



**connect**

**Dial-up**





Photograph: IRA AW ASTHI

A photograph of a stack of books, with the spines of the books visible. The books are illuminated from the side, creating a warm, golden glow on their edges against a dark background. The text 'Net' is overlaid on the image in a large, light gray, serif font.

Net

Secrets

WHAT THEY DON'T TELL YOU

**P**erhaps the most common question among Internet surfers today is “How can I speed up my Internet connection?” You can, to a certain extent, tweak your hardware and software to ensure that they give you the best performance possible. It also helps if you are familiar with various unpublicised hints that help you get the most out of your time online. Want to make the Net sizzle? You’ve come to the right place... let’s get going!

### Drivers are not forever

Are your drivers the latest available? Your modem needs the right drivers for optimum performance. If you’re like most people, you probably haven’t the foggiest idea what drivers are installed on your system. Visit your modem manufacturer’s Web page to download the latest drivers. The driver file you download will generally be an executable (EXE) file or compressed as an installation (INF) file. Moreover, you could also subscribe to driver sites so that you are automatically informed about updates.

### Go digital

Often the modem is set to pulse dialling when tone dialling would be faster and more efficient. Check if your telephone exchange supports it. TCP/IP accounts work better with tone lines whereas Shell

accounts seem to work better with pulse lines. Be prepared to face numerous dropped carriers if you have a TCP/IP account and a pulse line.

### Buzz off!

If you enable the ‘call waiting’ feature provided by many phone exchanges, your dial-up connection to the Internet may be interrupted if you receive a phone call in the middle of a session. Unless you are expecting any really urgent calls, disable the call waiting option.

### Cache and carry

Use cache effectively. By default, most browsers are set to automatically check for updated pages and use the cache accord-

ingly. You could turn this feature off and set the browser to always use the cache. Manually refresh the page when you want to check for updates.

Do not check for newer version of the cached pages too often. Pages on the Internet are, on the average, updated every 40 to 50 days. Depending on the content of the site, you may not need to view the latest version of the page, and can access the page directly from your cache. In Netscape Navigator go to **Edit > Preferences > Advanced > Cache** menu and click ‘never’ for the option ‘Document in cache is compared to document on network’. In Internet Explorer go to **View > Options > General > Temporary Internet Files > Settings** button and click ‘never’ for the option ‘Check for newer version of the page’. To see the latest version of the page you can always click the **Reload** or **Refresh** button on the top bar of your

## AVOID TRAFFIC JAMS



Any surfer in India will know the woes associated with getting on to the Internet. The phone lines seem to be perpetually busy.

Then of course, there are the frequent disconnections.

**If possible, go online when there is least Net traffic.**

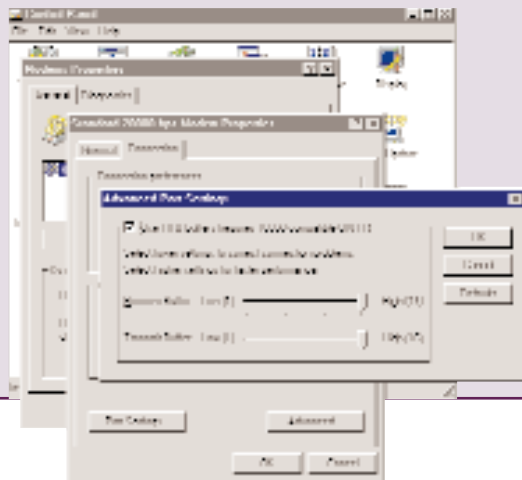
This would typically be between midnight and 5 a.m. During these off-peak hours, not only is telephone traffic relatively low, but reconnecting after a dropped carrier is much faster too. As for the side-effects—stumbling into class (or office) yawning and bleary-eyed... well, you can’t have *everything* going the way you want, can you?



Illustrations: G.

## UART TO DO THIS

Make sure your COM port uses 16550 UART to make best use of FIFO (First In First Out) buffers. The 16550 UART is a chip on the integrated motherboard which handles serial data buffering, and the speed of this chip is 110Kbps. It makes sure that the data which comes in first is processed first and sent out first. Older machines had the 8250 UART chip which was much slower—about half as fast as the 16550 UART.



browser.

## For starters

Is there a page you visit frequently? Set it as your home page. Most likely, this would be the home page of your favourite search engine. However, if your browser takes a long time to load, then it is best to keep a blank page on the local hard disk as the start page. The cache will take charge of loading the page for you.

## Nix to multimedia

Turn off multimedia features in your

browser if you don't require them. Manually display pictures that you need to see. However, if you often need to see almost all the pictures, leave this option on, as this will be faster. Your browser will start downloading all pictures simultaneously rather than one at a time.

## Have your cake and . . .

See an interesting link on a page, but still want to continue reading the page you are on? Just right-click on the link and choose the 'Open link in new window' option.

Alternatively, you can press the Shift key while clicking on the link—this will also open it in a new window. You may then resize both windows to your liking and continue browsing. If you are using a low resolution display (640 x 480 or 800 x 600) you may want to keep the windows full size and switch between the two.

## Rev it up

Use acceleration software for browsing—this starts collecting information about links as soon as the page has loaded. One example is Got It!, from Go Ahead Software, which lets you specify which pages to preload, supports off-line browsing and gives you a hyperlinked list of sites that have been cached by the program for even easier access to preloaded pages.

Note that, with most accelerators, if your system crashes or if you unload the browser and accelerator in the wrong order, you may not be able to access the Internet through your browser unless you start up the accelerator again or reset the browser option that tells the browser to use a proxy server.

## Get it right

Use resuming software such as GetRight from HeadLight software. If a site offers

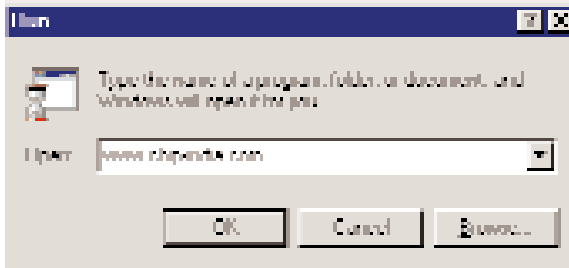
# AD

# connect

## Dial-up

### RUN FOR IT

Get to a favourite site almost instantly with the Windows 95 Run program. From the Start button, select Run and type the complete URL for a favourite site. Windows will launch your default Web browser and go right to the site. You can also have an address bar next to the Quick Launch bar in Internet Explorer or Windows 98.



more than one server, find the one that is nearest to you (or has the least traffic) to get the fastest connections.

### Ban the banners!

Software like AdsOff and PopOff95 prevent advertisement windows from opening up. This speeds up browsing.

### Mail checker to the rescue

Want to keep your Internet connection alive while you are away from the computer, but don't fancy running a special program that uses up precious resources? Open your e-mail program, and tell it to check your e-mail once every minute (or the minimum limit) under Options. This way, it keeps information going back and forth between you and the server, while doing something useful as well.

### Smart browsing

If you type in more than one word in the little bar window at the top of your browser meant for entering addresses, the words are sent as a query to a randomly selected search engine. This saves the time that you spend in going to a search engine site and waiting for the page to load before starting your search. Try typing 'hotmail' for the browser to take you to [http:// www.hotmail.com](http://www.hotmail.com). The latest editions of IE and Communicator let you type common terms into the location fields and the browsers will take you to sites with that URL—or at least a close match.

### Your URLs are numbered


If you know the IP address of a site, type that instead of the URL for faster access. For instance, try going to 206.86.11.206 instead of [www.chip-india.com](http://www.chip-india.com).



1/4 page Ad

1/4 page Ad



## PATRIOTISM DOES NOT ALWAYS PAY



If you are in India, it makes sense to download from a server in the US rather than one in India or anywhere else in Asia—Japan is probably the only exception. The notion of geographical proximity is irrelevant in because the vast majority of sites are housed on servers in the US.

### No password, please

In the no-Password mode, the dial-up networking is unable to save the password and remember it. You can get around this by going to **Settings > Control Panel** and then to **Passwords**. Once there, set it so that you can personalise the desktop. Now, when you shut down windows, there will be another option, **Log on as**

another user. In this mode, you will be able to **Remember Password**, so the Dial-up networking will be remembered. Enter your password and save it. Once it has been saved, go back to **Password** and change the configuration to **Anyone can use the same settings of the Desktop**, and don't use any password at all. Windows will now switch back to the normal mode, but the **Dial-up Networking save**

password is unchanged. So, your password is now saved and you won't have to type it in again

### Chat away

IRC clients such as mIRC and Pirch are better than Web-based chat programs like EZPro. For chatting, find out if the site has

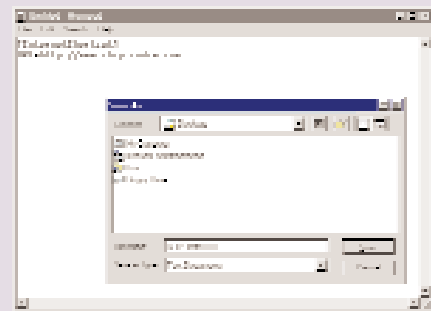
# AD



# connect

## Dial-up

### A SHORTCUT TO SHORTCUTS



You can create your own custom shortcuts to Internet sites using Notepad. This is how you do it: Click the Start button. Select Programs. Select Accessories. Click on Notepad. Type these lines in your Notepad document: [InternetShortcut]  
URL=http://www.yoursite.com  
Now, save the file with a .URL extension

an IRC server and use that instead of Web-based chat. If only Web-based chat is available, give preference to Java over HTML, if the option is provided.

### Browse offline

Offline Browsing Programmes can be set to go online and

download a site on schedule ready for reading later. Microsoft Internet Explorer 5.0 can be used for this, or you could try Web Wacker ([www.bluesquirrel.com/wacker](http://www.bluesquirrel.com/wacker)), Freeloader ([www.freeloader.com](http://www.freeloader.com)) or Web Buddy ([www.dataviz.com](http://www.dataviz.com))

### The crumbling cookie

A cookie is little more than a string of characters written to a file on your hard disk. Only the server which pushed the cookie to your machine can read the contents of this file and helps identify you—your computer, rather—on subsequent visits. Though generally harmless, some servers can be programmed to read other servers' cookies, thus tracking your browsing habits and online movements.

### Truly anonymous FTP

If you still use an FTP client program to download files (and many of us do), make certain that it is set to give a bogus password, like `anonymous@unknown.com`. If your browser lets you, turn off the feature that sends your e-mail address as a password for anonymous FTP sessions.

### Travel incognito

A straightforward approach to Web privacy is to temporarily remove your personal information from your browser. This is especially advised when browsing new sites. After you remove details such as your real name and genuine e-mail address from your browser, the only info a Web site can sniff out is your ISP's address and geographical location. Fat lot of good that will do them!

### Get around passwords

Search engines cannot penetrate sites that are protected by passwords or otherwise hard to get to—but you can, thanks to [www.internets.com](http://www.internets.com). The site indexes thousands of databases on the Web and lets you get at them by keyword search or by browsing an alphabetical index. You can also use it as a jumping-off spot to other search engines.

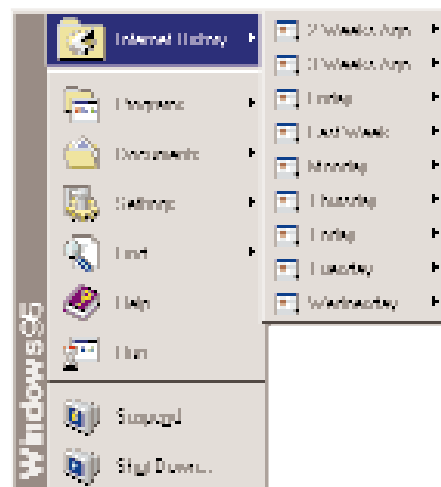


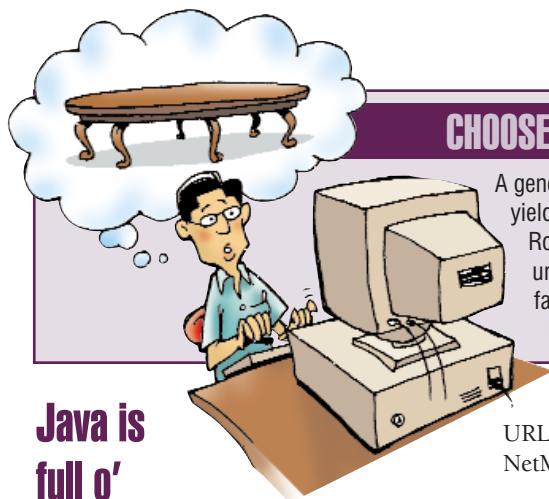
### WHERE IN THE WORLD?

Wondering which country or state a particular Internet site is located in? Try `http://205.177.25.9/cgi-bin/whois?` For example, to find out where Netscape ([netscape.com](http://netscape.com)) site is located, point your Web browser to `http://205.177.25.9/cgi-bin/whois?netscape.com`.

### WEB SIGHTING

Ever wish you could have a handy list of all the Web sites you most recently visited? If you use Internet Explorer, it's easy. In Windows 95 or NT, start Windows Explorer and navigate to `C: > Windows > Start Menu`. Right-click on Explorer's right pane. Choose New Folder. Type in this new name: `Internet History.{FF393560-C2A7-11CF-BFF4-444553540000}` and hit Enter. You must type the numbers in braces exactly as they appear here. Click on the Start button, then choose Internet History. All your most recently visited URLs will fly out to the right of the menu. Click on one, and Internet Explorer will spring into action, loaded with the specified page!





## CHOOSE YOUR WORDS WISELY

A generic search phrase like 'round table' will yield too many results—especially from Rotary Clubs worldwide—if you're trying to unearth information about Arthur's famous furniture. A better phrase would be 'king arthur knights round table'.

## Java is full o' beans, but...

Java and JavaScript applets make Web pages look real cool. However, they can also take control of your browser. JavaScript can send you to a Web page you didn't select, open a new pre-addressed e-mail message, or send internal commands to your browser—all without your having selected or clicked on anything. So, while you're modifying your browser's settings, you might want to disable Java and JavaScript too. Some pages may look less snazzy, but the increased security is probably worth it.

## Mind that URL

If you are tired of checking up on your favourite Web pages just to see if they have changed since the last time you vis-

ited them, why not let a program like URL-Minder (a free service provided by NetMind) do the checking for you?

## Sharing favourites

Internet Explorer Favorites, known as Bookmarks in Netscape Navigator, are a convenient way to organise and link to Web sites that you visit frequently. Your Netscape Bookmarks are automatically imported when you install Internet Explorer. On the Favorites menu, click the Imported Bookmarks folder to view them. If you use Internet Explorer on several computers, you can easily share Favorites between computers by importing them. Also, if you use both Internet Explorer and Navigator, you can keep your Favorites and Bookmarks up-to-date with each other by importing them between programs. To import Bookmarks or Favorites, click the File menu, and then click Import and Export. To export Favorites to Bookmarks, or Favorites on

## QUOTE, UNQUOTE

Put quotation marks around specific, verbatim phrases that you want to find exactly as written: "blood, toil, tears and sweat". This will take you to the famous quotation rather than to sites concerning butchers' shops, labour unions, sentimental films or aerobic classes. In HotBot, you can specify the same in a drop-down menu instead. The screenshot below shows the result of checking out the 'most-visited page' for the search string—we were bang on target!



the same or another computer, click the File menu, and then click Import and Export.

AD

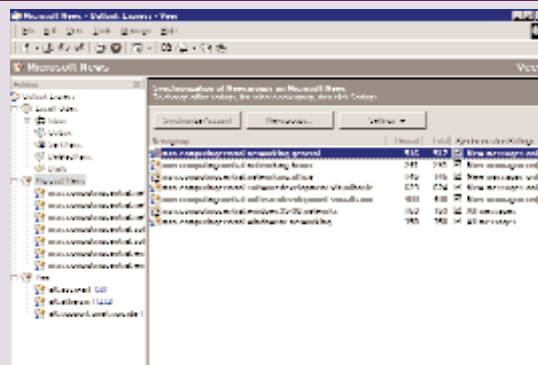


## Newsgroup basics

Subscribe to Newsgroups and Listservs relating to the information you require. You will be amazed at the amount of information you can get from many of them. Newsgroups make up Usenet, which you can think of as being part of the Internet. Each newsgroup, which is really a discussion string that comprises a series of related messages, covers a particular topic that is often alluded to in its name. Each message responds to an earlier message or addresses the overall newsgroup topic in some way. An advantage here is you normally have an option of downloading only headers. You can later download specific messages. You can also post specific queries and typically expect results in a couple of hours or less. You can post your own message in response to the messages that interest you most.

## E-MAIL PLUS

If your e-mail client is also a newsreader, you can use it to subscribe to, read messages from, and post messages to newsgroups—online discussions on practically any topic. In Internet Explorer, access the Go menu and simply select News. IE automatically launches Outlook Express if that is set as the default news reader and opens your newsgroups folder so you can get down to business.



## Trace Internet connections

There is a hidden Internet tool for DOS, called Tracert. This program will trace an Internet connection. To use this: Click the Start button. Select Programs and click on the MS-DOS button. Once you are at the DOS prompt, type: `tracert www.anysite.com` and press Enter. (Where `www.anysite.com` is the site you

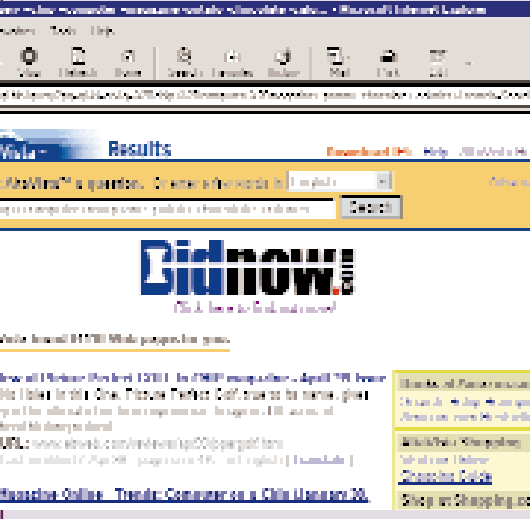
wish to access). You could also use a program like NeoTrace (`www.neoworx.com`) to display links being used and which of them are slowing down the process. Find information about the routers and computers on the way. Now you know whom to blame for that exasperatingly slow download!

1/4 page Ad

1/4 page Ad

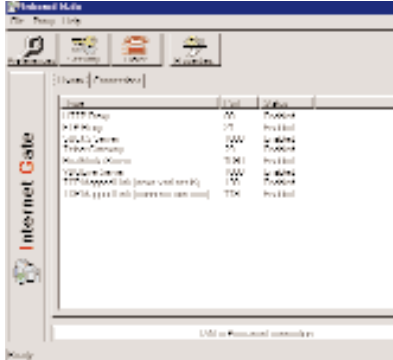


**+ OR -**



Search engines like AltaVista and Lycos let you use symbols such as + (plus) and - (minus) to force a word to appear in a document, or to eliminate it. Searching for +chip +potato -computer -electronic will let you zoom in on pages devoted to wafers of the edible kind. If you don't know the URL, searching for +chip +computer +magazine +india -potato -chocolate -calories will bring up pages relating to... well, you-know-who. We tried this search, and were gratified to find that, in spite of the large number of pages thrown up, the very first match indeed had something to do with CHIP.

**SURF BY PROXY**



Install a proxy server software even if the machine is a standalone one and set your browser to take the connection from this. A proxy acts as a buffer between you and the Web. This assures, both anonymity as well as greater speed in browsing.

### Peek-a-boo!

Wouldn't it be fun to peer over others' shoulders and spy on what they are searching for on the Internet? Well, with MetaCrawler's spybot, MetaSpy, you can do just that. Find out the top search queries of the moment. The unfiltered version at [www.metaspay.com/spy/warning-top](http://www.metaspay.com/spy/warning-top) exposes you to potentially racy stuff, so be warned. The squeamish can check out the censored version at [www.metaspay.com/spy/filtered.html](http://www.metaspay.com/spy/filtered.html).

### A really full screen

You can run practically any version of Internet Explorer in kiosk mode. Kiosk mode will run the browser in full screen mode without any toolbar buttons or menu bars. To do this: Click the Start button. Click Run. In the Open field, type `iexplore -k <page>` and click O.K. Substitute the URL of the page you want to go to in place of <page>. Of course, you need to be thoroughly familiar with IE shortcuts if you are to get any benefit out of

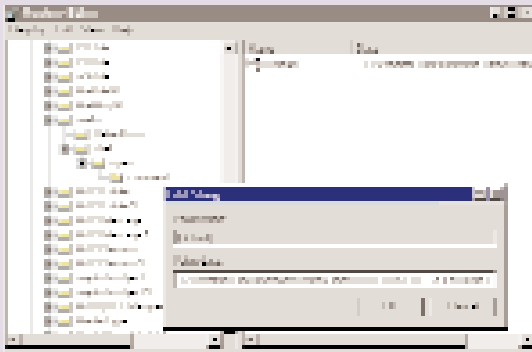
this.

### An animated performance

If you saved an animated GIF from a Web site to your hard drive, you probably won't be able to see the animation if you open it in another graphics program such as Photoshop. To view the animation, simply use Internet Explorer.

AD

## CHANGE OF MAIL



If you use Internet Explorer or Netscape, Windows will not let you make Internet Mail or Netscape Mail your default mail program. There is a way, however, to change to one of these as your default mail program, or any other program you fancy. This involves editing the Windows Registry. Having a backup of the registry before continuing is strongly recommended. To change your default mail program: Click the Start button. Click Run. In the Open field type 'regedit' and click Ok.

Once you are there, navigate your way to folder HKEY\_CLASSES\_ROOT\mailto\shell\open\command. From here, double click on the (Default) icon. In the Value Data field, type the path of the program you want as the new default. Before clicking OK, type %1 after the path. It should look something like this: C:\Program Files\Internet Explorer\mail.exe %1 Simply substitute the path for your machine, click OK and restart Windows.

## Slim is beautiful

Take a break from convention and try the new Opera browser. The only real alternative to Microsoft's Internet Explorer and Netscape's Communicator, Opera is faster than either and is slim enough to fit in a single floppy. Though you will have to give up extras like Java and ActiveX (which, if required, can be enabled by extra components), Opera offers features such as the ability to open multiple pages in a single window.

## Information overload?

The Internet holds so much information—and misinformation—that nothing short of a heroic expedition will enable you to find what you are looking for. Random searching is the quickest way of scouring for information—and also the most inefficient. The information is out there, right enough, but you can reduce your searching time if you use tips and shortcuts such as the ones given below.

## Fast results

Stick to familiar sites when hunting for information. This will not only pick up pages from the cache, but navigation will be faster too. Though most search engines look the same, they generally accept advanced queries in different ways. Also, some of them offer extra features such as lists of categorised links. Don't hesitate to try out different search engines to see which one you are most comfortable with.

## Map your moves

If the site you are browsing has a site map, go there directly. Navigation from site maps is usually faster—you can generally get to where you want with just a single click.

## Lower case—always!

This will bring up documents that have both capitals and small letters. Entering search words in capitals will force the search results to be case sensitive. Hence, searching for 'chocolate chip cookies' is a better idea than hunting for 'Chocolate Chip Cookies', punctilious as you may be

## 6 ERRONEOUS ZONES

Ever wondered what all those HTTP 404 not found messages mean? Here are the six most commonly found error messages on the Web, and their explanations

### 1 ERROR 403 Forbidden Pages:

This means that you are not authorised to view the content of this site. Probably you need to have a password—but please don't mail the Web master with a request unless the site says you can.

### 2 ERROR 404 Not Found:

The commonest of them all. This irritating message means that the site you are looking for cannot be located. If you get this message, there is a little trick you can do to help locate the missing file. Let us assume that you attempted to go to [www.mysite.com/pics/cool/cindy.html](http://www.mysite.com/pics/cool/cindy.html). If you receive an error message saying it cannot find that Web site, try going back to the root of the Web site to try and locate the site that you are looking for. For example, attempt to go to [www.mysite.com/pics/cool](http://www.mysite.com/pics/cool). You may be able to find a link for your page from there. And if that doesn't work, try

going to [www.mysite.com/pics](http://www.mysite.com/pics), and finally [www.mysite.com](http://www.mysite.com). You should have a good chance of locating the site you are looking for from one of those sites if it has been moved or renamed. If it has been deleted, however, you are out of luck.

### 3 ERROR 503 Service Unavailable:

This means that normally, the page would be there, but there is a temporary problem. Try again in a minute or so.

### 4 Host Unknown:

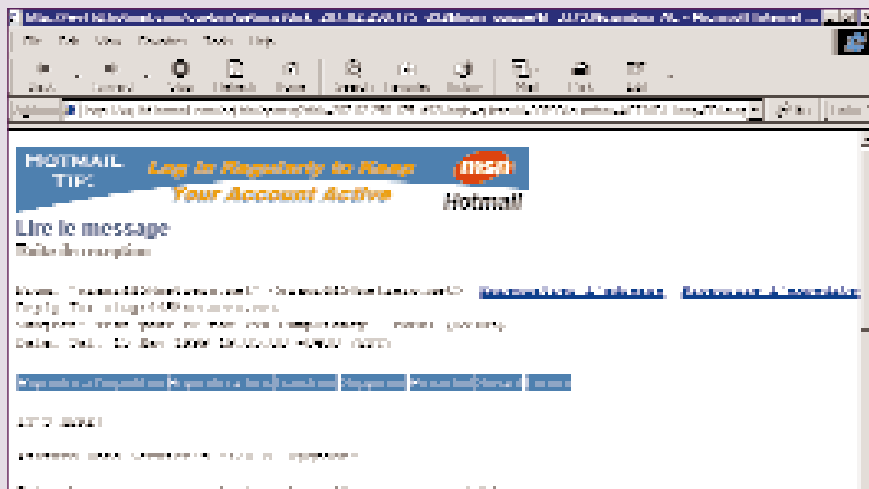
This means that the host you tried to reach is unavailable, and that there is no forwarding address. Check out <http://www.4domains.com> to see if it is a valid site.

### 5 Too Many Connections Try Again Later:

This one is pretty self-explanatory. Just click reload or refresh till you get to where you want to

## SPAM SUCKS

One way to prevent spam—those annoying e-mails sent in bulk—is to simply add a word to your e-mail address. For example, if your e-mail address is nerd@chip-india.com, you could tell a newsgroup without batting an eyelid that your address is nerd@DELETEME.chip-india.com. A person will see that your e-mail address is wrong, but an automatic e-mail address collector can never know. Hopefully, this simple step should eliminate a significant amount of spam. Further, you could add a little note at the bottom that says ‘remove the DELETEME before replying’, just in case there are idiots who take it to be a legitimate part of your e-mail ID... but then, you wouldn’t want such people writing to you in the first place, would you?



about punctuation.

### Phrase it right

You'll get better results if you enter a few related words rather than a single word. Thus, if you want to get complete low-down on King Arthur and his gallivanting knights, searching for 'king arthur excalibur lancelet galahad guinevere' will be more effective than simply 'arthur'. You may also enter a question: 'Who found

the holy grail?' Most search engines ignore words like 'the' and 'a' anyway.

### Persistence pays

If you don't glean what you're looking for on the first try, click again. Try varying the original query by substituting synonyms or related words. Too many results? Add descriptive terms to make your query more precise.

### Boolean logic

Go through your search engine's help pages and search tips entirely at least once to optimally refine your searches. Use Boolean operators such as AND, OR and NOT to narrow down results. Use keywords you think would be unique to the results required.

Don't use terms that are too common. For example, searching for just 'computers' might leave you pointing to about 25 percent of the Web! But searching for Educa-

AD

# connect

## Dial-up

### STAY FRESH

Yahoo is a great search engine. However, for most searches it may be too good—it will bring up sites no matter how old they may be. You can reduce the return of your searches by limiting them to return only the more recent pages relevant to the subject. To do this, click on Options (right next to the search button). You can limit your searches by whatever length of time you want.



tion AND Computers AND India will give you results that are much more precise.

### A question of refinement

Use search engines that allow you to further refine your search after the results are displayed. Any search engine worth its name should provide advanced search options to help you fine-tune your query. Though each search engine is unique, most let you search by file type, location or domain name, date, and language.

Infoseek, for example, gives an option

to 'Find similar pages'. With HotBot, you can use metawords to put the search engine's nontext search features to work. A simple metaword search looks like this: keyword:value. For example, to find a page with a picture of Elton John on it, type feature:image +elton.

### Meta is better

Give preferences to meta search engines (Metacrawler, for example) since they search multiple search engines simultaneously. This gives better results than if you were to search with just one or two search engines. You can also use utilities such as WebFerret and Naviscope to do more comprehensive and faster searches. Web Ferret uses other search engines and presents you with compiled results. Naviscope is a browser enhancement which speeds up Web searches by downloading the next page for search results while you are viewing the first page. When you click the 'Next' button, the page is displayed instantaneously.

### Take the expressway

For slow connections, metasearch sites can take longer to return results. You don't need to invest in a faster modem; you can speed up your search and boost the number of on-target results with Express from Infoseek.

### Go wild with wildcards

You can make use of wildcards like \* (asterisk) while searching for something on the Net. Be careful, though. Looking for ant\*, for instance, gets you to sites dealing with anteaters as well as anthropologists.

### Ring for the Butler

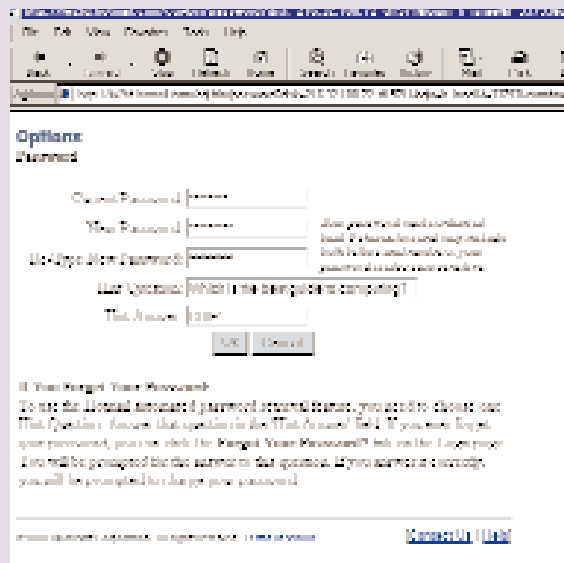
Sometimes the easiest way to find something is simply to ask for it. That's where Ask Jeeves comes in: ask him a question and Jeeves returns a number of customizable options for homing in on the information you are looking for. For example, when you type in a question and click on Ask, you get your answer and/or a series of links that answer similar queries. Jeeves also returns matches from the top search engines.

### Bang on target

Use a dead-on search result to find hidden keywords by peeking at a Web

### QUESTION CAREFULLY

Hotmail and some other Web services ask you to provide a question and an answer when you sign up. If you forget your password, they'll ask you the question to verify your identity. But any joker with a Web browser can view your question—so don't use one with an easy answer that even casual acquaintances might know (girlfriend's name or your favourite dessert, for example). After all, this is just like a password to your password. And so, we do *not* recommend that you use the example suggested alongside... ;-)







page's source code. To view a page's HTML in Microsoft Internet Explorer, select Source from the View menu. This opens the page in Notepad. Use Internet Explorer or Netscape Navigator to go to the View menu and select Page Source. HTML metatags look like this: `<META NAME= keywords CONTENT= publishing, magazine, Internet, pc, chip, computers >`. You will now know what other words to include in your search string, in order to bring up more pages like this one.

### The mail of the species...

E-mail is the most widely-used application of the Internet. It is also the most abused. Forget e-mail etiquette, few of us even bother to take advantage of the many features built into the e-mail packages we use. Make it a practice to use such features as bcc (blind carbon copy) and spam filter options to get the most out of your e-mail program.

### Offline is best

Always read and compose mail offline. Connect briefly to the Internet, download your mail, disconnect. Read and reply at leisure, and then re-connect and send your messages. Of course, this may be difficult for those with problems connecting to their servers. If you have to dial a dozen times before getting connected to your ISP, you can configure your e-mail program (say, Eudora) to connect automatically at a predetermined time and send and receive mail. You can set this function for late night or early morning, so that connection is easy and uploading and downloading fast. Alternatively, you can let the program do it in the background, while you work on something else.

### Open a 'Spam Box'

Okay, so you have implemented the previous suggestion. Still, it is impossible to avoid unsolicited mail completely if you sign up for free Web services. However, you can avoid cluttering up your Inbox by

using a free e-mail service (from Yahoo, Hotmail or iName) to sign up for these Web services. Do not use your primary e-mail account—the `verl.net.in` account—at any cost.

HARIKRISHNAN MENON and  
VEER KOTHARI