
aiogram Documentation

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aiogram is a pretty simple and fully asynchronous library for [Telegram Bot API](#) written in Python 3.7 with [asyncio](#) and [aiohttp](#). It helps you to make your bots faster and simpler.

CHAPTER 1

Official aiogram resources

- News: [@aiogram_live](#)
- Community: [@aiogram](#)
- Russian community: [@aiogram_ru](#)
- Pip: [aiogram](#)
- Docs: [ReadTheDocs](#)
- Source: [Github repo](#)
- Issues/Bug tracker: [Github issues tracker](#)
- Test bot: [@aiogram_bot](#)

CHAPTER 2

Features

- Asynchronous
- Awesome
- Makes things faster
- Has [FSM](#)
- Can reply into webhook. (In other words [make requests in response to updates](#))

CHAPTER 3

Contribute

- [Issue Tracker](#)
- [Source Code](#)

4.1 Installation Guide

4.1.1 Using PIP

```
$ pip install -U aiogram
```

4.1.2 From sources

```
$ git clone https://github.com/aiogram/aiogram.git
$ cd aiogram
$ python setup.py install
```

or if you want to install development version (maybe unstable):

```
$ git clone https://github.com/aiogram/aiogram.git
$ cd aiogram
$ git checkout dev-2.x
$ python setup.py install
```

4.1.3 Recommendations

You can speedup your bots by following next instructions:

- Use **uvloop** instead of default asyncio loop.

uvloop is a fast, drop-in replacement of the built-in asyncio event loop. *uvloop* is implemented in Cython and uses libuv under the hood.

Installation:

```
$ pip install uvloop
```

- Use `ujson` instead of default `json` module.

UltraJSON is an ultra fast JSON encoder and decoder written in pure C with bindings for Python 2.5+ and 3.

Installation:

```
$ pip install ujson
```

In addition, you don't need do nothing, *aiogram* is automatically starts using that if is found in your environment.

4.2 Quick start

4.2.1 Simple template

At first you have to import all necessary modules

```
import logging

from aiogram import Bot, Dispatcher, executor, types
```

Then you have to initialize bot and dispatcher instances. Bot token you can get from [@BotFather](#)

```
API_TOKEN = 'BOT TOKEN HERE'

# Configure logging
logging.basicConfig(level=logging.INFO)

# Initialize bot and dispatcher
bot = Bot(token=API_TOKEN)
dp = Dispatcher(bot)
```

Next step: interaction with bots starts with one command. Register your first command handler:

```
async def send_welcome(message: types.Message):
    """
    This handler will be called when client send `/start` or `/help` commands.
    """
    await message.reply("Hi!\nI'm EchoBot!\nPowered by aiogram.")
```

If you want to handle all messages in the chat simply add handler without filters:

```
@dp.message_handler(regexp='(^cat[s]?$|puss)')
async def cats(message: types.Message):
    with open('data/cats.jpg', 'rb') as photo:
```

Last step: run long polling.

4.2.2 Summary

```

1  """
2  This is a echo bot.
3  It echoes any incoming text messages.
4  """
5
6  import logging
7
8  from aiogram import Bot, Dispatcher, executor, types
9
10 API_TOKEN = 'BOT TOKEN HERE'
11
12 # Configure logging
13 logging.basicConfig(level=logging.INFO)
14
15 # Initialize bot and dispatcher
16 bot = Bot(token=API_TOKEN)
17 dp = Dispatcher(bot)
18
19
20
21 @dp.message_handler(regexp='^cat[s]?${puss}')
```

```

22 async def cats(message: types.Message):
23     with open('data/cats.jpg', 'rb') as photo:
24         await bot.send_photo(message.chat.id, photo, caption='Cats is here ',
25                             reply_to_message_id=message.message_id)
26
27
28 @dp.message_handler()
29 async def echo(message: types.Message):
30     await bot.send_message(message.chat.id, message.text)
31
32
33 if __name__ == '__main__':
34     executor.start_polling(dp, skip_updates=True)

```

4.3 Migration FAQ (1.4 -> 2.0)

This update make breaking changes in aiogram API and drop backward capability with previous versions of framework.

From this point aiogram supports only Python 3.7 and newer.

4.3.1 Changelog

- Used contextvars instead of *aiogram.utils.context*;
- Implemented filters factory;
- Implemented new filters mechanism;
- Allowed to customize command prefix in *CommandsFilter*;
- Implemented mechanism of passing results from filters (as dicts) as kwargs in handlers (like fixtures in pytest);

- Implemented states group feature;
- Implemented FSM storage's proxy;
- Changed files uploading mechanism;
- Implemented pipe for uploading files from URL;
- Implemented I18n Middleware;
- Errors handlers now should accept only two arguments (current update and exception);
- Used *aiohttp_socks* instead of *aiosocksy* for Socks4/5 proxy;
- *types.ContentType* was divided to *types.ContentType* and *types.ContentTypes*;
- Allowed to use rapidjson instead of ujson/json;
- *.current()* method in bot and dispatcher objects was renamed to *get_current()*;

4.3.2 Instructions

Contextvars

Context utility (*aiogram.utils.context*) now is removed due to new features of Python 3.7 and all subclasses of *aiogram.types.base.TelegramObject*, *aiogram.Bot* and *aiogram.Dispatcher* has *.get_current()* and *.set_current()* methods for getting/setting contextual instances of objects.

Example:

```
async def my_handler(message: types.Message):
    bot = Bot.get_current()
    user = types.User.get_current()
    ...
```

Filters

Custom filters

Now *func* keyword argument can't be used for passing filters to the list of filters instead of that you can pass the filters as arguments:

```
@dp.message_handler(lambda message: message.text == 'foo')
@dp.message_handler(types.ChatType.is_private, my_filter)
async def ...
```

(func filter is still available until v2.1)

Filters factory

Also you can bind your own filters for using as keyword arguments:

```
from aiogram.dispatcher.filters import BoundFilter

class MyFilter(BoundFilter):
    key = 'is_admin'
```

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```

def __init__(self, is_admin):
    self.is_admin = is_admin

    async def check(self, message: types.Message):
        member = await bot.get_chat_member(message.chat.id, message.from_user.id)
        return member.is_admin()

dp.filters_factory.bind(MyFilter)

@dp.message_handler(is_admin=True)
async def ...

```

Customize commands prefix

Commands prefix can be changed by following one of two available methods:

```

@dp.message_handler(commands=['admin'], commands_prefix='!/')
@dp.message_handler(Command('admin', prefixes='!/'))
async def ...

```

Passing data from filters as keyword arguments to the handlers

You can pass any data from any filter to the handler by returning dict. If any key from the received dictionary not in the handler specification the key will be skipped and will be unavailable from the handler

Before (<=v1.4)

```

async def my_filter(message: types.Message):
    # do something here
    message.conf['foo'] = 'foo'
    message.conf['bar'] = 42
    return True

@dp.message_handler(func=my_filter)
async def my_message_handler(message: types.Message):
    bar = message.conf["bar"]
    await message.reply(f'bar = {bar}')

```

Now (v2.0)

```

async def my_filter(message: types.Message):
    # do something here
    return {'foo': 'foo', 'bar': 42}

@dp.message_handler(my_filter)
async def my_message_handler(message: types.Message, bar: int):
    await message.reply(f'bar = {bar}')

```

Other

Filters can also be used as logical expressions:

```
Text(equals='foo') | Text(endswith='Bar') | ~Text(contains='spam')
```

States group

You can use States objects and States groups instead of string names of the states. String values is still also be available.

Writing states group:

```
from aiogram.dispatcher.filters.state import State, StatesGroup

class UserForm(StatesGroup):
    name = State() # Will be represented in storage as 'Form:name'
    age = State() # Will be represented in storage as 'Form:age'
    gender = State() # Will be represented in storage as 'Form:gender'
```

After that you can use states as *UserForm.name* and etc.

FSM storage's proxy

Now *Dispatcher.current_context()* can't be used as context-manager.

Implemented *FSMContext.proxy()* method which returns asynchronous *FSMContextProxy* context manager and can be used for more simply getting data from the storage.

FSMContextProxy load all user-related data on initialization and dump it to the storage when proxy is closing if any part of the data was changed.

Usage:

```
@dp.message_handler(commands=['click'])
async def cmd_start(message: types.Message, state: FSMContext):
    async with state.proxy() as proxy: # proxy = FSMContextProxy(state); await proxy.
        ↪load()
        proxy.setdefault('counter', 0)
        proxy['counter'] += 1
        return await message.reply(f"Counter: {proxy['counter']}")
```

This method is not recommended in high-load solutions in reason named “race-condition”.

File uploading mechanism

Fixed uploading files. Removed *BaseBot.send_file* method. This allowed to send the *thumb* field.

Pipe for uploading files from URL

Known issue when Telegram can not accept sending file as URL. In this case need to download file locally and then send.

In this case now you can send file from URL by using pipe. That means you download and send the file without saving it.

You can open the pipe and use for uploading by calling *types.InputFile.from_file(<URL>)*

Example:

```
URL = 'https://aiogram.readthedocs.io/en/dev-2.x/_static/logo.png'

@dpm.message_handler(commands=['image, img'])
async def cmd_image(message: types.Message):
    await bot.send_photo(message.chat.id, types.InputFile.from_url(URL))
```

I18n Middleware

You can internalize your bot by following next steps:

(Code snippets in this example related with *examples/i18n_example.py*)

First usage

1. Extract texts

```
pybabel extract i18n_example.py -o locales/mybot.pot
```

2. Create *.po files. For e.g. create *en*, *ru*, *uk* locales.
3. Translate texts
4. Compile translations

```
pybabel compile -d locales -D mybot
```

Updating translations

When you change the code of your bot you need to update *po* & *mo* files:

1. Regenerate pot file:

```
pybabel extract i18n_example.py -o locales/mybot.pot
```

2. Update po files

```
pybabel update -d locales -D mybot -i locales/mybot.pot
```

3. Update your translations
4. Compile *mo* files

```
pybabel compile -d locales -D mybot
```

Error handlers

Previously errors handlers had to have three arguments *dispatcher*, *update* and *exception* now *dispatcher* argument is removed and will no longer be passed to the error handlers.

Content types

Content types helper was divided to *types.ContentType* and *types.ContentTypes*.

In filters you can use *types.ContentTypes* but for comparing content types you must use *types.ContentType* class.

4.4 Telegram

4.4.1 Bot object

Low level API

Subclass of this class used only for splitting network interface from all of API methods.

```
class aiogram.bot.base.BaseBot (token: String, loop: Union[asyncio.base_events.BaseEventLoop,
                                asyncio.events.AbstractEventLoop, None] = None, connections_limit: Optional[Integer] = None, proxy: Optional[String]
                                = None, proxy_auth: Optional[aiohttp.helpers.BasicAuth] = None, validate_token: Optional[Boolean] = True,
                                parse_mode=None)
```

Bases: object

Base class for bot. It's raw bot.

Instructions how to get Bot token is found here: <https://core.telegram.org/bots#3-how-do-i-create-a-bot>

Parameters

- **token** (str) – token from @BotFather
- **loop** (Optional Union asyncio.BaseEventLoop, asyncio.AbstractEventLoop) – event loop
- **connections_limit** (int) – connections limit for aiohttp.ClientSession
- **proxy** (str) – HTTP proxy URL
- **proxy_auth** (Optional aiohttp.BasicAuth) – Authentication information
- **validate_token** (bool) – Validate token.
- **parse_mode** (str) – You can set default parse mode

Raise when token is invalid throw an `aiogram.utils.exceptions.ValidationError`

close()

Close all client sessions

```
download_file (file_path: String, destination: Optional[InputFile] = None, timeout: Optional[Integer] = 30, chunk_size: Optional[Integer] = 65536, seek: Optional[Boolean] = True) → Union[_io.BytesIO, _io.FileIO]
```

Download file by file_path to destination

if You want to automatically create destination (`io.BytesIO`) use default value of destination and handle result of this method.

Parameters

- **file_path** (str) – file path on telegram server (You can get it from `aiogram.types.File`)
- **destination** – filename or instance of `io.IOBase`. For e. g. `io.BytesIO`

- **timeout** – Integer
- **chunk_size** – Integer
- **seek** – Boolean - go to start of file when downloading is finished.

Returns destination

request (*method: String, data: Optional[Dict[KT, VT]] = None, files: Optional[Dict[KT, VT]] = None, **kwargs*) → Union[List[T], Dict[KT, VT], Boolean]

Make an request to Telegram Bot API

<https://core.telegram.org/bots/api#making-requests>

Parameters

- **method** (str) – API method
- **data** (dict) – request parameters
- **files** (dict) – files

Returns result

Return type Union[List, Dict]

Raise aiogram.exceptions.TelegramApiError

send_file (*file_type, method, file, payload*) → Union[Dict[KT, VT], Boolean]

Send file

<https://core.telegram.org/bots/api#inputfile>

Parameters

- **file_type** – field name
- **method** – API method
- **file** – String or io.IOBase
- **payload** – request payload

Returns response

Telegram Bot

This class based on `aiogram.bot.base.BaseBot`

class aiogram.bot.bot.**Bot** (*token: String, loop: Union[asyncio.base_events.BaseEventLoop, asyncio.events.AbstractEventLoop, None] = None, connections_limit: Optional[Integer] = None, proxy: Optional[String] = None, proxy_auth: Optional[aiohttp.helpers.BasicAuth] = None, validate_token: Optional[Boolean] = True, parse_mode=None*)

Bases: `aiogram.bot.base.BaseBot`, `aiogram.utils.mixins.DataMixin`, `aiogram.utils.mixins.ContextInstanceMixin`

Base bot class

Instructions how to get Bot token is found here: <https://core.telegram.org/bots#3-how-do-i-create-a-bot>

Parameters

- **token** (str) – token from @BotFather
- **loop** (Optional Union asyncio.BaseEventLoop, asyncio.AbstractEventLoop) – event loop

- **connections_limit** (int) – connections limit for aiohttp.ClientSession
- **proxy** (str) – HTTP proxy URL
- **proxy_auth** (Optional aiohttp.BasicAuth) – Authentication information
- **validate_token** (bool) – Validate token.
- **parse_mode** (str) – You can set default parse mode

Raise when token is invalid throw an `aiogram.utils.exceptions.ValidationError`

me

Alias for `self.get_me()` but lazy and with caching.

Returns `aiogram.types.User`

add_sticker_to_set (*user_id: Integer, name: String, png_sticker: Union[InputFile, String], emojis: String, mask_position: Optional[aiogram.types.mask_position.MaskPosition] = None*) → Boolean

Use this method to add a new sticker to a set created by the bot.

Source: <https://core.telegram.org/bots/api#addstickertoset>

Parameters

- **user_id** (base.Integer) – User identifier of sticker set owner
- **name** (base.String) – Sticker set name
- **png_sticker** (typing.Union[base.InputFile, base.String]) – 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.
- **emojis** (base.String) – One or more emoji corresponding to the sticker
- **mask_position** (typing.Union[types.MaskPosition, None]) – A JSON-serialized object for position where the mask should be placed on faces

Returns Returns True on success

Return type `base.Boolean`

answer_callback_query (*callback_query_id: String, text: Optional[String] = None, show_alert: Optional[Boolean] = None, url: Optional[String] = None, cache_time: Optional[Integer] = None*) → Boolean

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.

Source: <https://core.telegram.org/bots/api#answercallbackquery>

Parameters

- **callback_query_id** (base.String) – Unique identifier for the query to be answered
- **text** (typing.Union[base.String, None]) – Text of the notification. If not specified, nothing will be shown to the user, 0-1024 characters
- **show_alert** (typing.Union[base.Boolean, None]) – 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** (`typing.Union[base.String, None]`) – URL that will be opened by the user's client
- **cache_time** (`typing.Union[base.Integer, None]`) – The maximum amount of time in seconds that the result of the callback query may be cached client-side.

Returns On success, True is returned

Return type `base.Boolean`

answer_inline_query (*inline_query_id: String, results: List[aiogram.types.inline_query_result.InlineQueryResult], cache_time: Optional[Integer] = None, is_personal: Optional[Boolean] = None, next_offset: Optional[String] = None, switch_pm_text: Optional[String] = None, switch_pm_parameter: Optional[String] = None*) → Boolean

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

Source: <https://core.telegram.org/bots/api#answerinlinequery>

Parameters

- **inline_query_id** (`base.String`) – Unique identifier for the answered query
- **results** (`typing.List[types.InlineQueryResult]`) – A JSON-serialized array of results for the inline query
- **cache_time** (`typing.Union[base.Integer, None]`) – 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** (`typing.Union[base.Boolean, None]`) – 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** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.String, None]`) – 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.

Returns On success, True is returned

Return type `base.Boolean`

answer_pre_checkout_query (*pre_checkout_query_id: String, ok: Boolean, error_message: Optional[String] = None*) → Boolean

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.

Source: <https://core.telegram.org/bots/api#answerprecheckoutquery>

Parameters

- **pre_checkout_query_id** (`base.String`) – Unique identifier for the query to be answered

- **ok** (`base.Boolean`) – 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** (`typing.Union[base.String, None]`) – 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.

Returns On success, True is returned

Return type `base.Boolean`

answer_shipping_query (*shipping_query_id: String, ok: Boolean, shipping_options: Optional[List[aiogram.types.shipping_option.ShippingOption]] = None, error_message: Optional[String] = None*) → `Boolean`

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.

Source: <https://core.telegram.org/bots/api#answershippingquery>

Parameters

- **shipping_query_id** (`base.String`) – Unique identifier for the query to be answered
- **ok** (`base.Boolean`) – 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** (`typing.Union[typing.List[types.ShippingOption], None]`) – Required if ok is True. A JSON-serialized array of available shipping options
- **error_message** (`typing.Union[base.String, None]`) – 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.

Returns On success, True is returned

Return type `base.Boolean`

create_new_sticker_set (*user_id: Integer, name: String, title: String, png_sticker: Union[InputFile, String], emojis: String, contains_masks: Optional[Boolean] = None, mask_position: Optional[aiogram.types.mask_position.MaskPosition] = None*) → `Boolean`

Use this method to create new sticker set owned by a user. The bot will be able to edit the created sticker set.

Source: <https://core.telegram.org/bots/api#createnewstickerset>

Parameters

- **user_id** (`base.Integer`) – User identifier of created sticker set owner
- **name** (`base.String`) – Short name of sticker set, to be used in `t.me/addstickers/` URLs (e.g., `animals`)
- **title** (`base.String`) – Sticker set title, 1-64 characters

- **png_sticker** (`typing.Union[base.InputFile, base.String]`) – 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.
- **emojis** (`base.String`) – One or more emoji corresponding to the sticker
- **contains_masks** (`typing.Union[base.Boolean, None]`) – Pass True, if a set of mask stickers should be created
- **mask_position** (`typing.Union[types.MaskPosition, None]`) – A JSON-serialized object for position where the mask should be placed on faces

Returns Returns True on success

Return type `base.Boolean`

delete_chat_photo (*chat_id: Union[Integer, String]*) → Boolean

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.

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

Source: <https://core.telegram.org/bots/api#deletechatphoto>

Parameters **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel

Returns Returns True on success

Return type `base.Boolean`

delete_chat_sticker_set (*chat_id: Union[Integer, String]*) → Boolean

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 `can_set_sticker_set` optionally returned in `getChat` requests to check if the bot can use this method.

Source: <https://core.telegram.org/bots/api#deletechatstickerset>

Parameters **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup

Returns Returns True on success

Return type `base.Boolean`

delete_message (*chat_id: Union[Integer, String], message_id: Integer*) → Boolean

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 groups and supergroups. - 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.

The following methods and objects allow your bot to handle stickers and sticker sets.

Source: <https://core.telegram.org/bots/api#deletemessage>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **message_id** (`base.Integer`) – Identifier of the message to delete

Returns Returns True on success

Return type `base.Boolean`

delete_sticker_from_set (*sticker: String*) → Boolean

Use this method to delete a sticker from a set created by the bot.

The following methods and objects allow your bot to work in inline mode.

Source: <https://core.telegram.org/bots/api#deletestickerfromset>

Parameters **sticker** (`base.String`) – File identifier of the sticker

Returns Returns True on success

Return type `base.Boolean`

delete_webhook () → Boolean

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

Source: <https://core.telegram.org/bots/api#deletewebhook>

Returns Returns True on success

Return type `base.Boolean`

download_file_by_id (*file_id: String, destination=None, timeout: Integer = 30, chunk_size: Integer = 65536, seek: Boolean = True*)

Download file by file_id to destination

if You want to automatically create destination (`io.BytesIO`) use default value of destination and handle result of this method.

Parameters

- **file_id** – str
- **destination** – filename or instance of `io.IOBase`. For e. g. `io.BytesIO`
- **timeout** – int
- **chunk_size** – int
- **seek** – bool - go to start of file when downloading is finished

Returns destination

edit_message_caption (*chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*)
→ `aiogram.types.message.Message`

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

Source: <https://core.telegram.org/bots/api#editmessagecaption>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String, None]`) – Required if `inline_message_id` is not specified Unique identifier for the target chat or username of the target channel
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message

- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **caption** (`typing.Union[base.String, None]`) – New caption of the message
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

edit_message_live_location (*latitude: Float, longitude: Float, chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*) → `aiogram.types.message.Message`

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 `stopMessageLiveLocation`.

Source: <https://core.telegram.org/bots/api#editmessagelivelocation>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String, None]`) – Required if `inline_message_id` is not specified
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **latitude** (`base.Float`) – Latitude of new location
- **longitude** (`base.Float`) – Longitude of new location
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for a new inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

edit_message_media (*media: aiogram.types.input_media.InputMedia, chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*) → `Union[aiogram.types.message.Message, Boolean]`

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.

Source <https://core.telegram.org/bots/api#editmessagemedia>

Parameters

- **chat_id** (`typing.Union[typing.Union[base.Integer, base.String], None]`) – Required if `inline_message_id` is not specified
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **media** (`types.InputMedia`) – A JSON-serialized object for a new media content of the message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for a new inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

```
edit_message_reply_markup(chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) → aiogram.types.message.Message
```

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

Source: <https://core.telegram.org/bots/api#editmessagereplymarkup>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String, None]`) – Required if `inline_message_id` is not specified Unique identifier for the target chat or username of the target channel
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

```
edit_message_text(text: String, chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, parse_mode: Optional[String] = None, disable_web_page_preview: Optional[Boolean] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) → aiogram.types.message.Message
```

Use this method to edit text and game messages sent by the bot or via the bot (for inline bots).

Source: <https://core.telegram.org/bots/api#editmessagetext>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String, None]`) – Required if `inline_message_id` is not specified Unique identifier for the target chat or username of the target channel
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **text** (`base.String`) – New text of the message
- **parse_mode** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.Boolean, None]`) – Disables link previews for links in this message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

export_chat_invite_link (*chat_id: Union[Integer, String]*) → `String`

Use this method to generate a new invite link for a chat; any previously generated link is revoked. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

Source: <https://core.telegram.org/bots/api#exportchatinvitelink>

Parameters **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel

Returns Returns exported invite link as `String` on success

Return type `base.String`

forward_message (*chat_id: Union[Integer, String], from_chat_id: Union[Integer, String], message_id: Integer, disable_notification: Optional[Boolean] = None*) → `aiogram.types.message.Message`

Use this method to forward messages of any kind.

Source: <https://core.telegram.org/bots/api#forwardmessage>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **from_chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the chat where the original message was sent
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **message_id** (`base.Integer`) – Message identifier in the chat specified in `from_chat_id`

Returns On success, the sent Message is returned

Return type `types.Message`

get_chat (*chat_id*: *Union[Integer, String]*) → aiogram.types.chat.Chat

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.).

Source: <https://core.telegram.org/bots/api#getchat>

Parameters **chat_id** (*typing.Union[base.Integer, base.String]*) – Unique identifier for the target chat or username of the target supergroup or channel

Returns Returns a Chat object on success

Return type *types.Chat*

get_chat_administrators (*chat_id*: *Union[Integer, String]*) →
List[aiogram.types.chat_member.ChatMember]

Use this method to get a list of administrators in a chat.

Source: <https://core.telegram.org/bots/api#getchatadministrators>

Parameters **chat_id** (*typing.Union[base.Integer, base.String]*) – Unique identifier for the target chat or username of the target supergroup or channel

Returns 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.

Return type *typing.List[types.ChatMember]*

get_chat_member (*chat_id*: *Union[Integer, String]*, *user_id*: *Integer*) →
aiogram.types.chat_member.ChatMember

Use this method to get information about a member of a chat.

Source: <https://core.telegram.org/bots/api#getchatmember>

Parameters

- **chat_id** (*typing.Union[base.Integer, base.String]*) – Unique identifier for the target chat or username of the target supergroup or channel
- **user_id** (*base.Integer*) – Unique identifier of the target user

Returns Returns a ChatMember object on success

Return type *types.ChatMember*

get_chat_members_count (*chat_id*: *Union[Integer, String]*) → *Integer*

Use this method to get the number of members in a chat.

Source: <https://core.telegram.org/bots/api#getchatmemberscount>

Parameters **chat_id** (*typing.Union[base.Integer, base.String]*) – Unique identifier for the target chat or username of the target supergroup or channel

Returns Returns Int on success

Return type *base.Integer*

get_file (*file_id*: *String*) → aiogram.types.file.File

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.

Note: This function may not preserve the original file name and MIME type. You should save the file's MIME type and name (if available) when the File object is received.

Source: <https://core.telegram.org/bots/api#getfile>

Parameters **file_id** (*base.String*) – File identifier to get info about

Returns On success, a File object is returned

Return type `types.File`

get_game_high_scores (*user_id: Integer, chat_id: Optional[Integer] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None*) → `List[aiogram.types.game_high_score.GameHighScore]`

Use this method to get data for high score tables.

This method will currently return scores for the target user, plus two of his closest neighbors on each side. Will also return the top three users if the user and his neighbors are not among them. Please note that this behavior is subject to change.

Source: <https://core.telegram.org/bots/api#getgamehighscores>

Parameters

- **user_id** (`base.Integer`) – Target user id
- **chat_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Unique identifier for the target chat
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message

Returns Will return the score of the specified user and several of his neighbors in a game On success, returns an Array of `GameHighScore` objects. This method will currently return scores for the target user, plus two of his closest neighbors on each side. Will also return the top three users if the user and his neighbors are not among them.

Return type `typing.List[types.GameHighScore]`

get_me () → `aiogram.types.user.User`

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

Source: <https://core.telegram.org/bots/api#getme>

Returns Returns basic information about the bot in form of a User object

Return type `types.User`

get_sticker_set (*name: String*) → `aiogram.types.sticker_set.StickerSet`

Use this method to get a sticker set.

Source: <https://core.telegram.org/bots/api#getstickerset>

Parameters **name** (`base.String`) – Name of the sticker set

Returns On success, a `StickerSet` object is returned

Return type `types.StickerSet`

get_updates (*offset: Optional[Integer] = None, limit: Optional[Integer] = None, timeout: Optional[Integer] = None, allowed_updates: Optional[List[String]] = None*) → `List[aiogram.types.update.Update]`

Use this method to receive incoming updates using long polling (wiki).

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.

Source: <https://core.telegram.org/bots/api#getupdates>

Parameters

- **offset** (`typing.Union[base.Integer, None]`) – Identifier of the first update to be returned
- **limit** (`typing.Union[base.Integer, None]`) – Limits the number of updates to be retrieved
- **timeout** (`typing.Union[base.Integer, None]`) – Timeout in seconds for long polling
- **allowed_updates** (`typing.Union[typing.List[base.String], None]`) – List the types of updates you want your bot to receive

Returns An Array of Update objects is returned

Return type `typing.List[types.Update]`

get_user_profile_photos (*user_id: Integer, offset: Optional[Integer] = None, limit: Optional[Integer] = None*) → `aiogram.types.user_profile_photos.UserProfilePhotos`

Use this method to get a list of profile pictures for a user. Returns a `UserProfilePhotos` object.

Source: <https://core.telegram.org/bots/api#getuserprofilephotos>

Parameters

- **user_id** (`base.Integer`) – Unique identifier of the target user
- **offset** (`typing.Union[base.Integer, None]`) – Sequential number of the first photo to be returned. By default, all photos are returned
- **limit** (`typing.Union[base.Integer, None]`) – Limits the number of photos to be retrieved. Values between 1—100 are accepted. Defaults to 100

Returns Returns a `UserProfilePhotos` object

Return type `types.UserProfilePhotos`

get_webhook_info () → `aiogram.types.webhook_info.WebhookInfo`

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.

Source: <https://core.telegram.org/bots/api#getwebhookinfo>

Returns On success, returns a `WebhookInfo` object

Return type `types.WebhookInfo`

kick_chat_member (*chat_id: Union[Integer, String], user_id: Integer, until_date: Optional[Integer] = None*) → `Boolean`

Use this method to kick a user from a group, a supergroup or a channel. In the case of supergroups and channels, 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 chat for this to work and must have the appropriate admin rights.

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.

Source: <https://core.telegram.org/bots/api#kickchatmember>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target group or username of the target supergroup or channel

- **user_id** (`base.Integer`) – Unique identifier of the target user
- **until_date** (`typing.Union[base.Integer, None]`) – Date when the user will be unbanned, unix time

Returns Returns True on success

Return type `base.Boolean`

leave_chat (`chat_id: Union[Integer, String]`) → `Boolean`

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

Source: <https://core.telegram.org/bots/api#leavechat>

Parameters **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup or channel

Returns Returns True on success

Return type `base.Boolean`

pin_chat_message (`chat_id: Union[Integer, String]`, `message_id: Integer`, `disable_notification: Optional[Boolean] = None`) → `Boolean`

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.

Source: <https://core.telegram.org/bots/api#pinchatmessage>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup
- **message_id** (`base.Integer`) – Identifier of a message to pin
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Pass True, if it is not necessary to send a notification to all group members about the new pinned message

Returns Returns True on success

Return type `base.Boolean`

promote_chat_member (`chat_id: Union[Integer, String]`, `user_id: Integer`, `can_change_info: Optional[Boolean] = None`, `can_post_messages: Optional[Boolean] = None`, `can_edit_messages: Optional[Boolean] = None`, `can_delete_messages: Optional[Boolean] = None`, `can_invite_users: Optional[Boolean] = None`, `can_restrict_members: Optional[Boolean] = None`, `can_pin_messages: Optional[Boolean] = None`, `can_promote_members: Optional[Boolean] = None`) → `Boolean`

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.

Source: <https://core.telegram.org/bots/api#promotechatmember>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **user_id** (`base.Integer`) – Unique identifier of the target user
- **can_change_info** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can change chat title, photo and other settings

- **can_post_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can create channel posts, channels only
- **can_edit_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can edit messages of other users, channels only
- **can_delete_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can delete messages of other users
- **can_invite_users** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can invite new users to the chat
- **can_restrict_members** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can restrict, ban or unban chat members
- **can_pin_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can pin messages, supergroups only
- **can_promote_members** (`typing.Union[base.Boolean, None]`) – 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)

Returns Returns True on success

Return type `base.Boolean`

restrict_chat_member (*chat_id: Union[Integer, String], user_id: Integer, until_date: Optional[Integer] = None, can_send_messages: Optional[Boolean] = None, can_send_media_messages: Optional[Boolean] = None, can_send_other_messages: Optional[Boolean] = None, can_add_web_page_previews: Optional[Boolean] = None*) → `Boolean`

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.

Source: <https://core.telegram.org/bots/api#restrictchatmember>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup
- **user_id** (`base.Integer`) – Unique identifier of the target user
- **until_date** (`typing.Union[base.Integer, None]`) – Date when restrictions will be lifted for the user, unix time
- **can_send_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send text messages, contacts, locations and venues
- **can_send_media_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send audios, documents, photos, videos, video notes and voice notes, implies `can_send_messages`
- **can_send_other_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send animations, games, stickers and use inline bots, implies `can_send_media_messages`
- **can_add_web_page_previews** (`typing.Union[base.Boolean, None]`) – Pass True, if the user may add web page previews to their messages, implies `can_send_media_messages`

Returns Returns True on success

Return type `base.Boolean`

```
send_animation (chat_id: Union[Integer, String], animation: Union[InputFile, String],
                 duration: Optional[Integer] = None, width: Optional[Integer] =
                 None, height: Optional[Integer] = None, thumb: Union[InputFile,
                 String, None] = None, caption: Optional[String] = None, parse_mode:
                 Optional[String] = None, disable_notification: Optional[Boolean]
                 = None, reply_to_message_id: Optional[Integer] = None, re-
                 ply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup,
                 aiogram.types.reply_keyboard.ReplyKeyboardMarkup,
                 aiogram.types.reply_keyboard.ReplyKeyboardRemove,
                 aiogram.types.force_reply.ForceReply, None] = None) →
                 aiogram.types.message.Message
```

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

On success, the sent Message is returned. Bots can currently send animation files of up to 50 MB in size, this limit may be changed in the future.

Source <https://core.telegram.org/bots/api#sendanimation>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel (in the format `@channelusername`)
- **animation** (`typing.Union[base.InputFile, base.String]`) – 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
- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent animation in seconds
- **width** (`typing.Union[base.Integer, None]`) – Animation width
- **height** (`typing.Union[base.Integer, None]`) – Animation height
- **thumb** (`typing.Union[typing.Union[base.InputFile, base.String], None]`) – 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.
- **caption** (`typing.Union[base.String, None]`) – Animation caption (may also be used when resending animation by `file_id`), 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply], None]`) – 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

Returns On success, the sent Message is returned

Return type `types.Message`

send_audio (*chat_id: Union[Integer, String], audio: Union[InputFile, String], caption: Optional[String] = None, parse_mode: Optional[String] = None, duration: Optional[Integer] = None, performer: Optional[String] = None, title: Optional[String] = None, thumb: Union[InputFile, String, None] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None*) → `aiogram.types.message.Message`

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.

For sending voice messages, use the `sendVoice` method instead.

Source: <https://core.telegram.org/bots/api#sendaudio>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **audio** (`typing.Union[base.InputFile, base.String]`) – Audio file to send
- **caption** (`typing.Union[base.String, None]`) – Audio caption, 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **duration** (`typing.Union[base.Integer, None]`) – Duration of the audio in seconds
- **performer** (`typing.Union[base.String, None]`) – Performer
- **title** (`typing.Union[base.String, None]`) – Track name
- **thumb** (`typing.Union[base.InputFile, base.String, None]`) – Thumbnail of the file sent
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent `Message` is returned

Return type `types.Message`

send_chat_action (*chat_id: Union[Integer, String], action: String*) → `Boolean`

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).

We only recommend using this method when a response from the bot will take a noticeable amount of time to arrive.

Source: <https://core.telegram.org/bots/api#sendchataction>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **action** (`base.String`) – Type of action to broadcast

Returns Returns True on success

Return type `base.Boolean`

```
send_contact (chat_id: Union[Integer, String], phone_number: String, first_name: String, last_name: Optional[String] = None, vcard: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

Use this method to send phone contacts.

Source: <https://core.telegram.org/bots/api#sendcontact>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **phone_number** (`base.String`) – Contact's phone number
- **first_name** (`base.String`) – Contact's first name
- **last_name** (`typing.Union[base.String, None]`) – Contact's last name
- **vcard** (`typing.Union[base.String, None]`) – vcard
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_document (chat_id: Union[Integer, String], document: Union[InputFile, String], thumb: Union[InputFile, String, None] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

Use this method to send general files.

Bots can currently send files of any type of up to 50 MB in size, this limit may be changed in the future.

Source: <https://core.telegram.org/bots/api#senddocument>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **document** (`typing.Union[base.InputFile, base.String]`) – File to send
- **thumb** (`typing.Union[base.InputFile, base.String, None]`) – Thumbnail of the file sent
- **caption** (`typing.Union[base.String, None]`) – Document caption (may also be used when resending documents by file_id), 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_game(chat_id: Integer, game_short_name: String, disable_notification: Optional[Boolean]  
= None, reply_to_message_id: Optional[Integer] = None, reply_markup:  
Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) →  
aiogram.types.message.Message
```

Use this method to send a game.

Source: <https://core.telegram.org/bots/api#sendgame>

Parameters

- **chat_id** (`base.Integer`) – Unique identifier for the target chat
- **game_short_name** (`base.String`) – Short name of the game, serves as the unique identifier for the game. Set up your games via Botfather.
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard If empty, one 'Play game_title' button will be shown. If not empty, the first button must launch the game.

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_invoice(chat_id: Integer, title: String, description: String, payload: String,
              provider_token: String, start_parameter: String, currency: String, prices:
              List[aiogram.types.labeled_price.LabeledPrice], provider_data: Optional[Dict[KT,
              VT]] = None, photo_url: Optional[String] = None, photo_size: Op-
              tional[Integer] = None, photo_width: Optional[Integer] = None, photo_height:
              Optional[Integer] = None, need_name: Optional[Boolean] = None,
              need_phone_number: Optional[Boolean] = None, need_email: Optional[Boolean]
              = None, need_shipping_address: Optional[Boolean] = None, is_flexible:
              Optional[Boolean] = None, disable_notification: Optional[Boolean] =
              None, reply_to_message_id: Optional[Integer] = None, reply_markup: Op-
              tional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) →
              aiogram.types.message.Message
```

Use this method to send invoices.

Source: <https://core.telegram.org/bots/api#sendinvoice>

Parameters

- **chat_id** (`base.Integer`) – Unique identifier for the target private chat
- **title** (`base.String`) – Product name, 1-32 characters
- **description** (`base.String`) – Product description, 1-255 characters
- **payload** (`base.String`) – Bot-defined invoice payload, 1-128 bytes This will not be displayed to the user, use for your internal processes.
- **provider_token** (`base.String`) – Payments provider token, obtained via Botfather
- **start_parameter** (`base.String`) – Unique deep-linking parameter that can be used to generate this invoice when used as a start parameter
- **currency** (`base.String`) – Three-letter ISO 4217 currency code, see more on currencies
- **prices** (`typing.List[types.LabeledPrice]`) – Price breakdown, a list of components (e.g. product price, tax, discount, delivery cost, delivery tax, bonus, etc.)
- **provider_data** (`typing.Union[typing.Dict, None]`) – JSON-encoded data about the invoice, which will be shared with the payment provider
- **photo_url** (`typing.Union[base.String, None]`) – URL of the product photo for the invoice
- **photo_size** (`typing.Union[base.Integer, None]`) – Photo size
- **photo_width** (`typing.Union[base.Integer, None]`) – Photo width
- **photo_height** (`typing.Union[base.Integer, None]`) – Photo height
- **need_name** (`typing.Union[base.Boolean, None]`) – Pass True, if you require the user's full name to complete the order
- **need_phone_number** (`typing.Union[base.Boolean, None]`) – Pass True, if you require the user's phone number to complete the order
- **need_email** (`typing.Union[base.Boolean, None]`) – Pass True, if you require the user's email to complete the order
- **need_shipping_address** (`typing.Union[base.Boolean, None]`) – Pass True, if you require the user's shipping address to complete the order

- **is_flexible** (`typing.Union[base.Boolean, None]`) – Pass True, if the final price depends on the shipping method
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard. If empty, one 'Pay total price' button will be shown. If not empty, the first button must be a Pay button.

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_location (chat_id: Union[Integer, String], latitude: Float, longitude: Float,  
live_period: Optional[Integer] = None, disable_notification: Op-  
tional[Boolean] = None, reply_to_message_id: Optional[Integer] = None,  
reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup,  
aiogram.types.reply_keyboard.ReplyKeyboardMarkup,  
aiogram.types.reply_keyboard.ReplyKeyboardRemove,  
aiogram.types.force_reply.ForceReply, None] = None) →  
aiogram.types.message.Message
```

Use this method to send point on the map.

Source: <https://core.telegram.org/bots/api#sendlocation>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **latitude** (`base.Float`) – Latitude of the location
- **longitude** (`base.Float`) – Longitude of the location
- **live_period** (`typing.Union[base.Integer, None]`) – Period in seconds for which the location will be updated
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_media_group (chat_id: Union[Integer, String], media: Union[aiogram.types.input_media.MediaGroup,  
List[T]], disable_notification: Optional[Boolean] = None,  
reply_to_message_id: Optional[Integer] = None) →  
List[aiogram.types.message.Message]
```

Use this method to send a group of photos or videos as an album.

Source: <https://core.telegram.org/bots/api#sendmediagroup>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **media** (`typing.Union[types.MediaGroup, typing.List]`) – A JSON-serialized array describing photos and videos to be sent
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message

Returns On success, an array of the sent Messages is returned

Return type `typing.List[types.Message]`

```
send_message (chat_id: Union[Integer, String], text: String, parse_mode: Optional[String] =
None, disable_web_page_preview: Optional[Boolean] = None, disable_notification:
Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None,
reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup,
aiogram.types.reply_keyboard.ReplyKeyboardMarkup,
aiogram.types.reply_keyboard.ReplyKeyboardRemove,
aiogram.types.force_reply.ForceReply, None] = None) →
aiogram.types.message.Message
```

Use this method to send text messages.

Source: <https://core.telegram.org/bots/api#sendmessage>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **text** (`base.String`) – Text of the message to be sent
- **parse_mode** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.Boolean, None]`) – Disables link previews for links in this message
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_photo (chat_id: Union[Integer, String], photo: Union[InputFile, String], caption: Op-
tional[String] = None, parse_mode: Optional[String] = None, disable_notification:
Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None,
reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup,
aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove,
aiogram.types.force_reply.ForceReply, None] = None) →
aiogram.types.message.Message
```

Use this method to send photos.

Source: <https://core.telegram.org/bots/api#sendphoto>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **photo** (`typing.Union[base.InputFile, base.String]`) – Photo to send
- **caption** (`typing.Union[base.String, None]`) – Photo caption (may also be used when resending photos by `file_id`), 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_sticker (chat_id: Union[Integer, String], sticker: Union[InputFile, String], disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

Use this method to send .webp stickers.

Source: <https://core.telegram.org/bots/api#sendsticker>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **sticker** (`typing.Union[base.InputFile, base.String]`) – Sticker to send
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_venue (chat_id: Union[Integer, String], latitude: Float, longitude: Float, title: String, address: String, foursquare_id: Optional[String] = None, foursquare_type: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

Use this method to send information about a venue.

Source: <https://core.telegram.org/bots/api#sendvenue>

Parameters

- **chat_id** (typing.Union[base.Integer, base.String]) – Unique identifier for the target chat or username of the target channel
- **latitude** (base.Float) – Latitude of the venue
- **longitude** (base.Float) – Longitude of the venue
- **title** (base.String) – Name of the venue
- **address** (base.String) – Address of the venue
- **foursquare_id** (typing.Union[base.String, None]) – Foursquare identifier of the venue
- **foursquare_type** (typing.Union[base.String, None]) – Foursquare type of the venue, if known
- **disable_notification** (typing.Union[base.Boolean, None]) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (typing.Union[base.Integer, None]) – If the message is a reply, ID of the original message
- **reply_markup** (typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]) – Additional interface options

Returns On success, the sent Message is returned

Return type types.Message

```
send_video (chat_id: Union[Integer, String], video: Union[InputFile, String], duration: Optional[Integer] = None, width: Optional[Integer] = None, height: Optional[Integer] = None, thumb: Union[InputFile, String, None] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, supports_streaming: Optional[Boolean] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

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

Source: <https://core.telegram.org/bots/api#sendvideo>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **video** (`typing.Union[base.InputFile, base.String]`) – Video to send
- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent video in seconds
- **width** (`typing.Union[base.Integer, None]`) – Video width
- **height** (`typing.Union[base.Integer, None]`) – Video height
- **thumb** (`typing.Union[base.InputFile, base.String, None]`) – Thumbnail of the file sent
- **caption** (`typing.Union[base.String, None]`) – Video caption (may also be used when resending videos by `file_id`), 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **supports_streaming** (`typing.Union[base.Boolean, None]`) – Pass True, if the uploaded video is suitable for streaming
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_video_note (chat_id: Union[Integer, String], video_note: Union[InputFile, String], duration: Optional[Integer] = None, length: Optional[Integer] = None, thumb: Union[InputFile, String, None] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

As of v.4.0, Telegram clients support rounded square mp4 videos of up to 1 minute long. Use this method to send video messages.

Source: <https://core.telegram.org/bots/api#sendvideonote>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **video_note** (`typing.Union[base.InputFile, base.String]`) – Video note to send
- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent video in seconds

- **length** (`typing.Union[base.Integer, None]`) – Video width and height
- **thumb** (`typing.Union[base.InputFile, base.String, None]`) – Thumbnail of the file sent
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

```
send_voice (chat_id: Union[Integer, String], voice: Union[InputFile, String], caption: Optional[String] = None, parse_mode: Optional[String] = None, duration: Optional[Integer] = None, disable_notification: Optional[Boolean] = None, reply_to_message_id: Optional[Integer] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None) → aiogram.types.message.Message
```

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).

Source: <https://core.telegram.org/bots/api#sendvoice>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **voice** (`typing.Union[base.InputFile, base.String]`) – Audio file to send
- **caption** (`typing.Union[base.String, None]`) – Voice message caption, 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in your bot's message.
- **duration** (`typing.Union[base.Integer, None]`) – Duration of the voice message in seconds
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_to_message_id** (`typing.Union[base.Integer, None]`) – If the message is a reply, ID of the original message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options

Returns On success, the sent Message is returned

Return type `types.Message`

set_chat_description (*chat_id*: `Union[Integer, String]`, *description*: `Optional[String] = None`)
→ `Boolean`

Use this method to change the description of 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.

Source: <https://core.telegram.org/bots/api#setchatdescription>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **description** (`typing.Union[base.String, None]`) – New chat description, 0-255 characters

Returns Returns True on success

Return type `base.Boolean`

set_chat_photo (*chat_id*: `Union[Integer, String]`, *photo*: `InputFile`) → `Boolean`

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.

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

Source: <https://core.telegram.org/bots/api#setchatphoto>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **photo** (`base.InputFile`) – New chat photo, uploaded using multipart/form-data

Returns Returns True on success

Return type `base.Boolean`

set_chat_sticker_set (*chat_id*: `Union[Integer, String]`, *sticker_set_name*: `String`) → `Boolean`

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 `can_set_sticker_set` optionally returned in `getChat` requests to check if the bot can use this method.

Source: <https://core.telegram.org/bots/api#setchatstickerset>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup
- **sticker_set_name** (`base.String`) – Name of the sticker set to be set as the group sticker set

Returns Returns True on success

Return type `base.Boolean`

set_chat_title (*chat_id*: `Union[Integer, String]`, *title*: `String`) → `Boolean`

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.

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

Source: <https://core.telegram.org/bots/api#setchattitle>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target channel
- **title** (`base.String`) – New chat title, 1-255 characters

Returns Returns True on success

Return type `base.Boolean`

set_game_score (*user_id: Integer, score: Integer, force: Optional[Boolean] = None, disable_edit_message: Optional[Boolean] = None, chat_id: Optional[Integer] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None*) → `aiogram.types.message.Message`

Use this method to set the score of the specified user in a game.

Source: <https://core.telegram.org/bots/api#setgamescore>

Parameters

- **user_id** (`base.Integer`) – User identifier
- **score** (`base.Integer`) – New score, must be non-negative
- **force** (`typing.Union[base.Boolean, None]`) – Pass True, if the high score is allowed to decrease This can be useful when fixing mistakes or banning cheaters
- **disable_edit_message** (`typing.Union[base.Boolean, None]`) – Pass True, if the game message should not be automatically edited to include the current scoreboard
- **chat_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Unique identifier for the target chat
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message

Returns 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.

Return type `typing.Union[types.Message, base.Boolean]`

set_passport_data_errors (*user_id: Integer, errors: List[aiogram.types.passport_element_error.PassportElementError]*) → `Boolean`

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.

Source <https://core.telegram.org/bots/api#setpassportdataerrors>

Parameters

- **user_id** (`base.Integer`) – User identifier
- **errors** (`typing.List[types.PassportElementError]`) – A JSON-serialized array describing the errors

Returns Returns True on success

Return type `base.Boolean`

set_sticker_position_in_set (*sticker: String, position: Integer*) → Boolean

Use this method to move a sticker in a set created by the bot to a specific position.

Source: <https://core.telegram.org/bots/api#setstickerpositioninset>

Parameters

- **sticker** (`base.String`) – File identifier of the sticker
- **position** (`base.Integer`) – New sticker position in the set, zero-based

Returns Returns True on success

Return type `base.Boolean`

set_webhook (*url: String, certificate: Optional[InputFile] = None, max_connections: Optional[Integer] = None, allowed_updates: Optional[List[String]] = None*) → Boolean

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.

Source: <https://core.telegram.org/bots/api#setwebhook>

Parameters

- **url** (`base.String`) – HTTPS url to send updates to. Use an empty string to remove webhook integration
- **certificate** (`typing.Union[base.InputFile, None]`) – Upload your public key certificate so that the root certificate in use can be checked
- **max_connections** (`typing.Union[base.Integer, None]`) – Maximum allowed number of simultaneous HTTPS connections to the webhook for update delivery, 1-100.
- **allowed_updates** (`typing.Union[typing.List[base.String], None]`) – List the types of updates you want your bot to receive

Returns Returns true

Return type `base.Boolean`

stop_message_live_location (*chat_id: Union[Integer, String, None] = None, message_id: Optional[Integer] = None, inline_message_id: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*) → `aiogram.types.message.Message`

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.

Source: <https://core.telegram.org/bots/api#stopmessagelivelocation>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String, None]`) – Required if `inline_message_id` is not specified
- **message_id** (`typing.Union[base.Integer, None]`) – Required if `inline_message_id` is not specified. Identifier of the sent message
- **inline_message_id** (`typing.Union[base.String, None]`) – Required if `chat_id` and `message_id` are not specified. Identifier of the inline message
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for a new inline keyboard

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

Return type `typing.Union[types.Message, base.Boolean]`

unban_chat_member (*chat_id: Union[Integer, String], user_id: Integer*) → `Boolean`

Use this method to unban a previously kicked user in a supergroup or channel. ‘The user will not return to the group or channel automatically, but will be able to join via link, etc.

The bot must be an administrator for this to work.

Source: <https://core.telegram.org/bots/api#unbanchatmember>

Parameters

- **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target group or username of the target supergroup or channel
- **user_id** (`base.Integer`) – Unique identifier of the target user

Returns Returns `True` on success

Return type `base.Boolean`

unpin_chat_message (*chat_id: Union[Integer, String]*) → `Boolean`

Use this method to unpin a message in a supergroup chat. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

Source: <https://core.telegram.org/bots/api#unpinchatmessage>

Parameters **chat_id** (`typing.Union[base.Integer, base.String]`) – Unique identifier for the target chat or username of the target supergroup

Returns Returns `True` on success

Return type `base.Boolean`

upload_sticker_file (*user_id: Integer, png_sticker: InputFile*) → `aiogram.types.file.File`

Use this method to upload a .png file with a sticker for later use in `createNewStickerSet` and `addStickerToSet` methods (can be used multiple times).

Source: <https://core.telegram.org/bots/api#uploadstickerfile>

Parameters

- **user_id** (`base.Integer`) – User identifier of sticker file owner
- **png_sticker** (`base.InputFile`) – 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.

Returns Returns the uploaded `File` on success

Return type `types.File`

API Helpers

`aiogram.bot.api.check_token` (*token: str*) → bool
Validate BOT token

Parameters `token` –

Returns

`aiogram.bot.api.guess_filename` (*obj*)
Get file name from object

Parameters `obj` –

Returns

`aiogram.bot.api.compose_data` (*params=None, files=None*)
Prepare request data

Parameters

- `params` –
- `files` –

Returns

class `aiogram.bot.api.Methods`

Bases: `aiogram.utils.helper.Helper`

Helper for Telegram API Methods listed on <https://core.telegram.org/bots/api>

List is updated to Bot API 4.1

static `api_url` (*token, method*)

Generate API URL with included token and method name

Parameters

- `token` –
- `method` –

Returns

static `file_url` (*token, path*)

Generate File URL with included token and file path

Parameters

- `token` –
- `path` –

Returns

`aiogram.bot.api.check_result` (*method_name: str, content_type: str, status_code: int, body: str*)

Checks whether *result* is a valid API response. A result is considered invalid if: - The server returned an HTTP response code other than 200 - The content of the result is invalid JSON. - The method call was unsuccessful (The JSON 'ok' field equals False)

Parameters

- `method_name` – The name of the method called
- `status_code` – status code
- `content_type` – content type of result

- **body** – result body

Returns The result parsed to a JSON dictionary

Raises **ApiException** – if one of the above listed cases is applicable

4.4.2 Telegram data types

Bases

Base TelegramObject

MetaTelegramObject

```
class aiogram.types.base.MetaTelegramObject
```

Bases: type

Metaclass for telegram objects

TelegramObject

```
class aiogram.types.base.TelegramObject (conf=None, **kwargs)
```

Bases: aiogram.utils.mixins.ContextInstanceMixin

Abstract class for telegram objects

Deserialize object

Parameters

- **conf** –
- **kwargs** –

props

Get props

Returns dict with props

props_aliases

Get aliases for props

Returns

values

Get values

Returns

```
classmethod to_object (data)
```

Deserialize object

Parameters **data** –

Returns

```
to_python () → Dict[KT, VT]
```

Get object as JSON serializable

Returns

clean()
Remove empty values

as_json() → str
Get object as JSON string

Returns JSON

Return type str

iter_keys()
Iterate over keys

Returns

iter_values()
Iterate over values

Returns

Fields

BaseField

```
class aiogram.types.fields.BaseField(*, base=None, default=None, alias=None,
                                     on_change=None)
```

Bases: object

Base field (prop)

Init prop

Parameters

- **base** – class for child element
- **default** – default value
- **alias** – alias name (for e.g. field ‘from’ has to be named ‘from_user’ as ‘from’ is a builtin Python keyword)
- **on_change** – callback will be called when value is changed

get_value(*instance*)
Get value for the current object instance

Parameters **instance** –

Returns

set_value(*instance, value, parent=None*)
Set prop value

Parameters

- **instance** –
- **value** –
- **parent** –

Returns

serialize(*value*)
Serialize value to python

Parameters value –

Returns

deserialize (*value*, *parent=None*)

Deserialize python object value to TelegramObject value

export (*instance*)

Alias for *serialize* but for current Object instance

Parameters instance –

Returns

Field

```
class aiogram.types.fields.Field(*,      base=None,      default=None,      alias=None,
                                on_change=None)
```

Bases: *aiogram.types.fields.BaseField*

Simple field

Init prop

Parameters

- **base** – class for child element
- **default** – default value
- **alias** – alias name (for e.g. field ‘from’ has to be named ‘from_user’ as ‘from’ is a builtin Python keyword)
- **on_change** – callback will be called when value is changed

serialize (*value*)

Serialize value to python

Parameters value –

Returns

deserialize (*value*, *parent=None*)

Deserialize python object value to TelegramObject value

ListField

```
class aiogram.types.fields.ListField(*args, **kwargs)
```

Bases: *aiogram.types.fields.Field*

Field contains list ob objects

serialize (*value*)

Serialize value to python

Parameters value –

Returns

deserialize (*value*, *parent=None*)

Deserialize python object value to TelegramObject value

ListOfLists

```
class aiogram.types.fields.ListOfLists(*, base=None, default=None, alias=None,
                                       on_change=None)
```

Bases: *aiogram.types.fields.Field*

Init prop

Parameters

- **base** – class for child element
- **default** – default value
- **alias** – alias name (for e.g. field ‘from’ has to be named ‘from_user’ as ‘from’ is a builtin Python keyword)
- **on_change** – callback will be called when value is changed

serialize (*value*)

Serialize value to python

Parameters value –

Returns

deserialize (*value, parent=None*)

Deserialize python object value to TelegramObject value

DateTimeField

```
class aiogram.types.fields.DateTimeField(*, base=None, default=None, alias=None,
                                           on_change=None)
```

Bases: *aiogram.types.fields.Field*

In this field st_ored datetime

in: unixtime out: datetime

Init prop

Parameters

- **base** – class for child element
- **default** – default value
- **alias** – alias name (for e.g. field ‘from’ has to be named ‘from_user’ as ‘from’ is a builtin Python keyword)
- **on_change** – callback will be called when value is changed

serialize (*value: datetime.datetime*)

Serialize value to python

Parameters value –

Returns

deserialize (*value, parent=None*)

Deserialize python object value to TelegramObject value

TextField

```
class aiogram.types.fields.TextField(*,    prefix=None,    suffix=None,    default=None,
                                     alias=None)
```

Bases: *aiogram.types.fields.Field*

serialize (*value*)

Serialize value to python

Parameters *value* –

Returns

deserialize (*value*, *parent=None*)

Deserialize python object value to TelegramObject value

Mixins

Downloadable

```
class aiogram.types.mixins.Downloadable
```

Bases: object

Mixin for files

download (*destination=None*, *timeout=30*, *chunk_size=65536*, *seek=True*, *make_dirs=True*)

Download file

Parameters

- **destination** – filename or instance of `io.IOBase`. For e. g. `io.BytesIO`
- **timeout** – Integer
- **chunk_size** – Integer
- **seek** – Boolean - go to start of file when downloading is finished.
- **make_dirs** – Make dirs if not exist

Returns destination

get_file ()

Get file information

Returns `aiogram.types.File`

Types

StickerSet

```
class aiogram.types.sticker_set.StickerSet (conf=None, **kwargs)
```

Bases: *aiogram.types.base.TelegramObject*

This object represents a sticker set.

<https://core.telegram.org/bots/api#stickerset>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

EncryptedCredentials

class aiogram.types.encrypted_credentials.**EncryptedCredentials** (*conf=None, **kwargs*)

Bases: *aiogram.types.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.

<https://core.telegram.org/bots/api#encryptedcredentials>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

CallbackQuery

class aiogram.types.callback_query.**CallbackQuery** (*conf=None, **kwargs*)

Bases: *aiogram.types.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.

Exactly one of the fields `data` or `game_short_name` will be present.

<https://core.telegram.org/bots/api#callbackquery>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

answer (*text: Optional[String] = None, show_alert: Optional[Boolean] = None, url: Optional[String] = None, cache_time: Optional[Integer] = None*)

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.

Source: <https://core.telegram.org/bots/api#answercallbackquery>

Parameters

- **text** (*typing.Union[base.String, None]*) – Text of the notification. If not specified, nothing will be shown to the user, 0-200 characters

- **show_alert** (`typing.Union[base.Boolean, None]`) – 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** (`typing.Union[base.String, None]`) – URL that will be opened by the user's client.
- **cache_time** (`typing.Union[base.Integer, None]`) – The maximum amount of time in seconds that the result of the callback query may be cached client-side.

Returns On success, True is returned.

Return type `base.Boolean`

SuccessfulPayment

class `aiogram.types.successful_payment.SuccessfulPayment` (*conf=None, **kwargs*)
 Bases: `aiogram.types.base.TelegramObject`

This object contains basic information about a successful payment.

<https://core.telegram.org/bots/api#successfulpayment>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

MessageEntity

class `aiogram.types.message_entity.MessageEntity` (*conf=None, **kwargs*)
 Bases: `aiogram.types.base.TelegramObject`

This object represents one special entity in a text message. For example, hashtags, usernames, URLs, etc.

<https://core.telegram.org/bots/api#messageentity>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

get_text (*text*)

Get value of entity

Parameters **text** – full text

Returns part of text

parse (*text, as_html=True*)

Get entity value with markup

Parameters

- **text** – original text
- **as_html** – as html?

Returns entity text with markup

MessageEntityType

class aiogram.types.message_entity.**MessageEntityType**

Bases: aiogram.utils.helper.Helper

List of entity types

Key MENTION

Key HASHTAG

Key CASHTAG

Key BOT_COMMAND

Key URL

Key EMAIL

Key PHONE_NUMBER

Key BOLD

Key ITALIC

Key CODE

Key PRE

Key TEXT_LINK

Key TEXT_MENTION

ShippingQuery

class aiogram.types.shipping_query.**ShippingQuery** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object contains information about an incoming shipping query.

<https://core.telegram.org/bots/api#shippingquery>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

PassportData

class aiogram.types.passport_data.**PassportData** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

Contains information about Telegram Passport data shared with the bot by the user.

<https://core.telegram.org/bots/api#passportdata>

Deserialize object

Parameters

- **conf** –

- **kwargs** –

InlineKeyboardMarkup

class aiogram.types.inline_keyboard.**InlineKeyboardMarkup** (*row_width=3, inline_keyboard=None*)

Bases: *aiogram.types.base.TelegramObject*

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

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will display unsupported message.

<https://core.telegram.org/bots/api#inlinekeyboardmarkup>

add (*args)

Add buttons

Parameters args –

Returns self

Return type types.InlineKeyboardMarkup

row (*args)

Add row

Parameters args –

Returns self

Return type types.InlineKeyboardMarkup

insert (button)

Insert button to last row

Parameters button –

Returns self

Return type types.InlineKeyboardMarkup

InlineKeyboardButton

class aiogram.types.inline_keyboard.**InlineKeyboardButton** (*text: String, url: String = None, callback_data: String = None, switch_inline_query: String = None, switch_inline_query_current_chat: String = None, callback_game: aiogram.types.callback_game.CallbackGame = None, pay: Boolean = None*)

Bases: *aiogram.types.base.TelegramObject*

This object represents one button of an inline keyboard. You must use exactly one of the optional fields.

<https://core.telegram.org/bots/api#inlinekeyboardbutton>

User

class aiogram.types.user.**User** (*conf=None*, ***kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents a Telegram user or bot.

<https://core.telegram.org/bots/api#user>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

full_name

You can get full name of user.

Returns str

mention

You can get user's username to mention him Full name will be returned if user has no username

Returns str

locale

Get user's locale

Returns babel.core.Locale

Video

class aiogram.types.video.**Video** (*conf=None*, ***kwargs*)

Bases: *aiogram.types.base.TelegramObject*, *aiogram.types.mixins.Downloadable*

This object represents a video file.

<https://core.telegram.org/bots/api#video>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

EncryptedPassportElement

class aiogram.types.encrypted_passport_element.**EncryptedPassportElement** (*conf=None*, ***kwargs*)

Bases: *aiogram.types.base.TelegramObject*

Contains information about documents or other Telegram Passport elements shared with the bot by the user.

<https://core.telegram.org/bots/api#encryptedpassportelement>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Game

class aiogram.types.game.**Game** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject*

This object represents a game.

Use BotFather to create and edit games, their short names will act as unique identifiers.

<https://core.telegram.org/bots/api#game>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

File

class aiogram.types.file.**File** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject, aiogram.types.mixins.Downloadable*

This object represents a file ready to be downloaded.

The file can be downloaded via the link https://api.telegram.org/file/bot<token>/<file_path>.

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`.

Maximum file size to download is 20 MB

<https://core.telegram.org/bots/api#file>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

LabeledPrice

class aiogram.types.labeled_price.**LabeledPrice** (*label: String, amount: Integer*)
Bases: *aiogram.types.base.TelegramObject*

This object represents a portion of the price for goods or services.

<https://core.telegram.org/bots/api#labeledprice>

CallbackGame

class aiogram.types.callback_game.**CallbackGame** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

A placeholder, currently holds no information. Use BotFather to set up your game.

<https://core.telegram.org/bots/api#callbackgame>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ReplyKeyboardMarkup

class aiogram.types.reply_keyboard.**ReplyKeyboardMarkup** (*keyboard: Optional[List[List[aiogram.types.reply_keyboard.KeyboardButton]] = None, resize_keyboard: Boolean = None, one_time_keyboard: Boolean = None, selective: Boolean = None, row_width: Integer = 3*)

Bases: *aiogram.types.base.TelegramObject*

This object represents a custom keyboard with reply options (see Introduction to bots for details and examples).

<https://core.telegram.org/bots/api#replykeyboardmarkup>

add (**args*)

Add buttons

Parameters *args* –

Returns self

Return type *types.ReplyKeyboardMarkup*

row (**args*)

Add row

Parameters *args* –

Returns self

Return type *types.ReplyKeyboardMarkup*

insert (*button*)

Insert button to last row

Parameters *button* –

Returns self

Return type *types.ReplyKeyboardMarkup*

KeyboardButton

```
class aiogram.types.reply_keyboard.KeyboardButton (text: String, request_contact: Boolean = None, request_location: Boolean = None)
```

Bases: *aiogram.types.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. Optional fields are mutually exclusive. Note: request_contact and request_location options will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#keyboardbutton>

ReplyKeyboardRemove

```
class aiogram.types.reply_keyboard.ReplyKeyboardRemove (selective: Boolean = None)
```

Bases: *aiogram.types.base.TelegramObject*

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

<https://core.telegram.org/bots/api#replykeyboardremove>

Chat

```
class aiogram.types.chat.Chat (conf=None, **kwargs)
```

Bases: *aiogram.types.base.TelegramObject*

This object represents a chat.

<https://core.telegram.org/bots/api#chat>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

mention

Get mention if a Chat has a username, or get full name if this is a Private Chat, otherwise None is returned

delete_photo()

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.

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

Source: <https://core.telegram.org/bots/api#deletechatphoto>

Returns Returns True on success.

Return type `base.Boolean`

do (*action*)

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).

We only recommend using this method when a response from the bot will take a noticeable amount of time to arrive.

Source: <https://core.telegram.org/bots/api#sendchataction>

Parameters **action** (`base.String`) – Type of action to broadcast.

Returns Returns True on success.

Return type `base.Boolean`

export_invite_link ()

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.

Source: <https://core.telegram.org/bots/api#exportchatinvitelink>

Returns Returns exported invite link as String on success.

Return type `base.String`

get_administrators ()

Use this method to get a list of administrators in a chat.

Source: <https://core.telegram.org/bots/api#getchatadministrators>

Returns 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.

Return type `typing.List[types.ChatMember]`

get_member (*user_id*)

Use this method to get information about a member of a chat.

Source: <https://core.telegram.org/bots/api#getchatmember>

Parameters **user_id** (`base.Integer`) – Unique identifier of the target user

Returns Returns a ChatMember object on success.

Return type `types.ChatMember`

get_members_count ()

Use this method to get the number of members in a chat.

Source: <https://core.telegram.org/bots/api#getchatmemberscount>

Returns Returns Int on success.

Return type `base.Integer`

get_url ()

Use this method to get chat link. Private chat returns user link. Other chat types return either username link (if they are public) or invite link (if they are private). :return: link :rtype: `base.String`

kick (*user_id: Integer, until_date: Optional[Integer] = None*)

Use this method to kick a user from a group, a supergroup or a channel. In the case of supergroups and channels, 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 chat for this to work and must have the appropriate admin rights.

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.

Source: <https://core.telegram.org/bots/api#kickchatmember>

Parameters

- **user_id** (`base.Integer`) – Unique identifier of the target user
- **until_date** (`typing.Union[base.Integer, None]`) – Date when the user will be unbanned, unix time.

Returns Returns True on success.

Return type `base.Boolean`

`leave()`

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

Source: <https://core.telegram.org/bots/api#leavechat>

Returns Returns True on success.

Return type `base.Boolean`

`pin_message(message_id: int, disable_notification: bool = False)`

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.

Source: <https://core.telegram.org/bots/api#pinchatmessage>

Parameters

- **message_id** (`base.Integer`) – Identifier of a message to pin
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Pass True, if it is not necessary to send a notification to all group members about the new pinned message

Returns Returns True on success.

Return type `base.Boolean`

`promote(user_id: Integer, can_change_info: Optional[Boolean] = None, can_post_messages: Optional[Boolean] = None, can_edit_messages: Optional[Boolean] = None, can_delete_messages: Optional[Boolean] = None, can_invite_users: Optional[Boolean] = None, can_restrict_members: Optional[Boolean] = None, can_pin_messages: Optional[Boolean] = None, can_promote_members: Optional[Boolean] = None) → Boolean`

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.

Source: <https://core.telegram.org/bots/api#promotechatmember>

Parameters

- **user_id** (`base.Integer`) – Unique identifier of the target user
- **can_change_info** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can change chat title, photo and other settings
- **can_post_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can create channel posts, channels only

- **can_edit_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can edit messages of other users, channels only
- **can_delete_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can delete messages of other users
- **can_invite_users** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can invite new users to the chat
- **can_restrict_members** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can restrict, ban or unban chat members
- **can_pin_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the administrator can pin messages, supergroups only
- **can_promote_members** (`typing.Union[base.Boolean, None]`) – 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)

Returns Returns True on success.

Return type `base.Boolean`

restrict (*user_id: Integer, until_date: Optional[Integer] = None, can_send_messages: Optional[Boolean] = None, can_send_media_messages: Optional[Boolean] = None, can_send_other_messages: Optional[Boolean] = None, can_add_web_page_previews: Optional[Boolean] = None*) → `Boolean`

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.

Source: <https://core.telegram.org/bots/api#restrictchatmember>

Parameters

- **user_id** (`base.Integer`) – Unique identifier of the target user
- **until_date** (`typing.Union[base.Integer, None]`) – Date when restrictions will be lifted for the user, unix time.
- **can_send_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send text messages, contacts, locations and venues
- **can_send_media_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send audios, documents, photos, videos, video notes and voice notes, implies `can_send_messages`
- **can_send_other_messages** (`typing.Union[base.Boolean, None]`) – Pass True, if the user can send animations, games, stickers and use inline bots, implies `can_send_media_messages`
- **can_add_web_page_previews** (`typing.Union[base.Boolean, None]`) – Pass True, if the user may add web page previews to their messages, implies `can_send_media_messages`

Returns Returns True on success.

Return type `base.Boolean`

set_description (*description*)

Use this method to change the description of 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.

Source: <https://core.telegram.org/bots/api#setchatdescription>

Parameters **description** (`typing.Union[base.String, None]`) – New chat description, 0-255 characters

Returns Returns True on success.

Return type `base.Boolean`

set_photo (*photo*)

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.

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

Source: <https://core.telegram.org/bots/api#setchatphoto>

Parameters **photo** (`base.InputFile`) – New chat photo, uploaded using multipart/form-data

Returns Returns True on success.

Return type `base.Boolean`

set_title (*title*)

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.

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

Source: <https://core.telegram.org/bots/api#setchattitle>

Parameters **title** (`base.String`) – New chat title, 1-255 characters

Returns Returns True on success.

Return type `base.Boolean`

unban (*user_id: Integer*)

Use this method to unban a previously kicked user in a supergroup or channel. 'The user will not return to the group or channel automatically, but will be able to join via link, etc.

The bot must be an administrator for this to work.

Source: <https://core.telegram.org/bots/api#unbanchatmember>

Parameters **user_id** (`base.Integer`) – Unique identifier of the target user

Returns Returns True on success.

Return type `base.Boolean`

unpin_message ()

Use this method to unpin a message in a supergroup chat. The bot must be an administrator in the chat for this to work and must have the appropriate admin rights.

Source: <https://core.telegram.org/bots/api#unpinchatmessage>

Returns Returns True on success.

Return type `base.Boolean`

update_chat ()

User this method to update Chat data

Returns None

ChatType

class aiogram.types.chat.ChatType
Bases: aiogram.utils.helper.Helper

List of chat types

Key PRIVATE

Key GROUP

Key SUPER_GROUP

Key CHANNEL

classmethod **is_private** (*obj*) → bool
Check chat is private

Parameters *obj* –

Returns

classmethod **is_group** (*obj*) → bool
Check chat is group

Parameters *obj* –

Returns

classmethod **is_super_group** (*obj*) → bool
Check chat is super-group

Parameters *obj* –

Returns

classmethod **is_group_or_super_group** (*obj*) → bool
Check chat is group or super-group

Parameters *obj* –

Returns

classmethod **is_channel** (*obj*) → bool
Check chat is channel

Parameters *obj* –

Returns

ChatActions

class aiogram.types.chat.ChatActions
Bases: aiogram.utils.helper.Helper

List of chat actions

Key TYPING

Key UPLOAD_PHOTO

Key RECORD_VIDEO

Key UPLOAD_VIDEO

Key RECORD_AUDIO

Key UPLOAD_AUDIO

Key UPLOAD_DOCUMENT

Key FIND_LOCATION

Key RECORD_VIDEO_NOTE

Key UPLOAD_VIDEO_NOTE

classmethod **calc_timeout** (*text*, *timeout=0.8*)

Calculate timeout for text

Parameters

- **text** –
- **timeout** –

Returns

classmethod **find_location** (*sleep=None*)

Do find location

Parameters **sleep** – sleep timeout

Returns

classmethod **record_audio** (*sleep=None*)

Do record audio

Parameters **sleep** – sleep timeout

Returns

classmethod **record_video** (*sleep=None*)

Do record video

Parameters **sleep** – sleep timeout

Returns

classmethod **record_video_note** (*sleep=None*)

Do record video note

Parameters **sleep** – sleep timeout

Returns

classmethod **typing** (*sleep=None*)

Do typing

Parameters **sleep** – sleep timeout

Returns

classmethod **upload_audio** (*sleep=None*)

Do upload audio

Parameters **sleep** – sleep timeout

Returns

classmethod **upload_document** (*sleep=None*)

Do upload document

Parameters `sleep` – sleep timeout

Returns

classmethod `upload_photo` (*sleep=None*)

Do upload_photo

Parameters `sleep` – sleep timeout

Returns

classmethod `upload_video` (*sleep=None*)

Do upload video

Parameters `sleep` – sleep timeout

Returns

classmethod `upload_video_note` (*sleep=None*)

Do upload video note

Parameters `sleep` – sleep timeout

Returns

Document

class `aiogram.types.document.Document` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`, `aiogram.types.mixins.Downloadable`

This object represents a general file (as opposed to photos, voice messages and audio files).

<https://core.telegram.org/bots/api#document>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Audio

class `aiogram.types.audio.Audio` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`, `aiogram.types.mixins.Downloadable`

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

<https://core.telegram.org/bots/api#audio>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ForceReply

class aiogram.types.force_reply.**ForceReply** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

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.

Example: A poll bot for groups runs in privacy mode (only receives commands, replies to its messages and mentions). There could be two ways to create a new poll

The last option is definitely more attractive. And if you use ForceReply in your bot's questions, it will receive the user's answers even if it only receives replies, commands and mentions — without any extra work for the user.

<https://core.telegram.org/bots/api#forcereply>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

classmethod **create** (*selective: Optional[Boolean] = None*)

Create new force reply

Parameters **selective** –

Returns

PassportElementError

class aiogram.types.passport_element_error.**PassportElementError** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents an error in the Telegram Passport element which was submitted that should be resolved by the user.

<https://core.telegram.org/bots/api#passportelementerror>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

PassportElementErrorDataField

```
class aiogram.types.passport_element_error.PassportElementErrorDataField(source:  
    String,  
    type:  
    String,  
    field_name:  
    String,  
    data_hash:  
    String,  
    mes-  
    sage:  
    String)
```

Bases: *aiogram.types.passport_element_error.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.

<https://core.telegram.org/bots/api#passportelementerrordatafield>

PassportElementErrorFile

```
class aiogram.types.passport_element_error.PassportElementErrorFile(source:  
    String,  
    type:  
    String,  
    file_hash:  
    String,  
    mes-  
    sage:  
    String)
```

Bases: *aiogram.types.passport_element_error.PassportElementError*

Represents an issue with a document scan. The error is considered resolved when the file with the document scan changes.

<https://core.telegram.org/bots/api#passportelementerrorfile>

PassportElementErrorFiles

```
class aiogram.types.passport_element_error.PassportElementErrorFiles(source:  
    String,  
    type:  
    String,  
    file_hashes:  
    List[String],  
    mes-  
    sage:  
    String)
```

Bases: *aiogram.types.passport_element_error.PassportElementError*

Represents an issue with a list of scans. The error is considered resolved when the list of files containing the scans changes.

<https://core.telegram.org/bots/api#passportelementerrorfiles>

PassportElementErrorFrontSide

```
class aiogram.types.passport_element_error.PassportElementErrorFrontSide (source:
                                                                    String,
                                                                    type:
                                                                    String,
                                                                    file_hash:
                                                                    String,
                                                                    mes-
                                                                    sage:
                                                                    String)
```

Bases: *aiogram.types.passport_element_error.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.

<https://core.telegram.org/bots/api#passportelementerrorfrontside>

PassportElementErrorReverseSide

```
class aiogram.types.passport_element_error.PassportElementErrorReverseSide (source:
                                                                    String,
                                                                    type:
                                                                    String,
                                                                    file_hash:
                                                                    String,
                                                                    mes-
                                                                    sage:
                                                                    String)
```

Bases: *aiogram.types.passport_element_error.PassportElementError*

Represents an issue with the reverse side of a document. The error is considered resolved when the file with reverse side of the document changes.

<https://core.telegram.org/bots/api#passportelementerrorreverseside>

PassportElementErrorSelfie

```
class aiogram.types.passport_element_error.PassportElementErrorSelfie (source:
                                                                    String,
                                                                    type:
                                                                    String,
                                                                    file_hash:
                                                                    String,
                                                                    mes-
                                                                    sage:
                                                                    String)
```

Bases: *aiogram.types.passport_element_error.PassportElementError*

Represents an issue with the selfie with a document. The error is considered resolved when the file with the selfie changes.

<https://core.telegram.org/bots/api#passportelementerrorselfie>

ShippingAddress

class aiogram.types.shipping_address.**ShippingAddress** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents a shipping address.

<https://core.telegram.org/bots/api#shippingaddress>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ResponseParameters

class aiogram.types.response_parameters.**ResponseParameters** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

Contains information about why a request was unsuccessful.

<https://core.telegram.org/bots/api#responseparameters>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

OrderInfo

class aiogram.types.order_info.**OrderInfo** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents information about an order.

<https://core.telegram.org/bots/api#orderinfo>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

GameHighScore

class aiogram.types.game_high_score.**GameHighScore** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents one row of the high scores table for a game. And that's about all we've got for now. If you've got any questions, please check out our Bot FAQ

<https://core.telegram.org/bots/api#gamehighscore>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Sticker

class aiogram.types.sticker.**Sticker** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject, aiogram.types.mixins.Downloadable*

This object represents a sticker.

<https://core.telegram.org/bots/api#sticker>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQuery

class aiogram.types.inline_query.**InlineQuery** (*conf=None, **kwargs*)

Bases: *aiogram.types.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.

<https://core.telegram.org/bots/api#inlinequery>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

answer (*results: List[aiogram.types.inline_query_result.InlineQueryResult], cache_time: Optional[Integer] = None, is_personal: Optional[Boolean] = None, next_offset: Optional[String] = None, switch_pm_text: Optional[String] = None, switch_pm_parameter: Optional[String] = None*)

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

Source: <https://core.telegram.org/bots/api#answerinlinequery>

Parameters

- **results** (*typing.List[types.InlineQueryResult]*) – A JSON-serialized array of results for the inline query
- **cache_time** (*typing.Union[base.Integer, None]*) – 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** (`typing.Union[base.Boolean, None]`) – 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** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.String, None]`) – 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** (`typing.Union[base.String, None]`) – 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.

Returns On success, True is returned

Return type `base.Boolean`

Location

class `aiogram.types.location.Location` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`

This object represents a point on the map.

<https://core.telegram.org/bots/api#location>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Animation

class `aiogram.types.animation.Animation` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`, `aiogram.types.mixins.Downloadable`

You can provide an animation for your game so that it looks stylish in chats (check out Lumberjack for an example). This object represents an animation file to be displayed in the message containing a game.

<https://core.telegram.org/bots/api#animation>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputMedia

```
class aiogram.types.input_media.InputMedia (*args, **kwargs)
```

Bases: *aiogram.types.base.TelegramObject*

This object represents the content of a media message to be sent. It should be one of

- InputMediaAnimation
- InputMediaDocument
- InputMediaAudio
- InputMediaPhoto
- InputMediaVideo

That is only base class.

<https://core.telegram.org/bots/api#inputmedia>

InputMediaAnimation

```
class aiogram.types.input_media.InputMediaAnimation (media:      InputFile,  thumb:
                                                         Union[InputFile, String] =
                                                         None, caption: String = None,
                                                         width: Integer = None, height:
                                                         Integer = None, duration: In-
                                                         teger = None, parse_mode:
                                                         Boolean = None, **kwargs)
```

Bases: *aiogram.types.input_media.InputMedia*

Represents an animation file (GIF or H.264/MPEG-4 AVC video without sound) to be sent.

<https://core.telegram.org/bots/api#inputmediaanimation>

InputMediaDocument

```
class aiogram.types.input_media.InputMediaDocument (media:      InputFile,  thumb:
                                                         Union[InputFile, String] =
                                                         None, caption: String = None,
                                                         parse_mode: Boolean = None,
                                                         **kwargs)
```

Bases: *aiogram.types.input_media.InputMedia*

Represents a photo to be sent.

<https://core.telegram.org/bots/api#inputmediadocument>

InputMediaAudio

```
class aiogram.types.input_media.InputMediaAudio (media: InputFile, thumb: Union[InputFile, String] = None, caption: String = None, width: Integer = None, height: Integer = None, duration: Integer = None, performer: String = None, title: String = None, parse_mode: Boolean = None, **kwargs)
```

Bases: *aiogram.types.input_media.InputMedia*

Represents an animation file (GIF or H.264/MPEG-4 AVC video without sound) to be sent.

<https://core.telegram.org/bots/api#inputmediaanimation>

InputMediaPhoto

```
class aiogram.types.input_media.InputMediaPhoto (media: InputFile, thumb: Union[InputFile, String] = None, caption: String = None, parse_mode: Boolean = None, **kwargs)
```

Bases: *aiogram.types.input_media.InputMedia*

Represents a photo to be sent.

<https://core.telegram.org/bots/api#inputmediaphoto>

InputMediaVideo

```
class aiogram.types.input_media.InputMediaVideo (media: InputFile, thumb: Union[InputFile, String] = None, caption: String = None, width: Integer = None, height: Integer = None, duration: Integer = None, parse_mode: Boolean = None, supports_streaming: Boolean = None, **kwargs)
```

Bases: *aiogram.types.input_media.InputMedia*

Represents a video to be sent.

<https://core.telegram.org/bots/api#inputmediavideo>

MediaGroup

```
class aiogram.types.input_media.MediaGroup (medias: Optional[List[Union[aiogram.types.input_media.InputMedia, Dict[KT, VT]]]] = None)
```

Bases: *aiogram.types.base.TelegramObject*

Helper for sending media group

attach_many (*medias)

Attach list of media

Parameters medias –

attach (*media*: Union[aiogram.types.input_media.InputMedia, Dict[KT, VT]])
Attach media

Parameters *media* –

attach_photo (*photo*: Union[aiogram.types.input_media.InputMediaPhoto, InputFile], *caption*: String = None)
Attach photo

Parameters

- **photo** –
- **caption** –

attach_video (*video*: Union[aiogram.types.input_media.InputMediaVideo, InputFile], *thumb*: Union[InputFile, String] = None, *caption*: String = None, *width*: Integer = None, *height*: Integer = None, *duration*: Integer = None)
Attach video

Parameters

- **video** –
- **caption** –
- **width** –
- **height** –
- **duration** –

to_python () → List[T]
Get object as JSON serializable

Returns

InlineQueryResult

class aiogram.types.inline_query_result.InlineQueryResult (**kwargs)
Bases: *aiogram.types.base.TelegramObject*

This object represents one result of an inline query.

Telegram clients currently support results of the following 20 types

<https://core.telegram.org/bots/api#inlinequeryresult>

InlineQueryResultArticle

```
class aiogram.types.inline_query_result.InlineQueryResultArticle(*id:  
    String, title:  
    String, input_message_content:  
    aiogram.types.input_message_content.InputMessageContent,  
    reply_markup:  
    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup],  
    url: Optional[String],  
    hide_url: Optional[Boolean],  
    description: Optional[String],  
    thumb_url: Optional[String],  
    thumb_width: Optional[Integer],  
    thumb_height: Optional[Integer])
```

Bases: *aiogram.types.inline_query_result.InlineQueryResult*

Represents a link to an article or web page.

<https://core.telegram.org/bots/api#inlinequeryresultarticle>

InlineQueryResultPhoto

```
class aiogram.types.inline_query_result.InlineQueryResultPhoto(*id: String,  
                                                                photo_url:  
                                                                String,  
                                                                thumb_url:  
                                                                String,  
                                                                photo_width:  
                                                                Op-  
                                                                tional[Integer]  
                                                                = None,  
                                                                photo_height:  
                                                                Op-  
                                                                tional[Integer]  
                                                                = None,  
                                                                title: Op-  
                                                                tional[String]  
                                                                = None, de-  
                                                                scription: Op-  
                                                                tional[String]  
                                                                = None, cap-  
                                                                tion: Op-  
                                                                tional[String]  
                                                                = None, re-  
                                                                ply_markup:  
                                                                Op-  
                                                                tional[aiogram.types.inline_keyboard.Inl  
                                                                = None, in-  
                                                                put_message_content:  
                                                                Op-  
                                                                tional[aiogram.types.input_message_con  
                                                                = None)
```

Bases: *aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultphoto>

InlineQueryResultGif

```
class aiogram.types.inline_query_result.InlineQueryResultGif(*id: String,  
                    gif_url: String,  
                    gif_width: Optional[Integer] =  
                        None, gif_height: Optional[Integer]  
                        = None,  
                    gif_duration: Optional[Integer] =  
                        None, thumb_url: Optional[String]  
                        = None, title: Optional[String]  
                        = None, caption: Optional[String] =  
                        None, parse_mode: Optional[String]  
                        = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]  
                        = None, input_message_content: Optional[aiogram.types.input_message_content.InputMessageContent]  
                        = None)
```

Bases: *aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultgif>

InlineQueryResultMpeg4Gif

```

class aiogram.types.inline_query_result.InlineQueryResultMpeg4Gif(*,      id:
                                                                    String,
                                                                    mpeg4_url:
                                                                    String,
                                                                    thumb_url:
                                                                    String,
                                                                    mpeg4_width:
                                                                    Optional[Integer]
                                                                    = None,
                                                                    mpeg4_height:
                                                                    Optional[Integer]
                                                                    = None,
                                                                    mpeg4_duration:
                                                                    Optional[Integer]
                                                                    = None,
                                                                    title: Optional[String]
                                                                    = None,
                                                                    caption:
                                                                    Optional[String]
                                                                    = None,
                                                                    parse_mode:
                                                                    Optional[String]
                                                                    = None, reply_markup:
                                                                    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
                                                                    = None, input_message_content:
                                                                    Optional[aiogram.types.input_message_content.InputMessageContent]
                                                                    = None)

```

Bases: `aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultmpeg4gif>

InlineQueryResultVideo

```
class aiogram.types.inline_query_result.InlineQueryResultVideo(*id: String,  
    video_url: String,  
    mime_type: String,  
    thumb_url: String,  
    title: String,  
    caption: Optional[String] = None,  
    parse_mode: Optional[String] = None,  
    video_width: Optional[Integer] = None,  
    video_height: Optional[Integer] = None,  
    video_duration: Optional[Integer] = None,  
    description: Optional[String] = None,  
    reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None,  
    input_message_content: Optional[aiogram.types.input_message_content.InputMessageContent] = None)
```

Bases: `aiogram.types.inline_query_result.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.

If an `InlineQueryResultVideo` message contains an embedded video (e.g., YouTube), you must replace its content using `input_message_content`.

<https://core.telegram.org/bots/api#inlinequeryresultvideo>

InlineQueryResultAudio

```
class aiogram.types.inline_query_result.InlineQueryResultAudio(*id: String, au-  
dio_url: String,  
title: String,  
caption: Op-  
tional[String]  
= None,  
parse_mode:  
Op-  
tional[String]  
= None, per-  
former: Op-  
tional[String]  
= None, au-  
dio_duration:  
Op-  
tional[Integer]  
= None, re-  
ply_markup:  
Op-  
tional[aiogram.types.inline_keyboard.Inl  
= None, in-  
put_message_content:  
Op-  
tional[aiogram.types.input_message_con  
= None)
```

Bases: `aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultaudio>

InlineQueryResultVoice

```
class aiogram.types.inline_query_result.InlineQueryResultVoice(*id: String,  
    voice_url: String,  
    title: String,  
    caption: Optional[String]  
    = None,  
    parse_mode: Optional[String]  
    = None,  
    voice_duration: Optional[Integer]  
    = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]  
    = None, input_message_content: Optional[aiogram.types.input_message_content.InputMessageContent]  
    = None)
```

Bases: *aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultvoice>

InlineQueryResultDocument

```

class aiogram.types.inline_query_result.InlineQueryResultDocument(*,
    id:
        String, title:
        String, caption:
        Optional[String]
        = None,
    parse_mode:
        Optional[String]
        = None,
    document_url:
        Optional[String]
        = None,
    mime_type:
        Optional[String]
        = None,
    description:
        Optional[String]
        = None,
    reply_markup:
        Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
        = None,
    input_message_content:
        Optional[aiogram.types.input_message_content.InputMessageContent]
        = None,
    thumb_url:
        Optional[String]
        = None,
    thumb_width:
        Optional[Integer]
        = None,
    thumb_height:
        Optional[Integer]
        = None)

```

Bases: `aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultdocument>

InlineQueryResultLocation

```
class aiogram.types.inline_query_result.InlineQueryResultLocation(*,      id:
                                                                    String, lati-
                                                                    tude: Float,
                                                                    longi-
                                                                    tude: Float,
                                                                    title: String,
                                                                    live_period:
                                                                    Op-
                                                                    tional[Integer]
                                                                    = None, re-
                                                                    ply_markup:
                                                                    Op-
                                                                    tional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
                                                                    = None, in-
                                                                    put_message_content:
                                                                    Op-
                                                                    tional[aiogram.types.input_message_content.InputMessageContent]
                                                                    = None,
                                                                    thumb_url:
                                                                    Op-
                                                                    tional[String]
                                                                    = None,
                                                                    thumb_width:
                                                                    Op-
                                                                    tional[Integer]
                                                                    = None,
                                                                    thumb_height:
                                                                    Op-
                                                                    tional[Integer]
                                                                    = None)
```

Bases: `aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultlocation>

InlineQueryResultVenue

```

class aiogram.types.inline_query_result.InlineQueryResultVenue(*, id: String,
                                                                latitude: Float,
                                                                longitude:
                                                                Float,      title:
                                                                String,      ad-
                                                                dress: String,
                                                                foursquare_id:
                                                                Op-
                                                                tional[String]
                                                                = None, re-
                                                                ply_markup:
                                                                Op-
                                                                tional[aiogram.types.inline_keyboard.Inl
                                                                = None, in-
                                                                put_message_content:
                                                                Op-
                                                                tional[aiogram.types.input_message_con
                                                                = None,
                                                                thumb_url: Op-
                                                                tional[String]
                                                                = None,
                                                                thumb_width:
                                                                Op-
                                                                tional[Integer]
                                                                = None,
                                                                thumb_height:
                                                                Op-
                                                                tional[Integer]
                                                                = None,
                                                                foursquare_type:
                                                                Op-
                                                                tional[String] =
                                                                None)

```

Bases: `aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultvenue>

InlineQueryResultContact

```
class aiogram.types.inline_query_result.InlineQueryResultContact (*, id: String,
                                                                    phone_number:
                                                                    String,
                                                                    first_name:
                                                                    String,
                                                                    last_name:
                                                                    Op-
                                                                    tional[String]
                                                                    = None, re-
                                                                    ply_markup:
                                                                    Op-
                                                                    tional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
                                                                    = None, in-
                                                                    put_message_content:
                                                                    Op-
                                                                    tional[aiogram.types.input_message_content.InputMessageContent]
                                                                    = None,
                                                                    thumb_url:
                                                                    Op-
                                                                    tional[String]
                                                                    = None,
                                                                    thumb_width:
                                                                    Op-
                                                                    tional[Integer]
                                                                    = None,
                                                                    thumb_height:
                                                                    Op-
                                                                    tional[Integer]
                                                                    = None,
                                                                    foursquare_type:
                                                                    Op-
                                                                    tional[String]
                                                                    = None)
```

Bases: *aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultcontact>

InlineQueryResultGame

```
class aiogram.types.inline_query_result.InlineQueryResultGame (*, id: String,
                                                                    game_short_name:
                                                                    String,
                                                                    reply_markup: Op-
                                                                    tional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
                                                                    = None)
```

Bases: *aiogram.types.inline_query_result.InlineQueryResult*

Represents a Game.

Note: This will only work in Telegram versions released after October 1, 2016. Older clients will not display any inline results if a game result is among them.

<https://core.telegram.org/bots/api#inlinequeryresultgame>

InlineQueryResultCachedPhoto

```
class aiogram.types.inline_query_result.InlineQueryResultCachedPhoto(*, id:
    String,
    photo_file_id:
    String,
    title:
    Optional[String]
    =
    None,
    de-
    scrip-
    tion:
    Optional[String]
    =
    None,
    cap-
    tion:
    Optional[String]
    =
    None,
    parse_mode:
    Optional[String]
    =
    None,
    re-
    ply_markup:
    Optional[aiogram.types.inline_keyb
    =
    None,
    in-
    put_message_content:
    Optional[aiogram.types.input_mes
    =
    None)
```

Bases: `aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultcachedphoto>

InlineQueryResultCachedGif

```
class aiogram.types.inline_query_result.InlineQueryResultCachedGif(*id:  
    String,  
    gif_file_id:  
    String,  
    title: Optional[String]  
    = None,  
    caption: Optional[String]  
    = None,  
    parse_mode:  
    Optional[String]  
    = None,  
    reply_markup:  
    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]  
    = None,  
    input_message_content:  
    Optional[aiogram.types.input_message_content.InputMessageContent]  
    = None)
```

Bases: *aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultcachedgif>

InlineQueryResultCachedMpeg4Gif

```
class aiogram.types.inline_query_result.InlineQueryResultCachedMpeg4Gif(*,
                                                                    id:
                                                                    String,
                                                                    mpeg4_file_id:
                                                                    String,
                                                                    title:
                                                                    Optional[String]
                                                                    =
                                                                    None,
                                                                    caption:
                                                                    Optional[String]
                                                                    =
                                                                    None,
                                                                    parse_mode:
                                                                    Optional[String]
                                                                    =
                                                                    None,
                                                                    reply_markup:
                                                                    Optional[aiogram.types.inline.
                                                                    =
                                                                    None,
                                                                    input_message_content:
                                                                    Optional[aiogram.types.input_
                                                                    =
                                                                    None)
```

Bases: *aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultcachedmpeg4gif>

InlineQueryResultCachedSticker

```
class aiogram.types.inline_query_result.InlineQueryResultCachedSticker(*,
                                                                    id:
                                                                    String,
                                                                    sticker_file_id:
                                                                    String,
                                                                    re-
                                                                    ply_markup:
                                                                    Op-
                                                                    tional[aiogram.types.inline_q-
                                                                    =
                                                                    None,
                                                                    in-
                                                                    put_message_content:
                                                                    Op-
                                                                    tional[aiogram.types.input_m-
                                                                    =
                                                                    None])
```

Bases: *aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultcachedsticker>

InlineQueryResultCachedDocument

```

class aiogram.types.inline_query_result.InlineQueryResultCachedDocument(*,
    id:
    String,
    title:
    String,
    document_file_id:
    String,
    description:
    Optional[String]
    =
    None,
    caption:
    Optional[String]
    =
    None,
    parse_mode:
    Optional[String]
    =
    None,
    reply_markup:
    Optional[aiogram.types.inline_query_result.InlineQueryResultCachedDocumentReplyMarkup]
    =
    None,
    input_message_content:
    Optional[aiogram.types.input_message_content.InputMessageContent]
    =
    None)

```

Bases: `aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultcacheddocument>

InlineQueryResultCachedVideo

```
class aiogram.types.inline_query_result.InlineQueryResultCachedVideo(*id:  
    String,  
    video_file_id:  
    String,  
    title:  
    String,  
    description:  
    Optional[String]  
    =  
    None,  
    caption:  
    Optional[String]  
    =  
    None,  
    parse_mode:  
    Optional[String]  
    =  
    None,  
    reply_markup:  
    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]  
    =  
    None,  
    input_message_content:  
    Optional[aiogram.types.input_message_content.InputMessageContent]  
    =  
    None)
```

Bases: *aiogram.types.inline_query_result.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.

<https://core.telegram.org/bots/api#inlinequeryresultcachedvideo>

InlineQueryResultCachedVoice

```
class aiogram.types.inline_query_result.InlineQueryResultCachedVoice(*, id:
    String,
    voice_file_id:
    String,
    title:
    String,
    caption:
    Optional[String]
    =
    None,
    parse_mode:
    Optional[String]
    =
    None,
    reply_markup:
    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]
    =
    None,
    input_message_content:
    Optional[aiogram.types.input_message_content.InputMessageContent]
    =
    None)
```

Bases: *aiogram.types.inline_query_result.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.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultcachedvoice>

InlineQueryResultCachedAudio

```
class aiogram.types.inline_query_result.InlineQueryResultCachedAudio(*  
    String,  
    audio_file_id:  
    String,  
    caption:  
    Optional[String]  
    =  
    None,  
    parse_mode:  
    Optional[String]  
    =  
    None,  
    reply_markup:  
    Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup]  
    =  
    None,  
    input_message_content:  
    Optional[aiogram.types.input_message_content.InputMessageContent]  
    =  
    None)
```

Bases: *aiogram.types.inline_query_result.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 a message with the specified content instead of the audio.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inlinequeryresultcachedaudio>

InputFile

```
class aiogram.types.input_file.InputFile(path_or_bytesio, filename=None, conf=None)
```

Bases: *aiogram.types.base.TelegramObject*

This object represents the contents of a file to be uploaded. Must be posted using multipart/form-data in the usual way that files are uploaded via the browser.

Also that is not typical TelegramObject!

<https://core.telegram.org/bots/api#inputfile>

Parameters

- **path_or_bytesio** –
- **filename** –

- **conf** –

get_filename() → str
Get file name

Returns name

get_file()
Get file object

Returns

classmethod from_url(url, filename=None, chunk_size=65536)
Download file from URL

Manually is not required action. You can send urls instead!

Parameters

- **url** – target URL
- **filename** – optional. set custom file name
- **chunk_size** –

Returns InputFile

save(filename, chunk_size=65536)
Write file to disk

Parameters

- **filename** –
- **chunk_size** –

to_python()
Get object as JSON serializable

Returns

classmethod to_object(data)
Deserialize object

Parameters data –

Returns

PreCheckoutQuery

class aiogram.types.pre_checkout_query.**PreCheckoutQuery**(conf=None, **kwargs)
Bases: *aiogram.types.base.TelegramObject*

This object contains information about an incoming pre-checkout query. Your bot can offer users HTML5 games to play solo or to compete against each other in groups and one-on-one chats.

Create games via @BotFather using the /newgame command.

Please note that this kind of power requires responsibility: you will need to accept the terms for each game that your bots will be offering.

<https://core.telegram.org/bots/api#precheckoutquery>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Voice

class aiogram.types.voice.**Voice** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject, aiogram.types.mixins.Downloadable*

This object represents a voice note.

<https://core.telegram.org/bots/api#voice>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputMessageContent

class aiogram.types.input_message_content.**InputMessageContent** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents the content of a message to be sent as a result of an inline query.

Telegram clients currently support the following 4 types

<https://core.telegram.org/bots/api#inputmessagecontent>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputContactMessageContent

class aiogram.types.input_message_content.**InputContactMessageContent** (*phone_number: String, first_name: Optional[String] = None, last_name: Optional[String] = None*)

Bases: *aiogram.types.input_message_content.InputMessageContent*

Represents the content of a contact message to be sent as the result of an inline query.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inputcontactmessagecontent>

InputLocationMessageContent

```
class aiogram.types.input_message_content.InputLocationMessageContent (latitude:  
                                                                    Float,  
                                                                    longi-  
                                                                    tude:  
                                                                    Float)
```

Bases: *aiogram.types.input_message_content.InputMessageContent*

Represents the content of a location message to be sent as the result of an inline query.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inputlocationmessagecontent>

InputTextMessageContent

```
class aiogram.types.input_message_content.InputTextMessageContent (message_text:  
                                                                    Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    parse_mode:  
                                                                    Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    dis-  
                                                                    able_web_page_preview:  
                                                                    Op-  
                                                                    tional[Boolean]  
                                                                    = None)
```

Bases: *aiogram.types.input_message_content.InputMessageContent*

Represents the content of a text message to be sent as the result of an inline query.

<https://core.telegram.org/bots/api#inputtextmessagecontent>

InputVenueMessageContent

```
class aiogram.types.input_message_content.InputVenueMessageContent (latitude:
    Optional[Float]
    = None,
    longitude: Optional[Float]
    = None,
    title: Optional[String]
    = None,
    address:
    Optional[String]
    = None,
    foursquare_id:
    Optional[String]
    = None)
```

Bases: *aiogram.types.input_message_content.InputMessageContent*

Represents the content of a venue message to be sent as the result of an inline query.

Note: This will only work in Telegram versions released after 9 April, 2016. Older clients will ignore them.

<https://core.telegram.org/bots/api#inputvenuemessagecontent>

Update

```
class aiogram.types.update.Update (conf=None, **kwargs)
    Bases: aiogram.types.base.TelegramObject
```

This object represents an incoming update. At most one of the optional parameters can be present in any given update.

<https://core.telegram.org/bots/api#update>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

AllowedUpdates

```
class aiogram.types.update.AllowedUpdates
    Bases: aiogram.utils.helper.Helper
```

Helper for allowed_updates parameter in getUpdates and setWebhook methods.

You can use &, + or | operators for make combination of allowed updates.

Example:

```
>>> bot.get_updates(allowed_updates=AllowedUpdates.MESSAGE + AllowedUpdates.
↳EDITED_MESSAGE)
```

PhotoSize

class aiogram.types.photo_size.**PhotoSize** (*conf=None, **kwargs*)
 Bases: *aiogram.types.base.TelegramObject, aiogram.types.mixins.Downloadable*

This object represents one size of a photo or a file / sticker thumbnail.

<https://core.telegram.org/bots/api#photosize>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Venue

class aiogram.types.venue.**Venue** (*conf=None, **kwargs*)
 Bases: *aiogram.types.base.TelegramObject*

This object represents a venue.

<https://core.telegram.org/bots/api#venue>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ChosenInlineResult

class aiogram.types.chosen_inline_result.**ChosenInlineResult** (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

Represents a result of an inline query that was chosen by the user and sent to their chat partner.

Note: It is necessary to enable inline feedback via @Botfather in order to receive these objects in updates. Your bot can accept payments from Telegram users. Please see the introduction to payments for more details on the process and how to set up payments for your bot. Please note that users will need Telegram v.4.0 or higher to use payments (released on May 18, 2017).

<https://core.telegram.org/bots/api#choseninlineresult>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

VideoNote

class aiogram.types.video_note.**VideoNote** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject, aiogram.types.mixins.Downloadable*

This object represents a video message (available in Telegram apps as of v.4.0).

<https://core.telegram.org/bots/api#videonote>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

WebhookInfo

class aiogram.types.webhook_info.**WebhookInfo** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject*

Contains information about the current status of a webhook.

<https://core.telegram.org/bots/api#webhookinfo>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

PassportFile

class aiogram.types.passport_file.**PassportFile** (*conf=None, **kwargs*)
Bases: *aiogram.types.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.

<https://core.telegram.org/bots/api#passportfile>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ChatMember

class aiogram.types.chat_member.**ChatMember** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject*

This object contains information about one member of a chat.

<https://core.telegram.org/bots/api#chatmember>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ChatMemberStatus

class aiogram.types.chat_member.ChatMemberStatus

Bases: aiogram.utils.helper.Helper

Chat member status

ShippingOption

class aiogram.types.shipping_option.ShippingOption (*id: String, title: String, prices: List[aiogram.types.labeled_price.LabeledPrice] = None*)

Bases: *aiogram.types.base.TelegramObject*

This object represents one shipping option.

<https://core.telegram.org/bots/api#shippingoption>

add (*price: aiogram.types.labeled_price.LabeledPrice*)
Add price

Parameters **price** –

Returns

ChatPhoto

class aiogram.types.chat_photo.ChatPhoto (*conf=None, **kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object represents a chat photo.

<https://core.telegram.org/bots/api#chatphoto>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

download_big (*destination=None, timeout=30, chunk_size=65536, seek=True, make_dirs=True*)
Download file

Parameters

- **destination** – filename or instance of `io.IOBase`. For e. g. `io.BytesIO`
- **timeout** – Integer
- **chunk_size** – Integer
- **seek** – Boolean - go to start of file when downloading is finished.

- **make_dirs** – Make dirs if not exist

Returns destination

download_small (*destination=None, timeout=30, chunk_size=65536, seek=True, make_dirs=True*)
Download file

Parameters

- **destination** – filename or instance of `io.IOBase`. For e. g. `io.BytesIO`
- **timeout** – Integer
- **chunk_size** – Integer
- **seek** – Boolean - go to start of file when downloading is finished.
- **make_dirs** – Make dirs if not exist

Returns destination

Contact

class `aiogram.types.contact.Contact` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`

This object represents a phone contact.

<https://core.telegram.org/bots/api#contact>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Message

class `aiogram.types.message.Message` (*conf=None, **kwargs*)

Bases: `aiogram.types.base.TelegramObject`

This object represents a message.

<https://core.telegram.org/bots/api#message>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

is_command ()

Check message text is command

Returns bool

get_full_command ()

Split command and args

Returns tuple of (command, args)

get_command (*pure=False*)
Get command from message

Returns

get_args ()
Get arguments

Returns

parse_entities (*as_html=True*)
Text or caption formatted as HTML or Markdown.

Returns str

md_text
Text or caption formatted as markdown.

Returns str

html_text
Text or caption formatted as HTML

Returns str

delete ()
Delete this message

Returns bool

edit_live_location (*latitude: Float, longitude: Float, reply_markup=None*) →
Union[aiogram.types.message.Message, Boolean]
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 stopMessageLiveLocation.

Source: <https://core.telegram.org/bots/api#editmessagelivelocation>

Parameters

- **latitude** (base.Float) – Latitude of new location
- **longitude** (base.Float) – Longitude of new location
- **reply_markup** (typing.Union[types.InlineKeyboardMarkup, None])
– A JSON-serialized object for a new inline keyboard.

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

Return type typing.Union[types.Message, base.Boolean]

edit_text (*text: String, parse_mode: Optional[String] = None, disable_web_page_preview: Optional[Boolean] = None, reply_markup=None*)
Use this method to edit text and game messages sent by the bot or via the bot (for inline bots).

Source: <https://core.telegram.org/bots/api#editmessagetext>

Parameters

- **text** (base.String) – New text of the message
- **parse_mode** (typing.Union[base.String, None]) – 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** (typing.Union[base.Boolean, None]) – Disables link previews for links in this message

- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for an inline keyboard.

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

Return type `typing.Union[types.Message, base.Boolean]`

forward (*chat_id*, *disable_notification=None*) → `aiogram.types.message.Message`

Forward this message

Parameters

- **chat_id** –
- **disable_notification** –

Returns

pin (*disable_notification: bool = False*)

Pin message

Parameters **disable_notification** –

Returns

reply (*text*, *parse_mode=None*, *disable_web_page_preview=None*, *disable_notification=None*, *reply_markup=None*, *reply=True*) → `aiogram.types.message.Message`

Reply to this message

Parameters

- **text** – str
- **parse_mode** – str
- **disable_web_page_preview** – bool
- **disable_notification** – bool
- **reply_markup** –
- **reply** – fill 'reply_to_message_id'

Returns `aiogram.types.Message`

reply_audio (*audio: Union[InputFile, String]*, *caption: Optional[String] = None*, *duration: Optional[Integer] = None*, *performer: Optional[String] = None*, *title: Optional[String] = None*, *disable_notification: Optional[Boolean] = None*, *reply_markup=None*, *reply=True*) → `aiogram.types.message.Message`

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.

For sending voice messages, use the `sendVoice` method instead.

Source: <https://core.telegram.org/bots/api#sendaudio>

Parameters

- **audio** (`typing.Union[base.InputFile, base.String]`) – Audio file to send.
- **caption** (`typing.Union[base.String, None]`) – Audio caption, 0-200 characters
- **duration** (`typing.Union[base.Integer, None]`) – Duration of the audio in seconds

- **performer** (`typing.Union[base.String, None]`) – Performer
- **title** (`typing.Union[base.String, None]`) – Track name
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_document (*document: Union[InputFile, String], caption: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*)
→ `aiogram.types.message.Message`

Use this method to send general files.

Bots can currently send files of any type of up to 50 MB in size, this limit may be changed in the future.

Source: <https://core.telegram.org/bots/api#senddocument>

Parameters

- **document** (`typing.Union[base.InputFile, base.String]`) – File to send.
- **caption** (`typing.Union[base.String, None]`) – Document caption (may also be used when resending documents by file_id), 0-200 characters
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply], None]`) – Additional interface options.
- **reply** – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_location (*latitude: Float, longitude: Float, live_period: Optional[Integer] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*)
→ `aiogram.types.message.Message`

Use this method to send point on the map.

Source: <https://core.telegram.org/bots/api#sendlocation>

Parameters

- **latitude** (`base.Float`) – Latitude of the location
- **longitude** (`base.Float`) – Longitude of the location
- **live_period** (`typing.Union[base.Integer, None]`) – Period in seconds for which the location will be updated
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.

- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_media_group (*media: Union[aiogram.types.input_media.MediaGroup, List[T]], disable_notification: Optional[Boolean] = None, reply=True*) → List[aiogram.types.message.Message]

Use this method to send a group of photos or videos as an album.

Source: <https://core.telegram.org/bots/api#sendmediagroup>

Parameters

- **media** (`typing.Union[types.MediaGroup, typing.List]`) – A JSON-serialized array describing photos and videos to be sent
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply** – fill ‘reply_to_message_id’

Returns On success, an array of the sent Messages is returned.

Return type `typing.List[types.Message]`

reply_photo (*photo: Union[InputFile, String], caption: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → aiogram.types.message.Message

Use this method to send photos.

Source: <https://core.telegram.org/bots/api#sendphoto>

Parameters

- **photo** (`typing.Union[base.InputFile, base.String]`) – Photo to send.
- **caption** (`typing.Union[base.String, None]`) – Photo caption (may also be used when resending photos by file_id), 0-200 characters
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_sticker (*sticker: Union[InputFile, String], disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → aiogram.types.message.Message

Use this method to send .webp stickers.

Source: <https://core.telegram.org/bots/api#sendsticker>

Parameters

- **sticker** (`typing.Union[base.InputFile, base.String]`) – Sticker to send.
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_video (*video: Union[InputFile, String], duration: Optional[Integer] = None, width: Optional[Integer] = None, height: Optional[Integer] = None, caption: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

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

Source: <https://core.telegram.org/bots/api#sendvideo>

Parameters

- **video** (`typing.Union[base.InputFile, base.String]`) – Video to send.
- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent video in seconds
- **width** (`typing.Union[base.Integer, None]`) – Video width
- **height** (`typing.Union[base.Integer, None]`) – Video height
- **caption** (`typing.Union[base.String, None]`) – Video caption (may also be used when resending videos by `file_id`), 0-200 characters
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_video_note (*video_note: Union[InputFile, String], duration: Optional[Integer] = None, length: Optional[Integer] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

As of v.4.0, Telegram clients support rounded square mp4 videos of up to 1 minute long. Use this method to send video messages.

Source: <https://core.telegram.org/bots/api#sendvideonote>

Parameters

- **video_note** (`typing.Union[base.InputFile, base.String]`) – Video note to send.

- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent video in seconds
- **length** (`typing.Union[base.Integer, None]`) – Video width and height
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

reply_voice (*voice: Union[InputFile, String], caption: Optional[String] = None, duration: Optional[Integer] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

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).

Source: <https://core.telegram.org/bots/api#sendvoice>

Parameters

- **voice** (`typing.Union[base.InputFile, base.String]`) – Audio file to send.
- **caption** (`typing.Union[base.String, None]`) – Voice message caption, 0-200 characters
- **duration** (`typing.Union[base.Integer, None]`) – Duration of the voice message in seconds
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

send_animation (*animation: Union[InputFile, String], duration: Optional[Integer] = None, width: Optional[Integer] = None, height: Optional[Integer] = None, thumb: Union[InputFile, String, None] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

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

On success, the sent Message is returned. Bots can currently send animation files of up to 50 MB in size, this limit may be changed in the future.

Source <https://core.telegram.org/bots/api#sendanimation>

Parameters

- **animation** (`typing.Union[base.InputFile, base.String]`) – 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`
- **duration** (`typing.Union[base.Integer, None]`) – Duration of sent animation in seconds
- **width** (`typing.Union[base.Integer, None]`) – Animation width
- **height** (`typing.Union[base.Integer, None]`) – Animation height
- **thumb** (`typing.Union[typing.Union[base.InputFile, base.String], None]`) – 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.
- **caption** (`typing.Union[base.String, None]`) – Animation caption (may also be used when resending animation by `file_id`), 0-1024 characters
- **parse_mode** (`typing.Union[base.String, None]`) – Send Markdown or HTML, if you want Telegram apps to show bold, italic, fixed-width text or inline URLs in the media caption
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound
- **reply_markup** (`typing.Union[typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply], None]`) – 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
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent `Message` is returned

Return type `types.Message`

send_contact (*phone_number: String, first_name: String, last_name: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

Use this method to send phone contacts.

Source: <https://core.telegram.org/bots/api#sendcontact>

Parameters

- **phone_number** (`base.String`) – Contact's phone number
- **first_name** (`base.String`) – Contact's first name
- **last_name** (`typing.Union[base.String, None]`) – Contact's last name
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

send_venue (*latitude: Float, longitude: Float, title: String, address: String, foursquare_id: Optional[String] = None, disable_notification: Optional[Boolean] = None, reply_markup=None, reply=True*) → `aiogram.types.message.Message`

Use this method to send information about a venue.

Source: <https://core.telegram.org/bots/api#sendvenue>

Parameters

- **latitude** (`base.Float`) – Latitude of the venue
- **longitude** (`base.Float`) – Longitude of the venue
- **title** (`base.String`) – Name of the venue
- **address** (`base.String`) – Address of the venue
- **foursquare_id** (`typing.Union[base.String, None]`) – Foursquare identifier of the venue
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, types.ReplyKeyboardMarkup, types.ReplyKeyboardRemove, types.ForceReply, None]`) – Additional interface options.
- **reply** – fill 'reply_to_message_id'

Returns On success, the sent Message is returned.

Return type `types.Message`

stop_live_location (*reply_markup=None*) → `Union[aiogram.types.message.Message, Boolean]`

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.

Source: <https://core.telegram.org/bots/api#stopmessagelivelocation>

Parameters **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for a new inline keyboard.

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

Return type `typing.Union[types.Message, base.Boolean]`

ContentType

class `aiogram.types.message.ContentType`

Bases: `aiogram.utils.helper.Helper`

List of message content types

WARNING: Single elements

Key TEXT

Key AUDIO

Key DOCUMENT

Key GAME
Key PHOTO
Key STICKER
Key VIDEO
Key VIDEO_NOTE
Key VOICE
Key CONTACT
Key LOCATION
Key VENUE
Key NEW_CHAT_MEMBERS
Key LEFT_CHAT_MEMBER
Key INVOICE
Key SUCCESSFUL_PAYMENT
Key CONNECTED_WEBSITE
Key MIGRATE_TO_CHAT_ID
Key MIGRATE_FROM_CHAT_ID
Key UNKNOWN
Key ANY

ContentTypes

class aiogram.types.message.**ContentTypes**

Bases: aiogram.utils.helper.Helper

List of message content types

WARNING: List elements.

Key TEXT
Key AUDIO
Key DOCUMENT
Key GAME
Key PHOTO
Key STICKER
Key VIDEO
Key VIDEO_NOTE
Key VOICE
Key CONTACT
Key LOCATION
Key VENUE

Key NEW_CHAT_MEMBERS
Key LEFT_CHAT_MEMBER
Key INVOICE
Key SUCCESSFUL_PAYMENT
Key CONNECTED_WEBSITE
Key MIGRATE_TO_CHAT_ID
Key MIGRATE_FROM_CHAT_ID
Key UNKNOWN
Key ANY

ParseMode

class aiogram.types.message.**ParseMode**
Bases: aiogram.utils.helper.Helper
Parse modes
Key MARKDOWN
Key HTML

MaskPosition

class aiogram.types.mask_position.**MaskPosition** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject*
This object describes the position on faces where a mask should be placed by default.
<https://core.telegram.org/bots/api#maskposition>
Deserialize object
Parameters

- **conf** –
- **kwargs** –

UserProfilePhotos

class aiogram.types.user_profile_photos.**UserProfilePhotos** (*conf=None, **kwargs*)
Bases: *aiogram.types.base.TelegramObject*
This object represent a user's profile pictures.
<https://core.telegram.org/bots/api#userprofilephotos>
Deserialize object
Parameters

- **conf** –
- **kwargs** –

Invoice

class aiogram.types.invoice.**Invoice** (*conf=None*, ***kwargs*)

Bases: *aiogram.types.base.TelegramObject*

This object contains basic information about an invoice.

<https://core.telegram.org/bots/api#invoice>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

AuthWidgetData

class aiogram.types.auth_widget_data.**AuthWidgetData** (*conf=None*, ***kwargs*)

Bases: *aiogram.types.base.TelegramObject*

Deserialize object

Parameters

- **conf** –
- **kwargs** –

classmethod **parse** (*request:* *aiohttp.web_request.Request*) → *aiogram.types.auth_widget_data.AuthWidgetData*
 Parse request as Telegram auth widget data.

Parameters **request** –

Returns *AuthWidgetData*

Raise *aiohttp.web.HTTPBadRequest*

4.5 Dispatcher

4.5.1 Filters

Basics

Coming soon...

Filters factory

Coming soon...

Builtin filters

Coming soon...

Making own filters (Custom filters)

Coming soon...

4.5.2 Finite state machine

Storage

Coming soon...

Available storage's

Coming soon...

Memory storage

Coming soon...

Redis storage

Coming soon...

Rethink DB storage

Coming soon...

Making own storage's

Coming soon...

States

Coming soon...

State utils

Coming soon...

State

Coming soon...

States group

Coming soon...

4.5.3 Middleware

Bases

Coming soon...

Making own middleware's

Coming soon...

Available middleware's

Coming soon...

4.5.4 Webhook

Coming soon...

Bases

Coming soon...

Security

Coming soon...

Making requests when getting updates

Coming soon...

4.5.5 Basics

Coming soon...

4.5.6 Available handlers

Coming soon...

Handler class

Coming soon...

4.5.7 Features

Coming soon...

4.5.8 Dispatcher class

```
class aiogram.Dispatcher(bot, loop=None, storage: Optional[aiogram.dispatcher.storage.BaseStorage]  
                        = None, run_tasks_by_default: bool = False, throttling_rate_limit=0.1,  
                        no_throttle_error=False, filters_factory=None)
```

Bases: `aiogram.utils.mixins.DataMixin`, `aiogram.utils.mixins.ContextInstanceMixin`

Simple Updates dispatcher

It will process incoming updates: messages, edited messages, channel posts, edited channel posts, inline queries, chosen inline results, callback queries, shipping queries, pre-checkout queries.

```
stop_polling()  
    Break long-polling process.
```

Returns

```
is_polling()  
    Check if polling is enabled
```

Returns

```
register_message_handler(callback, *custom_filters, commands=None, regexp=None, con-  
                        tent_types=None, state=None, run_task=None, **kwargs)  
    Register handler for message
```

```
# This handler works only if state is None (by default).  
dp.register_message_handler(cmd_start, commands=['start', 'about'])  
dp.register_message_handler(entry_point, commands=['setup'])  
  
# This handler works only if current state is "first_step"  
dp.register_message_handler(step_handler_1, state="first_step")  
  
# If you want to handle all states by one handler, use `state="*"`.  
dp.register_message_handler(cancel_handler, commands=['cancel'], state="*")  
dp.register_message_handler(cancel_handler, lambda msg: msg.text.lower() ==  
    ↪ 'cancel', state="*")
```

Parameters

- **callback** –
- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **custom_filters** – list of custom filters
- **kwargs** –
- **state** –

Returns decorated function

```
message_handler(*custom_filters, commands=None, regexp=None, content_types=None,  
                state=None, run_task=None, **kwargs)  
    Decorator for message handler
```

Examples:

Simple commands handler:


```
@dp.message_handler(commands=['start', 'welcome', 'about'])
async def cmd_handler(message: types.Message):
```

Filter messages by regular expression:

```
@dp.message_handler(regexp='^[a-z]+-[0-9]+')
async def msg_handler(message: types.Message):
```

Filter messages by command regular expression:

```
@dp.message_handler(filters.RegexpCommandsFilter(regexp_commands=['item_([0-9]*)']))
async def send_welcome(message: types.Message):
```

Filter by content type:

```
@dp.message_handler(content_types=ContentType.PHOTO | ContentType.DOCUMENT)
async def audio_handler(message: types.Message):
```

Filter by custom function:

```
@dp.message_handler(lambda message: message.text and 'hello' in message.text.lower())
async def text_handler(message: types.Message):
```

Use multiple filters:

```
@dp.message_handler(commands=['command'], content_types=ContentType.TEXT)
async def text_handler(message: types.Message):
```

Register multiple filters set for one handler:

```
@dp.message_handler(commands=['command'])
@dp.message_handler(lambda message: demojize(message.text) == ':new_moon_with_face:')
async def text_handler(message: types.Message):
```

This handler will be called if the message starts with ‘/command’ OR is some emoji

By default content_type is ContentType.TEXT

Parameters

- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **custom_filters** – list of custom filters
- **kwargs** –
- **state** –
- **run_task** – run callback in task (no wait results)

Returns decorated function

```
register_edited_message_handler (callback, *custom_filters, commands=None, reg-  
exp=None, content_types=None, state=None,  
run_task=None, **kwargs)
```

Register handler for edited message

Parameters

- **callback** –
- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

```
edited_message_handler (*custom_filters, commands=None, regexp=None, content_types=None,  
state=None, run_task=None, **kwargs)
```

Decorator for edited message handler

You can use combination of different handlers

```
@dp.message_handler()  
@dp.edited_message_handler()  
async def msg_handler(message: types.Message):
```

Parameters

- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

```
register_channel_post_handler (callback, *custom_filters, commands=None, regexp=None,  
content_types=None, state=None, run_task=None,  
**kwargs)
```

Register handler for channel post

Parameters

- **callback** –
- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.

- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

channel_post_handler (**custom_filters, commands=None, regexp=None, content_types=None, state=None, run_task=None, **kwargs*)

Decorator for channel post handler

Parameters

- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

register_edited_channel_post_handler (*callback, *custom_filters, commands=None, regexp=None, content_types=None, state=None, run_task=None, **kwargs*)

Register handler for edited channel post

Parameters

- **callback** –
- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

edited_channel_post_handler (**custom_filters, commands=None, regexp=None, content_types=None, state=None, run_task=None, **kwargs*)

Decorator for edited channel post handler

Parameters

- **commands** – list of commands
- **regexp** – REGEXP
- **content_types** – List of content types.
- **custom_filters** – list of custom filters

- **state** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

register_inline_handler (*callback*, **custom_filters*, *state=None*, *run_task=None*, ***kwargs*)
Register handler for inline query

Example:

```
dp.register_inline_handler(some_inline_handler, lambda inline_query: True)
```

Parameters

- **callback** –
- **custom_filters** – list of custom filters
- **state** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

inline_handler (**custom_filters*, *state=None*, *run_task=None*, ***kwargs*)
Decorator for inline query handler

Example:

```
@dp.inline_handler(lambda inline_query: True)
async def some_inline_handler(inline_query: types.InlineQuery)
```

Parameters

- **state** –
- **custom_filters** – list of custom filters
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns decorated function

register_chosen_inline_handler (*callback*, **custom_filters*, *state=None*, *run_task=None*,
***kwargs*)
Register handler for chosen inline query

Example:

```
dp.register_chosen_inline_handler(some_chosen_inline_handler, lambda chosen_
↪ inline_query: True)
```

Parameters

- **callback** –
- **state** –

- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns

chosen_inline_handler (**custom_filters, state=None, run_task=None, **kwargs*)

Decorator for chosen inline query handler

Example:

```
@dp.chosen_inline_handler(lambda chosen_inline_query: True)
async def some_chosen_inline_handler(chosen_inline_query: types.
    ↳ ChosenInlineResult)
```

Parameters

- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

Returns

register_callback_query_handler (*callback, *custom_filters, state=None, run_task=None, **kwargs*)

Register handler for callback query

Example:

```
dp.register_callback_query_handler(some_callback_handler, lambda callback_
    ↳ query: True)
```

Parameters

- **callback** –
- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

callback_query_handler (**custom_filters, state=None, run_task=None, **kwargs*)

Decorator for callback query handler

Example:

```
@dp.callback_query_handler(lambda callback_query: True)
async def some_callback_handler(callback_query: types.CallbackQuery)
```

Parameters

- **state** –
- **custom_filters** –

- **run_task** – run callback in task (no wait results)
- **kwargs** –

register_shipping_query_handler (*callback*, **custom_filters*, *state=None*, *run_task=None*, ***kwargs*)

Register handler for shipping query

Example:

```
dp.register_shipping_query_handler(some_shipping_query_handler, lambda_
↳ shipping_query: True)
```

Parameters

- **callback** –
- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

shipping_query_handler (**custom_filters*, *state=None*, *run_task=None*, ***kwargs*)

Decorator for shipping query handler

Example:

```
@dp.shipping_query_handler(lambda shipping_query: True)
async def some_shipping_query_handler(shipping_query: types.ShippingQuery)
```

Parameters

- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

register_pre_checkout_query_handler (*callback*, **custom_filters*, *state=None*, *run_task=None*, ***kwargs*)

Register handler for pre-checkout query

Example:

```
dp.register_pre_checkout_query_handler(some_pre_checkout_query_handler,
↳ lambda shipping_query: True)
```

Parameters

- **callback** –
- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

pre_checkout_query_handler (*custom_filters, state=None, run_task=None, **kwargs)

Decorator for pre-checkout query handler

Example:

```
@dp.pre_checkout_query_handler(lambda shipping_query: True)
async def some_pre_checkout_query_handler(shipping_query: types.ShippingQuery)
```

Parameters

- **state** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

register_errors_handler (callback, *custom_filters, exception=None, run_task=None, **kwargs)

Register handler for errors

Parameters

- **callback** –
- **exception** – you can make handler for specific errors type
- **run_task** – run callback in task (no wait results)

errors_handler (*custom_filters, exception=None, run_task=None, **kwargs)

Decorator for errors handler

Parameters

- **exception** – you can make handler for specific errors type
- **run_task** – run callback in task (no wait results)

Returns

current_state (*, chat: Union[str, int, None] = None, user: Union[str, int, None] = None) → aiogram.dispatcher.storage.FSMContext

Get current state for user in chat as context

```
with dp.current_state(chat=message.chat.id, user=message.user.id) as state:
    pass

state = dp.current_state()
state.set_state('my_state')
```

Parameters

- **chat** –
- **user** –

Returns

check_key (key, chat=None, user=None)

Get information about key in bucket

Parameters

- **key** –
- **chat** –
- **user** –

Returns

process_update (*update: aiogram.types.update.Update*)
Process single update object

Parameters update –

Returns

process_updates (*updates, fast: Optional[bool] = True*)
Process list of updates

Parameters

- **updates** –
- **fast** –

Returns

release_key (*key, chat=None, user=None*)
Release blocked key

Parameters

- **key** –
- **chat** –
- **user** –

Returns

reset_webhook (*check=True*) → bool
Reset webhook

Parameters check – check before deleting

Returns

skip_updates ()
You can skip old incoming updates from queue. This method is not recommended to use if you use payments or you bot has high-load.

Returns None

start_polling (*timeout=20, relax=0.1, limit=None, reset_webhook=None, fast: Optional[bool] = True*)
Start long-polling

Parameters

- **timeout** –
- **relax** –
- **limit** –
- **reset_webhook** –
- **fast** –

Returns

throttle (*key*, *, *rate=None*, *user=None*, *chat=None*, *no_error=None*) → bool
 Execute throttling manager. Returns True if limit has not exceeded otherwise raises ThrottleError or returns False

Parameters

- **key** – key in storage
- **rate** – limit (by default is equal to default rate limit)
- **user** – user id
- **chat** – chat id
- **no_error** – return boolean value instead of raising error

Returns bool

wait_closed()
 Wait for the long-polling to close

Returns

async_task (*func*)
 Execute handler as task and return None. Use this decorator for slow handlers (with timeouts)

```
@dp.message_handler(commands=['command'])
@dp.async_task
async def cmd_with_timeout(message: types.Message):
    await asyncio.sleep(120)
    return SendMessage(message.chat.id, 'KABOOM').reply(message)
```

Parameters **func** –

Returns

4.6 Utils

4.6.1 Executor

Coming soon...

4.6.2 Exceptions

Coming soon...

4.6.3 Context

Coming soon...

4.6.4 Markdown

Coming soon...

4.6.5 Helper

Coming soon...

4.6.6 Auth Widget

Coming soon...

4.6.7 Payload

Coming soon...

4.6.8 Parts

Coming soon...

4.6.9 JSON

Coming soon...

4.6.10 Emoji

Coming soon...

4.6.11 Deprecated

Coming soon...

4.7 Examples

4.7.1 Echo bot

Very simple example of the bot which will sent text of the received messages to the sender

Listing 1: echo_bot.py

```
1  """
2  This is a echo bot.
3  It echoes any incoming text messages.
4  """
5
6  import logging
7
8  from aiogram import Bot, Dispatcher, executor, types
9
10 API_TOKEN = 'BOT TOKEN HERE'
11
```

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```

12 # Configure logging
13 logging.basicConfig(level=logging.INFO)
14
15 # Initialize bot and dispatcher
16 bot = Bot(token=API_TOKEN)
17 dp = Dispatcher(bot)
18
19
20 @dp.message_handler(commands=['start', 'help'])
21 async def send_welcome(message: types.Message):
22     """
23     This handler will be called when client send `/start` or `/help` commands.
24     """
25     await message.reply("Hi!\nI'm EchoBot!\nPowered by aiogram.")
26
27
28 @dp.message_handler(regexp='(^cat[s]?$|puss)')
29 async def cats(message: types.Message):
30     with open('data/cats.jpg', 'rb') as photo:
31         await bot.send_photo(message.chat.id, photo, caption='Cats is here ',
32                             reply_to_message_id=message.message_id)
33
34
35 @dp.message_handler()
36 async def echo(message: types.Message):
37     await bot.send_message(message.chat.id, message.text)
38
39
40 if __name__ == '__main__':
41     executor.start_polling(dp, skip_updates=True)

```

4.7.2 Inline bot

Listing 2: inline_bot.py

```

1 import asyncio
2 import logging
3
4 from aiogram import Bot, types, Dispatcher, executor
5
6 API_TOKEN = 'BOT TOKEN HERE'
7
8 logging.basicConfig(level=logging.DEBUG)
9
10 loop = asyncio.get_event_loop()
11 bot = Bot(token=API_TOKEN, loop=loop)
12 dp = Dispatcher(bot)
13
14
15 @dp.inline_handler()
16 async def inline_echo(inline_query: types.InlineQuery):
17     input_content = types.InputTextMessageContent(inline_query.query or 'echo')
18     item = types.InlineQueryResultArticle(id='1', title='echo',
19                                         input_message_content=input_content)
20     await bot.answer_inline_query(inline_query.id, results=[item], cache_time=1)

```

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```

21
22
23 if __name__ == '__main__':
24     executor.start_polling(dp, loop=loop, skip_updates=True)

```

4.7.3 Advanced executor example

`#!/usr/bin/env python3` **This example is outdated** In this example used ArgumentParser for configuring Your bot. Provided to start bot with webhook: `python advanced_executor_example.py -token TOKEN_HERE -host 0.0.0.0 -port 8084 -host-name example.com -webhook-port 443` Or long polling: `python advanced_executor_example.py -token TOKEN_HERE` So... In this example found small trouble: can't get bot instance in handlers. If you want to automatic change getting updates method use executor utils (from `aiogram.utils.executor`)

TODO: Move token to environment variables.

Listing 3: `advanced_executor_example.py`

```

1  import argparse
2  import logging
3  import ssl
4  import sys
5
6  from aiogram import Bot
7  from aiogram.dispatcher import Dispatcher
8  from aiogram.dispatcher.webhook import *
9  from aiogram.utils.executor import start_polling, start_webhook
10
11 logging.basicConfig(level=logging.INFO)
12
13 # Configure arguments parser.
14 parser = argparse.ArgumentParser(description='Python telegram bot')
15 parser.add_argument('--token', '-t', nargs='?', type=str, default=None, help='Set_
↳ working directory')
16 parser.add_argument('--sock', help='UNIX Socket path')
17 parser.add_argument('--host', help='Webserver host')
18 parser.add_argument('--port', type=int, help='Webserver port')
19 parser.add_argument('--cert', help='Path to SSL certificate')
20 parser.add_argument('--pkey', help='Path to SSL private key')
21 parser.add_argument('--host-name', help='Set webhook host name')
22 parser.add_argument('--webhook-port', type=int, help='Port for webhook (default=port)
↳ ')
23 parser.add_argument('--webhook-path', default='/webhook', help='Port for webhook_
↳ (default=port) ')
24
25
26 async def cmd_start(message: types.Message):
27     return SendMessage(message.chat.id, f"Hello, {message.from_user.full_name}!")
28
29
30 def setup_handlers(dispatcher: Dispatcher):
31     # This example has only one messages handler
32     dispatcher.register_message_handler(cmd_start, commands=['start', 'welcome'])
33
34
35 async def on_startup(dispatcher, url=None, cert=None):

```

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```

36     setup_handlers(dispatcher)
37
38     bot = dispatcher.bot
39
40     # Get current webhook status
41     webhook = await bot.get_webhook_info()
42
43     if url:
44         # If URL is bad
45         if webhook.url != url:
46             # If URL doesnt match with by current remove webhook
47             if not webhook.url:
48                 await bot.delete_webhook()
49
50             # Set new URL for webhook
51             if cert:
52                 with open(cert, 'rb') as cert_file:
53                     await bot.set_webhook(url, certificate=cert_file)
54             else:
55                 await bot.set_webhook(url)
56     elif webhook.url:
57         # Otherwise remove webhook.
58         await bot.delete_webhook()
59
60
61 async def on_shutdown(dispatcher):
62     print('Shutdown.')
63
64
65 def main(arguments):
66     args = parser.parse_args(arguments)
67     token = args.token
68     sock = args.sock
69     host = args.host
70     port = args.port
71     cert = args.cert
72     pkey = args.pkey
73     host_name = args.host_name or host
74     webhook_port = args.webhook_port or port
75     webhook_path = args.webhook_path
76
77     # Fi webhook path
78     if not webhook_path.startswith('/'):
79         webhook_path = '/' + webhook_path
80
81     # Generate webhook URL
82     webhook_url = f"https://{host_name}:{webhook_port}{webhook_path}"
83
84     # Create bot & dispatcher instances.
85     bot = Bot(token)
86     dispatcher = Dispatcher(bot)
87
88     if (sock or host) and host_name:
89         if cert and pkey:
90             ssl_context = ssl.SSLContext(ssl.PROTOCOL_TLSv1_2)
91             ssl_context.load_cert_chain(cert, pkey)
92         else:

```

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```

93         ssl_context = None
94
95         start_webhook(dispatcher, webhook_path,
96                       on_startup=functools.partial(on_startup, url=webhook_url,
97 → cert=cert),
98                       on_shutdown=on_shutdown,
99                       host=host, port=port, path=sock, ssl_context=ssl_context)
100     else:
101         start_polling(dispatcher, on_startup=on_startup, on_shutdown=on_shutdown)
102
103 if __name__ == '__main__':
104     argv = sys.argv[1:]
105
106     if not len(argv):
107         parser.print_help()
108         sys.exit(1)
109
110     main(argv)

```

4.7.4 Proxy and emoji

Listing 4: proxy_and_emoji.py

```

1  import asyncio
2  import logging
3
4  import aiohttp
5
6  from aiogram import Bot, types
7  from aiogram.dispatcher import Dispatcher
8  from aiogram.types import ParseMode
9  from aiogram.utils.emoji import emoji
10 from aiogram.utils.executor import start_polling
11 from aiogram.utils.markdown import bold, code, italic, text
12
13 # Configure bot here
14 API_TOKEN = 'BOT TOKEN HERE'
15 PROXY_URL = 'http://PROXY_URL' # Or 'socks5://...'
16
17 # If authentication is required in your proxy then uncomment next line and change
18 → login/password for it
19 # PROXY_AUTH = aiohttp.BasicAuth(login='login', password='password')
20 # And add `proxy_auth=PROXY_AUTH` argument in line 25, like this:
21 # >>> bot = Bot(token=API_TOKEN, loop=loop, proxy=PROXY_URL, proxy_auth=PROXY_AUTH)
22 # Also you can use Socks5 proxy but you need manually install aiohttp-socks package.
23
24 # Get my ip URL
25 GET_IP_URL = 'http://bot.whatismyipaddress.com/'
26
27 logging.basicConfig(level=logging.INFO)
28
29 loop = asyncio.get_event_loop()
30 bot = Bot(token=API_TOKEN, loop=loop, proxy=PROXY_URL)
31 dp = Dispatcher(bot)

```

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```

31
32
33 async def fetch(url, proxy=None, proxy_auth=None):
34     async with aiohttp.ClientSession() as session:
35         async with session.get(url, proxy=proxy, proxy_auth=proxy_auth) as response:
36             return await response.text()
37
38
39 @dp.message_handler(commands=['start'])
40 async def cmd_start(message: types.Message):
41     content = []
42
43     # Make request (without proxy)
44     ip = await fetch(GET_IP_URL)
45     content.append(text(':globe_showing_Americas:', bold('IP:'), code(ip)))
46     # This line is formatted to ' *IP:* `YOUR IP` '
47
48     # Make request through proxy
49     ip = await fetch(GET_IP_URL, bot.proxy, bot.proxy_auth)
50     content.append(text(':locked_with_key:', bold('IP:'), code(ip), italic('via proxy
↳')))
51     # This line is formatted to ' *IP:* `YOUR IP` _via proxy_'
52
53     # Send content
54     await bot.send_message(message.chat.id, emojiize(text(*content, sep='\n')), parse_
↳mode=ParseMode.MARKDOWN)
55
56     # In this example you can see emoji codes: ":globe_showing_Americas:" and
↳":locked_with_key:"
57     # You can find full emoji cheat sheet at https://www.webpagefx.com/tools/emoji-
↳cheat-sheet/
58     # For representing emoji codes into real emoji use emoji util (aiogram.utils.
↳emoji)
59     # (you have to install emoji module)
60
61     # For example emojiize('Moon face :new_moon_face:') is transformed to 'Moon face '
62
63
64 if __name__ == '__main__':
65     start_polling(dp, loop=loop, skip_updates=True)

```

4.7.5 Finite state machine example

Listing 5: finite_state_machine_example.py

```

1 import asyncio
2 from typing import Optional
3
4 import aiogram.utils.markdown as md
5 from aiogram import Bot, Dispatcher, types
6 from aiogram.contrib.fsm_storage.memory import MemoryStorage
7 from aiogram.dispatcher import FSMContext
8 from aiogram.dispatcher.filters.state import State, StatesGroup
9 from aiogram.types import ParseMode
10 from aiogram.utils import executor

```

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```

11
12 API_TOKEN = 'BOT TOKEN HERE'
13
14 loop = asyncio.get_event_loop()
15
16 bot = Bot(token=API_TOKEN, loop=loop)
17
18 # For example use simple MemoryStorage for Dispatcher.
19 storage = MemoryStorage()
20 dp = Dispatcher(bot, storage=storage)
21
22
23 # States
24 class Form(StatesGroup):
25     name = State() # Will be represented in storage as 'Form:name'
26     age = State() # Will be represented in storage as 'Form:age'
27     gender = State() # Will be represented in storage as 'Form:gender'
28
29
30 @dp.message_handler(commands=['start'])
31 async def cmd_start(message: types.Message):
32     """
33     Conversation's entry point
34     """
35     # Set state
36     await Form.name.set()
37
38     await message.reply("Hi there! What's your name?")
39
40
41 # You can use state '*' if you need to handle all states
42 @dp.message_handler(state='*', commands=['cancel'])
43 @dp.message_handler(lambda message: message.text.lower() == 'cancel', state='*')
44 async def cancel_handler(message: types.Message, state: FSMContext, raw_state:
↳ Optional[str] = None):
45     """
46     Allow user to cancel any action
47     """
48     if raw_state is None:
49         return
50
51     # Cancel state and inform user about it
52     await state.finish()
53     # And remove keyboard (just in case)
54     await message.reply('Canceled.', reply_markup=types.ReplyKeyboardRemove())
55
56
57 @dp.message_handler(state=Form.name)
58 async def process_name(message: types.Message, state: FSMContext):
59     """
60     Process user name
61     """
62     async with state.proxy() as data:
63         data['name'] = message.text
64
65     await Form.next()
66     await message.reply("How old are you?")

```

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```

67
68
69 # Check age. Age gotta be digit
70 @dp.message_handler(lambda message: not message.text.isdigit(), state=Form.age)
71 async def failed_process_age(message: types.Message):
72     """
73     If age is invalid
74     """
75     return await message.reply("Age gotta be a number.\nHow old are you? (digits only)
76     ↪")
77
78 @dp.message_handler(lambda message: message.text.isdigit(), state=Form.age)
79 async def process_age(message: types.Message, state: FSMContext):
80     # Update state and data
81     await Form.next()
82     await state.update_data(age=int(message.text))
83
84     # Configure ReplyKeyboardMarkup
85     markup = types.ReplyKeyboardMarkup(resize_keyboard=True, selective=True)
86     markup.add("Male", "Female")
87     markup.add("Other")
88
89     await message.reply("What is your gender?", reply_markup=markup)
90
91
92 @dp.message_handler(lambda message: message.text not in ["Male", "Female", "Other"],
93     ↪state=Form.gender)
94 async def failed_process_gender(message: types.Message):
95     """
96     In this example gender has to be one of: Male, Female, Other.
97     """
98     return await message.reply("Bad gender name. Choose you gender from keyboard.")
99
100 @dp.message_handler(state=Form.gender)
101 async def process_gender(message: types.Message, state: FSMContext):
102     async with state.proxy() as data:
103         data['gender'] = message.text
104
105     # Remove keyboard
106     markup = types.ReplyKeyboardRemove()
107
108     # And send message
109     await bot.send_message(message.chat.id, md.text(
110         md.text('Hi! Nice to meet you,', md.bold(data['name'])),
111         md.text('Age:', data['age']),
112         md.text('Gender:', data['gender']),
113         sep='\n'), reply_markup=markup, parse_mode=ParseMode.MARKDOWN)
114
115     # Finish conversation
116     data.state = None
117
118
119 if __name__ == '__main__':
120     executor.start_polling(dp, loop=loop, skip_updates=True)

```

4.7.6 Throtling example

Example for throttling manager. You can use that for flood controlling.

Listing 6: throttling_example.py

```
1 import asyncio
2 import logging
3
4 from aiogram import Bot, types
5 from aiogram.contrib.fsm_storage.memory import MemoryStorage
6 from aiogram.dispatcher import Dispatcher
7 from aiogram.utils.exceptions import Throttled
8 from aiogram.utils.executor import start_polling
9
10 API_TOKEN = 'BOT TOKEN HERE'
11
12 logging.basicConfig(level=logging.INFO)
13
14 loop = asyncio.get_event_loop()
15 bot = Bot(token=API_TOKEN, loop=loop)
16
17 # Throttling manager does not work without Leaky Bucket.
18 # Then need to use storages. For example use simple in-memory storage.
19 storage = MemoryStorage()
20 dp = Dispatcher(bot, storage=storage)
21
22
23 @dp.message_handler(commands=['start', 'help'])
24 async def send_welcome(message: types.Message):
25     try:
26         # Execute throttling manager with rate-limit equal to 2 seconds for key "start
27         ↪ "
28         await dp.throttle('start', rate=2)
29     except Throttled:
30         # If request is throttled, the `Throttled` exception will be raised
31         await message.reply('Too many requests!')
32     else:
33         # Otherwise do something
34         await message.reply("Hi!\nI'm EchoBot!\nPowered by aiogram.")
35
36 if __name__ == '__main__':
37     start_polling(dp, loop=loop, skip_updates=True)
```

4.7.7 I18n example

Internalize your bot Step 1: extract texts # pybabel extract i18n_example.py -o locales/mybot.pot Step 2: create *.po files. For e.g. create en, ru, uk locales. # echo {en,ru,uk} | xargs -n1 pybabel init -i locales/mybot.pot -d locales -D mybot -l Step 3: translate texts Step 4: compile translations # pybabel compile -d locales -D mybot Step 5: When you change the code of your bot you need to update po & mo files. Step 5.1: regenerate pot file: command from step 1 Step 5.2: update po files # pybabel update -d locales -D mybot -i locales/mybot.pot Step 5.3: update your translations Step 5.4: compile mo files command from step 4

Listing 7: i18n_example.py

```

1  from pathlib import Path
2
3  from aiogram import Bot, Dispatcher, executor, types
4  from aiogram.contrib.middlewares.i18n import I18nMiddleware
5
6  TOKEN = 'BOT TOKEN HERE'
7  I18N_DOMAIN = 'mybot'
8
9  BASE_DIR = Path(__file__).parent
10 LOCALES_DIR = BASE_DIR / 'locales'
11
12 bot = Bot(TOKEN, parse_mode=types.ParseMode.HTML)
13 dp = Dispatcher(bot)
14
15 # Setup i18n middleware
16 i18n = I18nMiddleware(I18N_DOMAIN, LOCALES_DIR)
17 dp.middleware.setup(i18n)
18
19 # Alias for gettext method
20 _ = i18n.gettext
21
22
23 @dp.message_handler(commands=['start'])
24 async def cmd_start(message: types.Message):
25     # Simply use `_('message')` instead of `message` and never use f-strings for
26     ↪translatable texts.
27     await message.reply(_('Hello, <b>{user}</b>!').format(user=message.from_user.full_
28     ↪name))
29
30
31 @dp.message_handler(commands=['lang'])
32 async def cmd_lang(message: types.Message, locale):
33     await message.reply(_('Your current language: <i>{language}</i>').
34     ↪format(language=locale))
35
36
37 if __name__ == '__main__':
38     executor.start_polling(dp, skip_updates=True)

```

4.7.8 Regexp commands filter example

Listing 8: regexp_commands_filter_example.py

```

1  from aiogram import Bot, types
2  from aiogram.dispatcher import Dispatcher, filters
3  from aiogram.utils import executor
4
5  bot = Bot(token='TOKEN')
6  dp = Dispatcher(bot)
7
8
9  @dp.message_handler(filters.RegexpCommandsFilter(regexp_commands=['item_([0-9]*)']))
10 async def send_welcome(message: types.Message, regexp_command):

```

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```

11     await message.reply("You have requested an item with number: {}".format(regex_
    ↪command.group(1)))
12
13
14 if __name__ == '__main__':
15     executor.start_polling(dp)

```

4.7.9 Check user language

Babel is required.

Listing 9: check_user_language.py

```

1  import asyncio
2  import logging
3
4  from aiogram import Bot, Dispatcher, executor, md, types
5
6  API_TOKEN = 'BOT TOKEN HERE'
7
8  logging.basicConfig(level=logging.INFO)
9
10 loop = asyncio.get_event_loop()
11 bot = Bot(token=API_TOKEN, loop=loop, parse_mode=types.ParseMode.MARKDOWN)
12 dp = Dispatcher(bot)
13
14
15 @dp.message_handler()
16 async def check_language(message: types.Message):
17     locale = message.from_user.locale
18
19     await message.reply(md.text(
20         md.bold('Info about your language:'),
21         md.text(' ', md.bold('Code:'), md.italic(locale.locale)),
22         md.text(' ', md.bold('Territory:'), md.italic(locale.territory or 'Unknown')),
23         md.text(' ', md.bold('Language name:'), md.italic(locale.language_name)),
24         md.text(' ', md.bold('English language name:'), md.italic(locale.english_
    ↪name)),
25         sep='\n'))
26
27
28 if __name__ == '__main__':
29     executor.start_polling(dp, loop=loop, skip_updates=True)

```

4.7.10 Middleware and antiflood

Listing 10: middleware_and_antiflood.py

```

1  import asyncio
2
3  from aiogram import Bot, Dispatcher, executor, types
4  from aiogram.contrib.fsm_storage.redis import RedisStorage2
5  from aiogram.dispatcher import DEFAULT_RATE_LIMIT

```

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```

6 from aiogram.dispatcher.handler import CancelHandler, current_handler
7 from aiogram.dispatcher.middlewares import BaseMiddleware
8 from aiogram.utils.exceptions import Throttled
9
10 TOKEN = 'BOT TOKEN HERE'
11
12 loop = asyncio.get_event_loop()
13
14 # In this example Redis storage is used
15 storage = RedisStorage2(db=5)
16
17 bot = Bot(token=TOKEN, loop=loop)
18 dp = Dispatcher(bot, storage=storage)
19
20
21 def rate_limit(limit: int, key=None):
22     """
23     Decorator for configuring rate limit and key in different functions.
24
25     :param limit:
26     :param key:
27     :return:
28     """
29
30     def decorator(func):
31         setattr(func, 'throttling_rate_limit', limit)
32         if key:
33             setattr(func, 'throttling_key', key)
34         return func
35
36     return decorator
37
38
39 class ThrottlingMiddleware(BaseMiddleware):
40     """
41     Simple middleware
42     """
43
44     def __init__(self, limit=DEFAULT_RATE_LIMIT, key_prefix='antiflood_'):
45         self.rate_limit = limit
46         self.prefix = key_prefix
47         super(ThrottlingMiddleware, self).__init__()
48
49     async def on_process_message(self, message: types.Message, data: dict):
50         """
51         This handler is called when dispatcher receives a message
52
53         :param message:
54         """
55         # Get current handler
56         handler = current_handler.get()
57
58         # Get dispatcher from context
59         dispatcher = Dispatcher.get_current()
60         # If handler was configured, get rate limit and key from handler
61         if handler:
62             limit = getattr(handler, 'throttling_rate_limit', self.rate_limit)

```

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```

63         key = getattr(handler, 'throttling_key', f"{self.prefix}_{handler.__name__}
↳ })")
64     else:
65         limit = self.rate_limit
66         key = f"{self.prefix}_message"
67
68         # Use Dispatcher.throttle method.
69         try:
70             await dispatcher.throttle(key, rate=limit)
71         except Throttled as t:
72             # Execute action
73             await self.message_throttled(message, t)
74
75             # Cancel current handler
76             raise CancelHandler()
77
78     async def message_throttled(self, message: types.Message, throttled: Throttled):
79         """
80         Notify user only on first exceed and notify about unlocking only on last_
↳ exceed
81
82         :param message:
83         :param throttled:
84         """
85         handler = current_handler.get()
86         dispatcher = Dispatcher.get_current()
87         if handler:
88             key = getattr(handler, 'throttling_key', f"{self.prefix}_{handler.__name__}
↳ })")
89     else:
90         key = f"{self.prefix}_message"
91
92         # Calculate how many time is left till the block ends
93         delta = throttled.rate - throttled.delta
94
95         # Prevent flooding
96         if throttled.exceeded_count <= 2:
97             await message.reply('Too many requests! ')
98
99         # Sleep.
100         await asyncio.sleep(delta)
101
102         # Check lock status
103         thr = await dispatcher.check_key(key)
104
105         # If current message is not last with current key - do not send message
106         if thr.exceeded_count == throttled.exceeded_count:
107             await message.reply('Unlocked.')
108
109
110 @dp.message_handler(commands=['start'])
111 @rate_limit(5, 'start') # this is not required but you can configure throttling_
↳ manager for current handler using it
112 async def cmd_test(message: types.Message):
113     # You can use this command every 5 seconds
114     await message.reply('Test passed! You can use this command every 5 seconds.')
115

```

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```

116
117 if __name__ == '__main__':
118     # Setup middleware
119     dp.middleware.setup(ThrottlingMiddleware())
120
121     # Start long-polling
122     executor.start_polling(dp, loop=loop)

```

4.7.11 Webhook example

Example outdated

Listing 11: webhook_example.py

```

1 import asyncio
2 import ssl
3 import sys
4
5 from aiohttp import web
6
7 import aiogram
8 from aiogram import Bot, types
9 from aiogram.contrib.fsm_storage.memory import MemoryStorage
10 from aiogram.dispatcher import Dispatcher
11 from aiogram.dispatcher.webhook import get_new_configured_app, SendMessage
12 from aiogram.types import ChatType, ParseMode, ContentType
13 from aiogram.utils.markdown import hbold, bold, text, link
14
15 TOKEN = 'BOT TOKEN HERE'
16
17 WEBHOOK_HOST = 'example.com' # Domain name or IP address which your bot is located.
18 WEBHOOK_PORT = 443 # Telegram Bot API allows only for usage next ports: 443, 80, 88,
    ↳ or 8443
19 WEBHOOK_URL_PATH = '/webhook' # Part of URL
20
21 # This options needed if you use self-signed SSL certificate
22 # Instructions: https://core.telegram.org/bots/self-signed
23 WEBHOOK_SSL_CERT = './webhook_cert.pem' # Path to the ssl certificate
24 WEBHOOK_SSL_PRIV = './webhook_pkey.pem' # Path to the ssl private key
25
26 WEBHOOK_URL = f"https://{WEBHOOK_HOST}:{WEBHOOK_PORT}{WEBHOOK_URL_PATH}"
27
28 # Web app settings:
29 # Use LAN address to listen webhooks
30 # User any available port in range from 1024 to 49151 if you're using proxy, or
    ↳ WEBHOOK_PORT if you're using direct webhook handling
31 WEBAPP_HOST = 'localhost'
32 WEBAPP_PORT = 3001
33
34 BAD_CONTENT = ContentType.PHOTO & ContentType.DOCUMENT & ContentType.STICKER &
    ↳ ContentType.AUDIO
35
36 loop = asyncio.get_event_loop()
37 bot = Bot(TOKEN, loop=loop)
38 storage = MemoryStorage()

```

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```

39 dp = Dispatcher(bot, storage=storage)
40
41
42 async def cmd_start(message: types.Message):
43     # Yep. aiogram allows to respond into webhook.
44     # https://core.telegram.org/bots/api#making-requests-when-getting-updates
45     return SendMessage(chat_id=message.chat.id, text='Hi from webhook!',
46                       reply_to_message_id=message.message_id)
47
48
49 async def cmd_about(message: types.Message):
50     # In this function markdown utils are used for formatting message text
51     return SendMessage(message.chat.id, text(
52         bold('Hi! I\'m just a simple telegram bot.'),
53         '',
54         text('I\'m powered by', bold('Python', Version(*sys.version_info[:]))),
55         text('With', link(text('aiogram', aiogram.VERSION), 'https://github.com/
↪aiogram/aiogram')),
56         sep='\n'
57     ), parse_mode=ParseMode.MARKDOWN)
58
59
60 async def cancel(message: types.Message):
61     # Get current state context
62     state = dp.current_state(chat=message.chat.id, user=message.from_user.id)
63
64     # If current user in any state - cancel it.
65     if await state.get_state() is not None:
66         await state.set_state(state=None)
67         return SendMessage(message.chat.id, 'Current action is canceled.')
68     # Otherwise do nothing
69
70
71 async def unknown(message: types.Message):
72     """
73     Handler for unknown messages.
74     """
75     return SendMessage(message.chat.id, f"I don\'t know what to do with content type `
↪{message.content_type()}`. Sorry :c")
76
77
78 async def cmd_id(message: types.Message):
79     """
80     Return info about user.
81     """
82     if message.reply_to_message:
83         target = message.reply_to_message.from_user
84         chat = message.chat
85     elif message.forward_from and message.chat.type == ChatType.PRIVATE:
86         target = message.forward_from
87         chat = message.forward_from or message.chat
88     else:
89         target = message.from_user
90         chat = message.chat
91
92     result_msg = [hbold('Info about user:'),
93                  f"First name: {target.first_name}"]

```

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```

94     if target.last_name:
95         result_msg.append(f"Last name: {target.last_name}")
96     if target.username:
97         result_msg.append(f"Username: {target.mention}")
98     result_msg.append(f"User ID: {target.id}")
99
100    result_msg.extend([hbold('Chat:'),
101                      f"Type: {chat.type}",
102                      f"Chat ID: {chat.id}"])
103    if chat.type != ChatType.PRIVATE:
104        result_msg.append(f"Title: {chat.title}")
105    else:
106        result_msg.append(f"Title: {chat.full_name}")
107    return SendMessage(message.chat.id, '\n'.join(result_msg), reply_to_message_
↳id=message.message_id,
108                        parse_mode=ParseMode.HTML)
109
110
111    async def on_startup(app):
112        # Demonstrate one of the available methods for registering handlers
113        # This command available only in main state (state=None)
114        dp.register_message_handler(cmd_start, commands=['start'])
115
116        # This handler is available in all states at any time.
117        dp.register_message_handler(cmd_about, commands=['help', 'about'], state='*')
118        dp.register_message_handler(unknown, content_types=BAD_CONTENT,
119                                    func=lambda message: message.chat.type == ChatType.
↳PRIVATE)
120
121        # You are able to register one function handler for multiple conditions
122        dp.register_message_handler(cancel, commands=['cancel'], state='*')
123        dp.register_message_handler(cancel, func=lambda message: message.text.lower().
↳strip() in ['cancel'], state='*')
124
125        dp.register_message_handler(cmd_id, commands=['id'], state='*')
126        dp.register_message_handler(cmd_id, func=lambda message: message.forward_from or
127                                    message.reply_to_message_
↳and
128                                    message.chat.type ==
↳ChatType.PRIVATE, state='*')
129
130        # Get current webhook status
131        webhook = await bot.get_webhook_info()
132
133        # If URL is bad
134        if webhook.url != WEBHOOK_URL:
135            # If URL doesnt match current - remove webhook
136            if not webhook.url:
137                await bot.delete_webhook()
138
139            # Set new URL for webhook
140            await bot.set_webhook(WEBHOOK_URL, certificate=open(WEBHOOK_SSL_CERT, 'rb'))
141            # If you want to use free certificate signed by LetsEncrypt you need to set_
↳only URL without sending certificate.
142
143
144    async def on_shutdown(app):

```

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```

145     """
146     Graceful shutdown. This method is recommended by aiohttp docs.
147     """
148     # Remove webhook.
149     await bot.delete_webhook()
150
151     # Close Redis connection.
152     await dp.storage.close()
153     await dp.storage.wait_closed()
154
155
156 if __name__ == '__main__':
157     # Get instance of :class:`aiohttp.web.Application` with configured router.
158     app = get_new_configured_app(dispatcher=dp, path=WEBHOOK_URL_PATH)
159
160     # Setup event handlers.
161     app.on_startup.append(on_startup)
162     app.on_shutdown.append(on_shutdown)
163
164     # Generate SSL context
165     context = ssl.SSLContext(ssl.PROTOCOL_TLSv1_2)
166     context.load_cert_chain(WEBHOOK_SSL_CERT, WEBHOOK_SSL_PRIV)
167
168     # Start web-application.
169     web.run_app(app, host=WEBAPP_HOST, port=WEBAPP_PORT, ssl_context=context)
170     # Note:
171     #     If you start your bot using nginx or Apache web server, SSL context is not_
172     ↪ required.
173     #     Otherwise you need to set `ssl_context` parameter.

```

4.7.12 Webhook example 2

Listing 12: webhook_example_2.py

```

1  import asyncio
2  import logging
3
4  from aiogram import Bot, types
5  from aiogram.dispatcher import Dispatcher
6  from aiogram.utils.executor import start_webhook
7
8  API_TOKEN = 'BOT TOKEN HERE'
9
10 # webhook settings
11 WEBHOOK_HOST = 'https://your.domain'
12 WEBHOOK_PATH = '/path/to/api'
13 WEBHOOK_URL = f"{WEBHOOK_HOST}{WEBHOOK_PATH}"
14
15 # webserver settings
16 WEBAPP_HOST = 'localhost' # or ip
17 WEBAPP_PORT = 3001
18
19 logging.basicConfig(level=logging.INFO)
20
21 loop = asyncio.get_event_loop()

```

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```

22 bot = Bot(token=API_TOKEN, loop=loop)
23 dp = Dispatcher(bot)
24
25
26 @dp.message_handler()
27 async def echo(message: types.Message):
28     await bot.send_message(message.chat.id, message.text)
29
30
31 async def on_startup(dp):
32     await bot.set_webhook(WEBHOOK_URL)
33     # insert code here to run it after start
34
35
36 async def on_shutdown(dp):
37     # insert code here to run it before shutdown
38     pass
39
40
41 if __name__ == '__main__':
42     start_webhook(dispatcher=dp, webhook_path=WEBHOOK_PATH, on_startup=on_startup, on_
↪ shutdown=on_shutdown,
43                     skip_updates=True, host=WEBAPP_HOST, port=WEBAPP_PORT)

```

4.7.13 Payments

Listing 13: payments.py

```

1  import asyncio
2
3  from aiogram import Bot
4  from aiogram import types
5  from aiogram.utils import executor
6  from aiogram.dispatcher import Dispatcher
7  from aiogram.types.message import ContentType
8
9
10 BOT_TOKEN = 'BOT TOKEN HERE'
11 PAYMENTS_PROVIDER_TOKEN = '123456789:TEST:1234567890abcdef1234567890abcdef'
12
13 loop = asyncio.get_event_loop()
14 bot = Bot(BOT_TOKEN)
15 dp = Dispatcher(bot, loop=loop)
16
17 # Setup prices
18 prices = [
19     types.LabeledPrice(label='Working Time Machine', amount=5750),
20     types.LabeledPrice(label='Gift wrapping', amount=500)
21 ]
22
23 # Setup shipping options
24 shipping_options = [
25     types.ShippingOption(id='instant', title='WorldWide Teleporter').add(types.
↪ LabeledPrice('Teleporter', 1000)),
26     types.ShippingOption(id='pickup', title='Local pickup').add(types.LabeledPrice(
↪ 'Pickup', 300))

```

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```

27 ]
28
29
30 @dp.message_handler(commands=['start'])
31 async def cmd_start(message: types.Message):
32     await bot.send_message(message.chat.id,
33                             "Hello, I'm the demo merchant bot."
34                             " I can sell you a Time Machine."
35                             " Use /buy to order one, /terms for Terms and Conditions")
36
37
38 @dp.message_handler(commands=['terms'])
39 async def cmd_terms(message: types.Message):
40     await bot.send_message(message.chat.id,
41                             'Thank you for shopping with our demo bot. We hope you_
↳like your new time machine!\n'
42                             '1. If your time machine was not delivered on time, please_
↳rethink your concept of time'
43                             ' and try again.\n'
44                             '2. If you find that your time machine is not working,_
↳kindly contact our future service'
45                             ' workshops on Trappist-1e. They will be accessible_
↳anywhere between'
46                             ' May 2075 and November 4000 C.E.\n'
47                             '3. If you would like a refund, kindly apply for one_
↳yesterday and we will have sent it'
48                             ' to you immediately.')
49
50
51 @dp.message_handler(commands=['buy'])
52 async def cmd_buy(message: types.Message):
53     await bot.send_message(message.chat.id,
54                             "Real cards won't work with me, no money will be debited_
↳from your account."
55                             " Use this test card number to pay for your Time Machine:_
↳`4242 4242 4242 4242`"
56                             "\n\nThis is your demo invoice:", parse_mode='Markdown')
57     await bot.send_invoice(message.chat.id, title='Working Time Machine',
58                             description='Want to visit your great-great-great-
↳grandparents?'
59                             ' Make a fortune at the races?'
60                             ' Shake hands with Hammurabi and take a stroll_
↳in the Hanging Gardens?'
61                             ' Order our Working Time Machine today!',
62                             provider_token=PAYMENTS_PROVIDER_TOKEN,
63                             currency='usd',
64                             photo_url='https://images.fineartamerica.com/images-medium-
↳large/2-the-time-machine-dmitriy-khristenko.jpg',
65                             photo_height=512, # !=0/None or picture won't be shown
66                             photo_width=512,
67                             photo_size=512,
68                             is_flexible=True, # True If you need to set up Shipping_
↳Fee
69                             prices=prices,
70                             start_parameter='time-machine-example',
71                             payload='HAPPY FRIDAYS COUPON')
72

```

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```

73
74 @dp.shipping_query_handler(func=lambda query: True)
75 async def shipping(shipping_query: types.ShippingQuery):
76     await bot.answer_shipping_query(shipping_query.id, ok=True, shipping_
    ↳ options=shipping_options,
77                                     error_message='Oh, seems like our Dog couriers_
    ↳ are having a lunch right now.'
78                                     ' Try again later!')
79
80
81 @dp.pre_checkout_query_handler(func=lambda query: True)
82 async def checkout(pre_checkout_query: types.PreCheckoutQuery):
83     await bot.answer_pre_checkout_query(pre_checkout_query.id, ok=True,
84                                         error_message="Aliens tried to steal your card
    ↳ 's CVV,"
85                                         " but we successfully protected_
    ↳ your credentials,"
86                                         " try to pay again in a few_
    ↳ minutes, we need a small rest.")
87
88
89 @dp.message_handler(content_types=ContentTypes.SUCCESSFUL_PAYMENT)
90 async def got_payment(message: types.Message):
91     await bot.send_message(message.chat.id,
92                             'Hoooooray! Thanks for payment! We will proceed your order_
    ↳ for `{}` `{}`'
93                             ' as fast as possible! Stay in touch.'
94                             '\n\nUse /buy again to get a Time Machine for your friend!
    ↳ '.format(
95                                     message.successful_payment.total_amount / 100, message.
    ↳ successful_payment.currency),
96                                     parse_mode='Markdown')
97
98
99 if __name__ == '__main__':
100     executor.start_polling(dp, loop=loop)

```

4.7.14 Broadcast example

Listing 14: broadcast_example.py

```

1 import asyncio
2 import logging
3
4 from aiogram import Bot, Dispatcher, types
5 from aiogram.utils import exceptions, executor
6
7 API_TOKEN = 'BOT TOKEN HERE'
8
9 logging.basicConfig(level=logging.INFO)
10 log = logging.getLogger('broadcast')
11
12 loop = asyncio.get_event_loop()
13 bot = Bot(token=API_TOKEN, loop=loop, parse_mode=types.ParseMode.HTML)
14 dp = Dispatcher(bot, loop=loop)

```

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```

15
16
17 def get_users():
18     """
19     Return users list
20
21     In this example returns some random ID's
22     """
23     yield from (61043901, 78238238, 78378343, 98765431, 12345678)
24
25
26 async def send_message(user_id: int, text: str, disable_notification: bool = False) ->
27     bool:
28     """
29     Safe messages sender
30
31     :param user_id:
32     :param text:
33     :param disable_notification:
34     :return:
35     """
36     try:
37         await bot.send_message(user_id, text, disable_notification=disable_
38         notification)
39     except exceptions.BotBlocked:
40         log.error(f"Target [ID:{user_id}]: blocked by user")
41     except exceptions.ChatNotFound:
42         log.error(f"Target [ID:{user_id}]: invalid user ID")
43     except exceptions.RetryAfter as e:
44         log.error(f"Target [ID:{user_id}]: Flood limit is exceeded. Sleep {e.timeout}
45         seconds.")
46         await asyncio.sleep(e.timeout)
47         return await send_message(user_id, text) # Recursive call
48     except exceptions.UserDeactivated:
49         log.error(f"Target [ID:{user_id}]: user is deactivated")
50     except exceptions.TelegramAPIError:
51         log.exception(f"Target [ID:{user_id}]: failed")
52     else:
53         log.info(f"Target [ID:{user_id}]: success")
54         return True
55     return False
56
57
58 async def broadcaster() -> int:
59     """
60     Simple broadcaster
61
62     :return: Count of messages
63     """
64     count = 0
65     try:
66         for user_id in get_users():
67             if await send_message(user_id, '<b>Hello!</b>'):
68                 count += 1
69             await asyncio.sleep(.05) # 20 messages per second (Limit: 30 messages
70             per second)
71     finally:

```

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```

68     log.info(f"{count} messages successful sent.")
69
70     return count
71
72
73 if __name__ == '__main__':
74     # Execute broadcaster
75     executor.start(dp, broadcaster())

```

4.7.15 Media group

Listing 15: media_group.py

```

1  import asyncio
2
3  from aiogram import Bot, Dispatcher, executor, filters, types
4
5  API_TOKEN = 'BOT TOKEN HERE'
6
7  loop = asyncio.get_event_loop()
8  bot = Bot(token=API_TOKEN, loop=loop)
9  dp = Dispatcher(bot)
10
11
12 @dp.message_handler(filters.CommandStart())
13 async def send_welcome(message: types.Message):
14     # So... At first I want to send something like this:
15     await message.reply("Do you want to see many pussies? Are you ready?")
16
17     # And wait few seconds...
18     await asyncio.sleep(1)
19
20     # Good bots should send chat actions. Or not.
21     await types.ChatActions.upload_photo()
22
23     # Create media group
24     media = types.MediaGroup()
25
26     # Attach local file
27     media.attach_photo(types.InputFile('data/cat.jpg'), 'Cat!')
28     # More local files and more cats!
29     media.attach_photo(types.InputFile('data/cats.jpg'), 'More cats!')
30
31     # You can also use URL's
32     # For example: get random puss:
33     media.attach_photo('http://loempixel.com/400/200/cats/', 'Random cat.')
34
35     # And you can also use file ID:
36     # media.attach_photo('<file_id>', 'cat-cat-cat.')
37
38     # Done! Send media group
39     await message.reply_media_group(media=media)
40
41
42 if __name__ == '__main__':

```

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```
43 executor.start_polling(dp, loop=loop, skip_updates=True)
```

4.8 Contribution

TODO

4.9 Links

TODO

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