Package ‘emayili’

March 8, 2023

Type   Package
Title  Send Email Messages
Version 0.7.15
Description A light, simple tool for sending emails with minimal dependencies.
URL    https://datawookie.github.io/emayili/
BugReports https://github.com/datawookie/emayili/issues
License GPL-3
Language en-GB
Imports base64enc, commonmark, curl (>= 4.0), digest, dplyr, glue,
       htmltools, httr, logger, magrittr (>= 2.0.1), mime, purrr,
       markdown, rvest, stringi, stringr, tidyr, urltools, xfun, xml2
Suggests cld2, cld3, gpg, here, jinjar, lintr, memoise, testthat (>=
       2.1.0), roxygen2, showtext, Microsoft365R
SystemRequirements The function render() requires Pandoc
       (http://pandoc.org). To use PGP/GnuPG encryption requires gpg.
Encoding UTF-8
RoxygenNote 7.2.1
KeepSource true
NeedsCompilation no
Author Andrew B. Collier [aut, cre, cph],
       Matt Dennis [ctb],
       Antoine Bichat [ctb] (<https://orcid.org/0000-0001-6599-7081>),
       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@fathomdata.dev>
Repository CRAN
Date/Publication 2023-03-08 13:50:07 UTC
**R topics documented:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>address</td>
<td>3</td>
</tr>
<tr>
<td>addresses</td>
<td>4</td>
</tr>
<tr>
<td>after.envelope</td>
<td>5</td>
</tr>
<tr>
<td>as.address</td>
<td>6</td>
</tr>
<tr>
<td>as.character.address</td>
<td>6</td>
</tr>
<tr>
<td>as.character.envelope</td>
<td>7</td>
</tr>
<tr>
<td>as.character.header</td>
<td>7</td>
</tr>
<tr>
<td>as.character.MIME</td>
<td>8</td>
</tr>
<tr>
<td>attachment</td>
<td>8</td>
</tr>
<tr>
<td>c.address</td>
<td>9</td>
</tr>
<tr>
<td>cleave</td>
<td>10</td>
</tr>
<tr>
<td>comments</td>
<td>10</td>
</tr>
<tr>
<td>compare</td>
<td>11</td>
</tr>
<tr>
<td>compliant</td>
<td>11</td>
</tr>
<tr>
<td>cutoff</td>
<td>12</td>
</tr>
<tr>
<td>display</td>
<td>13</td>
</tr>
<tr>
<td>domain</td>
<td>13</td>
</tr>
<tr>
<td>encrypt</td>
<td>14</td>
</tr>
<tr>
<td>envelope</td>
<td>15</td>
</tr>
<tr>
<td>format.address</td>
<td>16</td>
</tr>
<tr>
<td>html</td>
<td>17</td>
</tr>
<tr>
<td>keywords</td>
<td>18</td>
</tr>
<tr>
<td>length.address</td>
<td>19</td>
</tr>
<tr>
<td>local</td>
<td>20</td>
</tr>
<tr>
<td>mime-parameters</td>
<td>20</td>
</tr>
<tr>
<td>normalise</td>
<td>21</td>
</tr>
<tr>
<td>parties</td>
<td>22</td>
</tr>
<tr>
<td>precedence</td>
<td>22</td>
</tr>
<tr>
<td>print.address</td>
<td>23</td>
</tr>
<tr>
<td>print.envelope</td>
<td>24</td>
</tr>
<tr>
<td>qp</td>
<td>24</td>
</tr>
<tr>
<td>raw</td>
<td>25</td>
</tr>
<tr>
<td>receipt</td>
<td>26</td>
</tr>
<tr>
<td>render</td>
<td>26</td>
</tr>
<tr>
<td>response</td>
<td>28</td>
</tr>
<tr>
<td>sensitivity</td>
<td>29</td>
</tr>
<tr>
<td>server</td>
<td>30</td>
</tr>
<tr>
<td>subject</td>
<td>34</td>
</tr>
<tr>
<td>template</td>
<td>35</td>
</tr>
<tr>
<td>text</td>
<td>37</td>
</tr>
<tr>
<td>validate</td>
<td>38</td>
</tr>
</tbody>
</table>

Index 39
**Description**

Create an address object which represents an email address.

**Usage**

```r
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.

**Examples**

```r
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")
```
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.

Examples

# 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"))
# Populating the Bcc field.
msg <- envelope()
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"))

# Populating the From field.
msg %>% from("craig@gmail.com")

# Populating the Reply-To field.
msg <- envelope()
msg %>% reply("gerry@gmail.com")

# Populating the Return-Path field.
msg <- envelope()
msg %>% return_path("bounced-mail@devnull.org")

# Populating the Sender field.
msg <- envelope()
msg %>% sender("on_behalf_of@gmail.com")

---

**after.envelope**

**Append children to message**

**Description**

Append children to message

**Usage**

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

**Arguments**

- `x`  
  Message object

- `child`  
  A child to be appended
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>")

as.character.address  
Convert address object to character

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  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.
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")?
Value

A message object.

Examples

```r
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)
```

---

**Description**

Concatenate address objects

**Usage**

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

**Arguments**

... Address objects to be concatenated.

**Value**

An address object.

**Examples**

```r
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))
```
cleeve  

*Split a compound address object*

**Description**

Split a compound address object

**Usage**

```r
cleeve(addr)
```

**Arguments**

- `addr`  
  An address object.

**Value**

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

**Examples**

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

---

`comments`  

*Add or query comments of message.*

**Description**

Add or query comments of message.

**Usage**

```r
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`
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**

- **lhs**: 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.
Details
An email address may take either of the following forms:

- local@domain
- 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.

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

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

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.

Examples

```r
## 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."
)
```
# 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,
  importance = NULL,
  priority = NULL,
  text = NULL,
  html = NULL,
  encrypt = FALSE,
  sign = FALSE,
  public_key = FALSE
)

Arguments

to See to().
from See from().
cc See cc().
bcc See bcc().
reply See reply().
subject See subject().
importance See importance().
priority See priority().
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?"
)
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**

```r
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.
keywords

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().

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!</p><\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>", "<p>World!</p>"))

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

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

Examples

```r
# 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

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

Arguments

`x`  
An address object.

Value

A character vector.
local  

**Extract local part of email address**

**Description**
Extract local part of email address

**Usage**

```r
local(addr)
```

**Arguments**

- **addr**: An address object.

**Value**
A character vector.

**Examples**

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

---

**mime-parameters  
Parameters for MIME functions**

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

**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
Perform the following transformations:

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

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.

Examples

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)

precedence

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.

Examples

```r
# 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")

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

---

**print.address**

Print an address object

Description

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

Usage

```r
## 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)

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

x A message object.
details Whether or not to display full message content.
... Further arguments passed to or from other methods.

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().

Examples

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

---

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 address.

Value
A message object.

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 = "}
)
Arguments

- **msg**: A message object.
- **input**: The input Markdown file to be rendered or a character vector of Markdown text.
- **params**: A list of named parameters that override custom parameters specified in the YAML front-matter.
- **squish**: Whether to clean up whitespace in rendered document.
- **css_files**: Extra CSS files.
- **include_css**: Whether to include rendered CSS from various sources ("rmd" — native R Markdown CSS; "bootstrap" — Bootstrap CSS).
- **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()`.

Value

A message object.

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
Examples

# Plain Markdown

markdown <- "[This](https://www.google.com) is a link."
filename <- "message.md"

# 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"

# 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/).
#
# 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)
sensitivity

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.

Examples
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
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.

Examples

# 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  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,
  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(...)

**Arguments**

- **host**  
  DNS name or IP address of the SMTP server.

- **port**  
  Port that the SMTP server is listening on.

- **username**  
  Username for SMTP server.

- **password**  
  Password for SMTP server or API key.

- **insecure**  
  Whether to ignore SSL issues.

- **reuse**  
  Whether the connection to the SMTP server should be left open for reuse.

- **helo**  
  The HELO domain name of the sending host. If left as NA then will use local host name.

- **protocol**  
  Which protocol (SMTP or SMTPS) to use for communicating with the server. Default will choose appropriate protocol based on port.

- **test**  
  Test login to server.

- **pause_base**  
  Base delay (in seconds) for exponential backoff. See rate_backoff.

- **max_times**  
  Maximum number of times to retry.

- **...**  
  Additional curl options. See curl::curl_options() for a list of supported options.

**Details**

These functions return a function which can then be called with a message object.

**Value**

A function which is used to send messages to the 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. 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

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

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

# Set parameters for SMTP server (with username and password).
smtp <- server(
  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(
  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(
  host = "mail.example.com",
  helo = "client.example.com"
)

# Set parameters for Gmail SMTP server. The host and port are implicit.
smtp <- gmail(
  username = "bob@gmail.com",
  password = "bd40ef6d4a9413de9c1318a65cbae5d7"
)

# Set API key for SendGrid SMTP server.
smtp <- sendgrid(
  password = "SG.jHGdsPuuSTbD_hgfCVnTBA.KI8NlgWJcDeItILU8PfJ3XivwHBm1UTGyrd-ZY6BU"
)
# Set username and password for Mailgun SMTP server.
smtp <- mailgun(
    username = "postmaster@sandbox9ptce35fdf0b31338dec4284eb7aaa59.mailgun.org",
    password = "44d072e7g2b5f3bf23b2b642da0fe3a7-2ac825a1-a5be680a"
)

# Set username and password for Sendinblue SMTP server.
smtp <- sendinblue(
    username = "bob@gmail.com",
    password = "xsmtpsib-c75cf91323adc53a1747c005447c9c9a893c35888635bb7beff1a62bf773da33"
)

# Set username and password for MailerSend SMTP server.
smtp <- mailersend(
    username = "NS_Pf3ALM@gmail.com",
    password = "e5ATWLlt1nWJDaKeE"
)

# Set username and password for Mailfence SMTP server.
smtp <- mailfence(
    username = "bob",
    password = "F!Uosd6xbhSjd%63"
)

# Set password for ZeptoMail SMTP server.
# nolint start
smtp <- zeptomail("yA6KbHsL4l2mmI8Ns0/fs91STj8yG0dYBgfIG0j6FsV4P2uV32xh8ciEYN1kRkgCC7wRFkgWA==")
# nolint end

# SMTP Bucket server.
smtp <- smtpbucket()

---

subject

Add or query subject of message.

**Description**

Add or query subject of message.

**Usage**

```
subject(
msg,
subject = NULL,
prefix = NA,
suffix = NA,
interpolate = TRUE,
.open = "{{",
.close = "}}",
```
template

.

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.

Usage

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

- **msg**: A message object.
- **.name**: 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.
- **.envir**: 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.

Examples

```r
# 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)
```
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.
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.

Examples

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

address, 3
addresses, 4
after.envelope, 5
as.address, 6
as.character.address, 6
as.character.envelope, 7
as.character.header, 7
as.character.MIME, 8
attachment, 8

bcc, 19, 35
bcc(addresses), 4
bcc(), 15, 16

c.address, 9
cc, 19, 35
cc(addresses), 4
cc(), 15, 16
cleave, 10
comments, 10
commonmark::markdown_html(), 27
cmpare, 11
compliant, 11
cutoff, 12

display, 13
domain, 13

encrypt, 14
encrypt(), 16
envelope, 15
expires(cutoff), 12

format.address, 16
from, 19, 35
from(addresses), 4
from(), 15, 16

glue, 18, 21, 27, 35, 37
gmail(server), 30

html, 17, 27, 38
html(), 16

importance(precedence), 22
importance(), 15
inreplyto(response), 28

keywords, 18

length.address, 19
local, 20

mailersend(server), 30
mailfence(server), 30
mailgun(server), 30
mime-parameters, 20

normalise, 21

parties, 22
precedence, 22
print.address, 23
print.envelope, 24
priority(precedence), 22
priority(), 15

qp, 24
qp_decode(qp), 24
qp_encode(qp), 24

rate_backoff, 31
raw, 25
receipt, 26
references(response), 28
render, 18, 26, 38
reply, 19, 35
reply(addresses), 4
reply(), 15, 16
replyby(cutoff), 12
request_receipt_delivery(receipt), 26
request_receipt_read(receipt), 26

39
response, 28
return_path (addresses), 4
rmarkdown::render(), 27

sender (addresses), 4
sendgrid (server), 30
sendinblue (server), 30
sensitivity, 29
server, 30
signature (encrypt), 14
smtpbucket (server), 30
subject, 10, 34
subject(), 15, 16

template, 35
text, 18, 27, 37
text(), 16
to, 19, 35
to (addresses), 4
to(), 15, 16

validate, 38

zeptomail (server), 30