#### **NAME**

mailatt – send e-mail with attachments

### **SYNOPSIS**

```
mailatt [ message options | encoding options | header options | debug options ]
[ encoding options | -- | file1 [ file2... ] ]
mailatt { -h | -v }

Message options:
    [ -FIai ]

Header options:
    [ -r recipients ] [ -c cc-addresses ] [ -b bcc-addresses ] [ -f from ] [ -R reply-to-addresses ] [ -s subject ] [ -H headerline ]

Encoding options:
    [ -C charset ] [ -M mime-type ] [ -mqu ]

Debug options:
    [ -DVd ]
```

Please note that the order of the commandline options is significant.

# **DESCRIPTION**

mailatt is used to send multipart MIME e-mail messages with file attachments.

The message can be composed in either of two possible formats:

### - multipart/mixed

This is the default. It signifies that the message contains a collection of files which are not necessarily related.

One of the message parts may be displayed inline, as the inline message body; see the -i option below.

# multipart/alternative

This message type can be used to provide alternative representations of the same file (e.g. plain text and HTML), in which case the mail client can show the one it supports. See also the  $-\mathbf{a}$  option below.

Files can be of any MIME type and can be attached using several encoding types:

- Files of type text/\* and those that are known to be (mostly) ASCII-only, like e.g. many script types, will be attached using quoted-printable encoding by default (but see also the -m and -i options below). Note however, that this is only done for readability, and that mailatt's implementation of this encoding is binary-safe.
- Binary files (*i.e.* files having MIME types other than *text/\**) will be attached using base64 encoding by default (but see the **-q** option below).
- Files of type *message*/\* or *multipart*/\* will always be attached using 8bit–encoding, because of requirements imposed by RFC 2045.

Is is usually not necessary to specify the encoding, as **mailatt** has got sensible defaults. Specifying the character set however, is often necessary if a text is not clean 7-bit ASCII (see **-C** below).

If the host system has an  $\mathbf{md5}(1)$  or  $\mathbf{md5sum}(1)$  program, a Content-MD5 header will be added for all ascii and binary attachments to ensure data integrity to some extent. Attachments of types message/\* or multipart/\* will never have any Content-MD5 header, since RFC 1864 disallows it. See also the  $-\mathbf{D}$  option.

# **OPTIONS**

# -C charset

This option may be used multiple times, and in any position on the commandline. It specifies the character set to be used for all subsequent attachments and header lines. If unspecified, US-ASCII is used. See the EXAMPLES below.

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Some often used character sets:

US-ASCII	ISO-8859-6	GB18030	Windows-1251
UTF-8	ISO-8859-7	GB2312	Windows-1252
UTF-16	ISO-8859-8	Shift_JIS	Windows-1253
ISO-8859-1	ISO-8859-9	KOI8-R	Windows-1254
ISO-8859-2	ISO-8859-15	KOI8-U	Windows-1255
ISO-8859-3	EUC-JP	Big5	Windows-1256
ISO-8859-4	EUC-KR	Windows-874	Windows-1257
ISO-8859-5	EUC-CN	Windows-1250	Windows-1258

-D Suppress sending a Content-MD5 header line. This prevents mail clients from checking the file checksums, which may be useful in case problems are encountered.

-F Specifies that the first attachment must be attached with the **format=flowed** parameter. This signals to e-mail clients that the text may be flowed by paragraph and quotations may be rendered in a more legible way, e.g. with quote bars. This also prevents incorrect parsing of > characters at the start of lines.

This is probably only useful in combination with **-i** and a *text/plain* attachment.

Use this option for best legibility, and if preservation of the formatting is of less concern. Not using this option will preserve formatting, possibly at the expense of legibility.

See also -i.

### -H headerline

Specifies a line to add to the mail header. This option can be used multiple times. Do not end the line with a newline character.

-I This option is nearly identical to -i, but uses the "old" behavior, which is to include a filename for all MIME parts, even those that are attached using Content-Disposition: inline.

**Warning**: not all e-mail clients support this. This option is provided only for backward-compatibility. The use of this option is therefore discouraged; use  $-\mathbf{i}$  instead.

### -M mime-type

Specifies the MIME type to be used for the next file on the commandline. If not specified, the MIME type is inferred from the filename extension.

# -R *addr1*[,*addr2*...]

Specify Reply-To: addresses for the e-mail. See -r for allowed formats.

- -V For debugging purposes only. The name of each file will be reported on *stderr* when it is attached.
- -a Use multipart/alternative for the mail message instead of the default multipart/mixed. All message parts will automatically be included with Content-Disposition: inline, regardless of any
   -i option. Note that the simplest representation of the mail (probably text/plain) should be attached first.

### -b addr1[,addr2...]

Specify Bcc: addresses for the e-mail. See -r for allowed formats.

### -c *addr1*[,*addr2*...]

Specify Cc: addresses for the e-mail. See -r for allowed formats.

-d For debugging purposes only. The composed mail will be printed on *stdout* instead of actually being sent. This option is overruled by the MAILATT\_DEBUG variable (see below).

### -f addr1

Specify From: address for the e-mail.

Print help (usage information) and exit.

-i Specifies that the first file on the commandline must be included with a Content-Disposition: inline header, and without a filename. If this option is not specified, all parts of the message will be included with Content-Disposition: attachment and a specified filename.

If the first attachment is of type *text/\** and the characterset is US-ASCII, then it will be attached using 7bit–encoding.

Note that it is likely that e-mail clients will support this format only for files of type text/\*.

The option  $-\mathbf{a}$  takes precedence over  $-\mathbf{i}$ .

-m This option may be used multiple times, and in any position on the commandline. It indicates that base64 should be used as Content-Transfer-Encoding for all subsequent attachments and header lines. This is the default if unspecified.

This option is called **-m** as a reference to **mmencode**(1). However, **mailatt** does not require any external **mmencode**(1) program; instead, it handles the encoding itself.

```
See also -q.
```

-q This option may be used multiple times, and in any position on the commandline. It indicates that quoted-printable should be used as Content-Transfer-Encoding for all subsequent attachments and header lines.

Although quoted-printable is normally only used for ASCII attachments, **mailatt** also supports this encoding for binaries.

```
See also -m.
```

```
-r addr1[,addr2...]
```

Specify recipients (To: addresses) for the e-mail.

Each one of the addresses may be specified in one of the following formats:

```
user

<user>

<user@domain>

name <user>

name <user@domain>
```

The first two forms will be expanded (using the system *passwd* file or (if configured) the NIS *passwd* map) to the form "name <user>", which the mailer system may further expand to "name <user@domain>".

The **-r** option is strictly speaking not mandatory for **mailatt**, but it is for programs like **sendmail** (1).

# -s subject

Specify subject for the e-mail.

-u This option may be used multiple times, and in any position on the commandline. It indicates that uuencode should be used as Content-Transfer-Encoding for all subsequent attachments (header lines will be base64-encoded).

mailatt does not require any external uuencode (1) program; instead, it handles the encoding itself.

**Warning**: not all e-mail clients support this. The use of this option is therefore discouraged; use **-m** instead.

See also  $-\mathbf{m}$  and  $-\mathbf{q}$ .

- -v Display version information and exit.
- Indicates that no more options follow; all the remaining commandline arguments are to be interpreted
  as filenames.

```
file1 [ file2... ]
```

Indicate which files should be attached to the mail. Depending on the "extension" (*i.e.* the filename part following a . in the filename), a corresponding MIME type will be selected from a built-in list.

If the file type is not known or the extension is empty, the file will be sent as type *application/octet-stream*, unless the **-a** or **-i** option requires it to be included inline. In that case, the MIME type will be reported as *text/plain*.

At most one of the filenames may be specified as a single – (minus), which will cause **mailatt** to read a document from stdin. If entered from the terminal, such a document should be ended with the *eof*-character (usually CTRL-D). **mailatt** will assume that this document is of type *text/plain*, unless indicated otherwise with –**M**.

#### **EXAMPLES**

Send two \*.pdf files to two recipients (local users):

Send a file fragment, carbon copy to the sysadmin:

```
mailatt -s'Fragment 2/10' -r admin -c bofh dumps.tar.gz.xab
```

Send a formatted file, preceded by an introductory message, typed interactively:

```
mailatt -s manual -r beatrix@drakensteyn.nl -i - sendmail.pdf
Good morning Your Royal Highness,
Attached you will find the sendmail manual I promised.
^D
```

Send a formatted mail in HTML format, specifying a From: address:

Send a message in both plain text and HTML format:

```
mailatt -a -r constantijn,friso -s 'Greetings!' msg.txt msg.html
```

Attach a file of unknown MIME type using quoted-printable encoding (e.g. to increase readability). This overrules the default encoding (base64) that is used for attachments of unknown MIME type coming *before* the  $-\mathbf{q}$  option.

```
mailatt -r christina -s "config files" -i body.txt
    /etc/sendmail.cf -q /etc/hosts
```

Send a mail using the Cyrillic character set to multiple addresses:

```
mailatt -r 'Mr. Putin <putin@kremlin.ru>,root'
-s 'Important letter' -i -C ISO-8859-5 letter.txt
```

Add custom lines to the mail header:

```
mailatt -r 'Benedictus_XVI@vatican.va' -s 'Oldest translation' -i -H "X-Year-Finished: 1637" message.txt SV.pdf
```

Add a Sender: line to the mail header:

Send a mail with mixed character sets:

```
mailatt -C ISO-8859-15 -r 'François <francois@nimporte.ou>' -s 'Allô' -C UTF-8 -i message.html -C windows-1253 m.txt
```

Send a mail with specified MIME types:

```
mailatt -r amalia -i greeting.txt
          -M application/x-rpm mailcap-2.1.31.noarch.rpm
          -M audio/x-pn-realaudio recording.rpm
```

Specify the MIME type of an attachment fed via stdin:

#### **ENVIRONMENT**

#### MAILATT DEBUG

For debugging purposes only. If set and not  $\mathbf{0}$ , this causes the composed mail to be printed on *stdout* instead of actually being sent. This behavior is identical to adding the  $-\mathbf{d}$  option.

Setting this variable to 0 disables the debugging behavior. This takes precedence over adding -d.

### **BUGS and WARNINGS**

This script aims to run out of the box in **ksh**(1) and **bash**(1) on a wide variety of Un\*x-like platforms (such as AIX, HP-UX, SunOS, Solaris, Darwin, FreeBSD and Linux (SuSE, Debian, CentOS)), but has not yet been tested on all of them.

RFC 5322 warns that lines of characters in the body MUST be limited to 998 characters. If a file of type *message/\** or *multipart/\** is attached, this is not enforced, since the file is attached as-is.

### **SEE ALSO**

```
mail (1), mailx (1), md5 (1), md5sum (1), sendmail (8).RFC 822: Format of Internet Text MessagesRFC 1049: The Content-Type Header Field for Internet Messages
```

RFC 1864: The Content–MD5 Header Field

RFC 2045: MIME: Format of Internet Message Bodies

RFC 2046: MIME: Media Types

RFC 2047: MIME: Message Header Extensions for Non-ASCII Text

RFC 2183: The Content-Disposition Header Field

RFC 2387: The multipart/related Content-Type

RFC 2392: Content-ID and Message-ID URLs

RFC 4648: The Base16, Base32, and Base64 Data Encodings

RFC 5322: Internet Message Format

### VERSION

This manual pertains to mailatt version 1.27.4.

# **AUTHOR and COPYRIGHT**

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