Package 'telegram.bot'

November 12, 2018

Type Package

Title Develop a 'Telegram Bot' with R

Version 2.1.0
Description Provides a pure interface for the 'Telegram Bot API' http://core.telegram.org/bots/api . In addition to the pure API implementation, it features a number of tools to make the development of 'Telegram' bots with R easy and straightforward, providing an easy-to-use interface that takes some work off the programmer.
<pre>URL http://github.com/ebeneditos/telegram.bot</pre>
BugReports http://github.com/ebeneditos/telegram.bot/issues
Imports R6, httr, jsonlite
Depends R (>= 3.2.3)
Suggests covr, testthat, knitr, rmarkdown
License GPL-3
Encoding UTF-8
LazyData true
RoxygenNote 6.1.0
VignetteBuilder knitr
NeedsCompilation no
Author Ernest Benedito [aut, cre]
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Repository CRAN
Date/Publication 2018-11-12 10:00:09 UTC
R topics documented:
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Description

Registers an error handler in the Dispatcher.

Usage

```
add_error_handler(callback)
```

Arguments

callback

A function that takes (Bot, Update) as arguments.

add_handler

add_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 = 1)
```

Arguments

handler

A Handler instance.

group

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

Details

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.

answerInlineQuery

answerCallbackQuery answerCallbackQuery

Description

Use this method to send answers to callback queries sent from inline keyboard. 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 answerInlineQuery

Description

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

Usage

```
answerInlineQuery(inline_query_id, results, cache_time = 300,
  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.

Bot Bot

Description

This object represents a Telegram Bot.

Usage

```
Bot(token, base_url = NULL, base_file_url = NULL,
  request_config = NULL)
```

6 Bot

Arguments

token Bot's unique authentication.

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.

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 sent from inline keyboard
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 Get info about a file and prepare it for downloading
getMe Test your bot's auth token
getUpdates Receive incoming updates
getUserProfilePhotos Get a list of profile pictures for a user
getWebhookInfo Get current webhook status
leaveChat Leave a group, supergroup or channel
sendAnimation Send animation files
sendAudio Send audio files
sendChatAction Tell the user that something is happening on the bot's side
sendDocument Send general files
sendLocation Send point on the map
sendMessage Send text messages
sendPhoto Send image files
sendSticker Send .webp stickers
```

bot_token 7

```
sendVideo Send mp4 videos
sendVideoNote Send videos messages
sendVoice Send .ogg files encoded with OPUS
setWebhook Receive incoming updates via an outgoing 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 for setting details)
bot <- Bot(token = 'TOKEN', request_config = httr::use_proxy(...))
## End(Not run)</pre>
```

bot_token

bot_token

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

```
## Not run:
bot_token('RBot')
## End(Not run)
```

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 ${\tt CallbackQueryHandler} \quad \textit{CallbackQueryHandler}$

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_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.

clean_updates clean_updates

Description

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

Usage

```
clean_updates()
```

CommandHandler 9

CommandHandler	CommandHandler		
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Description

Handler class to handle Telegram commands.

Usage

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

Arguments

command	The command or list 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.

Format

An R6Class object.

|--|--|

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

Dispatcher

Details

You can also use it's snake_case equivalent delete_message.

deleteWebhook

deleteWebhook

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

Dispatcher

Description

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

Usage

```
Dispatcher(bot)
```

Arguments

bot

The bot object that should be passed to the handlers.

Format

An R6Class object.

Methods

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

editMessageReplyMarkup

editMessageReplyMarkup

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 channel

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

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.

Usage

```
effective_chat()
```

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|--|--|

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

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()
```

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ForceReply

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.

forwardMessage 13

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

forwardMessage

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.

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getFile

getFile

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 get_file again.

Usage

```
getFile(file_id)
```

Arguments

file_id

The file identifier

Details

You can also use it's snake_case equivalent get_file.

getMe

getMe

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.

getUpdates 15

Description

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

Usage

```
getUpdates(offset = NULL, limit = 100, timeout = 0,
  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.

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.

```
## Not run:
bot <- Bot(token = bot_token('RBot'))

updates <- bot$getUpdates()

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

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```
getUserProfilePhotos
```

Description

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

Usage

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

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.

Examples

```
## Not run:
bot <- Bot(token = bot_token('RBot'))
chat_id <- user_id('me')
bot$getUserProfilePhotos(chat_id = chat_id)
## End(Not run)</pre>
```

getWebhookInfo

getWebhookInfo

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 17

Handler		
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Description

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

Usage

```
Handler(callback, check_update = NULL, handle_update = NULL,
handlername = NULL)
```

Arguments

callback 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 (de-

fault) it will create a Handler class.

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.
```

```
## 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')
}</pre>
```

handle_update

handle_update

handle_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 19

InlineKeyboardButton InlineKeyboardButton

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.

Usage

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

Arguments

text Label text on the button (Required).

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.

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 InlineKeyboardMarkup

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).

```
## 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 21

 $In line Query Result \qquad \textit{In line Query Result}$

Description

Baseclass for the InlineQueryResult* classes.

Usage

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

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

Examples

KeyboardButton

KeyboardButton

Description

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

Usage

```
KeyboardButton(text, request_contact = NULL, request_location = NULL)
```

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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

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

leaveChat

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.

MessageFilters

MessageFilters

Description

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

Usage

MessageFilters

MessageHandler 23

Format

A list with filtering functions.

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.
- 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>
```

 ${\tt MessageHandler}$

MessageHandler

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){</pre>
  chat_id <- update$message$chat_id</pre>
  bot$sendMessage(chat_id = chat_id, text = 'Hello')
}
# No filtering
message_handler <- MessageHandler(callback_method, MessageFilters$all)</pre>
## End(Not run)
```

ReplyKeyboardMarkup

ReplyKeyboardMarkup

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

ReplyKeyboardRemove

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 TRUF

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

sendAnimation

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
animation	Animation to send. Pass a file_id as String to send an animation that exists on the 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

sendAudio 27

```
(Optional). Animation caption, 0-1024 characters
caption
                  (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
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
                  (Optional). A Reply Markup parameter object, it can be either:
reply_markup
                    • ReplyKeyboardMarkup
                    • InlineKeyboardMarkup
                    • ReplyKeyboardRemove
                    • ForceReply
```

Details

You can also use it's snake_case equivalent send_animation.

Examples

sendAudio

sendAudio

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.

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)
```

28 sendAudio

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.

sendChatAction 29

sendChatAction

sendChatAction

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.

30 sendDocument

sendDocument	sendDocument		
--------------	--------------	--	--

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

Details

parse_mode

You can also use it's snake_case equivalent send_document.

Examples

```
## Not run:
bot <- Bot(token = bot_token('RBot'))
chat_id <- user_id('me')
document_url <- "https://github.com/ebeneditos/telegram.bot/raw/gh-pages/docs/telegram.bot.pdf"</pre>
```

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

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

sendLocation 31

```
bot$sendDocument(chat_id = chat_id,
                 document = document_url)
## End(Not run)
```

sendLocation

sendLocation

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.

```
## Not run:
bot <- Bot(token = bot_token('RBot'))</pre>
chat_id <- user_id('me')</pre>
bot$sendLocation(chat_id = chat_id,
                  latitude = 51.521727,
                  longitude = -0.117255)
## End(Not run)
```

32 sendMessage

sendMessage

sendMessage

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

Details

You can also use it's snake_case equivalent send_message.

sendPhoto 33

sendPhoto	sendPhoto		
-----------	-----------	--	--

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

guments		
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	
	• 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.

34 sendSticker

```
caption = "Telegram Logo")
## End(Not run)
```

sendSticker

sendSticker

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

(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_sticker.

sendVideo 35

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
	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
	width	(Optional). Video width
	height	(Optional). Video height
	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
	supports_stream	ning
		(Optional). Pass TRUE, if the uploaded video is suitable for streaming

Details

You can also use it's snake_case equivalent send_video.

36 sendVideoNote

Examples

sendVideoNote

sendVideoNote

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)
```

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

sendVoice 37

Details

You can also use it's snake_case equivalent send_video_note.

Examples

sendVoice

sendVoice

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).

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	

38 setWebhook

- 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.

Examples

setWebhook

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 = 40,
   allowed_updates = NULL)
```

Arguments

url

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

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.

set_token 39

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 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

set token

Description

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

Usage

```
set_token(token)
```

Arguments

token

Bot's unique authentication.

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 = 10, clean = FALSE, allowed_updates = NULL,
  verbose = FALSE)
```

40 stop_polling

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.
```

Examples

```
## Not run:
# Start polling example
updater <- Updater(token = 'TOKEN')

updater$start_polling(verbose = TRUE)
## End(Not run)</pre>
```

stop_polling

stop_polling

Description

Stops the polling. Requires no parameters.

Usage

```
stop_polling()
```

telegram.bot 41

telegram.bot telegram.bot

Description

Provides a pure interface for the Telegram Bot API. In addition to the pure API implementation, it features a number of tools to make the development of Telegram bots with R easy and straightforward, providing an easy-to-use interface that takes some work off the programmer.

Details

In this page you can learn how to build a Bot quickly with this package.

Main Classes

Updater Package main class. This class, which employs the class Dispatcher, provides a frontend to class Bot to the programmer, so they can focus on coding the bot. Its purpose is to receive the updates from Telegram and to deliver them to said dispatcher.

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

Handler The base class for all update handlers.

Bot This object represents a Telegram Bot.

Update Update

Description

This object represents an incoming Update.

Usage

Update(data)

Arguments

data

Data of the update.

Format

An R6Class object.

Methods

```
effective_user To get the user that sent this update, no matter what kind of update this is.
effective_chat To get the chat that this update was sent in, 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.
```

42 Updater

Updater	Updater
---------	---------

Description

Package main class. This class, which employs the class Dispatcher, provides a front-end to class Bot to the programmer, so they 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 Handler classes for different kinds of data: Updates from Telegram, basic text commands and even arbitrary types.

Usage

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

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.

Format

An R6Class object.

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

user_id 43

Examples

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

# In case you want to set a proxy (see ?httr:use_proxy for setting details)
updater <- Updater(token = 'TOKEN', request_config = httr::use_proxy(...))

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

user_id

 $user_id$

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.

Usage

```
user_id(user_name)
```

Arguments

user_name

The user's name

```
## Not run:
user_id('me')
## End(Not run)
```

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