Know more. Profit more.

Advanced Cryptohopper Template Setup Guide

<+> Content

<+> Disclaimer

Gainscrypt is not a financial advisor. Any suggestions or recommendations by our support team should therefore never be interpreted as financial advice. Gainscrypt is not liable/responsible for losses in any way and it is the user's sole responsibility to make personal investment/trading decisions. All tools, templates, strategies provided are to be used with caution and expertise.

All strategies are regularly backtested, but as markets change, so can the results. Past performance does not guarantee future succes.

<+> Goal & Contribution

Deeper insight on configuring your hopper?
You have come to the right place.

In the Cryptohopper documentation there is an abundance of information on the *functionality* of the configuration settings. In extension to this knowledge, this manual strives to better relate these settings to **strategy, stances, trading style, risk management** and **market conditions** in an educative, inspirational manner.
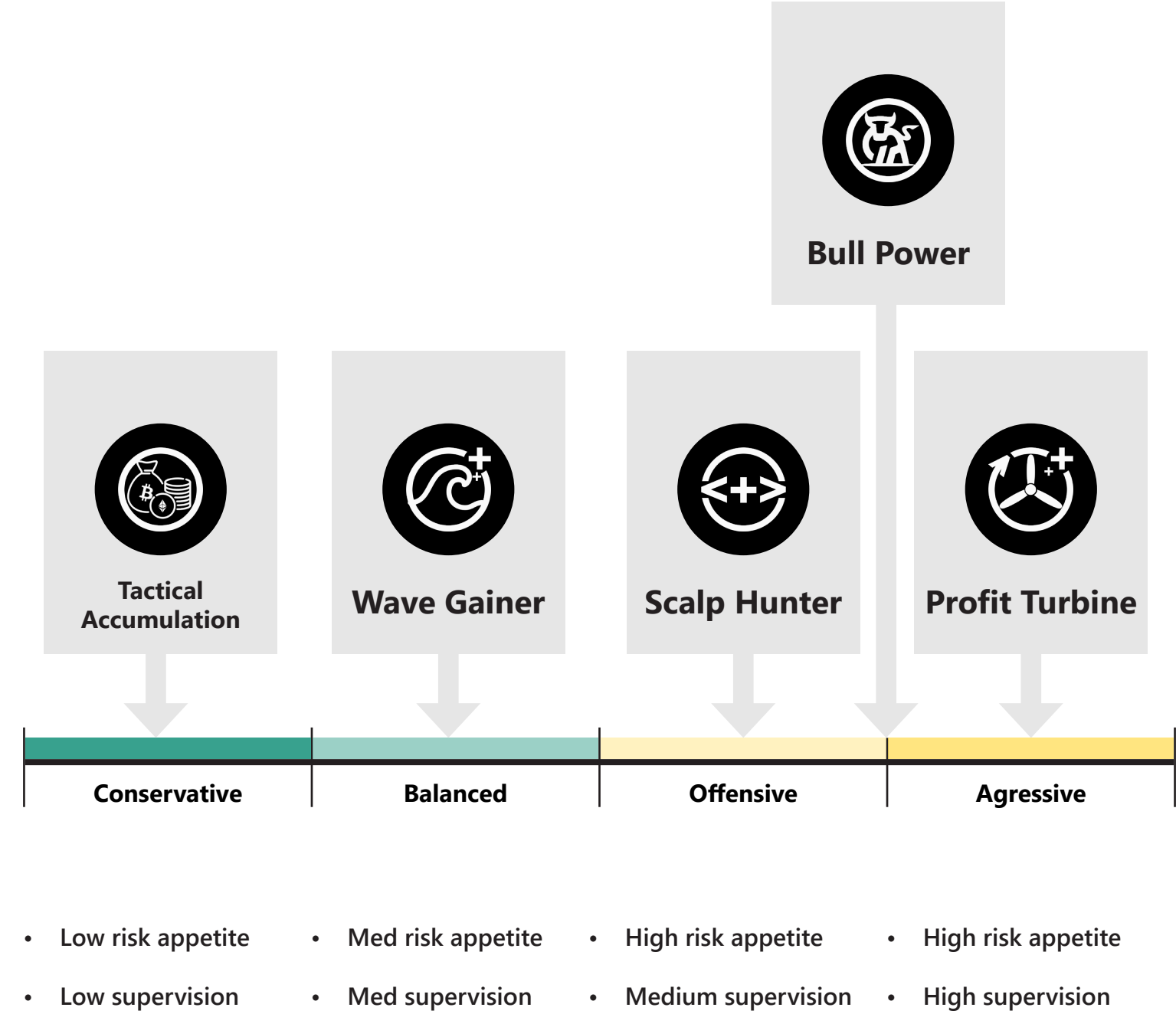
<+> Stances

Evaluation

- As a guiding element, relevant settings are explained using the 'stance' scale as shown below.

- This scale is indicative and intended for evaluation purposes. It may give additional insight on what it means to increase/decrease or turn on/off certain settings.

Stance

Risk Averse — Conservative — Balanced — Offensive — Agressive — Risk

- Our strategies are also labeled with a stance (see the overview table on our strategies page. Do note that the 'stance' labels of individual settings/strategies do not need to match up. They are just labels for evaluation purposes.

- Trade more agressively in uptrending market. More conservative in bearish markets.

<+> Strategies

Bull Power

Tactical Accumulation

Wave Gainer

Scalp Hunter

Profit Turbine

Conservative	Balanced	Offensive	Agressive

- Low risk appetite
- Low supervision

- Med risk appetite
- Med supervision

- High risk appetite
- Medium supervision

- High risk appetite
- High supervision

Note: infographics are a conceptualized representation of reality. For backtests and actual buys, please review the relevant backtest reports at our documentation section.
> www.gainscrypt.com/downloads

<+> Trading Styles
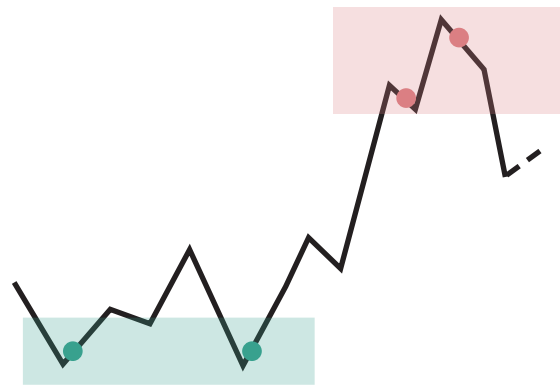
Position Trading

Building positions over extended periods of time in oversold markets, buying dips and adding to your position. Few signals during uptrends. Emphasis on large timeframes.
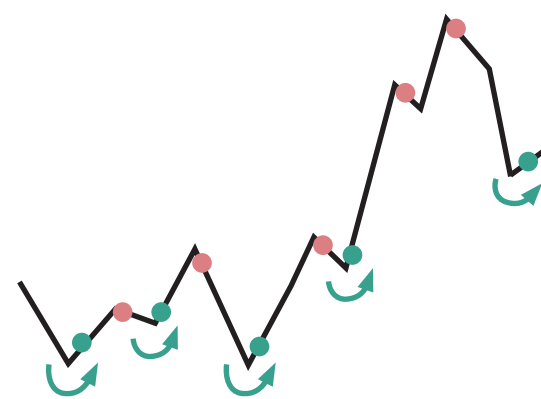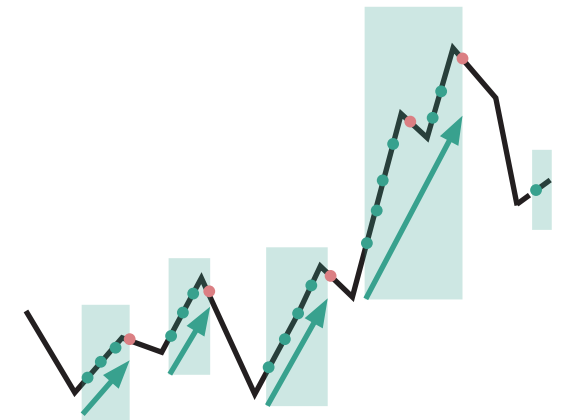
Swing Trading

Attempts to buy swing lows and sell at swing highs, typically using momentum indicators. Emphasis on medium-large timeframes.
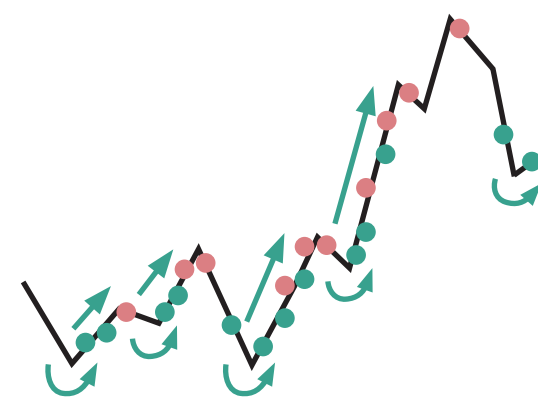
Day Trading

More entries within market swings, targeting smaller trades for higher frequency and lower holding times. Emphasis on shorter timeframes.
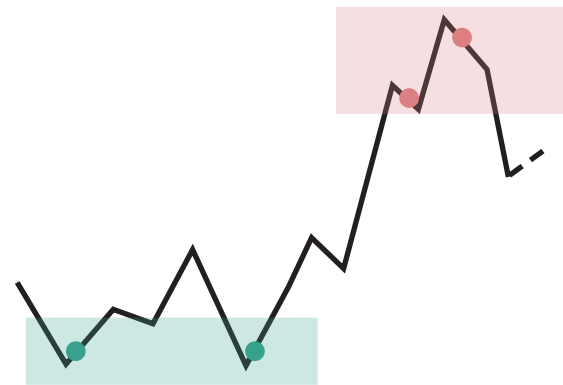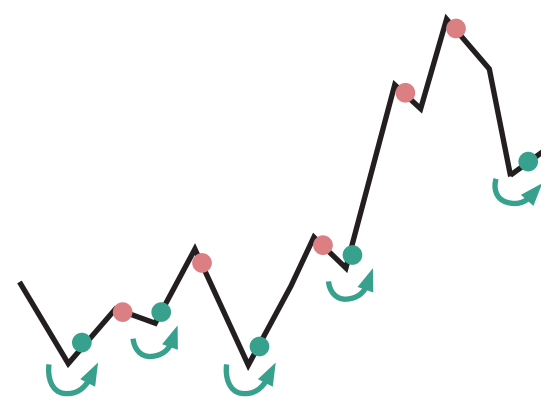
Scalping

Targets very short trades yielding small profits. Focus on small time frames, typically using momentum indicators with trend + volatility indicators on larger timeframes.

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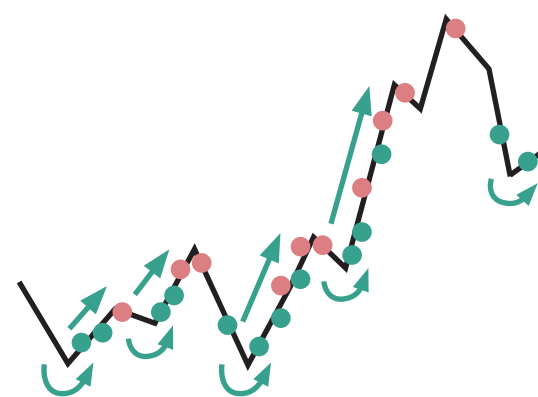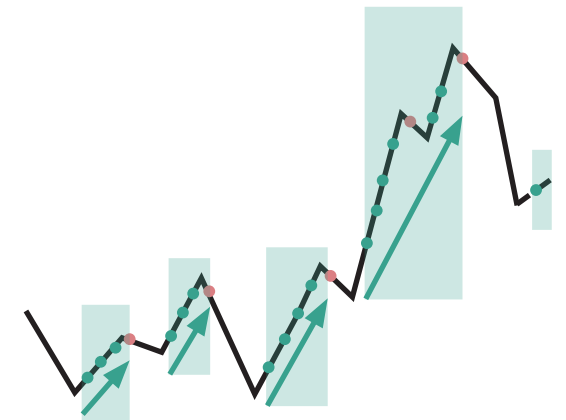> www.gainscrypt.com/downloads

Position Trading
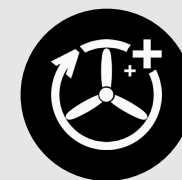
Swing Trading

Day Trading

Scalping

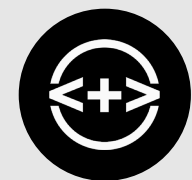**Tactical Accumulation**

Wave Gainer

Profit Turbine

Bull Power

Scalp Hunter

Note: infographics are a conceptualized representation of reality. For backtests and actual buys, please review the relevant backtest reports at our documentation section.
> www.gainscrypt.com/downloads

# Basic settings / Loading & saving templates

1. Config > Baseconfig
Here you can find the configuration tab for your hopper.

2. Basic settings
Set a name for your template. Your template can also be saved for later use. Make sure that 'live bot' is turned on (this is also possible at the dashboard).

3. Actions > Load template

4. Select template to load
Here you can load an existing template that you've created before, or from the marketplace if you have purchased one. You may adjust these templates to your own preferences liking.
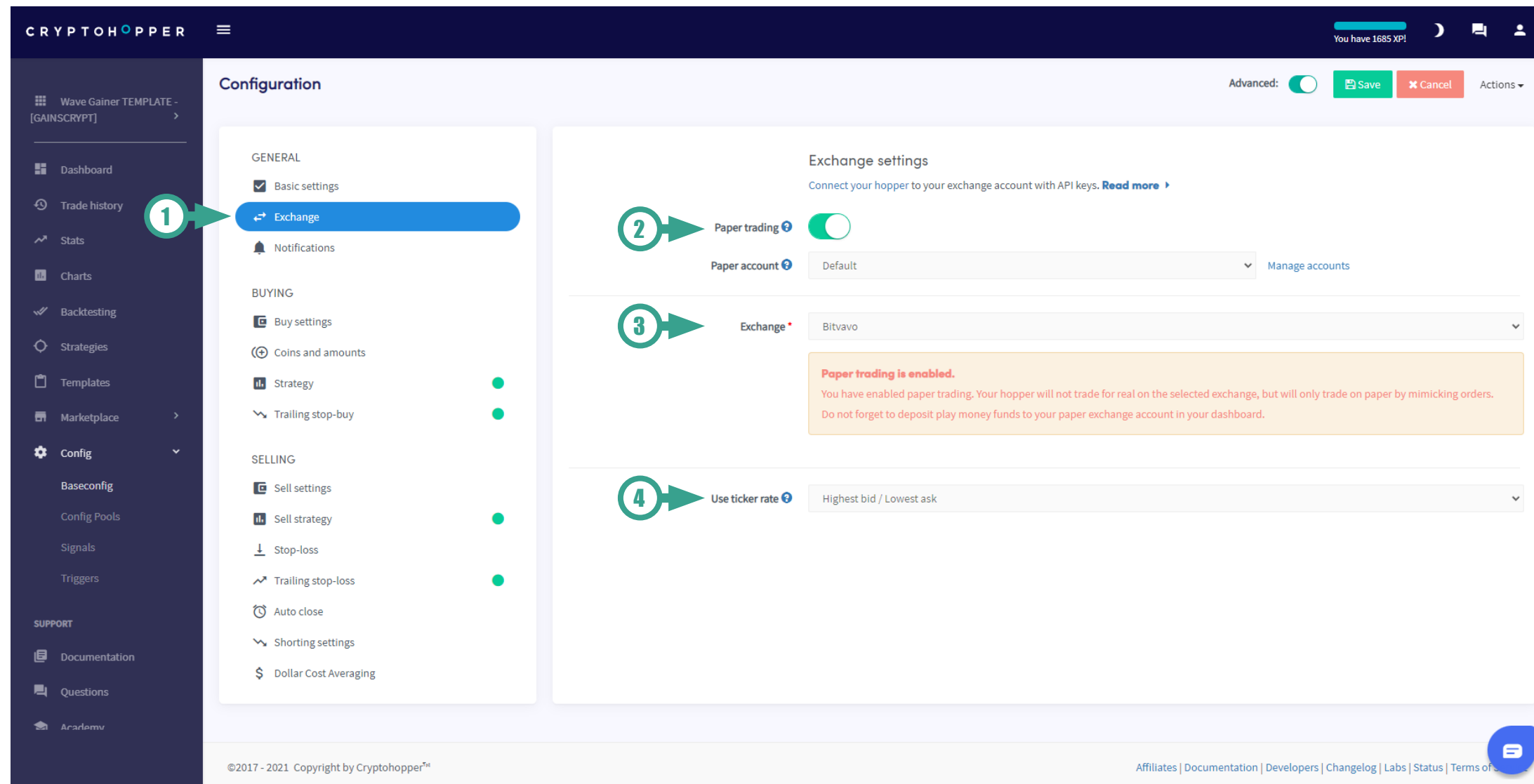
<+> Exchange

1. Exchange
Navigate to the exchange settings.

2. Paper Trading
Define if your hopper is a paper trader or if you want to use real money. It is generally recommended to paper-trade up to a month to get familiar with bot behavior if you are new to Cryptohopper. When you're ready for the real deal, connect your exchange.

3. Connect Exchange with API
The most important step when setting up your hopper for the first time. Here you can connect your exchange to your hopper. Don't have an exchange yet? Then you'll first need to sign up for one and get some funds on the exchange. We recommend Binance or KuCoin. They are big exchanges with high liquidity, a wide range of trading pairs and low transaction fees. You can also take a look at our list of exchanges and potentially get a welcome bonus! See next page for a list of tutorials on how to connect your hopper to your exchange using API.

4. Ticker Rate
Select ticker rate. We use Highest Bid / Lowest Ask. > More information

How to connect your exchange

3. Connect Exchange with API

Once you have chosen your exchange and signed up with an account, it is time to connect it to your hopper. Select the relevant tutorial of the list below from the Cryptohopper documentation.

Tutorials

> Connect your Bot to Bitpanda Pro

> Connect your Bot to Binance

> Connect your Bot to Binance US

> Connect your Bot to Bitfinex

> Connect your Bot to Bittrex

> Connect your Bot to Bitvavo

> Connect your Bot to Coinbase Pro

> Connect your Bot to HitBTC

> Connect your Bot to Huobi

> Connect your Bot to Kraken

> Connect your Bot to KuCoin

> Connect your Bot to OKEx

> Connect your Bot to Poloniex

> Connect your Bot to Crypto.com

> Connect your Bot to EXMO

You have 1685 XP!

Advanced: Save   Cancel   Actions ▾

Exchange settings

Connect your hopper to your exchange account with API keys. **Read more** ▸

Paper trading   ⬤

Paper account   Default   Manage accounts

③ ➔ Exchange *   Bitvavo

Paper trading is enabled.
You have enabled paper trading. Your hopper will not trade for real on the selected exchange, but will only trade on paper by mimicking orders. Do not forget to deposit play money funds to your paper exchange account in your dashboard.

Use ticker rate   Highest bid / Lowest ask

Not signed up for an exchange yet?

Check here if we have deals available.

<+> Notifications

Notification Settings
Speaks for itself. If you like to receive notifications on trades you may turn these on. However, the point of algorithmic trading is also to remain emotionally disconnected as much as possible. You could ask yourself if notifications help you to do so.

<+> Order Types

1. Order Type

When your hopper receives a buy signal, it will automatically place an order on your connected exchange. There are two order types: Limit Order and Buy Order. Definition Limit Order: Buy (or sell) order at a specified price or better. Upon Definition Market Order: Buy (or sell) order to buy market's current *best available* price. However for the latter there is no limit. If a market is illiquid or highly volatile, this "Best available price" might not be so favourable after all. A limit order is more risk-averse and is generally recommended.

> More information

Advantage & risk of Market Order

A market order is the likeliest to fill an order, but carries the risk of filling the order against an unfavourable price.

Advantage & risk of Limit Order

A limit order has the advantage of bidding lower than the current ticker and will lead to lower average buy-in prices. On the flipside, the amount of unfilled orders might increase.

<+> Limit Order

2. Percentage bid & Max open time to buy

Here you can set the percentage bid, lower or higher than the ticker price. A lower limit bid is more conservative, as your average buy-in price will be reduced. However, make sure this bid is not too low, as it will decrease the likelyhood of filling your order.

A limit order close to the ticker (e.g. 0.1% > ticker rate) can be considered to be a balanced setting.

In some unique cases, a 0.01 *higher* bid may even be used to mimic the fill-succes-rate of a market order, but still work with a limit order.

3. Max open time to buy

This is the time your hopper keeps the order open. The duration of this time should be somewhere between 5 minutes, depending on your strategy and the limit order. If you use a **Scalping** strategy and look for quick entries, a low Max open time makes sense, with a limit order that is not diverting too far from the ticker price (for example 0.2% lower bid). As **Position or Accumulation** strategy emphasizes larger time frames, the Max open time to buy may respectively be increased and bid lowered, for example 0.8% lower, 20 minutes. Then again, don't go to low: you don't want to miss your entry.

<+> Open positions, Exposure and Liquidity

Exposure

Max Open Positions	X	% Buy Amount

Liquidity

Total Account	-	Exposure

Exposure 60%

10%   Mildly Offensive   100%
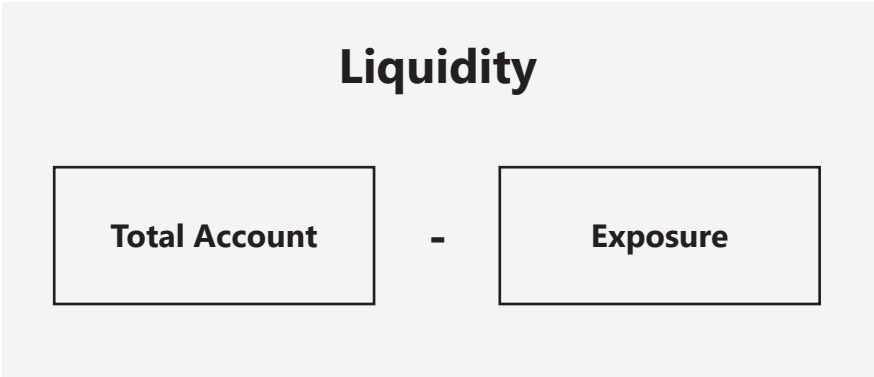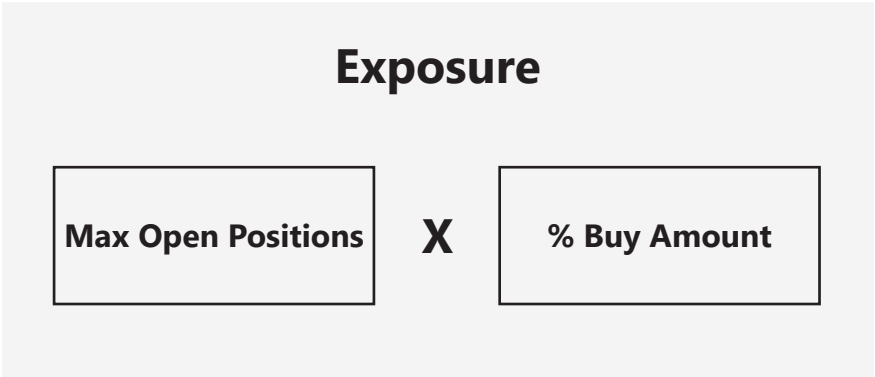
4. Open positions

Here you can set the amount of open positions that your hopper is able to take on. This setting should be assessed based on the **Percentage Buy Amount** (under Coins and Amounts), the amount of coins you have in your coin list, use of Dollar Cost Averaging (DCA) etc. The first consideration is, how much of your funds are you willing to expose at once? In the example above, Buy Amount 1.5% x 40 positions = 60% exposure. In this example, the remaining 40% is used as reserve to potentially double down positions using 'DCA'. This ties back into your risk management, which we will discuss later. For the sake of definition, we call the 'reserve funds' **liquidity**.

Trading with liquidity

Does that mean that the reserve funds can't be used for trading when the markets go up? No! They could be traded if they are managed with stop-loss instead.

You could build a setup where you allow more positions, but allocate for example 60% of your coins in a DCA pool using config pools, and the remaining 40% in a Stop-loss pool. This way your exposure could be a 100%, which will lead to higher profits in bullish markets. More on this in the **Config Pools section**.

Open positions per coin & Cooldown

5. Open positions per coin
On default one position if you use DCA. However, if you wish to further compartialize your trading, you could choose having two or multiple positions per coin, and respectively split your buy amount. When scalping with high frequency buy this could make sense to spread out your trading for a more 'fluid' output.

6. Cooldown
Enable cooldown. This means that after buying and/or selling a coin, your hopper will ignore any buy signals for the given 'Cooldown Period'. This feature is generally recommended to prevent excessive buying. Between 1 - 12 hours depending on your strategy, with higher Cooldown period considered to be more conservative. Strategies that work smaller timeframes (scalping, daytrading) may want to go with lower Cooldown periods to achieve high frequency trading, whereas strategies on the larger timeframes (position & swing trading) may have a higher Cooldown. Don't set the Cooldown period for too long though: you may miss out on trades.

<+> Miscellaneous & Auto merge (spreadbuy / smart DCA)

7. Buy order per coin
Recommended to keep on to prevent excessive buying.

8. Only buy when there are positive pairs
Optional. This is an additional feature to confirm that given coin is going up, either as trend or uptick on a specified timeframe (Positive pairs timeframe). However, Gainscrypt strategies have this feature built-in. Having this feature on is not necessary, and may result in missed (low) buy opportunities.

9. Auto-merge (spread-buy / Smart DCA)
This function can be used to spread your buys into one position, which we also refer to as 'Smart DCA'. It allows to add '1X' per buy to your position, with 'X' representing the Percentage Buy amount. This way your hopper can build positions over time, which can be useful for coins you want to accumulate slowly, as it will expand your position regardless if it is negative or positive. This is further elaborated on in the Dollar Cost Averaging chapter.

For Auto merge to work, make sure to *enable 2 positions per coin*. After each succesful buy, the hopper will merge them with your existing position. Match this with an adequate Cooldown period (example above).

<+> Quote currency and Allowed coins


1. Quote currency

This is the currency of your funds. This could be a Fiat currency such as USD or EUR. For most traders the preferred currency is a 'stable' currency with many pairs. USDT has been popular so far, but good alternatives are USDC or BUSD. However, make sure you research your Quote currency, as crypto stable coins have been experiencing regulatory pressure over the past year due to intransparency on their backing assets.

BTC is also a good alternative quote currency during bullish market sentiment and so called 'altcoin seasons', which occurs when altcoins are on average outperforming Bitcoin. To know if it is altcoin season, you can check the trend of the Bitcoin Dominance chart. If it is trending downwards, this is a good sign for altcoins. In a bear market it is safer to stick to stable coins.

2. Coin list

This is an important element of your set-up. Your profitability is eventually dependent on upward moves that your coin selection makes. And even good projects can eventually be overvalued or simply lose volatility. And low volatility means less trading texture.

If you're new to trading crypto, we suggest sticking with the well known, mid- to large cap coins (e.g. top 100 or top 250 coins). These projects have proven themselves enough to have long-term staying power. Make sure you get familiar with > Coinmarketcap. However, if you're longer in crypto you'll know that the biggest gains are found in the smaller coins, however with more risk to the downside. To learn finding the small altcoin gems, check out this video by Coinbureau. **Position / Swing strategies** work well for small coins.
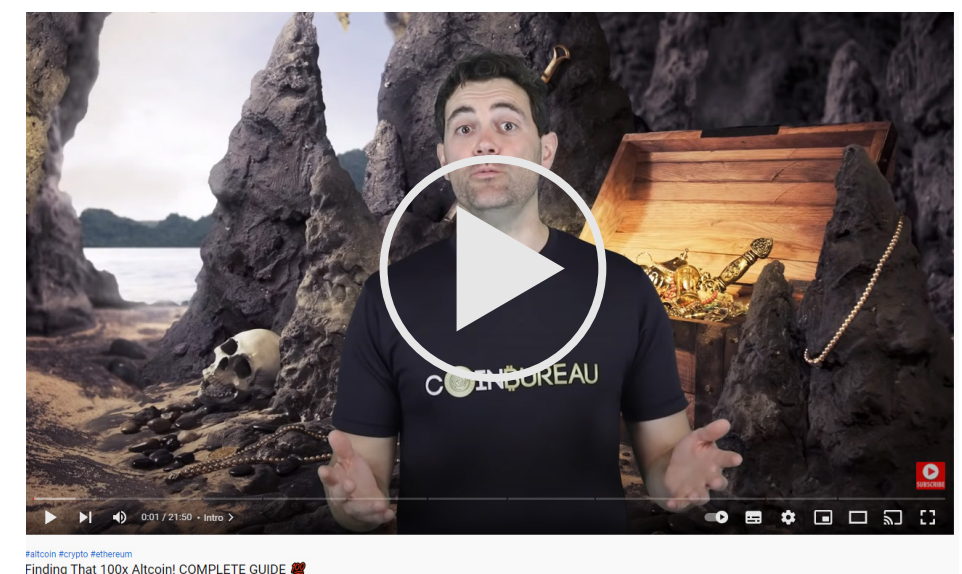
<+> Percentage buy amount and allocation

3. Percentage buy amount

This is the % amount of funds your hopper uses for each buy signal. Check the 'Open positions, exposure & liquidity' to understand how this relates to your risk strategy.

For some exchanges, the 'Minimum amount per order' should be at least 10$ or equivalent as it might not allow orders smaller than this threshold. If not applicable, you may also leave this field open.

If you want to work with fixed orders, you can check the 'Force minimum buy amount' field. However, you will lose the advantage of 'compounding / appreciated interest'. In other words, leaving this field unchecked will allow your hopper to make more gains with your previous gains. We like it unchecked. ;-)

Relation between Percentage buy amount and coin amount

The amount of coins you trade will also affect the percentage buy amount. As a starting point, you can divide a 100% / #coins. In this example, 100%/75 coins = 1.33% which is rounded off to 1.5%. Setting a higher percentage can be regarded as more agressive buying behaviour, whereas a lower buy amount more conservative. An indicative diagram shown at the right. Naturally, if you have multiple positions per coin also affects the percentage buy amount and should be factored in, affecting these values.

Furthermore, when using DCA this percentage should also be evaluated in relation to the 'DCA X amount', which we will discuss later.
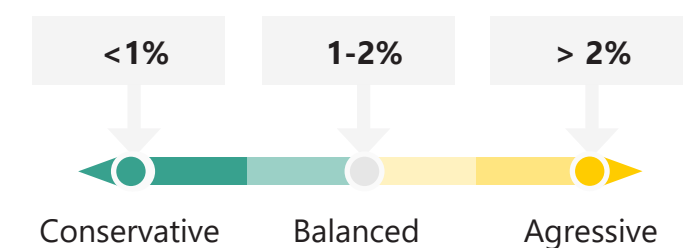
4. Maximum amount allocated

If you have many other activities on your exchange, be it manual trading or with other bots, or simply are starting out with bot trading and want to see some results first before going all-in, it may be preferred to cap the maximum available funds. In this case, you can fill in maximum allocation here.

`<+>` Strategy

1. Strategy
Select your default strategy or A.I. in this field. To learn more about our strategies and their performance, make sure you check the product documentation here:
https://www.gainscrypt.com/downloads

3. Number of targets to buy
This is the amount of coins your hopper targets at once. Increase for more buys, decrease to slow down buys.

2. Signals
Check if you only use signals. Signals may also be used as extension to your strategies to get more entries. Check out our signaler profiles below at the right.

Very low frequency of swing-styled entries. Free.
(max. 1 per week per coin)

High frequency of scalp-styled entries. 9$ per month.
(max. 4 per day per coin)

⟨+⟩ Trailing stop-buy

Trailing stop-buy

May be used as an extra confirmation that a coin is making an uptick. However, Gainscrypt strategies already have indicators for this built-in so this feature may also be switched off. If you choose to use it, make sure you don't trail too much upwards as your hopper is essentially missing the opportunity to buy in lower.

<+> Sell Settings

1. Take Profit (% TP)
When will take profit when this percentage is is crossed. This is typically set rather wide to allow the Trailling Stop-loss (% TSL) function and/or Sell Strategy do the profit taking.

2. Order Type
Generally recommended to use limit orders, to prevent selling to low bids unnecessarily. Read more about Order Types on the Buying Settings page.

3. Max open time sell
The amount of minutes that the hopper will keep your sell order open. If the order does not get filled, the hopper will attempt to sell again afterwards and readjust the order price.

4. Percentage Ask
Similarly to Percentage Bid in the buy settings, this feature allows to place a sell order with an X% higher than the ticker price. Make sure you don't set this value too high as it will increase the risk of unfilled orders. The percentage ask could also be set *0.01% lower* to get more instant-filled orders.

<+> Sell on strategy

1. Sell based on strategy

Most of our strategies include sell signals which may help with profit taking, reduce the holding time and reducing risk. However, in very strong bullish markets they may manually be turned off. The trend is your friend, In bearish or ranging markets it is recommended to keep them on.

Selling negative positions

It is possible that sell signals sell positions in red. This is a good thing. As sell signals will also help prevent 'bags'. A bag is when a position keeps dropping and become a larger negative position that your hopper keeps DCA-buying into for a long time before going up - if ever, which is a risk. From a trading perspective it is better to cut the bags early and regain liquidity to actually be able to make trades and thus, more profits profits.

To illustrate this, take a look at the trading output of Wave Gainer Hero at the right. In the period July 22 - November 11th the strategy sold 319 positions at an average loss of -3.13%. With 946 sales of +5.10% to make up for it, the average profits per trade are still above 3.04% with a controlled holding time.

Sell strategy **ON** Conservative

Sell strategy **OFF** Agressive
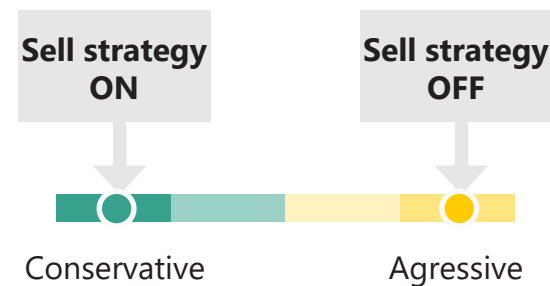
Trigger	Sells	Profit
Profit	1	29.10 %
Trailing Stop Loss	946	5.09 %
Strategy	319	-3.13 %

AVERAGE PROFITS PER COIN

Total average profits:
3.04 %

Average holding time:
1 day

> Download full report

⟨+⟩ Stop-loss

Stop-loss settings
A crude way to control risk is the stop-loss function. Gainscrypt strategies are typically tested to also work with stop-loss. The disadvantage however is that the hopper may realize losses unnecessarily. Especially volatile coins that quickly dump and pump will not work very well with stop-loss.

However, if you want to trade with 100% of your portfolio at once, you couldn't apply DCA to all your positions at once of markets turn sour. It is wise to create a 'liquid stop-loss pool' to which stop-loss is applied. In case of dumping markets, stop-losses will protect the majority of your funds and free up funds to DCA your open positions.

Advantage & Disadvantage of stop-loss
The advantage of stop-loss is a clear risk containment. Severe market downturns as we've seen in May 2021 wrecked traders relying solely on DCA. Stop-loss would have controlled a lot of damage.

The disadvantage is that a premature buy signal that would have been profitable might get knocked out by a stop-loss because of a volatile downswing. Therefore some strategies contain indicators that avoid buying into overly volatile markets. Ofcourse, setting a wider stop-loss might increase your winrate, but also negatively impacts your **Risk-reward ratio.**
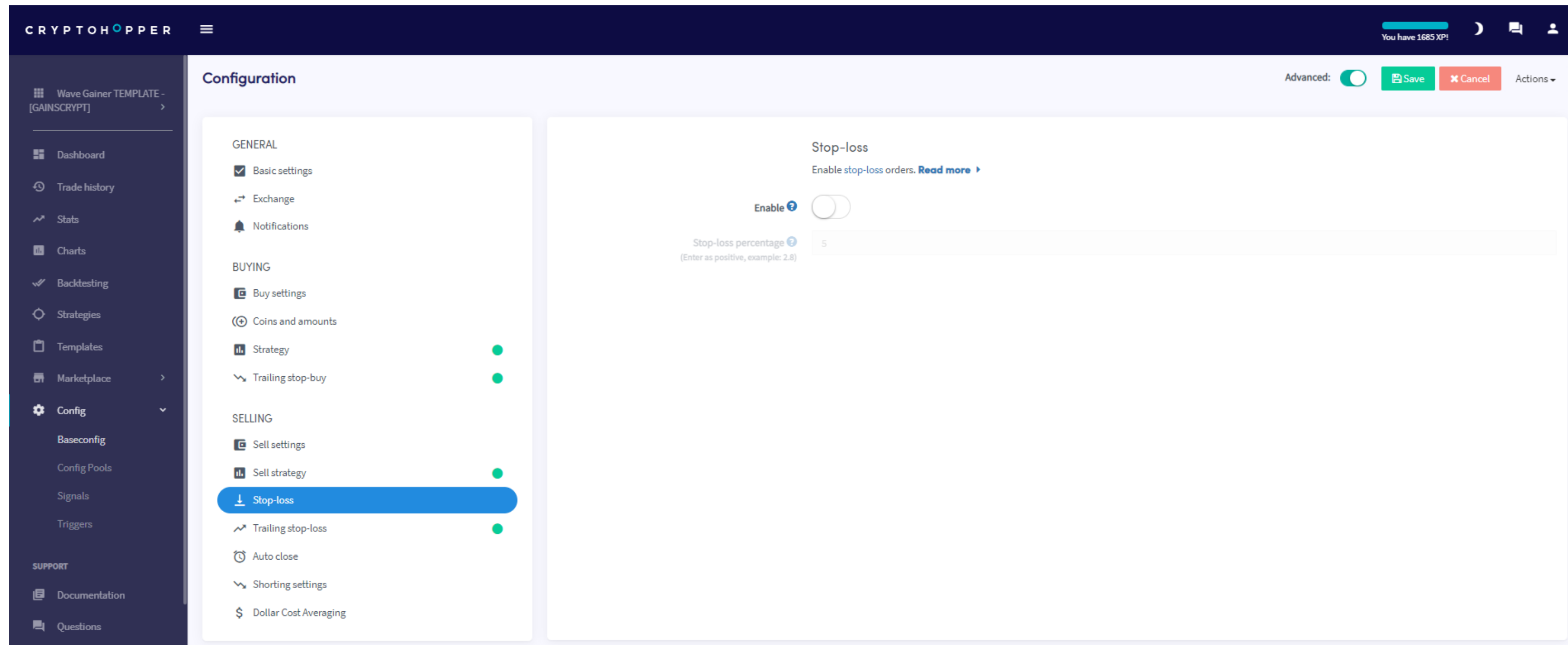
⟨+⟩ Risk/reward ratio

Risk-reward ratio
Risk-reward ratio is a comparison between potential upside and downside. For example, if your hopper targets 5% profits, a 1:1 risk reward ratio would mean setting a stop-loss at -5%. A 1:2 risk reward ratio may always be used if you want to give more room for coins to bottom out, however impact of an individual loss may be bigger. Take this into consideration.

Judge marketplace strategies
When judging the winrate% of a strategy, always put it into context. Determine the ratio between stop-loss (SL) and take profit (TP) or trailing stop-loss (TSL). If for example an impressive looking winrate is 90%, but the test used TP at 1% and stop-loss at -10%, then it will take 10 good trades to compensate for 1 bad trade. In this example, a **90% winrate is therefore still a net-loss.** Be wary of marketplace sellers that claim 90% winrate without indicating risk/reward ratio's or risk management. In most cases, Gainscrypt uses a risk/reward of approx. 1:1 or a slightly bigger reward when testing. Then 1 good trade rougly equals 1 bad trade. This way, a **70% winrate is profitable**.

Risk/reward Ratio

Potential profit	/	Potential loss

Trailing stop-loss

1. Enable Trailing stop-loss
In most cases, Gainscrypt strategies use mostly Trailing stop-loss to capitalize on profit. Trailing stop-loss means, that if your position crosses a certain threshold it will start 'trailing'. If it then drops a certain percentage (Trailing stop-loss percentage) it will sell your position. Keep this enabled. > More information

2. Trailing stop-loss percentage (%TSL)
Set the percentage amount that you'd like to trail your position.

3. Arm Trailing stop-loss percentage (%ATSL)
Set the point from which your position starts trailing. Make sure that your target is in realistic alignment with your strategy or A.I. setup.

Trailing Efficiency Ratio
When setting up your trailing stop-loss settings, do take into consideration the 'Trailing Efficiency Ratio'. This ratio adresses how high a position must grow before taking actual profits. In the example above, the Trailing Efficiency Ratio is 80%, because (TSL=1 / ATSL=5). Trailing is designed to be able to also capture bigger profits on individual trades, but if this ratio is too inefficient, you will be in trades for an unnecessary amount of time and missing out on profits. Say your ATSL was 2%, which it briefly touched, but then dropped 1% and up again 2%. But your profit was only 1% due because that is where your trailing stop-loss activated. Not only did you miss out on profit, your hopper also spent more time in an open position, not being able to take on other trades.

Trailing Efficiency Ratio

%TSL	/	%ATSL

<+> Miscellaneous

4. Use trailing stop loss only
Trailing stop-loss is *complementary* to Sell Signals. Best to keep this switched off, unless you're confident of strong uptrending markets.

5. Reset stop-loss after failed orders
Optional. If the hopper did not fill a sell order, it will then keep trying to sell the position regardless of the current profit. If you want to make sure that the hopper always sells your position above your trailing target you might want to switch this on, but best in uptrending markets.

6. Only sell with profit
Optional. For more conservative strategies, this may be turned on. Note that it is still possible for your hopper to sell negative positions upon **sell signals.** However, with this feature turned on, the chance of selling against a negative price due to a volatile downswing is reduced.

<+> Auto-close

1. Enable auto-close
Generally recommended to keep switched off. Auto-close can be used to reduce lingering positions that are not moving much in price. This is a method, although crude, to regain liquidity and use your funds to keep trading. When using daytrading or scalping strategies this feature may be deployed. Make sure this is not set too tight. Risk: auto-close does not take the position status into consideration, it might sell at a loss.

2. Close positions after X time open
Set the period after which your positions will be closed. Note: when a position is increased with DCA, merged or split, the position open time will refresh.

<+> Shorting settings

coming soon

Dollar Cost Averaging (DCA)

1. Dollar Cost Averaging
Dollar Cost averaging means buying more of the same coin to reduce the average buy price. For example, if a position dropped to -10% and a new buy signal comes in, the hopper will Double (or Triple) down the position, increasing its position size by a factor of 2X. Your position will then only be -5%.

2. Order type
For more information on order types, check the 'Order type' section in the buy settings.

3. DCA after X time open
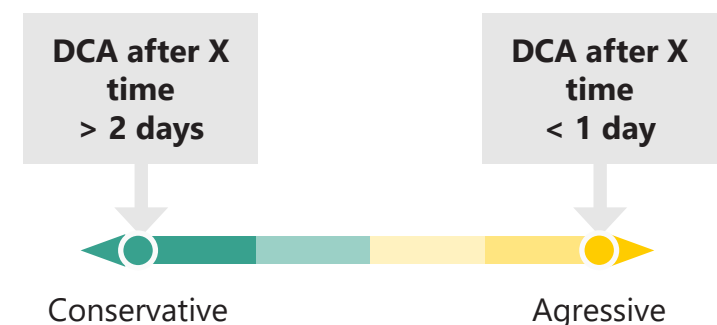Time threshold before the hopper is allowed to DCA.

DCA advantages
The advantage of managing your risk with DCA is that your trades don't get closed due to high volatility. The disadvantage however is that you will need to keep funds in reserve, it offers less protection during severe market downturns. Be aware that your hopper will be able to buy deeper in a coin, so make sure that the coins you apply DCA are coins you would be comfortable holding for a longer period of time.

Exposure & Liquidity
Read the related article on exposure and liquidity under the 'Buy Settings' section.

DCA time & Stance

DCA after X time > 2 days

DCA after X time < 1 day

Conservative   Agressive

`<+>` DCA considerations

4. DCA max retries
Set the amount of retries that your bot is able to do. Make sure you calculate the maximum position per coin in the worst case scenario. In the example above, this would be 1.5% (the Percentage Buy Amount) x2^3. This is 12% position for only 1 coin, for which the market only needed to dip (6.4+(6.4/2)+6.4/2))=12.8% in just 3 days. This is not much for crypto so you can see the risk here. The DCA settings above are suitable for uptrending markets, but **NOT** a set-and-forget solution. Using DCA therefore needs supervision. If markets turn bearish, reevaluate your risk management and DCA settings.

A more conservative set-up would be a humble 25% exposure, with DCA trigger >10, after two days. This would mean that all positions could be doubled down twice after a 20% downturn. The limited exposure will lead to lower profits in a bull market, unless you choose trade with stop-loss with the remaining funds.

5. DCA set percentage trigger
Set the trigger percentage to activate DCA. Once it is activated, your hopper will use the next buy signal to double down.

6. DCA buy immediately
Not recommended.

7. Order Size
Double down on default. For faster, more agressive trading, triple down may be used but be careful: your hopper will buy in to losing positions faster. With triple down, 1% will become 27% after three DCA attempts! Although the probability of clearing a position with triple down is higher, it is not a guarantee.

DCA trigger & Stance

DCA trigger > 10%	DCA trigger <5%

Conservative — Agressive
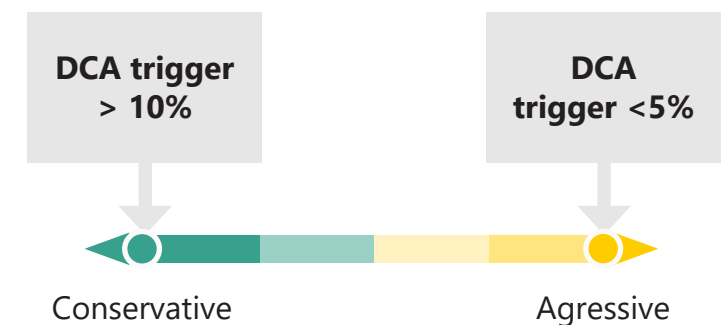
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