

# Matching Engine Technology

& OMS for Crypto Spot Exchanges

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Chief Product Officer



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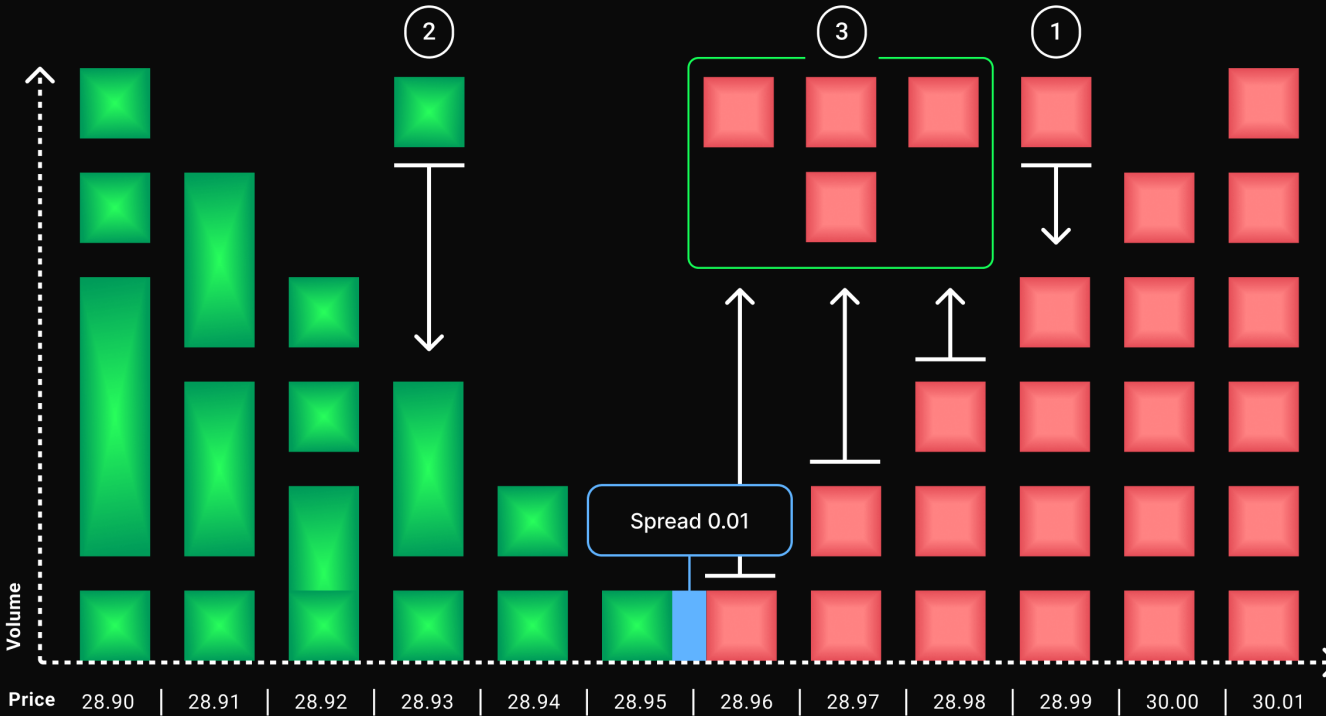
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# Matching Engine Technology & OMS How it works



■ BID ■ ASK

## ① Sell Limit Order

The limit orders are "makers" on the exchange they create liquidity & order book on the exchange. This particular sell order to sell one lot **not less than 28.99** arrives to OM, OM places it on the fourth position in the sell queue.

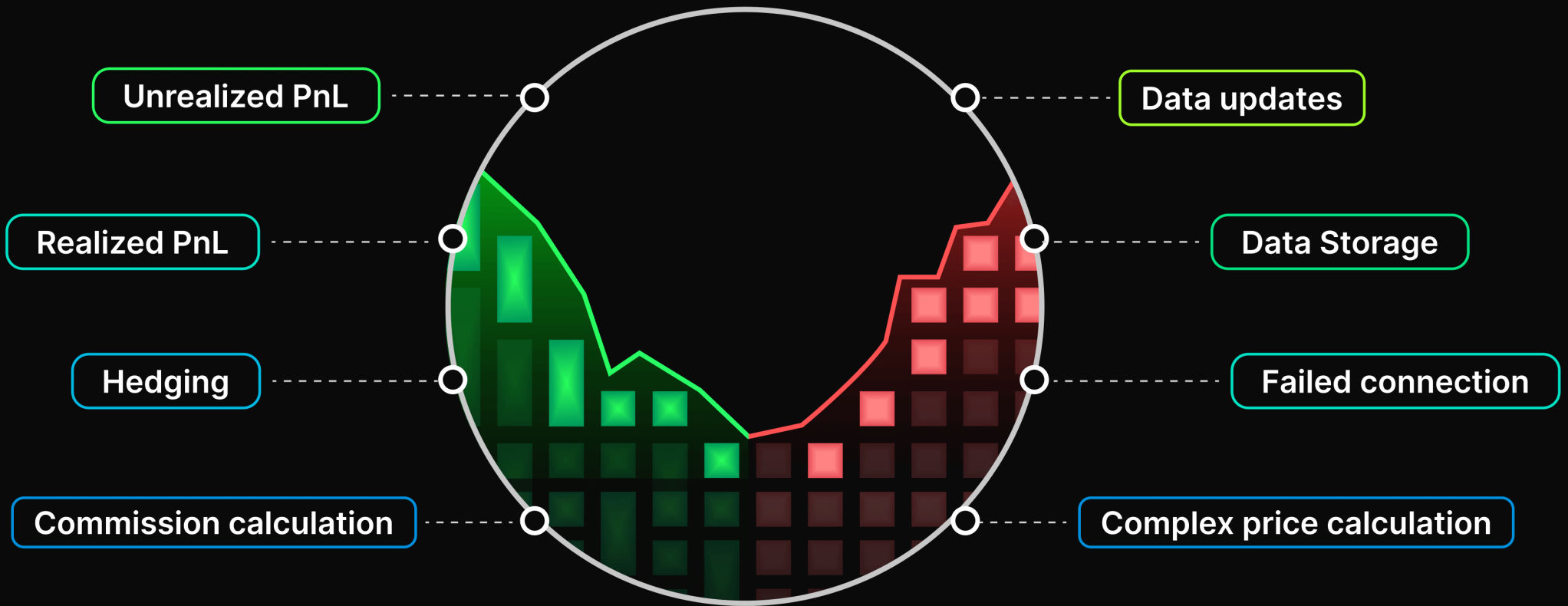
## ② Buy Limit Order

A limit order to buy one lot at the price **not more than 28.93** is send for the execution and gets into the OM, OM places it on the third position in the buy queue.

## ③ Buy Market Order

A market order is a "taker" order. They take liquidity from the market. When a market order hit the OM, it **fills the opposite limit orders** and executed by the OM immediately.

# Crypto Matcher Implementation Specifics

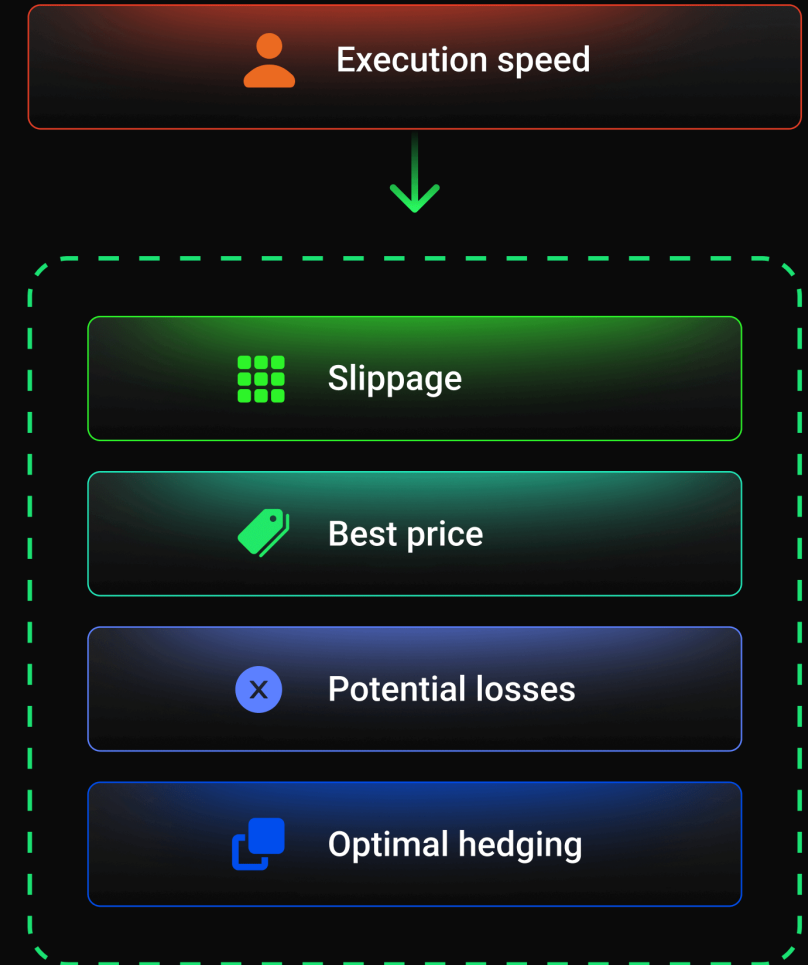


# Time & Processing Speed

Execution speed directly affects many final parameters:

- | The higher the execution speed, the lower the risk of slippage
- | The more chances to fill the top of the book, the less price changes when hedging B2Trader matching engine allow to the **trader execution speed from 12 ms.**

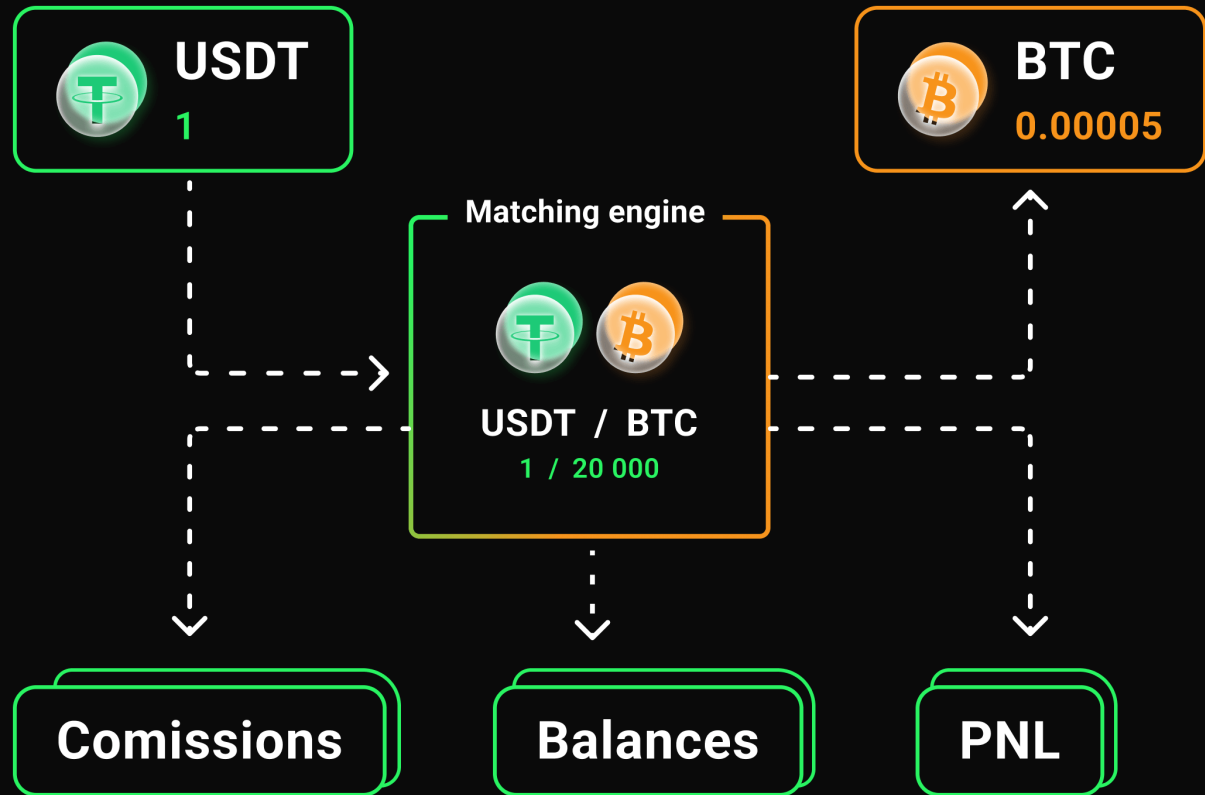
**95%** or the orders **executed less than 65 ms.**  
Instant execution for end-users.



# Maths, Calculations & Transformations

The current exchange rate of bitcoin is about \$20,000 that is, for **\$1** you can **buy 0.00005 BTC**

In addition to the conversion, OM performs real-time calculation of P&L, commissions, and balances. Order status changes. Trades are calculated and linked to the orders



# Crypto Spot Exchange Components





# Advanced User Interface

## WorkSpace Settings

- WorkSpaces Configuration
- Dark/Light Mode
- Interactive Tutorial
- Widgets Addition/Removal

## Trading View Widget

- Graph Display
- Indicators
- TimeFrame Configuration

## Orders History

- Open Orders
- Closed Orders
- Inactive Orders



## Assets Widget

## OrderBook

- Order Placement
- Volumes Display
- Grouping

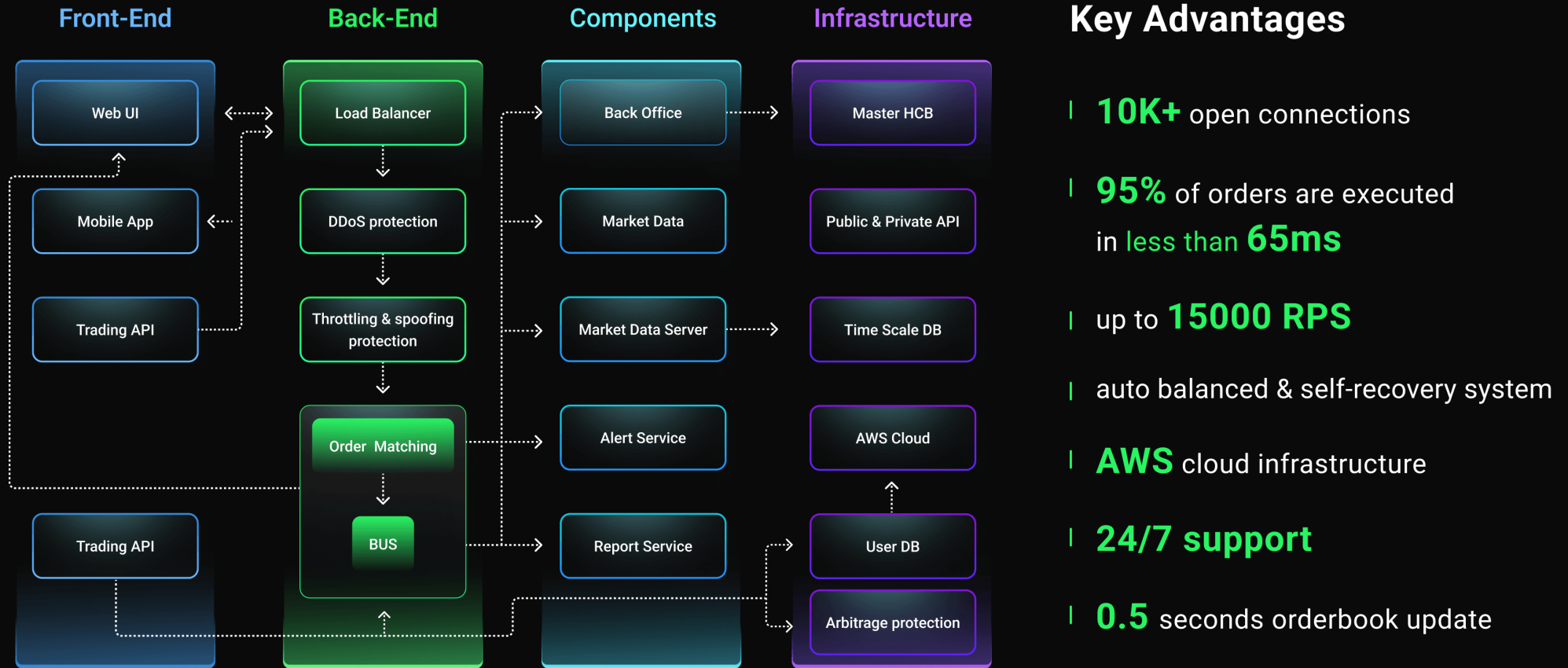
## Trades History

## Order Placement Widget

- Marks Orders FOK & IOC
- Limit Orders
- Stop Orders

## Market Depth Widget

# B2Trader™ Matching Engine Infrastructure





# B2Trader™ Back Office System

## Transfers

Email	Asset	Type	Amount	Rate to USD	Amount, USD	External ID	Transfer ID	Role	Status	Created At
gloria.deckow@hotmail.com	Bitcoin	Withdrawal	404.51	404.51	404.51	943	4562238	Trader	Completed	22.12.18 11:38
gerlach.daniel@gmail.com	EOS	Deposit	3000.00	3000.00	3000.00	743	4562238	Trader	Completed	22.12.18 11:38
trucken@hotmail.com	DASH	Deposit	5,950.74	5,950.74	5,950.74	194	4562238	Trader	Completed	22.12.18 11:38
skesler@johnson.biz	Bitcoin	Deposit	876540.00	876540.00	876540.00	634	4562238	Trader	Completed	22.12.18 11:38
hooops@hotmail.com	ETH	Deposit	546.66	546.66	546.66	934	4562238	Trader	Completed	22.12.18 11:38
breema00@yahoo.com	USDT	Deposit	84311.06	84311.06	84311.06	763	4562238	Trader	Completed	22.12.18 11:38
gja.hackert@yahoo.com	XMR	Deposit	6765.00	6765.00	6765.00	440	4562238	Trader	Completed	22.12.18 11:38
koz2@krem.com	DASH	Deposit	678645.90	678645.90	678645.90	511	4562238	Trader	Completed	22.12.18 11:38
rogahn.friedrich@hotmail.com	LTC	Deposit	84311.06	84311.06	84311.06	818	4562238	Trader	Completed	22.12.18 11:38
caroline.gottlieb@wegand.info	ETH	Deposit	5,950.74	5,950.74	5,950.74	137	4562238	Trader	Completed	22.12.18 11:38

## Balances

Asset	Asset Amount	Asset Amount, USD	Scale	Created At	
ETH	Etherium	404.51	404.51	8	22.12.18
BCH	Bitcoin Cash	3000.00	3000.00	8	22.12.18
XMR	Monero	5,950.74	5,950.74	8	22.12.18
BTC	Bitcoin	876540.00	876540.00	8	22.12.18
XRP	XRP	546.66	546.66	8	22.12.18
LTC	Litecoin	582325.03	582325.03	8	22.12.18
EOS	EOS	6765.00	6765.00	8	22.12.18
DASH	Dash	678645.90	678645.90	8	22.12.18
USDT	Tether	84311.06	84311.06	8	22.12.18
ETH	Etherium	404.51	404.51	8	22.12.18

## Logs

Timestamp	E-mail	Role	Operation
30.07.21 16:09:09	gerlach.daniel@gmail.com	Trader Admin	Reward request
30.07.21 16:09:09	Admin.silas.nervim@hotmail.com created user shopop@gmail.com		
30.07.21 16:09:09	gerlach.daniel@gmail.com	Trader Admin	Budget credited
30.07.21 16:09:09	gerlach.daniel@gmail.com	Trader Admin	Reward denial
30.07.21 16:09:09	gerlach.daniel@gmail.com	Trader Admin	Reward request
30.07.21 16:09:09	Admin.silas.nervim@hotmail.com created user shopop@gmail.com		

## Users

Email	Commission Group	Status	Current Balance, USD	Total Commission, USD	Total Traded Volume, USD	Realized PnL, USD
franecki.lina@yahoo.com	Group 1	Frozen	1223.12	1223.76	423.21	131.99
ekertzmann@gmail.com	No name	Terminated	342.74	765.12	133.04	312.25
dajja49@dach.biz	Draft	Active	53.83	536.79	24.75	78.21
malika.considine@bechtelar.com	Commission 0	Frozen	85.00	342.74	423.21	132.00
daren87@breitenberg.net	VIP	Frozen	765.12	234.86	681.32	425.56
fschillier@hotmail.com	Draft	Terminated	78.21	1223.76	85.00	86.23
leonardo86@yahoo.com	Group 1	Active	536.79	312.25	2474.97	132.00
leon.casper@fritsch.com	Group 1	Active	133.04	86.23	876.54	342.74
daren87@breitenberg.net	Group 1	Active	536.79	342.86	765.12	78.21
hooops@hotmail.com	Group 1	Frozen	133.04	78.21	86.23	534.86

## Comissions

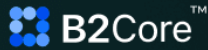
Asset	Current Asset Amount	Total Asset Commission	Current Amount, USD	Total Commission, USD	Total Traded Volume, USD	Realized PnL, USD
Bitcoin	479.54	964.42	195,768.22	964.42	11.93	172.22
EOS	964.42	3,546,326	964.42	479.54	479.54	252.95
DASH	3,546,326	479.54	479.54	2,014,563	856,43.43	724.95
LTC	856,43.43	195,768.22	2,014,563	856,43.43	30.02	1,439.59
ETH	11.93	2,014,563	30.02	195,768.22	964.42	573.47
USDT	843,11.06	856,43.43	843,11.06	2,014,563	399.81	
XMR	195,768.22	11.93	11.93	30.02	843,11.06	712.08

## PnL

All	Trader	VIP					
Total Commission (USD)	32,044,381.49	Total Volume (USD)	23,044,381.49	Total PnL (USD)	12,044,381.49		
E-Mail	Role	Status	Ag. Balance (USD)	Commissions (USD)	Traded Volume (USD)	Realized PnL (USD)	Unrealized PnL (USD)
franecki.lina@yahoo.com	Trader	Frozen	1223.12	1223.76	423.21	131.99	131.99
ekertzmann@gmail.com	Trader	Terminated	342.74	765.12	133.04	312.25	312.25
dajja49@dach.biz	Trader	Active	53.83	536.79	24.75	78.21	78.21
malika.considine@bechtelar.com	Trader	Frozen	85.00	342.74	423.21	132.00	132.00
daren87@breitenberg.net	VIP	Frozen	765.12	234.86	681.32	425.56	425.56
fschillier@hotmail.com	Trader	Terminated	78.21	1223.76	85.00	86.23	86.23
leonardo86@yahoo.com	Trader	Active	536.79	312.25	2474.97	132.00	132.00
leon.casper@fritsch.com	Trader	Active	133.04	86.23	876.54	342.74	342.74

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## In-House Development SAAS Technology Systems



- Trader's Room & CRM
- Client's Portal
- Back Office



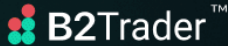
- Affiliate System
- Introducing Brokers Software
- Module of Partnerships Program



### Mobile App

iOS & Android

- For B2Core & B2Core IB
- For B2BinPay
- For B2Trader



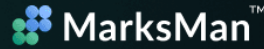
Spot Exchange Trading Platform

- Matching Engine
- Pure Order Book
- Trading API



Money Management Platform

- Copy Trading
- PAMM & MAM
- Social Trading



Liquidity Hub

- Bridge to Spot Exchange
- Bridge to Perpetual Futures

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## 11 Offices

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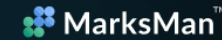
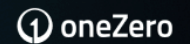
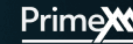
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## White Label Trading Platforms. BAAS (Broker as a Service)



Liquidity Hubs



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## Prime of Prime Multi-Asset Liquidity



- FOREX
- Indices
- Metals
- Commodities
- Crypto CFD

Regulation: CYSEC (Cyprus, EU), FSC (Mauritius)

## Digital Assets Exchange



- Corporate Clients
- Institutional Clients
- Professional Clients
- USD, EUR, GBP Settlement

B2BX.exchange

Regulation:  
FIU (Estonia, EU)

## Digital Assets Processing



Digital Assets Processing

- Merchants
- Enterprise
- Wallets
- Blockchain Infrastructure
- Custody Service

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Regulation:  
FIU (Estonia)

## Digital Banking Services



- Virtual IBANs
- Business Accounts
- Payment in Open Banking Environment

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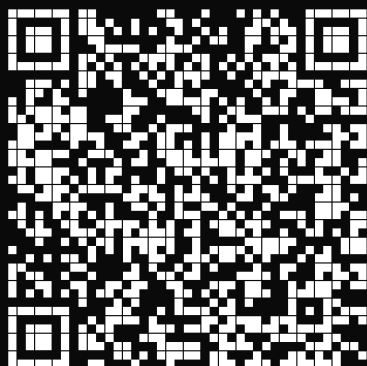
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## Venture Capital Fund



- Startups (IT & Digital assets)
- M&A Market

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