
aiogram Documentation

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Illemius / Alex Root Junior

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

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](#)

FEATURES

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

CONTRIBUTE

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

CONTENTS

4.1 Installation Guide

4.1.1 Using PIP

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

4.1.2 Using Pipenv

```
$ pipenv install aiogram
```

4.1.3 Using AUR

aiogram is also available in Arch User Repository, so you can install this framework on any Arch-based distribution like ArchLinux, Antergos, Manjaro, etc. To do this, use your favorite AUR-helper and install [python-aiogram](#) package.

4.1.4 From sources

Development versions:

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

Or if you want to install stable version (The same with version form PyPi):

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

4.1.5 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
```

- Use `aiohttp` speedups

- Use `cchardet` instead of `chardet` module.

cChardet is high speed universal character encoding detector.

Installation:

```
$ pip install cchardet
```

- Use `aiodns` for speeding up DNS resolving.

aiodns provides a simple way for doing asynchronous DNS resolutions.

Installation:

```
$ pip install aiodns
```

- Installing speedups altogether.

The following will get you `aiohttp` along with `cchardet`, `aiodns` and `brotlipy` in one bundle.

Installation:

```
$ pip install aiohttp[speedups]
```

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:

```
@dp.message_handler(commands=['start', 'help'])
async def send_welcome(message: types.Message):
    """
    This handler will be called when user sends `/start` or `/help` command
    """
    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:

```
photo,
caption='Cats are here ',
reply_to_message_id=message.message_id,
```

Last step: run long polling.

```
await message.reply_photo(photo, caption='Cats are here ')
```

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
```

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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
21 @dp.message_handler(regex='(^cat[s]?${puss})')
22 async def cats(message: types.Message):
23     with open('data/cats.jpg', 'rb') as photo:
24         '''
25         # Old fashioned way:
26         await bot.send_photo(
27             message.chat.id,
28             photo,
29             caption='Cats are here ',
30             reply_to_message_id=message.message_id,
31         )
32         '''
33
34         await message.reply_photo(photo, caption='Cats are here ')
35
36
37 @dp.message_handler()
38 async def echo(message: types.Message):
39     # old style:
40     # await bot.send_message(message.chat.id, message.text)
41
42     await message.answer(message.text)
43
44
45 if __name__ == '__main__':
46     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'

    def __init__(self, is_admin):
```

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```

        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_chat_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://docs.aiogram.dev/en/dev-2.x/_static/logo.png'

@dp.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:
    Optional[String] = None, timeout: Union[Integer, Float, aiohttp.client.ClientTimeout, None] = 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
- **timeout** (typing.Optional[typing.Union[base.Integer, base.Float, aiohttp.ClientTimeout]]) – Request timeout

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

request_timeout (*timeout: Union[Integer, Float, aiohttp.client.ClientTimeout]*)

Context manager implements opportunity to change request timeout in current context

Parameters **timeout** (*typing.Optional[typing.Union[base.Integer, base.Float, aiohttp.ClientTimeout]]*) – Request timeout

Returns

async close ()

Close all client sessions

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

async download_file (*file_path: String, destination: Optional[InputFile] = None, timeout: Optional[Integer] = <object object>, 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

async send_file (*file_type, method, file, payload*) → Union[Dict, 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: Optional[String] = None, timeout: Union[Integer, Float, aiohttp.client.ClientTimeout, None] = 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
- **timeout** (`typing.Optional[typing.Union[base.Integer, base.Float, aiohttp.ClientTimeout]]`) – Request timeout

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

property me

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

Returns `aiogram.types.User`

```
async 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

async 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]

async 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

async 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`

async 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`

async 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`

async 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. 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`

```
async 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

```
async send_photo (chat_id: Union[Integer, String], photo: Union[InputFile, String],  
                  caption: Optional[String] = None, parse_mode: Optional[String]  
                  = None, disable_notification: Optional[Boolean] = None, re-  
                  ply_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. 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`

```
async 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: Op-
                  tional[String] = None, title: Optional[String] = None, thumb:
                  Union[InputFile, String, None] = 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 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. 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`

```
async 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. 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

```
async 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. 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`

```
async 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: Op-
    tional[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 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`

```
async 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. 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`

```
async 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. 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`

```
async send_media_group (chat_id: Union[Integer, String], media: Union[aiogram.types.input_media.MediaGroup, List], 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]`

```
async send_location (chat_id: Union[Integer, String], latitude: Float, longitude: Float, live_period: 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 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. 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`

```
async 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]`

```
async 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]`

async 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. 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`

```
async 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. 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

```
async send_poll (chat_id: Union[Integer, String], question: String, options: List[String], is_anonymous: Optional[Boolean] = None, type: Optional[String] = None, allows_multiple_answers: Optional[Boolean] = None, correct_option_id: Optional[Integer] = None, is_closed: 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 a native poll. A native poll can’t be sent to a private chat. On success, the sent Message is returned.

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). A native poll can’t be sent to a private chat.

- **question** (`base.String`) – Poll question, 1-255 characters
- **options** – List of answer options, 2-10 strings 1-100 characters each
- **options** – `typing.List[base.String]`
- **is_anonymous** – True, if the poll needs to be anonymous, defaults to True
- **is_anonymous** – `typing.Optional[base.Boolean]`
- **type** – Poll type, “quiz” or “regular”, defaults to “regular”
- **type** – `typing.Optional[base.String]`
- **allows_multiple_answers** – True, if the poll allows multiple answers, ignored for polls in quiz mode, defaults to False
- **allows_multiple_answers** – `typing.Optional[base.Boolean]`
- **correct_option_id** – 0-based identifier of the correct answer option, required for polls in quiz mode
- **correct_option_id** – `typing.Optional[base.Integer]`
- **is_closed** – Pass True, if the poll needs to be immediately closed
- **is_closed** – `typing.Optional[base.Boolean]`
- **disable_notification** (`typing.Optional[Boolean]`) – Sends the message silently. Users will receive a notification with no sound.
- **reply_to_message_id** (`typing.Optional[Integer]`) – 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. 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`

async 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`

```
async 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`

```
async 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`

```
async kick_chat_member (chat_id: Union[Integer, String], user_id: Integer, until_date: Union[Integer, datetime.datetime, datetime.timedelta, None] = 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`

async 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*

async restrict_chat_member (*chat_id: Union[Integer, String], user_id: Integer, permissions: Optional[aiogram.types.chat_permissions.ChatPermissions] = None, until_date: Union[Integer, datetime.datetime, datetime.timedelta, None] = 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
- **permissions** (*ChatPermissions*) – New user permissions
- **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*

```

async 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`

```

async set_chat_administrator_custom_title (chat_id: Union[Integer, String], user_id: Integer,
                                             custom_title: String) → Boolean

```

Use this method to set a custom title for an administrator in a supergroup promoted by the bot.

Returns True on success.

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

Parameters

- **chat_id** – Unique identifier for the target chat or username of the target supergroup

- **user_id** – Unique identifier of the target user
- **custom_title** – New custom title for the administrator; 0-16 characters, emoji are not allowed

Returns True on success.

async set_chat_permissions (*chat_id*: Union[Integer, String], *permissions*: aiogram.types.chat_permissions.ChatPermissions) → Boolean

Use this method to set default chat permissions for all members. The bot must be an administrator in the group or a supergroup for this to work and must have the can_restrict_members admin rights.

Returns True on success.

Parameters

- **chat_id** – Unique identifier for the target chat or username of the target supergroup
- **permissions** – New default chat permissions

Returns True on success.

async 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

async 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

async 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`

async 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`

async 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`

async 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`

async 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`

async 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`

async 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`

async 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]`

async 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`

async 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

async 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

async 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

async 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`

```
async 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]`

```
async 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]

```
async 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]`

async 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]`

async stop_poll (*chat_id: Union[String, Integer], message_id: Integer, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*) → `aiogram.types.poll.Poll`

Use this method to stop a poll which was sent by the bot. On success, the stopped `Poll` with the final results is returned.

Parameters

- **chat_id** (`typing.Union[base.String, base.Integer]`) – Unique identifier for the target chat or username of the target channel
- **message_id** (`base.Integer`) – Identifier of the original message with the poll
- **reply_markup** (`typing.Union[types.InlineKeyboardMarkup, None]`) – A JSON-serialized object for a new message inline keyboard.

Returns On success, the stopped `Poll` with the final results is returned.

Return type `types.Poll`

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

granted `can_post_messages` permissions can delete outgoing messages in channels. - If the bot is an administrator of a group, it can delete any message there. - If the bot has `can_delete_messages` permission in a supergroup or a channel, it can delete any message there.

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`

```
async 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. 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`

```
async 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`


```
async 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`

```
async 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`

```
async 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`

async 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`

async delete_sticker_from_set (*sticker: String*) → Boolean

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

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`

async 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`

```
async 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] = None, photo_url: Optional[String] = None, photo_size: Optional[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: Optional[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`

async 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`

async 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*

async 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*

async 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`

```
async 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]`

```
async get_game_high_scores (user_id: Integer, chat_id: Optional[Integer] =
                             None, message_id: Optional[Integer] = None, in-
                             line_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]`

API Helpers

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

Validate BOT token

Parameters `token` –

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

`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 4.6

    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

```

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: Optional[Dict[str, Any]] = None, **kwargs: Any)
    Bases: aiogram.utils.mixins.ContextInstanceMixin

    Abstract class for telegram objects
    Deserialize object

    Parameters
    • conf –
    • kwargs –

    property props
        Get props

```

Returns dict with props

property props_aliases

Get aliases for props

Returns

property values

Get values

Returns

classmethod to_object (*data: Dict[str, Any]*) → T

Deserialize object

Parameters data –

Returns

to_python () → Dict[str, Any]

Get object as JSON serializable

Returns

clean () → None

Remove empty values

as_json () → str

Get object as JSON string

Returns JSON

Return type str

iter_keys () → Generator[Any, None, None]

Iterate over keys

Returns

iter_values () → Generator[Any, None, None]

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

abstract serialize (*value*)

Serialize value to python

Parameters *value* –

Returns

abstract 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

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

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 stored 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*

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

Mixins

Downloadable

class aiogram.types.mixins.Downloadable

Bases: object

Mixin for files

async 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

async get_file ()

Get file information

Returns aiogram.types.File

async get_url ()

Get file url.

Attention!! This method has security vulnerabilities for the reason that result contains bot's *access token* in open form. Use at your own risk!

Returns url

Types

StickerSet

class aiogram.types.sticker_set.StickerSet (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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*: *Optional[Dict[str, Any]] = None*, ***kwargs*: *Any*)

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*: *Optional[Dict[str, Any]] = None*, ***kwargs*: *Any*)

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** –

async 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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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 UNDERLINE

Key STRIKETHROUGH

Key TEXT_LINK

Key TEXT_MENTION

ShippingQuery

class aiogram.types.shipping_query.**ShippingQuery** (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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, **kwargs*)

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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, login_url:
aiogram.types.login_url.LoginUrl
= 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, **kwargs)
```

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

User

```
class aiogram.types.user.User (conf: Optional[Dict[str, Any]] = None, **kwargs: Any)
```

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** –

property full_name

You can get full name of user.

Returns str

property mention

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

Returns str

property locale

Get user's locale

Returns `babel.core.Locale`

Video

class `aiogram.types.video.Video` (*conf*: *Optional[Dict[str, Any]] = None*, ***kwargs*: *Any*)
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*:
Optional[Dict[str, Any]]
=
None,
***kwargs*:
Any)

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*: *Optional[Dict[str, Any]] = None*, ***kwargs*: *Any*)
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: Optional[Dict[str, Any]] = None, **kwargs: Any*)
 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

CallbackGame

class aiogram.types.callback_game.**CallbackGame** (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)
 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>

<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]]],
              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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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, request_poll: aiogram.types.reply_keyboard.KeyboardButtonPollType = 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 request_contact, request_location, and request_poll 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. Note: `request_poll` option will only work in Telegram versions released after 23 January, 2020. Older clients will receive unsupported message.

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

Deserialize object

Parameters

- `conf` –
- `kwargs` –

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>

Deserialize object

Parameters

- `conf` –
- `kwargs` –

Chat

class `aiogram.types.chat.Chat` (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

Bases: `aiogram.types.base.TelegramObject`

This object represents a chat.

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

Deserialize object

Parameters

- `conf` –
- `kwargs` –

property mention

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

async `get_url ()` → `String`

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`

async `update_chat ()`

User this method to update Chat data

Returns `None`

async set_photo (*photo: aiogram.types.input_file.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 photo (*base.InputFile*) – New chat photo, uploaded using multipart/form-data

Returns Returns True on success.

Return type *base.Boolean*

async delete_photo () → 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>

Returns Returns True on success.

Return type *base.Boolean*

async set_title (*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 title (*base.String*) – New chat title, 1-255 characters

Returns Returns True on success.

Return type *base.Boolean*

async set_description (*description: String*) → 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 description (*typing.Union[base.String, None]*) – New chat description, 0-255 characters

Returns Returns True on success.

Return type *base.Boolean*

async kick (*user_id: Integer, until_date: Union[Integer, datetime.datetime, datetime.timedelta, None] = 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

- **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`

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

Returns Returns True on success.

Return type `base.Boolean`

async restrict (*user_id: Integer, permissions: Optional[aiogram.types.chat_permissions.ChatPermissions] = None, until_date: Union[Integer, datetime.datetime, datetime.timedelta, None] = 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
- **permissions** (`ChatPermissions`) – New user permissions
- **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`

async 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`

async set_permissions (`permissions: aiogram.types.chat_permissions.ChatPermissions`) → `Boolean`

Use this method to set default chat permissions for all members. The bot must be an administrator in the group or a supergroup for this to work and must have the `can_restrict_members` admin rights.

Returns True on success.

Parameters **permissions** – New default chat permissions

Returns True on success.

async set_administrator_custom_title (*user_id: Integer, custom_title: String*) → Boolean

Use this method to set a custom title for an administrator in a supergroup promoted by the bot.

Returns True on success.

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

Parameters

- **user_id** – Unique identifier of the target user
- **custom_title** – New custom title for the administrator; 0-16 characters, emoji are not allowed

Returns True on success.

async pin_message (*message_id: Integer, disable_notification: Boolean = False*) → 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

- **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`

async unpin_message () → 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>

Returns Returns True on success.

Return type `base.Boolean`

async leave () → Boolean

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`

async get_administrators () → `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>

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]`

async get_members_count () → Integer

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`

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

Returns Returns a ChatMember object on success.

Return type `types.ChatMember`

async set_sticker_set (*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 **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`

async delete_sticker_set () → 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>

Returns Returns True on success

Return type `base.Boolean`

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

Returns Returns True on success.

Return type `base.Boolean`

async export_invite_link () → String

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#exportchatinviolink>

Returns Returns exported invite link as String on success.

Return type `base.String`

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

Do typing

Parameters **sleep** – sleep timeout

Returns

classmethod **upload_photo** (*sleep=None*)

Do upload_photo

Parameters **sleep** – sleep timeout

Returns

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

Do record video

Parameters **sleep** – sleep timeout

Returns

classmethod **upload_video** (*sleep=None*)

Do upload video

Parameters **sleep** – sleep timeout

Returns

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

Do record audio

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 `find_location` (*sleep=None*)

Do find location

Parameters `sleep` – sleep timeout

Returns

classmethod `record_video_note` (*sleep=None*)

Do record video note

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)
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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any)
```

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, message: 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

ShippingAddress

```
class aiogram.types.shipping_address.ShippingAddress (conf: Optional[Dict[str, Any]]
                                                       = None, **kwargs: Any)
```

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:
                                                                Optional[Dict[str, Any]]
                                                                = None, **kwargs:
                                                                Any)
```

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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** –

async set_position_in_set (*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 position (*base.Integer*) – New sticker position in the set, zero-based

Returns Returns True on success

Return type `base.Boolean`

async delete_from_set () → Boolean

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

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`

InlineQuery

class `aiogram.types.inline_query.InlineQuery` (*conf*: `Optional[Dict[str, Any]] = None`,
***kwargs*: `Any`)

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** –

async 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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputMediaAnimation

```
class aiogram.types.input_media.InputMediaAnimation(media: InputFile, thumb: Union[InputFile, String] = None, caption: String = None, width: Integer = None, height: Integer = None, duration: Integer = None, parse_mode: String = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputMediaDocument

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

Bases: *aiogram.types.input_media.InputMedia*

Represents a photo to be sent.

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

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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: String = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputMediaPhoto

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

Bases: *aiogram.types.input_media.InputMedia*

Represents a photo to be sent.

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

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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: String = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

MediaGroup

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

Bases: *aiogram.types.base.TelegramObject*

Helper for sending media group

Deserialize object

Parameters

- **conf** –
- **kwargs** –

attach_many (**medias: Union[aiogram.types.input_media.InputMedia, Dict]*)

Attach list of media

Parameters medias –

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

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

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultArticle

```
class aiogram.types.inline_query_result.InlineQueryResultArticle(*,
                                                                    id:
                                                                    String, title:
                                                                    String, in-
                                                                    put_message_content:
                                                                    aiogram.types.input_message_content.
                                                                    re-
                                                                    ply_markup:
                                                                    Op-
                                                                    tional[aiogram.types.inline_keyboard.
                                                                    =
                                                                    None,
                                                                    url:      Op-
                                                                    tional[String]
                                                                    =
                                                                    None,
                                                                    hide_url:
                                                                    Op-
                                                                    tional[Boolean]
                                                                    =
                                                                    None,
                                                                    descrip-
                                                                    tion:    Op-
                                                                    tional[String]
                                                                    =
                                                                    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 link to an article or web page.

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

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultPhoto

```
class aiogram.types.inline_query_result.InlineQueryResultPhoto(*, id: String,
    photo_url: String,
    thumb_url: String,
    photo_width: Optional[Integer] = None,
    photo_height: Optional[Integer] = None,
    title: Optional[String] = None,
    description: Optional[String] = None,
    caption: 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 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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: Op-
    tional[Integer] =
    None, thumb_url:
    Optional[String]
    = None, title:
    Optional[String] =
    None, caption:
    Optional[String] =
    None, parse_mode:
    Optional[String]
    = None, re-
    ply_markup: Op-
    tional[aiogram.types.inline_keyboard.Inline
    = None, in-
    put_message_content:
    Op-
    tional[aiogram.types.input_message_conten
    = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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]  
    = None, input_message_content:  
    Optional[aiogram.types.input_message]  
    = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- `conf` –

- **kwargs** –

InlineQueryResultAudio

```
class aiogram.types.inline_query_result.InlineQueryResultAudio (*, id: String, audio_url: String, title: String, caption: Optional[String] = None, parse_mode: Optional[String] = None, performer: Optional[String] = None, audio_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 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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.Inl
                                                                = None, input_message_content:
                                                                Optional[aiogram.types.input_message_con
                                                                = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultDocument

```
class aiogram.types.inline_query_result.InlineQueryResultDocument (*,      id:  
                                                                    String, title:  
                                                                    String, cap-  
                                                                    tion: Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    parse_mode:  
                                                                    Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    docu-  
                                                                    ment_url:  
                                                                    Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    mime_type:  
                                                                    Op-  
                                                                    tional[String]  
                                                                    = None,  
                                                                    descrip-  
                                                                    tion: Op-  
                                                                    tional[String]  
                                                                    = None, re-  
                                                                    ply_markup:  
                                                                    Op-  
                                                                    tional[aiogram.types.inline_keyboard]  
                                                                    = None, in-  
                                                                    put_message_content:  
                                                                    Op-  
                                                                    tional[aiogram.types.input_message]  
                                                                    = 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 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultLocation

```
class aiogram.types.inline_query_result.InlineQueryResultLocation(*id: String, latitude: Float, longitude: Float, title: String, live_period: Optional[Integer] = 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 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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.
                                                                    = None, in-
                                                                    put_message_content:
                                                                    Op-
                                                                    tional[aiogram.types.input_message_c
                                                                    = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultGame

```
class aiogram.types.inline_query_result.InlineQueryResultGame(*id: String,  
                                                             game_short_name:  
                                                             String, re-  
                                                             ply_markup: Op-  
                                                             tional[aiogram.types.inline_keyboard.Inlin  
                                                             = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultCachedPhoto

```

class aiogram.types.inline_query_result.InlineQueryResultCachedPhoto(*, id:
    String,
    photo_file_id:
    String,
    title:
    Optional[String]
    =
    None,
    description:
    Optional[String]
    =
    None,
    caption:
    Optional[String]
    =
    None,
    parse_mode:
    Optional[String]
    =
    None,
    reply_markup:
    Optional[aiogram.types.inline_keyb
    =
    None,
    input_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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultCachedGif

```
class aiogram.types.inline_query_result.InlineQueryResultCachedGif(*  
    id:  
    String,  
    gif_file_id:  
    String,  
    title: Op-  
    tional[String]  
    = None,  
    cap-  
    tion: Op-  
    tional[String]  
    = None,  
    parse_mode:  
    Op-  
    tional[String]  
    = None,  
    re-  
    ply_markup:  
    Op-  
    tional[aiogram.types.inline_keybo  
    = None,  
    in-  
    put_message_content:  
    Op-  
    tional[aiogram.types.input_messag  
    = 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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultCachedSticker

```
class aiogram.types.inline_query_result.InlineQueryResultCachedSticker(*,  
                                                                    id:  
                                                                    String,  
                                                                    sticker_file_id:  
                                                                    String,  
                                                                    re-  
                                                                    ply_markup:  
                                                                    Op-  
                                                                    tional[aiogram.types.inline_  
                                                                    =  
                                                                    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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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.
    =
        None,
    input_message_content:
        Optional[aiogram.types.input_
    =
        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>

Deserialize object

Parameters

- `conf` –

- **kwargs** –

InlineQueryResultCachedVideo

```
class aiogram.types.inline_query_result.InlineQueryResultCachedVideo (*, id:
    String,
    video_file_id:
    String,
    title:
    String,
    de-
    scrip-
    tion:
    Op-
    tional[String]
    =
    None,
    cap-
    tion:
    Op-
    tional[String]
    =
    None,
    parse_mode:
    Op-
    tional[String]
    =
    None,
    re-
    ply_markup:
    Op-
    tional[aiogram.types.inline_key
    =
    None,
    in-
    put_message_content:
    Op-
    tional[aiogram.types.input_mes
    =
    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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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_keyb
    =
    None,
    input_message_content:
    Optional[aiogram.types.input_mes
    =
    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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InlineQueryResultCachedAudio

```
class aiogram.types.inline_query_result.InlineQueryResultCachedAudio(* id:
    String,
    au-
    dio_file_id:
    String,
    cap-
    tion:
    Op-
    tional[String]
    =
    None,
    parse_mode:
    Op-
    tional[String]
    =
    None,
    re-
    ply_markup:
    Op-
    tional[aiogram.types.inline_key
    =
    None,
    in-
    put_message_content:
    Op-
    tional[aiogram.types.input_mes
    =
    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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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: Optional[Dict[str, Any]] = None, **kwargs: Any)
```

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: Optional[Dict[str, Any]] = None, **kwargs: Any)  
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: Optional[Dict[str, Any]] = None, **kwargs: Any)
```

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputLocationMessageContent

```
class aiogram.types.input_message_content.InputLocationMessageContent (latitude:
    Float,
    longitude:
    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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

InputTextMessageContent

```
class aiogram.types.input_message_content.InputTextMessageContent (message_text:  
    Optional[String]  
    = None,  
    parse_mode:  
    Optional[String]  
    = None,  
    disable_web_page_preview:  
    Optional[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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

Update

class aiogram.types.update.**Update** (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)
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: Optional[Dict[str, Any]] = None, **kwargs: Any*)
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: Optional[Dict[str, Any]] = None, **kwargs: Any*)
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*: *Optional[Dict[str, Any]] = None*,
***kwargs*: *Any*)

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*: *Optional[Dict[str, Any]] = None*,
***kwargs*: *Any*)

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*: *Optional[Dict[str, Any]] = None*,
***kwargs*: *Any*)

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>

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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

Add price

Parameters **price** –

Returns

ChatPhoto

class aiogram.types.chat_photo.**ChatPhoto** (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

Bases: *aiogram.types.base.TelegramObject*

This object represents a chat photo.

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

Deserialize object

Parameters

- **conf** –
- **kwargs** –

async 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

async 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

Contact

class `aiogram.types.contact.Contact` (*conf: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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

property md_text
Text or caption formatted as markdown.

Returns str

property html_text
Text or caption formatted as HTML

Returns str

property url
Get URL for the message

Returns str

link (*text, as_html=True*) → str
Generate URL for using in text messages with HTML or MD parse mode

Parameters

- **text** – link label
- **as_html** – generate as HTML

Returns str

async answer (*text: String, parse_mode: Optional[String] = None, disable_web_page_preview: Optional[Boolean] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False*)
→ aiogram.types.message.Message

Answer to this message

Parameters

- **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_markup** (`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** (`base.Boolean`) – fill `'reply_to_message_id'`

Returns On success, the sent Message is returned

Return type `types.Message`

```
async answer_photo (photo: Union[InputFile, String], caption: Optional[String]
                    = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean
                    = False) → 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`), 0-1024 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_markup** (`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** (`base.Boolean`) – fill `'reply_to_message_id'`

Returns On success, the sent Message is returned

Return type `types.Message`

```
async answer_audio (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, disable_notification: Optional[Boolean] = 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, reply: Boolean
                    = False) → 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
- **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
- **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. 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`

```
async answer_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: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardRemove, aiogram.types.force_reply.ForceReply, None] = None, reply: Boolean = False) → 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`

```
async answer_document (document: Union[InputFile, String], caption: Optional[String] = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False) → 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
- **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[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`

```
async answer_video (video: Union[InputFile, String], duration: Optional[Integer] = None, width: Optional[Integer] = None, height: Optional[Integer] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False) → 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
- **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[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`

```
async answer_voice (voice: Union[InputFile, String], caption: Optional[String] = None,
                    parse_mode: Optional[String] = None, duration: Optional[Integer]
                    = None, disable_notification: Optional[Boolean] = 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, reply: Boolean
                    = False) → 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
- **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
- **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. 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

```
async answer_video_note (video_note: Union[InputFile, String], duration: Op-
                    tional[Integer] = None, length: Optional[Integer] = None,
                    disable_notification: Optional[Boolean] = 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, reply: Boolean
                    = False) → 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. 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`

async answer_media_group (*media: Union[aiogram.types.input_media.MediaGroup, List], disable_notification: Optional[Boolean] = None, reply: Boolean = False*) → `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]`

async answer_location (*latitude: Float, longitude: Float, live_period: Optional[Integer] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False*) → `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. 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`

```
async answer_venue (latitude: Float, longitude: Float, title: String, address: String, foursquare_id: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False) → 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. 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`

```
async answer_contact (phone_number: String, first_name: String, last_name: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = False) → 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. 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`

```
async answer_sticker (sticker: Union[InputFile, String], disable_notification: Optional[Boolean] = 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, reply: Boolean = False) → 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. 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`

```
async reply (text: String, parse_mode: Optional[String] = None, disable_web_page_preview: Optional[Boolean] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = True) → aiogram.types.message.Message
```

Reply to this message

Parameters

- **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_markup** (`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** (`base.Boolean`) – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned

Return type `types.Message`

```

async reply_photo (photo: Union[InputFile, String], caption: Optional[String]
                    = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean =
                    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`), 0-1024 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_markup** (`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** (`base.Boolean`) – fill ‘reply_to_message_id’

Returns On success, the sent Message is returned

Return type `types.Message`


```
async reply_audio(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, disable_notification: Optional[Boolean] = 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, reply: Boolean =
                  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
- **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
- **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. 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`

```
async reply_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:
                      Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup,
                      aiogram.types.reply_keyboard.ReplyKeyboardMarkup,
                      aiogram.types.reply_keyboard.ReplyKeyboardRemove,
                      aiogram.types.force_reply.ForceReply, None] = None, reply: Boolean =
                      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`

```
async reply_document (document: Union[InputFile, String], caption: Optional[String]
                       = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = 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
- **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[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`

```
async reply_video(video: Union[InputFile, String], duration: Optional[Integer] = None, width: Optional[Integer] = None, height: Optional[Integer] = None, caption: Optional[String] = None, parse_mode: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = 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
- **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[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`

```
async reply_voice (voice: Union[InputFile, String], caption: Optional[String] = None,
                    parse_mode: Optional[String] = None, duration: Optional[Integer]
                    = None, disable_notification: Optional[Boolean] = 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, reply: Boolean =
                    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
- **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
- **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. 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`

```
async reply_video_note (video_note: Union[InputFile, String], duration: Op-
                        tional[Integer] = None, length: Optional[Integer] = None, dis-
                        able_notification: Optional[Boolean] = 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, reply: Boolean
                        = 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. 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`

async reply_media_group (*media: Union[aiogram.types.input_media.MediaGroup, List], disable_notification: Optional[Boolean] = None, reply: Boolean = 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]`

async reply_location (*latitude: Float, longitude: Float, live_period: Optional[Integer] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = 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. 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`

async reply_venue (*latitude: Float, longitude: Float, title: String, address: String, foursquare_id: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = 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. 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`

async reply_contact (*phone_number: String, first_name: String, last_name: Optional[String] = None, disable_notification: Optional[Boolean] = 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, reply: Boolean = 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. 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`

```
async reply_sticker (sticker: Union[InputFile, String], disable_notification:  
Optional[Boolean] = 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, reply: Boolean  
= 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. 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`

```
async forward (chat_id: Union[Integer, String], disable_notification: Optional[Boolean] = None)  
→ aiogram.types.message.Message
```

Forward this message

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
- **disable_notification** (`typing.Union[base.Boolean, None]`) – Sends the message silently. Users will receive a notification with no sound

Returns On success, the sent `Message` is returned

Return type `types.Message`

```
async edit_text (text: String, parse_mode: Optional[String] = None, disable_web_page_preview: Optional[Boolean] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) → Union[aiogram.types.message.Message, Boolean]
```

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]`

```
async edit_caption (caption: String, parse_mode: Optional[String] = None, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None) → Union[aiogram.types.message.Message, Boolean]
```

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

- **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]`

```
async edit_media (media: aiogram.types.input_media.InputMedia, 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

- **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]`

async edit_reply_markup (*reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = None*) → `Union[aiogram.types.message.Message, Boolean]`

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 **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]`

async delete_reply_markup () → `Union[aiogram.types.message.Message, Boolean]`

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

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]`

async edit_live_location (*latitude: Float, longitude: Float, reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = 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]`

async stop_live_location (*reply_markup: Optional[aiogram.types.inline_keyboard.InlineKeyboardMarkup] = 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]

async delete () → 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 private chats, groups, and supergroups. - Bots can delete incoming messages in private chats. - Bots granted `can_post_messages` permissions can delete outgoing messages in channels. - If the bot is an administrator of a group, it can delete any message there. - If the bot has `can_delete_messages` permission in a supergroup or a channel, it can delete any message there.

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

Returns Returns True on success

Return type base.Boolean

async pin (*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 `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

async send_copy (*chat_id: Union[str, int], disable_notification: Optional[bool] = None, reply_to_message_id: Optional[int] = None, reply_markup: Union[aiogram.types.inline_keyboard.InlineKeyboardMarkup, aiogram.types.reply_keyboard.ReplyKeyboardMarkup, None] = None*) → aiogram.types.message.Message

Send copy of current message

Parameters

- `chat_id` –
- `disable_notification` –
- `reply_to_message_id` –
- `reply_markup` –

Returns

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: Optional[Dict[str, Any]] = None, **kwargs: Any*)

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*: *Optional[Dict[str, Any]] = None, **kwargs: Any*)

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*: *Optional[Dict[str, Any]] = None, **kwargs: Any*)

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*: *Optional[Dict[str, Any]] = None, **kwargs: Any*)

Bases: *aiogram.types.base.TelegramObject*

Deserialize object

Parameters

- **conf** –
- **kwargs** –

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

Parameters **request** –

Returns *AuthWidgetData*

Raise *aiohhttp.web.HTTPBadRequest*

4.5 Dispatcher

4.5.1 Filters

Basics

Filter factory greatly simplifies the reuse of filters when registering handlers.

Filters factory

class aiogram.dispatcher.filters.factory.**FiltersFactory** (*dispatcher*)

Bases: object

Filters factory

bind (*callback: Union[Callable, aiogram.dispatcher.filters.filters.AbstractFilter]*, *validator: Optional[Callable] = None*, *event_handlers: Optional[List[aiogram.dispatcher.handler.Handler]] = None*, *exclude_event_handlers: Optional[Iterable[aiogram.dispatcher.handler.Handler]] = None*)

Register filter

Parameters

- **callback** – callable or subclass of AbstractFilter
- **validator** – custom validator.
- **event_handlers** – list of instances of Handler
- **exclude_event_handlers** – list of excluded event handlers (Handler)

unbind (*callback: Union[Callable, aiogram.dispatcher.filters.filters.AbstractFilter]*)

Unregister callback

Parameters **callback** – callable of subclass of AbstractFilter

resolve (*event_handler*, **custom_filters*, ***full_config*) → List[Union[Callable, aiogram.dispatcher.filters.filters.AbstractFilter]]

Resolve filters to filters-set

Parameters

- **event_handler** –
- **custom_filters** –
- **full_config** –

Returns

Builtin filters

aiogram has some builtin filters. Here you can see all of them:

Command

```
class aiogram.dispatcher.filters.builtin.Command(commands: Union[Iterable, str], pre-  
fixes: Union[Iterable, str] = '/',  
ignore_case: bool = True, ig-  
nore_mention: bool = False)
```

Bases: *aiogram.dispatcher.filters.filters.Filter*

You can handle commands by using this filter.

If filter is successful processed the *Command.CommandObj* will be passed to the handler arguments.

By default this filter is registered for messages and edited messages handlers.

Filter can be initialized from filters factory or by simply creating instance of this class.

Examples:

```
@dp.message_handler(commands=['myCommand'])  
@dp.message_handler(Command(['myCommand']))  
@dp.message_handler(commands=['myCommand'], commands_prefix='!/')
```

Parameters

- **commands** – Command or list of commands always without leading slashes (prefix)
- **prefixes** – Allowed commands prefix. By default is slash. If you change the default behavior pass the list of prefixes to this argument.
- **ignore_case** – Ignore case of the command
- **ignore_mention** – Ignore mention in command (By default this filter pass only the commands addressed to current bot)

classmethod validate (*full_config: Dict[str, Any]*) → Optional[Dict[str, Any]]
Validator for filters factory

From filters factory this filter can be registered with arguments:

- `command`
- `commands_prefix` (will be passed as `prefixes`)
- `commands_ignore_mention` (will be passed as `ignore_mention`)

Parameters full_config –

Returns config or empty dict

async check (*message: aiogram.types.message.Message*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

```
class CommandObj (prefix: str = '/', command: str = "", mention: str = None, args: str = None)
```

Bases: `object`

Instance of this object is always has command and it prefix.

Can be passed as keyword argument `command` to the handler

```
prefix = '/'
```

Command without prefix and mention

```
command = ''
```

Mention (if available)

```
mention = None
```

Command argument

```
property mentioned
```

This command has mention?

Returns

```
property text
```

Generate original text from object

Returns

CommandStart

```
class aiogram.dispatcher.filters.builtin.CommandStart (deep_link: Union[str, Pattern[str], None] = None, encoded: bool = False)
```

Bases: `aiogram.dispatcher.filters.builtin.Command`

This filter based on `Command` filter but can handle only `/start` command.

Also this filter can handle `deep-linking` arguments.

Example:

```
@dp.message_handler(CommandStart(re.compile(r'ref-([\d]+)')))
```

Parameters

- **deep_link** – string or compiled regular expression (by `re.compile(...)`).
- **encoded** – set True if you're waiting for encoded payload (default - False).

```
async check (message: aiogram.types.message.Message)
```

If deep-linking is passed to the filter result of the matching will be passed as `deep_link` to the handler

Parameters `message` –

Returns

CommandHelp

class aiogram.dispatcher.filters.builtin.**CommandHelp**

Bases: *aiogram.dispatcher.filters.builtin.Command*

This filter based on *Command* filter but can handle only /help command.

Filter can be initialized from filters factory or by simply creating instance of this class.

Examples:

```
@dp.message_handler(commands=['myCommand'])
@dp.message_handler(Command(['myCommand']))
@dp.message_handler(commands=['myCommand'], commands_prefix='!/')
```

Parameters

- **commands** – Command or list of commands always without leading slashes (prefix)
- **prefixes** – Allowed commands prefix. By default is slash. If you change the default behavior pass the list of prefixes to this argument.
- **ignore_case** – Ignore case of the command
- **ignore_mention** – Ignore mention in command (By default this filter pass only the commands addressed to current bot)

CommandSettings

class aiogram.dispatcher.filters.builtin.**CommandSettings**

Bases: *aiogram.dispatcher.filters.builtin.Command*

This filter based on *Command* filter but can handle only /settings command.

Filter can be initialized from filters factory or by simply creating instance of this class.

Examples:

```
@dp.message_handler(commands=['myCommand'])
@dp.message_handler(Command(['myCommand']))
@dp.message_handler(commands=['myCommand'], commands_prefix='!/')
```

Parameters

- **commands** – Command or list of commands always without leading slashes (prefix)
- **prefixes** – Allowed commands prefix. By default is slash. If you change the default behavior pass the list of prefixes to this argument.
- **ignore_case** – Ignore case of the command
- **ignore_mention** – Ignore mention in command (By default this filter pass only the commands addressed to current bot)

CommandPrivacy

class aiogram.dispatcher.filters.builtin.**CommandPrivacy**

Bases: *aiogram.dispatcher.filters.builtin.Command*

This filter based on *Command* filter but can handle only /privacy command.

Filter can be initialized from filters factory or by simply creating instance of this class.

Examples:

```
@dp.message_handler(commands=['myCommand'])
@dp.message_handler(Command(['myCommand']))
@dp.message_handler(commands=['myCommand'], commands_prefix='!/')
```

Parameters

- **commands** – Command or list of commands always without leading slashes (prefix)
- **prefixes** – Allowed commands prefix. By default is slash. If you change the default behavior pass the list of prefixes to this argument.
- **ignore_case** – Ignore case of the command
- **ignore_mention** – Ignore mention in command (By default this filter pass only the commands addressed to current bot)

Text

class aiogram.dispatcher.filters.builtin.**Text** (*equals: Union[str, babel.support.LazyProxy, Iterable[Union[str, babel.support.LazyProxy]], = None, contains: Union[str, babel.support.LazyProxy, Iterable[Union[str, babel.support.LazyProxy]], = None, startswith: Union[str, babel.support.LazyProxy, Iterable[Union[str, babel.support.LazyProxy]], = None, endswith: Union[str, babel.support.LazyProxy, Iterable[Union[str, babel.support.LazyProxy]], = None, ignore_case=False)*)

Bases: *aiogram.dispatcher.filters.filters.Filter*

Simple text filter

Check text for one of pattern. Only one mode can be used in one filter. In every pattern, a single string is treated as a list with 1 element.

Parameters

- **equals** – True if object's text in the list
- **contains** – True if object's text contains all strings from the list

- **startswith** – True if object’s text starts with any of strings from the list
- **endswith** – True if object’s text ends with any of strings from the list
- **ignore_case** – case insensitive

classmethod validate (*full_config: Dict[str, Any]*)

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters full_config – dict with arguments passed to handler registrar

Returns Current filter config

async check (*obj: Union[aiogram.types.message.Message, aiogram.types.callback_query.CallbackQuery, aiogram.types.inline_query.InlineQuery, aiogram.types.poll.Poll]*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

HashTag

class `aiogram.dispatcher.filters.builtin.HashTag` (*hashtags=None, cashtags=None*)

Bases: `aiogram.dispatcher.filters.filters.Filter`

Filter for hashtag’s and cashtag’s

classmethod validate (*full_config: Dict[str, Any]*)

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters full_config – dict with arguments passed to handler registrar

Returns Current filter config

async check (*message: aiogram.types.message.Message*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

Regexp

class `aiogram.dispatcher.filters.builtin.Regexp` (*regexp*)

Bases: `aiogram.dispatcher.filters.filters.Filter`

Regexp filter for messages and callback query

classmethod validate (*full_config: Dict[str, Any]*)

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters full_config – dict with arguments passed to handler registrar

Returns Current filter config

async check (*obj: Union[aiogram.types.message.Message, aiogram.types.callback_query.CallbackQuery, aiogram.types.inline_query.InlineQuery, aiogram.types.poll.Poll]*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

RegexpCommandsFilter

class aiogram.dispatcher.filters.builtin.**RegexpCommandsFilter** (*regexp_commands*)

Bases: *aiogram.dispatcher.filters.filters.BoundFilter*

Check commands by regexp in message

async check (*message*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

ContentTypeFilter

class aiogram.dispatcher.filters.builtin.**ContentTypeFilter** (*content_types*)

Bases: *aiogram.dispatcher.filters.filters.BoundFilter*

Check message content type

async check (*message*)

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

IsSenderContact

class aiogram.dispatcher.filters.builtin.**IsSenderContact** (*is_sender_contact: bool*)

Bases: *aiogram.dispatcher.filters.filters.BoundFilter*

Filter check that the contact matches the sender

is_sender_contact=True - contact matches the sender *is_sender_contact=False* - result will be inverted

async check (*message: aiogram.types.message.Message*) → bool

Will be called when filters checks.

This method must be overridden.

Parameters args –

Returns

StateFilter

class aiogram.dispatcher.filters.builtin.**StateFilter** (*dispatcher, state*)

Bases: *aiogram.dispatcher.filters.filters.BoundFilter*

Check user state

async check (*obj*)

Will be called when filters checks.

This method must be overridden.

Parameters **args** –

Returns

ExceptionsFilter

class aiogram.dispatcher.filters.builtin.**ExceptionsFilter** (*exception*)

Bases: *aiogram.dispatcher.filters.filters.BoundFilter*

Filter for exceptions

async check (*update, exception*)

Will be called when filters checks.

This method must be overridden.

Parameters **args** –

Returns

IDFilter

class aiogram.dispatcher.filters.builtin.**IDFilter** (*user_id: Union[Iterable[Union[int, str]], str, int, None] = None, chat_id: Union[Iterable[Union[int, str]], str, int, None] = None*)

Bases: *aiogram.dispatcher.filters.filters.Filter*

Parameters

- **user_id** –
- **chat_id** –

classmethod validate (*full_config: Dict[str, Any]*) → Optional[Dict[str, Any]]

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters **full_config** – dict with arguments passed to handler registrar

Returns Current filter config

async check (*obj: Union[aiogram.types.message.Message, aiogram.types.callback_query.CallbackQuery, aiogram.types.inline_query.InlineQuery]*)

Will be called when filters checks.

This method must be overridden.

Parameters **args** –

Returns

AdminFilter

```
class aiogram.dispatcher.filters.builtin.AdminFilter (is_chat_admin:
                                                    Union[Iterable[Union[int,
                                                                    str]], str, int, bool, None] =
                                                    None)
```

Bases: *aiogram.dispatcher.filters.filters.Filter*

Checks if user is admin in a chat. If `is_chat_admin` is not set, the filter will check in the current chat (correct only for messages). `is_chat_admin` is required for `InlineQuery`.

```
classmethod validate (full_config: Dict[str, Any]) → Optional[Dict[str, Any]]
```

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters `full_config` – dict with arguments passed to handler registrar

Returns Current filter config

```
async check (obj: Union[aiogram.types.message.Message, aiogram.types.callback_query.CallbackQuery,
                          aiogram.types.inline_query.InlineQuery]) → bool
```

Will be called when filters checks.

This method must be overridden.

Parameters `args` –

Returns

IsReplyFilter

Making own filters (Custom filters)

Own filter can be:

- any callable object
- any async function
- any anonymous function (Example: `lambda msg: msg.text == 'spam'`)
- Subclass of `AbstractFilter`, `Filter` or `BoundFilter`

AbstractFilter

```
class aiogram.dispatcher.filters.filters.AbstractFilter
```

Bases: `abc.ABC`

Abstract class for custom filters.

```
abstract classmethod validate (full_config: Dict[str, Any]) → Optional[Dict[str, Any]]
```

Validate and parse config.

This method will be called by the filters factory when you bind this filter. Must be overridden.

Parameters `full_config` – dict with arguments passed to handler registrar

Returns Current filter config

abstract async check (*args) → bool

Will be called when filters checks.

This method must be overridden.

Parameters *args* –

Returns

Filter

class aiogram.dispatcher.filters.filters.**Filter**

Bases: *aiogram.dispatcher.filters.filters.AbstractFilter*

You can make subclasses of that class for custom filters.

Method `check` must be overridden

classmethod **validate** (*full_config: Dict[str, Any]*) → Optional[Dict[str, Any]]

Here method `validate` is optional. If you need to use filter from filters factory you need to override this method.

Parameters *full_config* – dict with arguments passed to handler registrar

Returns Current filter config

BoundFilter

class aiogram.dispatcher.filters.filters.**BoundFilter**

Bases: *aiogram.dispatcher.filters.filters.Filter*

To easily create your own filters with one parameter, you can inherit from this filter.

You need to implement `__init__` method with single argument related with key attribute and `check` method where you need to implement filter logic.

key = None

Unique name of the filter argument. You need to override this attribute.

required = False

If `True` this filter will be added to the all of the registered handlers

default = None

Default value for configure required filters

classmethod **validate** (*full_config: Dict[str, Any]*) → Dict[str, Any]

If `cls.key` is not `None` and that is in config returns config with that argument.

Parameters *full_config* –

Returns

```
class ChatIdFilter(BoundFilter):
    key = 'chat_id'

    def __init__(self, chat_id: typing.Union[typing.Iterable, int]):
        if isinstance(chat_id, int):
            chat_id = [chat_id]
        self.chat_id = chat_id
```

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```
def check(self, message: types.Message) -> bool:
    return message.chat.id in self.chat_id
```

```
dp.filters_factory.bind(ChatIdFilter, event_handlers=[dp.message_handlers])
```

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.

async 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

async process_updates (updates, fast: Optional[bool] = True)

Process list of updates

Parameters

- **updates** –
- **fast** –

Returns

async process_update (update: aiogram.types.update.Update)

Process single update object

Parameters update –

Returns

async reset_webhook (*check=True*) → bool

Reset webhook

Parameters **check** – check before deleting

Returns

async start_polling (*timeout=20, relax=0.1, limit=None, reset_webhook=None, fast: Optional[bool] = True, error_sleep: int = 5*)

Start long-polling

Parameters

- **timeout** –
- **relax** –
- **limit** –
- **reset_webhook** –
- **fast** –

Returns

stop_polling ()

Break long-polling process.

Returns

async wait_closed ()

Wait for the long-polling to close

Returns

is_polling ()

Check if polling is enabled

Returns

register_message_handler (*callback, *custom_filters, commands=None, regexp=None, content_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, regexp=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_poll_handler (*callback*, **custom_filters*, *run_task=None*, ***kwargs*)

Register handler for poll

Example:

```
dp.register_poll_handler(some_poll_handler)
```

Parameters

- **callback** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

poll_handler (**custom_filters*, *run_task=None*, ***kwargs*)

Decorator for poll handler

Example:

```
@dp.poll_handler()
async def some_poll_handler(poll: types.Poll)
```

Parameters

- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

register_poll_answer_handler (*callback*, **custom_filters*, *run_task=None*, ***kwargs*)

Register handler for poll_answer

Example:

```
dp.register_poll_answer_handler(some_poll_answer_handler)
```

Parameters

- **callback** –
- **custom_filters** –
- **run_task** – run callback in task (no wait results)
- **kwargs** –

poll_answer_handler (**custom_filters*, *run_task=None*, ***kwargs*)

Decorator for poll_answer handler

Example:

```
@dp.poll_answer_handler()
async def some_poll_answer_handler(poll: types.Poll)
```

Parameters

- **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

async throttle (key, *, rate=None, user_id=None, chat_id=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_id** – user id
- **chat_id** – chat id
- **no_error** – return boolean value instead of raising error

Returns

async check_key (key, chat_id=None, user_id=None)
Get information about key in bucket

Parameters

- **key** –
- **chat_id** –
- **user_id** –

Returns

async release_key (key, chat_id=None, user_id=None)
Release blocked key

Parameters

- **key** –
- **chat_id** –
- **user_id** –

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

throttled (*on_throttled: Optional[Callable] = None, key=None, rate=None, user_id=None, chat_id=None*)

Meta-decorator for throttling. Invokes *on_throttled* if the handler was throttled.

Example:

```
async def handler_throttled(message: types.Message, **kwargs):
    await message.answer("Throttled!")

@dp.throttled(handler_throttled)
async def some_handler(message: types.Message):
    await message.answer("Didn't throttled!")
```

Parameters

- **on_throttled** – the callable object that should be either a function or return a coroutine
- **key** – key in storage
- **rate** – limit (by default is equal to default rate limit)
- **user_id** – user id
- **chat_id** – chat id

Returns decorator

4.6 Utils

4.6.1 Auth Widget

Implementation of Telegram site authorization checking mechanism for more information <https://core.telegram.org/widgets/login#checking-authorization>

Source: <https://gist.github.com/JrooTJunior/887791de7273c9df5277d2b1ecadc839>

`aiogram.utils.auth_widget.generate_hash` (*data: dict, token: str*) → str
Generate secret hash

Parameters

- **data** –
- **token** –

Returns

`aiogram.utils.auth_widget.check_token` (*data: dict, token: str*) → bool

Validate auth token

Parameters

- `data` –
- `token` –

Returns

`aiogram.utils.auth_widget.check_signature` (*token: str, hash: str, **kwargs*) → bool

Generate hexadecimal representation of the HMAC-SHA-256 signature of the data-check-string with the SHA256 hash of the bot's token used as a secret key

Parameters

- `token` –
- `hash` –
- `kwargs` – all params received on auth

Returns

`aiogram.utils.auth_widget.check_integrity` (*token: str, data: dict*) → bool

Verify the authentication and the integrity of the data received on user's auth

Parameters

- `token` – Bot's token
- `data` – all data that came on auth

Returns

4.6.2 Executor

`aiogram.utils.executor.start_polling` (*dispatcher, *, loop=None, skip_updates=False, reset_webhook=True, on_startup=None, on_shutdown=None, timeout=20, relax=0.1, fast=True*)

Start bot in long-polling mode

Parameters

- `dispatcher` –
- `loop` –
- `skip_updates` –
- `reset_webhook` –
- `on_startup` –
- `on_shutdown` –
- `timeout` –

```
aiogram.utils.executor.set_webhook (dispatcher: aiogram.dispatcher.dispatcher.Dispatcher,  
webhook_path: str, *, loop: Optional[asyncio.events.AbstractEventLoop] = None,  
skip_updates: bool = None, on_startup: Optional[Callable] = None, on_shutdown: Optional[Callable] = None,  
check_ip: bool = False, retry_after: Union[str, int, None] = None, route_name: str = 'webhook_handler', web_app: Optional[aiohttp.web_app.Application] = None)
```

Set webhook for bot

Parameters

- **dispatcher** – Dispatcher
- **webhook_path** – str
- **loop** – Optional[asyncio.AbstractEventLoop] (default: None)
- **skip_updates** – bool (default: None)
- **on_startup** – Optional[Callable] (default: None)
- **on_shutdown** – Optional[Callable] (default: None)
- **check_ip** – bool (default: False)
- **retry_after** – Optional[Union[str, int]] See <https://tools.ietf.org/html/rfc7231#section-7.1.3> (default: None)
- **route_name** – str (default: 'webhook_handler')
- **web_app** – Optional[Application] (default: None)

Returns

```
aiogram.utils.executor.start_webhook (dispatcher, webhook_path, *, loop=None,  
skip_updates=None, on_startup=None,  
on_shutdown=None, check_ip=False,  
retry_after=None, route_name='webhook_handler',  
**kwargs)
```

Start bot in webhook mode

Parameters

- **dispatcher** –
- **webhook_path** –
- **loop** –
- **skip_updates** –
- **on_startup** –
- **on_shutdown** –
- **check_ip** –
- **route_name** –
- **kwargs** –

Returns

`aiogram.utils.executor.start` (*dispatcher, future, *, loop=None, skip_updates=None, on_startup=None, on_shutdown=None*)

Execute Future.

Parameters

- **dispatcher** – instance of Dispatcher
- **future** – future
- **loop** – instance of AbstractEventLoop
- **skip_updates** –
- **on_startup** –
- **on_shutdown** –

Returns

class `aiogram.utils.executor.Executor` (*dispatcher, skip_updates=None, check_ip=False, retry_after=None, loop=None*)

Main executor class

set_web_app (*application: aiohttp.web_app.Application*)

Change instance of aiohttp.web.Applicaton

Parameters *application* –

on_startup (*callback: callable, polling=True, webhook=True*)

Register a callback for the startup process

Parameters

- **callback** –
- **polling** – use with polling
- **webhook** – use with webhook

on_shutdown (*callback: callable, polling=True, webhook=True*)

Register a callback for the shutdown process

Parameters

- **callback** –
- **polling** – use with polling
- **webhook** – use with webhook

set_webhook (*webhook_path: Optional[str] = None, request_handler: Any = <class 'aiogram.dispatcher.webhook.WebhookRequestHandler'>, route_name: str = 'webhook_handler', web_app: Optional[aiohttp.web_app.Application] = None*)

Set webhook for bot

Parameters

- **webhook_path** – Optional[str] (default: None)
- **request_handler** – Any (default: WebhookRequestHandler)
- **route_name** – str Name of webhook handler route (default: 'webhook_handler')
- **web_app** – Optional[Application] (default: None)

Returns

start_webhook (*webhook_path=None, request_handler=<class 'aiogram.dispatcher.webhook.WebhookRequestHandler'>, route_name='webhook_handler', **kwargs*)

Start bot in webhook mode

Parameters

- **webhook_path** –
- **request_handler** –
- **route_name** – Name of webhook handler route
- **kwargs** –

Returns

start_polling (*reset_webhook=None, timeout=20, relax=0.1, fast=True*)

Start bot in long-polling mode

Parameters

- **reset_webhook** –
- **timeout** –

start (*future*)

Execute Future.

Return the Future's result, or raise its exception.

Parameters future –

Returns

4.6.3 Exceptions

- **TelegramAPIError**

- **ValidationError**

- **Throttled**

- **BadRequest**

- **MessageError**

- **MessageNotModified**
- **MessageToForwardNotFound**
- **MessageToDeleteNotFound**
- **MessageIdentifierNotSpecified**
- **MessageTextIsEmpty**
- **MessageCantBeEdited**
- **MessageCantBeDeleted**
- **MessageToEditNotFound**
- **MessageToReplyNotFound**
- **ToMuchMessages**

- **PollError**

- PollCantBeStopped
- PollHasAlreadyClosed
- PollsCantBeSentToPrivateChats
- **PollSizeError**
 - PollMustHaveMoreOptions
 - PollCantHaveMoreOptions
 - PollsOptionsLengthTooLong
 - PollOptionsMustBeNonEmpty
 - PollQuestionMustBeNonEmpty
- MessageWithPollNotFound (with MessageError)
- MessageIsNotAPoll (with MessageError)
- * ObjectExpectedAsReplyMarkup
- * InlineKeyboardExpected
- * ChatNotFound
- * ChatDescriptionIsNotModified
- * InvalidQueryID
- * InvalidPeerID
- * InvalidHTTPUriContent
- * ButtonURLInvalid
- * URLHostIsEmpty
- * StartParamInvalid
- * ButtonDataInvalid
- * WrongFileIdentifier
- * GroupDeactivated
- * **BadWebhook**
 - WebhookRequireHTTPS
 - BadWebhookPort
 - BadWebhookAddrInfo
 - BadWebhookNoAddressAssociatedWithHostname
- * **NotFound**
 - MethodNotKnown
- * PhotoAsInputFileRequired
- * InvalidStickersSet
- * NoStickerInRequest
- * ChatAdminRequired
- * NeedAdministratorRightsInTheChannel

- * MethodNotAvailableInPrivateChats
- * CantDemoteChatCreator
- * CantRestrictSelf
- * NotEnoughRightsToRestrict
- * PhotoDimensions
- * UnavailableMembers
- * TypeOfFileMismatch
- * WrongRemoteFileIdSpecified
- * PaymentProviderInvalid
- * CurrencyTotalAmountInvalid
- * CantParseUrl
- * UnsupportedUrlProtocol
- * CantParseEntities
- * ResultIdDuplicate
- * MethodIsNotAvailable

– **ConflictError**

- * TerminatedByOtherGetUpdates
- * CantGetUpdates

– **Unauthorized**

- * BotKicked
- * BotBlocked
- * UserDeactivated
- * CantInitiateConversation
- * CantTalkWithBots

– NetworkError

– RetryAfter

– MigrateToChat

– RestartingTelegram

• **AIOGramWarning**

- TimeoutWarning

exception aiogram.utils.exceptions.**TelegramAPIError** (*message=None*)

exception aiogram.utils.exceptions.**AIOGramWarning**

exception aiogram.utils.exceptions.**TimeoutWarning**

exception aiogram.utils.exceptions.**FSMStorageWarning**

exception aiogram.utils.exceptions.**ValidationError** (*message=None*)

exception aiogram.utils.exceptions.**BadRequest** (*message=None*)

exception aiogram.utils.exceptions.**MessageError** (*message=None*)

exception aiogram.utils.exceptions.**MessageNotModified** (*message=None*)
Will be raised when you try to set new text is equals to current text.

exception aiogram.utils.exceptions.**MessageToForwardNotFound** (*message=None*)
Will be raised when you try to forward very old or deleted or unknown message.

exception aiogram.utils.exceptions.**MessageToDeleteNotFound** (*message=None*)
Will be raised when you try to delete very old or deleted or unknown message.

exception aiogram.utils.exceptions.**MessageToReplyNotFound** (*message=None*)
Will be raised when you try to reply to very old or deleted or unknown message.

exception aiogram.utils.exceptions.**MessageIdentifierNotSpecified** (*message=None*)

exception aiogram.utils.exceptions.**MessageTextIsEmpty** (*message=None*)

exception aiogram.utils.exceptions.**MessageCantBeEdited** (*message=None*)

exception aiogram.utils.exceptions.**MessageCantBeDeleted** (*message=None*)

exception aiogram.utils.exceptions.**MessageToEditNotFound** (*message=None*)

exception aiogram.utils.exceptions.**MessageIsTooLong** (*message=None*)

exception aiogram.utils.exceptions.**TooMuchMessages** (*message=None*)
Will be raised when you try to send media group with more than 10 items.

exception aiogram.utils.exceptions.**ObjectExpectedAsReplyMarkup** (*message=None*)

exception aiogram.utils.exceptions.**InlineKeyboardExpected** (*message=None*)

exception aiogram.utils.exceptions.**PollError** (*message=None*)

exception aiogram.utils.exceptions.**PollCantBeStopped** (*message=None*)

exception aiogram.utils.exceptions.**PollHasAlreadyBeenClosed** (*message=None*)

exception aiogram.utils.exceptions.**PollsCantBeSentToPrivateChats** (*message=None*)

exception aiogram.utils.exceptions.**PollSizeError** (*message=None*)

exception aiogram.utils.exceptions.**PollMustHaveMoreOptions** (*message=None*)

exception aiogram.utils.exceptions.**PollCantHaveMoreOptions** (*message=None*)

exception aiogram.utils.exceptions.**PollOptionsMustBeNonEmpty** (*message=None*)

exception aiogram.utils.exceptions.**PollQuestionMustBeNonEmpty** (*message=None*)

exception aiogram.utils.exceptions.**PollOptionsLengthTooLong** (*message=None*)

exception aiogram.utils.exceptions.**PollQuestionLengthTooLong** (*message=None*)

exception aiogram.utils.exceptions.**MessageWithPollNotFound** (*message=None*)
Will be raised when you try to stop poll with message without poll

exception aiogram.utils.exceptions.**MessageIsNotAPoll** (*message=None*)
Will be raised when you try to stop poll with message without poll

exception aiogram.utils.exceptions.**ChatNotFound** (*message=None*)

exception aiogram.utils.exceptions.**ChatIdIsEmpty** (*message=None*)

exception aiogram.utils.exceptions.**InvalidUserId** (*message=None*)

exception aiogram.utils.exceptions.**ChatDescriptionIsNotModified** (*message=None*)

exception aiogram.utils.exceptions.**InvalidQueryID** (*message=None*)

exception aiogram.utils.exceptions.**InvalidPeerID** (*message=None*)

exception aiogram.utils.exceptions.**InvalidHttpUrlContent** (*message=None*)

exception aiogram.utils.exceptions.**ButtonURLInvalid** (*message=None*)

exception aiogram.utils.exceptions.**URLHostIsEmpty** (*message=None*)

exception aiogram.utils.exceptions.**StartParamInvalid** (*message=None*)

exception aiogram.utils.exceptions.**ButtonDataInvalid** (*message=None*)

exception aiogram.utils.exceptions.**WrongFileIdentifier** (*message=None*)

exception aiogram.utils.exceptions.**GroupDeactivated** (*message=None*)

exception aiogram.utils.exceptions.**PhotoAsInputFileRequired** (*message=None*)
Will be raised when you try to set chat photo from file ID.

exception aiogram.utils.exceptions.**InvalidStickersSet** (*message=None*)

exception aiogram.utils.exceptions.**NoStickerInRequest** (*message=None*)

exception aiogram.utils.exceptions.**ChatAdminRequired** (*message=None*)

exception aiogram.utils.exceptions.**NeedAdministratorRightsInTheChannel** (*message=None*)

exception aiogram.utils.exceptions.**NotEnoughRightsToPinMessage** (*message=None*)

exception aiogram.utils.exceptions.**MethodNotAvailableInPrivateChats** (*message=None*)

exception aiogram.utils.exceptions.**CantDemoteChatCreator** (*message=None*)

exception aiogram.utils.exceptions.**CantRestrictSelf** (*message=None*)

exception aiogram.utils.exceptions.**NotEnoughRightsToRestrict** (*message=None*)

exception aiogram.utils.exceptions.**PhotoDimensions** (*message=None*)

exception aiogram.utils.exceptions.**UnavailableMembers** (*message=None*)

exception aiogram.utils.exceptions.**TypeOfFileMismatch** (*message=None*)

exception aiogram.utils.exceptions.**WrongRemoteFileIdSpecified** (*message=None*)

exception aiogram.utils.exceptions.**PaymentProviderInvalid** (*message=None*)

exception aiogram.utils.exceptions.**CurrencyTotalAmountInvalid** (*message=None*)

exception aiogram.utils.exceptions.**BadWebhook** (*message=None*)

exception aiogram.utils.exceptions.**WebhookRequireHTTPS** (*message=None*)

exception aiogram.utils.exceptions.**BadWebhookPort** (*message=None*)

exception aiogram.utils.exceptions.**BadWebhookAddrInfo** (*message=None*)

exception aiogram.utils.exceptions.**BadWebhookNoAddressAssociatedWithHostname** (*message=None*)

exception aiogram.utils.exceptions.**CantParseUrl** (*message=None*)

exception aiogram.utils.exceptions.**UnsupportedUrlProtocol** (*message=None*)

exception aiogram.utils.exceptions.**CantParseEntities** (*message=None*)

exception aiogram.utils.exceptions.**ResultIdDuplicate** (*message=None*)

exception aiogram.utils.exceptions.**BotDomainInvalid** (*message=None*)

exception aiogram.utils.exceptions.**MethodIsNotAvailable** (*message=None*)

exception aiogram.utils.exceptions.**NotFound** (*message=None*)

exception aiogram.utils.exceptions.**MethodNotKnown** (*message=None*)

exception aiogram.utils.exceptions.**ConflictError** (*message=None*)

exception aiogram.utils.exceptions.**TerminatedByOtherGetUpdates** (*message=None*)

exception aiogram.utils.exceptions.**CantGetUpdates** (*message=None*)

exception aiogram.utils.exceptions.**Unauthorized** (*message=None*)

exception aiogram.utils.exceptions.**BotKicked** (*message=None*)

exception aiogram.utils.exceptions.**BotBlocked** (*message=None*)

exception aiogram.utils.exceptions.**UserDeactivated** (*message=None*)

exception aiogram.utils.exceptions.**CantInitiateConversation** (*message=None*)

exception aiogram.utils.exceptions.**CantTalkWithBots** (*message=None*)

exception aiogram.utils.exceptions.**NetworkError** (*message=None*)

exception aiogram.utils.exceptions.**RestartingTelegram**

exception aiogram.utils.exceptions.**RetryAfter** (*retry_after*)

exception aiogram.utils.exceptions.**MigrateToChat** (*chat_id*)

exception aiogram.utils.exceptions.**Throttled** (***kwargs*)

4.6.4 Markdown

aiogram.utils.markdown.**quote_html** (**content, sep=' '*)

Quote HTML symbols

All <, >, & and " symbols that are not a part of a tag or an HTML entity must be replaced with the corresponding HTML entities (< with < ; > with > ; & with & and " with ").

Parameters

- **content** –
- **sep** –

Returns

aiogram.utils.markdown.**escape_md** (**content, sep=' '*)

Escape markdown text

E.g. for usernames

Parameters

- **content** –
- **sep** –

Returns

aiogram.utils.markdown.**text** (**content, sep=' '*)

Join all elements with a separator

Parameters

- **content** –
- **sep** –

Returns

`aiogram.utils.markdown.bold(*content, sep='')`

Make bold text (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hbold(*content, sep='')`

Make bold text (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.italic(*content, sep='')`

Make italic text (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hitalic(*content, sep='')`

Make italic text (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.code(*content, sep='')`

Make mono-width text (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hcode(*content, sep='')`

Make mono-width text (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.pre(*content, sep='\n')`

Make mono-width text block (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hpre(*content, sep='\n')`

Make mono-width text block (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.underline(*content, sep='')`

Make underlined text (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hunderline(*content, sep='')`

Make underlined text (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.strikethrough(*content, sep='')`

Make strikethrough text (Markdown)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.hstrikethrough(*content, sep='')`

Make strikethrough text (HTML)

Parameters

- `content` –
- `sep` –

Returns

`aiogram.utils.markdown.link(title: str, url: str) → str`

Format URL (Markdown)

Parameters

- `title` –
- `url` –

Returns

`aiogram.utils.markdown.hlink(title: str, url: str) → str`

Format URL (HTML)

Parameters

- `title` –
- `url` –

Returns

aiogram.utils.markdown.**hide_link** (*url: str*) → str
Hide URL (HTML only) Can be used for adding an image to a text message
Parameters *url* –
Returns

4.6.5 Helper

Example:

```
>>> from aiogram.utils.helper import Helper, ListItem, HelperMode, Item
>>> class MyHelper(Helper):
...     mode = HelperMode.lowerCamelCase
...     FOO_ITEM = ListItem()
...     BAR_ITEM = ListItem()
...     BAZ_ITEM = ListItem()
...     LOREM = Item()
...
>>> print(MyHelper.FOO_ITEM & MyHelper.BAR_ITEM)
<<< ['fooItem', 'barItem']
>>> print(MyHelper.all())
<<< ['barItem', 'bazItem', 'fooItem', 'lorem']
```

class aiogram.utils.helper.**Item** (*value=None*)
Helper item

If a value is not provided, it will be automatically generated based on a variable's name

class aiogram.utils.helper.**ListItem** (*value=None*)
This item is always a list

You can use &, | and + operators for that.

class aiogram.utils.helper.**ItemsList** (**seq*)
Patch for default list

This class provides +, &, |, +=, &=, |= operators for extending the list

4.6.6 Deprecated

aiogram.utils.deprecated.**deprecated** (*reason, stacklevel=2*) → Callable
This is a decorator which can be used to mark functions as deprecated. It will result in a warning being emitted when the function is used.

Source: <https://stackoverflow.com/questions/2536307/decorators-in-the-python-standard-lib-deprecated-specifically>

aiogram.utils.deprecated.**renamed_argument** (*old_name: str, new_name: str, until_version: str, stacklevel: int = 3*)

A meta-decorator to mark an argument as deprecated.

```
@renamed_argument("chat", "chat_id", "3.0") # stacklevel=3 by default
@renamed_argument("user", "user_id", "3.0", stacklevel=4)
def some_function(user_id, chat_id=None):
    print(f"user_id={user_id}, chat_id={chat_id}")

some_function(user=123) # prints 'user_id=123, chat_id=None' with warning
some_function(123) # prints 'user_id=123, chat_id=None' without warning
some_function(user_id=123) # prints 'user_id=123, chat_id=None' without warning
```


Parameters

- **old_name** –
- **new_name** –
- **until_version** – the version in which the argument is scheduled to be removed
- **stacklevel** – leave it to default if it's the first decorator used.

Increment with any new decorator used. :return: decorator

4.6.7 Payload

`aiogram.utils.payload.generate_payload(exclude=None, **kwargs)`

Generate payload

Usage: `payload = generate_payload(**locals(), exclude=['foo'])`

Parameters

- **exclude** –
- **kwargs** –

Returns dict

`aiogram.utils.payload.prepare_arg(value)`

Stringify dicts/lists and convert datetime/timedelta to unix-time

Parameters **value** –

Returns

4.6.8 Parts

`aiogram.utils.parts.split_text(text: str, length: int = 4096) → List[str]`

Split long text

Parameters

- **text** –
- **length** –

Returns list of parts

Return type `typing.List[str]`

`aiogram.utils.parts.safe_split_text(text: str, length: int = 4096) → List[str]`

Split long text

Parameters

- **text** –
- **length** –

Returns

`aiogram.utils.parts.paginate(data: Iterable, page: int = 0, limit: int = 10) → Iterable`

Slice data over pages

Parameters

- **data** (`typing.Iterable`) – any iterable object
- **page** (`int`) – number of page
- **limit** (`int`) – items per page

Returns sliced object

Return type `typing.Iterable`

4.6.9 JSON

4.6.10 Emoji

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
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 user sends `/start` or `/help` command
24     """
25     await message.reply("Hi!\nI'm EchoBot!\nPowered by aiogram.")
26
27
28 @dp.message_handler(regex='(^cat[s]?${puss})')
29 async def cats(message: types.Message):
30     with open('data/cats.jpg', 'rb') as photo:
31         '''
32         # Old fashioned way:
33         await bot.send_photo(
34             message.chat.id,
35             photo,
36             caption='Cats are here ',
37             reply_to_message_id=message.message_id,
38         )
39         '''
40
41     await message.reply_photo(photo, caption='Cats are here ')
```

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```

42
43
44 @dp.message_handler()
45 async def echo(message: types.Message):
46     # old style:
47     # await bot.send_message(message.chat.id, message.text)
48
49     await message.answer(message.text)
50
51
52 if __name__ == '__main__':
53     executor.start_polling(dp, skip_updates=True)

```

4.7.2 Inline bot

Listing 2: inline_bot.py

```

1  import hashlib
2  import logging
3
4  from aiogram import Bot, Dispatcher, executor
5  from aiogram.types import InlineQuery, \
6      InputTextMessageContent, InlineQueryResultArticle
7
8  API_TOKEN = 'BOT_TOKEN_HERE'
9
10 logging.basicConfig(level=logging.DEBUG)
11
12 bot = Bot(token=API_TOKEN)
13 dp = Dispatcher(bot)
14
15
16 @dp.inline_handler()
17 async def inline_echo(inline_query: InlineQuery):
18     # id affects both preview and content,
19     # so it has to be unique for each result
20     # (Unique identifier for this result, 1-64 Bytes)
21     # you can set your unique id's
22     # but for example i'll generate it based on text because I know, that
23     # only text will be passed in this example
24     text = inline_query.query or 'echo'
25     input_content = InputTextMessageContent(text)
26     result_id: str = hashlib.md5(text.encode()).hexdigest()
27     item = InlineQueryResultArticle(
28         id=result_id,
29         title=f'Result {text!r}',
30         input_message_content=input_content,
31     )
32     # don't forget to set cache_time=1 for testing (default is 300s or 5m)
33     await bot.answer_inline_query(inline_query.id, results=[item], cache_time=1)
34
35
36 if __name__ == '__main__':
37     executor.start_polling(dp, 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):
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:

```

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```

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:
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)

```

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```

100     start_polling(dispatcher, on_startup=on_startup, on_shutdown=on_shutdown)
101
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 logging
2
3  import aiohttp
4
5  from aiogram import Bot, types
6  from aiogram.dispatcher import Dispatcher
7  from aiogram.types import ParseMode
8  from aiogram.utils.emoji import emojiize
9  from aiogram.utils.executor import start_polling
10 from aiogram.utils.markdown import bold, code, italic, text
11
12 # Configure bot here
13 API_TOKEN = 'BOT_TOKEN_HERE'
14 PROXY_URL = 'http://PROXY_URL' # Or 'socks5://host:port'
15
16 # NOTE: If authentication is required in your proxy then uncomment next line and
17 ↪ change login/password for it
18 # PROXY_AUTH = aiohttp.BasicAuth(login='login', password='password')
19 # And add `proxy_auth=PROXY_AUTH` argument in line 30, like this:
20 # >>> bot = Bot(token=API_TOKEN, proxy=PROXY_URL, proxy_auth=PROXY_AUTH)
21 # Also you can use Socks5 proxy but you need manually install aiohttp_socks package.
22
23 # Get my ip URL
24 GET_IP_URL = 'http://bot.whatismyipaddress.com/'
25
26 logging.basicConfig(level=logging.INFO)
27
28 bot = Bot(token=API_TOKEN, proxy=PROXY_URL)
29
30 # If auth is required:
31 # bot = Bot(token=API_TOKEN, proxy=PROXY_URL, proxy_auth=PROXY_AUTH)
32 dp = Dispatcher(bot)
33
34 async def fetch(url, session):
35     async with session.get(url) as response:
36         return await response.text()
37
38

```

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```

39 @dp.message_handler(commands=['start'])
40 async def cmd_start(message: types.Message):
41     # fetching urls will take some time, so notify user that everything is OK
42     await types.ChatActions.typing()
43
44     content = []
45
46     # Make request (without proxy)
47     async with aiohttp.ClientSession() as session:
48         ip = await fetch(GET_IP_URL, session)
49         content.append(text(':globe_showing_Americas:', bold('IP:'), code(ip)))
50         # This line is formatted to ' *IP:* `YOUR IP` '
51
52     # Make request through bot's proxy
53     ip = await fetch(GET_IP_URL, bot.session)
54     content.append(text(':locked_with_key:', bold('IP:'), code(ip), italic('via proxy
↳')))
55     # This line is formatted to ' *IP:* `YOUR IP` _via proxy_'
56
57     # Send content
58     await bot.send_message(message.chat.id, emojiize(text(*content, sep='\n')), parse_
↳mode=ParseMode.MARKDOWN)
59
60     # In this example you can see emoji codes: ":globe_showing_Americas:" and
↳":locked_with_key:"
61     # You can find full emoji cheat sheet at https://www.webpagefx.com/tools/emoji-
↳cheat-sheet/
62     # For representing emoji codes into real emoji use emoji util (aiogram.utils.
↳emoji)
63     # (you have to install emoji module)
64
65     # For example emojiize('Moon face :new_moon_face:') is transformed to 'Moon face '
66
67
68 if __name__ == '__main__':
69     start_polling(dp, skip_updates=True)

```

4.7.5 Finite state machine example

Listing 5: finite_state_machine_example.py

```

1 import logging
2
3 import aiogram.utils.markdown as md
4 from aiogram import Bot, Dispatcher, types
5 from aiogram.contrib.fsm_storage.memory import MemoryStorage
6 from aiogram.dispatcher import FSMContext
7 from aiogram.dispatcher.filters import Text
8 from aiogram.dispatcher.filters.state import State, StatesGroup
9 from aiogram.types import ParseMode
10 from aiogram.utils import executor
11
12 logging.basicConfig(level=logging.INFO)
13
14 API_TOKEN = 'BOT TOKEN HERE'

```

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```

15
16
17 bot = Bot(token=API_TOKEN)
18
19 # For example use simple MemoryStorage for Dispatcher.
20 storage = MemoryStorage()
21 dp = Dispatcher(bot, storage=storage)
22
23
24 # States
25 class Form(StatesGroup):
26     name = State() # Will be represented in storage as 'Form:name'
27     age = State() # Will be represented in storage as 'Form:age'
28     gender = State() # Will be represented in storage as 'Form:gender'
29
30
31 @dp.message_handler(commands='start')
32 async def cmd_start(message: types.Message):
33     """
34     Conversation's entry point
35     """
36     # Set state
37     await Form.name.set()
38
39     await message.reply("Hi there! What's your name?")
40
41
42 # You can use state '*' if you need to handle all states
43 @dp.message_handler(state='*', commands='cancel')
44 @dp.message_handler(Text(equals='cancel', ignore_case=True), state='*')
45 async def cancel_handler(message: types.Message, state: FSMContext):
46     """
47     Allow user to cancel any action
48     """
49     current_state = await state.get_state()
50     if current_state is None:
51         return
52
53     logging.info('Cancelling state %r', current_state)
54     # Cancel state and inform user about it
55     await state.finish()
56     # And remove keyboard (just in case)
57     await message.reply('Cancelled.', reply_markup=types.ReplyKeyboardRemove())
58
59
60 @dp.message_handler(state=Form.name)
61 async def process_name(message: types.Message, state: FSMContext):
62     """
63     Process user name
64     """
65     async with state.proxy() as data:
66         data['name'] = message.text
67
68     await Form.next()
69     await message.reply("How old are you?")
70
71

```

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```

72 # Check age. Age gotta be digit
73 @dp.message_handler(lambda message: not message.text.isdigit(), state=Form.age)
74 async def process_age_invalid(message: types.Message):
75     """
76     If age is invalid
77     """
78     return await message.reply("Age gotta be a number.\nHow old are you? (digits only)
↳")
79
80
81 @dp.message_handler(lambda message: message.text.isdigit(), state=Form.age)
82 async def process_age(message: types.Message, state: FSMContext):
83     # Update state and data
84     await Form.next()
85     await state.update_data(age=int(message.text))
86
87     # Configure ReplyKeyboardMarkup
88     markup = types.ReplyKeyboardMarkup(resize_keyboard=True, selective=True)
89     markup.add("Male", "Female")
90     markup.add("Other")
91
92     await message.reply("What is your gender?", reply_markup=markup)
93
94
95 @dp.message_handler(lambda message: message.text not in ["Male", "Female", "Other"],
↳state=Form.gender)
96 async def process_gender_invalid(message: types.Message):
97     """
98     In this example gender has to be one of: Male, Female, Other.
99     """
100    return await message.reply("Bad gender name. Choose your gender from the keyboard.
↳")
101
102
103 @dp.message_handler(state=Form.gender)
104 async def process_gender(message: types.Message, state: FSMContext):
105     async with state.proxy() as data:
106         data['gender'] = message.text
107
108     # Remove keyboard
109     markup = types.ReplyKeyboardRemove()
110
111     # And send message
112     await bot.send_message(
113         message.chat.id,
114         md.text(
115             md.text('Hi! Nice to meet you, ', md.bold(data['name'])),
116             md.text('Age:', md.code(data['age'])),
117             md.text('Gender:', data['gender']),
118             sep='\n',
119         ),
120         reply_markup=markup,
121         parse_mode=ParseMode.MARKDOWN,
122     )
123
124     # Finish conversation
125     await state.finish()

```

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```

126
127
128 if __name__ == '__main__':
129     executor.start_polling(dp, skip_updates=True)

```

4.7.6 Throttling example

Example for throttling manager. You can use that for flood controlling.

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 6: i18n_example.py

```

1 Step 4: compile translations
2     # pybabel compile -d locales -D mybot
3
4 Step 5: When you change the code of your bot you need to update po & mo files.
5     Step 5.1: regenerate pot file:
6         command from step 1
7     Step 5.2: update po files
8         # pybabel update -d locales -D mybot -i locales/mybot.pot
9     Step 5.3: update your translations
10    Step 5.4: compile mo files
11        command from step 4
12
13
14 from pathlib import Path
15
16 from aiogram import Bot, Dispatcher, executor, types
17 from aiogram.contrib.middlewares.i18n import I18nMiddleware
18
19 TOKEN = 'BOT_TOKEN_HERE'
20 I18N_DOMAIN = 'mybot'
21
22 BASE_DIR = Path(__file__).parent
23 LOCALES_DIR = BASE_DIR / 'locales'
24
25 bot = Bot(TOKEN, parse_mode=types.ParseMode.HTML)
26 dp = Dispatcher(bot)
27
28 # Setup i18n middleware
29 i18n = I18nMiddleware(I18N_DOMAIN, LOCALES_DIR)
30 dp.middleware.setup(i18n)
31
32 # Alias for gettext method
33 _ = i18n.gettext

```

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```

34
35
36 @dp.message_handler(commands='start')
37 async def cmd_start(message: types.Message):
38     # Simply use `_('message')` instead of `message` and never use f-strings for
↳translatable texts.
39     await message.reply(_('Hello, <b>{user}</b>!').format(user=message.from_user.full_
↳name))
40
41
42 @dp.message_handler(commands='lang')
43 async def cmd_lang(message: types.Message, locale):
44     # For setting custom lang you have to modify i18n middleware
45     await message.reply(_('Your current language: <i>{language}</i>').
↳format(language=locale))
46
47 # If you care about pluralization, here's small handler
48 # And also, there's an example of comments for translators. Most translation tools
↳support them.
49
50 # Alias for gettext method, parser will understand double underscore as plural (aka
↳ngettext)
51 __ = i18n.gettext
52
53
54 # some likes manager
55 LIKES_STORAGE = {'count': 0}
56
57
58 def get_likes() -> int:
59     return LIKES_STORAGE['count']
60
61
62 def increase_likes() -> int:
63     LIKES_STORAGE['count'] += 1
64     return get_likes()
65
66
67 @dp.message_handler(commands='like')
68 async def cmd_like(message: types.Message, locale):
69     likes = increase_likes()
70
71     # NOTE: This is comment for a translator
72     await message.reply(__('Aiogram has {number} like!', 'Aiogram has {number} likes!
↳', likes).format(number=likes))
73
74 if __name__ == '__main__':
75     executor.start_polling(dp, skip_updates=True)

```

4.7.8 Regexp commands filter example

Listing 7: 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
6 bot = Bot(token='BOT_TOKEN_HERE', parse_mode=types.ParseMode.HTML)
7 dp = Dispatcher(bot)
8
9
10 @dp.message_handler(filters.RegexpCommandsFilter(regexp_commands=['item_([0-9]*)']))
11 async def send_welcome(message: types.Message, regexp_command):
12     await message.reply(f"You have requested an item with id <code>{regexp_command.
13     ↪group(1)}</code>")
14
15 @dp.message_handler(commands='start')
16 async def create_deeplink(message: types.Message):
17     bot_user = await bot.me
18     bot_username = bot_user.username
19     deeplink = f'https://t.me/{bot_username}?start=item_12345'
20     text = (
21         f'Either send a command /item_1234 or follow this link {deeplink} and then_
22     ↪click start\n'
23         'It also can be hidden in a inline button\n\n'
24         'Or just send <code>/start item_123</code>'
25     )
26     await message.reply(text, disable_web_page_preview=True)
27
28 if __name__ == '__main__':
29     executor.start_polling(dp, skip_updates=True)

```

4.7.9 Check user language

Babel is required.

Listing 8: check_user_language.py

```

1 import logging
2
3 from aiogram import Bot, Dispatcher, executor, md, types
4
5 API_TOKEN = 'BOT TOKEN HERE'
6
7 logging.basicConfig(level=logging.INFO)
8
9
10 bot = Bot(token=API_TOKEN, parse_mode=types.ParseMode.MARKDOWN)
11 dp = Dispatcher(bot)
12
13
14 @dp.message_handler()

```

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```

15 async def check_language(message: types.Message):
16     locale = message.from_user.locale
17
18     await message.reply(md.text(
19         md.bold('Info about your language:'),
20         md.text(' ', md.bold('Code:')), md.code(locale.language)),
21         md.text(' ', md.bold('Territory:')), md.code(locale.territory or 'Unknown')),
22         md.text(' ', md.bold('Language name:')), md.code(locale.language_name)),
23         md.text(' ', md.bold('English language name:')), md.code(locale.english_name)),
24         sep='\n',
25     ))
26
27
28 if __name__ == '__main__':
29     executor.start_polling(dp, skip_updates=True)

```

4.7.10 Middleware and antiflood

Listing 9: 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
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 # In this example Redis storage is used
13 storage = RedisStorage2(db=5)
14
15 bot = Bot(token=TOKEN)
16 dp = Dispatcher(bot, storage=storage)
17
18
19 def rate_limit(limit: int, key=None):
20     """
21     Decorator for configuring rate limit and key in different functions.
22
23     :param limit:
24     :param key:
25     :return:
26     """
27
28     def decorator(func):
29         setattr(func, 'throttling_rate_limit', limit)
30         if key:
31             setattr(func, 'throttling_key', key)
32         return func
33
34     return decorator
35

```

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```

36
37 class ThrottlingMiddleware (BaseMiddleware) :
38     """
39     Simple middleware
40     """
41
42     def __init__(self, limit=DEFAULT_RATE_LIMIT, key_prefix='antiflood'):
43         self.rate_limit = limit
44         self.prefix = key_prefix
45         super(ThrottlingMiddleware, self).__init__()
46
47     async def on_process_message(self, message: types.Message, data: dict):
48         """
49         This handler is called when dispatcher receives a message
50
51         :param message:
52         """
53         # Get current handler
54         handler = current_handler.get()
55
56         # Get dispatcher from context
57         dispatcher = Dispatcher.get_current()
58         # If handler was configured, get rate limit and key from handler
59         if handler:
60             limit = getattr(handler, 'throttling_rate_limit', self.rate_limit)
61             key = getattr(handler, 'throttling_key', f"{self.prefix}_{handler.__name__
↪}")
62         else:
63             limit = self.rate_limit
64             key = f"{self.prefix}_message"
65
66         # Use Dispatcher.throttle method.
67         try:
68             await dispatcher.throttle(key, rate=limit)
69         except Throttled as t:
70             # Execute action
71             await self.message_throttled(message, t)
72
73             # Cancel current handler
74             raise CancelHandler()
75
76     async def message_throttled(self, message: types.Message, throttled: Throttled):
77         """
78         Notify user only on first exceed and notify about unlocking only on last_
↪exceed
79
80         :param message:
81         :param throttled:
82         """
83         handler = current_handler.get()
84         dispatcher = Dispatcher.get_current()
85         if handler:
86             key = getattr(handler, 'throttling_key', f"{self.prefix}_{handler.__name__
↪}")
87         else:
88             key = f"{self.prefix}_message"
89

```

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```

90     # Calculate how many time is left till the block ends
91     delta = throttled.rate - throttled.delta
92
93     # Prevent flooding
94     if throttled.exceeded_count <= 2:
95         await message.reply('Too many requests! ')
96
97     # Sleep.
98     await asyncio.sleep(delta)
99
100    # Check lock status
101    thr = await dispatcher.check_key(key)
102
103    # If current message is not last with current key - do not send message
104    if thr.exceeded_count == throttled.exceeded_count:
105        await message.reply('Unlocked.')
106
107
108    @dp.message_handler(commands=['start'])
109    @rate_limit(5, 'start') # this is not required but you can configure throttling_
110    ↪manager for current handler using it
111    async def cmd_test(message: types.Message):
112        # You can use this command every 5 seconds
113        await message.reply('Test passed! You can use this command every 5 seconds.')
114
115    if __name__ == '__main__':
116        # Setup middleware
117        dp.middleware.setup(ThrottlingMiddleware())
118
119        # Start long-polling
120        executor.start_polling(dp)

```

4.7.11 Webhook example

Example outdated

Listing 10: webhook_example.py

```

1  from aiogram.dispatcher import Dispatcher
2  from aiogram.dispatcher.webhook import SendMessage
3  from aiogram.utils.executor import start_webhook
4
5
6  API_TOKEN = 'BOT_TOKEN_HERE'
7
8  # webhook settings
9  WEBHOOK_HOST = 'https://your.domain'
10 WEBHOOK_PATH = '/path/to/api'
11 WEBHOOK_URL = f"{WEBHOOK_HOST}{WEBHOOK_PATH}"
12
13 # webserver settings
14 WEBAPP_HOST = 'localhost' # or ip
15 WEBAPP_PORT = 3001
16

```

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```
17 logging.basicConfig(level=logging.INFO)
18
19 bot = Bot(token=API_TOKEN)
20 dp = Dispatcher(bot)
21 dp.middleware.setup(LoggingMiddleware())
22
23
24 @dp.message_handler()
25 async def echo(message: types.Message):
26     # Regular request
27     # await bot.send_message(message.chat.id, message.text)
28
29     # or reply INTO webhook
30     return SendMessage(message.chat.id, message.text)
31
32
33 async def on_startup(dp):
34     await bot.set_webhook(WEBHOOK_URL)
35     # insert code here to run it after start
36
37
38 async def on_shutdown(dp):
39     logging.warning('Shutting down..')
40
41     # insert code here to run it before shutdown
42
43     # Remove webhook (not acceptable in some cases)
44     await bot.delete_webhook()
45
46     # Close DB connection (if used)
47     await dp.storage.close()
48     await dp.storage.wait_closed()
49
50     logging.warning('Bye!')
51
52
53 if __name__ == '__main__':
54     start_webhook(
55         dispatcher=dp,
56         webhook_path=WEBHOOK_PATH,
57         on_startup=on_startup,
58         on_shutdown=on_shutdown,
59         skip_updates=True,
60         host=WEBAPP_HOST,
61         port=WEBAPP_PORT,
62     )
```


4.7.12 Webhook example 2

4.7.13 Payments

Listing 11: payments.py

```

1  from aiogram import Bot
2  from aiogram import types
3  from aiogram.dispatcher import Dispatcher
4  from aiogram.types.message import ContentType
5  from aiogram.utils import executor
6
7
8  BOT_TOKEN = 'BOT_TOKEN_HERE'
9  PAYMENTS_PROVIDER_TOKEN = '123456789:TEST:1422'
10
11 bot = Bot(BOT_TOKEN)
12 dp = Dispatcher(bot)
13
14 # Setup prices
15 prices = [
16     types.LabeledPrice(label='Working Time Machine', amount=5750),
17     types.LabeledPrice(label='Gift wrapping', amount=500),
18 ]
19
20 # Setup shipping options
21 shipping_options = [
22     types.ShippingOption(id='instant', title='WorldWide Teleporter').add(types.
↳ LabeledPrice('Teleporter', 1000)),
23     types.ShippingOption(id='pickup', title='Local pickup').add(types.LabeledPrice(
↳ 'Pickup', 300)),
24 ]
25
26
27 @dp.message_handler(commands=['start'])
28 async def cmd_start(message: types.Message):
29     await bot.send_message(message.chat.id,
30                             "Hello, I'm the demo merchant bot."
31                             " I can sell you a Time Machine."
32                             " Use /buy to order one, /terms for Terms and Conditions")
33
34
35 @dp.message_handler(commands=['terms'])
36 async def cmd_terms(message: types.Message):
37     await bot.send_message(message.chat.id,
38                             'Thank you for shopping with our demo bot. We hope you_
↳ like your new time machine!\n'
39                             '1. If your time machine was not delivered on time, please_
↳ rethink your concept of time'
40                             ' and try again.\n'
41                             '2. If you find that your time machine is not working,_
↳ kindly contact our future service'
42                             ' workshops on Trappist-1e. They will be accessible_
↳ anywhere between'
43                             ' May 2075 and November 4000 C.E.\n'
44                             '3. If you would like a refund, kindly apply for one_
↳ yesterday and we will have sent it'

```

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```

45         ' to you immediately.')
46
47
48 @dp.message_handler(commands=['buy'])
49 async def cmd_buy(message: types.Message):
50     await bot.send_message(message.chat.id,
51                             "Real cards won't work with me, no money will be debited_
↳from your account."
52                             " Use this test card number to pay for your Time Machine:
↳`4242 4242 4242 4242`"
53                             "\n\nThis is your demo invoice:", parse_mode='Markdown')
54     await bot.send_invoice(message.chat.id, title='Working Time Machine',
55                             description='Want to visit your great-great-great-
↳grandparents?'
56                             ' Make a fortune at the races?'
57                             ' Shake hands with Hammurabi and take a stroll_
↳in the Hanging Gardens?'
58                             ' Order our Working Time Machine today!',
59                             provider_token=PAYMENTS_PROVIDER_TOKEN,
60                             currency='usd',
61                             photo_url='https://telegra.ph/file/d08ff863531f10bf2ea4b.
↳jpg',
62                             photo_height=512, # !=0/None or picture won't be shown
63                             photo_width=512,
64                             photo_size=512,
65                             is_flexible=True, # True If you need to set up Shipping_
↳Fee
66                             prices=prices,
67                             start_parameter='time-machine-example',
68                             payload='HAPPY FRIDAYS COUPON')
69
70
71 @dp.shipping_query_handler(lambda query: True)
72 async def shipping_shipping_query(query: types.ShippingQuery):
73     await bot.answer_shipping_query(query.id, ok=True, shipping_
↳options=shipping_options,
74                                     error_message='Oh, seems like our Dog couriers_
↳are having a lunch right now.'
75                                     ' Try again later!')
76
77
78 @dp.pre_checkout_query_handler(lambda query: True)
79 async def checkout(pre_checkout_query: types.PreCheckoutQuery):
80     await bot.answer_pre_checkout_query(pre_checkout_query.id, ok=True,
81                                         error_message="Aliens tried to steal your card
↳'s CVV,"
82                                         " but we successfully protected_
↳your credentials,"
83                                         " try to pay again in a few_
↳minutes, we need a small rest.")
84
85
86 @dp.message_handler(content_types=ContentTypes.SUCCESSFUL_PAYMENT)
87 async def got_payment(message: types.Message):
88     await bot.send_message(message.chat.id,
89                             'Hoooooray! Thanks for payment! We will proceed your order_
↳for `{}` `{}`')

```

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```

90         ' as fast as possible! Stay in touch.'
91         '\n\nUse /buy again to get a Time Machine for your friend!
↪'.format (
92             message.successful_payment.total_amount / 100, message.
↪successful_payment.currency),
93             parse_mode='Markdown')
94
95
96 if __name__ == '__main__':
97     executor.start_polling(dp, skip_updates=True)

```

4.7.14 Broadcast example

Listing 12: 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 bot = Bot(token=API_TOKEN, parse_mode=types.ParseMode.HTML)
13 dp = Dispatcher(bot)
14
15
16 def get_users():
17     """
18     Return users list
19
20     In this example returns some random ID's
21     """
22     yield from (61043901, 78238238, 78378343, 98765431, 12345678)
23
24
25 async def send_message(user_id: int, text: str, disable_notification: bool = False) ->
↪ bool:
26     """
27     Safe messages sender
28
29     :param user_id:
30     :param text:
31     :param disable_notification:
32     :return:
33     """
34     try:
35         await bot.send_message(user_id, text, disable_notification=disable_
↪notification)
36     except exceptions.BotBlocked:
37         log.error(f"Target [ID:{user_id}]: blocked by user")
38     except exceptions.ChatNotFound:

```

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```

39     log.error(f"Target [ID:{user_id}]: invalid user ID")
40     except exceptions.RetryAfter as e:
41         log.error(f"Target [ID:{user_id}]: Flood limit is exceeded. Sleep {e.timeout}
↪seconds.")
42         await asyncio.sleep(e.timeout)
43         return await send_message(user_id, text) # Recursive call
44     except exceptions.UserDeactivated:
45         log.error(f"Target [ID:{user_id}]: user is deactivated")
46     except exceptions.TelegramAPIError:
47         log.exception(f"Target [ID:{user_id}]: failed")
48     else:
49         log.info(f"Target [ID:{user_id}]: success")
50         return True
51     return False
52
53
54 async def broadcaster() -> int:
55     """
56     Simple broadcaster
57
58     :return: Count of messages
59     """
60     count = 0
61     try:
62         for user_id in get_users():
63             if await send_message(user_id, '<b>Hello!</b>'):
64                 count += 1
65             await asyncio.sleep(.05) # 20 messages per second (Limit: 30 messages
↪per second)
66         finally:
67             log.info(f"{count} messages successful sent.")
68
69     return count
70
71
72 if __name__ == '__main__':
73     # Execute broadcaster
74     executor.start(dp, broadcaster())

```

4.7.15 Media group

Listing 13: media_group.py

```

1 import asyncio
2
3 from aiogram import Bot, Dispatcher, executor, filters, types
4
5
6 API_TOKEN = 'BOT_TOKEN_HERE'
7
8 bot = Bot(token=API_TOKEN)
9 dp = Dispatcher(bot)
10
11
12 @dp.message_handler(filters.CommandStart())

```

(continues on next page)

(continued from previous page)

```
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     # Wait a little...
18     await asyncio.sleep(1)
19
20     # Good bots should send chat actions...
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__':
43     executor.start_polling(dp, skip_updates=True)
```

4.8 Contribution

TODO

4.9 Links

TODO

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