Muttprint -- User's guide

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1. About Muttprint

The printing of mails from Mutt (and lots of other mail clients) is done as "plain text". Normally, that's enough, but in my opinion it's not so beautiful like a formatted printing, e. g. from Netscape.

Another fact disturbed me: The printing contains all displayed header information. I've configured Mutt that it displays things like "X-Mailer", but I don't want to print this. XFMail is quite worse: It prints all header information, so the printing is in my opinion unusable.

Sometime I had the idea to write a script myself, which creates a nice printing. And here's the result. I think it looks quite better than plain ASCII text and is comparable with the printing of well-known mail clients under Microsoft Windows.

2. Installation

2.1. System requirements

Muttprint was realized in the programming language *Perl* which requires a functioning Perl interpreter in version 5. This should be true on every Linux systems by default.

Make sure that a LaTeX distribution (I recommend teTeX higher than version 2.0) plus the programs *psselect* and *psnup* from the *PS-Utils* are available on your system. The last are only necessary if you want to use paper save mode and/or duplex printing; and they are not necessary if you use CUPS and if you configured Muttprint to use it, see Section 3.1.2.

If you use a Perl 5.6 then it must be a small C program compiled. It is required to get information about the current locale environment. That means that there must be a C compiler installed. If you use Linux this is not necessary.

All required LaTeX packages are included in teTeX. If you use another LaTeX distribution, read the file `README.latex`, which contains information about all required packages. You have to install all packages, that are not present on your system.

For parsing the date, Muttprint uses the Perl module Date::Parse[1] [2]. If the module is not installed, Muttprint works without problems except the function to convert the time zone and print the date in the local language, see Section 3.1.7.

Since Muttprint 0.72 the Perl module Text::Iconv [3] [4] has to be installed. It is used to convert between different encodings. At first you should check if the module is distributed with your operating system (on Linux: distribution). Search for a file called `Iconv.pm`. If not, install it. If you cannot install Perl modules on your system, Muttprint can use the external applications iconv (or even recode). This is slower and error-prone. If you want to do this, just set the variable `ICONV_EXTERNAL` to `on` in your configuration file, see Section 3.1. But keep in mind that this is only a compromise solution!

To have support for the charset UTF-8 the LaTeX command for changing the charset must support UTF-8. This is naturally not the case! You'll find a suitable extension in the CTAN. Just download the file ftp://ftp.dante.de/tex-archive/macros/latex/contrib/supported/unicode.tar.gz and install it as described in the file `INSTALL` which is included. You only need UTF-8 support if you work in a UTF-8 environment. You find out the current encoding under Linux with the command **locale charmap**, on other operating systems use `muttprint --print-locale` after Muttprint is installed.

2.2. Installation of the files on your computer

2.2.1. Manual installation

At first, you have to unpack the archive. This could be done by the command

```
$ tar xvfz muttprint-Version.tar.gz
```

Change in the directory which was created:

```
$ cd muttprint-Version
```

There is distributed a suitable `Makefile` with Muttprint. To adjust the locations on your system, edit the Makefile with your favourite editor.

As mentioned above, there must be a small C program compiled. If you use Perl 5.8 and/or Linux, you could skip this step. For this, just execute

```
$ make
```

You need Root permissions to install the program. After you have changed with the **su** command to the superuser, perform the installation with

```
# make install
```

The script should work now.

If you would like to uninstall Muttprint later and all files are still on the same location, execute simply

```
# make uninstall
```

as root.

2.2.2. Installation of the packages

If your distribution uses a package management system such as RPM or DPKG, it is a good idea to use the correlatively packages. The greatest advantage is the simple uninstallation.

Most Linux distributions use the RPM package management system. The easiest way to install the package is the command

```
# rpm -Uvh muttprint-Version-Release.noarch.rpm
```

All RPM packages are signed with my GnuPG-Key (ID DDAF6454). You get more detailed information about RPM and verification of signatures in Maximum RPM (http://www.rpm.org/maximum-rpm.ps.gz).

The Debian packages are created by René Engelhard <rene@debian.org> and are normally available a few days after a new release of Muttprint. The could be installed by

```
# dpkg -i muttprint_[version]-[release]_all.deb
```

Take a look at the Debian "Developer's Corner" (http://www.debian.org/devel/) for more information about Debian packages.

Another possibility to install Debian packages is **apt-get**.

2.3. Integration of Muttprint in mail and news clients

Muttprint was originally developed for the use together with Mutt only. However, it could be integrated in following mail programs without problems. I got some description of users. Muttprint would be work independently of Mutt in future, too.

2.3.1. Mutt

You have to add or change following line in the file `$HOME/.muttrc` or system wide in `/etc/Muttrc`:

```
set print_command="muttprint"
```

Moreover you must make sure that all necessary headers are dumped when the mail is printed out. The easiest way is to write a small macro (in your `~/.muttrc`) which makes sure that all headers are dumped. Only the most important headers are really printed (see Section 3.1.20).

Here's the macro:

```
# Dump all headers
macro index p "<display-toggle-weed> <print-message> <display-toggle-weed> <exit>"
macro pager p "<display-toggle-weed> <print-message> <display-toggle-weed>"
```

At first, the macro switches to the mode where all headers are shown, then the mail is printed and finally it switches back. It is necessary to turn the confirmation of printing off so that the macro works right:

```
# No confirmation before printing
set print="yes"
```

To print more than one mail sensible in one step, you should add following entry:

```
# Print every mail extra
set print_split
```

You'll find more information in the documentation of Mutt (`/usr/share/doc/muttprint/mutt/manual.txt(.gz)`).

2.3.2. Slrn

Simply add following lines in your configuration file `~/.slrnrc`:

```
% Use Muttprint for printing
set printer_name "muttprint"
```

If Muttprint should print more headers than this which are displayed on the screen, you have to use instead of the normal printing command **y** the combination **ESC**, **1**, **y** (one after another). This is important for printing the X-Face header, see Section 3.1.4.

2.3.3. XFMail

In the dialogue Misc, Config Misc you have to do an entry in Print Command: `/usr/bin/muttprint -f $f`.

> **Note:** With some versions of XFMail, problems are reported because XFMail does not add the headers in the printing. This is not a problem of Muttprint. To solve the problem you could look for a new version of XFMail which doesn't have this bug.
>
> See also the XFMail developer mailing list archive (http://slappy.org/listarchives/xfmail/2001-June/002398.html) for a solution.

2.3.4. Pine

Enter the print command `muttprint` in Setup, Printer, Personally select print command. Save the changes.

2.3.5. Sylpheed

To use Muttprint permanently as printing program, call Configuration, Common preferences, Other, Printing and entry `muttprint -f %s`.

2.3.6. Gnus

Muttprint could be integrated in Gnus, too. I got a Lisp code from a user that realizes the integration. Please ask me no questions about this because I don't know Lisp and don't use (X)Emacs myself.

You find the code in `README.Gnus` and I would like to refer to this file in this manual. If you use packages for the installation you should find this file in the `/usr/share/doc/muttprint/muttprint/` directory.

2.3.7. Exmh

Choose at first Preferences, then Text Print Command and set Text Print Command to `muttprint -f $file`.

2.3.8. Other mail clients

Muttprint works with all mail programs theoretically if they comply with following conditions:

- The output must be plain ASCII text without any formattings.
- You must be able to choose the printing command freely.

Newsreader are also supported because the `To` header is optional and the `Newsgroups` header is also evaluated.

If you use Muttprint with other programs than mentioned above, please send me a short message in which you describe how you've configured the program. I could add the description here.

3. Configuration

3.1. The configuration file

Some things could be configured in Muttprint. This is permanently done in the configuration files `$HOME/.muttprintrc` (only for the current user) or `/etc/Muttprintrc` (global for all users). User settings override global settings.

You can also specify an additional configuration file with the `-r` *`filename`* option. This file is read finally and overwrites command line settings, too. This additional configuration file is useful for using more than one configurations and you can combine it with some *Hooks* of Mutt.

The configuration file is structured in a way that values are assigned to different variables -- this is different from `.muttrc`. The name of the variable stands first and is case sensitive; take over them exactly. Then follows a equal sign (=) without any whitespaces. At last, there's the value. Quotes (`'` or `"`) are optional.

An example for a configuration file is distributed with Muttprint (`sample-muttprintrc`). If you've installed a RPM or Debian package, you'll find it in `/usr/share/doc/muttprint/muttprint/`.

An example for a correct assignment:

```
VARIABLE=value
```

Normally the script works without any adapts. But it is recommended to inform about the possibilities you have.

3.1.1. Printer

If Muttprint should not print on the default printer, you can change this by setting `PRINTER` to the correct value.

To print in a file, you could use following syntax, the name (and location) of the file is freely chooseable:

```
PRINTER="TO_FILE:/foo/bar/test.ps"
```

If duplex printing is enabled, Muttprint creates a second file with the prefix `2`, e. g. `test2.ps`.

If this variable is not set, Muttprint evaluates the environment variable PRINTER and uses its value to get the printer. Normally it is set to the default printer. If you use CDE (which is common on commercial Unix systems) its configuration file is read to get the default printer.

As of version 0.70 Muttprint offers direct support of the new printing system CUPS. It will be turned on by setting `PRINT_COMMAND` to `CUPS`. Alternatively it is possible to set it to an arbitrary command which contains the string `$CUPS_OPTIONS` which is substituted by the CUPS printing options.

> **Tip:** You could use the setting `gv -` to have a print preview. This is useful if you test different settings.

3.1.2. Printing command

Muttprint uses lpr to print in its default setting. If you would like to use another printing command, set `PRINT_COMMAND` to the program you would like to use. The string `$PRINTER` is replaced by the chosen printer. The default is `lpr -P$PRINTER`.

> **Tip:** You could use the setting `gv -` to have a print preview. This is useful if you test different settings.

3.1.3. Penguin

As a default setting it is printed a little penguin on the right top of the page. If there should be another picture or if the penguin has another location as Muttprint assumes, you can configure this by setting the `PENGUIN` variable to the right value. The picture must be in Encapsulated PostScript (you could use **convert** from the Image Magick package for converting your favourite picture into EPS) and it is scaled to a height of 2 cm (5.08 in). The logo must not have a higher width than height.

If `PENGUIN=on`, Muttprint tries to find out the location of the penguin file. (Read the source code to find out, where Muttprint searches.) This is the default setting.

Additionally, Muttprint comes with some example pictures that are already converted into the EPS format. After the installation, you'll find this in `/usr/share/muttprint`.

If the printing of the graphic should turned off, set `PENGUIN` to the value `off`.

3.1.4. Printing of X-Faces

X-Faces are black and white pictures with a size of 48 x 48 pixels, that could be included as mail header (the `X-Face:` header) in each message. This is no "official" standard but it is spread especially in news articles.

Muttprint supports the printing of this picture instead of the image specified with the `PENGUIN` variable. To do this, set `XFACE` to `on`. If there's no such header, the `PENGUIN` picture (or nothing) is printed.

To work right, following two programs are required:

- convert from the Image Magick package (http://www.imagemagick.org)
- uncompface (http://www.ibiblio.org/pub/Linux/apps/graphics/convert/compface-1.4.tar.gz)

Both programs should be part of common Linux distributions and can simply be installed.

In any case you must make sure that this header is really dumped to Muttprint. If you use Mutt, see Section 2.3.1 for a correct configuration. Otherwise read the documentation of your mail software.

3.1.5. Duplex printing

Muttprint allows manual duplex printing. It prints odd pages at first, waits a while and prints then even pages.

Muttprint needs the speed of your printer to calculate the time when the printing of even pages will start, see Section 3.1.9.

To activate the duplex printing, set `DUPLEX` to `on`.

If you own a real Postscript printer and if this printer has duplex capabilities, you should set `DUPLEX` to `printer`. This changes the Postscript code in a way that tells your printer to enable automatic duplex printing; for CUPS a corresponding option is used.

3.1.6. Paper save mode

It's possible to print two pages on one page in landscape. This allows you to save paper and ink and increases the printing speed. This makes only with the paper format DIN A4 sense because two reduced pages fit exactly to one sheet.

To enable this mode, set `PAPERSAVE` to `on`.

If you only want to activate the papersave mode if more than one page is printed, set `PAPERSAVE` to `optional`.

3.1.7. Date

The `DATE` option allows two settings: `original` and `local`. If set to `original`, Muttprint print the date unchanged as it is in the mail header, i. e. in English and in the sender's time zone.

If you set this option to `local`, Muttprint converts the time zone in the time zone of the system and prints the date in the local language [5].

The format of the date could be specified with the `DATE_FORMAT` variable. The argument is a format string, e. g. `"%A, %d. %B %Y %H:%M:%S"`. The quotation marks are necessary because the string contains spaces. The strftime(3) manpage contains details about it.

3.1.8. Format of printed mail addresses

There are different ways of writing mail address and realname together in the mail header. Here are some examples:

- `Bernhard Walle <Bernhard.Walle@gmx.de>`
- `"Bernhard Walle <Bernhard.Walle@gmx.de>`
- `Bernhard.Walle@gmx.de (Bernhard Walle)`

The used format depends of the mail program of the sender; all three are correct. If the variable `ADDRESSFORMAT` is set to the value `original`, the addresses are printed unchanged.

If you would like uniform mail headers, you can assign a format string to this variable. The default setting is `"%r <%a>,\n"`. You can use all characters as format string, `%r` is substituted by the name ("real name"), `%a` by the mail address and `\n` prints a newline. The paling quotes are necessary because of the spaces. A newline at the end means that every address is printed in a separate line if more than one address is given. Muttprint removes newlines and commas after the last address automatically.

Additionally, particular parts could be printed bold or italic. If a part is embedded in stars (`*`), the text is bold; slashes (`/`) means italic printing; nesting is possible.

Here is just another example for a format string (this is the one that I use): `"/%r/ (%a),"`.

3.1.9. Printing speed

As mentioned above, Muttprint requires the duration which your printer needs to print one page. This setting is done by setting the variable `SPEED` to the value in seconds (only integers are allowed). Default is 30 seconds (`SPEED=30`).

3.1.10. Font

You could use different fonts for the printing. The correspondent variable is names `FONT`. `Latex` (standard steting) means the standard LaTeX font of the EC family. `Latex-bright` uses *Computer Modern Bright*. This font is not available on many systems because of its license[6]. Another choice is `Latin-modern` for the *lmodern* fonts (not available on most systems).

There are several Postscript fonts which are possible here: `Times`, `Palatino`, `Utopia`, `Charter Bookman`, `CentSchool` (New Century Schoolbook), `Chancery` (Zapf Chancery), `Helvetica` or `AvantGarde`.

Of course the fonts has to be installed on your system. As the LaTeX distribution *teTeX* is standard on Linux systems, this should be no problem.

3.1.11. Font size

You can control the font size with the variable `FONTSIZE`. Only the values `10pt`, `11pt` and `12pt` are possible.

3.1.12. Formatting of the mail body

The mail body is split into two parts: text and signature. If there is a signature and it should not be removed (see Section 3.1.18), this two parts can be formatted separately.

Muttprint uses the LaTeX package `fancyvrb.sty` to print the body, which offers lots of formatting options. The options which are passed to the `Verbatim` environment could be set with the variable `VERBATIMNORMAL` (for the normal text) and `VERBATIMSIG` (for the signature).

You'll find the exact syntax in the documentation of `fancyvrb.sty`, which could be viewed with the command **texdoc fancyvrb**. Normally, the signature is printed in Italics. You can print borders, too.

If you don't want a separate formatting of mail body and signature, just set `VERBATIMSIG` to `raw`. If so, the signature is treated as normal mail text and is printed like this (including the signature separator).

Here're some examples:

- `fontshape=it,frame=topline`: italic font, border above the block
- `fontfamily=helvetica,fontseries=b`: Helvetica font, bold
- `numbers=left,stepnumber=5`: Line numbering each fifth line

3.1.13. Margin settings

The margins could be set by modifying following variables: `TOPMARGIN` (top margin), `BOTTOMMARGIN` (bottom margin), `LEFTMARGIN` (left margin) and `RIGHTMARGIN` (right margin).

This variables should be set to a integer, which specifies the margin in millimeters (mm). Other measuring units are not possible; 25.4 mm are 1 inch.

3.1.14. Wrapping long lines

The length of the longest line is specified with the `WRAPMARGIN` variable. Longer lines are wrapped automatically but shorter lines are not joined.

3.1.15. Rules under/over head- and footline

There could be printed a rule under the headline resp. over the footline. They are turned off as default.

Set the variables `HEADRULE` resp. `FOOTRULE` to `on` or `off`.

3.1.16. Design of the first pages

There exists different possibilities to highlight the mail headers on the first page. Here is a listing of them:

Style	Description
`plain`	no rules
`border`	rule after the headers (*default setting*)
`Border`	thick rule after the headers
`fbox`	simple box around the mailheaders
`shadowbox`	shadowbox around the header
`ovalbox`	box with rounded corners around the header (thin lines)
`Ovalbox`	same as `ovalbox` but thicker lines
`doublebox`	box with double lines around the header
`grey`	grey background behind the headers
`greybox`	same as `grey` but with a additional black box

Set the variable `FRONTSTYLE` to a value from the table above.

3.1.17. Paper format

To set the paper format, set `PAPER` to the right value. Possible are only `A4` and `letter`.

If there exists a file `/etc/papersize` as usually on Debian systems, it is evaluated, too. Own settings overwrite this system settings.

3.1.18. Cut signature

Often the signature contains useless information or advertising and should therefore not be printed. Muttprint is able to cut the signature, if it was separated from the mail by using "`-- `" -- take a look at the whitespace (some mail clients don't generate a correct separator).

To do this you've to set `REM_SIG` (this means "remove signature" to the value `on`.

If Muttprint should recognize other separators to indicate the beginning of a signature, you can set `SIG_REGEXP` to a regular expression in Perl syntax. The default setting is `^-- $`. If you don't know what this notation means, just don't change the default.

3.1.19. Omit quoting

Often the author of the mail does not quote sensibly but attaches the whole mail so that the printing becomes very long and confusing.

If `REM_QUOTE` is set to `on`, the quoting will not be printed. Muttprint detects the quoting by using the same regular expression that Mutt does in its standard configuration. So the text which is color emphasized from Mutt should omitted in the printing. This corresponds to the *toggle quote* function (**Shift**-**t**) on screen.

3.1.20. Printed headers

Normally only the interesting headers are printed. You could change this settings with the variable `PRINTED_HEADERS`. Specify each header separated with a underline (_).

The order is important for the printing. The evaluation is case-insensitive. Headers that doesn't exist are ignored. For bold printing embed the name of the header in stars (`*`), for italic printing do the same with slashes (`/`).

The default setting is:

```
PRINTED_HEADERS="Date_To_From_CC_Newsgroups_*Subject*"
```

One more example for a sensible setting:

```
PRINTED_HEADERS="/Date/_To_From_*Subject*_X-Mailer"
```

3.1.21. Own LaTeX code

The variable `LATEXCODE` is for people who are very familiar with LaTeX and would like to customize the printing without changing the source code of Muttprint. For example, it is useful to use own fonts.

Besides `LATEXCODE` there are five additional variables (`LATEXCODE1` till `LATEXCODE5`) to split your LaTeX code nicely. This variables are integrated in the code in this order.

> **Tip:** You could print the mail text in a proportional font (instead of typewriter font) with following setting:
>
> ```
> LATEXCODE="\renewcommand{\ttdefault}{\rmdefault}"
> ```

3.1.22. Printing in the background

Normally Muttprint runs in the foreground and terminates after the print procedure is finished successfully. This simplifies the output of error messages. On modern computers, the printing of normal mails takes only a few seconds. (An exception could be the first run of Muttprint because LaTeX has to create lots of font files.)

Sometimes it could be useful to put Muttprint in the background immediately. So you can use the your mail client instantly after you started the print job. This is only recommended if you already tested Muttprint to make sure that there must be printed no error messages.

For this, you can assign the variable `BACKGROUND` the value `on`. In the debug mode (see Section 3.1.23) this option has no effect.

3.1.23. Error messages

The output of **latex** and **dvips** are not displayed. If there are any problems, it would be helpful to read this output. Therefore you should set `DEBUG` to `1` in your `.muttprintrc`. Now Muttprint creates a log file named `/tmp/muttprint.log` in the next run so that you can watch the error messages. This could be helpful for all bug reports, too.

3.2. Command line options

Most configuration settings could be made by command line options as well. The advantage is a easier integration in the mail client (e. g. with own macros).

You find a detailed description of all options with **muttprint** `-h` or or in the muttprint(1) manpage.

The effects of this options are the same as in the configuration file but command line settings override all other settings.

3.3. Different languages

3.3.1. Overview

The script supports different languages. In contrast to old versions the configuration is done not with the configuration file but with the locale environment of your operating system.

Under Unix environment variables are used to control the locale settings. There are different variables which control different aspects of localization. For example a user might English text messages but he wants to work with German texts (and the Western European character set).

For Muttprint the variables `LC_ALL`, `LANG`, `LC_MESSAGES`, `LC_CTYPE` and `LC_TIME` are important. `LC_CTYPE` specifies the encoding used for input and output. Muttprint expects its input (especially the mail that should be printed) in this charset and prints all messages in this charset. `LC_MESSAGES` specifies the language for messages and the printing and `LC_TIME` is responsible for date and time information. The date in the footer is generated by LaTeX and so it's in the language specified by `LC_MESSAGES`. `LC_ALL` overwrites all other `LC_` variables, so if it's set, the other have no meaning anymore. `LANG` is a fallback: If, for example, `LC_MESSAGES` is not defined `LANG` is used to determine the language for messages. Normally you only set the `LANG` variable.

In the first place the language adaptions affect some words in the printing, which means the labels of the mail header and the date.

Also the encoding is determined by the locale environment of your system. There's no way to do this manual as in older versions of Muttprint anymore. The number of supported charsets is limited because of the usage of LaTeX. Following encodings are supported: ISO-8859-1 (Western European languages), ISO-8859-2 (Eastern European languages), ISO-8859-3 (South-Eastern European and other languages), ISO-8859-4 (Scandinavian and Baltic languages), ISO-8859-9 (Turkish), ISO-8859-15 (ISO-8859-1 with some modifications, especially the Euro sign), KOI8-R (languages with Cyrillic characters, e. g. Russian) and UTF-8.

The support of UTF-8 is not complete. LaTeX itself uses 8-bit character sets. This means that it could be only this subset of characters used, which are usual in the current locale environment. So Cyrillic letters could only be printed in a Russian environment. Maybe this changes in future but the main problem is LaTeX.

3.3.2. Translation file

The Muttprint translation files are located in the `share` directory and have the name `translation-`*`language`*`.pl`. You could add new files in this directory without any changes on the Muttprint script. Not only the headers mentioned above but also the help message are translated here.

For new translations take any file as template, copy it and translate it. If you would like to provide your translation to other users, just send me the new file with a e-mail and I'll add it in the next release.

Important: The encoding of this file must be (independent of the current locale environment) UTF-8. Read the file `README` which is in the `translation/` directory of Muttprint (the source code distribution).

4. Known Bugs

Even Muttprint contains bugs. Following problems exists currently:

Problem with parsing of the configuration file (RedHat Linux). Because of a bug in the Perl version distributed with RedHat Linux 9.0, Muttprint cannot parse the configuration file in a UTF-8 environment. You can use Muttprint in a non-UTF-8 environment or upgrade Perl from RawHide (ftp://ftp.redhat.com/pub/redhat/linux/rawhide/). The bug is described at http://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=98274.

Error in line-wrapping with Perl 5.6. Lines that contain non-ASCII characters are wrapped too early in all Perl 5.6.x versions (earlier versions don't work at all). Umlauts and Cyrillic characters count twice. The problem occurs in all locale environments and bases on a bug in the standard module Text::Wrap in this Perl versions. The bug occurs only if the mail contains lines which are too long and you don't see it in a normal German or English text. You can increase the value of `WRAPMARGIN` (see Section 3.1.14) or use a up to date Perl (recommended is 5.8.1).

Wrong printing of the date (Perl 5.8.0). The date is printed wrong if it's printed in the language of the country (see Section 3.1.7) and if it contains non-ASCII characters. The problem is that the mentioned Perl version encodes the UTF-8 encoded string again in UTF-8. The result is a quasi twice-encoded date. There are improved versions of Perl 5.8.0 where this problem is solved (for example the Perl distributed with Debian unstable).

5. Notes

5.1. Author, License

The script has been written by Bernhard Walle <`Bernhard.Walle@gmx.de`>.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but *without any warranty*; without even the implied warranty of *merchantability* or *fitness for a particular purpose*. See the GNU General Public License for more details.

You have received a copy of the GNU General Public License along with this program (file `COPYING`).

Please send notes, comments, improvement proposals etc. via e-mail to me.

The translations are copyrighted by the respective translators. Read `README.translations` for the names of the translator.

5.2. Download

The current version and all old versions could be downloaded from http://muttprint.sourceforge.net. This is the Homepage of Muttprint.

I announce new versions on Freshmeat (http://www.freshmeat.net).

5.3. Printing of attachments

Muttprint is not able to print mail attachments. To reach this, Muttprint would have to parse the raw MIME message and decode it. This is quite difficult. For example Muttprint would have to decrypt PGP-encrypted messages, choose the right alternative in `multipart/alternative` messages and work recursive for `message/*` -- this are only a few things. Short: Essential parts of a mail client must be integrated and lots of settings (like for PGP) must be done. Moreover, not all mail clients support outputting the raw message for printing.

But Mutt has itself a comfortable function to print attachments. You can choose a separate printing command for each MIME type. This could be set in `~/.mailcap`. Read further information in the Mutt manual, section 5.3.3.1.

I've written a very small script named `imageprint` for printing images (almost every format is supported). You could use it as template for own scripts. Here it is:

```
#!/bin/sh
target=/tmp/imageprint-$$.ps
convert -page A4 $1 $target
lpr $target
rm $target
```

Just press the **p**-key in the attachment menu of Mutt.

Users of other mail clients should read the documentation for information about how to print attachments.

5.4. Thanks

to all who helped me with their bug reports to improve and enhance Muttprint. Especially I want to thank Roman Beigelbeck for providing additional pictures, Roberto Vallone for the Italian transation, Vincent Bernat for the French translation, Marcelo Ramos for the Spanish translation, Dominik Formánek for the Czech translation and the Debian maintainers Dr. Guenter Bechly and Chanop Silpa-Anan.

Finally I would like to thank all people who contributed to free software. Most people did this in their spare time without receiving a penny for this!

Notes

1. http://search.cpan.org/CPAN/authors/id/G/GB/GBARR/TimeDate-1.16.tar.gz
2. You find details about the installation in this file. Normally, using the following procedure should work:

   ```
   $ tar xvfz Time-Date-1.16.tar.gz
   $ perl Makefile.PL
   ```

```
$ make

$ make test

# make install
```

3. http://search.cpan.org/CPAN/authors/id/M/MP/MPIOTR/Text-Iconv-1.2.tar.gz
4. You find details about the installation in this file. Normally, using the following procedure should work:

```
$ tar xvfz Text-Iconv-1.2.tar.gz

$ perl Makefile.PL

$ make

$ make test

# make install
```

5. This works independent from the translation file by using the functions of the operating system.
6. You can download this font and install it on your computer from the CTAN. You find the fonts in CTAN:/tex-archive/nonfree/fonts/cmbright/ (CTAN = *Comprehensive TeX Archive Network* consists of a network of several servers. The CTAN server in Germany is ftp://ftp.dante.de, in the United Kingdom ftp://cam.ctan.org and in the United States ftp://tug.ctan.org).