# Package 'mailR'

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Type Package

Title Generate mails and send them via sendmail

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**Depends** R (>= 2.9.0),methods

**Description** You can use this package to generate the console commands to send mail with the sendmail command line tool. Digital encryption via OpenPGP is also supported, signatures don't work yet. You need a working setup of the required tools, namely postfix/sendmail, qprint and GnuPG, for this package to be really useful. It was originally inspired by the need of the C3S project (https://C3S.cc) for a mail interface to R. Note that mailR is in its early stages and most likely not ready for professional use!

License GPL (>= 3)

**Encoding** UTF-8

LazyLoad yes

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Collate '00\_internal\_functions.R' '01\_class\_01\_email.R' '02\_method\_01\_show.R' 'genMail.R' 'mail.R' 'mailR-package.R' 'mailx.R' 'qprint.R'

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mailR-package The mailR Package

#### Description

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#### Details

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Version:	0.02-1
Date:	2014-05-31
Depends:	R (>= 2.9.0), methods
Encoding:	UTF-8
License:	GPL (>= 3)
LazyLoad:	yes
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You can use this package to generate the console commands to send mail with the sendmail command line tool. Digital encryption via OpenPGP is also supported, signatures don't work yet. You need a working setup of the required tools, namely postfix/sendmail, qprint and GnuPG, for this package to be really useful. It was originally inspired by the need of the C3S project (https://C3S.cc) for a mail interface to R. Note that mailR is in its early stages and most likely not ready for professional use!

#### Author(s)

Meik Michalke

email,-class Class email

#### Description

This class is used as a container for e-mails.

#### genMail

#### Details

You should use the constructor function genMail to generate email objects.

#### Slots

body Character string, the actual mail body.

- subject Character string, subject of e-mail.
- to Character string, mail address of the recepient.
- from Character string, mail address of the sender.
- bcc Character string, mail address for blind carbon copies.
- replyto Character string, mail address to be used for replies.
- OpenPGPKeyFrom Character string, OpenPGP key ID of the sender, used for signing the message.
- OpenPGPKeyTo Character string, OpenPGP key ID of the recepient, used for encrypting the message.
- boundaryEncrypted Character string, MIME boundary used for the encrypted parts. If not set, a random boundary will be generated automatically.
- boundaryPlain Character string, MIME boundary used inside the plain message. If not set, a random boundary will be generated automatically.
- charset Character string, character encoding of the plain message body. Defaults to "us-ascii".
- ContentTransferEncoding Character string, set the transfer encoding for the message body, e.g., "7bit" or "quoted-printable" (default).

#### See Also

genMail

genMail

Generate objects of class email

#### Description

Contructor function to generate email messages to be used by mail.

#### Usage

```
genMail(body, subject, to, from = "", bcc = "", replyto = "",
OpenPGPKeyFrom = "", OpenPGPKeyTo = "",
boundaryEncrypted = MIMEboundary(), boundaryPlain = MIMEboundary(),
charset = "us-ascii", ContentTransferEncoding = "quoted-printable",
encodeQP = TRUE)
```

# Arguments

body	Character string, the actual mail body.				
subject	Character string, subject of e-mail.				
to	Character string, mail address of the recepient.				
from	Character string, mail address of the sender.				
bcc	Character string, mail address for blind carbon copies.				
replyto	Character string, mail address to be used for replies.				
OpenPGPKeyFrom	Character string, OpenPGP key ID of the sender, used for signing the message.				
OpenPGPKeyTo	Character string, OpenPGP key ID of the recepient, used for encrypting the message.				
boundaryEncrypted					
	Character string, MIME boundary used for the encrypted parts. If not set, a random boundary will be generated automatically.				
boundaryPlain	Character string, MIME boundary used inside the plain message. If not set, a random boundary will be generated automatically.				
charset	Character string, charater encoding of the plain message body. Defaults to "us-ascii".				
ContentTransferEncoding					
	Character string, set the transfer encoding for the message body, e.g., "7bit" or "quoted-printable" (default).				
encodeQP	Logical, whether the message body should automatically be encoded quoted- printable, by calling <b>qprint</b> with default parameters.				

# Value

An object of class email.

# See Also

mail, qprint, email

mail

Send mail via sendmail

# Description

This method generates a redy-to-use console command to send mails using the sendmail command line tool.

mail

#### Usage

```
mail(obj, options = "-t -oi", messageOnly = FALSE, encrypt = TRUE,
  sign = TRUE, keyring = NULL, micalg = "pgp-sha1")
## S4 method for signature 'email'
mail(obj, options = "-t -oi", messageOnly = FALSE,
  encrypt = TRUE, sign = TRUE, keyring = NULL, micalg = "pgp-sha1")
```

#### Arguments

An object of class email.
Character string, options which will be passed to sendmail.
Logical, if FALSE, omits the senmail command line part and prints only the mail headers and message
Logical, if TRUE tries to encrypt the message with GnuPG. Only effective if the email object also contains at least one key ID in OpenPGPKeyTo.
Logical, if TRUE tries to sign the message with GnuPG. Only effective if the email object also contains a key ID in OpenPGPKeyFrom.
Character string, optional path to an additional keyring to look for needed keys.
Character string, possibility to override the default "micalg" argument for signed messages if another algorithm was used.

#### Details

You need to have sendmail installed and set up correctly for the mail delivery to work. Setup instructions on sendmail are beyond the scope of this documentation.

#### Value

A character string, which can be fed to system() to actually send the mail.

#### **Encryption/Signatures**

To be able to use the signature and encryption features, you must have a working GnuPG setup. All keys called for must be present in your keyrings. If you set encryption=TRUE and provide a massing ir invalid key ID in the email object, the mail will not be generated and an error is given.

#### See Also

genMail to generate message objects, email

#### Examples

```
exampleMail <- genMail(
  to="foo@example.com",
  subject="this is a test!",
  body="hi,\n\ni'm just testing.\n\nbye\n",
  from="me@example.com")</pre>
```

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```
# inspect the generated commands
cat(mail(exampleMail))
## Not run:
# evaluate commands, i.e., send the mail
system(mail(exampleMail), intern=TRUE)
## End(Not run)
```

mail

#### Send mail via mailx

#### Description

This simple function generates a redy-to-use console command to send mails using the mailx command line tool.

#### Usage

```
mail(to, subject, message, from = NULL, bcc = NULL,
replyto = NULL)
```

#### Arguments

to	Character string, mail address of the recepient.
subject	Character string, subject of the message.
message	Character string, the actual mail body.
from	Character string, mail address of the sender.
bcc	Character string, mail address for blind carbon copies.
replyto	Character string, mail address to be used for replies.

#### Details

You need to have mailx installed and set up correctly for the mail delivery to work. Setup instructions on mailx are beyond the scope of this documentation.

#### Value

A character string, which can be fed to system() to actually send the mail.

## Note

Try the heirloom-mailx package instead of bsd-mailx on Debian based distros.

mail

#### mailx

#### Examples

```
exampleMail <- mail("foo@example.com", "this is a test!",
    "hi,\n\ni'm just testing.\n\nbye\n", "me@example.com")
# inspect the generated commands
cat(exampleMail)
## Not run:
# evaluate commands, i.e., send the mail
system(exampleMail, intern=TRUE)
## End(Not run)
```

mailx

Send mail via mailx

#### Description

This simple function generates a redy-to-use console command to send mails using the mailx command line tool.

#### Usage

mailx(to, subject, message, from = NULL, bcc = NULL, replyto = NULL)

#### Arguments

to	Character string, mail address of the recepient.
subject	Character string, subject of the message.
message	Character string, the actual mail body.
from	Character string, mail address of the sender.
bcc	Character string, mail address for blind carbon copies.
replyto	Character string, mail address to be used for replies.

# Details

You need to have mailx installed and set up correctly for the mail delivery to work. Setup instructions on mailx are beyond the scope of this documentation.

#### Value

A character string, which can be fed to system() to actually send the mail.

#### Note

Try the heirloom-mailx package instead of bsd-mailx on Debian based distros.

#### Examples

```
exampleMail <- mailx("foo@example.com", "this is a test!",
    "hi,\n\ni'm just testing.\n\nbye\n", "me@example.com")
# inspect the generated commands
cat(exampleMail)
## Not run:
# evaluate commands, i.e., send the mail
system(exampleMail, intern=TRUE)
```

## End(Not run)

qprint

Quoted-printable encoding/decoding of text

#### Description

This function is a simple wrapper for the qprint[1] command line tool to encode/decode messages in quoted-printable format. qprint must be installed for this to work.

#### Usage

qprint(text, encode = TRUE, qprint = Sys.which("qprint"), adjustLF = TRUE)

#### Arguments

text	Character string, the text to be encoded/decoded.
encode	Logical, if FALSE will run in decoding mode.
qprint	Character string, path to the qprint executable.
adjustLF	Logical, if TRUE, " $r$ " will be replaced with " $n$ " for convenience (e.g., see output by using cat()).

#### Value

Character string of the processed text.

show, email-method Show method for S4 objects of class email

#### Description

Used to display objects of class email.

#### Usage

```
## S4 method for signature 'email'
show(object)
```

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# show,email-method

# Arguments

object An object of class email

# See Also

email

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