

# Tool instructions

The Trading GUI makes it easier to sell/bow immediately, getting price differences, seeing how many XRP you'd get at a set price and change the price of an existing buy order with just 1 click.

The Trading GUI runs on NodeJs. You need to install NodeJS and some modules.

The GUI works on a very primitive web server only "reacting" to commands coming from the HTML GUI.

The GUI is only worth half it's value without the bot. The bot does the hard work. It makes sure, that if current price reaches a defined value, the existing buy order is deleted and with the money crypto is bought instantly.

## NodeJs installation

Windows/Mac:

<https://nodejs.org/en/download/>

After installation you should test the installation.

Windows:

Open command prompt:

`node --version`

Mac:

Open up a Terminal and type

`node --version`

This should print the version of NodeJS installed. If it does, then all is well.

## Install Trading Tools

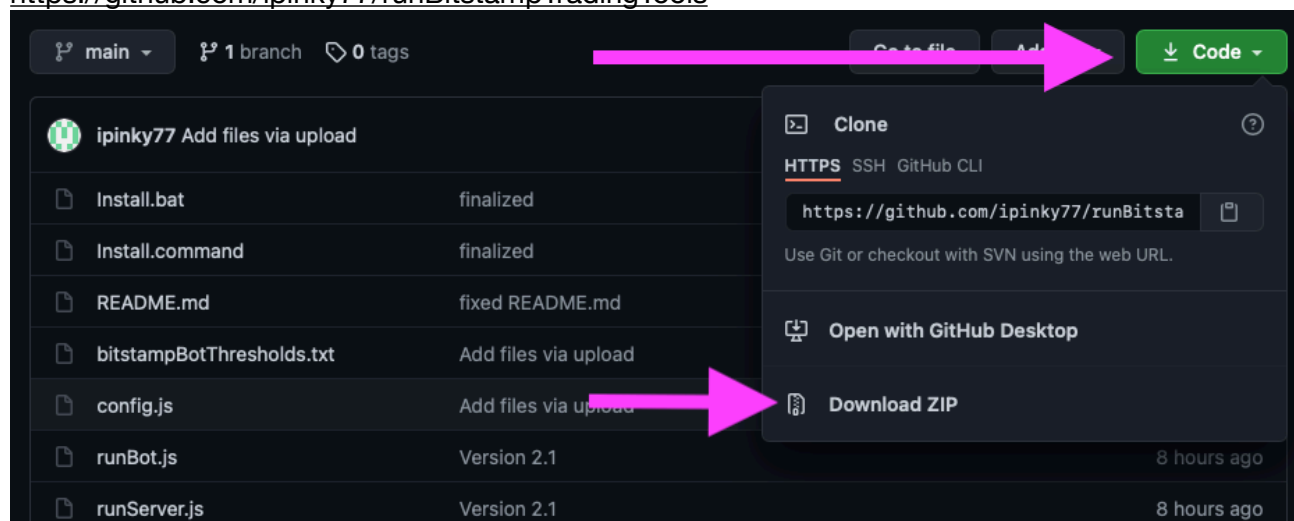
Windows (open command prompt and go to target directory):

Mac (open Terminal window and go to target directory):

`npm install bitstamp_trading_tools`

Download the files to run the tools from here:

<https://github.com/ipinky77/runBitstampTradingTools>



# Updating the tool

npm install bitstamp\_trading\_tools

## Installed files

File	Explanation
<b>config.js</b>	Configuration file. Here you add your API keys/secrets and customise other stuff like debugging level, file names of logs and thresholds. You can also define multiple profiles here, see below.
<b>runBot.js</b>	node runBot.js starts the bot
<b>runServer.js</b>	node runServer.js starts the web server for the GUI
<b>thresholds.txt</b>	Contains just 2 lines: high=price low=price  you can define the name of this file in the config.js

## config.js

Both bot and GUI need some configuration. Both need API key/secret pair.

For the GUI you can create preset “profiles”. A profile can distinct the sub-account on Bitstamp it is matched with, through the API key/secret pair, or simply use a different crypto/currency combination on the same sub account.

## Profiles

```
// mandatory
defaultProfile = {
  name: 'Profile Name', // preferably your Bitstamp sub account name for easy reference
  key: 'api key',
  secret: 'api secret',
  uniqueID: 'uniqueID',
  defaultCrypto: 'BTC',
  defaultCurrency: 'USD'
}
// mandatory if you want to move funds between sub accounts, requires API for main account to JUST move funds to/from main
account
main = {
  name: 'Main account',
  key: 'api key',
  secret: 'api secret',
  uniqueID: 'uniqueID',
  defaultCrypto: 'BTC',
  defaultCurrency: 'USD'
}
profile1 = {
  name: 'Profile Name', // preferably your Bitstamp sub account name for easy reference
  key: 'api key',
  secret: 'api secret',
  uniqueID: 'uniqueID',
  defaultCrypto: 'BTC',
  defaultCurrency: 'USD'
}
profile2...
profile3...
var profiles = { defaultProfile, main, profile1, profile2 ...}
```

## Other

Parameter	Explanation
<b>debug</b>	true, will print messages to the window AND the log file false will not print messages to window, JUST to the log file  suggestion: true
<b>debugLevel</b>	1/2/3. 1 outputs basic messages, 2 a bit more detailed, and 3 is quite verbose (mostly used to find errors)  suggestion: 1
<b>path_log</b>	name the log file however you please
<b>executeTrades</b>	true will run live: create the buy order at defined low value (see thresholds file) and make sure if price goes over high the crypto is bought anyway false will just run the bot without it executing trades, good for testing, to see if it runs at night etc. cause it HAS to run all the time in order for it to do it's work: Cap the price if it rises
<b>heartBeat</b>	just some sort of vital sign from the bot so you know it runs
<b>thresholdIntervall</b>	after how many minutes it shall pickup from the thresholds file updated high value, it also picks up the low, but the low does not influence the buy order, as this exists already

## Running/Stopping the tools

### Run the server:

Open a terminal window, move to the Trading GUI directory (cd) and type:  
node runServer.js

### Stop the server:

Enter <ctrl><c> or directly close the window

### Run the bot:

Open a terminal window, move to the Trading GUI directory (cd) and type:  
node runBot.js

### Stop the server:

Enter <ctrl><c> or directly close the window

## Creating a sub account on Bitstamp

In the settings go to sub accounts, Active sub accounts.

If you want to transfer funds between the accounts you need to put uniqueID parameter to each profile in your config.js

The unique ID you find on the same page

**Security**

- Change password
- 2 Factor authentication
- Withdrawal confirmations

**Access control**

- API access
- Mobile access
- My devices
- Connected apps

Bank accounts

Phone verification

**SMS price alerts**

Notifications

**Sub accounts**

- Active sub accounts
- Inactive sub accounts
- Transfers

Bonus codes

Deactivate account

### Reserve

Unique ID: 21855811

Created on May 11, 2021, 8:39 a.m.

Close Account

### ManualTrading

Unique ID: 48669399

Created on May 31, 2021, 11 a.m.

Close Account

### TradingBot

Unique ID: 22031722

Created on Feb 26, 2020, 9:23 p.m.

Close Account

## Creating an API Key on Bitstamp

**Security**

- Change password
- 2 Factor authentication
- Withdrawal confirmations

**Access control**

- API access**
- Mobile access
- My devices
- Connected apps

Bank accounts

Phone verification

SMS price alerts

Notifications

**Sub accounts**

- Active sub accounts
- Inactive sub accounts

**Associated account**

Main account

**Permissions**

**General permissions**

- Account balance
- User transactions

**Withdrawals**

- BTC
- XRP
- LTC
- ETH
- BCH
- Ripple IOU

**Transfers**

- Transfer balance to main account
- Transfer balance from main account

**Orders**

- Open orders
- Cancel order
- Buy limit/market orders
- Sell limit/market orders

Liquidation address

Withdrawal requests

Also in the settings on Bitstamp under Access control. If you want to be able to move funds between sub accounts you need 1 API key with JUST the transfer balance to/from main account enabled ON the main account!

I do **NOT** recommend adding more functionality than that to the API for the **main** account.

## Using the Trading GUI

Profile

Trading Bot

Page

Trading

Get Balances

XRP

USD

Available	0.0000	35.3700
Reserved	0.0000	0.0000
Fee		0.110%

Get last Sell Price

0.6550

Get Min/Max

	no loss	Min	Max
Percent	0%	-4 %	+3 %
Price	0.6536	0.6274	0.6732
expected XRP	54.0595	56.3120	52.4850

Get current Price

0.6569

Get target XRP

53.2220

target XRP

Get target Price

0.6569

required price

Get open Order

	actual	down	up
Price		NaN	NaN
XRP	NaN	NaN	NaN

Change by

0.0005

Bot will buy high at

0.6753

write bot thresholds

Bot will buy low at

0.6325

Sell now

Buy now

## Get Balances

Clicking the link will retrieve both available and reserved XRP and USD and the current fee you have at Bitstamp.

Note:

The initial fee is high, but keeps on dropping very fast, specially if the XRP price is higher or if you trade more XRP. Currently I have a turnover of over 4 million USD which results in a fee of 0.11%

But stay calm: I do not have 4 million XRP. I just make a lot of trades (sometimes 10-15 a day)! And each trade (sell/buy) is counted towards the fees schedule.

## Get last Sell Price

The name is speaking for itself

<a href="#">Get last Sell Price</a>	0.6222
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Clicking the link will also update the section Get Min/Max

## Get Min/Max

<a href="#">Get Min/Max</a>			
	<b>no loss</b>	<b>Min</b>	<b>Max</b>
<b>Percent</b>	0%	<input type="text" value="-4 %"/>	<input type="text" value="+3 %"/>
<b>Price</b>	0.6208	0.5960	0.6395
<b>expected XRP</b>	NaN	NaN	NaN

Clicking the link will:

- Calculate no loss (or zero loss) price
- Calculate the minimum price you have to set in your buy order to get the percentage profit you set in the minimum field
- Calculate the maximum price you have to set in the buy order to minimise your loss according to the percentage set in the Max field in case you have to buy high!

**Attention:** the Max value is NOT related/connected to the **high** value from the Bot! This is just so you know where you would manually have to get in again. You can however set that Max price as **high** value for the bot.

## Get current Price

<b>expected XRP</b>	NaN	NaN	NaN
<a href="#">Get current Price</a>	0.6013		
<a href="#">Get target XRP</a>	<input type="text" value="1661.2346"/>		Target XRP
<a href="#">Get target Price</a>	<input type="text" value="0.6013"/>		required price
<a href="#">Get open Order</a>	1275730181427200		

Clicking the link will, as it names tells, fetch the last paid price on Bitstamp. It will also automatically calculate the section below. That way you know how many XRP you would get if you sold at that price

## Get target XRP / Get target Price

Get target XRP

1661.2346

Target XRP

Get target Price

0.6013

required price

If you have USD available or in reserve you can use this section to calculate either the target price for a wanted XRP amount or the target XRP amount for a wanted price.

It works as follows:

Enter a wanted price (a price you'd expect to happen), then click Get target XRP. This will include the fee into the calculation!

Enter a wanted amount of XRP and click Get target Price. This will include the fee into the calculation.

Scenarios:

a)

Say you had 1000 XRP and sold at 1\$. Your aim is to increase to 1050 XRP. So you enter 1050 into the field Target XRP and click the link Get target Price. The result will be the price you will be looking for.

b)

Say you had 1000 XRP and sold at 1\$. The price drops to 98 cents. You want to know how many XRP you'd receive if the price would drop to 97 cents. So you enter 0.97 into the field required price and click the link Get target XRP.

## Get open Order

This will fetch any open order, buy or sell.

You can see the order type in the GUI like below

Get open Order

1376060455989248

SELL

Get open Order

1376060688818181

BUY

The interface will move the price up or down by the value you set in the change by field.

For a buy order moving the price down means you make more XRP as result

For a sell order moving the price down means you make less currency as result.

Let's see, I have a sell order at 2\$ (very high so it does not execute for testing purposes)

Get open Order

1375730181427200

	actual	down	up
Price	2.00000	2.0000	2.0000
XRP	25	25	25
	▲ ▲ ▲ ▲		
Change by	0.0000	▼	▲
	▼ ▼ ▼ ▼		

In this section you can adjust by how much you want the price to change.

You can then adjust the price of your buy order UP or DOWN by that amount with 1 single click!

Each arrow will change the corresponding digit up (for the up arrow) or down (for the down arrow)

2 clicks on the second up arrow will create this ( $0 + 2 \times 0.0100$ )

Change by

▲ ▲ ▲ ▲

0.0200

▼ ▼ ▼ ▼

New target prices if you change the price of the current buy order would be:

	actual	down	up
Price	2.00000	1.9800	2.0200

2 clicks on the third down arrow will create this ( $0.0200 - 2 \times 0.0010$ )

Change by

▲ ▲ ▲ ▲

0.0180

▼ ▼ ▼ ▼

New target prices if you change the price of the current buy order would be:

	actual	down	up
Price	2.00000	1.9820	2.0180

3 clicks on the 4th up arrow will create this ( $0.0180 + 3 \times 0.0001$ )

Change by

▲ ▲ ▲ ▲

0.0183

▼ ▼ ▼ ▼

New target prices if you change the price of the current buy order would be:

	actual	down	up
Price	2.00000	1.9817	2.0183

The green boxes show how much you could change the price of the current buy order with just one click!

The orange boxes show the resulting price on the buy order if you change that price up or down.

You may ask: why can't I just enter 2.0183 in the field and click a button. Why does it have to be so complicated?

IF you get really into trading a lot. This process will come in VERY handy.



Example:

Current buy order has a price of 1\$. You sold at 1.1\$ Price keeps getting closer to 1\$ and is dropping fast. If you have the Change by field setup like this:

▲ ▲ ▲ ▲

Change by

▼ ▼ ▼ ▼

You can with just 1 click lower the price buy order price to 0.99\$.

If the price keeps dropping to 1\$ and you think: Maybe it'll go down to 0.98\$. ONE more click and the price of your buy order is 0.98\$. Keeps the price dropping fast, you can (roughly) click 3 times per second to lower the price in your buy order. But don't overdo it! Decreasing the price by 10 cents and the market may not reach this price, so use small steps.

Right now, when the price is around 0.6, I personally change the price on the 3rd, sometimes on the 4th digit.

If you see however, the price keeps rising, check the order book!, you may wanna increase again from 0.98 to 0.99 to make sure you close the trade at 10% instead of the initial 9%

## Write bot thresholds

Bot will buy high at	<input type="text" value="2"/>	<a href="#">write bot thresholds</a>
Bot will buy low at	<input type="text" value="1"/>	

Enter the **high** and **low** value for your bot conveniently here and click the link. The web server will update the high and low value into the thresholds file for the bot to pick up at the defined intervall.

### ATTENTION!

*The bot will NOT adjust an existing buy order! Restarting the bot will neither do that! The bot will only work IF there is money in your account. So IF you want the bot to pickup the low too, then you HAVE to delete the existing order on Bitstamp first!*

## Sell now / Buy now

<a href="#">Sell now</a>
<a href="#">Buy now</a>

### Use these buttons in an emergency only!!!

If the price starts dropping fast and you think: maybe now, then click sell now. Start the bot thereafter or just use the GUI (if you can rest in front of the computer). At least you have sold immediately. Now you need take care that the buy order (either manually or via bot) is setup properly.

If the price starts rising fast and you are NOT using the bot to "cap" at the upper price limit, then you can buy XRP instantly with the Buy now. It'll cancel you existing buy order and place an instant sell.

You may use this too if the price drops really fast (maybe you have no time to adjust the change by section), like 1% per minute, just to make sure to realise some profit. Be aware though, that during such VERY high volatility, the ask prices usually differ WAY MORE from the bid prices than during normal times. So it may be that you clicked that button once the price was at 0.95, but the lowest ask was 0.954, so you lose 4/10s of a cent per XRP.

## Important

In order to make sure your bot runs 100% fine you should consider setting the executeTrades parameter in the config.js to false for 1-2 days. Check if the bot runs at night. Check if the bot picks up changed **high** values from the config.ini

You might wanna consider setting the heartbeat parameter in config.js to a higher value 15 or 30 minutes.

The bot DOES NOT change any buy order! A changed **low** value has no effect. You can delete the buy order on Bitstamp, and restart the bot, then the bot will use the new **low** value to create a new buy order.

You can however adjust the buy order yourself, either using the Trading GUI, or do it manually. Doing it manually means: You cancel the existing buy order and create a new one BEFORE the bot ticks the next heartbeat! If the bot does not find a buy order it will stop. You could simply restart it then. But make sure it's really running if you manually cancel the buy order and create a new one

## Release Notes

All files have version numbers at the beginning in order to be able to support you guys well

### Version 1.2

completely redone the whole tool on NodeJS, no more Python required. Added additional functionality to the GUI (profiles, currency pairs, transactions overview, funds transfers) and made the whole package a whole lot easier to install and update.

Server and Bot are now in a node module, hidden away. Only 4 files are required:

- config.js
- runBot.js
- runServer.js
- thresholds.txt

### Version 1.1

Adds currency to the config.js. You can set usd, gbp, or eur as currency. It's the currency you trade in on Bitstamp

Streamlined logs on the console

Enabled handling SELL orders too via GUI, this will NOT affect the bot! The bot ONLY handles buy orders!

#### Updated files:

- config.js
- classBitstampClient.js
- serverBitstampGUI.js
- html/bitstampGUI.html
- html/GUI.css