# How to Use CryptoGain

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# Overview

CryptoGain can be used in two easy steps!

# Step 1: Upload Data

Consolidate your trading data by uploading data (usually in CSV or excel format) downloaded from the exchanges/services that you use.

## Step 2: Analyze!

Before we look at each step more closely, let's go over the General Settings.

# General Settings

# What is affected by the General Settings

The General Settings are applied uniformly to each portfolio under a certain account. If you want to apply a different setting to a specific portfolio, you can do that by creating a new account.

#### **Account Name**

The Account Name is used to login to your account.

You can use any account name that you want, as long as it's not already taken.

If you care about privacy, we recommend that you use something that is not associated with your identity.

#### **Email (Optional)**

You do not have to provide us with your email info.

The benefits of providing your email is that we can recover your Account Name and Password for you in case you forget them.

#### **Password**

You can use any password that you want.

No restrictions on the number of characters that you must use.

It is your freedom and responsibility to choose the password that is safe and at the same time memorable.

If you did not provide your email info, we can't recover your Account Name and Password for you in case you forget them.

#### **Functional Currency**

Choose the currency that you mainly use in your day to day activities.

For example, if 80% of your economic activity is done in USD and 20% in JPY, USD would most likely be your functional currency.

We look forward to the day all economic activity is done in crypto, so we've made sure that you could choose crypto as your functional currency.

The concept of Functional Currency is taken from IAS 21.

#### **Presentation Currency**

Choose the currency that you want to use to present the calculation results in CryptoGain. In most cases, this will be the same as the Functional Currency.

The concept of Presentation Currency is taken from IAS 21.

#### Time Zone

Set the Time Zone of your location.

#### Yearend date

Set your yearend date.

In accounting terms, this is often referred to as the balance sheet date or the fiscal yearend date.

#### Language

CryptoGain currently supports English and Japanese.

That's because those are the only languages that we can speak.

If you want to use CryptoGain in your language, we are always open to learn new languages if you could teach us!

# Step 1: Upload Data How to get your trade data

The first thing that you need to do is to download your trade data from the exchanges/services that you use.

#### Exchanges/Services supported by CryptoGain

For these exchanges/services, you can directly upload the files to CryptoGain and it will automatically recognize the files.

Instructions on how to download trade data from exchange/services

#### Exchanges/Services not currently supported by CryptoGain

For the exchanges/services that are not currently supported by CryptoGain, you can upload trade data from such exchanges/services by using our standard template.

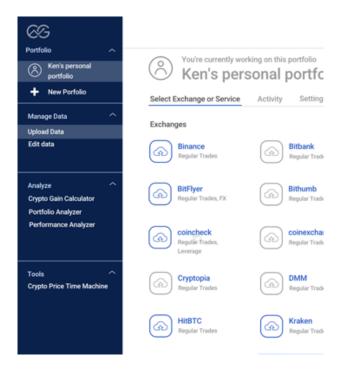
#### Instructions on how to use the standard template

You can also manually input transaction data into CryptoGain, but this method is suitable only if you have few transactions to enter.

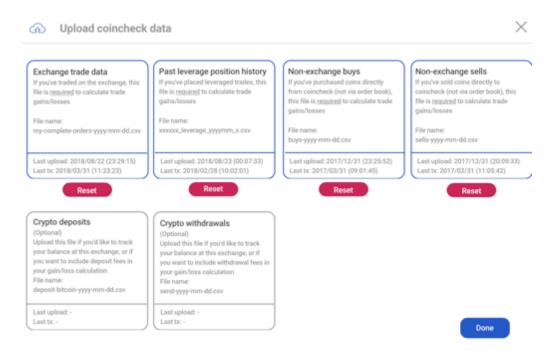
## How to upload your trade data

#### Exchanges/Services supported by CryptoGain

1. Select "Upload Data" from the left sidebar



2. Click on the exchange/service for which you want to upload data



3. Click on the file that you want to upload.

The boxes highlighted in blue shows the types of files you've uploaded in the past.

You can tell when you uploaded the file last and the most recent transaction date in that file by looking at the date information provided in the boxes.

If you want to delete the files you uploaded in the past, click on "Reset".



- 4. Drag drop the file you want to upload and CryptoGain will automatically recognize the file.
- 5. If there are errors in the file, or if you are trying to upload a wrong file, CryptoGain will give you an error message.
- 6. Delete data that you don't want to upload by pressing "x".

#### Optional settings

#### Upload mode

Add – This mode will add new transactions that have occurred after the last transaction you previously uploaded. This mode will be useful in most cases if you don't want to delete your existing data.

Override – This mode will replace your existing data with the data that you are uploading now. This mode will be useful when you want to start with a clean slate. If you want to add new transactions to your existing data, try the "Add" mode.

#### Data time zone

In most cases you won't need to change the time zone from the default setting. If you know that the time stamp in your data represents a specific time zone, you can change this setting so that CryptoGain accurately recognizes the correct time zone.

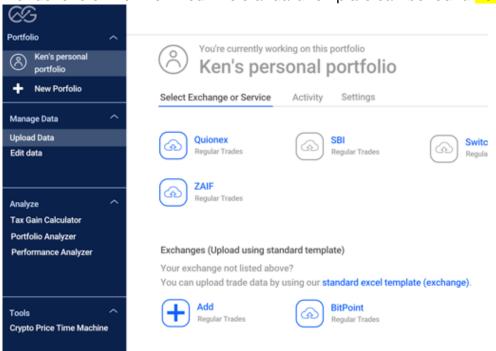
7. Click "Upload".

Check to make sure your file has been uploaded successfully and click "Close" at the bottom corner or the "X" at the top corner.

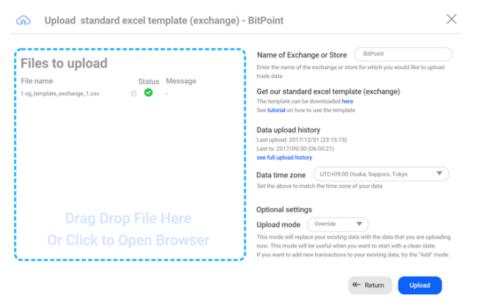
#### Exchanges/Services not supported by CryptoGain

You can upload trading data from exchanges/services not supported by CryptoGain by using our standard template.

Instructions on how to fill out the standard template can be found here.



1. After filling out the standard template, click "+ Add" icon to add a new exchange/service, or click on an existing exchange/service that you previously created to add new data.



2. Drag drop the file you want to upload and CryptoGain will automatically recognize the file.

If you see any error messages, make sure you filled in the standard template correctly.

3. Check the following sections to ensure that the data is properly reflected in CryptoGain:

Name of Exchange or Service: Enter the name of the exchange or service for which you would like to upload trade data

Data time zone: Set the time zone to match the time zone of your data

#### Optional settings

#### Upload mode

Add – This mode will add new transactions that have occurred after the last transaction you previously uploaded. This mode will be useful in most cases if you don't want to delete your existing data.

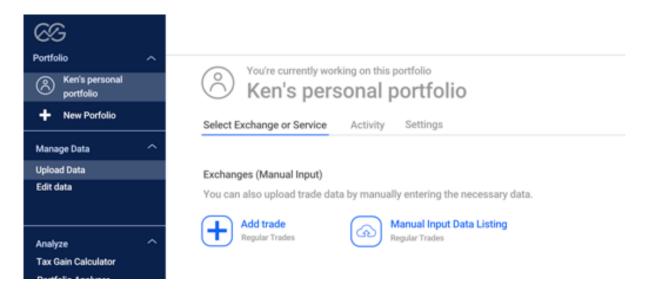
Override – This mode will replace your existing data with the data that you are uploading now. This mode will be useful when you want to start with a clean slate. If you want to add new transactions to your existing data, try the "Add" mode.

#### 4. Click "Upload"

Check to make sure your file has been uploaded successfully and click "Close" at the bottom corner or the "X" at the top corner.

#### Manually Upload Transactions to CryptoGain

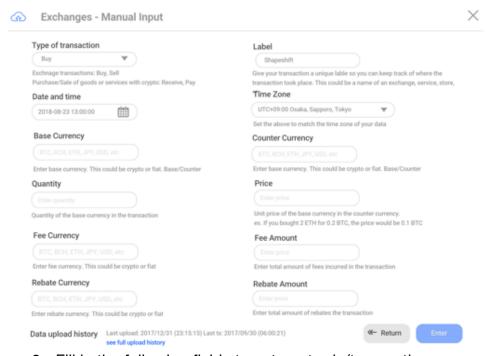
If you don't have many transactions to upload, or if your exchange/service doesn't let you download transaction data, you can manually enter transactions to CryptoGain.



1. Click "+ Add" icon to add a new trade/transaction.

Once you've manually entered a transaction, an icon will appear next to the "+ Add" icon.

In the future, you can review and edit the transactions you've manually entered in the past by clicking on this icon.



2. Fill in the following fields to enter a trade/transaction:

#### Type of transaction

If you are entering an exchange transaction (ex. trades at an exchange):

Buy: Select this if the transaction you are entering is a "buy transaction"

Sell: Select this if the transaction you are entering is a "sell transaction"

If you are entering a purchase or sale of goods or services with crypto:

Receive: Select this if you are receiving crypto for a sale of goods or services

Pay: Select this if you are paying crypto for goods or services

#### Label

Give your transaction a unique label so you can keep track of where the transaction took place. This could be a name of an exchange, service, store, etc.

#### Date and time

Enter the date and time of the trade/transaction.

#### Time Zone

Set the time zone to match the time zone of your data.

#### **Base Currency**

The base currency is the currency that you sold in a Sell transaction, bought in a Buy transaction, received in a Receive transaction and paid in a Pay transaction. This could be crypto or fiat.

#### **Counter Currency**

Enter the counter currency.

This could be crypto or fiat.

#### Quantity

Enter the quantity of the base currency in the transaction.

ex. If you bought 2 ETH for 0.2 BTC, the quantity would be 2 ETH. You would enter 2 in this situation.

#### Price

Enter the unit price of the base currency in the counter currency. ex. If you bought 2 ETH for 0.2 BTC, the price would be 0.1 BTC. You would enter 0.1 in this situation.

#### Fee Currency

Enter fee currency.
This could be crypto or fiat.

#### Fee Amount

Enter total amount of fees incurred in the transaction.

The amount should be entered as a positive number.

If the fee in fact is a negative fee (i.e. if you are receiving a rebate), enter this as a rebate in the following fields.

#### **Rebate Currency**

Enter rebate currency.

This could be crypto or fiat.

#### Rebate Amount

Enter total amount of rebates in the transaction.

The amount should be entered as a positive number.

- 3. Click "Enter"
  Check to make sure your transaction has been entered successfully and click
  "Close" at the bottom corner or the "X" at the top corner.
- 4. If you want to continue entering a new transaction, click "+ Add New".

### **Edit Data**

After you upload your transaction data, CryptoGain will consolidate all transactions into one database.

The next step is to review the database for any errors and address these errors.



- 1. Select "Edit Data" in the left sidebar.
- 2. The "Error Listing" section will give you a summary of the Errors that exist in your database.

If you don't have any errors, lucky you! You can skip this step and start analyzing your gains.

For most people, there will be errors that will need to be addressed.

#### What are the common errors?

In most cases, these errors will be "Insufficient balance" errors.

The "Insufficient balance" occurs when there are gaps in the data.

If the data you uploaded isn't complete, there is a high chance you will have "insufficient balance" errors.

For example, let's say that you started your crypto trading by purchasing BTC directly from a friend in exchange for fiat, who then sends the BTC to your wallet.

From your wallet, you send the BTC to an exchange and trade it for ETH.

The trade data downloaded from the exchange will include the BTC to ETH trade, but will not include the initial transaction (purchase of BTC for fiat).

If you just upload the trade data from the exchange to CryptoGain, CryptoGain will recognize that you sold BTC for ETH, but because it doesn't know where the BTC came from, it will give you an "Insufficient balance" error.

#### What should I do if I have "Insufficient balance errors"?

There are three actions that you can take.

- 1. Upload/enter missing transactions: Recommended
- 2. Force zero cost basis: Quick fix but this will result in overstatement of gains
- 3. Ignore: This is not recommended as the error will result in inaccurate gain/loss calculations and would understate gains

#### The Recommended Action

The recommended action is to upload or manually enter missing transactions.

In the example above, you would click "Upload Data" in the left sidebar and manually enter the initial transaction in which you purchased BTC.

You can use our standard template to upload multiple transactions.

#### Quick Fix (use with caution)

Manually entering missing transactions can be a tedious process, especially if you transact on a frequent basis and use exchanges/services that do not provide transaction data.

We've provided a quick fix that would let you address these errors by forcing zero cost basis to the insufficient balance errors.

In our previous example, if you force zero cost basis to the errors, CryptoGain will assume that you acquired ETH in exchange for BTC that you got for zero.

As a result, the gain calculated from this trade becomes the full market price of ETH.

It is important to note that this quick fix tends to overstate your gains.

If you use the gain amount calculated by forcing zero cost basis for tax purposes, you may end up overpaying your taxes.

#### Not Recommended

If you decide to ignore the errors all together, CryptoGain will still give you a result by ignoring transactions that have errors.

Obviously, the results will not be accurate and can be considered meaningless.

At the end of the day, if you want accurate results, you will have to take the recommended approach and upload or manually enter missing transactions.

#### What if I spot errors in the uploaded transactions?

If you spot any errors in the uploaded transactions, you can edit the transactions directly by clicking on the individual transaction.



# Step 2: Analyze

Once you've uploaded your transaction data and made sure that you addressed any errors in your database, it's time to analyze!

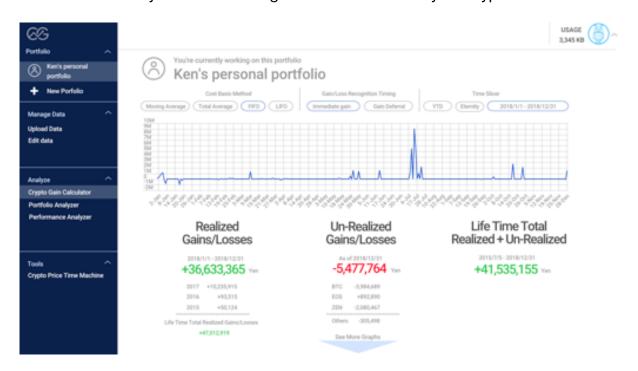
CryptoGain has three tools that let you analyze your trades.

- 1. Gain Analyzer: Calculate gains and losses from your crypto trades
- 2. Portfolio Analyzer: Analyze your portfolio balance
- 3. Performance Analyzer: Analyze your portfolio performance

Access these tools from the left sidebar.

## Gain Analyzer

Use the Gain Analyzer to calculate gains and losses from your crypto trades.



There are three settings that you can play around with:

- 1. Cost Basis Method
- 2. Gain/Loss Recognition Timing

#### 3. Time slicer

#### Cost Basis Method

You can select from four different methods.

- 1. Moving Average: Method of calculating cost whereby, after each acquisition, average cost is recomputed by adding cost of acquired crypto to the cost of existing crypto in inventory and dividing by the new total number of units.
- 2. Total Average: Method of calculating cost using the average purchase price during a given accounting period.
- 3. First-In-First-Out (FIFO): Method of calculating cost whereby, the cost associated with the crypto that was purchased first is the cost expensed first. In times of increasing prices, FIFO will calculate cost based on comparatively lower unit cost, which tends to result in higher trade gains when compared to LIFO. The opposite will occur in times of decreasing prices.
- 4. Last-In-Last-Out (LIFO): Method of calculating cost whereby, the cost associated with the crypto that was purchased last is the cost expensed first. In times of increasing prices, LIFO will calculate cost based on comparatively higher unit cost, which tends to result in lower trade gains when compared to FIFO. The opposite will occur in times of decreasing prices.

For various financial reporting purposes, the common rule is that when one accounting method is chosen, that method should be applied continuously.

#### Gain/Loss Recognition Timing

You can select from two different methods

- 1. Immediate gain: Gain/Loss will be recognized from both crypto-to-fiat and crypto-to-crypto trades.
- 2. Gain Deferral: Gain/Loss will only be recognized from crypto-to-fiat trades only.

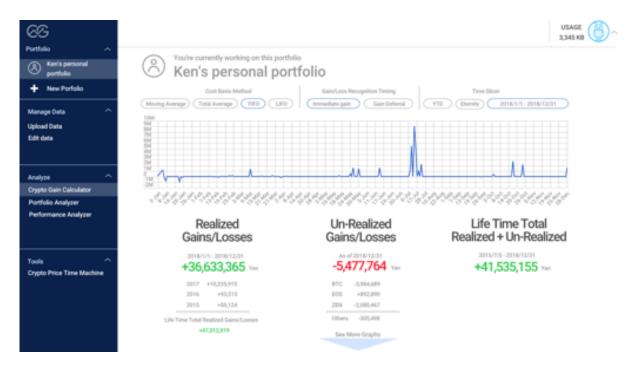
Gains/Losses from crypto-to-crypto trades are deferred until they are converted into fiat.

#### Time Slicer

You can use the Time Slicer to set the calculation period.

- YTD (Year-To-Date): This setting will calculate Gains/Losses from the beginning of the period to the current date. You can change your fiscal year end in the user settings.
- 2. Eternity: This setting will calculate Gains/Losses from when the first transaction in your database took place to the current date.
- 3. Detailed setting: You can specify the calculation period by using the calendar.

#### Interpreting the results



#### Realized Gains/Losses

The amount shown here is the Realized Gains/Losses for the calculation period set using the Time Slicer.

If you chose "Immediate gain" in the "Gain/Loss Recognition Timing" setting, the amount will include gains/losses from both crypto-fiat and crypto-to-crypto trades.

If you chose "Gain Deferral", the amount will include gains/losses from crypto-fiat trades only and will defer those from crypto-to-crypto trades.

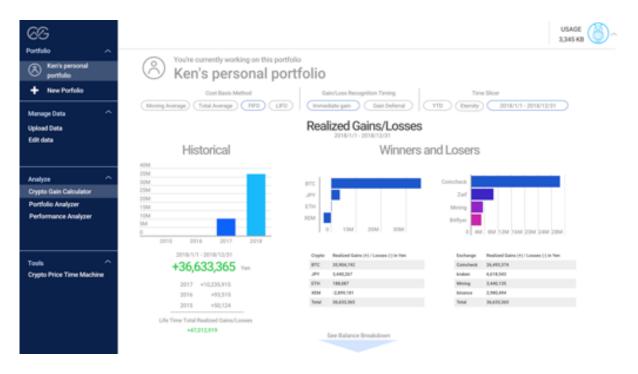
#### **Un-Realized Gains/Losses**

The amount shown here is the Un-Realized Gains/Losses as of the end of the calculation period set using the Time Slicer.

The amount is calculated as the difference between the market price and the cost basis of the crypto balance as of the end of the calculation period.

#### Life Time Total Realized + Un-Realized

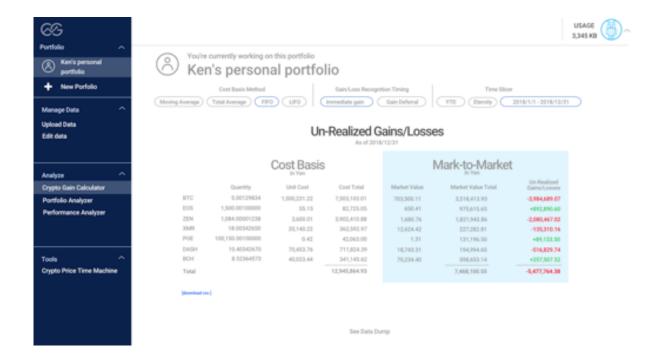
The amount shown here is the total of lifetime realized gains/losses and un-realized gains/losses as of the end of the calculation period.



#### Historical and Winners and Losers

The Historical graph shows your gain and loss results per fiscal year.

The Winners and Losers breaks down your gains and losses for the calculation period based on crypto type and exchange/service.



#### **Un-Realized Gains/Losses**

This section shows the Cost Basis and Mark-to-Market Price of the crypto balance as of the end of the calculation period set using the Time Slicer.

The "Un-Realized Gains/Losses" amount is calculated according to the following equation:

Market Value Total - Cost Total = Un-Realized Gains/Losses

#### Data Dump

The Data Dump file can be downloaded for backup and analysis purposes. If you want to download your entire database, the easiest way would be to choose "Eternity" in the Time Slicer before clicking on the download button.

## Portfolio Analyzer

Use the Portfolio Analyzer to review your crypto balance.



The Portfolio Analyzer will display your current crypto balance and the current market value of your portfolio.

The Portfolio Analyzer will also keep track of your past balance history so you can go back in time and check out your portfolio from the past.

This can be done by using the Time Slicer by setting the end date to the date you want to go back to.

You can enter balances to the Portfolio Analyzer using two different modes:

- 1. Update Balance Manually
- 2. Sync Balance with Gain Analyzer

#### **Update Balance Manually**

In this mode, you can update your crypto balance manually when you feel like it. This mode will not sync with the Gain Analyzer.

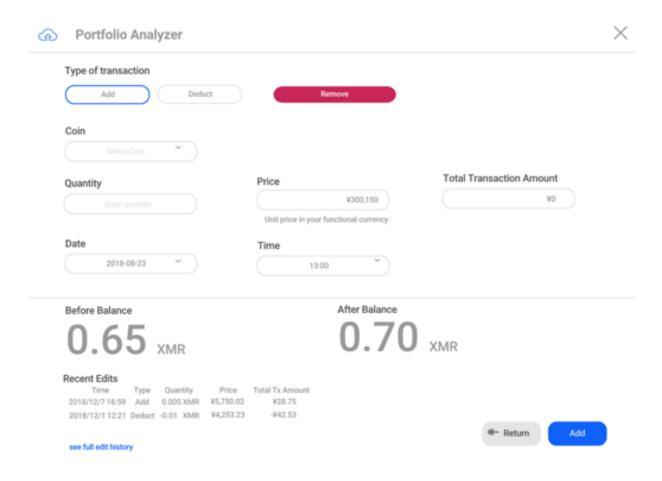
The best use case for this mode will be if you want to simply track your crypto balance in a simple and easy way.

You can switch to Sync Mode and come right back to manual mode, and your old data will be there waiting for you.

There is also a quick way to adjust your balance in manual mode to match the balance with the Gain Analyzer.

This will be explained in the following section (see "Adjusting Portfolio Analyzer Balance to Match Gain Analyzer").

1. You can make changes to your crypto balance by filling out the following sections:



#### Type of transaction

Select "Add" if you want to increase your balance.

Select "Deduct" if you want to decrease your balance.

Click "Remove" if you want to remove a crypto entirely from the Portfolio Analyzer

#### Coin

If you want to add a new coin to your portfolio, select the coin you want to add

#### Quantity

Enter the quantity that you want to increase or decrease.

#### **Price**

The current market price is preset for you.

You can adjust the price if you want to.

If you enter "Quantity" and "Total Transaction Amount", the Price will be determined based on those two inputs.

#### **Total Transaction Amount**

The "Total Transaction Amount" will be calculated automatically based on "Quantity" and "Price".

Alternatively, you can fill out "Quantity" and "Total Transaction Amount" and the "Price" will be calculated automatically.

#### Date and time

The current date and time are preset for you.

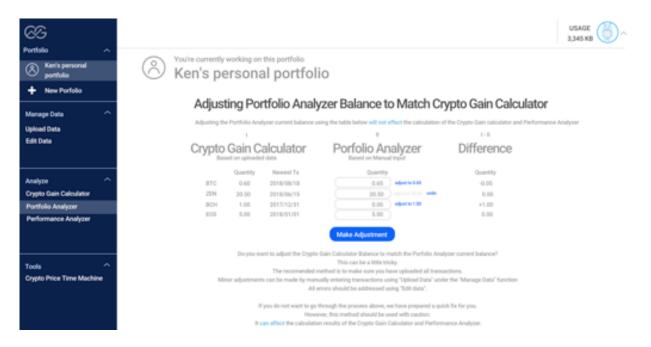
You can make changes if you want to.

2. Once you've filled out all the sections and have confirmed the entry, click "Add" (or "Deduct" if deducting) towards the bottom of the screen.

If you want to exit the screen without making any changes, click "Return" or the "x" at the top of the screen.

#### Adjusting Portfolio Analyzer Balance to Match Gain Analyzer

When you're using the Portfolio Analyzer in manual mode, you can easily adjust the balance to match that of the Gain Analyzer.



Column I shows the Gain Analyzer balance. Column II shows the Portfolio Analyzer balance.

1. Click on "adjust to xxx" to match the Portfolio Analyzer balance to that of the Gain Analyzer.

Or, you can manually enter the balance you want by clicking on the quantity and entering a number.

Click "undo" if you want to undo any edits.

2. Once you're done with the edits, click "Make Adjustment".

This adjustment only affects the Portfolio Analyzer balance and will not influence the gain/loss calculation in the Gain Analyzer.

The procedures above are for adjusting the Portfolio Analyzer balance to that of the Crypto Gain Analyzer.

What if you want to adjust the Gain Analyzer balance to match that of the Portfolio Analyzer?

This can be tricky but there is a quick fix.

Read on.

#### Adjusting Gain Analyzer Balance to Match Portfolio Analyzer

Do you want to adjust the Gain Analyzer Balance to match the Portfolio Analyzer current balance?

This can be a little tricky.

The recommended method is to make sure you have uploaded all transactions.

Minor adjustments can be made by manually entering transactions using "Upload Data" under the "Manage Data" function.

All errors should be addressed using "Edit data".

If you don't want to go through the process above, we've prepared a quick fix for you.

However, this method should be used with caution.

It can affect the calculation results of the Gain Analyzer and Performance Analyzer.

#### How the Quick Fix Generator Works

Upward balance adjustments:

- 1. A transaction to acquire an asset will be generated based on the selected price.
- 2. The adjustment quantity will be filled in for you. You can change the quantity if you want.
- 3. You can set the price to be the following: zero, cost basis (according to the Gain Analyzer), or the market value as of the Posting Date.

The total amount (quantity x price) will be added to the asset balance.

- 4. You will need to select whether the adjustment is recognized as a gain in the Gain Analyzer.
- 5. You can also specify the date the transaction is posted to.

#### Downward balance adjustments:

- 1. A transaction to dispose an asset will be generated based on the cost basis (according to the Gain Analyzer) in accordance with the selected cost accounting method (FIFO, LIFO, etc.).
- 2. The adjustment quantity will be filled in for you. You can change the quantity if you want.
- 3. The total amount (quantity x cost basis) will be deducted from the asset balance.
- 4. You will need to select whether the adjustment is recognized as a loss in the Gain Analyzer.
- 5. You can also specify the date the transaction is posted to.

#### Review Adjustment:

Review the Adjustment you generated in the "Adjustment Summary" section.

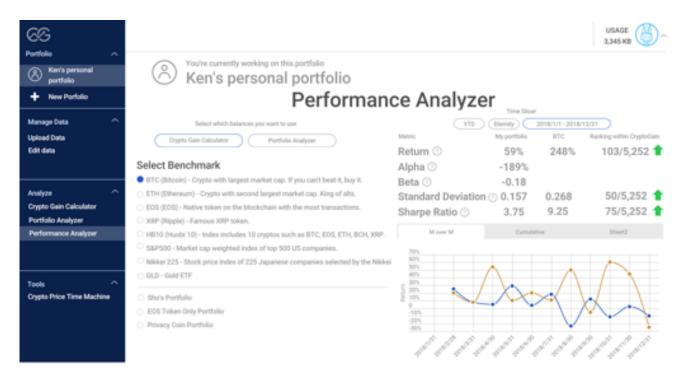
If the adjustment is correct, reflect the adjustment into the Gain Analyzer by clicking "Post Quick Fix".

Once posted, the Quick Fix can be edited like any other transaction by going to "Edit Data" under the "Manage Data" function.

You can filter the Quick Fix Adjustments using the "Quick Fix" label in the "Upload Method" column.

## Performance Analyzer

Use the Portfolio Analyzer to analyze your portfolio performance.



When determining the performance of an investment portfolio, you need to have something to compare against.

Just calculating the return is not enough to determine whether you did good or bad.

Here's an example.

Let's assume that your portfolio's return for the year was 10%.

This looks good at a glance but, what if during the same period, BTC's return was 20%?

Your portfolio underperformed BTC by 10%, which means that you were better off just holding BTC.

Therefore, to determine the performance of your portfolio, you need to compare it with a benchmark.

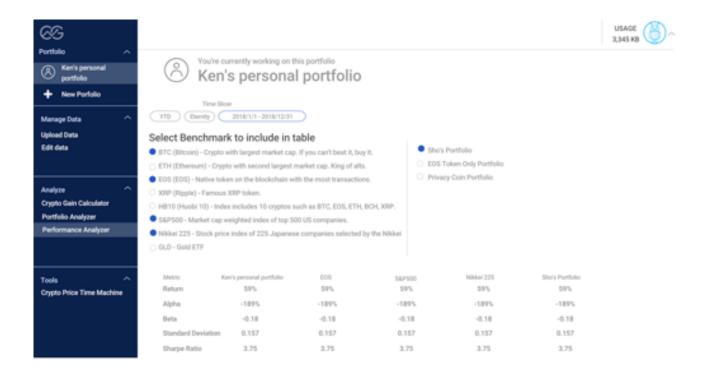
The Performance Analyzer will let you compare the performance of your portfolio with several benchmarks.

1. Select which balance you want to use when calculating the Portfolio Performance.

- Select the benchmark of your choice.
   You can select from some that we've prepared for you.
   You can also choose from your own portfolio collection.
- 3. Select the calculation period using the Time Slicer.
  Your portfolio needs at least three months of history to be eligible for ranking.

You can compare the results Month over Month, or on a cumulative basis by switching the tabs.

You can also compare the performance of multiple portfolios in a table format.



- 1. Select the calculation period using the Time Slicer.
- 2. Select the benchmark that you want to compare.

#### What the Metrics mean

Return: Percentage change in the portfolio balance determined by dividing the change in balance by the beginning balance.

Equation: (P1 - P0) / P0 P0 = Beginning balance P1 = Ending balance When calculating return, the increases/decreases to the portfolio balance caused by trades that involve fiat are removed to prevent them from effecting the calculation.

#### Alpha:

Excess return of the portfolio relative to the return of the benchmark. If the alpha is 1, that means that the portfolio outperformed the benchmark by 1%. Generally speaking, the higher the alpha, the higher the return.

#### Beta:

The relationship between the volatility of the portfolio and that of the benchmark. If the beta is 1.1, that means that the portfolio had a 10% higher volatility than the benchmark.

Generally speaking, higher volatility is perceived as higher risk, and therefore, higher the volatility, higher the risk.

#### Sharpe Ratio:

The relationship between the portfolio return and the portfolio risk.

The Sharpe ratio shows the excess return per unit of risk taken, and therefore, the higher the Sharpe ratio, the higher the return per risk taken.