# Package 'emayili'

June 24, 2024

```
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Title Send Email Messages
Version 0.9.1
Description A light, simple tool for sending emails with minimal dependencies.
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BugReports https://github.com/datawookie/emayili/issues
License GPL-3
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     rmarkdown, rvest, stringi, stringr, tidyr, urltools, xfun, xml2
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Author Andrew B. Collier [aut, cre, cph],
     Matt Dennis [ctb],
     Antoine Bichat [ctb] (<a href="https://orcid.org/0000-0001-6599-7081">https://orcid.org/0000-0001-6599-7081</a>),
     Daniel Fahey [ctb],
     Johann R. Kleinbub [ctb],
     Panagiotis Moulos [ctb],
     Swechhya Bista [ctb],
     Colin Fay [ctb] (<https://orcid.org/0000-0001-7343-1846>)
Maintainer Andrew B. Collier <andrew.b.collier@gmail.com>
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address 3

address Email Address

## Description

Create an address object which represents an email address.

## Usage

```
address(
  email = NA,
  display = NA,
  local = NA,
  domain = NA,
  normalise = TRUE,
  validate = FALSE
)
```

## **Arguments**

email	Email address.
display	Display name.
local	Local part of email address.
domain	Domain part of email address.
normalise	Whether to try to normalise address to RFC-5321 requirements.
validate	Whether to validate the address.

## Value

An address object, representing an email address.

```
address("gerry@gmail.com")
address("gerry@gmail.com", "Gerald")
address("gerry@gmail.com", "Gerald Durrell")
# Display name in "Last, First" format.
address("gerry@gmail.com", "Durrell, Gerald")
# Display name contains non-ASCII characters.
address("hans@gmail.com", "Hansjörg Müller")
```

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addresses

Add address fields to message

## Description

Add address fields to message

## Usage

```
to(msg, ..., append = TRUE)

cc(msg, ..., append = TRUE)

bcc(msg, ..., append = TRUE)

from(msg, addr = NULL)

reply(msg, addr = NULL)

return_path(msg, addr = NULL)

sender(msg, addr = NULL)
```

#### **Arguments**

msg A message object.

... Addresses.

append Whether to append or replace addresses.

addr Single address.

#### Value

A message object.

```
# Populating the To field.
msg <- envelope()
msg %>% to("bob@gmail.com, alice@yahoo.com")
msg %>% to("bob@gmail.com", "alice@yahoo.com")
msg %>% to(c("bob@gmail.com", "alice@yahoo.com"))

# Populating the Cc field.
msg <- envelope()
msg %>% cc("bob@gmail.com, alice@yahoo.com")
msg %>% cc("bob@gmail.com", "alice@yahoo.com")
msg %>% cc(c("bob@gmail.com", "alice@yahoo.com"))
```

after.envelope 5

```
# Populating the Bcc field.
msg <- envelope()</pre>
msg %>% bcc("bob@gmail.com, alice@yahoo.com")
msg %>% bcc("bob@gmail.com", "alice@yahoo.com")
msg %>% bcc(c("bob@gmail.com", "alice@yahoo.com"))
msg <- envelope()</pre>
# Populating the From field.
msg %>% from("craig@gmail.com")
# Populating the Reply-To field.
msg <- envelope()</pre>
msg %>% reply("gerry@gmail.com")
# Populating the Return-Path field.
msg <- envelope()</pre>
msg %>% return_path("bounced-mail@devnull.org")
# Populating the Sender field.
msg <- envelope()</pre>
msg %>% sender("on_behalf_of@gmail.com")
```

after.envelope

Append children to message

## **Description**

Append children to message

## Usage

```
## S3 method for class 'envelope'
after(x, child)
```

## **Arguments**

x Message object

child A child to be appended

6 as.character.address

as.address

Create an address object

## **Description**

Create an address object

#### Usage

```
as.address(addr, validate = FALSE)
```

## **Arguments**

addr An email address.

validate Whether to validate the address.

#### Value

A list of address objects.

## **Examples**

```
as.address("gerry@gmail.com")
as.address("Gerald <gerry@gmail.com>")
as.address(c("Gerald <gerry@gmail.com>", "alice@yahoo.com", "jim@aol.com"))
as.address("Gerald <gerry@gmail.com>, alice@yahoo.com, jim@aol.com")
as.address("Durrell, Gerald <gerry@gmail.com>")
```

## **Description**

If display name is specified as "Last, First" then the display name will be quoted.

## Usage

```
## S3 method for class 'address'
as.character(x, ...)
```

## **Arguments**

x An address object.

... Further arguments passed to or from other methods.

#### Value

A character vector.

as.character.envelope 7

```
as.character.envelope Create formatted message.
```

## **Description**

Accepts a message object and formats it as a MIME document.

## Usage

```
## S3 method for class 'envelope'
as.character(x, ..., details = TRUE, encode = FALSE)
```

## Arguments

x A message object.

... Further arguments passed to or from other methods.

details Whether or not to display full message content.

encode Whether to encode headers.

#### Value

A formatted message object.

```
as.character.header Create formatted header.
```

## Description

Accepts a header object and formats it as a header field.

## Usage

```
## S3 method for class 'header'
as.character(x, width = 30, ...)
```

## **Arguments**

x A header object.

width The width of the head name field.

... Further arguments passed to or from other methods.

## Value

A formatted header field.

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as.character.MIME

Convert MIME object to character vector

## **Description**

Convert MIME object to character vector

## Usage

```
## S3 method for class 'MIME'
as.character(x, ...)
```

#### **Arguments**

x MIME object

... Further arguments passed to or from other methods.

attachment

Add attachments to a message object

## **Description**

Add attachments to a message object

#### Usage

```
attachment(
  msg,
  path,
  name = NA,
  type = NA,
  cid = NA,
  disposition = "attachment"
)
```

## **Arguments**

msg A message object.
path Path to file.

name Name to be used for attachment (defaults to base name of path).

type MIME type or NA, which will result in a guess based on file extension.

cid Content-ID or NA.

disposition How is attachment to be presented ("inline" or "attachment")?

c.address 9

## Value

A message object.

#### **Examples**

```
path_mtcars <- tempfile(fileext = ".csv")
path_scatter <- tempfile(fileext = ".png")
path_cats <- system.file("cats.jpg", package = "emayili")

write.csv(mtcars, path_mtcars)

png(path_scatter)
plot(1:10)
dev.off()

msg <- envelope() %>%
    attachment(path_mtcars) %>%
    # This attachment will have file name "cats.jpg".
    attachment(path_cats, name = "cats.jpg", type = "image/jpeg") %>%
    attachment(path_scatter, cid = "scatter")
file.remove(path_scatter, path_mtcars)
```

c.address

Concatenate address objects

## **Description**

Concatenate address objects

## Usage

```
## S3 method for class 'address' c(...)
```

#### **Arguments**

... Address objects to be concatenated.

#### Value

An address object.

```
gerry <- as.address("Gerald <gerry@gmail.com>")
alice <- address("alice@yahoo.com")
jim <- address("jim@aol.com", "Jim")
c(gerry, alice)
c(gerry, c(alice, jim))</pre>
```

10 comments

cleave

Split a compound address object

## Description

Split a compound address object

## Usage

```
cleave(addr)
```

## **Arguments**

addr

An address object.

## Value

A list of address objects, each of which contains only a single address.

## **Examples**

```
cleave(as.address(c("foo@yahoo.com", "bar@yahoo.com")))
```

comments

Add or query comments of message.

## Description

Add or query comments of message.

## Usage

```
comments(msg, comments = NULL)
```

## **Arguments**

msg

A message object.

comments

Comments for the message.

## Value

A message object or the comments of the message object (if comments is NULL).

## See Also

subject

compare 11

## **Examples**

```
# Create a message and set the comments.
msg <- envelope() %>% comments("This is a comment")
# Retrieve the comments for a message.
comments(msg)
```

compare

Compare vectors

## **Description**

Returns TRUE wherever elements are the same (including NA), and FALSE everywhere else.

## Usage

```
compare(lhs, rhs)
```

## **Arguments**

1hs LHS of operation.rhs RHS of operation.

## Value

A Boolean value.

compliant

Tests whether an email address is syntactically correct

## **Description**

Checks whether an email address conforms to the syntax rules.

## Usage

```
compliant(addr, error = FALSE)
```

## **Arguments**

addr An email address.

error Whether to create an error if not compliant.

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## **Details**

An email address may take either of the following forms:

- local@domain or
- Display Name <local@domain>.

#### Value

A Boolean.

## **Examples**

```
compliant("alice@example.com")
compliant("alice?example.com")
```

cutoff

Set or query message expiry or reply-by time

## **Description**

Functions to specify the time at which a message expires or by which a reply is requested.

#### Usage

```
expires(msg, datetime = NULL, tz = "")
replyby(msg, datetime = NULL, tz = "")
```

## **Arguments**

msg A message object. datetime Date and time.

tz A character string specifying the time zone.

#### **Details**

Manipulate the Expires and Reply-By fields as specified in RFC 2156.

## Value

A message object.

```
envelope() %>%
   expires("2030-01-01 13:25:00", "UTC")
envelope() %>%
   replyby("2021-12-25 06:00:00", "GMT")
```

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display

Extract display name

## Description

Extracts the display name from an email address.

## Usage

```
display(addr)
```

## Arguments

addr

An address object.

#### Value

The display name or NA.

## **Examples**

```
gerry <- as.address("Gerald <gerry@gmail.com>")
display(gerry)
```

domain

Extract domain of email address

## Description

Extract domain of email address

## Usage

```
domain(addr)
```

## **Arguments**

addr

An address object.

## Value

A character vector.

```
domain("alice@example.com")
```

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	<b>.</b>	
encrypt	Encrypt or sign a message	

## **Description**

Specify whether the message should be encrypted, signed or have a public key attached.

#### Usage

```
encrypt(msg, encrypt = TRUE, sign = TRUE, public_key = TRUE)
signature(msg, public_key = TRUE)
```

#### **Arguments**

msg A message object.

encrypt Whether to encrypt the mess:

encrypt Whether to encrypt the message. If TRUE then the entire message will be en-

crypted using the private key of the sender.

sign Whether to sign the message. If TRUE then the entire message will be signed

using the private key of the sender.

public\_key Whether to attach a public key. If TRUE then the public key of the sender will be

attached.

#### **Details**

The signature() function will add a digital signature to a message. It will also optionally include a copy of the sender's public key.

The encrypt() function will encrypt the contents of a message using the public key(s) of the recipient(s). It can also add a digital signature to the message (this is the default behaviour) and include a copy of the sender's public key. Signing happens *before* encryption, so the digital signature will only be accessible once the message has been decrypted. If a recipient no longer has access to their private key or their email client is unable to decrypt the message then they will not be able to access the message contents.

#### Value

A message object.

```
## Not run:
msg <- envelope(
   from = "flotilla@kriegsmarine.gov",
   to = "schunk@u-boat.com",
   subject = "Top Secret Message",
   text = "Immediate readiness. There are indications that the invasion has begun."
)</pre>
```

envelope 15

```
# Encrypt and sign the message.
msg %>% encrypt()
# Only encrypt the message.
msg %>% encrypt(sign = FALSE)
# Only sign the message.
msg %>% signature()
msg %>% encrypt(encrypt = FALSE)
## End(Not run)
```

envelope

Create a message.

## Description

Create a message.

## Usage

```
envelope(
  to = NULL,
  from = NULL,
  cc = NULL,
 bcc = NULL,
 reply = NULL,
  subject = NULL,
  id = NULL,
  importance = NULL,
 priority = NULL,
  text = NULL,
 html = NULL,
 encrypt = FALSE,
  sign = FALSE,
 public_key = FALSE
)
```

## Arguments

```
See to().
to
                See from().
from
                See cc().
СС
bcc
                See bcc().
                See reply().
reply
                See subject().
subject
id
                See id().
importance
                See importance().
```

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priority	See priority().
text	See text().
html	See html().
encrypt	Whether to encrypt the message. If TRUE then the entire message will be encrypted using the private key of the sender.
sign	Whether to sign the message. If TRUE then the entire message will be signed using the private key of the sender.
public_key	Whether to attach a public key. If TRUE then the public key of the sender will be attached.

#### Value

A message object.

#### See Also

```
subject(), from(), to(), cc(), bcc(), reply() and encrypt().
```

## **Examples**

```
# Create an (empty) message object.
#
msg <- envelope()

# Create a complete message object, specifying all available fields.
#
envelope(
    to = "bob@gmail.com",
    from = "craig@gmail.com",
    cc = "alex@gmail.com",
    bcc = "shannon@gmail.com",
    reply = "craig@yahoo.com",
    importance = "high",
    priority = "urgent",
    subject = "Hiya!",
    text = "Hi Bob, how are you?"
)</pre>
```

format.address

Encode email addresses in a common format

#### **Description**

Encode email addresses in a common format

#### Usage

```
## S3 method for class 'address'
format(x, quote = TRUE, encode = FALSE, ...)
```

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## **Arguments**

x An address object.

quote Whether to quote display name (only relevant if display name is given in "Last,

First" format).

encode Whether to encode headers.

... Further arguments passed to or from other methods.

#### Value

A character vector.

html

Add an HTML body to a message object.

## **Description**

Add an HTML body to a message object.

#### Usage

```
html(
  msg,
  content,
  disposition = "inline",
  charset = "utf-8",
  encoding = NA,
  css_files = c(),
  language = FALSE,
  interpolate = TRUE,
  .open = "{{",
   .close = "}}",
  .envir = NULL
)
```

#### **Arguments**

msg A message object.

content A string of message content.

disposition Should the content be displayed inline or as an attachment? Valid options are

"inline" and "attachment". If set to NA then will guess appropriate value.

charset What character set is used. Most often either "UTF-8" or "ISO-8859-1".

encoding How content is transformed to ASCII. Options are "7bit", "quoted-printable"

and "base64". Use NA or NULL for no (or "identity") encoding.

css\_files Extra CSS files.

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will attempt to auto-detect language. Otherwise will use the specified language.

interpolate Whether or not to interpolate into input using glue.

. open The opening delimiter.. close The closing delimiter.

.envir Environment used for glue interpolation. Defaults to parent.frame().

#### Value

A message object.

#### See Also

```
text, render
```

## **Examples**

```
# Inline HTML message.
envelope() %>% html("<b>Hello!</b>")

# Read HTML message from a file.
htmlfile <- tempfile(fileext = ".html")
cat("<p>Hello!\n", file = htmlfile)
envelope() %>% html(htmlfile)

# You can pass a vector of character. Components will be separated by a
# "\n".
envelope() %>% html(c("<b>Hello</b>", "World!"))

# You can also pass a tagList from {htmltools}.
if (requireNamespace("htmltools", quietly = TRUE)) {
   library(htmltools)
   envelope() %>% html(tagList(h2("Hello"), p("World!")))
}
```

id

Set message ID.

## **Description**

Set message ID.

## Usage

```
id(msg, id)
```

keywords 19

## **Arguments**

msg A message object.

id An ID for the message.

#### Value

A message object.

## **Examples**

```
# Create a message and set the ID
msg <- envelope() %>% id("1234567890.123456@example.com")
# Create a message with specified ID
msg <- envelope(id="1234567890.123456@example.com")</pre>
```

keywords

Add or query keywords of message.

## **Description**

Add or query keywords of message.

## Usage

```
keywords(msg, ..., append = FALSE)
```

## Arguments

msg A message object.

... Keywords.

append Whether to append or replace keywords.

#### Value

A message object or the comments of the message object (if comments is NULL).

## See Also

```
to, from, cc, bcc and reply
```

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## **Examples**

```
# Create a message and set the keywords.
envelope() %>% keywords("newsletter, marketing")
envelope() %>% keywords("newsletter", "marketing")
envelope() %>% keywords(c("newsletter", "marketing"))

# Retrieve the keywords for a message.
msg <- envelope() %>% keywords("newsletter, marketing")
keywords(msg)
```

length.address

Length of address object

## Description

Length of address object

## Usage

```
## S3 method for class 'address'
length(x)
```

## **Arguments**

Х

An address object.

## Value

A character vector.

local

Extract local part of email address

## **Description**

Extract local part of email address

## Usage

```
local(addr)
```

## **Arguments**

addr

An address object.

message\_id 21

## Value

A character vector.

## **Examples**

```
local("alice@example.com")
```

message\_id

Create a message ID

## Description

Create a message ID

## Usage

```
message_id(domain = "mail.gmail.com")
```

## Arguments

domain

Originating domain.

## Value

A message ID.

## **Examples**

```
message_id()
message_id("example.com")
```

mime-parameters

Parameters for MIME functions

## Description

These are parameters which occur commonly across functions for components of a MIME document.

22 normalise

## **Arguments**

content A string of message content.

disposition Should the content be displayed inline or as an attachment? Valid options are

"inline" and "attachment". If set to NA then will guess appropriate value.

charset What character set is used. Most often either "UTF-8" or "ISO-8859-1".

encoding How content is transformed to ASCII. Options are "7bit", "quoted-printable"

and "base64". Use NA or NULL for no (or "identity") encoding.

language Language of content. If FALSE then will not include language field. If TRUE then

will attempt to auto-detect language. Otherwise will use the specified language.

description Description of content.

name Name used when downloading file.

filename Path to a file.
boundary Boundary string.

type The MIME type of the content. children List of child MIME objects.

interpolate Whether or not to interpolate into input using glue.

. open The opening delimiter.. close The closing delimiter.

.envir Environment used for glue interpolation. Defaults to parent.frame().

normalise Normalise email address

#### Description

Ensure that email address is in a standard format.

## Usage

normalise(email)

## **Arguments**

email An email address.

#### **Details**

Performs the following transformations:

- lowercase the domain part
- replace some Unicode characters with compatible equivalents. See Unicode equivalence.

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## Value

An email address.

## **Examples**

```
normalise("bob@GMAIL.COM")
```

parties

Extract sender and recipient(s)

## Description

Extract sender and recipient(s)

## Usage

```
parties(msg)
```

## Arguments

msg

A message object.

## Value

A tibble.

```
msg <- envelope() %>%
  from("Gerald <gerald@gmail.com>") %>%
  to(c("bob@gmail.com", "alice@yahoo.com")) %>%
  cc("Craig < craig@gmail.com>") %>%
  bcc(" Erin <erin@yahoo.co.uk >")

parties(msg)
```

24 precedence

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Add fields for message importance and priority

#### **Description**

Functions to influence message delivery speed and importance.

#### Usage

```
priority(msg, priority = NULL)
importance(msg, importance = NULL)
```

## Arguments

msg A message object.

priority Priority level. One of "non-urgent", "normal", or "urgent".

importance Importance level. One of "low", "normal", or "high".

#### **Details**

The priority() function adds the Priority header field which gives a hint to influence transmission speed and delivery. Valid values are "non-urgent", "normal", and "urgent". The non-standard X-Priority header field is similar, for which valid values are 1 (Highest), 2 (High), 3 (Normal, the default), 4 (Low), and 5 (Lowest).

The importance() function adds the Importance header field, which gives a hint to the message recipient about how important the message is. Does not influence delivery speed.

#### Value

A message object.

```
# How rapidly does the message need to be delivered?
#
envelope() %>%
    subject("Deliver this immediately!") %>%
    priority("urgent")

envelope(priority = "non-urgent") %>%
    subject("No rush with this.")

# How much attention should be paid by recipient?
#
envelope() %>%
    subject("Read this immediately!") %>%
    importance("high")
```

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```
envelope(importance = "low") %>%
  subject("Not important at all. Just delete.")
```

print.address

Print an address object

## Description

If display name is specifed as "Last, First" then the display name will be quoted.

## Usage

```
## S3 method for class 'address'
print(x, ...)
```

## **Arguments**

x An address object.

. . . Further arguments passed to or from other methods.

#### **Examples**

```
gerry <- as.address("gerry@gmail.com")
print(gerry)</pre>
```

print.envelope

Print a message object

## Description

The message body will be printed if details is TRUE or if the envelope\_details option is TRUE.

## Usage

```
## S3 method for class 'envelope'
print(x, details = NA, ...)
```

#### **Arguments**

A message object.

details Whether or not to display full message content.

. . . Further arguments passed to or from other methods.

26 qp

## **Examples**

```
msg <- envelope() %>% text("Hello, World!")
print(msg)
print(msg, details = TRUE)

options(envelope_details = TRUE)
print(msg)
```

qp

Quoted-Printable encoding

## Description

Encode to and decode from Quoted-Printable encoding.

## Usage

```
qp_encode(x, crlf = CRLF)
qp_decode(x)
```

## Arguments

x A string for encoding or decoding.

crlf End-of-line characters.

#### Value

An encoded string for qp\_encode() or a decoded string for qp\_decode().

```
qp_encode("Mieux vaut être seul que mal accompagné.")
qp_decode("Mieux vaut =C3=AAtre seul que mal accompagn=C3=A9.")
```

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raw

Extract raw email address

## **Description**

Strips the display name off an email address (if present).

## Usage

```
raw(addr)
```

## **Arguments**

addr

An address object.

#### Value

A raw email address.

## **Examples**

```
gerry <- as.address("Gerald <gerry@gmail.com>")
raw(gerry)
```

receipt

Request read or delivery receipts

## **Description**

Request the recipient to acknowledge that they have read the message. Inserts MDN (Message Disposition Notification) header entries.

## Usage

```
request_receipt_read(msg, addr = NULL)
request_receipt_delivery(msg, addr = NULL)
```

## **Arguments**

msg A message object.

addr Single address (optional). If address is not specified then will use sender ad-

dress.

## Value

A message object.

28 render

render

Render Markdown into email

## **Description**

Render either Plain Markdown or R Markdown directly into the body of an email.

If input is a file then it will be interpreted as R Markdown it its extension is either "Rmd" or "Rmarkdown". Otherwise it will be processed as Plain Markdown.

## Usage

```
render(
  msg,
  input,
  params = NULL,
  squish = TRUE,
  css_files = c(),
  include_css = c("rmd", "bootstrap"),
  language = FALSE,
  interpolate = TRUE,
  .open = "{{",
  .close = "}}",
  .envir = NULL
)
```

## **Arguments**

A message object.
The input Markdown file to be rendered or a character vector of Markdown text.
A list of named parameters that override custom parameters specified in the YAML front-matter.
Whether to clean up whitespace in rendered document.
Extra CSS files.
Whether to include rendered CSS from various sources ("rmd" — native R Markdown CSS; "bootstrap" — Bootstrap CSS).
Language of content. If FALSE then will not include language field. If TRUE then will attempt to auto-detect language. Otherwise will use the specified language.
Whether or not to interpolate into input using glue.
The opening delimiter.
The closing delimiter.
Environment used for glue interpolation. Defaults to parent.frame().

## Value

A message object.

render 29

#### Plain Markdown

Plain Markdown is processed with commonmark::markdown\_html().

#### R Markdown

R Markdown is processed with rmarkdown::render().

Regardless of what output type is specified in the input file, render() will always use the "html\_document" output format.

Rending an R Markdown document can result in a lot of CSS. When all of the CSS is included in the HTML <head> and sent to GMail it can result in a message which is not correctly displayed inline in the Gmail web client. To get around this you can specify include\_css = FALSE. This will mean that some styling will not be present in the resulting message, but that the message content will be correctly rendered inline.

#### See Also

text, html

```
# Plain Markdown
markdown <- "[This](https://www.google.com) is a link."</pre>
filename <- "message.md"</pre>
# Render from Markdown in character vector.
msg <- envelope() %>% render(markdown)
# Create a file containing Markdown
cat(markdown, file = filename)
# Render from Markdown in file.
msg <- envelope() %>% render(filename)
# Cleanup.
file.remove(filename)
# R Markdown
filename <- "gh-doc.Rmd"</pre>
# Create an Rmd document from template.
rmarkdown::draft(
  filename,
  template = "github_document",
  package = "rmarkdown",
  edit = FALSE
)
# Check for suitable version of Pandoc (https://pandoc.org/).
```

30 response

```
#
# Need to have version 2.0 or greater to support required --quiet option.
#
pandoc <- rmarkdown::find_pandoc()
suitable_pandoc <- !is.null(pandoc$dir) && grepl("^2", pandoc$version)

# Render from Rmd file.
if (suitable_pandoc) {
   msg <- envelope() %>%
      render(filename, include_css = c("rmd", "bootstrap"))
}
# Cleanup.
file.remove(filename)
```

response

Add In-Reply-To and References header fields

#### **Description**

Add In-Reply-To and References header fields

## Usage

```
inreplyto(msg, msgid, subject_prefix = "Re: ")
references(msg, msgid, subject_prefix = "Re: ")
```

#### **Arguments**

msg A message object.

msgid A message ID. This would be the contents of the Message-ID field from another

message.

subject\_prefix Prefix to add to subject. If specified will be prepended onto the Subject field.

Set to NULL if not required.

#### Value

A message object.

```
envelope() %>% inreplyto("<6163c08e.1c69fb81.65b78.183c@mx.google.com>")
# Now for German.
envelope() %>%
   inreplyto("6163c08e.1c69fb81.65b78.183c@mx.google.com", "AW: ")
# And also for Danish, Norwegian and Swedish (but not Finnish!).
envelope() %>%
   references("6163c08e.1c69fb81.65b78.183c@mx.google.com", "SV: ")
```

sensitivity 31

```
# Can reference multiple messages.
envelope() %>%
  references(c(
    "6163c08e.1c69fb81.65b78.183c@mx.google.com",
    "e8e338ff-a05c-4c0f-99f2-0dc8fb72682f@mail.gmail.com"
))
```

sensitivity

Set or query message sensitivity

## Description

Manipulate the Sensitivity field as specified in RFC 2156.

#### Usage

```
sensitivity(msg, sensitivity = NULL)
```

## **Arguments**

msg A message object.

sensitivity Sensitivity level. One of "personal", "private", or "company-confidential".

## Value

A message object.

```
# Not sensitive.
envelope() %>%
    subject("Your daily dose of spam")

# Sensitive personal message.
envelope() %>%
    subject("The results from your test") %>%
    sensitivity("personal")

# Sensitive private message.
envelope() %>%
    subject("Your OTP (don't show this to anybody!") %>%
    sensitivity("private")

# Sensitive business message.
envelope() %>%
    subject("Top Secret Strategy Document") %>%
    sensitivity("company-confidential")
```

server server

server

Create a SMTP server object.

## Description

Create an object which can be used to send messages to an SMTP server.

#### Usage

```
server(
  host,
  port = 25,
  username = NULL,
  password = NULL,
  insecure = FALSE,
  reuse = TRUE,
 helo = NA,
 protocol = NA,
  use\_ssl = NA,
  test = FALSE,
  pause_base = 1,
 max\_times = 5,
)
gmail(username, password, ...)
sendgrid(password, ...)
mailgun(username, password, ...)
sendinblue(username, password, ...)
mailersend(username, password, ...)
mailfence(username, password, ...)
zeptomail(password, ...)
smtpbucket(...)
mailtrap(username, password, sandbox = FALSE, bulk = FALSE, ...)
```

## Arguments

host DNS name or IP address of the SMTP server.

port Port that the SMTP server is listening on.

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Username for SMTP server. username Password for SMTP server or API key. password insecure Whether to ignore SSL issues. Whether the connection to the SMTP server should be left open for reuse. reuse helo The HELO domain name of the sending host. If left as NA then will use local host name. Which protocol (SMTP or SMTPS) to use for communicating with the server. protocol Default will choose appropriate protocol based on port. Whether to use SSL. If not specified then SSL will be used if the port is 465 or use\_ssl 587. This enables SSL on non-standard ports. test Test login to server. Base delay (in seconds) for exponential backoff. See rate\_backoff. pause\_base Maximum number of times to retry. max\_times Additional curl options. See curl::curl\_options() for a list of supported options. sandbox Use email sandbox to test server.

#### **Details**

bulk

These functions return a function that can then be called with a message object. This function mediates the interaction with the Simple Mail Transfer Protocol (SMTP) server.

SMTP is a plain text protocol, which means that it is not secure. The secure variant, SMTPS, comes in two flavours: TLS and StartTLS. With TLS (also called Implicit TLS) the connection with the server is initiated using an Secure Socket Layer (SSL) or Transport Layer Security (TLS) certificate. Such a connection is secure from the start. By contract, a StartTLS connection is initiated in plain text and then upgraded to TLS if possible. By convention TLS operates on port 465 and StartTLS on port 587.

The specifications of an SMTP server are given in an SMTP URL, which takes one of the following forms:

- mail.example.com hostname only
- mail.example.com:587 hostname and port
- smtp://mail.example.com SMTP URL (default port)
- smtps://mail.example.com SMTPS URL (default port)
- smtp://mail.example.com:25 SMTP URL (explicit port)
- smtps://mail.example.com:587 SMTPS URL (explicit port)

Send bulk mail to multiple recipients.

#### Value

A function which is used to send messages to the server.

34 server

#### Gmail

If you're having trouble authenticating with Gmail then you should try the following:

- · enable 2-factor authentication and
- create an app password.

Then use the app password rather than your usual account password.

#### Sendgrid

To use SendGrid you'll need to first create an API key. # nolint Then use the API key as the password.

SendGrid will accept messages on ports 25, 587 and 2525 (using SMTP) as well as 465 (using SMTPS).

#### Mailgun

To use Mailgun you'll need to first register a sender domain. This will then be assigned a username and password.

Mailgun will accept messages on ports 25 and 587 (using SMTP) as well as 465 (using SMTPS).

#### Sendinblue

To use Sendinblue you'll need to first create an account. You'll find your SMTP username and password in the SMTP & API section of your account settings.

## MailerSend

To use MailerSend you'll need to first create an account. You'll find your SMTP username and password under Domains. See How to send emails via SMTP with MailerSend.

Although this is not likely to be a problem in practice, MailerSend insists that all messages have at minimum a valid subject and either text or HTML content.

#### Mailfence

To use Mailfence you'll need to create a premium account.

## ZeptoMail

Zeptomail is an email sending service provided by Zoho Corporation. It is designed primarily for transactional email delivery, which includes emails like password resets, order confirmations, notifications, and other automated, non-marketing communications that websites and applications need to send to their users.

#### **SMTP Bucket**

SMTP Bucket is a fake SMTP server that captures all the messages it receives and makes them available through a website or REST API.

SMTP Bucket is a fake SMTP server that captures all the messages it receives and makes them available through a website or REST API.

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```
# Set parameters for SMTP server (with username and password).
smtp <- server(</pre>
  host = "smtp.gmail.com",
  port = 587,
  username = "bob@gmail.com",
  password = "bd40ef6d4a9413de9c1318a65cbae5d7"
)
# Set parameters for a (fake) testing SMTP server.
# More information about this service can be found at https://www.smtpbucket.com/.
smtp <- server(</pre>
 host = "mail.smtpbucket.com",
 port = 8025
)
# Create a message
msg <- envelope() %>%
  from("bob@gmail.com") %>%
  to("alice@yahoo.com")
# Send message (verbose output from interactions with server)
## Not run:
smtp(msg, verbose = TRUE)
## End(Not run)
# To confirm that the message was sent, go to https://www.smtpbucket.com/ then:
# - fill in "bob@gmail.com" for the Sender field and
# - fill in "alice@yahoo.com" for the Recipient field then
# - press the Search button.
# With explicit HELO domain.
smtp <- server(</pre>
 host = "mail.example.com",
  helo = "client.example.com"
# Set parameters for Gmail SMTP server. The host and port are implicit.
smtp <- gmail(</pre>
  username = "bob@gmail.com",
  password = "bd40ef6d4a9413de9c1318a65cbae5d7"
# Set API key for SendGrid SMTP server.
smtp <- sendgrid(</pre>
  password = "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"
)
```

36 subject

```
# Set username and password for Mailgun SMTP server.
smtp <- mailgun(</pre>
  username = "postmaster@sandbox9ptce35fdf0b31338dec4284eb7aaa59.mailgun.org",
  password = "44d072e7g2b5f3bf23b2b642da0fe3a7-2ac825a1-a5be680a"
)
# Set username and password for Sendinblue SMTP server.
smtp <- sendinblue(</pre>
  username = "bob@gmail.com",
  password = "xsmtpsib-c75cf91323adc53a1747c005447cbc9a893c35888635bb7bef1a624bf773da33"
# Set username and password for MailerSend SMTP server.
smtp <- mailersend(</pre>
  username = "NS_Pf3ALM@gmail.com",
  password = "e5ATWLlTnWWDaKeE"
)
# Set username and password for Mailfence SMTP server.
smtp <- mailfence(</pre>
  username = "bob",
  password = "F!Uosd6xbhSjd%63"
)
# Set password for ZeptoMail SMTP server.
# nolint start
smtp <- zeptomail("yA6KbHsL412mmI8Ns0/fs9iSTj8yG0dYBgfIG0j6Fsv4P2uV32xh8ciEYNY1RkgCC7wRfkgWA==")</pre>
# nolint end
# SMTP Bucket server.
smtp <- smtpbucket()</pre>
# SMTP Bucket server.
smtp <- smtpbucket()</pre>
```

subject

Add or query subject of message.

#### Description

Add or query subject of message.

## Usage

```
subject(
  msg,
  subject = NULL,
  prefix = NA,
  suffix = NA,
```

template 37

```
interpolate = TRUE,
.open = "{{",
.close = "}}",
.envir = NULL
)
```

## **Arguments**

msg A message object.

subject A subject for the message.

prefix A subject prefix. suffix A subject suffix.

interpolate Whether or not to interpolate into input using glue.

. open The opening delimiter.. close The closing delimiter.

.envir Environment used for glue interpolation. Defaults to parent.frame().

#### **Details**

The prefix and suffix can be used to add extra subject abbreviations.

## Value

A message object or the subject of the message object (if subject is NULL).

## See Also

```
to, from, cc, bcc and reply
```

## Examples

```
# Create a message and set the subject
msg <- envelope() %>% subject("Updated report")
# Retrieve the subject for a message
subject(msg)
```

template

Add message body from template

#### **Description**

Variables given as named arguments will override any variables in the environment with the same name.

38 template

#### Usage

```
template(msg, .name, ..., .envir = parent.frame())
```

## **Arguments**

A message object.

A template name. This can be provided as either: (i) the name of a template that's baked into the package, (ii) a relative path or (iii) an absolute path. The paths must be for the directory containing the template files, not the files themselves.

Variables for substitution.

Environment for substitution.

#### **Details**

Will probably not get variables from environment if used as part of a pipeline. In this case might need to use the %|>% (nested pipe) operator.

#### Value

A message object.

```
# Use a builtin template.
envelope() %>%
 template(
    "newsletter",
    title = "A Sample Newsletter",
   articles = list(
      list(
        "title" = "Article (with date)",
        "content" = as.list("Vivamus, justo quisque, sed."),
        "date" = "1 January 2022"
      ),
      list(
        "title" = "Another Article (without date)",
        "content" = as.list("Quam lorem sed metus egestas.")
      )
   )
 )
# Use a custom local template.
## Not run:
envelope() %>%
 template("./templates/custom-template")
## End(Not run)
```

text 39

text

Add a text body to a message.

## Description

Add text/plain content to a message.

## Usage

```
text(
  msg,
  content,
  disposition = "inline",
  charset = "utf-8",
  encoding = "7bit",
  language = FALSE,
  interpolate = TRUE,
  .open = "{{",
   .close = "}}",
  .envir = NULL
)
```

## **Arguments**

msg	A message object.
content	A string of message content.
disposition	Should the content be displayed inline or as an attachment? Valid options are "inline" and "attachment". If set to NA then will guess appropriate value.
charset	What character set is used. Most often either "UTF-8" or "ISO-8859-1".
encoding	How content is transformed to ASCII. Options are "7bit", "quoted-printable" and "base64". Use NA or NULL for no (or "identity") encoding.
language	Language of content. If FALSE then will not include language field. If TRUE then will attempt to auto-detect language. Otherwise will use the specified language.
interpolate	Whether or not to interpolate into input using glue.
.open	The opening delimiter.
.close	The closing delimiter.
.envir	Environment used for glue interpolation. Defaults to parent.frame().

## **Details**

The text/plain format is described in RFC 2646.

Uses glue::glue() to evaluate expressions enclosed in brackets as R code.

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#### Value

A message object.

#### See Also

```
html, render
```

#### **Examples**

```
msg <- envelope() %>% text("Hello!")

# Using {glue} interpolation.
#
name <- "Alice"
msg <- envelope() %>% text("Hello {name}.")

print(msg, details = TRUE)

# Disable {glue} interpolation.
#
msg <- envelope() %>% text("This is a set: {1, 2, 3}.", interpolate = FALSE)
```

validate

Validate email address

## **Description**

Validate email address

## Usage

```
validate(addr, deliverability = TRUE)
```

## Arguments

```
addr An email address.

deliverability Whether to check for deliverability (valid domain).
```

## Value

A logical indicating whether or not the address is valid.

```
# A valid address.
validate("cran-sysadmin@r-project.org")
# An invalid address.
validate("help@this-domain-does-not-exist.com")
```

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