippest thing to happen to music? Well, to rephrase Bob Dylan, the times certainly have a-changed. MP3 has taken the world by storm and as portable MP3 players become more popular, get ready to kiss good bye to your piles of audio cassettes and your music CD collection.

Eager to join the digital music revolution? For this you will need to learn how to work with MP3 players, right from connecting them to your computer to transferring and sorting music files via software. First off, though, a quick look at what equipment you require.

The bare essentials

An MP3 player: There is a plethora of MP3 players available in the market. Hot favourites include Creative's Nomad series and Diamond's portable range. While shopping for a piece that suits your needs and budget, do take into account factors such as interface and memory.

The interface decides the ease of connectivity and the speed at which file transfers take place. MP3 players have either a parallel port or a USB interface. Parallel port is easier to implement and cheaper, while USB is faster.

Another consideration is the total amount of memory supported by the player. This will tell you how many songs can be stored in it at a given time. Entry-level MP3 players come with 32 MB of RAM, while the more expensive and feature-rich ones carry 64 MB of RAM, upgradeable all the way up to 128 MB. Also, the memory in MP3 players is of a special type, called Flash memory—turning off the player does not erase this memory. Two popular formats in which Flash memory is available are CompactFlash and SmartMedia. CompactFlash is slightly larger in size than SmartMedia, and is also more robust.

Your choice in MP3 players will also dictate the number of features supported like voice recording capabilities and FM radio.

Connecting cables: Connecting cables come as standard accessories when you purchase an MP3 player. Depending on the model of your player, you would get a parallel cable or a USB cable. For a parallel cable, you have to power down →

Groove on the Move

Bit by Bit

When audio is encoded, digital audio data—the kind that is found on audio CDs and WAV files—is converted into a highly compressed stream of bits. This process is known as encoding.

The challenge with audio compression software is to maintain the highest possible compression ratio, while still keeping the audio quality as high as possible.

This process of suppressing the redundant parts of the audio is known as masking. During the encoding stage, the software attempts to allocate the available number of bits so as to meet both bit rate and masking requirements.

The most conventional method of creating MP3s—CBR (Constant Bitrate Encoding)—is not necessarily the most intelligent form of creating MP3 files, since the program allocates the same data rate to encode the audio, irrespective of the type of audio content in the song playing.

In variable bit rate (VBR) encoding, the software is capable of making intelligent decisions regarding the number of bits that need to be allocated while encoding MP3 songs.

Therefore, if there are passages in the songs that, for example, have increased stereo separation or complex frequency content, the software allocates additional bits for the encoding process, thus ensuring the highest possible audio quality during the MP3 creation process.

The advantage with VBR is that you are ensured of consistently high audio quality. However, since the bit rate in these songs are continually changing, functions like seeking within tracks and the total track length might not work correctly.

your computer before connecting your MP3 player. Also, it would be a good idea to set the data transfer rate of your parallel port to the highest setting possible through the CMOS of your computer. This would appear as EPP or EPP+ECP in your computer's BIOS.

On the other hand, if your player is equipped with a USB cable, you'll have to enable USB support in your computer and use the right operating system like Windows 98/Me. With USB, you don't need to power down your computer to connect. This makes it more convenient to transfer files to the player.

The connecting points in MP3 players are rather tiny, so it would be a good idea to take care while connecting the terminals of your player with that of your computer. Make sure that you don't use undue force while inserting the jacks into your player.

MP3 control software: Finally, you will need software to be able to transfer files from your computer to your portable MP3 player. This is also available as part of standard accessories. The software allows you to sort out MP3 tracks on

your computer or external storage devices, create playlists of your favourite music and transfer songs to your player. With most players, only the transfer of tracks to the player is possible. For copyright reasons, transfer of files from the portable MP3 player to the computer is not allowed. The software also allows you to convert existing audio CDs into MP3 format before transferring them to your player thus providing a one-stop solution for working with MP3 songs and transferring them to your player. The quality of the final MP3 tracks created by the player is decided by your software and the playback capabilities of your player (*see box, 'Bit by bit'*).

Since some of the MP3 players cannot handle MP3 songs that are encoded at higher bit rates such as those in excess of 128 Kbps, the MP3 control software has to scale down these songs before they can be transferred to your player. If this is not done, there would be errors during playback. The software gives you the option of choosing the optimal audio quality that you want to convert your MP3 songs to before finally transferring them to your MP3 player.

Connecting the Player to your Computer

After you have the basic elements to enable portable MP3 audio, you can move towards transferring MP3 songs to your player. Let's see how the same can be done using the Rio 500 MP3 player which features a USB interface.

STEP 1: SET UP SOFTWARE

Set up the software from the CD that accompanied your MP3 player. You may or may not be required to



The setup screen for loading your MP3 software

connect the MP3 player to your system. In this case, since the player uses a USB interface, the computer does not need to be powered off before connecting.

STEP 2: CONNECT CABLE

Attach one end of the cable to the port on the player. Connect the other end to the corresponding port on the rear of your computer. In this case, it is connected to any of the free USB ports on the computer. In



Connect the interface cable to your MP3 player



Connect the other end of the cable to the USB (left) or parallel (right) port of your computer.

some cases, the MP3 player needs to be connected to a docking station which, in turn, is connected to your computer. If your player uses a parallel port interface, be sure to power down your computer before connecting it.



Hot Favourite MP3 Encoding Software

MP3 enthusiasts, rejoice! If you're the type of person who encodes all his favourite music into MP3 format, this one's for you: a selection of some of the hottest MP3 encoding and file transfer applications available.

MusicMatch Jukebox

This widely acclaimed software offers you a rich assortment of MP3 management tasks and supports advanced functions such as VBR, equalisation and blazing fast MP3 encoding capabilities. The interface of the software is extremely user friendly and best of all, it's free!

Audio Catalyst

Based on one of the fastest MP3 encoding engines available, Audio Catalyst is capable of converting WAV files or standard audio CDs into MP3 format.

Additionally, it is also capable of equalising your tracks so that all your MP3s have the same volume level. It also supports high quality VBR encoding.

Windows Media Player 7

The latest version of Windows Media Player features very powerful MP3 support. Right from converting audio CDs into MP3 format to finally transferring them on to your player, Windows Media Player provides a simple one-stop solution.

The good: it's free; the bad: it's heavy on your system's resources.

Real Jukebox

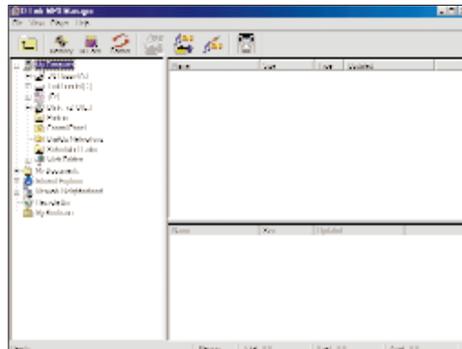
This feature-rich MP3 software comes from the makers of RealPlayer. Bundled with players such as the Thomson Lyra and the Philips Rush, this software allows very advanced categorisation capabilities, allowing you to catalogue your tracks according to artist, album, genre, etc.

Transferring Songs to your Player

Now that you have successfully connected your MP3 player to the computer, you are ready to begin transferring songs to your player. So get ready with your collection of MP3 songs on the hard disk of your computer or on external CDs.

STEP 1: START MP3 SOFTWARE

Start up the software that you loaded with your MP3 player. In nearly all cases, the interface of the soft-

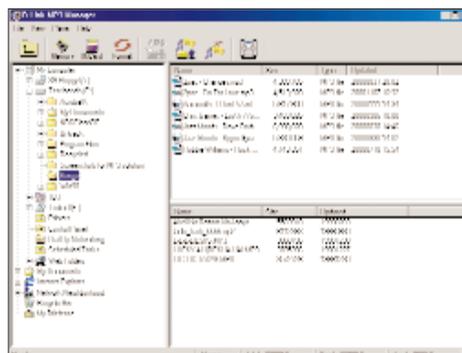


This is what the interface of most MP3 control software looks like

ware will be divided into two regions. On one side, you will be presented with a list of songs that are available on your hard disk or on CDs. You will be prompted by the software to search for the songs during installation. The other part of the interface will indicate the songs present on your MP3 player.

STEP 2: DRAG AND DROP FILES

Transferring songs to your MP3 player is as simple as drag and drop. All you need to do before choosing the



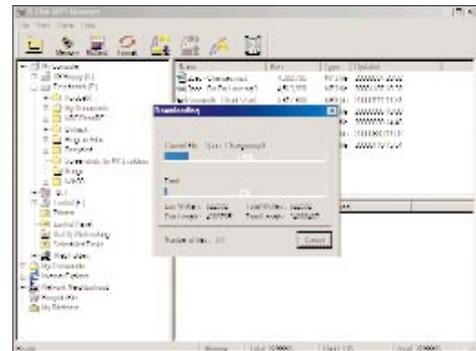
You can chose which songs to transfer from your system (top half) to your MP3 player (bottom half)

songs you want to transfer is to make sure that you have the necessary space on your MP3 player. Some software also provide a status bar at the base, which graphically indicates the amount of free space on your player. After you have made sure you have the necessary space, you could either use the drag and

drop method to transfer songs, or you could click on the Transfer or Upload button.

STEP 3: FILE COPYING

While the copy process is taking place, you will be presented with a status bar that indicates the progress of



As files are copied, you are presented with a transfer indicator indicating the progress

the songs as they are being transferred to your player. Here, you would also be alerted if any errors have occurred. The software will notify you after all the tracks have been copied to the player. The speed at which the songs are copied to your computer is totally dependant on the interface that your MP3 player is using. USB supports maximum transfer rates of 12 Mbps while parallel port gives speeds up to 1.5 Mbps.

TIP: Set your parallel port to ECP or ECP+EPP for maximum performance if your MP3 player uses a parallel port to transfer data.

CAUTION: While MP3 tracks are being copied to your player, it is important that you do not disturb the player or the computer. Preferably, do not invoke any other task while the copy process is taking place. Disrupting this process could result in loss of information and in some cases it could even harm your computer or MP3 player. Wait until file copy is over before removing the MP3 player.

STEP 4: DISCONNECTING

After all the tracks are transferred to your player, you will be notified by the software. Depending on whether you have a parallel port MP3 player or a USB version, you will have to verify that it is safe to disconnect your player while your computer is still on. In the case of a USB player, you need not worry about shutting down your computer. Some parallel port MP3 players also allow you to disconnect your player from the computer while it is powered.

That's it! You are now ready for digital audio on the move.



Hardware

+ Connecting right

Please tell me how to connect two computers using the USB ports and direct cable connection in Windows 98. Is it also possible to connect two adjacent computers using modems with a single telephone line?

Senthil

Via e-mail

RYou need a specialised USB peripheral known as a USB bridge or USB to USB adapter to enable this. You cannot make a direct cable connection like a null modem using just the USB ports. If you do so, there are chances that the power supplies of both the PCs may blow up. This is because USB doesn't support such kind of communication and, therefore, the need for a USB bridge. You can visit sites such as www.ezlinkusb.com for more information.

You can use Dial-up Networking to connect machines together using a telephone line. If you do not have it installed, add the dial-up adapter as follows: Go to Start > Add/Remove Programs > Windows Setup. Double-click on Communications, and check Dial-up Networking.

Next, install Dial-up Networking on the machine that will answer the phone and include Dial-up Server in the list of components. In File and Print Sharing for Microsoft Networks properties, set this machine's Browse Master setting to Enabled instead of Automatic. Once you finish this, turn on the dial-up server. Specify a password if you want.

Finally, on the machine dialling in, set the Browse Master preferences to Disabled. Create a dial-up connection that uses only NetBEUI as this is the fastest protocol for slow links. Then try dialling the telephone

number of the dial-up server machine, using the username and password you specified on the server. Once you connect, you should be able to browse the other machine.

Internet & Communications

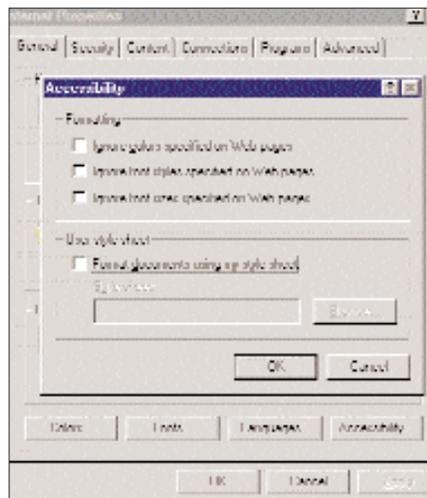
+ IE shows invalid page fault

When I close Internet Explorer, I get an error which says, 'Explorer caused an invalid page fault in module MSHTML.DLL at 015f:70c4d5f9'. How do I fix this?

Indra

Via e-mail

RIt's possible that you get this error when you start Windows with Active Desktop enabled or when you start or close Internet Explorer. It can also occur if the style sheet that specifies how Web pages are displayed in Internet Explorer is damaged



Check the user style sheet if you are problems with Active Desktop

or contains an invalid command. To solve the problem, first try re-registering the Mshtml.dll file. Go to Start > Run, type `regsvr32.exe /i mshtml.dll` and click OK.

If this does not solve the problem, go to Start > Settings > Control Panel. Double-click on Internet Options. In the General tab, click Accessibility. Click the 'Format documents using my style sheet' check box to clear it or change the path to a valid style sheet. Click OK twice. However, if you have Active Desktop enabled, you will have to do this in Safe mode.

On restarting in Normal mode, click Restore My Active Desktop followed by Yes when the Active Desktop Recovery screen appears.

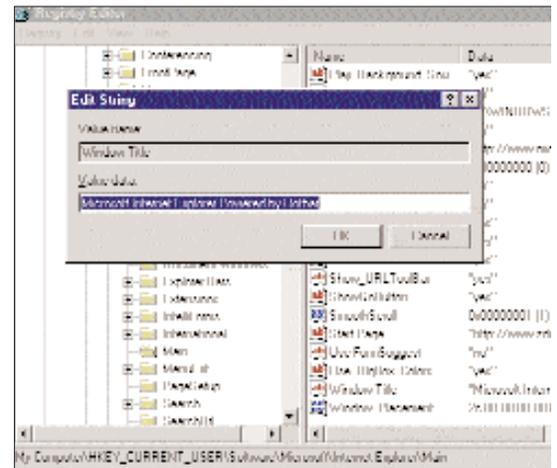
Internet & Communications

+ Changing the title bar

I downloaded some browser skins from Hotbar.com. Now, Internet Explorer's title bar shows 'Powered by Hotbar'. How can I revert to the original?

Sanjib

Via e-mail



Change the IE Window Title to the original

RTo change the title bar back to the original 'Microsoft Internet Explorer', you will have to edit the registry. Back up the registry before you make any changes to it. Go to Start > Run, type `regedit` and click OK. Navigate to the key, `HKEY_LOCAL_MACHINE\Software\Microsoft\Internet Explorer\Main`.

Here double-click the string value, Window Title, which should say something like, 'Microsoft Internet Explorer Powered by Hotbar'. You can change this to anything else you want, even your own name!

Once you have done this, go to Start, type `msconfig` and in the Startup tab, disable Hotbar. →

Applications

+ Backing up Gator information

I use Gator to fill forms. I have to format my disk now. How do I back up my Gator information and use it after I reinstall Windows?

Ajit Kukreja
Via e-mail

RTo back up the information you have entered into Gator, follow these steps. Right-click on Gator in the System Tray. Select Export User from the pop-up menu. If you have more than one Gator user on your computer, make sure you are exporting the correct user information. In the



Save As window, select where you want the file to be saved and click the Save button.

This will export the Gator information. If the information is password protected, you will be prompted for the password during the export process. This file can then be imported for use with the new Gator installation.

Windows

+ Is it CD error?

When I insert some CDs in my laptop, I get the error message, 'Isset_se error at 0001.00003552'. My vendor is unable to solve the problem. What could it be?

Arun Khazanchi
Via e-mail

RThe problem could occur due to either of two reasons. You could try the following solutions one by one, and see if the problem is solved. The most likely reason could be that Norton Antivirus (version 4) is installed with the Norton Auto-protect feature enabled to scan all files. You could use Live Update to download an updated version or you could disable Norton Auto-protect mode while using the CD. For this, right-click the Norton icon on the taskbar and then click Disable.

Another reason could be that the software, MS IntelliPoint, is installed on your computer and the Point32 program is running. If this is the case, quit the Point32 program using the Close Program menu after pressing [Ctrl] + [Alt] + [Del].

Hardware

+ Installing soundcard drivers

I recently installed a new soundcard, the 32-bit Crystal CS4281. But after installation, when I restart the machine, I get the error, 'Virtual Audio Driver Initialization Error. Virtual audio driver was unable to locate the sound system hardware'. Please help me in installing this card.

Anish
Via e-mail

RYou probably face the problem because your previous soundcard drivers are still present in the system. To remove them, go to Start > Run and type `sysedit`. In the System.ini file, remove the line, `device=V930D.386` (the line could be something similar) from the [386Enh] section. Reinstall your new card by restarting

Windows

+ A lingering infection

My system was infected with I-Worm/RC5.A. I had AVG anti-virus software loaded on my system, which was able to cure the system of the virus. But now whenever I start the system

and enter Windows, the system tries to run Wininit.exe. Why is this happening? Can you tell me what havoc this worm creates in the system and how to set it right?

Aditya
Via e-mail

RThe virus is known to infect Win9x machines where file sharing is enabled. It propagates by randomly selecting an arbitrary IP address and attempting to connect to the root file share (typically C:) on that machine.

If it is successful in accessing that share, it will copy several files into the remote machine's C:\Windows\System\ directories. These files typically would be Wininit.exe, Dnetc.exe and Dnetc.ini.

After rebooting, the infected computer's Wininit.exe tries to execute Dnetc.exe and continues infecting other computers. This is the reason your Wininit.exe starts every time your machine boots. Even though your anti-virus program may have got rid of the virus, the following line from the Win.ini has not been removed:

```
load=C:\Windows\System\Wininit.exe.
```

To remove this line from the Win.ini file, go to Start > Run and type `sysedit`. Click on the Win.ini file from the different windows that open, and in that file go down to the [windows] section. Thereafter, remove the offending line.



Illustrations: Mahesh Benkar



■ resolve~S.O.S.

the machine and installing the right drivers for it. This should take care of the problem.

Internet & Communications

+ A mixed-up Outlook

Due to some problems, I had to reinstall Windows. After the installation, Outlook Express is not working. Whenever its icon is clicked, it says MSOE.DLL could not be loaded.

Capt A. Bhalla

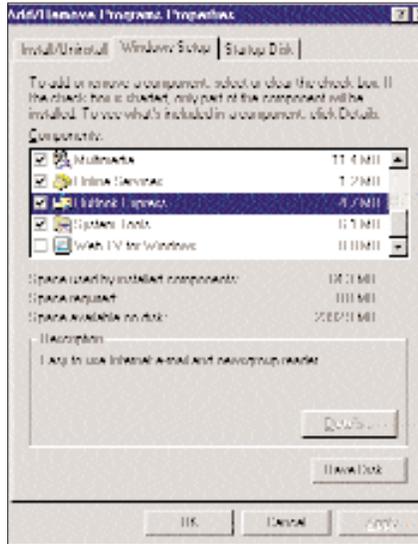
Via e-mail

RX The error occurred because you uninstalled Microsoft Internet Explorer 5 and then reinstalled Windows 98, which, by default, installs Internet Explorer 4.x. You get the error as Outlook Express 5 is not uninstalled. To fix the problem, you should edit the registry.

Go to **Start > Run**, type `regedit` and click OK. Navigate to the following key: `HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Setup\Migration`

Delete the 100 subkey folder if it exists and then quit Registry Editor.

Now go to **Start > Settings > Control Panel > Add/Remove Programs** and remove Outlook Express 5. You will receive a message which says something like, 'Uninstall requires at least Internet Explorer 5 to work correctly. If you continue, setup may not be able to restore the previous version of this application. Do you want to continue?'



Remove Outlook Express

Click Yes and restart your computer.

Again go to **Start > Settings > Control Panel > Add/Remove Programs** and click on the Windows Setup tab. Select the Microsoft Outlook Express check box and click Apply. You may need to insert the Windows 98 CD-ROM, so keep it handy. Outlook should now work properly.

Windows

+ The right name

My computer vendor installed the original version of Windows 98 SE. While installing, he

registered Windows in the name of 'abc' instead of my name. How do I change this to my name without reinstalling Windows as my vendor suggests?

Mitul

Via e-mail

RX You don't need to reinstall Windows for this. You can change this information by editing the registry. In the Registry Editor, navigate to the key, `HKEY_CURRENT_USER\Software\Microsoft\MS Setup (ACME)\User Info`.

In the right pane, change the values of `DefName` and `DefCompany` to the ones that you want. Exit the Registry Editor and restart your machine. This should take care of your problem.

Windows

+ Startup hassles

In my Windows NT machine, the problem is that immediately after logging into the network at startup, the `WindowsNT\System32` folder opens up. Can you help me out on this?

Tabrez

Via e-mail

RX This can occur if a null entry exists in the registry. A simple solution would be to uninstall the Windows Desktop Update component. Another solution is to wait for 30 seconds to 1 minute before you log on to Windows NT.

If the above two solutions don't work,

Internet & Communications

+ Locked out

Someone working on my friend's PC has inadvertently locked the browser with the Content Advisor (security) password. He is unable to use the Internet Browser (IE5). Reinstalling IE5 does not work. Is there any way to get rid of the password?

A K. Ravi Kumar

Via e-mail

RX Content Advisor passwords enables you to restrict certain sites from being loaded. There is a way to delete the lost password and disable Content Advisor password. You will have to edit the registry to delete the password. Navigate to the following key: `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\Ratings`. In the right pane, right-click on 'key' and click on Delete. Exit the Registry Editor. Now open IE. Go to **View**



> **Internet Options > Content**. Click on **Disable**. When asked for a password, don't enter

anything; click **OK**. This will disable Content Advisor.



■ resolve~S.O.S.

use Windows Registry Editor to view the following two Windows NT registry keys: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Run

Verify that none of the values in these keys contain any null entries such as "". Typically, the incorrect value should be in the key HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run

Check under the keys, Value: ActiveMovie File Extensions and Value Data: ActMovie.exe.

If the value data for this entry is null, you may experience the problem described above. To correct the problem, change the value data to match the entry above or delete the ActiveMovie File Extensions value.

Windows

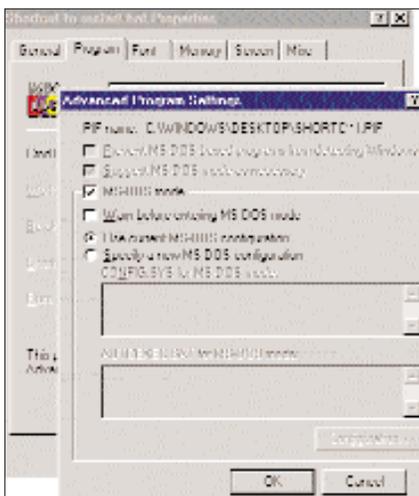
+ Restart shortcuts

I recently purchased the CHIP Special for Tips and Tricks. In this magazine, you have suggested a quick restart shortcut, using the target C:\Windows\rundll.exe user.exe, ExitWindowsExec. But this command does not restart my PC, although the quick shutdown shortcut works fine. I think the above command is wrong. Please suggest the appropriate command.

Pankaj

Via e-mail

RX The shortcut is correct. Sometimes, it may not work because of a program that refuses to quit. You can try the following alternative.



• Making a quick & easy Start cut

Open Notepad and type @exit. Save it as, say, restart.bat. Make sure that you get the extension right. Now make a shortcut for this on the desktop. Right-click on the shortcut and click on Properties. Click on the Program tab and check the Close on Exit box. Click on the Advanced button. Select MS-DOS mode and uncheck 'Warn before entering MS-DOS mode'.

Click OK twice. Now when you double-click on this shortcut, the system will restart.

Applications

+ Saving Dragon's training data

I am using Dragon Naturally Speaking as a dictation program. Now I plan to go in for a new PC. Kindly guide me on how to transfer my speech files to the new PC so that I don't have to go through the trouble of training Dragon again from scratch.

Adishekar

Via e-mail

RX Dragon saves the training data as an acoustic file and a set of vocabulary files. In the Deluxe Edition, there can be multiple sets of vocabulary files and also your macro file. The acoustic file contains all the information that Dragon Naturally Speaking has learnt about how you talk. The set of vocabulary files contains all of the words that are currently active for you, as well as any other information computed when you ran the Vocabulary Builder program. In addition, any dictation shorthand created by you is also stored in your vocabulary files.

In the Personal Edition version 1.0, your speech files are stored in the following directory: C:\NatSpeak\Users\Customer\current. This directory contains one file that contains your acoustic information called dd10user.usr and five files which contain your vocabulary information called dd10voc1.voc, dd10voc2.voc, dd10voc3.voc, dd10voc4.voc and general.voc. In version 2.0, the directory contains two or more subdirectories. Your acoustic file is stored in C:\NatSpeak\Users\name\current\voice and is called dd10user.usr. Your vocabulary files are stored in C:\NatSpeak\Users\name\current\General. In the Deluxe Edition, it is also possible to have additional topics, which are different sets

of vocabulary files. In that case, the subdirectory name is formed from the topic name.

Copy these files to your backup media. When restoring the same, install the software, but click Cancel when asked for the training option. Restart so that the directory structure is created and copy the files back to the original location.

Windows

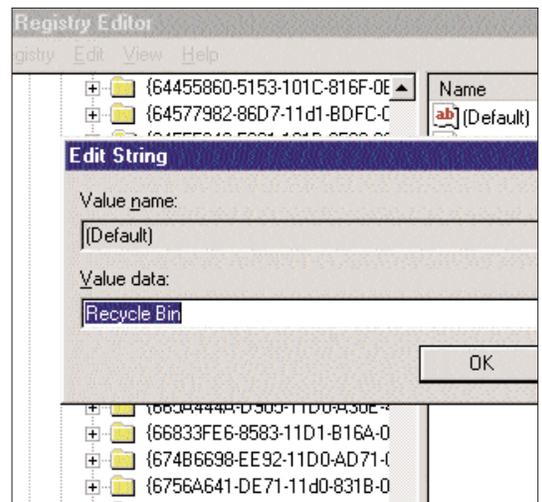
+ Renaming Recycle Bin

Can I change the name of Recycle Bin?

Shipa

Via e-mail

RX You can change the name of the Recycle Bin by editing the registry. Be careful though; any mistakes in editing the registry



Renaming the Recycle Bin

can render your system unbootable. In the Registry Editor, go to Edit > Find. Type Recycle Bin and click on Find Next.

You should get Recycle Bin in a folder similar to:

HKEY_CLASSES_ROOT\CLSID\{645FF040-5081-101B-9F08-00AA002F954E}

If you do not get something similar to the above, in the left pane, click again on Find Next. Having found the key 'Recycle Bin', change it to the name you like and exit the editor. Restart your machine. This should do the trick. If you feel this method is a bit risky, you could download a program that not only allows you to rename the Recycle Bin, but also allows you to change its icon. Get this program from: <http://members.nbci.com/EasyIcons98/> ♦

DO YOU NEED HELP?

Bring your queries and problems to www.drchip.com (under re-construction)

Mail to drchip@chip-india.com, write in at Dr CHIP, D-222, Om Sagar Bldg, MIDC, Nerul-400706

tips & tricks

Photograph: Rahul Sharma Imaging: Neeta Wadiker



Portrait of an Artist

If you live in the world of bevels and curves, interactive rollups and blends and other lighting effects, then get set for a panoramic view ahead

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Photoshop

Adobe Photoshop is the most popular image-editing tool used by design professionals. The number of features it sports is quite mind-boggling. As every design professional would vouch, you can never stop learning in Photoshop

🔥 Sharpening JPEG images

Blurring an image that is to be saved as a JPEG file will reduce its file size, whereas sharpening it will increase the size. To sharpen an image for the Web, choose **Filter > Sharpen > Unsharp Mask** and use a low Amount setting (somewhere around 20 per cent), a high Radius setting (15-20 pixels) and a low Threshold setting (3-5 levels). This will keep your file size down but will still make your image appear a little sharper.

🔥 Setting Feather options

Feathering and anti-aliasing are very important to give a natural to your selections. Make sure you choose the Anti-aliased option and give your selection a pixel or two of Feather before you use any selection tool such as Lasso or Marquee.

🔥 Feathering selections

To feather a part of a selection, switch to Quick Mask Mode, select the area you want to feather and apply the Gaussian Blur filter. To make the transition look as smooth as possible, you should feather the selections before you apply the Blur effect.

🔥 Painting selections

You can paint selections using Photoshop's painting tools such as Airbrush. Click on the Quick Mask Mode button and start painting your selection. The default colour is red but you can change this by double-clicking on the Quick Mask Mode icon. When you have finished painting your selection, click on the Standard Mode button to get the selection.

🔥 Hiding palettes

You can get rid of all your open palettes to create more space by pressing the [Tab] key. Alternatively, you can also

press [Shift] + [Tab] to hide other palettes except the toolbar. Press the same keys to bring them back.

🔥 Using the Dodge tool

For white, bright, shiny effects like, say, the brightening of teeth or pure white marble texture, you can make use of the Dodge tool. This tool helps in faster whitening and brightening of the desired selection. In the Options palette, select Midtones and set the Exposure to about 20 per cent. Select a small, soft brush. Be sure the brush is smaller than the portion selected. Carefully paint over the



Use the Dodge tool to transform the selected part (teeth) to a brighter one (below)

selection with the Dodge tool. For better accuracy, select the portion before working with the Dodge tool. It can definitely brighten up the smile on your face.

🔥 Defringing cutouts

The Defringe command in the **Layer > Matting** option removes unwanted pixels from cutouts. For this, just type in the number of pixels you want to defringe and they will be deleted from the edges of the cutout.

🔥 Working with Color Range

If you are working with images that do not have the highlights and shadows in order, you can use the Color Range option to correct them. Go to **Select > Color Range**, choose Highlights or Shadows from the drop-down menu to apply in the troubled areas and click OK. Then feather your selection and use the Levels dialog box to get those shadows or highlights under control. The Color Range option is quite useful as you get better selections than with the Magic Wand tool. You will notice that you get selections that also contain partially selected pixels (shown as grey), which the Magic Wand cannot do.

🔥 Grayscale conversions

If you have an image which is in RGB or CMYK and you have to convert it to Grayscale, don't convert it directly. To get more accurate conversions, first convert the image to Lab Color. Then select just the Lightness channel and again use the **Image > Mode** option to convert to Grayscale. Click OK when prompted with 'Discard other channels?'

🔥 Working in CMYK

The move from RGB to CMYK can cause some nasty shocks. To avoid this, always use the CMYK preview from the View menu. Also, if you are working towards

a printed output, you should always work in CMYK. If you work in RGB and convert to CMYK, you run the risk of getting dull, flat and out of Gamut colours.

Preserving transparency

Turn on the Preserve Transparency option (from **Image > Apply Image**) and any pixels that are 100 per cent will not be affected by the changes that you make. Experiment by keeping this option on and off to see the difference it makes.

Batch conversion of files

If you need to convert a number of files from one mode to another, you can make use of the Conditional Mode Change feature. Just click on **File > Automate > Conditional Mode Change**. In the Source mode area of the dialog box, check the colour mode of your files. In the Target mode area, choose the output mode. Click OK. All open files will now be changed.

Removing unwanted backgrounds

The Magic Eraser tool can help in erasing unwanted backgrounds. Once you have chosen a tolerance setting, clicking anywhere on your background will remove (make transparent) any pixels that fall within the close tolerance. Uncheck the Contiguous box if you want more control over which areas are erased.

Free transform of images

The Free Transform feature in the Edit menu is typically used to scale and rotate a layer (or multiple layers if they are linked together). You can also type [Command] + [T] (Macintosh) or [Ctrl] + [T] (Windows) as a shortcut to get to Free Transform. After you choose that command, you can click and drag the corner handles to scale the image or move your cursor beyond one of the corner handles and drag to rotate the image.

Saving selections

If you need to work with a particular

selection over and over again, then choose Save Selection from the Select menu. To retrieve the selection later, choose Load Selection from the same menu. These saved selections will remain in the file as long as you use the Photoshop or TIFF file formats. To save the image in any other file format, be sure to choose **File > Save A Copy**, otherwise the other file formats will not be available.

Making custom brushes

You can create a custom brush from any part of an image. With a Marquee, select the area you want to construct the brush and choose Define Brush from the Brush palette options. You can use the same method to create a custom brush from a specially painted shape.

Smoothing skin and concealing blemishes

Well, wouldn't we all want to look a few years younger or magically erase facial blemishes? Maybe it's not possible in real life, but luckily, we can turn back the clock digitally thanks to the History brush.

Open the image. Go to **Filter > Blur > Gaussian Blur**. Set the Radius just high enough to conceal any wrinkles or blemishes. Anything over 1 or 2 pixels is probably too much. Click OK to apply the Gaussian Blur.

If the History palette is not visible, go to **Window > Show History**. Click the small arrow in the upper right corner of the History palette and choose New Snapshot. Name the snapshot 'Blurred'. At the top of the History palette, click the first snapshot to revert to the original image state. It should have the same name as your filename. Click in the square next to the blurred snapshot to set it as the source for the History brush. Create a new layer. Select the History brush. Choose a soft brush and paint on the new layer. You will be applying paint from the blurred snapshot source image.

When you are happy with the final image, choose **Layer > Merge Down** to combine the retouched layer with the origi-



Top: Image with blemishes
Below: Smoother skin after using History brush

nal image. Remember, there's no going back after you merge the layers.

Removing Red Eye

It's the perfect picture...except that it has been ruined by those unsightly, glowing red eyes from camera flash. Fortunately, it's fairly simple to correct.

Open the image. Go to **Image > Duplicate** and close the original. Go to **View > New View**. This will open a duplicate window of the same image. Zoom one of the windows so that you can see the eyes as large as possible. Set the other window view to 100 per cent. Arrange the two windows so you can see both the zoomed view and the 100 per cent view at the same time.

Select the red area of each eye using the Elliptical Marquee tool.

Hold the [Shift] key down for selecting the second eye without deselecting the first one. Go to **Select > Feather**, and apply a feather of 1 pixel. Go to **Image > Adjust > Variations**. The default pick in Variations is usually just about right, but

■ resolve~tips & tricks

feel free to make adjustments as desired. You may need to make it darker or lighter. When you are satisfied, click OK.

If the red eye still persists, use the Burn tool to take it out. It should only take a couple of strokes with the Burn tool.

🔥 Taking care of washed out photos

If your image is looking washed out, you can easily manipulate it to look better. Open the file. If the Layer palette is not visible, display it by going to **Window > Show Layers**. Drag the background to the New Layer button on the Layer palette to duplicate it. Change the Blend mode for the duplicate layer to Soft Light. If the results are too dark, lower the opacity of the layer. If the photo is still too light, drag the copy to the New Layer button to duplicate it again. Adjust opacity as needed.

🔥 Fixing dark pictures

Got an image that is too dark? Here's a quick and easy way to fix a dark picture using Blend modes. Open the photo. If the Layer palette is not visible, display it by going to **Window > Show Layers**. Drag the background to the New Layer button on the Layer palette to duplicate it. Change the Blend mode for the duplicate layer to Screen. Alternatively, go to **Image > Adjust > Levels** and try playing around with the settings.



Below (left): The dark image
Top: Image lightened using layers

🔥 Changing contrast levels

There are a number of ways to improve image contrast. The Overlay mode in the Layers palette is one of the simplest. Open the dull image and duplicate the background layer. In the Layers palette, click on the little triangles immediately to the right of the box that says Normal. The Blend Mode pop-up menu should appear. Scroll down and select Overlay. Using Overlay, the dark colours in an image are multiplied while the light colours are screened out, creating better contrast. By doing this you get a sharper picture. After this, go to the Layer menu and select Flatten Image.

🔥 Correcting flesh tones

There are times when you get pictures that are too red. Don't panic. There's an easy way to tone them down. Go to **Image > Adjust > Hue/Saturation**. By default you would get the Master colours selected. Choosing the Master changes all the colours at once, but since we have to change the red colour, change the option to Reds. Watch what happens to your image when you decrease (move the slider to the left) the Saturation. You can also increase the Lightness. You can eliminate the yellow jaundiced look by selecting the Yellows and decreasing the yellow

Photoshop 6.0

The new release from the Adobe stable promises to be a boon for all designers

Photoshop 6.0 comes with a whole new set of interesting features

- A cool interface with a context-sensitive text tool that displays all relevant controls and parameters.
- You can easily combine vector text and bitmap images. You can freely twist and wrap text and moreover, the text can be edited at any stage.
- New layer management which does away with the limited undo levels (restricted to 99). The new version supports *n* number of undo levels depending on your system.
- Layers can now be colour-coded for easier recognition and locked to prevent accidental edits.
- Layer effects can be easily copied by simply clicking and dragging on to another layer.
- A new Preset manager simplifies working by centralising the management of custom brushes, gradients, patterns, shapes, etc.
- A new set of vector tools enable the creation of rectangles, ellipses, lines and polygons to be used as shape layers, vector masks or just for painting pixels.

Saturation. Experiment with the settings to get the desired effect.

🔥 Adding text watermarks

Open an image. Select the Type tool and type the copyright symbol or any other text you want for the watermark. Click the Color swatch, and set the colour to 50 per cent grey. Click OK to exit the Type tool. Resize and position your text as desired. Right-click on the Type layer in the Layer palette and choose Effects. Apply the Bevel and Emboss effect and adjust the setting to your liking. Change the Blend mode to Hard Light. This should give a watermark effect to your image.

Paint Shop Pro

Jasc's Paint Shop Pro (PSP) is the common man's Photoshop. However, it does offer a lot of features at a relatively lesser price. Jasc also offers a 30-day trial version so you can get a feel of it

🔥 Sharpening images

Open the image in PSP and go to **Effects > Enhance Photo > Automatic Contrast Enhancement**. Play around with the



Using colour enhancements, the faint image (top) is sharpened (below)

settings to get the desired effect. For greater visibility keep **Bias Lighter**, **Strength Normal** and **Appearance Natural**.

🔥 Vectorising lines

A single line is just that... a line. It doesn't do much. But if the **Create as Vector** option was selected then the line may be edited and deformed later with the **Vector Properties** dialog box and the **Vector Object Selection** tool.

🔥 Curving lines

Place the cursor over your canvas and draw a straight line. Left-click anywhere above or below the line. Direction handles will appear at each end of the line. Drag the direction handle to form a curve. You can also create point-to-point lines by simply clicking on different points on the canvas to connect them.

🔥 Removing white spots

There are times when a photograph is laden with white spots that simply spoil the image. You can use the **Retouch** tool to improve the image. Click the **Retouch** button. Keep the brush size normal—



Top: Image with spots; below: Using the **Retouch** tool, the spots are removed

don't make it too large. Also make sure that the **Hardness**, **Opacity** and **Density** are kept low. For **Retouch Mode**, select **Push** as the option. By doing so, the adjoining colours are pushed on to the damaged portion and the image gets cleaned up by moving the adjoining colours into the white spot. Carefully move the cursor from the surrounding darker colours on to the white spot until it has disappeared.

🔥 Blending two images

The smooth transition of one image blending into another is always wonderful and is used by many professionals to portray their artwork. To do the same, open a new file with default settings and then add a new layer by clicking on **Layers > New Raster Layer**. Then open another image. Pick the **Freehand** tool and draw a selection around the image. Keep the settings as follows: **Selection Type: Point to Point**, **Feather: 0**, **Anti-Alias: Checked**.

Feather the selection by 15 pixels. Copy the selection and then go to the main image and paste it as a new selection using **[Ctrl] + [E]**. Click on **Layers > Properties** and set the **Blend Mode** to **Hardlight**. You will be amazed at the blending of two different images. Use different images with various backgrounds and try blending them using various options.

🔥 Creating a vintage look

If you want your photograph to have a vintage look, then do the following. Create a new image that is the same size as your photo and has a white background. Make your photo the active image by clicking on its title bar. Select the entire image using the keyboard shortcut **[Ctrl] + [A]**. Go to **Selections > Modify > Feather** and feather by 30 pixels. Click **OK**. Then copy the selection to the clipboard. Make the white image active and paste the

■ resolve~tips & tricks

clipboard as new selection from **Edit > Paste > As New Selection**. Centre selection and deselect it. Your new photo should



Creating a vintage look (below) from a colour image (above) using Colorize option

now have faded edges. Go to **Effects > Noise > Add**. Add around 8-10 per cent noise. Click OK. Then go to **Colors > Colorize**. Keep the settings as follows—Hue: 30, Saturation: 40. Click OK. You can adjust these settings to your own preference. Now the image should have that vintage look.

🔥 Setting a transparent colour

When you are creating a GIF image, you can specify one colour to be transparent. Once you finish working on the image, decrease the colours to 256 from **Colors > Decrease Color Depth**. Using the Dropper tool, right-click the colour you want to make transparent to set it as a background colour. Click on **Colors > Set Palette Transparency** and select the option

of setting the transparency value to the current background colour.

🔥 Using brush-sized pointers

When you are working with a Paint brush or Air brush, it is handy to see the size of the brush to know where it will paint. To view the pointer shape, switch to the cursor and go to the Tablet Options tab from the Tool options palette. Enable Use Precise Cursors and Show Brush Outlines. The brush shape and size will appear over the entire area that it covers.

🔥 Paste to size

If you have to paste an image into a part of another image, select the area in the target and click on **Edit > Paste > Into Selection**. You can also paste into an irregular-shaped selection.

🔥 Paste without a background

When copying a selection and pasting it on to another image, you can paste it without its background. Before pasting, set the current background colour to the colour that you want to remove. Click on **Edit > Paste > As Transparent Selection**. The image minus the background is pasted.

🔥 Making multiple selections

You can add an area to the current selection by holding the [Shift] key as you select a new area. To deselect a part of a selection, hold the [Ctrl] key as you select an area. Using this, you can create multiple selection tools to build a complex selection.

🔥 Customising the Undo/Redo options

To change the options for Undo and Redo, click on **File > Preferences > General Program Preferences** and select Undo/Redo. Configure the way PSP should handle Undo/Redo information. Click OK to save the settings.

🔥 Applying the Charcoal effect

Charcoal paintings do tend to mesmerise you, and it's easy to get the same effect

even in PSP. Open the image and convert the image to Grayscale. Click on **Colors > Adjust > Brightness/Contrast**. Keep the settings as Brightness: 50 per cent and Contrast: 20 per cent. You can play with the settings as the colour variation may differ from image to image. Click on **Effects**



Top: Actual image Below: Image after the charcoal effect has been applied

> Edge > Edge Enhance More. You'll get your desired charcoal effect. Alternatively, **Effects > Artistic Effects > Charcoal** should also work, but always convert the image to Grayscale first.

🔥 Customising toolbars

If your toolbar is too cluttered, you can customise it to show fewer items. For example, you can get rid of New, Open, Cut, Copy, etc and use their shortcuts instead. To customise the toolbar, click on **View > Toolbar**. Select the toolbar you wish to modify and click on Customise.

CorelDraw

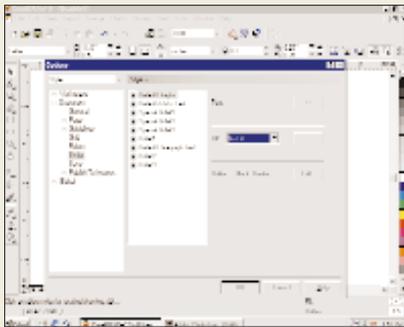
CorelDRAW is a terrific graphic utility that is a favourite with most designers. It offers both vector-based and raster-based manipulation among a host of other features

Select all objects

If you want to select all the objects on the page, just double-click the arrow (Pointer tool). This includes anything sitting on the desktop (the area around your page). With version 9 and above, you can also use the shortcut key [Ctrl] + [A].

Adjusting the tools properties

If you want to change the properties of a particular tool, say the size or pen colour, then right-click on the particular toolbar and select Properties from the menu that appears. You will get all the options for



Modify the properties of any of the items in the toolbar to suit your requirements

that particular toolbar and you can change the parameters as you like.

Adjusting nudge values

With an object selected, you can move or nudge it in increments by tapping the arrow keys. To adjust the distance that the object is moved when you tap the arrow keys, look for the Nudge Offset dialog box on the property bar and type in a value.

For a more permanent adjustment, go to **Tools > Options > Edit** and make the desired changes. Here you can adjust the Super Nudge value. To activate Super Nudge when you are using the arrow keys to move an object, hold the [Shift] key down as you tap the arrow keys. The

object will then move according to the set increments.

Stretching objects

To stretch an object from its centre, hold down [Shift] and drag one of the side selection handles. To stretch an object in increments of 100 per cent, hold down [Ctrl] as you drag a selection handle. To stretch an object vertically and horizontally at the same time, hold down [Alt] as you drag one of the corner selection handles.

Constraining movement

If you hold down the [Ctrl] key after clicking and dragging an object, it will be constrained to move only horizontally or vertically.

Shifting buttons

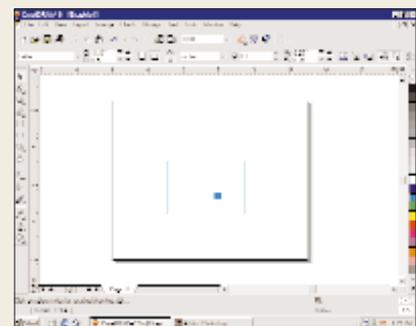
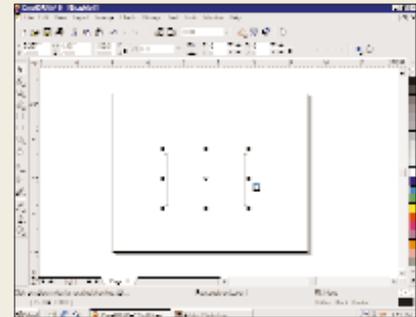
You can quickly move a button on a toolbar by dragging it while holding down [Shift] and [Alt]. To delete a button from a toolbar, drag it off the toolbar while holding the [Alt] key. You can duplicate a button or create a copy of it on another toolbar if you hold down [Ctrl] + [Alt] and drag it.

Duplicating objects

When clicking and dragging an object, just before you release the left mouse button, click the right mouse button and a duplicate will be created. If you want to create multiple copies (works only in version 9 and upwards) tap the [Spacebar] wherever you want the duplicates to be placed as you drag the object.

Colouring objects

Just click and drag a colour from the Color palette to either the objects, fill area or its outline. As you drag, you will see a Color swatch. When it is hollow you are over an outline and when it is solid you are over a fill area.



The hollow Color swatch (top) indicates outline while solid (below) indicates fill area

Converting outlines to objects

Want to apply various effects to outlines? In version 9 and upwards, you can convert the outlines to objects and apply various fills and effects to the object. From the Arrange menu, just select Convert Outline To Object.

Creating pies and arcs

After creating an ellipse with the Ellipse tool, pull on the Node at the top of the Ellipse. Pull outside the Ellipse to create an arc; pull inside the Ellipse to create a pie.

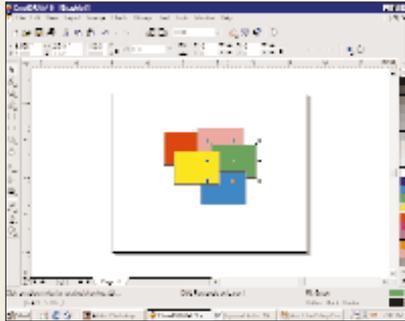
Shifting the origin

To modify the location of the Rulers' origin, that is, where the zero starts on the page, click and drag the Rulers Intersection Point (which is the icon in the top-left corner where the horizontal and vertical rulers meet). Simply drag this

icon to the position on the page where you want the zeros to be. To return to the default location, double-click on the Rulers Intersection Point icon.

Effects without ungrouping

While selecting an object in a group and changing the properties such as colour,



Editing objects in a group

fill, line etc, just hold down the [Ctrl] key. This allows you to edit that object within the group without ungrouping it. When you are doing this, you will notice the selection handles of that object will be round instead of the usual square shape.

Matching Mac and Windows fonts

If your document contains Macintosh fonts, you can specify the Windows equivalents for them. Click on **Tools > Options**. In the list of categories, select **Text > Fonts**. Click the Panose Font matching button. Click the Spelling button and match the relevant Windows fonts to the Macintosh fonts.

Setting up colour management

If your colour management is not set up correctly, then the onscreen colours may not look as they are supposed to. To correct this, click on **Tools > Options** to open the Options dialog box. Under the list of categories, select **Global > Color Management**.

Creating great 3D effects

A great 3D effect can be obtained by various ways in CorelDRAW. Let us take an

easy method. Type a name in any typeface. Then go to the Interactive Blend rollout and from there call out the Interactive Extrude option tool.

The Extrude option gives a deep 3D effect, where you can change the colour, play with the lighting, judge the bevel look and also decide the angle of axis in various planes.

Alternatively, create a typeface, select any colour and then give it a black outline thickness of, say, 3. Create a duplicate. Take the duplicate and give it a red outline and a thickness of 1 point. Select both and centre them or keep them at a slight angle. While both are selected, put 20 steps in the Blend dialog box and click Apply. The more complicated the font style, the more radical the effect. Try experimenting with the higher values and also check out the various colour blend options.

Applying the wet paint effect

If you want a wet paint effect to your image, then select the bitmap with the Pick tool. Go to **Bitmaps > Distort > Wet Paint**. Move the Percentage slider to set the size of the drips. Move the Wetness slider to determine which colours drip. Negative values cause the dark colours to drip; positive values cause the light colours to drip. The value you select also determines the range of light and dark pixels that drip. Play around with the settings to get the desired effect.

Applying shadow effect

Open the Interactive Tools flyout and click the Interactive Drop Shadow tool. It allows you to give a realistic shadow effect to almost any object. An object must have a fill before you apply the drop shadow. For example, just type any text, give it a colour and click on the Drop Shadow tool.

You can play around with the settings such as Left, Centre and Right to have the desired effect. Alternatively, you can duplicate the object by giving it a slightly grey colour and placing it just behind the original object.

Working with Powerclips

Powerclip is a way of placing one object inside another as if the latter is a selection tool. Select the first object, click **Effects > Powerclip**. Click the menu option



The Powerclip option lets you place objects within objects

Place Inside Container, carry the resulting arrow to the second object and click again. The first object appears inside the second. A Powerclip object can be applied on bitmaps also and a powerclipped object can be powerclipped over and over again.

Giving a spooky feel

You can get a frightening effect using the Convert to Curves command. Type in any text and then go to **Arrange > Convert to Curves** or use the shortcut [Ctrl] + [Q].



Change the text type to curves and get a spooky feel

By running this command, the text gets distorted.

Then use the Node tool to drag the end points from each character to give a spooky effect. Alternatively, the Distortion tool from the Interactive Blend rollout can be definitely used for a devastating effect. ❖