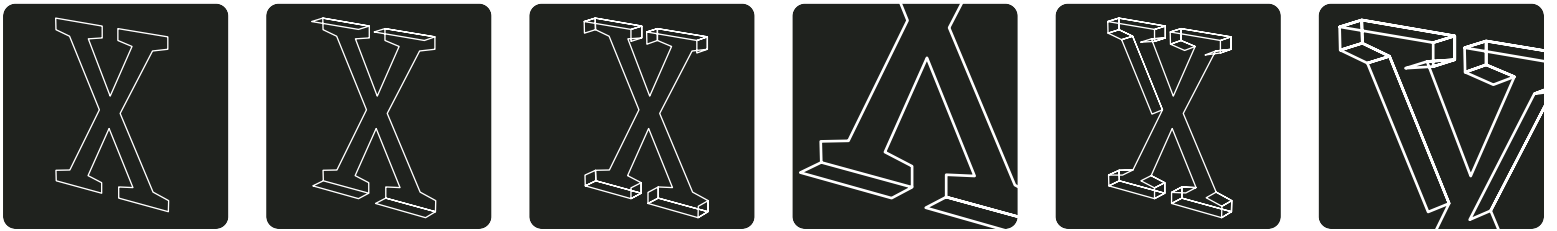
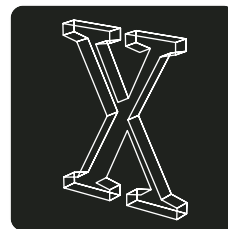
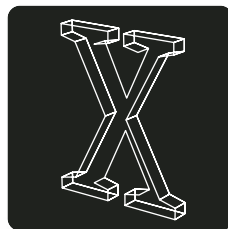
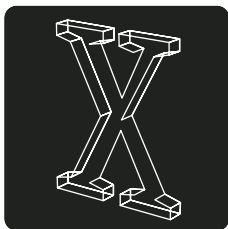


OS X **secrets reve**



There's a great deal more to the latest version of the Mac OS X than stylish toolbars and interface gimmicks. Rob Buckley reveals the hidden depths that make Panther the world's most powerful and cutting-edge Operating System...

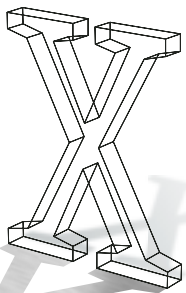
aled



Panther is pretty good now, isn't it? Looking at its now-ancient predecessor, OS 9, and even at previous versions of OS X, it's obvious to anybody who hasn't had a chip implanted in their brain by Microsoft that Panther (aka OS X 10.3) is by far the best Operating System there's ever been. It's the nicest to look at, nicest to use and has a feature set so thick you could break down walls with it.

As if being able to use just about any common modern peripheral or digital camera without even having to install some software wasn't enough, the ways in which Panther can do simple things as easily as it can do tough jobs like printing to a password-protected printer connected to a Windows PC are enough to take your breath away – kind of.

Panther keeps a lot of its juiciest features hidden underneath the covers, but keep reading and you'll learn all about Panther's secrets. How to do what only the most knowledgeable Mac users can do and even how to use features that Apple deliberately hid from us! So join us, as we uncover the hidden depths of this remarkable OS that are guaranteed to make Windows users green with envy.



1 Burn multi-session discs
There's nothing more annoying than having to use only a small fraction of a CD's capacity. Fortunately, Panther's Disk Utility lets you keep on filling up the CD even after you've written to it. Instead of burning directly from the Finder, create a folder of your files then use Disk Utility's 'New image from folder...' command to create a disk image from it. You can then burn that image by picking it from the sidebar of Disk Utility and clicking 'Burn'. You can burn this image to a blank CD-R as well as to one you've done this to before as long as you have space.

2 Make friends with Menulets
Menulets are little icons that sit in your menu bar and let you change your iChat status, run iSync, monitor your AirPort connection or battery status and other useful little tricks. Whenever you're in an application, look in its preferences to see if there's an option to 'Display status in menu bar'. If there is, the menulet it creates might be a handy timesaver that stops you having to crank up an application, AirPort Assistant or the system preferences every time you want to do something.

3 Desktop picture slideshows
Don't like your current desktop background, but can't decide which image to replace it with? The Desktop & Screen Saver System Preference pane lets you alternate your background at regular intervals - from every five minutes to every day. Simply drag a folder of pictures to it or pick a folder using 'Choose Folder...' and decide how often you want change in your desktop's life. Best of all, if you have iPhoto 4, you'll have instant access to your photo albums as possible backgrounds folders.



Make your desktop picture change at regular or irregular intervals by selecting a folder of images as a desktop picture slideshow



Move between different user accounts in a jiffy with Fast User Switching's cool cube transition

4 Fast user switching
One of the great things about OS X is that it's multi-user: lots of people can access a Mac and have their own settings, desktop and private data. But until Panther, if anyone wanted to get access to use the Mac, they had to log anyone else out then log themselves in - a pain for you and everyone else if you only wanted to check your emails briefly. Panther's Fast User Switching, enabled using the 'Login Options' button of the Accounts System Preference pane, lets you switch between accounts in an instant, returning all your programs and windows to the way they were before you last switched.

5 Turn a digicam into a spycam with Image Capture
The Image Capture application may be overshadowed by iPhoto, but it still has some tricks that are all its own. Plug a suitable digital camera or Webcam into your Mac, start up Image Capture and you'll be able to share its view over the Web with anyone who has access to a web browser. You can use it to monitor an area and even take pictures of people who pass by. Open Image Captures Preferences dialog and click on the Sharing tab to get started.

6 Get to grips with Terminal
For raw, undiluted UNIX power, nothing beats Terminal. Just about everything you can do with a mouse, you can do with Terminal (if you can remember

the command) and then some. You can also log in to a Mac over a network and send commands to it, which is useful if someone else is using it at the time or it has no working monitor. Importantly, you can use Terminal to take advantage of the decades of development of UNIX software by downloading, compiling and running any of the countless programs available on the Web. Find Terminal inside the 'Utilities' folder of your 'Applications' folder.

7 Clear clutter with Exposé
Fed up of hunting for one window among many? Or do you want to get to the desktop without having to close or hide all the windows in front of it? Then Exposé is for you. Using your mouse or keyboard, you can cause

Power Tips

The Services menu
Concealed in the application menu, 'Services' are functions that one application can give to another. With services, you can highlight some text in TextEdit, for instance, and have it open in Safari, read out by the Finder or sent as a mail message in Mail. Not all applications offer services or can use them, but any Services-aware application can automatically spot the functions offered by another services-enabled application as long as it's sitting in the Applications folder or a sub-folder.

windows to shrink in size so you can instantly pick the one you're after. You can even make them all move out the way so you can get to your desktop in a second. It's easy to set up using the Exposé System Preference pane and will save you hours.

8 Share files with Bluetooth
If your friends have Macs or even PCs equipped with Bluetooth, you can easily share files with them without having to set up a network. The Bluetooth File Exchange program in your Utilities folder will allow you to upload files to another Bluetooth device and also to browse another device - be it PDA, mobile phone, PC or Mac - and download files from it. It's not as fast as a regular network or even USB, but if you haven't got cables or AirPort, it's a useful stopgap.

9 Wireless printing with Bluetooth
As of Panther 10.3.2, anyone with a Bluetooth-equipped Mac can print to a similarly-equipped printer (or at least one with the right kind of drivers). While there aren't too many of these at the moment, business laptop users who take their briefcase-sized Bluetooth printer with them on foreign trips are now able to search for Bluetooth printers from any of their Macs' print dialogue boxes as easily as they would for a network printer.

10 Conversion with the Calculator
The Calculator application is more than just a way to add up your bills: it also includes some useful conversion tools. Along with the more scientifically handy volume, area and energy conversions, Calculator can also convert distances between metric and imperial, temperatures between °C and °F and, even more handily, look up exchange rates on the Internet so you can convert dollars to pounds and realise just how much cheaper an iPod is in the US than the UK. Click on the 'Convert' menu to get started.



You need never be bamboozled by Celsius and Joules again with the Calculator app's handy conversion feature at your disposal

Power Tips



Fix a broken keychain

The last thing you want to happen to your keychain is for it to get damaged. However, OS X has a hidden way of fixing damage to a keychain. While Keychain Access is most often used for editing and viewing passwords, it's also got a well-hidden extra: Keychain First Aid under the 'Window' menu. Enter your password and click on 'Verify'. You'll get an analysis of all your passwords to see if any are damaged. If you use Entourage, you'll probably find some are missing their 'port', but if there are any other problems, you should repair them. There are other keychain issues you might encounter, most relating to ease of use, and these are usually fixable using the 'Expert' options.



Panther's Address Book applications allows you to easily print Avery labels out to any printer

(so you can print out as much information about each contact as you like) or mailing labels – with preset sizes for the ubiquitous Avery label standard.

15 Unlocking accessibility features

Those with hearing or visual impairments can still use a Mac thanks to the Universal Access System Preference pane – and it can be of help to others. As well as being able to better set the contrast of the screen and zoom in, Universal Access also enables cursor movement using the keyboard rather than a mouse. And by enabling assisted devices using the checkbox at the bottom of the preference pane, you can also let applications control and interact with your Mac's interface.

16 Network with a PC

Panther's ability to network with Windows computers is now pretty good. As well as being able to spot Windows PCs and shared printers on a network almost as easily as it can spot other Macs, your Mac can also share files with Windows users using the Sharing System Preference pane and its 'Windows

Sharing' option. If you turn that on, you'll also be able to share your printer with Windows users via 'Printer Sharing'.

17 Manage passwords with Keychain access

Just about every Mac application now uses your Keychain to store passwords, enabling you to share passwords between applications and stop you from having to remember countless passwords for different sites and programs. The Keychain Access utility lets you weed out old passwords, destroy those that you typed in incorrectly and keep appearing whenever you revisit sites, and also remind yourself of a password when you need to use another machine. Find it in the 'Utilities' folder.

18 Window minimising tricks

There are lots of ways to dismiss a window, but minimising has the coolest effect. Pressing 'Apple + M' in most applications will do it, as will clicking on the yellow button in the title bar, selecting Minimize from the Window menu or double-clicking the title bar. But the effect is even cooler if you hold down the shift key while you do any of the last three: the window will disappear at a leisurely saunter, leaving you time to admire the view.



Amaze your friends with some of Panther's more luxuriant excesses by learning how to minimise windows like this...

11 Turn your Mac into a fax machine

Not everyone in the world can yet cope with email and attachments. So for these people, who, let's face it, are barely one step up from the Amish, Panther comes with built-in fax software that integrates with the OS X Address Book – a giant step up from FaxSTF which used to come bundled with laptops. Now every time you print a document, you have the option of faxing it instead using the 'Fax' button. You can even share your fax line over a network with other Panther owners using the Print & Fax System Preference pane.

be able to sync your contacts and calendar between the two (subject to iSync support), you'll be able to send text messages to any of your Address Book contacts without even going near your phone and its teeny, tiny 'three letters to a key' keyboard. Just click on the word 'Mobile' next to your contact's mobile number and select 'SMS message'.

14 Printing labels with Address Book

The Address Book 'Print' command is a bit more complicated than most because it gives you the option to print out a Filofax, an envelope or a set of labels. You can use the 'Paper Size' pull-down menu to select not just the standard A4, but also to pick different sizes of envelopes and index cards. A 'Style' pull-down menu gives you the option of lists

12 Send text messages with Bluetooth

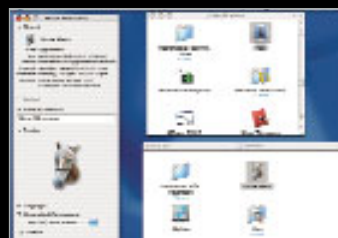
Got a Bluetooth phone? Then pair it up with your Mac using the Bluetooth Assistant and not only will you

13 Changing your Mac's icons

Bored with your Mail icon? Want your hard drive to look like Kermit the Frog? Then change the icons using a downloaded set from the internet



1. Download or create a new icon
Unfortunately, you can't just make a new icon from the contents of your clipboard: you have to use an existing icon. There are plenty on the Web available for download, and a Photoshop plug-in for designing your available from www.iconfactory.com.



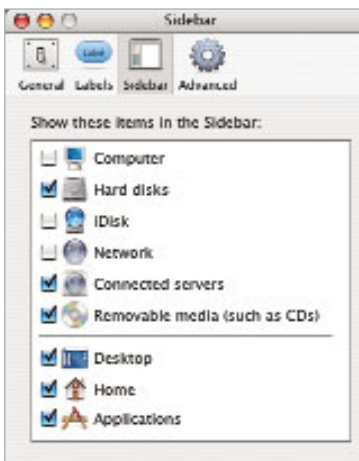
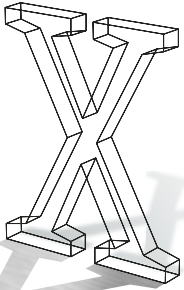
2. Get Info on your new icon
In the Finder, highlight the file or folder that has the icon you want to use. Select 'Get Info' from the 'File' menu. Then click on the icon in the Get Info window so that it gets a blue border. You can now 'Copy' the icon to your clipboard by pressing 'Apple + C'.



3: Paste on a new icon
Repeat the process with the file or folder that has the icon you want to change, but this time 'Paste' (Apple + V) instead of Copy. You should now have a new icon. In the example above we have changed the Mail icon into a horse for no discernable reason other than we can.

19 Use multiple monitors

Just about every modern Mac can mirror its display on an external monitor, but PowerBooks and PowerMacs can also use a second monitor as an extension of their built-in or primary display. Simply plug in the second display and then use the Displays System Preference pane to decide where you want the menu bar and whether you want a really long monitor or a really deep one. For Photoshop users and creative professionals, the benefits are great: palettes on one screen, image on the other.



You can customise the way the Finder's new Sidebar behaves by clicking on the 'Finder' menu and tinkering in the 'Preferences' dialog box

20 Secrets of the Sidebar
New to the Finder in Panther was an iTunes-esque Sidebar with shortcuts to all your favourite areas. Really just an extension to the toolbar at the top of the window, the Sidebar does however dynamically add disks as you mount them (you can change what does and doesn't appear by dragging objects to and from the Sidebar, but also using the 'Preferences' command in the 'Finder' menu). If the Sidebar is taking up too much space, you can click on the lozenge in the top right-hand corner of the window and make it and the iTunes look disappear.

21 Use foreign keyboard layouts
If you're not British or you got your Mac overseas, it's possible that you're used to having your keys in different

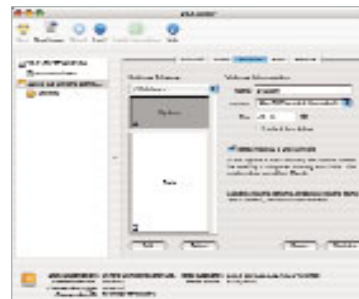
places. A US keyboard might be cheaper, but it doesn't have a £ sign on it. Fortunately, even if you're using a keyboard that's foreign to you, you can get it to work like one you're used to using the International System Preference pane. Add the keyboard you want to the 'Input Menu' and then pick it from the menu bar flag whenever you want to switch.

22 Encrypt files with FileVault
If your computer has been stolen, the last thing you want to happen is for the thief to take important information from your files. A password will secure your Mac against the less astute thieves, but those who can mount your hard drive using another computer stand a better chance. FileVault, enabled using the Security System Preference pane, will encrypt all the data in your home directory, so even if they get as far as reading your drive, they'll never be able to look at your data without the password. Be careful though - forget this password and your files are gone forever.

23 File-sharing
Emailing files around is certainly handy, but sometimes you want to send something that's too big for an email inbox or you don't have Internet access. Using a simple network - AirPort or otherwise - and by turning on 'Personal File Sharing' in the Sharing System Preference pane, anything in your 'Public' folder is available for download by others. And if they have an account on your Mac, they can access all their own files at the same time.

25 Boot into another OS with Startup Disk
If your hard drive has more than one partition, you have more than one hard drive or your Mac is old enough to run OS 9 outside of OS X, you can install another operating system and use the Startup Disk System Preference pane to use it instead of OS X. So if you have an application that only runs in OS 9 proper or OS X 10.0 - or even OS X Server - you can restart your machine after a swift adjustment to your preferences and that obsolete program becomes just as useful as it was ten years ago.

26 Partition your hard drive
If you'd like to be able to install other Operating Systems on your Mac or even have a backup OS in case OS X gets damaged irreparably somehow, partitioning your hard drive is the first step. This, in effect, creates two or more hard drives on your desktop that you can format and install onto however you like. Disk Utility will allow you to take any disk that isn't your Startup Disk (ie not the OS currently running) and split it up, format it and resize your partitions however you like.



When you want to partition your hard drive - just use Panther's free Disk Utility program

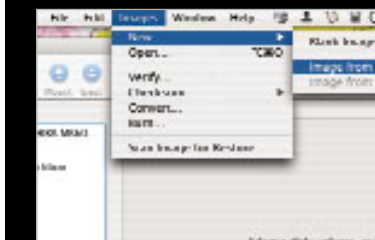
27 Speech recognition technology
In addition to being able to speak to you in a variety of voices, your Mac can also understand a basic series of commands using the 'Speakable Items' system. You can enable this using the Speech System Preference pane and then tell your Mac to "Close this window" or "Get my mail". It will even tell you what day it is when you ask.

28 Monitor your processor activity
CPU Monitor is a handy way to see what your Mac is up to at any moment. In bright, happy colours, it'll tell you that your system software isn't doing much and that even though you're only typing, Word is hogging most of your Mac's GHz.

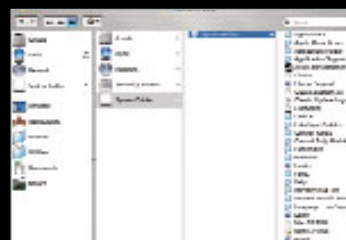
Power Tips

Advanced printing
If you have a troublesome printer on your network, such as ones that use HP JetDirect, or if you want to do something nifty like print to an Internet printer, you'll need to bring up Printer Setup Utility's advanced options. When clicking on the 'Add' button in the toolbar, hold down the alt/option key and at the bottom of the list of printer options on the next dialog box, along with 'USB' and 'Rendezvous', will be 'Advanced'. Select that and you'll find a list of extra printer types you can use.

24 Improving Classic performance
Classic is a necessary evil for old applications. It's a dog though, so improving performance is important if you use it often...



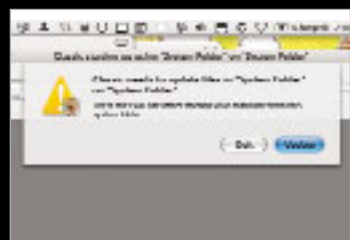
1. Create a disk image
Open Disk Utility and use the 'New Image from Folder...' command to create a read/write disk image of your OS 9 System Folder. Save it anywhere you like, but make sure everyone who's going to use OS 9 has permission to access it.



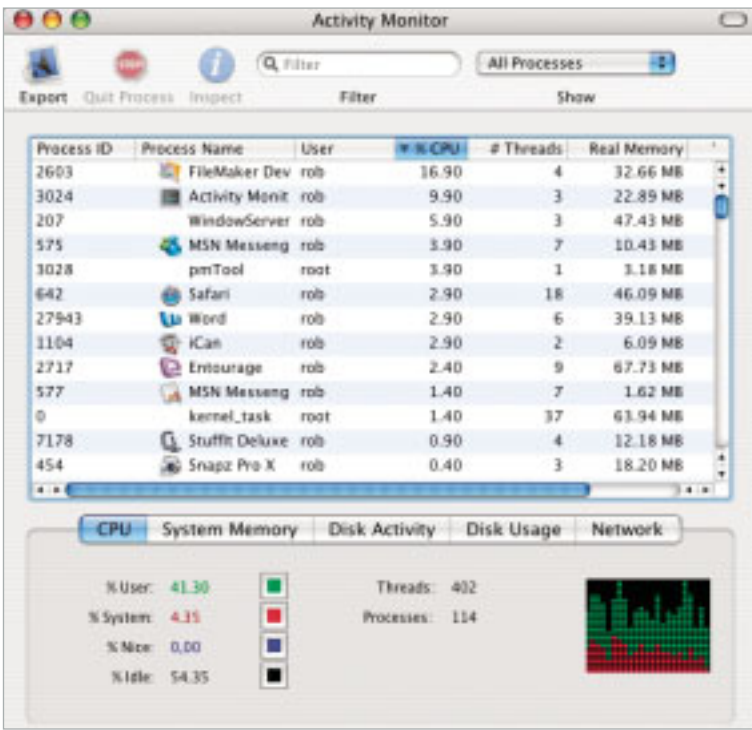
2. Mount the image
Next, mount the image by double-clicking on it. When you open it, you'll find all of OS 9 ready and waiting for you. Unfortunately, OS X can't spot this yet.



3. Create a new folder
Create a new folder called 'System Folder' and drag everything else into it. Then you'll be able to go into the Classic System Preference pane and select this folder for Classic.



4. Start Classic
When Classic runs, you'll need to update the System Folder as per usual to let it work with OS X. Using this technique, you can expect some good Classic speed improvements since OS X won't need to access your disk as much.



Find out which application or person has nicked all your processing grunt or memory usage with the Activity Monitor

29 Monitoring system resources

Wondering why your Mac is suddenly so slow? Maybe it's a rogue program doing something odd. Or perhaps someone has logged into your computer over a network and is using it to calculate the trillionth decimal place of Pi. Use Activity Monitor in your Utilities folder to find out what – or who – is hogging your CPU. It will also tell you which applications are taking up the most memory.

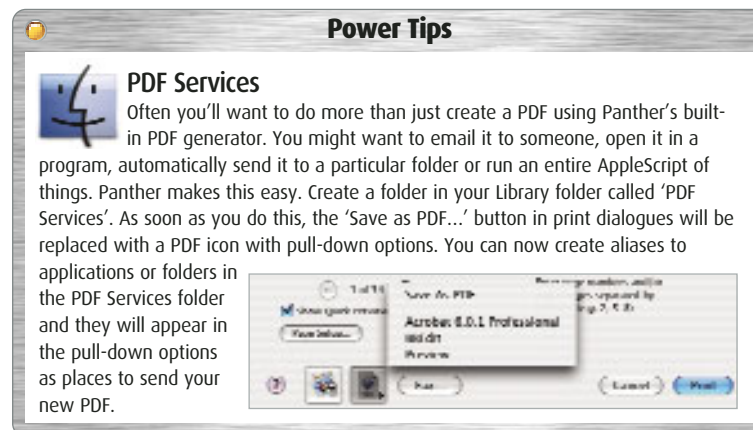
30 Hack your Mac with Terminal

Developers often find it takes more time to remove a feature they were playing with than it's actually worth spending. So, they leave it in – albeit without necessarily any way for you to use it. Apple is the same, but using the Terminal, you can enable some of those features. “defaults write com.apple.dock showhidden -bool true” will make hidden applications transparent in the dock; “defaults write com.apple.dock wvous-floater -bool true” will create a blue floating blob that you can click on to make Exposé activate; and “defaults write com.apple.Finder AppleShowAllFiles ‘1’” will reveal all the invisible files on your disks that the Finder hides from you. You'll

have to log out and log back in again to see these working properly. Changing the ‘1’ or ‘true’ to ‘0’ and ‘false’ in these will set things back to normal again.

31 Seeing information about your Mac

There's a whole lot of technical stuff about your Mac that you probably don't know, like its serial number, what your Ethernet card's MAC address is and exactly which versions of all your software you have. The System Profiler utility has all this and more, so if you want to know if you should bother with that monster



updater, or what information you should plug into your unfriendly new router to allow your Mac to network properly, System Profiler is worth a call.

32 Pick the right workgroup

If you do lots of Windows networking, you might want to set a particular Workgroup as your default, rather than “WORKGROUP”. Open up the Directory Access app in the ‘Utilities’ folder and, after authenticating, double-click on SMB. You'll then be able to enter your new workgroup – and for the really advanced, put in your WINS server information.

33 The Secret Safari menu

Safari has a secret ‘Debug’ menu that you can enable; with it, you can get Safari to pretend to be another Web browser, import bookmarks from other browsers or open its Web page in other browsers you might have. Quit Safari first, then open Terminal and type the following (be careful about the case): “defaults write com.apple.safari IncludeDebugMenu 1”. Then restart Safari. If you want to get rid of the menu, go through the same process but change the “1” to “0” in the Terminal command.

34 Get London traffic news from Sherlock

While Sherlock is mostly a tool for Americans, enterprising developers have created plug-ins that can actually make it useful to those of us in the UK. Barney's Mac Software (<http://homepage.ntlworld.com/b.hilken/pages/Software.html>) has a plug-in that allows you to compare prices on videos, DVDs, music, electronics, books and games without having to search all the UK shopping sites yourself, while London Jam

Cams (www.versiontracker.com/dyn/moreinfo/macosx/18816) gives you access to all the traffic cameras in London – see where all the bottlenecks are and if you're going to be late for work.

35 Panther's hidden FTP features

FTP may not be pretty, but it is often the quickest way to transfer files, particularly over the Internet. Panther includes its own FTP server, activated using the ‘FTP Access’ checkbox in the Sharing System Preference pane, so you can let people upload and download files from your ‘Public’ folder. But it also has an FTP client so you can download files from other people's FTP servers. Just ‘Connect to Server...’ from the Finder's ‘Go’ menu and type in the FTP address and you'll be able to copy files over as if it was a hard drive.

Top Panther keyboard shortcuts

The mouse is nice but it's not as fast as a keyboard. If you really want to save time, master the Mac and access some hidden features, you need to learn these top 20 keyboard shortcuts.

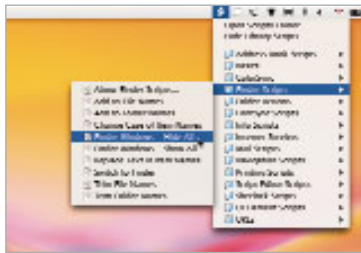
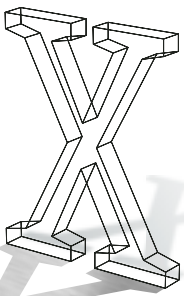
- Apple-W:** Close the window
- Apple-Shift-W:** Close all windows
- Apple-M:** Minimise the window
- Apple-S:** Save
- Apple-P:** Print
- Apple-O:** Open
- Apple-Alt-D:** Turn dock on or off
- Apple-H:** Hide the application
- Apple-Alt-H:** Hide other applications
- Apple-Space:** Switch between languages or keyboards
- Apple-Tab:** Switch between running applications
- Apple-Shift-Tab:** Switch between running applications in reverse order
- Apple-Shift-3:** Take screenshot
- Apple-Shift-4:** Capture part of screen using crosshairs
- Apple-Alt-Esc:** Pick an application to force quit.

In the Finder

- Apple-Delete:** Move selection to the trash
- Apple-Shift-Delete:** Empty trash
- Apple-⌘:** Open parent folder

In any dialogue box

- Apple-⌘:** Cancel
- Return/Enter:** Accept the default (highlighted) button



Add extra features to your Mac by enabling AppleScript – the Mac’s very own scripting language

36 Add a menu full of hidden utilities

Apple provides a great big pile of useful utilities with OS X that most people don't know about. They can print the contents of Finder windows, replace text in file names and even give you stock quotes. To reveal them, go to the 'AppleScript' folder in your Applications folder and run the 'Install Script Menu' item. A scroll should appear in your menu bar with a list of useful new utilities. And the great thing is you can add your own.

37 Password protected screensavers

You might not always be able to stand guard over your Mac, particularly at work, so the data thief or the practical joker can often have a window of opportunity to fiddle around while you're gone. But using the Security System Preference pane, you can set your Mac so that if you go away for a while – long enough for the screensaver to start – any snoop that tries to play around with your system will need to enter a password to get in.

38 Using special characters

Always trying to remember what key strokes to use to get foreign characters such as é or symbols such as ©? The character palette has all these and more available a click away. The quickest way to do summon up the palette is to go to the Finder and then pick 'Special characters...' from the 'Edit' menu. The palette floats above your other windows so you'll always have access to it.

39 Stay organised with Labels

Back from the OS 9 graveyard, Labels let you colour-code your files and folders. To access them, you can use the 'Action' cog in the top of your Finder windows or by pressing the Control key while you click to select. Now, what meaning you attach to the colour yellow is up to you, but you can change the meaning

displayed using the 'Preferences' command in the 'Finder' menu. Then you'll know what colour to give an item through the handy tool tips shown below.

40 Create a root account

Some bits of Unix software and some Terminal hacks (for particularly stubborn file deletion, for instance) require that you have a 'root' account. This is even more powerful than an administrator account and can do practically anything to the system. To enable it, open NetInfo Manager from the 'Utilities' folder and select 'Enable Root User' from the 'Security' menu. Don't do this unless you need to though – and always pick a different password from your own.

41 Connect to databases

If you want to access databases over a network, then the ODBC Administrator is for you. It allows you to set up connections between any program – such as FileMaker, Word or Excel – that understands the open database connectivity standard (ODBC) and any database that supports ODBC. The other detail is you'll need to find an OS X ODBC driver for the database you're trying to connect to. If you can muster all of them together, then you'll have access to your database data in any program that needs it.

42 Turn documents into PDFs

If you can print it with Panther, you can also make a PDF from it. No longer the realm of expensive software like Acrobat, PDF creation means that you can

43 Move your home directory

Your home directory is in the Users folder of your Startup Disk, but you can get speed improvements by moving it to another disk altogether...



Copy over your home directory

Make sure you've set up another administrator account – just in case. When you've done that, copy your home directory to its intended new location. Then open up a Terminal window and drag the copy onto it: that will give you its Unix path.

Power Tips

Extra Calculator functions

Apple developed a set of extra capabilities for Calculator that it never enabled, including graphing. Enable them by highlighting the Calculator icon and selecting 'Get Info' from the Finder's 'File' menu. Open up 'Plug-ins' section and click on the 'Add' button. You can now navigate through your disk to locate the Calculator application, but keep on going. Highlight Calculator, then the 'Contents' folder inside, then the 'Resources' folder inside that. Lurking among the other folders will be Graphing-2D.calview, Hexadecimal.calview and ExpressionSheet.calview. Highlight the one(s) you want to add and click the Choose button. Now when you next run Calculator, you'll get up to three new options under the View menu.

send documents that look just like your originals to anyone and they'll be able to read them in any number of programs on any number of platforms (even some mobile phones), even if they don't have the same software as you or the same fonts. Just pick the print settings you want, click on the 'Save as PDF...' button at the bottom of the print dialogue and save it.

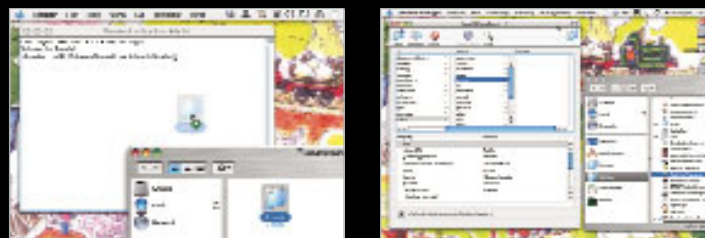
44 Host Web sites on your Mac

Every copy of OS X has a built in Web server based on Apache, the most popular and powerful (and complicated) Web server in the world. Apple has made it almost ridiculously easy to run it as well: just check the 'Personal Web Sharing' box in the Sharing System Preference pane and all

the users on your Mac will have their own Web sites running out of their Sites folders. There'll even be one for the whole machine tucked away in the Library folder. Let the whole world know about you and your Mac.

45 Keep your updates

Software Update keeps your Mac up to date, but if you've more than one machine, having to download tens of megabytes of updates for each one can take a long time and a lot of bandwidth. Luckily, there is an option in Software Update to keep any updater you download so that you can copy it across a network to other machines (or keep for a reinstall). Just select the packages you want to keep then go to the 'Update' menu and pick 'Install and Keep Package'.



Find your NetInfo account settings

NetInfo is the database that stores, among other things, details about all your user account's settings. NetInfo Manager is your way to alter these settings. After authenticating, find the 'Users' entry and then look for the account you want to change.



Change the path

When you highlight the account, the configuration information will appear. Look for the 'Home' entry and double-click on it to change it. You'll need to put in the Unix path name you got in step 1. Save the changes using 'Save' on the 'Domain' menu, log out and back in. Job done.