

Mail User Agents

Mail and more

Nobody likes to leave a vital task such as email to chance. The quest is, which mail user agent is the right one for me?

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The old Unix paradigm that every program is a thin specialist geared to handle a specific task, instead of a jack of all trades that can't see the job for functions, not only applies to numerous shell tools, but also to application software. These can be standalone tools, such as Balsa and Kmail or integrated within more complex packages, such as Mozilla and Evolution.

Modern "Mail User Agents" (MUAs) for Linux tend to be GUI based. They not only manage local mailboxes, but can access remote mailboxes on POP3 or IMAP servers. Most of them no longer rely on a local MTA, but can speak enough SMTP to forward outgoing mail to a smart host.

Add a whole range of additional functionality that simplifies reading and writing messages and, by this point, it starts to become a question of taste. What is important to one user is a pain for another. This article takes an in-depth look at standalone MUAs.

Balsa

Talking about taste, even choosing the right *balsa* can be challenging. Should I opt for the brand new GTK 2 version, or keep to the tried and trusted 1.4.2? As both provide a comparable range of functions, most distributions now opt for GNOME 2, and the GTK 2 version has seen more intensive development, we decided to test version 2.0.5.

The first – equally superfluous and annoying – obstacle awaits the users during the initial setup phase, as entries such as *smtp.provider.co.uk* for the SMTP server do not lead to a working system. We were at a loss to understand why *balsa* attempts to dispatch outgoing mail via port 587, something which is

doomed to failure in the case of most mail providers. Although the appropriate RFCs explicitly specify this port for mail forwarding, in reality most providers opt for the normal SMTP port 25. So you need an SMTP server entry such as *smtp.provider.co.uk:smtp* to get things working.

The unintuitive interface is also annoying in some places: a mixture of languages and confusing dialog boxes, such as the one shown in Figure 1, make the program difficult to set up and use. Additionally, *balsa* does not provide a function for creating address books; if you want to use one, you first have to create it with *gnome-card*.

This is unfortunate, because *balsa* is definitely worth looking into – if you need a quick mail program that integrates well with GNOME 2 and do not need things like GPG support or multiple SMTP servers. The fact that you can organize your mail folders in registers instead of a tree structure is interesting, this provides you with space that you lose in a tree structure. *Balsa* can cope with different kinds of encoding in both the body and subject of a message.

Operations with POP accounts and local mailboxes are quick and stable. Unfortunately, this is not always the case for IMAP facilities – the IMAP standard components that the program implements commonly crash. Actions such as copying individual messages, or creating a subfolder, often cause the program to freeze. And *balsa* misbehaves when you delete a message on a server – even after scanning the directory tree a second time, it still displays deleted messages occasionally, and sporadic error messages indicating that the connection to the IMAP server is down, which often



occur when you change directory. This does very little to build up a user's trust.

Sylpheed

Originating in Japan, *sylpheed* [1] enjoys increasing popularity in Europe. The reason for this is the program's speed and functionality; it can be used both for mail handling and as a news reader. Visually appealing three-panel optics and solid localization mean that users moving to *sylpheed* from other mail clients should have no trouble getting used to the program (Figure 2).

Sylpheed is a good choice, if you do not run a local MTA, as it allows you to set up any number of mail accounts on different SMTP servers.

In addition to dependable and speedy mail processing it is the little things that make *sylpheed* so attractive. If you have multiple mail addresses, you can assign a standard account for each individual folder. Once set up this way, *sylpheed* will ensure that messages to mailing lists, for example, will always be dispatched with the address you used to join that list.

The *Configuration / Actions* menu additionally lets you add the functionality of external programs to *sylpheed*. If you feel the need to send **rot13** encoded messages, you can create an item in the actions menu for this purpose. To do so, add the following command:

```
|tr a-zA-Z n-za-mN-ZA-M|
```

to the *Command line* box. Type a name for the entry in *Menu name*, and click on

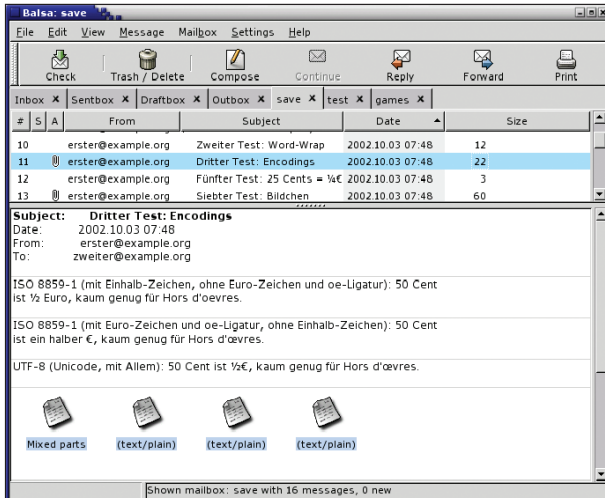


Figure 1: A mixture of languages in the balsa configuration menus

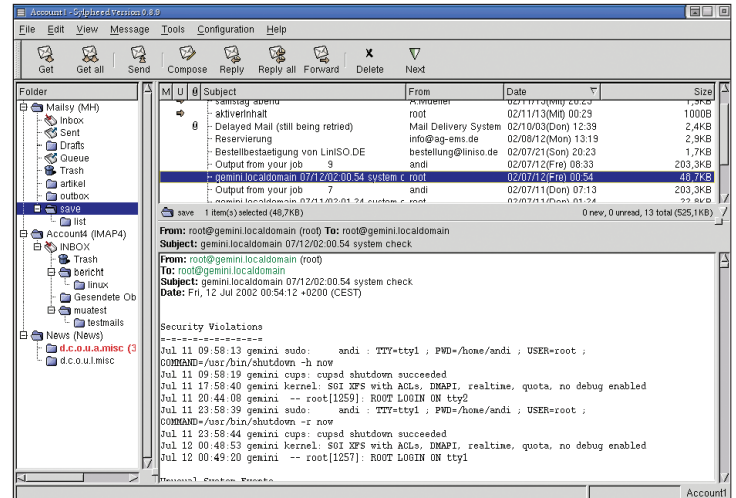


Figure 2: Mail and news accounts in Sylpheed

Register to provide access to the action via *Tools / Actions*.

Sylpheed provides quite a few nice features of this kind: Gnus users do not even need to do without their treasured **XFaces**.

Where there's light, there's shade, and the integrated editor is probably the ultimate black spot in *sylpheed's* case. With its inconvenient editing functionality, *sylpheed* often dispatches messages with overlong lines. Of course, you can resort to an external editor to remedy this situation. The fact that the program defaults to two subject lines will annoy some mail targets.

Another annoying thing is the fact that only the first message in a **thread** will be moved, if you attempt to move the whole thread to another folder.

The fact that the program is under active development means that functions that are missing today might be available tomorrow. If you cannot wait to get your hands on the latest features, you might like to look at the developer version, called *sylpheed-claws* [2]; claws had mail queries based on SMTP after POP and **Scoring** on offer before this issue went to print. As it is a bleeding edge version, *sylpheed-claws* may contain severe errors, so a look at the archive for the mailing list [3] is recommended.

Mulberry

Modern-day nomads wishing to access their mail from various machines at various sites have no alternative but to use an IMAP server as their central mail repository. A well-implemented mail

client can offload a lot of work onto the server (such as searching for specific messages) and thus save the resources of the local machine. Unfortunately, IMAP is not only a powerful protocol, but also an extremely complex one, and there are not many MUAs capable of leveraging its strengths. *mulberry* is a client that gets an IMAP server working really hard.

You can even organize mailboxes on different servers in a so-called *cabinet* and apply numerous search rules. Unfortunately, the program does not scale well (and slow servers are not always to blame). If a user has amassed too many mailboxes and other files (many IMAP servers allow access to the complete home directory, for example), it can take several minutes after an IMAP login before *mulberry* is ready to respond.

GLOSSARY

MTA: Short for "Mail Transfer Agent" is a program that takes care of forwarding email messages, often referred to as a mail server. Postfix, Sendmail, and Exim are some of the most popular members of this category.

SMTP: "Simple Mail Transfer Protocol" is the language two mail servers on the Internet use to talk to each other and ensure that messages reach the right recipient.

Smart host: A remote mail server (mainly run by Internet service providers) that, much like a mailbox, accepts outgoing mail from computers that do not have a mail server or, at least, do not have a mail server permanently listening on the Internet, forwarding it to the mail server ("Mail Exchanger", MX) responsible for the recipient's domain.

Port: A place where client programs bind to access services running on other machines in an internet.

RFC: The first "Request for Comment" was issued by Steve Crocker in 1969 and was an invitation to discuss an article he had composed. This kind of scientific exchange was completely new, and gave rise to more requests. Many of the network protocols in use today were (and still are) standardized by RFCs.

Encoding: In order to represent non-standard characters that do not occur in the US alphabet, you need to select an encoding method other than 7 bit ASCII. Thus, you can use ISO-8859-1 encoding, although this does not include the Euro sign. You need ISO-8859-15 to represent the Euro sign. Unicode UTF-8 encoding has most of the alphabets used world-wide. However, a character set must be installed (or embedded) to allow a program to display its characters.

rot13: A cipher commonly used in mailing lists and on Usenet to "encrypt" texts that should not be immediately legible, e.g. the contents of

serials that have not yet been broadcast. Each letter is replaced by the letter that occurs 13 letters down the alphabet, special characters and spaces remain unchanged. Thus "abc" becomes "nop" and vice-versa.

XFace: A header line that some MUAs can display as a monochrome image. To use a graphic as an XFace, you need to store it as a 48x48 .xbm file, and use the *compface* package to convert it to a header line.

Thread: A group of mail or news messages that relate to one another. The thread view of a MUA displays threads in a tree view by content rather than date and time.

Scoring: Grading system for email. Messages are awarded scores by arbitrarily definable evaluation criteria. The total score is calculated by adding and subtracting points, and decides whether a message will be highlighted (high score) or not displayed at all (kill score).

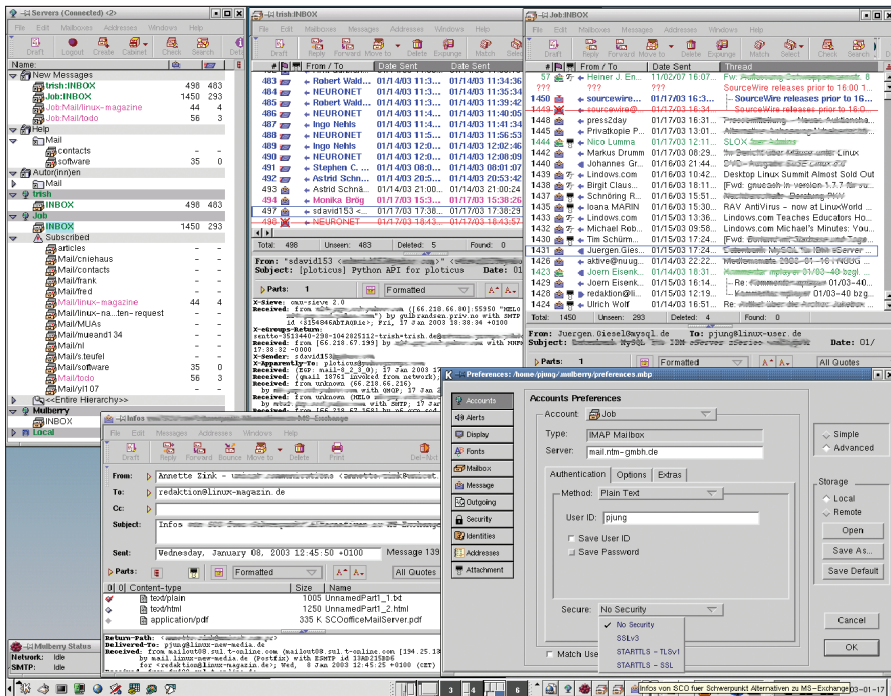


Figure 3: Mulberry 3.0 Beta with a traditional window layout

The subjective speed of this proprietary program is not always convincing, especially considering the fact that it tends to take things one step at a time. You cannot start composing a message while *mulberry* is busy logging on to a server, for example.

Users with multiple reply addresses will find that the MUA offers excellent identity management facilities; signatures, X-headers, PGP/GPG keys etc., can be combined to form reply addresses that you can choose.

This functionality is counteracted by severe usability issues. Tool tips occasionally point out the use and usefulness of an operative element, but bubble help tends to be lacking for icons and menu items that may puzzle even experienced users at first glance (or entirely). The more or less non-existent documentation for the Linux version is unforgivable in a commercial product.

The dialog boxes hardly win prizes for ergonomic design; it takes a while to figure out that you are expected to click on a *radio button* somewhere on the right margin (Figure 3 lower right) to toggle a quick configuration of an individual mail account to an expert configuration mode. Our tests also showed that the program was by no means stable, and not only the Beta version of the next stable release, 3.0.

The policy of opening a window per message, mailbox, or overview, tends to clutter the desktop and waste time searching. Thus, the new 3.0 version will put a fix to this and allow you to choose the 3 panel view typical of modern GUI mail clients. The program can also bounce mail and add mail addresses to an address book automatically or via a shortcut. Unfortunately, there is no way of quickly inserting mail headers selectively – the function is either enabled or disabled. You can hide quote levels when viewing messages.

KMail

KDE provides an application for almost every task, so, it was no surprise to hear that KDE had an email client of its own.

KMail's major strength lies in its POP account management facility, and most users will appreciate the convenience of this feature. Users with dial-up access to the Internet will appreciate the ability to filter mail directly on the server, provided they have enabled this feature in the preferences for the account in question.

This avoids downloading unsolicited adverts or overly large attachments. *KMail* also allows you to delete unwanted mail directly on the server, or to leave messages on the server and download them later.

Local filters help organize home repositories. You can specify a folder where mail for an account will be stored when creating the account; the filter menu allows more granular control. The fact that clicking on *Cancel* to close the filter menu occasionally crashes what is otherwise an extremely stable program is a minor annoyance. You can create identities to ensure that you access the right SMTP server; to specify a server for outgoing mail, click on *Special transport* in the *Advanced* tab. Alternatively, you can specify the server you want to use in the Composer window for the current message.

Happily, the developers are particularly keen on security; HTML is displayed as source-code by default, active content is not executed and a security prompt appears when you open attachments. If you prefer to display HTML, you can select to do so globally, or for individual folders. A combination of this feature and filtering rules allows you to display rendered HTML from trusted sources only.

KMail shows its weaker spots in the context of IMAP, as it does not leverage the full power of this protocol; you cannot search a server, for example. The attempt to integrate an external editor is also a let down, as the editor does not launch automatically, instead waiting for you to press a key in the Composer window.

A glance at version 1.5, which is part of KDE 3.1 Release Candidate 6, indicates that the future does hold some promise. In addition to improved graphics, functions such as LDAP support are in the offing. The filter dialog box no longer crashes, and you can specify the view type for HTML encoded mail individually without accessing the menu (Figure 4). The developers have still not resolved one problem: the latest *KMail* version still requires enormous amounts of memory to dispatch messages with large attachments.

Mutt

Users who compose and edit large numbers of email messages soon feel restricted by the point and click paradigm and slow response of many GUI based programs. In this case, they might look to *mutt*, the only character

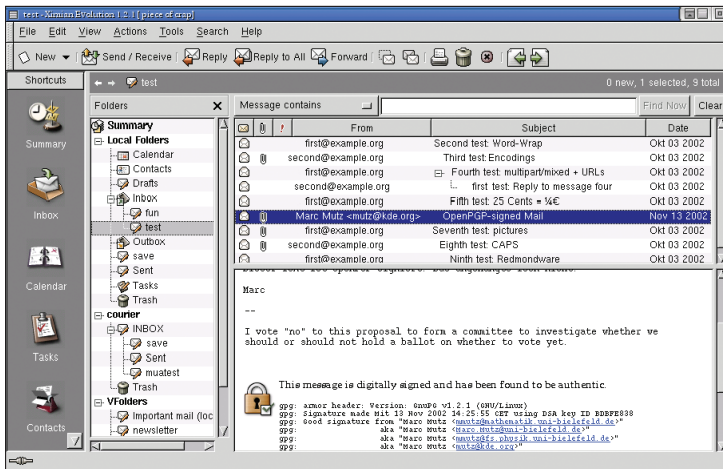


Figure 7: GnuPG encryption in Evolution

and possibly entering the appointment in the calendar.

Visually, *evolution* reminded us of *Microsoft Outlook*, the left-justified shortcut bar, for example, immediately caught our attention. We were impressed by the customizable overview that provides the user with a list of unread mail and uncompleted tasks. You can integrate weather reports, or newstickers. *evolution* is not afraid of competition: a few mouse clicks will see the GTK program serving up the latest news from *dot.kde.org*.

Evolution's mail management functionality leaves more or less nothing to be desired, allowing users to create multiple mail accounts offering useful integrated GnuPG support (see Figure 7).

Although *evolution* is capable of sending HTML messages filled with graphic based emoticons, if required, the developers are aware of the fact that not everyone wants HTML messages. The address book allows you to add a note

hides the text variant of any messages tagged as *multipart/alternative* (to indicate that they included, multiple format variants), displaying the more "colorful" variant, such as HTML. It is bad enough that the user is not allowed to choose a format – but not displaying an attachment symbol is an insult to the user's intelligence.

Apart from this, *evolution* often uses clever techniques when accessing attachments: the **inline address book minicard viewer** not only allows you to view vCards, but to click on a card to transfer to your address book. Formats that cannot be displayed inline can be opened in external applications.

Virtual folders allow users to sort messages according to various filter criteria, or even store search results. This allows you to group messages thematically, without endless copying.

Mozilla Mail&News

If you simply cannot get to grips with the philosophy of a separate mail program that may offer scheduling facilities, you might like to take a look at *Mozilla*. This all-in-one Internet suite not only manages your mail, but comprises a Web browser, mail and news clients, an IRC program and a HTML editor.

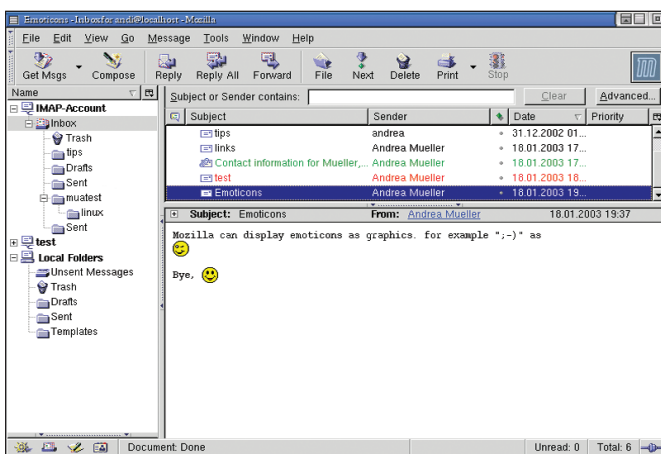


Figure 8: Mozilla shows you what the recipient thinks

for addressees who will not accept HTML mail and warns you, if you attempt to send HTML messages to them. The developers themselves seem to be quite happy with HTML; *evolution*

There are enough configuration options, but not too many to save Internet newbies from headaches.

A wizard is available for setting up an account; this ensures that your basic configuration will be up and running in next to no time. When you get round to fine-tuning, you may notice a few peculiarities, such as the fact that you assign accounts for SMTP servers you have previously defined via the *Advanced* feature in the main account tab, instead of in *Server Preferences*, which would be the logical place to look.

Six additional tabs provide further configuration options, and allow you a tidy overview of things like the maximum download size for mail attachments, or how *Mozilla* should react when asked to confirm message receipt. Global preferences are set in *Edit / Preferences / Mail & Newsgroups* and the submenus below this level.

The mail management facility itself is quite friendly. *Mozilla* handled both IMAP and POP without any trouble, configurable filters kept things tidy, and a graphic display for ASCII emoticons is nice extra (Figure 8).

Mozilla had no problem with larger mail folders, although the user might be shocked by empty folders from time to time. In this case the *mst* file containing internal *Mozilla* administrative information for the folder is probably damaged. If you read the file, *Mozilla* re-reads the messages and displays them. However, any preferences you may have set for the folder, such as enabling the thread view, will be lost.

Any self-respecting browser should be able to handle HTML. The good thing is: the mail and news clients do not launch JavaScript by default, and you can even stop the clients from loading graphics off the Web. The decision to send HTML formatted mail by default is not a good idea, however.

Of course *Mozilla* can use *text/plain*, provided you leave out any of the HTML formatting options, such as bold typeface or colors, but most mail newbies will not realize that a colored font will cause some recipients to dump their messages directly in the trash can. Just like *evolution*, *Mozilla* does not bother to inform the user that *multipart/alternative* mails not only contain

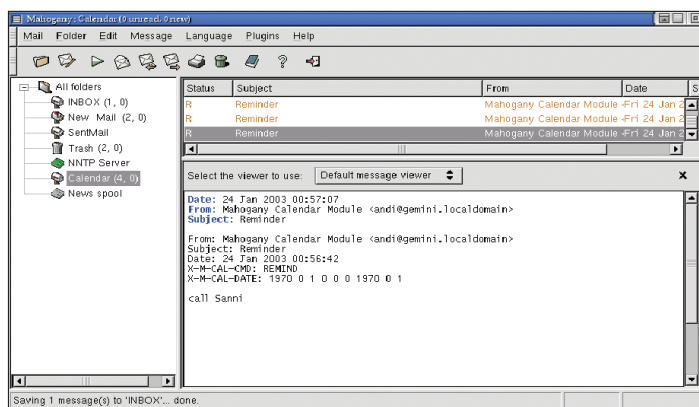


Figure 9: Reminders are stored in the Calendar mailbox

HTML, but also a text section. If this does not concern you, and if you prefer to keep all your Internet applications under one roof, you will find that *Mozilla* is a powerful but still newbie-friendly mail program.

Mahogany

Don't be surprised if 99% of your friends have never heard of this wallflower, a mail software called *mahogany*. One reason for this is the fact that most major distributions don't bother supplying the packages. *Mahogany* does not deserve to be ignored. Users of multiplatform Linux and Windows machines will probably appreciate the fact that the combined mail and news client is available for both operating systems. The program uses the *wxWindows* GUI toolkit as the bridge between these two worlds.

Mahogany owes its categorization as an integrated MUA to its modular structure that allows you to add more functionality to the program. The developers supply a calendar module, although enabling will cause *mahogany*

to freeze, if you forget to create a *Calendar* mailbox beforehand because *mahogany* needs this mailbox to store reminders (Figures 9).

It is extremely likely that this freeze will happen as the documentation does not mention this issue.

If you drag a message or an e-mail to the calendar window, the dialog box that then appears will prompt you to specify when you want to be reminded about the event – when the time comes, *mahogany* will inform you that have received a new message and display the reminder text you previously defined.

The program has a lot more to offer than that. As *mahogany* actually is an IMAP client, managing POP accounts is quite simple. You can set individual preferences for each account, and the HTML viewer renders HTML tags without displaying active content – a sensible compromise between security and convenience. *mahogany*'s quoting facilities are exemplary; the default settings allow you to mark a section in a message and then formulate a replay – *mahogany* will then quote only the highlighted section and place the cursor at the end of the section to avoid **TOFU**.

One of *mahogany*'s strengths turns out to be one of its weaknesses at the same time. About a dozen tabs are available for detailed customizing the characteristics of each identity, or folder (Figure 10). Users who do not take time to get to know the program or *RTFM* tend to lose track, as the options appear to be organized arbitrarily, although sensible defaults are some consolation. The integrated spam filter is nice try, but not particularly effective – that is, the filter actually caught 89 of 1000 spam mails.

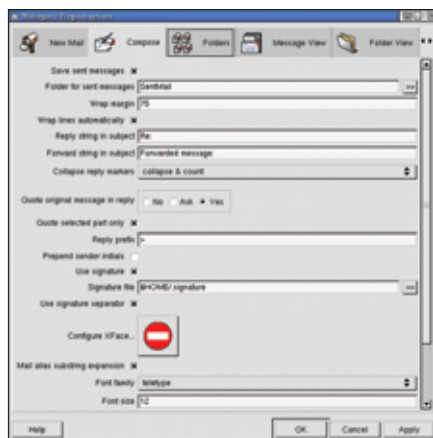


Figure 10: Mahogany's folder config dialog

GLOSSARY

~!: Shortcut for your own home directory.

Inline display: Refers to the technique of displaying non-text components "between the lines" of a message, that is, without opening a separate window.

IRC: You can use an "Internet Relay Chat" Client to attach to an IRC network (e.g. IRCNet) server and chat to other users in channels which are typically organized by subject.

TOFU: Pejorative for mail with text at the top and a full quote at the bottom. Sending TOFU is generally regarded as being extremely impolite as the recipient is forced to scroll back and forward to see what the sender is referring to. Unnecessary full quotes also increase download times and this is annoying in case of longer mail exchanges.

Fun for all the family

In contrast to the standalone MUAs, the integrated mail programs are not direct competitors; each one of them is targeted at a different group. Home users can opt for *Mozilla* to cover all their Internet specific needs. Commercial users might appreciate *Evolution* as an alternative to *Outlook*, and users looking for a simple, but extensible, MUA with calendaring facilities should look to *Mahogany*.

Users who prefer the speed of access that *mutt* provides are unlikely to move to *KMail*, although the latter provides a similar feature range and easier configuration options. Both programs show weaknesses with regard to IMAP. *Mulberry* could fill the gap, but you will need to be patient. Or should you go for *Sylpheed* after all?

Everyone has their own opinion of what makes a program usable, and choosing the right MUA is a question of taste, when all is said and done. Take a look at the programs we discussed in this article to find out for yourself.

INFO

- [1] Thomas Zell: "Mail enough for everyone", *Linux Magazine*, Issue 26, p42
- [2] <http://sylpheed-claws.sourceforge.net/>
- [3] <http://sourceforge.net/mailarchive/forum.php?forum=sylpheed-claws-users>
- [4] Marc André Selig: "Needles in a haystack", *Linux Magazine*, Issue 24, p82
- [5] *Evolution*: <http://www.ximian.com/>