
Poloniexlendingbot Documentation

Release 1

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1. Installation

1.1 1.1 Installing on a Computer

Installing the bot on a computer is drag-and-drop and platform independent.

1.1.1 1.1.1 Prerequisites

You will need:

- Python 2.7.10 (Must be added to PATH)

1.1.2 1.1.2 Downloading

To download the bot you can either:

- Download the source .zip file from the GitHub repo page or from [this link](#). Extract it into an empty folder you won't accidentally delete.
- Run `git clone https://github.com/Mikadily/poloniexlendingbot` if you have git installed.

1.1.3 1.1.3 Configuring

To configure the bot with your settings:

1. Copy `default.cfg.example` to `default.cfg`
2. Open `default.cfg` and enter your desired settings ([information on settings here](#)).
3. Save `default.cfg`

You are now ready to run the bot.

1.1.4 1.1.4 Running

To run, either double-click `lendingbot.py` (if you have .py associated with the Python executable)

or run `python lendingbot.py` in console.

1.2 1.2 Installing on Pythonanywhere.com

Pythonanywhere.com is a useful website that will host and run Python code for you. This is perfect for our bot.

1.2.1 1.2.1 Prerequisites

You will need:

- A pythonanywhere.com account (Free version works fine, premium recommended)

1.2.2 1.2.2 Uploading the bot's files to Pythonanywhere

1. Download the bot's code from [this link](#).
2. Extract the files, and run `lendingbot.py` once to generate the `default.cfg`
3. Modify the `default.cfg` with your settings (See section 2, Configuration.) It is recommended to use a high `sleeptimeinactive` time for this website, as they meter your CPU usage if you are a free user.
4. Go to the "files" tab of the website.
5. Create a new directory, preferably named "poloniexlendingbot" and upload all the files within the folder. (You cannot upload the `.zip` or a folder itself, you must do all the contents.)

1.2.3 1.2.3 Creating the Web App (Optional)

1. If you would like to use the Webserver to view your bot's status, navigate to the "Web" tab.
2. Add a new web app.
3. Set the working directory to `/home/<username>/poloniexlendingbot/www/`
4. Set the static files to URL: `/static/` Directory: `/home/<username>/poloniexlendingbot/www`
5. Refresh your website.
6. You will be able to access the webapp at `http://<username>.pythonanywhere.com/static/lendingbot.html` once it finishes setting up.

1.2.4 1.2.4 Running the Bot

To run the bot continuously (Recommended for free accounts):

1. Navigate to the "Consoles" tab.
2. Add a new "Custom console," name it "Poloniexlendingbot" and set the path to `"python /home/<username>/poloniexlendingbot/lendingbot.py"`
3. Click this link whenever you want to start the bot, it will run continuously until the website goes down for maintenance or the bot experiences an unexpected error.

To have the bot restart itself every 24 hours, you need to have a [premium pythonanywhere account](#). This will make the bot more or less invincible to crashes and resets.

1. Navigate to the "Schedule" tab.
2. Create a new task to run daily (time does not matter) set the path to: `python /home/<username>/poloniexlendingbot/lendingbot.py`

3. The bot will start once the time comes (UTC) and run indefinitely.

Note: If you are a free user, it will allow you to make the scheduled restart, but then it will only run for one hour and stop for 23.

Note: Just because 1 second is a permitted sleeptime does not mean it is a good idea.

`sleeptimeinactive` is how long the bot will “rest” (in seconds) between running while the bot has nothing to do.

- Default value: 300 seconds (5 minutes)
- Allowed range: 1 to 3600 seconds
- If the bot finishes a cycle and has lend orders to manage, it will change to active mode.

2.3 2.3 Min and Max Rates

`mindailyrate` is the minimum rate (in percent) that the bot will allow lends to open.

- Default value: 0.04 percent
- Allowed range: 0.0031 to 5 percent
- It is not worth it to settle at a low rate, 0.0031% every day for a year comes out to about 1%. That is worse than bank interest.
- The current default value is a optimistic but very viable for the more high volume currencies. Not viable for lending DOGE, for example.

`maxdailyrate` is the maximum rate (in percent) that the bot will allow lends to open.

- Default value: 2 percent
- Allowed range: 0.0031 to 5 percent
- 2% is the default value offered by the exchange, but there is little reason not to set it higher if you feel optimistic.

2.4 2.4 Spreading your Lends

If $spreadlend = 1$ and $gapbottom = 0$, it will behave as simple lending bot lending at lowest possible offer.

`spreadlend` is the amount (as an integer) of separate lends the bot will split your balance into across the order book.

- Default value: 3
- Allowed range: 1 to 20 (1 is the same as disabling)
- The lends are distributed evenly between `gapbottom` and `gaptop`.
- This allows the bot to benefit from spikes in lending rate but can result in loan fragmentation (not really a bad thing since the bot has to deal with it.)

`gapbottom` is how far into the lending book (in percent of YOUR balance for the respective coin) the bot will go to start spreading lends.

- Default value: 10 percent
- Allowed range: 0 to <arbitrary large number> percent
- 10% `gapbottom` is recommended to skip past dust at the bottom of the lending book, but if you have a VERY high volume this will cause issues as you stray to far away from the most competitive bid.

`gaptop` is how far into the lending book (in percent of YOUR balance for the respective coin) the bot will go to stop spreading lends.

- Default value: 200
- Allowed range: 0 to <arbitrary large number> percent
- This value should be adjusted based on your coin volume to avoid going astronomically far away from a realistic rate.

2.5 2.5 Variable loan Length

These values allow you to lock in a better rate for a longer period of time, as per your configuration.

`xdaythreshold` is the rate (in percent) where the bot will begin attempting to lend for a longer period of time.

- Default value: 0.2 percent
- Allowed range: 0 to 5 percent

`xdays` is the length(in days) of any loan whose rate exceeds the set `xdaythreshold`.

- Default value: 60 days
- Allowed range: 2 to 60 days

2.6 2.6 Auto-transfer from Exchange Balance

If you regularly transfer funds into your Poloniex account but don't enjoy having to log in yourself and transfer them to the lending balance, this feature is for you.

`transferableCurrencies` is a list of currencies you would like to be transferred.

- Default value: Commented out
- Format: `CURRENCY_TICKER, STR, BTC, BTS, CLAM, DOGE, DASH, LTC, MAID, XMR, XRP, ETH, FCT`
- Commenting it out will disable the feature.
- Coins will be transferred every time the bot runs (60 seconds by default) so if you intend to trade or withdrawal it is recommended to turn off the bot or disable this feature.

2.7 2.7 Unimportant settings

Very few situations require you to change these settings.

`minloansize` is the minimum size that a bot will make a loan at.

- Default value: 0.001 of a coin
- Allowed range: 0.001 and up.
- If you dislike loan fragmentation, then this will make the minimum for each loan larger.

`autorenew` If 0, does nothing. If 1, will enable autorenew on loans once the bot closes with CTRL-C.

2.8 2.8 Max to be lent

This feature group allows you to only lend a certain percentage of your total holding in a coin, until the lending rate surpasses a certain threshold. Then it will lend at max capacity.

`maxtolent` is a raw number of how much you will lend of each coin whose lending rate is below `maxtolentraterate`.

- Default value: Disabled
- Allowed range: 0 (disabled) or `minloansize` and up
- If set to 0, same as if commented.
- If disabled, will check if `maxpercenttolent` is enabled and use that if it is enabled.
- Setting this overwrites `maxpercenttolent`
- This is a global setting for the raw value of coin that will be lent if the coins lending value is under `maxtolentraterate`
- Has no effect if current rate is higher than `maxtolentraterate`
- If the remainder (after subtracting `maxtolent`) in a coin's balance is less than `minloansize`, then the remainder will be lent anyway. Otherwise, the coins would go to waste since you can't lend under `minloansize`

`maxpercenttolent` is a percentage of how much you will lend of each coin whose lending rate is below `maxtolentraterate`

- Default value: Disabled
- Allowed range: 0 (disabled) to 100 percent
- If set to 0, same as if commented.
- If disabled in addition to `maxtolent`, entire feature will be disabled.
- This percentage is calculated per-coin, and is the percentage of the balance that will be lent if the coin's current rate is less than `maxtolentraterate`
- Has no effect if current rate is higher than `maxtolentraterate`
- If the remainder (after subtracting `maxpercenttolent`'s value) in a coin's balance is less than `minloansize`, then the remainder will be lent anyway. Otherwise, the coins would go to waste since you can't lend under `minloansize`

`maxtolentraterate` is the rate threshold when all coins are lent.

- Default value: Disabled
- Allowed range: 0 (disabled) or `mindailyrate` to 5 percent
- Setting this to 0 with a limit in place causes the limit to always be active.
- When an individual coin's lending rate passes this threshold, all of the coin will be lent instead of the limits `maxtolent` or `maxpercenttolent`

2.9 2.9 Config per Coin

`coincfg` is in the form of a dictionary and allows for advanced, per-coin options.

- Default value: Commented out, uncomment to enable.
- Format: ["COINTICKER:MINLENDRATE:ENABLED?:MAXTOLENT:MAXPERCENTTOLENT:MAXTOLENTRATE", "CLAN"

- COINTICKER refers to the ticker of the coin, ex. BTC, CLAM, MAID, DOGE.
- MINLENDRATE is that coins minimum lending rate, overrides the global setting. Follows the limits of `minlendrate`
- ENABLED? refers to a value of 0 if the coin is disabled and will no longer lend. Any positive integer will enable lending for the coin.
- MAXTOLENT, MAXPERCENTTOLENT, and MAXTOLENTRATE refer to their respective settings above, but are unique to the specified coin specifically.
- There can be as many different coins as you want in `coincfg`, but each coin may only appear once.

2.10 2.10 Advanced logging and Web Display

`jsonfile` is the location where the bot will log to a `.json` file instead of into console.

- Default value: Commented out, uncomment to enable.
- Format: `www/botlog.json`
- This is the location relative to the running instance of the bot where it will store the `.json` file. The default location is recommended if using the webserver functionality.

`jsonlogsize` is the amount of lines the botlog will keep before deleting the oldest event.

- Default value: Commented out, uncomment to enable.
- Format: 200
- Reasons to lower this include: you are conscious of bandwidth when hosting your webserver, you prefer (slightly) faster loading times and less RAM usage of bot.

`startwebserver` if true, this enables a webserver on the `www/` folder.

- Default value: Commented out, uncomment to enable.
- The server page can be accessed locally at `http://127.0.0.1:8000/lendingbot.html`
- If you want to access this page remotely, you need to modify line 420 (as of 10/11/16) to change `HOST` to `0.0.0.0`. You may then access the webpage on `<computer local IP address>:8000/lendingbot.html`.
- You must close bot with a keyboard interrupt (CTRL-C on Windows) to properly shutdown the server and release the socket, otherwise you will have to wait several minutes for it to release itself.

`outputCurrency` this is the ticker of the coin which you would like the website to report your summary earnings in.

- Default value: BTC
- Acceptable values: BTC, USDT, Any coin with a direct Poloniex BTC trading pair (ex. DOGE, MAID, ETH)
- Will be a close estimate, due to unexpected market fluctuations, trade fees, and other unforeseeable factors.

Indices and tables

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