# Package 'telegram.bot'

April 28, 2019

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|--|
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| Version 2.3.1  |
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+.TelegramObject

Constructing an Updater

## **Description**

With + you can add any kind of Handler to an Updater's Dispatcher (or directly to a Dispatcher).

#### Usage

Index

```
## S3 method for class 'TelegramObject'
e1 + e2
```

#### **Arguments**

- e1 An object of class Updater or Dispatcher.
- e2 An object of class Handler.

#### **Details**

See add\_handler for further information.

## **Examples**

```
## Not run:
# You can chain multiple handlers
start <- function(bot, update) {
  bot$sendMessage(
    chat_id = update$message$chat_id,
    text = sprintf(
        "Hello %s!",
        update$message$from$first_name
    )
  )
}
echo <- function(bot, update) {
  bot$sendMessage(
    chat_id = update$message$chat_id,</pre>
```

4 add\_error\_handler

```
text = update$message$text
  )
}
updater <- Updater("TOKEN") + CommandHandler("start", start) +</pre>
  MessageHandler(echo, MessageFilters$text)
# And keep adding...
caps <- function(bot, update, args) {</pre>
  if (length(args > 0L)) {
    text_caps <- toupper(paste(args, collapse = " "))</pre>
    bot$sendMessage(
      chat_id = update$message$chat_id,
      text = text_caps
 }
}
updater <- updater + CommandHandler("caps", caps, pass_args = TRUE)</pre>
# Give it a try!
updater$start_polling()
# Send '/start' to the bot, '/caps foo' or just a simple text
## End(Not run)
```

add\_error\_handler

Add an error handler

## Description

Registers an error handler in the Dispatcher.

## Usage

```
add_error_handler(callback)
```

## Arguments

callback

A function that takes (bot, error) as arguments.

#### **Details**

You can also use add\_handler to register error handlers if the handler is of type ErrorHandler.

add\_handler 5

#### **Examples**

```
## Not run:
updater <- Updater(token = "TOKEN")

# Create error callback
error_callback <- function(bot, error) {
    warning(simpleWarning(conditionMessage(error), call = "Updates polling"))
}

# Register it to the updater's dispatcher
updater$dispatcher$add_error_handler(error_callback)
# or
updater$dispatcher$add_handler(ErrorHandler(error_callback))
# or
updater <- updater + ErrorHandler(error_callback)

## End(Not run)</pre>
```

add\_handler

Add a handler

## **Description**

Register a handler. A handler must be an instance of a subclass of Handler. All handlers are organized in groups with a numeric value. The default group is 1. All groups will be evaluated for handling an update, but only 0 or 1 handler per group will be used.

#### Usage

```
add_handler(handler, group = 1L)
```

#### **Arguments**

handler A Handler instance.

group The group identifier, must be higher or equal to 1. Default is 1.

## **Details**

You can use the add (+) operator instead.

The priority/order of handlers is determined as follows:

- 1. Priority of the group (lower group number = higher priority)
- 2. The first handler in a group which should handle an update will be used. Other handlers from the group will not be used. The order in which handlers were added to the group defines the priority (the first handler added in a group has the highest priority).

answerInlineQuery

answerCallbackQuery Send answers to callback queries

#### **Description**

Use this method to send answers to callback queries sent from inline keyboards. The answer will be displayed to the user as a notification at the top of the chat screen or as an alert. On success, TRUE is returned.

#### Usage

```
answerCallbackQuery(callback_query_id, text = NULL, show_alert = FALSE,
   url = NULL, cache_time = NULL)
```

## **Arguments**

callback\_query\_id

Unique identifier for the query to be answered.

text (Optional). Text of the notification. If not specified, nothing will be shown to

the user, 0-200 characters.

show\_alert (Optional). If TRUE, an alert will be shown by the client instead of a notification

at the top of the chat screen. Defaults to FALSE.

url (Optional). URL that will be opened by the user's client.

cache\_time (Optional). The maximum amount of time in seconds that the result of the call-

back query may be cached client-side. Telegram apps will support caching start-

ing in version 3.14. Defaults to 0.

## **Details**

You can also use it's snake\_case equivalent answer\_callback\_query.

answerInlineQuery Send answers to an inline query

## Description

Use this method to send answers to an inline query. No more than 50 results per query are allowed.

```
answerInlineQuery(inline_query_id, results, cache_time = 300L,
  is_personal = NULL, next_offset = NULL, switch_pm_text = NULL,
  switch_pm_parameter = NULL)
```

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#### **Arguments**

inline\_query\_id

Unique identifier for the answered query.

results A list of InlineQueryResult for the inline query.

cache\_time (Optional). The maximum amount of time in seconds that the result of the inline

query may be cached on the server.

is\_personal (Optional). Pass TRUE, if results may be cached on the server side only for the

user that sent the query. By default, results may be returned to any user who

sends the same query.

next\_offset (Optional). Pass the offset that a client should send in the next query with the

same text to receive more results. Pass an empty string if there are no more

results or if you don't support pagination. Offset length can't exceed 64 bytes.

switch\_pm\_text (Optional). If passed, clients will display a button with specified text that switches the user to a private chat with the bot and sends the bot a start message with the

parameter switch\_pm\_parameter.

switch\_pm\_parameter

(Optional). Deep-linking parameter for the /start message sent to the bot when user presses the switch button. 1-64 characters, only A-Z, a-z, 0-9, \_ and - are allowed.

Example: An inline bot that sends YouTube videos can ask the user to connect the bot to their YouTube account to adapt search results accordingly. To do this, it displays a 'Connect your YouTube account' button above the results, or even before showing any. The user presses the button, switches to a private chat with the bot and, in doing so, passes a start parameter that instructs the bot to return an auth link. Once done, the bot can offer a switch\_inline button so that the user can easily return to the chat where they wanted to use the bot's inline capabilities.

## Details

To enable this option, send the /setinline command to @BotFather and provide the placeholder text that the user will see in the input field after typing your bot's name.

You can also use it's snake\_case equivalent answer\_inline\_query.

BaseFilter The base of all filters

## Description

Base class for all Message Filters.

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#### Usage

```
BaseFilter(filter)
as.BaseFilter(x, ...)
is.BaseFilter(x)
```

#### Arguments

filter If you want to create your own filters you can call this generator passing by a filter function that takes a message as input and returns a boolean: TRUE if the message should be handled, FALSE otherwise.

x Object to be coerced or tested.

Further arguments passed to or from other methods.

#### **Details**

See filtersLogic to know more about combining filter functions.

#### **Examples**

```
## Not run:
# Create a filter function
text_or_command <- function(message) !is.null(message$text)

# Make it an instance of BaseFilter with its generator:
text_or_command <- BaseFilter(filter = text_or_command)

# Or by coercing it with as.BaseFilter:
text_or_command <- as.BaseFilter(function(message) !is.null(message$text))

## End(Not run)</pre>
```

Bot

Creating a Bot

## **Description**

This object represents a Telegram Bot.

```
Bot(token, base_url = NULL, base_file_url = NULL,
    request_config = NULL)
is.Bot(x)
```

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#### **Arguments**

token The bot's token given by the *BotFather*.

base\_url (Optional). Telegram Bot API service URL.

base\_file\_url (Optional). Telegram Bot API file URL.

request\_config (Optional). Additional configuration settings to be passed to the bot's POST

requests. See the config parameter from ?httr::POST for further details.

The request\_config settings are very useful for the advanced users who would like to control the default timeouts and/or control the proxy used for HTTP com-

munication.

x Object to be tested.

#### **Format**

An R6Class object.

#### **Details**

To take full advantage of this library take a look at Updater.

You can also use its methods snake\_case equivalent.

#### **API Methods**

```
answerCallbackQuery Send answers to callback queries
answerInlineQuery Send answers to an inline query
deleteMessage Delete a message
deleteWebhook Remove webhook integration
editMessageReplyMarkup Edit the reply markup of a message
forwardMessage Forward messages of any kind
getFile Prepare a file for downloading
getMe Check your bot's information
getUpdates Receive incoming updates
getUserProfilePhotos Get a user's profile photos
getWebhookInfo Get current webhook status
leaveChat Leave a chat
sendAnimation Send animation files
sendAudio Send audio files
sendChatAction Send a chat action
sendDocument Send general files
sendLocation Send point on the map
sendMessage Send text messages
sendPhoto Send image files
```

bot\_token

```
sendSticker Send a sticker
sendVideo Send a video
sendVideoNote Send video messages
sendVoice Send voice files
setWebhook Set a webhook
```

## **Other Methods**

```
clean_updates Clean any pending updates
set_token Change your bot's auth token
```

## **Examples**

```
## Not run:
bot <- Bot(token = "TOKEN")

# In case you want to set a proxy (see ?httr:use_proxy)
bot <- Bot(
   token = "TOKEN",
   request_config = httr::use_proxy(...)
)

## End(Not run)</pre>
```

bot\_token

Get a token from environment

## Description

Obtain token from system variables (in .Renviron) set according to the naming convention R\_TELEGRAM\_BOT\_X where X is the bot's name.

## Usage

```
bot_token(bot_name)
```

## Arguments

 $bot\_name$ 

The bot's name.

#### **Examples**

```
## Not run:
# Open the `.Renviron` file
file.edit(path.expand(file.path("~", ".Renviron")))
# Add the line (uncomment and replace <bot-token> by your bot TOKEN):
# R_TELEGRAM_BOT_RTelegramBot=<bot-token>
# Save and restart R

bot_token("RTelegramBot")
## End(Not run)
```

CallbackQueryHandler

Handling callback queries

## **Description**

Handler class to handle Telegram callback queries. Optionally based on a regex.

## Usage

```
CallbackQueryHandler(callback, pattern = NULL)
```

## **Arguments**

callback The callback function for this handler. See Handler for information about this

function.

pattern (Optional). Regex pattern to test.

#### **Format**

An R6Class object.

check\_update

Check an update

## Description

This method is called to determine if an update should be handled by this handler instance. It should always be overridden (see Handler).

## Usage

```
check_update(update)
```

## **Arguments**

update

The update to be tested.

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| clean_updates Clean any pending updates |
|---|
|---|

# Description

Use this method to clean any pending updates on Telegram servers. Requires no parameters.

# Usage

```
clean_updates()
```

# Description

Handler class to handle Telegram commands.

# Usage

```
CommandHandler(command, callback, filters = NULL, pass_args = FALSE,
  username = NULL)
```

# Arguments

| command   | The command or vector of commands this handler should listen for.  |
|-----------|--|
| callback  | The callback function for this handler. See Handler for information about this function.   |
| filters   | (Optional). Only allow updates with these filters. See MessageFilters for a full list of all available filters.  |
| pass_args | (Optional). Determines whether the handler should be passed args, received as a vector, split on spaces.   |
| username  | (Optional). Bot's username, you can retrieve it from bot\$getMe()\$username. If this parameter is passed, then the CommandHandler will also listen to the command/command@username, as bot commands are often called this way. |

## **Format**

An R6Class object.

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#### **Examples**

```
## Not run:

# Initialize bot
bot <- Bot("TOKEN")
username <- bot$getMe()$username
updater <- Updater(bot = bot)

# Add a command
start <- function(bot, update) {
   bot$sendMessage(
     chat_id = update$message$chat_id,
     text = "Hi, I am a bot!"
   )
}

updater <- updater + CommandHandler("start", start, username = username)

## End(Not run)</pre>
```

deleteMessage

Delete a message

#### **Description**

Use this method to delete a message. A message can only be deleted if it was sent less than 48 hours ago. Any such recently sent outgoing message may be deleted. Additionally, if the bot is an administrator in a group chat, it can delete any message. If the bot is an administrator in a supergroup, it can delete messages from any other user and service messages about people joining or leaving the group (other types of service messages may only be removed by the group creator). In channels, bots can only remove their own messages.

#### Usage

```
deleteMessage(chat_id, message_id)
```

## **Arguments**

chat\_id Unique identifier for the target chat or username of the target channel.

message\_id Identifier of the message to delete.

#### **Details**

You can also use it's snake\_case equivalent delete\_message.

Dispatcher Dispatcher

deleteWebhook

Remove webhook integration

## Description

Use this method to remove webhook integration if you decide to switch back to getUpdates. Requires no parameters.

## Usage

```
deleteWebhook()
```

#### **Details**

You can also use it's snake\_case equivalent delete\_webhook.

Dispatcher

The dispatcher of all updates

## Description

This class dispatches all kinds of updates to its registered handlers.

## Usage

```
Dispatcher(bot)
is.Dispatcher(x)
```

## **Arguments**

bot The bot object that should be passed to the handlers.

x Object to be tested.

#### **Format**

```
An R6Class object.
```

# Methods

```
add_handler Registers a handler in the Dispatcher.
add_error_handler Registers an error handler in the Dispatcher.
```

editMessageReplyMarkup

Edit a reply markup

#### **Description**

Use this method to edit only the reply markup of messages sent by the bot or via the bot (for inline bots).

## Usage

```
editMessageReplyMarkup(chat_id = NULL, message_id = NULL,
  inline_message_id = NULL, reply_markup = NULL)
```

## Arguments

chat\_id (Optional). Unique identifier for the target chat or username of the target chan-

nel.

message\_id (Optional). Required if inline\_message\_id is not specified. Identifier of the sent

message.

inline\_message\_id

(Optional). Required if chat\_id and message\_id are not specified. Identifier of

the inline message.

reply\_markup (Optional). A Reply Markup parameter object, it can be either:

• ReplyKeyboardMarkup

• InlineKeyboardMarkup

• ReplyKeyboardRemove

• ForceReply

#### **Details**

You can also use it's snake\_case equivalent edit\_message\_reply\_markup.

effective\_chat

Get the effective chat

#### **Description**

The chat that this update was sent in, no matter what kind of update this is. Will be None for inline\_query, chosen\_inline\_result, callback\_query from inline messages, shipping\_query and pre\_checkout\_query.

```
effective_chat()
```

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| 66                | C                         |
|-------------------|---------------------------|
| effective_message | Get the effective message |

## **Description**

The message included in this update, no matter what kind of update this is. Will be None for inline\_query, chosen\_inline\_result, callback\_query from inline messages, shipping\_query and pre\_checkout\_query.

#### Usage

```
effective_message()
```

effective\_user

Get the effective user

## Description

The user that sent this update, no matter what kind of update this is. Will be NULL for channel\_post.

## Usage

```
effective_user()
```

ErrorHandler

Handling errors

## Description

Handler class to handle errors in the Dispatcher.

## Usage

```
ErrorHandler(callback)
is.ErrorHandler(x)
```

## Arguments

callback A function that takes (bot, error) as arguments.

x Object to be tested.

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## **Format**

An R6Class object.

## **Examples**

```
## Not run:
updater <- Updater(token = "TOKEN")

# Create error callback
error_callback <- function(bot, error) {
    warning(simpleWarning(conditionMessage(error), call = "Updates polling"))
}

# Register it to the updater's dispatcher
updater$dispatcher$add_handler(ErrorHandler(error_callback))
# or
updater <- updater + ErrorHandler(error_callback)

## End(Not run)</pre>
```

filtersLogic

Combining filters

## **Description**

Creates a function which returns the corresponding logical operation between what f and g return.

## Usage

```
## S3 method for class 'BaseFilter'
!f

## S3 method for class 'BaseFilter'
f & g

## S3 method for class 'BaseFilter'
f | g
```

## Arguments

f, g Arbitrary BaseFilter class functions.

## **Details**

See BaseFilter and MessageFilters for further details.

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#### **Examples**

```
not_command <- !MessageFilters$command
text_and_reply <- MessageFilters$text & MessageFilters$reply
audio_or_video <- MessageFilters$audio | MessageFilters$video</pre>
```

ForceReply

Display a reply

## Description

Upon receiving a message with this object, Telegram clients will display a reply interface to the user (act as if the user has selected the bot's message and tapped 'Reply').

## Usage

```
ForceReply(force_reply = TRUE, selective = NULL)
```

## Arguments

force\_reply Shows reply interface to the user, as if they manually selected the bot's message

and tapped 'Reply'. Defaults to TRUE.

selective (Optional). Use this parameter if you want to show the keyboard to specific

users only.

## **Examples**

```
## Not run:
# Initialize bot
bot <- Bot(token = "TOKEN")
chat_id <- "CHAT_ID"

# Set input parameters
text <- "Don't forget to send me the answer!"

# Send reply message
bot$sendMessage(chat_id, text, reply_markup = ForceReply())
## End(Not run)</pre>
```

forwardMessage 19

| forwardMessage | Forward messages of any kind |  |
|----------------|------------------------------|--|
|----------------|------------------------------|--|

## **Description**

Use this method to forward messages of any kind.

## Usage

```
forwardMessage(chat_id, from_chat_id, message_id,
  disable_notification = FALSE)
```

## Arguments

chat\_id Unique identifier for the target chat or username of the target channel.
from\_chat\_id Unique identifier for the chat where the original message was sent.
message\_id Message identifier in the chat specified in from\_chat\_id.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no sound.

#### **Details**

You can also use it's snake\_case equivalent forward\_message.

from\_chat\_id

Get an update's chat ID

## **Description**

Get the id from the Update's effective chat.

## Usage

```
from_chat_id()
```

from\_user\_id

Get an update's user ID

## **Description**

Get the id from the Update's effective user.

```
from_user_id()
```

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|                  |    |   | _ |   |
|------------------|----|---|---|---|
| σ <sub>Δ</sub> t | ᅡᆮ | ÷ | 1 | _ |
| 20               | LI | 1 | 1 | c |

Prepare a file for downloading

## **Description**

Use this method to get basic info about a file and prepare it for downloading. For the moment, bots can download files of up to 20MB in size. It is guaranteed that the link will be valid for at least 1 hour. When the link expires, a new one can be requested by calling getFile again.

## Usage

```
getFile(file_id, destfile = NULL, ...)
```

## **Arguments**

| file_id  | The file identifier.   |
|----------|--|
| destfile | (Optional). If you want to save the file, pass by a character string with the name where the downloaded file is saved. See the destfile parameter from ?curl::curl_download for further details. |
| •••      | (Optional). Additional parameters to be passed to curl_download. It is not used if destfile is NULL.   |

#### **Details**

You can also use it's snake\_case equivalent get\_file.

# Examples

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")

photos <- bot$getUserProfilePhotos(chat_id = chat_id)

# Download user profile photo
file_id <- photos$photos[[1L]][[1L]]$file_id
bot$getFile(file_id, destfile = "photo.jpg")

## End(Not run)</pre>
```

getMe 21

| getMe | Check your bot's information |  |
|-------|------------------------------|--|
|       |                              |  |

#### **Description**

A simple method for testing your bot's auth token. Requires no parameters.

#### Usage

```
getMe()
```

#### **Details**

You can also use it's snake case equivalent get\_me.

| ge | tUpdates | Receive incoming updates |
|----|----------|--------------------------|
|    |          |                          |

## **Description**

Use this method to receive incoming updates. It returns a list of Update objects.

#### Usage

```
getUpdates(offset = NULL, limit = 100L, timeout = 0L,
  allowed_updates = NULL)
```

#### **Arguments**

offset (Optional). Identifier of the first update to be returned returned.

limit (Optional). Limits the number of updates to be retrieved. Values between 1-100

are accepted. Defaults to 100.

timeout (Optional). Timeout in seconds for long polling. Defaults to 0, i.e. usual short

polling. Should be positive, short polling should be used for testing purposes

only.

allowed\_updates

(Optional). String or vector of strings with the types of updates you want your bot to receive. For example, specify c("message", "edited\_channel\_post", "callback\_query")

to only receive updates of these types. See Update for a complete list of available update types. Specify an empty string to receive all updates regardless of

type (default). If not specified, the previous setting will be used.

Please note that this parameter doesn't affect updates created before the call to the getUpdates, so unwanted updates may be received for a short period of time. 22 getUserProfilePhotos

#### **Details**

- 1. This method will not work if an outgoing webhook is set up.
- 2. In order to avoid getting duplicate updates, recalculate offset after each server response or use Bot method clean\_updates.
- 3. To take full advantage of this library take a look at Updater.

You can also use it's snake\_case equivalent get\_updates.

## **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
updates <- bot$getUpdates()
## End(Not run)</pre>
```

```
getUserProfilePhotos Get a user's profile photos
```

## Description

Use this method to get a list of profile pictures for a user.

## Usage

```
getUserProfilePhotos(user_id, offset = NULL, limit = 100L)
```

## Arguments

| user_id | Unique identifier of the target user.  |
|---------|--|
| offset  | (Optional). Sequential number of the first photo to be returned. By default, all photos are returned.        |
| limit   | (Optional). Limits the number of photos to be retrieved. Values between 1-100 are accepted. Defaults to 100. |

## **Details**

You can also use it's snake\_case equivalent get\_user\_profile\_photos.

See getFile to know how to download files.

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#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")

photos <- bot$getUserProfilePhotos(chat_id = chat_id)

## End(Not run)</pre>
```

getWebhookInfo

Get current webhook status

## **Description**

Use this method to get current webhook status. Requires no parameters.

## Usage

```
getWebhookInfo()
```

#### **Details**

If the bot is using getUpdates, will return an object with the url field empty.

You can also use it's snake\_case equivalent get\_webhook\_info.

Handler

The base of all handlers

## Description

The base class for all update handlers. Create custom handlers by inheriting from it.

```
Handler(callback, check_update = NULL, handle_update = NULL,
    handlername = NULL)
is.Handler(x)
```

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#### **Arguments**

The callback function for this handler. Its inputs will be (bot, update), where bot is a Bot instance and update an Update class.

check\_update Function that will override the default check\_update method. Use it if you want to create your own Handler.

handle\_update Function that will override the default handle\_update method. Use it if you want to create your own Handler.

handlername Name of the customized class, which will inherit from Handler. If NULL (default) it will create a Handler class.

x Object to be tested.

#### **Format**

An R6Class object.

#### Methods

check\_update Called to determine if an update should be handled by this handler instance.
handle\_update Called if it was determined that an update should indeed be handled by this instance.

#### **Sub-classes**

MessageHandler To handle Telegram messages.

CommandHandler To handle Telegram commands.

CallbackQueryHandler To handle Telegram callback queries.

ErrorHandler To handle errors while polling for updates.

## **Examples**

```
## Not run:
# Example of a Handler
callback_method <- function(bot, update) {
   chat_id <- update$effective_chat()$id
   bot$sendMessage(chat_id = chat_id, text = "Hello")
}
hello_handler <- Handler(callback_method)

# Customizing Handler
check_update <- function(update) {
   TRUE
}
handle_update <- function(update, dispatcher) {
   self$callback(dispatcher$bot, update)
}</pre>
```

handle\_update 25

```
foo_handler <- Handler(callback_method,
  check_update = check_update,
  handle_update = handle_update,
  handlername = "FooHandler"
)
## End(Not run)</pre>
```

handle\_update

Handle an update

## **Description**

This method is called if it was determined that an update should indeed be handled by this instance. It should also be overridden (see Handler).

#### Usage

```
handle_update(update, dispatcher)
```

#### **Arguments**

update The update to be handled.

dispatcher The dispatcher to collect optional arguments.

#### **Details**

In most cases self\$callback(dispatcher\$bot, update) can be called, possibly along with optional arguments.

InlineKeyboardButton

Create an inline keyboard button

## Description

This object represents one button of an inline keyboard. You **must** use exactly one of the optional fields. If all optional fields are NULL, by defect it will generate callback\_data with same data as in text.

```
InlineKeyboardButton(text, url = NULL, callback_data = NULL,
    switch_inline_query = NULL, switch_inline_query_current_chat = NULL)
is.InlineKeyboardButton(x)
```

#### **Arguments**

text Label text on the button.

url (Optional). HTTP url to be opened when button is pressed.

callback\_data (Optional). Data to be sent in a callback query to the bot when button is pressed,

1-64 bytes.

switch\_inline\_query

(Optional). If set, pressing the button will prompt the user to select one of their chats, open that chat and insert the bot's username and the specified inline query in the input field. Can be empty, in which case just the bot's username will be

inserted.

switch\_inline\_query\_current\_chat

(Optional). If set, pressing the button will insert the bot's username and the specified inline query in the current chat's input field. Can be empty, in which

case only the bot's username will be inserted.

x Object to be tested.

#### **Details**

**Note:** After the user presses a callback button, Telegram clients will display a progress bar until you call answerCallbackQuery. It is, therefore, necessary to react by calling answerCallbackQuery even if no notification to the user is needed (e.g., without specifying any of the optional parameters).

InlineKeyboardMarkup Create an inline keyboard markup

## **Description**

This object represents an inline keyboard that appears right next to the message it belongs to.

#### **Usage**

InlineKeyboardMarkup(inline\_keyboard)

## **Arguments**

inline\_keyboard

List of button rows, each represented by a list of InlineKeyboardButton objects.

#### **Details**

**Note:** After the user presses a callback button, Telegram clients will display a progress bar until you call answerCallbackQuery. It is, therefore, necessary to react by calling answerCallbackQuery even if no notification to the user is needed (e.g., without specifying any of the optional parameters).

InlineQueryResult 27

## **Examples**

```
## Not run:
# Initialize bot
bot <- Bot(token = "TOKEN")</pre>
chat_id <- "CHAT_ID"</pre>
# Create Inline Keyboard
text <- "Could you type their phone number, please?"</pre>
IKM <- InlineKeyboardMarkup(</pre>
  inline_keyboard = list(
    list(
      InlineKeyboardButton(1),
      InlineKeyboardButton(2),
      InlineKeyboardButton(3)
    ),
    list(
      InlineKeyboardButton(4),
      InlineKeyboardButton(5),
      InlineKeyboardButton(6)
    ),
    list(
      InlineKeyboardButton(7),
      InlineKeyboardButton(8),
      InlineKeyboardButton(9)
    ),
    list(
      InlineKeyboardButton("*"),
      InlineKeyboardButton(0),
      InlineKeyboardButton("#")
 )
)
# Send Inline Keyboard
bot$sendMessage(chat_id, text, reply_markup = IKM)
## End(Not run)
```

InlineQueryResult

The base of inline query results

## **Description**

Baseclass for the InlineQueryResult\* classes.

```
InlineQueryResult(type, id, ...)
is.InlineQueryResult(x)
```

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#### **Arguments**

type Type of the result. See the documentation for a list of supported types.
 id Unique identifier for this result, 1-64 Bytes.
 ... Additional parameters for the selected type. See the documentation for the description of the parameters depending on the InlineQueryResult type.
 x Object to be tested.

#### **Examples**

```
## Not run:
document_url <- paste0(
   "https://github.com/ebeneditos/telegram.bot/raw/gh-pages/docs/",
   "telegram.bot.pdf"
)

result <- InlineQueryResult(
   type = "document",
   id = 1,
    title = "Documentation",
   document_url = document_url,
   mime_type = "application/pdf"
)

## End(Not run)</pre>
```

KeyboardButton

Create a keyboard button

## **Description**

This object represents one button of the reply keyboard. Optional fields are mutually exclusive.

# Usage

```
KeyboardButton(text, request_contact = NULL, request_location = NULL)
is.KeyboardButton(x)
```

#### **Arguments**

text

Text of the button. If none of the optional fields are used, it will be sent as a message when the button is pressed.

request\_contact

(Optional). If TRUE, the user's phone number will be sent as a contact when the button is pressed. Available in private chats only.

request\_location

(Optional). If TRUE, the user's current location will be sent when the button is pressed. Available in private chats only.

x Object to be tested.

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## **Details**

**Note:** request\_contact and request\_location options will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

leaveChat

Leave a chat

## **Description**

Use this method for your bot to leave a group, supergroup or channel.

#### Usage

leaveChat(chat\_id)

## **Arguments**

chat\_id

Unique identifier for the target chat or username of the target channel.

#### **Details**

You can also use it's snake\_case equivalent leave\_chat.

 ${\tt MessageFilters}$ 

Filter message updates

## Description

Predefined filters for use as the filter argument of class MessageHandler.

## Usage

MessageFilters

## Format

A list with filtering functions.

## **Details**

See BaseFilter and filtersLogic for advanced filters.

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## **Functions**

- all: All Messages.
- text: Text Messages.
- command: Messages starting with /.
- reply: Messages that are a reply to another message.
- audio: Messages that contain audio.
- document: Messages that contain document.
- photo: Messages that contain photo.
- sticker: Messages that contain sticker.
- video: Messages that contain video.
- voice: Messages that contain voice.
- contact: Messages that contain contact.
- $\bullet\,$  location: Messages that contain location.
- venue: Messages that are forwarded.
- game: Messages that contain game.

## **Examples**

```
## Not run:
# Use to filter all video messages
video_handler <- MessageHandler(callback_method, MessageFilters$video)
# To filter all contacts, etc.
contact_handler <- MessageHandler(callback_method, MessageFilters$contact)
## End(Not run)</pre>
```

MessageHandler

Handling messages

#### **Description**

Handler class to handle Telegram messages. They might contain text, media or status updates.

## Usage

```
MessageHandler(callback, filters = NULL)
```

## **Arguments**

callback The callback function for this handler. See Handler for information about this

function.

filters (Optional). Only allow updates with these filters. Use NULL (default) or MessageFilters\$all

for no filtering. See MessageFilters for a full list of all available filters.

#### **Format**

An R6Class object.

#### **Examples**

```
## Not run:
callback_method <- function(bot, update) {
   chat_id <- update$message$chat_id
   bot$sendMessage(chat_id = chat_id, text = "Hello")
}

# No filtering
message_handler <- MessageHandler(callback_method, MessageFilters$all)

## End(Not run)</pre>
```

ReplyKeyboardMarkup

Create a keyboard markup

## Description

This object represents a custom keyboard with reply options.

#### Usage

```
ReplyKeyboardMarkup(keyboard, resize_keyboard = NULL,
  one_time_keyboard = NULL, selective = NULL)
```

## **Arguments**

keyboard

List of button rows, each represented by a list of KeyboardButton objects.

resize\_keyboard

(Optional). Requests clients to resize the keyboard vertically for optimal fit. Defaults to FALSE, in which case the custom keyboard is always of the same height as the app's standard keyboard.

one\_time\_keyboard

(Optional). Requests clients to hide the keyboard as soon as it's been used. The keyboard will still be available, but clients will automatically display the usual letter-keyboard in the chat - the user can press a special button in the input field to see the custom keyboard again. Defaults to FALSE.

selective

(Optional). Use this parameter if you want to show the keyboard to specific users only.

#### **Examples**

```
## Not run:
# Initialize bot
bot <- Bot(token = "TOKEN")</pre>
chat_id <- "CHAT_ID"</pre>
# Create Custom Keyboard
text <- "Aren't those custom keyboards cool?"
RKM <- ReplyKeyboardMarkup(</pre>
  keyboard = list(
    list(KeyboardButton("Yes, they certainly are!")),
    list(KeyboardButton("I'm not quite sure")),
    list(KeyboardButton("No..."))
  ),
  resize_keyboard = FALSE,
  one_time_keyboard = TRUE
# Send Custom Keyboard
bot$sendMessage(chat_id, text, reply_markup = RKM)
## End(Not run)
```

ReplyKeyboardRemove

Remove a keyboard

## **Description**

Upon receiving a message with this object, Telegram clients will remove the current custom keyboard and display the default letter-keyboard. By default, custom keyboards are displayed until a new keyboard is sent by a bot. An exception is made for one-time keyboards that are hidden immediately after the user presses a button (see ReplyKeyboardMarkup).

## Usage

```
ReplyKeyboardRemove(remove_keyboard = TRUE, selective = NULL)
```

#### **Arguments**

remove\_keyboard

Requests clients to remove the custom keyboard. (user will not be able to summon this keyboard; if you want to hide the keyboard from sight but keep it accessible, use one\_time\_keyboard in ReplyKeyboardMarkup). Defaults to TRUE.

selective

(Optional). Use this parameter if you want to show the keyboard to specific users only.

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## **Examples**

```
## Not run:
# Initialize bot
bot <- Bot(token = "TOKEN")</pre>
chat_id <- "CHAT_ID"</pre>
# Create Custom Keyboard
text <- "Don't forget to send me the answer!"
RKM <- ReplyKeyboardMarkup(</pre>
  keyboard = list(
    list(KeyboardButton("Yes, they certainly are!")),
    list(KeyboardButton("I'm not quite sure")),
    list(KeyboardButton("No..."))
  ),
  resize_keyboard = FALSE,
  one_time_keyboard = FALSE
)
# Send Custom Keyboard
bot$sendMessage(chat_id, text, reply_markup = RKM)
# Remove Keyboard
bot$sendMessage(
  chat_id,
  "Okay, thanks!",
  reply_markup = ReplyKeyboardRemove()
)
## End(Not run)
```

sendAnimation

Send animation files

## Description

Use this method to send animation files (GIF or H.264/MPEG-4 AVC video without sound).

## Usage

```
sendAnimation(chat_id, animation, duration = NULL, width = NULL,
height = NULL, caption = NULL, parse_mode = NULL,
disable_notification = FALSE, reply_to_message_id = NULL,
reply_markup = NULL)
```

## **Arguments**

chat\_id

Unique identifier for the target chat or username of the target channel.

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Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an animation from the Internet, or upload a local file by passing a file path.

duration (Optional). Duration of sent audio in seconds.

width (Optional). Video width.

height (Optional). Video height.

caption (Optional). Animation caption, 0-1024 characters.

parse\_mode (Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.

disable\_notification (Optional). Sends the message cilently. Users will receive a potification with po

(Optional). Sends the message silently. Users will receive a notification with no sound.

Animation to send. Pass a file\_id as String to send an animation that exists on the

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

animation

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

#### **Details**

You can also use it's snake\_case equivalent send\_animation.

#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
animation_url <- "http://techslides.com/demos/sample-videos/small.mp4"
bot$sendAnimation(
   chat_id = chat_id,
   animation = animation_url
)
## End(Not run)</pre>
```

sendAudio

Send audio files

## Description

Use this method to send audio files, if you want Telegram clients to display them in the music player. Your audio must be in the .mp3 format. On success, the sent Message is returned. Bots can currently send audio files of up to 50 MB in size, this limit may be changed in the future. For sending voice messages, use the sendVoice method instead.

sendAudio 35

#### Usage

```
sendAudio(chat_id, audio, duration = NULL, performer = NULL,
  title = NULL, caption = NULL, disable_notification = FALSE,
  reply_to_message_id = NULL, reply_markup = NULL, parse_mode = NULL)
```

#### **Arguments**

chat\_id Unique identifier for the target chat or username of the target channel.

audio Audio file to send. Pass a file\_id as String to send an audio that exists on the

Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an audio from the Internet, or upload a local audio file by passing a file

path.

duration (Optional). Duration of sent audio in seconds.

performer (Optional). Performer. title (Optional). Track name.

caption (Optional). Audio caption, 0-1024 characters.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no

sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

parse\_mode

(Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.

#### Details

You can also use it's snake\_case equivalent send\_audio.

## **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
audio_url <- "http://www.largesound.com/ashborytour/sound/brobob.mp3"
bot$sendAudio(
   chat_id = chat_id,
   audio = audio_url
)
## End(Not run)</pre>
```

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sendChatAction

Send a chat action

## **Description**

Use this method when you need to tell the user that something is happening on the bot's side. The status is set for 5 seconds or less (when a message arrives from your bot, Telegram clients clear its typing status).

## Usage

```
sendChatAction(chat_id, action)
```

#### **Arguments**

chat\_id

Unique identifier for the target chat or username of the target channel.

action

Type of action to broadcast. Choose one, depending on what the user is about to receive:

- typing for text messages
- upload\_photo for photos
- upload\_video for videos
- record\_video for video recording
- upload\_audio for audio files
- record\_audio for audio file recording
- upload\_document for general files
- find\_location for location data
- upload\_video\_note for video notes
- record\_video\_note for video note recording

#### **Details**

You can also use it's snake\_case equivalent send\_chat\_action.

## **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")

bot$sendChatAction(
   chat_id = chat_id,
   action = "typing"
)

## End(Not run)</pre>
```

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| sendDocument | Send general files |  |  |
|--------------|--------------------|--|--|
|--------------|--------------------|--|--|

#### **Description**

Use this method to send general files.

#### Usage

```
sendDocument(chat_id, document, filename = NULL, caption = NULL,
  disable_notification = FALSE, reply_to_message_id = NULL,
  reply_markup = NULL, parse_mode = NULL)
```

#### Arguments

chat\_id Unique identifier for the target chat or username of the target channel.

document File to send. Pass a file\_id as String to send a file that exists on the Telegram

servers (recommended), pass an HTTP URL as a String for Telegram to get a

file from the Internet, or upload a local file by passing a file path

filename (Optional). File name that shows in telegram message.

caption (Optional). Document caption, 0-1024 characters.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no

sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

parse\_mode

(Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.

#### **Details**

You can also use it's snake\_case equivalent send\_document.

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
document_url <- paste0(
   "https://github.com/ebeneditos/telegram.bot/raw/gh-pages/docs/",</pre>
```

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```
"telegram.bot.pdf"
)
bot$sendDocument(
   chat_id = chat_id,
   document = document_url
)
## End(Not run)
```

sendLocation

Send point on the map

## Description

Use this method to send point on the map.

#### Usage

```
sendLocation(chat_id, latitude, longitude, disable_notification = FALSE,
  reply_to_message_id = NULL, reply_markup = NULL)
```

#### Arguments

chat\_id Unique identifier for the target chat or username of the target channel.

latitude Latitude of location.
longitude Longitude of location.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

#### **Details**

You can also use it's snake\_case equivalent send\_location.

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#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")

bot$sendLocation(
   chat_id = chat_id,
   latitude = 51.521727,
   longitude = -0.117255
)

## End(Not run)</pre>
```

sendMessage

Send text messages

## **Description**

Use this method to send text messages.

## Usage

```
sendMessage(chat_id, text, parse_mode = NULL,
  disable_web_page_preview = NULL, disable_notification = FALSE,
  reply_to_message_id = NULL, reply_markup = NULL)
```

#### **Arguments**

chat\_id Unique identifier for the target chat or username of the target channel.

text Text of the message to be sent.

parse\_mode (Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show

bold, italic, fixed-width text or inline URLs in your bot's message.

disable\_web\_page\_preview

(Optional). Disables link previews for links in this message.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

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#### **Details**

You can also use it's snake\_case equivalent send\_message.

#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")

bot$sendMessage(
   chat_id = chat_id,
   text = "foo *bold* _italic_",
   parse_mode = "Markdown"
)

## End(Not run)</pre>
```

sendPhoto

Send image files

#### **Description**

Use this method to send photos.

#### Usage

```
sendPhoto(chat_id, photo, caption = NULL, disable_notification = FALSE,
  reply_to_message_id = NULL, reply_markup = NULL, parse_mode = NULL)
```

#### **Arguments**

chat\_id Unique identifier for the target chat or username of the target channel.

photo Photo to send. Pass a file\_id as String to send a photo that exists on the Telegram

servers (recommended), pass an HTTP URL as a String for Telegram to get a

photo from the Internet, or upload a local photo by passing a file path.

caption (Optional). Photo caption (may also be used when re-sending photos by file\_id),

0-1024 characters.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no

sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup

(Optional). A Reply Markup parameter object, it can be either:

- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove

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#### • ForceReply

parse\_mode

(Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.

#### **Details**

You can also use it's snake\_case equivalent send\_photo.

#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
photo_url <- "https://telegram.org/img/t_logo.png"

bot$sendPhoto(
   chat_id = chat_id,
   photo = photo_url,
   caption = "Telegram Logo"
)

## End(Not run)</pre>
```

sendSticker

Send a sticker

## Description

Use this method to send . webp stickers.

#### Usage

```
sendSticker(chat_id, sticker, disable_notification = FALSE,
  reply_to_message_id = NULL, reply_markup = NULL)
```

#### **Arguments**

| chat_id              | Unique identifier for the target chat or username of the target channel.   |  |
|----------------------|--|--|
| sticker              | Sticker to send. Pass a file_id as String to send a file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get a .webp file from the Internet, or upload a local one by passing a file path. |  |
| disable_notification |  |  |
|                      | (Optional). Sends the message silently. Users will receive a notification with no sound.   |  |
| reply_to_message_id  |  |  |
|                      | (Optional). If the message is a reply, ID of the original message.   |  |
| reply_mar            | kup (Optional). A Reply Markup parameter object, it can be either:   |  |

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- ReplyKeyboardMarkup
- InlineKeyboardMarkup
- ReplyKeyboardRemove
- ForceReply

#### **Details**

You can also use it's snake\_case equivalent send\_sticker.

## **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
sticker_url <- "https://www.gstatic.com/webp/gallery/1.webp"
bot$sendSticker(
   chat_id = chat_id,
   sticker = sticker_url
)
## End(Not run)</pre>
```

sendVideo

Send a video

## **Description**

Use this method to send video files, Telegram clients support mp4 videos (other formats may be sent as Document).

#### Usage

```
sendVideo(chat_id, video, duration = NULL, caption = NULL,
  disable_notification = FALSE, reply_to_message_id = NULL,
  reply_markup = NULL, width = NULL, height = NULL,
  parse_mode = NULL, supports_streaming = NULL)
```

## Arguments

| chat_id  | Unique identifier for the target chat or username of the target channel.   |
|----------|--|
| video    | Video file to send. Pass a file_id as String to send a video that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get a video from the Internet, or upload a local video file by passing a file path. |
| duration | (Optional). Duration of sent audio in seconds.   |
| caption  | (Optional). Video caption, 0-1024 characters.  |

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```
disable_notification
                  (Optional). Sends the message silently. Users will receive a notification with no
                  sound.
reply_to_message_id
                  (Optional). If the message is a reply, ID of the original message.
reply_markup
                  (Optional). A Reply Markup parameter object, it can be either:
                    • ReplyKeyboardMarkup
                    • InlineKeyboardMarkup
                    • ReplyKeyboardRemove
                    • ForceReply
                  (Optional). Video width.
width
                  (Optional). Video height.
height
                  (Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show
parse_mode
                  bold, italic, fixed-width text or inline URLs in your bot's message.
supports_streaming
```

(Optional). Pass TRUE, if the uploaded video is suitable for streaming.

#### **Details**

You can also use it's snake\_case equivalent send\_video.

#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
video_url <- "http://techslides.com/demos/sample-videos/small.mp4"
bot$sendVideo(
  chat_id = chat_id,
  video = video_url
)
## End(Not run)</pre>
```

sendVideoNote

Send video messages

#### **Description**

Use this method to send video messages.

## Usage

```
sendVideoNote(chat_id, video_note, duration = NULL, length = NULL,
  disable_notification = FALSE, reply_to_message_id = NULL,
  reply_markup = NULL)
```

44 sendVoice

#### Arguments

chat\_id Unique identifier for the target chat or username of the target channel.

video\_note Video note file to send. Pass a file\_id as String to send a video note that exists

on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get a video note from the Internet, or upload a local video note file

by passing a file path.

duration (Optional). Duration of sent audio in seconds.

length (Optional). Video width and height.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no

sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup (Optional). A Reply Markup parameter object, it can be either:

• ReplyKeyboardMarkup

• InlineKeyboardMarkup

• ReplyKeyboardRemove

• ForceReply

#### **Details**

You can also use it's snake\_case equivalent send\_video\_note.

#### **Examples**

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
video_note_url <- "http://techslides.com/demos/sample-videos/small.mp4"
bot$sendVideoNote(
   chat_id = chat_id,
    video_note = video_note_url
)
## End(Not run)</pre>
```

sendVoice

Send voice files

## Description

Use this method to send audio files, if you want Telegram clients to display the file as a playable voice message. For this to work, your audio must be in an .ogg file encoded with OPUS (other formats may be sent with sendAudio or sendDocument).

sendVoice 45

#### Usage

```
sendVoice(chat_id, voice, duration = NULL, caption = NULL,
  disable_notification = FALSE, reply_to_message_id = NULL,
  reply_markup = NULL, parse_mode = NULL)
```

#### **Arguments**

chat\_id Unique identifier for the target chat or username of the target channel.

voice Voice file to send. Pass a file\_id as String to send a voice file that exists on the

Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get a voice file from the Internet, or upload a local voice file file by passing a

file path.

duration (Optional). Duration of sent audio in seconds.

caption (Optional). Voice message caption, 0-1024 characters.

disable\_notification

(Optional). Sends the message silently. Users will receive a notification with no

sound.

reply\_to\_message\_id

(Optional). If the message is a reply, ID of the original message.

reply\_markup (Optional). A Reply Markup parameter object, it can be either:

• ReplyKeyboardMarkup

• InlineKeyboardMarkup

• ReplyKeyboardRemove

• ForceReply

parse\_mode

(Optional). Send 'Markdown' or 'HTML', if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.

#### **Details**

You can also use it's snake\_case equivalent send\_voice.

```
## Not run:
bot <- Bot(token = bot_token("RTelegramBot"))
chat_id <- user_id("Me")
ogg_url <- "https://upload.wikimedia.org/wikipedia/commons/c/c8/Example.ogg"
bot$sendVoice(
   chat_id = chat_id,
   voice = ogg_url
)
## End(Not run)</pre>
```

46 setWebhook

#### **Description**

Use this method to specify a url and receive incoming updates via an outgoing webhook. Whenever there is an update for the bot, we will send an HTTPS POST request to the specified url, containing a JSON-serialized Update.

#### Usage

```
setWebhook(url = NULL, certificate = NULL, max_connections = 40L,
  allowed_updates = NULL)
```

## Arguments

url HTTPS url to send updates to. Use an empty string to remove webhook integra-

tion.

certificate (Optional). Upload your public key certificate so that the root certificate in use

can be checked. See Telegram's self-signed guide for details.

max\_connections

(Optional). Maximum allowed number of simultaneous HTTPS connections to the webhook for update delivery, 1-100. Defaults to 40. Use lower values to limit the load on your bot's server, and higher values to increase your bot's throughput.

allowed\_updates

(Optional). String or vector of strings with the types of updates you want your bot to receive. For example, specify c("message", "edited\_channel\_post", "callback\_query") to only receive updates of these types. See <a href="Update">Update</a> for a complete list of available update types. Specify an empty string to receive all updates regardless of type (default). If not specified, the previous setting will be used.

Please note that this parameter doesn't affect updates created before the call to the get\_updates, so unwanted updates may be received for a short period of time.

#### **Details**

If you'd like to make sure that the webhook request comes from Telegram, we recommend using a secret path in the URL, e.g. https://www.example.com/<token>.

You can also use it's snake\_case equivalent set\_webhook.

set\_token 47

| set | tΛ | ken |
|-----|----|-----|
|     |    |     |

Change your bot's auth token

#### **Description**

Use this method to change your bot's auth token.

#### Usage

```
set_token(token)
```

## **Arguments**

token

The bot's token given by the BotFather.

start\_polling

Start polling

# Description

Starts polling updates from Telegram. You can stop the polling either by using the the interrupt R command in the session menu or with the stop\_polling method.

#### Usage

```
start_polling(timeout = 10L, clean = FALSE, allowed_updates = NULL,
   verbose = FALSE)
```

#### **Arguments**

timeout (Optional). Passed to getUpdates. Default is 10.

clean (Optional). Whether to clean any pending updates on Telegram servers before

actually starting to poll. Default is FALSE.

allowed\_updates

(Optional). Passed to getUpdates.

verbose (Optional). If TRUE, prints status of the polling. Default is FALSE.

48 stop\_polling

#### **Examples**

```
## Not run:
# Start polling example
start <- function(bot, update) {
  bot$sendMessage(
    chat_id = update$message$chat_id,
    text = sprintf(
       "Hello %s!",
       update$message$from$first_name
    )
  }
}

updater <- Updater("TOKEN") + CommandHandler("start", start)

updater$start_polling(verbose = TRUE)

## End(Not run)</pre>
```

stop\_polling

Stop polling

## **Description**

Stops the polling. Requires no parameters.

#### Usage

```
stop_polling()
```

```
## Not run:
# Example of a 'kill' command
kill <- function(bot, update) {
  bot$sendMessage(
    chat_id = update$message$chat_id,
    text = "Bye!"
)
# Clean 'kill' update
bot$getUpdates(offset = update$update_id + 1)
# Stop the updater polling
  updater$stop_polling()
}

updater <<- updater + CommandHandler("kill", kill)

updater$start_polling(verbose = TRUE) # Send '/kill' to the bot
## End(Not run)</pre>
```

TelegramObject 49

TelegramObject

The base of telegram.bot objects

# Description

Base class for most telegram objects.

# Usage

```
TelegramObject
is.TelegramObject(x)
```

# Arguments

Χ

Object to be tested.

#### **Format**

An R6Class generator object.

Update

Represent an update

# Description

This object represents an incoming Update.

## Usage

```
Update(data)
is.Update(x)
```

# Arguments

data Data of the update.

x Object to be tested.

## **Format**

An R6Class object.

50 Updater

#### Methods

```
from_chat_id To get the id from the update's effective chat.
from_user_id To get the id from the update's effective user.
effective_chat To get the chat that this update was sent in, no matter what kind of update this is.
effective_user To get the user that sent this update, no matter what kind of update this is.
effective_message To get the message included in this update, no matter what kind of update this is.
```

Updater

Building a Telegram Bot

## **Description**

This class, which employs the class <code>Dispatcher</code>, provides a front-end to class <code>Bot</code> to the programmer, so you can focus on coding the bot. Its purpose is to receive the updates from Telegram and to deliver them to said dispatcher. The dispatcher supports <code>Handler</code> classes for different kinds of data: Updates from Telegram, basic text commands and even arbitrary types. See <code>add(+)</code> to learn more about building your <code>Updater</code>.

#### Usage

```
Updater(token = NULL, base_url = NULL, base_file_url = NULL,
  request_config = NULL, bot = NULL)
is.Updater(x)
```

#### **Arguments**

token (Optional). The bot's token given by the *BotFather*.

base\_url (Optional). Telegram Bot API service URL. base\_file\_url (Optional). Telegram Bot API file URL.

request\_config (Optional). Additional configuration settings to be passed to the bot's POST

requests. See the config parameter from ?httr::POST for further details.

The request\_config settings are very useful for the advanced users who would like to control the default timeouts and/or control the proxy used for HTTP com-

munication.

bot (Optional). A pre-initialized Bot instance.

x Object to be tested.

## **Format**

An R6Class object.

user\_id 51

#### **Details**

Note: You must supply either a bot or a token argument.

#### Methods

```
start_polling Starts polling updates from Telegram.
stop_polling Stops the polling.
```

#### References

Bots: An introduction for developers and Telegram Bot API

#### **Examples**

```
## Not run:
updater <- Updater(token = "TOKEN")</pre>
# In case you want to set a proxy (see ?httr:use_proxy)
updater <- Updater(</pre>
  token = "TOKEN",
  request_config = httr::use_proxy(...)
)
# Add a handler
start <- function(bot, update) {</pre>
  bot$sendMessage(
    chat_id = update$message$chat_id,
    text = sprintf(
      "Hello %s!",
      update$message$from$first_name
  )
}
updater <- updater + CommandHandler("start", start)</pre>
# Start polling
updater$start_polling(verbose = TRUE) # Send '/start' to the bot
## End(Not run)
```

user\_id

Get a user from environment

# Description

Obtain Telegram user id from system variables (in .Renviron) set according to the naming convention R\_TELEGRAM\_USER\_X where X is the user's name.

52 user\_id

# Usage

```
user_id(user_name)
```

# Arguments

user\_name The user's name.

```
## Not run:
# Open the `.Renviron` file
file.edit(path.expand(file.path("~", ".Renviron")))
# Add the line (uncomment and replace <user-id> by your Telegram user ID):
# R_TELEGRAM_USER_Me=<user-id>
# Save and restart R

user_id("Me")
## End(Not run)
```

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