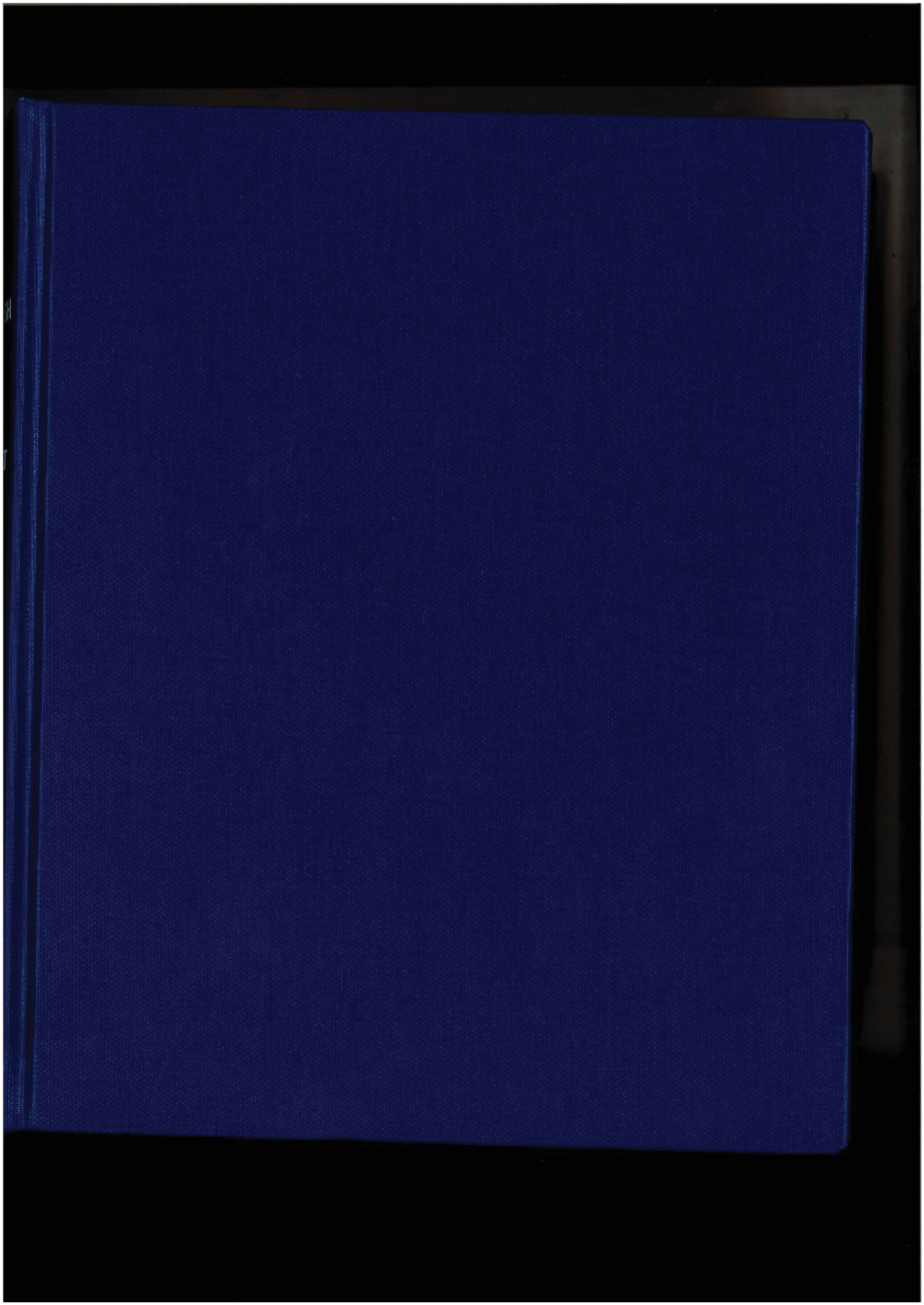

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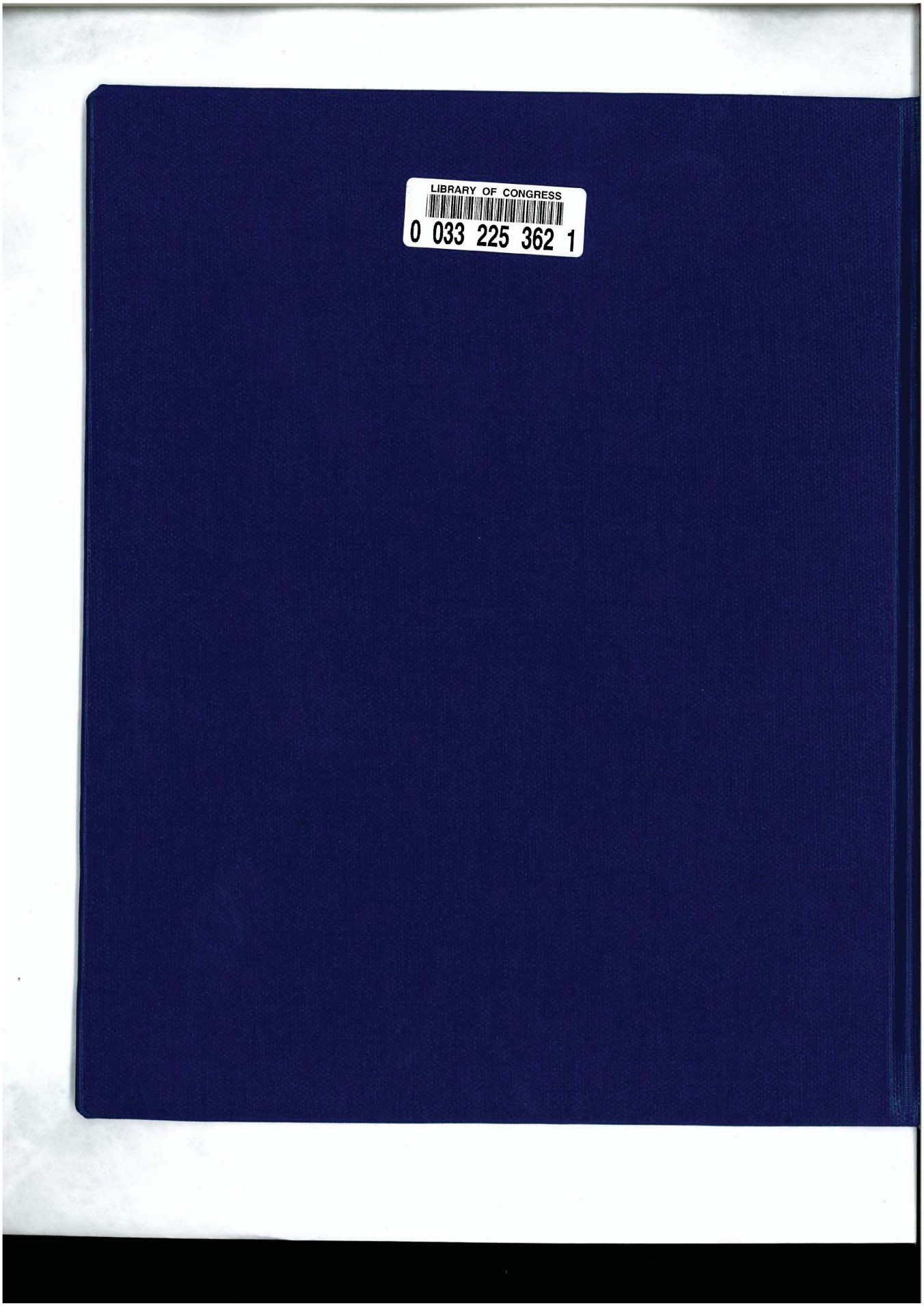
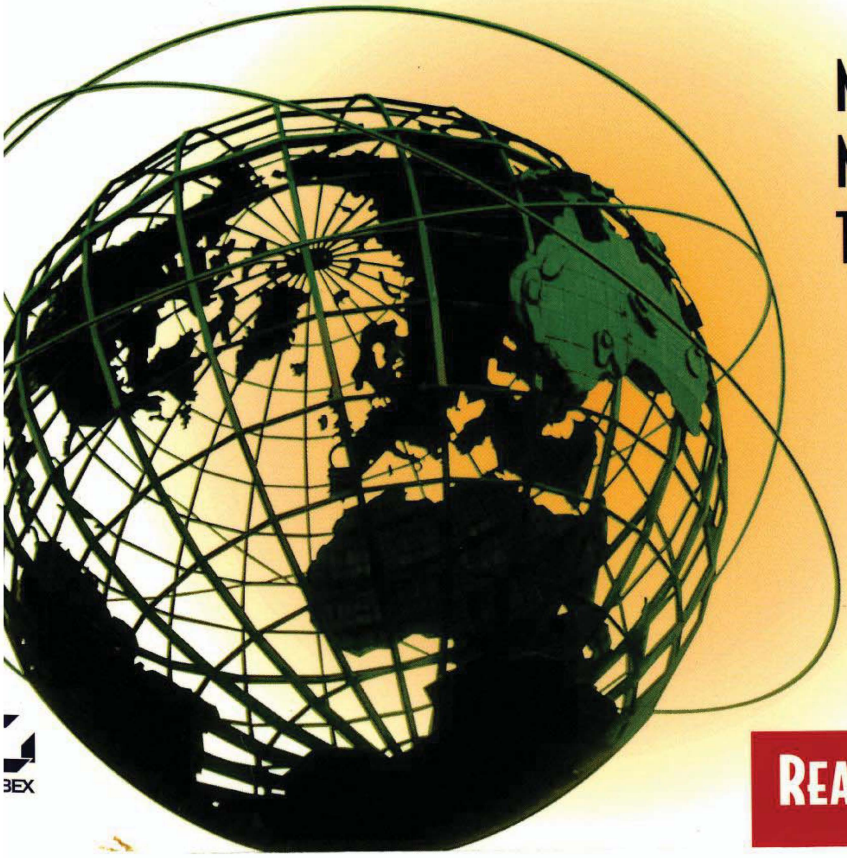


Christian Crumlish

The ABCs of the Internet



Make the Most of Your Time Online

READY, SET, GO...

The ABCs of the Internet

The ABCs of the Internet

Christian Crumlish

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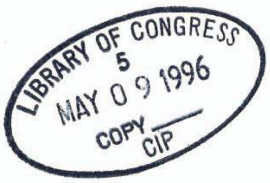

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To the Merry Punsters
(NTAP)

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Thanks as always to Briggs, who has stood by me through my ridiculous way of working on too many projects at once.

Contents at a Glance

Table of Contents

Introduction

Will the Internet hype never end? It seems like there's a newspaper article or magazine cover story every day. You probably saw hundreds of other Internet books on the shelf where you picked this up. Most of those books and magazine articles are full of breathless prose about an "information superhighway," or vague first impressions that betray not only a lack of understanding but also a deadline looming large.

Still, more and more people are connecting to the Net every day, and some businesses are beginning to rely on it for communication, for information, and even for transportation of certain types of products, such as software or writing. Maybe you've already got access to the Internet through your work or school, or maybe you're considering getting a modem and trying it out for yourself.

NOTE **I assume you own a computer or have access to one, but it's not your favorite toy. You don't think like a computer wizard, and you don't want to know too much technical drivel, just enough to get going.**

This book is different from most of the other books out there. It's not a puff piece, full of generalities and futuristic hype. Neither is it a technical manual. I assume that you generally don't care *why* things work the way they do. Instead, this book tells exactly *how* to get things done on the Internet.

WARNING **The Internet changes rapidly, and it's more than likely that some of the screen shots I've shown in this book will have changed slightly or even drastically by the time you visit the displayed sites. Don't let that throw you!**

How This Book Works

For most people, the basic appeal of the Internet is e-mail and the World Wide Web. I devote a lot of this book to those two topics because I realize that that's all some people are going to want to do. Eventually, though, you'll be tempted to look into some of the other resources available via the Net, and I cover some of the most interesting ones, such as Usenet and FTP.

NOTE **The Internet has two uses. One is person-to-person communication. The other is finding information. I cover both, starting with the person-to-person stuff because it's easier to get into, and it's what you hear about most.**

The Internet is a great resource, and you're bound to learn more about it once you're connected. For now, I'm just going to tell you enough to get you over the threshold. That's all you really need.

The book contains twelve chapters and two appendices. The next sections discuss what these chapters cover.

Getting Oriented and Sending Mail

Chapter 1 gives you a basic overview of the Internet, e-mail, and the World Wide Web. I introduce most of the basic terminology you'll need to deal with to start learning about these subjects. I also explain the different ways you might connect to the Internet and how the book will handle those alternatives.

Chapter 2 introduces the most basic e-mail concepts, essentially how to send, read, and respond to mail. If you've already used e-mail, you should be able to skim this chapter. Chapter 3 explains some of the other useful and more elaborate uses of e-mail (such as attaching files). Both Chapters 2 and 3 cover a variety of e-mail programs, so either the program you use will be covered there or a very similar program will be.

The Web—Where the Action Is

Chapter 4 introduces you to the World Wide Web and the various programs (called Web browsers) that you might use to connect to it. Chapter 5 shows you how

to search the Internet with your Web browser, so that finding things on the Net can be a little easier than just hunting around blindly. Chapter 6 explains how you can juice up your Web browser and connect to and play all kinds of multimedia content from the Internet.

The Internet as Community

In some ways the Net is like the phone system. It's another tool for contacting people, but it works only if the other people you want to reach are also on the system.

Chapter 7 tells you all about mailing lists—how to get on them, how to contribute to them, and how to find them. These lists will be your first taste of *virtual communities* of people united by common interests, no matter where they are geographically.

Chapter 8 explains the Usenet news network, a huge assortment of newsgroups devoted to interests and topics of every imaginable stripe, and tells you the practical details of running a newsreader program and reading and contributing to newsgroups yourself. No matter what newsreader you end up using—or even if you use your Web browser to read news—this chapter will have you covered.

Chapter 9 discusses live chatting using the IRC system and the various programs you can use to access IRC.

The Internet's Nooks and Crannies

Not everything on the Net is easily available via the World Wide Web, so Chapter 10 explains how to use some of the older Internet protocols, such as FTP and Telnet to find and connect to resources on the Net. Chapter 11 covers Gopher, a convenient way of browsing the Internet's archives, especially those at universities (although much of its usefulness has been overshadowed by the World Wide Web).

Your Name Here

The last chapter of the book shows you how to easily create a simple home page and how to find a place to publish it on the Web.

Appendices

Appendix A explains how to get an Internet connection, starting from scratch if necessary, as well as how to connect and what to do when things don't work the way they

should. Appendix B is an essential glossary of the Internet jargon you hear bandied about nowadays (and other things you'll hear about on the Net and want explained).

Conventions I Use in This Book

When I want you to type something, I'll put it in boldface, and I'll use italics for new terms and jargon. When I want to give you useful Internet addresses or references, I'll put the information `in this font` or even

```
on a line by itself.
```

Sometimes, the specific text you need to type will vary from case to case. If so, I'll include some dummy text in *italics*. Don't type the italicized or underlined words! Instead, substitute the relevant file name, directory name, newsgroup name, etc. When the time comes, you'll know what to do. Usenet newsgroups also appear `in this font`. Program messages that appear on your screen are shown in quotation marks.

TIP

Macintosh users should be aware that for programs that exist on both the Mac and Windows platform, I usually give the Windows shortcuts (such as Ctrl+P). Most of the time, the equivalent Macintosh shortcuts use the Command key instead of the Ctrl key.

You'll notice (if you haven't already) that Web addresses (also called URLs) are often quite long, and it's important that you type them in exactly, if you're trying to visit a mentioned site with your Web browser. Because many of them are too long to fit snugly on one line of this book, I've allowed URLs to break after any forward slash (/) or dot (.), without a hyphen ever being inserted. If you see a URL that breaks over a line and continues on the next line (such as `http://ezone.org/ez/e5/articles/xian/backdrop.html`), just type it all on one line, without skipping a space for the line break!

Occasionally in this book I'll mention Unix programs. Because Unix is case sensitive, the names of many of these programs are traditionally written all lowercase (such as pine, irc, gopher, tin, vi, and so on). I will refer to these programs by capitalizing their initial letter (Pine, Irc, Gopher, Vi) to make the sentences easier to read

and understand, but remember that you have to type the program's name in all lowercase to run it.

Sorting through the Many Programs

Because there are so many different ways to connect to the Net (at your office, through an online service, with an ISP) and so many different types of programs you can run to achieve many of the same goals, most of the chapters in this book are divided into two parts. In the first part, I usually explain the concepts you need to understand and, in generic terms, how to work the kind of program you'll need to send mail, browse the Web, post an article to a newsgroup, etc. In the second half, I'll cover the most popular and most common programs available for the feature in question and fill you in on the specific commands and idiosyncrasies of each.

You'll then have to read up on only one particular program (at least until you change to another one, at which time you can come back to the chapter and pick up the details for your new program).

TIP **Software changes rapidly on the Net and new versions of products come out all the time. Chapter 5 explains how you can make sure you always have the latest version of a program.**

Stay in Touch

If you correct an error, I'll fix whatever's wrong in the next edition of the book, and even thank you in the acknowledgments.

If you find anything incorrect or misleading, if you'd like to point me toward something you think I've overlooked, or if you'd just like to give me some feedback (or even flame me), please write me at the following addresses:

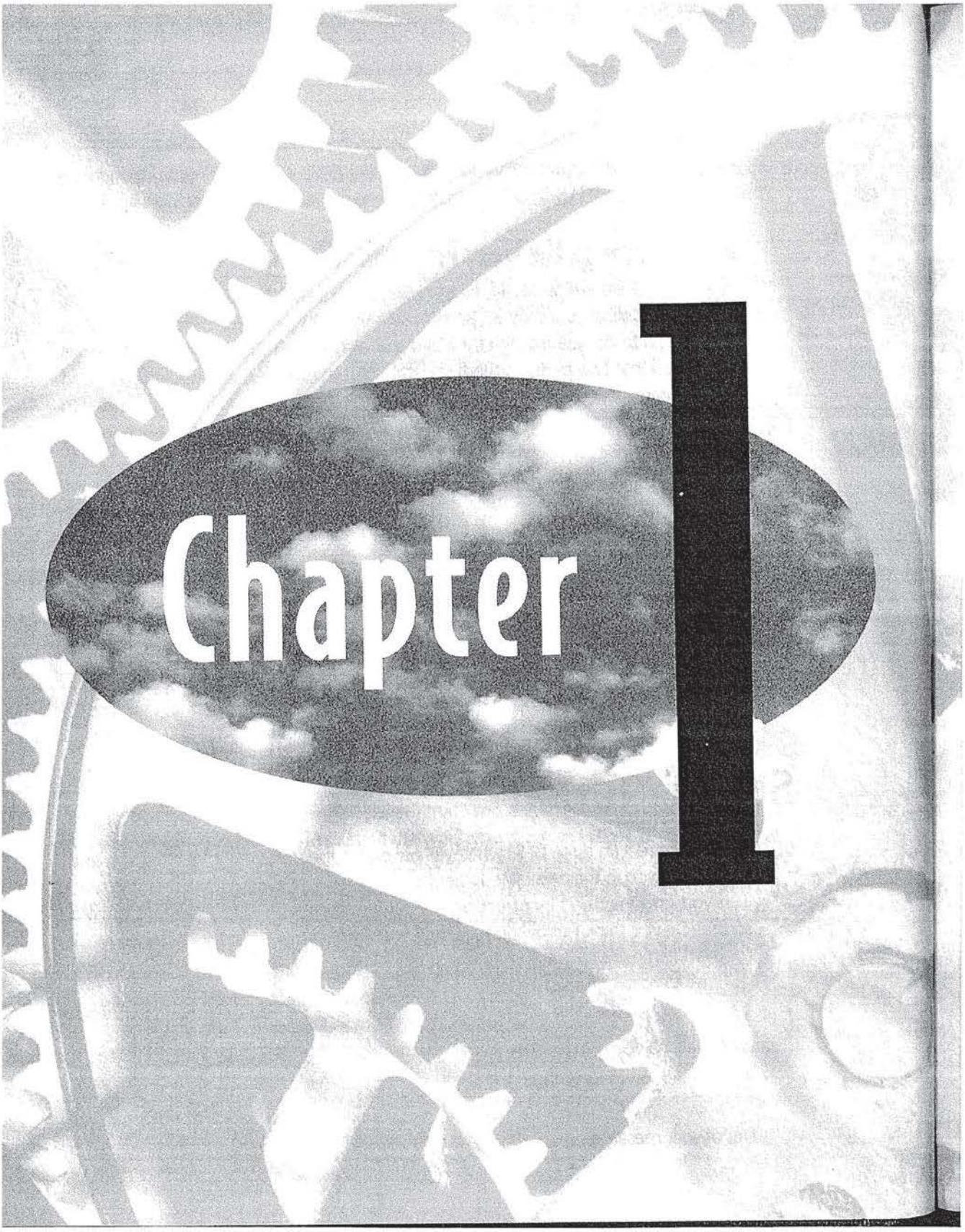
Christian Crumlish

c/o Sybex Inc.

2021 Challenger Drive

Alameda, CA 94501

Or send me e-mail at `xian@pobox.com` and put the word ABC in the subject line of your message.



1

JUST ENOUGH TO GET STARTED

FEATURING

- **Understanding the Internet**
- **Accessing the Internet at work and at home**
- **Discovering what you can do on the Internet**
- **Using Internet addresses**

I know, you're raring to go. You want to start sending and receiving e-mail, browsing the Web, and exploring the global library of fun stuff out on the Internet. Well, I don't want to hold you back. Feel free to skip to Chapter 2 and start right in on e-mail (or even jump to Chapter 4 to start messing around with the World Wide Web). However, if you've got some questions about what the Internet actually is, how you get access to it, and what you do once you're there, I'll try to answer those questions here.

I'll also try to explain most of the jargon you hear when people start babbling about the *Net*, so you can figure out for yourself what you want to learn about and what you'd like to ignore. (In addition Appendix B is a glossary of Internet

terms used in this book.) Notice that I just used the word *Net* and not *Internet*. For the most part, the words are synonymous, although some people will use the word Net to refer to just about any aspect of the global inter-networking of computers.

NOTE **If you want a more thorough compendium of Internet jargon, terminology, and culture at your fingertips, try my *Internet Dictionary*, also from Sybex.**

What Is the Internet?

In this chapter, there are no dumb questions. Everybody talks about the Internet these days but most people don't really know what it is. One reason for this is that the Internet looks different depending on how you come across it and what you do with it. Another reason is that everyone talks about it as if it's actually a network, like a local network in someone's office or even a large global network like CompuServe. Fact is, it's something different. A beast unto itself. The Internet is really a *way for computers to communicate*.

As long as a computer or smaller network can "speak" the Internet lingo (or *protocols*, to be extra formal about it) to other machines, then it's "on the Internet." If the Internet were a language, it wouldn't be French or Farsi or Tagalog or even English. It would be Esperanto.

Having said that, I might backtrack and allow that there's nothing wrong with thinking of the Internet as if it is a single network unto itself. It certainly behaves like one in a lot of important ways. But this can be misleading. No one "owns" the Internet. No one even really runs it. And no one can turn it off.

E-mail and a Whole Lot More

The Internet is also a collection of different ways to communicate or store information in a retrievable form. Take e-mail, for example. If you work in an office with a local-area network, then chances are you have an e-mail account and can communicate with people in your office by sending them messages. (See Chapters 2 and 3 for an in-depth discussion of all the ins and outs of e-mail.) This is not the Internet. Likewise, if you have an account at America Online and you send a message to someone else at

AOL, you're still not using the Internet. But, if your office network has a *gateway* to the Internet, and you send e-mail to someone who does not work at your office, then you're sending mail over the Internet.

NOTE **A *gateway* is a computer or the program running on it that transfers files (or e-mail messages, or commands) from one network to another.**

Likewise, if you send a message from your AOL account to someone at CompuServe, or elsewhere, then, again, you are sending messages over the Internet (see Figure 1.1).

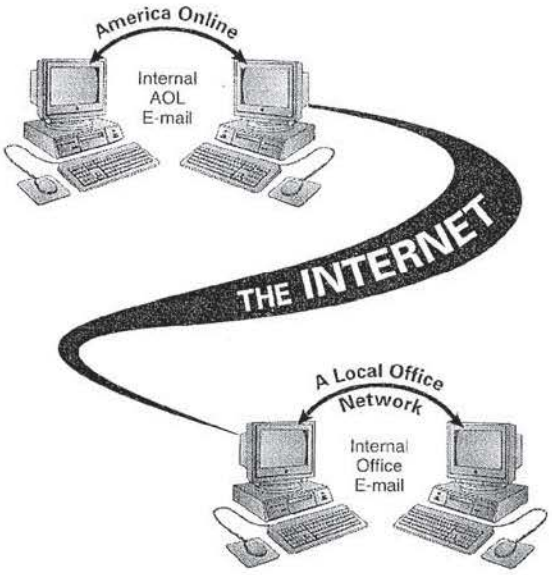


FIGURE 1.1: The Internet carries e-mail from one network to another.

But, from your point of view, the Internet is not just a collection of networks all talking to each other. A single computer can also participate in the Internet by connecting to a network or service provider that's connected to the Internet. And while the local office network I described and the big commercial online services are not themselves the Internet, they can and often do provide access through their gateways to the Internet. (I cover online services later in this chapter, in the section called *Accessing the Net at Home*.)

This can be confusing to first-time Internet users (universally referred to as *newbies*). Say you have an AOL account and you join one of the *discussion groups*

(bulletin boards) there. It may not be obvious to you right away whether you're talking in an internal venue, one only accessible to AOL members, or in a public Internet newsgroup. One of the benefits of an online service is the seamlessness that makes everything within your grasp appear to be part of the same little program running on your computer.

NOTE

A *bulletin board* is a public discussion area where people can post messages—without sending them to anyone's e-mail address—that can be viewed by anyone who enters the area. Other people can then reply to posted messages and ongoing discussions can ensue. On CompuServe, a bulletin board is called a *forum*. On the Internet, the equivalent areas are called *newsgroups*.

The Web Is Not the Net, or Is It?

Nowadays, most of the hype about the Internet is focused on the World Wide Web. It's existed for under ten years now but it's been the fastest growing and most popular part of the Net for many of those years (except, perhaps, for the voluminous flow of e-mail around the globe). But what is the *Web* (also called *WWW* or *w3*) and is it the same thing as the Internet? Well, to answer the second question first: yes and no. Technically, the Web is just part of the Internet—or, more properly, a way of getting around part of the Internet. But it's a big part, because a lot of the Internet that's not strictly speaking part of the Web can still be reached through it.

So the Web, on one level, is an *interface*. A window onto the Net. A way of getting to where you're going. Its appeal derives from three different benefits:

1. It disguises the gobbledygook that passes for Internet addresses and commands. (See *A Few Words about Internet Addresses* at the end of this chapter.)
2. It wraps up most of the different features of the Internet into a single interface.
3. It allows you to see pictures, and even hear sounds or watch movies (if your computer can hack it), along with your helpings of text.

TIP

To play sounds, your computer needs a sound card, speakers, and some kind of software (such as MS Sound Recorder or Sound Machine for the Macintosh, but there are many others); to play movies, your computer needs software (such as Media Player for Windows or QuickTime for the Macintosh or Windows) and a lot of memory (or else the movies will play real herky-jerky).

It helps to know a little bit about the history of the Net to understand why these three features of the Web have spurred on the Internet boom. First of all, before the Web, to do anything beyond simple e-mail (and even that could be difficult, depending on your type of access) used to require knowing weird Unix commands and understanding the Internet's system for numbering and naming all the computers connected to it. If you've ever wrestled with DOS and lost, then you can appreciate the effort required to surmount this type of barrier.

Imagine it's 1991 and you've gotten yourself an Internet account, solved the problems of logging in with a communications program to a Unix computer somewhere out there, and mastered the Unix programs needed to send and receive mail, read newsgroups, download files, and so on. You'd still be looking at lots of screenfuls of plain text, reams and reams of words. No pictures. Well, if you were dying for pictures you could download enormous text files that had begun their lives as pictures and then were encoded as plain text so they could be squeezed through the text-only pipelines that constituted the Net. Next you'd have to decode the files, download them onto your PC or Mac, and then run some special program to look at them. Not quite as easy as flipping through a magazine.

The Web uses a method called *hypertext* to disguise the actual commands and addresses you use to navigate the Net. Instead of these commands and addresses, what you see in your *Web browser* (the program you use to travel the Web) is plain English key words highlighted in some way. Simply select or click on the key words, and your browser program talks the Internet talk, negotiates the transaction with the computer at the other end, and brings the picture, text, program, or activity you desire onto your computer screen. This is how all computer functions should work (and probably how they will work one day).

NOTE

You may have already encountered a form of hypertext on your desktop computer. If you have a Macintosh, think of hypercard stacks--the cards in those stacks are hyperlinked to one another. If you have Windows running on a PC, think about the Windows Help system, where clicking on highlighted words connects you to definitions or tangentially related help topics.

Early, Unix-based Web browsers such as Www (developed at CERN, the European particle physics laboratory where the Web was invented) and Lynx (developed at the University of Kansas) were not especially attractive to look at, but they did offer the "one-step" technique for jumping to a specific location on the Net or downloading a file or piece of software. Figure 1.2 shows Lynx, running on a Unix machine in a terminal window and connected to a PC by a modem.

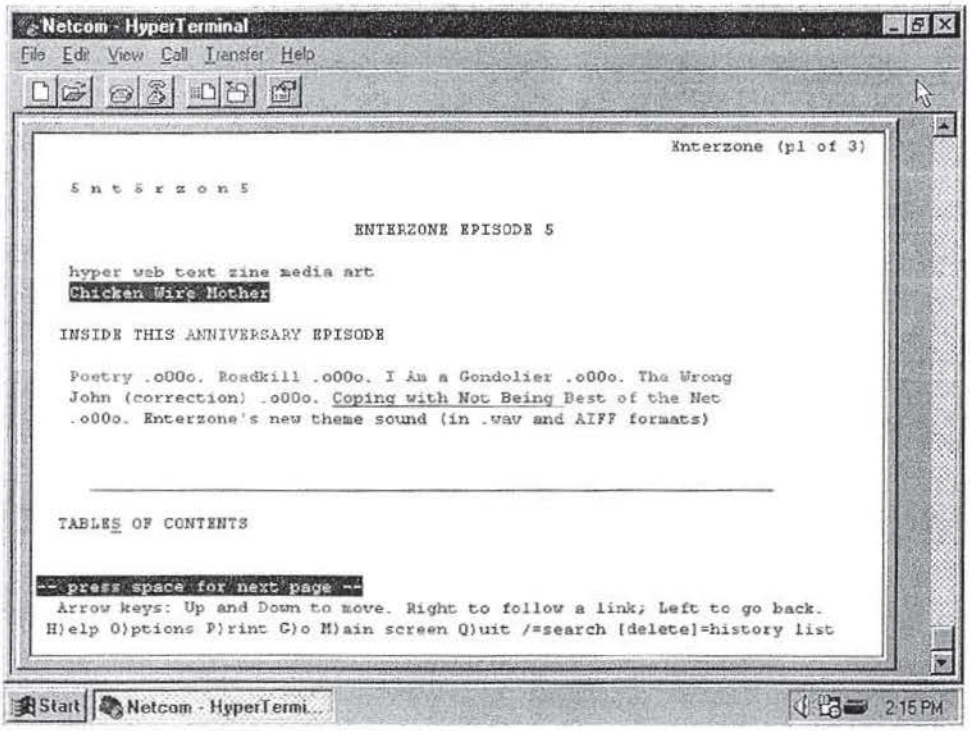


FIGURE 1.2: In Lynx, you can press Tab to get to and highlight a link, and then press Enter to execute the link and follow it to a file or another part of the Internet.

The next advance on the Web was the development of graphical Web browsers that could run on a desktop PC or Macintosh, permitting the user to employ the familiar point-and-click techniques available for other programs on the computer and incorporating text formatting and graphics into the browser screen. The first program of this type was NCSA Mosaic, which was developed at the National Center for Supercomputer Applications and distributed for free (see Figure 1.3).

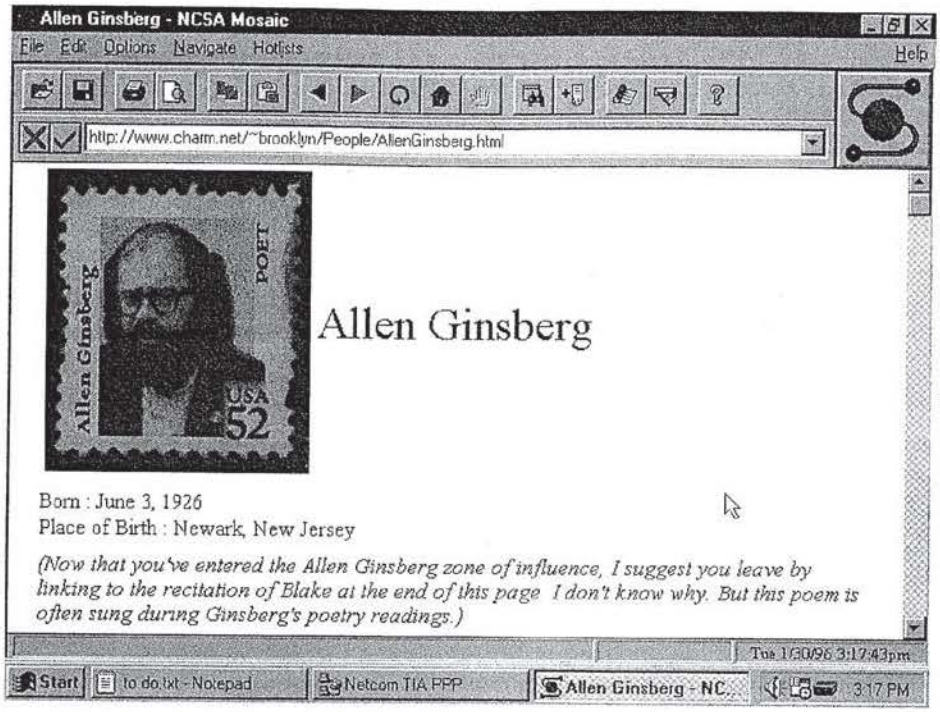


FIGURE 1.3: Mosaic made it possible to point to a link and click on it, making the Internet much more accessible to non-technical users. It also pioneered the use of in-line graphics (meaning illustrations mixed in with text).

Furthermore, the various Web browsers can more or less substitute for a plethora of little specialty programs (such as Gopher clients, newsreaders, FTP programs, and so on) that you had to assemble and set up yourself "in the old days." The browsers all have their own little idiosyncrasies, but they're still remarkably uniform and consistent compared to the zoo of different programs and rules you had to follow just a few years ago. These days, the most popular browser is Netscape Navigator (see Figure 1.4).

NOTE **"Just a few years ago" *is* the old days on the Internet. Changes happen so rapidly in the online world that time on the Internet is like "dog years," something like seven years go by for each one in the real world.**

FIGURE 1.4: Netscape Navigator is hands-down the most popular World Wide Web browser program. It works very much the way Mosaic does but with a number of additional features and improvements.

The Web has made it possible for browsers to display pictures right there in the midst of text, without you having to know how to decode files. A picture's worth a thousand watchamacallits, and pictures look better in newspaper articles and on TV than scads of typewritten text. So this ability was the final ingredient that made the Web seem so accessible and interesting to people who'd never in a million years care to learn what a Unix "regular expression" is.

So, I haven't really answered the question that heads up this section: Is the Web the Internet? Technically it's not exactly the same thing, but for all intents and purposes, it is. And Web browsers are the must-have programs that have made the Internet what it is today.

Getting on the Internet

So what exactly does it mean to be "on the Internet"? Generally, if someone asks you, "Are you on the Net?" it means something like, "Do you have an Internet e-mail address?" That is, do you have e-mail and can your e-mail account be reached over the Internet? With the popularity of the Web what it is, another common interpretation of what it means to be on the Net is, "Do you have the ability to browse the World Wide Web?" Often these two features—Internet e-mail, and Web access—go hand in hand, but not always. We're also getting to a time when being on the Internet will also entail having your own *home page*, your own "place" on the Web where information about you is stored and where you can be found.

Accessing the Net at Work

More and more companies these days (as well as schools and other organizations) are installing internal networks and relying on e-mail as one of the ways to share information. E-mail messages are starting to replace interoffice memos, at least for some types of announcements, questions, and scheduling purposes. The logical next step for most of these organizations is to connect their internal network to the Internet through a gateway. When this happens, you may suddenly be on the Net. This doesn't mean that anything will necessarily change on your desktop. You'll probably still use the same e-mail program and still send and receive mail within your office in the same way you always have.

What will change at this point is that you'll be able to send mail to people on the Internet outside of your office, as long as you type the right kind of Internet address. (Generally, this means adding @ and then a series of words separated by periods to the *username* portion of an address, but I'll explain more about addresses at the end of this chapter.) Likewise, people out there in the great beyond will be able to send mail to you as well.

Depending on the type of Internet connection your company has, e-mail may be all you get. Then again, it might also be possible for you to run a Web browser on your computer and visit Internet *sites* while sitting at your desk. Of course your company will only want you to do this if it's relevant to your job, but it works the same way whether you're researching a product your company uses or reading cartoons at the Dilbert site.

Accessing the Net at Home

If you're interested in exploring the Internet as a form of entertainment or for personal communication, then a work account is not really the way to do that. (An *account* minimally consists of a username and an e-mail in box; it may also provide storage space on a computer or access to a Web server.) You'll need your own personal account to really explore the Internet on your own time, without looking over your shoulder to make sure nobody's watching.

TIP **If your office is quite sophisticated, you may actually be able to dial into a company network from home via a modem to check your e-mail messages or even browse the Web, but again, this might not be an appropriate use of your boss's resources.**

Your best bet is to sign up for an account from a commercial online service or a direct-access Internet service provider. (Appendix A explains how to find and get your own Internet account.) What's the difference between those two choices? Well, an *online service* (such as CompuServe, America Online, Prodigy, Microsoft Network, and so on) is first and foremost a private, proprietary network, offering its own content and access to other network members. An *Internet service provider* (also called an *ISP*) offers *just* access to the Internet and no local content (or only very limited local information and discussion groups). Figure 1.5 will help illustrate this distinction.

Online services have only recently begun offering full (or somewhat limited) Internet access. Because they are trying to do two things at once (sell you their own content and connect you to the Internet), they are usually an expensive way of exploring the Net. On the other hand, they tend to offer a single, simplified interface. I often recommend to people who just want to get their feet wet before plunging wholeheartedly into the Net, to sign up for a free trial account at one of the online services. If they like what the Internet has to offer or if they start using the Net so much they run up an expensive bill (after that first free month), then I recommend that they switch to a direct-access Internet service provider.

ISPs can be much cheaper than online services, especially if you can find one that offers a *flat rate*—a monthly charge that doesn't vary no matter how much time you spend connected to the Net. They also don't try to compete with the Internet by offering their own content and sponsors. Instead, they function as a gateway, getting you onto the Internet and letting you go wherever you want.

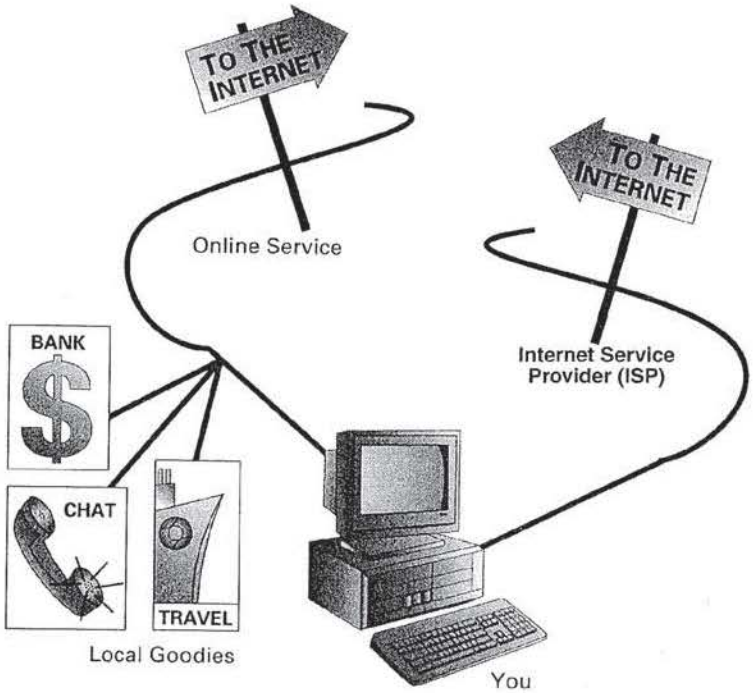


FIGURE 1.5: Online services connect you to the Internet but encourage you to explore their own offerings, whereas ISPs just connect you to the Internet and let you fend for yourself.

What Kinds of ISP Accounts Are There?

An ISP account generally includes, along with the e-mail address, an account with some storage space on a computer somewhere on the Net, usually in a directory (a folder) with the same name as your username. An account is also a billing entity, and your account will be billed monthly, sometimes with a surcharge based on the amount of time you spent connected that month (depending on the provider) or the amount of space you used on their hard drive.

But how do you use an account? Well, you need a computer with a modem, and you need software that knows how to use that modem to call up (dial up) your provider and allow you to log in to your account. Appendix A has more on the nitty-gritty of connecting to an account. If you want more than simply a connection to a Unix command-line and a plain text account (and I suspect that you do), then nowadays you need something called a *PPP* or *SLIP account*. (The other kind is usually called a *shell account* or sometimes a *Unix shell account*.) Again, I'll explain more about these distinctions in Appendix A, if you're really interested. A PPP (or SLIP) account lets your computer behave like it's connected directly to another computer

on the Internet—when it's really connected over a phone line whenever you dial in—and it enables you to run software, such as graphical Web browsers like Mosaic and Netscape Navigator, that functions in your computers' native environment (for example, Windows or the Macintosh operating system) instead of forcing you to deal with plain-text programs like the text-only browsers Lynx and Unix (see Figure 1.6).

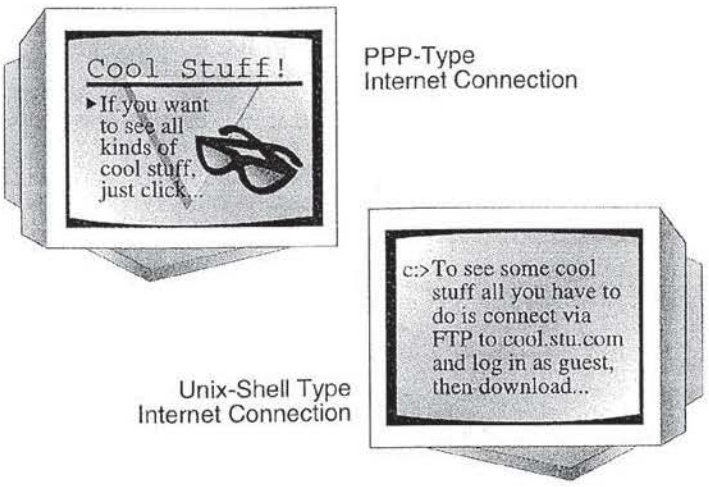


FIGURE 1.6: If you can get a PPP (or SLIP) account, then your connection to the Internet will be much more seamlessly integrated into your computer's normal environment.

Once you're set up, you won't have to think much about whether you have a PPP or SLIP account or any other kind of account, but I just wanted to introduce the terminology so you'll know what I'm talking about when I mention it again.

WARNING **By the way, the speed of your modem—and that of the modem at the other end of the dial-up line, that is, your provider's modem—determines the speed of your Internet connection, and even the fastest modems these days are still slower than a direct network connection to the Net, such as you might enjoy at your office.**

The Internet Doesn't Care What Kind of Computer You Use

One of the nice things about the Internet is that it makes some of the seemingly important distinctions between types of computers a lot less important. Sure, if you use a Macintosh, you have to run Macintosh software, and if you use Windows 95, you have to run Windows software, but the information out on the Internet, the public discussion areas, and the World Wide Web look and act more or less the same, no matter what kind of computer you use.

In fact, the Web is quickly becoming a sort of universal computer platform now that certain types of programs and services are being designed to run on the Web, rather than to run on one specific type of computer. In this book, most of the screen shots (such as in Figure 1.2) show Windows 95 screens, because that's the kind of computer I do most of my work on, but many of the programs featured also exist for the Macintosh, and when they do, I'll be sure to fill you in on the Macintosh equivalents and where to find them. Figure 1.7 shows a Netscape Navigator window on a Macintosh. Notice how similar it looks to the Windows 95 version shown in Figure 1.4.

Part of the elegance of the Internet is that much of the heavy duty processing power and storage of large programs and dense information takes place "out there," not on your computer. Your computer—whether it's a PC, a Mac, or a Unix workstation—becomes just a convenient beanstalk to climb up to the land of the Internet giants. You'll sometimes refer to this common structure of Internet facilities as *client-server* (sorry for the jargon). In this scenario, you are the client (or your computer or the program running on it is) and the information source or World Wide Web site or mail-handling program is the server. *Servers* are centralized repositories of information or specialized handlers of certain kinds of traffic. All your client has to do is connect to the right server and a wealth of goodies are within your reach, without you having to overload your machine. This is a major reason why it doesn't matter what kind of computer you prefer.

What You Can Do on the Net

I've touched on the most popular facilities on the Internet—e-mail and the World Wide Web—but I'll run down some of the other useful features covered in this book.

FIGURE 1.7: Netscape Navigator for the Mac works almost exactly the same way as the PC (and for that matter, Unix) version of the program, except for the normal Macintosh user-interface features, such as the menu bar being at the top of the screen instead of below the title bar.

All of these things are interrelated, and you may notice me mentioning something *before* I cover it in detail. I don't want to leave you scratching your head when I'm forced to sputter terms of the trade, such as FTP, Telnet, and Gopher.

Once you start exploring the Web you might start to get tired of its disorganization (imagine a library where every card-carrying member worked part-time as a librarian for one of the shelves, and each micro-librarian used their own system for organizing their section) or with not knowing for sure where *anything* is on the Internet. Fortunately, there are a lot of useful *search engines* available on the Net, and I'll show you where to find them and how to use them. Not as thorough as a card catalog, perhaps, but easier to use.

NOTE **A *search engine* is a program or Web page that enables you to search an Internet site (or the entire Internet) for a specific key word or words (see Chapter 5).**

The Web itself is becoming more of a whiz-bang medium with some of the bells and whistles we've come to expect in television advertisements and big budget movies. To take full advantage of some of the more dynamic Web offerings, though, you have to learn how to plug special tools into your browser. I'll show you where to find the tools and how to plug them in.

Those newsgroups I alluded to before, the Internet's public message boards, are organized (to use the term loosely) into a system called *Usenet*. I'll tell you how Usenet works, how to get and install a *newsreader,* and how to start participating in this public forum without getting called a jerk. (If you plan to join in on the public discourse of the Net, you have to learn a thing or two about something called *netiquette*—the traditional rules of civilized behavior online. (Usenet and netiquette are explained in Chapter 8.)

If you prefer the idea of communicating with people "live" rather than posting messages and waiting for people to reply later, then you'll want to know about the various *chat* facilities available on the Internet, particularly *IRC* (*Internet Relay Chat*).

If you're willing to get your hands a little dirty and want to start tunneling your way around the Internet, connecting to computers all over the globe and moving files hither and yon, you might be able to do all that from your Web browser, or you may want to pick up the basics of *FTP* (*File Transfer Protocol*) and *Telnet*, a system that allows you to log into remote computers over the Net).

Finally, if you want to join the ranks of people with their own home pages on the Web, so you can create a "presence" on the Net or publicize your favorite Internet sites, I'll show you how to do that as well.

A Few Words about Internet Addresses

One of the confusing things to Internet newbies is that the word *address* is used to mean at least three different things on the Internet. The most basic meaning—but the

one used least often—is the name of a computer, also called a *host* or *site,* on the Internet in the form `something.something.something` (to really use the lingo properly you have to pronounce the periods "dot"—you'll get used to it and it saves a lot of time over the long haul). For example, I publish a magazine (or 'zine) on the Internet called *Enterzone;* it's stored on a machine at Vassar that's part of the American Arts & Letters Network. The address of that machine is

```
ezone.org
```

Reading from right to left, you first have the *domain,* `org`, which stands for (non-commercial) organization. Next you sometimes have a *subdomain*. Finally you have the *hostname,* `ezone`, which is the name (or a name) of the specific computer the magazine is stored on.

Another type of address is an e-mail address. An e-mail address consists of a *username* (also called a *login, a log-on name,* a *userID,* an *account name*, and so on), followed by an "at sign" (@) and then an Internet address of the type just described. So, for example, say you want to send mail to me in my capacity as editor of *Enterzone*. You could address that e-mail message to a special username created for that job (it will stay the same even if someone else takes over in the future):

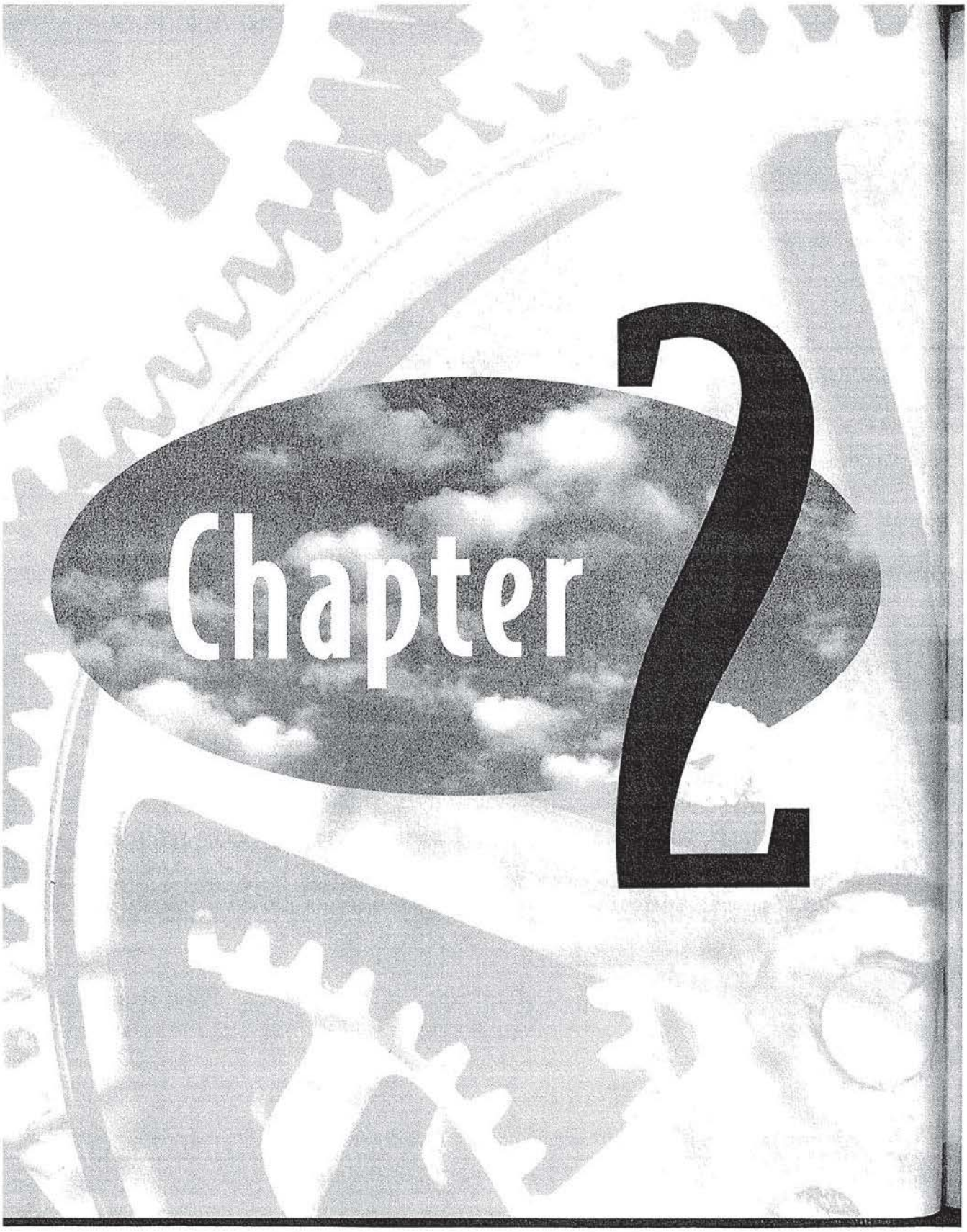
```
editor@ezone.org
```

The third type of address is the kind you see everywhere these days, on billboards, on TV commercials, in the newspaper, and so on—a Web address, also called a *URL* (*Uniform Resource Locator*). I'll explain more about how to read (or ignore) URLs in Chapter 4. For now, it's enough just to know what one looks like. The Web address of that magazine I told you about is

```
http://ezone.org/ez
```

Fortunately, you often can avoid typing in Web addresses yourself and can zip around the Web just by clicking pre-established *links.* Links are highlighted words or images that when clicked on or selected take you directly to a new document, another part of the current document, or some other type of file entirely.

Well, I think I've kept you waiting long enough. Are you ready for e-mail?



SENDING AND RECEIVING E-MAIL

FEATURING

- **Sending e-mail**
- **Reading e-mail**
- **Replying to e-mail**
- **Deleting e-mail**
- **Working with America Online, cc:Mail, CompuServe, Eudora, MS Exchange, NetCruiser, Netscape Mail, Pegasus Mail, Pine, and QuickMail**

This is the real stuff. The reason why you're on the Net. E-mail! Instant (more or less) communication with people all over the globe. Sure, we'll get to the World Wide Web soon (see Chapter 4), but first things first. Once you can send and receive e-mail, you're wired.

This chapter will cover the most basic e-mail concepts—mainly, how to send and receive e-mail. If you have an internal network at your office and you're already familiar with how to send and receive mail, you can probably skip this chapter

(though you might want to read the parts about how to write an Internet e-mail address to send mail beyond your network). If you don't yet have an e-mail account or Internet access, look in Appendix A for how to get connected to the Internet, and how to get started once you are connected.

NOTE

When you get used to sending e-mail, you'll find that it's as useful a form of communication as the telephone, and it doesn't require the other person to drop whatever they're doing to answer your call. You can include a huge amount of specific information, and the person you sent mail to can reply in full in their own good time. And unlike the telephone, with e-mail you can write your message and edit it first before you send it.

E-mail is the lifeblood of the Internet. Daily, millions of written messages course through the wires, enabling people all over the planet to communicate in seconds. One reason for the widespread use of the Internet as *the* international computer network is that it's a flexible enough system to allow just about any type of computer or network to participate. The upside of this is that whether you have a Mac, PC, or more exotic type of computer; whether you connect by modem or from a smaller network; and no matter what e-mail program you have you can still send and receive mail over the Internet.

The downside is that there are so many different e-mail programs available that I can't hope to cover each one in detail, so I'll start off by explaining the most common activities associated with e-mail, the kinds of things you'll want to know how to do no matter what program you have. I'll use generic terminology in this part of the chapter, such as In box and Out box, even if some specific programs use different terms for the same ideas. Focus on the concepts and the standard features, not what they're called in one program or another. Then, I'll cover specific commands and tips for a heaping handful of the most common e-mail programs—chances are you'll be using one of them.

In the unlikely circumstance that you have none of the specific programs that I cover, the first part of the chapter will still provide you with a list of actions to look for in the help portion of your e-mail program or to discuss with your system (or network) administrator.

Your E-Mail Program May Depend on Your Type of Service

If you have a typical dial-up account, or if you connect to the Internet through a network at your work or school, then you'll run a stand-alone mail program in your normal operating environment. If you get your Internet access through a commercial network, such as America Online or CompuServe, then you'll use their built-in mail programs, and sending mail over the Internet will require only that you use the proper sort of Internet mailing address.

If you've got a Unix shell account, then you'll handle your mail either by running a Unix e-mail program (such as Pine) or by setting up an offline mail program, such as Eudora, that will run in your normal computer environment and connect with your shell account only to send and receive mail.

TIP **Throughout this book, I will provide alternative approaches to the various Internet services that provide only e-mail. Then, as long as you have e-mail access to the Internet, you'll be able to use some of the services that your provider does not offer directly.**

Working with E-Mail

These are the things that you will do most often with e-mail:

- Run the mail program
- Send mail
- Read incoming mail
- Reply to mail
- Delete mail
- Exit the mail program

In Chapter 3, I'll show you some additional e-mail tricks you might find useful, such as how to forward mail and create an electronic address book.

Running a Mail Program

You start most e-mail programs the way you do any program, usually by double-clicking an icon or by choosing a program name from a menu (the Start menu in

Windows 95, the Apple menu on a Mac). If your Internet connection is not already up and running, your e-mail program may be able to start that process for you. (If not, see Appendix A for how to connect to the Net.)

TIP **If you have to log into a Unix shell, then you'll start your mail program (probably Pine) by typing its name at the Unix prompt and pressing enter.**

Your e-mail program will start and either show you the contents of your In mailbox or will show you a list of all your mailboxes (in which case you'll want to open the In box).

In addition to an In mailbox where just-arrived messages appear, you'll automatically have an Out mailbox in which copies of your outgoing messages can be saved (some programs will do this automatically), and usually a deleted-messages or Trash mailbox where discarded messages are held until they're completely purged. Figure 2.1 shows a Microsoft Exchange Inbox.

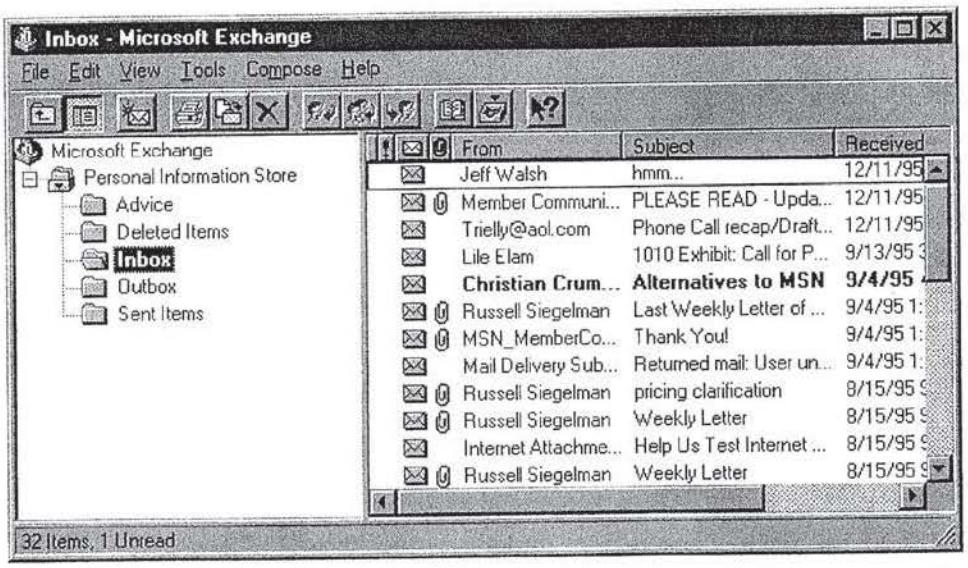


FIGURE 2.1: My Microsoft Exchange Inbox with messages listed in the order they were sent, from the most recent to the oldest

Mailboxes generally list just the sender's name and the subject line of the message (and probably its date as well). When you double-click on a message in any of your mailboxes, the message will open up in a window of its own.

Sending Mail

All mail programs have a New Message or Compose E-mail command, often located on a message menu, and they usually have a keyboard shortcut for the command as well, such as Ctrl+N for New Message. When you start a new message, your program will open a new window. Figure 2.2 shows a new message window in Exchange.

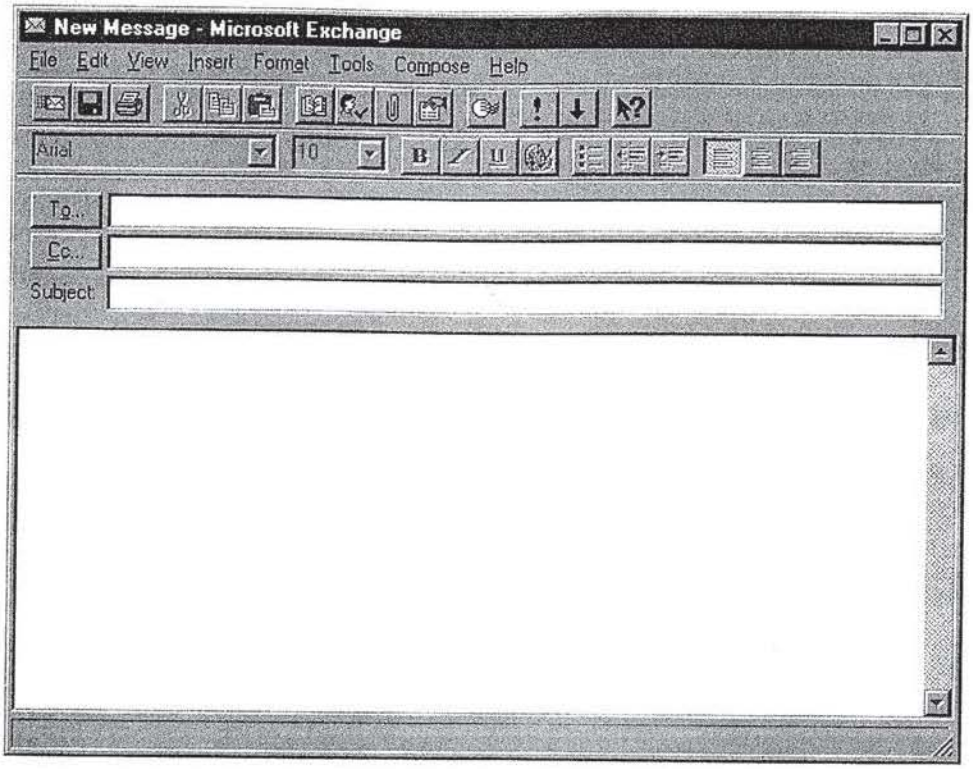


FIGURE 2.2: A blank New Message window

TIP **Most e-mail programs enable you to save addresses and then select them from an address book or list of names rather than type them in directly. See Chapter 3 for more on this.**

Type the address of the person to whom you wish to send the mail. The person's address must be of the form `username@address.domain`, where *username* is the person's identifier (the name they log in with); *address* is the identifier of the person's network and or machine on the network (the address might consist of several

words—the *host* and *subdomain*—separated by dots); and *domain* is the three-letter code indicating whether the address is a business (.com), a non-profit (.org), a university (.edu), a branch of the government (.gov), a part of the military (.mil), and so on. (Some e-mail programs require special text before or after the Internet e-mail address.)

By the way, all the rules mentioned in the previous category apply only to sending mail over the Internet. Generally, if you're sending mail to someone on your own network (or another member of your online service or subscriber of your service provider), you only have to specify the username, not any of the Internet information.

TIP

The easiest way to send mail to someone is to reply to mail that they've sent you. If you're not sure exactly how to form someone's e-mail address, ask them to send you some mail and then simply reply to it. That's what I always do.

One of my addresses is `xian@netcom.com` (you pronounce the "@ sign" as "at," and the "." as "dot"). I log in as "xian," my service provider is Netcom, and Netcom is a commercial business.

Sending Mail to People on Other Networks

Many people have Internet addresses even though they are not, strictly speaking, on the Internet. Most other networks have gateways that send mail to and from the Internet. If you want to send mail to someone on another network, you'll need to know their identifier on that network and how their network address appears in Internet form. Here are examples of the most common Internet addresses:

Network	Username	Internet Address
America Online	Beebles	Beebles@aol.com
AT&T Mail	Beebles	beebles@attmail.com
CompuServe	75555,5555	75555.5555@compuserve.com
Delphi	Beebles	beebles@delphi.com
Fidonet BBSs	1:2/3	f3.n2.z1@fidonet.org
GEnie	Beebles	beebles@genie.com
MCI Mail	555-7777	555-7777@mcimail.com
Microsoft Network	Beebles	beebles@msn.com
Prodigy	Beebles	beebles@prodigy.com

As you can see, the only tricky ones are CompuServe, for which you have to change the comma in the CompuServe address to a dot in the Internet address; and Fidonet, for which you have to reverse the order of the three numbers and then put them after *f*, *n*, and *z*, respectively. (If you are only given two numbers, in the form a/b, then assume that they are the *n* and *f* numbers and that the *z* number is 1 [one].)

After entering the address, press Tab and then type a subject on the next line (keep it short). This will be the first thing the recipient of your mail sees.

TIP **In almost all e-mail programs, you can press Tab to jump from box to box or from area to area when filling in an address and subject. Generally, you can also just click directly in the area you want to jump to in most programs.**

To send a copy of the e-mail message to another recipient, press Tab again and type that person's address on the Cc: line. Press Tab a few more times until the insertion point jumps into the message area.

NOTE **Would you rather write up your message ahead of time and then just paste it in when it comes time to send it? See Chapter 3 for how to include a text file you've already prepared.**

Most mail programs can word-wrap your message, so you only have to press Enter when you want to start a new paragraph. I recommend leaving a blank line between paragraphs, to make them easier to read. Figure 2.3 shows a short e-mail message.

When you are done, send the message or add it to a *queue*, a list of outgoing messages to be sent all at once.

Reading Mail

Whenever I connect to the Net, the first thing I do is check my e-mail. It's like checking your mailbox when you get home, except the contents are usually more interesting. Some mail programs combine the process of sending queued messages with checking for new mail. Most also check for new mail when you first start them.

Unread (usually new) mail typically appears with some indicator that it's new, such as the Subject line appearing in bold, or a bullet or checkmark appearing next to new messages. This is supposed to help you avoid accidentally missing messages.

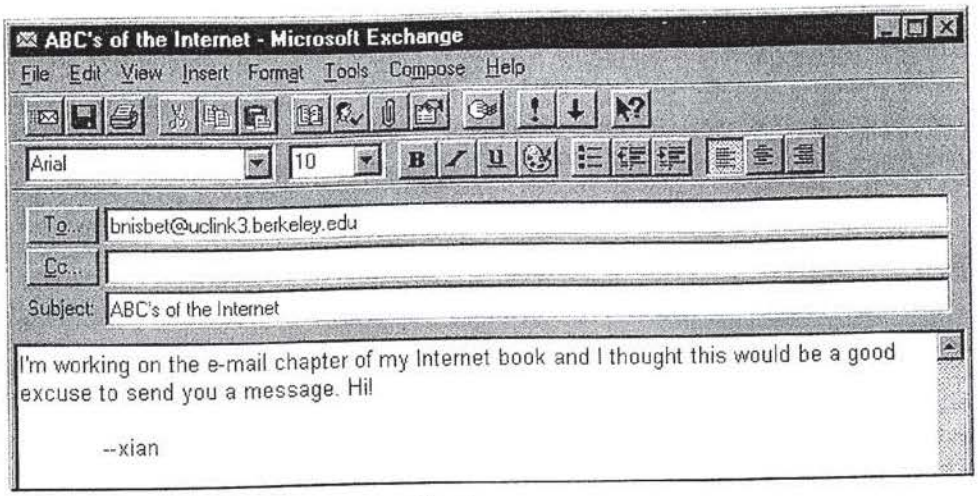


FIGURE 2.3: A short e-mail message to a friend

To view the contents of a mail message, highlight it in the window and press Enter (or double-click on it). The message will appear in its own window, much like an outgoing message. Figure 2.4 shows an incoming message in Exchange.

If the message continues beyond the bottom of the window, use the scroll bar to see the next screenful.

After reading the message, you can close or reply to the message.

TIP **I keep my mail around until I've replied to it. I could save it to a mailbox (as I'll explain presently) but then I might forget about it. When my In box gets too cluttered, I bite the bullet and reply to mail I've been putting off, and then delete most of it.**

Replying to Mail

Somewhere near the New Message command (probably on the same menu or button bar), you'll find the Reply command. To reply to mail, highlight the message in the In box, or open it and then select the Reply command.

TIP **If you start a reply by mistake, just close the message window and don't save the reply if prompted.**

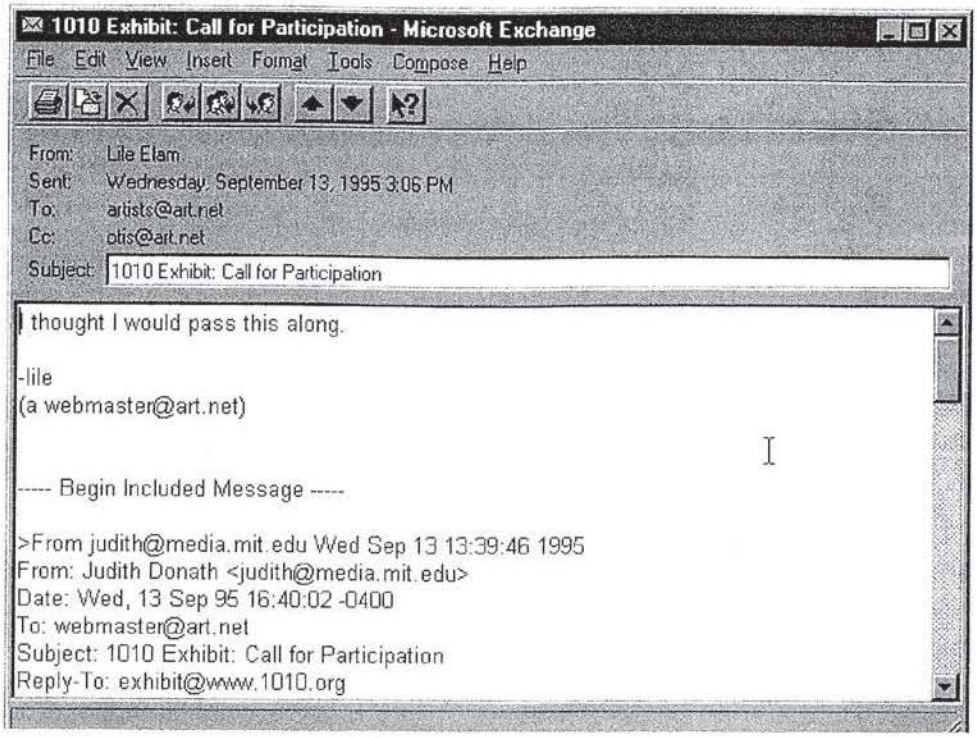


FIGURE 2.4: Here's an e-mail message I received.

Your program will also start a new message automatically addressed to the sender of the message you're replying to. Some mail programs will also automatically include the contents of the original message (or will give you the choice of including the contents or not). Often, especially with e-mail programs that were designed primarily for use on the Internet, the included message will appear with each line preceded by a ">" character to indicate that it is quoted text, although different mail programs have different ways of showing quoted messages. Some, for example, just indent the quoted material (see Figure 2.5).

Sometimes, you'll want to reply to everyone who was sent a copy of the original message. Most e-mail programs also offer a variation on the normal reply command that includes all original recipients in your reply.

Type a subject and press Tab. (People often fail to change the subject line of messages, even when the conversation has evolved its way onto a new topic.) Add other recipients if necessary or tab your way into the message area to type your reply, and then choose the Send (or Queue) command. But before we go on, there are a few rules of netiquette to follow.

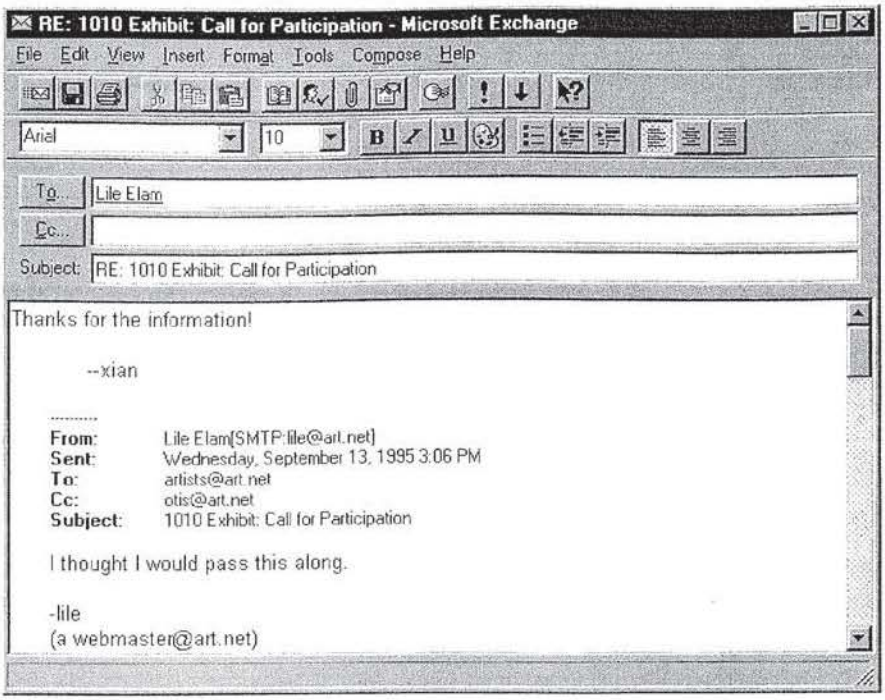


FIGURE 2.5: A reply with the original message included

Keep Your Messages to the Point

Try to minimize the amount of quoted text that you keep in your return message. Leave enough so it's clear what you're replying to (people don't always remember exactly what they wrote to you.)

Don't Fly off the Handle

In this book I'm trying to not give you too much advice about how to behave on the Net, for several reasons. First, I assume you are an adult and can decide for yourself how to behave. Secondly, the Net has a strongly interactive culture, and you will receive plenty of advice and cues from others if you overstep the bounds of good behavior.

Nevertheless, I will point out that e-mail is a notoriously volatile medium. Because it is so easy to write out a reply and send it in the heat of the moment, and because text lacks many of the nuances of face-to-face communication—the expression and body cues that add emphasis, the tones of voice that indicate joking instead of insult, and so on—it has become a matter of course for many people to dash off ill-considered replies to perceived insults and therefore fan the flames of invective.

NOTE **Issues of netiquette (as it's called) arise even more frequently when you are communicating with large numbers of people on mailing lists or Usenet. See Chapters 7 and 8 for more details.**

This Internet habit, called *flaming*, is widespread and you will no doubt encounter it on one end or the other. All I can suggest is that you try to restrain yourself when you feel the urge to fly off the handle. (And I have discovered that apologies work wonders when people have misunderstood a friendly gibe or have mistaken sarcasm for idiocy.)

Deleting Mail

If you have read a piece of mail and you're positive that you have no need to save it, you should delete it so it doesn't clutter up your In box (and waste precious hard-disk storage space). To delete a message, you typically highlight it and press Delete (or click on the Delete or Trash button, if there is one). In most programs, this moves the message to the Deleted-mail or Trash mailbox until you empty the trash (or quit the program).

WARNING **In some programs, you don't get a chance to undelete a message, so be sure you know how your program works before deleting messages willy-nilly.**

If you change your mind, try opening the Trash mailbox (or Deleted-Mail mailbox) and then look for a command that allows you to transfer mail from one box to another. It may even be called Transfer (as it is in Eudora). When you find it, transfer the mail back to your In box.

I cover saving messages in Chapter 3.

Exiting a Mail Program

When you are finished sending, reading, and replying to mail, you can quit your program or leave it running to check your mail at regular intervals. You can quit most mail programs by selecting File ➢ Exit or File ➢ Quit.

Using Specific E-Mail Programs

Well, now you know the basic e-mail moves no matter what program you have. In the rest of this chapter, I'll detail the specific commands for most of the popular e-mail programs (listed here in alphabetical order). Look ahead to see if I cover yours and just read that section unless you're interested in checking out another program. Then you're done with this chapter. Chapter 3 covers some of e-mail's more interesting possibilities, and Chapter 7 tells you all about mailing lists. Jump to Chapter 4 if you're impatient to get onto the World Wide Web.

America Online

America Online (also known as AOL) is the most popular online service today. It has an easy-to-use mail interface both for sending mail to other members of the service as well as for sending Internet mail. Figure 2.6 shows what the America Online mail program for Windows looks like.

TIP

America Online lets you compose messages offline; then you can log in and send them in something called a Flash Session, so you're not paying for connect charges while racking your brains over what to write. You can also arrange file transfers this way.

With America Online, choose Mail ➢ Compose Mail or click on the Compose Mail button to send mail. Type the recipient's address (if they're on AOL, you can just use their *screen name*—which is what AOL calls a username). Press Tab twice to jump to the Subject box and enter a subject line. Press Tab again to begin typing your message. When you're done, click on the Send or Send Later button.

To read mail, select Mail ➢ Read New Mail, and then double-click the title of the message in the New Mail dialog box. Read the message and close the window when you're done. Once you've read a message, AOL moves it to the Old Mail dialog box. To read an old message, select Mail ➢ Check Mail You've Read. AOL also keeps copies of outgoing messages. To read them, select Mail ➢ Check Mail You've Sent. Close all open dialog boxes when you're done.

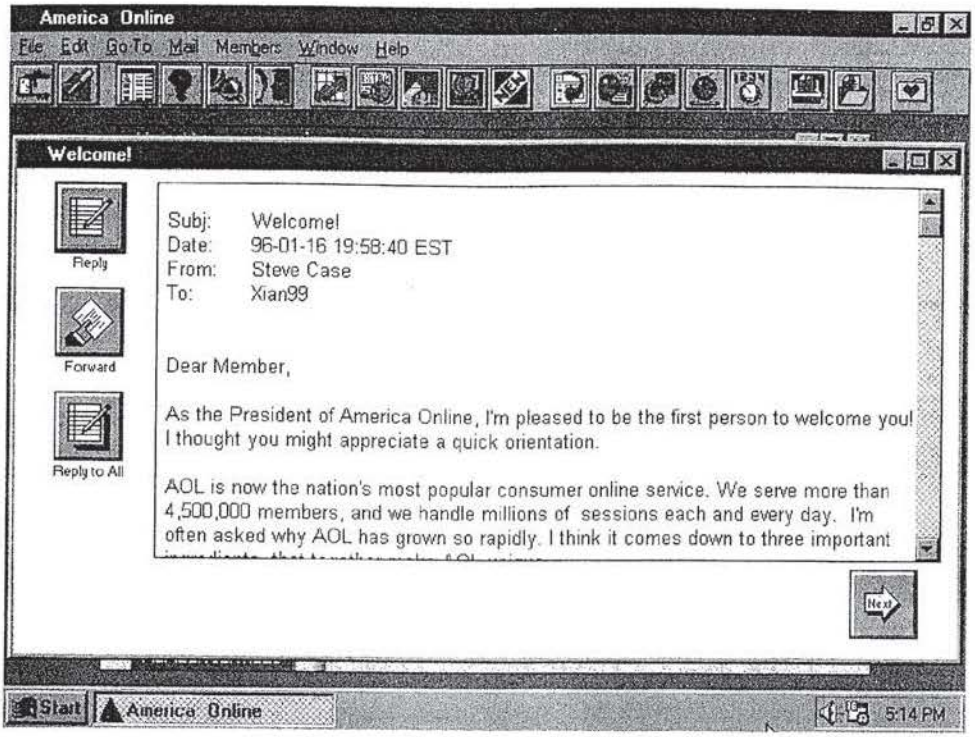


FIGURE 2.6: America Online's e-mail program is very easy to get the hang of.

TIP **If you have received new mail since the last time you logged on, the Welcome dialog box will tell you, "You have new mail." Click on the picture above the message to open the New Mail dialog box.**

To reply to a message, click on the Reply button (or click on Reply to All to send your reply to all of the recipients of the original message). This opens up a new mail window just like the kind you get when you send a new message.

To delete a message, select it and then click the Delete button at the bottom of the dialog box.

WARNING **You can't undelete AOL e-mail messages.**

cc:Mail

Lotus's cc:Mail is a popular network-oriented mail program (see Figure 2.7). To send mail with cc:Mail, click on the Prepare SmartIcon. A new window will appear. After typing the recipient's address, press Tab to jump to the Subject text box to enter a subject.

Press Tab until you reach the text area. Type your message, and then click on the Send SmartIcon.

To read a message in your In box, just double-click on it. To reply to a message, click on the Reply SmartIcon. To delete a message, click on the Delete SmartIcon.

To exit cc:Mail, select File ➢ Exit or click on the Exit SmartIcon.

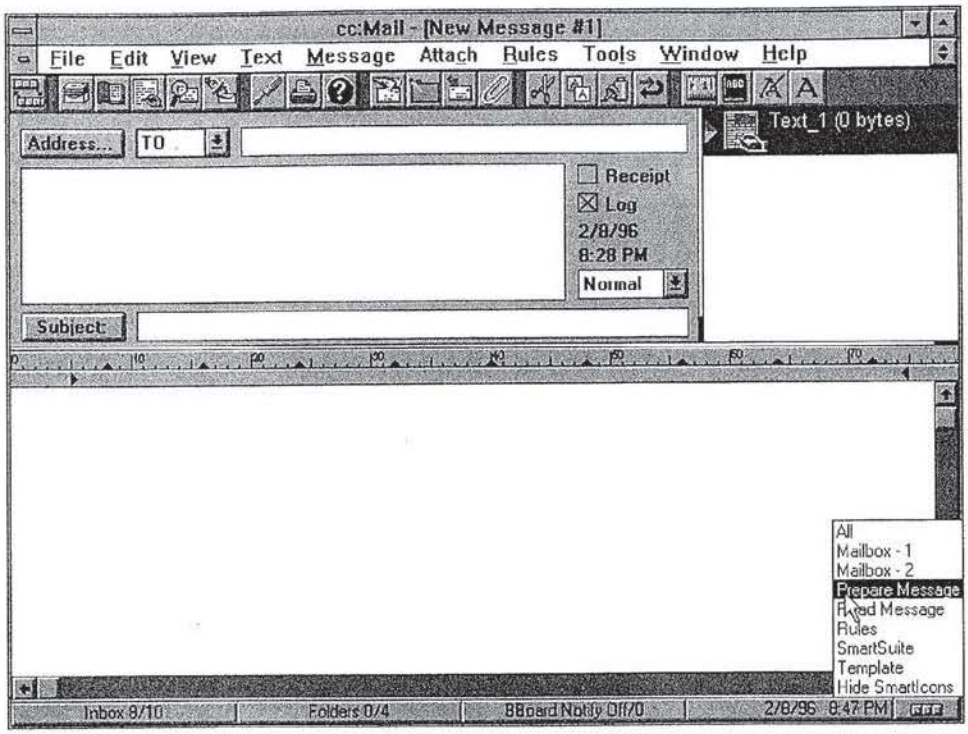


FIGURE 2.7: cc:Mail has easy-to-understand toolbar buttons for all the most common e-mail commands.

CompuServe

After America Online, CompuServe is the next most popular online service. If you're using one of the other services, the commands will likely be very similar to

either AOL or CompuServe.

With CompuServe, choose Mail ➢ Create/Send Mail to send mail. In the Recipient List dialog box, either choose your recipient's name in the address book window and click on Copy>> or type their name, press Tab, type their e-mail address, press Tab again, select Internet at Address Type:, and then click on the Add button. Click on the OK button when you're done. For Internet addresses, CompuServe will append INTERNET: to the front of the e-mail address.

Write your message in the Create Mail dialog box (see Figure 2.8). Then click on the Send Now button or on the Out-Basket button.

TIP

CompuServe lets you compose any number of messages offline and put them in your out-basket. You can then use the Mail ➢ Send/Receive All Mail command to send and receive all your mail as quickly as possible so you can get back offline. You can also arrange file transfers this way.

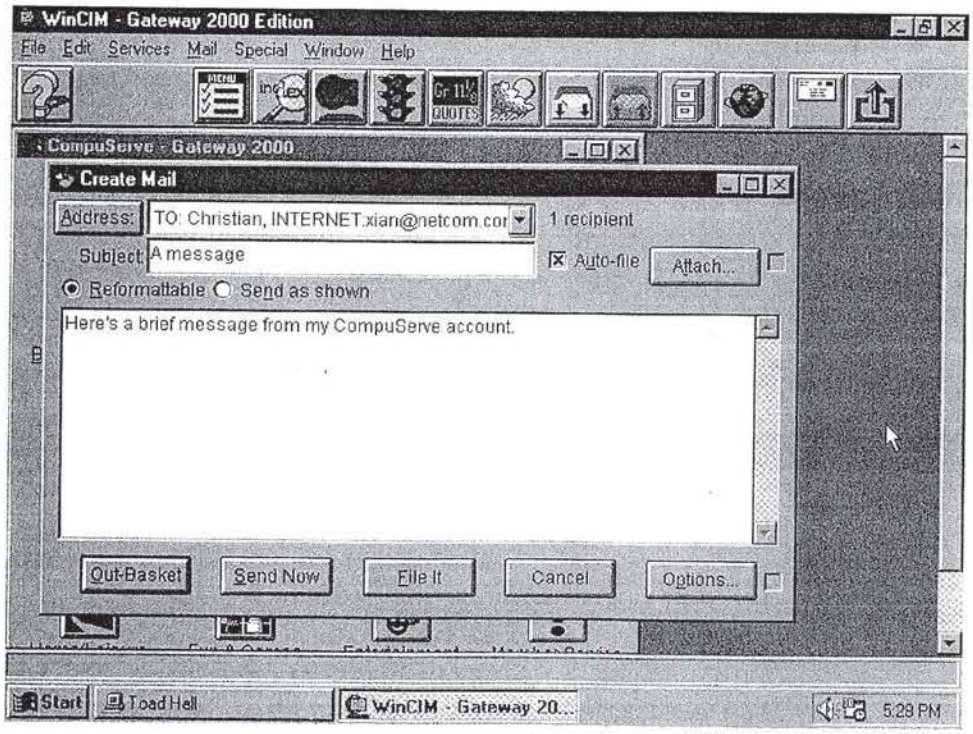


FIGURE 2.8: With CompuServe, click on the Send Now button to send the message immediately or on the Out-Basket button to store the message until you next connect.

To retrieve mail on CompuServe, choose Mail ➢ Get New Mail. Double-click on a message to read it. To reply to a message, click on the Reply button at the bottom of the message window. To delete a message, click on the Delete button at the bottom of the window and then click on Yes.

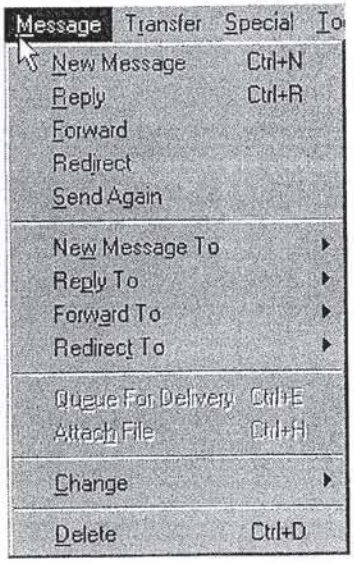
If you want more information about CompuServe's mail feature, choose Go ➢ Mailcenter.

WARNING **CompuServe e-mail messages cannot be undeleted.**

Eudora

Eudora is one of the most popular and dependable Internet e-mail programs. It can work on a network connection, with a PPP or SLIP dial-up account, or as an offline mail reader with a Unix shell account.

TIP **A free evaluation copy of Eudora (called Eudora Lite) can be downloaded from `http://www.qualcomm.com`. See Chapters 5 and 10 for how to download files off the Net.**



Most of the useful Eudora commands are available on the Message menu (shown here).

To send mail, select Message ➢ New Message (or press Ctrl+N in Windows, Command+N on the Mac). Type the address of the person to whom you wish to send the mail and press Tab a few times until the insertion point jumps to the area below the gray line. Figure 2.9 shows a short e-mail message.

When you are done, click on the Send button in the upper-right corner of the message window. The button might read Queue instead of Send. That means that it will be added to a list (a queue) of messages to be sent all at once either when the program checks for new mail or when you quit the program.

To check your mail with Eudora, select File ➢ Check Mail or press Ctrl+M (or Command+M). Eudora will connect to something

called a *POP server* (POP stands for *Post Office Protocol*, but you can forget that) to pick up all your mail.

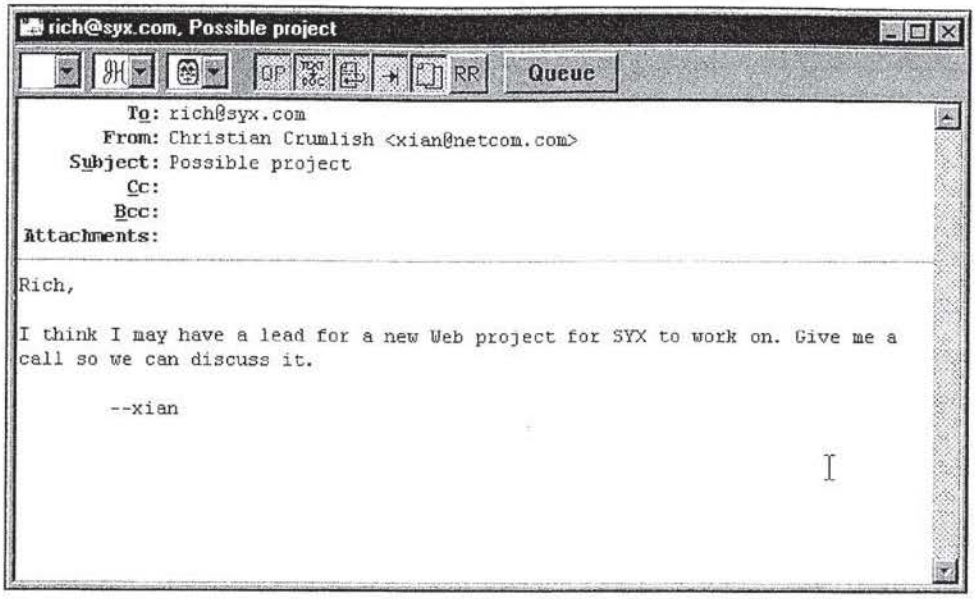


FIGURE 2.9: A new message window in Eudora

Unread mail will appear with a large dot (or bullet) in the left column of the In box. To view the contents of a mail message, highlight it in the window and press Enter (or double-click on it).

After reading the message, you can close its window or select Message ➢ Reply (or Ctrl+R) to reply to the message. If you start a reply by mistake, just close the message window and don't save it when prompted.

TIP **If you want to reply to everyone who was also sent a copy of the message, press Ctrl+Shift+R instead of Ctrl+R (or hold down Shift while selecting Message ➢ Reply).**

To delete a message, place the highlight on it and press Delete (or click on the Trash icon at the top of the mailbox window). This moves the message to the Trash mailbox. It won't actually be deleted until you empty the trash (Special ➢ Empty Trash).

If you change your mind, select Mailbox ➢ Trash to open the Trash box, highlight the message, and then select Transfer ➢ In to move the message back into the In box.

When you are finished sending, reading, and replying to mail, you can quit Eudora or leave it running so you can check your mail. To quit Eudora, select File ➢ Exit (or File ➢ Quit in the Macintosh version of Eudora), or select Ctrl+Q (or Command+Q for the Mac).

Microsoft Exchange

Microsoft Exchange (formerly Microsoft Mail) comes built in with Windows 95. If you join the Microsoft Network (MSN), Exchange will be your mail program, but it can also handle network mail. You can start it by double-clicking on the Inbox icon on the desktop.

Exchange starts you off in a window showing two panes. The pane on the left shows your mailboxes (folders), and the pane on your right shows you your In mailbox (but if you choose another folder in the left pane, Exchange will show its contents in the right), as shown in Figure 2.10.

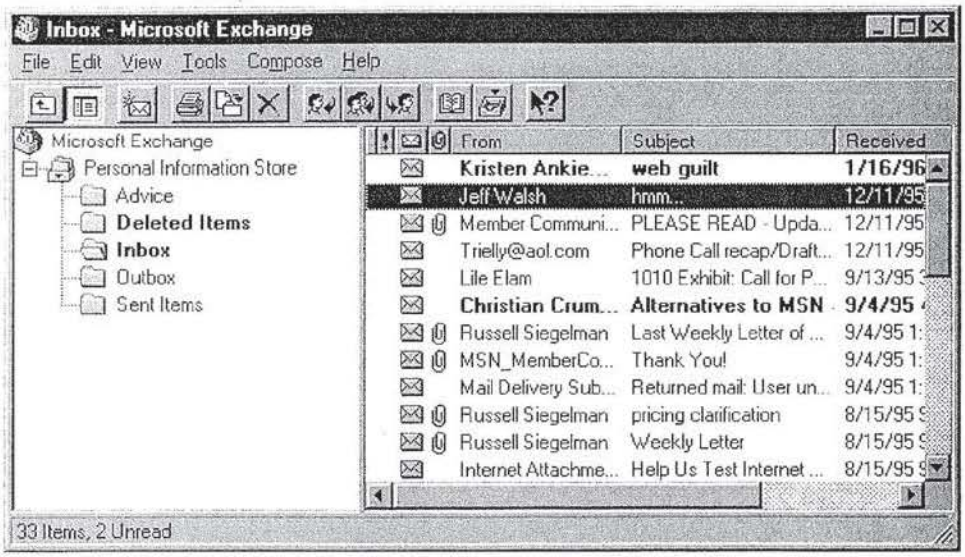


FIGURE 2.10: The main Exchange window shows you the messages in your Inbox or in whichever mailbox you've selected.

To send a new message with Exchange, select Compose ➢ New Message (Ctrl+N). This will open up a new message window (as shown back in Figure 2.2). Type an address and press Tab to get down to the message area.

Type your message and then click on the Send button.

To read a message in your Inbox, just double-click its subject line. The message will appear in its own window. To reply to the message, select Compose ➢ Reply to Sender (Ctrl+R). Exchange will supply the recipient's address. Proceed as if you were sending a new message.

To delete a message, just highlight it and press Delete. It will be moved to the Deleted Items folder until you specifically open that folder and delete its contents (even then Exchange will warn you that you are permanently deleting the message).

TIP

To undelete a message, open the Deleted Items folder and select the message you want to restore. Then select File ➢ Move, choose the Inbox folder to move it to from the dialog box that appears, and click on OK.

To exit Exchange, select File ➢ Exit.

NetCruiser

NetCruiser is an all-in-one Internet program from Netcom, for both Windows and the Macintosh. NetCruiser has its own mail program, but it also allows you to run outside programs, such as Eudora or Pegasus.

To send mail with NetCruiser, click on the Send Mail button on the button bar.

This brings up the Address Mail To window. Type the recipient's address, click on the Use button, and then click on OK. After entering a subject line, press Tab to enter the message area and type your message (NetCruiser will take care of word-wrapping). When you're done, click on the Send Current Message button (it looks the same as the Send Mail button on the main button bar, but it's on the Send Mail window's button bar instead).

To read incoming mail, click on the Read Mail button on the button bar

This brings up the Select a Folder window. Choose Inbox and click on OK. In the Read Mail window, messages are listed by author and subject line in the top pane and message contents are displayed in the bottom pane. To read a message, double-click it in the top pane (see Figure 2.11).

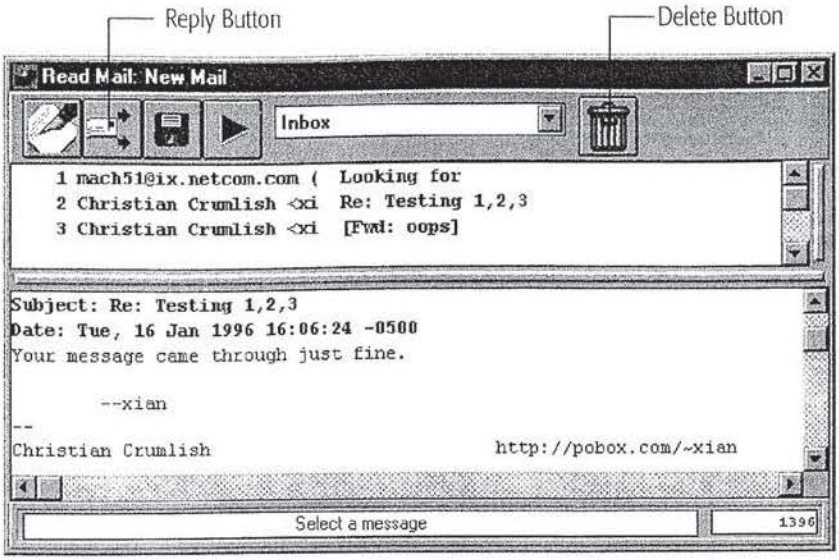


FIGURE 2.11: Incoming messages can be read in the bottom half of NetCruiser's Read Mail: New Mail window.

To reply to a message, click on the Reply button. To delete a message, click on the Delete button (the Trashcan icon). To exit the mail module of NetCruiser, just close the window. To exit NetCruiser, select File ➢ Exit.

Netscape Mail

Netscape Navigator 2 is mainly a Web browser, but it also sports a full-featured mail program that earlier versions of Netscape did not have.

NOTE **You'll learn more about Netscape's Web capabilities in Chapter 4.**

To send mail with Netscape mail, first select File ➢ New Mail Message (or press Ctrl+M). Type an address in the Mail To box. Press Tab twice and type a Subject. Then press Tab again to enter the message area and type your message (see Figure 2.12).

When you're done, click on the Send button (or press Ctrl+Enter).

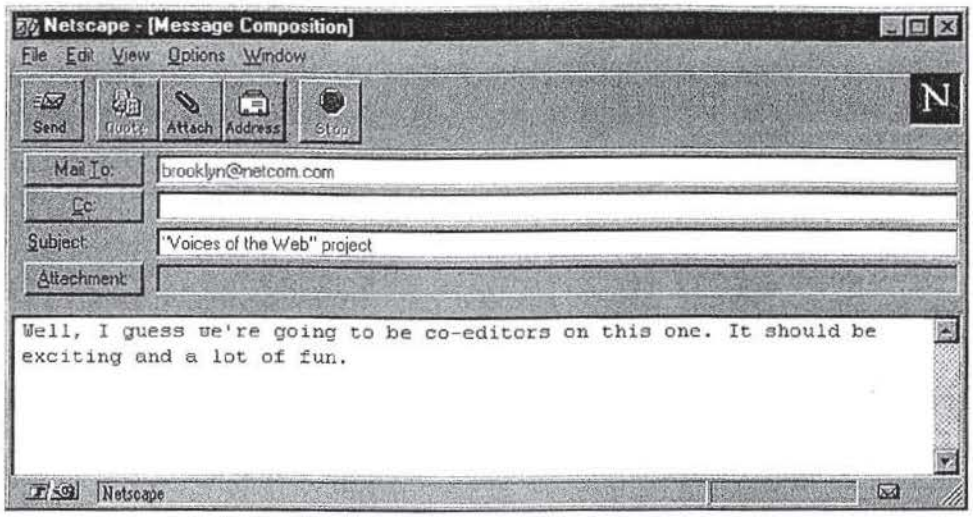


FIGURE 2.12: Sending mail with Netscape

If you receive mail while working in Netscape (the little envelope in the lower-right corner of the Netscape window will alert you), select Window ➢ Netscape Mail to open the Mail window (see Figure 2.13). The first time you do this, Netscape will require that you enter your password.

TIP

Any Web addresses mentioned in e-mail messages to you will function as clickable links. That means when you finish reading, all you have to do is click on a highlighted word to go to that Web page and start surfing. For more information on the Web, see Chapter 4.

Just highlight a message in the top-right pane to see its contents in the bottom pane. To reply to a message, select Message ➢ Reply (or press Ctrl+R). To delete a message, just highlight it and press Delete. Netscape will move the message to a Trash folder. To undelete a message, just select the Trash folder in the top-left pane, and then drag the message you want to restore back into the Inbox folder (also in the left pane).

You can close the Mail window but keep Netscape running—in Windows 95, just click on the close button in the upper-right corner—or you can quit Netscape entirely by selecting File ➢ Exit.

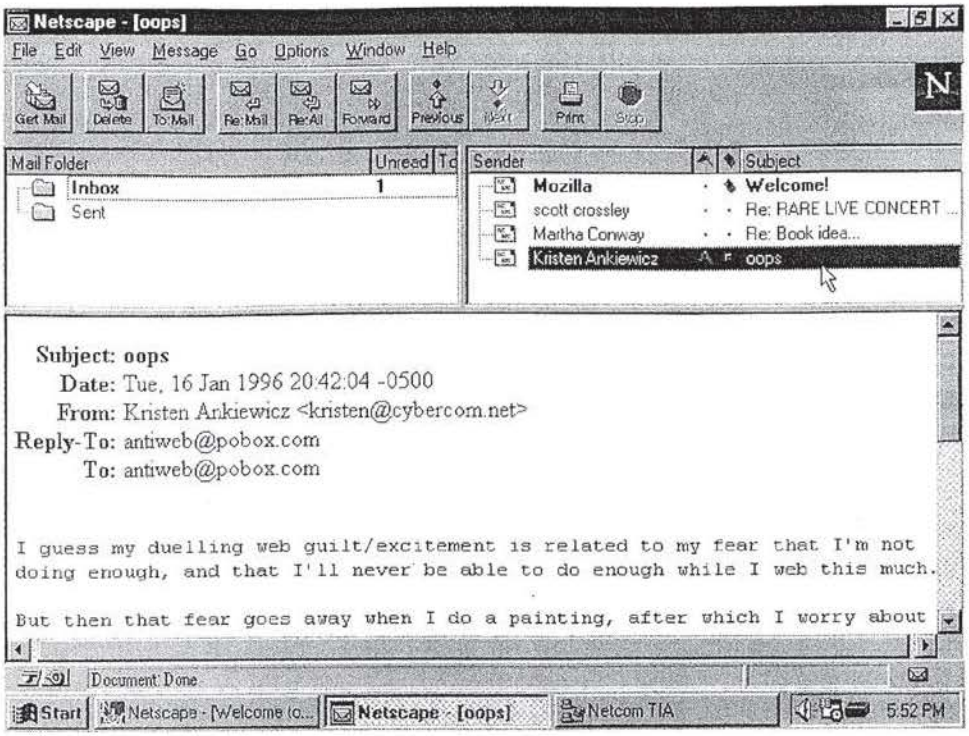


FIGURE 2.13: The Netscape Mail window has panes showing your mail folders, the contents of the selected folder to the right, and the selected message below.

Pegasus Mail

Pegasus is a popular, free mail program that can run on networks and over dial-up Internet connections.

TIP **You can download Pegasus from its Web site (`http://www.cuslm.ca/pegasus/`). See Chapters 5 and 10 for how to download files off the Net.**

To send a new message with Pegasus, select File ➢ New Message (or press Ctrl+N). Type the recipient's name, press Tab, and type a subject. Then press Tab two more times to get down to the message area and type your message (see Figure 2.14).

When you're done, click on the Send button to either send your message immediately or put your message in a queue, depending on how your version of Pegasus is set up. To send all queued messages, select File ➢ Send All Queued Mail.

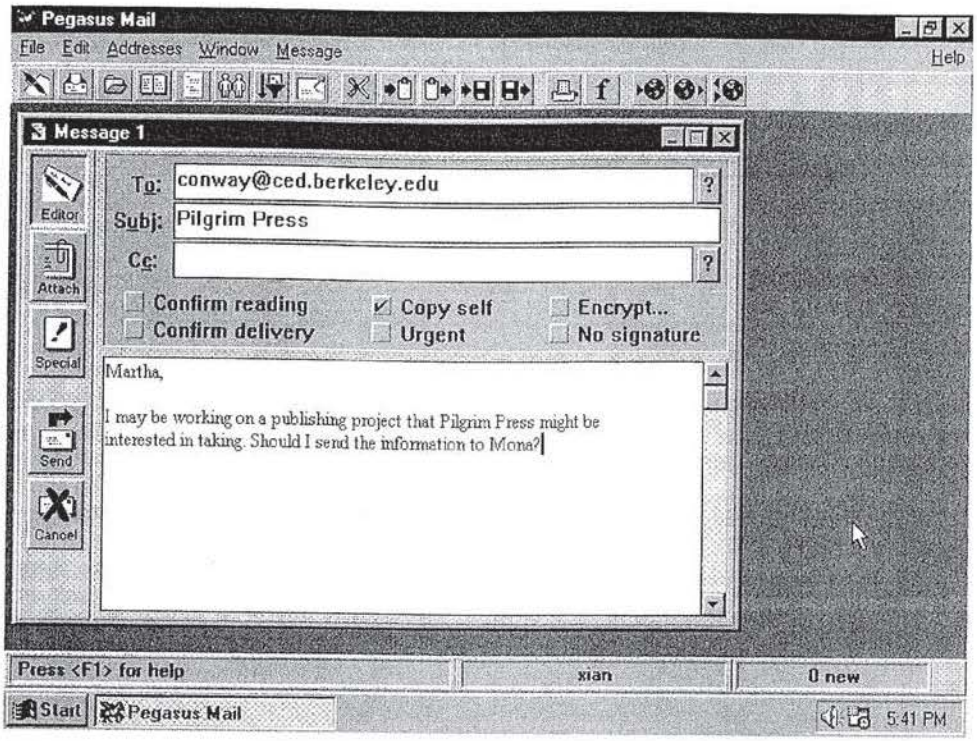


FIGURE 2.14: A new message window in Pegasus

To read new mail, select File ➢ Read New Mail (or press Ctrl+W). This opens the New mail folder. (Once you've read a message, it will automatically be moved to the Main mail folder after you close the New Mail folder or exit Pegasus.)

To check for new messages, select File ➢ Check Host for New Mail. Double-click on a message to read it. Figure 2.15 shows an incoming message.

To reply to the message, click on the Reply button. To delete it, click on the Delete button.

To exit Pegasus, select File ➢ Exit.

Pine

If you're determined to get your hands dirty and log in directly to a Unix account to read mail with a Unix mail reader, then here's a quick rundown of the most useful commands in the most popular Unix mail program, Pine.

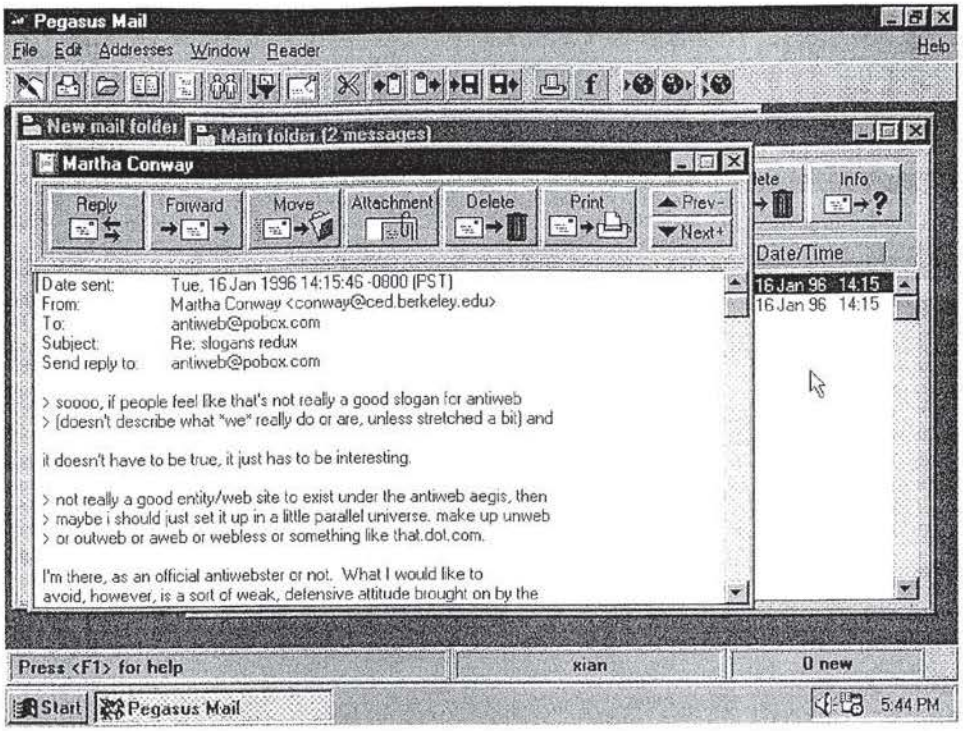


FIGURE 2.15: An incoming message in Pegasus has useful shortcut buttons at the top of its window.

TIP

Another popular Unix e-mail program is Elm. For information about Elm, send mail to `mail-server@cs.ruu.nl` with no subject and the lines `send NEWS.ANSWERS/elm/FAQ` and `end` each on their own lines.

To run Pine, type **pine** (yes, all lowercase—it matters) at the Unix command prompt and press Enter. Pine starts you off at a main menu. To enter your In box, type **i**.

To send mail, type **c**—and don't press Enter. Pine will start a new message (see Figure 2.16). Type the recipient's address, press Tab, and type a subject. Press Tab again until you're in the message area. Then type your message. Pine will handle word-wrapping, so you only have to press Enter when you're starting a new paragraph. When you're done, press Ctrl+X to send the message.

To read a message, highlight it in your In box (you can use the up and down arrow

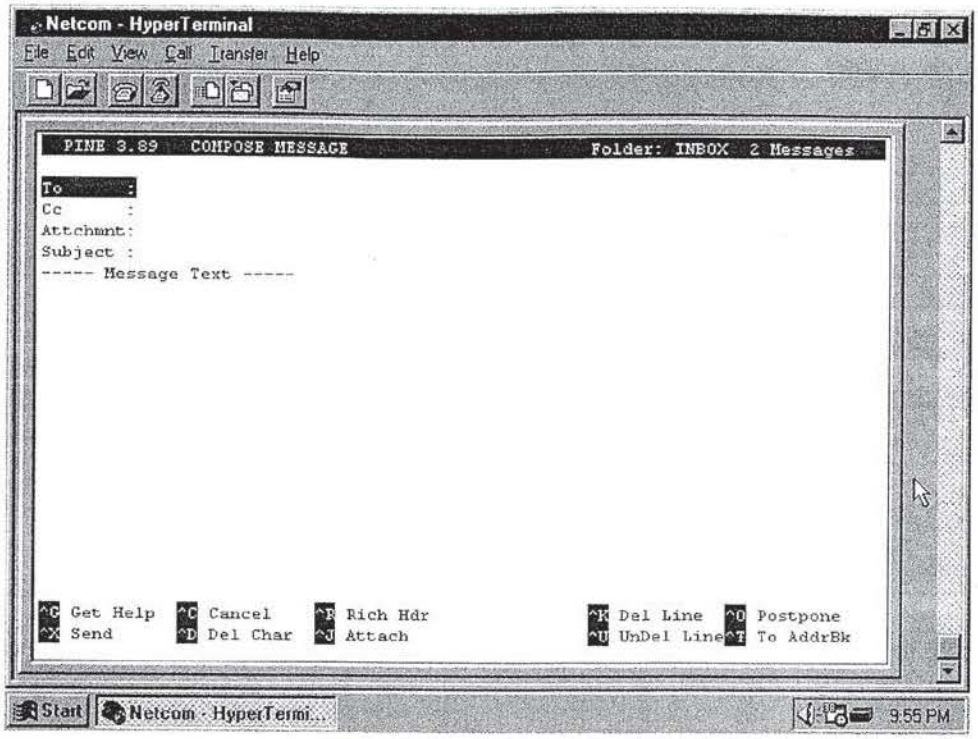


FIGURE 2.16: Pine is a *full-screen* editor, so it works something like a *normal* Windows or Mac program, even though it's text only and runs in Unix.

keys to move through the list of messages) and press Enter. To return to the message list from a message, type **i**. To reply to a message, type **r**. To delete a message, type **d**. To undelete a message, type **u** (deleted messages don't disappear until you quit the program). To quit the program, type **q**.

The following list summarizes what you need to type to perform some of the specific functions mentioned in this section:

Function	Type
To run Pine	Type **pine**
To send mail	Type **c**
To return to your message list	Type **i**
To reply to a message	Type **r**
To delete a message	Type **d**
To undelete a message	Type **u**
To quit Pine	Type **q**