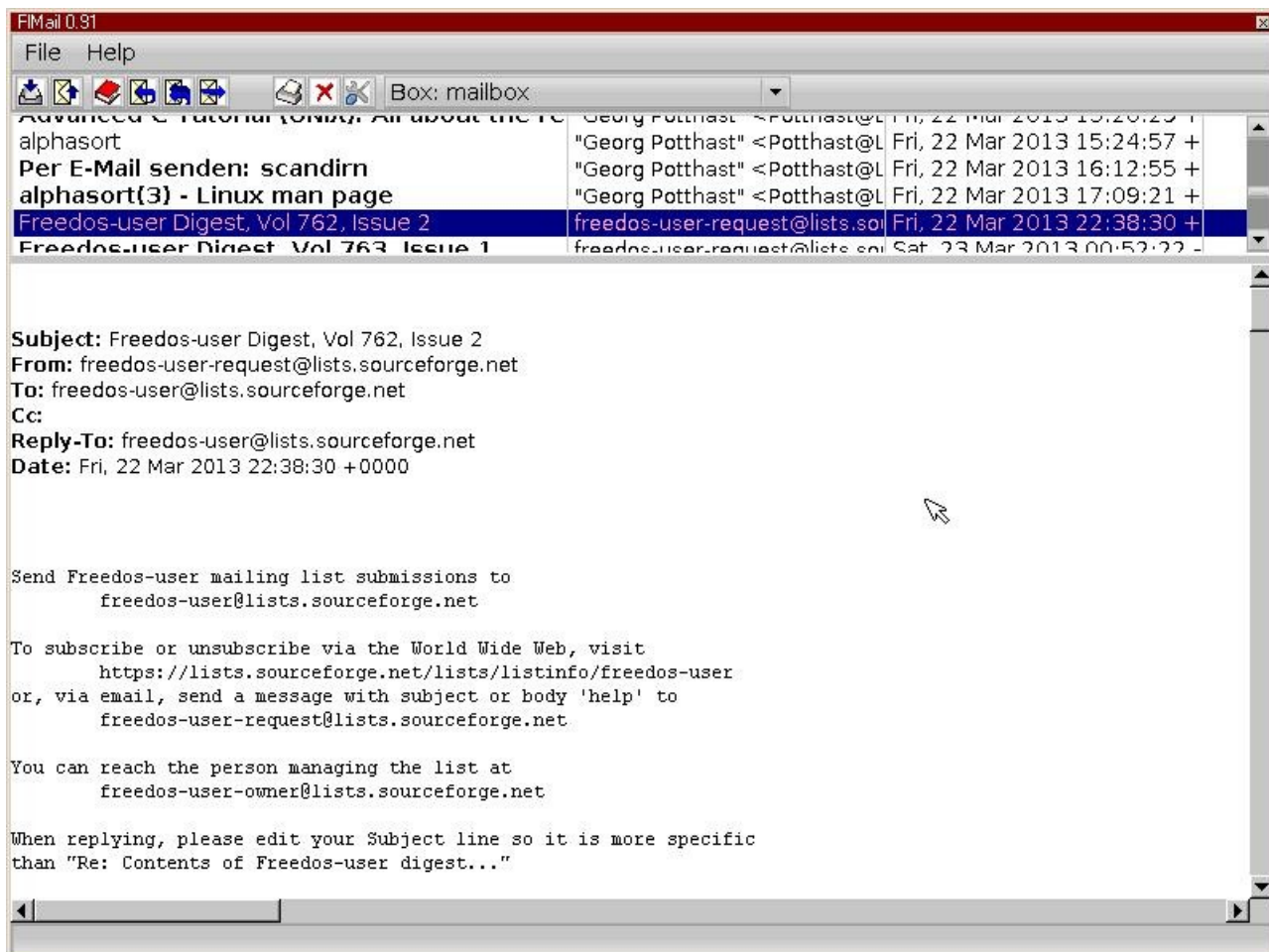


FIMail for DOS User Guide



FIMail is a graphical email client for DOS. It is written in C and C++ and its GUI is based on FLTK, the Fast Light Toolkit.

It has been compiled with DJGPP and uses the Watt32 library for TCP/IP communications plus OpenSSL for receiving and sending emails.

It is based on an old Linux program from Jean-Marc Lienher and ported to DOS and extended by Georg Potthast.

1. Installation

a) Packet driver

The general setup is this:

FIMail email client
Packet driver
Network card

Before running FIMail please load the packet driver which fits your network card. You may find it on the CD which came with your PC or network card. Otherwise you may find one here:

[Packet drivers for DOS.htm](http://www.softsystem.co.uk/products/swsvpkt.htm)

If you want to run FIMail in a Windows XP DOS box you can use the SWSVPKT driver:

<http://www.softsystem.co.uk/products/swsvpkt.htm>

b) FIMail package

Unzip the archive you downloaded into a directory e.g. c:\flmail.

The directory structure of this package is:

bin - flmail.exe and cwsdpmi.exe, the DPML server for DJGPP

fonts - local fonts directory

attach - directory for attachments

xd640cfg\etc - FIMail's configuration file flmail.cfg and the wattcp.cfg config file for tcp/ip.

plus a directory for each mailbox or email account defined. This directory name is always the first 8 letters of the user-id and automatically generated by FIMail. You should therefore not have mailboxes with the same user-id on different servers. The directory contains the received emails in html format, an index.txt file containing a directory of these emails and the file popmail.out which is the last file downloaded from the server by FIMail.exe containing all the emails in

In there is also a "sent" directory which contains the emails sent using this email account.

In the root directory of flmail there is the batch file flmail.bat which sets some environment variables and calls flmail.exe.

c) Customize the FLMAIL batch file

There is a FLMAIL.BAT file in the FLMAIL directory which will set the environment variables and start FLMAIL.

The path names in this batch file have to be checked by yourself to match your environment.

The default batch file currently looks like that:

```
@echo off
REM Customize these lines for your system:
REM -----
set FLTK_SCHEME=grad1
set FLMAIL=C:\FLMAIL
rem set FLMAIL=G:\FLMAIL

rem set NANOSCR=640 480 8888
rem set NANOSCR=800 600 8888
rem set NANOSCR=1024 768 565
set NANOSCR=1024 768 8888
rem set NANOSCR=1152 864 8888
rem set NANOSCR=1280 960 8888
rem set NANOSCR=1280 1024 8888
rem set NANOSCR=1400 1050 8888

REM -----
REM You shouldn't need to edit below this line.
REM -----

set WATTCP.CFG=%FLMAIL%\xd640cfg\etc

%FLMAIL%\bin\flmail.exe %1 >flmail.log
```

The first environment variable selects the GRAD1 scheme with the FLTK toolkit. The FLMAIL environment variable is just used in this batch file to allow to start FIMail from a different directory than FLMAIL.

The NANOSCR variable is defined as:

NANOSCR=[SCREEN_WIDTH] [SCREEN_HEIGHT] [SCREEN_PIXTYPE]

For SCREEN_PIXTYPE the following values are valid: 8888 for 32bit, 888 for 24bit and 565 for 16bit. The 24bit value is currently untested.

I recommend to use 1024 768 8888 resolution and pixtype. Depending on your graphics card higher resolutions may be possible and you can try to select a different setting. The listed settings in the FLMAIL.BAT file have been working on some PCs. If you select 16bit some colors will not be rendered properly.

The WATTCP.CFG environment variable is read by the Watt32 TCP/IP driver and points to the location of the WATTCP.CFG file which is located in the XD640\ETC subdirectory.

FIMail will write some messages into the log file. If it does not work you can look at that file and it may contain some helpful information.

d) Edit the WATTCP.CFG file

In the xd640\etc directory there is a WATTCP.CFG file. This is set for DHCP as default. This may not be the right setting for you so you may have to edit the "my_ip", "netmask", "nameserver" and "gateway" variables in this file.

If you set "my_ip" to DHCP the Wattcp driver will store the dhcp settings it has got from the router in the file W32DHCP.TMP. This file may outdate quickly so you may have to erase this file to continue. This is turned off in the included wattcp.cfg file configuration now.

In a Windows XP DOS box DHCP does not seem to work OK, only if it finds an old W32DHCP.TMP file. Use a fixed IP address here.

2. Running FIMail

Make sure you loaded a mouse driver and the packet driver for your network card. Then run the FLMAIL.BAT file to start FIMail. If the packet driver is not loaded FIMail will not be able to download or send emails. It will just display the emails retrieved before.

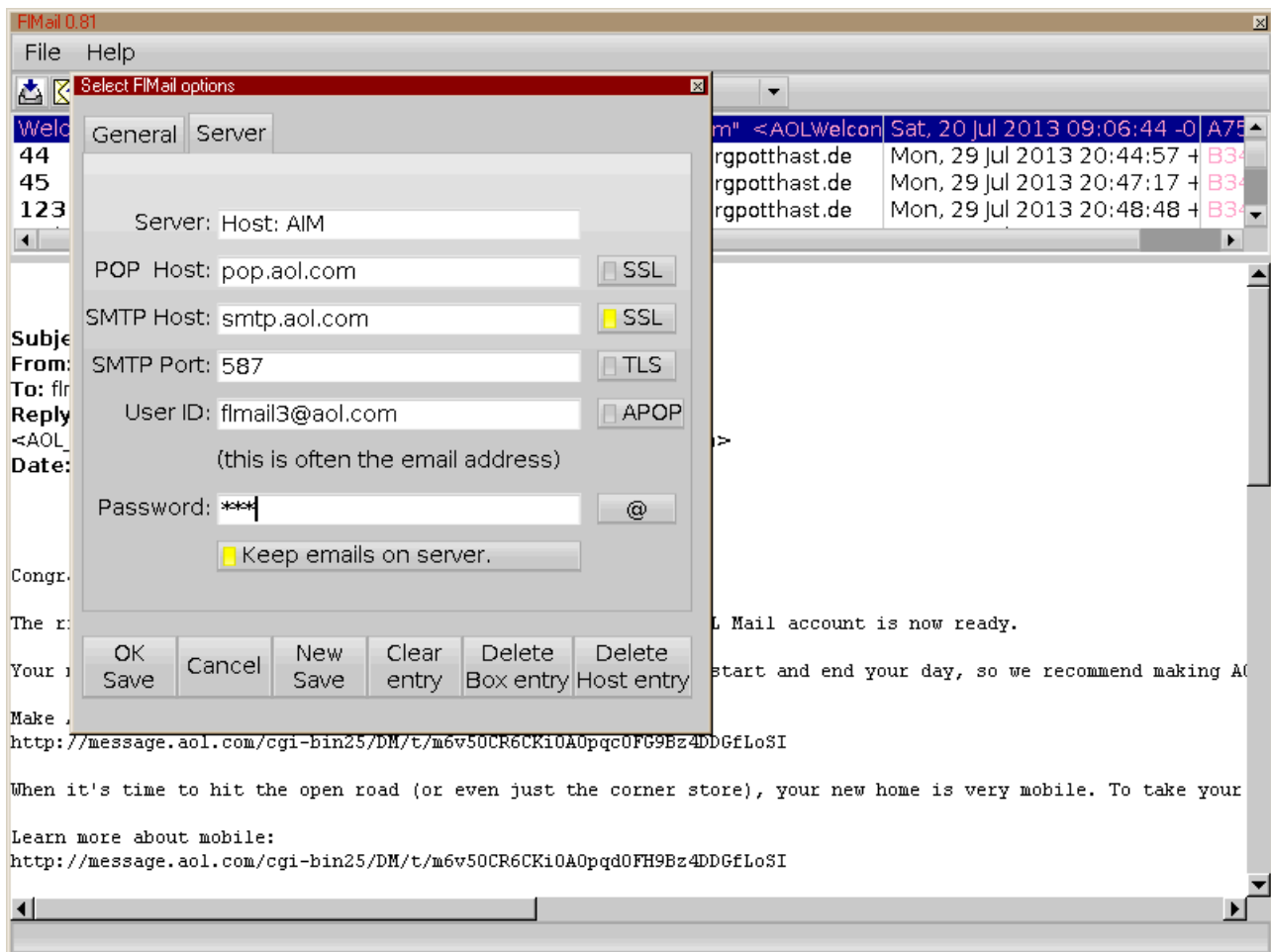
FIMail displays the received emails in a list below the toolbar. You can scroll through this list and resize the columns with the cursor by moving the separation bars. The first column shows the subject of the email, the second the sender and the third column the date and time sent.

Below that the received email that is currently selected from the list is displayed. You can select an email by clicking on the line in the list of received emails.

In this release just text emails are displayed properly, support for the MIME extensions is very limited. Also, if an email contains the same contents both in text and html form then FIMail will display both of them since rendering of html pages is limited. So if the email contains just pure text that is available both in text and also in html then the text appears twice on the screen that way.

FIMail will also not display images but show red blocks instead. It would have to download the images according to the links specified in the email and then display them.

In the toolbar there is a drop-down list where you can select the email server and the email box you want to use. In the version you downloaded there is one example entry present called "demo-host". You can add further email accounts by clicking on the settings icon in the toolbar which will open the following settings/options dialog window:



In the above settings window there are two TABs. In the general TAB you can enter your email address and, if entered in this field, the name that will be displayed at the receiver of the email instead of the email address. You can also enter a password for the POP server in case you use different passwords for the POP and the SMTP server. If you leave this field blank FIMail will use the SMTP password for the POP server too. You can also enter the same password here if you like. See the screenshots of this TAB in the last section of this manual.

In the Server TAB you can modify an existing entry or enter a new entry. If you modify the settings and press "OK Save" the existing entry will be modified. If you press "New Save" instead, FIMail will generate a new mailbox account. This account will be added to the existing server if you did not modify the server name or to a new server if you entered a new server name e.g. as "host: newhost". If you have several identical user names, FIMail will add a # to the mailbox name to be able to distinguish them. It cannot handle identical names even if defined for different servers.

In the first input field you can enter a name for the email server of your provider. Then the domain names of your POP host for downloading emails and your SMTP host for sending emails can be entered.

The SMTP host needs a port number which is usually 587. For this you usually have to select the TLS button too. Otherwise the port number could be 465 for just SSL without TLS. But some servers work on port 587 if just SSL is selected without TLS. You have to try the settings for your server. Some SMTP hosts do not require SSL so you have to turn that off in that case.

For POP FIMail will use port 110. You can also select the SSL protocol here for POP transfers. FIMail will use port 995 then.

Then enter your user-id for these servers and your password. If you check the light-button "Keep emails on server" the downloaded emails will be kept on the email server and are not deleted when being downloaded to FIMail. The settings made here are saved in the flmail.cfg file which is in the xd640cfg\etc directory. In there you can see your passwords in clear text.

There is also a APOP button. If you select that your POP password will not be transmitted in clear but using a challenge response dialog. This cannot be selected together with SSL. In Outlook Express this is called: "Log on using Secure Password Authentication" while Windows Live Email has a check box for APOP. A email server supporting APOP will also work without that. So try to connect to your server first without enabling APOP.

The button "Delete Box entry" allows to remove a mailbox from a server while the button "Delete Host entry" will delete a complete server with all mailboxes defined for it. If you remove all mailboxes from a server and then try to delete the server this will currently not work. You can only delete a server which has mailboxes defined!

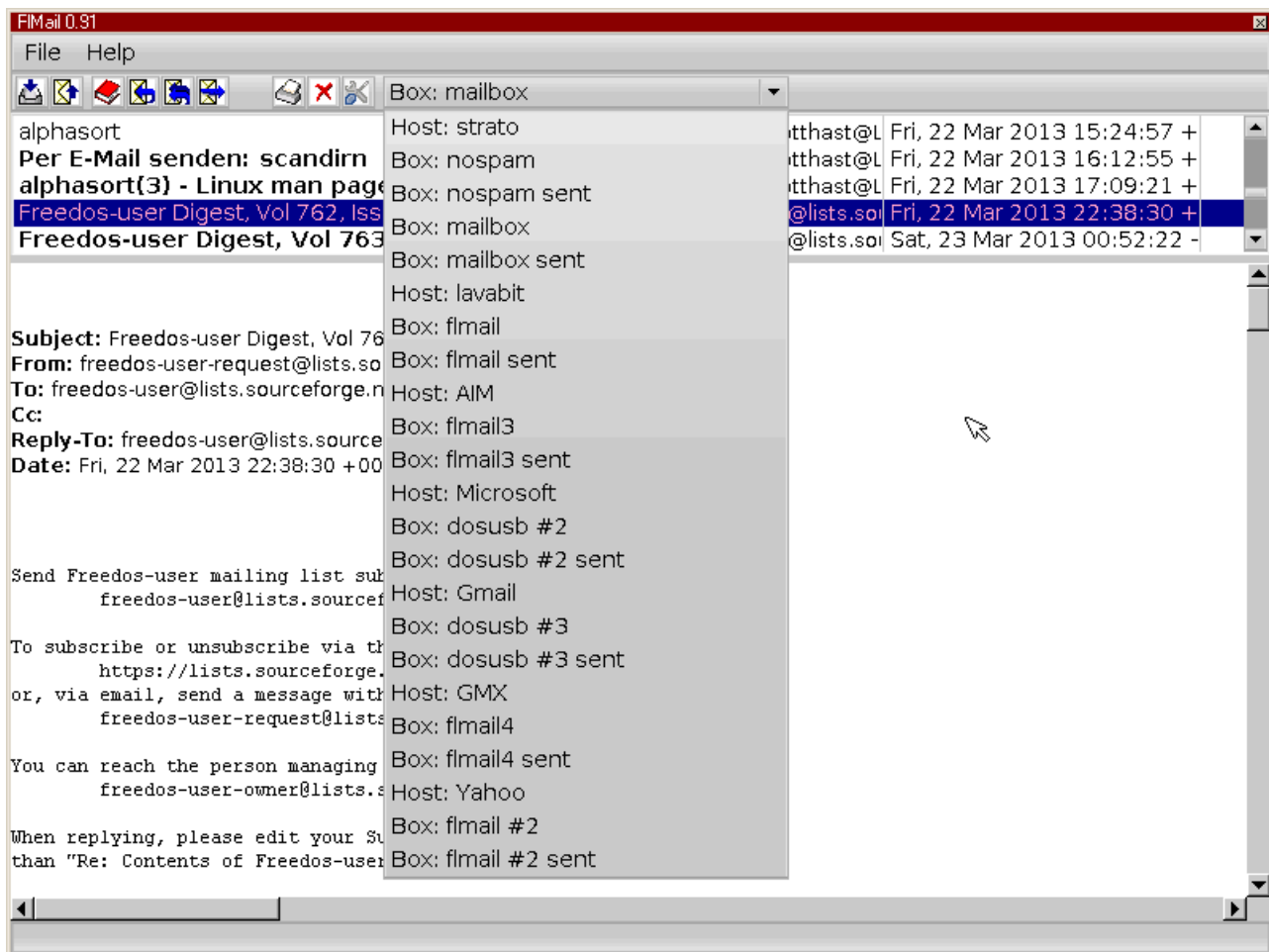
There is also an "@" button. On some PCs entering the @ sign is difficult. If you click this button the @ sign is copied into the clipboard. Using Ctrl-V you can enter it at the cursor position into any of the input fields as required. This button is also available in the "Send" and "Addressbook" windows described below. You can also mark the text in an input field and use Ctrl-C to copy that to the clipboard. Then you can paste the text with Ctrl-V into any input field in FIMail, also in different windows.

To make changes to these settings active you have to terminate FIMail now and start it again so that the settings are read!

If you have trouble connecting with your email provider you can use the "-d" commandline option which will print debugging information to STDOUT or the flmail.log file if you run FIMail from the flmail.bat file.

Some email providers (e.g. AOL) try to defend against spam being sent using their service by requesting a reverse-DNS or PTR record. This way they check if the sender's email address matches the IP address he is using. Setting this reverse-DNS can be done with your internet service provider. Some have a web interface where you can specify which of your domains shall match the IP address they give you for each session. This way the email service provider can make a lookup if your IP address matches your domain name. At the moment AOL still seems to accept emails without reverse-DNS.

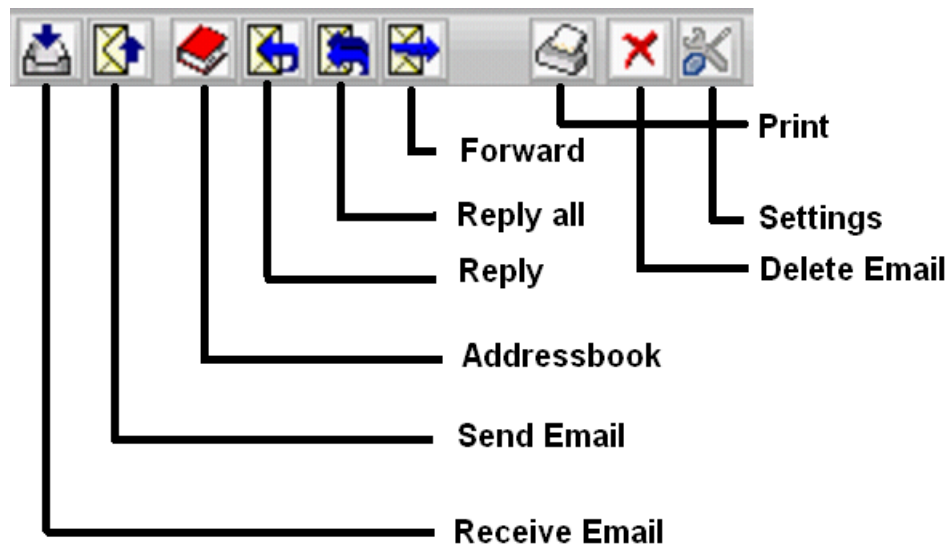
This is an example of a drop-down list with several mailboxes defined:



As you can see there are several email servers defined, one is called strato. On the strato server there are defined the email accounts nospam@georgpotthast.de and mailbox@georgpotthast.de. On the other servers there is just one account defined.

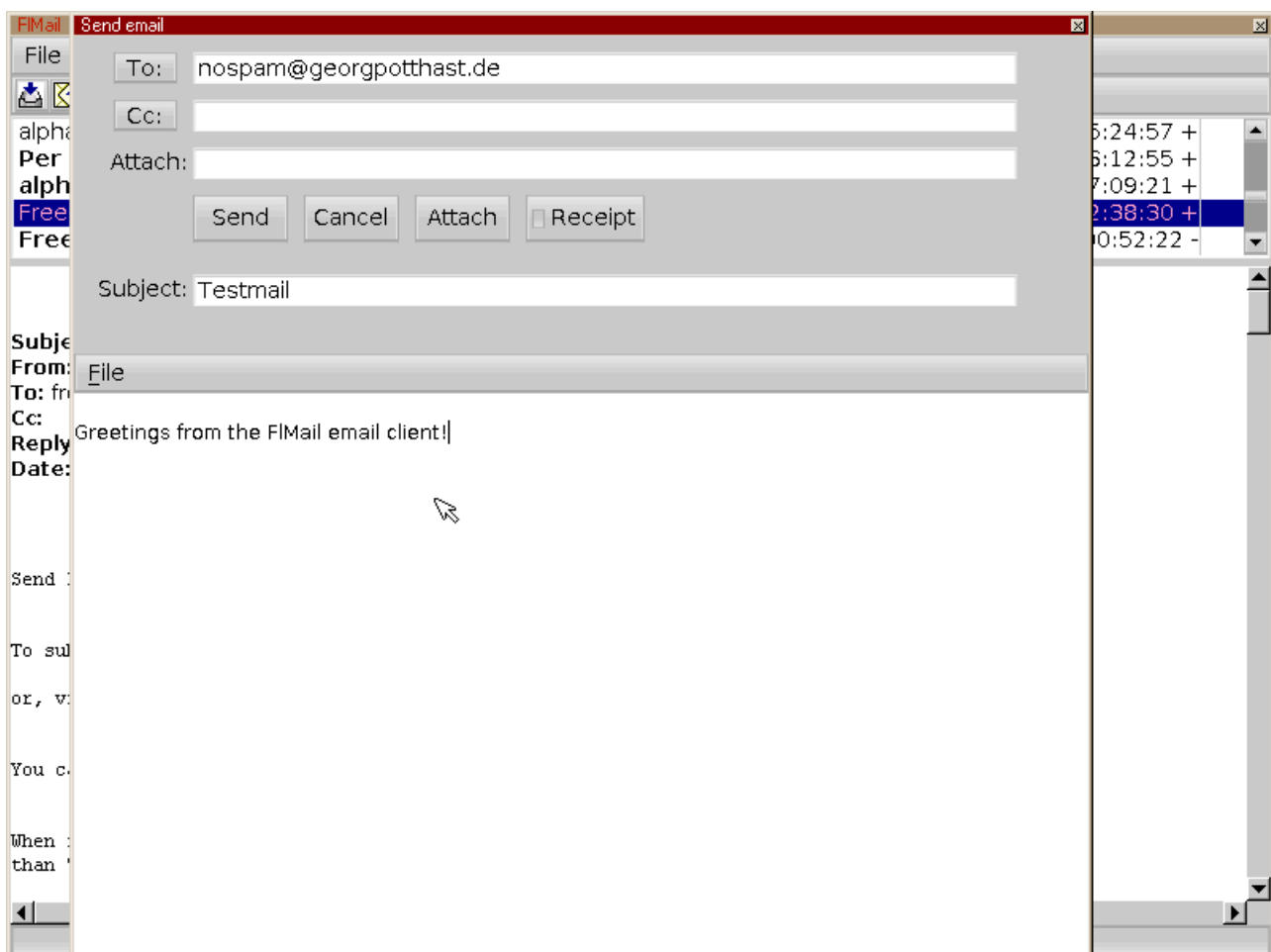
FIMail does not allow two boxes with the same name. Therefore if the first box is called "demo" FIMail will change the name for the second box to "demo #2", even if they are on different hosts.

Once you have defined your email account settings you can select the following actions from the icon bar:



After a click on the "Receive Email" icon FMail will connect to the server via TCP/IP and see what emails can be downloaded and download those. If you have set the "Keep emails on server" setting, it will only download the emails not yet retrieved from the server.

A click on the "Send Email" icon will open a window to allow you to enter the text for a new email:

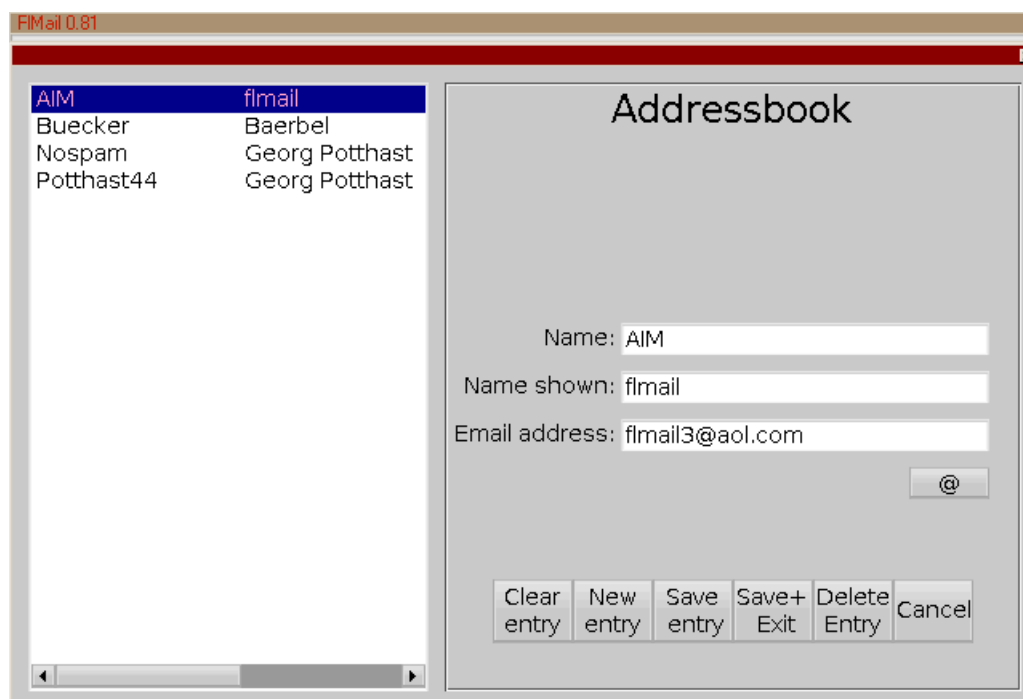


If you click on the "To:" or "Cc:" button, a list of entries in the addressbook will open and you can select an entry from the list by clicking on it. This will then be copied to the input field on the right side of the button.

The "File" menu item will allow you to select a file to be entered as the email text.

The "Send" button will send the email, the "Attach" button will allow you to select a file as an attachment and the "Receipt" button will request a receipt from the receiver of the email.

The next icon in the icon bar will open the address book. Here you can store the contacts which you can then select in the Send and Reply/Forward windows. These will be stored in the file addresses.dat in the root directory. The fields in this file are separated by TAB characters (0x09).



The buttons in the addressbook window have the following functions:

"Clear entry" will erase the contents of the currently displayed entry. Do not use this to delete an entry, just clear if you want to clear the field to enter new text.

"New entry" will generate a new entry in the addressbook and display that in the list in the left window. It is not saved yet on disk!

"Save entry" will save the changes you made to an existing entry. The changes will be displayed in the left window but not saved to disk yet.

"Save+Exit" will write all the changes you made to disk and these will be read when you open the addressbook window again.

"Delete entry" will erase the current entry display from the list. It is not erased from disk yet though.

"Cancel" allows you to leave the window without any changes being saved to disk. This will only be the case if you select "Save+Exit".

Use the scroll bar in the left window to view the email address stored. The "Name shown" field is just used to give the entries in the list a name.

The further icons in the icon bar are the "Reply" button which will allow you to send a reply email to the sender of the currently selected, received email. The "Reply all" button will also send the reply to the email addresses mentioned in the "Cc" line. Finally the "Forward" button will allow you to forward a received email to a new email address.

The "Print" icon allows to print the currently selected email to a postscript file.

Then there is the "Delete" icon which lets you delete a received email. This is not saved in a "Deleted" folder but deleted without backup.

3. Plans for the next release

- improve rendering of MIME emails
- activate email account settings without restarting FIMail
- also store text attachments in the attach folder and do not add them to the email text
- allow to search the email list
- allow to resend emails in sent folder
- support forwarding emails including attachment
- display inline images
- make FIMail callable from Dillo browser and other applications

4. Commandline options

If you call FIMail.exe or FLMAIL.BAT with the "-d" option, it will write debug messages for SMTP and POP into the flmail.log file. In there the data sent by FIMail will be displayed beginning with a [C] for client and the data received beginning with a [S] for server.

5. Example settings for several email service providers

This are the settings tested to work with FIMail for different email service providers.

a) AOL - <http://mail.aol.com> - free email service

The image shows two side-by-side screenshots of the 'Select FIMail options' dialog box. The left screenshot shows the 'General' tab with fields for 'Name displayed', 'Email address' (flmail3@aol.com), and 'POP Password'. The right screenshot shows the 'Server' tab with fields for 'Host: AIM', 'POP Host: pop.aol.com', 'SMTP Host: smtp.aol.com', 'SMTP Port: 587', 'User ID: flmail3@aol.com', and 'Password'. It also includes checkboxes for 'SSL', 'TLS', and 'APOP', and a 'Keep emails on server' checkbox.

Remark:

before being allowed to send emails you have to complete the image test at <http://challenge.aol.com/spam.html>. Otherwise e.g. the "Reply" icon does not work with AOL.

b) GMX - <http://www.gmx.net> - free email service

The image shows two side-by-side screenshots of the 'Select FIMail options' dialog box. The left screenshot shows the 'General' tab with fields for 'Name displayed' (FIMail at GMX), 'Email address' (flmail4@gmx.de), and 'POP Password'. The right screenshot shows the 'Server' tab with fields for 'Host: GMX', 'POP Host: pop.gmx.net', 'SMTP Host: mail.gmx.net', 'SMTP Port: 587', 'User ID: flmail4@gmx.de', and 'Password'. It also includes checkboxes for 'SSL', 'TLS', and 'APOP', and a 'Keep emails on server' checkbox.

c) Strato - www.strato.de

The image shows two side-by-side screenshots of the 'Select FMail options' dialog box, specifically the 'Server' tab for a Strato email account.

Left Screenshot (General Tab):

- General Tab is selected.
- Name displayed: Nospam
- Email address: nospam@georgpotthast.de
- POP Password: (empty)
- (if not different to SMTP password leave blank)
- @ button
- Buttons at the bottom: OK Save, Cancel, New Save, Clear entry, Delete Box entry, Delete Host entry

Right Screenshot (Server Tab):

- Server Tab is selected.
- Server: Host: strato
- POP Host: post.strato.de ☐ SSL
- SMTP Host: post.strato.de ☒ SSL
- SMTP Port: 587 ☒ TLS
- User ID: nospam@georgpotthast.de ☒ APOP
- (this is often the email address)
- Password: *** @
- ☒ Keep emails on server.
- Buttons at the bottom: OK Save, Cancel, New Save, Clear entry, Delete Box entry, Delete Host entry

d) Gmail - email service by Google

The image shows two side-by-side screenshots of the 'Select FMail options' dialog box, specifically the 'Server' tab for a Gmail email account.

Left Screenshot (General Tab):

- General Tab is selected.
- Name displayed: Gmail-Account
- Email address: dosusb@gmail.com
- POP Password: (empty)
- (if not different to SMTP password leave blank)
- @ button
- Buttons at the bottom: OK Save, Cancel, New Save, Clear entry, Delete Box entry, Delete Host entry

Right Screenshot (Server Tab):

- Server Tab is selected.
- Server: Host: Gmail
- POP Host: pop.gmail.com ☒ SSL
- SMTP Host: smtp.gmail.com ☒ SSL
- SMTP Port: 587 ☒ TLS
- User ID: dosusb@gmail.com ☐ APOP
- (this is often the email address)
- Password: **** @
- ☒ Keep emails on server.
- Buttons at the bottom: OK Save, Cancel, New Save, Clear entry, Delete Box entry, Delete Host entry

e) Outlook - email service by Microsoft

The image shows two screenshots of the 'Select FIMail options' dialog box for Microsoft Outlook. The left screenshot shows the 'General' tab with fields for Name displayed, Email address (dosusb@outlook.com), and POP Password. The right screenshot shows the 'Server' tab with fields for Server Host (Microsoft), POP Host (pop3.live.com), SMTP Host (smtp.live.com), SMTP Port (25), User ID (dosusb@outlook.com), and Password. It also includes checkboxes for SSL, TLS, and APOP, and a 'Keep emails on server' checkbox.

Remark: smtp.live.com will only work on port 25.

f) Yahoo - email service

The image shows two screenshots of the 'Select FIMail options' dialog box for Yahoo! email service. The left screenshot shows the 'General' tab with fields for Name displayed (FIMail at Yahoo), Email address (fmail23@yahoo.com), and POP Password. The right screenshot shows the 'Server' tab with fields for Server Host (Yahoo), POP Host (pop.mail.yahoo.com), SMTP Host (smtp.mail.yahoo.com), SMTP Port (465), User ID (fmail23@yahoo.com), and Password. It also includes checkboxes for SSL, TLS, and APOP, and a 'Keep emails on server' checkbox.

Remark: to retrieve emails from the server, you first have to enable that in the web interface. Select Options right next to "Hello your name" in the upper right corner, then extended options, then POP and Forward and in there "Access emails via POP".

18th August 2013 Georg Potthast