**Beschreibung Cases**

Real Time Data Feed = RTDF

«RTD» Real Time Data» / bestellen

Der Kunde bestellt via «Blockchain Transaktion» den Email «RTD»-Report. Der Preis pro «RTDR» beträgt 1 Litecoin.

ZZZInputUI = Userinterface

3 User ausführen

User abstrakt

* Controller: Arbitrage.analyze
* Admin: PaiRiT.check
* Kunde: Engine.place (Banlage.java source)

Anlage / platzieren

Der Kunde platziert Anlagen, indem er einen bestimmten Betrag in einer beliebigen Währung (Fiat oder Crypto) für das gewünschte Produkt einsetzt. Die Zuordnung geschieht automatisch, da für kurzfristige und langfristige Anlagen unterschiedliche Einzahlungskonti existieren.

Engine / manuell «traden»

\*Still in Development\* Dies ist die kurzfristige Anlagestrategie für gierige und risikobewusste Anleger. Der Einsatz wird genau 2 Wochen lang verwendet. Durch den Einsatz eines zweiten Algorithmus in Kombination mit unserem «RTD»-Tool werden die Anlagen von Hand verwaltet. Dadurch sind höhere Gewinne erzielbar. Es birgt jedoch auch höhere Risiken. Für die tägliche Betreuung der Engine werden hohe Gebühren auf den Gewinn erhoben.

Geplanter Launch: Go Live 2

Banlage = abstrakt

MainEngine = Engine abstrakt & extends Banlage

1. Arbitrage Engine
2. PaiRiT Engine

Engine Arbitrage: Algorithmus 1 – Fill the Gap

automatisiert «traden»

Die langfristige Anlagestrategie, welche kein grosses Risiko trägt, beinhaltet jedoch auch geringere Gewinnchancen. Sie stellt einen Safe Haven für sorgenfreies Anlegen dar. Hier wird der Einsatz des Kunden für exakt 3 Monate verwendet, um das voll automatisierte Trading-Tool zu handeln. Dabei werden die Lücken zwischen Angebot und Nachfrage mit dem Algorithmus ausgenutzt um den Gewinn zu erzielen. Es handelt sich hier um «Kleinst-Margen» welche gehandelt werden.

Geplanter Launch: Go Live 1

**Read API**

Buy Order Input: API HTTPS Request Highest Bid plus 1 Rappen = Output x  
Sell Order Input: API HTTPS Request Lowest Sell minus 1 Rappen = Output y

X = Buy Price

Y = Sell Price

Amount = 1 ETH

Filter

Highest Bid / Lowest Sell above 1 LTC volume

Watchdog is active when SELL/BUY balance < 1 ETH

X = Highest Bid => Still good

X < Highest Bid => Cancel oldest order

Y = Lowest Sell => Still good

Y > Lowest Sell => Cancel oldest order

Engine PaiRiT: Algorithmus 2 – Pair the Pair

Read XML

Provide Array for RTDF

**Triangular arbitrage** (also referred to as **cross currency arbitrage** or **three-point arbitrage**) is the act of exploiting an [arbitrage](https://en.wikipedia.org/wiki/Arbitrage) opportunity resulting from a pricing discrepancy among three different [currencies](https://en.wikipedia.org/wiki/Currency) in the [foreign exchange market](https://en.wikipedia.org/wiki/Foreign_exchange_market).[[1]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Carbaugh_2005-1)[[2]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Pilbeam_2006-2)[[3]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Aiba_et_al._2002-3) A triangular arbitrage strategy involves three trades, exchanging the initial currency for a second, the second currency for a third, and the third currency for the initial. During the second trade, the arbitrageur locks in a zero-risk profit from the discrepancy that exists when the market [cross exchange rate](https://en.wikipedia.org/wiki/Exchange_rate) is not aligned with the implicit cross exchange rate.[[4]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Madura_2007-4)[[5]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Eun_&_Resnick_2011-5) A profitable trade is only possible if there exist market imperfections. Profitable triangular arbitrage is very rarely possible because when such opportunities arise, traders execute trades that take advantage of the imperfections and prices adjust up or down until the opportunity disappears.[[6]](https://en.wikipedia.org/wiki/Triangular_arbitrage#cite_note-Ozyasar_2013-6)

Algorithmus 3 – Bonus – in development

Wertvermehrung für kurzfristige Anlagen in der semiautomatischen «Engine». Fix eingerichtete Berechnungen zu Kurvenprognosen und ausnutzen von Standardabweichungen.

Abstrakte Klasse, Superklasse, Vater

Konkrete Klasse, erbt

I think this text is not the newest version:

The Bid-Ask Spread

The bid-ask spread is a reflection of the supply and demand for a particular asset. The bids represent the demand, and the asks represent the supply for the asset. The depth of the bids and the asks can have a significant impact on the bid-ask spread, making it widen significantly if one outweighs the other or if both are not robust. Market makers and traders make money by exploiting the Bid-Ask Spread and the depth of bids and asks to net the spread difference.

## The Bid-Ask Spread's Relation to Liquidity

The size of the bid-ask [spread](http://www.investopedia.com/video/play/spread/) from one asset to another differs mainly because of the difference in [liquidity](http://www.investopedia.com/terms/l/liquidity.asp) of each asset. Certain markets are more liquid than others. For example, currency is considered the most [liquid asset](http://www.investopedia.com/terms/l/liquidasset.asp) in the world, and the Bid-Ask Spread in the currency market is one of the smallest (one-hundredth of a percent); in other words, the spread can be measured in fractions of pennies. On the other hand, less liquid assets, such as small-cap stocks, may have spreads that are equivalent to 1 to 2% of the asset's lowest ask price.

**Glossar**

Blockchain Transaktion Jede Transaktion wird in einem Block auf der Blockchain gespeichert und kann optional eine Nachricht enthalten.  
  
Bei einer Transaktion wird eine Nachricht hinzugefügt, damit der Admin weiss, wohin er die Email zustellen soll.

Wenn der Kunde über ein Blockchain Zahlung in der Currency

**Glossary**

**Address**

A Bitcoin address looks like a long string of random letters and numbers. Addresses are used when you want to send or receive Bitcoins. Each wallet has at least one receiving and one sending address. When you want to receive Bitcoins to your wallet you need to give the sender your receiving wallet address.

**AML and KYC**

Anti-Money Laundering and Know Your Customer is a group of laws in the United States that require Bitcoin sellers to know who their customers are. Certain sellers will ask for your identification to comply with these laws. Other countries around the world may have similar laws and requirements.

**Blockchain**

The Blockchain is the technology behind Bitcoins. It’s what makes it work. Bitcoin transactions are sent to the Blockchain so that miners can put them into the blocks that they mine. Once a block containing your transaction is mined it has been added to the Blockchain and your transaction receives one confirmation.

**Blockchain.info**

Not to be confused with the Blockchain, blockchain.info is one of many websites that work as Blockchain explorers. These websites allow you to ‘see’ the Bockchain and what’s going on in it. In practical terms this lets you view your transactions and see if they are confirmed or not. You can also check to see how many unconfirmed transactions there are, the more the longer it will take for your transaction to become confirmed.

**Bitcoin Block**

A Bitcoin block is one “link” in the Blockchain. One block contains a group of Bitcoin transactions that have been confirmed. When Bitcoin miners ‘mine’ these blocks they calculate through computer algorithms which when put in the Blockchain, confirms transactions. In turn miners receive transaction fees and newly created Bitcoins for confirming transactions.

**BTC/Coin**

BTC is the acronym for Bitcoin. Coin, coins et. al. are also slang terms for Bitcoin.

**Circle/Coinbase**

Two Bitcoin exchanges based in the U.S. that require you to verify your identity before being allowed to trade, along with other limitations.

**Cold storage/Cold wallet**

This refers to a way of storing Bitcoins in a safe and secure way, offline. This is also how the clear majority of Bitcoins LocalBitcoins hold on to are stored.

**Confirmation**

For a Bitcoin transaction to be completed it needs to be confirmed. Good habits are to wait for at least 3-6 confirmations before you can consider a transaction good. A confirmation happens when a transaction has been added to a block that Bitcoin miners successfully mine.

**Exchange**

An exchange is a platform/service where users can change one type of currency for another.

**Fiat**

Fiat comes from Latin and means “let it be done” or “it shall be”. It’s used as a term to mean all currencies that derive their value from governmental regulation or other central authorities.

**Hot wallet**

The opposite of a cold wallet / cold storage. A hot wallet is located on a computer connected to the internet. At LocalBitcoins the hot wallet is where we store a small number of Bitcoins at a time. It’s from here where your transactions are sent. We only keep a very small amount of Bitcoin here to protect ourselves from hackers.

**LBC**

LBC is where you are, it’s the acronym for LocalBitcoins :)

**Mining**

This is what Bitcoin Miners do to confirm transactions and add them to the Blockchain. When a Bitcoin miner mines, he uses computers to do difficult calculations which answers are easily proven to be correct. This way, when a miner completes a calculation anyone can easily see that the miner has done work. This work can then be used to create a Bitcoin block. What miners get in return from mining is new Bitcoins and transaction fees.

**Multisig**

Multisignature, often heard in combination with wallet. A multisignature wallet is one that has several cryptographic keys concerned with it. This way if you have two of three keys, say, you can move money out of it. But with only one you cannot do anything.

**P2P**

Peer-to-Peer. It’s a form of network structure. Rather than having everything go via a centralized node, in a peer-to-peer structure everything goes from user to user. There’s no centralized hub to rely on.

**Satoshi**

A Satoshi is the smallest amount of Bitcoin that can be sent, or 0.00000001 BTC.

**Satoshi Nakamoto**

The pseudonym of the person who invented Bitcoin. No one knows who he is, but he does own quite a nice amount of BTC.

**SEPA**

Single Euro Payment Area, SEPA transfers are a special kind of bank transfers within the EU.

**Transaction**

A Bitcoin transaction, the actual act of moving Bitcoin from one wallet to another.

**Transaction fee**

Since the Bitcoin miners work to confirm your transactions, they won’t do this for free. Rather you pay a tiny amount of Bitcoin to them to help them continue to confirm. Therefore each time you move Bitcoin, it costs a tiny bit.

**txid**

Transaction Id. This is a long string of numbers and letters that is the ID of a single transaction. It’s handy to know as you can paste this into a Blockchain explorer and see what’s up with your transaction. It’s mainly used to see how many confirmations a transaction has.

**Wallet**

The place where you store your Bitcoins. This can be quite confusing to new users, but a wallet is essentially just a Bitcoin address. A Bitcoin wallet can exist on a service such as LocalBitcoins, in an app on your phone or computer, or even on a piece of paper! As it’s just a series of numbers and letters it does not matter where it’s stored. It’s completely OK to use your LocalBitcoins account as your wallet when you’re still new. But when you start to accumulate more and more Bitcoin you may want to think of different ways to store them.