Python Telegram Bot Documentation

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Contents

CHAPTER 1

Guides and tutorials

If you're just starting out with the library, we recommend following our "Your first Bot" tutorial that you can find on our wiki. On our wiki you will also find guides like how to use handlers, webhooks, emoji, proxies and much more.

CHAPTER 2

Examples

A great way to learn is by looking at examples. Ours can be found at our github in the examples folder.

Reference

Below you can find a reference of all the classes and methods in python-telegram-bot. Apart from the *telegram.ext* package the objects should reflect the types defined in the official telegram bot api documentation.

3.1 telegram.ext package

3.1.1 telegram.ext.Updater

class telegram.ext.**Updater**(*token=None*, *base_url=None*, *workers=4*, *bot=None*, *private_key=None*, *private_key_password=None*, *user_sig_handler=None*, *request_kwargs=None*, *persistence=None*, *use_context=False*)

    Bases: `object`

This class, which employs the `telegram.ext.Dispatcher`, provides a frontend to `telegram.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. It also runs in a separate thread, so the user can interact with the bot, for example on the command line. The dispatcher supports handlers for different kinds of data: Updates from Telegram, basic text commands and even arbitrary types. The updater can be started as a polling service or, for production, use a webhook to receive updates. This is achieved using the WebhookServer and WebhookHandler classes.

bot
    The bot used with this Updater.

        Type `telegram.Bot`

user_sig_handler
    signals the updater will respond to.

        Type `signal`

update_queue
    Queue for the updates.

        Type `Queue`

job_queue
    Jobqueue for the updater.

> **Type** *telegram.ext.JobQueue*

dispatcher
> Dispatcher that handles the updates and dispatches them to the handlers.
>
> > **Type** *telegram.ext.Dispatcher*

running
> Indicates if the updater is running.
>
> > **Type** `bool`

persistence
> Optional. The persistence class to store data that should be persistent over restarts.
>
> > **Type** *telegram.ext.BasePersistence*

use_context
> `True` if using context based callbacks.
>
> > **Type** `bool`, optional

> **Parameters**
>
> - **token** (`str`, optional) – The bot's token given by the @BotFather.
>
> - **base_url** (`str`, optional) – Base_url for the bot.
>
> - **workers** (`int`, optional) – Amount of threads in the thread pool for functions decorated with `@run_async`.
>
> - **bot** (*telegram.Bot*, optional) – A pre-initialized bot instance. If a pre-initialized bot is used, it is the user's responsibility to create it using a *Request* instance with a large enough connection pool.
>
> - **private_key** (`bytes`, optional) – Private key for decryption of telegram passport data.
>
> - **private_key_password** (`bytes`, optional) – Password for above private key.
>
> - **user_sig_handler** (`function`, optional) – Takes `signum, frame` as positional arguments. This will be called when a signal is received, defaults are (SIGINT, SIGTERM, SIGABRT) setable with *idle*.
>
> - **request_kwargs** (`dict`, optional) – Keyword args to control the creation of a *telegram.utils.request.Request* object (ignored if *bot* argument is used). The request_kwargs are very useful for the advanced users who would like to control the default timeouts and/or control the proxy used for http communication.
>
> - **use_context** (`bool`, optional) – If set to `True` Use the context based callback API. During the deprecation period of the old API the default is `False`. **New users**: set this to `True`.
>
> - **persistence** (*telegram.ext.BasePersistence*, optional) – The persistence class to store data that should be persistent over restarts.

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

> **Raises** `ValueError` – If both `token` and *bot* are passed or none of them.

idle(*stop_signals=(<Signals.SIGINT: 2>, <Signals.SIGTERM: 15>, <Signals.SIGABRT: 6>)*)
> Blocks until one of the signals are received and stops the updater.
>
> > **Parameters stop_signals** (`iterable`) – Iterable containing signals from the signal module that should be subscribed to. Updater.stop() will be called on receiving one of those signals. Defaults to (`SIGINT`, `SIGTERM`, `SIGABRT`).

---

start_polling(*poll_interval=0.0*, *timeout=10*, *clean=False*, *bootstrap_retries=-1*, *read_latency=2.0, allowed_updates=None*)

Starts polling updates from Telegram.

Parameters

- **poll_interval** (`float`, optional) – Time to wait between polling updates from Telegram in seconds. Default is 0.0.

- **timeout** (`float`, optional) – Passed to `telegram.Bot.get_updates`.

- **clean** (`bool`, optional) – Whether to clean any pending updates on Telegram servers before actually starting to poll. Default is False.

- **bootstrap_retries** (`int`, optional) – Whether the bootstrapping phase of the *Updater* will retry on failures on the Telegram server.

  – < 0 - retry indefinitely (default)

  – 0 - no retries

  – > 0 - retry up to X times

- **allowed_updates** (List[`str`], optional) – Passed to `telegram.Bot.get_updates`.

- **read_latency** (`float | int`, optional) – Grace time in seconds for receiving the reply from server. Will be added to the *timeout* value and used as the read timeout from server (Default: 2).

Returns The update queue that can be filled from the main thread.

Return type `Queue`

start_webhook(*listen='127.0.0.1'*, *port=80*, *url_path=''*, *cert=None*, *key=None*, *clean=False*, *bootstrap_retries=0*, *webhook_url=None*, *allowed_updates=None*)

Starts a small http server to listen for updates via webhook. If cert and key are not provided, the webhook will be started directly on http://listen:port/url_path, so SSL can be handled by another application. Else, the webhook will be started on https://listen:port/url_path

Parameters

- **listen** (`str`, optional) – IP-Address to listen on. Default `127.0.0.1`.

- **port** (`int`, optional) – Port the bot should be listening on. Default `80`.

- **url_path** (`str`, optional) – Path inside url.

- **cert** (`str`, optional) – Path to the SSL certificate file.

- **key** (`str`, optional) – Path to the SSL key file.

- **clean** (`bool`, optional) – Whether to clean any pending updates on Telegram servers before actually starting the webhook. Default is `False`.

- **bootstrap_retries** (`int`, optional) – Whether the bootstrapping phase of the *Updater* will retry on failures on the Telegram server.

  – < 0 - retry indefinitely (default)

  – 0 - no retries

  – > 0 - retry up to X times

- **webhook_url** (`str`, optional) – Explicitly specify the webhook url. Useful behind NAT, reverse proxy, etc. Default is derived from *listen*, *port* & *url_path*.

- **allowed_updates** (List[`str`], optional) – Passed to `telegram.Bot.set_webhook`.

Returns The update queue that can be filled from the main thread.

> **Return type** Queue

stop()
> Stops the polling/webhook thread, the dispatcher and the job queue.

3.1.2 telegram.ext.Dispatcher

class telegram.ext.**Dispatcher**(*bot*, *update_queue*, *workers=4*, *exception_event=None*, *job_queue=None*, *persistence=None*, *use_context=False*)
> Bases: object

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

bot
> The bot object that should be passed to the handlers.
>
> > **Type** *telegram.Bot*

update_queue
> The synchronized queue that will contain the updates.
>
> > **Type** Queue

job_queue
> Optional. The *telegram.ext.JobQueue* instance to pass onto handler callbacks.
>
> > **Type** *telegram.ext.JobQueue*

workers
> Number of maximum concurrent worker threads for the @run_async decorator.
>
> > **Type** int

user_data
> A dictionary handlers can use to store data for the user.
>
> > **Type** defaultdict

chat_data
> A dictionary handlers can use to store data for the chat.
>
> > **Type** defaultdict

persistence
> Optional. The persistence class to store data that should be persistent over restarts
>
> > **Type** *telegram.ext.BasePersistence*

> **Parameters**
> - **bot** (*telegram.Bot*) – The bot object that should be passed to the handlers.
> - **update_queue** (Queue) – The synchronized queue that will contain the updates.
> - **job_queue** (*telegram.ext.JobQueue*, optional) – The *telegram.ext.JobQueue* instance to pass onto handler callbacks.
> - **workers** (int, optional) – Number of maximum concurrent worker threads for the @run_async decorator. defaults to 4.
> - **persistence** (*telegram.ext.BasePersistence*, optional) – The persistence class to store data that should be persistent over restarts
> - **use_context** (bool, optional) – If set to True Use the context based callback API. During the deprecation period of the old API the default is False. **New users**: set this to True.

add_error_handler(*callback*)

Registers an error handler in the Dispatcher. This handler will receive every error which happens in your bot.

Warning: The errors handled within these handlers won't show up in the logger, so you need to make sure that you reraise the error.

> **Parameters callback** (`callable`) – The callback function for this error handler. Will be called when an error is raised. Callback signature for context based API:
>
> def callback(update: Update, context: CallbackContext)
>
> The error that happened will be present in context.error.

Note: See https://git.io/fxJuV for more info about switching to context based API.

---

add_handler(*handler*, *group=0*)

Register a handler.

TL;DR: Order and priority counts. 0 or 1 handlers per group will be used.

A handler must be an instance of a subclass of *telegram.ext.Handler*. All handlers are organized in groups with a numeric value. The default group is 0. All groups will be evaluated for handling an update, but only 0 or 1 handler per group will be used. If telegram.ext. DispatcherHandlerStop is raised from one of the handlers, no further handlers (regardless of the group) will be called.

The priority/order of handlers is determined as follows:

- Priority of the group (lower group number == higher priority)

- The first handler in a group which should handle an update (see *telegram.ext.Handler. check_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.

> **Parameters**
>
> - **handler** (*telegram.ext.Handler*) – A Handler instance.
>
> - **group** (`int`, optional) – The group identifier. Default is 0.

dispatch_error(*update*, *error*)

Dispatches an error.

> **Parameters**
>
> - **update** (`str` | *telegram.Update* | None) – The update that caused the error
>
> - **error** (`Exception`) – The error that was raised.

error_handlers = None

A list of errorHandlers.

> **Type** List[`callable`]

classmethod get_instance()

Get the singleton instance of this class.

> **Returns** *telegram.ext.Dispatcher*
>
> **Raises** `RuntimeError`

groups = None

A list with all groups.

> **Type** List[`int`]

---

handlers = None
    Holds the handlers per group.

> **Type** Dict[int, List[`telegram.ext.Handler`]]

process_update(*update*)
    Processes a single update.

> **Parameters update** (str | `telegram.Update` | telegram.TelegramError) –
>   The update to process.

remove_error_handler(*callback*)
    Removes an error handler.

> **Parameters callback** (`callable`) – The error handler to remove.

remove_handler(*handler*, *group=0*)
    Remove a handler from the specified group.

> **Parameters**
>
> - **handler** (`telegram.ext.Handler`) – A Handler instance.
>
> - **group** (`object`, optional) – The group identifier. Default is 0.

run_async(*func*, **args*, ***kwargs*)
    Queue a function (with given args/kwargs) to be run asynchronously.

> **Warning:** If you're using @run_async you cannot rely on adding custom attributes to
> `telegram.ext.CallbackContext`. See its docs for more info.

> **Parameters**
>
> - **func** (`callable`) – The function to run in the thread.
>
> - ***args** (`tuple`, optional) – Arguments to *func*.
>
> - ****kwargs** (`dict`, optional) – Keyword arguments to *func*.
>
> **Returns** Promise

running = None
    Indicates if this dispatcher is running.

> **Type** `bool`

start(*ready=None*)
    Thread target of thread 'dispatcher'.

    Runs in background and processes the update queue.

> **Parameters ready** (`threading.Event`, optional) – If specified, the event will be set
>   once the dispatcher is ready.

stop()
    Stops the thread.

update_persistence()
    Update `user_data` and `chat_data` in `persistence`.

user_data = None
    A dictionary handlers can use to store data for the user.

> **Type** `dict`

3.1.3 telegram.ext.filters Module

This module contains the Filters for use with the MessageHandler class.

class telegram.ext.filters.**Filters**
   Bases: `object`

   Predefined filters for use as the *filter* argument of `telegram.ext.MessageHandler`.

   ___

   Examples

   Use `MessageHandler(Filters.video, callback_method)` to filter all video messages. Use
   `MessageHandler(Filters.contact, callback_method)` for all contacts. etc.

   ___

   all = Filters.all
      All Messages.

   animation = Filters.animation
      Messages that contain `telegram.Animation`.

   audio = Filters.audio
      Messages that contain `telegram.Audio`.

   class caption_entity(*entity_type*)
      Bases: `telegram.ext.filters.BaseFilter`

      Filters media messages to only allow those which have a `telegram.MessageEntity` where their
      type matches *entity_type*.

      ___

      Examples

      Example   `MessageHandler(Filters.caption_entity("hashtag"),`
      `callback_method)`

      ___

         Parameters entity_type – Caption Entity type to check for. All types can be found as
               constants in `telegram.MessageEntity`.

   class chat(*chat_id=None*, *username=None*)
      Bases: `telegram.ext.filters.BaseFilter`

      Filters messages to allow only those which are from specified chat ID.

      ___

      Examples

      `MessageHandler(Filters.chat(-1234), callback_method)`

      ___

         Parameters

             • **chat_id** (`int` | List[`int`], optional) – Which chat ID(s) to allow through.

             • **username** (`str` | List[`str`], optional) – Which username(s) to allow through. If
                username start swith '@' symbol, it will be ignored.

         Raises `ValueError` – If chat_id and username are both present, or neither is.

   command = Filters.command
      Messages starting with /.

   contact = Filters.contact
      Messages that contain `telegram.Contact`.

document = Filters.document
    Subset for messages containing a document/file.

Examples

Use these filters like: `Filters.document.mp3`, `Filters.document.mime_type("text/plain")` etc. Or use just `Filters.document` for all document messages.

---

category
    This Filter filters documents by their category in the mime-type attribute.

Example

`Filters.documents.category('audio/')` filters all types of audio sent as file, for example 'audio/mpeg' or 'audio/x-wav'. The following attributes can be used as a shortcut like: `Filters.document.audio`

---

application

audio

image

video

text

mime_type
    This Filter filters documents by their mime-type attribute.

Example

`Filters.documents.mime_type('audio/mpeg')` filters all audio in mp3 format. The following attributes can be used as a shortcut like: `Filters.document.jpg`

---

apk

doc

docx

exe

gif

jpg

mp3

pdf

py

svg

txt

targz

wav

xml

zip

---

category
    This Filter filters documents by their category in the mime-type attribute

---

Note: This Filter only filters by the mime_type of the document, it doesn't check the validity of the document. The user can manipulate the mime-type of a message and send media with wrong types that don't fit to this handler.

Example

`Filters.documents.category('audio/')` filters all types of audio sent as file, for example 'audio/mpeg' or 'audio/x-wav'

---

application
    Same as `Filters.document.category("application")`.

audio
    Same as `Filters.document.category("audio")`.

image
    Same as `Filters.document.category("image")`.

video
    Same as `Filters.document.category("video")`.

text
    Same as `Filters.document.category("text")`.

mime_type
    This Filter filters documents by their mime-type attribute

---

Note: This Filter only filters by the mime_type of the document, it doesn't check the validity of document.

The user can manipulate the mime-type of a message and send media with wrong types that don't fit to this handler.

Example

`Filters.documents.mime_type('audio/mpeg')` filters all audio in mp3 format.

---

apk
    Same as `Filters.document.mime_type("application/vnd.android.package-archive")`-

doc
    Same as `Filters.document.mime_type("application/msword")`-

docx
    Same as `Filters.document.mime_type("application/vnd.openxmlformats-officedocument.wordprocessingml.document")`-

exe
    Same as `Filters.document.mime_type("application/x-ms-dos-executable")`-

gif
    Same as `Filters.document.mime_type("video/mp4")`-

jpg
    Same as `Filters.document.mime_type("image/jpeg")`-

---

mp3
> Same as `Filters.document.mime_type("audio/mpeg")`-

pdf
> Same as `Filters.document.mime_type("application/pdf")`-

py
> Same as `Filters.document.mime_type("text/x-python")`-

svg
> Same as `Filters.document.mime_type("image/svg+xml")`-

txt
> Same as `Filters.document.mime_type("text/plain")`-

targz
> Same as `Filters.document.mime_type("application/x-compressed-tar")`-

wav
> Same as `Filters.document.mime_type("audio/x-wav")`-

xml
> Same as `Filters.document.mime_type("application/xml")`-

zip
> Same as `Filters.document.mime_type("application/zip")`-

class entity(*entity_type*)
> Bases: *telegram.ext.filters.BaseFilter*
>
> Filters messages to only allow those which have a *telegram.MessageEntity* where their *type* matches *entity_type*.
>
> ---
>
> **Examples**
>
> Example `MessageHandler(Filters.entity("hashtag"), callback_method)`
>
> ---
>
> > **Parameters entity_type** – Entity type to check for. All types can be found as constants in *telegram.MessageEntity*.

forwarded = Filters.forwarded
> Messages that are forwarded.

game = Filters.game
> Messages that contain *telegram.Game*.

group = Filters.group
> Messages sent in a group chat.

invoice = Filters.invoice
> Messages that contain *telegram.Invoice*.

class language(*lang*)
> Bases: *telegram.ext.filters.BaseFilter*
>
> Filters messages to only allow those which are from users with a certain language code.
>
> ---
>
> **Note:** According to official telegram api documentation, not every single user has the *language_code* attribute. Do not count on this filter working on all users.
>
> ---
>
> ---
>
> **Examples**

```
MessageHandler(Filters.language("en"), callback_method)
```

> **Parameters lang** (str | List[str]) – Which language code(s) to allow through. This
> will be matched using `.startswith` meaning that 'en' will match both 'en_US' and
> 'en_GB'.

location = Filters.location
> Messages that contain *telegram.Location*.

passport_data = Filters.passport_data
> Messages that contain a *telegram.PassportData*

photo = Filters.photo
> Messages that contain *telegram.PhotoSize*.

private = Filters.private
> Messages sent in a private chat.

class regex(*pattern*)
> Bases: *telegram.ext.filters.BaseFilter*
>
> Filters updates by searching for an occurrence of `pattern` in the message text. The `re.search`
> function is used to determine whether an update should be filtered.
>
> Refer to the documentation of the `re` module for more information.
>
> To get the groups and groupdict matched, see *telegram.ext.CallbackContext.matches*.

Examples

Use `MessageHandler(Filters.regex(r'help'), callback)` to capture all messages
that contain the word help. You can also use `MessageHandler(Filters.regex(re.
compile(r'help', re.IGNORECASE), callback)` if you want your pattern to be case in-
sensitive. This approach is recommended if you need to specify flags on your pattern.

Note: Filters use the same short circuiting logic that pythons *and*, *or* and *not*. This means that for
example:

```
>>> Filters.regex(r'(a?x)') | Filters.regex(r'(b?x)')
```

With a message.text of *x*, will only ever return the matches for the first filter, since the second one is
never evaluated.

> **Parameters pattern** (str | Pattern) – The regex pattern.

reply = Filters.reply
> Messages that are a reply to another message.

status_update = Filters.status_update
> Subset for messages containing a status update.

Examples

Use these filters like: `Filters.status_update.new_chat_members` etc. Or use just
`Filters.status_update` for all status update messages.

chat_created
> Messages that contain *telegram.Message.group_chat_created*,

telegram.Message.supergroup_chat_created or *telegram.Message.channel_chat_created*.

delete_chat_photo
> Messages that contain *telegram.Message.delete_chat_photo*.

left_chat_member
> Messages that contain *telegram.Message.left_chat_member*.

migrate
> Messages that contain *telegram.Message.migrate_from_chat_id* or :attr: *telegram.Message.migrate_from_chat_id*.

new_chat_members
> Messages that contain *telegram.Message.new_chat_members*.

new_chat_photo
> Messages that contain *telegram.Message.new_chat_photo*.

new_chat_title
> Messages that contain *telegram.Message.new_chat_title*.

pinned_message
> Messages that contain *telegram.Message.pinned_message*.

sticker = Filters.sticker
> Messages that contain *telegram.Sticker*.

successful_payment = Filters.successful_payment
> Messages that confirm a *telegram.SuccessfulPayment*.

text = Filters.text
> Text Messages.

update = _UpdateType
> Subset for filtering the type of update.

Examples

Use these filters like: `Filters.update.message` or `Filters.update.channel_posts` etc. Or use just `Filters.update` for all types.

---

message
> Updates with *telegram.Update.message*

edited_message
> Updates with *telegram.Update.edited_message*

messages
> Updates with either *telegram.Update.message* or *telegram.Update.edited_message*

channel_post
> Updates with *telegram.Update.channel_post*

edited_channel_post
> Updates with *telegram.Update.edited_channel_post*

channel_posts
> Updates with either *telegram.Update.channel_post* or *telegram.Update.edited_channel_post*

class user(*user_id=None*, *username=None*)
> Bases: *telegram.ext.filters.BaseFilter*

Filters messages to allow only those which are from specified user ID.

Examples

```
MessageHandler(Filters.user(1234), callback_method)
```

Parameters

- **user_id** (int | List[int], optional) – Which user ID(s) to allow through.
- **username** (str | List[str], optional) – Which username(s) to allow through. If username starts with '@' symbol, it will be ignored.

Raises ValueError – If chat_id and username are both present, or neither is.

venue = Filters.venue
    Messages that contain *telegram.Venue*.

video = Filters.video
    Messages that contain *telegram.Video*.

video_note = Filters.video_note
    Messages that contain *telegram.VideoNote*.

voice = Filters.voice
    Messages that contain *telegram.Voice*.

class telegram.ext.filters.**BaseFilter**
    Bases: object

    Base class for all Message Filters.

    Subclassing from this class filters to be combined using bitwise operators:

    And:

    ```
    >>> (Filters.text & Filters.entity(MENTION))
    ```

    Or:

    ```
    >>> (Filters.audio | Filters.video)
    ```

    Not:

    ```
    >>> ~ Filters.command
    ```

    Also works with more than two filters:

    ```
    >>> (Filters.text & (Filters.entity(URL) | Filters.entity(TEXT_LINK)))
    >>> Filters.text & (~ Filters.forwarded)
    ```

    Note: Filters use the same short circuiting logic that pythons *and*, *or* and *not*. This means that for example:

    ```
    >>> Filters.regex(r'(a?x)') | Filters.regex(r'(b?x)')
    ```

    With a message.text of *x*, will only ever return the matches for the first filter, since the second one is never evaluated.

    If you want to create your own filters create a class inheriting from this class and implement a *filter* method that returns a boolean: *True* if the message should be handled, *False* otherwise. Note that the filters work only as class instances, not actual class objects (so remember to initialize your filter classes).

    By default the filters name (what will get printed when converted to a string for display) will be the class name. If you want to overwrite this assign a better name to the *name* class variable.

name
>   Name for this filter. Defaults to the type of filter.
>
>   **Type** `str`

update_filter
>   Whether this filter should work on update. If `False` it will run the filter on `update.`
>   `effective_message`. Default is `False`.
>
>   **Type** `bool`

data_filter
>   Whether this filter is a data filter. A data filter should return a dict with lists. The dict will be merged
>   with *telegram.ext.CallbackContext*'s internal dict in most cases (depends on the handler).
>
>   **Type** `bool`

filter(*update*)
>   This method must be overwritten.
>
>   ---
>   **Note:** If *update_filter* is false then the first argument is *message* and of type *telegram.*
>   *Message*.
>   ---
>
>   **Parameters update**(*telegram.Update*) – The update that is tested.
>
>   **Returns** `dict` or `bool`

class telegram.ext.filters.**InvertedFilter**(*f*)
>   Bases: *telegram.ext.filters.BaseFilter*
>
>   Represents a filter that has been inverted.
>
>   **Parameters f** – The filter to invert.

filter(*update*)
>   This method must be overwritten.
>
>   ---
>   **Note:** If update_filter is false then the first argument is *message* and of type *telegram.*
>   *Message*.
>   ---
>
>   **Parameters update**(*telegram.Update*) – The update that is tested.
>
>   **Returns** `dict` or `bool`

class telegram.ext.filters.**MergedFilter**(*base_filter*, *and_filter=None*, *or_filter=None*)
>   Bases: *telegram.ext.filters.BaseFilter*
>
>   Represents a filter consisting of two other filters.
>
>   **Parameters**
>
>   • **base_filter** – Filter 1 of the merged filter
>
>   • **and_filter** – Optional filter to "and" with base_filter. Mutually exclusive with
>   or_filter.
>
>   • **or_filter** – Optional filter to "or" with base_filter. Mutually exclusive with
>   and_filter.

filter(*update*)
>   This method must be overwritten.

Note: If update_filter is false then the first argument is *message* and of type *telegram. Message*.

> **Parameters update** (*telegram.Update*) – The update that is tested.
>
> **Returns** dict or bool

3.1.4 telegram.ext.Job

class telegram.ext.**Job**(*callback*, *interval=None*, *repeat=True*, *context=None*, *days=(0, 1, 2, 3, 4, 5, 6)*, *name=None*, *job_queue=None*)

Bases: object

This class encapsulates a Job.

callback
> The callback function that should be executed by the new job.
>
> > **Type** callable

context
> Optional. Additional data needed for the callback function.
>
> > **Type** object

name
> Optional. The name of the new job.
>
> > **Type** str

> **Parameters**
> - **callback** (callable) – The callback function that should be executed by the new job. It should take bot, job as parameters, where job is the *telegram.ext.Job* instance. It can be used to access it's *context* or change it to a repeating job.
> - **interval** (int | float | datetime.timedelta, optional) – The interval in which the job will run. If it is an int or a float, it will be interpreted as seconds. If you don't set this value, you must set *repeat* to False and specify next_t when you put the job into the job queue.
> - **repeat** (bool, optional) – If this job should be periodically execute its callback function (True) or only once (False). Defaults to True.
> - **context** (object, optional) – Additional data needed for the callback function. Can be accessed through job.context in the callback. Defaults to None.
> - **name** (str, optional) – The name of the new job. Defaults to callback.__name__.
> - **days** (Tuple[int], optional) – Defines on which days of the week the job should run. Defaults to Days.EVERY_DAY
> - **job_queue** (*telegram.ext.JobQueue*, optional) – The JobQueue this job belongs to. Only optional for backward compatibility with JobQueue.put().

days
> Optional. Defines on which days of the week the job should run.
>
> > **Type** Tuple[int]

enabled
> Whether this job is enabled.
>
> > **Type** bool

interval
> Optional. The interval in which the job will run.
>
> > **Type** `int` | `float` | `datetime.timedelta`

interval_seconds
> The interval for this job in seconds.
>
> > **Type** `int`

job_queue
> Optional. The `JobQueue` this job belongs to.
>
> > **Type** *`telegram.ext.JobQueue`*

removed
> Whether this job is due to be removed.
>
> > **Type** `bool`

repeat
> Optional. If this job should periodically execute its callback function.
>
> > **Type** `bool`

run(*dispatcher*)
> Executes the callback function.

schedule_removal()
> Schedules this job for removal from the `JobQueue`. It will be removed without executing its callback function again.

3.1.5 telegram.ext.JobQueue

class `telegram.ext.`**JobQueue**(*bot=None*)
> Bases: `object`
>
> This class allows you to periodically perform tasks with the bot.
>
> **_queue**
> > The queue that holds the Jobs.
> >
> > > **Type** `PriorityQueue`
>
> **bot**
> > The bot instance that should be passed to the jobs. DEPRECATED: Use set_dispatcher instead.
> >
> > > **Type** *`telegram.Bot`*
>
> **get_jobs_by_name**(*name*)
> > Returns a tuple of jobs with the given name that are currently in the `JobQueue`
>
> **jobs**()
> > Returns a tuple of all jobs that are currently in the `JobQueue`.
>
> **run_daily**(*callback*, *time*, *days=(0, 1, 2, 3, 4, 5, 6)*, *context=None*, *name=None*)
> > Creates a new `Job` that runs on a daily basis and adds it to the queue.
> >
> > **Parameters**
> > - **callback** (`callable`) – The callback function that should be executed by the new job. It should take `bot,  job` as parameters, where `job` is the *`telegram.ext.Job`* instance. It can be used to access its `Job.context` or change it to a repeating job.
> > - **time** (`datetime.time`) – Time of day at which the job should run.
> > - **days** (Tuple[`int`], optional) – Defines on which days of the week the job should run. Defaults to `EVERY_DAY`

- **context** (object, optional) – Additional data needed for the callback function. Can be accessed through `job.context` in the callback. Defaults to `None`.

- **name** (str, optional) – The name of the new job. Defaults to `callback.__name__`.

> **Returns** The new `Job` instance that has been added to the job queue.

> **Return type** *telegram.ext.Job*

Notes

Daily is just an alias for "24 Hours". That means that if DST changes during that interval, the job might not run at the time one would expect. It is always recommended to pin servers to UTC time, then time related behaviour can always be expected.

run_once(*callback*, *when*, *context=None*, *name=None*)
  Creates a new `Job` that runs once and adds it to the queue.

> **Parameters**

- **callback** (callable) – The callback function that should be executed by the new job. It should take `bot, job` as parameters, where `job` is the *telegram.ext.Job* instance. It can be used to access its `job.context` or change it to a repeating job.

- **when** (int | float | datetime.timedelta | datetime.datetime | datetime.time) – Time in or at which the job should run. This parameter will be interpreted depending on its type.

  - `int` or `float` will be interpreted as "seconds from now" in which the job should run.

  - `datetime.timedelta` will be interpreted as "time from now" in which the job should run.

  - `datetime.datetime` will be interpreted as a specific date and time at which the job should run.

  - `datetime.time` will be interpreted as a specific time of day at which the job should run. This could be either today or, if the time has already passed, tomorrow.

- **context** (object, optional) – Additional data needed for the callback function. Can be accessed through `job.context` in the callback. Defaults to `None`.

- **name** (str, optional) – The name of the new job. Defaults to `callback.__name__`.

> **Returns** The new `Job` instance that has been added to the job queue.

> **Return type** *telegram.ext.Job*

run_repeating(*callback*, *interval*, *first=None*, *context=None*, *name=None*)
  Creates a new `Job` that runs at specified intervals and adds it to the queue.

> **Parameters**

- **callback** (callable) – The callback function that should be executed by the new job. It should take `bot, job` as parameters, where `job` is the *telegram.ext.Job* instance. It can be used to access its `Job.context` or change it to a repeating job.

- **interval** (int | float | datetime.timedelta) – The interval in which the job will run. If it is an `int` or a `float`, it will be interpreted as seconds.

- **first** (int | float | datetime.timedelta | datetime.datetime | datetime.time, optional) – Time in or at which the job should run. This parameter will be interpreted depending on its type.

  - int or float will be interpreted as "seconds from now" in which the job should run.

  - datetime.timedelta will be interpreted as "time from now" in which the job should run.

  - datetime.datetime will be interpreted as a specific date and time at which the job should run.

  - datetime.time will be interpreted as a specific time of day at which the job should run. This could be either today or, if the time has already passed, tomorrow.

  Defaults to interval

- **context** (object, optional) – Additional data needed for the callback function. Can be accessed through job.context in the callback. Defaults to None.

- **name** (str, optional) – The name of the new job. Defaults to callback.__name__.

Returns The new Job instance that has been added to the job queue.

Return type *telegram.ext.Job*

Notes

interval is always respected "as-is". That means that if DST changes during that interval, the job might not run at the time one would expect. It is always recommended to pin servers to UTC time, then time related behaviour can always be expected.

start()
Starts the job_queue thread.

stop()
Stops the thread.

tick()
Run all jobs that are due and re-enqueue them with their interval.

3.1.6 telegram.ext.MessageQueue

class telegram.ext.**MessageQueue**(*all_burst_limit=30*, *all_time_limit_ms=1000*, *group_burst_limit=20*, *group_time_limit_ms=60000*, *exc_route=None*, *autostart=True*)
Bases: object

Implements callback processing with proper delays to avoid hitting Telegram's message limits. Contains two DelayQueue, for group and for all messages, interconnected in delay chain. Callables are processed through *group* DelayQueue, then through *all* DelayQueue for group-type messages. For non-group messages, only the *all* DelayQueue is used.

Parameters

- **all_burst_limit** (int, optional) – Number of maximum *all-type* callbacks to process per time-window defined by all_time_limit_ms. Defaults to 30.

- **all_time_limit_ms** (int, optional) – Defines width of *all-type* time-window used when each processing limit is calculated. Defaults to 1000 ms.

- **group_burst_limit** (int, optional) – Number of maximum *group-type* callbacks to process per time-window defined by group_time_limit_ms. Defaults to 20.

- **group_time_limit_ms** (int, optional) – Defines width of *group-type* time-window used when each processing limit is calculated. Defaults to 60000 ms.

- **exc_route** (callable, optional) – A callable, accepting one positional argument; used to route exceptions from processor threads to main thread; is called on Exception subclass exceptions. If not provided, exceptions are routed through dummy handler, which re-raises them.

- **autostart** (bool, optional) – If True, processors are started immediately after object's creation; if False, should be started manually by *start* method. Defaults to True.

__call__ (*promise*, *is_group_msg=False*)

Processes callables in troughput-limiting queues to avoid hitting limits (specified with burst_limit and time_limit.

Parameters

- **promise** (callable) – Mainly the telegram.utils.promise.Promise (see Notes for other callables), that is processed in delay queues.

- **is_group_msg** (bool, optional) – Defines whether promise would be processed in group*+*all* DelayQueue``s (if set to ``True), or only through *all* DelayQueue (if set to False), resulting in needed delays to avoid hitting specified limits. Defaults to False.

Notes

Method is designed to accept telegram.utils.promise.Promise as promise argument, but other callables could be used too. For example, lambdas or simple functions could be used to wrap original func to be called with needed args. In that case, be sure that either wrapper func does not raise outside exceptions or the proper exc_route handler is provided.

Returns Used as promise argument.

Return type callable

__init__ (*all_burst_limit=30*, *all_time_limit_ms=1000*, *group_burst_limit=20*, *group_time_limit_ms=60000*, *exc_route=None*, *autostart=True*)

Initialize self. See help(type(self)) for accurate signature.

__weakref__

list of weak references to the object (if defined)

start ()

Method is used to manually start the MessageQueue processing.

stop (*timeout=None*)

Used to gently stop processor and shutdown its thread.

Parameters timeout (float) – Indicates maximum time to wait for processor to stop and its thread to exit. If timeout exceeds and processor has not stopped, method silently returns. is_alive could be used afterwards to check the actual status. timeout set to None, blocks until processor is shut down. Defaults to None.

3.1.7 telegram.ext.DelayQueue

class telegram.ext.**DelayQueue** (*queue=None*, *burst_limit=30*, *time_limit_ms=1000*, *exc_route=None*, *autostart=True*, *name=None*)

Bases: threading.Thread

Processes callbacks from queue with specified throughput limits. Creates a separate thread to process callbacks with delays.

burst_limit
> Number of maximum callbacks to process per time-window.
>
>> **Type** `int`

time_limit
> Defines width of time-window used when each processing limit is calculated.
>
>> **Type** `int`

exc_route
> A callable, accepting 1 positional argument; used to route exceptions from processor thread to main thread;
>
>> **Type** `callable`

name
> Thread's name.
>
>> **Type** `str`

> **Parameters**
>
> - **queue** (`Queue`, optional) – Used to pass callbacks to thread. Creates `Queue` implicitly if not provided.
> - **burst_limit** (`int`, optional) – Number of maximum callbacks to process per time-window defined by `time_limit_ms`. Defaults to 30.
> - **time_limit_ms** (`int`, optional) – Defines width of time-window used when each processing limit is calculated. Defaults to 1000.
> - **exc_route** (`callable`, optional) – A callable, accepting 1 positional argument; used to route exceptions from processor thread to main thread; is called on *Exception* subclass exceptions. If not provided, exceptions are routed through dummy handler, which re-raises them.
> - **autostart** (`bool`, optional) – If True, processor is started immediately after object's creation; if `False`, should be started manually by *start* method. Defaults to True.
> - **name** (`str`, optional) – Thread's name. Defaults to `'DelayQueue-N'`, where N is sequential number of object created.

__call__(*func*, **args*, ***kwargs*)
> Used to process callbacks in throughput-limiting thread through queue.
>
> **Parameters**
>
> - **func** (`callable`) – The actual function (or any callable) that is processed through queue.
> - ***args** (`list`) – Variable-length *func* arguments.
> - ****kwargs** (`dict`) – Arbitrary keyword-arguments to *func*.

__init__(*queue=None*, *burst_limit=30*, *time_limit_ms=1000*, *exc_route=None*, *autostart=True*, *name=None*)
> This constructor should always be called with keyword arguments. Arguments are:
>
> *group* should be None; reserved for future extension when a ThreadGroup class is implemented.
>
> *target* is the callable object to be invoked by the run() method. Defaults to None, meaning nothing is called.
>
> *name* is the thread name. By default, a unique name is constructed of the form "Thread-N" where N is a small decimal number.
>
> *args* is the argument tuple for the target invocation. Defaults to ().
>
> *kwargs* is a dictionary of keyword arguments for the target invocation. Defaults to {}.

If a subclass overrides the constructor, it must make sure to invoke the base class constructor (Thread.__init__()) before doing anything else to the thread.

run()
> Do not use the method except for unthreaded testing purposes, the method normally is automatically called by autostart argument.

stop(*timeout=None*)
> Used to gently stop processor and shutdown its thread.

> > **Parameters timeout** (`float`) – Indicates maximum time to wait for processor to stop and its thread to exit. If timeout exceeds and processor has not stopped, method silently returns. `is_alive` could be used afterwards to check the actual status. `timeout` set to None, blocks until processor is shut down. Defaults to None.

3.1.8 telegram.ext.CallbackContext

class telegram.ext.**CallbackContext**(*dispatcher*)
> This is a context object passed to the callback called by *telegram.ext.Handler* or by the *telegram.ext.Dispatcher* in an error handler added by *telegram.ext.Dispatcher.add_error_handler* or to the callback of a *telegram.ext.Job*.

> ---

> **Note:** *telegram.ext.Dispatcher* will create a single context for an entire update. This means that if you got 2 handlers in different groups and they both get called, they will get passed the same *Callback-Context* object (of course with proper attributes like *.matches* differing). This allows you to add custom attributes in a lower handler group callback, and then subsequently access those attributes in a higher handler group callback. Note that the attributes on *CallbackContext* might change in the future, so make sure to use a fairly unique name for the attributes.

> ---

> **Warning:** Do not combine custom attributes and @run_async. Due to how @run_async works, it will almost certainly execute the callbacks for an update out of order, and the attributes that you think you added will not be present.

> **chat_data**
> > A dict that can be used to keep any data in. For each update from the same chat it will be the same `dict`.

> > > **Type** `dict`, optional

> **user_data**
> > A dict that can be used to keep any data in. For each update from the same user it will be the same `dict`.

> > > **Type** `dict`, optional

> **matches**
> > If the associated update originated from a regex-supported handler or had a `Filters.regex`, this will contain a list of match objects for every pattern where `re.search(pattern, string)` returned a match. Note that filters short circuit, so combined regex filters will not always be evaluated.

> > > **Type** List[`re match object`], optional

> **args**
> > Arguments passed to a command if the associated update is handled by *telegram.ext.CommandHandler*, *telegram.ext.PrefixHandler* or *telegram.ext.StringCommandHandler*. It contains a list of the words in the text after the command, using any whitespace string as a delimiter.

> > > **Type** List[`str`], optional

error
> The Telegram error that was raised. Only present when passed to a error handler registered with *telegram.ext.Dispatcher.add_error_handler*.
>
> > **Type** telegram.TelegramError, optional

job
> The job that that originated this callback. Only present when passed to the callback of *telegram. ext.Job*.
>
> > **Type** *telegram.ext.Job*

bot
> The bot associated with this context.
>
> > **Type** *telegram.Bot*

job_queue
> The JobQueue used by the *telegram.ext.Dispatcher* and (usually) the *telegram.ext. Updater* associated with this context.
>
> > **Type** *telegram.ext.JobQueue*

match
> The first match from *matches*. Useful if you are only filtering using a single regex filter. Returns *None* if *matches* is empty.
>
> > **Type** *Regex match type*

update_queue
> The Queue instance used by the *telegram.ext.Dispatcher* and (usually) the *telegram. ext.Updater* associated with this context.
>
> > **Type** queue.Queue

3.1.9 Handlers

telegram.ext.Handler

class telegram.ext.**Handler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*)
> Bases: object

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

callback
> The callback function for this handler.
>
> > **Type** callable

pass_update_queue
> Determines whether update_queue will be passed to the callback function.
>
> > **Type** bool

pass_job_queue
> Determines whether job_queue will be passed to the callback function.
>
> > **Type** bool

pass_user_data
> Determines whether user_data will be passed to the callback function.
>
> > **Type** bool

pass_chat_data
> Determines whether chat_data will be passed to the callback function.

> **Type** `bool`

Note: *`pass_user_data`* and *`pass_chat_data`* determine whether a `dict` you can use to keep any data in will be sent to the *`callback`* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same `dict`.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

Parameters

- **callback** (`callable`) – The callback function for this handler. Will be called when *`check_update`* has determined that an update should be processed by this handler. Callback signature for context based API:

  ```
  def callback(update:  Update, context:  CallbackContext)
  ```

  The return value of the callback is usually ignored except for the special case of *`telegram.ext.ConversationHandler`*.

- **pass_update_queue** (`bool`, optional) – If set to `True`, a keyword argument called `update_queue` will be passed to the callback function. It will be the `Queue` instance used by the *`telegram.ext.Updater`* and *`telegram.ext.Dispatcher`* that contains new updates which can be used to insert updates. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (`bool`, optional) – If set to `True`, a keyword argument called `job_queue` will be passed to the callback function. It will be a *`telegram.ext.JobQueue`* instance created by the *`telegram.ext.Updater`* which can be used to schedule new jobs. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (`bool`, optional) – If set to `True`, a keyword argument called `user_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (`bool`, optional) – If set to `True`, a keyword argument called `chat_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)

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

> **Parameters update** (`str` | *`telegram.Update`*) – The update to be tested.

> **Returns** Either `None` or `False` if the update should not be handled. Otherwise an object that will be passed to *`handle_update`* and *`collect_additional_context`* when the update gets handled.

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)

Prepares additional arguments for the context. Override if needed.

> **Parameters**
>
> - **context** (*`telegram.ext.CallbackContext`*) – The context object.
>
> - **update** (*`telegram.Update`*) – The update to gather chat/user id from.
>
> - **dispatcher** (*`telegram.ext.Dispatcher`*) – The calling dispatcher.
>
> - **check_result** – The result (return value) from *`check_update`*.

---

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
> Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.
>
> DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.
>
> > **Parameters**
> >
> > - **dispatcher** (`telegram.ext.Dispatcher`) – The dispatcher.
> > - **update** (`telegram.Update`) – The update to gather chat/user id from.
> > - **check_result** – The result from check_update

handle_update(*update*, *dispatcher*, *check_result*, *context=None*)
> This method is called if it was determined that an update should indeed be handled by this instance. Calls `self.callback` along with its respectful arguments. To work with the `telegram.ext.ConversationHandler`, this method returns the value returned from `self.callback`. Note that it can be overridden if needed by the subclassing handler.
>
> > **Parameters**
> >
> > - **update** (`str` | `telegram.Update`) – The update to be handled.
> > - **dispatcher** (`telegram.ext.Dispatcher`) – The calling dispatcher.
> > - **check_result** – The result from `check_update`.

telegram.ext.CallbackQueryHandler

class telegram.ext.**CallbackQueryHandler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pattern=None*, *pass_groups=False*, *pass_groupdict=False*, *pass_user_data=False*, *pass_chat_data=False*)
> Bases: `telegram.ext.handler.Handler`
>
> Handler class to handle Telegram callback queries. Optionally based on a regex.
>
> Read the documentation of the `re` module for more information.
>
> **callback**
> > The callback function for this handler.
> >
> > > **Type** `callable`
>
> **pass_update_queue**
> > Determines whether `update_queue` will be passed to the callback function.
> >
> > > **Type** `bool`
>
> **pass_job_queue**
> > Determines whether `job_queue` will be passed to the callback function.
> >
> > > **Type** `bool`
>
> **pattern**
> > Optional. Regex pattern to test `telegram.CallbackQuery.data` against.
> >
> > > **Type** `str` | *Pattern*
>
> **pass_groups**
> > Determines whether `groups` will be passed to the callback function.
> >
> > > **Type** `bool`
>
> **pass_groupdict**
> > Determines whether `groupdict.` will be passed to the callback function.

> **Type** bool

pass_user_data
> Determines whether user_data will be passed to the callback function.

> > **Type** bool

pass_chat_data
> Determines whether chat_data will be passed to the callback function.

> > **Type** bool

Note: *pass_user_data* and *pass_chat_data* determine whether a dict you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same dict.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

> **Parameters**

> - **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

>  >  ```
>  >  def callback(update:   Update, context:
>  >  CallbackContext)
>  >  ```

> > The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

> - **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRECATED: Please switch to context based callbacks.

> - **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

> - **pattern** (str | *Pattern*, optional) – Regex pattern. If not None, re.match is used on *telegram.CallbackQuery.data* to determine if an update should be handled by this handler.

> - **pass_groups** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groups() as a keyword argument called groups. Default is False DEPRECATED: Please switch to context based callbacks.

> - **pass_groupdict** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groupdict() as a keyword argument called groupdict. Default is False DEPRECATED: Please switch to context based callbacks.

> - **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

> - **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

---

check_update(*update*)
> Determines whether an update should be passed to this handlers *callback*.
>
> > **Parameters update** (*telegram.Update*) – Incoming telegram update.
> >
> > **Returns** bool

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)
> Prepares additional arguments for the context. Override if needed.
>
> > **Parameters**
> >
> > - **context** (*telegram.ext.CallbackContext*) – The context object.
> > - **update** (*telegram.Update*) – The update to gather chat/user id from.
> > - **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.
> > - **check_result** – The result (return value) from *check_update*.

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
> Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.
>
> DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.
>
> > **Parameters**
> >
> > - **dispatcher** (*telegram.ext.Dispatcher*) – The dispatcher.
> > - **update** (*telegram.Update*) – The update to gather chat/user id from.
> > - **check_result** – The result from check_update

telegram.ext.ChosenInlineResultHandler

class telegram.ext.**ChosenInlineResultHandler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*)
> Bases: telegram.ext.handler.Handler
>
> Handler class to handle Telegram updates that contain a chosen inline result.
>
> **callback**
> > The callback function for this handler.
> >
> > > **Type** callable
>
> **pass_update_queue**
> > Determines whether update_queue will be passed to the callback function.
> >
> > > **Type** bool
>
> **pass_job_queue**
> > Determines whether job_queue will be passed to the callback function.
> >
> > > **Type** bool
>
> **pass_user_data**
> > Determines whether user_data will be passed to the callback function.
> >
> > > **Type** bool
>
> **pass_chat_data**
> > Determines whether chat_data will be passed to the callback function.
> >
> > > **Type** bool

> **Note:** *pass_user_data* and *pass_chat_data* determine whether a dict you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same dict.
>
> Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

Parameters

- **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

  def callback(update: Update, context: CallbackContext)

  The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)

Determines whether an update should be passed to this handlers *callback*.

> **Parameters update** (*telegram.Update*) – Incoming telegram update.
>
> **Returns** bool

telegram.ext.ConversationHandler

class telegram.ext.**ConversationHandler**(*entry_points, states, fallbacks, allow_reentry=False, per_chat=True, per_user=True, per_message=False, conversation_timeout=None, name=None, persistent=False, map_to_parent=None*)

Bases: telegram.ext.handler.Handler

A handler to hold a conversation with a single user by managing four collections of other handlers. Note that neither posts in Telegram Channels, nor group interactions with multiple users are managed by instances of this class.

The first collection, a list named *entry_points*, is used to initiate the conversation, for example with a *telegram.ext.CommandHandler* or *telegram.ext.RegexHandler*.

The second collection, a `dict` named *states*, contains the different conversation steps and one or more associated handlers that should be used if the user sends a message when the conversation with them is currently in that state. Here you can also define a state for *TIMEOUT* to define the behavior when *conversation_timeout* is exceeded, and a state for *WAITING* to define behavior when a new update is received while the previous `@run_async` decorated handler is not finished.

The third collection, a `list` named *fallbacks*, is used if the user is currently in a conversation but the state has either no associated handler or the handler that is associated to the state is inappropriate for the update, for example if the update contains a command, but a regular text message is expected. You could use this for a `/cancel` command or to let the user know their message was not recognized.

To change the state of conversation, the callback function of a handler must return the new state after responding to the user. If it does not return anything (returning `None` by default), the state will not change. If an entry point callback function returns None, the conversation ends immediately after the execution of this callback function. To end the conversation, the callback function must return *END* or `-1`. To handle the conversation timeout, use handler *TIMEOUT* or `-2`.

Note: In each of the described collections of handlers, a handler may in turn be a *ConversationHandler*. In that case, the nested *ConversationHandler* should have the attribute *map_to_parent* which allows to return to the parent conversation at specified states within the nested conversation.

Note that the keys in *map_to_parent* must not appear as keys in *states* attribute or else the latter will be ignored. You may map *END* to one of the parents states to continue the parent conversation after this has ended or even map a state to *END* to end the *parent* conversation from within the nested one. For an example on nested *ConversationHandler* s, see our examples.

---

entry_points
> A list of `Handler` objects that can trigger the start of the conversation.
>
> > **Type** List[*telegram.ext.Handler*]

states
> A `dict` that defines the different states of conversation a user can be in and one or more associated `Handler` objects that should be used in that state.
>
> > **Type** Dict[object, List[*telegram.ext.Handler*]]

fallbacks
> A list of handlers that might be used if the user is in a conversation, but every handler for their current state returned `False` on *check_update*.
>
> > **Type** List[*telegram.ext.Handler*]

allow_reentry
> Determines if a user can restart a conversation with an entry point.
>
> > **Type** `bool`

per_chat
> If the conversationkey should contain the Chat's ID.
>
> > **Type** `bool`

per_user
> If the conversationkey should contain the User's ID.
>
> > **Type** `bool`

per_message
> If the conversationkey should contain the Message's ID.
>
> > **Type** `bool`

conversation_timeout
> Optional. When this handler is inactive more than this timeout (in seconds), it will be automatically ended. If this value is 0 (default), there will be no timeout. When it's triggered, the last received update will be handled by ALL the handler's who's *check_update* method returns True that are in the state `ConversationHandler.TIMEOUT`.
>
> > **Type** float`|:obj:`datetime.timedelta

name
> Optional. The name for this conversationhandler. Required for persistence
>
> > **Type** str

persistent
> Optional. If the conversations dict for this handler should be saved. Name is required and persistence has to be set in `telegram.ext.Updater`
>
> > **Type** bool

map_to_parent
> Optional. A `dict` that can be used to instruct a nested conversationhandler to transition into a mapped state on its parent conversationhandler in place of a specified nested state.
>
> > **Type** Dict[object, object]

> **Parameters**
> - **entry_points** (List[`telegram.ext.Handler`]) – A list of `Handler` objects that can trigger the start of the conversation. The first handler which `check_update` method returns `True` will be used. If all return `False`, the update is not handled.
>
> - **states** (Dict[object, List[`telegram.ext.Handler`]]) – A `dict` that defines the different states of conversation a user can be in and one or more associated `Handler` objects that should be used in that state. The first handler which `check_update` method returns `True` will be used.
>
> - **fallbacks** (List[`telegram.ext.Handler`]) – A list of handlers that might be used if the user is in a conversation, but every handler for their current state returned `False` on `check_update`. The first handler which `check_update` method returns `True` will be used. If all return `False`, the update is not handled.
>
> - **allow_reentry** (bool, optional) – If set to `True`, a user that is currently in a conversation can restart the conversation by triggering one of the entry points.
>
> - **per_chat** (bool, optional) – If the conversationkey should contain the Chat's ID. Default is `True`.
>
> - **per_user** (bool, optional) – If the conversationkey should contain the User's ID. Default is `True`.
>
> - **per_message** (bool, optional) – If the conversationkey should contain the Message's ID. Default is `False`.
>
> - **conversation_timeout** (float | datetime.timedelta, optional) – When this handler is inactive more than this timeout (in seconds), it will be automatically ended. If this value is 0 or None (default), there will be no timeout. The last received update will be handled by ALL the handler's who's *check_update* method returns True that are in the state `ConversationHandler.TIMEOUT`.
>
> - **name** (str, optional) – The name for this conversationhandler. Required for persistence
>
> - **persistent** (bool, optional) – If the conversations dict for this handler should be saved. Name is required and persistence has to be set in `telegram.ext.Updater`

- **map_to_parent** (Dict[object, object], optional) – A dict that can be used
  to instruct a nested conversationhandler to transition into a mapped state on its parent
  conversationhandler in place of a specified nested state.

> **Raises** ValueError

END = −1
> Used as a constant to return when a conversation is ended.

> > **Type** int

TIMEOUT = −2
> Used as a constant to handle state when a conversation is timed out.

> > **Type** int

WAITING = −3
> Used as a constant to handle state when a conversation is still waiting on the previous @run_sync
> decorated running handler to finish.

> > **Type** int

check_update(*update*)
> Determines whether an update should be handled by this conversationhandler, and if so in which state
> the conversation currently is.

> > **Parameters update** (*telegram.Update*) – Incoming telegram update.

> > **Returns** bool

handle_update(*update*, *dispatcher*, *check_result*, *context=None*)
> Send the update to the callback for the current state and Handler

> > **Parameters**

> > - **check_result** – The result from check_update. For this handler it's a tuple of key,
> >   handler, and the handler's check result.

> > - **update** (*telegram.Update*) – Incoming telegram update.

> > - **dispatcher** (*telegram.ext.Dispatcher*) – Dispatcher that originated the
> >   Update.

persistence = None
> The persistence used to store conversations. Set by dispatcher

> > **Type** telegram.ext.BasePersistance

telegram.ext.CommandHandler

class telegram.ext.**CommandHandler**(*command*, *callback*, *filters=None*, *allow_edited=None*,
  pass_args=False, *pass_update_queue=False*,
  pass_job_queue=False, *pass_user_data=False*,
  pass_chat_data=False)
Bases: telegram.ext.handler.Handler

Handler class to handle Telegram commands.

Commands are Telegram messages that start with /, optionally followed by an @ and the bot's name
and/or some additional text. The handler will add a list to the *CallbackContext* named
CallbackContext.args. It will contain a list of strings, which is the text following the command
split on single or consecutive whitespace characters.

By default the handler listens to messages as well as edited messages. To change this behavior use
~Filters.update.edited_message in the filter argument.

command
> The command or list of commands this handler should listen for. Limitations are the same as described here https://core.telegram.org/bots#commands
>
> > **Type** `str | List[str]`

callback
> The callback function for this handler.
>
> > **Type** `callable`

filters
> Optional. Only allow updates with these Filters.
>
> > **Type** `telegram.ext.BaseFilter`

allow_edited
> Determines Whether the handler should also accept edited messages.
>
> > **Type** `bool`

pass_args
> Determines whether the handler should be passed `args`.
>
> > **Type** `bool`

pass_update_queue
> Determines whether `update_queue` will be passed to the callback function.
>
> > **Type** `bool`

pass_job_queue
> Determines whether `job_queue` will be passed to the callback function.
>
> > **Type** `bool`

pass_user_data
> Determines whether `user_data` will be passed to the callback function.
>
> > **Type** `bool`

pass_chat_data
> Determines whether `chat_data` will be passed to the callback function.
>
> > **Type** `bool`

Note: *pass_user_data* and *pass_chat_data* determine whether a `dict` you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same `dict`.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

> **Parameters**
>
> - **command** (`str | List[str]`) – The command or list of commands this handler should listen for. Limitations are the same as described here https://core.telegram.org/bots#commands
>
> - **callback** (`callable`) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:
>
>   `def callback(update: Update, context: CallbackContext)`
>
>   The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **filters** (telegram.ext.BaseFilter, optional) – A filter inheriting from *telegram.ext.filters.BaseFilter*. Standard filters can be found in *telegram.ext.filters.Filters*. Filters can be combined using bitwise operators (& for and, | for or, ~ for not).

- **allow_edited** (bool, optional) – Determines whether the handler should also accept edited messages. Default is False. DEPRECATED: Edited is allowed by default. To change this behavior use ~Filters.update.edited_message.

- **pass_args** (bool, optional) – Determines whether the handler should be passed the arguments passed to the command as a keyword argument called args. It will contain a list of strings, which is the text following the command split on single or consecutive whitespace characters. Default is False DEPRECATED: Please switch to context based callbacks.

- **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

Raises ValueError - when command is too long or has illegal chars.

check_update(*update*)
    Determines whether an update should be passed to this handlers *callback*.

   Parameters update (*telegram.Update*) – Incoming telegram update.

   Returns The list of args for the handler

   Return type list

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)
    Prepares additional arguments for the context. Override if needed.

   Parameters

   - **context** (*telegram.ext.CallbackContext*) – The context object.

   - **update** (*telegram.Update*) – The update to gather chat/user id from.

   - **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.

   - **check_result** – The result (return value) from *check_update*.

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
    Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.

    DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.

   Parameters

- **dispatcher** (`telegram.ext.Dispatcher`) – The dispatcher.

- **update** (`telegram.Update`) – The update to gather chat/user id from.

- **check_result** – The result from check_update

telegram.ext.InlineQueryHandler

class telegram.ext.**InlineQueryHandler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pattern=None*, *pass_groups=False*, *pass_groupdict=False*, *pass_user_data=False*, *pass_chat_data=False*)
    Bases: telegram.ext.handler.Handler

Handler class to handle Telegram inline queries. Optionally based on a regex. Read the documentation of the `re` module for more information.

callback
    The callback function for this handler.

        Type callable

pass_update_queue
    Determines whether `update_queue` will be passed to the callback function.

        Type bool

pass_job_queue
    Determines whether `job_queue` will be passed to the callback function.

        Type bool

pattern
    Optional. Regex pattern to test `telegram.InlineQuery.query` against.

        Type str|Pattern

pass_groups
    Determines whether `groups` will be passed to the callback function.

        Type bool

pass_groupdict
    Determines whether `groupdict.` will be passed to the callback function.

        Type bool

pass_user_data
    Determines whether `user_data` will be passed to the callback function.

        Type bool

pass_chat_data
    Determines whether `chat_data` will be passed to the callback function.

        Type bool

Note: *pass_user_data* and *pass_chat_data* determine whether a `dict` you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same `dict`.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

Parameters

- **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

  def callback(update: Update, context: CallbackContext)

  The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pattern** (str | Pattern, optional) – Regex pattern. If not None, re.match is used on *telegram.InlineQuery.query* to determine if an update should be handled by this handler.

- **pass_groups** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groups() as a keyword argument called groups. Default is False DEPRECATED: Please switch to context based callbacks.

- **pass_groupdict** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groupdict() as a keyword argument called groupdict. Default is False DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)
> Determines whether an update should be passed to this handlers *callback*.

>> **Parameters update** (*telegram.Update*) – Incoming telegram update.

>> **Returns** bool

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)
> Prepares additional arguments for the context. Override if needed.

>> **Parameters**

>>> - **context** (*telegram.ext.CallbackContext*) – The context object.

>>> - **update** (*telegram.Update*) – The update to gather chat/user id from.

>>> - **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.

>>> - **check_result** – The result (return value) from *check_update*.

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
> Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.

> DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.

> **Parameters**
>
> - **dispatcher** (*telegram.ext.Dispatcher*) – The dispatcher.
> - **update** (*telegram.Update*) – The update to gather chat/user id from.
> - **check_result** – The result from check_update

telegram.ext.MessageHandler

class telegram.ext.**MessageHandler**(*filters*, *callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*, *message_updates=None*, *channel_post_updates=None*, *edited_updates=None*)

Bases: telegram.ext.handler.Handler

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

filters
> Only allow updates with these Filters. See *telegram.ext.filters* for a full list of all available filters.
>
> > **Type** Filter

callback
> The callback function for this handler.
>
> > **Type** callable

pass_update_queue
> Determines whether update_queue will be passed to the callback function.
>
> > **Type** bool

pass_job_queue
> Determines whether job_queue will be passed to the callback function.
>
> > **Type** bool

pass_user_data
> Determines whether user_data will be passed to the callback function.
>
> > **Type** bool

pass_chat_data
> Determines whether chat_data will be passed to the callback function.
>
> > **Type** bool

message_updates
> Should "normal" message updates be handled? Default is None.
>
> > **Type** bool

channel_post_updates
> Should channel posts updates be handled? Default is None.
>
> > **Type** bool

edited_updates
> Should "edited" message updates be handled? Default is None.
>
> > **Type** bool

Note: *pass_user_data* and *pass_chat_data* determine whether a dict you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same dict.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

> **Parameters**
>
> > - **filters** (telegram.ext.BaseFilter, optional) – A filter inheriting from *telegram.ext.filters.BaseFilter*. Standard filters can be found in *telegram.ext.filters.Filters*. Filters can be combined using bitwise operators (& for and, | for or, ~ for not). Default is *telegram.ext.filters. Filters.update*. This defaults to all message_type updates being: message, edited_message, channel_post and edited_channel_post. If you don't want or need any of those pass ~Filters.update.* in the filter argument.
> >
> > - **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:
> >
> >   def callback(update: Update, context: CallbackContext)
> >
> >   The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.
> >
> > - **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRE-CATED: Please switch to context based callbacks.
> >
> > - **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext. JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.
> >
> > - **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRE-CATED: Please switch to context based callbacks.
> >
> > - **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRE-CATED: Please switch to context based callbacks.
> >
> > - **message_updates** (bool, optional) – Should "normal" message updates be handled? Default is None. DEPRECATED: Please switch to filters for update filtering.
> >
> > - **channel_post_updates** (bool, optional) – Should channel posts updates be handled? Default is None. DEPRECATED: Please switch to filters for update filtering.
> >
> > - **edited_updates** (bool, optional) – Should "edited" message updates be handled? Default is None. DEPRECATED: Please switch to filters for update filtering.
>
> **Raises** ValueError

check_update(*update*)

> Determines whether an update should be passed to this handlers *callback*.
>
> > **Parameters update** (*telegram.Update*) – Incoming telegram update.
> >
> > **Returns** bool

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)

> Prepares additional arguments for the context. Override if needed.
>
> > **Parameters**
> >
> > > - **context** (*telegram.ext.CallbackContext*) – The context object.

- **update** (*telegram.Update*) – The update to gather chat/user id from.

- **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.

- **check_result** – The result (return value) from *check_update*.

telegram.ext.PreCheckoutQueryHandler

class telegram.ext.**PreCheckoutQueryHandler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*)

Bases: telegram.ext.handler.Handler

Handler class to handle Telegram PreCheckout callback queries.

callback
> The callback function for this handler.

> > **Type** callable

pass_update_queue
> Determines whether update_queue will be passed to the callback function.

> > **Type** bool

pass_job_queue
> Determines whether job_queue will be passed to the callback function.

> > **Type** bool

pass_user_data
> Determines whether user_data will be passed to the callback function.

> > **Type** bool

pass_chat_data
> Determines whether chat_data will be passed to the callback function.

> > **Type** bool

Note: *pass_user_data* and *pass_chat_data* determine whether a dict you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same dict.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

> **Parameters**

> - **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

> > def callback(update: Update, context: CallbackContext)

> > The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

> - **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue DEPRECATED: Please switch to context based callbacks. instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext. JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (bool, optional) – If set to True, a keyword argument called user_data will be passed to the callback function. Default is False. DEPRE-CATED: Please switch to context based callbacks.

- **pass_chat_data** (bool, optional) – If set to True, a keyword argument called chat_data will be passed to the callback function. Default is False. DEPRE-CATED: Please switch to context based callbacks.

check_update(*update*)
Determines whether an update should be passed to this handlers *callback*.

> **Parameters update** (*telegram.Update*) – Incoming telegram update.

> **Returns** bool

telegram.ext.PrefixHandler

class telegram.ext.**PrefixHandler**(*prefix,   command,   callback,   filters=None, pass_args=False,   pass_update_queue=False, pass_job_queue=False,   pass_user_data=False, pass_chat_data=False*)
Bases: telegram.ext.commandhandler.CommandHandler

Handler class to handle custom prefix commands

This is a intermediate handler between *MessageHandler* and *CommandHandler*. It supports configurable commands with the same options as CommandHandler. It will respond to every combination of *prefix* and *command*. It will add a list to the *CallbackContext* named *CallbackContext. args*. It will contain a list of strings, which is the text following the command split on single or consecutive whitespace characters.

Examples:

```
Single prefix and command:

    PrefixHandler('!', 'test', callback) will respond to '!test'.

Multiple prefixes, single command:

    PrefixHandler(['!', '#'], 'test', callback) will respond to '!test' and
    '#test'.

Miltiple prefixes and commands:

    PrefixHandler(['!', '#'], ['test', 'help`], callback) will respond to '!
↪test',
    '#test', '!help' and '#help'.
```

By default the handler listens to messages as well as edited messages. To change this behavior use ~``Filters.update.edited_message``.

prefix
The prefix(es) that will precede *command*.

> **Type** str|List[str]

command
The command or list of commands this handler should listen for.

Type `str | List[str]`

callback
:   The callback function for this handler.

    Type `callable`

filters
:   Optional. Only allow updates with these Filters.

    Type `telegram.ext.BaseFilter`

pass_args
:   Determines whether the handler should be passed `args`.

    Type `bool`

pass_update_queue
:   Determines whether `update_queue` will be passed to the callback function.

    Type `bool`

pass_job_queue
:   Determines whether `job_queue` will be passed to the callback function.

    Type `bool`

pass_user_data
:   Determines whether `user_data` will be passed to the callback function.

    Type `bool`

pass_chat_data
:   Determines whether `chat_data` will be passed to the callback function.

    Type `bool`

Note: *pass_user_data* and *pass_chat_data* determine whether a `dict` you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same `dict`.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

> **Parameters**
>
> - **prefix** (`str | List[str]`) – The prefix(es) that will precede *command*.
>
> - **command** (`str | List[str]`) – The command or list of commands this handler should listen for.
>
> - **callback** (`callable`) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:
>
>   `def callback(update: Update, context: CallbackContext)`
>
>   The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.
>
> - **filters** (`telegram.ext.BaseFilter`, optional) – A filter inheriting from *telegram.ext.filters.BaseFilter*. Standard filters can be found in *telegram.ext.filters.Filters*. Filters can be combined using bitwise operators (& for and, | for or, ~ for not).
>
> - **pass_args** (`bool`, optional) – Determines whether the handler should be passed the arguments passed to the command as a keyword argument called `args`. It will contain a list of strings, which is the text following the command split on single or consecutive

whitespace characters. Default is `False` DEPRECATED: Please switch to context based callbacks.

- **pass_update_queue** (`bool`, optional) – If set to `True`, a keyword argument called `update_queue` will be passed to the callback function. It will be the `Queue` instance used by the *`telegram.ext.Updater`* and *`telegram.ext.Dispatcher`* that contains new updates which can be used to insert updates. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (`bool`, optional) – If set to `True`, a keyword argument called `job_queue` will be passed to the callback function. It will be a *`telegram.ext. JobQueue`* instance created by the *`telegram.ext.Updater`* which can be used to schedule new jobs. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (`bool`, optional) – If set to `True`, a keyword argument called `user_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (`bool`, optional) – If set to `True`, a keyword argument called `chat_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)
> Determines whether an update should be passed to this handlers *`callback`*.

> > **Parameters update** (*`telegram.Update`*) – Incoming telegram update.

> > **Returns** The list of args for the handler

> > **Return type** `list`

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)
> Prepares additional arguments for the context. Override if needed.

> > **Parameters**

> > > - **context** (*`telegram.ext.CallbackContext`*) – The context object.

> > > - **update** (*`telegram.Update`*) – The update to gather chat/user id from.

> > > - **dispatcher** (*`telegram.ext.Dispatcher`*) – The calling dispatcher.

> > > - **check_result** – The result (return value) from *`check_update`*.

telegram.ext.RegexHandler

class telegram.ext.**RegexHandler**(*pattern*, *callback*, *pass_groups=False*, *pass_groupdict=False*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*, *allow_edited=False*, *message_updates=True*, *channel_post_updates=False*, *edited_updates=False*)
> Bases: `telegram.ext.messagehandler.MessageHandler`

> Handler class to handle Telegram updates based on a regex.

> It uses a regular expression to check text messages. Read the documentation of the `re` module for more information. The `re.match` function is used to determine if an update should be handled by this handler.

pattern
> The regex pattern.

> > **Type** `str|Pattern`

callback
> The callback function for this handler.

> **Type** callable

pass_groups
> Determines whether groups will be passed to the callback function.
>
> > **Type** bool

pass_groupdict
> Determines whether groupdict. will be passed to the callback function.
>
> > **Type** bool

pass_update_queue
> Determines whether update_queue will be passed to the callback function.
>
> > **Type** bool

pass_job_queue
> Determines whether job_queue will be passed to the callback function.
>
> > **Type** bool

pass_user_data
> Determines whether user_data will be passed to the callback function.
>
> > **Type** bool

pass_chat_data
> Determines whether chat_data will be passed to the callback function.
>
> > **Type** bool

Note: This handler is being deprecated. For the same usecase use: `MessageHandler(Filters.regex(r'pattern'), callback)`

Parameters

- **pattern** (str | Pattern) – The regex pattern.

- **callback** (callable) – The callback function for this handler. Will be called when check_update has determined that an update should be processed by this handler. Callback signature for context based API:

  `def callback(update: Update, context: CallbackContext)`

  The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **pass_groups** (bool, optional) – If the callback should be passed the result of `re.match(pattern, data).groups()` as a keyword argument called groups. Default is False

- **pass_groupdict** (bool, optional) – If the callback should be passed the result of `re.match(pattern, data).groupdict()` as a keyword argument called groupdict. Default is False

- **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False.

- **pass_user_data** (bool, optional) – If set to `True`, a keyword argument called `user_data` will be passed to the callback function. Default is `False`.

- **pass_chat_data** (bool, optional) – If set to `True`, a keyword argument called `chat_data` will be passed to the callback function. Default is `False`.

- **message_updates** (bool, optional) – Should "normal" message updates be handled? Default is `True`.

- **channel_post_updates** (bool, optional) – Should channel posts updates be handled? Default is `True`.

- **edited_updates** (bool, optional) – Should "edited" message updates be handled? Default is `False`.

Raises `ValueError`

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.

DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.

Parameters

- **dispatcher** (`telegram.ext.Dispatcher`) – The dispatcher.

- **update** (`telegram.Update`) – The update to gather chat/user id from.

- **check_result** – The result from check_update

telegram.ext.ShippingQueryHandler

class `telegram.ext.`**ShippingQueryHandler**(*callback*, *pass_update_queue=False*, *pass_job_queue=False*, *pass_user_data=False*, *pass_chat_data=False*)
Bases: `telegram.ext.handler.Handler`

Handler class to handle Telegram shipping callback queries.

callback
The callback function for this handler.

> **Type** `callable`

pass_update_queue
Determines whether `update_queue` will be passed to the callback function.

> **Type** `bool`

pass_job_queue
Determines whether `job_queue` will be passed to the callback function.

> **Type** `bool`

pass_user_data
Determines whether `user_data` will be passed to the callback function.

> **Type** `bool`

pass_chat_data
Determines whether `chat_data` will be passed to the callback function.

> **Type** `bool`

Note: *pass_user_data* and *pass_chat_data* determine whether a `dict` you can use to keep any data in will be sent to the *callback* function. Related to either the user or the chat that the update was sent in. For each update from the same user or in the same chat, it will be the same `dict`.

Note that this is DEPRECATED, and you should use context based callbacks. See https://git.io/fxJuV for more info.

Parameters

- **callback** (`callable`) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

  `def callback(update:  Update, context:  CallbackContext)`

  The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **pass_update_queue** (`bool`, optional) – If set to `True`, a keyword argument called `update_queue` will be passed to the callback function. It will be the `Queue` instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (`bool`, optional) – If set to `True`, a keyword argument called `job_queue` will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_user_data** (`bool`, optional) – If set to `True`, a keyword argument called `user_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

- **pass_chat_data** (`bool`, optional) – If set to `True`, a keyword argument called `chat_data` will be passed to the callback function. Default is `False`. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)

Determines whether an update should be passed to this handlers *callback*.

> **Parameters** **update** (*telegram.Update*) – Incoming telegram update.

> **Returns** `bool`

telegram.ext.StringCommandHandler

class telegram.ext.**StringCommandHandler**(*command*, *callback*, *pass_args=False*, *pass_update_queue=False*, *pass_job_queue=False*)

Bases: telegram.ext.handler.Handler

Handler class to handle string commands. Commands are string updates that start with `/`.

Note: This handler is not used to handle Telegram *telegram.Update*, but strings manually put in the queue. For example to send messages with the bot using command line or API.

---

command

The command this handler should listen for.

> **Type** `str`

---

callback
>   The callback function for this handler.
>
> > **Type** `callable`

pass_args
>   Determines whether the handler should be passed `args`.
>
> > **Type** `bool`

pass_update_queue
>   Determines whether `update_queue` will be passed to the callback function.
>
> > **Type** `bool`

pass_job_queue
>   Determines whether `job_queue` will be passed to the callback function.
>
> > **Type** `bool`

> **Parameters**
>
> - **callback** (`callable`) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:
>
>   ```
>   def callback(update:  Update, context:  CallbackContext)
>   ```
>
>   The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.
>
> - **pass_args** (`bool`, optional) – Determines whether the handler should be passed the arguments passed to the command as a keyword argument called `args`. It will contain a list of strings, which is the text following the command split on single or consecutive whitespace characters. Default is `False` DEPRECATED: Please switch to context based callbacks.
>
> - **pass_update_queue** (`bool`, optional) – If set to `True`, a keyword argument called `update_queue` will be passed to the callback function. It will be the `Queue` instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is `False`. DEPRECATED: Please switch to context based callbacks.
>
> - **pass_job_queue** (`bool`, optional) – If set to `True`, a keyword argument called `job_queue` will be passed to the callback function. It will be a class:*telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is `False`. DEPRECATED: Please switch to context based callbacks.

check_update(*update*)
>   Determines whether an update should be passed to this handlers *callback*.
>
> > **Parameters update** (`str`) – An incoming command.
>
> > **Returns** `bool`

collect_additional_context(*context*, *update*, *dispatcher*, *check_result*)
>   Prepares additional arguments for the context. Override if needed.
>
> > **Parameters**
> >
> > - **context** (*telegram.ext.CallbackContext*) – The context object.
> >
> > - **update** (*telegram.Update*) – The update to gather chat/user id from.
> >
> > - **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.
> >
> > - **check_result** – The result (return value) from *check_update*.

collect_optional_args(*dispatcher*, *update=None*, *check_result=None*)
> Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.
>
> DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.
>
> > **Parameters**
> >
> > - **dispatcher** (`telegram.ext.Dispatcher`) – The dispatcher.
> > - **update** (`telegram.Update`) – The update to gather chat/user id from.
> > - **check_result** – The result from check_update

telegram.ext.StringRegexHandler

class telegram.ext.**StringRegexHandler**(*pattern*, *callback*, *pass_groups=False*, *pass_groupdict=False*, *pass_update_queue=False*, *pass_job_queue=False*)
> Bases: `telegram.ext.handler.Handler`
>
> Handler class to handle string updates based on a regex which checks the update content.
>
> Read the documentation of the `re` module for more information. The `re.match` function is used to determine if an update should be handled by this handler.

Note: This handler is not used to handle Telegram `telegram.Update`, but strings manually put in the queue. For example to send messages with the bot using command line or API.

---

pattern
> The regex pattern.
>
> > **Type** `str|Pattern`

callback
> The callback function for this handler.
>
> > **Type** `callable`

pass_groups
> Determines whether `groups` will be passed to the callback function.
>
> > **Type** `bool`

pass_groupdict
> Determines whether `groupdict.` will be passed to the callback function.
>
> > **Type** `bool`

pass_update_queue
> Determines whether `update_queue` will be passed to the callback function.
>
> > **Type** `bool`

pass_job_queue
> Determines whether `job_queue` will be passed to the callback function.
>
> > **Type** `bool`

> **Parameters**
>
> - **pattern** (`str|Pattern`) – The regex pattern.

- **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:

  ```
  def callback(update:  Update, context:  CallbackContext)
  ```

  The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.

- **pass_groups** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groups() as a keyword argument called groups. Default is False DEPRECATED: Please switch to context based callbacks.

- **pass_groupdict** (bool, optional) – If the callback should be passed the result of re.match(pattern, data).groupdict() as a keyword argument called groupdict. Default is False DEPRECATED: Please switch to context based callbacks.

- **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRECATED: Please switch to context based callbacks.

- **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

check_update (*update*)

Determines whether an update should be passed to this handlers *callback*.

> **Parameters update** (str) – An incoming command.
>
> **Returns** bool

collect_additional_context (*context*, *update*, *dispatcher*, *check_result*)

Prepares additional arguments for the context. Override if needed.

> **Parameters**
>
> - **context** (*telegram.ext.CallbackContext*) – The context object.
>
> - **update** (*telegram.Update*) – The update to gather chat/user id from.
>
> - **dispatcher** (*telegram.ext.Dispatcher*) – The calling dispatcher.
>
> - **check_result** – The result (return value) from *check_update*.

collect_optional_args (*dispatcher*, *update=None*, *check_result=None*)

Prepares the optional arguments. If the handler has additional optional args, it should subclass this method, but remember to call this super method.

DEPRECATED: This method is being replaced by new context based callbacks. Please see https://git.io/fxJuV for more info.

> **Parameters**
>
> - **dispatcher** (*telegram.ext.Dispatcher*) – The dispatcher.
>
> - **update** (*telegram.Update*) – The update to gather chat/user id from.
>
> - **check_result** – The result from check_update

telegram.ext.TypeHandler

class telegram.ext.**TypeHandler**(*type*, *callback*, *strict=False*, *pass_update_queue=False*, *pass_job_queue=False*)

> Bases: telegram.ext.handler.Handler

Handler class to handle updates of custom types.

type
> The type of updates this handler should process.
>
> > **Type** *type*

callback
> The callback function for this handler.
>
> > **Type** callable

strict
> Use type instead of isinstance. Default is False.
>
> > **Type** bool

pass_update_queue
> Determines whether update_queue will be passed to the callback function.
>
> > **Type** bool

pass_job_queue
> Determines whether job_queue will be passed to the callback function.
>
> > **Type** bool

> **Parameters**
>
> - **type** (*type*) – The type of updates this handler should process, as determined by isinstance
>
> - **callback** (callable) – The callback function for this handler. Will be called when *check_update* has determined that an update should be processed by this handler. Callback signature for context based API:
>
>   def callback(update: Update, context: CallbackContext)
>
>   The return value of the callback is usually ignored except for the special case of *telegram.ext.ConversationHandler*.
>
> - **strict** (bool, optional) – Use type instead of isinstance. Default is False
>
> - **pass_update_queue** (bool, optional) – If set to True, a keyword argument called update_queue will be passed to the callback function. It will be the Queue instance used by the *telegram.ext.Updater* and *telegram.ext.Dispatcher* that contains new updates which can be used to insert updates. Default is False. DEPRE-CATED: Please switch to context based callbacks.
>
> - **pass_job_queue** (bool, optional) – If set to True, a keyword argument called job_queue will be passed to the callback function. It will be a *telegram.ext.JobQueue* instance created by the *telegram.ext.Updater* which can be used to schedule new jobs. Default is False. DEPRECATED: Please switch to context based callbacks.

> **check_update**(*update*)
> Determines whether an update should be passed to this handlers *callback*.
>
> > **Parameters** **update** (*telegram.Update*) – Incoming telegram update.
> >
> > **Returns** bool

3.1.10 Persistence

telegram.ext.BasePersistence

class telegram.ext.**BasePersistence**(*store_user_data=True*, *store_chat_data=True*)
Bases: `object`

Interface class for adding persistence to your bot. Subclass this object for different implementations of a persistent bot.

All relevant methods must be overwritten. This means:

- If *store_chat_data* is True you must overwrite *get_chat_data()* and *update_chat_data()*.

- If *store_user_data* is True you must overwrite *get_user_data()* and *update_user_data()*.

- If you want to store conversation data with *telegram.ext.ConversationHandler*, you must overwrite *get_conversations()* and *update_conversation()*.

- *flush()* will be called when the bot is shutdown.

store_user_data
Optional, Whether user_data should be saved by this persistence class.

> **Type** `bool`

store_chat_data
Optional. Whether chat_data should be saved by this persistence class.

> **Type** `bool`

> **Parameters**
>
> - **store_user_data** (`bool`, optional) – Whether user_data should be saved by this persistence class. Default is `True`.
>
> - **store_chat_data** (`bool`, optional) – Whether chat_data should be saved by this persistence class. Default is `True` .

flush()
Will be called by *telegram.ext.Updater* upon receiving a stop signal. Gives the persistence a chance to finish up saving or close a database connection gracefully. If this is not of any importance just pass will be sufficient.

get_chat_data()
"Will be called by *telegram.ext.Dispatcher* upon creation with a persistence object. It should return the chat_data if stored, or an empty `defaultdict(dict)`.

> **Returns** The restored chat data.

> **Return type** `defaultdict`

get_conversations(*name*)
"Will be called by *telegram.ext.Dispatcher* when a *telegram.ext. ConversationHandler* is added if *telegram.ext.ConversationHandler. persistent* is True. It should return the conversations for the handler with *name* or an empty `dict`

> **Parameters** **name** (`str`) – The handlers name.

> **Returns** The restored conversations for the handler.

> **Return type** `dict`

get_user_data()
  "Will be called by *telegram.ext.Dispatcher* upon creation with a persistence object. It should return the user_data if stored, or an empty `defaultdict(dict)`.

  Returns The restored user data.

  Return type `defaultdict`

update_chat_data(*chat_id*, *data*)
  Will be called by the *telegram.ext.Dispatcher* after a handler has handled an update.

  Parameters

  - **chat_id** (`int`) – The chat the data might have been changed for.

  - **data** (`dict`) – The `telegram.ext.dispatcher.chat_data` [user_id].

update_conversation(*name*, *key*, *new_state*)
  Will be called when a `telegram.ext.ConversationHandler.update_state` is called. this allows the storeage of the new state in the persistence.

  Parameters

  - **name** (`str`) – The handlers name.

  - **key** (`tuple`) – The key the state is changed for.

  - **new_state** (`tuple | any`) – The new state for the given key.

update_user_data(*user_id*, *data*)
  Will be called by the *telegram.ext.Dispatcher* after a handler has handled an update.

  Parameters

  - **user_id** (`int`) – The user the data might have been changed for.

  - **data** (`dict`) – The `telegram.ext.dispatcher.user_data` [user_id].

telegram.ext.PicklePersistence

class `telegram.ext.`**PicklePersistence**(*filename*, *store_user_data=True*, *store_chat_data=True*, *single_file=True*, *on_flush=False*)
  Bases: `telegram.ext.basepersistence.BasePersistence`

  Using python's builtin pickle for making you bot persistent.

  filename
    The filename for storing the pickle files. When *single_file* is false this will be used as a prefix.

    Type `str`

  store_user_data
    Optional. Whether user_data should be saved by this persistence class.

    Type `bool`

  store_chat_data
    Optional. Whether user_data should be saved by this persistence class.

    Type `bool`

  single_file
    Optional. When `False` will store 3 sperate files of *filename_user_data*, *filename_chat_data* and *filename_conversations*. Default is `True`.

    Type `bool`

on_flush

When `True` will only save to file when `flush()` is called and keep data in memory until that happens. When `False` will store data on any transaction *and* on call fo `flush()`. Default is `False`.

> **Type** `bool`, optional

Parameters

- **filename** (`str`) – The filename for storing the pickle files. When `single_file` is false this will be used as a prefix.

- **store_user_data** (`bool`, optional) – Whether user_data should be saved by this persistence class. Default is `True`.

- **store_chat_data** (`bool`, optional) – Whether user_data should be saved by this persistence class. Default is `True`.

- **single_file** (`bool`, optional) – When `False` will store 3 sperate files of *filename_user_data*, *filename_chat_data* and *filename_conversations*. Default is `True`.

- **on_flush** (`bool`, optional) – When `True` will only save to file when `flush()` is called and keep data in memory until that happens. When `False` will store data on any transaction *and* on call fo `flush()`. Default is `False`.

flush()

Will save all data in memory to pickle file(s).

get_chat_data()

Returns the chat_data from the pickle file if it exsists or an empty defaultdict.

> **Returns** The restored chat data.
>
> **Return type** `defaultdict`

get_conversations(*name*)

Returns the conversations from the pickle file if it exsists or an empty defaultdict.

> **Parameters** **name** (`str`) – The handlers name.
>
> **Returns** The restored conversations for the handler.
>
> **Return type** `dict`

get_user_data()

Returns the user_data from the pickle file if it exsists or an empty defaultdict.

> **Returns** The restored user data.
>
> **Return type** `defaultdict`

update_chat_data(*chat_id*, *data*)

Will update the chat_data (if changed) and depending on `on_flush` save the pickle file.

> **Parameters**
>
> - **chat_id** (`int`) – The chat the data might have been changed for.
>
> - **data** (`dict`) – The `telegram.ext.dispatcher.chat_data` [chat_id].

update_conversation(*name*, *key*, *new_state*)

Will update the conversations for the given handler and depending on `on_flush` save the pickle file.

> **Parameters**
>
> - **name** (`str`) – The handlers name.
>
> - **key** (`tuple`) – The key the state is changed for.
>
> - **new_state** (`tuple | any`) – The new state for the given key.

update_user_data(*user_id*, *data*)

Will update the user_data (if changed) and depending on *on_flush* save the pickle file.

> **Parameters**
>
> - **user_id** (int) – The user the data might have been changed for.
>
> - **data** (dict) – The `telegram.ext.dispatcher.user_data` [user_id].

telegram.ext.DictPersistence

class `telegram.ext.`**DictPersistence**(*store_user_data=True*, *store_chat_data=True*, *user_data_json=''*, *chat_data_json=''*, *conversations_json=''*)

Bases: `telegram.ext.basepersistence.BasePersistence`

Using python's dicts and json for making you bot persistent.

store_user_data

Whether user_data should be saved by this persistence class.

> **Type** `bool`

store_chat_data

Whether chat_data should be saved by this persistence class.

> **Type** `bool`

> **Parameters**
>
> - **store_user_data** (`bool`, optional) – Whether user_data should be saved by this persistence class. Default is `True`.
>
> - **store_chat_data** (`bool`, optional) – Whether user_data should be saved by this persistence class. Default is `True`.
>
> - **user_data_json** (`str`, optional) – Json string that will be used to reconstruct user_data on creating this persistence. Default is `""`.
>
> - **chat_data_json** (`str`, optional) – Json string that will be used to reconstruct chat_data on creating this persistence. Default is `""`.
>
> - **conversations_json** (`str`, optional) – Json string that will be used to reconstruct conversation on creating this persistence. Default is `""`.

chat_data

The chat_data as a dict

> **Type** `dict`

chat_data_json

The chat_data serialized as a JSON-string.

> **Type** `str`

conversations

The conversations as a dict

> **Type** `dict`

conversations_json

The conversations serialized as a JSON-string.

> **Type** `str`

get_chat_data()

Returns the chat_data created from the `chat_data_json` or an empty defaultdict.

> **Returns** The restored user data.

Return type `defaultdict`

get_conversations(*name*)
    Returns the conversations created from the `conversations_json` or an empty defaultdict.

        Returns The restored user data.

        Return type `defaultdict`

get_user_data()
    Returns the user_data created from the `user_data_json` or an empty defaultdict.

        Returns The restored user data.

        Return type `defaultdict`

update_chat_data(*chat_id*, *data*)
    Will update the chat_data (if changed).

        Parameters

            • **chat_id** (`int`) – The chat the data might have been changed for.

            • **data** (`dict`) – The `telegram.ext.dispatcher.chat_data` [chat_id].

update_conversation(*name*, *key*, *new_state*)
    Will update the conversations for the given handler.

        Parameters

            • **name** (`str`) – The handlers name.

            • **key** (`tuple`) – The key the state is changed for.

            • **new_state** (`tuple | any`) – The new state for the given key.

update_user_data(*user_id*, *data*)
    Will update the user_data (if changed).

        Parameters

            • **user_id** (`int`) – The user the data might have been changed for.

            • **data** (`dict`) – The `telegram.ext.dispatcher.user_data` [user_id].

user_data
    The user_data as a dict

        Type `dict`

user_data_json
    The user_data serialized as a JSON-string.

        Type `str`

3.2 telegram package

3.2.1 telegram.Animation

class telegram.**Animation**(*file_id*, *width*, *height*, *duration*, *thumb=None*, *file_name=None*, *mime_type=None*, *file_size=None*, *bot=None*, ***kwargs*)
    Bases: `telegram.base.TelegramObject`

    This object represents an animation file to be displayed in the message containing a game.

    file_id
        Unique file identifier.

            Type `str`

width
> Video width as defined by sender.
>
> > **Type** `int`

height
> Video height as defined by sender.
>
> > **Type** `int`

duration
> Duration of the video in seconds as defined by sender.
>
> > **Type** `int`

thumb
> Optional. Animation thumbnail as defined by sender.
>
> > **Type** *`telegram.PhotoSize`*

file_name
> Optional. Original animation filename as defined by sender.
>
> > **Type** `str`

mime_type
> Optional. MIME type of the file as defined by sender.
>
> > **Type** `str`

file_size
> Optional. File size.
>
> > **Type** `int`

bot
> Optional. The Bot to use for instance methods.
>
> > **Type** *`telegram.Bot`*
>
> > **Parameters**
> >
> > - **file_id** (`str`) – Unique file identifier.
> > - **width** (`int`) – Video width as defined by sender.
> > - **height** (`int`) – Video height as defined by sender.
> > - **duration** (`int`) – Duration of the video in seconds as defined by sender.
> > - **thumb** (*`telegram.PhotoSize`*, optional) – Animation thumbnail as defined by sender.
> > - **file_name** (`str`, optional) – Original animation filename as defined by sender.
> > - **mime_type** (`str`, optional) – MIME type of the file as defined by sender.
> > - **file_size** (`int`, optional) – File size.
> > - **bot** (*`telegram.Bot`*, optional) – The Bot to use for instance methods.
> > - ****kwargs** (`dict`) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
> Convenience wrapper over *`telegram.Bot.get_file`*
>
> > **Parameters**
> >
> > - **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns *telegram.File*

Raises telegram.TelegramError

3.2.2 telegram.Audio

class telegram.**Audio**(*file_id*, *duration*, *performer=None*, *title=None*, *mime_type=None*, *file_size=None*, *thumb=None*, *bot=None*, ***kwargs*)
    Bases: telegram.base.TelegramObject

This object represents an audio file to be treated as music by the Telegram clients.

file_id
    Unique identifier for this file.

        Type str

duration
    Duration of the audio in seconds.

        Type int

performer
    Optional. Performer of the audio as defined by sender or by audio tags.

        Type str

title
    Optional. Title of the audio as defined by sender or by audio tags.

        Type str

mime_type
    Optional. MIME type of the file as defined by sender.

        Type str

file_size
    Optional. File size.

        Type int

thumb
    Optional. Thumbnail of the album cover to which the music file belongs

        Type *telegram.PhotoSize*

bot
    Optional. The Bot to use for instance methods.

        Type *telegram.Bot*

    Parameters

- **file_id** (str) – Unique identifier for this file.
- **duration** (int) – Duration of the audio in seconds as defined by sender.
- **performer** (str, optional) – Performer of the audio as defined by sender or by audio tags.
- **title** (str, optional) – Title of the audio as defined by sender or by audio tags.
- **mime_type** (str, optional) – MIME type of the file as defined by sender.
- **file_size** (int, optional) – File size.

- **thumb** (*telegram.PhotoSize*, optional) – Thumbnail of the album cover to which the music file belongs

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

- ****kwargs** (dict) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
    Convenience wrapper over *telegram.Bot.get_file*

        Parameters

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

        Returns *telegram.File*

        Raises telegram.TelegramError

3.2.3 telegram.Bot

class telegram.**Bot**(*token*, *base_url=None*, *base_file_url=None*, *request=None*, *private_key=None*, *private_key_password=None*)
    Bases: telegram.base.TelegramObject

    This object represents a Telegram Bot.

        Parameters

- **token** (str) – Bot's unique authentication.

- **base_url** (str, optional) – Telegram Bot API service URL.

- **base_file_url** (str, optional) – Telegram Bot API file URL.

- **request** (*telegram.utils.request.Request*, optional) – Pre initialized *telegram.utils.request.Request*.

- **private_key** (bytes, optional) – Private key for decryption of telegram passport data.

- **private_key_password** (bytes, optional) – Password for above private key.

addStickerToSet(*user_id*, *name*, *png_sticker*, *emojis*, *mask_position=None*, *timeout=20*, ***kwargs*)
    Alias for *add_sticker_to_set*

add_sticker_to_set(*user_id*, *name*, *png_sticker*, *emojis*, *mask_position=None*, *timeout=20*, ***kwargs*)
    Use this method to add a new sticker to a set created by the bot.

    Note: The png_sticker argument can be either a file_id, an URL or a file from disk open(filename, 'rb')

        Parameters

- **user_id** (int) – User identifier of created sticker set owner.

- **name** (str) – Sticker set name.

- **png_sticker** (str | *filelike object*) – Png image with the sticker, must be up to 512 kilobytes in size, dimensions must not exceed 512px, and either width or height must be exactly 512px. Pass a file_id as a String to send a file that already exists on

the Telegram servers, pass an HTTP URL as a String for Telegram to get a file from the Internet, or upload a new one using multipart/form-data.

- **emojis** (`str`) – One or more emoji corresponding to the sticker.

- **mask_position** (*telegram.MaskPosition*, optional) – Position where the mask should beplaced on faces.

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, `True` is returned.

Return type `bool`

Raises `telegram.TelegramError`

answerCallbackQuery(*callback_query_id*, *text=None*, *show_alert=False*, *url=None*, *cache_time=None*, *timeout=None*, ***kwargs*)
Alias for *answer_callback_query*

answerInlineQuery(*inline_query_id*, *results*, *cache_time=300*, *is_personal=None*, *next_offset=None*, *switch_pm_text=None*, *switch_pm_parameter=None*, *timeout=None*, ***kwargs*)
Alias for *answer_inline_query*

answerPreCheckoutQuery(*pre_checkout_query_id*, *ok*, *error_message=None*, *timeout=None*, ***kwargs*)
Alias for *answer_pre_checkout_query*

answerShippingQuery(*shipping_query_id*, *ok*, *shipping_options=None*, *error_message=None*, *timeout=None*, ***kwargs*)
Alias for *answer_shipping_query*

answer_callback_query(*callback_query_id*, *text=None*, *show_alert=False*, *url=None*, *cache_time=None*, *timeout=None*, ***kwargs*)
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. Alternatively, the user can be redirected to the specified Game URL. For this option to work, you must first create a game for your bot via BotFather and accept the terms. Otherwise, you may use links like t.me/your_bot?start=XXXX that open your bot with a parameter.

Parameters

- **callback_query_id** (`str`) – Unique identifier for the query to be answered.

- **text** (`str`, optional) – Text of the notification. If not specified, nothing will be shown to the user, 0-200 characters.

- **show_alert** (`bool`, 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** (`str`, optional) – URL that will be opened by the user's client. If you have created a Game and accepted the conditions via @Botfather, specify the URL that opens your game - note that this will only work if the query comes from a callback game button. Otherwise, you may use links like t.me/your_bot?start=XXXX that open your bot with a parameter.

- **cache_time** (`int`, optional) – The maximum amount of time in seconds that the result of the callback query may be cached client-side. Defaults to 0.

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns `bool` On success, `True` is returned.

Raises `telegram.TelegramError`

answer_inline_query(*inline_query_id*, *results*, *cache_time=300*, *is_personal=None*, *next_offset=None*, *switch_pm_text=None*, *switch_pm_parameter=None*, *timeout=None*, ***kwargs*)
Use this method to send answers to an inline query. No more than 50 results per query are allowed.

Parameters

- **inline_query_id** (`str`) – Unique identifier for the answered query.

- **results** (List[*telegram.InlineQueryResult*]) – A list of results for the inline query.

- **cache_time** (`int`, optional) – The maximum amount of time in seconds that the result of the inline query may be cached on the server. Defaults to 300.

- **is_personal** (`bool`, 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** (`str`, 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** (`str`, 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** (`str`, 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.

- **timeout** (`int | float`, optional) – If this value is specified, use it as he read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

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 oauth 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.

Returns `bool` On success, `True` is returned.

Raises `telegram.TelegramError`

answer_pre_checkout_query(*pre_checkout_query_id*, *ok*, *error_message=None*, *timeout=None*, ***kwargs*)
Once the user has confirmed their payment and shipping details, the Bot API sends the final confirmation in the form of an Update with the field pre_checkout_query. Use this method to respond to such pre-checkout queries.

Note: The Bot API must receive an answer within 10 seconds after the pre-checkout query was sent.

Parameters

- **pre_checkout_query_id** (str) – Unique identifier for the query to be answered.

- **ok** (bool) – Specify True if everything is alright (goods are available, etc.) and the bot is ready to proceed with the order. Use False if there are any problems.

- **error_message** (str, optional) – Required if ok is False. Error message in human readable form that explains the reason for failure to proceed with the checkout (e.g. "Sorry, somebody just bought the last of our amazing black T-shirts while you were busy filling out your payment details. Please choose a different color or garment!"). Telegram will display this message to the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, True is returned.

Return type bool

Raises telegram.TelegramError

answer_shipping_query(*shipping_query_id*, *ok*, *shipping_options=None*, *error_message=None*, *timeout=None*, ***kwargs*)
If you sent an invoice requesting a shipping address and the parameter is_flexible was specified, the Bot API will send an Update with a shipping_query field to the bot. Use this method to reply to shipping queries.

Parameters

- **shipping_query_id** (str) – Unique identifier for the query to be answered.

- **ok** (bool) – Specify True if delivery to the specified address is possible and False if there are any problems (for example, if delivery to the specified address is not possible).

- **shipping_options** (List[*telegram.ShippingOption*]) – Required if ok is True. A JSON-serialized array of available shipping options.

- **error_message** (str, optional) – Required if ok is False. Error message in human readable form that explains why it is impossible to complete the order (e.g. "Sorry, delivery to your desired address is unavailable"). Telegram will display this message to the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns bool; On success, True is returned.

Raises telegram.TelegramError

createNewStickerSet(*user_id*, *name*, *title*, *png_sticker*, *emojis*, *contains_masks=None*, *mask_position=None*, *timeout=20*, ***kwargs*)
Alias for *create_new_sticker_set*

create_new_sticker_set(*user_id*, *name*, *title*, *png_sticker*, *emojis*, *contains_masks=None*, *mask_position=None*, *timeout=20*, ***kwargs*)
Use this method to create new sticker set owned by a user.

The bot will be able to edit the created sticker set.

> **Note:** The png_sticker argument can be either a file_id, an URL or a file from disk
> `open(filename, 'rb')`

Parameters

- **user_id** (`int`) – User identifier of created sticker set owner.

- **name** (`str`) – Short name of sticker set, to be used in t.me/addstickers/ URLs (e.g., animals). Can contain only english letters, digits and underscores. Must begin with a letter, can't contain consecutive underscores and must end in "_by_<bot username>". <bot_username> is case insensitive. 1-64 characters.

- **title** (`str`) – Sticker set title, 1-64 characters.

- **png_sticker** (`str` | *filelike object*) – Png image with the sticker, must be up to 512 kilobytes in size, dimensions must not exceed 512px, and either width or height must be exactly 512px. Pass a file_id as a String to send a file that already exists on the Telegram servers, pass an HTTP URL as a String for Telegram to get a file from the Internet, or upload a new one using multipart/form-data.

- **emojis** (`str`) – One or more emoji corresponding to the sticker.

- **contains_masks** (`bool`, optional) – Pass True, if a set of mask stickers should be created.

- **mask_position** (*telegram.MaskPosition*, optional) – Position where the mask should be placed on faces.

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, `True` is returned.

Return type `bool`

Raises telegram.TelegramError

deleteChatPhoto(*chat_id*, *timeout=None*, ***kwargs*)
　　Alias for *delete_chat_photo*

deleteChatStickerSet(*chat_id*, *timeout=None*, ***kwargs*)
　　Alias for *delete_chat_sticker_set*

deleteMessage(*chat_id*, *message_id*, *timeout=None*, ***kwargs*)
　　Alias for *delete_message*

deleteStickerFromSet(*sticker*, *timeout=None*, ***kwargs*)
　　Alias for *delete_sticker_from_set*

deleteWebhook(*timeout=None*, ***kwargs*)
　　Alias for *delete_webhook*

delete_chat_photo(*chat_id*, *timeout=None*, ***kwargs*)
　　Use this method to delete a chat photo. Photos can't be changed for private chats. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

Parameters

- **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments

Note: In regular groups (non-supergroups), this method will only work if the 'All Members Are Admins' setting is off in the target group.

Returns Returns `True` on success.

Return type `bool`

Raises `telegram.TelegramError`

delete_chat_sticker_set(*chat_id*, *timeout=None*, ***kwargs*)

Use this method to delete a group sticker set from a supergroup. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights. Use the field `telegram.Chat.can_set_sticker_set` optionally returned in `get_chat` requests to check if the bot can use this method.

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target supergroup (in the format @supergroupusername).

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns True on success.

Return type `bool`

delete_message(*chat_id*, *message_id*, *timeout=None*, ***kwargs*)

Use this method to delete a message, including service messages, with the following limitations:

- A message can only be deleted if it was sent less than 48 hours ago.

- Bots can delete outgoing messages in private chats, groups, and supergroups.

- Bots can delete incoming messages in private chats.

- Bots granted can_post_messages permissions can delete outgoing messages in channels.

- If the bot is an administrator of a group, it can delete any message there.

- If the bot has can_delete_messages permission in a supergroup or a channel, it can delete any message there.

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (int) – Identifier of the message to delete.

- **timeout** (int | float, optional) – If this value is specified, use it as

- **read timeout** (*the*) – from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, `True` is returned.

Return type bool

Raises telegram.TelegramError

delete_sticker_from_set(*sticker*, *timeout=None*, ***kwargs*)
Use this method to delete a sticker from a set created by the bot.

Parameters

- **sticker** (str) – File identifier of the sticker.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, True is returned.

Return type bool

Raises telegram.TelegramError

delete_webhook(*timeout=None*, ***kwargs*)
Use this method to remove webhook integration if you decide to switch back to getUpdates. Requires no parameters.

Parameters

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns bool On success, True is returned.

Raises telegram.TelegramError

editMessageCaption(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *caption=None*, *reply_markup=None*, *timeout=None*, *parse_mode=None*, ***kwargs*)
Alias for *edit_message_caption*

editMessageLiveLocation(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *latitude=None*, *longitude=None*, *location=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Alias for *edit_message_live_location*

editMessageMedia(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *media=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Alias for *edit_message_media*

editMessageReplyMarkup(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Alias for *edit_message_reply_markup*

editMessageText(*text*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *parse_mode=None*, *disable_web_page_preview=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Alias for *edit_message_text*

edit_message_caption(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *caption=None*, *reply_markup=None*, *timeout=None*, *parse_mode=None*, ***kwargs*)
Use this method to edit captions of messages sent by the bot or via the bot (for inline bots).

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **caption** (str, optional) – New caption of the message.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, if edited message is sent by the bot, the edited Message is returned, otherwise True is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

edit_message_live_location(*chat_id=None,   message_id=None,   inline_message_id=None, latitude=None, longitude=None, location=None, reply_markup=None, timeout=None, **kwargs*)

Use this method to edit live location messages sent by the bot or via the bot (for inline bots). A location can be edited until its live_period expires or editing is explicitly disabled by a call to *stop_message_live_location*.

Note: You can either supply a latitude and longitude or a location.

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **latitude** (float, optional) – Latitude of location.

- **longitude** (float, optional) – Longitude of location.

- **location** (*telegram.Location*, optional) – The location to send.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

Returns On success the edited message.

Return type *telegram.Message*

edit_message_media(*chat_id=None*,   *message_id=None*,   *inline_message_id=None*,   *media=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)

Use this method to edit audio, document, photo, or video messages. If a message is a part of a message album, then it can be edited only to a photo or a video. Otherwise, message type can be changed arbitrarily. When inline message is edited, new file can't be uploaded. Use previously uploaded file via its file_id or specify a URL. On success, if the edited message was sent by the bot, the edited Message is returned, otherwise True is returned.

Parameters

- **chat_id** (int | str, optional) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **media** (*telegram.InputMedia*) – An object for a new media content of the message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

edit_message_reply_markup(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)

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

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, if edited message is sent by the bot, the editedMessage is returned, otherwise True is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

---

edit_message_text (*text*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *parse_mode=None*, *disable_web_page_preview=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
    Use this method to edit text and game messages sent by the bot or via the bot (for inline bots).

> **Parameters**
>
> - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **message_id** (`int`, optional) – Required if inline_message_id is not specified. Identifier of the sent message.
>
> - **inline_message_id** (`str`, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.
>
> - **text** (`str`) – New text of the message.
>
> - **parse_mode** (`str`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message. See the constants in *telegram.ParseMode* for the available modes.
>
> - **disable_web_page_preview** (`bool`, optional) – Disables link previews for links in this message.
>
> - **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.
>
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.
>
> **Returns** On success, if edited message is sent by the bot, the edited Message is returned, otherwise `True` is returned.
>
> **Return type** *telegram.Message*
>
> **Raises** telegram.TelegramError

exportChatInviteLink (*chat_id*, *timeout=None*, ***kwargs*)
    Alias for *export_chat_invite_link*

export_chat_invite_link (*chat_id*, *timeout=None*, ***kwargs*)
    Use this method to export an invite link to a supergroup or a channel. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

> **Parameters**
>
> - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments
>
> **Returns** Exported invite link on success.
>
> **Return type** str
>
> **Raises** telegram.TelegramError

first_name
    Bot's first name.

> **Type** str

---

forwardMessage(*chat_id*, *from_chat_id*, *message_id*, *disable_notification=False*, *timeout=None*, ***kwargs*)

Alias for *forward_message*

forward_message(*chat_id*, *from_chat_id*, *message_id*, *disable_notification=False*, *timeout=None*, ***kwargs*)

Use this method to forward messages of any kind.

> **Parameters**
>
> - **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
> - **from_chat_id** (int | str) – Unique identifier for the chat where the original message was sent (or channel username in the format @channelusername).
> - **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.
> - **message_id** (int) – Message identifier in the chat specified in from_chat_id.
> - **timeout** (int | float, optional) – If this value is specified, use it as
> - **read timeout** (*the*) – from the server (instead of the one specified during creation of the connection pool).
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** On success, the sent Message is returned.
>
> **Return type** *telegram.Message*
>
> **Raises** telegram.TelegramError

getChat(*chat_id*, *timeout=None*, ***kwargs*)

Alias for *get_chat*

getChatAdministrators(*chat_id*, *timeout=None*, ***kwargs*)

Alias for *get_chat_administrators*

getChatMember(*chat_id*, *user_id*, *timeout=None*, ***kwargs*)

Alias for *get_chat_member*

getChatMembersCount(*chat_id*, *timeout=None*, ***kwargs*)

Alias for *get_chat_members_count*

getFile(*file_id*, *timeout=None*, ***kwargs*)

Alias for *get_file*

getGameHighScores(*user_id*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *timeout=None*, ***kwargs*)

Alias for *get_game_high_scores*

getMe(*timeout=None*, ***kwargs*)

Alias for *get_me*

getStickerSet(*name*, *timeout=None*, ***kwargs*)

Alias for *get_sticker_set*

getUpdates(*offset=None*, *limit=100*, *timeout=0*, *read_latency=2.0*, *allowed_updates=None*, ***kwargs*)

Alias for *get_updates*

getUserProfilePhotos(*user_id*, *offset=None*, *limit=100*, *timeout=None*, ***kwargs*)

Alias for *get_user_profile_photos*

getWebhookInfo(*timeout=None*, ***kwargs*)

Alias for *get_webhook_info*

get_chat (*chat_id*, *timeout=None*, ***kwargs*)

Use this method to get up to date information about the chat (current name of the user for one-on-one conversations, current username of a user, group or channel, etc.).

> **Parameters**
>
> - **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** *telegram.Chat*
>
> **Raises** telegram.TelegramError

get_chat_administrators (*chat_id*, *timeout=None*, ***kwargs*)

Use this method to get a list of administrators in a chat. On success, returns an Array of ChatMember objects that contains information about all chat administrators except other bots. If the chat is a group or a supergroup and no administrators were appointed, only the creator will be returned.

> **Parameters**
>
> - **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** List[*telegram.ChatMember*]
>
> **Raises** telegram.TelegramError

get_chat_member (*chat_id*, *user_id*, *timeout=None*, ***kwargs*)

Use this method to get information about a member of a chat.

> **Parameters**
>
> - **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **user_id** (int) – Unique identifier of the target user.
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** *telegram.ChatMember*
>
> **Raises** telegram.TelegramError

get_chat_members_count (*chat_id*, *timeout=None*, ***kwargs*)

Use this method to get the number of members in a chat

> **Parameters**
>
> - **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns Number of members in the chat.

Return type int

Raises telegram.TelegramError

get_file(*file_id*, *timeout=None*, ***kwargs*)

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. The file can then be downloaded with *telegram.File. download*. 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.

Parameters

- **file_id** (str | *telegram.Animation* | *telegram.Audio* | *telegram. ChatPhoto* | *telegram.Document* | *telegram.PhotoSize* | *telegram. Sticker* | *telegram.Video* | *telegram.VideoNote* | *telegram.Voice*) – Either the file identifier or an object that has a file_id attribute to get file information about.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns *telegram.File*

Raises telegram.TelegramError

get_game_high_scores(*user_id*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *timeout=None*, ***kwargs*)

Use this method to get data for high score tables. Will return the score of the specified user and several of his neighbors in a game

Parameters

- **user_id** (int) – User identifier.

- **chat_id** (int | str, optional) – Required if inline_message_id is not specified. Unique identifier for the target chat.

- **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns List[*telegram.GameHighScore*]

Raises telegram.TelegramError

get_me(*timeout=None*, ***kwargs*)

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

Parameters **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

Returns A *telegram.User* instance representing that bot if the credentials are valid, None otherwise.

> **Return type** *telegram.User*
>
> **Raises** telegram.TelegramError

get_sticker_set(*name*, *timeout=None*, ***kwargs*)
> Use this method to get a sticker set.
>
> > **Parameters**
> >
> > - **name** (str) – Short name of the sticker set that is used in t.me/addstickers/ URLs (e.g., animals)
> >
> > - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> >
> > - ****kwargs** (dict) – Arbitrary keyword arguments.
> >
> > **Returns** *telegram.StickerSet*
> >
> > **Raises** telegram.TelegramError

get_updates(*offset=None*, *limit=100*, *timeout=0*, *read_latency=2.0*, *allowed_updates=None*, ***kwargs*)
> Use this method to receive incoming updates using long polling.
>
> > **Parameters**
> >
> > - **offset** (int, optional) – Identifier of the first update to be returned. Must be greater by one than the highest among the identifiers of previously received updates. By default, updates starting with the earliest unconfirmed update are returned. An update is considered confirmed as soon as getUpdates is called with an offset higher than its update_id. The negative offset can be specified to retrieve updates starting from -offset update from the end of the updates queue. All previous updates will forgotten.
> >
> > - **limit** (int, optional) – Limits the number of updates to be retrieved. Values between 1-100 are accepted. Defaults to 100.
> >
> > - **timeout** (int, 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** (List[str]), optional) – List the types of updates you want your bot to receive. For example, specify ["message", "edited_channel_post", "callback_query"] to only receive updates of these types. See *telegram.Update* for a complete list of available update types. Specify an empty list 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.
> >
> > - ****kwargs** (dict) – Arbitrary keyword arguments.
> >
> > ### Notes
> >
> > 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.
> >
> > 3. To take full advantage of this library take a look at *telegram.ext.Updater*
> >
> > **Returns** List[*telegram.Update*]
> >
> > **Raises** telegram.TelegramError

get_user_profile_photos(*user_id*, *offset=None*, *limit=100*, *timeout=None*, ***kwargs*)
> Use this method to get a list of profile pictures for a user.

Parameters

- **user_id** (`int`) – Unique identifier of the target user.

- **offset** (`int`, optional) – Sequential number of the first photo to be returned. By default, all photos are returned.

- **limit** (`int`, optional) – Limits the number of photos to be retrieved. Values between 1-100 are accepted. Defaults to 100.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns *telegram.UserProfilePhotos*

Raises `telegram.TelegramError`

get_webhook_info(*timeout=None*, ***kwargs*)
Use this method to get current webhook status. Requires no parameters.

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

Parameters

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns *telegram.WebhookInfo*

id
Unique identifier for this bot.

Type `int`

kickChatMember(*chat_id*, *user_id*, *timeout=None*, *until_date=None*, ***kwargs*)
Alias for *kick_chat_member*

kick_chat_member(*chat_id*, *user_id*, *timeout=None*, *until_date=None*, ***kwargs*)
Use this method to kick a user from a group or a supergroup. In the case of supergroups, the user will not be able to return to the group on their own using invite links, etc., unless unbanned first. The bot must be an administrator in the group for this to work.

Parameters

- **chat_id** (`int | str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **user_id** (`int`) – Unique identifier of the target user.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- **until_date** (`int | datetime.datetime`, optional) – Date when the user will be unbanned, unix time. If user is banned for more than 366 days or less than 30 seconds from the current time they are considered to be banned forever.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Note: In regular groups (non-supergroups), this method will only work if the 'All Members Are Admins' setting is off in the target group. Otherwise members may only be removed by the group's creator or by the member that added them.

> **Returns** `bool` On success, `True` is returned.
>
> **Raises** `telegram.TelegramError`

last_name
>   Optional. Bot's last name.
>
>   > **Type** `str`

leaveChat(*chat_id*, *timeout=None*, ***kwargs*)
>   Alias for *leave_chat*

leave_chat(*chat_id*, *timeout=None*, ***kwargs*)
>   Use this method for your bot to leave a group, supergroup or channel.
>
>   **Parameters**
>
>   - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
>   - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
>   - ****kwargs** (`dict`) – Arbitrary keyword arguments.
>
>   **Returns** `bool` On success, `True` is returned.
>
>   **Raises** `telegram.TelegramError`

name
>   Bot's @username.
>
>   > **Type** `str`

pinChatMessage(*chat_id*, *message_id*, *disable_notification=None*, *timeout=None*, ***kwargs*)
>   Alias for *pin_chat_message*

pin_chat_message(*chat_id*, *message_id*, *disable_notification=None*, *timeout=None*, ***kwargs*)
>   Use this method to pin a message in a supergroup. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.
>
>   **Parameters**
>
>   - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
>   - **message_id** (`int`) – Identifier of a message to pin.
>
>   - **disable_notification** (`bool`, optional) – Pass True, if it is not necessary to send a notification to all group members about the new pinned message.
>
>   - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
>   - ****kwargs** (`dict`) – Arbitrary keyword arguments
>
>   **Returns** Returns `True` on success.
>
>   **Return type** `bool`
>
>   **Raises** `telegram.TelegramError`

promoteChatMember(*chat_id*, *user_id*, *can_change_info=None*, *can_post_messages=None*, *can_edit_messages=None*, *can_delete_messages=None*, *can_invite_users=None*, *can_restrict_members=None*, *can_pin_messages=None*, *can_promote_members=None*, *timeout=None*, ***kwargs*)

Alias for *promote_chat_member*

promote_chat_member(*chat_id*, *user_id*, *can_change_info=None*, *can_post_messages=None*, *can_edit_messages=None*, *can_delete_messages=None*, *can_invite_users=None*, *can_restrict_members=None*, *can_pin_messages=None*, *can_promote_members=None*, *timeout=None*, ***kwargs*)

Use this method to promote or demote a user in a supergroup or a channel. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights. Pass False for all boolean parameters to demote a user

> **Parameters**
>
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target supergroup (in the format @supergroupusername).
>
> - **user_id** (`int`) – Unique identifier of the target user.
>
> - **can_change_info** (`bool`, optional) – Pass True, if the administrator can change chat title, photo and other settings.
>
> - **can_post_messages** (`bool`, optional) – Pass True, if the administrator can create channel posts, channels only.
>
> - **can_edit_messages** (`bool`, optional) – Pass True, if the administrator can edit messages of other users, channels only.
>
> - **can_delete_messages** (`bool`, optional) – Pass True, if the administrator can delete messages of other users.
>
> - **can_invite_users** (`bool`, optional) – Pass True, if the administrator can invite new users to the chat.
>
> - **can_restrict_members** (`bool`, optional) – Pass True, if the administrator can restrict, ban or unban chat members.
>
> - **can_pin_messages** (`bool`, optional) – Pass True, if the administrator can pin messages, supergroups only.
>
> - **can_promote_members** (`bool`, optional) – Pass True, if the administrator can add new administrators with a subset of his own privileges or demote administrators that he has promoted, directly or indirectly (promoted by administrators that were appointed by him).
>
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments
>
> **Returns** Returns True on success.
>
> **Return type** `bool`
>
> **Raises** `telegram.TelegramError`

restrictChatMember(*chat_id*, *user_id*, *permissions*, *until_date=None*, *timeout=None*, ***kwargs*)

Alias for *restrict_chat_member*

restrict_chat_member(*chat_id*, *user_id*, *permissions*, *until_date=None*, *timeout=None*, ***kwargs*)

Use this method to restrict a user in a supergroup. The bot must be an administrator in the supergroup

for this to work and must have the appropriate admin rights. Pass True for all boolean parameters to lift restrictions from a user.

> **Note:** Since Bot API 4.4, `restrict_chat_member` takes the new user permissions in a single argument of type `telegram.ChatPermissions`. The old way of passing parameters will not keep working forever.

> **Parameters**
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target supergroup (in the format @supergroupusername).
> - **user_id** (`int`) – Unique identifier of the target user.
> - **until_date** (`int` | `datetime.datetime`, optional) – Date when restrictions will be lifted for the user, unix time. If user is restricted for more than 366 days or less than 30 seconds from the current time, they are considered to be restricted forever.
> - **permissions** (`telegram.ChatPermissions`) – New user permissions.
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> - ****kwargs** (`dict`) – Arbitrary keyword arguments
>
> **Returns** Returns True on success.
>
> **Return type** `bool`
>
> **Raises** `telegram.TelegramError`

sendAnimation(*chat_id*, *animation*, *duration=None*, *width=None*, *height=None*, *thumb=None*, *caption=None*, *parse_mode=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, ***kwargs*)
Alias for *send_animation*

sendAudio(*chat_id*, *audio*, *duration=None*, *performer=None*, *title=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, *thumb=None*, ***kwargs*)
Alias for *send_audio*

sendChatAction(*chat_id*, *action*, *timeout=None*, ***kwargs*)
Alias for *send_chat_action*

sendContact(*chat_id*, *phone_number=None*, *first_name=None*, *last_name=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *contact=None*, *vcard=None*, ***kwargs*)
Alias for *send_contact*

sendDocument(*chat_id*, *document*, *filename=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, *thumb=None*, ***kwargs*)
Alias for *send_document*

sendGame(*chat_id*, *game_short_name*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Alias for *send_game*

sendInvoice(*chat_id*, *title*, *description*, *payload*, *provider_token*, *start_parameter*, *currency*, *prices*, *photo_url=None*, *photo_size=None*, *photo_width=None*, *photo_height=None*, *need_name=None*, *need_phone_number=None*, *need_email=None*, *need_shipping_address=None*, *is_flexible=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *provider_data=None*, *send_phone_number_to_provider=None*, *send_email_to_provider=None*, *timeout=None*, ***kwargs*)
　　Alias for *send_invoice*

sendLocation(*chat_id*, *latitude=None*, *longitude=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *location=None*, *live_period=None*, ***kwargs*)
　　Alias for *send_location*

sendMediaGroup(*chat_id*, *media*, *disable_notification=None*, *reply_to_message_id=None*, *timeout=20*, ***kwargs*)
　　Alias for *send_media_group*

sendMessage(*chat_id*, *text*, *parse_mode=None*, *disable_web_page_preview=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
　　Alias for *send_message*

sendPhoto(*chat_id*, *photo*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, ***kwargs*)
　　Alias for *send_photo*

sendPoll(*chat_id*, *question*, *options*, *disable_notification=None*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
　　Alias for *send_poll*

sendSticker(*chat_id*, *sticker*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, ***kwargs*)
　　Alias for *send_sticker*

sendVenue(*chat_id*, *latitude=None*, *longitude=None*, *title=None*, *address=None*, *foursquare_id=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *venue=None*, *foursquare_type=None*, ***kwargs*)
　　Alias for *send_venue*

sendVideo(*chat_id*, *video*, *duration=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *width=None*, *height=None*, *parse_mode=None*, *supports_streaming=None*, *thumb=None*, ***kwargs*)
　　Alias for *send_video*

sendVideoNote(*chat_id*, *video_note*, *duration=None*, *length=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *thumb=None*, ***kwargs*)
　　Alias for *send_video_note*

sendVoice(*chat_id*, *voice*, *duration=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, ***kwargs*)
　　Alias for *send_voice*

send_animation(*chat_id*, *animation*, *duration=None*, *width=None*, *height=None*, *thumb=None*, *caption=None*, *parse_mode=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, ***kwargs*)
　　Use this method to send animation files (GIF or H.264/MPEG-4 AVC video without sound).

　　　　Parameters

　　　　　　• **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **animation** (str | *filelike object* | `telegram.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 new animation using multipart/form-data. Lastly you can pass an existing `telegram.Animation` object to send.

- **duration** (int, optional) – Duration of sent animation in seconds.

- **width** (int, optional) – Animation width.

- **height** (int, optional) – Animation height.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

- **caption** (str, optional) – Animation caption (may also be used when resending animations by file_id), 0-1024 characters.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (`telegram.ReplyMarkup`, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type `telegram.Message`

Raises telegram.TelegramError

send_audio(*chat_id*, *audio*, *duration=None*, *performer=None*, *title=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, *thumb=None*, ***kwargs*)
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.

Note: The audio argument can be either a file_id, an URL or a file from disk open(filename, 'rb')

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **audio** (str | *filelike object* | `telegram.Audio`) – Audio file to send. Pass a file_id as String to send an audio file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an audio file from the Internet, or upload a new one using multipart/form-data. Lastly you can pass an existing `telegram.Audio` object to send.

- **caption** (str, optional) – Audio caption, 0-1024 characters.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **duration** (int, optional) – Duration of sent audio in seconds.

- **performer** (str, optional) – Performer.

- **title** (str, optional) – Track name.

- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

- **timeout** (int | float, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_chat_action(*chat_id*, *action*, *timeout=None*, ***kwargs*)

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).

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **action** (*telegram.ChatAction* | str) – Type of action to broadcast. Choose one, depending on what the user is about to receive. For convenience look at the constants in *telegram.ChatAction*

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns True on success.

Return type bool

Raises telegram.TelegramError

send_contact(*chat_id*, *phone_number=None*, *first_name=None*, *last_name=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *contact=None*, *vcard=None*, ***kwargs*)

Use this method to send phone contacts.

Note: You can either supply contact or phone_number and *first_name* with optionally *last_name* and optionally vcard.

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **phone_number** (str, optional) – Contact's phone number.

- **first_name** (str, optional) – Contact's first name.

- **last_name** (str, optional) – Contact's last name.

- **vcard** (str, optional) – Additional data about the contact in the form of a vCard, 0-2048 bytes.

- **contact** (*telegram.Contact*, optional) – The contact to send.

- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_document(*chat_id*, *document*, *filename=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, *thumb=None*, ***kwargs*)
Use this method to send general files.

Note: The document argument can be either a file_id, an URL or a file from disk open(filename, 'rb')

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **document** (str | *filelike object* | *telegram.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 new one using multipart/form-data. Lastly you can pass an existing *telegram.Document* object to send.

- **filename** (str, optional) – File name that shows in telegram message (it is useful when you send file generated by temp module, for example). Undocumented.

- **caption** (str, optional) – Document caption (may also be used when resending documents by file_id), 0-1024 characters.
- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.
- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.
- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.
- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.
- **timeout** (int | float, optional) – Send file timeout (default: 20 seconds).
- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_game(*chat_id*, *game_short_name*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
  Use this method to send a game.

  Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
- **game_short_name** (str) – Short name of the game, serves as the unique identifier for the game. Set up your games via Botfather.
- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.
- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.
- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.
- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_invoice(*chat_id*, *title*, *description*, *payload*, *provider_token*, *start_parameter*, *currency*, *prices*, *photo_url=None*, *photo_size=None*, *photo_width=None*, *photo_height=None*, *need_name=None*, *need_phone_number=None*, *need_email=None*, *need_shipping_address=None*, *is_flexible=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *provider_data=None*, *send_phone_number_to_provider=None*, *send_email_to_provider=None*, *timeout=None*, ***kwargs*)

Use this method to send invoices.

Parameters

- **chat_id** (`int | str`) – Unique identifier for the target private chat.

- **title** (`str`) – Product name.

- **description** (`str`) – Product description.

- **payload** (`str`) – Bot-defined invoice payload, 1-128 bytes. This will not be displayed to the user, use for your internal processes.

- **provider_token** (`str`) – Payments provider token, obtained via Botfather.

- **start_parameter** (`str`) – Unique deep-linking parameter that can be used to generate this invoice when used as a start parameter.

- **currency** (`str`) – Three-letter ISO 4217 currency code.

- **prices** (List[`telegram.LabeledPrice`]) – Price breakdown, a list of components (e.g. product price, tax, discount, delivery cost, delivery tax, bonus, etc.).

- **provider_data** (`str | object`, optional) – JSON-encoded data about the invoice, which will be shared with the payment provider. A detailed description of required fields should be provided by the payment provider. When an object is passed, it will be encoded as JSON.

- **photo_url** (`str`, optional) – URL of the product photo for the invoice. Can be a photo of the goods or a marketing image for a service. People like it better when they see what they are paying for.

- **photo_size** (`str`, optional) – Photo size.

- **photo_width** (`int`, optional) – Photo width.

- **photo_height** (`int`, optional) – Photo height.

- **need_name** (`bool`, optional) – Pass True, if you require the user's full name to complete the order.

- **need_phone_number** (`bool`, optional) – Pass True, if you require the user's phone number to complete the order.

- **need_email** (`bool`, optional) – Pass True, if you require the user's email to complete the order.

- **need_shipping_address** (`bool`, optional) – Pass True, if you require the user's shipping address to complete the order.

- **send_phone_number_to_provider** (`bool`, optional) – Pass True, if user's phone number should be sent to provider.

- **send_email_to_provider** (`bool`, optional) – Pass True, if user's email address should be sent to provider.

- **is_flexible** (`bool`, optional) – Pass True, if the final price depends on the shipping method.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (`telegram.ReplyMarkup`, optional) – Additional interface options. An inlinekeyboard. If empty, one 'Pay total price' button will be shown. If not empty, the first button must be a Pay button.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises `telegram.TelegramError`

send_location(*chat_id*, *latitude=None*, *longitude=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *location=None*, *live_period=None*, ***kwargs*)
Use this method to send point on the map.

Note: You can either supply a `latitude` and `longitude` or a `location`.

Parameters

- **chat_id** (`int | str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **latitude** (`float`, optional) – Latitude of location.

- **longitude** (`float`, optional) – Longitude of location.

- **location** (`telegram.Location`, optional) – The location to send.

- **live_period** (`int`, optional) – Period in seconds for which the location will be updated, should be between 60 and 86400.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (`telegram.ReplyMarkup`, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises `telegram.TelegramError`

send_media_group(*chat_id*, *media*, *disable_notification=None*, *reply_to_message_id=None*, *timeout=20*, ***kwargs*)
Use this method to send a group of photos or videos as an album.

Parameters

- **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **media** (List[`telegram.InputMedia`]) – An array describing photos and videos to be sent, must include 2–10 items.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **timeout** (`int`|`float`, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns An array of the sent Messages.

Return type List[`telegram.Message`]

Raises `telegram.TelegramError`

send_message(*chat_id*, *text*, *parse_mode=None*, *disable_web_page_preview=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Use this method to send text messages.

Parameters

- **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **text** (`str`) – Text of the message to be sent. Max 4096 characters. Also found as `telegram.constants.MAX_MESSAGE_LENGTH`.

- **parse_mode** (`str`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message. See the constants in `telegram.ParseMode` for the available modes.

- **disable_web_page_preview** (`bool`, optional) – Disables link previews for links in this message.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (`telegram.ReplyMarkup`, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent message is returned.

Return type `telegram.Message`

Raises `telegram.TelegramError`

send_photo(*chat_id*, *photo*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, ***kwargs*)
Use this method to send photos.

Note: The photo argument can be either a file_id, an URL or a file from disk `open(filename, 'rb')`

> **Parameters**
>
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
>
> - **photo** (`str` | *filelike object* | *telegram.PhotoSize*) – 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 new photo using multipart/form-data. Lastly you can pass an existing *telegram.PhotoSize* object to send.
>
> - **caption** (`str`, optional) – Photo caption (may also be used when resending photos by file_id), 0-1024 characters.
>
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> - **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.
>
> - **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.
>
> - **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.
>
> - **timeout** (`int` | `float`, optional) – Send file timeout (default: 20 seconds).
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.
>
> **Returns** On success, the sent Message is returned.
>
> **Return type** *telegram.Message*
>
> **Raises** `telegram.TelegramError`

send_poll(*chat_id*, *question*, *options*, *disable_notification=None*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
Use this method to send a native poll. A native poll can't be sent to a private chat.

> **Parameters**
>
> - **chat_id** (`int` | `str`) – Unique identifier for the target private chat.
>
> - **question** (`str`) – Poll question, 1-255 characters.
>
> - **options** (`List[str]`) – List of answer options, 2-10 strings 1-100 characters each.
>
> - **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.
>
> - **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.
>
> - **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.
>
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_sticker(*chat_id*, *sticker*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, ***kwargs*)
Use this method to send .webp stickers.

Note: The sticker argument can be either a file_id, an URL or a file from disk open(filename, 'rb')

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **sticker** (str | *filelike object telegram.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 new one using multipart/form-data. Lastly you can pass an existing *telegram. Sticker* object to send.

- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_venue(*chat_id*, *latitude=None*, *longitude=None*, *title=None*, *address=None*, *foursquare_id=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=None*, *venue=None*, *foursquare_type=None*, ***kwargs*)
Use this method to send information about a venue.

Note: you can either supply venue, or latitude, longitude, title and address and optionally foursquare_id and optionally foursquare_type.

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **latitude** (float, optional) – Latitude of venue.

- **longitude** (float, optional) – Longitude of venue.

- **title** (str, optional) – Name of the venue.

- **address** (str, optional) – Address of the venue.

- **foursquare_id** (str, optional) – Foursquare identifier of the venue.

- **foursquare_type** (str, optional) – Foursquare type of the venue, if known. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)

- **venue** (*telegram.Venue*, optional) – The venue to send.

- **disable_notification** (bool, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (int, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_video(*chat_id*, *video*, *duration=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *width=None*, *height=None*, *parse_mode=None*, *supports_streaming=None*, *thumb=None*, ***kwargs*)
Use this method to send video files, Telegram clients support mp4 videos (other formats may be sent as Document).

Note: The video argument can be either a file_id, an URL or a file from disk open(filename, 'rb')

Parameters

- **chat_id** (int | str) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **video** (str | *filelike object* | *telegram.Video*) – Video file to send. Pass a file_id as String to send an video file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an video file from the Internet, or upload a new one using multipart/form-data. Lastly you can pass an existing *telegram.Video* object to send.

- **duration** (int, optional) – Duration of sent video in seconds.

- **width** (int, optional) – Video width.

- **height** (int, optional) – Video height.

- **caption** (str, optional) – Video caption (may also be used when resending videos by file_id), 0-1024 characters.

- **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **supports_streaming** (`bool`, optional) – Pass True, if the uploaded video is suitable for streaming.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

- **timeout** (`int` | `float`, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_video_note(*chat_id*, *video_note*, *duration=None*, *length=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *thumb=None*, ***kwargs*)
Use this method to send video messages.

Note: The video_note argument can be either a file_id or a file from disk `open(filename, 'rb')`

Parameters

- **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **video_note** (`str` | *filelike object* | *telegram.VideoNote*) – Video note to send. Pass a file_id as String to send a video note that exists on the Telegram servers (recommended) or upload a new video using multipart/form-data. Or you can pass an existing *telegram.VideoNote* object to send. Sending video notes by a URL is currently unsupported.

- **duration** (`int`, optional) – Duration of sent video in seconds.

- **length** (`int`, optional) – Video width and height

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

- **timeout** (`int` | `float`, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

send_voice(*chat_id*, *voice*, *duration=None*, *caption=None*, *disable_notification=False*, *reply_to_message_id=None*, *reply_markup=None*, *timeout=20*, *parse_mode=None*, ***kwargs*)

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 as Audio or Document).

Note: The voice argument can be either a file_id, an URL or a file from disk `open(filename, 'rb')`

Parameters

- **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **voice** (`str` | *filelike object* | *telegram.Voice*) – Voice file to send. Pass a file_id as String to send an voice file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an voice file from the Internet, or upload a new one using multipart/form-data. Lastly you can pass an existing *telegram.Voice* object to send.

- **caption** (`str`, optional) – Voice message caption, 0-1024 characters.

- **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **duration** (`int`, optional) – Duration of the voice message in seconds.

- **disable_notification** (`bool`, optional) – Sends the message silently. Users will receive a notification with no sound.

- **reply_to_message_id** (`int`, optional) – If the message is a reply, ID of the original message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (`int` | `float`, optional) – Send file timeout (default: 20 seconds).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns On success, the sent Message is returned.

Return type *telegram.Message*

Raises telegram.TelegramError

setChatDescription(*chat_id*, *description*, *timeout=None*, ***kwargs*)

Alias for *set_chat_description*

setChatPermissions(*chat_id*, *permissions*, *timeout=None*, ***kwargs*)
 Alias for *set_chat_permissions*

setChatPhoto(*chat_id*, *photo*, *timeout=20*, ***kwargs*)
 Alias for *set_chat_photo*

setChatStickerSet(*chat_id*, *sticker_set_name*, *timeout=None*, ***kwargs*)
 Alias for *set_chat_sticker_set*

setChatTitle(*chat_id*, *title*, *timeout=None*, ***kwargs*)
 Alias for *set_chat_title*

setGameScore(*user_id*, *score*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *force=None*, *disable_edit_message=None*, *timeout=None*, ***kwargs*)
 Alias for *set_game_score*

setPassportDataErrors(*user_id*, *errors*, *timeout=None*, ***kwargs*)
 Alias for *set_passport_data_errors*

setStickerPositionInSet(*sticker*, *position*, *timeout=None*, ***kwargs*)
 Alias for *set_sticker_position_in_set*

setWebhook(*url=None*, *certificate=None*, *timeout=None*, *max_connections=40*, *allowed_updates=None*, ***kwargs*)
 Alias for *set_webhook*

set_chat_description(*chat_id*, *description*, *timeout=None*, ***kwargs*)
 Use this method to change the description of a group, a supergroup or a channel. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

  Parameters

   • **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

   • **description** (`str`) – New chat description, 1-255 characters.

   • **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

   • ****kwargs** (`dict`) – Arbitrary keyword arguments

  Returns Returns `True` on success.

  Return type `bool`

  Raises `telegram.TelegramError`

set_chat_permissions(*chat_id*, *permissions*, *timeout=None*, ***kwargs*)
 Use this method to set default chat permissions for all members. The bot must be an administrator in the group or a supergroup for this to work and must have the `can_restrict_members` admin rights. Returns True on success.

  Parameters

   • **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target supergroup (in the format @*supergroupusername*).

   • **permissions** (*telegram.ChatPermissions*) – New default chat permissions.

   • **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

   • ****kwargs** (`dict`) – Arbitrary keyword arguments

  Returns Returns True on success.

Return type `bool`

Raises `telegram.TelegramError`

set_chat_photo(*chat_id*, *photo*, *timeout=20*, ***kwargs*)
Use this method to set a new profile photo for the chat.

Photos can't be changed for private chats. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

> **Parameters**
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
> - **photo** (*filelike object*) – New chat photo.
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> - ****kwargs** (`dict`) – Arbitrary keyword arguments

Note: In regular groups (non-supergroups), this method will only work if the 'All Members Are Admins' setting is off in the target group.

> **Returns** Returns True on success.
>
> **Return type** `bool`
>
> **Raises** `telegram.TelegramError`

set_chat_sticker_set(*chat_id*, *sticker_set_name*, *timeout=None*, ***kwargs*)
Use this method to set a new group sticker set for a supergroup. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights. Use the field `telegram.Chat.can_set_sticker_set` optionally returned in `get_chat` requests to check if the bot can use this method.

> **Parameters**
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target supergroup (in the format @supergroupusername).
> - **sticker_set_name** (`str`) – Name of the sticker set to be set as the group sticker set.
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.
>
> **Returns** True on success.
>
> **Return type** `bool`

set_chat_title(*chat_id*, *title*, *timeout=None*, ***kwargs*)
Use this method to change the title of a chat. Titles can't be changed for private chats. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

> **Parameters**
> - **chat_id** (`int` | `str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).
> - **title** (`str`) – New chat title, 1-255 characters.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments

Note: In regular groups (non-supergroups), this method will only work if the 'All Members Are Admins' setting is off in the target group.

> **Returns** Returns True on success.
>
> **Return type** bool
>
> **Raises** telegram.TelegramError

set_game_score(*user_id*, *score*, *chat_id=None*, *message_id=None*, *inline_message_id=None*, *force=None*, *disable_edit_message=None*, *timeout=None*, ***kwargs*)
> Use this method to set the score of the specified user in a game. On success, if the message was sent by the bot, returns the edited Message, otherwise returns True. Returns an error, if the new score is not greater than the user's current score in the chat and force is False.
>
> **Parameters**
>
> - **user_id** (int) – User identifier.
>
> - **score** (int) – New score, must be non-negative.
>
> - **force** (bool, optional) – Pass True, if the high score is allowed to decrease. This can be useful when fixing mistakes or banning cheaters
>
> - **disable_edit_message** (bool, optional) – Pass True, if the game message should not be automatically edited to include the current scoreboard.
>
> - **chat_id** (*int|str, optional*) – Required if inline_message_id is not specified. Unique identifier for the target chat.
>
> - **message_id** (int, optional) – Required if inline_message_id is not specified. Identifier of the sent message.
>
> - **inline_message_id** (str, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** The edited message, or if the message wasn't sent by the bot , True.
>
> **Return type** *telegram.Message*
>
> **Raises**
>
> - telegram.TelegramError – If the new score is not greater than the user's
>
> - current score in the chat and force is False.

set_passport_data_errors(*user_id*, *errors*, *timeout=None*, ***kwargs*)
> Informs a user that some of the Telegram Passport elements they provided contains errors. The user will not be able to re-submit their Passport to you until the errors are fixed (the contents of the field for which you returned the error must change). Returns True on success.
>
> Use this if the data submitted by the user doesn't satisfy the standards your service requires for any reason. For example, if a birthday date seems invalid, a submitted document is blurry, a scan shows evidence of tampering, etc. Supply some details in the error message to make sure the user knows how to correct the issues.

Parameters

- **user_id** (int) – User identifier

- **errors** (List[*PassportElementError*]) – A JSON-serialized array describing the errors.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, True is returned.

Return type bool

Raises telegram.TelegramError

set_sticker_position_in_set(*sticker*, *position*, *timeout=None*, ***kwargs*)
Use this method to move a sticker in a set created by the bot to a specific position.

Parameters

- **sticker** (str) – File identifier of the sticker.

- **position** (int) – New sticker position in the set, zero-based.

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

Returns On success, True is returned.

Return type bool

Raises telegram.TelegramError

set_webhook(*url=None*, *certificate=None*, *timeout=None*, *max_connections=40*, *allowed_updates=None*, ***kwargs*)
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. In case of an unsuccessful request, we will give up after a reasonable amount of attempts.

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>. Since nobody else knows your bot's token, you can be pretty sure it's us.

Note: The certificate argument should be a file from disk open(filename, 'rb').

Parameters

- **url** (str) – HTTPS url to send updates to. Use an empty string to remove webhook integration.

- **certificate** (filelike) – Upload your public key certificate so that the root certificate in use can be checked. See our self-signed guide for details. (https://goo.gl/rw7w6Y)

- **max_connections** (int, 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** (List[`str`], optional) – List the types of updates you want your bot to receive. For example, specify ["message", "edited_channel_post", "callback_query"] to only receive updates of these types. See *telegram.Update* for a complete list of available update types. Specify an empty list 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 set_webhook, so unwanted updates may be received for a short period of time.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Note:

1. You will not be able to receive updates using get_updates for as long as an outgoing webhook is set up.

2. To use a self-signed certificate, you need to upload your public key certificate using certificate parameter. Please upload as InputFile, sending a String will not work.

3. Ports currently supported for Webhooks: 443, 80, 88, 8443.

    Returns `bool` On success, `True` is returned.

    Raises telegram.TelegramError

stopMessageLiveLocation(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
    Alias for *stop_message_live_location*

stopPoll(*chat_id*, *message_id*, *reply_markup=None*, *timeout=None*, ***kwargs*)
    Alias for *stop_poll*

stop_message_live_location(*chat_id=None*, *message_id=None*, *inline_message_id=None*, *reply_markup=None*, *timeout=None*, ***kwargs*)
    Use this method to stop updating a live location message sent by the bot or via the bot (for inline bots) before live_period expires.

    Parameters

- **chat_id** (`int | str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

- **message_id** (`int`, optional) – Required if inline_message_id is not specified. Identifier of the sent message.

- **inline_message_id** (`str`, optional) – Required if chat_id and message_id are not specified. Identifier of the inline message.

- **reply_markup** (*telegram.ReplyMarkup*, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

- **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

    Returns On success the edited message.

    Return type *telegram.Message*

stop_poll(*chat_id*, *message_id*, *reply_markup=None*, *timeout=None*, ***kwargs*)
>   Use this method to stop a poll which was sent by the bot.

>   **Parameters**

>>   - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

>>   - **message_id** (`int`) – Identifier of the original message with the poll.

>>   - **reply_markup** (`telegram.ReplyMarkup`, optional) – Additional interface options. A JSON-serialized object for an inline keyboard, custom reply keyboard, instructions to remove reply keyboard or to force a reply from the user.

>>   - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

>>   - ****kwargs** (`dict`) – Arbitrary keyword arguments.

>   **Returns**

>>   **On success, the stopped Poll with the** final results is returned.

>   **Return type** `telegram.Poll`

>   **Raises** `telegram.TelegramError`

unbanChatMember(*chat_id*, *user_id*, *timeout=None*, ***kwargs*)
>   Alias for `unban_chat_member`

unban_chat_member(*chat_id*, *user_id*, *timeout=None*, ***kwargs*)
>   Use this method to unban a previously kicked user in a supergroup.

>   The user will not return to the group automatically, but will be able to join via link, etc. The bot must be an administrator in the group for this to work.

>   **Parameters**

>>   - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

>>   - **user_id** (`int`) – Unique identifier of the target user.

>>   - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

>>   - ****kwargs** (`dict`) – Arbitrary keyword arguments.

>   **Returns** `bool` On success, `True` is returned.

>   **Raises** `telegram.TelegramError`

unpinChatMessage(*chat_id*, *timeout=None*, ***kwargs*)
>   Alias for `unpin_chat_message`

unpin_chat_message(*chat_id*, *timeout=None*, ***kwargs*)
>   Use this method to unpin a message in a supergroup. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

>   **Parameters**

>>   - **chat_id** (`int`|`str`) – Unique identifier for the target chat or username of the target channel (in the format @channelusername).

>>   - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

>>   - ****kwargs** (`dict`) – Arbitrary keyword arguments

Returns Returns `True` on success.

Return type `bool`

Raises `telegram.TelegramError`

uploadStickerFile(*user_id*, *png_sticker*, *timeout=20*, ***kwargs*)
Alias for *upload_sticker_file*

upload_sticker_file(*user_id*, *png_sticker*, *timeout=20*, ***kwargs*)
Use this method to upload a .png file with a sticker for later use in *create_new_sticker_set* and *add_sticker_to_set* methods (can be used multiple times).

Note: The png_sticker argument can be either a file_id, an URL or a file from disk `open(filename, 'rb')`

Parameters

- **user_id** (`int`) – User identifier of sticker file owner.

- **png_sticker** (`str` | *filelike object*) – Png image with the sticker, must be up to 512 kilobytes in size, dimensions must not exceed 512px, and either width or height must be exactly 512px.

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns The uploaded File

Return type *telegram.File*

Raises `telegram.TelegramError`

username
Bot's username.

Type `str`

3.2.4 telegram.CallbackQuery

class telegram.**CallbackQuery**(*id*, *from_user*, *chat_instance*, *message=None*, *data=None*, *inline_message_id=None*, *game_short_name=None*, *bot=None*, ***kwargs*)
Bases: `telegram.base.TelegramObject`

This object represents an incoming callback query from a callback button in an inline keyboard.

If the button that originated the query was attached to a message sent by the bot, the field *message* will be present. If the button was attached to a message sent via the bot (in inline mode), the field *inline_message_id* will be present.

Note:

- In Python *from* is a reserved word, use *from_user* instead.

- Exactly one of the fields *data* or *game_short_name* will be present.

---

id
Unique identifier for this query.

> **Type** str

from_user
> Sender.
>
> > **Type** *telegram.User*

message
> Optional. Message with the callback button that originated the query.
>
> > **Type** *telegram.Message*

inline_message_id
> Optional. Identifier of the message sent via the bot in inline mode, that originated the query.
>
> > **Type** str

chat_instance
> Optional. Global identifier, uniquely corresponding to the chat to which the message with the callback button was sent.
>
> > **Type** str

data
> Optional. Data associated with the callback button.
>
> > **Type** str

game_short_name
> Optional. Short name of a Game to be returned.
>
> > **Type** str

> **Parameters**
>
> - **id** (str) – Unique identifier for this query.
>
> - **from_user** (*telegram.User*) – Sender.
>
> - **message** (*telegram.Message*, optional) – Message with the callback button that originated the query. Note that message content and message date will not be available if the message is too old.
>
> - **inline_message_id** (str, optional) – Identifier of the message sent via the bot in inline mode, that originated the query.
>
> - **chat_instance** (str, optional) – Global identifier, uniquely corresponding to the chat to which the message with the callback button was sent. Useful for high scores in games.
>
> - **data** (str, optional) – Data associated with the callback button. Be aware that a bad client can send arbitrary data in this field.
>
> - **game_short_name** (str, optional) – Short name of a Game to be returned, serves as the unique identifier for the game

---

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

---

answer(**args*, ***kwargs*)
> Shortcut for:

```
bot.answer_callback_query(update.callback_query.id, *args, **kwargs)
```

> > **Returns** On success, True is returned.

> **Return type** `bool`

edit_message_caption(*caption*, **args*, ***kwargs*)
> Shortcut for either:

```
bot.edit_message_caption(caption=caption,
                         chat_id=update.callback_query.message.chat_id,
                         message_id=update.callback_query.message.message_id,
                         *args, **kwargs)
```

> or:

```
bot.edit_message_caption(caption=caption
                         inline_message_id=update.callback_query.inline_
→message_id,
                         *args, **kwargs)
```

> > **Returns** On success, if edited message is sent by the bot, the edited Message is returned, otherwise `True` is returned.
> >
> > **Return type** *telegram.Message*

edit_message_reply_markup(*reply_markup*, **args*, ***kwargs*)
> Shortcut for either:

```
bot.edit_message_replyMarkup(chat_id=update.callback_query.message.chat_id,
                             message_id=update.callback_query.message.
→message_id,
                             reply_markup=reply_markup,
                             *args, **kwargs)
```

> or:

```
bot.edit_message_reply_markup(inline_message_id=update.callback_query.
→inline_message_id,
                              reply_markup=reply_markup,
                              *args, **kwargs)
```

> > **Returns** On success, if edited message is sent by the bot, the edited Message is returned, otherwise `True` is returned.
> >
> > **Return type** *telegram.Message*

edit_message_text(*text*, **args*, ***kwargs*)
> Shortcut for either:

```
bot.edit_message_text(text, chat_id=update.callback_query.message.chat_id,
                      message_id=update.callback_query.message.message_id,
                      *args, **kwargs)
```

> or:

```
bot.edit_message_text(text, inline_message_id=update.callback_query.inline_
→message_id,
                      *args, **kwargs)
```

> > **Returns** On success, if edited message is sent by the bot, the edited Message is returned, otherwise `True` is returned.
> >
> > **Return type** *telegram.Message*

3.2.5 telegram.Chat

class telegram.**Chat**(*id*, *type*, *title=None*, *username=None*, *first_name=None*, *last_name=None*, *bot=None*, *photo=None*, *description=None*, *invite_link=None*, *pinned_message=None*, *permissions=None*, *sticker_set_name=None*, *can_set_sticker_set=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

This object represents a chat.

id
> Unique identifier for this chat.
>
> > **Type** `int`

type
> Type of chat.
>
> > **Type** `str`

title
> Optional. Title, for supergroups, channels and group chats.
>
> > **Type** `str`

username
> Optional. Username.
>
> > **Type** `str`

first_name
> Optional. First name of the other party in a private chat.
>
> > **Type** `str`

last_name
> Optional. Last name of the other party in a private chat.
>
> > **Type** `str`

photo
> Optional. Chat photo.
>
> > **Type** *telegram.ChatPhoto*

description
> Optional. Description, for groups, supergroups and channel chats.
>
> > **Type** `str`

invite_link
> Optional. Chat invite link, for supergroups and channel chats.
>
> > **Type** `str`

pinned_message
> Optional. Pinned message, for supergroups. Returned only in get_chat.
>
> > **Type** *telegram.Message*

permissions
> Optional. Default chat member permissions, for groups and supergroups. Returned only in getChat.
>
> > **Type** `telegram.ChatPermission`

sticker_set_name
> Optional. For supergroups, name of Group sticker set.
>
> > **Type** `str`

can_set_sticker_set
 Optional. `True`, if the bot can change group the sticker set.

> **Type** `bool`

Parameters

- **id** (`int`) – Unique identifier for this chat. This number may be greater than 32 bits and some programming languages may have difficulty/silent defects in interpreting it. But it is smaller than 52 bits, so a signed 64 bit integer or double-precision float type are safe for storing this identifier.

- **type** (`str`) – Type of chat, can be either 'private', 'group', 'supergroup' or 'channel'.

- **title** (`str`, optional) – Title, for supergroups, channels and group chats.

- **username** (`str`, optional) – Username, for private chats, supergroups and channels if available.

- **first_name** (`str`, optional) – First name of the other party in a private chat.

- **last_name** (`str`, optional) – Last name of the other party in a private chat.

- **photo** (`telegram.ChatPhoto`, optional) – Chat photo. Returned only in getChat.

- **description** (`str`, optional) – Description, for groups, supergroups and channel chats. Returned only in get_chat.

- **invite_link** (`str`, optional) – Chat invite link, for supergroups and channel chats. Returned only in get_chat.

- **pinned_message** (`telegram.Message`, optional) – Pinned message, for supergroups. Returned only in get_chat.

- **permissions** (`telegram.ChatPermission`) – Optional. Default chat member permissions, for groups and supergroups. Returned only in getChat.

- **bot** (`telegram.Bot`, optional) – The Bot to use for instance methods.

- **sticker_set_name** (`str`, optional) – For supergroups, name of Group sticker set. Returned only in get_chat.

- **can_set_sticker_set** (`bool`, optional) – `True`, if the bot can change group the sticker set. Returned only in get_chat.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

CHANNEL = 'channel'
 'channel'

> **Type** `str`

GROUP = 'group'
 'group'

> **Type** `str`

PRIVATE = 'private'
 'private'

> **Type** `str`

SUPERGROUP = 'supergroup'
 'supergroup'

> **Type** `str`

get_administrators(**args*, ***kwargs*)
 Shortcut for:

```
bot.get_chat_administrators(update.message.chat.id, *args, **kwargs)
```

> **Returns** A list of administrators in a chat. An Array of *telegram.ChatMember* objects that contains information about all chat administrators except other bots. If the chat is a group or a supergroup and no administrators were appointed, only the creator will be returned
>
> **Return type** List[*telegram.ChatMember*]

get_member(**args*, ***kwargs*)
> Shortcut for:

```
bot.get_chat_member(update.message.chat.id, *args, **kwargs)
```

> > **Returns** *telegram.ChatMember*

get_members_count(**args*, ***kwargs*)
> Shortcut for:

```
bot.get_chat_members_count(update.message.chat.id, *args, **kwargs)
```

> > **Returns** int

kick_member(**args*, ***kwargs*)
> Shortcut for:

```
bot.kick_chat_member(update.message.chat.id, *args, **kwargs)
```

> > **Returns** If the action was sent succesfully.
> >
> > **Return type** bool

> **Note:** This method will only work if the *All Members Are Admins* setting is off in the target group. Otherwise members may only be removed by the group's creator or by the member that added them.

leave(**args*, ***kwargs*)
> Shortcut for:

```
bot.leave_chat(update.message.chat.id, *args, **kwargs)
```

> > **Returns** bool If the action was sent successfully.

link
> Convenience property. If the chat has a *username*, returns a t.me link of the chat.
>
> > **Type** str

send_action(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_chat_action(update.message.chat.id, *args, **kwargs)
```

> > **Returns** If the action was sent successfully.
> >
> > **Return type** bool

send_animation(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_animation(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_audio(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_audio(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_document(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_document(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_message(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_message(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_photo(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_photo(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_poll(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_poll(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_sticker(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_sticker(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_video(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_video(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_video_note(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_video_note(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

send_voice(**args*, ***kwargs*)
    Shortcut for:

```
bot.send_voice(Chat.id, *args, **kwargs)
```

Where Chat is the current instance.

> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

set_permissions(**args*, ***kwargs*)
    Shortcut for:

```
bot.set_chat_permissions(update.message.chat.id, *args, **kwargs)
```

Returns: `bool`: If the action was sent successfully.

unban_member(**args*, ***kwargs*)
    Shortcut for:

```
bot.unban_chat_member(update.message.chat.id, *args, **kwargs)
```

> **Returns** If the action was sent successfully.
>
> **Return type** `bool`

3.2.6 telegram.ChatAction

class telegram.**ChatAction**
    Bases: `object`

    Helper class to provide constants for different chatactions.

    FIND_LOCATION = 'find_location'
        'find_location'

> **Type** str

RECORD_AUDIO = 'record_audio'
> 'record_audio'
>
> > **Type** str

RECORD_VIDEO = 'record_video'
> 'record_video'
>
> > **Type** str

RECORD_VIDEO_NOTE = 'record_video_note'
> 'record_video_note'
>
> > **Type** str

TYPING = 'typing'
> 'typing'
>
> > **Type** str

UPLOAD_AUDIO = 'upload_audio'
> 'upload_audio'
>
> > **Type** str

UPLOAD_DOCUMENT = 'upload_document'
> 'upload_document'
>
> > **Type** str

UPLOAD_PHOTO = 'upload_photo'
> 'upload_photo'
>
> > **Type** str

UPLOAD_VIDEO = 'upload_video'
> 'upload_video'
>
> > **Type** str

UPLOAD_VIDEO_NOTE = 'upload_video_note'
> 'upload_video_note'
>
> > **Type** str

3.2.7 telegram.ChatMember

class telegram.**ChatMember**(*user*, *status*, *until_date=None*, *can_be_edited=None*, *can_change_info=None*, *can_post_messages=None*, *can_edit_messages=None*, *can_delete_messages=None*, *can_invite_users=None*, *can_restrict_members=None*, *can_pin_messages=None*, *can_promote_members=None*, *can_send_messages=None*, *can_send_media_messages=None*, *can_send_polls=None*, *can_send_other_messages=None*, *can_add_web_page_previews=None*, *is_member=None*, ***kwargs*)
> Bases: telegram.base.TelegramObject

This object contains information about one member of the chat.

user
> Information about the user.
>
> > **Type** *telegram.User*

status
>   The member's status in the chat.

>> **Type** str

until_date
>   Optional. Date when restrictions will be lifted for this user.

>> **Type** datetime.datetime

can_be_edited
>   Optional. If the bot is allowed to edit administrator privileges of that user.

>> **Type** bool

can_change_info
>   Optional. If the user can change the chat title, photo and other settings.

>> **Type** bool

can_post_messages
>   Optional. If the administrator can post in the channel.

>> **Type** bool

can_edit_messages
>   Optional. If the administrator can edit messages of other users.

>> **Type** bool

can_delete_messages
>   Optional. If the administrator can delete messages of other users.

>> **Type** bool

can_invite_users
>   Optional. If the user can invite new users to the chat.

>> **Type** bool

can_restrict_members
>   Optional. If the administrator can restrict, ban or unban chat members.

>> **Type** bool

can_pin_messages
>   Optional. If the user can pin messages.

>> **Type** bool

can_promote_members
>   Optional. If the administrator can add new administrators.

>> **Type** bool

is_member
>   Optional. Restricted only. True, if the user is a member of the chat at the moment of the request.

>> **Type** bool

can_send_messages
>   Optional. If the user can send text messages, contacts, locations and venues.

>> **Type** bool

can_send_media_messages
>   Optional. If the user can send media messages, implies can_send_messages.

>> **Type** bool

can_send_polls
>   Optional. True, if the user is allowed to send polls.

Type `bool`

can_send_other_messages
> Optional. If the user can send animations, games, stickers and use inline bots, implies can_send_media_messages.

> > **Type** `bool`

can_add_web_page_previews
> Optional. If user may add web page previews to his messages, implies can_send_media_messages

> > **Type** `bool`

> **Parameters**
> > - **user** (`telegram.User`) – Information about the user.
> > - **status** (`str`) – The member's status in the chat. Can be 'creator', 'administrator', 'member', 'restricted', 'left' or 'kicked'.
> > - **until_date** (`datetime.datetime`, optional) – Restricted and kicked only. Date when restrictions will be lifted for this user.
> > - **can_be_edited** (`bool`, optional) – Administrators only. True, if the bot is allowed to edit administrator privileges of that user.
> > - **can_change_info** (`bool`, optional) – Administrators and restricted only. True, if the user can change the chat title, photo and other settings.
> > - **can_post_messages** (`bool`, optional) – Administrators only. True, if the administrator can post in the channel, channels only.
> > - **can_edit_messages** (`bool`, optional) – Administrators only. True, if the administrator can edit messages of other users, channels only.
> > - **can_delete_messages** (`bool`, optional) – Administrators only. True, if the administrator can delete messages of other user.
> > - **can_invite_users** (`bool`, optional) – Administrators and restricted only. True, if the user can invite new users to the chat.
> > - **can_restrict_members** (`bool`, optional) – Administrators only. True, if the administrator can restrict, ban or unban chat members.
> > - **can_pin_messages** (`bool`, optional) – Administrators and restricted only. True, if the user can pin messages, supergroups only.
> > - **can_promote_members** (`bool`, optional) – Administrators only. True, if the administrator can add new administrators with a subset of his own privileges or demote administrators that he has promoted, directly or indirectly (promoted by administrators that were appointed by the user).
> > - **is_member** (`bool`, optional) – Restricted only. True, if the user is a member of the chat at the moment of the request.
> > - **can_send_messages** (`bool`, optional) – Restricted only. True, if the user can send text messages, contacts, locations and venues.
> > - **can_send_media_messages** (`bool`, optional) – Restricted only. True, if the user can send audios, documents, photos, videos, video notes and voice notes, implies can_send_messages.
> > - **can_send_polls** (`bool`, optional) – Restricted only. True, if the user is allowed to send polls.
> > - **can_send_other_messages** (`bool`, optional) – Restricted only. True, if the user can send animations, games, stickers and use inline bots, implies can_send_media_messages.

- **can_add_web_page_previews** (`bool`, optional) – Restricted only. True, if user may add web page previews to his messages, implies can_send_media_messages.

ADMINISTRATOR = 'administrator'
   'administrator'

> **Type** `str`

CREATOR = 'creator'
   'creator'

> **Type** `str`

KICKED = 'kicked'
   'kicked'

> **Type** `str`

LEFT = 'left'
   'left'

> **Type** `str`

MEMBER = 'member'
   'member'

> **Type** `str`

RESTRICTED = 'restricted'
   'restricted'

> **Type** `str`

3.2.8 telegram.ChatPermissions

class telegram.**ChatPermissions**(*can_send_messages=None*, *can_send_media_messages=None*, *can_send_polls=None*, *can_send_other_messages=None*, *can_add_web_page_previews=None*, *can_change_info=None*, *can_invite_users=None*, *can_pin_messages=None*, ***kwargs*)
   Bases: `telegram.base.TelegramObject`

   Describes actions that a non-administrator user is allowed to take in a chat.

   can_send_messages
      Optional. True, if the user is allowed to send text messages, contacts, locations and venues.

> **Type** `bool`

   can_send_media_messages
      Optional. True, if the user is allowed to send audios, documents, photos, videos, video notes and voice notes, implies *can_send_messages*.

> **Type** `bool`

   can_send_polls
      Optional. True, if the user is allowed to send polls, implies *can_send_messages*.

> **Type** `bool`

   can_send_other_messages
      Optional. True, if the user is allowed to send animations, games, stickers and use inline bots, implies *can_send_media_messages*.

> **Type** `bool`

can_add_web_page_previews
> Optional. True, if the user is allowed to add web page previews to their messages, implies *can_send_media_messages*.
>
> > **Type** `bool`

can_change_info
> Optional. True, if the user is allowed to change the chat title, photo and other settings. Ignored in public supergroups.
>
> > **Type** `bool`

can_invite_users
> Optional. True, if the user is allowed to invite new users to the chat.
>
> > **Type** `bool`

can_pin_messages
> Optional. True, if the user is allowed to pin messages. Ignored in public supergroups.
>
> > **Type** `bool`

> **Parameters**
> - **can_send_messages** (`bool`, optional) – True, if the user is allowed to send text messages, contacts, locations and venues.
> - **can_send_media_messages** (`bool`, optional) – True, if the user is allowed to send audios, documents, photos, videos, video notes and voice notes, implies *can_send_messages*.
> - **can_send_polls** (`bool`, optional) – True, if the user is allowed to send polls, implies *can_send_messages*.
> - **can_send_other_messages** (`bool`, optional) – True, if the user is allowed to send animations, games, stickers and use inline bots, implies *can_send_media_messages*.
> - **can_add_web_page_previews** (`bool`, optional) – True, if the user is allowed to add web page previews to their messages, implies *can_send_media_messages*.
> - **can_change_info** (`bool`, optional) – True, if the user is allowed to change the chat title, photo and other settings. Ignored in public supergroups.
> - **can_invite_users** (`bool`, optional) – True, if the user is allowed to invite new users to the chat.
> - **can_pin_messages** (`bool`, optional) – True, if the user is allowed to pin messages. Ignored in public supergroups.

3.2.9 telegram.ChatPhoto

class `telegram.`**ChatPhoto**(*small_file_id*, *big_file_id*, *bot=None*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`

> This object represents a chat photo.

> **small_file_id**
> > File identifier of small (160x160) chat photo.
> >
> > > **Type** `str`

> **big_file_id**
> > File identifier of big (640x640) chat photo.
> >
> > > **Type** `str`

> Parameters
>
> - **small_file_id** (`str`) – File identifier of small (160x160) chat photo. This file_id can be used only for photo download and only for as long as the photo is not changed.
>
> - **big_file_id** (`str`) – File identifier of big (640x640) chat photo. This file_id can be used only for photo download and only for as long as the photo is not changed.
>
> - **bot** (`telegram.Bot`, optional) – The Bot to use for instance methods
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

get_big_file(*timeout=None*, ***kwargs*)
> Convenience wrapper over `telegram.Bot.get_file` for getting the big (640x640) chat photo
>
> > Parameters
> >
> > - **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> >
> > - ****kwargs** (`dict`) – Arbitrary keyword arguments.
> >
> > Returns `telegram.File`
> >
> > Raises telegram.TelegramError

get_small_file(*timeout=None*, ***kwargs*)
> Convenience wrapper over `telegram.Bot.get_file` for getting the small (160x160) chat photo
>
> > Parameters
> >
> > - **timeout** (`int | float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> >
> > - ****kwargs** (`dict`) – Arbitrary keyword arguments.
> >
> > Returns `telegram.File`
> >
> > Raises telegram.TelegramError

3.2.10 telegram.constants Module

Constants in the Telegram network.

The following constants were extracted from the Telegram Bots FAQ.

telegram.constants.**MAX_MESSAGE_LENGTH**
> 4096
>
> > Type int

telegram.constants.**MAX_CAPTION_LENGTH**
> 1024
>
> > Type int

telegram.constants.**SUPPORTED_WEBHOOK_PORTS**
> [443, 80, 88, 8443]
>
> > Type List[int]

telegram.constants.**MAX_FILESIZE_DOWNLOAD**
> In bytes (20MB)
>
> > Type int

telegram.constants.**MAX_FILESIZE_UPLOAD**
> In bytes (50MB)

> **Type** int

telegram.constants.**MAX_MESSAGES_PER_SECOND_PER_CHAT**
> *1*. Telegram may allow short bursts that go over this limit, but eventually you'll begin receiving 429 errors.

> > **Type** int

telegram.constants.**MAX_MESSAGES_PER_SECOND**
> 30

> > **Type** int

telegram.constants.**MAX_MESSAGES_PER_MINUTE_PER_GROUP**
> 20

> > **Type** int

telegram.constants.**MAX_INLINE_QUERY_RESULTS**
> 50

> > **Type** int

The following constant have been found by experimentation:

telegram.constants.**MAX_MESSAGE_ENTITIES**
> 100 (Beyond this cap telegram will simply ignore further formatting styles)

> > **Type** int

3.2.11 telegram.Contact

class telegram.**Contact**(*phone_number*, *first_name*, *last_name=None*, *user_id=None*, *vcard=None*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`

> This object represents a phone contact.

> **phone_number**
> > Contact's phone number.

> > > **Type** str

> **first_name**
> > Contact's first name.

> > > **Type** str

> **last_name**
> > Optional. Contact's last name.

> > > **Type** str

> **user_id**
> > Optional. Contact's user identifier in Telegram.

> > > **Type** int

> **vcard**
> > Optional. Additional data about the contact in the form of a vCard.

> > > **Type** str

> **Parameters**
> > - **phone_number** (str) – Contact's phone number.
> > - **first_name** (str) – Contact's first name.
> > - **last_name** (str, optional) – Contact's last name.

- **user_id** (int, optional) – Contact's user identifier in Telegram.

- **vcard** (str, optional) – Additional data about the contact in the form of a vCard.

- ****kwargs** (dict) – Arbitrary keyword arguments.

3.2.12 telegram.Document

class telegram.**Document**(*file_id*, *thumb=None*, *file_name=None*, *mime_type=None*, *file_size=None*, *bot=None*, ***kwargs*)
    Bases: telegram.base.TelegramObject

This object represents a general file (as opposed to photos, voice messages and audio files).

file_id
    Unique file identifier.

        Type str

thumb
    Optional. Document thumbnail.

        Type *telegram.PhotoSize*

file_name
    Original filename.

        Type str

mime_type
    Optional. MIME type of the file.

        Type str

file_size
    Optional. File size.

        Type int

bot
    Optional. The Bot to use for instance methods.

        Type *telegram.Bot*

    Parameters

- **file_id** (str) – Unique file identifier

- **thumb** (*telegram.PhotoSize*, optional) – Document thumbnail as defined by sender.

- **file_name** (str, optional) – Original filename as defined by sender.

- **mime_type** (str, optional) – MIME type of the file as defined by sender.

- **file_size** (int, optional) – File size.

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

- ****kwargs** (dict) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
    Convenience wrapper over *telegram.Bot.get_file*

    Parameters

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

> **Returns** *telegram.File*

> **Raises** telegram.TelegramError

3.2.13 telegram.error module

This module contains an object that represents Telegram errors.

exception telegram.error.**BadRequest**(*message*)
> Bases: *telegram.error.NetworkError*

exception telegram.error.**ChatMigrated**(*new_chat_id*)
> Bases: *telegram.error.TelegramError*

> > **Parameters new_chat_id** (int) –

exception telegram.error.**Conflict**(*msg*)
> Bases: *telegram.error.TelegramError*

> Raised when a long poll or webhook conflicts with another one.

> > **Parameters msg** (str) – The message from telegrams server.

exception telegram.error.**InvalidToken**
> Bases: *telegram.error.TelegramError*

exception telegram.error.**NetworkError**(*message*)
> Bases: *telegram.error.TelegramError*

exception telegram.error.**RetryAfter**(*retry_after*)
> Bases: *telegram.error.TelegramError*

> > **Parameters retry_after** (int) –

exception telegram.error.**TelegramError**(*message*)
> Bases: Exception

exception telegram.error.**TimedOut**
> Bases: *telegram.error.NetworkError*

exception telegram.error.**Unauthorized**(*message*)
> Bases: *telegram.error.TelegramError*

3.2.14 telegram.File

class telegram.**File**(*file_id*, *bot=None*, *file_size=None*, *file_path=None*, ***kwargs*)
> Bases: telegram.base.TelegramObject

> This object represents a file ready to be downloaded. The file can be downloaded with *download*. 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.

Note: Maximum file size to download is 20 MB

---

file_id
> Unique identifier for this file.

> > **Type** str

file_size
> Optional. File size.

> > **Type** str

file_path
> Optional. File path. Use [*download*](#) to get the file.
>
> > **Type** str

> **Parameters**
>
> - **file_id** (str) – Unique identifier for this file.
> - **file_size** (int, optional) – Optional. File size, if known.
> - **file_path** (str, optional) – File path. Use [*download*](#) to get the file.
> - **bot** ([*telegram.Bot*](#), optional) – Bot to use with shortcut method.
> - ****kwargs** (dict) – Arbitrary keyword arguments.

Note: If you obtain an instance of this class from [*telegram.PassportFile.get_file*](#), then it will automatically be decrypted as it downloads when you call [*download()*](#).

---

download(*custom_path=None*, *out=None*, *timeout=None*)
> Download this file. By default, the file is saved in the current working directory with its original filename as reported by Telegram. If a custom_path is supplied, it will be saved to that path instead. If out is defined, the file contents will be saved to that object using the out.write method.

Note: custom_path and out are mutually exclusive.

> **Parameters**
>
> - **custom_path** (str, optional) – Custom path.
> - **out** (io.BufferedWriter, optional) – A file-like object. Must be opened for writing in binary mode, if applicable.
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> **Returns** The same object as out if specified. Otherwise, returns the filename downloaded to.
>
> **Return type** str | io.BufferedWriter
>
> **Raises** ValueError – If both custom_path and out are passed.

download_as_bytearray(*buf=None*)
> Download this file and return it as a bytearray.
>
> **Parameters buf** (bytearray, optional) – Extend the given bytearray with the downloaded data.
>
> **Returns** The same object as buf if it was specified. Otherwise a newly allocated bytearray.
>
> **Return type** bytearray

3.2.15 telegram.ForceReply

class telegram.**ForceReply**(*force_reply=True*, *selective=False*, ***kwargs*)
> Bases: telegram.replymarkup.ReplyMarkup

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'). This can be extremely useful if you want to create user-friendly step-by-step interfaces without having to sacrifice privacy mode.

force_reply
>   Shows reply interface to the user.
>
>   > **Type** `True`

selective
>   Optional. Force reply from specific users only.
>
>   > **Type** `bool`

> **Parameters**
>
> > - **selective** (`bool`, optional) – Use this parameter if you want to force reply from specific users only. Targets:
> >
> >   1) users that are @mentioned in the text of the Message object
> >
> >   2) if the bot's message is a reply (has reply_to_message_id), sender of the original message.
> >
> > - ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.16 telegram.InlineKeyboardButton

class `telegram.`**`InlineKeyboardButton`**(*text*, *url=None*, *callback_data=None*, *switch_inline_query=None*, *switch_inline_query_current_chat=None*, *callback_game=None*, *pay=None*, *login_url=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

This object represents one button of an inline keyboard.

Note: You must use exactly one of the optional fields. Mind that *callback_game* is not working as expected. Putting a game short name in it might, but is not guaranteed to work.

---

text
>   Label text on the button.
>
>   > **Type** `str`

url
>   Optional. HTTP url to be opened when button is pressed.
>
>   > **Type** `str`

login_url
>   authorize the user.
>
>   > **Type** *telegram.LoginUrl*

callback_data
>   Optional. Data to be sent in a callback query to the bot when button is pressed, UTF-8 1-64 bytes.
>
>   > **Type** `str`

switch_inline_query
>   Optional. 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.
>
>   > **Type** `str`

switch_inline_query_current_chat
> Optional. Will insert the bot's username and the specified inline query in the current chat's input field.
>
> > **Type** `str`

callback_game
> Optional. Description of the game that will be launched when the user presses the button.
>
> > **Type** *telegram.CallbackGame*

pay
> Optional. Specify True, to send a Pay button.
>
> > **Type** `bool`

> **Parameters**
>
> - **text** (`str`) – Label text on the button.
> - **url** (`str`) – HTTP url to be opened when button is pressed.
> - **login_url** (*telegram.LoginUrl*, optional) – authorize the user.
> - **callback_data** (`str`, optional) – Data to be sent in a callback query to the bot when button is pressed, 1-64 UTF-8 bytes.
> - **switch_inline_query** (`str`, 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. This offers an easy way for users to start using your bot in inline mode when they are currently in a private chat with it. Especially useful when combined with switch_pm* actions - in this case the user will be automatically returned to the chat they switched from, skipping the chat selection screen.
> - **switch_inline_query_current_chat** (`str`, 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. This offers a quick way for the user to open your bot in inline mode in the same chat - good for selecting something from multiple options.
> - **callback_game** (*telegram.CallbackGame*, optional) – Description of the game that will be launched when the user presses the button. This type of button must always be the `first` button in the first row.
> - **pay** (`bool`, optional) – Specify True, to send a Pay button. This type of button must always be the `first` button in the first row.
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.17 telegram.InlineKeyboardMarkup

class telegram.**InlineKeyboardMarkup**(*inline_keyboard*, ***kwargs*)
> Bases: `telegram.replymarkup.ReplyMarkup`

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

inline_keyboard
> Array of button rows, each represented by an Array of InlineKeyboardButton objects.
>
> > **Type** List[List[*telegram.InlineKeyboardButton*]]

> **Parameters**
>
> - **inline_keyboard** (List[List[*telegram.InlineKeyboardButton*]]) – Array of button rows, each represented by an Array of InlineKeyboardButton objects.
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

classmethod from_button(*button*, ***kwargs*)
    Shortcut for:

```
InlineKeyboardMarkup([[button]], **kwargs)
```

Return an InlineKeyboardMarkup from a single InlineKeyboardButton

> **Parameters**
>
> • **button** (`telegram.InlineKeyboardButton`) – The button to use in the markup
>
> • ****kwargs** (`dict`) – Arbitrary keyword arguments.

classmethod from_column(*button_column*, ***kwargs*)
    Shortcut for:

```
InlineKeyboardMarkup([[button] for button in button_column], **kwargs)
```

Return an InlineKeyboardMarkup from a single column of InlineKeyboardButtons

> **Parameters**
>
> • **button_column** (List[`telegram.InlineKeyboardButton`]) – The button to use in the markup
>
> • ****kwargs** (`dict`) – Arbitrary keyword arguments.

classmethod from_row(*button_row*, ***kwargs*)
    Shortcut for:

```
InlineKeyboardMarkup([button_row], **kwargs)
```

Return an InlineKeyboardMarkup from a single row of InlineKeyboardButtons

> **Parameters**
>
> • **button_row** (List[`telegram.InlineKeyboardButton`]) – The button to use in the markup
>
> • ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.18 telegram.InputFile

class telegram.**InputFile**(*obj*, *filename=None*, *attach=None*)
    Bases: `object`

This object represents a Telegram InputFile.

input_file_content
    The binaray content of the file to send.

> **Type** bytes

filename
    Optional, Filename for the file to be sent.

> **Type** str

attach
    Optional, attach id for sending multiple files.

> **Type** str

Parameters

• **obj** (`File handler`) – An open file descriptor.

- **filename** (str, optional) – Filename for this InputFile.

- **attach** (bool, optional) – Whether this should be send as one file or is part of a collection of files.

Raises TelegramError

static is_image(*stream*)
Check if the content file is an image by analyzing its headers.

Parameters **stream** (str) – A str representing the content of a file.

Returns The str mime-type of an image.

Return type str

3.2.19 telegram.InputMedia

class telegram.**InputMedia**
Bases: telegram.base.TelegramObject

Base class for Telegram InputMedia Objects.

See *telegram.InputMediaAnimation*, *telegram.InputMediaAudio*, *telegram.InputMediaDocument*, *telegram.InputMediaPhoto* and *telegram.InputMediaVideo* for detailed use.

3.2.20 telegram.InputMediaAnimation

class telegram.**InputMediaAnimation**(*media*, *thumb=None*, *caption=None*, *parse_mode=None*, *width=None*, *height=None*, *duration=None*)
Bases: telegram.files.inputmedia.InputMedia

Represents an animation file (GIF or H.264/MPEG-4 AVC video without sound) to be sent.

type
animation.

Type str

media
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 new animation using multipart/form-data. Lastly you can pass an existing *telegram. Animation* object to send.

Type str | *filelike object* | *telegram.Animation*

thumb
Optional. Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

Type *filelike object*

caption
Optional. Caption of the animation to be sent, 0-1024 characters.

Type str

parse_mode
Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

> **Type** str

width
> Optional. Animation width.

>> **Type** int

height
> Optional. Animation height.

>> **Type** int

duration
> Optional. Animation duration.

>> **Type** int

Parameters

- **media** (str) – File to send. Pass a file_id to send a file that exists on the Telegram servers (recommended), pass an HTTP URL for Telegram to get a file from the Internet. Lastly you can pass an existing *telegram.Animation* object to send.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

- **caption** (str, optional) – Caption of the animation to be sent, 0-1024 characters.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **width** (int, optional) – Animation width.

- **height** (int, optional) – Animation height.

- **duration** (int, optional) – Animation duration.

Note: When using a *telegram.Animation* for the *media* attribute. It will take the width, height and duration from that video, unless otherwise specified with the optional arguments.

3.2.21 telegram.InputMediaAudio

class telegram.**InputMediaAudio**(*media*, *thumb=None*, *caption=None*, *parse_mode=None*, *duration=None*, *performer=None*, *title=None*)
> Bases: telegram.files.inputmedia.InputMedia

Represents an audio file to be treated as music to be sent.

type
> audio.

>> **Type** str

media
> Audio file to send. Pass a file_id as String to send an audio file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an audio file from the Internet, or upload a new one using multipart/form-data. Lastly you can pass an existing *telegram.Audio* object to send.

>> **Type** str | *filelike object* | *telegram.Audio*

caption
> Optional. Caption of the audio to be sent, 0-1024 characters.

Type str

parse_mode
Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

Type str

duration
Duration of the audio in seconds.

Type int

performer
Optional. Performer of the audio as defined by sender or by audio tags.

Type str

title
Optional. Title of the audio as defined by sender or by audio tags.

Type str

thumb
Optional. Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

Type *filelike object*

Parameters

- **media** (str) – File to send. Pass a file_id to send a file that exists on the Telegram servers (recommended), pass an HTTP URL for Telegram to get a file from the Internet. Lastly you can pass an existing `telegram.Document` object to send.

- **caption** (str, optional) – Caption of the audio to be sent, 0-1024 characters.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

- **duration** (int) – Duration of the audio in seconds as defined by sender.

- **performer** (str, optional) – Performer of the audio as defined by sender or by audio tags.

- **title** (str, optional) – Title of the audio as defined by sender or by audio tags.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

Note: When using a `telegram.Audio` for the `media` attribute. It will take the duration, performer and title from that video, unless otherwise specified with the optional arguments.

3.2.22 telegram.InputMediaDocument

class telegram.**InputMediaDocument**(*media*, *thumb=None*, *caption=None*, *parse_mode=None*)
Bases: telegram.files.inputmedia.InputMedia

Represents a general file to be sent.

---

type
> document.

>> **Type** `str`

media
> 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 new one using multipart/form-data. Lastly you can pass an existing `telegram.Document` object to send.

>> **Type** `str` | *filelike object* | `telegram.Document`

caption
> Optional. Caption of the document to be sent, 0-1024 characters.

>> **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

>> **Type** `str`

thumb
> Optional. Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

>> **Type** *filelike object*

> **Parameters**

>> • **media** (`str`) – File to send. Pass a file_id to send a file that exists on the Telegram servers (recommended), pass an HTTP URL for Telegram to get a file from the Internet. Lastly you can pass an existing `telegram.Document` object to send.

>> • **caption** (`str`, optional) – Caption of the document to be sent, 0-1024 characters.

>> • **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

>> • **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

3.2.23 telegram.InputMediaPhoto

class telegram.**InputMediaPhoto**(*media*, *caption=None*, *parse_mode=None*)
> Bases: `telegram.files.inputmedia.InputMedia`

> Represents a photo to be sent.

type
> photo.

>> **Type** `str`

media
> 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 new photo using multipart/form-data. Lastly you can pass an existing `telegram.PhotoSize` object to send.

>> **Type** `str` | *filelike object* | `telegram.PhotoSize`

caption
Optional. Caption of the photo to be sent, 0-1024 characters.

> **Type** `str`

parse_mode
Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

> **Type** `str`

> **Parameters**
>
> - **media** (`str`) – File to send. Pass a file_id to send a file that exists on the Telegram servers (recommended), pass an HTTP URL for Telegram to get a file from the Internet. Lastly you can pass an existing `telegram.PhotoSize` object to send.
>
> - **caption** (`str`, optional) – Caption of the photo to be sent, 0-1024 characters.
>
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

3.2.24 telegram.InputMediaVideo

class telegram.**InputMediaVideo**(*media*, *caption=None*, *width=None*, *height=None*, *duration=None*, *supports_streaming=None*, *parse_mode=None*, *thumb=None*)
Bases: `telegram.files.inputmedia.InputMedia`

Represents a video to be sent.

type
video.

> **Type** `str`

media
Video file to send. Pass a file_id as String to send an video file that exists on the Telegram servers (recommended), pass an HTTP URL as a String for Telegram to get an video file from the Internet, or upload a new one using multipart/form-data. Lastly you can pass an existing `telegram.Video` object to send.

> **Type** `str` | *filelike object* | `telegram.Video`

caption
Optional. Caption of the video to be sent, 0-1024 characters.

> **Type** `str`

parse_mode
Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

> **Type** `str`

width
Optional. Video width.

> **Type** `int`

height
Optional. Video height.

> **Type** `int`

duration
Optional. Video duration.

> **Type** `int`

supports_streaming
Optional. Pass True, if the uploaded video is suitable for streaming.

> **Type** `bool`

thumb
Optional. Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

> **Type** *filelike object*

Parameters

- **media** (`str`) – File to send. Pass a file_id to send a file that exists on the Telegram servers (recommended), pass an HTTP URL for Telegram to get a file from the Internet. Lastly you can pass an existing `telegram.Video` object to send.

- **caption** (`str`, optional) – Caption of the video to be sent, 0-1024 characters.

- **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

- **width** (`int`, optional) – Video width.

- **height** (`int`, optional) – Video height.

- **duration** (`int`, optional) – Video duration.

- **supports_streaming** (`bool`, optional) – Pass True, if the uploaded video is suitable for streaming.

- **thumb** (*filelike object*, optional) – Thumbnail of the file sent. The thumbnail should be in JPEG format and less than 200 kB in size. A thumbnail's width and height should not exceed 90. Ignored if the file is not is passed as a string or file_id.

Note: When using a `telegram.Video` for the `media` attribute. It will take the width, height and duration from that video, unless otherwise specified with the optional arguments.

3.2.25 telegram.KeyboardButton

class telegram.**KeyboardButton**(*text*, *request_contact=None*, *request_location=None*, ***kwargs*)
Bases: `telegram.base.TelegramObject`

This object represents one button of the reply keyboard. For simple text buttons String can be used instead of this object to specify text of the button.

Note: Optional fields are mutually exclusive.

---

text
Text of the button.

> **Type** `str`

---

request_contact
> Optional. If the user's phone number will be sent.
>
> > **Type** `bool`

request_location
> Optional. If the user's current location will be sent.
>
> > **Type** `bool`

> **Parameters**
>
> - **text** (`str`) – Text of the button. If none of the optional fields are used, it will be sent to the bot as a message when the button is pressed.
>
> - **request_contact** (`bool`, 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** (`bool`, optional) – If True, the user's current location will be sent when the button is pressed. Available in private chats only.

> **Note:** *request_contact* and *request_location* options will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

3.2.26 telegram.Location

class telegram.**Location**(*longitude*, *latitude*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`

This object represents a point on the map.

longitude
> Longitude as defined by sender.
>
> > **Type** `float`

latitude
> Latitude as defined by sender.
>
> > **Type** `float`

> **Parameters**
>
> - **longitude** (`float`) – Longitude as defined by sender.
>
> - **latitude** (`float`) – Latitude as defined by sender.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.27 telegram.LoginUrl

class telegram.**LoginUrl**(*url*, *forward_text=None*, *bot_username=None*, *request_write_access=None*)
> Bases: `telegram.base.TelegramObject`

This object represents a parameter of the inline keyboard button used to automatically authorize a user. Serves as a great replacement for the Telegram Login Widget when the user is coming from Telegram. All the user needs to do is tap/click a button and confirm that they want to log in. Telegram apps support these buttons as of version 5.7.

Sample bot: @discussbot

---

url
>   An HTTP URL to be opened with user authorization data.

>>   **Type** `str`

forward_text
>   Optional. New text of the button in forwarded messages.

>>   **Type** `str`

bot_username
>   Optional. Username of a bot, which will be used for user authorization.

>>   **Type** `str`

request_write_access
>   Optional. Pass True to request the permission for your bot to send messages to the user.

>>   **Type** `bool`

>   **Parameters**

>   - **url** (`str`) – An HTTP URL to be opened with user authorization data added to the query string when the button is pressed. If the user refuses to provide authorization data, the original URL without information about the user will be opened. The data added is the same as described in Receiving authorization data. NOTE: You must always check the hash of the received data to verify the authentication and the integrity of the data as described in Checking authorization.

>   - **forward_text** (`str`, optional) – New text of the button in forwarded messages.

>   - **bot_username** (`str`, optional) – Username of a bot, which will be used for user authorization. See Setting up a bot for more details. If not specified, the current bot's username will be assumed. The url's domain must be the same as the domain linked with the bot. See Linking your domain to the bot for more details.

>   - **request_write_access** (`bool`, optional) – Pass True to request the permission for your bot to send messages to the user.

3.2.28 telegram.Message

`class` `telegram.`**`Message`**(*message_id*, *from_user*, *date*, *chat*, *forward_from=None*, *forward_from_chat=None*, *forward_from_message_id=None*, *forward_date=None*, *reply_to_message=None*, *edit_date=None*, *text=None*, *entities=None*, *caption_entities=None*, *audio=None*, *document=None*, *game=None*, *photo=None*, *sticker=None*, *video=None*, *voice=None*, *video_note=None*, *new_chat_members=None*, *caption=None*, *contact=None*, *location=None*, *venue=None*, *left_chat_member=None*, *new_chat_title=None*, *new_chat_photo=None*, *delete_chat_photo=False*, *group_chat_created=False*, *supergroup_chat_created=False*, *channel_chat_created=False*, *migrate_to_chat_id=None*, *migrate_from_chat_id=None*, *pinned_message=None*, *invoice=None*, *successful_payment=None*, *forward_signature=None*, *author_signature=None*, *media_group_id=None*, *connected_website=None*, *animation=None*, *passport_data=None*, *poll=None*, *forward_sender_name=None*, *reply_markup=None*, *bot=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

This object represents a message.

Note:

- In Python *from* is a reserved word, use *from_user* instead.

---

message_id
> Unique message identifier inside this chat.
>
> > **Type** int

from_user
> Optional. Sender.
>
> > **Type** *telegram.User*

date
> Date the message was sent.
>
> > **Type** datetime.datetime

chat
> Conversation the message belongs to.
>
> > **Type** *telegram.Chat*

forward_from
> Optional. Sender of the original message.
>
> > **Type** *telegram.User*

forward_from_chat
> Optional. Information about the original channel.
>
> > **Type** *telegram.Chat*

forward_from_message_id
> Optional. Identifier of the original message in the channel.
>
> > **Type** int

forward_date
> Optional. Date the original message was sent.
>
> > **Type** datetime.datetime

reply_to_message
> Optional. The original message.
>
> > **Type** *telegram.Message*

edit_date
> Optional. Date the message was last edited.
>
> > **Type** datetime.datetime

media_group_id
> Optional. The unique identifier of a media message group this message belongs to.
>
> > **Type** str

text
> Optional. The actual UTF-8 text of the message.
>
> > **Type** str

entities
> Optional. Special entities like usernames, URLs, bot commands, etc. that appear in the text. See *Message.parse_entity* and *parse_entities* methods for how to use properly.
>
> > **Type** List[*telegram.MessageEntity*]

---

caption_entities
Optional. Special entities like usernames, URLs, bot commands, etc. that appear in the caption. See *Message.parse_caption_entity* and *parse_caption_entities* methods for how to use properly.

> **Type** List[*telegram.MessageEntity*]

audio
Optional. Information about the file.

> **Type** *telegram.Audio*

document
Optional. Information about the file.

> **Type** *telegram.Document*

animation
For backward compatibility, when this field is set, the document field will also be set.

> **Type** *telegram.Animation*

game
Optional. Information about the game.

> **Type** *telegram.Game*

photo
Optional. Available sizes of the photo.

> **Type** List[*telegram.PhotoSize*]

sticker
Optional. Information about the sticker.

> **Type** *telegram.Sticker*

video
Optional. Information about the video.

> **Type** *telegram.Video*

voice
Optional. Information about the file.

> **Type** *telegram.Voice*

video_note
Optional. Information about the video message.

> **Type** *telegram.VideoNote*

new_chat_members
Optional. Information about new members to the chat. (the bot itself may be one of these members).

> **Type** List[*telegram.User*]

caption
Optional. Caption for the document, photo or video, 0-1024 characters.

> **Type** str

contact
Optional. Information about the contact.

> **Type** *telegram.Contact*

location
Optional. Information about the location.

> **Type** *telegram.Location*

venue
> Optional. Information about the venue.

>> **Type** *telegram.Venue*

left_chat_member
> Optional. Information about the user that left the group. (this member may be the bot itself).

>> **Type** *telegram.User*

new_chat_title
> Optional. A chat title was changed to this value.

>> **Type** str

new_chat_photo
> Optional. A chat photo was changed to this value.

>> **Type** List[*telegram.PhotoSize*]

delete_chat_photo
> Optional. The chat photo was deleted.

>> **Type** bool

group_chat_created
> Optional. The group has been created.

>> **Type** bool

supergroup_chat_created
> Optional. The supergroup has been created.

>> **Type** bool

channel_chat_created
> Optional. The channel has been created.

>> **Type** bool

migrate_to_chat_id
> Optional. The group has been migrated to a supergroup with the specified identifier.

>> **Type** int

migrate_from_chat_id
> Optional. The supergroup has been migrated from a group with the specified identifier.

>> **Type** int

pinned_message
> Optional. Specified message was pinned.

>> **Type** telegram.message

invoice
> Optional. Information about the invoice.

>> **Type** *telegram.Invoice*

successful_payment
> Optional. Information about the payment.

>> **Type** *telegram.SuccessfulPayment*

connected_website
> Optional. The domain name of the website on which the user has logged in.

>> **Type** str

forward_signature
> Optional. Signature of the post author for messages forwarded from channels.

> **Type** str

forward_sender_name
> Optional. Sender's name for messages forwarded from users who disallow adding a link to their account in forwarded messages.
>
> > **Type** str

author_signature
> Optional. Signature of the post author for messages in channels.
>
> > **Type** str

passport_data
> Optional. Telegram Passport data.
>
> > **Type** *telegram.PassportData*

poll
> Optional. Message is a native poll, information about the poll.
>
> > **Type** *telegram.Poll*

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

bot
> Optional. The Bot to use for instance methods.
>
> > **Type** *telegram.Bot*

> **Parameters**
>
> - **message_id** (int) – Unique message identifier inside this chat.
> - **from_user** (*telegram.User*, optional) – Sender, can be empty for messages sent to channels.
> - **date** (datetime.datetime) – Date the message was sent in Unix time. Converted to datetime.datetime.
> - **chat** (*telegram.Chat*) – Conversation the message belongs to.
> - **forward_from** (*telegram.User*, optional) – For forwarded messages, sender of the original message.
> - **forward_from_chat** (*telegram.Chat*, optional) – For messages forwarded from a channel, information about the original channel.
> - **forward_from_message_id** (int, optional) – For forwarded channel posts, identifier of the original message in the channel.
> - **forward_sender_name** (str, optional) – Sender's name for messages forwarded from users who disallow adding a link to their account in forwarded messages.
> - **forward_date** (datetime.datetime, optional) – For forwarded messages, date the original message was sent in Unix time. Converted to datetime.datetime.
> - **reply_to_message** (*telegram.Message*, optional) – For replies, the original message. Note that the Message object in this field will not contain further reply_to_message fields even if it itself is a reply.
> - **edit_date** (datetime.datetime, optional) – Date the message was last edited in Unix time. Converted to datetime.datetime.
> - **media_group_id** (str, optional) – The unique identifier of a media message group this message belongs to.

- **text** (*str, optional*) – For text messages, the actual UTF-8 text of the message, 0-4096 characters. Also found as *telegram.constants.MAX_MESSAGE_LENGTH*.

- **entities** (List[*telegram.MessageEntity*], optional) – For text messages, special entities like usernames, URLs, bot commands, etc. that appear in the text. See attr:*parse_entity* and attr:*parse_entities* methods for how to use properly.

- **caption_entities** (List[*telegram.MessageEntity*]) – Optional. For Messages with a Caption. Special entities like usernames, URLs, bot commands, etc. that appear in the caption. See *Message.parse_caption_entity* and *parse_caption_entities* methods for how to use properly.

- **audio** (*telegram.Audio*, optional) – Message is an audio file, information about the file.

- **document** (*telegram.Document*, optional) – Message is a general file, information about the file.

- **animation** (*telegram.Animation*, optional) – Message is an animation, information about the animation. For backward compatibility, when this field is set, the document field will also be set.

- **game** (*telegram.Game*, optional) – Message is a game, information about the game.

- **photo** (List[*telegram.PhotoSize*], optional) – Message is a photo, available sizes of the photo.

- **sticker** (*telegram.Sticker*, optional) – Message is a sticker, information about the sticker.

- **video** (*telegram.Video*, optional) – Message is a video, information about the video.

- **voice** (*telegram.Voice*, optional) – Message is a voice message, information about the file.

- **video_note** (*telegram.VideoNote*, optional) – Message is a video note, information about the video message.

- **new_chat_members** (List[*telegram.User*], optional) – New members that were added to the group or supergroup and information about them (the bot itself may be one of these members).

- **caption** (str, optional) – Caption for the document, photo or video, 0-1024 characters.

- **contact** (*telegram.Contact*, optional) – Message is a shared contact, information about the contact.

- **location** (*telegram.Location*, optional) – Message is a shared location, information about the location.

- **venue** (*telegram.Venue*, optional) – Message is a venue, information about the venue.

- **left_chat_member** (*telegram.User*, optional) – A member was removed from the group, information about them (this member may be the bot itself).

- **new_chat_title** (str, optional) – A chat title was changed to this value.

- **new_chat_photo** (List[*telegram.PhotoSize*], optional) – A chat photo was change to this value.

- **delete_chat_photo** (bool, optional) – Service message: The chat photo was deleted.

- **group_chat_created** (bool, optional) – Service message: The group has been created.

- **supergroup_chat_created** (`bool`, optional) – Service message: The supergroup has been created. This field can't be received in a message coming through updates, because bot can't be a member of a supergroup when it is created. It can only be found in *reply_to_message* if someone replies to a very first message in a directly created supergroup.

- **channel_chat_created** (`bool`, optional) – Service message: The channel has been created. This field can't be received in a message coming through updates, because bot can't be a member of a channel when it is created. It can only be found in attr:*reply_to_message* if someone replies to a very first message in a channel.

- **migrate_to_chat_id** (`int`, optional) – The group has been migrated to a supergroup with the specified identifier. This number may be greater than 32 bits and some programming languages may have difficulty/silent defects in interpreting it. But it is smaller than 52 bits, so a signed 64 bit integer or double-precision float type are safe for storing this identifier.

- **migrate_from_chat_id** (`int`, optional) – The supergroup has been migrated from a group with the specified identifier. This number may be greater than 32 bits and some programming languages may have difficulty/silent defects in interpreting it. But it is smaller than 52 bits, so a signed 64 bit integer or double-precision float type are safe for storing this identifier.

- **pinned_message** (`telegram.message`, optional) – Specified message was pinned. Note that the Message object in this field will not contain further attr:*reply_to_message* fields even if it is itself a reply.

- **invoice** (*telegram.Invoice*, optional) – Message is an invoice for a payment, information about the invoice.

- **successful_payment** (*telegram.SuccessfulPayment*, optional) – Message is a service message about a successful payment, information about the payment.

- **connected_website** (`str`, optional) – The domain name of the website on which the user has logged in.

- **forward_signature** (`str`, optional) – Signature of the post author for messages forwarded from channels.

- **author_signature** (`str`, optional) – Signature of the post author for messages in channels.

- **passport_data** (*telegram.PassportData*, optional) – Telegram Passport data.

- **poll** (*telegram.Poll*, optional) – Message is a native poll, information about the poll.

- **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message. login_url buttons are represented as ordinary url buttons.

caption_html

Creates an HTML-formatted string from the markup entities found in the message's caption.

Use this if you want to retrieve the message caption with the caption entities formatted as HTML in the same way the original message was formatted.

Returns Message caption with captionentities formatted as HTML.

Return type `str`

caption_html_urled

Creates an HTML-formatted string from the markup entities found in the message's caption.

Use this if you want to retrieve the message caption with the caption entities formatted as HTML. This also formats *telegram.MessageEntity.URL* as a hyperlink.

> **Returns** Message caption with caption entities formatted as HTML.

> **Return type** str

caption_markdown
>   Creates an Markdown-formatted string from the markup entities found in the message's caption.

>   Use this if you want to retrieve the message caption with the caption entities formatted as Markdown in the same way the original message was formatted.

>> **Returns** Message caption with caption entities formatted as Markdown.

>> **Return type** str

caption_markdown_urled
>   Creates an Markdown-formatted string from the markup entities found in the message's caption.

>   Use this if you want to retrieve the message caption with the caption entities formatted as Markdown. This also formats *telegram.MessageEntity.URL* as a hyperlink.

>> **Returns** Message caption with caption entities formatted as Markdown.

>> **Return type** str

chat_id
>   Shortcut for *telegram.Chat.id* for *chat*.

>> **Type** int

delete(**args*, ***kwargs*)
>   Shortcut for:

```
bot.delete_message(chat_id=message.chat_id,
                   message_id=message.message_id,
                   *args,
                   **kwargs)
```

>> **Returns** On success, True is returned.

>> **Return type** bool

edit_caption(**args*, ***kwargs*)
>   Shortcut for:

```
bot.edit_message_caption(chat_id=message.chat_id,
                         message_id=message.message_id,
                         *args,
                         **kwargs)
```

> **Note:** You can only edit messages that the bot sent itself, therefore this method can only be used on the return value of the bot.send_* family of methods.

>> **Returns** On success, instance representing the edited message.

>> **Return type** *telegram.Message*

edit_media(*media*, **args*, ***kwargs*)
>   Shortcut for:

```
bot.edit_message_media(chat_id=message.chat_id,
                       message_id=message.message_id,
                       *args,
                       **kwargs)
```

Note: You can only edit messages that the bot sent itself, therefore this method can only be used on the return value of the `bot.send_*` family of methods.

> **Returns** On success, instance representing the edited message.
>
> **Return type** *telegram.Message*

edit_reply_markup(**args*, ***kwargs*)
   Shortcut for:

```
bot.edit_message_reply_markup(chat_id=message.chat_id,
                             message_id=message.message_id,
                             *args,
                             **kwargs)
```

Note: You can only edit messages that the bot sent itself, therefore this method can only be used on the return value of the `bot.send_*` family of methods.

> **Returns** On success, instance representing the edited message.
>
> **Return type** *telegram.Message*

edit_text(**args*, ***kwargs*)
   Shortcut for:

```
bot.edit_message_text(chat_id=message.chat_id,
                      message_id=message.message_id,
                      *args,
                      **kwargs)
```

Note: You can only edit messages that the bot sent itself, therefore this method can only be used on the return value of the `bot.send_*` family of methods.

> **Returns** On success, instance representing the edited message.
>
> **Return type** *telegram.Message*

effective_attachment
   telegram.Audio or *telegram.Contact* or *telegram.Document* or *telegram.Animation* or *telegram.Game* or *telegram.Invoice* or *telegram.Location* or List[*telegram.PhotoSize*] or *telegram.Sticker* or *telegram.SuccessfulPayment* or *telegram.Venue* or *telegram.Video* or *telegram.VideoNote* or *telegram.Voice*: The attachment that this message was sent with. May be `None` if no attachment was sent.

forward(*chat_id*, *disable_notification=False*)
   Shortcut for:

```
bot.forward_message(chat_id=chat_id,
                    from_chat_id=update.message.chat_id,
                    disable_notification=disable_notification,
                    message_id=update.message.message_id)
```

> **Returns** On success, instance representing the message forwarded.
>
> **Return type** *telegram.Message*

link

    Convenience property. If the chat of the message is a supergroup or a channel and has a *Chat.*
username, returns a t.me link of the message.

        Type `str`

parse_caption_entities(*types=None*)

    Returns a `dict` that maps *telegram.MessageEntity* to `str`. It contains entities from this
message's caption filtered by their *telegram.MessageEntity.type* attribute as the key, and
the text that each entity belongs to as the value of the `dict`.

    Note: This method should always be used instead of the *caption_entities* attribute,
since it calculates the correct substring from the message text based on UTF-16 codepoints. See
parse_entity for more info.

        Parameters **types** (List[`str`], optional) – List of *telegram.MessageEntity* types
as strings. If the `type` attribute of an entity is contained in this list, it will be returned.
Defaults to a list of all types. All types can be found as constants in *telegram.*
MessageEntity.

        Returns A dictionary of entities mapped to the text that belongs to them, calculated based
on UTF-16 codepoints.

        Return type Dict[*telegram.MessageEntity*, `str`]

parse_caption_entity(*entity*)

    Returns the text from a given *telegram.MessageEntity*.

    Note: This method is present because Telegram calculates the offset and length in UTF-16 code-
point pairs, which some versions of Python don't handle automatically. (That is, you can't just slice
`Message.caption` with the offset and length.)

        Parameters **entity** (*telegram.MessageEntity*) – The entity to extract the text
from. It must be an entity that belongs to this message.

        Returns The text of the given entity

        Return type `str`

parse_entities(*types=None*)

    Returns a `dict` that maps *telegram.MessageEntity* to `str`. It contains entities from this
message filtered by their *telegram.MessageEntity.type* attribute as the key, and the text that
each entity belongs to as the value of the `dict`.

    Note: This method should always be used instead of the *entities* attribute, since it calculates the
correct substring from the message text based on UTF-16 codepoints. See *parse_entity* for more
info.

        Parameters **types** (List[`str`], optional) – List of *telegram.MessageEntity* types
as strings. If the `type` attribute of an entity is contained in this list, it will be returned.
Defaults to a list of all types. All types can be found as constants in *telegram.*
MessageEntity.

        Returns A dictionary of entities mapped to the text that belongs to them, calculated based
on UTF-16 codepoints.

        Return type Dict[*telegram.MessageEntity*, `str`]

---

parse_entity(*entity*)

Returns the text from a given *telegram.MessageEntity*.

Note: This method is present because Telegram calculates the offset and length in UTF-16 code-point pairs, which some versions of Python don't handle automatically. (That is, you can't just slice `Message.text` with the offset and length.)

> **Parameters** **entity** (*telegram.MessageEntity*) – The entity to extract the text from. It must be an entity that belongs to this message.
>
> **Returns** The text of the given entity
>
> **Return type** `str`

reply_animation(**args*, ***kwargs*)

Shortcut for:

```
bot.send_animation(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments** **quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_audio(**args*, ***kwargs*)

Shortcut for:

```
bot.send_audio(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments** **quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_contact(**args*, ***kwargs*)

Shortcut for:

```
bot.send_contact(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments** **quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_document(**args*, ***kwargs*)

Shortcut for:

```
bot.send_document(update.message.chat_id, *args, **kwargs)
```

Keyword Arguments quote (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

Returns On success, instance representing the message posted.

Return type *telegram.Message*

reply_html(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_message(update.message.chat_id, parse_mode=ParseMode.HTML, *args,␣
↪**kwargs)
```

Sends a message with HTML formatting.

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the message is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

reply_location(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_location(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

> **Returns** On success, instance representing the message posted.

> **Return type** *telegram.Message*

reply_markdown(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_message(update.message.chat_id, parse_mode=ParseMode.MARKDOWN,␣
↪*args,
**kwargs)
```

Sends a message with markdown formatting.

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the message is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

reply_media_group(**args*, ***kwargs*)
> Shortcut for:

```
bot.reply_media_group(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the media group is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

> **Returns** An array of the sent Messages.

> **Return type** List[*telegram.Message*]

> **Raises** telegram.TelegramError

reply_photo(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_photo(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_poll(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_poll(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_sticker(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_sticker(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_text(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_message(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the message is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.

reply_venue(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_venue(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_video(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_video(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_video_note(**args*, ***kwargs*)
>   Shortcut for:

```
bot.send_video_note(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

reply_voice(**args*, ***kwargs*)
>   Shortcut for:

```
bot.send_voice(update.message.chat_id, *args, **kwargs)
```

> **Keyword Arguments quote** (`bool`, optional) – If set to `True`, the photo is sent as an actual reply to this message. If `reply_to_message_id` is passed in `kwargs`, this parameter will be ignored. Default: `True` in group chats and `False` in private chats.
>
> **Returns** On success, instance representing the message posted.
>
> **Return type** *telegram.Message*

text_html
>   Creates an HTML-formatted string from the markup entities found in the message.
>
>   Use this if you want to retrieve the message text with the entities formatted as HTML in the same way the original message was formatted.
>
> > **Returns** Message text with entities formatted as HTML.
> >
> > **Return type** `str`

text_html_urled
>   Creates an HTML-formatted string from the markup entities found in the message.
>
>   Use this if you want to retrieve the message text with the entities formatted as HTML. This also formats *telegram.MessageEntity.URL* as a hyperlink.
>
> > **Returns** Message text with entities formatted as HTML.
> >
> > **Return type** `str`

text_markdown
>   Creates an Markdown-formatted string from the markup entities found in the message.
>
>   Use this if you want to retrieve the message text with the entities formatted as Markdown in the same way the original message was formatted.
>
> > **Returns** Message text with entities formatted as Markdown.
> >
> > **Return type** `str`

> **text_markdown_urled**
>> Creates an Markdown-formatted string from the markup entities found in the message.
>>
>> Use this if you want to retrieve the message text with the entities formatted as Markdown. This also formats *telegram.MessageEntity.URL* as a hyperlink.
>>
>>> **Returns** Message text with entities formatted as Markdown.
>>>
>>> **Return type** `str`

3.2.29 telegram.MessageEntity

class telegram.**MessageEntity**(*type*, *offset*, *length*, *url=None*, *user=None*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`

> This object represents one special entity in a text message. For example, hashtags, usernames, URLs, etc.

> **type**
>> Type of the entity.
>>
>>> **Type** `str`

> **offset**
>> Offset in UTF-16 code units to the start of the entity.
>>
>>> **Type** `int`

> **length**
>> Length of the entity in UTF-16 code units.
>>
>>> **Type** `int`

> **url**
>> Optional. Url that will be opened after user taps on the text.
>>
>>> **Type** `str`

> **user**
>> Optional. The mentioned user.
>>
>>> **Type** *telegram.User*

>> **Parameters**
>>
>> - **type** (`str`) – Type of the entity. Can be mention (@username), hashtag, bot_command, url, email, bold (bold text), italic (italic text), code (monowidth string), pre (monowidth block), text_link (for clickable text URLs), text_mention (for users without usernames).
>>
>> - **offset** (`int`) – Offset in UTF-16 code units to the start of the entity.
>>
>> - **length** (`int`) – Length of the entity in UTF-16 code units.
>>
>> - **url** (`str`, optional) – For "text_link" only, url that will be opened after usertaps on the text.
>>
>> - **user** (*telegram.User*, optional) – For "text_mention" only, the mentioned user.

> **ALL_TYPES = ['mention', 'hashtag', 'cashtag', 'phone_number', 'bot_command', 'url',**
>> List of all the types.
>>
>>> **Type** List[`str`]

> **BOLD = 'bold'**
>> 'bold'
>>
>>> **Type** `str`

BOT_COMMAND = 'bot_command'
    'bot_command'

        Type str

CASHTAG = 'cashtag'
    'cashtag'

        Type str

CODE = 'code'
    'code'

        Type str

EMAIL = 'email'
    'email'

        Type str

HASHTAG = 'hashtag'
    'hashtag'

        Type str

ITALIC = 'italic'
    'italic'

        Type str

MENTION = 'mention'
    'mention'

        Type str

PHONE_NUMBER = 'phone_number'
    'phone_number'

        Type str

PRE = 'pre'
    'pre'

        Type str

TEXT_LINK = 'text_link'
    'text_link'

        Type str

TEXT_MENTION = 'text_mention'
    'text_mention'

        Type str

URL = 'url'
    'url'

        Type str

3.2.30 telegram.ParseMode

class telegram.**ParseMode**
    Bases: object

    This object represents a Telegram Message Parse Modes.

    HTML = 'HTML'
        'HTML'

Type `str`

MARKDOWN = 'Markdown'
'Markdown'

Type `str`

3.2.31 telegram.PhotoSize

class telegram.**PhotoSize**(*file_id*, *width*, *height*, *file_size=None*, *bot=None*, ***kwargs*)
Bases: `telegram.base.TelegramObject`

This object represents one size of a photo or a file/sticker thumbnail.

file_id
Unique identifier for this file.

Type `str`

width
Photo width.

Type `int`

height
Photo height.

Type `int`

file_size
Optional. File size.

Type `int`

bot
Optional. The Bot to use for instance methods.

Type *telegram.Bot*

Parameters

- **file_id** (`str`) – Unique identifier for this file.

- **width** (`int`) – Photo width.

- **height** (`int`) – Photo height.

- **file_size** (`int`, optional) – File size.

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
Convenience wrapper over *telegram.Bot.get_file*

Parameters

- **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns *telegram.File*

Raises `telegram.TelegramError`

3.2.32 telegram.Poll

class telegram.**Poll**(*id*, *question*, *options*, *is_closed*, ***kwargs*)

Bases: telegram.base.TelegramObject

This object contains information about a poll.

id
> Unique poll identifier.
>
> > **Type** str

question
> Poll question, 1-255 characters.
>
> > **Type** str

options
> List of poll options.
>
> > **Type** List[*PollOption*]

is_closed
> True, if the poll is closed.
>
> > **Type** bool

> **Parameters**
>
> - **id** (str) – Unique poll identifier.
>
> - **question** (str) – Poll question, 1-255 characters.
>
> - **options** (List[*PollOption*]) – List of poll options.
>
> - **is_closed** (bool) – True, if the poll is closed.

3.2.33 telegram.PollOption

class telegram.**PollOption**(*text*, *voter_count*, ***kwargs*)

Bases: telegram.base.TelegramObject

This object contains information about one answer option in a poll.

text
> Option text, 1-100 characters.
>
> > **Type** str

voter_count
> Number of users that voted for this option.
>
> > **Type** int

> **Parameters**
>
> - **text** (str) – Option text, 1-100 characters.
>
> - **voter_count** (int) – Number of users that voted for this option.

3.2.34 telegram.ReplyKeyboardRemove

class telegram.**ReplyKeyboardRemove**(*selective=False*, ***kwargs*)

Bases: telegram.replymarkup.ReplyMarkup

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 *telegram.ReplyKeyboardMarkup*).

remove_keyboard
> Requests clients to remove the custom keyboard.
>
> > **Type** `True`

selective
> Optional. Use this parameter if you want to remove the keyboard for specific users only.
>
> > **Type** `bool`

Example

A user votes in a poll, bot returns confirmation message in reply to the vote and removes the keyboard for that user, while still showing the keyboard with poll options to users who haven't voted yet.

> **Parameters**
> - **selective** (`bool`, optional) – Use this parameter if you want to remove the keyboard for specific users only. Targets:
>
>   1) users that are @mentioned in the text of the Message object
>
>   2) if the bot's message is a reply (has reply_to_message_id), sender of the original message.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.35 telegram.ReplyKeyboardMarkup

class `telegram.`**`ReplyKeyboardMarkup`**(*keyboard*, *resize_keyboard=False*, *one_time_keyboard=False*, *selective=False*, ***kwargs*)
> Bases: `telegram.replymarkup.ReplyMarkup`

This object represents a custom keyboard with reply options.

keyboard
> Array of button rows.
>
> > **Type** List[List[*telegram.KeyboardButton*|str]]

resize_keyboard
> Optional. Requests clients to resize the keyboard.
>
> > **Type** `bool`

one_time_keyboard
> Optional. Requests clients to hide the keyboard as soon as it's been used.
>
> > **Type** `bool`

selective
> Optional. Show the keyboard to specific users only.
>
> > **Type** `bool`

Example

A user requests to change the bot's language, bot replies to the request with a keyboard to select the new language. Other users in the group don't see the keyboard.

Parameters

- **keyboard** (List[List[str | `telegram.KeyboardButton`]]) – Array of button rows, each represented by an Array of `telegram.KeyboardButton` objects.

- **resize_keyboard** (`bool`, optional) – Requests clients to resize the keyboard vertically for optimal fit (e.g., make the keyboard smaller if there are just two rows of buttons). Defaults to false, in which case the custom keyboard is always of the same height as the app's standard keyboard. Defaults to `False`

- **one_time_keyboard** (`bool`, 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** (`bool`, optional) – Use this parameter if you want to show the keyboard to specific users only. Targets:

  1) users that are @mentioned in the text of the Message object

  2) if the bot's message is a reply (has reply_to_message_id), sender of the original message.

  Defaults to `False`.

- ***kwargs** (`dict`) – Arbitrary keyword arguments.

classmethod from_button(*button*, *resize_keyboard=False*, *one_time_keyboard=False*, *selective=False*, ***kwargs*)

Shortcut for:

```
ReplyKeyboardMarkup([[button]], **kwargs)
```

Return an ReplyKeyboardMarkup from a single KeyboardButton

Parameters

- **button** (`telegram.KeyboardButton | str`) – The button to use in the markup

- **resize_keyboard** (`bool`, optional) – Requests clients to resize the keyboard vertically for optimal fit (e.g., make the keyboard smaller if there are just two rows of buttons). Defaults to false, in which case the custom keyboard is always of the same height as the app's standard keyboard. Defaults to `False`

- **one_time_keyboard** (`bool`, 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** (`bool`, optional) – Use this parameter if you want to show the keyboard to specific users only. Targets:

  1) users that are @mentioned in the text of the Message object

  2) **if the bot's message is a reply (has reply_to_message_id), sender of the**
     original message.

  Defaults to `False`.

- ***kwargs** (`dict`) – Arbitrary keyword arguments.

classmethod from_column(*button_column*, *resize_keyboard=False*, *one_time_keyboard=False*, *selective=False*, ***kwargs*)

Shortcut for:

```
ReplyKeyboardMarkup([[button] for button in button_column], **kwargs)
```

Return an ReplyKeyboardMarkup from a single column of KeyboardButtons

Parameters

- **button_column** (List[*telegram.KeyboardButton* | str]) – The button to use in the markup

- **resize_keyboard** (bool, optional) – Requests clients to resize the keyboard vertically for optimal fit (e.g., make the keyboard smaller if there are just two rows of buttons). Defaults to false, in which case the custom keyboard is always of the same height as the app's standard keyboard. Defaults to False

- **one_time_keyboard** (bool, 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** (bool, optional) – Use this parameter if you want to show the keyboard to specific users only. Targets:

  1) users that are @mentioned in the text of the Message object

  2) **if the bot's message is a reply (has reply_to_message_id), sender of the** original message.

  Defaults to False.

- ****kwargs** (dict) – Arbitrary keyword arguments.

classmethod from_row(*button_row*, *resize_keyboard=False*, *one_time_keyboard=False*, *selective=False*, ***kwargs*)

Shortcut for:

```
ReplyKeyboardMarkup([button_row], **kwargs)
```

Return an ReplyKeyboardMarkup from a single row of KeyboardButtons

Parameters

- **button_row** (List[*telegram.KeyboardButton* | str]) – The button to use in the markup

- **resize_keyboard** (bool, optional) – Requests clients to resize the keyboard vertically for optimal fit (e.g., make the keyboard smaller if there are just two rows of buttons). Defaults to false, in which case the custom keyboard is always of the same height as the app's standard keyboard. Defaults to False

- **one_time_keyboard** (bool, 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** (bool, optional) – Use this parameter if you want to show the keyboard to specific users only. Targets:

  1) users that are @mentioned in the text of the Message object

  2) **if the bot's message is a reply (has reply_to_message_id), sender of the** original message.

  Defaults to False.

- ****kwargs** (dict) – Arbitrary keyword arguments.

3.2.36 telegram.ReplyMarkup

class telegram.**ReplyMarkup**

Bases: telegram.base.TelegramObject

Base class for Telegram ReplyMarkup Objects.

See *telegram.ReplyKeyboardMarkup* and *telegram.InlineKeyboardMarkup* for detailed use.

3.2.37 telegram.TelegramObject

class telegram.**TelegramObject**
    Bases: object

Base class for most telegram objects.

to_json()

> **Returns** str

3.2.38 telegram.Update

class telegram.**Update**(*update_id*, *message=None*, *edited_message=None*, *channel_post=None*, *edited_channel_post=None*, *inline_query=None*, *chosen_inline_result=None*, *callback_query=None*, *shipping_query=None*, *pre_checkout_query=None*, *poll=None*, ***kwargs*)
    Bases: telegram.base.TelegramObject

This object represents an incoming update.

Note: At most one of the optional parameters can be present in any given update.

---

update_id
    The update's unique identifier.

> **Type** int

message
    Optional. New incoming message.

> **Type** *telegram.Message*

edited_message
    Optional. New version of a message.

> **Type** *telegram.Message*

channel_post
    Optional. New incoming channel post.

> **Type** *telegram.Message*

edited_channel_post
    Optional. New version of a channel post.

> **Type** *telegram.Message*

inline_query
    Optional. New incoming inline query.

> **Type** *telegram.InlineQuery*

chosen_inline_result
    Optional. The result of an inline query that was chosen by a user.

> **Type** *telegram.ChosenInlineResult*

callback_query
    Optional. New incoming callback query.

> > **Type** *telegram.CallbackQuery*

shipping_query
> Optional. New incoming shipping query.
>
> > **Type** *telegram.ShippingQuery*

pre_checkout_query
> Optional. New incoming pre-checkout query.
>
> > **Type** *telegram.PreCheckoutQuery*

poll
> Optional. New poll state. Bots receive only updates about polls, which are sent or stopped by the bot
>
> > **Type** *telegram.Poll*

> **Parameters**
>
> - **update_id** (int) – The update's unique identifier. Update identifiers start from a certain positive number and increase sequentially. This ID becomes especially handy if you're using Webhooks, since it allows you to ignore repeated updates or to restore the correct update sequence, should they get out of order.
>
> - **message** (*telegram.Message*, optional) – New incoming message of any kind - text, photo, sticker, etc.
>
> - **edited_message** (*telegram.Message*, optional) – New version of a message that is known to the bot and was edited.
>
> - **channel_post** (*telegram.Message*, optional) – New incoming channel post of any kind - text, photo, sticker, etc.
>
> - **edited_channel_post** (*telegram.Message*, optional) – New version of a channel post that is known to the bot and was edited.
>
> - **inline_query** (*telegram.InlineQuery*, optional) – New incoming inline query.
>
> - **chosen_inline_result** (*telegram.ChosenInlineResult*, optional) – The result of an inline query that was chosen by a user and sent to their chat partner.
>
> - **callback_query** (*telegram.CallbackQuery*, optional) – New incoming callback query.
>
> - **shipping_query** (*telegram.ShippingQuery*, optional) – New incoming shipping query. Only for invoices with flexible price.
>
> - **pre_checkout_query** (*telegram.PreCheckoutQuery*, optional) – New incoming pre-checkout query. Contains full information about checkout
>
> - **poll** (*telegram.Poll*, optional) – New poll state. Bots receive only updates about polls, which are sent or stopped by the bot
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.

classmethod de_json(*data*, *bot*)

effective_chat
> 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*, *pre_checkout_query* and *poll*.
>
> > **Type** *telegram.Chat*

effective_message
> 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*, *pre_checkout_query* and *poll*.

> **Type** *telegram.Message*

effective_user
> The user that sent this update, no matter what kind of update this is. Will be `None` for *channel_post* and *poll*.

> **Type** *telegram.User*

3.2.39 telegram.User

class telegram.**User**(*id*, *first_name*, *is_bot*, *last_name=None*, *username=None*, *language_code=None*, *bot=None*, ***kwargs*)
> Bases: telegram.base.TelegramObject

This object represents a Telegram user or bot.

id
> Unique identifier for this user or bot.

> **Type** int

is_bot
> True, if this user is a bot

> **Type** bool

first_name
> User's or bot's first name.

> **Type** str

last_name
> Optional. User's or bot's last name.

> **Type** str

username
> Optional. User's or bot's username.

> **Type** str

language_code
> Optional. IETF language tag of the user's language.

> **Type** str

bot
> Optional. The Bot to use for instance methods.

> **Type** *telegram.Bot*

> **Parameters**
> - **id** (int) – Unique identifier for this user or bot.
> - **is_bot** (bool) – True, if this user is a bot
> - **first_name** (str) – User's or bot's first name.
> - **last_name** (str, optional) – User's or bot's last name.
> - **username** (str, optional) – User's or bot's username.
> - **language_code** (str, optional) – IETF language tag of the user's language.
> - **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

classmethod de_json(*data*, *bot*)

classmethod de_list(*data*, *bot*)

full_name
> Convenience property. The user's *first_name*, followed by (if available) *last_name*.
>
>> **Type** str

get_profile_photos(**args*, ***kwargs*)
> Shortcut for:

```
bot.get_user_profile_photos(update.message.from_user.id, *args, **kwargs)
```

link
> Convenience property. If *username* is available, returns a t.me link of the user.
>
>> **Type** str

mention_html(*name=None*)

>> **Parameters name** (str) – The name used as a link for the user. Defaults to *full_name*.
>>
>> **Returns** The inline mention for the user as HTML.
>>
>> **Return type** str

mention_markdown(*name=None*)

>> **Parameters name** (str) – The name used as a link for the user. Defaults to *full_name*.
>>
>> **Returns** The inline mention for the user as markdown.
>>
>> **Return type** str

name
> Convenience property. If available, returns the user's *username* prefixed with "@". If *username* is not available, returns *full_name*.
>
>> **Type** str

send_animation(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_animation(User.id, *args, **kwargs)
```

> Where User is the current instance.

>> **Returns** On success, instance representing the message posted.
>>
>> **Return type** *telegram.Message*

send_audio(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_audio(User.id, *args, **kwargs)
```

> Where User is the current instance.

>> **Returns** On success, instance representing the message posted.
>>
>> **Return type** *telegram.Message*

send_document(**args*, ***kwargs*)
> Shortcut for:

```
bot.send_document(User.id, *args, **kwargs)
```

> Where User is the current instance.

>> **Returns** On success, instance representing the message posted.
>>
>> **Return type** *telegram.Message*

send_message(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_message(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

send_photo(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_photo(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

send_sticker(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_sticker(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

send_video(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_video(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

send_video_note(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_video_note(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

send_voice(**args*, ***kwargs*)

    Shortcut for:

```
bot.send_voice(User.id, *args, **kwargs)
```

    Where User is the current instance.

        Returns On success, instance representing the message posted.

        Return type *telegram.Message*

3.2.40 telegram.UserProfilePhotos

class telegram.**UserProfilePhotos**(*total_count*, *photos*, ***kwargs*)
    Bases: telegram.base.TelegramObject

This object represent a user's profile pictures.

total_count
    Total number of profile pictures.

        Type int

photos
    Requested profile pictures.

        Type List[List[*telegram.PhotoSize*]]

    Parameters

- **total_count** (int) – Total number of profile pictures the target user has.

- **photos** (List[List[*telegram.PhotoSize*]]) – Requested profile pictures (in up to 4 sizes each).

3.2.41 telegram.Venue

class telegram.**Venue**(*location*, *title*, *address*, *foursquare_id=None*, *foursquare_type=None*, ***kwargs*)
    Bases: telegram.base.TelegramObject

This object represents a venue.

location
    Venue location.

        Type *telegram.Location*

title
    Name of the venue.

        Type str

address
    Address of the venue.

        Type str

foursquare_id
    Optional. Foursquare identifier of the venue.

        Type str

foursquare_type
    Optional. Foursquare type of the venue. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)

        Type str

    Parameters

- **location** (*telegram.Location*) – Venue location.

- **title** (str) – Name of the venue.

- **address** (str) – Address of the venue.

- **foursquare_id** (str, optional) – Foursquare identifier of the venue.

- **foursquare_type** (`str`, optional) – Foursquare type of the venue. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.42 telegram.Video

class telegram.**Video**(*file_id*, *width*, *height*, *duration*, *thumb=None*, *mime_type=None*, *file_size=None*, *bot=None*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object represents a video file.

file_id
Unique identifier for this file.

> **Type** `str`

width
Video width as defined by sender.

> **Type** `int`

height
Video height as defined by sender.

> **Type** `int`

duration
Duration of the video in seconds as defined by sender.

> **Type** `int`

thumb
Optional. Video thumbnail.

> **Type** *telegram.PhotoSize*

mime_type
Optional. Mime type of a file as defined by sender.

> **Type** `str`

file_size
Optional. File size.

> **Type** `int`

bot
Optional. The Bot to use for instance methods.

> **Type** *telegram.Bot*

Parameters

- **file_id** (`str`) – Unique identifier for this file.

- **width** (`int`) – Video width as defined by sender.

- **height** (`int`) – Video height as defined by sender.

- **duration** (`int`) – Duration of the video in seconds as defined by sender.

- **thumb** (*telegram.PhotoSize*, optional) – Video thumbnail.

- **mime_type** (`str`, optional) – Mime type of a file as defined by sender.

- **file_size** (`int`, optional) – File size.

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

- ****kwargs** (dict) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
Convenience wrapper over `telegram.Bot.get_file`

> **Parameters**
>
> - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> - ****kwargs** (dict) – Arbitrary keyword arguments.
>
> **Returns** `telegram.File`
>
> **Raises** telegram.TelegramError

3.2.43 telegram.VideoNote

class telegram.**VideoNote**(*file_id*, *length*, *duration*, *thumb=None*, *file_size=None*, *bot=None*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object represents a video message (available in Telegram apps as of v.4.0).

file_id
Unique identifier for this file.

> **Type** str

length
Video width and height as defined by sender.

> **Type** int

duration
Duration of the video in seconds as defined by sender.

> **Type** int

thumb
Optional. Video thumbnail.

> **Type** `telegram.PhotoSize`

file_size
Optional. File size.

> **Type** int

bot
Optional. The Bot to use for instance methods.

> **Type** `telegram.Bot`

> **Parameters**
>
> - **file_id** (str) – Unique identifier for this file.
> - **length** (int) – Video width and height as defined by sender.
> - **duration** (int) – Duration of the video in seconds as defined by sender.
> - **thumb** (`telegram.PhotoSize`, optional) – Video thumbnail.
> - **file_size** (int, optional) – File size.
> - **bot** (`telegram.Bot`, optional) – The Bot to use for instance methods.
> - ****kwargs** (dict) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)

> Convenience wrapper over [*telegram.Bot.get_file*](#)

> > **Parameters**

> > > - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

> > > - ****kwargs** (dict) – Arbitrary keyword arguments.

> > **Returns** [*telegram.File*](#)

> > **Raises** telegram.TelegramError

3.2.44 telegram.Voice

class telegram.**Voice**(*file_id*, *duration*, *mime_type=None*, *file_size=None*, *bot=None*, ***kwargs*)

> Bases: telegram.base.TelegramObject

> This object represents a voice note.

> **file_id**
> > Unique identifier for this file.

> > > **Type** str

> **duration**
> > Duration of the audio in seconds as defined by sender.

> > > **Type** int

> **mime_type**
> > Optional. MIME type of the file as defined by sender.

> > > **Type** str

> **file_size**
> > Optional. File size.

> > > **Type** int

> **bot**
> > Optional. The Bot to use for instance methods.

> > > **Type** [*telegram.Bot*](#)

> > **Parameters**

> > > - **file_id** (str) – Unique identifier for this file.

> > > - **duration** (int, optional) – Duration of the audio in seconds as defined by sender.

> > > - **mime_type** (str, optional) – MIME type of the file as defined by sender.

> > > - **file_size** (int, optional) – File size.

> > > - **bot** ([*telegram.Bot*](#), optional) – The Bot to use for instance methods.

> > > - ****kwargs** (dict) – Arbitrary keyword arguments.

> **get_file**(*timeout=None*, ***kwargs*)
> > Convenience wrapper over [*telegram.Bot.get_file*](#)

> > > **Parameters**

> > > > - **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

Returns *telegram.File*

Raises telegram.TelegramError

3.2.45 telegram.WebhookInfo

class telegram.**WebhookInfo**(*url,   has_custom_certificate,   pending_update_count, last_error_date=None,   last_error_message=None, max_connections=None, allowed_updates=None, **kwargs*)

Bases: telegram.base.TelegramObject

This object represents a Telegram WebhookInfo.

Contains information about the current status of a webhook.

url
> Webhook URL.
>
> > **Type** str

has_custom_certificate
> If a custom certificate was provided for webhook.
>
> > **Type** bool

pending_update_count
> Number of updates awaiting delivery.
>
> > **Type** int

last_error_date
> Optional. Unix time for the most recent error that happened.
>
> > **Type** int

last_error_message
> Optional. Error message in human-readable format.
>
> > **Type** str

max_connections
> Optional. Maximum allowed number of simultaneous HTTPS connections.
>
> > **Type** int

allowed_updates
> Optional. A list of update types the bot is subscribed to.
>
> > **Type** List[str]

Parameters

- **url** (`str`) – Webhook URL, may be empty if webhook is not set up.

- **has_custom_certificate** (`bool`) – True, if a custom certificate was provided for webhook certificate checks.

- **pending_update_count** (`int`) – Number of updates awaiting delivery.

- **last_error_date** (`int`, optional) – Unix time for the most recent error that happened when trying todeliver an update via webhook.

- **last_error_message** (`str`, optional) – Error message in human-readable format for the most recent error that happened when trying to deliver an update via webhook.

- **max_connections** (`int`, optional) – Maximum allowed number of simultaneous HTTPS connections to the webhook for update delivery.

- **allowed_updates** (List[`str`], optional) – A list of update types the bot is subscribed to. Defaults to all update types.

3.2.46 Stickers

telegram.Sticker

class telegram.**Sticker**(*file_id*, *width*, *height*, *is_animated*, *thumb=None*, *emoji=None*, *file_size=None*, *set_name=None*, *mask_position=None*, *bot=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

This object represents a sticker.

file_id
 Unique identifier for this file.

  Type `str`

width
 Sticker width.

  Type `int`

height
 Sticker height.

  Type `int`

is_animated
 True, if the sticker is animated.

  Type `bool`

thumb
 Optional. Sticker thumbnail in the .webp or .jpg format.

  Type *telegram.PhotoSize*

emoji
 Optional. Emoji associated with the sticker.

  Type `str`

set_name
 Optional. Name of the sticker set to which the sticker belongs.

  Type `str`

mask_position
 Optional. For mask stickers, the position where the mask should be placed.

  Type *telegram.MaskPosition*

file_size
 Optional. File size.

  Type `int`

bot
 Optional. The Bot to use for instance methods.

  Type *telegram.Bot*

 Parameters

- **file_id** (`str`) – Unique identifier for this file.
- **width** (`int`) – Sticker width.

- **height** (int) – Sticker height.

- **is_animated** (bool) – True, if the sticker is animated.

- **thumb** (*telegram.PhotoSize*, optional) – Sticker thumbnail in the .webp or .jpg format.

- **emoji** (str, optional) – Emoji associated with the sticker

- **set_name** (str, optional) – Name of the sticker set to which the sticker belongs.

- **mask_position** (*telegram.MaskPosition*, optional) – For mask stickers, the position where the mask should be placed.

- **file_size** (int, optional) – File size.

- **(obj** (***kwargs*) – *dict*): Arbitrary keyword arguments.7

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

get_file(*timeout=None*, ***kwargs*)
 Convenience wrapper over *telegram.Bot.get_file*

 Parameters

- **timeout** (int | float, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

- ****kwargs** (dict) – Arbitrary keyword arguments.

 Returns *telegram.File*

 Raises telegram.TelegramError

telegram.StickerSet

class telegram.**StickerSet**(*name*, *title*, *is_animated*, *contains_masks*, *stickers*, *bot=None*, ***kwargs*)
 Bases: telegram.base.TelegramObject

 This object represents a sticker set.

 name
 Sticker set name.

 Type str

 title
 Sticker set title.

 Type str

 is_animated
 True, if the sticker set contains animated stickers.

 Type bool

 contains_masks
 True, if the sticker set contains masks.

 Type bool

 stickers
 List of all set stickers.

 Type List[*telegram.Sticker*]

 Parameters

- **name** (str) – Sticker set name.

- **title** (str) – Sticker set title.

- **is_animated** (bool) – True, if the sticker set contains animated stickers.

- **contains_masks** (bool) – True, if the sticker set contains masks.

- **stickers** (List[*telegram.Sticker*]) – List of all set stickers.

telegram.MaskPosition

class telegram.**MaskPosition**(*point*, *x_shift*, *y_shift*, *scale*, ***kwargs*)
  Bases: telegram.base.TelegramObject

  This object describes the position on faces where a mask should be placed by default.

  point
    The part of the face relative to which the mask should be placed.

      Type str

  x_shift
    Shift by X-axis measured in widths of the mask scaled to the face size, from left to right.

      Type float

  y_shift
    Shift by Y-axis measured in heights of the mask scaled to the face size, from top to bottom.

      Type float

  scale
    Mask scaling coefficient. For example, 2.0 means double size.

      Type float

  ### Notes

  type should be one of the following: *forehead*, *eyes*, *mouth* or *chin*. You can use the classconstants for those.

    Parameters

      - **point** (str) – The part of the face relative to which the mask should be placed.

      - **x_shift** (float) – Shift by X-axis measured in widths of the mask scaled to the face size, from left to right. For example, choosing -1.0 will place mask just to the left of the default mask position.

      - **y_shift** (float) – Shift by Y-axis measured in heights of the mask scaled to the face size, from top to bottom. For example, 1.0 will place the mask just below the default mask position.

      - **scale** (float) – Mask scaling coefficient. For example, 2.0 means double size.

  CHIN = 'chin'
    'chin'

      Type str

  EYES = 'eyes'
    'eyes'

      Type str

  FOREHEAD = 'forehead'
    'forehead'

> **Type** str

MOUTH = 'mouth'
> 'mouth'

> > **Type** str

3.2.47 Inline Mode

telegram.InlineQuery

class telegram.**InlineQuery**(*id*, *from_user*, *query*, *offset*, *location=None*, *bot=None*, ***kwargs*)
> Bases: telegram.base.TelegramObject

> This object represents an incoming inline query. When the user sends an empty query, your bot could return some default or trending results.

> **Note:**
> > • In Python *from* is a reserved word, use *from_user* instead.

> **id**
> > Unique identifier for this query.

> > > **Type** str

> **from_user**
> > Sender.

> > > **Type** *telegram.User*

> **location**
> > Optional. Sender location, only for bots that request user location.

> > > **Type** *telegram.Location*

> **query**
> > Text of the query (up to 512 characters).

> > > **Type** str

> **offset**
> > Offset of the results to be returned, can be controlled by the bot.

> > > **Type** str

> **Parameters**
> > • **id** (str) – Unique identifier for this query.
> >
> > • **from_user** (*telegram.User*) – Sender.
> >
> > • **location** (*telegram.Location*, optional) – Sender location, only for bots that request user location.
> >
> > • **query** (str) – Text of the query (up to 512 characters).
> >
> > • **offset** (str) – Offset of the results to be returned, can be controlled by the bot.
> >
> > • **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.
> >
> > • ****kwargs** (dict) – Arbitrary keyword arguments.

> **answer**(**args*, ***kwargs*)
> > Shortcut for:

```
bot.answer_inline_query(update.inline_query.id, *args, **kwargs)
```

> **Parameters**
> - **results** (List[*telegram.InlineQueryResult*]) – A list of results for the inline query.
> - **cache_time** (int, optional) – The maximum amount of time in seconds that the result of the inline query may be cached on the server. Defaults to 300.
> - **is_personal** (bool, 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** (str, 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** (str, 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** (str, 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.

telegram.InlineQueryResult

class telegram.**InlineQueryResult**(*type*, *id*, ***kwargs*)

> Bases: telegram.base.TelegramObject
>
> Baseclass for the InlineQueryResult* classes.
>
> **type**
> > Type of the result.
> >
> > > **Type** str
>
> **id**
> > Unique identifier for this result, 1-64 Bytes.
> >
> > > **Type** str
>
> **Parameters**
> - **type** (str) – Type of the result.
> - **id** (str) – Unique identifier for this result, 1-64 Bytes.
> - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultArticle

class telegram.**InlineQueryResultArticle**(*id*, *title*, *input_message_content*, *reply_markup=None*, *url=None*, *hide_url=None*, *description=None*, *thumb_url=None*, *thumb_width=None*, *thumb_height=None*, ***kwargs*)

> Bases: telegram.inline.inlinequeryresult.InlineQueryResult
>
> This object represents a Telegram InlineQueryResultArticle.
>
> **type**
> > 'article'.

>   **Type** str

id
>   Unique identifier for this result, 1-64 Bytes.

>   **Type** str

title
>   Title of the result.

>   **Type** str

input_message_content
>   Content of the message to be sent.

>   **Type** *telegram.InputMessageContent*

reply_markup
>   Optional. Inline keyboard attached to the message.

>   **Type** *telegram.ReplyMarkup*

url
>   Optional. URL of the result.

>   **Type** str

hide_url
>   Optional. Pass True, if you don't want the URL to be shown in the message.

>   **Type** bool

description
>   Optional. Short description of the result.

>   **Type** str

thumb_url
>   Optional. Url of the thumbnail for the result.

>   **Type** str

thumb_width
>   Optional. Thumbnail width.

>   **Type** int

thumb_height
>   Optional. Thumbnail height.

>   **Type** int

>   **Parameters**

>   - **id** (str) – Unique identifier for this result, 1-64 Bytes.

>   - **title** (str) – Title of the result.

>   - **input_message_content** (*telegram.InputMessageContent*) – Content of the message to be sent.

>   - **reply_markup** (*telegram.ReplyMarkup*, optional) – Inline keyboard attached to the message

>   - **url** (str, optional) – URL of the result.

>   - **hide_url** (bool, optional) – Pass True, if you don't want the URL to be shown in the message.

>   - **description** (str, optional) – Short description of the result.

>   - **thumb_url** (str, optional) – Url of the thumbnail for the result.

- **thumb_width** (int, optional) – Thumbnail width.

- **thumb_height** (int, optional) – Thumbnail height.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultAudio

class telegram.**InlineQueryResultAudio**(*id*, *audio_url*, *title*, *performer=None*, *audio_duration=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
   Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to an mp3 audio file. By default, this audio file will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the audio.

type
   'audio'.

> **Type** str

id
   Unique identifier for this result, 1-64 bytes.

> **Type** str

audio_url
   A valid URL for the audio file.

> **Type** str

title
   Title.

> **Type** str

performer
   Optional. Caption, 0-200 characters.

> **Type** str

audio_duration
   Optional. Performer.

> **Type** str

caption
   Optional. Audio duration in seconds.

> **Type** str

parse_mode
   Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

> **Type** str

reply_markup
   Optional. Inline keyboard attached to the message.

> **Type** *telegram.InlineKeyboardMarkup*

input_message_content
   Optional. Content of the message to be sent instead of the audio.

> **Type** *telegram.InputMessageContent*

Parameters

- **id** (str) – Unique identifier for this result, 1-64 bytes.

- **audio_url** (str) – A valid URL for the audio file.

- **title** (str) – Title.

- **performer** (str, optional) – Caption, 0-200 characters.

- **audio_duration** (str, optional) – Performer.

- **caption** (str, optional) – Audio duration in seconds.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the audio.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedAudio

class telegram.**InlineQueryResultCachedAudio**(*id*, *audio_file_id*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)

Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to an mp3 audio file stored on the Telegram servers. By default, this audio file will be sent by the user. Alternatively, you can use *input_message_content* to send amessage with the specified content instead of the audio.

type
    'audio'.

        Type str

id
    Unique identifier for this result, 1-64 bytes.

        Type str

audio_file_id
    A valid file identifier for the audio file.

        Type str

caption
    Optional. Caption, 0-1024 characters

        Type str

parse_mode
    Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

        Type str

reply_markup
    Optional. Inline keyboard attached to the message.

        Type *telegram.InlineKeyboardMarkup*

input_message_content
    Optional. Content of the message to be sent instead of the audio.

        Type *telegram.InputMessageContent*

    Parameters

- **id** (str) – Unique identifier for this result, 1-64 bytes.

- **audio_file_id** (str) – A valid file identifier for the audio file.

- **caption** (str, optional) – Caption, 0-1024 characters

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the audio.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedDocument

class telegram.**InlineQueryResultCachedDocument**(*id*, *title*, *document_file_id*, *description=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
    Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to a file stored on the Telegram servers. By default, this file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the file.

type
    'document'.

        Type str

id
    Unique identifier for this result, 1-64 bytes.

        Type str

title
    Title for the result.

        Type str

document_file_id
    A valid file identifier for the file.

        Type str

description
    Optional. Short description of the result.

        Type str

caption
    Optional. Caption, 0-1024 characters

        Type str

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption.. See the constants in *telegram.ParseMode* for the available modes.
>
> > **Type** str

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the file.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
> - **id** (str) – Unique identifier for this result, 1-64 bytes.
> - **title** (str) – Title for the result.
> - **document_file_id** (str) – A valid file identifier for the file.
> - **description** (str, optional) – Short description of the result.
> - **caption** (str, optional) – Caption, 0-1024 characters
> - **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption.. See the constants in *telegram.ParseMode* for the available modes.
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.
> - **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the file.
> - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedGif

class telegram.**InlineQueryResultCachedGif**(*id*, *gif_file_id*, *title=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
> Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to an animated GIF file stored on the Telegram servers. By default, this animated GIF file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with specified content instead of the animation.

type
> 'gif'.
>
> > **Type** str

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** str

gif_file_id
> A valid file identifier for the GIF file.
>
> > **Type** str

title
> Optional. Title for the result.
>
>> **Type** `str`

caption
> Optional. Caption, 0-1024 characters
>
>> **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.
>
>> **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
>> **Type** `telegram.InlineKeyboardMarkup`

input_message_content
> Optional. Content of the message to be sent instead of the gif.
>
>> **Type** `telegram.InputMessageContent`

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
> - **gif_file_id** (`str`) – A valid file identifier for the GIF file.
> - **title** (`str`, optional) – Title for the result.caption (`str`, optional):
> - **caption** (`str`, optional) – Caption, 0-1024 characters
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.
> - **reply_markup** (`telegram.InlineKeyboardMarkup`, optional) – Inline keyboard attached to the message.
> - **input_message_content** (`telegram.InputMessageContent`, optional) – Content of the message to be sent instead of the gif.
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedMpeg4Gif

class telegram.**InlineQueryResultCachedMpeg4Gif**(*id*, *mpeg4_file_id*, *title=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a video animation (H.264/MPEG-4 AVC video without sound) stored on the Telegram servers. By default, this animated MPEG-4 file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the animation.

type
> 'mpeg4_gif'.
>
>> **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

mpeg4_file_id
> A valid file identifier for the MP4 file.
>
> > **Type** `str`

title
> Optional. Title for the result.
>
> > **Type** `str`

caption
> Optional. Caption, 0-1024 characters
>
> > **Type** `str`

parse_mode
> Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.
>
> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** `telegram.InlineKeyboardMarkup`

input_message_content
> Optional. Content of the message to be sent instead of the MPEG-4 file.
>
> > **Type** `telegram.InputMessageContent`

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **mpeg4_file_id** (`str`) – A valid file identifier for the MP4 file.
>
> - **title** (`str`, optional) – Title for the result.
>
> - **caption** (`str`, optional) – Caption, 0-1024 characters
>
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.
>
> - **reply_markup** (`telegram.InlineKeyboardMarkup`, optional) – Inline keyboard attached to the message.
>
> - **input_message_content** (`telegram.InputMessageContent`, optional) – Content of the message to be sent instead of the MPEG-4 file.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedPhoto

class telegram.**InlineQueryResultCachedPhoto**(*id*, *photo_file_id*, *title=None*, *description=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
> Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a photo stored on the Telegram servers. By default, this photo will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the photo.

type
> 'photo'.
>
>> **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
>> **Type** `str`

photo_file_id
> A valid file identifier of the photo.
>
>> **Type** `str`

title
> Optional. Title for the result.
>
>> **Type** `str`

description
> Optional. Short description of the result.
>
>> **Type** `str`

caption
> Optional. Caption, 0-1024 characters
>
>> **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
>> **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
>> **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the photo.
>
>> **Type** *telegram.InputMessageContent*

> **Parameters**
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
> - **photo_file_id** (`str`) – A valid file identifier of the photo.
> - **title** (`str`, optional) – Title for the result.
> - **description** (`str`, optional) – Short description of the result.
> - **caption** (`str`, optional) – Caption, 0-1024 characters
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`, optional) –
  Content of the message to be sent instead of the photo.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedSticker

class `telegram.`**`InlineQueryResultCachedSticker`**(*id,   sticker_file_id,   reply_markup=None,   input_message_content=None,*
**kwargs)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a sticker stored on the Telegram servers. By default, this sticker will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the sticker.

type
'sticker'.

> **Type** `str`

id
Unique identifier for this result, 1-64 bytes.

> **Type** `str`

sticker_file_id
A valid file identifier of the sticker.

> **Type** `str`

reply_markup
Optional. Inline keyboard attached to the message.

> **Type** *telegram.InlineKeyboardMarkup*

input_message_content
Optional. Content of the message to be sent instead of the sticker.

> **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (`str`) –
>
> - **sticker_file_id** (`str`) –
>
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.
>
> - **input_message_content** (*telegram.InputMessageContent*, optional) –
>   Content of the message to be sent instead of the sticker.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedVideo

class `telegram.`**`InlineQueryResultCachedVideo`**(*id, video_file_id, title, description=None,*
caption=None,   reply_markup=None,
input_message_content=None,
parse_mode=None, **kwargs)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a video file stored on the Telegram servers. By default, this video file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the video.

type
> 'video'.
>
> > **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

video_file_id
> A valid file identifier for the video file.
>
> > **Type** `str`

title
> Title for the result.
>
> > **Type** `str`

description
> Optional. Short description of the result.
>
> > **Type** `str`

caption
> Optional. Caption, 0-1024 characters.
>
> > **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the video.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **video_file_id** (`str`) – A valid file identifier for the video file.
>
> - **title** (`str`) – Title for the result.
>
> - **description** (`str`, optional) – Short description of the result.
>
> - **caption** (`str`, optional) – Caption, 0-1024 characters.
>
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`, optional) –
  Content of the message to be sent instead of the video.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultCachedVoice

class `telegram.`**`InlineQueryResultCachedVoice`**(*id*,   *voice_file_id*,   *title*,   *caption=None*,   *reply_markup=None*,
input_message_content=None,
parse_mode=None, ***kwargs*)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a voice message stored on the Telegram servers. By default, this voice message will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the voice message.

type
> 'voice'.
>
> > **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

voice_file_id
> A valid file identifier for the voice message.
>
> > **Type** `str`

title
> Voice message title.
>
> > **Type** `str`

caption
> Optional. Caption, 0-1024 characters.
>
> > **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the voice.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **voice_file_id** (`str`) – A valid file identifier for the voice message.
>
> - **title** (`str`) – Voice message title.
>
> - **caption** (`str`, optional) – Caption, 0-1024 characters.

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the voice.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultContact

class telegram.**InlineQueryResultContact**(*id*, *phone_number*, *first_name*, *last_name=None*, *reply_markup=None*, *input_message_content=None*, *thumb_url=None*, *thumb_width=None*, *thumb_height=None*, *vcard=None*, ***kwargs*)
    Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a contact with a phone number. By default, this contact will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the contact.

type
    'contact'.

> **Type** str

id
    Unique identifier for this result, 1-64 bytes.

> **Type** str

phone_number
    Contact's phone number.

> **Type** str

first_name
    Contact's first name.

> **Type** str

last_name
    Optional. Contact's last name.

> **Type** str

vcard
    Optional. Additional data about the contact in the form of a vCard, 0-2048 bytes.

> **Type** str

reply_markup
    Optional. Inline keyboard attached to the message.

> **Type** *telegram.InlineKeyboardMarkup*

input_message_content
    Optional. Content of the message to be sent instead of the contact.

> **Type** *telegram.InputMessageContent*

thumb_url
    Optional. Url of the thumbnail for the result.

> **Type** str

thumb_width
    Optional. Thumbnail width.

> **Type** `int`

thumb_height
    Optional. Thumbnail height.

> **Type** `int`

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **phone_number** (`str`) – Contact's phone number.
>
> - **first_name** (`str`) – Contact's first name.
>
> - **last_name** (`str`, optional) – Contact's last name.
>
> - **vcard** (`str`, optional) – Additional data about the contact in the form of a vCard, 0-2048 bytes.
>
> - **reply_markup** (`telegram.InlineKeyboardMarkup`, optional) – Inline keyboard attached to the message.
>
> - **input_message_content** (`telegram.InputMessageContent`, optional) – Content of the message to be sent instead of the contact.
>
> - **thumb_url** (`str`, optional) – Url of the thumbnail for the result.
>
> - **thumb_width** (`int`, optional) – Thumbnail width.
>
> - **thumb_height** (`int`, optional) – Thumbnail height.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultDocument

class telegram.**InlineQueryResultDocument**(*id*, *document_url*, *title*, *mime_type*, *caption=None*, *description=None*, *reply_markup=None*, *input_message_content=None*, *thumb_url=None*, *thumb_width=None*, *thumb_height=None*, *parse_mode=None*, ***kwargs*)
    Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a file. By default, this file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the file. Currently, only .PDF and .ZIP files can be sent using this method.

type
    'document'.

> **Type** `str`

id
    Unique identifier for this result, 1-64 bytes.

> **Type** `str`

title
    Title for the result.

> **Type** `str`

caption
    Optional. Caption, 0-1024 characters

> > **Type** str

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

> > **Type** str

document_url
> A valid URL for the file.

> > **Type** str

mime_type
> Mime type of the content of the file, either "application/pdf" or "application/zip".

> > **Type** str

description
> Optional. Short description of the result.

> > **Type** str

reply_markup
> Optional. Inline keyboard attached to the message.

> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the file.

> > **Type** *telegram.InputMessageContent*

thumb_url
> Optional. URL of the thumbnail (jpeg only) for the file.

> > **Type** str

thumb_width
> Optional. Thumbnail width.

> > **Type** int

thumb_height
> Optional. Thumbnail height.

> > **Type** int

> **Parameters**
>> - **id** (str) – Unique identifier for this result, 1-64 bytes.
>> - **title** (str) – Title for the result.
>> - **caption** (str, optional) – Caption, 0-1024 characters
>> - **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>> - **document_url** (str) – A valid URL for the file.
>> - **mime_type** (str) – Mime type of the content of the file, either "application/pdf" or "application/zip".
>> - **description** (str, optional) – Short description of the result.
>> - **reply_markup** (*telegram.InlineKeyboardMarkup*) – Optional. Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`) – Optional. Content of the message to be sent instead of the file.

- **thumb_url** (`str`, optional) – URL of the thumbnail (jpeg only) for the file.

- **thumb_width** (`int`, optional) – Thumbnail width.

- **thumb_height** (`int`, optional) – Thumbnail height.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultGame

class telegram.**InlineQueryResultGame**(*id*, *game_short_name*, *reply_markup=None*, ***kwargs*)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a Game.

type
> 'game'.
>
> > **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

game_short_name
> Short name of the game.
>
> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** `telegram.InlineKeyboardMarkup`

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **game_short_name** (`str`) – Short name of the game.
>
> - **reply_markup** (`telegram.InlineKeyboardMarkup`, optional) – Inline keyboard attached to the message.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultGif

class telegram.**InlineQueryResultGif**(*id*, *gif_url*, *thumb_url*, *gif_width=None*, *gif_height=None*, *title=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *gif_duration=None*, *parse_mode=None*, ***kwargs*)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to an animated GIF file. By default, this animated GIF file will be sent by the user with optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the animation.

type
> 'gif'.
>
> > **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

gif_url
> A valid URL for the GIF file. File size must not exceed 1MB.
>
> > **Type** `str`

gif_width
> Optional. Width of the GIF.
>
> > **Type** `int`

gif_height
> Optional. Height of the GIF.
>
> > **Type** `int`

gif_duration
> Optional. Duration of the GIF.
>
> > **Type** `int`

thumb_url
> URL of the static thumbnail for the result (jpeg or gif).
>
> > **Type** `str`

title
> Optional. Title for the result.
>
> > **Type** `str`

caption
> Optional. Caption, 0-1024 characters
>
> > **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the gif.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **gif_url** (`str`) – A valid URL for the GIF file. File size must not exceed 1MB.
>
> - **gif_width** (`int`, optional) – Width of the GIF.
>
> - **gif_height** (`int`, optional) – Height of the GIF.
>
> - **gif_duration** (`int`, optional) – Duration of the GIF
>
> - **thumb_url** (`str`) – URL of the static thumbnail for the result (jpeg or gif).
>
> - **title** (`str`, optional) – Title for the result.caption (`str`, optional):

- **caption** (str, optional) – Caption, 0-1024 characters

- **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.

- **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the gif.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultLocation

class telegram.**InlineQueryResultLocation**(*id*, *latitude*, *longitude*, *title*, *live_period=None*, *reply_markup=None*, *input_message_content=None*, *thumb_url=None*, *thumb_width=None*, *thumb_height=None*, ***kwargs*)
    Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a location on a map. By default, the location will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the location.

type
    'location'.

        Type str

id
    Unique identifier for this result, 1-64 bytes.

        Type str

latitude
    Location latitude in degrees.

        Type float

longitude
    Location longitude in degrees.

        Type float

title
    Location title.

        Type str

live_period
    Optional. Period in seconds for which the location can be updated, should be between 60 and 86400.

        Type int

reply_markup
    Optional. Inline keyboard attached to the message.

        Type *telegram.InlineKeyboardMarkup*

input_message_content
    Optional. Content of the message to be sent instead of the location.

        Type *telegram.InputMessageContent*

thumb_url
    Optional. Url of the thumbnail for the result.

> **Type** str

thumb_width
>   Optional. Thumbnail width.

>   **Type** int

thumb_height
>   Optional. Thumbnail height.

>   **Type** int

> **Parameters**
>
>   - **id** (str) – Unique identifier for this result, 1-64 bytes.
>
>   - **latitude** (float) – Location latitude in degrees.
>
>   - **longitude** (float) – Location longitude in degrees.
>
>   - **title** (str) – Location title.
>
>   - **live_period** (int, optional) – Period in seconds for which the location can be updated, should be between 60 and 86400.
>
>   - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.
>
>   - **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the location.
>
>   - **thumb_url** (str, optional) – Url of the thumbnail for the result.
>
>   - **thumb_width** (int, optional) – Thumbnail width.
>
>   - **thumb_height** (int, optional) – Thumbnail height.
>
>   - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultMpeg4Gif

class telegram.**InlineQueryResultMpeg4Gif**(*id*, *mpeg4_url*, *thumb_url*, *mpeg4_width=None*, *mpeg4_height=None*, *title=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *mpeg4_duration=None*, *parse_mode=None*, ***kwargs*)
Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to a video animation (H.264/MPEG-4 AVC video without sound). By default, this animated MPEG-4 file will be sent by the user with optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the animation.

type
>   'mpeg4_gif'.

>   **Type** str

id
>   Unique identifier for this result, 1-64 bytes.

>   **Type** str

mpeg4_url
>   A valid URL for the MP4 file. File size must not exceed 1MB.

>   **Type** str

mpeg4_width
> Optional. Video width.
>
>> **Type** `int`

mpeg4_height
> Optional. Video height.
>
>> **Type** `int`

mpeg4_duration
> Optional. Video duration.
>
>> **Type** `int`

thumb_url
> URL of the static thumbnail (jpeg or gif) for the result.
>
>> **Type** `str`

title
> Optional. Title for the result.
>
>> **Type** `str`

caption
> Optional. Caption, 0-1024 characters
>
>> **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *`telegram.ParseMode`* for the available modes.
>
>> **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.
>
>> **Type** *`telegram.InlineKeyboardMarkup`*

input_message_content
> Optional. Content of the message to be sent instead of the MPEG-4 file.
>
>> **Type** *`telegram.InputMessageContent`*

> **Parameters**
>> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>>
>> - **mpeg4_url** (`str`) – A valid URL for the MP4 file. File size must not exceed 1MB.
>>
>> - **mpeg4_width** (`int`, optional) – Video width.
>>
>> - **mpeg4_height** (`int`, optional) – Video height.
>>
>> - **mpeg4_duration** (`int`, optional) – Video duration.
>>
>> - **thumb_url** (`str`) – URL of the static thumbnail (jpeg or gif) for the result.
>>
>> - **title** (`str`, optional) – Title for the result.
>>
>> - **caption** (`str`, optional) – Caption, 0-1024 characters
>>
>> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *`telegram.ParseMode`* for the available modes.
>>
>> - **reply_markup** (*`telegram.InlineKeyboardMarkup`*, optional) – Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`, optional) –
  Content of the message to be sent instead of the MPEG-4 file.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultPhoto

class telegram.**InlineQueryResultPhoto**(*id*, *photo_url*, *thumb_url*, *photo_width=None*, *photo_height=None*, *title=None*, *description=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a link to a photo. By default, this photo will be sent by the user with optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the photo.

type
    'photo'.

> **Type** str

id
    Unique identifier for this result, 1-64 bytes.

> **Type** str

photo_url
    A valid URL of the photo. Photo must be in jpeg format. Photo size must not exceed 5MB.

> **Type** str

thumb_url
    URL of the thumbnail for the photo.

> **Type** str

photo_width
    Optional. Width of the photo.

> **Type** int

photo_height
    Optional. Height of the photo.

> **Type** int

title
    Optional. Title for the result.

> **Type** str

description
    Optional. Short description of the result.

> **Type** str

caption
    Optional. Caption, 0-1024 characters

> **Type** str

parse_mode
    Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

> **Type** str

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the photo.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (str) – Unique identifier for this result, 1-64 bytes.
>
> - **photo_url** (str) – A valid URL of the photo. Photo must be in jpeg format. Photo size must not exceed 5MB.
>
> - **thumb_url** (str) – URL of the thumbnail for the photo.
>
> - **photo_width** (int, optional) – Width of the photo.
>
> - **photo_height** (int, optional) – Height of the photo.
>
> - **title** (str, optional) – Title for the result.
>
> - **description** (str, optional) – Short description of the result.
>
> - **caption** (str, optional) – Caption, 0-1024 characters
>
> - **parse_mode** (str, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
>
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.
>
> - **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the photo.
>
> - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InlineQueryResultVenue

class telegram.**InlineQueryResultVenue**(*id*, *latitude*, *longitude*, *title*, *address*, *foursquare_id=None*, *foursquare_type=None*, *reply_markup=None*, *input_message_content=None*, *thumb_url=None*, *thumb_width=None*, *thumb_height=None*, ***kwargs*)
> Bases: telegram.inline.inlinequeryresult.InlineQueryResult

Represents a venue. By default, the venue will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the venue.

type
> 'venue'.
>
> > **Type** str

id
> Unique identifier for this result, 1-64 Bytes.
>
> > **Type** str

latitude
> Latitude of the venue location in degrees.
>
> > **Type** float

longitude
Longitude of the venue location in degrees.

> **Type** `float`

title
Title of the venue.

> **Type** `str`

address
Address of the venue.

> **Type** `str`

foursquare_id
Optional. Foursquare identifier of the venue if known.

> **Type** `str`

foursquare_type
Optional. Foursquare type of the venue, if known. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)

> **Type** `str`

reply_markup
Optional. Inline keyboard attached to the message.

> **Type** *`telegram.InlineKeyboardMarkup`*

input_message_content
Optional. Content of the message to be sent instead of the venue.

> **Type** *`telegram.InputMessageContent`*

thumb_url
Optional. Url of the thumbnail for the result.

> **Type** `str`

thumb_width
Optional. Thumbnail width.

> **Type** `int`

thumb_height
Optional. Thumbnail height.

> **Type** `int`

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 Bytes.
> - **latitude** (`float`) – Latitude of the venue location in degrees.
> - **longitude** (`float`) – Longitude of the venue location in degrees.
> - **title** (`str`) – Title of the venue.
> - **address** (`str`) – Address of the venue.
> - **foursquare_id** (`str`, optional) – Foursquare identifier of the venue if known.
> - **foursquare_type** (`str`, optional) – Foursquare type of the venue, if known. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)
> - **reply_markup** (*`telegram.InlineKeyboardMarkup`*, optional) – Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`, optional) –
  Content of the message to be sent instead of the location.

- **thumb_url** (`str`, optional) – Url of the thumbnail for the result.

- **thumb_width** (`int`, optional) – Thumbnail width.

- **thumb_height** (`int`, optional) – Thumbnail height.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultVideo

class telegram.**InlineQueryResultVideo**(*id*, *video_url*, *mime_type*, *thumb_url*, *title*, *caption=None*, *video_width=None*, *video_height=None*, *video_duration=None*, *description=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)

Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a page containing an embedded video player or a video file. By default, this video file will be sent by the user with an optional caption. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the video.

type
    'video'.

> **Type** `str`

id
    Unique identifier for this result, 1-64 bytes.

> **Type** `str`

video_url
    A valid URL for the embedded video player or video file.

> **Type** `str`

mime_type
    Mime type of the content of video url, "text/html" or "video/mp4".

> **Type** `str`

thumb_url
    URL of the thumbnail (jpeg only) for the video.

> **Type** `str`

title
    Title for the result.

> **Type** `str`

caption
    Optional. Caption, 0-1024 characters

> **Type** `str`

parse_mode
    Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in `telegram.ParseMode` for the available modes.

> **Type** `str`

video_width
    Optional. Video width.

> **Type** `int`

video_height
> Optional. Video height.

> > **Type** `int`

video_duration
> Optional. Video duration in seconds.

> > **Type** `int`

description
> Optional. Short description of the result.

> > **Type** `str`

reply_markup
> Optional. Inline keyboard attached to the message.

> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the video.

> > **Type** *telegram.InputMessageContent*

> **Parameters**
> > - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
> >
> > - **video_url** (`str`) – A valid URL for the embedded video player or video file.
> >
> > - **mime_type** (`str`) – Mime type of the content of video url, "text/html" or "video/mp4".
> >
> > - **thumb_url** (`str`) – URL of the thumbnail (jpeg only) for the video.
> >
> > - **title** (`str`) – Title for the result.
> >
> > - **caption** (`str`, optional) – Caption, 0-1024 characters.
> >
> > - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption. See the constants in *telegram.ParseMode* for the available modes.
> >
> > - **video_width** (`int`, optional) – Video width.
> >
> > - **video_height** (`int`, optional) – Video height.
> >
> > - **video_duration** (`int`, optional) – Video duration in seconds.
> >
> > - **description** (`str`, optional) – Short description of the result.
> >
> > - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.
> >
> > - **input_message_content** (*telegram.InputMessageContent*, optional) – Content of the message to be sent instead of the video.
> >
> > - ***kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InlineQueryResultVoice

class telegram.**InlineQueryResultVoice**(*id*, *voice_url*, *title*, *voice_duration=None*, *caption=None*, *reply_markup=None*, *input_message_content=None*, *parse_mode=None*, ***kwargs*)
> Bases: `telegram.inline.inlinequeryresult.InlineQueryResult`

Represents a link to a voice recording in an .ogg container encoded with OPUS. By default, this voice recording will be sent by the user. Alternatively, you can use *input_message_content* to send a message with the specified content instead of the the voice message.

type
> 'voice'.
>
> > **Type** `str`

id
> Unique identifier for this result, 1-64 bytes.
>
> > **Type** `str`

voice_url
> A valid URL for the voice recording.
>
> > **Type** `str`

title
> Voice message title.
>
> > **Type** `str`

caption
> Optional. Caption, 0-1024 characters.
>
> > **Type** `str`

parse_mode
> Optional. Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption.. See the constants in *telegram.ParseMode* for the available modes.
>
> > **Type** `str`

voice_duration
> Optional. Recording duration in seconds.
>
> > **Type** `int`

reply_markup
> Optional. Inline keyboard attached to the message.
>
> > **Type** *telegram.InlineKeyboardMarkup*

input_message_content
> Optional. Content of the message to be sent instead of the voice.
>
> > **Type** *telegram.InputMessageContent*

> **Parameters**
>
> - **id** (`str`) – Unique identifier for this result, 1-64 bytes.
>
> - **voice_url** (`str`) – A valid URL for the voice recording.
>
> - **title** (`str`) – Voice message title.
>
> - **caption** (`str`, optional) – Caption, 0-1024 characters.
>
> - **parse_mode** (`str`, optional) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption.. See the constants in *telegram.ParseMode* for the available modes.
>
> - **voice_duration** (`int`, optional) – Recording duration in seconds.
>
> - **reply_markup** (*telegram.InlineKeyboardMarkup*, optional) – Inline keyboard attached to the message.

- **input_message_content** (`telegram.InputMessageContent`, optional) – Content of the message to be sent instead of the voice.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InputMessageContent

class telegram.**InputMessageContent**

Bases: telegram.base.TelegramObject

Base class for Telegram InputMessageContent Objects.

See: `telegram.InputContactMessageContent`, `telegram.InputLocationMessageContent`, `telegram.InputTextMessageContent` and `telegram.InputVenueMessageContent` for more details.

telegram.InputTextMessageContent

class telegram.**InputTextMessageContent**(*message_text*, *parse_mode=None*, *disable_web_page_preview=None*, ***kwargs*)

Bases: telegram.inline.inputmessagecontent.InputMessageContent

Represents the content of a text message to be sent as the result of an inline query.

message_text

Text of the message to be sent, 1-4096 characters.

> **Type** `str`

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.

> **Type** `str`

disable_web_page_preview

Optional. Disables link previews for links in the sent message.

> **Type** `bool`

Parameters

- **message_text** (`str`) – Text of the message to be sent, 1-4096 characters. Also found as `telegram.constants.MAX_MESSAGE_LENGTH`.

- **parse_mode** (`str`, 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** (`bool`, optional) – Disables link previews for links in the sent message.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InputLocationMessageContent

class telegram.**InputLocationMessageContent**(*latitude*, *longitude*, *live_period=None*, ***kwargs*)

Bases: telegram.inline.inputmessagecontent.InputMessageContent

Represents the content of a location message to be sent as the result of an inline query.

latitude

Latitude of the location in degrees.

> **Type** `float`

> **longitude**
>
> > Longitude of the location in degrees.
> >
> > > **Type** `float`

> **Parameters**
>
> - **latitude** (`float`) – Latitude of the location in degrees.
>
> - **longitude** (`float`) – Longitude of the location in degrees.
>
> - **live_period** (`int`, optional) – Period in seconds for which the location can be updated, should be between 60 and 86400.
>
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.InputVenueMessageContent

class telegram.**InputVenueMessageContent**(*latitude*, *longitude*, *title*, *address*, *foursquare_id=None*, *foursquare_type=None*, ***kwargs*)

> Bases: `telegram.inline.inputmessagecontent.InputMessageContent`
>
> Represents the content of a venue message to be sent as the result of an inline query.

> **latitude**
>
> > Latitude of the location in degrees.
> >
> > > **Type** `float`

> **longitude**
>
> > Longitude of the location in degrees.
> >
> > > **Type** `float`

> **title**
>
> > Name of the venue.
> >
> > > **Type** `str`

> **address**
>
> > Address of the venue.
> >
> > > **Type** `str`

> **foursquare_id**
>
> > Optional. Foursquare identifier of the venue, if known.
> >
> > > **Type** `str`

> **foursquare_type**
>
> > Optional. Foursquare type of the venue, if known. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)
> >
> > > **Type** `str`

> **Parameters**
>
> - **latitude** (`float`) – Latitude of the location in degrees.
>
> - **longitude** (`float`) – Longitude of the location in degrees.
>
> - **title** (`str`) – Name of the venue.
>
> - **address** (`str`) – Address of the venue.
>
> - **foursquare_id** (`str`, optional) – Foursquare identifier of the venue, if known.

- **foursquare_type** (str, optional) – Foursquare type of the venue, if known. (For example, "arts_entertainment/default", "arts_entertainment/aquarium" or "food/icecream".)

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.InputContactMessageContent

class telegram.**InputContactMessageContent**(*phone_number*, *first_name*, *last_name=None*, *vcard=None*, ***kwargs*)

Bases: telegram.inline.inputmessagecontent.InputMessageContent

Represents the content of a contact message to be sent as the result of an inline query.

phone_number
Contact's phone number.

> **Type** str

first_name
Contact's first name.

> **Type** str

last_name
Optional. Contact's last name.

> **Type** str

vcard
Optional. Additional data about the contact in the form of a vCard, 0-2048 bytes.

> **Type** str

Parameters

- **phone_number** (str) – Contact's phone number.

- **first_name** (str) – Contact's first name.

- **last_name** (str, optional) – Contact's last name.

- **vcard** (str, optional) – Additional data about the contact in the form of a vCard, 0-2048 bytes.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.ChosenInlineResult

class telegram.**ChosenInlineResult**(*result_id*, *from_user*, *query*, *location=None*, *inline_message_id=None*, ***kwargs*)

Bases: telegram.base.TelegramObject

Represents a result of an inline query that was chosen by the user and sent to their chat partner.

Note: In Python *from* is a reserved word, use *from_user* instead.

---

result_id
The unique identifier for the result that was chosen.

> **Type** str

from_user
The user that chose the result.

> **Type** *telegram.User*

---

location
> Optional. Sender location.

> > **Type** *telegram.Location*

inline_message_id
> Optional. Identifier of the sent inline message.

> > **Type** str

query
> The query that was used to obtain the result.

> > **Type** str

> **Parameters**
> > - **result_id** (str) – The unique identifier for the result that was chosen.
> >
> > - **from_user** (*telegram.User*) – The user that chose the result.
> >
> > - **location** (*telegram.Location*, optional) – Sender location, only for bots that require user location.
> >
> > - **inline_message_id** (str, optional) – Identifier of the sent inline message. Available only if there is an inline keyboard attached to the message. Will be also received in callback queries and can be used to edit the message.
> >
> > - **query** (str) – The query that was used to obtain the result.
> >
> > - ***kwargs** (dict) – Arbitrary keyword arguments.

3.2.48 Payments

telegram.LabeledPrice

class telegram.**LabeledPrice**(*label*, *amount*, ***kwargs*)
> Bases: telegram.base.TelegramObject

> This object represents a portion of the price for goods or services.

> **label**
> > Portion label.

> > > **Type** str

> **amount**
> > Price of the product in the smallest units of the currency.

> > > **Type** int

> **Parameters**
> > - **label** (str) – Portion label
> >
> > - **amount** (int) – Price of the product in the smallest units of the currency (integer, not float/double). For example, for a price of US$ 1.45 pass amount = 145. See the exp parameter in currencies.json, it shows the number of digits past the decimal point for each currency (2 for the majority of currencies).
> >
> > - ***kwargs** (dict) – Arbitrary keyword arguments.

telegram.Invoice

class telegram.**Invoice**(*title*, *description*, *start_parameter*, *currency*, *total_amount*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object contains basic information about an invoice.

title
Product name.

> **Type** str

description
Product description.

> **Type** str

start_parameter
Unique bot deep-linking parameter.

> **Type** str

currency
Three-letter ISO 4217 currency code.

> **Type** str

total_amount
Total price in the smallest units of the currency.

> **Type** int

Parameters

- **title** (str) – Product name.

- **description** (str) – Product description.

- **start_parameter** (str) – Unique bot deep-linking parameter that can be used to generate this invoice.

- **currency** (str) – Three-letter ISO 4217 currency code.

- **total_amount** (int) – Total price in the smallest units of the currency (integer, not float/double). For example, for a price of US$ 1.45 pass amount = 145.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.ShippingAddress

class telegram.**ShippingAddress**(*country_code*, *state*, *city*, *street_line1*, *street_line2*, *post_code*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object represents a Telegram ShippingAddress.

country_code
ISO 3166-1 alpha-2 country code.

> **Type** str

state
State, if applicable.

> **Type** str

city
City.

> **Type** str

street_line1
    First line for the address.

        Type `str`

street_line2
    Second line for the address.

        Type `str`

post_code
    Address post code.

        Type `str`

    Parameters

- **country_code** (`str`) – ISO 3166-1 alpha-2 country code.
- **state** (`str`) – State, if applicable.
- **city** (`str`) – City.
- **street_line1** (`str`) – First line for the address.
- **street_line2** (`str`) – Second line for the address.
- **post_code** (`str`) – Address post code.
- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.OrderInfo

class telegram.**OrderInfo**(*name=None*, *phone_number=None*, *email=None*, *shipping_address=None*, ***kwargs*)
    Bases: `telegram.base.TelegramObject`

This object represents information about an order.

name
    Optional. User name.

        Type `str`

phone_number
    Optional. User's phone number.

        Type `str`

email
    Optional. User email.

        Type `str`

shipping_address
    Optional. User shipping address.

        Type *telegram.ShippingAddress*

    Parameters

- **name** (`str`, optional) – User name.
- **phone_number** (`str`, optional) – User's phone number.
- **email** (`str`, optional) – User email.
- **shipping_address** (*telegram.ShippingAddress*, optional) – User shipping address.
- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.ShippingOption

class telegram.**ShippingOption**(*id*, *title*, *prices*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object represents one shipping option.

id
Shipping option identifier.

> **Type** str

title
Option title.

> **Type** str

prices
List of price portions.

> **Type** List[*telegram.LabeledPrice*]

> **Parameters**
>
> - **id** (str) – Shipping option identifier.
> - **title** (str) – Option title.
> - **prices** (List[*telegram.LabeledPrice*]) – List of price portions.
> - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.SuccessfulPayment

class telegram.**SuccessfulPayment**(*currency*, *total_amount*, *invoice_payload*, *telegram_payment_charge_id*, *provider_payment_charge_id*, *shipping_option_id=None*, *order_info=None*, ***kwargs*)
Bases: telegram.base.TelegramObject

This object contains basic information about a successful payment.

currency
Three-letter ISO 4217 currency code.

> **Type** str

total_amount
Total price in the smallest units of the currency.

> **Type** int

invoice_payload
Bot specified invoice payload.

> **Type** str

shipping_option_id
Optional. Identifier of the shipping option chosen by the user.

> **Type** str

order_info
Optional. Order info provided by the user.

> **Type** *telegram.OrderInfo*

telegram_payment_charge_id
Telegram payment identifier.

> **Type** str

provider_payment_charge_id
    Provider payment identifier.

        Type `str`

    Parameters

- **currency** (`str`) – Three-letter ISO 4217 currency code.

- **total_amount** (`int`) – Total price in the smallest units of the currency (integer, not float/double). For example, for a price of US$ 1.45 pass amount = 145. See the exp parameter in currencies.json, it shows the number of digits past the decimal point for each currency (2 for the majority of currencies).

- **invoice_payload** (`str`) – Bot specified invoice payload.

- **shipping_option_id** (`str`, optional) – Identifier of the shipping option chosen by the user.

- **order_info** (`telegram.OrderInfo`, optional) – Order info provided by the user

- **telegram_payment_charge_id** (`str`) – Telegram payment identifier.

- **provider_payment_charge_id** (`str`) – Provider payment identifier.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.ShippingQuery

class telegram.**ShippingQuery**(*id*, *from_user*, *invoice_payload*, *shipping_address*, *bot=None*, ***kwargs*)
    Bases: `telegram.base.TelegramObject`

This object contains information about an incoming shipping query.

Note:

- In Python *from* is a reserved word, use *from_user* instead.

---

id
    Unique query identifier.

        Type `str`

from_user
    User who sent the query.

        Type `telegram.User`

invoice_payload
    Bot specified invoice payload.

        Type `str`

shipping_address
    User specified shipping address.

        Type `telegram.ShippingAddress`

bot
    Optional. The Bot to use for instance methods.

        Type `telegram.Bot`

    Parameters

- **id** (`str`) – Unique query identifier.

- **from_user** (`telegram.User`) – User who sent the query.

- **invoice_payload** (`str`) – Bot specified invoice payload.

- **shipping_address** (`telegram.ShippingAddress`) – User specified shipping address.

- **bot** (`telegram.Bot`, optional) – The Bot to use for instance methods.

- ****kwargs** (`dict`) – Arbitrary keyword arguments.

answer(**args*, ***kwargs*)
> Shortcut for:

```
bot.answer_shipping_query(update.shipping_query.id, *args, **kwargs)
```

> Parameters
>
> - **ok** (`bool`) – Specify True if delivery to the specified address is possible and False if there are any problems (for example, if delivery to the specified address is not possible).
>
> - **shipping_options** (List[`telegram.ShippingOption`], optional) – Required if ok is True. A JSON-serialized array of available shipping options.
>
> - **error_message** (`str`, optional) – Required if ok is False. Error message in human readable form that explains why it is impossible to complete the order (e.g. "Sorry, delivery to your desired address is unavailable'). Telegram will display this message to the user.

telegram.PreCheckoutQuery

class telegram.**PreCheckoutQuery**(*id*, *from_user*, *currency*, *total_amount*, *invoice_payload*, *shipping_option_id=None*, *order_info=None*, *bot=None*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`

This object contains information about an incoming pre-checkout query.

Note:

- In Python *from* is a reserved word, use *from_user* instead.

---

id
> Unique query identifier.
>
> > **Type** `str`

from_user
> User who sent the query.
>
> > **Type** `telegram.User`

currency
> Three-letter ISO 4217 currency code.
>
> > **Type** `str`

total_amount
> Total price in the smallest units of the currency.
>
> > **Type** `int`

invoice_payload
> Bot specified invoice payload.

> **Type** `str`

shipping_option_id
> Optional. Identifier of the shipping option chosen by the user.
>
> > **Type** `str`

order_info
> Optional. Order info provided by the user.
>
> > **Type** *telegram.OrderInfo*

bot
> Optional. The Bot to use for instance methods.
>
> > **Type** *telegram.Bot*

> **Parameters**
>
> - **id** (`str`) – Unique query identifier.
> - **from_user** (*telegram.User*) – User who sent the query.
> - **currency** (`str`) – Three-letter ISO 4217 currency code
> - **total_amount** (`int`) – Total price in the smallest units of the currency (integer, not float/double). For example, for a price of US$ 1.45 pass amount = 145. See the exp parameter in currencies.json, it shows the number of digits past the decimal point for each currency (2 for the majority of currencies).
> - **invoice_payload** (`str`) – Bot specified invoice payload.
> - **shipping_option_id** (`str`, optional) – Identifier of the shipping option chosen by the user.
> - **order_info** (*telegram.OrderInfo*, optional) – Order info provided by the user.
> - **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

answer(**args*, ***kwargs*)
> Shortcut for:

```
bot.answer_pre_checkout_query(update.pre_checkout_query.id, *args,
↪**kwargs)
```

> **Parameters**
>
> - **ok** (`bool`) – Specify True if everything is alright (goods are available, etc.) and the bot is ready to proceed with the order. Use False if there are any problems.
> - **error_message** (`str`, optional) – Required if ok is False. Error message in human readable form that explains the reason for failure to proceed with the checkout (e.g. "Sorry, somebody just bought the last of our amazing black T-shirts while you were busy filling out your payment details. Please choose a different color or garment!"). Telegram will display this message to the user.
> - ****kwargs** (`dict`) – Arbitrary keyword arguments.

3.2.49 Games

class telegram.**Game**(*title*, *description*, *photo*, *text=None*, *text_entities=None*, *animation=None*,
                   ***kwargs*)
   Bases: telegram.base.TelegramObject

   This object represents a game. Use BotFather to create and edit games, their short names will act as unique
   identifiers.

   title
      Title of the game.

         Type str

   description
      Description of the game.

         Type str

   photo
      Photo that will be displayed in the game message in chats.

         Type List[*telegram.PhotoSize*]

   text
      Optional. Brief description of the game or high scores included in the game message. Can be auto-
      matically edited to include current high scores for the game when the bot calls set_game_score, or
      manually edited using edit_message_text.

         Type str

   text_entities
      Optional. Special entities that appear in text, such as usernames, URLs, bot commands, etc.

         Type List[*telegram.MessageEntity*]

   animation
      Optional. Animation that will be displayed in the game message in chats. Upload via BotFather.

         Type *telegram.Animation*

      Parameters

         • **title** (str) – Title of the game.

         • **description** (str) – Description of the game.

         • **photo** (List[*telegram.PhotoSize*]) – Photo that will be displayed in the game
           message in chats.

         • **text** (str, optional) – Brief description of the game or high scores included in the
           game message. Can be automatically edited to include current high scores for the game
           when the bot calls set_game_score, or manually edited using edit_message_text. 0-4096
           characters. Also found as telegram.constants.MAX_MESSAGE_LENGTH.

         • **text_entities** (List[*telegram.MessageEntity*], optional) – Special entities
           that appear in text, such as usernames, URLs, bot commands, etc.

         • **animation** (*telegram.Animation*, optional) – Animation that will be displayed
           in the game message in chats. Upload via BotFather.

   parse_text_entities(*types=None*)
      Returns a dict that maps *telegram.MessageEntity* to str. It contains entities from this
      message filtered by their type attribute as the key, and the text that each entity belongs to as the value
      of the dict.

> **Note:** This method should always be used instead of the *text_entities* attribute, since it calculates the correct substring from the message text based on UTF-16 codepoints. See *parse_text_entity* for more info.

> **Parameters** **types** (List[`str`], optional) – List of `MessageEntity` types as strings. If the `type` attribute of an entity is contained in this list, it will be returned. Defaults to *telegram.MessageEntity.ALL_TYPES*.
>
> **Returns** A dictionary of entities mapped to the text that belongs to them, calculated based on UTF-16 codepoints.
>
> **Return type** Dict[*telegram.MessageEntity*, `str`]

parse_text_entity(*entity*)
> Returns the text from a given *telegram.MessageEntity*.

> **Note:** This method is present because Telegram calculates the offset and length in UTF-16 code-point pairs, which some versions of Python don't handle automatically. (That is, you can't just slice `Message.text` with the offset and length.)

> **Parameters** **entity** (*telegram.MessageEntity*) – The entity to extract the text from. It must be an entity that belongs to this message.
>
> **Returns** The text of the given entity.
>
> **Return type** `str`

telegram.Callbackgame

class telegram.**CallbackGame**
> Bases: `telegram.base.TelegramObject`

> A placeholder, currently holds no information. Use BotFather to set up your game.

telegram.GameHighScore

class telegram.**GameHighScore**(*position*, *user*, *score*)
> Bases: `telegram.base.TelegramObject`

> This object represents one row of the high scores table for a game.

position
> Position in high score table for the game.

> **Type** `int`

user
> User.

> **Type** *telegram.User*

score
> Score.

> **Type** `int`

Parameters

- **position** (`int`) – Position in high score table for the game.

- **user** (`telegram.User`) – User.

- **score** (`int`) – Score.

3.2.50 Passport

telegram.PassportElementError

class `telegram.`**`PassportElementError`**(*source*, *type*, *message*, ***kwargs*)

> Bases: `telegram.base.TelegramObject`
>
> Baseclass for the PassportElementError* classes.
>
> **source**
> > Error source.
> >
> > > **Type** `str`
>
> **type**
> > The section of the user's Telegram Passport which has the error.
> >
> > > **Type** `str`
>
> **message**
> > Error message
> >
> > > **Type** `str`
>
> > **Parameters**
> >
> > - **source** (`str`) – Error source.
> >
> > - **type** (`str`) – The section of the user's Telegram Passport which has the error.
> >
> > - ****kwargs** (`dict`) – Arbitrary keyword arguments.

telegram.PassportElementErrorFile

class `telegram.`**`PassportElementErrorFile`**(*type*, *file_hash*, *message*, ***kwargs*)

> Bases: `telegram.passport.passportelementerrors.PassportElementError`
>
> Represents an issue with a document scan. The error is considered resolved when the file with the document scan changes.
>
> **type**
> > The section of the user's Telegram Passport which has the issue, one of "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration".
> >
> > > **Type** `str`
>
> **file_hash**
> > Base64-encoded file hash.
> >
> > > **Type** `str`
>
> **message**
> > Error message.
> >
> > > **Type** `str`
>
> > **Parameters**
> >
> > - **type** (`str`) – The section of the user's Telegram Passport which has the issue, one of "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration".

- **file_hash** (str) – Base64-encoded file hash.

- **message** (str) – Error message.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.PassportElementErrorReverseSide

class telegram.**PassportElementErrorReverseSide**(*type*, *file_hash*, *message*, ***kwargs*)
    Bases: telegram.passport.passportelementerrors.PassportElementError

Represents an issue with the front side of a document. The error is considered resolved when the file with the reverse side of the document changes.

type
    The section of the user's Telegram Passport which has the issue, one of "passport", "driver_license", "identity_card", "internal_passport".

        Type str

file_hash
    Base64-encoded hash of the file with the reverse side of the document.

        Type str

message
    Error message.

        Type str

    Parameters

- **type** (str) – The section of the user's Telegram Passport which has the issue, one of "driver_license", "identity_card".

- **file_hash** (str) – Base64-encoded hash of the file with the reverse side of the document.

- **message** (str) – Error message.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.PassportElementErrorFrontSide

class telegram.**PassportElementErrorFrontSide**(*type*, *file_hash*, *message*, ***kwargs*)
    Bases: telegram.passport.passportelementerrors.PassportElementError

Represents an issue with the front side of a document. The error is considered resolved when the file with the front side of the document changes.

type
    The section of the user's Telegram Passport which has the issue, one of "passport", "driver_license", "identity_card", "internal_passport".

        Type str

file_hash
    Base64-encoded hash of the file with the front side of the document.

        Type str

message
    Error message.

        Type str

    Parameters

- **type** (str) – The section of the user's Telegram Passport which has the issue, one of "passport", "driver_license", "identity_card", "internal_passport".

- **file_hash** (str) – Base64-encoded hash of the file with the front side of the document.

- **message** (str) – Error message.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.PassportElementErrorFiles

class telegram.**PassportElementErrorFiles**(*type*, *file_hashes*, *message*, ***kwargs*)
    Bases: telegram.passport.passportelementerrors.PassportElementError

Represents an issue with a list of scans. The error is considered resolved when the file with the document scan changes.

type
    The section of the user's Telegram Passport which has the issue, one of "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration".

        Type str

file_hash
    Base64-encoded file hash.

        Type str

message
    Error message.

        Type str

    Parameters

- **type** (str) – The section of the user's Telegram Passport which has the issue, one of "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration".

- **file_hashes** (List[str]) – List of base64-encoded file hashes.

- **message** (str) – Error message.

- ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.PassportElementErrorDataField

class telegram.**PassportElementErrorDataField**(*type*, *field_name*, *data_hash*, *message*, ***kwargs*)
    Bases: telegram.passport.passportelementerrors.PassportElementError

Represents an issue in one of the data fields that was provided by the user. The error is considered resolved when the field's value changes.

type
    The section of the user's Telegram Passport which has the error, one of "personal_details", "passport", "driver_license", "identity_card", "internal_passport", "address".

        Type str

field_name
    Name of the data field which has the error.

        Type str

data_hash
>   Base64-encoded data hash.
>
>> **Type** str

message
>   Error message.
>
>> **Type** str

>> **Parameters**
>>
>>   - **type** (str) – The section of the user's Telegram Passport which has the error, one of "personal_details", "passport", "driver_license", "identity_card", "internal_passport", "address".
>>
>>   - **field_name** (str) – Name of the data field which has the error.
>>
>>   - **data_hash** (str) – Base64-encoded data hash.
>>
>>   - **message** (str) – Error message.
>>
>>   - ****kwargs** (dict) – Arbitrary keyword arguments.

telegram.Credentials

class telegram.**Credentials**(*secure_data*, *nonce*, *bot=None*, ***kwargs*)
>   Bases: telegram.base.TelegramObject

secure_data
>   Credentials for encrypted data
>
>> **Type** *telegram.SecureData*

nonce
>   Bot-specified nonce
>
>> **Type** str

telegram.DataCredentials

class telegram.**DataCredentials**(*data_hash*, *secret*, ***kwargs*)
>   Bases: telegram.passport.credentials._CredentialsBase

These credentials can be used to decrypt encrypted data from the data field in EncryptedPassportData.

>   **Parameters**
>
>>   - **data_hash** (str) – Checksum of encrypted data
>>
>>   - **secret** (str) – Secret of encrypted data

hash
>   Checksum of encrypted data
>
>> **Type** str

secret
>   Secret of encrypted data
>
>> **Type** str

class telegram.**SecureData**(*personal_details=None*, *passport=None*, *internal_passport=None*, *driver_license=None*, *identity_card=None*, *address=None*, *utility_bill=None*, *bank_statement=None*, *rental_agreement=None*, *passport_registration=None*, *temporary_registration=None*, *bot=None*, ***kwargs*)

    Bases: telegram.base.TelegramObject

    This object represents the credentials that were used to decrypt the encrypted data. All fields are optional and depend on fields that were requested.

    personal_details
        Credentials for encrypted personal details.

            Type telegram.SecureValue, optional

    passport
        Credentials for encrypted passport.

            Type telegram.SecureValue, optional

    internal_passport
        Credentials for encrypted internal passport.

            Type telegram.SecureValue, optional

    driver_license
        Credentials for encrypted driver license.

            Type telegram.SecureValue, optional

    identity_card
        Credentials for encrypted ID card

            Type telegram.SecureValue, optional

    address
        Credentials for encrypted residential address.

            Type telegram.SecureValue, optional

    utility_bill
        Credentials for encrypted utility bill.

            Type telegram.SecureValue, optional

    bank_statement
        Credentials for encrypted bank statement.

            Type telegram.SecureValue, optional

    rental_agreement
        Credentials for encrypted rental agreement.

            Type telegram.SecureValue, optional

    passport_registration
        Credentials for encrypted registration from internal passport.

            Type telegram.SecureValue, optional

    temporary_registration
        Credentials for encrypted temporary registration.

            Type telegram.SecureValue, optional

telegram.FileCredentials

class telegram.**FileCredentials**(*file_hash*, *secret*, ***kwargs*)
    Bases: `telegram.passport.credentials._CredentialsBase`

These credentials can be used to decrypt encrypted files from the front_side, reverse_side, selfie and files fields in EncryptedPassportData.

> **Parameters**
>
> > • **file_hash** (`str`) – Checksum of encrypted file
> >
> > • **secret** (`str`) – Secret of encrypted file

hash
    Checksum of encrypted file

> **Type** `str`

secret
    Secret of encrypted file

> **Type** `str`

telegram.IdDocumentData

class telegram.**IdDocumentData**(*document_no*, *expiry_date*, *bot=None*, ***kwargs*)
    Bases: `telegram.base.TelegramObject`

This object represents the data of an identity document.

document_no
    Document number.

> **Type** `str`

expiry_date
    Optional. Date of expiry, in DD.MM.YYYY format.

> **Type** `str`

telegram.PersonalDetails

class telegram.**PersonalDetails**(*first_name*, *last_name*, *birth_date*, *gender*, *country_code*, *residence_country_code*, *first_name_native=None*, *last_name_native=None*, *middle_name=None*, *middle_name_native=None*, *bot=None*, ***kwargs*)
    Bases: `telegram.base.TelegramObject`

This object represents personal details.

first_name
    First Name.

> **Type** `str`

middle_name
    Optional. First Name.

> **Type** `str`

last_name
    Last Name.

> **Type** `str`

birth_date
> Date of birth in DD.MM.YYYY format.
>
>> **Type** `str`

gender
> Gender, male or female.
>
>> **Type** `str`

country_code
> Citizenship (ISO 3166-1 alpha-2 country code).
>
>> **Type** `str`

residence_country_code
> Country of residence (ISO 3166-1 alpha-2 country code).
>
>> **Type** `str`

first_name
> First Name in the language of the user's country of residence.
>
>> **Type** `str`

middle_name
> Optional. Middle Name in the language of the user's country of residence.
>
>> **Type** `str`

last_name
> Last Name in the language of the user's country of residence.
>
>> **Type** `str`

telegram.ResidentialAddress

class telegram.**ResidentialAddress**(*street_line1*, *street_line2*, *city*, *state*, *country_code*, *post_code*, *bot=None*, ***kwargs*)
> Bases: `telegram.base.TelegramObject`
>
> This object represents a residential address.

street_line1
> First line for the address.
>
>> **Type** `str`

street_line2
> Optional. Second line for the address.
>
>> **Type** `str`

city
> City.
>
>> **Type** `str`

state
> Optional. State.
>
>> **Type** `str`

country_code
> ISO 3166-1 alpha-2 country code.
>
>> **Type** `str`

post_code
> Address post code.

> **Type** str

telegram.PassportData

class telegram.**PassportData**(*data*, *credentials*, *bot=None*, ***kwargs*)
    Bases: telegram.base.TelegramObject

    Contains information about Telegram Passport data shared with the bot by the user.

    data
        Array with encrypted information about documents and other Telegram Passport elements that was shared with the bot.

        > **Type** List[*telegram.EncryptedPassportElement*]

    credentials
        Encrypted credentials.

        > **Type** *telegram.EncryptedCredentials*

    bot
        The Bot to use for instance methods.

        > **Type** *telegram.Bot*, optional

    Parameters

        • **data** (List[*telegram.EncryptedPassportElement*]) – Array with encrypted information about documents and other Telegram Passport elements that was shared with the bot.

        • **credentials** (str) – Encrypted credentials.

        • **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

        • ****kwargs** (dict) – Arbitrary keyword arguments.

    Note: To be able to decrypt this object, you must pass your private_key to either telegram.Updater or *telegram.Bot*. Decrypted data is then found in *decrypted_data* and the payload can be found in *decrypted_credentials*'s attribute telegram.Credentials.payload.

---

    decrypted_credentials

        Lazily decrypt and return credentials that were used to decrypt the data. This object also contains the user specified payload as *decrypted_data.payload*.

        Raises telegram.TelegramDecryptionError – Decryption failed. Usually due to bad private/public key but can also suggest malformed/tampered data.

        > **Type** *telegram.Credentials*

    decrypted_data

        Lazily decrypt and return information about documents and other Telegram Passport elements which were shared with the bot.

        Raises telegram.TelegramDecryptionError – Decryption failed. Usually due to bad private/public key but can also suggest malformed/tampered data.

        > **Type** List[*telegram.EncryptedPassportElement*]

telegram.PassportFile

class telegram.**PassportFile**(*file_id*, *file_date*, *file_size=None*, *bot=None*, *credentials=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

This object represents a file uploaded to Telegram Passport. Currently all Telegram Passport files are in JPEG format when decrypted and don't exceed 10MB.

file_id
Unique identifier for this file.

> **Type** `str`

file_size
File size.

> **Type** `int`

file_date
Unix time when the file was uploaded.

> **Type** `int`

bot
Optional. The Bot to use for instance methods.

> **Type** *telegram.Bot*

> **Parameters**
> - **file_id** (`str`) – Unique identifier for this file.
> - **file_size** (`int`) – File size.
> - **file_date** (`int`) – Unix time when the file was uploaded.
> - **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.
> - ***kwargs** (`dict`) – Arbitrary keyword arguments.

get_file(*timeout=None*, ***kwargs*)
Wrapper over *telegram.Bot.get_file*. Will automatically assign the correct credentials to the returned *telegram.File* if originating from *telegram.PassportData.decrypted_data*.

> **Parameters**
> - **timeout** (`int` | `float`, optional) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> - ***kwargs** (`dict`) – Arbitrary keyword arguments.

> **Returns** *telegram.File*

> **Raises** `telegram.TelegramError`

telegram.EncryptedPassportElement

class telegram.**EncryptedPassportElement**(*type*, *data=None*, *phone_number=None*, *email=None*, *files=None*, *front_side=None*, *reverse_side=None*, *selfie=None*, *translation=None*, *hash=None*, *bot=None*, *credentials=None*, ***kwargs*)

Bases: `telegram.base.TelegramObject`

Contains information about documents or other Telegram Passport elements shared with the bot by the user. The data has been automatically decrypted by python-telegram-bot.

type
>   Element type. One of "personal_details", "passport", "driver_license", "identity_card", "internal_passport", "address", "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration", "phone_number", "email".
>
>   > **Type** str

data
>   Optional. Decrypted or encrypted data, available for "personal_details", "passport", "driver_license", "identity_card", "identity_passport" and "address" types.
>
>   > **Type** *telegram.PersonalDetails* or telegram.IdDocument or *telegram.ResidentialAddress* or str

phone_number
>   Optional. User's verified phone number, available only for "phone_number" type.
>
>   > **Type** str

email
>   Optional. User's verified email address, available only for "email" type.
>
>   > **Type** str

files
>   Optional. Array of encrypted/decrypted files with documents provided by the user, available for "utility_bill", "bank_statement", "rental_agreement", "passport_registration" and "temporary_registration" types.
>
>   > **Type** List[*telegram.PassportFile*]

front_side
>   Optional. Encrypted/decrypted file with the front side of the document, provided by the user. Available for "passport", "driver_license", "identity_card" and "internal_passport".
>
>   > **Type** *telegram.PassportFile*

reverse_side
>   Optional. Encrypted/decrypted file with the reverse side of the document, provided by the user. Available for "driver_license" and "identity_card".
>
>   > **Type** *telegram.PassportFile*

selfie
>   Optional. Encrypted/decrypted file with the selfie of the user holding a document, provided by the user; available for "passport", "driver_license", "identity_card" and "internal_passport".
>
>   > **Type** *telegram.PassportFile*

translation
>   Optional. Array of encrypted/decrypted files with translated versions of documents provided by the user. Available if requested for "passport", "driver_license", "identity_card", "internal_passport", "utility_bill", "bank_statement", "rental_agreement", "passport_registration" and "temporary_registration" types.
>
>   > **Type** List[*telegram.PassportFile*]

hash
>   Base64-encoded element hash for using in telegram.PassportElementErrorUnspecified.
>
>   > **Type** str

bot
>   Optional. The Bot to use for instance methods.
>
>   > **Type** *telegram.Bot*

Parameters

- **type** (str) – Element type. One of "personal_details", "passport", "driver_license", "identity_card", "internal_passport", "address", "utility_bill", "bank_statement", "rental_agreement", "passport_registration", "temporary_registration", "phone_number", "email".

- **data** (*telegram.PersonalDetails* or telegram.IdDocument or *telegram.ResidentialAddress* or str, optional) – Decrypted or encrypted data, available for "personal_details", "passport", "driver_license", "identity_card", "identity_passport" and "address" types.

- **phone_number** (str, optional) – User's verified phone number, available only for "phone_number" type.

- **email** (str, optional) – User's verified email address, available only for "email" type.

- **files** (List[*telegram.PassportFile*], optional) – Array of encrypted/decrypted files with documents provided by the user, available for "utility_bill", "bank_statement", "rental_agreement", "passport_registration" and "temporary_registration" types.

- **front_side** (*telegram.PassportFile*, optional) – Encrypted/decrypted file with the front side of the document, provided by the user. Available for "passport", "driver_license", "identity_card" and "internal_passport".

- **reverse_side** (*telegram.PassportFile*, optional) – Encrypted/decrypted file with the reverse side of the document, provided by the user. Available for "driver_license" and "identity_card".

- **selfie** (*telegram.PassportFile*, optional) – Encrypted/decrypted file with the selfie of the user holding a document, provided by the user; available for "passport", "driver_license", "identity_card" and "internal_passport".

- **translation** (List[*telegram.PassportFile*], optional) – Array of encrypted/decrypted files with translated versions of documents provided by the user. Available if requested for "passport", "driver_license", "identity_card", "internal_passport", "utility_bill", "bank_statement", "rental_agreement", "passport_registration" and "temporary_registration" types.

- **hash** (str) – Base64-encoded element hash for using in telegram.PassportElementErrorUnspecified.

- **bot** (*telegram.Bot*, optional) – The Bot to use for instance methods.

- ****kwargs** (dict) – Arbitrary keyword arguments.

Note: This object is decrypted only when originating from *telegram.PassportData.decrypted_data*.

---

telegram.EncryptedCredentials

class telegram.**EncryptedCredentials**(*data*, *hash*, *secret*, *bot=None*, ***kwargs*)
> Bases: telegram.base.TelegramObject

> Contains data required for decrypting and authenticating EncryptedPassportElement. See the Telegram Passport Documentation for a complete description of the data decryption and authentication processes.

> **data**
>> Decrypted data with unique user's nonce, data hashes and secrets used for EncryptedPassportElement decryption and authentication or base64 encrypted data.
>>
>> **Type** *telegram.Credentials* or str

hash
>   Base64-encoded data hash for data authentication.

>   **Type** `str`

secret
>   Decrypted or encrypted secret used for decryption.

>   **Type** `str`

>   **Parameters**

>   • **data** (`telegram.Credentials` or `str`) – Decrypted data with unique user's nonce, data hashes and secrets used for EncryptedPassportElement decryption and authentication or base64 encrypted data.

>   • **hash** (`str`) – Base64-encoded data hash for data authentication.

>   • **secret** (`str`) – Decrypted or encrypted secret used for decryption.

>   • ****kwargs** (`dict`) – Arbitrary keyword arguments.

> **Note:** This object is decrypted only when originating from `telegram.PassportData.decrypted_credentials`.

---

decrypted_data

> **Lazily decrypt and return credentials data. This object** also contains the user specified nonce as *decrypted_data.nonce*.

>   **Raises** `telegram.TelegramDecryptionError` – Decryption failed. Usually due to bad private/public key but can also suggest malformed/tampered data.

>   **Type** `telegram.Credentials`

decrypted_secret
>   Lazily decrypt and return secret.

>   **Raises** `telegram.TelegramDecryptionError` – Decryption failed. Usually due to bad private/public key but can also suggest malformed/tampered data.

>   **Type** `str`

3.3 telegram.utils package

3.3.1 telegram.utils.helpers Module

This module contains helper functions.

telegram.utils.helpers.**create_deep_linked_url**(*bot_username*, *payload=None*, *group=False*)
>   Creates a deep-linked URL for this `bot_username` with the specified `payload`. See https://core.telegram.org/bots#deep-linking to learn more.

>   The `payload` may consist of the following characters: `A-Z, a-z, 0-9, _, -`

> **Note:** Works well in conjunction with `CommandHandler("start", callback, filters = Filters.regex('payload'))`

Examples

```
create_deep_linked_url(bot.get_me().username, "some-params")
```

> **Parameters**
>
> - **bot_username** (`str`) – The username to link to
>
> - **payload** (`str`, optional) – Parameters to encode in the created URL
>
> - **group** (`bool`, optional) – If *True* the user is prompted to select a group to add the bot to. If *False*, opens a one-on-one conversation with the bot. Defaults to *False*.
>
> **Returns** An URL to start the bot with specific parameters
>
> **Return type** `str`

telegram.utils.helpers.**decode_conversations_from_json**(*json_string*)

> Helper method to decode a conversations dict (that uses tuples as keys) from a JSON-string created with `_encode_conversations_to_json`.
>
> > **Parameters** **json_string** (`str`) – The conversations dict as JSON string.
> >
> > **Returns** The conversations dict after decoding
> >
> > **Return type** `dict`

telegram.utils.helpers.**decode_user_chat_data_from_json**(*data*)

> Helper method to decode chat or user data (that uses ints as keys) from a JSON-string.
>
> > **Parameters** **data** (`str`) – The user/chat_data dict as JSON string.
> >
> > **Returns** The user/chat_data defaultdict after decoding
> >
> > **Return type** `dict`

telegram.utils.helpers.**effective_message_type**(*entity*)

> Extracts the type of message as a string identifier from a *telegram.Message* or a *telegram.Update*.
>
> > **Parameters** **entity** (`Update|Message`) –
> >
> > **Returns** One of `Message.MESSAGE_TYPES`
> >
> > **Return type** str

telegram.utils.helpers.**enocde_conversations_to_json**(*conversations*)

> Helper method to encode a conversations dict (that uses tuples as keys) to a JSON-serializable way. Use `_decode_conversations_from_json` to decode.
>
> > **Parameters** **conversations** (`dict`) – The conversations dict to transofrm to JSON.
> >
> > **Returns** The JSON-serialized conversations dict
> >
> > **Return type** `str`

telegram.utils.helpers.**escape_markdown**(*text*)

> Helper function to escape telegram markup symbols.

telegram.utils.helpers.**from_timestamp**(*unixtime*)

> > **Parameters** **unixtime** (*int*) –
> >
> > **Returns**
> >
> > **Return type** datetime.datetime

telegram.utils.helpers.**get_signal_name**(*signum*)

> Returns the signal name of the given signal number.

telegram.utils.helpers.**mention_html**(*user_id*, *name*)

> **Parameters**
>
> > - **user_id** (`int`) –
> >
> > - **name** (`str`) –
>
> **Returns** The inline mention for the user as html.
>
> **Return type** `str`

telegram.utils.helpers.**mention_markdown**(*user_id*, *name*)

> **Parameters**
>
> > - **user_id** (`int`) –
> >
> > - **name** (`str`) –
>
> **Returns** The inline mention for the user as markdown.
>
> **Return type** `str`

telegram.utils.helpers.**to_timestamp**(*dt_obj*)

> **Parameters** **dt_obj** (`datetime.datetime`) –
>
> **Returns**
>
> **Return type** `int`

3.3.2 telegram.utils.promise.Promise

class telegram.utils.promise.**Promise**(*pooled_function*, *args*, *kwargs*)

> Bases: `object`
>
> A simple Promise implementation for use with the run_async decorator, DelayQueue etc.
>
> > **Parameters**
> >
> > > - **pooled_function** (`callable`) – The callable that will be called concurrently.
> > >
> > > - **args** (`list | tuple`) – Positional arguments for *pooled_function*.
> > >
> > > - **kwargs** (`dict`) – Keyword arguments for *pooled_function*.
>
> **pooled_function**
> > The callable that will be called concurrently.
> >
> > > **Type** `callable`
>
> **args**
> > Positional arguments for *pooled_function*.
> >
> > > **Type** `list | tuple`
>
> **kwargs**
> > Keyword arguments for *pooled_function*.
> >
> > > **Type** `dict`
>
> **done**
> > Is set when the result is available.
> >
> > > **Type** `threading.Event`
>
> **exception**
> > The exception raised by *pooled_function* or `None` if no exception has been raised (yet).
>
> **result**(*timeout=None*)
> > Return the result of the `Promise`.

> **Parameters** **timeout** (`float`, optional) – Maximum time in seconds to wait for the result to be calculated. `None` means indefinite. Default is `None`.
>
> **Returns** Returns the return value of *pooled_function* or `None` if the `timeout` expires.
>
> **Raises** Any exception raised by *pooled_function*.

run()
> Calls the *pooled_function* callable.

3.3.3 telegram.utils.request.Request

class telegram.utils.request.**Request**(*con_pool_size=1*, *proxy_url=None*, *urllib3_proxy_kwargs=None*, *connect_timeout=5.0*, *read_timeout=5.0*)

Bases: `object`

Helper class for python-telegram-bot which provides methods to perform POST & GET towards telegram servers.

> **Parameters**
>
> - **con_pool_size** (*int*) – Number of connections to keep in the connection pool.
> - **proxy_url** (*str*) – The URL to the proxy server. For example: *http://127.0.0.1:3128*.
> - **urllib3_proxy_kwargs** (*dict*) – Arbitrary arguments passed as-is to *urllib3.ProxyManager*. This value will be ignored if proxy_url is not set.
> - **connect_timeout** (*int* | *float*) – The maximum amount of time (in seconds) to wait for a connection attempt to a server to succeed. None will set an infinite timeout for connection attempts. (default: 5.)
> - **read_timeout** (*int* | *float*) – The maximum amount of time (in seconds) to wait between consecutive read operations for a response from the server. None will set an infinite timeout. This value is usually overridden by the various `telegram.Bot` methods. (default: 5.)

con_pool_size
> The size of the connection pool used.

download(*url*, *filename*, *timeout=None*)
> Download a file by its URL.
>
> > **Parameters**
> >
> > - **url** (*str*) – The web location we want to retrieve.
> > - **timeout** – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

get(*url*, *timeout=None*)
> Request an URL.
>
> > **Parameters**
> >
> > - **url** (`str`) – The web location we want to retrieve.
> > - **timeout** (`int` | `float`) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
> >
> > **Returns** A JSON object.

post(*url*, *data*, *timeout=None*)
> Request an URL.

> **Parameters**
>
> - **url** (`str`) – The web location we want to retrieve.
>
> - **data** (`dict[str, str|int]`) – A dict of key/value pairs. Note: On py2.7 value is unicode.
>
> - **timeout** (`int|float`) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).
>
> **Returns** A JSON object.

retrieve(*url*, *timeout=None*)
> Retrieve the contents of a file by its URL.
>
> **Parameters**
>
> - **url** (`str`) – The web location we want to retrieve.
>
> - **timeout** (`int|float`) – If this value is specified, use it as the read timeout from the server (instead of the one specified during creation of the connection pool).

3.4 Changelog

3.4.1 Changelog

Version 12.2.0

New features:

- Nested ConversationHandlers (#1512).

Minor changes, CI improvments or bug fixes:

- Fix CI failures due to non-backward compat attrs depndency (#1540).

- travis.yaml: TEST_OFFICIAL removed from allowed_failures.

- Fix typos in examples (#1537).

- Fix Bot.to_dict to use proper first_name (#1525).

- Refactor `test_commandhandler.py` (#1408).

- Add Python 3.8 (RC version) to Travis testing matrix (#1543).

- test_bot.py: Add to_dict test (#1544).

- Flake config moved into setup.cfg (#1546).

Version 12.1.1

Released 2019-09-18

Hot fix release

Fixed regression in the vendored urllib3 (#1517).

Version 12.1.0

Released 2019-09-13

Major changes:

- Bot API 4.4 support (#1464, #1510)

- Add *get_file* method to *Animation* & *ChatPhoto*. Add, *get_small_file* & *get_big_file* methods to *ChatPhoto* (#1489)

- Tools for deep linking (#1049)

Minor changes and/or bug fixes:

- Documentation fixes (#1500, #1499)

- Improved examples (#1502)

Version 12.0.0

Released 2019-08-29

Well. . . This felt like decades. But here we are with a new release.

Expect minor releases soon (mainly complete Bot API 4.4 support)

Major and/or breaking changes:

- Context based callbacks

- Persistence

- PrefixHandler added (Handler overhaul)

- Deprecation of RegexHandler and edited_messages, channel_post, etc. arguments (Filter overhaul)

- Various ConversationHandler changes and fixes

- Bot API 4.1, 4.2, 4.3 support

- Python 3.4 is no longer supported

- Error Handler now handles all types of exceptions (#1485)

- Return UTC from from_timestamp() (#1485)

See the wiki page at https://git.io/fxJuV for a detailed guide on how to migrate from version 11 to version 12.

Context based callbacks (#1100)

- Use of `pass_` in handlers is deprecated.

- Instead use `use_context=True` on `Updater` or `Dispatcher` and change callback from (bot, update, others. . .) to (update, context).

- This also applies to error handlers `Dispatcher.add_error_handler` and JobQueue jobs (change (bot, job) to (context) here).

- For users with custom handlers subclassing Handler, this is mostly backwards compatible, but to use the new context based callbacks you need to implement the new collect_additional_context method.

- Passing bot to `JobQueue.__init__` is deprecated. Use JobQueue.set_dispatcher with a dispatcher instead.

- Dispatcher makes sure to use a single *CallbackContext* for a entire update. This means that if an update is handled by multiple handlers (by using the group argument), you can add custom arguments to the *Callback-Context* in a lower group handler and use it in higher group handler. NOTE: Never use with @run_async, see docs for more info. (#1283)

- If you have custom handlers they will need to be updated to support the changes in this release.

- Update all examples to use context based callbacks.

Persistence (#1017)

- Added PicklePersistence and DictPersistence for adding persistence to your bots.

- BasePersistence can be subclassed for all your persistence needs.

- Add a new example that shows a persistent ConversationHandler bot

Handler overhaul (#1114)

- CommandHandler now only triggers on actual commands as defined by telegram servers (everything that the clients mark as a tabable link).

- PrefixHandler can be used if you need to trigger on prefixes (like all messages starting with a "/" (old CommandHandler behaviour) or even custom prefixes like "#" or "!").

Filter overhaul (#1221)

- RegexHandler is deprecated and should be replaced with a MessageHandler with a regex filter.

- Use update filters to filter update types instead of arguments (message_updates, channel_post_updates and edited_updates) on the handlers.

- Completely remove allow_edited argument - it has been deprecated for a while.

- data_filters now exist which allows filters that return data into the callback function. This is how the regex filter is implemented.

- All this means that it no longer possible to use a list of filters in a handler. Use bitwise operators instead!

ConversationHandler

- Remove `run_async_timeout` and `timed_out_behavior` arguments (#1344)

- Replace with `WAITING` constant and behavior from states (#1344)

- Only emit one warning for multiple CallbackQueryHandlers in a ConversationHandler (#1319)

- Use warnings.warn for ConversationHandler warnings (#1343)

- Fix unresolvable promises (#1270)

Bug fixes & improvements

- Handlers should be faster due to deduped logic.

- Avoid compiling compiled regex in regex filter. (#1314)

- Add missing `left_chat_member` to Message.MESSAGE_TYPES (#1336)

- Make custom timeouts actually work properly (#1330)

- Add convenience classmethods (from_button, from_row and from_column) to InlineKeyboardMarkup

- Small typo fix in setup.py (#1306)

- Add Conflict error (HTTP error code 409) (#1154)

- Change MAX_CAPTION_LENGTH to 1024 (#1262)

- Remove some unnecessary clauses (#1247, #1239)

- Allow filenames without dots in them when sending files (#1228)

- Fix uploading files with unicode filenames (#1214)

- Replace http.server with Tornado (#1191)

- Allow SOCKSConnection to parse username and password from URL (#1211)

- Fix for arguments in passport/data.py (#1213)

- Improve message entity parsing by adding text_mention (#1206)

- Documentation fixes (#1348, #1397, #1436)

- Merged filters short-circuit (#1350)

- Fix webhook listen with tornado (#1383)

- Call task_done() on update queue after update processing finished (#1428)

- Fix send_location() - latitude may be 0 (#1437)

- Make MessageEntity objects comparable (#1465)

- Add prefix to thread names (#1358)

Buf fixes since v12.0.0b1

- Fix setting bot on ShippingQuery (#1355)

- Fix _trigger_timeout() missing 1 required positional argument: 'job' (#1367)

- Add missing message.text check in PrefixHandler check_update (#1375)

- Make updates persist even on DispatcherHandlerStop (#1463)

- Dispatcher force updating persistence object's chat data attribute(#1462)

Internal improvements

- Finally fix our CI builds mostly (too many commits and PRs to list)

- Use multiple bots for CI to improve testing times significantly.

- Allow pypy to fail in CI.

- Remove the last CamelCase CheckUpdate methods from the handlers we missed earlier.

- test_official is now executed in a different job

Version 11.1.0

Released 2018-09-01

Fixes and updates for Telegram Passport: (#1198)

- Fix passport decryption failing at random times

- Added support for middle names.

- Added support for translations for documents

- Add errors for translations for documents

- Added support for requesting names in the language of the user's country of residence

- Replaced the payload parameter with the new parameter nonce

- Add hash to EncryptedPassportElement

Version 11.0.0

Released 2018-08-29

Fully support Bot API version 4.0! (also some bugfixes :))

Telegram Passport (#1174):

- **Add full support for telegram passport.**
    - New types: PassportData, PassportFile, EncryptedPassportElement, EncryptedCredentials, PassportElementError, PassportElementErrorDataField, PassportElementErrorFrontSide, PassportElementErrorReverseSide, PassportElementErrorSelfie, PassportElementErrorFile and PassportElementErrorFiles.
    - New bot method: set_passport_data_errors
    - New filter: Filters.passport_data
    - Field passport_data field on Message
    - PassportData can be easily decrypted.
    - PassportFiles are automatically decrypted if originating from decrypted PassportData.
- See new passportbot.py example for details on how to use, or go to our telegram passport wiki page for more info
- NOTE: Passport decryption requires new dependency *cryptography*.

Inputfile rework (#1184):

- Change how Inputfile is handled internally
- This allows support for specifying the thumbnails of photos and videos using the thumb= argument in the different send_ methods.
- Also allows Bot.send_media_group to actually finally send more than one media.
- Add thumb to Audio, Video and Videonote
- Add Bot.edit_message_media together with InputMediaAnimation, InputMediaAudio, and inputMediaDocument.

Other Bot API 4.0 changes:

- Add forusquare_type to Venue, InlineQueryResultVenue, InputVenueMessageContent, and Bot.send_venue. (#1170)
- Add vCard support by adding vcard field to Contact, InlineQueryResultContact, InputContactMessageContent, and Bot.send_contact. (#1166)
- **Support new message entities: CASHTAG and PHONE_NUMBER. (#1179)**
    - Cashtag seems to be things like *$USD* and *$GBP*, but it seems telegram doesn't currently send them to bots.
    - Phone number also seems to have limited support for now
- Add Bot.send_animation, add width, height, and duration to Animation, and add Filters.animation. (#1172)

Non Bot API 4.0 changes:

- Minor integer comparison fix (#1147)
- Fix Filters.regex failing on non-text message (#1158)
- Fix ProcessLookupError if process finishes before we kill it (#1126)
- Add t.me links for User, Chat and Message if available and update User.mention_* (#1092)
- Fix mention_markdown/html on py2 (#1112)

Version 10.1.0

Released 2018-05-02

Fixes changing previous behaviour:

- Add urllib3 fix for socks5h support ([#1085](#))
- Fix send_sticker() timeout=20 ([#1088](#))

Fixes:

- Add a caption_entity filter for filtering caption entities ([#1068](#))
- Inputfile encode filenames ([#1086](#))
- InputFile: Fix proper naming of file when reading from subprocess.PIPE ([#1079](#))
- Remove pytest-catchlog from requirements ([#1099](#))
- Documentation fixes ([#1061](#), [#1078](#), [#1081](#), [#1096](#))

Version 10.0.2

Released 2018-04-17

Important fix:

- Handle utf8 decoding errors ([#1076](#))

New features:

- Added Filter.regex ([#1028](#))
- Filters for Category and file types ([#1046](#))
- Added video note filter ([#1067](#))

Fixes:

- Fix in telegram.Message ([#1042](#))
- Make chat_id a positional argument inside shortcut methods of Chat and User classes ([#1050](#))
- Make Bot.full_name return a unicode object. ([#1063](#))
- CommandHandler faster check ([#1074](#))
- Correct documentation of Dispatcher.add_handler ([#1071](#))
- Various small fixes to documentation.

Version 10.0.1

Released 2018-03-05

Fixes:

- Fix conversationhandler timeout (PR [#1032](#))
- Add missing docs utils (PR [#912](#))

Version 10.0.0

Released 2018-03-02

Non backward compatabile changes and changed defaults

- JobQueue: Remove deprecated prevent_autostart & put() (PR [#1012](#))

- Bot, Updater: Remove deprecated network_delay (PR #1012)

- Remove deprecated Message.new_chat_member (PR #1012)

- Retry bootstrap phase indefinitely (by default) on network errors (PR #1018)

New Features

- Support v3.6 API (PR #1006)

- User.full_name convinience property (PR #949)

- Add *send_phone_number_to_provider* and *send_email_to_provider* arguments to send_invoice (PR #986)

- Bot: Add shortcut methods reply_{markdown,html} (PR #827)

- Bot: Add shortcut method reply_media_group (PR #994)

- Added utils.helpers.effective_message_type (PR #826)

- Bot.get_file now allows passing a file in addition to file_id (PR #963)

- Add .get_file() to Audio, Document, PhotoSize, Sticker, Video, VideoNote and Voice (PR #963)

- Add .send_*() methods to User and Chat (PR #963)

- Get jobs by name (PR #1011)

- Add Message caption html/markdown methods (PR #1013)

- File.download_as_bytearray - new method to get a d/led file as bytearray (PR #1019)

- File.download(): Now returns a meaningful return value (PR #1019)

- Added conversation timeout in ConversationHandler (PR #895)

Changes

- Store bot in PreCheckoutQuery (PR #953)

- Updater: Issue INFO log upon received signal (PR #951)

- JobQueue: Thread safety fixes (PR #977)

- WebhookHandler: Fix exception thrown during error handling (PR #985)

- Explicitly check update.effective_chat in ConversationHandler.check_update (PR #959)

- Updater: Better handling of timeouts during get_updates (PR #1007)

- Remove unnecessary to_dict() (PR #834)

- CommandHandler - ignore strings in entities and "/" followed by whitespace (PR #1020)

- Documentation & style fixes (PR #942, PR #956, PR #962, PR #980, PR #983)

Version 9.0.0

Released 2017-12-08

Breaking changes (possibly)

- Drop support for python 3.3 (PR #930)

New Features

- Support Bot API 3.5 (PR #920)

Changes

- Fix race condition in dispatcher start/stop (#887)

- Log error trace if there is no error handler registered (#694)

- Update examples with consistent string formatting (#870)

- Various changes and improvements to the docs.

Version 8.1.1

Released 2017-10-15

- Fix Commandhandler crashing on single character messages (PR #873).

Version 8.1.0

Released 2017-10-14

New features - Support Bot API 3.4 (PR #865).

Changes - MessageHandler & RegexHandler now consider channel_updates. - Fix command not recognized if it is directly followed by a newline (PR #869). - Removed Bot._message_wrapper (PR #822). - Unitests are now also running on AppVeyor (Windows VM). - Various unitest improvements. - Documentation fixes.

Version 8.0.0

Released 2017-09-01

New features

- Fully support Bot Api 3.3 (PR #806).
- DispatcherHandlerStop (see docs).
- Regression fix for text_html & text_markdown (PR #777).
- Added effective_attachment to message (PR #766).

Non backward compatible changes

- Removed Botan support from the library (PR #776).
- Fully support Bot Api 3.3 (PR #806).
- Remove de_json() (PR #789).

Changes

- Sane defaults for tcp socket options on linux (PR #754).
- Add RESTRICTED as constant to ChatMember (PR #761).
- Add rich comparison to CallbackQuery (PR #764).
- Fix get_game_high_scores (PR #771).
- Warn on small con_pool_size during custom initalization of Updater (PR #793).
- Catch exceptions in error handlerfor errors that happen during polling (PR #810).
- For testing we switched to pytest (PR #788).
- Lots of small improvements to our tests and documentation.

Version 7.0.1

Released 2017-07-28

- Fix TypeError exception in RegexHandler (PR #751).
- Small documentation fix (PR #749).

Version 7.0.0

Released 2017-07-25

- Fully support Bot API 3.2.
- New filters for handling messages from specific chat/user id (PR #677).
- Add the possibility to add objects as arguments to send_* methods (PR #742).
- Fixed download of URLs with UTF-8 chars in path (PR #688).
- Fixed URL parsing for `Message` text properties (PR #689).
- Fixed args dispatching in `MessageQueue`'s decorator (PR #705).
- Fixed regression preventing IPv6 only hosts from connnecting to Telegram servers (Issue #720).
- ConvesationHandler - check if a user exist before using it (PR #699).
- Removed deprecated `telegram.Emoji`.
- Removed deprecated `Botan` import from `utils` (`Botan` is still available through `contrib`).
- Removed deprecated `ReplyKeyboardHide`.
- Removed deprecated `edit_message` argument of `bot.set_game_score`.
- Internal restructure of files.
- Improved documentation.
- Improved unitests.

Pre-version 7.0

2017-06-18

Released 6.1.0

- Fully support Bot API 3.0
- Add more fine-grained filters for status updates
- Bug fixes and other improvements

2017-05-29

Released 6.0.3

- Faulty PyPI release

2017-05-29

Released 6.0.2

- Avoid confusion with user's `urllib3` by renaming vendored `urllib3` to `ptb_urllib3`

2017-05-19

Released 6.0.1

- Add support for `User.language_code`
- Fix `Message.text_html` and `Message.text_markdown` for messages with emoji

2017-05-19

Released 6.0.0

- Add support for Bot API 2.3.1
- Add support for `deleteMessage` API method

- New, simpler API for `JobQueue` - https://github.com/python-telegram-bot/python-telegram-bot/pull/484
- Download files into file-like objects - https://github.com/python-telegram-bot/python-telegram-bot/pull/459
- Use vendor `urllib3` to address issues with timeouts - The default timeout for messages is now 5 seconds. For sending media, the default timeout is now 20 seconds.
- String attributes that are not set are now `None` by default, instead of empty strings
- Add `text_markdown` and `text_html` properties to `Message` - https://github.com/python-telegram-bot/python-telegram-bot/pull/507
- Add support for Socks5 proxy - https://github.com/python-telegram-bot/python-telegram-bot/pull/518
- Add support for filters in `CommandHandler` - https://github.com/python-telegram-bot/python-telegram-bot/pull/536
- Add the ability to invert (not) filters - https://github.com/python-telegram-bot/python-telegram-bot/pull/552
- Add `Filters.group` and `Filters.private`
- Compatibility with GAE via `urllib3.contrib` package - https://github.com/python-telegram-bot/python-telegram-bot/pull/583
- Add equality rich comparision operators to telegram objects - https://github.com/python-telegram-bot/python-telegram-bot/pull/604
- Several bugfixes and other improvements
- Remove some deprecated code

2017-04-17

Released 5.3.1

- Hotfix release due to bug introduced by urllib3 version 1.21

2016-12-11

Released 5.3

- Implement API changes of November 21st (Bot API 2.3)
- `JobQueue` now supports `datetime.timedelta` in addition to seconds
- `JobQueue` now supports running jobs only on certain days
- New `Filters.reply` filter
- Bugfix for `Message.edit_reply_markup`
- Other bugfixes

2016-10-25

Released 5.2

- Implement API changes of October 3rd (games update)
- Add `Message.edit_*` methods
- Filters for the `MessageHandler` can now be combined using bitwise operators (`&` and `|`)
- Add a way to save user- and chat-related data temporarily
- Other bugfixes and improvements

2016-09-24

Released 5.1

- Drop Python 2.6 support
- Deprecate `telegram.Emoji`

- Use `ujson` if available
- Add instance methods to `Message`, `Chat`, `User`, `InlineQuery` and `CallbackQuery`
- RegEx filtering for `CallbackQueryHandler` and `InlineQueryHandler`
- New `MessageHandler` filters: `forwarded` and `entity`
- Add `Message.get_entity` to correctly handle UTF-16 codepoints and `MessageEntity` offsets
- Fix bug in `ConversationHandler` when first handler ends the conversation
- Allow multiple `Dispatcher` instances
- Add `ChatMigrated` Exception
- Properly split and handle arguments in `CommandHandler`

2016-07-15

Released 5.0

- Rework `JobQueue`
- Introduce `ConversationHandler`
- Introduce `telegram.constants` - https://github.com/python-telegram-bot/python-telegram-bot/pull/342

2016-07-12

Released 4.3.4

- Fix proxy support with `urllib3` when proxy requires auth

2016-07-08

Released 4.3.3

- Fix proxy support with `urllib3`

2016-07-04

Released 4.3.2

- Fix: Use `timeout` parameter in all API methods

2016-06-29

Released 4.3.1

- Update wrong requirement: `urllib3>=1.10`

2016-06-28

Released 4.3

- Use `urllib3.PoolManager` for connection re-use
- Rewrite `run_async` decorator to re-use threads
- New requirements: `urllib3` and `certifi`

2016-06-10

Released 4.2.1

- Fix `CallbackQuery.to_dict()` bug (thanks to @jlmadurga)
- Fix `editMessageText` exception when receiving a `CallbackQuery`

2016-05-28

Released 4.2

- Implement Bot API 2.1

- Move `botan` module to `telegram.contrib`
- New exception type: `BadRequest`

2016-05-22

Released 4.1.2

- Fix `MessageEntity` decoding with Bot API 2.1 changes

2016-05-16

Released 4.1.1

- Fix deprecation warning in `Dispatcher`

2016-05-15

Released 4.1

- Implement API changes from May 6, 2016
- Fix bug when `start_polling` with `clean=True`
- Methods now have snake_case equivalent, for example `telegram.Bot.send_message` is the same as `telegram.Bot.sendMessage`

2016-05-01

Released 4.0.3

- Add missing attribute `location` to `InlineQuery`

2016-04-29

Released 4.0.2

- Bugfixes
- `KeyboardReplyMarkup` now accepts `str` again

2016-04-27

Released 4.0.1

- Implement Bot API 2.0
- Almost complete recode of `Dispatcher`
- Please read the [Transition Guide to 4.0](#)
- **Changes from 4.0rc1**
    - The syntax of filters for `MessageHandler` (upper/lower cases)
    - Handler groups are now identified by `int` only, and ordered
- **Note:** v4.0 has been skipped due to a PyPI accident

2016-04-22

Released 4.0rc1

- Implement Bot API 2.0
- Almost complete recode of `Dispatcher`
- Please read the [Transistion Guide to 4.0](#)

2016-03-22

Released 3.4

- Move `Updater`, `Dispatcher` and `JobQueue` to new `telegram.ext` submodule (thanks to @rahiel)
- Add `disable_notification` parameter (thanks to @aidarbiktimirov)

- Fix bug where commands sent by Telegram Web would not be recognized (thanks to @shelomentsevd)

- Add option to skip old updates on bot startup

- Send files from `BufferedReader`

2016-02-28

Released 3.3

- Inline bots

- Send any file by URL

- Specialized exceptions: `Unauthorized`, `InvalidToken`, `NetworkError` and `TimedOut`

- Integration for botan.io (thanks to @ollmer)

- HTML Parsemode (thanks to @jlmadurga)

- Bugfixes and under-the-hood improvements

Very special thanks to Noam Meltzer (@tsnoam) for all of his work!

2016-01-09

Released 3.3b1

- Implement inline bots (beta)

2016-01-05

Released 3.2.0

- Introducing `JobQueue` (original author: @franciscod)

- Streamlining all exceptions to `TelegramError` (Special thanks to @tsnoam)

- Proper locking of `Updater` and `Dispatcher` `start` and `stop` methods

- Small bugfixes

2015-12-29

Released 3.1.2

- Fix custom path for file downloads

- Don't stop the dispatcher thread on uncaught errors in handlers

2015-12-21

Released 3.1.1

- Fix a bug where asynchronous handlers could not have additional arguments

- Add `groups` and `groupdict` as additional arguments for regex-based handlers

2015-12-16

Released 3.1.0

- The `chat`-field in `Message` is now of type `Chat`. (API update Oct 8 2015)

- `Message` now contains the optional fields `supergroup_chat_created`, `migrate_to_chat_id`, `migrate_from_chat_id` and `channel_chat_created`. (API update Nov 2015)

2015-12-08

Released 3.0.0

- Introducing the `Updater` and `Dispatcher` classes

2015-11-11

Released 2.9.2

- Error handling on request timeouts has been improved

2015-11-10

Released 2.9.1

- Add parameter `network_delay` to Bot.getUpdates for slow connections

2015-11-10

Released 2.9

- Emoji class now uses `bytes_to_native_str` from `future` 3rd party lib
- Make `user_from` optional to work with channels
- Raise exception if Telegram times out on long-polling

Special thanks to @jh0ker for all hard work

2015-10-08

Released 2.8.7

- Type as optional for `GroupChat` class

2015-10-08

Released 2.8.6

- Adds type to `User` and `GroupChat` classes (pre-release Telegram feature)

2015-09-24

Released 2.8.5

- Handles HTTP Bad Gateway (503) errors on request
- Fixes regression on `Audio` and `Document` for unicode fields

2015-09-20

Released 2.8.4

- `getFile` and `File.download` is now fully supported

2015-09-10

Released 2.8.3

- Moved `Bot._requestURL` to its own class (`telegram.utils.request`)
- Much better, such wow, Telegram Objects tests
- Add consistency for `str` properties on Telegram Objects
- Better design to test if `chat_id` is invalid
- Add ability to set custom filename on `Bot.sendDocument(..,filename='')`
- Fix Sticker as `InputFile`
- Send JSON requests over urlencoded post data
- Markdown support for `Bot.sendMessage(..., parse_mode=ParseMode.MARKDOWN)`
- Refactor of `TelegramError` class (no more handling `IOError` or `URLError`)

2015-09-05

Released 2.8.2

- Fix regression on Telegram ReplyMarkup
- Add certificate to `is_inputfile` method

2015-09-05

Released 2.8.1

- Fix regression on Telegram objects with thumb properties

2015-09-04

Released 2.8

- TelegramError when `chat_id` is empty for send* methods
- `setWebhook` now supports sending self-signed certificate
- Huge redesign of existing Telegram classes
- Added support for PyPy
- Added docstring for existing classes

2015-08-19

Released 2.7.1

- Fixed JSON serialization for `message`

2015-08-17

Released 2.7

- Added support for `Voice` object and `sendVoice` method
- Due backward compatibility performer or/and title will be required for `sendAudio`
- Fixed JSON serialization when forwarded message

2015-08-15

Released 2.6.1

- Fixed parsing image header issue on < Python 2.7.3

2015-08-14

Released 2.6.0

- Depreciation of `require_authentication` and `clearCredentials` methods
- Giving `AUTHORS` the proper credits for their contribution for this project
- `Message.date` and `Message.forward_date` are now `datetime` objects

2015-08-12

Released 2.5.3

- `telegram.Bot` now supports to be unpickled

2015-08-11

Released 2.5.2

- New changes from Telegram Bot API have been applied
- `telegram.Bot` now supports to be pickled
- Return empty `str` instead `None` when `message.text` is empty

2015-08-10

Released 2.5.1

- Moved from GPLv2 to LGPLv3

2015-08-09

Released 2.5

- Fixes logging calls in API

2015-08-08

Released 2.4

- Fixes `Emoji` class for Python 3
- `PEP8` improvements

2015-08-08

Released 2.3

- Fixes `ForceReply` class
- Remove `logging.basicConfig` from library

2015-07-25

Released 2.2

- Allows `debug=True` when initializing `telegram.Bot`

2015-07-20

Released 2.1

- Fix `to_dict` for `Document` and `Video`

2015-07-19

Released 2.0

- Fixes bugs
- Improves `__str__` over `to_json()`
- Creates abstract class `TelegramObject`

2015-07-15

Released 1.9

- Python 3 officially supported
- `PEP8` improvements

2015-07-12

Released 1.8

- Fixes crash when replying an unicode text message (special thanks to JRoot3D)

2015-07-11

Released 1.7

- Fixes crash when `username` is not defined on `chat` (special thanks to JRoot3D)

2015-07-10

Released 1.6

- Improvements for GAE support

2015-07-10

Released 1.5

- Fixes randomly unicode issues when using `InputFile`

2015-07-10

Released 1.4

- `requests` lib is no longer required

- Google App Engine (GAE) is supported

2015-07-10

Released 1.3

- Added support to `setWebhook` (special thanks to macrojames)

2015-07-09

Released 1.2

- `CustomKeyboard` classes now available
- Emojis available
- `PEP8` improvements

2015-07-08

Released 1.1

- PyPi package now available

2015-07-08

Released 1.0

- Initial checkin of python-telegram-bot

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