Your Cyberspace Companion



june 1995





Internet sites inside



38-Page Internet Primer!

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june 1995 • issue 01

Beginnings

The Net: You're going to love it — and use it.



elcome to cyberspace with a difference. I imagine by now you've heard all the talk about how the Internet is going to change the world and how you must be online before sundown, lest you become technologically deprived and cease functioning as a normal human being (whatever that means). Of course, much of what you've heard is hype — after all, has anyone actually seen Elvis in cyberspace? Nevertheless, the information superhighway is

a reality as well as an incredible phenomenon, and it is changing the way we think, communicate, and

approach our lives.

777

But, how do you get on board the deified digital interstate, with its strange new chariots and alarmingly insular language? How to visit those stunningly beautiful sites people keep raving about, or tap into all the free software rumored to be out there, floating, waiting to be accessed?

Until now, no publication has attempted to take you by the hand and show you — step by step — how to get online in the easiest, most painless, and most efficient way. At *The Net*, our goal is to teach you how to converse with others around the world while you learn to trek in the heady atmosphere of cyberspace. You will also be kept up to date with the rapid changes under way on the information superhighway — because (r)evolutions do occur every day.

This is our promise to you. We'll underscore it with a stunning visual style and flare that will make the Internet come alive for you. Whether you're an experienced infobahn traveler or a frustrated but enthusiastic newbie, *The Net* is going to take you places you've never dreamed of visiting.

So, arm yourself with some hardware, some software, a six-pack of Diet Coke (not a pre-requisite, whatever beverage you prefer), and a copy of *The Net* — and let's get started.

And by the way, if you have seen Elvis — or anything else thought provoking — let me know at talk-to-us@thenet-usa.com.

Mary Ellis Launch Editor



Special Report

18

Plug In, Log On, Reach Out

As your cyberspace companions, we thought the best place to start in our premiere issue was at the beginning. Our 38-page introductory section walks you through everything — and we mean everything you need to know to understand, manipulate, and fall in love with the Internet.

— various authors

Features

Interview: Mining Cyberia

"The Internet ... is just like the street": a striking conversation with author Douglas Rushkoff, in which he discusses his most recent works, cyberspace, and how the Internet will rock our world.

- Simon Hindle

WebWalking: Le Louvre

A step-by-step stroll through a World Wide Web site we like: This month we take a tour through the famous treasures of the opulent Louvre museum in Paris.

- Neil Randall and David Wade

Playtime: Gaming Slick Tricks

From *Myst* to *Mortal Kombat*, we show you how to find the best cheats, walkthroughs, hints, and tips on the Internet — as well as cyberspace's countless veteran game players.

- Kevin M. Savetz

Cover by Aaron Lauer and Laura Morris

Girl Q began her adventures on the Internet through the rather safe environs of AOL. Soon, however, she was deep into chat groups and chasing gophers. Suddenly, an e-mail appeared, begging for help. "She's after me again," the message read, "she's reading my mail. Help, Girl Q!" Rocked into action, Girl Q carefully put on 5150, and her lightning fingers went to work. With a stogie clenched in her teeth and a liter of JD in her fist



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California **Today**, the World **Tomorrow**?

he Internet is expected to serve as a hub for tens of millions to electronically buy and sell products and services. But how soon will this happen? The Net has the inside scoop ...

It's the usual chicken or egg conundrum. Marketers are salivating over the software and hardware that compose the Internet and commercial online services, expecting both an exponential jump in sales and a new umbilical cord to consumers. Still, online commerce remains more virtual than actual reality. (The *Wall Street Journal*, for instance, reports that only 120,000 of Prodigy's 2 million subscribers bought airline tickets via the online service in 1994.) Whether that's because businesses are only beginning to jump onto the information superhighway or because only 6% of U.S. households subscribe to online services is hard to call.

But businesses seeking to set up shop on the Internet are already being targeted by telecommunications companies. In California, Pacific Bell is phasing in dedicated Internet access services to big businesses located in the San Francisco Bay, greater Los

et Knowledge

• Business Outlook: RHI Consulting asked 1,000 CFOs of companies with more than 20 employees to predict how U.S. firms will use the Internet. The results: sales and marketing, 46%; customer support and communications, 36%; research, 6%; other/don't know, 12%.

 GenX Effect: Computer products and channels will become a \$70 billion market by 1997, predicts the Multimedia Research Group. The jump will be fueled by 18- to 24-year-olds, whose buying power is pegged at \$125 billion. Angeles and Orange County, San Diego, and Sacramento areas. Pacific Bell's full range of services is intended to provide a onestop Internet access system. Partners in the project are

Brand-Name Electronic Shopping

MCI's marketplaceMCI is described as the first brand-name secure electronic shopping area. Storefronts include Dun & Bradstreet Information Services, Hammacher Schlemmer & Company, OfficeMax, Intercontinental Florist, Damark International, PC Zone and Mac Zone, Reiter's Scientific & Professional Books, QUALCOMM Incorporated, Proxima, Reveal Computer Products, Covey, Doneckers, FTP Software, National Wildlife Galleries (Art Access), Aetna, Amtrak, Borders Books and Music, Healthrider, Sara Lee, Tiger Direct, and Timberland. MCI is using Netscape's browser software and Netsite servers, as well as FTP

Software's Internet software, to create marketplaceMCI services. To shop, Internet users log in to MCI's home page (http://www.internetMCI.com) and have their credit cards verified, then they can point and click on marketplaceMCI (http://www.marketplace. internetMCI.com/ marketplace). Users can browse the merchant fronts for product

the merchant fronts for product information, graphic images, and pricing. Any browser software can be used to access marketplaceMCI, but secure transactions require software compatible with Netscape's Secure Socket Layer encryption protocol (see article to the right).

Netscape Communications, Sun Microsystems, and Cisco Systems. Sun and Cisco are providing a full line of routers and Internet-ready server hardware, while Netscape is supplying its Navigator software package. Sun is also providing firewall security software, and Sun workstations and servers are part of Pacific Bell's Internet services network and operations infrastructure. Noting that "the Internet is rapidly becoming the data equivalent of basic telephone service," Pacific Bell President and CEO Dave Dorman says the company is attempting to make the Internet "as easy to use and as widely accessible as the telephone."

In the fourth quarter of 1995, Pacific Bell plans to offer switched access service to small businesses and residential customers in the same four areas of the state. By 1996, it will provide dedicated and switched access for other service areas.

California is probably the best market for such services at the moment. The state accounts for one of every four commercial domains in the U.S., has three times as many connections as any other state, and is home to 10 of the 25 U.S. cities with the highest concentration of Internet-connected companies, says Internet Info, a market research and analysis firm.

Battle Over Online Security Heats Up

As with everything related to computers and information technology, competition rages over security data systems. No system has yet emerged as the industry standard — an important issue, since interoperability will advance the cause of electronic commerce on the Internet.

Netscape has published both the specification for its security encryption service, the Secure Sockets Layer (SSL) protocol, and the source code to the reference implementation on the Internet. Eighteen companies, including Apple, Microsoft, IBM, Silicon Graphics, Prodigy, and Sun Microsystems, are supporting SSL. However, Terisa Systems — a joint venture of Enterprise Integration Technologies and RSA Data Security — is touting a rival standard, known as Secure HTTP. Testers of early versions of Secure HTTP include CommerceNet, Spry (recently purchased by CompuServe, see page 6), and Open Market, a company that helps merchants get an online presence.

Although critics have argued that Netscape should have waited for the software industry to create some standards before it widely released SSL, the matter may be moot. SSL and Secure HTTP are being evaluated by the World Wide Web Consortium and the Internet Engineering Task Force, and it is possible that both will be adopted.

Pacific Bell is hooking up to the Internet businesses in cities up and down the coast of California.



Gateways

NEWS ABOUT COMMERCIAL ONLINE SERVICES CompuServe Serves Up Internet Access

With Internet curiosity surging as the World Wide Web emerges as a medium with appeal for businesses and consumers, commercial online companies increasingly are viewing Internet access as a must. Although it has been a slow transition for firms like H&R Block Inc.'s CompuServe to move from e-mail to FTP to Telnet, the pace is quickening as the race for cyberspace explodes. CompuServe, which had been lagging behind its competition, has gained a more solid foothold via the acquisition of Seattle-based Spry for about \$100 million in stock and cash. Privately held Spry makes user-friendly software, including its popular Internet in a Box (see review, page 72), for entering and browsing the Web. Commenting on the deal, Ozzie Wenich, H&R Block's vice president of finance, noted that Spry will bring CompuServe "the expertise that will help us become a significant player in the Internet industry." In addition to Web browsing capabilities, CompuServe will offer separate telephone connections for full Internet access. CompuServe expects Internet software, access, and consulting services to grow into a \$4 billion industry in two years.

Prodigy Was First

Prodigy, a partnership of IBM and Sears, was long seen as the least aggressive of the commercial services, but it was the first to provide Web access with a graphical interface. More than 200,000 users signed up for this service within two weeks after Prodigy made it available.

AOL Isn't Left Behind

Meanwhile, America Online has acquired BookLink Technologies, another developer of World Wide Web software, in an attempt to integrate a browser into its services. AOL's rapid growth over the last year, and expectations that it will double its subscriber base this year, have also led the company to acquire the commercial arm of Advanced Network & Services, This acquisition is tantamount to the purchase of a major chunk of the Internet, since ANS operates one of the largest and fastest public networks (it controls more than 12,000 miles of leased fiber-optic circuits), and has been referred to as the backbone of the Internet.

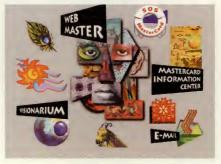
(continued on facing page ...)

Trying to Spur Online Transactions

A number of business giants are working feverishly to ensure that consumers' technophobia and electronic commerce security fears are allayed. MasterCard recently set up a home page on the Internet's World Wide Web (http://www.mastercard.com) that not only includes information on what to do if your credit card is lost or stolen and where to find ATMs around the world but also has a WebMaster section to help newcomers learn how to use the Web and navigate the Internet. It contains a history of the Web, a tour of Web sites, and a tutorial on

performing online searches and downloading files. A key goal of the page is to help users learn about cybermalls, where they can now shop using MasterCard. The creditcard company is working with Netscape to ensure secure electronic transactions on the Internet. Visa, which has had a Web home page since September 1994, recently added 59 pages of automated ATM site information that is updated monthly. Visa's page also includes information on its portfolio of products. Visa is working with Spyglass on a secure transaction system.

Meanwhile, as part of its effort to put a personal computer in every U.S. home — and attract subscribers to its online service (see page 7) — Microsoft is producing the Home and Family Computing Supershow, a traveling event designed to "teach the latest in computer



One of WebMaster's goals is to help Internet users learn about cybermalls.

and consumer technology products and services." Consumers attending the show will be able to test products, query manufacturers, view about 8,000 CD-ROM titles, and surf the Internet. The Supershow will feature pavilions entitled "Internet and Online Services" and "E-Mail to the Rich and Famous," plus a computer games area and a learning center. Microsoft is teaming up with Multi-Media Publishing Corp. for the four 1995 events (Boston, Oct. 6-8; Atlanta, Oct. 20-22; Dallas, Dec. 8-10; and San Francisco, Dec. 15-17).

Omni's Internet Faith

Not satisfied with an online version, *Omni* abandons print for a feet-first plunge into the cyberfuture.

The growing interest in electronic commerce can be charted by the new ventures related to writing about it. Recently, *PC World* announced that it would co-publish with *Forbes* a special section, "Electronic Commerce," about new developments in electronic banking and commerce. Notably, the publication will be in print form.

PC World's publisher, Richard J. Marino, notes that the magazine still believes that "the most effective way to deliver new editorial content to readership audiences is in the context of traditional environments that they are already comfortable with."

This contrasts sharply with the beliefs of General Media, which has taken the radical step of suspending a print version of its *Omni* magazine and transporting it into cyberspace. *Omni* will shore up its established beachhead on America Online with a World Wide Web site and services on other networks.

The only vestige of a print-format *Omni* will be a jumbo quarterly issue available at newsstands (not by subscription). *Omni's* change in medium is not the desperate gamble of a foundering company: It has a circulation of 700,000 and a rising number of ad pages. Rather, *Omni* is underscoring its reputation as a "tool for the 21st century," says Keith Ferrell, vice president and editor.

"Anticipating the future

and its new technologies is what *Omni* is all about," Ferrell adds. Also not lost on Ferrell is the fact that students make up a large proportion of *Omni's* circulation, and they are much more likely to accept, and know how to use, a digital medium for their reading material.

Many magazines have begun publishing online versions — the pioneer is *Wired*, and *Time* has also gotten into the act, as have *Business Week* (available through America Online), and *Aviation Week & Space Technology* (online on CompuServe). However, a key difference from the *Omni* project is that these sites basically serve to complement their print counterparts. postings

Flying Online

It's getting harder and harder to slip unobtrusively from the office, even on a plane ride. Now flyers can go online: In-Flight Phone Corp. is establishing a local area network for aircraft with its FlightLink II digital system. The product of six years of labor and a \$200 million investment, FlightLink permits airline passengers to send faxes and hook up to the Internet and online services. Five U.S. airlines plan to install the system on about 900 planes. Already, more than 60 USAir planes have it.

Freedom, Privacy, and the Internet

The fifth annual Computers, Freedom, and Privacy (CFP) conference, which took place in Burlingame, CA March 28-31, focused on the uses of the Internet and computer database networks as both intellectual and potential terrorist tools. Topics included privacy and intelligent transportation systems; minority and international Internet accessibility issues; censorship; intellectual property rights;

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electronic cash; and anonymous remailers. Cryptography was among the most highly debated subjects, with attendees largely favoring absolute freedom. By contrast, intellectual property was less hotly contested — copyright protection appeared to have the support of most of those in attendance. Instead, discussion focused on the subtler points of enforcement and the role of the courts.

Sci-fi author William Gibson, considered the founder of cyberpunk ideology, is entering his once-make-believe wired community. On May 18, he will participate in an online press conference promoting adaptations of his 1980 story, "Johnny Mnemonic," about a young data courier. Gibson has recast the story as a full-length feature film for TriStar Pictures, and it is also

appearing as a CD-ROM game created by Sony Imagesoft

for PCs, Macs, and Sega. The game will have real-time fight scenes and the electronic gadgets Gibson is famous for videophones and neurocomputers — to allow players to interact in a futuristic Gibson society. Gibson's conference takes place from 6 to 7 p.m. (PST) on ZiffNet and CompuServe, and again from 7 to 8 p.m. (PST) on America Online and *HotWired*.

Virtual Wars

The CD-ROM

version of

Johnny Mnemonic

features

videophones

omark Software is stepping up the pace in the online gaming world with its latest product, Confirmed Kill, a World War II flight combat game. Initially, the Telnet site for this game supported 375 players, but that number will be at 500 as of June. While this sort of interaction has a truly violent edge, there is something awe inspiring about the notion of hundreds of customized virtual planes flying through a simulated wild blue yonder. And don't worry about those practiced aces dropping every newcomer out of the skies: Domark plans on maintaining different arenas for different skill levels.

Virtual Trees

Earthday's 25th Anniversary on the Internet

This year, the Internet was a key participant in the events marking the April 22 Earthday celebration. Virtual Earthday was overseen by the Earthday Network, which for the last year has extended technical support, advised interested individuals and groups about how to get involved virtually. and planned several national events. Nearly all the major online service providers held special forums to discuss the issues; among featured guests were such eco-celebrities as Carol Browner, administrator of the U.S. Environmental Protection Agency, and Steve Manning of The Nature Company.

But for those who missed all the fun, ArtRock Gallery is running an online auction of Rock Star memorabilia through May 21 (http://www. ccurrents.com/cc/). Proceeds will benefit activities addressing urgent local and global issues surrounding water and air pollution, toxic waste, and damage to ecological systems. The Rolling Stones, John Lee Hooker, Metallica, Suzanne Vega, and Soundgarden are just a few of the artists donating autographs to the cause. If you want to get a jump on Earthday 1996, you can reach the Earthday Network at earthday@ qualcomm.com. SIL Although Prodigy may have gotten the jump on AOL in being the first to offer Web service, AOL's recent acquisitions will give it an edge in connectivity that will likely pay off big time.

Delphi Reorganizes for Internet-Based Platform

Delphi has reorganized in preparation for launching an open, Internet-based platform this year. Mark Benerofe, formerly director of interactive media for Microsoft, now leads Delphi's consumer services development, responsible for overseeing the acquisition and development and placement of content on the online service. Content will include products and services from News Corporation (Delphi's Rupert Murdoch-owned global media parent) and from other media sources. Benerofe played a role in developing the Microsoft Network (see below).

Reporting to Benerofe will be Bruce W. Thurlby, newly appointed vice president, business affairs for Delphi. Thurlby previously was the new product development director for AT&T's Interchange, and the director and manager of editorial business and operations for Prodigy. Delphi recently signed a licensing agreement with Netscape for use of its Web software suite, after abandoning plans to come up with its own Web interface.

David & Goliath

To say that competition among the commercial online services will heat up even more later this year is something of an understatement, considering that Microsoft is at work on an Internet access system. Most of the major hardware and software vendors currently found on CompuServe will also be on the Microsoft Network. Because the communications software to access this network will be included with the company's Windows 95 operating system, the network is expected to rapidly gain subscribers. Microsoft apparently is bent on starting its own electronic news service as part of the Microsoft Network. The plans created an uproar when they were revealed by a new hire who was chatting in a private discussion group for journalists on the Internet, New Information Technologies. Immediately, a wave of furious questions was unleashed in the group, as journalists expressed concern that Microsoft might distort or omit news. Microsoft has licensed Spyglass's Mosaic Web browser, and plans to customize it for the Microsoft Network. Another giant is also apparent on the horizon: AT&T's Interchange.

Making Contacts and Connections Online

THE WONDERS OF THE WEB

The Web turns users into active information gatherers and creators.

aybe new technological revolutions are only meant to come around every 400 hundred years or so, but it seems we are the lucky ones: We find ourselves on the brink of a transformative

ourselves on the brink of a transformative change. A transformation this great hasn't been seen since the invention of movable type, which made possible the production of multiple copies of text- and graphic-laden paper. and spawned an explosion in knowledge that continues, unchecked, today. Yet content limitations, as well as the need to physically move paper from its site of creation to the end user, have constrained the ultimate capabilities of print publishing.

Today, though, the World Wide Web is transcending print's restrictions and at the same time, breaking the boundaries of nation, culture, time, and space. Unlike print, which is static once it's produced, or the one-way



Wired House: Between October 1994, when the White House set up a page on the World Wide Web (http:/www.whitehouse. gov/), and March 1995 the site was visited more than 1.25 million times, and at least 18 million files have been downloaded. the White House says. The files have ranged from pictures of artwork found in the White House sculpture garden to the fiscal year 1996 budget document.



channels of radio and TV, the Web is an interactive system for the dissemination and retrieval of textual, graphic, and audio information in the form of **hypertext** or **hypermedia** through the Internet. The way the Web links together documents results in remarkably creative opportunities for the user to discover, interact with, and create knowledge.

The Web operates according to a popular model for networked communication — the client/server model. A server is a computer host and its associated software;

when it's made publicly accessible, it serves as a "broadcast" station that provides access to information and resources contained in its online files. Those interested in accessing information found on Web servers use client software (called Web browsers).

There are a variety of Web browsers, all of which communicate with the myriad of Web servers worldwide using a standard set of rules. This allows you to use different browsers to view the same information on

Web servers, much as you use different television sets to watch the same program on TV.

The Web certainly isn't the much-hyped 500 channels of television, nor is it an orderly



No last call: The Miller

Genuine

Draft Tap

especially

destination

Find it at

com/

on the Web.

http://www.

mgdtaproom.

popular

Room is an

Hypertext Documents on the World Wide Web have authordefined features called links, or hotspots. Each hotspot selected by a user connects the text to related items that may be located anywhere on the Internet. Hypermedia Hypertext that includes some combination of pictures, sound, graphics, and

moving images.

The World Wide Web transcends print's restrictions and breaks boundaries of nation, culture, time, and space.

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FIRST POWER UP...

RALPH ABRAHAM, FRANK JAS and WILL RUSSELL, University of California, Santa Cruz, CA THE WEB EMPOWERMENT BOOK

The Web Empowerment Book is one of the first books devoted entirely to the World Wide Web, a hypertext-linked system which enables Internet users to navigate readily through a maze of Web servers and providers. This "how-to" book explains in simple, pragmatic terms how to establish your own connection, navigate through, and understand the WWW in three basic steps. It also contains coverage of the requisite UNIX commands. This well-illustrated book includes a full color tour of the Web (Chapter 2, A Brief Tour) and acts as a guide for potential and current Web-users in gaining access to a storehouse of freeware and shareware which provides a multitude of appropriate browsers and display software to facilitate use of the Web. The freeware and shareware will be made available through a variety of Internet services.

Contents: •Part 1: An introduction to the World-Wide Web •Introduction •A Brief Tour •WWW Basics •Hypertext •Hypermedia •Part 2: Empowerment for the World Wide Web •Internet Providers •How to Get Connected Macintosh Bootstrap •Windows Bootstrap (Commercial) •Windows Bootstrap (Shareware) •Part 3: The UNIX Environment •UNIX Basics •Files and Directories •E-mail •Shared Data: Internetworking •The UNIX Shell •Conclusion •WWW Glossary •Webography •Index 1995/approx. 224 pages/Softcover/\$24.95/ISBN 0-387-94431-1

....THEN MAKE WAVES!!

"Others surf the Net; I make waves." -Webmaster's credo



by **DENNIS WOO**, Technology Consultant & a Featured Lecturer at the Exploratorium, San Francisco and **RAY COLE**, AT&T Global Information Solutions, San Diego

The WEB

Empowerment

Book

Ralph Abraham Frank Jas Willard Russell

WEBMASTER: AN INTRODUCTION TO ELECTRONIC PUBLISHING ON THE GLOBAL INTERNET

A Webmaster is a publisher of electronic documents on the World Wide Web, an Internet-based, graphicsrich system used by everyone ranging from the White House to the e-zinc publisher in college dorms to reach a global readership. Webmaster provides a lucid, step-by-step guide to creating Web documents using Hypertext Mark-up Language (HTML), Common Gateway Interface (CGI) scripts, and multimedia authoring tools. Also covered are electronic publishing dos and don'ts, ethics and legal issues, and advice from successful Webmasters through interviews. Included are sidebars on extensions to HTML for Netscape, TIA (The Internet Adapter), and a checklist on retooling your skills if you are a desktop publisher/graphic designer. Clip-art, scripts, and regular addendums will be made available via the TELOS Publications Web site (http://www.telospub.com).

Contents: PREFACE: Gutenberg Revisited • Publishing online • Defining Audience • Defining Goals WEBMASTER • What Is the Web? • How Does It Look? • Examples of Usage • What Might I Do With It? • The Relationship of the Net and the Web • Writing HTML • Production of Multimedia Content • Making Engaging Multimedia • Server Configuration • Advanced HTML/Server functions • HTML Tools • Site Structure and Site-Level Issues • Webmaster Interviews • Web Gotchas • Efficiency – Getting bang for thebandwidth • The Tech of Connection • Appendices • Index

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- Visit: Your bookstore or urge your librarian to order for your dept.



or even a definitive collection of human experience and knowledge. Rather, it's a new medium born from the need of researchers to organize and associatively link related information.

Using the Web, you can do everything from accessing White House documents to checking Southwest Airlines' latest flight and fare information, discovering little-known facts about the San Jose Sharks, and planning your summer rafting trip. You could also use the Web to gamble without having to go to Vegas, track your Federal Express package without ever lifting the phone, or order the latest games without leaving your keyboard.

You'll find information on the Web about beekeeping, Fermilab, genealogy, the General Agreement on Tariffs and Trade, horror movies, mood disorders, motorcycling, pet rabbits, sumo wrestling, vegetarianism, and world oceans. The list is endless. You'll also "bump" into a myriad of other users: mainstream and fringe culture folks, corporations looking for your dollars, and

university researchers intent on answering their thesis questions.

There is no shortage of Web sites to choose from. Every day marks the debut of yet more Web pages, with everyone from the White House to Metro Goldwyn Mayer, the Krema Nut Company, and Miller Brewing Company getting in on the action. But organizations and institutions aren't the only ones providing Web offerings. Individuals are creating home pages that offer personal information. Groups of people are collaborating to create interlinked trees and webs of information about nearly every subject of human interest around. And, as more sites pop up on the Web, more users are drawn to explore the resources, and many of them in turn are inspired to become information creators.

The Web is thus weaving the global communication network many utopian thinkers have dreamt about. As the Web grows, it increases in value, and as its value increases, it grows.

SIL.

A Primer on Browsing for Beginners

Sound overwhelming? Fortunately, the World Wide Web itself contains plenty of resources to aid you in your journeying. Following each "starter" resource listed below is its Uniform Resource Locator (URL). Use a Web browser to access these URLs:

• Yahoo: A rapidly growing collection of Web- and Internet-based information categorized in a subject tree. URL: http://akebono. stanford.edu/yahoo/

• Lycos: A Web "spider" that helps you locate resources using keyword searches. URL: http://lycos.cs.cmu.edu/

World Wide Web More information about the Internet's "killer application" can be found on pages 22 and 54-55 of The Net.

Internet Web Text:

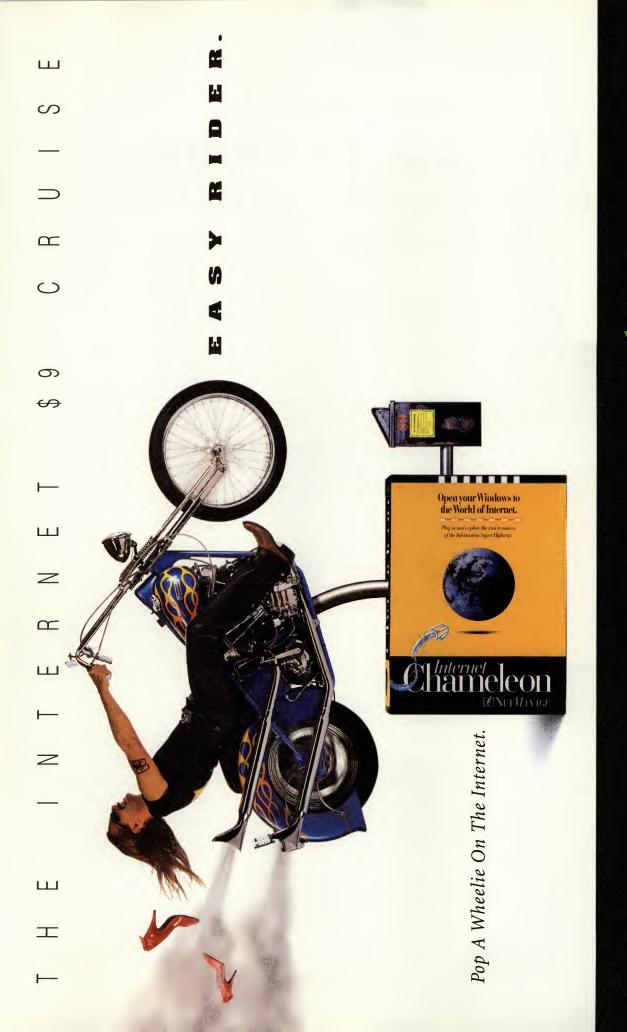
A hypertext listing of Internet-based guides, indexes, and subject and keyword searching resources to help you learn about the Internet and the Web. URL: http://www.rpi.edu/ Internet/Guides/decemj/text. html

Exploring the Web

Here are some popular Web sites and their URLs.

WEB DESTINATION	URL
The White House	http://www.whitehouse.gov/
Citicorp/Citibank Home Page	http://www.tti.com/
Sony	http://www.sony.com/
Palo Alto Airport Home Page	http://xymox.palo-alto.ca.us/av/
Metro Goldwyn Mayer	http://www.earthlink.net/MGM/
Yale University	http://www.yale.edu/
Miller Brewing	http://www.mgdtaproom.com/
Atlanta Journal-Constitution	http://www.ping.com/ajc/ajchome.html
The Krema Nut Company	http://www.ip.net/shops/KremaNutButtersNutsCandyGifts/
Paramount	http://www.paramount.com/
House Rabbit Society	http://www.psg.lcs.mit.edu/~carl/paige/HRS-home.html
Ocean Information Center	http://diu.cms.udel.edu/
World Guide To Vegetarianism	http://catless.ncl.ac.uk/Vegetarian/Guide/index.html
Motorcycle Home Page	http://cs.wpi.edu/~ravi/
Fermilab	http://www.fnal.gov/
Mentos breath mints	http://www.cs.hmc.edu/people/zbaker/mentos-faq.html
GATT	http://ananse.irv.uit.no/trade_law/gatt/nav/toc.html
Mood Disorders	http://avocado.pc.helsinki.fi/~janne/mood/mood.html
Genealogy Home Page	http://ftp.cac.psu.edu/~saw/genealogy.html
The Horror Web Page	http://www.ee.pdx.edu/~caseyh/horror/horror.html
Dublin Pub Review	http://www.dsg.cs.tcd.ie:/dsg_people/czimmerm/pubs.html
Sumo Information Page	http://akebono.stanford.edu/users/jerry/sumo/
Beekeeping Home Page	http://weber.u.washington.edu/~jlks/bee.html
Socks the White House Cat	http://www.whitehouse.gov/White_House/Family/html/Life.html
World Birthday Web	http://sunsite.unc.edu/btbin/birthday
Carlos' Coloring Book	http://robot0.ge.uiuc.edu/~carlosp/color/
Weather World	http://www.atmos.uiuc.edu/wxworld/html/top.html

212



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MICROSOFT WINDOWS



threads

Important Issues and Topics on the Internet

TECHNO TERROR Protecting Yourself on the Mean Streets of Cyberspace

ow dangerous is the Internet? I imagine by now you've heard about the recent spate of computer crimes. Let's see.

- Mitnick, a fugitive computer programmer, for
- allegedly stealing at least 20,000 credit-card
- numbers from the computer files of Internet
- access service provider Netcom.
- Then, there was the electronic terrorism
- vandals visited upon
- > journalists Michelle
- Slatalla and Josh
- Quittner. Their book
 about computer
 hackers spawned a
 "bombing" of

Quittner's Internet mailbox — it was stuffed with thousands of

unwanted messages until his Internet access was shut down. Other journalists who've written about the Internet have also been targeted. Michael Wolff, author of *NetChat*, booted up to find that his e-mail messages had been removed by someone using a hacker program. In addition, there've been other problems, such as sexual harassment via e-mail.

Taken together, these happenings could evoke a vision of cyberspace as a lawless frontier. But I urge you to put the risks in perspective and exercise a few simple precautions. The potential for security breaches is a bit less alarming than it first appears. It's true that, as recent magazine and newspaper headlines have been trumpeting, system break-ins doubled between 1993

Firewalls FAQ (Rev 3, updated Sat Dec 3 22:33:57 1994) • Industry • Industry • Industry • Mark setters & terral • M

This list of Frequently Asked Questions about firewalls provides information about how to protect computers from being tampered with.

fellow humans opens us up to some risk. Breaking into computers is like stealing cars: If a pro wants your car, no alarm, lock, or club is going to stop him or her. However, as any police officer will tell you, 99% of car thieves are amateurs. They get into your car because you left the keys in the ignition or didn't lock the door.

The same is true of computer systems. I cannot count the number of networks I've serviced whose operators hadn't bothered to set the supervisor password. These

same people who are lax in enforcing security on their systems are now talking to me about hooking their in-house networks up to the Internet. So, it's not hard to predict that there are going to be a lot of carjackings along the information superhighway, especially after

and 1994. However, it's important to remember that during that same time period, the number of Internet domains increased by 1,000%.

Also, although government reports cited about 2,400 break-ins in 1994, keep in mind that commercial online services added more than 2 million users (at least) to the system that year. When you consider the fact that the number of people on the Internet has

increased at a dramatically higher rate than the number of trespasses, the computer crime wave looks a bit more like swells lapping against the beach.

We should also remember that any activity exposing us to

the actions of our

Breaking into computers is like stealing cars: If a pro wants your car, no alarm, lock, or club is going to stop him or her. However, as any police officer will tell you, 99% of car thieves are amateurs.

12

You travel at the speed of sound, waking bats who dangle in your way. You pontificate on the virtues of virtual worlds and laugh HA-HA at those who dare reply. You crush the weak with your little finger and thumb your nose at any who stand in your way.

Hey, if you want to be in control, get control of the Internet first. I-Link gets you going in about 10 clicks of the minute hand, and gives you easy, full internet access on our high speed service for just \$17.95 per month. Plus, there's no startup fee. Even someone as multi-faceted as you can appreciate simplicity like that. So go there, Be there. Start here.

Getting on is easy when you know where to start

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threads

Unix Security Information

Assession URAP Web Tanes: 48: API 13-114, Pane. 15:4-100 NOT DOWNLOAD AND EMECTRAFIE PROCESSA OL DOCUMENTS OF DURINOM CONTRACT VIA THEI WEB SEMPLE FROM NON-OVERMART SOURCESS Il you was specific coltures, costat you MAICOM Small Computer Technical Center (SCTC). Size the system provides access to World Walk Web, Oppler, and Anonymous PTP arrays, we have NO CONTOL of externi dua stores. Frogene allow ten whold was then bere ben known to be accessive in the Starmet.

The standard US Military declarger applies to all levels of this Web Server

Frequently Asked Questions (FAQ)

Security information resides in many places on the World Wide Web. You'll find software, Frequently Asked Questions lists, and lists of consultants.

How Hackers Work

passwords. 2. Pose as someone else. such as a telephone service person. 3. Find holes and flaws in the system that create backdoors. 4. Fool software into thinking they are legitimate users of the system. 5. Exploit holes in the protocols used to set up secure communications. 6. Find securityrelated information. 7. Overload system resources so that the system ceases to function correctly. - Lance Rose, NetLaw (Osborne

McGraw-Hill)

learning the results of a recent survey by consulting firm Ernst & Young and *Information Week* magazine. It found that only 22% of the respondents considered computer security "extremely important." If this describes you or your company, you may want to rethink your priorities.

If you're worried about online thieves making off with your credit-card number, remember that the best way to prevent that is to avoid putting the number on the Internet in the first place. Most of us have become considerably more wary about providing card numbers over the phone, and that same healthy suspicion should be applied to electronic transmissions. If you want to buy something online, see if you can be billed. Consider the security of the company's ordering system; online vendors are working on upgrades in response to consumer concerns, and it might be worth e-mailing the company for information about how they will protect your personal data.

As for harassment, some urge fighting back instead of logging off. They suggest responding to abusive message senders with strongly worded replies telling them to back off, and reporting harassers to the system operator of bulletin board systems or online services.

Computer security is a real issue, but it's one based largely on common sense. Have you changed your password lately? If not, do so, and while you're at it, better run out and grab the keys from your ignition.



Internet Security Systems' Web page advertises its computer security consulting services, which include analysis of a system's penetration vulnerabilities.

DEVILISH TIMES FOR NETWORK SECURITY

ith the antics of Kevin Mitnick and other crackers sending chills up the collective spine of Internet users, network owners are racing to create firewalls within systems connected to the Internet. However, these software developments could actually help, rather than hinder, crackers.

For example, there's a software program called SATAN (Security Administrator Tool for Analyzing Networks) that's now available for free over the Internet. SATAN was developed by data security expert Dan Farmer (who worked for Silicon Graphics until a controversy over his plans to distribute SATAN to all for free erupted) and Dutch researcher Wietse Venema. It's designed to help network administrators uncover network weaknesses so that they can buttress security. Unlike most security software programs, SATAN can scan multiple host computers, rather than just one, to identify vulnerabilities.

Some in the Internet community, however, are worried that SATAN will fall into the wrong hands and end up assisting those intent on cracking a computer's security. In particular, they believe that the software's easy-to-use Mosaic interface will eliminate the need for crackers to be technically savvy. SRI, the technology think tank in Menlo Park, CA, has asked Farmer to attach a hefty price tag to the software and make it proprietary.

The question of whether SATAN and other security systems should be free and available to all underscores the fact that secrecy and freedom issues are going to play an important role in shaping the future of the Internet.

Hot Words

Crackers

Typically lumped in with hackers by the general media, these are people who employ their technical skills to break into computer systems and commit crimes, such as vandalism or stealing data for financial gain. **Firewalls** Security-conscious companies set up computers called firewalls to prevent outsiders from tampering with their internal computer systems. The firewalls act

The firewalls act as a gateway, monitoring traffic between an Internet site and the Internet, and ferreting out and blocking unauthorized access.



THIS SPACE LEFT INTENTIONALLY BLANK!

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downloads

Using the Internet to Build Your Software Library

JUST AN OLD-FASHIONED HACKER Slashing Through the Cyberspace Jungle in Search of Classic Games

When I'm in a

mood, I prefer tried-and-true

classics that are

unglamorous -

at least by the

and-whistles

standards.

multimedia bells-

time-wasting

decidedly

latest

here are 20 million or more Internet users out there in cyberspace. At least, that's the figure that gets from

repeated time after e, time like some highσ tech mantra. What are σ you all doing? Wandering from one chat room to the next? Could be - those rooms get pretty crowded these days. Subscribing to newsgroups? Flaming poor > newbies? Survey says ... The m number-one activity is downloading files.

Software is the name of the game. There are thousands — no, make that tens of thousands — of programs available. Internet tools and information. Freeware. Shareware. Commercial demos. Upgrades, patches,

and product previews. And they're all yours for the FTPing.

Me, I like old-fashioned games. You might think that, as someone who gets to play beta copies and advance promotional copies of forthcoming CD-ROMs and software, I wouldn't waste my time with games that are more than five minutes old. But when I'm in a time-wasting mood, I prefer tried-and-true classics that are decidedly unglamorous — at least by the latest multimedia bells-andwhistles standards.

Shanghai, for example, remains a firm favorite. I'll always play a hand or two of cribbage. And sometimes I still try to beat my best time at *Minesweeper* without cheating. But it is **Rogue** that remains at the top of my Best of the Oldies list. It has transcended the limitations of its character-based graphics to provide endless hours of blade-wielding fun.

It took me a couple of weeks — I lie; it took me a couple of months — to hack and slash my way down 30 flights or more of that doom-laden dungeon and claim my prize.

And the other night I felt a nostalgic desire to hold that sword once more, and to fight my way past unknown terrors to the bottom of the deathcursed maze. Surely, I wasn't alone in remembering Rogue with such rose-tinted visions. I logged on and kicked in the newsreader. Scrolling down the list, I quickly discovered not just one, but six different newsgroups dedicated to discussing Rogue and Roguelike games. I scanned the likeliest-looking files and soon hit on Aliza R. Panitz's FAQ of FTP sites. Wow — there were all kinds of goodies here to warm the cockles of a virtual

warrior's heart.

Ragnarok caught my eye. I remembered when the game came out commercially, and it has since been released in a shareware version. The FAQ told me it was available from poppy.engr.ucdavis.edu/rag22.exe. Sounded worth trying.

I sent Fetch off and running and pretty soon it came back with rag22.exe between its teeth. It took quite a few minutes to download the binary file — later, I tried FTPing via America Online and received a message that it would take more than half an hour for the transfer. I flipped the file over to Windows (I was using the Mac side of the machine up to that point) and it self-extracted and quickly decompressed itself into a new folder. There it was: Ragnarok.exe.

Did I feel guilty about using the vast



While no longer available, the original Rogue has spawned clones that still offer a good dungeon game.

3 16

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DOS:	3.5	5.25	High Density	Low Density
Apple:	Macintosh®			
Do you own a CD ROM?		Yes	D No	

*To use America Online for Windows, you must have a 386 PC or higher, 4MB of RAM, a VGA (256 color support recommended) monitor, a mouse, a modern, and a working copy of Windows 3.1. Use of America Online requires a major credit card or checking account. Limit one free trial per household. America Online is a registered service mark of America Online, Inc. Other names are service marks or trademarks of their respective owners. 11453

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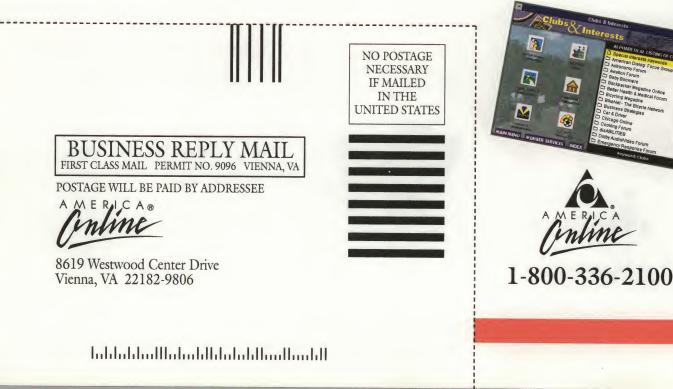
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See other side for details about your FREE trial of America Online!





resources of the Internet for such a trivial pursuit? No way - I was already too busy hacking my way through the forests of Ragnarok. What a rogue!

There are a half-

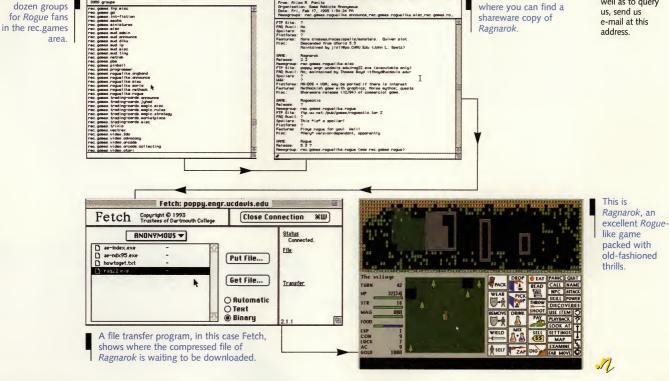
You can play your part in keeping this

column current by e-mailing me at the magazine to tell me what you've found and what you're looking for, or just to ask one of those "Whatever happened to ... " kind of questions.

> This FTP FAQ shows where you can find a



talk-to us@thenetusa.com To enlighten us with your ideas and insights, as well as to query us, send us e-mail at this address.



"The future of computing is defined by the Net." Business Week, April 3, 1995

Don't be left behind. The Net

August issue closes May 23, 1995

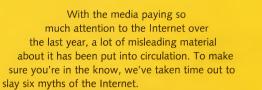
Plug In ...

In this premiere issue of *The Net*, we start you off right at square one. We're not going to assume that you understand even one piece of Internet jargon or can define the latest cyberbuzzword. Instead, we'd like to walk you through, step by step, everything you need to know to get plugged in, logged on, and up to speed on the information superhighway. Even if you're already online, you'll still find plenty of interest in this special, in-depth introductory section.

To help you get

acclimated to the world you'll find during your online journeys, we provide a thumbnail history of the Internet. Then, we look at the hardware requirements for Internet cruising to see how you can optimize your PC for highway velocity. We also provide a quick guide to Internet acronyms and a day-to-day working vocabulary. Next, we describe just what a service provider offers — and how to choose the best one. To help you learn exactly which tools you already have on hand, we examine the various operating systems. You'll also get a guide to the beginner books out there and a handy primer on good cybermanners to ensure that your rides are smooth.





At this point, you'll be plugged in, logged on, and ready to roll. What should you do next? Well, we'll lead you through the seven basic actions you can take online. These seven tasks will probably account for 90% or more of your cyberspace activities — electronic mail, transferring files, searching for information, exploring Gopherspace, joining in online discussions and chat groups, partaking in newsgroups, and, most exciting of all, roaming the World Wide Web. With this section under your belt, you're sure to be in the fast lane in no time at all.

Contents

cover story



In the Beginning There Was a Defense Department That Didn't Feel Safe ...

An outgrowth of government-sponsored, defense-oriented research, the Internet was created by a mixture of academics, graduate students, computer scientists, and engineers. From the outset, it has been the meeting ground for a diverse, eclectic, and improbable association of people.

725

ruising cyberspace, you can bump into everyone from military analysts and academics to computer geeks, hyperactive technopunks, and outdoor enthusiasts seeking the latest ski report, not to mention software company spies charting their competitors' latest moves. Now that gaining access to the vast Internet computer network is becoming easier — especially with commercial online services such as CompuServe adding Telnet capabilities — the Internet is extending beyond its original group of users to encompass all kinds of people all over the world.

Yet ironically, today's eclectic mix of Internet aficionados are benefiting from technology born of paranoid, Cold War fear mongering within the U.S. government. The imagined echo, "the Russians are coming, the Russians are coming," sparked the revolution in computer networking that, ultimately, spawned the Internet. Worried that a thermonuclear strike might cramp its ability to transfer data, the U.S. Department of Defense in the late 1960s began funding research on computer networking as a means of bolstering military communications. One of the projects was a wide area network called the ARPANET (Advanced Research Projects Agency — a properly Bond-like acronym).

Hor Words

Telnet

A remote log-in service for the Internet that enables a user at one site to access a remote site as if the two sites were directly connected. The downside is Telnet's grievous slowness. Wide Area

Network A form of

A form of networking that connects computers across long distances, using modems to send signals. It allows communication to be independent of the computers using the wide area network. Using the ARPANET both as a way to move data between project sites and as a place to evaluate new communication software and applications, defense-funded researchers put in place a prototype Internet by 1982. Many of the top computer scientists in industry and academia had access to this structure through CSNET (Computer Science Network), a project created by the National Science Foundation (NSF), yet another U.S. government agency. Then, in 1983, all U.S. military sites were connected to the ARPANET, marking its transition to a practical rather than an experimental network.

Recognizing the role interconnectivity had begun to play in computer communication research, the NSF built its own wide area network, called NSFNET, which linked its five supercomputer centers across the country. Determined to extend access to every science and engineering researcher in the U.S. (a goal that eluded both the ARPANET and the NSFNET due to lack of capacity), the NSF helped fund the building of a high-speed wide area network in 1988.

This new Internet opened its doors to all educational facilities, academic researchers, government employees, and international research organizations, which essentially democratized the system. Graduate students using the Internet saw its potential not only for research, but also for fun and games (probably the most unlikely uses the founders of the

The imagined echo, "the Russians are coming," sparked a revolution in computer networking.

ARPANET could have envisioned).

What happened next was a sort of "big bang." In 1983, 562 computers were on the Internet. By 1989, that number had jumped to 80,000. With capacity again strained, another wide area network was built in 1992; it forms the backbone of the current Internet. Today, there are more than 30 million users and 2 million computers on the Internet.

So, cyberspace friends, not only are you in good company (you're bound to find someone on the Internet with interests similar to yours), but you have a vast array of worlds to explore. Where else could you buy Erik Estrada keepsakes *and* check up on the Asian stock market? So, log on, plug in. What have you got to lose?

— Clyde Ellis



The Cold War escalates.

1982

Researchers put a prototype Internet into place, using it to evaluate new communication software and applications.

1969

National defense moguls sponsor research on computer networking that includes a network called the ARPANET.







The U.S. military chooses the Internet as its primary computer communication system; all military sites are connected to it. 1,024 computers on the Internet.

28,174 computers

Internet.

on the

The National Science Foundation establishes NSFNET to link its five supercomputers.

1988

The NSF helps fund the building of a new high-speed wide area network. This new Internet is opened up to educational facilities, academic researchers, government employees, and international research organizations.

BIG BANG!

290,000 computers on the Internet.

A new wide area network is built to meet capacity needs; it forms the backbone of the current Internet.

2,217,000 computers on the Internet. part 2

The Art of Getting Ready Tuning Up Your Computer for Life on the Web

Most PCs on sale today can handle anything the World Wide Web throws their way — with a little help. Here's a rundown of what you'll need for optimal access.

Before the dawn of the World Wide Web and the graphical capabilities of Web browsers, almost any personal computer setup was adequate for accessing the Internet.

Sure, maybe you needed an SVGA card to view an image you'd downloaded, but at least you weren't waiting for several images on a single Web page to be drawn.

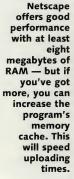
Like it or not, the Web has changed the way people use the Internet — as well as the tools required to get the most out of time online. Here's a brief rundown on what you need to maximize your PC's cruising speed.

CPU: 486/50 megahertz (MHz) or faster. Most Internet applications run under Windows, so peppy Windows performance is a must.

RAM: Eight megabytes (MB) should be adequate, but Netscape's memory cache will use more if you can allocate it, which will speed up reload times for previously accessed pages.

Modem: 14.4 modems, which transfer 14,400 bits per second, are pretty much the baseline standard. They were considered the hottest chariots just a year or so ago.

However, if your provider offers (or plans to offer) 28.8 (28,000 bps) or faster access, the extra money you spend for this kind of modem will pay



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off. You'll get significantly faster Internet cruising and speedier downloading of graphics.

Video Card: Data transmission rate levels the playing field — because data come in only so fast, nearly any card is adequate. If your card handles graphic images well, it'll be fine for most of the stuff you download.

However, a Windows-accelerated video card will speed up everything you do if you're in Windows.

Hard Drive: Since you'll be downloading all sorts of goodies, you'll probably want at least a 500 MB hard drive.

If you don't have that much space, you can either use disk compression software or buy a new hard drive. Although the latter suggestion may sound expensive, hard-drive memory upgrades are actually quite affordable, around 50 cents a megabyte.

Sound Card: Any 16- or 32-bit sound card with Windows drivers should be just fine. Buy one based on how it sounds to you and how well it fits your budget.

Monitor: A 15-inch monitor is certainly sufficient, but if you plan on running at 800 by 600 or higher, you'll save yourself a lot of eye strain with a 17-inch monitor.

Don't even think about anything smaller you'd be amazed at how tiny a 14-inch monitor seems when you're looking at graphics.

Speakers: You can spend anywhere from \$25 to more than \$300 on speakers for your PC. As with the sound card, your choice depends on budget and the level of sound quality you want. You could run your PC straight into a stereo, if one happens to be nearby.

Software and Utilities: Make sure you have the latest drivers for your video and audio cards. For playback of video clips, you'll want Video for Windows, Quicktime for Windows, and the Indeo



World Wide Web Known as the Internet's "killer application, the Web was developed in 1990 at Switzerland's European Laboratory for Particle Physics. It provides a graphical, magazine-style interface to the Internet using hypertext-linked documents. The click of a mouse allows users to easily move from one piece of information (text. graphics, audio) to another. You'll learn more about the Web on pages 8-10 and 54-55.

Words to Live by?

Internet jargon

TCP/IP

Transmission Control Protocol and Internet Protocol, the software that implements the protocols specifying how computers communicate on the Internet.

SLIP

Serial Line IP. A protocol that allows a computer to use TCP/IP over a telephone line or other serial communication medium.

PPP

Point-to-Point Protocol. This protocol sends TCP/IP traffic across a serial transmission line attached directly to the Internet. It's like SLIP, but better.

FTP

File Transfer Protocol, an Internet service that transfers a copy of a file from one computer to another. Often used to download software (see pages 44-45).

IRC

Internet Relay Chat, an Internet service that lets users join rooms or "channels" to communicate via keyboard. Members each receive a copy of a message sent to the channel they are visiting (see pages 48-49).

Gopher

An Internet browsing service in which information is organized by menus. Users of Gopher receive a menu and select an item or another menu for retrieval (see pages 46-47).

WAIS

Wide Area Information Server, an automated Internet search service that allows users to locate documents containing key words or phrases.

Source: Douglas E. Comer, The Internet Book (Prentice-Hall, Inc. 1995)



Most sound cards come with .WAV editors of varying capabilities, but MPEG audio is now replacing the .WAV format as the standard for audio files.

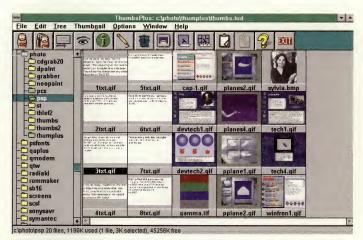
Video drive. Audio files are most commonly saved in .WAV or MPEG format.

Listening to .WAV files is no problem — just use the Media Player or Sound Record programs that are included with Windows (some type of .WAV playback device probably was included with your sound card as well). For MPEG Audio, we recommend the Xing MPEG Audio player.

Graphic images are among the most commonly downloaded file types on the Internet. Most are posted as either GIFs or JPEGs. There are many viewers capable of handling both formats, but three of our favorites are Paint Shop Pro, LView, and ThumbsPlus. Each has its own advantages.

For instance, Paint Shop Pro handles the greatest number of file formats; LView offers some fairly advanced options for altering images; and ThumbsPlus has — you guessed it — thumbnails of every image in a directory. Since many file names for images can be rather cryptic (M8225X.JPG, for example), ThumbsPlus can be invaluable in pulling up the right image every time.

— Steve Poole



ThumbsPlus is an image viewer with a great feature — it displays thumbnails of all the images in a directory.

Set Me Up! How to Choose an Internet Provider

part 3

The most basic step to going online, other than getting a computer and a modem, involves selecting a service provider — a company that will supply you with the connection you need. Here are a few things to consider before taking the plunge.

he fact that you're reading this magazine instead of *Elegant Bride* or *Hot Rod* suggests that you either have an Internet account or are thinking about opening one. If you're already hooked up, you may be wondering if you could get a better deal; if not, choosing from among the dozens of local and national Internet service providers can be a daunting task.

Connect:

Basically, you have four types of Internet service providers to choose from: 1. Dedicated: This is the most expensive type, typically used by universities. It allows a direct connection to the Internet with no limit on how many companies can work off of the connection. 2. Dial-In (SLIP/PPP) You dial in to a company that has a direct connection. See page 23 for a definition of SLIP and PPP, the protocols for connecting. 3. Dial-Un (Terminal): You're connected to another company's system that is connected to the Internet: this is how commercial online services such as CompuServe work.

4. Mail Only:

You can often access e-mail through bulletin board systems, but you won't be able to gain entry to other aspects of the Internet. Either way, by answering the following questions, you should be able to narrow your list of possible providers.

• What's the total cost?

The true cost of Internet service is made up of several elements: a monthly charge, which may include a fixed or unlimited number of hours online; an hourly fixed charge for additional time; and a charge for the connection itself, which may require long-distance telephone calls or access through a data network such as Sprintnet. A "free" Internet account in another city might actually cost more than a local one for \$20 or \$30 per month.

• Can you connect easily?

The lowest cost is not always the best choice. If you spend more time listening to busy signals than you do online, it's time to cancel your account. (Hint: Use a redial-on-busy script; you'll be amazed at how often you can connect within two minutes or less.) System downtime also holds up connections. It's true that modems, servers, and routers sometimes fail, but if you suffer frequent and prolonged stretches of time when the system does not answer, you need a different service provider.

• Is support available? Is it useful?

Sooner or later, you'll need some kind of handholding. You might want to configure a new modem, or a program that has worked flawlessly for months might mysteriously die. What happens when you call for help? Calls to tech support tend to come in bunches, especially when some part of the service provider's setup crashes. If you can't get an immediate answer, does someone return your call within a couple hours? A local access number does not guarantee that the support center is nearby. Can you reach it with a free call, or will you pay by the minute while you're waiting on long-distance hold?

One good measure of tech support is a service provider's ability to give you a custom log-in script. It's a good sign if the provider knows enough to get you up and running quickly and easily. Also, ask if the support staff knows about the software you plan to use.

· What kind of extra services do you get?

Many service providers offer a plain vanilla connection and nothing more, but if you look around, you might find some added hot fudge and whipped cream. For example, some accounts include space on a Web server or an FTP server. Other providers might offer their own conferences or newsgroups, or a toll-free telephone number for access from out of town. Especially in competitive markets, such as Seattle and Boston, it's worth asking about extras. And don't ignore the commercial online services. Some hard-core Internet heads may sneer at @aol.com or @prodigy.com e-mail addresses, but these services are relatively easy to use, and their prices can be competitive with those of other Internet service providers.

Finally, take advantage of the free connect time that many Internet service providers offer to new users. If you get constant busy signals or unhelpful tech support while you're on their dime, thank them politely and move to the next provider on your list.

— John Ross



Hot Fudge and Whipped Cream Two sinfully fattening toppings to vanilla ice cream. These decadent extras can turn the act of eating ice cream into a blissful experience. Likewise, choosing an Internet access provider with a few extra "toppings" can transform cyber travel into a truly unprecedented affair - and you won't gain weight.

024

Start Me Up! Packages that Promise the World

nart 4

While starter packages can be good deals, making a smart purchase is tricky. A word to the wise: Don't let disks alone be your guide. Here's why.

f you've been to a bookstore lately, you've probably seen the racks brimming with Internet books. Most come with one or two disks of Internet software, and some include sign-up offers from Internet service providers. Others dispense with the book altogether: "All you need to surf the Net!" scream the covers of floppy disks sitting next to the cash register. "Be on the Internet in minutes! Hundreds of dollars in free software included!"

One of the great things about books is that you can flip through the pages to see what you're getting. But when software and Internet services are included, you'll find that making a wise purchase is a bit trickier. Some packages are good deals, but often useful books are bundled with software that misses the mark, and few packages, if any, are worth buying just to get the disks.

Living Up to Expectations?

Sometimes the software isn't quite what you'd expect. A few Internet books come with sign-up kits for WinNet or Delphi, for example. WinNet provides offline e-mail and Usenet news feeds, while Delphi is a conventional online system with some Internet access. These aren't bad services they're just not what most of us have in mind when we think about connecting to the Internet.

Caveat emptor: Netcruiser's box says, "Free Internet Service Offer," but that free month costs \$25.

Other packages offer more complete access but are tied to a single Internet service provider.

Billing	Information
About Your Accou	unt
NETCON welcomes you to Net(Your first monthly fee, a v waived after your one time, registration fee is paid. Your current charge will be After your free month, youn \$19.95 billed on the first	value of \$19.95, will be , non-refundable, \$25.00 e \$25.00 c monthly fee will be
Please Enter Your Credit Card In Credit Card	nformation Card Number Example: 1234-567/8-90/12/3456 Expiration Date Example: mm/yy

Netcom's Netcruiser and **PSINET Pipeline's** Internaut, for example, require you to sign up with their default providers. The software is fine, but the providers' range is limited. Netcom has a presence in a couple dozen

large cities, while other small providers are local only to their particular areas. If you don't live in those places, you'll have to make a long-distance call or use a packet network such as Sprintnet. Either option adds to your hourly Internet cost.

For total Internet access that isn't tied to a single service provider, Trumpet WinSock and the Chameleon Sampler are the low-end standards for Windows users. They're widely available online and are also included in many book/disk combinations. Trumpet WinSock is shareware, unpolished in appearance but quite powerful. The Chameleon Sampler is a freeware demo of Netmanage Inc.'s Internet Chameleon, but it's usable in its own right. Both programs handle SLIP and PPP connections to the service of your choice.

Another set of WinSock-based Internet tools is available with Angela Gunn's *Plug 'n Play Mosaic* (see review, page 73), which comes with a software bundle that includes Distinct TCP/IP and Enhanced NCSA Mosaic. On the other hand, Mortice Kern Systems' *Internet Anywhere* book contains little more than instructions for the software, which is a very limited trial version of the company's commercial product.

Finding Bargains with Small Providers

What you pay for Internet service and what you get for your money both depend on the provider you choose. Some book/disk kits try to make that choice for you, with software that's tied to one provider or that automatically calls up a cooperating service. But in many parts of the country, the best Internet deals often come from smaller providers. A local company may be the only provider with its own modems in your local dialing area, particularly if you live outside a big city. That can make a big difference in your monthly bill, but a small provider isn't likely to offer its services in books that are sold all over the country. If an Internet book looks like something you want to read, buy it, and maybe you'll get some useful software as a bonus. But unless you already know that the software and services are your best bet, don't let the included disks guide your decision about services.



Pipeline Direct access

Internet service provider that was founded by James Gleick, author of *Chaos: Making a New Science*. It has been acquired by Performance Systems International (PSINet).

— Tim Victor

part 5

About That Technical Stuff... A Brief Guige to Operating Systems

Internet explorers are notoriously picky about which operating system they use for voyaging. Fury can erupt when one user espouses Mac and another Windows — and those aren't even the only two operating systems around.

Because we at **The Net** aren't taking sides, we asked five expert users to focus on their operating system of choice, appraising the Internet-ready features bundled with it and identifying missing links. They also recommend tools that will compensate for deficiencies, so users can cruise the information superhighway more easily.

When it comes to Internet connectivity, some operating systems simply inspire more passion than others — as you'll see.

Windows 3.1

Fresh out of the box, Windows 3.1 doesn't allow easy Internet connectivity. Still, the large number of add-on software packages available for Windows has made it one of the most popular operating systems for accessing cyberspace.



Windows 3.1 Made by the ubiquitous Microsoft. Windows 3.1 is (soon?) to be updated by Windows 95 which will let you run DOS games that didn't work with version 3.1. For more information on Windows 95, see page 28.

When first installed, Windows 3.1 doesn't impress with its Internet-ability. Its meager communications applet, called Terminal, can dial your modem to access a bulletin-board system or the text-based menus of services such as CompuServe or GEnie, but it can't get you on the Internet.

To do this, you'll need shell software provided by your Internet service, or a TCP/IP connection with SLIP/PPP dial-up and WinSock-compliant clients, such as Netscape for World Wide Web access.

Windows for Workgroups does include TCP/IP networking, but no SLIP or PPP. That means you

can get online only if your local area network is itself tied into the Internet via a gateway of some kind.

Do-It-Yourself Shareware

Nevertheless, you have plenty of choices for TCP/IP and WinSock compatibility with Windows 3.1. You get a TCP/IP suite, SLIP and PPP dial-up, and a few utilities with shareware Trumpet WinSock.

Just plug the technical details of your Internet account — such as the IP addresses for your Domain Name System (DNS) server, gateway, and so forth — and your username and domain, into the Trumpet configuration program. Then, dial your provider to get an actual connection to the Internet.

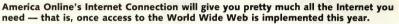
The advantage of a live connection like PPP is that you are an actual participant on a network attached directly to the Internet.

With PPP, you can "roll your own" Internet access, choosing from shareware, freeware, and commercial tools such as Eudora for e-mail, WS_FTP for file transfer, and Netscape for With PPP, you can "roll your own" Internet access.



Netscape Navigator 1.0 is the hottest thing going on the Internet. It's optimized for modem access, and it displays documents and images as they're loading.





the Web, as well as a bevy of little tools for Telnet, IRC, newsreaders, and more.

Commercial Shareware and Shell Accounts

If you're not satisfied with do-it-yourself shareware, you can choose among a number of commercial packages, such as Spry's Internet In a Box, which features Chameleon TCP/IP from Netmanage and Spry's own commercial tools for FTP, Telnet, as well as an enhanced Web Viewer (Air Mosaic). Other tools include Frontier's SuperHighway Access and book/shareware combinations like Internet Membership Kit from Ventana Media.

Instead of going the TCP/IP and PPP route, you can subscribe to a shell account from an Internet provider. In the past, a shell account gave you a text-based menu system, but recently, providers such as Pipeline have enhanced their tools with easy-to-use Windows graphical user interfaces, including their own brands of Web browsers. Shell accounts are less expensive, but they narrow your options to the software provided with the account.



A developer of

popular Internet in

a Box (see review, page 72) for

World Wide Web. Based in Seattle,

acquired in March

by CompuServe

for about \$100

and cash. At the

CompuServe said

Spry would help

significant Internet

million in stock

time of the

acquisition.

make it a

player.

user-friendly

entering and

browsing the

WA, it was

software, including its

Sprv

Commercial Online Services

You can also turn to commercial online service providers such as CompuServe, GEnie, Prodigy, and America Online for Internet access. At the time of this writing, only Prodigy featured the Web viewing, but you usually get FTP, newsgroups, Internet mail, Gopher/WAIS — pretty much all the Internet you need from all of them.

Getting on the Internet this way can be more costly, however, since you're paying the usual online charges, and you're limited by the dial-up speed of the service, often just 9,600 baud in many areas. However, both CompuServe and America Online are working to launch high-speed, 28,800 bits per second networks in the coming year. — Charles Brannon Internet Resources

What resources are available to connect Windows users to the Internet? Here's a quick overview:

Shareware Packages: NetCruiser Netcom 301 Tisch Way, Second Floor San Jose, CA 95128 info@netcom.com

(800) 501-8649 \$25 (includes one month of free access)

SuperHighway Access

Frontier Technologies Corp. 10201 North Port Washington Road, 13 West Mequon, WI 53092 superhighway@frontiertech.com (800) 929-3054 \$149

Internet in a Box (See review, page 72) Spry, Inc. 316 Occidental Ave. South Seattle, WA 98104 iboxinfo26@spry.com (800) 557-9614 \$149

Internaut

PSINet Pipeline 150 Broadway, Suite 610 New York, NY 10038 info@pipeline.com (212) 267-3636 Access software free, \$15-\$30 per month online charge

Internet Chameleon NetManage 10725 N. DeAnza Blvd. Cupertino, CA 95014 info@netmanage.com (408) 973-7171 \$199

Shareware Based on Book/Disk Packages: Internet Membership Kit Version 2.0

(ISBN 1-56604-212-7) Ventana Media P.O. Box 2468 Chapel Hill, NC 27515 orders@vmedia.com (800) 743-5369 \$69.95

Access the Internet (ISBN 0-7821-1529-2) Sybex 2021 Challenger Drive Alameda, CA 94501 (800) 227-2346 \$15.99

Internet Starter Kit (ISBN 1-56830-094-8) Hayden Books (McMillan Publishing) 201 W. 103 Street Indianapolis, IN 46290 http://www.mcp.com (800) 428-5331 \$29,95

027

Windows 95 Internet Support

Windows 95 promises users a live connection to the Internet, as well as the ability to view Web pages directly with Microsoft Word. Even more exciting, you'll be able to create hypertext documents ready for Web consumption.

Microsoft's next-generation operating system for Intel-compatible PCs, Windows 95, will include numerous core technology improvements. Among them is a built-in, 32-bit protected mode TCP/IP stack that's WinSock-compatible, meaning you can run off-the-shelf or shareware applications like Mosaic, WS_FTP, Eudora for e-mail, and any

Gopher or Telnet client. While Windows for

Workgroups has network TCP/IP, Windows 95 adds support for dial-up networking via your modem and the PPP.

To get online with Windows 95, you must first configure your machine to use dial-up networking and TCP/IP by running Network Setup from the Control Panel.

You then open Dial-Up Networking and create a new dial-up connection, or start a session with one you've already set up. Besides

P Properties	the second s
Gateway WINS C Bindings Advan	configuration IP Address ced DNS Configuration
C Disable DNS	
C Enable DNS	
Host charlesb	Domain. Mmedia.com
DNS Server Search Order	
	Add
199 72 13.1	
199.72.1.1	
Domein Suttix Search Order	
Comon Sance Search Order	
1 Com	
edu gov	2
net	

To connect, you need to know the provider's phone number, your login name and password, and the type of server (PPP or SLIP).



To create a connection, you just need to know the telephone number of the provider, your log-in name and password, and the type of server you're calling (PPP or SLIP).

accessing the Internet, Dial-Up Networking can link you to a Windows NT or

Netware server. It's also possible to configure Dial-Up Networking to turn your computer

> into a dial-up server, enabling other callers (or you from another location) to dial in and access shared drives, printers, and network resources using your local PC as the gateway.

To get the best results, make sure your Internet provider supports CHAP or PAP authentication, which lets Windows 95 log you in automatically. Since scripting is not supported, you can briefly enter terminal mode after dialing if you need to manually log in.

Once you've dialed in,

you have a live connection to the Internet, and you can open up a Netscape session to browse the World Wide Web. The new Microsoft Exchange mail client directly supports Internet mail using POP3 and MIME. Windows 95 also includes a graphical Telnet application, and DOS command line tools for ARP, FTP, PING, route, and tracert.

Microsoft recently acquired a license to Mosaic and, with access to the source code, is sprucing it up and customizing it extensively.

The program is scheduled to be available soon after Windows 95 ships. With Microsoft's Internet Assistant, you can view Web pages directly in Microsoft Word, and what's more, you can create HTML documents ready for Web consumption. — Charles Brannon

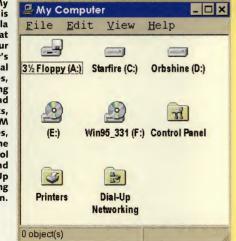


MIME

Multipurpose

Internet Mail Extensions, They allow an Internet e-mail message to contain nontextual files, such as video images or sounds. To transfer such files, both the sender and the receiver need e-mail software that understands MIME. HTML: Hypertext Markup Language. It is used to specify the contents and format of a hypermedia document on the Web. Hypermedia is an information storage system that lets each page of information contain embedded references to images, sounds, and other pages of information. Users select an item and the hypermedia system follows the associated reference. See page 73 for a review of Kris Nosack's HTML Writer.

"My Computer" is an umbrella folder that contains your computer's local resources, including floppy and hard disks. CD-ROM drives, printers, the Control Panel, and the Dial-Up Networking icon.



028

Macintosh

Although Macs lack even a basic terminal program, there are plenty of software systems available that will enable Mac users to do serious Internet surfing.

Macintosh users are pretty much on their own when it comes to Internet access. The Macintosh operating system doesn't include even a basic terminal program, and most Macs don't ship with a modem. So it's up to you to find the Maccompatible Internet stuff you need.

The key is getting a fast modem. Once you have that, you can check into Apple's eWorld service. Apple gives the kits away with most new Macs. eWorld is still finding its legs, however. America Online is still a sturdier commercial service for Mac owners, and it should be offering a full Internet browser soon.

For serious Net surfing, get copies of:

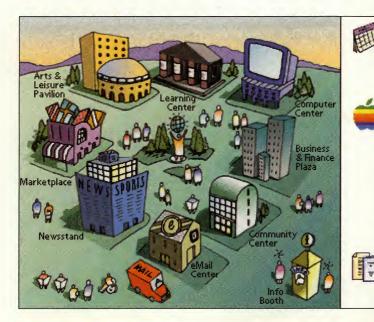
- ZTerm, a no-frills telecom program
- MacTCP, for TCP/IP compatibility
- InterSLIP, for SLIP connectivity
- Fetch, a Mac FTP program
- TurboGopher, for finding files
- Eudora, a powerful e-mail program
- Mosaic or another Web browser
- StuffIt Expander, to unpack them all

You can download these programs from AOL or eWorld, or get them in a book/disk package, such as Ventana's *Internet Membership Kit*, or Celestin's *Destination: Internet CD-ROM* (see page 74).

Then, all you'll need to do is sign on with an Internet service provider and catch the wave.

- Steven Anzovin

Commercially



DON'T BE SHY. GIVE IT A TRY! Live events can be both fun & educational. Check the eWorld Events Calendar for the latest topics & times.

IS YOUR SW UP TO DATE? See Apple SW Updates: New Files: What's new... for the latest FREE (except for transfer time) updated Apple SW.

HOW'S THE SNOW THERE? Planning a ski trip to Aspen, Banff, Zermatt or just about anywhere? Check The Ski Report for latest conditions.

I WANNA SHAKE YOUR HAND. Having a bit o' trouble connecting at 14.4K? See helpful hint in the 2/3 eWorld Weekly News under <Shaking Hands>.

available since the summer of 1994, Apple's eWorld is intended to be a virtual neighborhood for users to visit. Apple is positioning eWorld as being more interactive. making better use of graphics, and being easier to navigate around than other commercial services.

It's a Small eWorld, After All

"With online services, new virtual neighborhoods of like-minded people spring up daily, hourly...People not only find likeminded people that because of geographic distance they couldn't find before, but... families and friends...once separated by distance re-establish their intimacy because of the ease and accessibility of online services. I believe this idea — that natural relationships can be re-established because of online services — acts as a metaphor for what online services can do to the vendor/customer relationship: bringing it back to a level of openness and intimacy that's more intuitive and natural and appropriate. Just as the eWorld town square tells our users that they're not just accessing information, but coming to a neighborhood, so, too, can online services take the customer/vendor relationship out of data analysis and spreadsheets and back to conversation and discussion."

— Peter Friedman, vice president, eWorld



OS/2 Warp lives up to its hype: It will enable you to surf the Internet with ease and provides a fullfeatured Web browser that works well the first time.

Good news for the nun in the IBM commercial who says she's "dying to surf the Net": OS/2 Warp will let her do all the surfing she desires. As an OS/2 user, she owes it to herself, and so do you, to upgrade to Warp. If you're a Microsoft Windows or even an MS-DOS user, you might also consider it because it's a quick and easy way to get started on the Internet. Warp is a complete operating system, demanding about eight megabytes (MB) of RAM and 80 MB of hard disk space, but it gives you full

Internet access right out of the box.

Easy-to-Use Screens

Warp's Web browser, a necessity in an Internet package, doesn't disappoint.

Once you've installed Warp, load the Internet software from the Bonus Pack. On your desktop will appear an icon labeled IBM Internet Connection for OS/2. Double-click here, go into the IBM Internet Customer Service folder, and double-click on Registration. You'll be taken through a series of easyto-use screens that ask for your name, address, phone number, credit card information, modem

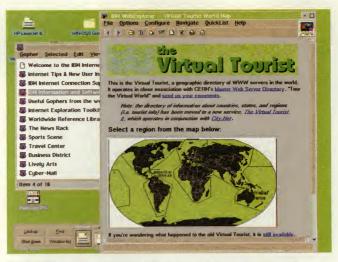
type, serial port number, and so on. You'll also be asked for three preferred usernames. Then, the program will dial a toll-free number and instantly register you with the IBM Network.

IBMNet offers access in many countries, and the local phone number list is growing rapidly. When you sign up, you receive three free

hours of access, then you're switched automatically



IBMNet's registration system's visual icons get you connected.



With IBMNet's user-friendly, full-featured WebExplorer, you'll quickly find yourself becoming a "virtual tourist" of the World Wide Web, with easy access to all its wonders and mysteries.

to the standard subscription fee of \$12.95 per month for six hours of access. A comprehensive plan gives you a reasonable 30 hours of access for \$29.95 monthly.

Or, you can dial in through a toll-free number, but this adds \$6.00 per hour to the price. IBMNet offers special deals in a number of different countries, so be sure to check your options. Also, note that you can configure Warp to dial into your existing Internet account, although this takes some work.

A Robust Browser, but Little Software

So, what does IBMNet provide? There's a solid little e-mail program called Ultimedia Mail Lite, and you get a very browsable Gopher program. NewsReader/2 gives you access to nearly 8,000 Usenet groups (happily, IBM doesn't seem to believe in censorship), while two Telnet programs offer you VT100 or the less-used 3270 access to other machines. You get point-and-click access to files around the world from the attractive and functional FTP program.

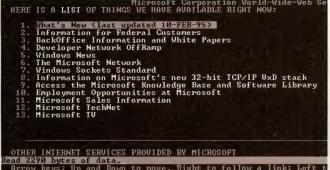
Warp's Web browser — WebExplorer doesn't disappoint, either. This full-featured browser works well the first time. To get it, access the Retrieve Software Updates program from the IBM Internet Connection folder. Warp both downloads and installs the browser, with an ease rarely seen in Internet programs anywhere. The downside? Just one — there simply isn't a lot of OS/2 software available for the Internet and not much is on the horizon. No NCSA Mosaic, no Netscape, few e-mail choices. Yes, you can run Windows from OS/2, but it'll run more slowly and sometimes takes ages to load.

Then again, this could inspire you to write OS/2 programs, which you could distribute across the Internet to the growing number of OS/2 and IBMNet users. If they're good, you'll be an instant hero.

- Neil Randall



OS/2 Warp OS/2 Warp is a family of products made by IBM. It includes OS/2 Warp Connect, which has enhanced TCP/IP support to provide dial-up or LAN connections to the Internet and other online services.



Arrow keys: Up and Down to move. Right to follow a link; Left H>elp O.pptions P)rint G>o M}ain screen QUit /=search [delete]= Alt-Z for Help | UI102 | \$7600-N81 FDX | |

Though lacking pretty graphics, users of DOS can still get updated on new items available from Microsoft's Web site with Lynx using Telix.

DOS

DOS access to the Internet is, not surprisingly, similar to the operating system itself: You can perform only one task a time, and there are no graphics. Still, even DOS users can access e-mail, Gopher, FTP, the World Wide Web, and more.

If you're a DOS user, there's no need to feel shut out of the Internet, despite all the recent focus on

While your screen won't look very pretty, your can still get to the Web from DOS, and access will generally be faster. graphical interfaces and SLIP/PPP connections. After all, for years almost all access to the Internet was with character-based terminals.

DOS users can usually begin with the terminal software included with modems or Internet sign-up kits. You might want to download a shareware program (like Telix, for example) that supports various terminal emulations (especially DEC VT models), and transfer protocols (such as Kermit, Xmodem, Ymodem, or Zmodem).

Even the World Wide Web is available to many DOS users through a character-based Web browser called Lynx. Your screen won't look nearly as pretty as it would if you could use Mosaic, but access will generally be faster because you aren't downloading

pictures for the graphical interface. You can read the text and grab picture files using Lynx, viewing them later offline.

DOS access to the Internet is a reflection of the operating system itself: You can do one task at a time with screens of text rather than graphics. But for those with limited needs and budgets, it's a great way to get started on the Internet.

– J. Blake Lambert

UNIX

UNIX workstations, although considered complex and unwieldy, remain popular among engineers, scientists, and high-end multimedia producers for Internet access.

There's no denying the importance of the UNIX operating system to the Internet. Though critics say

it's too complex and unwieldy for the latest wave of non-technical users, UNIX workstations run most of the server machines that parcel out World Wide Web pages and provide SLIP and PPP connections to the Internet. They also remain popular among engineers, scientists, and high-end multimedia producers, who want Internet access.

With Internet support woven so tightly into most versions of UNIX, there aren't many issues to address when it comes to getting hooked up. The Internet looks about the same from a UNIX box as it does from a Mac or a Windows PC, thanks to X Window, a front-end system that

hides UNIX's cryptic command line and inscrutable configuration files. While *The Net* won't be devoting much space to UNIX, we wanted to reference it in this guide. Thankfully, the Internet can be accessed by anyone, no matter which operating system is used.

— Tim Victor

The UNIX Connection

UNIX was built in the early 1970s by a group of computer scientists at Bell Telephone Laboratories. Copies were distributed to universities for use in research and teaching.

A group of faculty and students at the University of California at Berkeley conducted the most innovative research on UNIX, writing application programs and modifying the system. Seeking to receive input from other researchers on their work, they began distributing these programs electronically.

Then, under a contract from the U.S. Department of Defense, the UC-Berkeley group modified TCP/IP, the Internet's communication software protocols. It distributed the modified protocols to a large proportion of the research community. This was the first time many computer science departments had seen the TCP/IP software, and the exposure further spurred the development of the Internet.

UNIX workstations run most of the server machines that provide SLIP and PPP connections to cyberspace.



Cruising the global Infobahn is even cooler when you know the shortcuts.

There you are, cruising along at 14.4 on your 90 megahertz machine. You're happily enjoying the view. Then suddenly you're lost, wandering aimlessly. Somewhere you made a wrong turn. Sound familiar? Then you need CompuServe.

With CompuServe, you can use our simple software to access Internet Made Easy[™]—a new feature that includes helpful forums to teach you the rules of the road. Plus USENET, Telnet, FTP, and e-mail. And with CompuServe's dial-up capabilities, you can ride the Web using your favorite browser.

If you're looking for speed, only CompuServe gives you access to the entire Internet at up to 14,400 baud from most major cities in the world. (Ha! Try *that* with your local service.)

The best part is that you pay only \$9.95 a month to be a member. So you not only get



unlimited access to more than 120 of our basic services, but also to nearly 3,000 other online areas and the Internet. (There's an hourly fee

for cruising the 'Net or using our extended services. We'll give you five free hours to point you in the right direction.)

Call us today for your free Membership Kit or, if you can, cruise to www.compuserve.com to join us right now.

Call 1-800-487-9197 for a Free Membership Kit

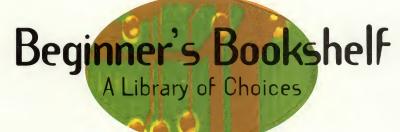
Join CompuServe now and you'll receive:

- A free Membership Kit. CompuServe Information Manager software for DOS, Macintosh, Windows, or OS/2.
- 2.) One free month of more than 120 popular services, a \$9.95 value.
- 3.) A \$25.00 usage credit to explore other extended services.



The information service you won't outgrow.™

part 6



Publishers apparently have never met an Internet book they didn't like. Here, we provide a brief synopsis of some of the most popular books out there.

Curious About the Internet

Ned Snell (SAMS, \$14.95) Some people dive right into the deep end of the pool, others test the water with their toes. If you're the cautious type, Ned Snell's *Curious About the Internet* is a good primer. Clearly written, it covers most of the basics for the beginner and lives up to its subtitle, A Plain-English Guide for Ordinary People. For those whose appetites he whets, Snell offers plenty of good leads to follow. Bear in mind, though, that this is for the

non-Internet-initiated. If you're up and running, you'll need a more detailed guide.

How the Internet Works Joshua Eddings (Ziff-Davis, \$24.95)

How to Use the Internet

Mark Butler (Ziff-Davis, \$17.95) These two complementary titles are in the Ziff-Davis line of graphical introductions to computing topics. The first, by Joshua Eddings, admirably elucidates the complex technology underpinning the vast worldwide electronic communications system. Eddings explains everything from why e-mail lands at the right address to how talk radio works over a computer.

The second book covers much the same ground, but from the individual user's perspective. Either of these volumes will get you up to speed quickly and give you an at-a-glance understanding of the major Internet topics and techniques.

The Internet for Dummies

John R. Levine and Carol Baroudi (IDG Books, \$19.95)

This best-selling starter series (available for both PC and Mac users) indeed answers the kinds of questions you might feel like a dummy for asking. Broken into easily digested sections, the books contain tips, tech stuff, and navigation pointers to lead you by the hand into the Internet maze. Beware of picking up the earliest editions change has been so rapid in the last 20 months that key subjects of today, like Web browsers, weren't even around for inclusion when the series was launched.

The Complete Idiot's Guide to the Internet

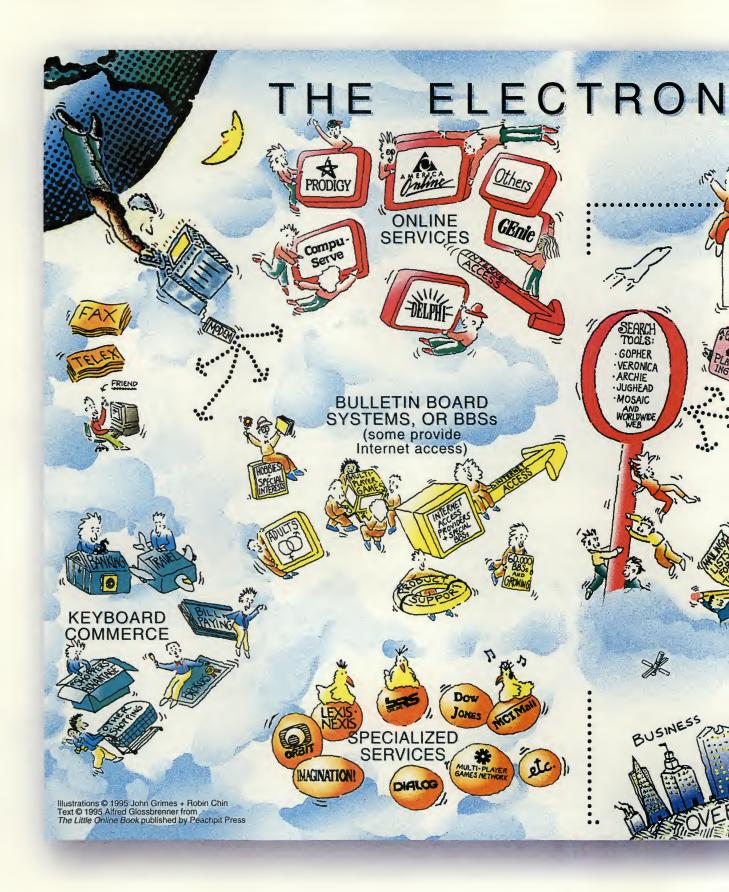
Peter Kent (Alpha Books, \$19.95) While it covers much the same ground as the Dummies books, this series seems slightly better organized. It also contains such extras as a tear-out cheat sheet of commonly used commands and a useful, bound-in disk full of Internet

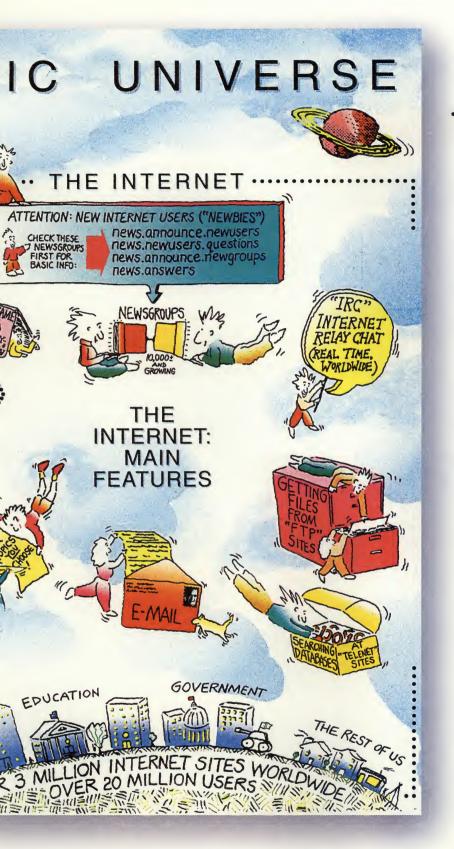
disk full of Internet information. There are dozens of sidebars that teach you to speak like a geek and act like a techno nerd, and each section has a handy "the least you need to know" summary. A bonus: It includes a few necessary words about virus protection, which were lacking in the *Dummies*' guide.

Point and Click Internet

Seth Godin (Peachpit Press, \$12.95) Available in both PC and Mac editions, this is little more than a 100-page manual accompanying a disk with an America Online sign-up offer of 10 free hours. Yes, you can get online in less than an hour, as the cover promises, but that's really due to AOL's software package. The book itself won't make you an Internet whiz within 60 minutes. In fact, you hardly need to read this manual, since AOL's point-and-click interface is so simple to explore.

— David Wade





The Little Online Book Alfred Glossbrenner Illustrations by John Grimes (Peachpit Press, \$17.95)

his modestly titled handbook is a very civilized introduction to the delights of the online wonderland. Alfred Glossbrenner, a long-time evangelist of and expert on PC communications, takes the reader by the hand from square one, and I mean, right from the beginning — the Internet doesn't even get mentioned until Chapter 24.

He anticipates and patiently addresses all the questions a beginner might be embarrassed to ask, while enticing the reader with discussions of the digital riches awaiting cyberspace explorers.

No one starting out on the road of computer communications can go wrong with Glossbrenner as a guide. The illustrations and cartoons by John Grimes are a real bonus, helping to keep a light tone throughout. **Highly recommended.**

- David Wade

part 7

The Importance of Cybermanners The Do's and Don'ts of Life on the Information Highway

> All those kindergarten rules about playing nicely with others still apply. Here's a primer to help you avoid committing Internet faux pas.



Netiquette Etiquette for the Internet, which translates into the proverbial wiping your feet, sweeping away your cookie crumbs, and otherwise making your presence on the Internet as benign and pleasant for others as possible.

Do's of Netiquette

1. Keep your eyes and ears open as you approach email contact with someone new. 2. Promptly respond to messages. 3. Identify yourself and your affiliations. 4. Post brief messages. 5. Be sure to identify any strongly worded statements as being your opinion only. 6. Throw in some friendly words. 7. Don't assume your sense of humor, sarcasm. and satire will be appreciated by others 8. Let the sun set on a message that "gets your goat." 9. Organize your thoughts before sending off an e-mail. - Dr. Donald

Rose, Minding Your Cybermanners on the Internet (Alpha Books) f you enjoy igniting the wrath of thousands and thousands of people and being the recipient of their hatred, try committing some serious breach of **netiquette**. This somewhat transitory concept is, basically, the unspoken rule that governs the anarchic nature of the Internet. Just as you wouldn't spit across the Sunday dinner table, or borrow a neighbor's car and run it through the mud and out of gas, there are several things you shouldn't do on the Internet, ever. Netiquette is essentially peer pressure — do something wrong and you may find real fire coming out of your computer.

Keep a Lid on It

The overriding rule is, quite simply, don't make an ass of yourself — or a pest. Don't monopolize conversations, don't post five messages when one would do, don't call someone a bloody idiot for expressing a viewpoint you don't quite agree with, don't download GIFs of your favorite rock star from remote computers during business hours. You get the picture.

The Internet is a great resource to enjoy, but it's also easy to abuse. Believe it or not, people on the Internet have important things they're trying to accomplish, and the minute someone stands between them and their getting those things done, they get pissed off. Bonehead maneuvers may piss them off even if they're not working.

Be Lively, but Restrained

The best way to avoid netiquette breaches is to keep one thing firmly in mind: The Internet thrives on cooperation. Yes, you can have lively discussions, even drag-'em-out flame sessions, and yes, you can at times post overly long files or use excessively cute e-mail signatures. But do these things constantly, or without reason, and you're abusing that spirit of cooperation. You're infringing on other users' time, energy, and bandwidth. On the Internet, that's simply unforgivable.

You may be wondering what bandwidth could possibly have to do with netiquette. Actually, a lot. Computer networks are based on the idea that many people use the network simultaneously. But even the most advanced network has a limited capacity for carrying data, so it's important that users don't commandeer more than their fair share of its capacity. This capacity, called bandwidth, varies across the Internet. Send too much data repeatedly, and you slow things down for everyone else.

If lots of people do this, bad things start to happen. For instance, e-mail may not reach its destination for several hours. So, if you routinely answer every posting that meets your approval with, "I agree, Donna" or "Me, too!," or if your signature file contains a full ASCII graphic of the *Starship Enterprise*, then you're guilty of chewing up unnecessary bandwidth. This is destructive, and it's frowned upon. Make an effort to avoid doing this, and others on the Internet will appreciate you for it.

— Neil Randall

DON'T BE RUDE!

The Top

Paths to Net Boorishness

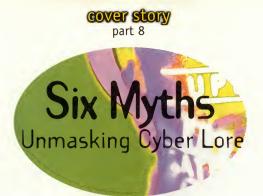
1. Engage in flame wars about whether a Mac is better than a PC.

2. Use an e-mail signature that is larger than most messages.

3. FTP large files from corporate or academic computers during their business hours.

4. Reply to newsgroup or mailing-list postings by including the entire original message or by sending personal messages to each member of the group.

5. Decorate your Web pages with huge, gratuitous graphics.



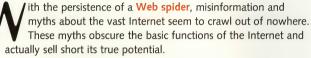
You've heard that the Internet is a division of the Illuminati? Or perhaps that it's a cyberpunk wasteland? The CIA is definitely involved — isn't it? Finding out what the Internet is only represents half the battle. You also need to know what it's not.

John December sets out to tear down some of the most extreme Internet myths.

UUCP

Internet

Commercial Services



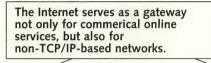
Is the Internet a dangerous, lawless place, or a new utopia, brimming with democracy and conviviality? Or is it something quite different? Cutting through the misinformation requires some knowledge. Here, then, are six of the biggest myths, and the realities behind them.



Web Spider A program that traverses the Web automatically, creating a database of Web links.

FidoNet

BITNET



Private Nets



MYTH 1 : The Internet is a single network controlled by one organization.

FACT: The Internet is actually a patchwork of commercial, educational, government, and public and private networks, all cooperating to achieve an open, interconnected communications system.

BOTTOM LINE: The term "Internet" refers to the electronic pathways used worldwide for online communication. Similar to the global telephone system, the Internet comprises many networks operated by different organizations.

These components include various global communications networks -Internet, **BITNET**, UUCP, FidoNet - as well as commercial online services and large commercial network ventures, such as NetworkMCI and IBM's Global Net. The makeup of these large-scale networks is even more complex. For example, there is an Internet portion of the Internet that's not just one network, but tens of thousands of networks run by independent organizations sharing rules for exchanging information. The operators of these networks interconnect them so that their users can communicate with each other.



BITNET A major wide area network that stands for Because It's Time network. Since it is not based on the TCP/IP protocols that the Internet uses, BITNET is not truly a part of the Internet. However, users can send and retrieve e-mail over the Internet.

Communication gateway <

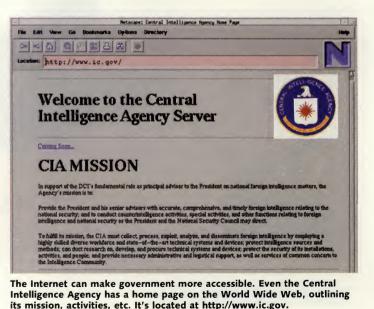


MYTH 3 : The Internet will usher in a new age of democracy, a socio-political nirvana.

FACT: People created the Internet, people run the Internet, people drive what happens on the Internet – and people are human. No inherent technological properties of the Internet will bring democracy or a new age of global community.

BOTTOM LINE: When the telegraph was invented, some thought the capacity for instant global communication would end war. The arrival of the telephone was greeted by many as the start of a new era of democracy, in which citizens could contact government representatives directly. Radio and television were expected to link the inner cities with the far-flung corners of the country, creating a common cultural identity and a rallying point for democracy.

While the Internet offers innovative ways for people to communicate, it isn't going to save the world any more than the telegraph, telephone, radio, and television did. Sending e-mail to president@whitehouse.gov won't get you the ear of the president any easier than if you called (202) 456-1414. The Internet can connect you to information from the White House (http://www. whitehouse.gov), as well as federal agencies (http://www.fedworld.gov/). This access to government information has exciting potential. But information, unless it is significant and serves the needs of its users, is just expensive PR. The passion and imagination of people are what drives technology to create meaning.



Provides information on a variety of Presidential itself. initiatives. To learn how to sign

VEDDORGA

VIESOPAM

MYTH 2 : The Internet is free.

FACT: Don't believe it for a moment. All of the

Internet's conduits, computers, and information

organization provides free Internet access to its

members as part of an affiliation. But, for people

lacking Internet access through an organization,

getting on the Internet carries a price tag.

resources are paid for by someone. Often an

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WASHINGTON, D.C.

up for daily electronic publications, search and retrieve speeches and press releases, and to send e-mail to the White House, query the FAQ file at ftp info.umd.edu; log-in anonymous; cd info/Government/ US/WhiteHouse. See picture on page 8.

http:www.

whitehouse.

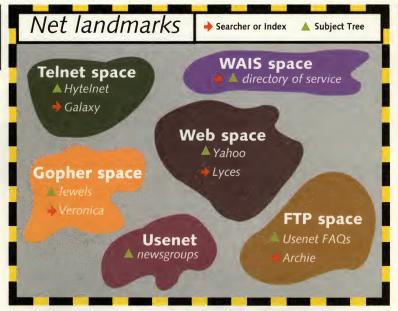
BOTTOM LINE: For people who receive Internet access as part of their employment or student status, the Internet may seem free. However, organizations pay for the infrastructure, equipment, and connections to gateways (exchange points for trading Internet traffic), and hire commercial providers to supply their connections to the Internet People who don't have organizational access

can join commercial services offering Internet access. National providers such as America Online, CompuServe, Delphi, and Prodigy offer a variety of services and varying kinds of Internet access. A variety of local access providers and bulletin-board systems also provide Internet connections.

Customers access these services through dial-up phone lines and pay for phone calls to the service. The price varies depending on whether the number is local, toll free or long distance. Once online, the user may face an hourly or a flat monthly fee for a fixed number of access hours. Online services may also charge extra for "premium" services.

Internet Landmarks Reference Card

Like myths throughout the ages, those about the Internet constantly shift shape, acquiring new silhouettes and more marvelously outrageous personae with each telling. And, again like their predecessors, Internet fables are really attempts to grapple with the riddles of existence, to answer those basic, angstinducing questions: Who are we, and why are we here? Maybe the Internet can't or won't definitively answer those questions for us, but it can help us in our quest for discovery. Journeying within it, we learn more about the things that interest us and about the world around us. Here are some landmark resource collections and tools to help you avoid getting lost in cyberspace ...



There are numerous landmarks on the Internet to help guide your ventures.

Web space

TTT Yahoo http://akebono.stanford.edu/yahoo/ RRR Lycos http://lycos.cs.cmu.edu/

Gopher space

TTT Jewels http://galaxy.einet.net/GJ/index.html RRR Veronica gopher://veronica.scs.unr.edu/11/veronica

FTP space

TTT Usenet FAQs ftp://rtfm.mit.edu/pub/usenet/ RRR Archie telnet://archie@archie.sura.net RRR Archie http://web.nexor.co.uk/archie.html

WAIS space

http://debra.dgbt.

Web site for the

http://king.ncb.

government of

Singapore.

Japan.

http://www.

glocom.ac.jp/

Web site for the government of

government of

doc.ca:80/

opengov/

Canada.

gov.sg/ Web site for the TTT RRR Servers http://server.wais.com/directory-ofservers.html

Telnet space

TTT Hytelnet telnet://hytelnet@access.usask.ca TTT Hytelnet http://www.cc.ukans.edu/hytelnet_html/S TART.TXT.html RRR Galaxy http://galaxy.einet.net/search.html

Usenet

TTT Newsgroups news: alt.internet.services comp.internet.library alt.best.of.internet



MYTH 4 : Internet users are cyberpunks and the content they create is cyberporn.

FACT: While some consider portions of the material on the Internet to be immoral, obscene, or useless, much of it is no more controversial than what's found at a public library or in a bookstore.

BOTTOM LINE: The Internet is like a large city it's a public space, and people choose to express themselves in this space in quirky, surprising, sometimes offensive, and frequently mundane ways. Internet information reflects the whole range of human activities and interests.

For example, in discussion groups on the Internet, professionals, students, and educators routinely take part in specialized and detailed online discussions about educational research and issueoriented topics.

A wide range of information providers can be found on the Internet. The Central Intelligence Agency (http://www.ic.gov/) provides information, as do the governments of Canada (http://debra.dgbt.doc.ca:80/opengov/), Singapore (http://king.ncb.gov.sg/), and Japan

(http://www.glocom.ac.jp/), and the European Community (http://www.echo.lu/). Corporations are on the Internet, among them

General Electric (http://www.ge.com/) and the Bank of America (http://www.bofa.com/), as well as smaller organizations such as WZLX Radio 100.7

FM, "Boston's Classic Rock" (http://www.wzlx.com/wzlx/index.html), and the Stillwater, OK, Chamber of Commerce (http://www.okstate.edu/stillwater/ introduction.html).

Stereotypes of the Internet as the home of trivial ramblings or sexually explicit material often arise when the focus is on particular segments of activity. The Usenet newsgroup alt.food.wafflehouse may be pretty silly, and the newsgroup alt.sex.girl.watchers may be offensive — but these activities don't characterize the whole Internet.

The challenge of the Internet is to learn to find the best that it has to offer and to avoid the silly and the salacious — unless that's what you're looking for.

The home page of Boston's classic rock station WZLX invites viewers to meet the staff.





MYTH 5 : The Internet is chaotic. There's simply no way to find anything.

FACT: While no Internet information-collection or resource-searching tool is flawless, there are landmark collections and tools on the Internet that you can use to find what you want.

BOTTOM LINE: The Internet's physical infrastructure isn't centrally planned, and information on the Internet isn't hierarchically organized. Finding things on the Internet takes knowledge and skill, but it can be done.

For example, the Web's interplay of hypermedia and graphical Web browsers gives users an efficient point-and-click interface. On the Web, a user can reach landmark subject collections such as Yahoo (http://akebono.stanford. edu/yahoo/), and search for resources containing keywords with Web spiders such as Lycos (http://lycos.cs.cmu.edu/). In each Internet information space, landmark subject trees and searching tools help users find information. The Internet isn't simple, but it's far from chaotic.



MYTH 6 : The Internet is hostile to newcomers — the hapless newbies.

FACT: While a newbie can get mercilessly flamed for ignoring or flouting the Internet's social customs, there are plenty of ways a new user can get up to speed in a hurry.

BOTTOM LINE: Not many beginner tennis players would even consider running onto the court at Wimbledon and joining a match in progress. Instead, a new player typically seeks out information and support — by taking a class, learning from a teacher, watching tennis videos, or reading books about playing. A new player then spends time practicing the basics before playing a game.

Newcomers to the Internet should spend some time learning its behavioral standards, not just its technical necessities. The Internet has any number of different cultures. The liveliness of the Internet derives from the people who take part in it, and different communities of people have different social norms.

A good spot for a new user to visit is the Internet Web Text (http://www.rpi.edu/ Internet/Guides/decemj/text.html). This guide provides directions to starting places for learning about the Internet. New users can also learn about the Internet by observing online groups and getting a "feel" for them before actually participating. The first stop for a newbie to Usenet should be **news.announce.newusers**, where introductory material is continuously posted. Within other newsgroups, a new user can find lists of Frequently Asked Questions (FAQs) and answers, which describe that group's knowledge and practices.



http://www. rpi.edu/ Internet/Guides/ decemi/text.html A good place for a new Internet user to visit. It will direct you to places where you can learn more about the Internet. news.announce. newusers Introductory material about Usenet is posted here continuously, to help introduce newcomers to newsgroups.



The Internet Web Text helps new users find their way around the Internet. It will direct you to new places that can, in turn, offer you information about where to go in your cruises in cyberspace.

– John December

premiere issue 1995

Yahoo

With its hierarchical list of

entries on

This database is a

great guide to the

World Wide Web.

more than 21,000

entries, it allows

you to search for

everything from

education, to

computers,

New sites

art, business, and

government, law,

added in the last

five days — and

"cool" ones can

also be searched

for. Access it at

http://akebono.

stanford.edu/ yahoo/. Also, refer

to our Reach

column, pages 8-10.

news, and science.

part 9

The Magnificent Seven

Hungry for some action on the Internet after all this preparatory gearing up? Well, let's take a moment to focus on what it is you can actually do as an Internet voyager. There's been so much hype about the information superhighway, it sometimes seems like the most basic reasons to use the Internet are lost under all the glitz. In this section, we'll review the major activities you can do on the Internet. There are seven action items. and we think that taken together, they're pretty impressive. You can send and receive messages from all over the world: transfer files; search for and retrieve information; explore Gopherspace; join in online discussions and chat groups; participate in newsgroups; and, most exciting of all, explore the World Wide Web.

E-MAIL

pg. 42

FTP

GOPHER

pg. 44

pg. 46

IRC

NEWSGROUPS

MAILING LISTS

pg. 48

pg. 50

THE WEB

pg. 52

pg. 54

part 9a



E-mail's ability to transfer information to other people quickly and easily, combined with its speed relative to regular postal delivery, has made it so popular that it's the most widely used application on the Internet. Here's how to enjoy it, no matter which operating system you're using.

Because the

Internet is

so vast, you

and receive

information

to and from

anyone.

can send

t's Friday afternoon, and you've finally finished that dense proposal. You're printing the file from your PC when the phone rings. It's your boss, asking you to send a copy to the New York office, as well as provide the word processing file, "so they can add it to their own information by Monday." You hang up the phone and groan, glancing at the

clock: five to five. It's going to be another Friday

Snail Mail How the Internet community refers to regular postal service. Guess we can all figure that one out.



night of work because you'll have to break your graphic-laden proposal into disk-sized chunks, then annotate it so someone else can piece it together again. You slump at your computer, and almost wish you lived in New Jersey. At least then you could drive it over.

If you and your New York office both had access to the Internet, though, you could simply send your file and text comments over the Internet via e-mail, short for electronic mail. And the Internet doesn't limit you to intercompany network connections. Because it is so vast, and not owned by any company or institution, you can send and receive information to and from anyone on the Internet.

The great advantage of e-mail, at least relative to **snail mail**, is speed. But that's not the only reason for using e-mail. The abilities to send information without having to print it first and to use received data whenever you like have helped to make e-mail the most popular application on the Internet. Even if you don't have an Internet account, you can use e-mail if you subscribe to any of the major online service providers.

First Things First

Regardless of how you connect to the Internet, the first thing you need to know about e-mail is that everyone on the Internet has an address. Let's say the (fictitious) International Networks Inc. supplies you with an account. You connect to a computer called intnet.com. If your name is Jane Smith, your user name (or user ID) might be jsmith. In this example, your address is the combination of your user name and your machine name: jsmith@intnet.com. The placement of the @ sign and the period are important, so be sure you type them correctly. Remember, too, that most Internet information is case-sensitive, so don't capitalize

names automatically.

Once you know someone's address, start your e-mail program. Depending on your Internet provider, it could range from an easy-to-use program for PCs to cumbersome UNIX commands. If you connect to the Internet with a terminal emulator (meaning your screen is all text and you have to type commands), there are two ways to send mail. The first is through the UNIX mail command. Forget this, unless you are a masochist. The other is to use a mail program like Pine.

You Send Me?

To send mail in Pine, type C (for compose) at the first screen. You'll

see a screen that looks like a memo form. On the bottom of the screen are options to help you compose your message, as well as general program help. Remember, though, that when you see a command like ^G (Get Help) in Pine, it means that you have to hold down the Ctrl key on your PC keyboard while you press the appropriate letter.

If you want to send someone a computer file, type the name of the file at the Attchmnt line. If the file is still on your PC, you'll need to send it to your Internet account first, using the Z-Modem protocol if possible.

To save time, you can create nicknames for people to whom you send mail frequently. From the To line in Pine's Compose window, press Ctrl T to take you to the Address Book. At this screen,



Pine The easiest to use of all the UNIX-based mail applications. To start using it, simply type Pine at the UNIX command.

premiere issue 1995

type a short nickname, the person's full name, and the Internet address. Next time, all you'll have to do is type the nickname on the To line.

Signed, Sealed, Delivered

To receive mail in Pine, choose the I option from the main menu. You'll see a list of messages, their subject lines, and the senders' names. At the bottom of this mail screen are commands, just like in the Compose screen. However, they don't require the Ctrl key, so if you want to delete a message, just press the D key. You can also save messages (press the S key) to a directory called folders. You should delete messages you don't want periodically, especially if you pay for storage space on your Internet account.

R.S.V.P.

Reply to mail by pressing the R key while you're reading a message. Pine opens the Compose window and automatically copies the address and subject line for you. Pine also copies the message you received, which you can also edit or delete. If you don't want to reply, but want to send the message to someone else, type F to forward it.

Pine versus Eudora

If you're lucky enough to have Internet access

through special Macintosh, Windows or OS/2 programs, you needn't ever use Pine. Such software often comes with its own e-mail program. A popular e-mail program for both Macintosh and Windows is **Eudora**, which is freely available from many places on the Internet.

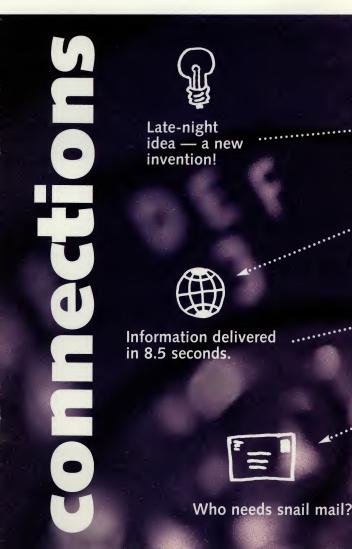
Like Pine, Eudora sends text and files to anyone on the Internet. You can create distribution lists and nicknames, reply to messages, and forward them. However, Eudora uses a graphic interface that is able to integrate with other Mac and PC software. For example, when you send an attachment with Eudora, you select the Attach Document menu item. With a couple of mouse clicks, you can attach any file to your mail without first transferring it to your Internet account. Similarly, you can save messages on your PC hard drive so you can work on them whenever you wish, in whatever computer application you like.

Because programs like Eudora "go get" your mail, then store it on your PC or Mac, you can read it after you've disconnected from the Internet. If you pay for your connection time, this can save a lot of money. On the other hand, putting files on your computer can create havoc. Always run any program files you receive via e-mail through a recent virus checker before you open them.



Eudora An easy-to-use mail-reading program that runs under Windows. It can be used by those who are connected to the Internet using SLIP. It "talks" to SLIP using the WinSock standard. Eudora lets you write and reply to messages, read mail, and store messages in folders on your





Write details and send to Lee — in Iceland.

Receive files in Iceland with U.S. patent information.

Files, Files, Files FTP, Archie, WAIS, and Veronica

cover story part 9b

The Internet is big - very big. That means finding your way around, not to mention trying to retrieve information, can seem daunting. Luckily, there are several tools that make locating and downloading files almost a piece of cake.

ith another local network being added to the Internet every 10 minutes or so, the prospect of trying to find a file you think is out there, somewhere, is forbidding. Especially with no central computer "running" things and nobody in charge to query. Meanwhile, an army of people is at work making available more and more files all the time.

Despite the challenges, finding and retrieving data files is an Internet application that occurs about as frequently as e-mail. There are two

File

and

enables you

to upload

heolowoh

files from

around the

world.

relatively simple ways to instruct your computer to find files on other computers scattered throughout the world: One is Gopher (see pages 46-47), an Internet browsing service; the other is the World Wide Web, which allows a user to browse for information by following references. Both also enable you to access newsgroups and e-mail postings. The only downside to using them is that you'll probably be spending a lot of time downloading files.

How Do I Download Files?

Both Gopher and the Web are methods for performing one of the Internet's oldest processes, File Transfer Protocol, or FTP, which lets you upload or download files from around the world.

All the FTP methods accomplish the same thing: They connect you to the remote site through FTP software. Once you reach the site, they permit you to download a file in an accessible directory, and sometimes you can upload to that directory as well.

Although Gopher and the Web — as well as specialized FTP programs such as Window's File Manager — have made it less important for you to understand how files actually get transferred on the

computer. For example, Open ftp.nsca.uiuc.edu gets you to the site for downloading a copy of Mosaic. You'll be asked for a username, which is usually Anonymous, and a password, which is either Guest or your full Internet e-mail account. Next, you move into the Transfer Protocol

appropriate directory by using the Cd (change directory) command - for example, Cd pub - and type Ls (list) to get a directory of files. When you find the file you want, type Get and the file name to transfer it to your account. At this point, it's on your UNIX host machine, so you must download it to your PC or Mac with communications software. Thankfully, PC and Mac users with SLIP or PPP accounts can follow an easier course. Programs such as Fetch for the Mac and WinSock FTP or Network File Manager from Internet in a Box (reviewed on page 72) let you transfer files directly to your

Internet, there will be times - many, in fact -

when the only way to get a file is to retrieve it

The basic FTP takes place at the UNIX

command. Type ftp to get started, then type Open

<remotemachineaddress>, to connect to the other

directly from a remote machine.

You're also given a graphical depiction of the remote machine's

directories, and buttons like Copy or View that do the work for you. The principle is the same as on the UNIX system, however; similarly, you'll need to use your username and passwords. Knowing how to do it the hard way can often help considerably.

How Do I Find Files in the First Place?

own computer.

Luckily, you're not the only person who's felt daunted by the prospect of finding files. In fact, this has been a problem since the Internet's early days, and it's been addressed by enterprising



Archie

Designed by graduate students at McGill University, Archie is an abbreviation for "archive." It indexes FTP sites so that you can know what's available at each one. It also lets you search for files about particular subjects.

programmers. One such programmer, Peter Deutsch, developed Archie with fellow graduate student Alan Emrich. This system scans FTP sites on the Internet, then offers you a searchable database with all the files it found. You simply fire up the Archie software, it conducts your search, then you FTP to the site, and download the file.

Of course, it's not really that easy. You'll find hordes of duplicate file names, for example, and Archie doesn't sort them by subject for you the way CompuServe and Prodigy do. Nor does it give you descriptions of the files beyond what the FTP provider offers. Nevertheless, it's extremely valuable.



Veronica This frequently updated index system is intended to make Gopher an even easier tool. You use Veronica (which stands for Very Easy Rodent-Oriented Netwide Index to Computerized Archives) to search

Gopherspace.

To search for a file using Archie, you need an Archie Client. Your UNIX system may have one, but if not, you can Telnet to a system that does, and type Archie at the command line. There are several versions of Archie out there, and the new ones are much more user-friendly, so it makes sense to shop around.

Or, you can use the Archie client in Netmanage's Chameleon suite, or download WinSock Archie from the Internet itself. These last two choices link you directly to FTP programs, but you'll need a SLIP or PPP connection to make use of them.

Another pioneer in information seeking is Brewster Kahle, who developed Wide Area Information Servers (WAIS) in the late 1980s. WAIS has since become the standard search tool on the Web. You can see it in action through Netscape or Mosaic by accessing the EINet Galaxy (http://www.einet.net) and doing a search for any topic you like.

You'll get a series of files, each with a "score" beside it. The highest score is 1,000, which means that the file contains precisely the phrase you've searched for. WAIS is a system that creates databases of related files, and as you get more involved with it, you can create your own.

At first, though, you'll most likely use it to see what's out there waiting to be downloaded. WAIS can also be accessed through Gopher, or directly using WAIS software. WinWAIS from EINet is a good possibility, as is WAIS Manager, available from the Internet.

A final popular choice is **Veronica**. Yep, the name is a pun on Archie, which is actually an abbreviation for "archive" and was not intended to refer to the popular comic book character. Veronica is a search tool used within Gopher.

You'll find references to Veronica searches throughout your Gopher browsing. Essentially, they all Telnet into a computer that contains Veronica software. Veronica works, it's clean, and it allows FTPing directly from the search results.

As you begin your journeys, these three important tools can help you find your way. — Neil Randall I wonder how Lee finds these files?



Check archie: searchable archives of FTP sites ...



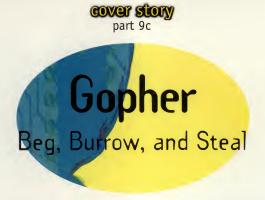
try universities: gopher.umich.edu to find ftp://archive.umich.edu.

Find a file and download: >get (filename)



0000

Try not to download during business hours.



Gopher, a search and retrieval system, will help you discover a myriad of interesting information without having to deal with difficult Internet technospeak. Follow this step by step through a sample Gopher search.

Gopher

grow in

continues to

popularity,

due to its

relative

intuitive

ease of use.

speed, and

organization.

hat is **Gopher**, you may ask, and why is it named after a bucktoothed animal? Technically speaking, Gopher is a distributed document search and retrieval system or, in simpler language, an easy way to gain access to a huge amount of information on the Internet. It uses a nested, menu-based interface, which allows you to drill down through different lists until you reach

your intended or actual destination. Using Gopher, you can link up

to many different computers without having to know lengthy, incomprehensible commands. In fact, you rarely have to type anything more than a menu number. You can use Telnet and FTP from Gopher, and fairly easily download anything you find in your Gopher journeys onto your own hard drive.

Virtually anyone with an Internet account can use Gopher. Regardless of whether you use a PC, a Mac, a UNIX workstation, or almost any other system, Gopher is there at your fingertips, ready to scamper off and retrieve some information for you.

Function Over Style

During the last few years, a multitude of tools for finding information on the Internet have appeared, but Gopher has withstood the competition. In fact, Gopher's popularity continues to increase, and its widespread use, mainly in university settings, shows no signs of abating.

Gopher's appeal stems from its ease of use, relative speed, and intuitive organization. Another attractive feature: You don't need special software on your PC to run it. If you happen to be sitting in front of a networked UNIX terminal (or you dial into a UNIX shell account), you can type Gopher at your prompt. You will likely be cast into your organization's hierarchy of information, which allows you to surf just as easily as if you were scanning an extremely large table of contents. If the Gopher command doesn't work, ask your systems administrator to install it. It's free, after all.

If you use the World Wide Web through Netscape, Mosaic, or any other popular browser, you can access Gopher sites from there as well. To get ahold of the University of Southern California

> Gopher site, for example, select Open URL from the File menu and type **Gopher://cwis.usc.edu**. The screens don't look as pretty as welldesigned Web pages, but they're still highly functional. Actually, function over style is one of the reasons many people prefer Gopher to the Web, especially if they're trying to get work done.

Digging on the Wild Side

Gopher's main feature is its ability to take you effortlessly from one Gopher listing to another, anywhere in the world. For this sample walkthrough (which I did using a simple UNIX shell account), I wanted to visit a fun, interesting site, but first I had to find one. I started with my own university's main Gopher, and simply progressed through

many menus. From the first menu listing, I selected 9) Electronic Resources Around The World/. When the resulting menu appeared, I selected 4) Campus and Other Information Systems/. From the next menu, I picked 17) Subject Specific Information Servers/, then chose 29) PEG - A Peripatetic, Eclectic Gopher/.

Whew! It sounds like a lot of traveling just to get to a site with the word peripatetic in it, but it was no big deal. All those menu selections were performed within one minute. Now — how did I do this? Any menu selection with a slash (/) after its description will take you to another menu listing. If you choose a selection that has no slash, you will



1. Any of various shorttailed. burrowing mammals of the family Geomyidae, of North America. 2 Native or inhabitant of Minnesota: the Gopher state. 3. One who runs errands, does odd jobs, and fetches or delivers documents for office staff. 4. A distributed document search and retrieval system on the Internet. Slash (/) 1. Any menu selection with a slash after its description will take you to

another menu

2. Guitarist of

Guns 'n' Roses.

listing.





You can also get files and books through Gopher.



Gopher menus lead to other menus.

burrow



Gophers also link universities to other universities.



You might even find patent info ...

Keep digging it's buried there somewhere.

receive a file (or something else that's not a menu). All menu items are numbered, so to choose a specific item, you either type that item's number (it will appear at the bottom of your screen), or use your up and down arrow keys to scroll through the menu selections. Hit return when you're ready to move on. If there's more than one page of listings, hit the space bar.

I thought PEG seemed like a good choice for a walkthrough with Gopher, since its purpose is, according to its maintainer, "to demonstrate the utility and the versatility of a Gopher server in providing improved access to needed information distributed throughout the network."

Some of the subject headings from the PEG main menu were: Politics and Government, Humanities, The Virtual Reference Desk, Women's Studies and Resources, Electronic Journals, and Favorite Bookmarks. There was, it seemed, something for everyone, as tends to be the case with Gophers.

I checked out the Virtual Reference Desk first and found that it was an electronic encyclopedia housing frequently accessed information stored on various computers across the U.S. The Virtual Reference Desk also contained a list of up-to-date currency exchanges, as well as an item called Food and Drink, which stored a collection of varied recipes, from lobster and Thai Masaman to a drink called Jamaica-Me-Crazy. And this is just one submenu of one sub-Gopher of one Gopher on the whole Internet! After exploring the Virtual Reference Desk, I returned to the PEG main menu (done by pressing return to go back one screen or by pressing U to go up one menu).

This time, I checked out item 3) Electronic Journals. There I found a list of published journals (by no means exhaustive) available in electronic format, including titles such as *The New Republic* and some postmodern culture publications. The PEG Gopher also contained an extensive listing of French Language sites under its Humanities category, as well as a frequently updated list of other interesting sites maintained by PEG's creator.

Most Gophers are more subject-specific than this one. Many universities throughout the world have Gophers, known as campuswide information systems, to help people navigate their way through the university. They offer information about campus services, academic policies, campus and community events, athletics, and the like.

So Gopher away! You'll discover information without encountering difficult Internet lingo. To get started, try the following pretty cool sites, which will take you to many other Gophers — PEG: **peg.cwis.uci.edu** (select 13, then 9); Gopher Jewels: **cwis.usc.edu** (select 9, then 11); and Electronic Frontier Foundation: **gopher.eff.org** (see The Anthology for more fun Gophers, pages 80-84). — Carrie Pascal



A Peripatetic, Eclectic Gopher. cwis.usc.edu Gopher Jewels. gopher.eff.org Electronic Frontier Foundation Gopher.

MUD, MUCK, and IRC Interacting in Real Time

cover story part 9d

Internet Relay Chats and Multi-User Domains enable you to directly interact with other Internet users in real time, thus linking you to the human being on the other side of the wire.

medieval

bars. or

debate

research

with fellow

scientists.

TTL.



The Clipper Chip A device for encoding information. See page 61.



Lurk To frequent a particular spot on the Internet (such as an IRC) but seldom or never contribute to it.



t's been a long, busy day on the Internet. You've researched how the Clipper Chip might affect your software business, downloaded an e-text for your daughter's school paper, and found a home remedy for Fluffy's flea problem. Time to kick back and slay a few dragons. Then again, perhaps tonight you'll boldly go where no one has gone before. Or, maybe you'll just settle back with a beer

and chat about the good old times with a friend halfway around the world. All of MUD players

these social activities are possible via two of the Internet's most popular resources: Internet Relay Chat and Multi-User Domains. The first is better known as IRC, while the second goes by the name MUDs. Close relatives of MUDs are MOOs, MUCKs, MUSHs, and MUSEs.

The Internet's CB Radio

In IRC, users fire up the necessary software, join a "channel," and participate in one or more of the potentially many threads of discussion. Unlike Usenet newsgroup dialogue, IRC happens in real time: What you type appears instantly (allowing for Internet lag, of course) to the other folks on the same

channel. Most channels have a specific topic of discussion - anything from Disney favorites to what it's like to live in Houston. If there isn't a channel that strikes your fancy, it's easy to create one and invite others to join you.

New users may find themselves overwhelmed by the yammerings of several conversants scrolling by on the screen. IRC takes some getting used to it's an acquired skill, much like carrying on a conversation at a crowded cocktail party. Most newcomers find it useful to lurk for a while until the conventions of purely textual communication become clear.

IRC also supports online help, usually accessed by typing [/help] at the IRC prompt. (The [/] indicates that what follows is a command rather than part of the conversation to be broadcast.)

Make-Believe Worlds

The other Internet resource allowing real-time participation is the MUD. In contrast to the channel-based nature of IRC, MUDs are location based (a specific computer houses the MUD). Using Telnet (or MUD client software) and a host name (for example, Telnet lambda.parc.xerox.com 8888), a user logs into the MUD, chooses a nickname/ identity and is launched into a text-based

virtual world.

MUDs are built around an endless variety of themes. Some may dwell in are based on characters and settings in a specific novel or movie, while others center on a particular language and culture. A Europe, visit few MUDs are simply comfortable virtual spaces in which you can intergalactic interact. Additionally, some MUDs and MOOs (MUDs, Object-Oriented) function as professional communities, where scholars in a particular field can log on to collaborate with colleagues.

Like old-time, text-based computer games, MUDs rely on users imagining themselves into a completely make-believe environment. Vivid descriptions of

the areas, objects, and individuals that users encounter enhance the players' imaginations. Several commands provide access to a wide variety of actions, emotions, and speech techniques. Depending upon the theme of a MUD, a player might fight a battle in medieval Europe, have a drink in an intergalactic bar, or debate research results with a fellow astronomer.

Technically Speaking

IRC and MUDs are both client/server resources, meaning that you and the host computer must run a particular type of software. The server software keeps the game running. It monitors players' progress and gives the appropriate responses to players' actions. The client software that you run on your Internet account connects you to the server.



http://www.cis.up

enn.edu~lwl/mudi nf.html A MUD resource that includes documents about MUDding, as well as annotated links to various MUDs. http:// akebono. stanford.edu/ Entertainment/ Games A good collection of MUD pages that provides a

broad overview of the wealth of MUD sites available.

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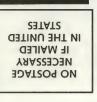


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Boulder, CO 80323-6136 Boulder, CO 80323-6136 There are some advanced clients that not only allow connection, but also have some extra features, such as word wrapping for long strings of text.

If you are directly connected to the Internet, your site may already be running a client program. (To find out, type IRC at your system prompt and see what happens.) If you access the Internet via modem and a dial-up service, your service might have some client programs to choose from. Otherwise, you'll need to install one. There are several very good FAQ (Frequently Asked Questions) documents on the Internet that cover this and other aspects of MUDding and IRC. The IRC FAQ, written by Helen Trillian Rose, is posted regularly to the Usenet hierarchy alt.irc. It can also be retrieved via anonymous FTP from ftp.kei.com as /pub/irc/alt-irc-faq. This FAQ covers basic IRC operations, offers a list of servers, and tells you where to go for more information.

Jennifer "Moira" Smith has created a very helpful three-part FAQ on several aspects of MUDding. It details MUD history and terminology, evaluates client software, and even describes how to start your own MUD. It is posted regularly to the **rec.games.mud** Usenet hierarchy, and is also available via anonymous FTP from ftp.math.okstate.edu in pub/muds/misc/mud-faq. Smith also maintains an HTML version at URL http://math.okstate.edu/~jds/mudfaqs.html.

Some Musings

A few final thoughts: Try to access MUDs and their ilk at off-peak hours, and make sure they're nonbusiness hours in the time zone local to the MUD. Host machine administrators appreciate it if you save your after-hour pursuits for, well, after hours. Remember, there are people from diverse backgrounds and countries on the Internet. Don't be too offended by what you come across; it might just be a cultural misunderstanding. Jennifer Smith states it best in her FAQ: "The important thing to remember is that (the MUD) is the fantasy world of possibly hundreds of people, and not just you in particular. There's a human being on the other side of each and every wire!"

MUDs and IRC, like many aspects of the Internet, take some getting used to, but the potential rewards are well worth the effort. Their real-time nature allows for direct human interaction across the wires. Not only do you get to slay those dragons, but you also meet some interesting people in the process.

— Karin Trgovac

So many rooms (channels) to choose from.



Too much stimuli?

Try IRC chat.

Type /list for channels available. A LONG list beware! ر سی

Or, visit a MUD instead, and slay some dragons.

And maybe think up a new invention!



cover story

Whether you're interested in building a community of artists or learning the latest back-rub technique, there's bound to be a group of people on the Internet conversing about it via a mailing list. Here are three easy ways to find out about subscribing to one.

easier to flip

through 200

alphabetized

mailing lists

than to read

information

on screen.

pages of

the

ondering about the Zen of growing bonsai? Or the psychological elements of humor? Maybe you want to know the current thinking on bagpipes, or get a critique of your secretly penned short stories. Perhaps you have a penchant for non-human primate research?

The Internet is a resource for all of this and much more. You can access a lot of It's actually

it through mailing lists, which actually are groups of people interested in certain subjects.

Members of the list send messages to a group address, and everyone on the list receives them as e-mail. As a subscriber, you will get messages 24 hours a day, which enables you to keep up with the latest information as it's sent out.

There are literally thousands of mailing lists. Some are more specific than others. Because many universities use the Internet as a research tool, a large percentage of mailing lists are academically oriented - and highly specialized. However, there are also broad and narrow mailing lists on almost any subject that might be of interest to you.

How to Track Down Those Mailing Lists

Like everything else on the Internet, the wealth of potential mailing lists you can subscribe to is sometimes difficult to fathom. There are three main ways to find out which mailing lists are available.

First, you can check the newsgroups news.newusers and news.groups (see the article on newsgroups on pages 52-53) for interesting mailing lists. And, though I don't recommend this, you can also find many mailing lists by sending an e-mail to listserv@bitnic.educom.edu. Put the words List Global in the body of your mail message. Don't put anything else in the body (or the subject line). In a matter of days or hours, a machine will send you mail with a very large number of mailing lists.

Another way to find mailing lists, or lists of mailing lists, is to use Gopher. This is certainly easier than wading through a text file, but you also have to trust your luck a bit in Gopherspace. Still, most university Gophers have links to mailing list descriptions, or to a mailing list archive, which means you can read portions of the information a mailing list group previously sent out.

The Low-Tech Approach

Finally, you can buy a book that describes available mailing lists. This may seem low tech, but it's actually harder reading the information onscreen than it is to flip through 200 pages of alphabetized mailing lists.

That's how many pages of mailing lists are in Eric Braun's The Internet Directory (Fawcett Columbine [Ballantine Books]). It has the advantage of combining most of the available descriptive information from many Internet sources.

Of course, the disadvantage of books about the Internet is that information dates so quickly. Still, The Internet Directory is a good

place to start.

All of these sources contain subscription information for mailing lists. You subscribe to a mailing list by sending e-mail to a subscription address, often with the single word Subscribe in the body of the message. It's important to carefully follow the subscription directions for each list, because they vary from one to another. If you need help, you can generally send mail to the group's subscription address, with the single word Help in the body of the text.

You should receive an e-mail reply that tells you how to join the group. The reply also informs you about quitting the group, so save it in a file that you can retrieve later. And, by the way, there really is a list about bagpipes.

- James H. Roberts



Mailing Lists Discussion groups of people who use e-mail to pontificate on specific subjects of interest. In some cases, newsgroups utilize mailing lists to keep their members informed.





Subscribe to lists on nearly every subject.

Some universities have lists of lists: listserv@brownvm. brown.edu.

Some lists might

for you ...

have too much mail



Receive list of lists in just hours.

l://listserv@bingymb.bitnet "Co il://ifc-info@isi.edu "help:ways

://www.cis.ohio-state.edu/rfc/f ://nic.merit.edu/documents/fy/ ://nic.merit.edu/documents/fy/ ://nic.merit.edu/resources/ ://sunsite.unc.edu/pub/docs/a



... while some have just the right amount.

Although it's unlikely that you will actually meet face to face — with the people who make up a mailing list, you'll find a clear image of them beginning to form in your mind if you spend enough time sending and receiving messages. There's the long-winded bore clammering for attention, the quiet intellectual immersed in thought, the party animal looking for a good time, the belligerent cynic who frowns upon the goings on. Particular quirks will become apparent as buttons get pushed and tempers flare. While the messages you'll read will be "only" words, there are many ways that innuendoes, jokes, and secrets can be put between the lines.

People on the Internet have become quite adept at inserting emotion and self-expression into computer messages by using typographic characters and other tricks of the keyboard. With a winking smiley '-) to Seth Godin, compiler of The Smiley Dictionary (1993, Peachpit Press), here are a few ways you can spice up your messages and let your personality shine through the Internet.

- :-) **Classic smiley** Left-handed smiley (-: Wry and winking smiley ,-} "Omigod!!" 8-0 Very unhappy smiley (:-(**Crying smiley** :-(**Skeptical smiley** :-/ Sarcastic smiley :-> Screaming smiley :-@ :-* **Kiss** :-X A big wet kiss **Open-mouthed** kiss :-<> A very lewd remark was just made >:-> :-& **Tongue-tied** Smiley after eating something spicy :-6 Vampire smiley :-[:-E **Bucktoothed vampire** Smiley touching her tongue to her nose :-a Smiley wearing a turban @:-) (8-0) It's Mr. Bill! :-е **Disappointed** smiley What you say makes no sense :-S X-(You are brain dead **Bored** smiley I-o Glasses on forehead 8:-) Taoist monk 0|-):-\$ **Biting one's tongue** :-1 Smiley with a fever Haight-Ashbury smiley #-) Grin <g> Laugh < ><s> Sigh Just kidding <jk>
- <i>> Irony
- < > No comment
- \\// Live long and prosper

premiere issue 1995

Newsgroups Any Topic Under the Sun

part 9f

Newsgroups will put you in touch with folks who share an interest in the subjects that matter to you. Some are humorous, some serious, but all can make you forget you're sitting alone in front of a flickering computer screen.



Newsgroups

Delivered via a universal feeder

network called

Usenet, news-

subject-specific

forums. Unlike

mailing lists,

postings to

which deliver

your e-mail box

(see page 50),

you have to "visit" a

newsgroup.

groups are

discussion

f you want to find people on the Internet who share your interests — no matter how unusual those might be — you'll want to subscribe to some **newsgroups**. Thousands upon thousands of people read an immense number of newsgroup postings daily. I'm one of them. Probably the only thing I don't like about newsgroups on the Internet

is that reading their messages is usually a solitary event. I don't often do my Internet surfing while someone else is in the room — that would be too rude. The problem is that, as I browse through a newsgroup, I invariably read something so interesting, humorous, or strange that I feel a need to share it with someone. Maybe that's why I've ended up writing about newsgroups.

Variety Reigns

I don't want to give you the wrong impression — newsgroups are not just for laughs. Like everywhere else on the Internet, variety reigns in newsgroups. A very large number of newsgroups are devoted to serious and important topics, while many more are scandalous, silly or

downright insane. Contrast, for instance, the newsgroup dedicated to poking fun at children's television character Barney

(alt.barney.dinosaur.die.die.die) with the newsgroup for professors and researchers in the field of microbiology (sci.bio.microbiology). In this sense, newsgroups are a lot like television: Among much banality, you'll find some amusing but largely useless material; occasionally, however, you'll stumble upon pearls of wisdom.

In fact, your first encounters with a newsgroup in many ways will resemble the first few weeks of viewing a soap opera. When you're new to a newsgroup, you won't understand half of the conversations under way. You'll find numerous subplots (referred to as threads) centered on different subjects. In addition, there may be rampant arguing and fighting (although this seems to happen more with the not-so-serious newsgroups). Newsgroups for fans, whether of sports, television, or music, seem to have the most numerous argument threads.

Newsgroups and Kids

Newsgroup users aren't screened before being

Newsgroups are devoted to everything from the serious to the silly, scandalous, and downright insane. allowed to participate - anyone with access to the newsgroup can join in. Lately, the pornography available through Usenet (as well as the Internet) has received much attention, but as usual, a lot of this controversy is hype. It's true that "naughty stuff" exists, but you can't simply press a button and have all the pornographic material available fall into your lap. In fact, you have to hunt pretty far and wide to find sites from which pornographic pictures or literature can be downloaded. Still, the Internet, like television and other media, is suitable for children only under supervision. Keep this in mind when you introduce your kids to the joys of newsgroups.

Steps for Getting Started

How to start accessing newsgroups? If you use a shell account for Internet access, your first step is to type Rn or Trn. (These are the two most popular newsreaders for UNIX.) Next, find someone who is a veteran user of this very powerful but quite userhostile software to help you. If you have SLIP or PPP access to the Internet, you'll find newsgroup subscribing easier. Simply obtain a copy of one of the Windows- or Mac-compatible newsreaders such as Trumpet Newsreader — available either commercially or free from the Internet. To subscribe, find the Subscribe function and engage. That's it!

You'll more than likely have to wait a few minutes while your server downloads a list of all



SLIP or PPP access See pages 23 and 24 for more information about these Internet connection protocols.



1. Groups of messages in a newsgroup concerning the same topic, including the initial posting, follow-up postings, and follow-ups to follow-ups. 2. Name of a column in The Net that addresses important Internet topics and issues. See page 12.

available newsgroups. Some newsgroup readers will allow you to use a search string to find groups on a certain subject.

The list of newsgroups you get is determined by the server you use. In many cases, the server will limit newsgroups to those of universal and local interest. (For example, if you live in Seattle, you may not be able to subscribe to local New York newsgroups.) Some servers won't allow users access to the alt. string of newsgroups.

You can usually double-click on a newsgroup to choose it, or select the Subscribe function. After you subscribe, you'll often have to wait a bit while your server updates the number of messages to be read in each group. It's a good idea not to subscribe to more than a few at first — you'll be amazed at how quickly you're inundated with messages. Plan to set aside an hour or two to read the postings. If, after reading a batch of messages, you find a newsgroup really isn't what you were hoping for, just unsubscribe. Don't worry about offending anyone.

Mostly, remember to be polite when you ask for help or information, and to keep your messages topic related. Also, always, always include a descriptive subject line in your message; most people just skip messages with no subject line. — Celine Latulipe

Message Posting Conventions

The most important function in newsgroups is message posting. Before you get started, there are some conventions to be aware of:



Flamed

To receive a nasty or insulting message, usually because you've broken the rules of cybermanners (see page 36). To read particularly vivid flames that have appeared on the Internet, visit the newsgroup alt.best.of. internet.

• FAQs — Lists of Frequently Asked Questions exist for most newsgroups, and you should read these before you post any kind of message.

• Remember, your audience is worldwide in most cases.

• CAPITAL LETTERS CARRY A CONNOTATION OF ANGER.

• Newsgroup postings are stored in archives on FTP sites. If you want information on something that's already been discussed, read the archives before posting or prepare to be flamed.

• When you reply to a posting, make sure your response is of interest to the whole newsgroup. Otherwise, reply only to the sender.

• It's helpful to include a portion of the original message in your reply. However, brevity is always appreciated by the other users.

I heard there was a newsgroup about my invention.



I subscribed to see what it was about.

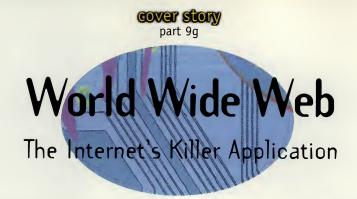
They flamed me and my invention!

STOP

So I unsubscribed ...



... and started my very own newsgroup.



Not only does the Web allow us easy cybersurfing, but its similarity to the printed page increases our comfort level. Here, we'll show you the ups and downs of the various browsers available to help you cruise the Web.

Regardless

of what you

World Wide

Web is out

waiting for

your call.

there

seek, the

f you've been following CNN, *Time*, *Business Week*, or just about any other popular news medium over the last six months, you've heard about the World Wide Web and its "pages." The Web promises to give you graphics and video and fill-in shopping forms from all over the world.

So, why all the hoopla? The Web is the first sign that the Internet will soon be ready for prime time. Previously, the Internet was primarily used for sending and receiving text messages and text files. Its interface was about as exciting as MS-DOS (not to mention much harder to use).

With the Web, though, we get point-and-click access to the Internet, with an interface as easy to use as the Help screen in a typical piece of Windows or Mac software.

The Web will spell the end of Internet users having to type indecipherable commands. Web pages are replete with hyperlinks, which connect you to sites with related information. When you see

one of these on the screen, simply mouse over to the link and click. Automatically, your computer will connect you to the remote machine (no matter where it is on the Internet), and you can download the page into your browser. Usually, a page will contain additional links, which you can use to retrieve even more pages.

Unbounded Horizons

Once you get onto the Web, you'll quickly find yourself surfing from page to page, accelerating through cyberspace like an expert veteran. There's no end to the number of sites you can visit, and some of the sites have numerous pages of their own. Endless reading, viewing, learning, and, yes, playing will ensue.

But, you may ask, doesn't Gopher (see pages 46-47) let you do the same thing the Web does?

Yes, but there are two crucial differences. First, the Web was designed to allow **multimedia** displays. As a result, Web pages usually have full-color graphics, and many have audio and video clips as well. These take a long time to download, but as Internet connection speeds improve, the potential for full multimedia access will increase dramatically.

> Second, Gopher lets you point and click, but everything in Gopher is presented as a list. On the Web, the hyperlinks can appear anywhere on the page, even inside the graphics.

The result is that the Web looks and feels more like the printed page, which is something we're all extremely familiar and comfortable with. Read a few sentences in a paragraph, click on the link, navigate your way back to read some more, then click on the graphic to go somewhere else and so on.

Web Browsers

To navigate the Web, you need a piece of software called a browser.

Officially, it's called a client, but because nobody but techies uses that term, we'll stick with browser.

The first browser to enable non-techie Internet users to access the Web with a simple point-andclick command structure was Mosaic, developed at the National Center for Supercomputer Applications (NCSA) at the University of Illinois. It was so successful that NCSA licensed the technology for commercial marketing to a company called Spyglass. It also licensed the software code underlying Mosaic to more than 20 other companies, including Microsoft, IBM, AT&T, and Digital Equipment. As a result, commercial browsers are sprouting like proverbial weeds.

If you have a UNIX dial-in connection only, your choices are limited, and you won't get the Web's rich graphics. However, the most important text browser, Lynx, is widely available and easy to



Hyperlink Web pages have information

(pictures, sounds, video) linked in multiple ways at several levels of detail. The pages also may be linked to other, related documents. Multimedia The convergence of computers with video, sound. graphics, and text. Some have described it as a "technological loom" that weaves media together. It can be used for education, entertainment, training, and communications, as well as for art.





Better learn how to advertise my invention on the Web. Search for Internet guides and tool books: http://www. ukans.edu.



It may take some time to learn how it works ...



Macintosh and Microsoft For more information about these platforms, see pages 26-31. use. (It's also free, so if it's not on your system type Lynx at the prompt — ask for it.) Lynx is designed for the near-standard VT100 terminal emulation, and navigating is mostly a matter of using the arrow keys.

... but soon it'll

pay off!

Two browsers are available for the three main platforms: Macintosh, Microsoft Windows, and XWindows. These browsers are Mosaic and Netscape Navigator, and both are immensely popular.

To get your personal copy of Mosaic, launch an anonymous FTP to **ftp.nsca.uiuc.edu** and go into the Mosaic directory. For Netscape, anonymous FTP to **ftp.mcom.com** and change to the Netscape directory. You simply can't go wrong with either of these two browsers.



ftp.nsca.uiuc. edu To get a copy of Mosaic, launch an

anonymous FTP to this address. ftp.mcom.com Annonymous FTP here to get a copy of Netscape. with either of these two browsers. Mac users should try out at least one other browser — MacWeb from the EINet Galaxy (**ftp.einet.net**). This browser is similar to Mosaic, but kinder on systems resources. The Windows counterpart for MacWeb is WinWeb, available from the same location. WinWeb is always at least a step behind MacWeb, but it's capable nonetheless.

Microsoft Windows users have a horde of browsers to choose from beyond Mosaic, Netscape, and WinWeb. Cello is a popular choice (FTP to **fatty.law.cornell**), and should be available in version 2.0 by the time you read this. Air Mosaic comes with Spry's *Internet in a Box* (reviewed on page 72), WebSurfer is part of Netmanage's Chameleon suite, and QMosaic is an excellent browser from Quarterdeck. Two others, both of which are superb multipurpose browsers, are WinTapestry from FTP Software and Internet Works from America Online. In addition, Prodigy now has a built-in browser available to anyone with Windows and a Prodigy account. To use the graphical browsers, you need either SLIP or PPP access (except for Prodigy users). In fact, using the Web is the primary reason for getting SLIP/PPP.

If you've ever had any doubts about the Internet's potential as an information provider, surfing the Internet for a few hours with a program like Mosaic or Netscape will cure that skepticism for good.

Whether you seek entertainment, education, current events, sports scores, financial information, or even government reports, the Web is out there waiting for your call.

Many Web pages even offer fill-in sales forms in which you can type your name, address, and credit card information. Some of these pages are becoming sophisticated shopping sites, and a considerable amount of corporate money is being pumped into making the Web a safe and viable place for you to spend your cash. This, quite clearly, is one of the waves of the future.

— Neil Randall



SLIP or PPP access See pages 23 and 24 for more information about these Internet connection protocols.



Out there in cyberspace is a brave new world — a revolution, some say — that's waiting to be explored. Let us show you how to begin your trekking.

1. *The Net* is your cyberspace companion, with a user-friendly, step-by-step approach that will enable you to get involved in the rapidly changing universe of the Internet. Each month, you'll find:



• *The Net*'s Anthology and Directory, which point you to a host of exciting FTP, Gopher, and Web sites.

http://www. thenet-usa.com URL for *The Net*'s Web site, where you can send us messages, download cool software and demos, and get the inside scoop on what's new with your cyberspace companion. Special features that highlight the ins and outs of e-mail, newsgroups, mailing lists, and real-time chats.

• Regular columns showing you how to conduct business on the Internet, have fun in cyberspace, and find some of the best software around.

• Reviews giving you rated opinions and buying advice for software, hardware, books, CD-ROMs, videos, services, and resources.

2. This is your magazine. We want to hear from you about your views on the Internet, and your insights into its evolving culture. Make suggestions for Anthology listings, query our experts, and provide us with hot tips. See page 92 to find out how.

3. Point your browser to **http://www.thenet-usa.com**, *The Net's* evolving Web site. You'll be able to send quick notes to our staff, download software and demos, and watch for what's coming up.

So, don't let the revolution begin without you — and without *The Net*.

— Launch Editor 🥠

🙂 🙂 Polite Sites

At this point, you're probably eager to take all this knowledge you've newly acquired, and venture out into the world of cyberspace.

To help ease your initial journeying, we've put together a list of exceptionally "polite" sites in which you can frolic while you get acquainted with Internet culture and learn the rules of this information revolution: 1. alt.tv.x-files — This group is devoted to Fox TV's "X-Files" series chronicling the adventures of FBI agents Dana Scully and Fox Mulder as they investigate the realms of the extraterrestrial and the supernatural. This superb series has attracted many literary and witty fans. Discussions range from UFOs to vampires and forensic pathology, not to mention how great David Duchovny looks in Speedos.

2. alt.folklore.urban — It debunks urban legends — those tales we've always believed in, although they've yet to occur. This group's FAQ will keep you from asking dumb questions, as well as shatter long-held misconceptions about stories that happened to a friend of a friend.

3. alt.fan.cecil-adams — If you like a.f.u. (above), then you'll love the fans of the irascible Cecil Adams, knowledgemeister of "The Straight Dope," a weekly newspaper column that seeks to solve all the mysteries of life. You'll learn what happens if you flip on your headlights while you're driving at the speed of light, as well as the calorie and fat content of sperm. This is education at its most fun.

4. news.newusers.questions — If you want to ask a dumb question, this is the place to do it.

5. news.answers — FAQmania! Answers to questions you haven't even asked.

6. **rec.arts.wobegon** — A meeting hall for the residents of Lake Wobegon, where all the women are strong, all the men are good-looking, and all the children are above average.

7. **rec.humour.funny** — Be warned that the humor here can get very ribald.

8. alt.music.lyrics — The question: "How did that song go?"

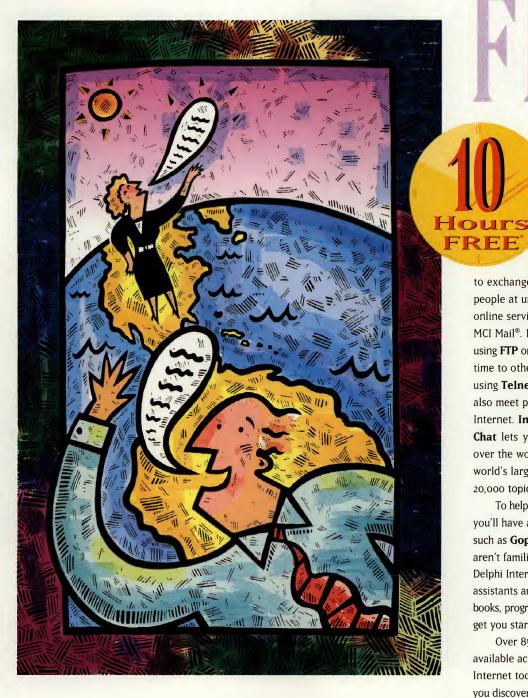
9. alt.fan.letterman.top-ten — Postings updated daily.

10. alt.cuddle — When the going gets tough, drop in here for a digital hug from a professional cuddler, at no charge.

Remember, even in the comforting cyberspace of these groups, wipe your feet, be polite, and ALWAYS read the FAQ. — David Allen

premiere issue 1995

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using **FTP** or connect in realtime to other networks using **Telnet**. You can also meet people on the Internet. **Internet Relay**



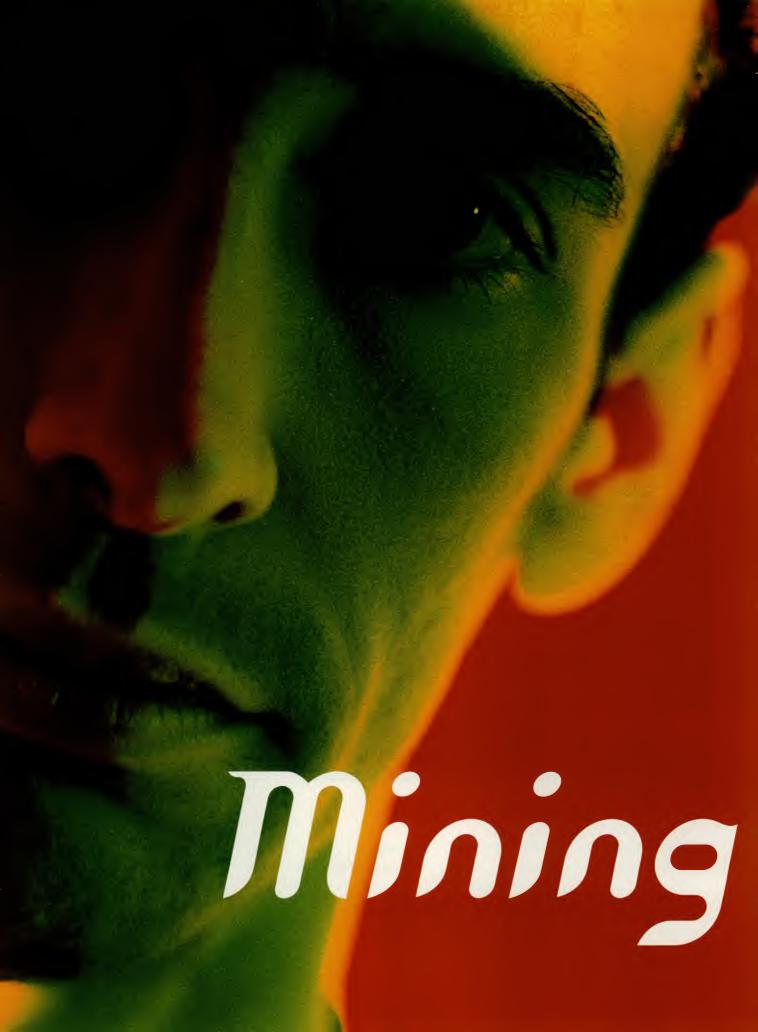
Chat lets you "talk" with people all over the world and **Usenet News** is the world's largest bulletin board with over 20,000 topics!

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Douglas Rushkoff is

the author of *Media* Virus! Hidden Agendas in Popular Culture, a recently published examination of the media as a natural extension of human consciousness, and Cyberia, Life in the Trenches of *Hyperspace*, a book linking such diverse topics as psychedelic drugs, raves, and the Internet. The following interview originally appeared in issue two of .net, Britain's puckish monthly journal of Internet culture.

— Simon Hindle

How long have you been using the Internet?

"I got on in '91."

And what do you use it for? "Well, it's changed. In 1991, I joined as a young, inquisitive journalist trying to actually find and communicate with the people who were my subject matter, and to meet more of them. So using the Internet, I was able to find scientists from NASA, virtual reality scientists, people in the computer industry and the psychedelics industry — people in the new science/bohemian kind of world. That was my original 'why.'

"Later on, when I'd made a lot of friends on the Internet, I started to use it for conferencing. I was mainly on services like The WELL in

San Francisco, and other equivalents — intellectual virtual communities, even Usenet groups to some extent — to argue out points.

"Then it changed again, and I got bored. I realized that the same conversation is going on all over. It's about different things, but it's the exact same conversation. It starts with someone saying something provocative, then a bunch of people come down on him really hard, and then he's just about to give up when someone else comes down on his side, and then people start arguing about the tactics that are used in the arguing, and the conversation dissipates into this metaconversation.

"As you can imagine, I got pretty tired of that, and now I just use it really for e-mail and to look at newspapers I don't want to buy — to get reviews and to find articles."

What do you like and dislike about the Internet — what parts of it appeal to you?

"What appeals to me is that it tends to foster the basic



Media Virus! is published by Ballantine Books and sells for \$21.95 at bookstores. human instinct to reach out and connect with other people, to create a global community.

"What I don't like about it is that in some cases, it tends to be growing more like an ingrown hair than a root system, in that rather than bringing the Internet as it is — with good old Gopher, Archie, FTP, and all that — huge repository of free speech. Do you see that happening?

"No. I mean, technology evolves like biology, and it's very hard for there to be reverse evolution. There are very, very few examples historically of technologies being available to people, and then being taken

"What we've got on the Internet is a tremendous empowerment experience. We've got the whole world in our hands, a privilege formerly reserved for God himself, and that's frightening to people."

to a wider number of people, we tend instead to be developing higher and higher quality, and more and more expensive interfaces for those of us who already have access, and can afford it.

"What's happening now is that you need greater computing power, and wider access, and a bigger account, to start doing the things that people want to do, and I think the Internet would have grown just as powerfully without that. I don't know, though. You could argue that it was elitist before because it used typed commands, and it's becoming less elitist now because you can do other things. The important thing to me, and I think to a lot of people, is that it's spreading South — to Africa, South America, and other places. And to do that it has to be cheap."

Is that how you see it evolving?

"Yeah, I do. I'm interested in the way that all American and Western media tend to spread around the globe to some extent, for better and for worse. And this media, which is multidirectional, will surely do the same thing, but even faster.

What's your new book about?

"It's called *Media Virus!* and it's a look at the media space, the datasphere, as a natural, organic, kudzu-like extension of human consciousness, [with the premise] that ideas spread throughout the datasphere in the same way a virus spreads throughout the biological community."

Will this book be available on the Internet? "This one will be, yes. I had trouble with the publishers on *Cyberia* — only the introduction and the first chapter are on the Gopher server on **The WELL**."

I read a piece of fiction in a futuristic RPG (role-playing game) concerning the Internet, describing its demise at the hands of governments who were unhappy with this away. The only case of that I know of is the sort of magical pagan plant technologies that women had before the Dark Ages — the original 'witchcraft' technology that was usurped by the church, and ultimately science and Western medicine. I don't see that happening again.

"The Internet is different because it was constructed to be anarchic. It was developed intentionally to fight censorship and to fight control. It's a system that was designed to imitate a natural system, like a coral reef. You can knock down any single part of it and the rest of it still functions, so I think there's almost no way for that to happen."

There's a large migration onto the Internet going on at the moment, with many more people suddenly becoming aware that there's this huge repository of censor-free information on tap. Do you think we're in for yet another bout of Luddite media scare stories along the lines of, "Kids can get bomb recipes! This filth must stop!"?

"It's already happening. That's because the media is afraid of losing its control over the content of our reality, finally. The people who this threatens the most are network news shows, the *New York Times* and everything else, because people are getting their information from each other.

"The Internet, in a sense, is just like the street — it's the real world, and there are going to be child pornographers on the street, and there are going to be bomb makers on the street, and there are going to be brilliant people on the street, too. It's almost more of an issue for parents than for the governors of the Internet. It's possible that parents don't want their kids to have free access to the information of the world, but I suspect that's because they don't trust the way they've raised their kids, or they don't trust the intelligence of their kids. That's too bad — if parents have raised their children

The WELL

Archetypal online "virtual community," based in San Francisco and founded by a member of The Grateful Dead. A BBS and nationwide public Internet provider, The WELL (Whole Earth 'Lectronic Link) recently celebrated its 10th birthday and seems to be beloved by all who know it. Phone: (415) 332-6106; e-mail: info@well.sf.ca.us, Telnet: well.sf.ca.us and log in as "guest."

interview

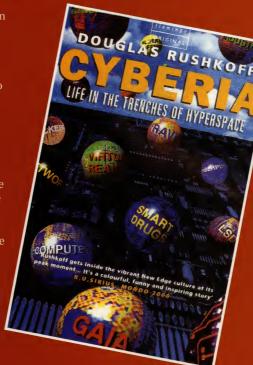
badly, then they're going to be scared of them getting involved in the world, which is a real shame, because the opportunities far outweigh any possible risk.

"The real risk of the Internet is a fear of empowerment. People are afraid that if left to their own devices, they'd rape and pillage each other and destroy the world. We have either been programmed or have reprogrammed ourselves to believe that we are a race of savages that cannot be trusted. What we've got on the Internet is such a tremendous empowerment experience. We've got the whole world in our hands, a privilege that was formerly reserved for God himself, and that's frightening to people. What would we do if we were left to our own devices? The Internet is about to show us.

"For instance, I'm sure there's child pornography on the Internet. And I'm sure there are step-by-step instructions on how to conduct a home abortion, too. I'm sure there's everything — any piece of information you want, especially if it's subversive. The real question is: What do we want? And do we trust ourselves if we can have whatever we want? Do we want freedom, or do we want restrictions?"

What do you think about **the Clipper Chip** affair?

"I think it's a joke. What it is is an attempt to de-evolve technology. At the moment there's encryption software called Pretty Good Privacy (PGP) that is fine. It works, period. The Clipper Chip is taking PGP and crippling it, twice. It's taking the same basic piece of software and saying, "This is great, but we're going to disable it like this and like that," meaning that there's a back door for the FBI and a back door for the CIA, or the NSA, two good back doors for them to be able to decode anything.



Cyberia – *Life in the Trenches of Hyperspace*, published by Harper Collins, is available for \$22. *The GenX Reader* is also published by Ballantine Books and costs \$13.95.

phones — they're changing the push buttons to rotary dials to stop drug dealers.

"As I said before, reversing technology never works. The Clipper Chip is like throwing the gauntlet down to hackers everywhere. To most hackers, it's like a Holy Grail. The U.S. government is saying 'Okay, you lot, here's something that we, the baddest of the bad U.S. government secret people, have done to challenge you.'

"And, of course, everybody's just taken up the gauntlet. People have already found the back doors in the Clipper Chip, and no

"The Internet, in a sense, is just like the street — it's the real world, and there are going to be child pornographers, and there are going to be bomb makers, and there are going to be brilliant people on the street, too.

"The idea is to put it in everything — in every phone, in every modem. The idea is that it encrypts for you, so rather than using commercial encryption or your own encryption, which will be illegal, you'll use the government encryption so you get your privacy, but they'll be able to look in whenever and wherever they want. It's like in New York at the moment, where they're disabling pay Contact Douglas Rushkoff at Rushkoff@well.com.

one's even supposed to have it yet. The code's already been broken.

"At the end of the day, you can't really control the flow of the Internet any more than you can control the flow of the ocean. It's like water — it's going to spread where it wants to, and even if they build a little dike here and there, it's gonna eventually bust through."

The Clipper Chip

A hardware device originally intended for the telephone — designed to create some measure of security by encoding information and enabling or those with the correct code to listen in. A trapdoor, however, would be included with each chip to enable "concerned" bodies" — read, the government—to listen in when "necessary." Apart from the unpleasant Big Brother implications of such a system the Clipper Chip idea is also untenable - you can double encode information and thus render the trapdoor useless quite easily.



How to Find Cheats, Walkthroughs, Hints, and Tips on the Internet

Gaming Slick Tricks

elp for the frustrated gamer is available from a rich multitude of resources on the Internet. Here, we'll show you how to find cyberspace's countless veteran game



Easter Eggs Widely fabled, these hidden tricks and prizes lurk in many games. They can be unlocked by code words or special joystick-keypad combinations.

So, you're fed up, are you? Can't stand to spend another sleepless night twisting anxiously amid the covers, reviewing that damned game's strategy? Are your dreams riddled with schemes about how to make it to the next level of Lemmings? Maybe you've even lost your job (twice) because you prefer the glowing phosphors of Mortal Kombat to your boss' dry assignments.

Fear Not, Help is Here

No, friends, I am not talking about some 12step video-game addict group therapy meeting. Your salvation is actually on the Internet, which can show you how to beat, once and for all, that game haunting you. See, the Internet is

home to

who are

countless veteran

entrenched in the

world that your

know how to get

game players

same silicon

soul craves.

These people



Super Nintendo Entertainment System gamers can learn how to kill the last boss in Super Bomberman, and answer other difficult questions, at the SNES Web page.

to level 40, beat the dragon, and find the secret pot of gold in many a virtual world.

No matter what games hold your rapt attention, there's a place on the Internet designed to offer you help. Internet aid can come in many forms: discreet hints to help you in your gameplay; not-so-discreet "cheats"; "walkthroughs" (for the severely frustrated) providing start-to-finish instructions that will show you how to survive intact; and Easter eggs. So, if you're really stuck, or just want to know whether there exists a secret way to glean extra lives from your games, read on.

Your Cheatin' Heart

The central repository for gaming information on the Internet is the Games Domain, a massive World Wide Web site players, to learn their strategies and secrets. We'll also reveal how you can overcome your worst gaming nightmares.

Back Fee

— Kevin M. Savetz

Games Domain

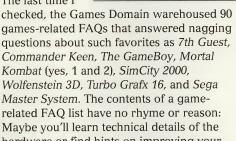
A message from the maint 1st February, 1995

authorast com nuty 35 active HTTP connections to this site. best been accessed 363,110 times since 1st Jan

te follow the link. It gives a few poi

File Edit View Go Bookmarks Options Directory I Games Domain - Games related inform New Terror Hener Below Images Open Print Field S Union State (Arcente as we Arcente as a

designed as a central reference point for all things games-related. It specializes in gaming FAQs (frequently asked questions lists) and walkthroughs. The last time I



gameplay, or perhaps you'll discover how to crash the darn thing altogether in a fit of frustration. Meanwhile, the subjects of the cheats on tap include everything from Beyond Zork, King's Quest, and Leisure Suit Larry to Monkey Island and the everpopular, beautiful but ultimately frustrating Myst.

To get to the Games Domain, point your Web browser to

http://wclrs.bham.ac.uk/GamesDomain.

If you don't have access to the Web, don't despair. Simply Gopher to risc.ua.edu:70/11/games/solutions, a trove of zillions of games solutions. There you can find hints for Ultima 6, level codes for Lemmings, and the solutions for The Incredible Machine.

When you've exhausted these resources, burrow your gopher to the Spies in the Wire Gaming Archive (wiretap.Spies. COM/11/game_archive/), where you'll find



Classic games -Intellivision, the Atari 2600, and the Fairchild "Channel F" live on among afficionados of the Classic Video Games Web page.

hu 12:48 PM 😰 N

The Games

Domain Web

more than 90

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a variety of

questions.

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FAQs answering

site warehouses

N

hardware or find hints on improving your



about DOOM Doom, the game

that brought head-to-head network and modem play into the 21st century, is so phenomenally successful that it's beginning to spawn a whole new industry of BBSs and services tailor-made for the NetDoomer. People are realizing they can make pretty good money by simply providing an available hub. devoted to nothing but the wanton blood-lust of Deathmatch play. Many are pretty elaborate affairs, too, with libraries full of user-created levels and new editors. in addition to the promise of some bitching Deathmatch action. Look for them. Ask around on Usenet. You'll soon learn that not everyone on the Internet fights via the keyboard. Plenty of us are toting guns.

> — Matt Firme, Editor PC Gamer

endless cheats and hints, plus technical stuff like board pinouts and DIP switch settings for arcade games. It's way cool. The FTP site **ftp.netcom.com** also has an excellent selection of FAQs, walkthroughs, and cheats.

More, More, More

Not satisfied yet? Check out Nathan Cochrane's home page at http://wantree.com.au:80/gamewave/. Nathan is a freelance cyberspace communications journalist who has placed an enticing library of reviews and games-related articles on the Web. Then, move on to Cardiff's video-game pages: http://www.cm.cf.ac.uk/Games/. There, you will find a home page dedicated to various play-at-home game platforms, such as Sega, Nintendo, and 3DO, and gaming computers like Atari and Amiga.

If you have a GameBoy, check out http://www.cs.umd.edu/users/fms/ GameBoy/. It contains everything you could possibly want to know about the GameBoy. Included are links to the FAQ, cheats and tips, codes, games lists, mailing lists, and lots more. The FAQ alone is worth its weight in cartridges — it has lists of GameGenie code, GameBoy games, and accessories, as well as technical information about the hardware.

Super Nintendo addicts, don't feel left out. You can check out http://sbh.cse.bris. ac.uk/Nintendo.html, where you'll discover everything you could ever want to know about the Super Nintendo.

Or, is *Doom* your destiny? Then Web over to Doomgate — the self-proclaimed "main worldwide access point for all things Doom-related that are on the Web." You'll find the best levels list, the *Doom II* secrets list, and dozens of other sources of information. It's at http://doomgate. cs.buffalo.edu/index-html.html.

On Usenet

I would be remiss

not to mention the

copious amount of

information you

Usenet's gaming-

newsgroups. There

can find on

are countless

newsgroups for

related



Doomgate is the self-proclaimed worldwide repository of all things *Doom*related on the Web. discussion of games of every type (video, board, card, and otherwise).

You can find them under **alt.games** and **rec.games**. A quick tour of some of the most popular games-related newsgroups includes **alt.games.apogee**, **alt.games.doom**,

alt.games.sf2 (Street Fighter 2), rec.games.bolo, rec.games.video.3do, rec.games.video.arcade, rec.games.video.atari, rec.games.video.cd32, and rec.games.video. nintendo.

Not only can you find answers to specific gaming questions on newsgroups,

but you'll also be able to discover expert gamers exchanging their best high scores as well as playing tips.

Games-related FAQ lists are often posted to these newsgroups, too. It's easy to spend an entire afternoon wading through the wondrous amount of information in FAQs like the **comp.sys.mac.games FAQ** (for Macintosh gamers), the **rec.games.int-fiction FAQ** (for fans of interactive fiction games), and even the **rec.games.pinball FAQ**. (Ever

wonder how pinball games make that loud THWAP! sound when you win an extra game? This FAQ will tell you.)

If you can't find a newsgroup related to your diversion of choice, you can always query the newsgroups

rec.games.misc or **alt.games**. You're sure to find other interested folks on these general interest gaming groups.

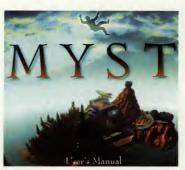
Long Live the Classics

If you're like me, and have a soft spot in your heart for "classic" video games — those early, and by now somewhat quaint, home videogame systems like Intellivision, the Atari 2600, and the Fairchild "Channel F" — there's also a place or two on the Internet for you. Start by checking out the newsgroups rec.games.video.classic and alt.games.video.classic.

There, you'll discover secret Easter eggs (which seem to have been more prevalent in earlier games than in today's more complex generation), game tricks, and cheats. You'll also find plenty of people buying and selling those classic systems. There's also the Classic Video Games Web page at

http://www2.ecst.csuchico.edu/~gchance/. There, you'll find pictures and great information about long-lost systems, like the Vectrex, the Odyssey, and the Atari 5200.

No matter what your game is, you're sure to find plenty of hints, cheats, and tricks — and maybe a worthy opponent or two in the process — on the Internet. Live long and phosphor.



Not necessarily a gamer's game: The Games Domain also provides cheats for such mildmannered games as the ever-lovely, ever-mysterious, and everfrustrating Myst.

Mortal Kombat I and Mortal Kombat II fans can find move lists, hints, and cheats online through the Games Domain and alt.games.mk.



http://wclrs.bham .ac.uk/GamesDo main

To get to the Games Domain, point your Web browser this way.

alt.games,

rec.games These newsgroups are a great way to find answers to specific gaming questions. From the publishers of today's most innovative, visually stunning magazines ...

ading Guide to PC and Mac Mui

CD-ROM Today

PC Gamer

NEXT Generation

PC GAMER

Your Cyberspace

nvision a magazine that is 100% committed to bringing the Internet to life, superbly visual, engagingly fresh, immeasurably helpful, dedicated to making sense of the Internet for the millions of people who want to cruise the information highway for fun and profit.

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5NIA3



A Step-by-Step Stroll Through a Web Site We Like

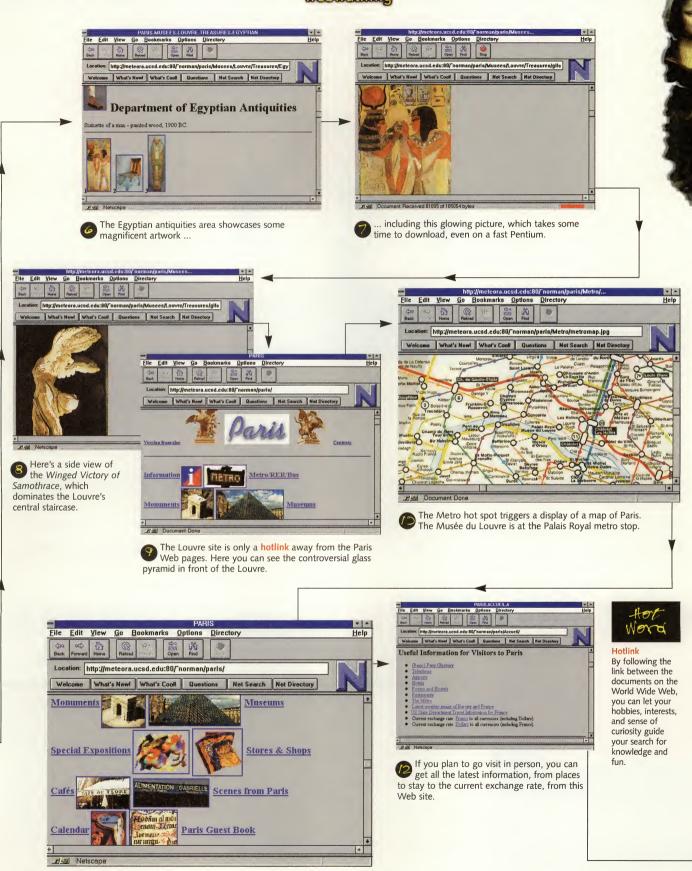
Le Louvre

ach month, we will walk you — screen by screen through a World Wide Web site chosen for its outstanding content and funky appeal. On our first tour, we take a look at the illustrious treasures of the Louvre museum in Paris, one of the most famous art galleries in the world. This brief junket illustrates not only that one thing of beauty leads to another, but also how quickly you'll find yourself surfing the Internet. So, put on your WebWalking shoes, and let us show you around.

- Neil Randall and David Wade







The Paris pages, undoubtedly among the most beautiful sites on the Web, offer a host of fascinating diversions.

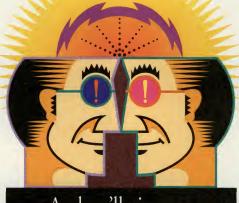
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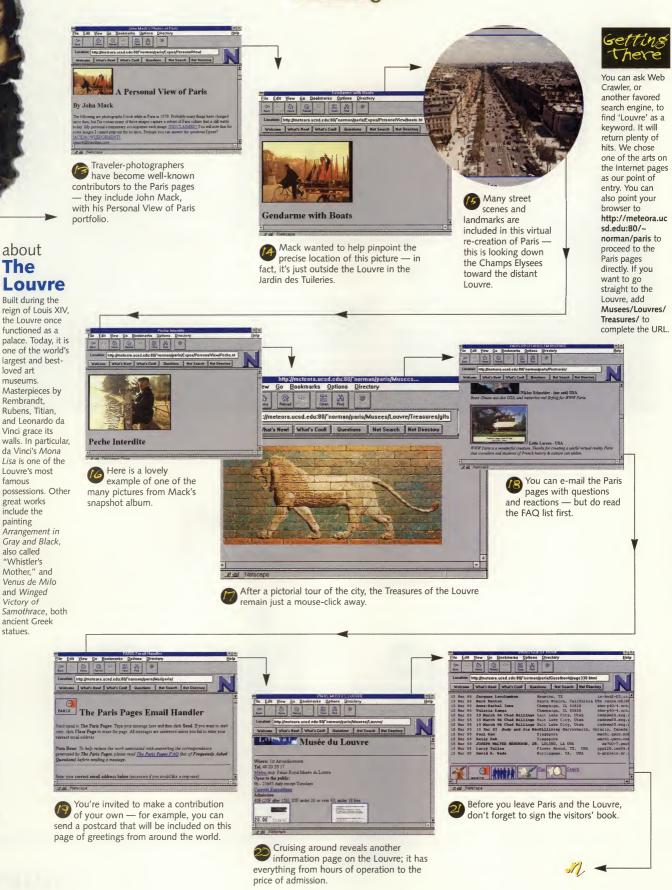
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webwalking



069



coming soon MAC & PC CD-ROM

OD-i

HILIPS

Doc and rid yourself of this binary bacteria before your head explodes and you end up decorating the

reviews

Objects of Desire

rom this very first issue on, we will bring you a whole range of products that will help make your life in the fast lanes of the information superhighway a little bit easier and safer. Veteran Internet users and other experts will evaluate software programs, new hardware, reference books, CD-ROMs, instructional videos, special services, and resources — in fact, any Internet-related items that deserve to be brought to your attention.

software

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Our reviewers will put all these things to the test — looking for the appropriate functionality, ease-of-use, pleasing design, clear instructions, value for the dollar, and timeliness — and then we'll assign each and every product a percentage mark. No guessing, no fudging the issue — you'll know exactly where we stand. This monthly reviews section will strive to be the most complete product guide and your first source of information before making a wise buying decision.

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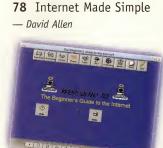
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Internet, Macintosh Edition *Shelli Craig*76 Internet Insider
James H. Roberts



77 Detour: The Truth about the Information Superhighway *James H. Roberts*77 Mosaic Quick Tour for Mac *Steven Anzovin*



all-in-one package

hardware

78 Microsoft Natural

Keyboard

— Charles Brannon

Ratings: Here's the Score

90%-100% - Editor's Choice Excellent content and design - a rating this high is a must have. 80%-89% - Damn Good Strong and informative. 70%-79% — Solid Good and helpful. 60%-69% — Plain Vanilla Simply average; could be much better 50%-59% — Same Old, Same Old No new news here; not especially useful. 40% - 49% - 50.5Poor quality; definitely needs improvement. 30%-39% — The Pits Don't waste your time.

Judge and Jury Our Reviewers

David Allen is a technical support manager and freelance writer in High Point, NC.

Steven Anzovin, based in Amherst, MA, is the author of three books on Macintosh multimedia. His most recent work is *The Green PC* (McGraw-Hill).

Charles Brannon, based in Greensboro, NC, is a programmer, network supervisor, and writer. He is co-authoring the upcoming *The Windows 95 Book* (Ventura Press).

Shelli Craig, formerly of *PC Gamer* magazine, is an expert regarding America Online.

Neil Randall, based in Waterloo, Ontario, is the author of Teach Yourself the Internet in 21 Days and co-author with John December of the World Wide Web Unleashed.

James H. Roberts, currently on leave from IBM Canada Lab as a senior assistant information developer, is a Ph.D. candidate at the University of Waterloo in Waterloo, Ontario.

Tim Victor, based in North Carolina, is a technology enthusiast who has worked as a writer and programmer, most recently for Hanna-Barbera Productions in Los Angeles.

David Wade is the new media editor for Imagine Publishing in Burlingame, CA.

We'd also like to extend an invitation: If you produce a product or service of interest to our readers, please send us two copies and all available information to Reviews Editor, *The Net*, Imagine Publishing, Inc., 1350 Old Bayshore Highway, Suite 210, Burlingame, CA 94010. And if, as a reader, there are areas you would like to see treated in greater depth, or products you wish to draw to our attention, please contact us at thenet@aol.com.



Internet in a Box

Category: Software

Price: \$149 suggested retail, \$99 street Format: Windows, floppies Manufacturer: Spry Contact: (800) 557-9614, (206) 447-0300, e-mail iboxinfo26@spry.com



NCSA Mosaic The most popular graphical Web browser, available for X Windows, Mac, and Windows, and licensed to several commercial outfits. Not too long ago, using the Internet meant working with some fairly ornery UNIX tools. You got a UNIX account, used the standard UNIX software, and occasionally found and downloaded custom UNIX tools. It was fast, efficient — and dull.

If you had a GUI like Microsoft Windows, you'd soon wish for more. After all, a VT100 session didn't look any better in Windows than in good old text-based UNIX, and activities such as file transfer and printing mail messages were difficult, to say the least. Programs like Mosaic promised a solution in full graphical glory, but putting them to work wasn't easy.

Software companies could hardly miss such an opportunity, and several have scrambled to bundle all the important Internet tools into an easily installed package.

Perhaps the best of the lot so far is Spry's *Internet in a Box (IBox)*. It lets you configure easily to use your existing Internet provider if you don't want to use Spry's



IBox's configuration system lets you determine every aspect of your log in, and it gives you a scripting system to set up an automatic log in every time.

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Air Gopher is easy to use and graphically appealing. The split screen gives you a continuous record of where you've been. scripting procedure on the market: You don't have to write script files; just type the necessary commands in the scripting dialog box. Or, you can log on manually and let *IBox* take over. *IBox* supports both SLIP and PPP access, as well as BOOTP commands for accounts that require it. You can configure several different accounts, choosing between them when you load the dialer. Even more important than easy

default choice, and the installation

program works well. In fact, IBox

may have the most effortless

configuration is the high quality of the tools. The *IBox* e-mail program, Air Mail, is rich and complete, with enough options to satisfy all but the most demanding user. The newsgroup reader, Air News, works extremely well and includes a UUDecode program to let you work with binaries you find on these

groups. The Telnet client enables you to configure several frequent sessions, and ImageView, a graphics program, allows you to look at graphics files downloaded from Gopherspace or the World Wide Web.

IBox's core features are all excellent. Air Gopher offers a split-screen view of

Gopherspace. The main directory titles are on the left; when you double-click on one of them, the full directory opens on the right. The result is an easily navigated Gopher program that's well integrated with tools such as graphics viewers.

Air Mosaic, *IBox*'s Web browser, is a fully developed, licensed version of NCSA Mosaic. The improvements to the original are obvious: interruptible downloads, an excellent bookmarking system, a stop button that works every time, and a strong system for setting preferences. The browser doesn't support Netscape's nonstandard HTML tags, but on the whole it's so good that Spry has wisely packaged it as a separate product entirely, *Mosaic in a Box*.

Network File Manager (NFM) takes the pain out of FTP. Just launch your FTP session — there's an easy-to-use dialog box that lets you establish your username and password — and NFM launches Windows' File Manager along with it. You get a full drag-and-drop interface for retrieving files

from a remote computer (or sending them there if you have written permission).

Internet in a Box is an excellent package for new Internet users, yet sophisticated enough for old hands. I've had some minor compatibility problems between *IBox* and a couple of freeware programs downloaded from the Internet, but for the most part, there's nothing to complain about. This package is worth considering and could be the only one you'll need.

— Neil Randall

Likes: Good installation and e-mail programs; excellent core features. Dislikes: Minor incompatibility problems.





Network File Manager makes use of Windows' familiar File Manager to let you drag and drop files from remote hosts to your own PC.



Interruptible downloads and an excellent bookmarking system are among the joys of Web browser Air Mosaic.

Second Opinion It's a Snap

Installing and configuring *IBox* is easy — but read the pamphlets that come with it. They explain the process and are very helpful to have on hand.

IBox's Air Mail program offers a convenient interface, with a folder list and the messages in the chosen folder sharing the screen. Personal configuration and folder management are handled via pull-down menus, or with an excellent graphical tool bar. On the other hand, I'd rather not have the View New Messages command, and Air Mail's address book doesn't allow for notes pertaining to the listed recipients.

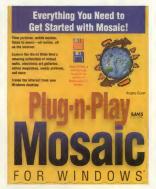
Air News is a very good graphical news reader. The options are clear, the documentation complements the design, and the newsgroup browser and personal folders are useful. I wish the Article menu had the "mark as read/unread" options, but the Find function makes up for it. — David Randall



Plug-n-Play Mosaic for Windows

Category: Software and Book Price: \$29.99 Format: Windows; Book, Floppies Manufacturer: SAMS Publishing Contact: (317) 581-3500

The 400-page book portion of Angela Gunn's *Plug-n-Play Mosaic for Windows* is well written and properly attuned to Internet novices — unfortunately, the software is not quite ready for prime time. For most readers,



this package won't live up to its "plug and play" billing. While the text does a great job of describing what a Web browser is and what Mosaic can do, technical problems lurk here. Each of the package's two pieces of software must be installed and configured flawlessly, and setting up a PPP/SLIP connection from a book simply isn't for the faint of heart. Using a 486 system, I could not get my Internet provider to recognize

Each of the package's three pieces of software must be installed and configured flawlessly not a piece of cake. the connection. Because the software that makes the connection is so stripped down, I couldn't even determine why it was failing. (When I used a P90 system with NetManage's PPP connection, Mosaic itself worked fine.) The default Internet provider, Portal, uses CompuServe's dial-in lines, so I couldn't get a connection number faster than 9,600 baud. Believe me, that's too slow. The system will literally crawl, and you will pay for this crawling: \$2.95 an hour, in addition to a monthly fee (outside the San Francisco Bay Area).

Even if you succeed in getting a fast connection, Mosaic is slower than the Netscape browser, so the book seems somewhat out of touch. If you really want a "plug and play" Web browser, don't buy a book. Instead, find an Internet provider that will set you up with a reliable, fast PPP connection. Then you can use any browser you like.

- James H. Roberts

Likes: Good description of Web browsers. **Dislikes:** Software doesn't live up to its "plugand-play" name.



HTML Writer

Category: Software

Format: Windows Price: Donationware (Send what you can afford or what you think it's worth.) Developer: Kris Nosack Contact: http://lal.cs.byu.edu/people/nosack/index.html

Let's face it — getting started with HTML isn't like doing brain surgery, but, as with any scripting or programming chore, a forgotten closure or the tiniest typo will foil



or programming chore, a forgotten closure or the tiniest typo will foil your best intentions. Luckily, an HTML script can be checked out as you go along, facilitated by an editor such as Kris Nosack's *HTML Writer*. If you want to try it, you can find *HTML Writer* on a number of Web tool sites (I downloaded version 0.9 beta from http://lal.cs.byu.edu /people/nosack/index.html); not only do you get the editor, but also a

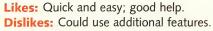
short course in HyperText Mark-up Language. There's also a built-in tutorial available through the Windows help file. If you need a book to prop beside the keyboard, I'd suggest either Larry Aronson's *HTML Manual of Style* or Laura Lemay's *Teach Yourself Web Publishing with HTML in a Week*.

The built-in help system offers a quick tutorial in HTLM. The editor is an elementary word processor with a toolbar full of the most common markup instructions, allowing for style, header size, image placement, and so on; not included are such relative refinements as radio buttons and forms creation. You can clear the tags at the touch of a button to check on your text or use the small eye icon in the top left corner, which allows you to bring up your favored Web browser.

HTML Writer is simple to use and seemingly robust. The various help files are quite sufficient to get you going. There's still lots of room for a more sophisticated HTML editor, but the beginner will find this a good tool to get started with. Kris

Nosack has done a fine job, and distributes his *HTML Writer* as 'donationware' — if you use it, he deserves your support.

- David Wade







HTML Writer enables you to quickly check how your work will be displayed in a browser such as Netscape.



Atlantis Internet

Category: Software

Price: \$39.99 Format: CD-ROM for Macintosh, DOS, Windows, and UNIX Manufacturer: Atlanta Innovation Contact: (800) 285-4680, fax (404) 640-8769

The Atlantis Internet CD-ROM mixes fundamental information about the Internet with a useful assortment of software for getting connected, including shareware, freeware, and feature-limited, but still useful, versions of commercial programs for Mac, MS-DOS, Windows, and UNIX-based systems. Much of what's on this disc can be found online in one place or another, but tracking everything down might be a tall order for an Internet neophyte. And, after



Included on Atlantis Internet is NetManage's Chameleon Sampler, a quick way to access the Internet. that, downloading it all could take awhile, so it's quite a convenience to have all these programs and documents in one place. There are no sign-up kits or special introductory offers here, but with a thorough list of Internet service providers included, this is an excellent CD-ROM for someone who's just getting started on the Internet.

— Tim Victor



Atlantis Internet groups communications software and other basics for beginners in one handy place.

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	Lisa Farley	09:57	AH	2/1/95	2	Re: new poll standings Tuesday
	Mike Thayer	10:23	AH	2/1/95	2	Re: bizarre synchronicity
	Dennis Sacks	10:09	AH	2/1/95	2	Re: bizarre synchronicity
	Stephen L Burt	05:17	PH	2/1/95	3	britpop band
	Andy Ruppenstein	12:51	PH	2/1/95	4	a few Alias questions and answers
	Dennis Sacks	12:45	PH	2/1/95		Digested version of loud-fans
						-0

Also included is the Eudora e-mail mail-reader program, which allows you to send and receive electronic messages.

192

product that is

free to use for a

trial period. If you want to continue using it, you have to pay for it. Freeware A software

product that you can use free, but sometimes there

will be limitations

concerning its use.

or stipulations

Shareware A software

Likes: For the newbie, this disc pulls all the essentials together.

Dislikes: Experienced netters already know where to find these files and programs on the Internet.





Category: Software

Price: \$45 Format: CD-ROM for Macintosh, Book Manufacturer: Celestin Company Contact: (206) 385-3767, fax (206) 385-3586

As a one-stop shop for Mac Internet stuff, *Destination: Internet* has no peer. There's a lot more here than comes with any other Mac Internet book/disc combo — about 540MB more. Besides

the standard MacTCP, Fetch, Telnet, WAIS, SLIP, MacPPP, and other essential Internet tools, you'll find more than 14,000 information files, 1,200-plus applications, utilities, and "read mes," plus a couple of games thrown in for good measure. Celestin has arranged for access to a free SLIP connection (via slip.net) for owners of the disc, which is a good way to get started — as long as you don't mind making a toll call to the

Double-Click Mei + Getting Configured
 reader in dealer by aux change and merely approximated and point and the second s

Destination: Internet steps you through the delicate task of configuring MacPPP.

(217) area code. True, you can download almost all these files yourself without paying for the CD. But how many hours would that take? Celestin has already done the work; I suggest that you get the disc.

— Steven Anzovin

Likes: All the Internet tools and info your Mac can possibly use. **Dislikes:** Most files can be downloaded from online services for free.

RATING: 80%

Net Journal

Mac

back issue of *Mac Net Journal*, one of the disc's 300 netzine files. reviews

The Internet for Everybody

Category: Software Price: \$49.95 Format: CD-ROM for Macintosh and Windows Manufacturer: Emerging Technology Applications Contact: (508) 879-0006, fax (508) 820-4396

Encompassing more than two hours of tours and tutorials, The Internet for Everybody's QuickTime movie clips are packed with tips about the Internet. The video isn't quite as entertaining or well-produced as the package suggests, but it



nonetheless is informative. An attractive, well-thought-out interface with versions for both Macintosh and Windows helps to organize the information.

There are a few problems, though. It took me a fair amount of configuration tweaking to find a setup (a very non-standard one) in which the QuickTime for Windows video would play, and the interface tended to be slow to respond. But if you're willing to overlook its rough edges, The

They may not give Pulp Fiction a run for its money, but this disc's QuickTime movies are full of information.

- Tim Victor Likes: Lots of tips and pointers to interesting destinations.

Dislikes: Software could be faster, easier to configure.

Internet for Everybody is a useful introduction to the Internet



and the resources it offers.

Hitchhiking on the Information Highway

Category: Software

Price: \$69.99 Format: CD-ROM for Windows Manufacturer: Moon Valley Software Contact: (805) 781-3890, fax (805) 781-3898

Moon Valley Software's cyberspace CD-ROM offers a mix of software and documents, but the collection seems to lack a single, clear focus. It combines



Hitchhiking takes a Cuisinart approach to providing Internet tools and information.

Likes: Exciting graphics and easy provider access onto the Internet.

Dislikes: Tries to cover too much in too little space and ends up losing real content.



sign-up kits for five online services, a version of the Softerm telecommunications program, a database of more than 16,000 bulletin-board systems around the world, and several electronic texts about the Internet. The disc also includes video tutorials and slide shows demonstrating the basics of various online services and systems, but they're too short and their content is too limited - a couple of pages in the manual might have covered the same ground just as effectively. There's some good stuff on the disc, but overall, Hitch-

hiking on the Information Highway isn't as comprehensive or as well targeted as other Internet discs.

— Tim Victor

Internet Info

Category: Software Price: \$39.95 Format: CD-ROM for Macintosh, DOS, and Windows Manufacturer: Walnut Creek Contact: (800) 786-9907, (510) 674-0783, fax (510) 674-0821, e-mail info@cdrom.com

Walnut Creek's Internet Info disc is a techie's delight, with more than 12,000 documents, including standards from bodies such as ANSI, IEEE, ISO, and **CCITT**; Internet protocol specs and descriptions of RFC, FYI, IEN, and IETF files; and the full collection of files from the Frequently Asked Questions archives. There are no introductions or tutorials

here, and there's no software either - the real gurus for whom this disc is designed already know how to connect to the Internet and where to get the latest copies of the programs. An in-depth and well-organized reference to the technical side of the Internet. Internet Info can also be accessed at Walnut Creek's own online site, ftp.cdrom.com. The generous try-before-youbuy policy makes the CD all the more attractive.



ANSI American National Standards Institute IFFF Institute of Electrical and Electronics Engineers ISO International Standards Organization Consultative Committee for International Telegraphy and Telephony

— Tim Victor

Likes: Wealth of in-depth Internet documents, lots of nice touches on the disc.

Dislikes: If you aren't an Internet guru and don't aspire to become one, you won't find much of interest.





The full FAQ files are part of the techie appeal of this packed reference disc.



America Online's Internet, Macintosh Edition

Category: Books

Price: \$24.95 Publisher: Ventana Press Contact: (919) 942-0220, fax (919) 942-1140

I hate manuals. I despise reading instructions when putting together a complicated computer desk. I prefer to explore the situation and learn from my mistakes. Granted, it may take me much longer this way, but I'm stubborn. I clung to this method

when dealing with the

Internet, too, until recently. As a long-time America

Online user, I was eager to hook up to the Internet as soon as access was available in early 1994. I remember typing in the keyword Internet and being confronted with choices such as Gopher, Mail Lists, and

Lichty's descriptions of features F such as Gopher, Veronica, Archie, au and Jughead ensure that you ju won't confuse Internet tools with a comic book. A

FTP. I wandered around dazed and confused, and eventually just gave up. Finally, I got my hands on Tom Lichty's book, America Online's Internet,

Macintosh Edition. I broke my golden rule of not reading the directions—and I was immediately enlightened.

The purpose of this book, as stated by

the author, is not to delve deeply into what you'll find on the Internet, but to show readers how to use America Online to access the Internet. Lichty achieves that goal with easy-to-understand instructions on using AOL's interface. If you've never used AOL, you'll appreciate the detailed explanations Lichty gives, as well as the 10 free hours of AOL time included for new users. Lichty explores the realms of e-mail, mailing lists, newsgroups, Gopher and WAIS databases, and FTP sites so that we newbies won't have to wander out into cyberspace with no sense of direction. Sidebars throughout the book contain fascinating tidbits about the Internet, including historical information.

After reading this manual, I was able to find many things that I wouldn't have discovered on my own. Now, if I could only get that new computer desk together ... — Shelli Craig

Likes: Well-written; helpful information. **Dislikes:** Somewhat redundant in places.





America Online Commercial online service that is one of the "Big Three" — the others are Prodigy and CompuServe. It provides some Internet access, as well as its own content, including software libraries, discussion groups, and online shopping.

Internet Insider

Category: Books

Price: \$14.95 Publisher: McGraw-Hill Contact: (800) 722-4726

I'm almost ashamed to admit it, but I really like this book. The 234-page Internet Insider is a cross between a basic, introductory look at what the Internet is all about and a breathy gossip sheet with the tabloid excesses of the Weekly World News. In fact, you don't even need an Internet connection to enjoy this one, just an "inquiring" mind. Filled with pictures, a sly sense of humor, and a wealth of entertaining information, Ruffin Prevost's Insider is a real treat. After all, a collection of Internet "content" (from newsgroups, mailing lists and FTP sites) could make for one of the most boring books imaginable. Instead, the author has snapped a tabloid picture of the Internet that captures cyberspace in all its quirky glory. With information purposely presented in no particular order, *Internet Insider* covers topics from the strange desires of those who frequent alt.pave.the.earth to the chronicles of the Clintons' cat, Socks.

In addition, the book provides lots of pointers, as well as some good advice about netiquette, so that you, too, can participate happily in the goings-on described here. Thankfully, there's also an index, so if you always wondered just what the heck alt.adjective.noun.verb.verb. verb is, you can quickly find out. In sum, if you're interested in an examination of the Internet as a cultural comedy, rather than as an information source, you'll enjoy this book — even if its shelf life is short. Isn't that what tabloids are for? — James H. Roberts

Likes: A great read, with an irreverent style that melds information and entertainment. Dislikes: Its potential for becoming rapidly outdated is high.





Internet Insider snaps a tabloid picture of the Internet that brings the information highway to life with its focus on the bizarre, the strange, and the fascinating.



Detour: The Truth About the Information Superhighway

Category: Books

Price: \$22.99 Publisher: IDG Books Contact: (800) 762-2974

When the stakes are high, looking into the future seems an irresistible pastime. And the stakes certainly seem towering when talk turns to "the information superhighway." But pinning down exactly what that superhighway metaphor represents — beyond more TV channels — is a difficult task at best.



Vaporware A software product that is announced but will not be imminently released. Michael Sullivan-Trainor's 319-page Detour outlines various takes on the information future for a general audience. Filled with quotations and insider views from corporations such as Time-Warner and Disney, the book reveals how these media giants are preparing to bring interactive entertainment services to our homes. It also discusses the basics of the Internet and even suggests that the Internet may dwindle back to its research roots when a new superhighway — made possible by emerging phone and cable technologies — becomes available.

I agree with the author that these technologies will cause massive changes. In fact, they already have: Just look at how the Internet changes the notion of national borders. But the book doesn't go far enough; it merely presents possibilities without looking at how they fit together as a whole and doesn't analyze any of the information it reports. Why it's called *Detour* is a mystery — unless bad puns are considered necessary for books on this topic because the book doesn't discuss what could go wrong with the corporate visions presented. I would have liked less emphasis on broadly based, vaporware applications and more discussion of the cultural and technical hurdles that need to be overcome.

By the end of the book, I felt like I'd been reading a long advertisement for the future, though I couldn't tell you who the sponsor

was. Still, everything *Detour* reports might come to pass — eventually. The information superhighway might, someday, have nothing to do with the Internet, and it might be controlled by firms like Time-Warner and Disney. It might involve something called a "teleputer." Personally, I'm holding out for a jetpack before I cancel my Internet access. — James H. Roberts

<text>

All detour, no destination? Michael Sullivan-Trainor outlines the information future for a general audience.

Likes: Presents possible implications of the information superhighway. **Dislikes:** Analysis doesn't go far enough.



Mosaic Quick Tour for Mac

Category: Books

Price: \$12.00 Publisher: Ventana Press Contact: (919) 942-0220, (800) 743-5369, fax (919) 942-1140

The World Wide Web is the future of the Internet, and NCSA Mosaic, for many netters, *is* the Web. A browser program allowing users to experience graphics, sound, and video on the Web, Mosaic and similar programs promise to transform the Internet from an unfriendly domain into a vast infosource as easy to use as, say, the Apple Macintosh.

Gareth Branwyn's *Mosaic Quick Tour for the Mac* is an excellent introduction to this ground-breaking program. After



providing an overview of Mosaic and HTML (the Web's formatting language), the author takes you on a sample Web session visiting some of the cooler Web sites.

The author's Internet credentials include regular

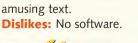
Written by a cyberspace connoisseur, this book will ease your Web journeys.

contributions to *Wired* and *Mondo 2000* magazines, the Internet sections in the *Millennial Whole Earth Catalog*, and the notable hypermedia compendium, *Beyond Cyberpunk!* He clearly knows and loves the Internet, so this is not just another software manual replacement or how-to guide for newbies you get Branwyn's own informed perspective, which tends toward the whimsical. (Among other things, you'll learn how to get an Internet cup of coffee and take a dip in an Internet hot tub.)

The only thing that's missing from this is software; by some massively odd quirk, neither a Mosaic disk nor a Mosaic hypertutorial — something Branwyn is well qualified to create

— is included. Don't let that prevent you from buying the book, however — it's as good a guide to Mosaic for Mac as you'll find.

- Steven Anzovin



Likes: Well-written,

informative, sometimes



reviews

Internet Made Simple

Category: All-in-One Package Price: \$129.95 Format: Windows; Video, Books, Floppies Manufacturer: Digital Data Express Inc. Contact: (800) 335-5327

Internet Made Simple is billed as an all-in-one package that teaches you what you need to know about the Internet, and provides the tools to get you connected. The product contains a 70-minute training video; a workbook: a two-disk. Windows-based tutorial; the *NetPages* Internet directory;



Apples and oranges? The video focuses on using UNIX commands, even though the package includes Windowsbased software.

NETCOM's NetCruiser software; and coupons for trial subscriptions to Internet World and Internet Business Advantage. Because the product is promoted as a training tool for neophytes, I tested it on my wife, who, though knowledgeable of computers. was unfamiliar with the Internet.

We started, as the instructions

suggested, by watching the Introduction to the Internet video. The instructor, Tom Beneman, is fairly articulate, but within five minutes my wife was hopelessly lost, buried under an avalanche of technospeak and UNIX commands. Yes, despite the fact that the package includes Windows-based software, the video focuses on using UNIX commands to navigate the Internet. While

this might be appropriate for a seasoned user, it's a fatal flaw in a product marketed to beginners. The confusion is compounded by the pace of the video, which throws jargon at the viewer, then uses more jargon to explain itself. The frustration increases when the instructor starts explaining a complex topic, then shies away with the comment, "Further discussion is beyond the scope of this video."

There are a couple of bright spots in this product: The NetPages directory is a cornucopia of Internet sources, FTP sites, and lists, although it's only helpful if you have some knowledge of how to use it; and the floppy disk tutorial, while not all-inclusive, is better at explaining things than the videotape. Overall, however, this package does a poor job at its primary task — easing the uninitiated into the sometimes arcane world of the Internet.

- David Allen

Likes: Good set of Internet resources. Dislikes: Too jargon filled to help the uninitiated get started.



Microsoft Natural Keyboard

Category: Hardware Price: \$99.95 Format: PC, Mac Manufacturer: Microsoft Corporation

The sculpted casing and splitangled layout of the Microsoft Natural Keyboard are designed to increase comfort and help prevent repetitive motion disorders. A traditional keyboard forces the wrists to twist sideways so the user can face the keyboard head-on. More than just awkward, this twisting can compress nerves in the wrist and lead to numbness, tingling, and pain. The Natural lets each wrist rest at an easy angle on a large shelf, supporting your hands in a much more comfortable position.

Three extra keys, which

use special software, are included with the Natural and are another new. ergonomically correct feature on this keyboard. They let you pop open on-screen menus without having to reach for the mouse. The two Windows logo keys can also be used as alternatives to Alt and Ctrl for keyboard shortcuts. In addition, the Caps/Scroll/Num Lock status lights in the middle of the keyboard are easier to monitor than when they are in their usual location above the numeric keypad.

The Natural has a softer touch and requires less

keystroke force than conventional keyboards. This, combined with the odd layout, has slowed my top typing speed slightly, and leads to occasional mistakes, even after months of getting used to it. These minor drawbacks aside, however, the keyboard has definitely reduced my wrist pain. - Charles Brannon



Technospeak

of those who

jargon and

technospeak.

understood the

complex UNIX

commands that constitute

Until recently, the Internet was the

exclusive domain

The two halves of the Microsoft Natural Keyboard are split and rotated out and upward. Although it takes some getting used to, this keyboard lets you type longer without cramping your wrists and fingers.

Likes: Comfortable layout, bonus keys, nifty keyboard enhancement software, large wrist wrest, adjustable angle. Dislikes: Split angle not adjustable; keystroke slightly mushy; no keyboard macro programming; no integrated pointing device.

127/ RATING: 85%













Destinations and Libations

hink of our monthly Anthology as an annotated telephone book — a classified guide to some of the slickest, coolest, most provocative,

inspiring, and entertaining sites on the Internet. The Anthology is divided into categories by subject — arts and publications, business, entertainment, science, and so on

Alternative Music

Criteria

World Wide

Web pages:

design and initial impact.

Interface

ease of use.

and layout

of content.

revisiting?

Is it worth

Newsgroups:

to the stated

Just how

interesting is it,

• What's the

"flame factor

for the group?

What's the

activity level?

IRC and other

chat activities:

Level of

participationFocus of

factor — is this

subject worth

talking about? • Tolerance

content.Banality

toward

newcomers

Gophers &

FTP sites:

Ease of

Organization

and navigation.

Topicality —

how often are

the contents

refreshed?

breadth of

added to and

Depth and

material offered

access.

topic?

really?

• Do the contents adhere

• Depth and

appropriateness

of site

aesthetics and

Organization

Overall

Groupie Land

name: Welcome to Paradise address: http://www.cs.caltech.edu/~adam/ greenday.html

Exploring the "unofficial" Web page for the band Green Day is like meeting and then instantly becoming good friends with someone who's completely and resolutely bonkers about Green Day.

The site's level of enthusiasm is super high, and it's

pretty easy to navigate. You'll find loads of information here, including a discography and song lyrics, with emphasized words in BOLD CAPS. Don't miss the philosophically deep quotes from the band members.

pros: The link allowing you to "flame the losers who don't like Green Day." **cons:** No audio samples to download. *typical example:* Green Day's *Dookie* album cover, with links to lyrics for the songs on this 1994 smash hit. — *CL*

Green Day's *Dookie* album cover is linked to lyrics from this smash hit of 1994.



L.A and Elsewhere name: Strobe Magazine address:

http://www.iuma.com/strobe/

This online 'zine treats you to the latest and greatest in the Los Angeles area, and international alternative music, too. Strobe is bizarre: From the fabulous introductory index icon to the last review included, this magazine is a must-see for alternative music fans. You can get sound samples from the latest groups, interviews, articles, and reviews. Bands are assessed according to their user-friendliness. (Whether that's supposed to be a good or a bad thing, I have yet to discover.) pros: Great art gallery. cons: The editor, John Bitzer, is closeminded — but he redeems himself with a sharp, sarcastic wit.

typical example: "The Mighty Morphin' Power Rangers Mass Merchandising Award to the Rolling Stones ... Voodoo Lounge is easily their best LP since Some Girls — too bad it got lost under all those T-shirts." — CL





Talk about 3-D graphics, this one works as an index to take you anywhere you want to go in Strobe.

— and each listing will point you to the applicable World Wide Web pages, newsgroups, IRC and other chat activities, Gophers, and FTP sites.

— Jim Connelly (JC), Wayne Cunningham (WKC), Celine Latulipe (CL), Tim Victor (TV), and Shel Kimen (SK), contributed to this month's Anthology.

What is Alternative, Anyway?

name: Alternative music address: Usenet: alt.music.alternative

This forum for discussing anything related to alternative music — including ways to define alternative — should be called "Bashing Lollapalooza." And it's nothing if not busy, averaging about 100 messages per day. Some posters have a tendency to flame one another, but there are surprisingly few

of them in number, considering the high level of traffic. The usual stuff can be found here, such as best and worst ratings for albums, songs, bands, and concerts. There are also ticket offerings and concert dates.

pros: Some excellent reviews and gossip.

cons: Way too many messages. *typical example:* "I hate you with a jealous passion that is hard to encapsulate in words." — CL



Nineformation

name: The Unofficial Nine Inch Nails World Wide Web Page address: http://www.scri.fsu. edu/~patters/nin.html

Thanks to its creator, Jason Patterson, this is a laid-back, cool place, and therefore hugely popular — the page is apparently accessed every 25 seconds, on average. It features a comprehensive collection of Trent Reznor pictures, plus a discography, and all the other usual stuff. **pros:** Totally unpretentious — just information, my friends. **cons:** Ugly ASCII-type home page logo.

typical example: "I hate to use that word, alternative, since it sticks as a label on a large number of sell-out bands, but Nine is a big alternative. It is especially great at weddings." — CL



Ratings Here's the Score

90%-100% Editor's Choice Must-visit. 80%-89% Damn Good Highly recommended but a little less innovative. 70%-79% Solid Recommended if subject matter is of interest to you.

60%-69% Plain Vanilla Average, but still useful. 50%-59% Same Old, Same Old Nothing new here, but not completely worthless 40%-49% S.O.S. Amateurish fumble __ needs improvement fast. 30%-39% The Pits Not worth

your time.



Libations Pouring liquid, such as wine, as a sacrifice (as to a deity); drinking ceremoniously; a drink used as a sacrifice; taking sips of the wealth of offerings found on the Internet.

prodigy@10hrs//:free+e.z.internet/.access

(Get 10 free hours* with easy Internet access)

By the way, our real e-mail address is: getlive@prodigy.com

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Signature

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Zip_

Service

33036/7940

Or Call I-800-PRODIGY ext. 515 Please send me software in the following format: (please check only one)

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DOS 3.5 DOS 5.25 Windows[®] 3.5 Macintosh[®] 3.5

PRODIGY

Trial offer includes 1st month's membership fee and 10 hours of usage in the 1st month. Usage beyond trial offer will result in extra fees. Some features charged for separately. Credit card required. Phone charges may apply. Limited time offer subject to change, and orders are subject to acceptance. Please allow approximately two weeks for shipment of your PRODIGY software. The offer is available to new members only and is limited to one person per household.

Nobody makes the Net easier than PRODIGY.

The <u>Net</u> is sizzling and there's no better way to surf it than with <u>PRODIGY's</u> <u>New Web Browser for Windows</u>. Explore the exploding <u>World Wide Web</u> with <u>full multimedia capabilities</u> including audio and images.

Exchange opinions and information with 20 million people around the world (all of whom will probably become close personal friends) with Internet **Usenet Newsgroups.**

Send an <u>E-Mail</u> to Kansas City, Kentucky, Kashmir and Kamchatka. (You can also send E-Mails to places that don't start with a K.)

When you've had enough of the Net, settle into the best <u>Real-Time Chat</u>. Talk to people who care about what you care about no matter what you care about. PRODIGY Chat also gives you the chance to talk up the Bigwigs in the Cyberbiz—magazine editors, columnists and the other thought leaders who have those cushy jobs and lunch a lot.

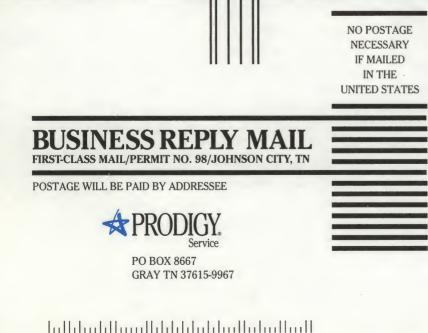
You also have to check out PRODIGY's new *Communities of Interest** where everything you want to know and everybody you want to talk to on a specific topic are all in one place. (Pretty convenient, huh?) Topics range from genealogy and games to computers and movies.

There's no extra charge for <u>high speed access</u>. (Why should we penalize you for having a better modem?) And <u>14,400 bps</u> is available in most areas to placate New Yorkers and other really impatient types.

Some stuff you'll find <u>Only on PRODIGY</u> and nowhere else. Good stuff like Strategic Investor,[™] Sports Illustrated for Kids and more.

Try us for <u>**10 free hours**</u>. 'Cause if you haven't tried PRODIGY lately, you haven't tried PRODIGY.

*Communities of Interest are scheduled for availability in the Spring of 1995. The PRODIGY Web Browser is available only for Windows[®] Windows is a registered trademark of Microsoft Corporation. PRODIGY is a registered trademark of Prodigy Services Company. © 1995 Prodigy Services Company.





To get your 10 free hours

Call us at 1-800-PRODIGY. But before you call, you should check your screen because you may already have the PRODIGY software on your computer. If you prefer to E-Mail us, our address is getlive@prodigy.com . And you can also download the software right off the WWW location: www.astranet.com . After your 10 free hours, PRODIGY is only \$9.95 for five hours.

Call 1-800-PRODIGY ext. 515

RODIGY Service

Site of the Month

Soopafunky Online

name: Intrrr Nrrrd address: http://www.etext.org/Zines/Intrrr.Nrrrd/text.html

Founding Nrrrd, Brother Bri (aka Soopafunky), Sister Danielle Devoss, and Brother Mosquito have a spectacular e-zine with all the bells and whistles. Feature article subjects range from technology and feminism (Sister Danielle will blow your socks off) to "Punk Rawwwk." Complete with a snazzy photo album (see Mickey Monster) and great link sites (connections to QuarkWeb, Homebrewers, Factsheet Five, and others), the 'zine even offers us free patches to wear while we're out terrorizing the Internet, courtesy of Brother Bri. But wait, there's more: pages of "Punk Rawwwk" record reviews, each with a high-quality album cover scan and audio sample; and tons of information on freeware, shareware, and hardware for Mac users. Wrrrd of the Nrrrd is intelligent, clever, beautiful to look at, easy to maneuver, and just all around



"soopa" cool. Don't miss it. pros: Haven't I said enough already? cons: It makes a lot of other sites look pretty boring. typical example: "Oh Geez ... This place is weird." - SK



Advertising on the Net

name: Chiat-Day Idea Factory

address: http://www.chiatday.com/

designed sites on the Web. Eschewing the ugly fonts available in hypertext, Chiat-Day's

explore an art gallery, and see how the company is structured. Despite the plethora of

material to discover, the childish and intentionally naive tone - sort of like, "Oh, look

Chiat-Day is an advertising company (although it insists on calling itself an "Idea

Factory") that's skirting the cutting edge with this virtual office, one of the best-

site relies on graphics for navigation. You can tour the office, join a focus group,

anthology

Business



One of the best-designed sites on the Web, Chiat-Day relies on graphics for navigation.

pros: Web page design of the highest caliber in terms of look and navigability. cons: Staffers call their chairman "Uncle Jay." typical example: Multimedia art gallery provides fascinating navigation possibilities. - WKC

at this, isn't it just neat!" - bugs me.



choose from, and you

won't be buying

specifications,

blindly. A detailed

report on technical

including engine,

structure, and flight

hours, is available

online for each

The Big Book of Non-Profits name: Guide to Internet Resources for Non-Profits address: Gopher: gopher.eff.org/

The Electronic Frontier Foundation (EFF) has created a Gopher that encompasses the Computer and Academic Freedom Archives, Online Activism, the American Civil Liberties Union, and a quide for non-profit organizations. Small and large non-profits alike have never had a better reason to go online — if only to get their hands on this. The guide lists every free resource imaginable on the Internet. Using it, you can track down grants and government agencies, statistics, listings of volunteer programs, the names and addresses of support groups and census organizations, and ways to link up with other non-profits. pros: Excellent resource for anyone doing research for nonprofits and civil rights groups, or Internet activism. cons: Some of the menus are very slow, although it's worth the wait if you can stand it.

typical example: "We have created this guide in order to help administrators and employees of non-profits and public service organizations easily locate relevant information on the Internet." - SK



Fly Through the Air With the **Greatest of Ease**

name: Aircraft Shopper Online address: http://www.sonic.net/aso/

Tired of dealing with commercial airlines, but don't want to pony up the cash for a new Lear jet? Consider a "pre-owned" plane from Aircraft Shopper Online. There are dozens to



Vintage craft best bargain: Chance-Vought F4U-4 Corsair, AT, AC, PB, PS \$850,000.

listing. Of course, if you're in my income tax bracket, you'll settle for simply downloading the cool pictures. pros: Wide variety of planes with two pictures of each. cons: You may end up feeling sorry for yourself if you can't afford that '72 Beechcraft Bonanza V35B.

typical example: Everything from Cessnas to Lear jets - on sale now! - WKC





Mickey turns monstrous: A frightening mouse rears up from the Portraits page.

Soopafunky Does It Himself

World Wide Web hotspot Intrrr Nrrrd has been online since last August, and represents much more than the cool graphics that inspired its creator, Brian Cors.

Cors brings the do-it-yourself (DIY) concept to life by connecting the people running small businesses, independent presses, and record labels to one another as well as to the wealth of resources available on the Internet. He provides products, services, and information to anyone who wants it - free, and with flavor and style.

"A lot of people in the 'punk' scene [which preaches a DIY ethic] can't fathom that computers are punk," Cors says. "The Internet and the rise of the ability to completely run a label from home, distribute and book events through e-mail, and offer promotional material via a Web site is the DIY thing. That's what Intrrr Nrrrd is based on.

Cors proves his point well. In addition to continuing to work on Intrrr Nrrrd, he looks forward to broadcasting live concerts through a video interactive program, CUSee-me, and expresses interest in working with DJ Matt MacQueen to set up a live rave or "techno-event."

When asked about the future of the Internet, he almost glows with excitement. "It's exploding," he says. "With things like the Web, navigation and information retrieval is soooo much easier. It's going to introduce a lot of people to the Internet who may not have [been interested] earlier."

Along with the DIY message, Cors promotes the idea that computers should be "tools, not toys," and that those who use them should not be treated as objects. He attributes the "distance and global nature of the Internet" to the objectification of people, especially women, and comments, "I was once told I had too many 'computer friends.' Like they weren't real or something. They are very real.'

As for Intrrr Nrrrd, Cors plans to add QuickTime films and expects more feminist "wrrrds" from Danielle Devoss, who has written four articles for Intrrr Nrrrd already.

In his spare time, Cors is a graduate student in media arts at Michigan State University, where he's writing a thesis about independent publishing and publicity through the Internet. He's also a research assistant, Internet server administrator, teacher of a media production course, and - gasp - 22 years old.

081

Arts, Entertainment, & Sports

Before You View ... or After

name: Movie Reviews address: Usenet: rec.art.movies.reviews

Pulp Fiction This modern three-part thriller won the best original screenplay Oscar and catapulted director/coscreenwriter Quentin Tarantino onto the pages of People magazine.

While this newsgroup seems wan in comparison to the stardust generated by the Pulp Fiction Web site, it has good information for dedicated film lovers. The reviews cover Hollywood and independent films, many times with analytical insight that proves a better read after you've seen the movie. Although the reviews are often lengthy — up to 10 pages they are articulate, clever, and even entertaining. There seems to be a semiconsistent format throughout all the postings, so you may want to read a few before you try on your Siskel or Ebert hat. pros: Good reviews

cons: Could spoil the surprises if you read the reviews before seeing the films.

typical example: "On a scale from 0 to 10 Ninjas, The Hunted gets 4.5 Ninjas." - SK



No Couch Potatoes name: Team.Net Automotive Information Archives address: http://triumph.cs.utah.edu/team.net.html

Team.Net is a loose collection of auto enthusiasts; it grew out of the Internet's autocross mailing list. The emphasis here is on participating in motor sports, not watching them. To help the would-be racer, Team.Net's home page offers



links to pages about driving and vehicle dynamics, along with information about the mailing list and its 700-plus members. The

The car nuts at Team.Net would rather be racing than watching. site also includes an excellent Internet

directory for car enthusiasts; it's organized by make and model of car, and includes mailing lists, newsgroups, and other Web sites of interest.

pros: Good resources for do-it-yourselfers.

cons: You have to dig to find some of the best stuff. typical example: Directory organized by make and model of car. - TV



Mice Running the Experiments?

name: Douglas Adams Fans List address: Usenet: alt.fan.douglas-adams

The Hitchhiker's Guide to the Galaxy and Restaurant at the End of the Universe are just two books by Douglas Adams (DNA, his affectionate Internet acronym) discussed on this list. Other topics: games relating to his books, character analysis, rumors, interview dialog, and a slew of other topics covering almost everything imaginable, including what color toothbrush he favors (well, almost). A famed Internet user himself, DNA has been said



to visit the site from time to time and even post. These fans are hard-core, serious - and newbie friendly. The fire is low and the chatter is usually respectful. Just don't ask about the number 42 without checking the FAQ list. pros: Good place to meet other Hitchhikers.

cons: At times heavy and repetitive postings. typical example: 0.K., 0.K., for all those not in the know: number 42

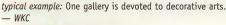
equals "The Ultimate Question of Life, the Universe, and Everything." - SK

Culture? In Los Angeles?

name: L.A. County Museum of Art address: http://www.lacma.org/

People have always made fun of Los Angelinos for caring more about the prices of their cars and how tanned/toned their mates are than about art, literature, and other elements of culture, but the L.A. County Museum of Art (LACMA) begins to refute these charges. This Web site gives a good sense of the layout of the museum and the scope of its collection. The Permanent Collection

contains works by European, Middle Eastern, Indian, Asian, and American artists, from ancient to modern times. Each piece on the site is accompanied by text explaining the significance of the object. The 20th-century section was limited to one piece by Picasso when I looked at it, but the museum reportedly plans to continue expanding the site. pros: Good and plentiful representative selection of works. cons: Small modern art section.





Let's Have a Revolution

name: Treasures of the Czars address: http://www.times.st-pete.fl.us/

Treasures of the Czars is an exhibition currently running at the Florida International Museum in St. Petersburg, FL. This Web site provides a small taste of

what's on display, plus plenty of background on the artifacts, and a sketch of Russian history from the 1600s to 1917. (You can click on a convenient timeline to get information about specific periods.) The exhibit fills 12 galleries, and the Web site provides one sample picture from each. Unfortunately, this means there are not many pictures from the exhibition. I also found various linking errors throughout the site. If you're interested, go there soon — the exhibit closes June 11. pros: Museum sites — they're the next best

cons: Few good graphics, poorly scripted. Typical example: Gallery 12 covers late tsarist rule. — WKC



The crown of Peter the Great, Russia's bizarre tsar, can be found in Gallery 2.



Think Globally, Pave Locally name: Pave the EARTH

address: Usenet: alt.pave.the.earth

Started as a parody of alt.save.the.earth, this newsgroup has developed into its own organization, complete with trademarked ideas and breakaway factions. The primary mission, The Plan[™], is to pour asphalt over the entire earth, so the pavers can drive their Hypercars[™] faster than mach 1, guzzle beer, and eat cheeseburgers. If you are against The Plan, you will be put on The List[™], and forced to work in the hydropits underground. The most prominent faction is intent on chroming the moon to turn it into a giant streetlight.

pros: Endless debate of what some consider a good idea. cons: Endless debate of what some consider an unthinkable idea. typical example: "It is an enormous challenge to squeeze that last drop of oil out of the ground. It is,

however, a task for which we are ready." - WKC





The L.A County Museum's Photo Gallery has located the most current artwork in this collection.

avorite Things

Dr. Crusher's son on "Star Trek: The Next Generation'

i.die.die.di

Counselor Troi's Mother on "Star Trek: The Next eneration'

The fat guy we love to hate

The purple one still arouses active opposition

thing to being there.



Issues

Debates on Former Yugoslavia

name: Bosnia Current Events Newsgroup address: Usenet: alt.current-events.bosnia

Mirroring the conflict on the ground, postings here are filled with attacks, counterattacks, and stalemates. Passion and knowledge characterize the debates and discussions on the intricacies of the political situation in Bosnia. The regulars here are well-informed about the history and personalities that contribute to the Bosnian conflict. With its regular postings of news-wire bulletins, this newsgroup will supply you with up-to-the-minute information on the progress towards peace, and the events that continue to keep this war roaring.

pros: Exceptionally good source of news on and analysis of the war in Bosnia.

cons: A good portion of the postings are in Slavic languages, which, if you are like most readers of this magazine, you won't understand.

typical example: "You don't suppose that once the war is over, people might start to take a second look at Karadzic and his policies, imperiling his power, do you? I'm reminded of a quote from a high Vietnamese government official, some years after Saigon fell: To win the war was easy; to build a country is hard." — WKC



Science and Technology

So You Want to Be An Astronaut

name: NASA address: http://www.nasa.gov/

Reviewing the NASA site in 100 words really doesn't do it justice. NASA sprawls over the Internet, maintaining more than 10 Web sites, each with a different piece of the



NASA whole. Surfing these sites will make you feel like there's a good reason — besides avoiding time in a federal prison — to pay taxes. You

NASA online information provides astrophiles unforgettable views of its space shuttle endeavors. prison — to pay taxes. You can peruse general information,

personnel directories, current programs, technical and commercial technology reports, and on and on. The NASA site also features special programs, such as links to current shuttle missions. And you can download space pictures. For space buffs, this is the real thing. **pros:** It's such a dynamic place, you may never finish exploring.

cons: The pages aren't going to win any design awards. *typical example*: Log entry from Space Shuttle *Endeavor*'s flight on March 2, 1995: "Activation and calibration of the Astro-2 ultraviolet telescopes are continuing slightly behind schedule following a steering jet leak that has twice forced closure of the instruments' protective doors." — *WKC*



Some of My Best Friends Are Heterosexual

name: Gayhelp Chat Group address: IRC: #gayhelp

Students, professionals, and average Joes and Joannes hang OUT here, talking about issues, seeking advice, and engaging in the usual day-to-day nonsense that goes on in most IRC chat rooms. You'll find at least four or five Gayhelpers on at a time, and sometimes more at peak hours (late afternoon/early evening). The group topic isn't always real intense, but there are plenty of welcoming regulars who will pull you into private messages if you need or want to discuss serious things. It provides good support, and lots of fun, friendly people, and it's pretty darn safe as far as I can tell.

pros: Good, safe spot for gay men and women (I hear they want more women to participate).

cons: Sometimes there is little group conversation because so many people send private messages.

typical example: "The REAL family channel for help, happiness, hope, and hanging OUT." — *SK*



Reference

How to Research a Good Education

name: FEDIX/MOLIS
address: http://web.fie.com

A very useful resource indeed! If you're interested in picking one college (out of the thousands); getting financial assistance for it; learning about faculty, enrollment, tuition, courses offered, and other details of specific schools; discovering which colleges are located in particular states; tracking down African-American or Latino colleges; or answering just about any other question regarding higher education, then go, go, go to this site now. The Web address connects you directly to FEDIX (Federal EDucation Information eXchange) or MOLIS (Minority Online Service), but there is a catch. Before you can connect, you have to register. It's quick and online, and I'm not sure how valid your credentials have to be, but it's irritating just the same. The site itself works smoothly.

pros: Amazing amounts of great information.

cons: Users have to register.

typical example: Choose one: Institutional Data, Research Facilities, Academic Programs or Pre-College Programs.



shop in the past two years, you may be

unaware of the hottest game to hit the

games market: a successful, highly

incarnation. (A CD-ROM version from

MicroProse has just been released.)

market since Dungeons & Dragons. Wizards

of the Coast's Magic: The Gathering (M:tG) is

something unheard of in the contemporary

addictive, truly fun game that doesn't run

on a computer — at least not in its original

Gaming

Feel the Magic name: MAGIC: THE GATHERING addresses: See Address Book (right) If you haven't been to your local hobby



M:tG has spawned 5 related discussion groups.

The original M:tG is a card game that pits two players against each other as dueling wizards in a battle of arcane arts. The object of the game is to vanquish your opponent by summoning creatures or casting spells.

The game's popularity is evident on the Internet, where it has spawned five related discussion groups covering rules, strategies, the buying and selling of cards, and other topics. Each group averages at least 200 posts per day. Posters are fairly receptive to inquiries, but they can be unmerciful to people asking questions found in the FAQ list. — *David Allen*



Check out the discussions at • rec.games. deckmaster • rec.games. deckmaster. marketplace • rec.games. tradingcards. magic.strategy • rec.games. tradingcards. magic.rules · rec.games. tradingcards. magic.misc



in #gayhelp may

interested in

also be

Lambda.Net. Based in Georgia, Lambda.net is a gay-owned and -operated service provider offering complete Internet access: It provides email, FTP, Telnet, and 50 megabytes each day of Usenet. There is a reasonable onetime set-up fee, and no membership fee annual dues. Several different types of accounts are offered: Telnet shell, personal shell, business shell, and PPP and SLIP accounts. Prices range from \$10 to \$45 a month, depending on the account type. There are no per-hour or other usage charges. You can reach Lambda.net by voice at (800) 948-0530 or modem at (404) 447-6736



Commercial Online Services

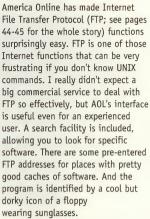
America Online: Small, Furry Mammals

name: AOL's Internet Gopher address: AOL Internet FTP



Move over John Travolta, a new cool fellow has arrived: AOL's program is identified by a cool but dorky icon of a floppy sporting shades.

cons: The download utility doesn't give very specific information, just the approximate amount of time it will take. typical example: Search facilities. - WKC



pros: A beginner could use it.



America Online: Automania

name: AOL's Car & Driver Online address: AOL Entertainment

I've always liked Car & Driver. It has a sense of humor. When the magazine road-tested a limo, the writer didn't actually drive the car, a chauffeur did. Unfortunately, that sensibility didn't make the transition to this AOL site. Car

& Driver Online has a lot of statistics on various cars, as well as reviews. There are also some pretty neat pictures. You can download them and, with the right software, make it look like you are behind the wheel of that Porsche 911. If you're car shopping, this is a really good resource for comparing things such as acceleration, braking distances, and miles per gallon.

pros: Informative and has cool pictures. cons: It lacks the print magazine's caliber of humor.

typical example: Statistics — WKC



This AOL site doesn't have the same sass as the print magazine - but the cars are still cool



Prodigy: Can You Tell Me How to Get, How to Get to Sesame Street?

name: Sesame Street address: Jump Sesame

Jump, Prodigy's link command, can go from ESPNet (you guessed it, sports) to Homework Helper and Sesame Street. And Jump Sesame Street gets brownie points for being the coolest site I've seen in a while. On Sesame Street, children get to solve puzzles, play games, read interactive books, and get personal letters from muppets. In fact, anyone who has a password can receive a letter from a muppet. (I got one from the Cookie Monster.) The graphics here are cartoon style, and they make up for all the stupid windows and boxes clogging up the rest of Prodigy's screens. If you have a child, or still have some child within you, go here now. pros: Fun learning tool for kids and adults. (We might learn a bit about being nice and sharing here.)

cons: You don't get to choose which muppet writes letters to you.

typical example: "Co is for Cookie." – SK



Delphi: Read All About it!

name: Delphi's UFI Wire address: Delphi News, Weather, and Sports UPI

Here, you get access to all the articles posted by UPI, one of the leading newswire services. Your local newspaper probably doesn't even publish a tenth of the articles UPI posts, but this Delphi service lets you take editorial control and pick from an abundance of up-to-the-minute dispatches from all over the globe. And the articles go into enough depth to make CNN look like a tabloid news show. If you want to keep informed, this is a must-visit area. New items come in every 30 minutes

pros: All the news that's fit to print, and a bit extra. cons: Oh no! Information overload! typical example: "27-MAR 15:37 Argentine arms said traded in Uruguay

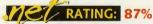
27-MAR 15:19 Taiwan envoy denounces immigrant trade 27-MAR 14:38 Newspaper chief killed in Algeria" - WKC



Delphi: Your Complete Star Source

name: Delphi's Astro-Predictions address: Delphi Entertainment Astro

Confused about your love life? Want to know about your financial future? Don't call one of those fake TV psychics, try Delphi's Astro-Predictions, a complete online astrology service. Daily and weekly horoscopes are available, as are general descriptions of all the signs of the Zodiac and their various aspects. For an extra charge, you can get your natal chart computed and interpreted, or a personal Sexoscope reading. (While I was curious about that last one, I didn't want to shell out \$12.50 to see what it was.) pros: Daily update of your horoscope, and more general information. cons: If you don't believe in it, you'll find this a waste of time. typical example: "Leo: So many choices, so little time! You're bound and determined to start fresh now, but career, health, and romantic issues all require direction; dependents and partners will help guide your decisions." - WKC



CompuServe: Reality Bites name: Winona.gif

address: Go Archive (Sub Category Entertainment)

WinCim, CompuServe's software for Windows, has a lot to offer, from travel information to business and health news. The graphical interface for the World Wide Web, Telnet, and FTP provides user-friendly access to the Internet, with point-and-click ease. CompuServe Go commands send the user into a world of



In WinCim, Go Archive enables you to collect snapshots of everyone and everything - from Hollywood's latest little woman to GE-'s Toastmaster.

possibilities — Go Sports, Go Mail, Go Archive. Archive is a photo collection with snapshots of everything from Tony Bennett to GE's Toastmaster. (Careful: These images are copyrighted.) A search option lets you type in a file name or key words to find what you're looking for. Type Shark and see right into the jaws of Jaws. Type Winona (Ryder, of course) and see Hollywood's leading slacker up close at last year's Academy Awards.

pros: Cool pictures of everybody who's anybody.

cons: Lots of downloading time. typical example: A dreamy photo of Buddy Holly ... sigh. - SK





Essential!

Met guide to critical Internet sites

rucial. Lean. Mean. Informative. Absolute. This is it. Necessary. The bottom line. The nitty gritty. Decisive. Our Directory promises to provide you with the most indispensable sites and addresses on

the Internet.

Just as you wouldn't set out on an extended, cross-

E-Mail

Cruising: Mailing list for navigators. Type: subscribe navigate (your name) mail://listserv@ubvm.cc.buffalo.edu

The Infinite List: A long list of mailing lists. Type: list global

mail://listserv@brownvm.brown.edu

Web Word: Web sites, news, how-tos. Type: intro (your address) (your name) mail://innovation@euronet.nl

Volunteer America: Vista online newsletter. Type: sub Vista-L (your name) mail://listserv@american.edu

FTP

Academic Freedom: Includes ACLU, Academic freedom archives, general activism for civil rights. ftp://ftp.eff.org

Hitchhiker's Guide: Infamous Internet guide with valuable how-to tips and other resources. ftp://nic.merit.edu/documents/rfc/rfc1118.txt

IRC Help: Information on IRC programming and everything else you might need for chat fun. ftp://ftp.kei.com:/pub/irc

History of the PC: Newsletters debating the philosophy and history of personal computers. ftp://ftp.etext.org:/pub/Politicks/ Amateur.Computerist

Web Guide: Yet another guide providing information on Web browsing and building. ftp://ftp.eit.com/pub/web.guide

Internet Companion: Everything you need to know about the Internet - nothing left out here. ftp://ftp.std.com/obs/The.Internet.Companion

More Internet Info: Just in case the Internet Companion missed something . ftp://ftp.farnet.org/internet.information

Usenet Archive: A repository of newsgroup FAQs and information. Good searching reference. rtfm.mit.edu/pub/usenet/

Apple Computer, Inc.: Site for official Mac software, including System 7.01 and earlier. ftp.apple.com

More MAC files: A small collection of files; good when you get a busy signal somewhere else. ftp.uwtc.washington.edu/pub/Macintosh

Gopher

Mac Gopher: Libraries, resources, and information on where to get Mac freeware and shareware. qopher://info.hed.apple.com/11/

PC Gopher: Libraries, resources, and information on where to get PC freeware and shareware. gopher://index.almaden.ibm.com/11/

FAQ Internet: Frequently asked questions about

Internet resources and guides. gopher://bigcheese.math.scarolina.edu/11/faq

ACM, since 1947: The Association for Computer Machinery: interesting history and debates. aopher://acm.ora

Digital Future: Internet newsletter focusing on Internet marketing and commerce. gopher://marketplace.com EFF Gopher: Includes ACLU and Computers and

Academic freedom archives, and information on

civil rights activism.

gopher://gopher.eff.org ADA Gopher: Valuable Information on ADA (Americans With Disabilities Act). gopher://valdor.cc.buffalo.edu:70/00/ .leaislation/.ada.txt

Merit Gopher: The main gopher menu for educational institutions in the state of Michigan. gopher://nic.merit.edu

Kansas Gopher: Comprehensive university Gopher with exceptional links and resources. gopher://gopher.ukans.edu

Wolverine Archives: Tons and tons o' files - all free — in all the popular flavors. gopher.archive.umich.edu

Intro to the Internet: Just the basics: A good primer covering all aspects of the Internet. gopher-chem.ucdavis.edu/11/Index/ Internet_aw/Intro_the_Internet

World Wide Web: General Cyber Sonic: Early warnings for Sega fans on new hardware, software, gaming, etc. http://www.segaoa.com/

Vibe Magazine: Colorful online magazine devoted to hip hop and multi-culti scenes. http://www.vibe.com/

Sports Illustrated: An American classic: The venerable sports authority gets a digital update. http://www.pathfinder.com/@@aUOLWtBbgAEAQ Ni8/si/welcome.html

Mother Jones: Order back issues; includes section on how to be an Internet activist. http://mojones.com/motherjones.html

PC Magazine: Leading publication offers news, reviews, and free software online. http://zcias3.ziff.com/%7Epcmag/

MacUser: Online magazine for the Mac devotee with the usual zesty Mac graphics and style. http://zcias3.ziff.com/~macuser/

Entertainment Weekly: Hollywood gossip and new movie reviews at your beck and call. http://www.pathfinder.com/@@eDwjwvAdhwEAQ Nq8/ew/Welcome.html

Virtual Vegas: Spin the wheel or roll the dice:

country adventure without a map, why enter the vast, unknown world of copper cables and electrical currents without a guide?

Take our Directory with you on your next journey through cyberspace.

- Compiled by Wayne Cunningham and Shel Kimen

Even losing can be fun with contests, games, etc. http://www.virtualvegas.com/



NBA: Follow basketball from preseason to the championships with news and statistics. http://www.netgen.com/sis/NBA/NBA.html

NHL: Scores, standings, schedules — and penalty-box updates — for professional hockey. http://www.netgen.com/sis/NHL/NHL.htm

NFL: Statistics and information on your favorite football teams, players, and shenanigans. http://www.netgen.com/sis/NFL/NFL.html

Voyager Company: Catalog of CD-ROMs, software, and gobs more; cool sign-on process. http://www.voyagerco.com/



The White House: The nation's executive household on the Internet - Socks included. http://www.whitehouse.gov/

White House Press Releases: Bypass CNN: Keep current with these items from the President. http://eos.esusda.gov/wh/whsum.html

Listing of Senators and Representatives: Forgot who represents you? Look it up here. http://www.dorsai.org/~adamn/congress.html

FBI: They know about you — you should know about them. Here's where to start. http://naic.nasa.gov/fbi/

CapWeb: An unofficial guide to the U.S.

Congress: All sorts of info on current legislation. http://policy.net/



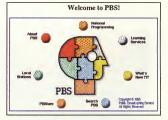
Fox Broadcasting: From Springfield to Melrose Place — unofficial page devoted to Fox network. http://www.eden.com/users/my-html/fox.html

The Sci-Fi Channel: Following asteroids and aliens: general sci-fi as well as specific show info. http://www.scifi.com,



United Paramount Network: Going where no site has gone before: includes "Star Trek" pages. http://www.ftms.com/vidiot/upn.html

Public Broadcasting Service: Support public broadcasting! Bookmark this Web site. http://www.pbs.org/



Apple Info: Apple/Mac information, press releases, software, hardware, and more. http://www.info.apple.com

Apple Support: Support and additional information on Apple hardware and software. http://www.support.apple.com



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Addison-Wesley Publishing Company: Offers profiles of an exclusive selection of books. http://www.aw.com/awpc.html

Benjamin/Cummings Publishing Company, Inc.: Previews new computer and science books. http://www.aw.com/bc/home.html

Alternative-X: This bookstore carries hip, dissident literature for GenX, Y and A, B, C. http://marketplace.com/alt.x/althome.html



Welcome to Alternative-X!

McGraw-Hill: Here's a site you can learn from: a list of books that can be ordered online. http://www.cityscape.co.uk/bookshop/mccat.html

Penguin Books Ltd: Online bookstore catalogs Penguin's extensive offerings.

http://www.demon.co.uk/bookshop/pecat.html

Time-Warner Pathfinder: Pathfinder guides you through Time-Warner's magazine and book pages. http://www.pathfinder.com/pathfinder/Greet.html



Ziff-Davis Publishing Company: Access bytes of all of Ziff-Davis's computer publications. http://www.ziff.com/

Compaq Computer Corporation: Compaq's home page, with links to products and services. http://www.compaq.com/

AT&T Global Information Systems: AT&T's computer division offers products catalog. http://www.attgis.com/

Hewlett-Packard: Latest news, products, and services from hardware developer HP. http://www.hp.com/

IBM Web: Press releases and information on hardware, software, and related subjects. http://www.ibm.com

IBM: IBM's PC page offers news on the latest products for your personal computer. http://www.pc.ibm.com/

Microsoft: Where do you want to go today? Take a trip to the industry leader's home page. http://www.microsoft.com/



Adobe Systems Incorporated: News, product information, and free software from Adobe. http://www.adobe.com/ MCA/Universal CyberWalk: Television and movie news, as well as an online magazine. http://www.mca.com/



Buena Vista Pictures: Mucho info on Disney, Touchstone, and Hollywood Pictures releases. http://bvp.wdp.com/

Metro-Goldwyn-Mayer: Home of the lion, MGM (and its current releases) roar from this den. http://www.digiplanet.com/MGM/

Miramar Pictures: Catalog of audio and video products available from Miramar. http://www.uspan.com:80/miramar/

Sony: Cyber playstation: Music, film, electronics, and much more — spicy graphics and all. http://www.sony.com/

Geffen/DGC Records: News and soundbytes from the label that gave us Hole and Veruca Salt. http://aeffen.com/

Insanely Interactive Systems: A helpful site that offers an international business and travel guide. http://www.iisys.com/www/iishome.htm

Travel and Entertainment Network: More online travel, entertainment, and sports information. http://www.ten-io.com/index.html

Council Travel: Counting pennies? Student and budget travel arrangements that make cents. http://www.ciee.org/cts/ctshome.htm



UM Go BLUE Web: One of the country's most useful and comprehensive university Web sites. http://www.umich.edu

Pacific Northwest: Travel information about the Northwest — includes resources and guides. http://www.northcoast.com/index.html

NetSurfer Digest: Newsletter with a broad range of Internet topics for experienced and new users. http://www.netsurf.com/nsd/index.html

Cyberwerks!: Stay ahead of the game with highquality Internet and cyberspace news coverage. http://cyberwerks.com

Anarchy!@#*!: The rebel's hot spot! Online text about social systems, revolution, and anarchy. http://www.cs.oberlin.edu/students/pjaques/etext /home.html

Department of Human Services: Everything from Social Security to Medicaid information. http://www.os.dhhs.gov

HungerNet: Info for non-profits working to feed people in the U.S.; great links and resources. http://www.hunger.brown.edu/hungerweb

Internet Help: New-user reference to Internet tools, resources, and links to other guides. http://www.internic.net/infoguide/gopher/aboutinternet.html EINet Galaxy: Travel to the outer limits; index of Web sites searchable by subject or title. http://www.einet.net/

WWW Virtual Library: Lost in cyberspace? Find even more exciting Web sites by subject. http://info.cern.ch/hypertext/DataSources/bySubj ect/Overview.html

The Yahoo's Guide to the Internet: Extensive database of Web sites, and incredible links! http://akebono.stanford.edu/yahoo/

NCSA Mosaic Home Page: The birthplace of the Web, with lots of good, basic information. http://www.ncsa.uiuc.edu/

Visa: Visa and Plus International ATM network have put an ATM locator guide online. http://www/via/com/visa/

World Wide Web: Movie Sites

Akira Kurosawa's Dreams: Sleep tight with an unofficial tribute to Kurosawa's acclaimed film. http://www.pitt.edu/~ddj/dreams/

Blade Runner: Lots of Blade Runner information for futurists, nihilists, and Harrison Ford fans. http://kzsu.stanford.edu/uwi/br/off-world.html



Blue Velvet: Still pictures from the cult classic movie. They're pretty, but that's all, folks! http://iac.net/~brian/bluevelvet.html

Brazil: Just a FAQ list for the movie; very informative for fans and the perpetually curious. http://www.cis.ohio-

state.edu/hypertext/faq/usenet/movies/brazilfaq/faq.html

The Crow: Fly here for a well-designed page full of cool pictures, groovy sounds, and trivia. http://www2.ncsu.edu/unity/users/b/bsspiche/ www/crow/crowpage.html



Ster Book Star Morre Star Video Storad Stheets Software

Ed Wood: Stunning video clips and stills from a movie as eccentric as its estranged subject. http://bvp.wdp.com/BVPM/PressRoom/EdWood/Ed Wood.html



Higher Learning: Download a preview of the film and decide for yourself if you want to see more. http://touchstone.power.net/hlearn/

The Jungle Book: Wild advertising site for the movie with info, pictures, and a slick trailer. http://bvp.wdp.com/BVPM/PressRoom/JungleBook /JungleBook.html

The Lion King: See clips of the Academy Award-

winning film at Disney's site. Grrrrrrrreat!!! http://bvp.wdp.com/BVPM/PressRoom/LionKing/ LionKing.html

The Little Mermaid: Fishing for a labor-of-love site with a pink link to a Barbie page? Go here. http://silver.ucs.indiana.edu/~jwarf/little.html

Miami Rhapsody: Get a little comic relief with clips and stills from this saucy South Florida flick. http://bvp.wdp.com/BVPM/PressRoom/MiamiRhap sody/MiamiRhapsody.html

Pulp Fiction: Cutting-edge site for cutting-edge people. It's as savvy as Uma is sexy! http://wolf.cso.uiuc.edu/pulpfict.html

Quiz Show: Besides the usual clips and stills, you'll find interviews with the actors. http://bvp.wdp.com/BVPM/PressRoom/QuizShow/ QuizShow.html

Reservoir Dogs: A film to bite your soul and a Web page to match: shivering clips and stills. http://www.foresight.co.uk/ents/dogs/dogin.html

The Specialist: Clips, interviews, and a dazzling section on special effects used in the movie. http://www.foresight.co.uk/specialist/

StarGate: Travel through time, stopping only for video clips and behind-the-scenes info. http://www.earthlink.net/STARGATE/

Street Fighter: In the battle of the Web, this site weighs in with a huge movie poster. http://www.mca.com/universal_pictures/streetfigh ter/sf_homepage.html

Tank Girl: Visit the cyberqueen's hideaway and win really cool Tank Girl promo stuff. http://www.digiplanet.com/tank_girl/tank.html

The Nightmare Before Christmas: Even Jack the Pumpkin King would applaud its ghoulish design. http://www.musicbase.co.uk/movie/night/

Quentin Tarantino Special: Of the many Tarantino Web sites, this is one of the better. http://www.ios.com/~jbonne/qt/



World Wide Web: Shopping Sites

A Tangled Web: Check out this virtual store, which sells unique and sometimes quirky items. http://www.cts.com:80/~atweb/

Burlington Coat Factory: Bundle up with online discounts. Includes a store locator and coupons. http://www.coat.com/

A-1 Bargain Buying Channel: A bargain basement with the usual eclectic charm. http://www.northcoast.com/unlimited/ product_directory/a1/a1.html

Blacksburg Electronic Village Mall: A small selection of shops, just like at a vacation hub. http://www.bev.net/mall/index.html

Catalog Central: Save the trees and sample a variety of online mail-order services, paper free. http://catalog.florida.com/cchome.html

CyberMall: From real estate to disability services, CyberMall covers a broad range. http://www.nstn.ca/cybermall/first.html

Cyberspace Malls, International: A comprehensive group of stores and catalog companies. http://chili.rt66.com/cyspacemalls/

Deep Space Mall: A collection of shops and galactic links to online space pictures. http://www.deepspace.com/deepspace.html

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Design Studio: A rich catalog of high-end products from artists and manufacturers. http://www.spectracom.com/designstudio/



eMall: Even more shopping (it hardly seems possible) in a virtual community environment. http://eMall.com

Eureka! The Web Junction: Browse a unique collection of goodies, such as winery T-shirts. http://www.wilder.com/eureka.html

First Virtual's Infohaus: Everyone and their brother can set up shop here to sell info products. http://www.infohaus.fv.com/

INFOMART: A one-stop-shopping computer superstore with over 100 commercial retailers. http://www.onramp.net/infomart/infomart.html

Internet Shopping Network: Could be called "Computer Shopping Network." https://www.internet.net/

JCPenney: Catalog be gone! The conventional department store sets up an online presence. http://www.jcpenney.com/

MarketPlace.com: Software and books. Software and books. Software and books. Software and... http://marketplace.com/

Mexplaza: Bienvenidos (welcome) to the first virtual Mexican shopping center. Arrrriba!!! http://mexplaza.udg.mx

Net-Mart: Just like living in the suburbs there are a zillion Internet malls to choose from. http://netmart.com/

NetMall: A general mishmash of retail stores and online service providers for you to cruise. http://www.ais.net/netmall/

NetMarket: Another hodgepodge of products and services with no theme whatsoever. http://www.netmarket.com/netmarket/bin/market /:grm/:mode=text

Offworld Metaplex: A well-designed mall with sci-fi flavor and pizzazz (and a catchy name). http://offworld.wwa.com/



One World Plaza: More than 100 virtual storefronts for your purchasing pleasure. http://www.wincorp.com/windata/OneWorldPlaza/ OneWorldPlaza.html

Shopping2000: A shopping guide to products and services available directly from merchants. http://www.shopping2000.com/ Super Mall: Products, services, promotional events, and a kooky kool kids' section. Yum. http://www.supermall.com/

The Awesome Internet Mall: One thing stands out as different about this site: free classifieds. http://www.gate.net/~dmusic/aim.html

The Internet Plaza: Another virtual town with a shopping district. Get your plastic ready. http://plaza.xor.com/

The World Square: Had enough? One-stop shopping place for information and goods. http://www.w2.com/

USMall: This site is neatokeen. In addition to the stores, there's a Washington, DC travel guide. http://www.usmall.com/

WebMall — Digital's Electronic Mall: Bookstore, flower shop, and tech support in one spot. http://www.service.digital.com/html/emall.html



World Wide Mall: Lots and lots of general products and services to entice your pocketbook. http://www.olworld.com/olworld/



World Wide Markeplace: Embrace decadence with goods and services from this site in Canada. http://www.cygnus.nb.ca/

Downtown Anywhere: A virtual community centered on shopping — like Los Angeles. http://www.awa.com/index.html

ElectraCity: A virtual city with a virtual mall. You can see this really is big business. http://inforamp.net/electracity/index.html



Web Street Mall: Shop shop shop 'till you drop at this virtual town and mall. http://www.microserve.net:80/mall/

A Few More Celestial Web Sites

Shuttle Shots: Snapshots of the Space Shuttle and fantastic views from it. http://zebu.uoregon.edu/earth.html

Space Movie Archive: Hundreds of QuickTime clips and info on science films about outer space. http://www.univ-rennes1.fr/ASTRO/anim-e.html

Mercury, Venus, Mars: See high-quality maps and images of some of the planets in our galaxy. http://fi-www.arc.nasa.goV/fia/projects/bayesgroup/Atlas

Mount Wilson Observatory: Visit famous observatory and get tours of areas closed to the public. http://www.mtwilson.edu/index.html

Software

Mirror for SIMTEL archive: Loads of PC software to keep you busy for a long, long time. ftp://oak.oakland.edu

Windows

CICA (Center for Innovative Computer Applications): The latest Windows software. ftp://ftp.cica.indiana.edu



0S/2

Get Warped: All versions of OS/2, freeware, and shareware for a fun multitasking platform. ftp://hobbes.nmsu.edu

Mac

INFOMAC Archive: Everything — but only usable on weekends and evenings, and busy even then. *ftp://sumex-aim.stanford.edu*

Mirror INFOMAC: Use this if INFOMAC is busy. It's got almost the exact same stuff. ftp://wuarchive.wustl.edu/systems/mac/infomac

Clip Art & Fonts: Find your creative self with these fun Mac freeware and shareware yummies. ftp://mac.archive.umich.edu

Software Info: Get the latest press releases and information on Apple programming and software. ftp://ftp.apple.com

Internet Goodies: Mosaic files for Mac, Windows or XWindow can be found here ... FREE!!! ftp://ftp.ncsa.uiuc.edu/mosaic

IRC

Make Friends: Visit this room to meet new people with charming chat and smileys galore. :) Channel #friends

Speak in Spanish: Habla con sus amigos del todo el mundo. (If you don't speak it, stay clear.) Channel #espanol

29 ... Again: If you have had your 29th birthday for the tenth time, check out this room. *Channel #30plus*

UNIX Help: If you absolutely must learn UNIX, this isn't such a bad place to go for help. Channel #unix Mac Talk: Chitchat and techtalk for Mac

afficionados; lots of solid information. Channel #macintosh



Warp OS/2: It's usually crowded, and super helpful if you use OS/2. Channel #os/2

Punk Rock, Grrr: Get together with punkers to argue about who sold out and who didn't. Channel #punk

Windy City: Although no one talks much about Chicago here, it's usually busy and worth a peek. Channel #chicago

Newsgroups

MS-DOS Programming: This newsgroup is for the serious MS-DOS user; we tried to warn you. comp.os.ms-dos.programmer

IBM Newsbytes: Get a bite of all the latest in IBM press releases and general news. clari.nb.ibm

Debate MS Windows: Get on your soapbox and profess your love for Microsoft Windows. comp.os.ms-windows.advocacy

OS/2 Games: It's more than just a hip operating system; find out about games available for OS/2. *comp.os.os2.games*

Mac Programmers: Just as there are serious DOS programmers, there are serious Mac programmers. comp.sys.mac.programmer

Mac Newsbytes: And just as there's news for IBM users, Mac and Apple news is readily available. *calri.nb.apple*

Sources for Mac Software: A newsgroup for those seeking Mac software via the Internet. comp.sources.mac

Internet Presses: The latest and greatest information on current Internet presses. *alt.etext* or *alt.internet.services*

Alien Abduction: Stories about alien visits, abductions, and conspiracy theory. Zoooom. *alt.alien.visitors*

Internet BBSs: Info on BBSs accessible via the Internet and some chatter about online services. *alt.bbs.internet*

It's Miller Time: Discuss the many facets of beer (tastes great or less filling), with users who know. alt.beer

November 22, 1963: Discuss possible conspiracy theories on the assassination of John F. Kennedy. alt.conspiracy.jfk

Hip Tech Talk: Zip through cyberspace with others who live and play in a virtual world. *alt.cyberpunk*

Bill Gates Fan Club: And you thought it wasn't possible. He is powerful and very popular. alt.fan.bill-gates

Family Trees: Helpful hints, advice, and resource information about researching genealogy. alt.genealogy

Female DIY: Read the latest news about female artists on independent record labels. Very cool. alt.music.independent.female

Slippery Spandex: Believe it or not, a discussion group devoted to the wonderful world of Lycra. *alt.lycra*

Organic Software: Find out about the latest software designed for biologists. bitnet.software

Multimedia Publishing: Learn about software for multimedia authoring and publishing. comp.publish.cdrom.multimedia

Teen Talk: A forum for students in middle school or high school on issues and hobbies. *k12.chat.junior* or *k12.chat.senior*

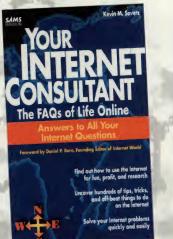
Tattoo Time: A great site for anyone interested in the pins and needles of tattoos and piercings. rec.arts.bodyart

Antique Automobiles: Great information about autos that have been around for 25+ years. rec.autos.antique

Vegetable Rights: Lots of great recipes, cooking instructions, and nutrition inf for vegetarians. rec.food.veg.cooking

FAQs

A Q&A Covering Reader Inquiries and Cries for Help



Addiress Book

There are currently about 2,200 FAQ lists on the Internet. Here's a sampling: • alt.beer faq • alt.magic FAQ · alt.pave.the. earth FAQ alt.religion. scientology FAQ comp.windows.x Cryonics FAQ • FAQ: Typing Injuries Gilligan's Island FAQ: Episode Guide Hungarian electronic resources FAQ Mensa - FAQ Modula-3 • MPEG-EAO multimedia compression · rec.arts.bonsai rec.guns FAQ rec.jugglingrec.models.scale Ship Modeling FAQ rec.music.reggae rec.pets.dogs: Shetland Sheepdogs Breed-FAQ

rec.scouting
 FAQ

Q. So, what is a FAQ, anyway? A. FAQ is Internet speak for "frequently asked question." Internet users who are experts in their fields create lists of FAQs and distribute them. (Actually, they're lists of answers to frequently asked questions — FAQs wouldn't be useful otherwise.) FAQ is pronounced

F-A-Q or "fack." Many FAQ lists are offshoots of Usenet discussion groups. For instance, the newsgroup alt.internet.services has a FAQ list called the Internet Services FAQ. The group rec.pets.dogs has several FAQ lists, each of which focuses on a specific canine breed. As you might expect, with so many people coming and going on Usenet, certain basic questions pop up again and again. Regular readers of a newsgroup may tire of reading the same newbie questions over and over again, so someone in the know creates a FAQ list for that group and posts it every so often, in the hopes that newbies will access it for answers to their basic questions.

Q. How can I get FAQs?

A. FAQ lists are usually posted to the newsgroup they cover once or twice a month. So, if you're interested in reading the rec.skydiving FAQ, look in the

With a Little Help from our Friends

ust the FAQs, ma'am ... (that is, answers to frequently asked questions) ... and also some good clues on how to find someone on the Internet ... and a few opinions on Internet advertising ...

newsgroup rec.skydiving. Most FAQs are cross-posted to the newsgroup **news.answers**. You could easily while away a rainy afternoon perusing the encyclopedic knowledge to be found there.

There also is an FAQ document server on the MIT computer system, **rtfm.mit.edu**. Use your FTP program to connect to MIT, then look in the directory /pub/usenet. You can get FAQs via

Those who choose to advertise on the Internet should be flogged only for heinous violations of its culture.

e-mail as well. To do so, send mail to mail-server@rtfm.mit.edu with the message body Send followed by the name of the FAQ you seek: for instance, Send usenet/news.answers/internetservices/faq. For more information about the mail server, send the message body Help to mail-server@rtfm.mit.edu.

Q. How do I find out if a certain organization is on the Internet?

A. There isn't a foolproof way to find out if a specific organization is connected to the Internet. Your best bet may be simply to phone

someone at that institution and ask. However, you can get some information about Internet sites using the WHOIS database maintained at the InterNIC. If you have access to a UNIX host on the Internet, you may be able to simply type WHOIS apple, for example, to look up companies with Apple in the name. Or you can access the database by Telneting to nic.ddn.mil and typing whois at the login: prompt. Type Host followed by the company name. Your search may look something like this: WHOIS: host apple Apple Computer (APPLE) [No rolemailbox] Hostname: APPLE.COM Address: 130.43.2.2 System: VAX-8650 running UNIX **Coordinator:** Fair, Erik E. (EF16) FAIR@APPLE.COM domain server Record last updated on 12-Apr-89. The WHOIS command gives slightly different output, but it's

still useful: \$ WHOIS apple APPLE COMPUTER (NET-APPLE-COMPUTER1) APPLE-COMPUTER1 204.79.190.0 Apple Computer (APPLE) APPLE.COM 130.43.2.2 Apple Computer Corporation (HP1-ONLINE-HST) HP1.ONLINE.APPLE.COM 192.215.65.17 Apple Computer Corporation (HP3-ONLINE-HST) HP3.ONLINE.APPLE.COM 192.215.65.19 **Apple Computer Corporation**



Getting the FAQs:

1. Read a newsgroup regularly and look for a posting on a FAQ list (which typically occurs at regular intervals). 2 Look at the news answers newsgroup. which is completely FAQ list-related. 3. Anonymous FTP to download a FAQ list from a Usenet archive. 4. Post a message to your newsgroup to query if a FAO list exists. If it does, ask whether someone can e-mail vou a copy or tell you how to get it. - Harley Hahn and Rick Stout, The Internet Complete Reference

(APPLE-DOM) APPLE.COM Apple OnLine Services (E-WORLD-DOM) E-WORLD.COM Apple Users' Society of Melbourne Inc. (NET-AUSOM-AU) AUSOM-AU 203.8.161.0 Apple Valley High School (NET-AVHS) AVHS 199.89.148.0 Apple, Bryan H. (BHA2) brambles@AIS.NET Apple, Jeff (JA32) japple@ATM.COM Apple, Jeff (JA176) jeffa@PWI.COM Applegate, John W. (JWA22) apple@GSIMAIL.DDN.MIL

Q. Is commercial activity allowed on the Internet? Is it purely an academic and educational network? Should people who advertise and sell stuff on the Internet be flogged?

A. Yes and no. Because the Internet is an independent network of computers and not owned by anyone or anything, the only real restrictions placed on users are by the consensus of the community itself. The trick to effective Internet advertising is taking the time to learn what is and is not acceptable. It's generally agreed that advertising in which the user comes to you for information is perfectly acceptable. So, a World Wide Web page advertising your wondrous product or service is fine because the user must approach you for information.

Similarly, an e-mail autoresponder program that replies with information about your business when a person e-mails a request to you is considered fair enough.

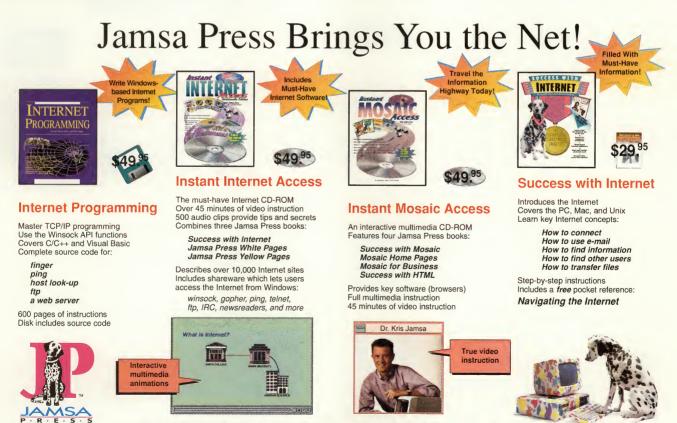
People who advertise on the Internet should be flogged only for heinous violations of Internet culture, such as sending unsolicited junk e-mail or posting commercial messages to Usenet groups that aren't supposed to be used for commercial messages. This type of "invasive" advertising — ads that come to users without their solicitation — is a bad idea and is likely to earn the advertiser many enemies.

Potential advertisers take note: Do your homework before blasting onto the Internet. This virtual community has some very strong feelings about inappropriate activity, and the penalty for unwelcome advertising methods could be international hate mail sent to you, your boss, and your stockholders.

If you are troubled by a nagging question, send it to: Kevin Savetz

(savetz@northcoast.com). Kevin is an Internet guru living in Humboldt County, California, with his wife, his PowerBook, and their three cats. He is the author of Your Internet Consultant — the FAQs of Life Online, which is living a lonely life on a bookstore shelf near you. Rescue it!

You can also address your questions to **talk-to-us@thenet-usa.com** or fax to (415) 696-1678.



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A Treasure Chest of Must-Know Tips About the Internet's Major Tools

Finding the Netnews You Want

nifty Netnews filtering service called SIFT from Stanford University enables you to search for items of interest through e-mail and on the World Wide Web. Here's a

Question: How do I find Netnews items of interest that occur outside the groups I normally read? For example, I'm a singer/songwriter and regularly read rec.music.makers. songwriting, but I want to find songwriting discussions going on elsewhere.

Answer: The folks at Stanford University's Electronic Library Project have created a clever, automatic Netnews filtering service called SIFT (the Stanford Information Filtering Tool). Anyone with e-mail access may use the service for free. There's also a World Wide Web interface (http:// sift.stanford.edu).

To use **SIFT**, you create a profile of your interests, then **SIFT** searches all the newsgroups available at stanford.edu, looking for any mentions of the words in your profile.

Each time a mention that matches your profile is found, **SIFT** does a statistical analysis to determine how much correlation there is between the message it is part of and your profile. Then, **SIFT** sends you an e-mail containing the first few lines of the found message, and the score it calculated.

step-by-step guide to using it.

If you are interested in the e-mail that **SIFT** sends you, and want to receive the entire message, simply send a [Get] message back to **SIFT**, specifying the message's identification.

You can tell **SIFT** how low a threshold score you wish the mention to have before it informs you of it. You can also finetune how often you get delivered email from **SIFT**, and how many articles are returned to you.

Several additional commands allow you to specify the number of lines in each message sent, how often and for how long messages are sent, and which articles you especially like. You can also view, update, cancel or add subscriptions.

To get started, send **SIFT** an email subscription message telling it what to look for, such as [Subscribe songwriter not jazz]. This will tell SIFT to look for all articles containing the words - J. Blake Lambert

SIFT is a clever Netnews filtering service that makes sure you won't miss any items of interest to you.

singer and songwriter, but not containing the word jazz. You might try [Subscribe songwriter not makers] to avoid postings to **rec.music.makers.**

songwriting that you've already read. SIFT is really handy, letting you use either Boolean phrases (such as the one used earlier) or weighted phrases. You also can test your phrases using the SEARCH feature in the Web interface.

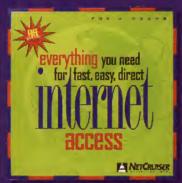
For more information, send a message with any subject using the body text HELP to netnews@db.stanford.edu.



Boolean A logical combination system that symbolically represents relationships between entities, after the 19thcentury English mathematician George Boole.

how to reach us	how to subscribe		
telephone: (415) 696-1688	telephone: (800) 706-9500		
mailing address: 1350 Old Bayshore Highway, Suite 210 Burlingame, CA 94010	mailing address: 1350 Old Bayshore Highway, Suite 210, Burlingame, CA 94010		
fax: (415) 696-1678	fax: (415) 696-1678		
e-mail: talk-to-us@thenet-usa.com (<i>The Net</i> Web site is at http://www.thenet-usa.com.)	e-mail: subscribe@thenet-usa.com		

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"...NetCruiser from NETCOM is one of the most comprehensive Internet packages available. This one-stop interface will have you on the Internet within minutes..." LAN Times

> "NetCruiser—best Internet front end."

Online Access Magazine

"NetCruiser is great for people who are intrigued by the Net but intimidated by the commands usually required for access." PC/Computing



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Signatures Net Names, Needs, and Invitations

o, readers, we are here to serve you: to answer your questions, guide you through problems, and listen to your reactions to our magazine. Send us your true stories about what you've encountered on the Internet — whether you've met your soulmate or discovered a new interest by logging on to an obscure newsgroup. Please contact us at talk-to-us@thenet-usa.com.

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Special thanks to S.B., K.I., A.P., I.S, and G-Q; love to Dog and Ziff.

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J. Blake Lambert

As a freelance writer,

Coming up, look for a special feature on how to get around the Internet, highlighting information on Web and Gopher browsers, search tools, and strategies. Other future articles will include a cheapskate's guide to cyber surfing and a how-to article on finding a job on the Internet.

Finally, in case you're wondering who we are, here's a brief rundown of our staff and friends:

singer/songwriter, and computer consultant based in Greensboro, NC, Blake uses the Internet to keep up with the latest happenings in science, popular music, computers, and more.

Celine Latulipe

Celine is a freelance writer and graduate student at the University of Waterloo in Ontario.

Aaron Lauer

Currently pursuing a master's degree in industrial arts at San Francisco State University, Aaron is a professional photographer in his spare time. He contributed the cover photography, as well as the assorted photography in our special report.

Carrie Pascal

Carrie is a student in the English and Computer Science departments at the University of Waterloo and is currently studying how people interact with hypertext and hypermedia systems.

Steve Poole

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A professor of English and rhetoric at the University of Waterloo in Ontario, Neil is an expert on the World Wide Web and has written for Imagine for several years. He is the author of *Teach Yourself the Internet in 21 Days* and co-author with John December of the *World Wide Web Unleashed*. Contact him at nrandall@hookup.net or compuserve73637,1733.

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A technology expert, Tim has written for various multimedia titles, including *CD-ROM Today*, *PC Gamer*, and *Compute* magazines. He comes to *The Net* from a recent stint as a writer/programmer for Hanna-Barbera productions in Los Angeles. He can be found at TimV@well.sf.casus, TimVictor@aol.com.

David Wade

As new media editor at Imagine Publishing, David constructs the Web site for *The Net* and its sister publications.

Mark Wagoner

Mark owns Mark Wagoner Fotografie in Greensboro, NC. He contributed the photography of the telephone jacks in our special report, as well as the portraits of our columnists and launch editor.

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The Net Reader Survey

The Internet is today's information highway. At The Net, we're eager to find out what you are doing online, which equipment you use to access cyberspace, and a little bit about yourself.

Tell us about your online world:

1. Which of the following online services does your household subscribe to? Please check all that apply.

□ America Online	□ eWorld
□ AT&T Interchange	GEnie GEnie
CompuServe	□ Prodigy
Delphi	□ Other:
\Box None of the above	

2. Do you currently have access to the Internet? \Box Yes (answer Q. 2a) □ No (skip to Q. 3)

2a. If you do, how do you access the Internet? Please check all that apply.

At work:	At home:	
□ America Online	□America Online	
□Delphi	□Delphi	
□Prodigy	□Prodigy	
□ Service provider	□ Service provider	
LAN (direct connection)		
Other:		

3. How long have you been online? Years: ____ Months:

4. To the best of your knowledge, how many hours do you spend online per week? Please check one only. \Box 1–2 hours □8–14 hours $\Box 3-5$ hours □15–20 hours □5–7 hours □More than 20 hours □0 hours: I have yet to go online

5. Do you use online services for any of the following? Please check all that apply.

□Chat	Home business
🗆 E-mail	□ News/Weather
□ Education	Shopping
□ Finance	□ Sports
□ Health	□ Travel
□ Hobbies	Other:

6. Do you access any bulletin boards? □ No

Tell us about your hardware/software:

7. What type of computer(s) do you use to access online services or the Internet? Please check all that apply. □ PC/Compatible **UNIX** □ Macintosh Other:

Please complete this survey, and mail or fax it (415.696.1678) no later than May 31, 1995 to qualify for our \$500 Shopping Spree contest.

8. What modem brand do you use and what is its rated top speed?

Brand: Speed (Please check one only): □ 1,200 bps □ 14,400 bps □ 2,400 bps □ 9,600 bps □ Don't know

□ 28,800 bps □ Other: _ □ Don't use a modem

received before are entered in a

pree contest.

9. Do you use a CD-ROM drive? □Yes □ No

10. Are you personally involved in software purchase decisions at your place of work? □Yes □ No

Tell us about yourself:

11. Are there any children under the age of 18 in your household? □Yes

□ No

12. What is your annual household income? Please check one only.

□Less than \$19,999	□ \$50,000-\$74,999
□ \$20,000-\$29,999	□ \$75,000-\$99,999
□\$30,000-\$49,999	□ More than \$100,000

13. What is the highest level of education you have completed? Please check one only. □ High school □ College graduate □ Some college □ Graduate school

14. What is your age? Years:

15. Are you male or female? □Male □ Female

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Company

Address

City/State/Zip



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Humor, Jokes, Cartoons, and Generally Funny Stuff from Cyberspace

Low-Tar **Sigs** and Trolling for **Flames**

nternet signature lines amuse the young and the tender, and even offer humorous solace to the cold at heart.
 They will get you and keep you on the floor laughing.

— David Allen

If life were truly cool, we would all have a theme song or soundtrack — a signature piece of music that would herald our arrival, signal our intentions, or let us know when some machetewielding psychopath is hiding in the basement.

The closest thing we have may be our Internet signature lines (sig). Some people spend hours, days, or even weeks agonizing over them. A good sig should be humorous or thought provoking. Hopefully, it will convey a snapshot of who the poster is. Ideally, it also is short and memorable — and delivers a good punch. With these stipulations in mind, I've traversed the Internet searching for sigs that live up to the ideal. Here's a sample of what I found:

• When I die, I want to go like my grandfather did: quietly, peacefully, in his sleep. Not like his passengers.

• For every action, there is an equal and opposite overreaction.

• One useless man is a disgrace; two useless men are a law firm; three or more useless men mean Congress is in session.

• There is no such thing as bad data, only data from bad homes.

• YOU! Out of the gene pool!

• Just because we serve you, doesn't mean we like you.

• The difference between involvement and commitment is like ham and eggs. The chicken is involved, the pig is committed. • We are from Microsoft. You will be assimilated.

• Some environmental groups have warned that the development of the new Iridium-225 reactor has the potential to wipe out dinosaurkind. Scientists, however, dismiss these claims as unduly alarmist and irresponsible.

A more interactive, and perhaps more challenging, form of online word play is trolling, the delicate art of posting to a discussion group a remark that is guaranteed to galvanize the less stable elements — or those who take themselves too seriously ---into making long, ranting, semicoherent tirades against your opinion. Points are given for style, originality, subtlety, and response elicited, with a bonus awarded if you actually include the word troll in your post but still sucker people in.

Trolling is a great spectator sport, and you would do well to remember this if you find yourself fired up by somebody's post. Some people have trouble recognizing a troll for what it is. For the benefit of those folks, here is a list of sure-fire hooks to watch for:

• What really irritates me about Fat Boy is the endless prattle from his legion of good old boys, semiliterate frat boys, illiterate Klansmen, and ditto-head Hitler wannabes, who call to praise him. Posted to alt.fan.rush-limbaugh.

• At least Jim Kirk was a REAL man, not some [sissy], bald Frenchman with an English accent.



Posted to any "Star Trek" group, especially alt.sexy.bald.captains.

• I am looking for a traditional, old-fashioned wife [followed by a description matching this month's *Playboy* centerfold]. Any ladies wishing a REAL man to love and protect them, contact me at ... *Posted to soc.feminism*.

• MAKE.MONEY.FAST Posted anywhere on the Internet.

• I am planning on buying a computer for home use and have been receiving conflicting advice. Should I buy a PC or a Mac? Cross-posted to comp.sys.ibm.pc and comp.sys.mac.advocacy.

• In my opinion, abortion should be ...

Posted anywhere on the Internet.

• Banning assault weapons is the only way to protect society from these knuckle-dragging, psychotic, gun-toting loonies. *Posted to rec.guns.*

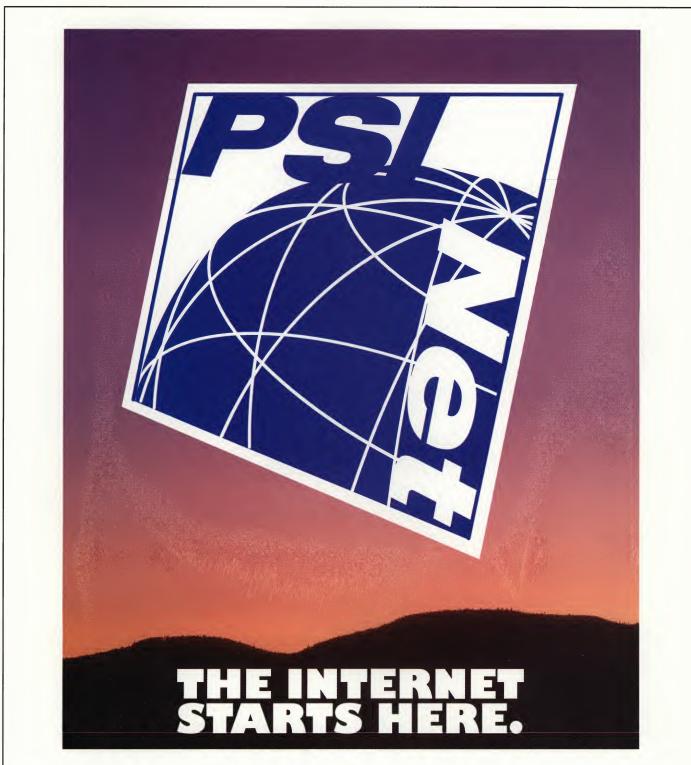
• I don't know why you people get so worked up about eating lobster. I read somewhere that they don't even feel pain when dumped in boiling water.

Posted to rec.food.veg.

Whatta are ya gonna do — 'cept laugh?



ROTFL Yet another Internet acronym, this time standing for Rolling On The Floor Laughing.



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