

An E-mail Starter Kit:

Internet E-mail With Minimum Hassle.

Communication with fellow human beings is a fundamental part of daily life. Aside from speaking face-face or by phone, permanent record communications include FAXes, conventional paper mail (US postal and/or overnight services), and the most ubiquitous of all Internet tools, *E-mail* (Electronic Mail). E-mail does require a PC, and can't accept paper input directly. Nevertheless, its virtues are many. It is faster than most other mail forms, it can easily transmit messages of long lengths, and it provides a permanent record. Printed e-mail allows the highest quality, essentially equal to the original input. Finally, it can also be used to *attach* various file types (i.e., transmit a file along with a message). These might be graphic images, program files, or this column, which goes to Electronic Design as an e-mail attachment.

Many readers may already be plugged into some sort of e-mail system via work, in which case the program used may be outside your control. But, using e-mail from home via an Internet provider can be an extremely efficient communication tool, particularly when the latent powers of today's current programs are exploited. Having mastered ISP selection and getting Net' connected, in this column we look at an **E-mail Starter Kit** of basic concepts for Internet-style e-mail programs for Windows 3.1 and 95. Best of all e-mail virtues is the fact that, aside from your ISP service fee, e-mail traffic is basically *free*! Next best, it also goes virtually anywhere in the world—in a time frame of minutes, not days.

So, the focus of this column is on Internet compatible *off-line* e-mail programs. As this name implies, an off-line mail program operates most of the time in an off-line state, i.e., not connected to your phone line. You prepare messages at your leisure, and when ready to send they are queued for delivery, while the e-mail program calls up your WINSOCK program. It in turn dials your ISP, and net-connects, a WINSOCK feature called *demand dialing*. Once net connected, the mail program then logs into your

ISP's outgoing SMTP (Simple Mail Transfer Protocol)^{1,2} mail server, and sends your messages onward to their destinations. Then, it logs into your provider's POP3 (Post Office Protocol)³ server, downloads any received messages to your local computer and disconnects, returning back to the off-line state. You can then read new messages, responding as you wish.

Note that you need not be present for this, as the mail program automatically fetches messages for you. Most e-mail programs automate the above process completely, storing your e-mail ID and password internally, making a mail send or pickup as close as a mouse click, or, alternately running as a background task, a once-per-hour (or other interval) mail checking process. As your messages arrive, you can be brought to attention with a "Mail's in!" sound⁴ if you'd like.

So, what's involved in getting a good e-mail package up and running, and what do they cost? The answers here are not much in real effort, and not much if any actual cost. This column is intentionally restricted to just some of the readily available Internet e-mail packages, with main focus on the most popular of those. If you'd like to explore these (or other) e-mail packages on the Net, just look at Forrest Stroud's useful Windows software site. To try out any of a number Windows 3.1 or 95 e-mail programs, see Stroud's "mail clients" listing under: <http://www.stroud.com/inx16.html>, or <http://www.stroud.com/inx32.html>, and download a trial program.

One might ask the obvious, since most browsers have built-in e-mail capabilities, won't that suffice? The answer is a "yes, but." Yes, you can certainly use Netscape e-mail as a starter. However, any integrated or "all-in-one" Internet application must necessarily sacrifice something, vis-à-vis an expressly tailored e-mail program (those listed below). My think-

ing is to use *E-mail* programs for e-mail, and browsers for browsing, i.e., the *right* tool for the right job.

E-mail program features can include a great number of things beyond just the bare ability to send/receive messages. The standard requirements list below will make a minimum set of feature requirements, while the extra (*) features will likely be found in the commercial packages.

First, any program should be easy to setup and configure. For this you'll need your e-mail ID and password, plus the applicable POP3 and SMTP server names (provided by your ISP). On-line help should be included in the package, and some minimum level of user support should also be available (FAQs, on-line newsgroup, etc.). Note that many freeware programs come with no documentation, other than built in help.

It should include a flexible, Windows-compatible text editor, or, the same, plus an integrated spell checker*.

It should include support for Internet compatible attachment encoding such as MIME⁵ and UUENCODE/DECODE.

It should include an address book, for aliasing cryptic e-mail addresses into recognizable names. As extras, it can easily map received addresses into address book entries, and support multiple address books.*

It should include flexible support for hierarchical mail folders and mailboxes, so that you can organize your messages as you prefer. And as a plus, store messages in easily edited ASCII form.

Some extra features* which will most likely appear in the more complete commercial versions include: Vendor phone and/or e-mail support, mail *filtering* capability for mail organization, *support for multiple POP3 accounts*, message *encryption* capability, and support for program *plugins*.

Message filters are a great tool for organizing both incoming or outgoing mail, by virtue of the fact that they automatically place mail in an appropriate mailbox, just as you specify. Anyone handling more than a few messages per day can appreciate the utility of filters. Once set up, they re-



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ally do contribute to both ease-of-management and your overall mail organization. **TIP:** Once you see what filters can do, you'll say "This is the way E-mail is supposed to work!" More sophisticated filtering, along with spell checking are hallmarks of the more powerful e-mail programs.

Some popular off-line Windows e-mail programs are discussed below. They all have the virtue of being available for no (or low) cost, with fully supported versions available from \$35 to \$89. Freeware versions of these programs include the standard features above, and some, all, or more of the extra features can be found in their commercial counterparts.

While the list of E-mail programs available from the Stroud site (listed above) is a long one, just a few tend to be the more popular. Among these are **E-mail Connection**, a full featured Windows 3.1 program which also runs under 95, available from ConnectSoft, 11130 NE 33rd Place, Suite 250, Bellevue, WA, 98004; 206-827-6467, or 800-889-3499. Their URL is: <http://www.connectsoft.com/>. E-mail Connection has both freeware and commercial (\$49.95) versions.

Another program is **Pegasus Mail**, suitable for both Windows 3.1 or 95. Written by David Harris, the program is available from the author: Pegasus Mail, c/o David Harris, P.O. Box 5451, Dunedin, New Zealand, plus various Net sites. Pegasus mail comes in but one basic (free) version, but there is a charge for the printed documentation (\$35). Both of these programs are quite powerful, and incorporate many of the features listed above.

Eudora is a very popular e-mail program, with 18 million worldwide users claimed. It comes in both 3.1 and 95 Windows formats (the 95 version also runs under NT), plus versions for the Macintosh. For these platforms there are both freeware (Eudora Light) and commercial (Eudora Pro) versions. Eudora is available from the Eudora division of QUALCOMM Inc., 6455 Lusk Blvd, San Diego, CA, 92121-1779; (619) 658-1291 or 800 2EUDORA, or: <http://www.eudora.com>

Eudora began as a program designed expressly for the Internet, so many of its net-related features are innate. Easily the most popular e-mail program on the Net, some ISPs dis-

tribute Eudora Light, and two active USENET newsgroups plus a mail list are dedicated to it. The newsgroups are:

comp.mail.eudora.mac and:
comp.mail.eudora.ms-windows

The mailing list can be joined by sending a message of "subscribe eudora-win" to:

majordomo@wso.williams.edu

The dialogs on these forums abound in useful ideas and problem solving tips. There is also Pete Beim's uniquely useful website devoted to Eudora:

<http://www.cs.nwu.edu/~beim/eudora/>

This site includes many useful FAQs, freeware documentation, links to the various Eudora versions and other info sources.

Well, with all this interest, does the Eudora program deliver? You bet. Even the freeware versions have a good array of features, going beyond the basic list above. With the recently released v3.0.1 Light version there are such features as basic filters, drag and drop operation, "hot links" (auto-launch an application from a message URL), plus support for plugins and MAPI. For a more detailed freeware version comparison, check out:

<http://www.cs.nwu.edu/~beim/eudora/eudora-ver-154-v-301.html>

Going back about 18 months, I have used 5 different Eudora Light and Pro versions under Windows 3.1. Recently I upgraded to Eudora Pro v3.0, and tried it out on both 3.1 and 95 systems. The Windows 95 Eudora Pro version definitely has a lot of pluses vis-à-vis the 3.1 version; just two examples are extended text capabilities and a fancier graphics interface.

Some of the other Eudora Pro v3.0 extra features are powerful message filtering (you can even auto-forward incoming messages via a filter), multiple POP3 accounts, plug-in support, drag and drop operation, user customizable "stationery" templates, a customizable spell checker, a customizable toolbar (32 bit only), MAPI support, active hot links, and 90 days of toll-free phone support as well as e-mail support.

Two major features I like about Eudora are the virtually unlimited folders and mailboxes you can create, and the ability to customize filters to automatically direct in/out mail to the right mailbox. The mailbox flexibility allows

you to file messages by topics you chose, such as "Analog," "Audio," etc. Obviously, this can get quite elaborate if you get carried away. Eudora support does warn against bloated mailbox systems, and the larger your mail database, the more memory resources you'll consume. However, I can't say that I've ever had a crash in Eudora due solely to an excess of mailboxes (although I've seen them for other reasons, such as a corrupt mailbox file).

Occasionally a mailbox can get messed up, and in such a case it is relatively easy to fix with an ASCII editor (Notepad). The reason this can be done is that Eudora's mailboxes are pure ASCII Internet style files, a case where the lineage definitely pays off.

TIP: Here's a "traveling e-mail" scenario. Does anyone think I'm overstating the issue of ASCII mailboxes as a significant plus? Just consider a case where you'd like to maintain a (master) desktop machine with an e-mail program and a main set of mailboxes, and sync it up with a (slave) laptop computer with similar e-mail. With Eudora, it is a simple matter of copying the mailbox files and complete directory structure from master to slave. Prior to a trip, you copy the mailboxes over to the slave, then you're on the way. You use the laptop-based Eudora for on-the-road e-mail, keeping up via your ISP's 800 #.

To work well, the slave machine needs to be set for a "leave messages on server" mail option. Upon return home, all the syncing that needs to be done is to copy all messages *sent* from the laptop over to a special mailbox on the desktop, let's call this mailbox "XFER.MBX." You can do this with a simple floppy transfer, but an even easier way would be to send yourself an extra message as you close down your laptop's use. Just attach the XFER.MBX file to it, and it will be downloaded to your desktop as you pull down those stored messages.

This single file, once copied to the Eudora desktop setup directory structure, will be recognized by Eudora, and then all the previously sent laptop messages can easily be integrated into their proper desktop system mailboxes (note that filters make this step a piece of cake). Unfortunately, I don't know of a simple way that such a "traveling e-mail" trick can be pulled

off if you are using the non-ASCII mail database files of other systems.

In summary, I have found that Eudora Pro v3.0 is one of those programs whose power seems easy to use. But, the freeware versions also offer great utility for little effort, particularly the recent v3.0.1 release. Both the commercial and freeware versions can be recommended on the basis of good to exceptional performance, and the available support (either direct or indirect). Never underestimate the importance of support! Without answers to your questions, no number of other features can compensate.

Eudora Pro v3.0 for Windows has a suggested list of \$89, and Eudora Pro v2.x users can upgrade for \$39. These figures are for a package including diskettes and a printed manual. Downloaded from the website, prices drop to \$69 and \$29 respectively (Note: street prices are as low as \$49).

That's our E-mail Starter Kit, for those with questions on how to get e-mail going. Hopefully, one of the above programs will be useful to you. So, good luck with it, and send a note from your new e-mail setup!

References:

1. SMTP is described in RFC 821
2. Standard Internet messaging is described in RFC 822
3. POP3 is described in RFC 1225
4. Morticia Adams' mail arrival announcement, "The Adams Family" TV series.
5. MIME is described in RFC 1341
6. See *Eudora Pro 3.0 User Manual*, Appendices C and D for more information
7. The above RFC references and many other useful Internet information is available by FTP from:
ftp://nic.ddn.mil/rfc/

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Walt Jung is a Corporate Staff Applications Engineer for Analog Devices of Norwood, Mass. A long-time contributor to Electronic Design, he can be reached via e-mail at Walter.Jung@Analog.Com.