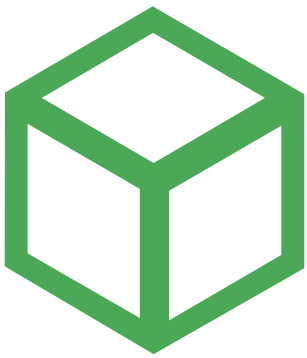


Rubic

Whitepaper ver. 1

Contents

Executive Summary

New DeFi market

In January 2021, the amount of assets blocked in the DeFi protocols exceeded $ 22 billion.

The DeFi Pulse analytical resource. This is an absolute record, and this value has increased since September twice. It is obvious that DeFi has now become one of the fastest growing and most relevant trends in the world of cryptocurrencies.

By September, the amount of assets blocked in DeFi protocols exceeded $7 billion, according to the DeFi Pulse analytical resource. This is an absolute record, while since June the figure has increased seven times. It is obvious that DeFi has now become one of the fastest growing and most actual trends in the world of cryptocurrency.

At present, the development of DeFi products is limited by the infrastructure of Ethereum blockchain and cross-chain issues. To solve the problem of total dependence on the native blockchain, Rubic. finance is developing a cross-chain solution for DeFi.

The basis of the Rubic project is a protocol for exchanging and receiving revenue while providing liquidity and business services. Rubic organizes DeFi services to enable a project to create, manage and trade tokens in a decentralized manner in one place and to ensure cross-chain compatibility.

Rubic's features

- Multichain support (currently supported blockchains: Ethereum, Binance Smart Chain, Polygon & TRON)
- P2P swaps (via Order Book)
- Instant Swaps (Ethereum, BSC, Polygon)
- Cross-chain Swaps (BSC-Ethereum, Polygon-Ethereum, Ethereum-BSC-TRON)
- Option to lock liquidity until trade is closed
- DEX / Liquidity aggregators
- No volume limits
- Ability to make crowdsales
- Public/Private deals
- No need to list token
- Investors get % from every successful trade
- % of platform revenue can be regulated
- Brokers support
- Decentralized OTC platform
- Limit orders for Ethereum
- Creation of Custom Bridges
- iFrame Widget
- Custom routing

Rubic's platform is a place where users can complete cross-chain swaps using multiple solutions, and in the process, they will get the best rates from all leading protocols (thanks to a DEX aggregator implementation), as well as P2P swaps within our Order Book where users can make deals on their own terms.

Rubic continues to build a grand ecosystem and connect different blockchains in one place — Rubic's platform.

Introduction

How DeFi works and its distinctive features

Decentralized finance is a digital ecosystem that operates based on the Blockchain technology, like the cryptocurrencies Bitcoin or Ethereum rely on. But unlike cryptocurrency payment systems like Bitcoin and Ether, DeFi services use derivative cryptographic assets - tokens. These are digital accounting units, issued on the basis of already operating blockchain-type platforms like Ethereum.

Characteristics of DeFi.

1. **Resistance to censorship.** Storage, transfer and exchange of tokens cannot be limited to a narrow group of players responsible for network maintenance.

2. **Program assets.** Assets that make up a DeFi product must have the attributes of standard tokens in a decentralized network.

3. **Pseudonymity.** DeFi applications must use Web 3.0 standards for transaction confirmation and identification. This means that users use only the private access key with which they sign their transactions and confirm ownership of assets by analogy with Bitcoin. No additional user identity verification (KYC/AML) is required.

4. **Transparency and reliability.** The holder of a DeFi asset can be found and verified with the help of a block quote. DeFi- service should not store user funds on large centralized cryptocurrency exchange wallets. Operations involve independent electronic wallets such as Trust Wallet, imToken and Coinbase Wallet, as well as smart contracts.

5. **Lack of permission.** Users can issue, trade and own DeFi-assets without the approval of the banking regulator.

The audience of the platform.

How our service can be used for our main target audience:

1. Traders and token holders
Rubic provides a full list of the services needed for users, who would like to manage crypto assets on the most popular blockchains and p2p exchanging services in a decentralized and open way. Users can execute instant swaps, p2p trades, limit orders (upcoming) or participate in pools - almost everything needed for trading (except margin trading).

2. Brokers

Brokers can easily set up a trade by adding Brokers % and share the trade's link either with the public or make it private. The commission is set inside the trade which makes it transparent for all parties.

Also, the intermediary, which selects and evaluates the transaction, can choose the most favorable deal on the platform and get their commission from it.

3. Projects and project owners

Rubic provides a list of ready to use solutions for token creation (on any popular blockchain), token sale contracts, airdrop tools, and many others. After asset creation, the project owner can instantly list it on the platform, and trade in a p2p manner (via Order Book). The platform provides a liquidity lock option - to provide more guarantees to token holders.

4. Exchanges and OTC companies

Crypto exchange platforms can leverage Rubic's Order Book feature to enable transparent trades within a highly secured environment. The exchanges can redirect their clients in an organized way to a bargain for a profitable transaction and take their percentage for it.

A special feature is that it will be decentralized and secure. OTC companies can also use a more advanced and convenient service that can be implemented directly to the site using the API protocol.

5. Investment groups

- Hedge funds - investment fund representing a pool of assets of investors
- Family offices - private independent organization providing services to family assets
- Private investors - holders of large cryptocurrency stocks

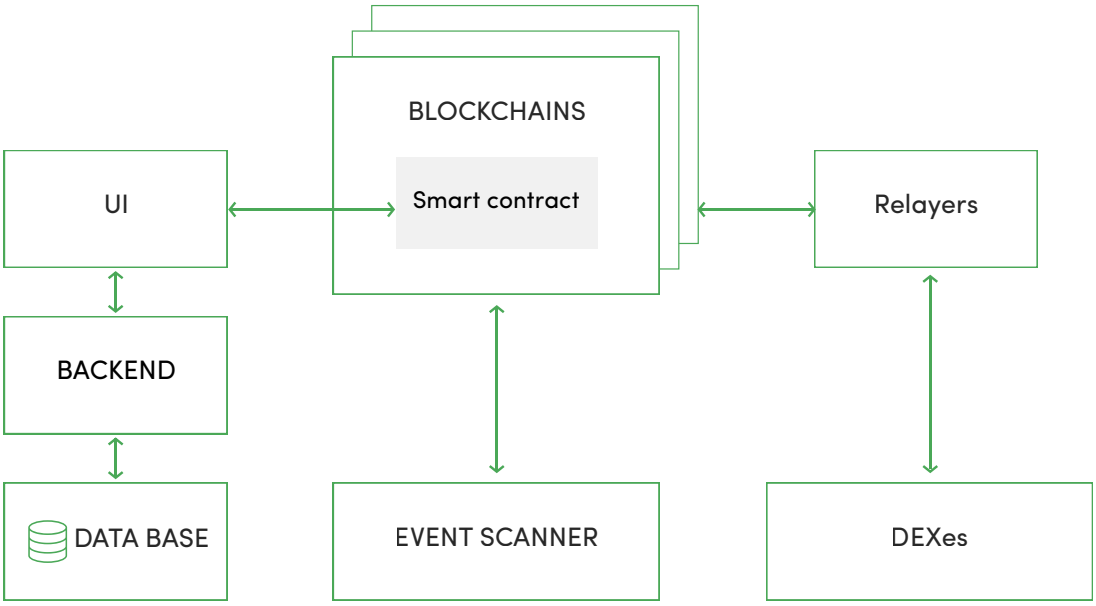
Advantages of use:

- exchange large amounts of investment in tokens within a highly secure platform
- trade any pairs increasing capital at a favorable rate
- increase the wealthy safely

Description of the platform

Logically, the platform can be represented in the form of the following modules:

- Smart contract registering and executing swaps (depending on the blockchain, the corresponding programming languages are used)
- Interface for creating and managing transactions (using Angular 7 framework)
- Blockchains event scanner (uses Python 3)
- Database and back-end for managing transactions (using Python 3 (Django 1.11) and PostgreSQL database)
- Relayers for pushing transactions to external DEXes
- External DEXes (like uniswap or curve)



Consider each of these modules in more detail.

1. Smart Contract

Rubic's smart contracts can be found here: https://github.com/Cryptorubic

Single smart contract for all transactions.

With this approach, the creation of a trade is a transaction of calling a smart contract with its parameters. That is, one smart contract handles all requests for the creation, management and participation in transactions.

The parameters of the transaction to create a transaction:

- Unique ID Swap
- Token 1 address
- Token 2 address
- Number of Tokens 1
- Number of tokens 2
- Managing address of the transaction
- Minimum possible contributions
- Permanent flag
- Public/Private flag
- Brokerage percentage of token 1 and/or token 2 address for a broker commission
- Extra options

Pros of this approach

- Low cost swap creation
- High swap creation speed
- Trust in the smart contract, due to a large number of transactions

Cons of this approach

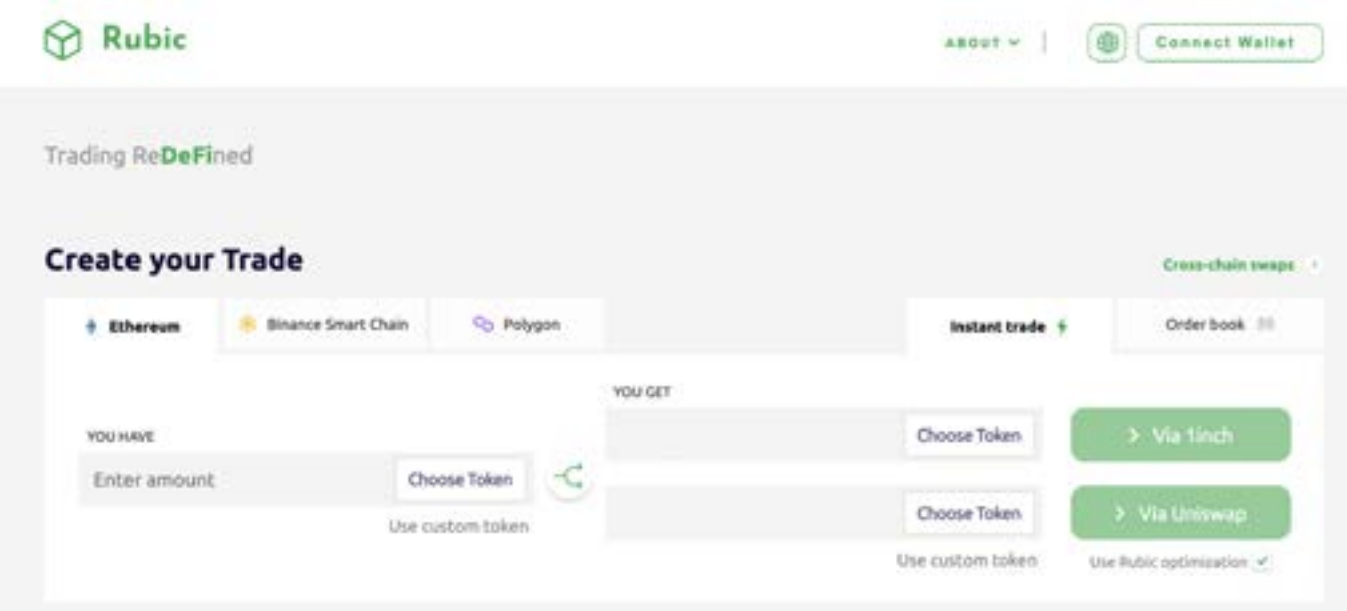
- The ability to simply track transactions

To mitigate the ability to track Anonimizer tool plan to be developed which will hide not only amount of the trade but also trading pair.

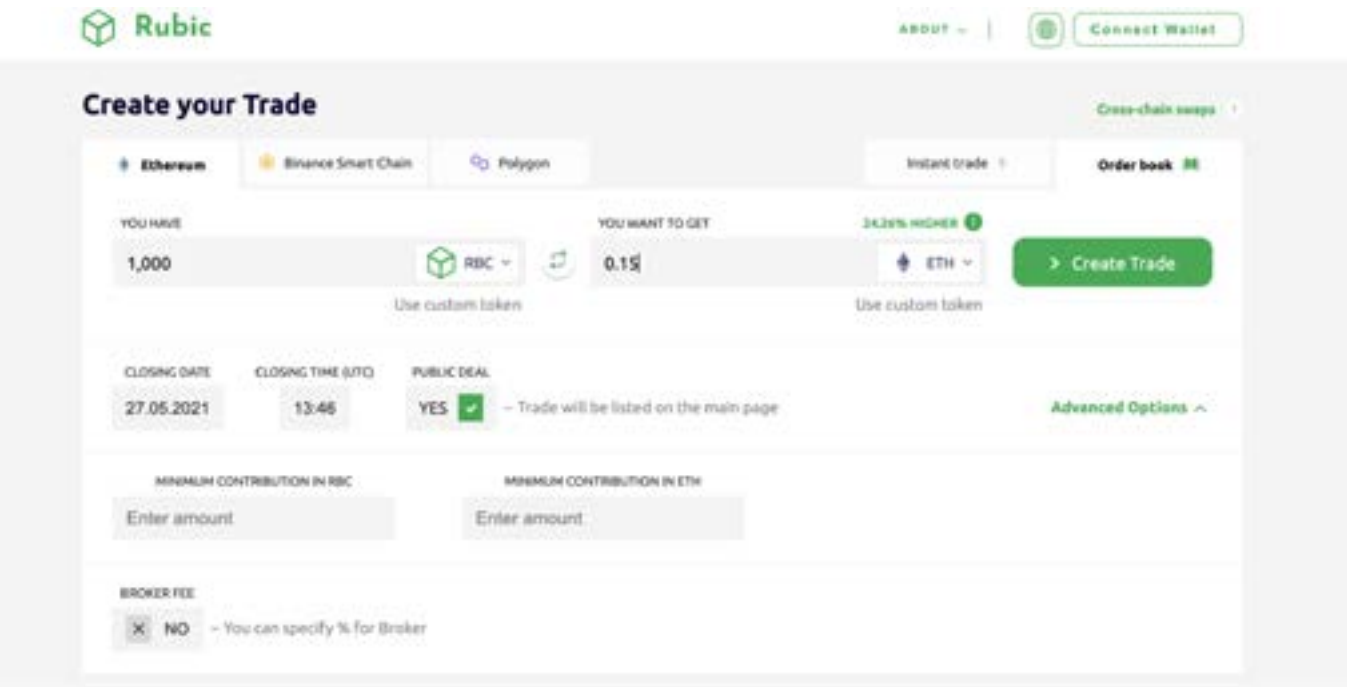
2. Interface

The service interface is implemented as a web page that supports mobile layout thanks to responsive design. The service is convenient to use on almost all mobile devices, which can support a resolution of 320x640.

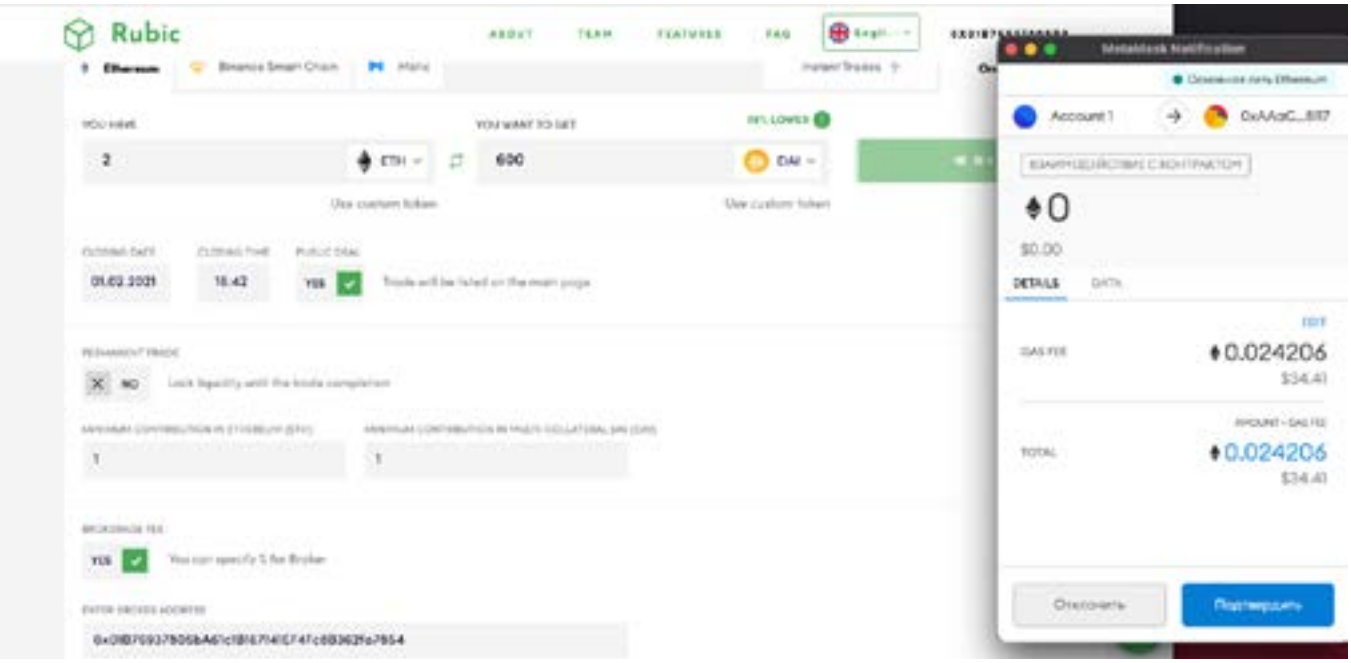
Step 1. Select tokens and exchange direction



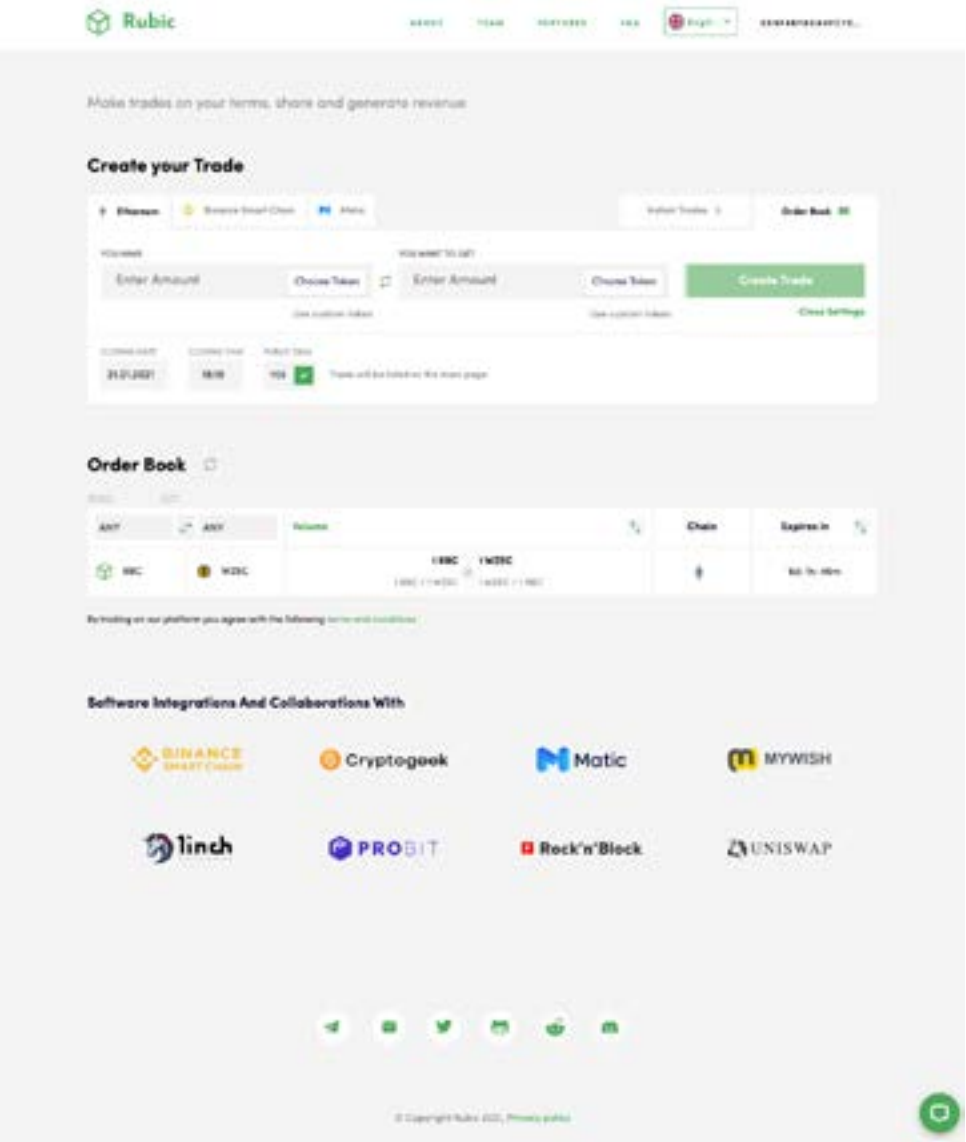
Step 2. Setting the parameters of the transaction



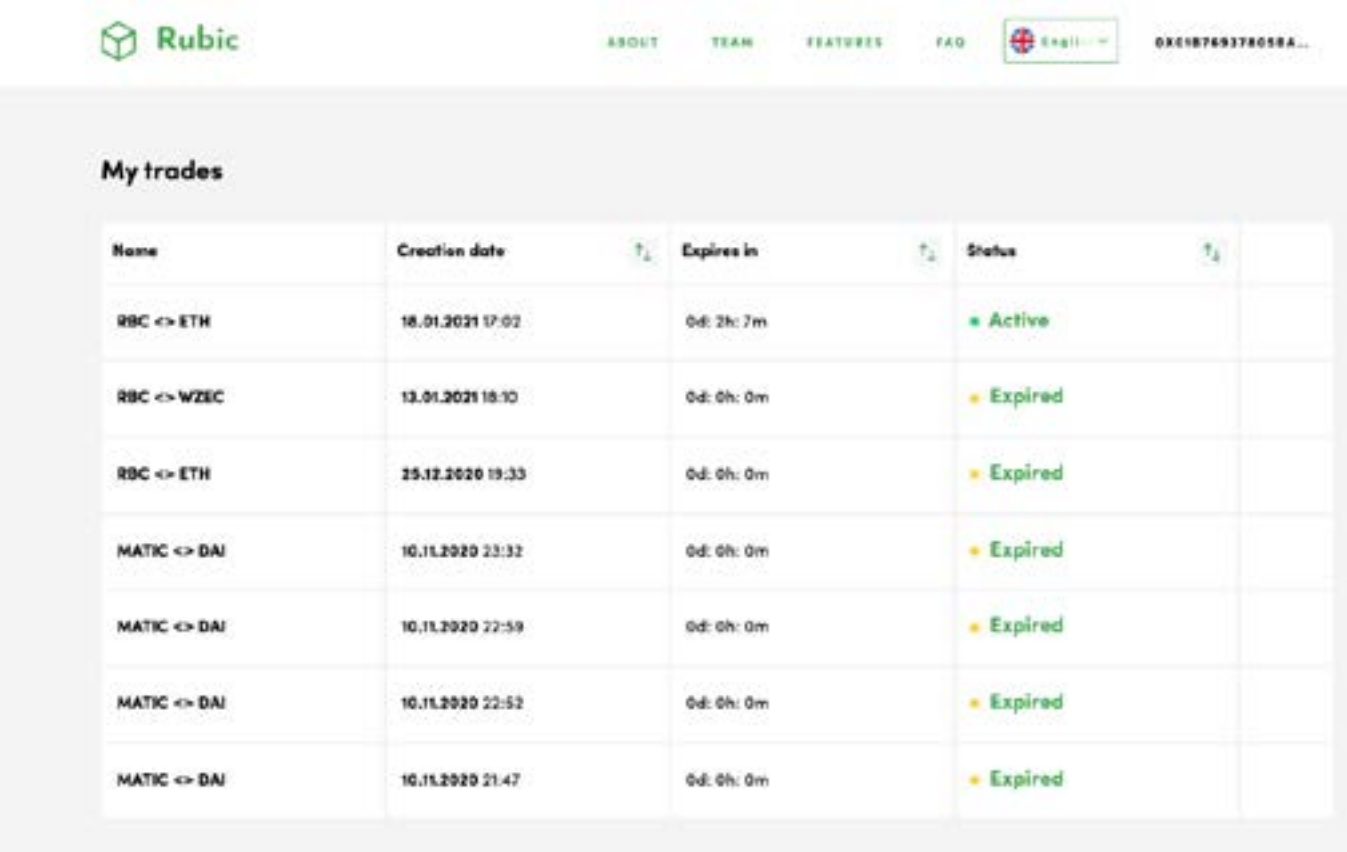
Step 3. Initialization of the transaction



Step 4. Managing the transaction



Step 5. Create and Manage all of your trades



You can see how it's shown in live version: https://rubic.exchange/

3. Blockchain event scanner

The project uses public nodes of each blockchain. In some cases, for reliable operation, own nodes are deployed (for example, own nodes are used for Ethereum and NEO). The scanner is a service for monitoring blocks and transactions in the blockchain.

Scanner source code: https://github.com/Cryptorubic/rubic_backend

4. Backend and Database

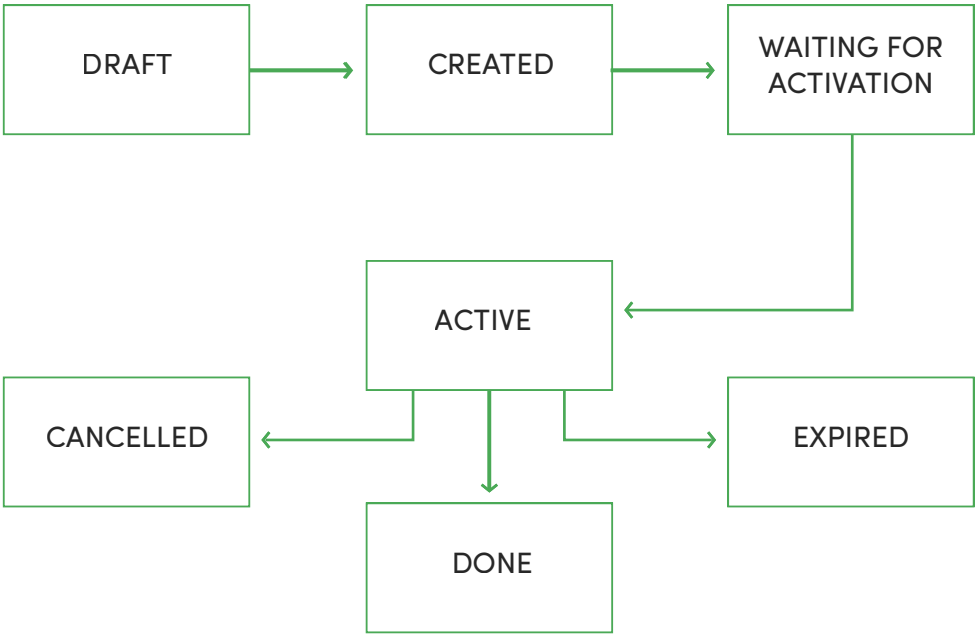
The Scanner works with Rabbit MQ and with own library Receiver - Its task is to receive events and distinguish them by type and then call the corresponding method.

Celery is used - asynchronous task queue.

For the basic functions of the service (user model, registration, etc.), the standard Django Rest Framework library is used.

Scanner source code: https://github.com/Cryptorubic/rubic_scanner

Trade Life-Cycle



The transaction has the following states:

- *Draft:* a swap is in the process of being created; swap in this state are not saved in the database.
- *Created:* the user has filled in all the necessary parameters. In this state, the swap is first stored in the Database. There is a binding connection to the user account.
- *Waiting for Payment / Waiting for Initialization:* A transaction is pending payment or initialization.
- *Active:* The swap is activated and ready to be executed. Available features deposit and refund, and cancel the swap by the author.
- *Cancelled:* The swap is cancelled by the author of the transaction. The only function available is a refund.
- *Done:* The swap was successful, all funds are distributed among the participants.
- *Expired:* The terms of the swap were not fulfilled before the expiration date. The only function available is a refund.

Competitors

The P2P Trade market exists for many years now. There are different companies who have created their own solutions for P2P/OTC trading.

We could break these into 2 main groups:

1. Centralized (Circle, itBit, Grapefruit Trading, etc)

2. Decentralized (AirSwap, SwitchEO, Tokrex, etc)

We understand that crypto exchanges want to participate in the OTC market and we could consider them our competitors. However, we think that their business's models contrast the OTC mode.

So below we will mostly compare our service with decentralized services because centralized OTCs have problems such as escrow, trust and most of the decentralized services solve them.

We could divide competitors into 2 groups:

- The first group creates an exchange service on an existing blockchain using its functionality.

- The second, develops its own product, which is an interlayer between users and blockchains.

Amongst these two groups, the most popular solutions on the market are projects based on a single blockchain.

DeFi Area/ Competitors	Rubic	Uniswap	1inch	Pancake Swap	Sushi-Swap	DODO	Airswap	Kyber-swap
P2P / Peer to Peer	✓	✓	✓	✓	✓	✓	✓	✓
Instant trades	✓	✓	✓	✓	✓	✓	—	✓
Multiple participants at 1 deal (Order Book)	✓	—	—	—	✓	—	—	—
Limit orders	✓	—	✓	—	✓	—	✓	✓
Custom token	✓	✓	✓	✓	✓	—	—	—
Choose ddl of your deal	✓	—	—	—	—	—	✓	—
Choose your rate	✓	✓	—	—	—	—	✓	—
Smart Contract integration	✓	✓	✓	✓	✓	✓	✓	✓

DeFi Area/ Competitors	Rubic	Uniswap	1inch	Pancake Swap	Sush-iSwap	DODO	Airswap	Kyber-swap
Multi-chain:								
Ethereum	✓	✓	✓	✓	✓	✓	✓	✓
BSC	✓	—	✓	—	—	—	—	—
Polygon	✓	—	—	—	—	—	—	—
Cross-chain swaps	✓	—	—	—	—	—	—	—
Rubic Bridge for projects	✓	—	—	—	—	—	—	—
Own Routing	✓	✓	✓	✓	✓	✓	✓	✓
Own Routing including calculation of gas fees	✓	—	✓	—	—	—	—	—
Layer 2	Q2	Uniswap v3	—	—	—	—	—	—
Anonymizer	Q2	—	—	—	—	—	—	—
Private deals - Order Book	✓	✓	✓	✓	✓	✓	✓	✓
Providing liquidity	—	✓	✓	✓	✓	✓	✓	—
Deposit	—	✓	✓	✓	✓	✓	✓	✓
Building an Oracle	—	✓	—	—	—	—	—	—
App version	—	—	—	—	—	—	—	✓
Multiple tokens	✓	✓	✓	✓	✓	✓	✓	✓
Multilingual service	✓	✓	✓	✓	—	—	—	✓
Multiple wallets	Q2	✓	✓	✓	✓	✓	—	✓
Fees	Low	Low	Low	Low	Low	Medium/ depens on the rate	No fees	Quite high/ depens on the rate
Live	Live	Live	Live	Live	Live	Live	Live	Live

Tokenomic

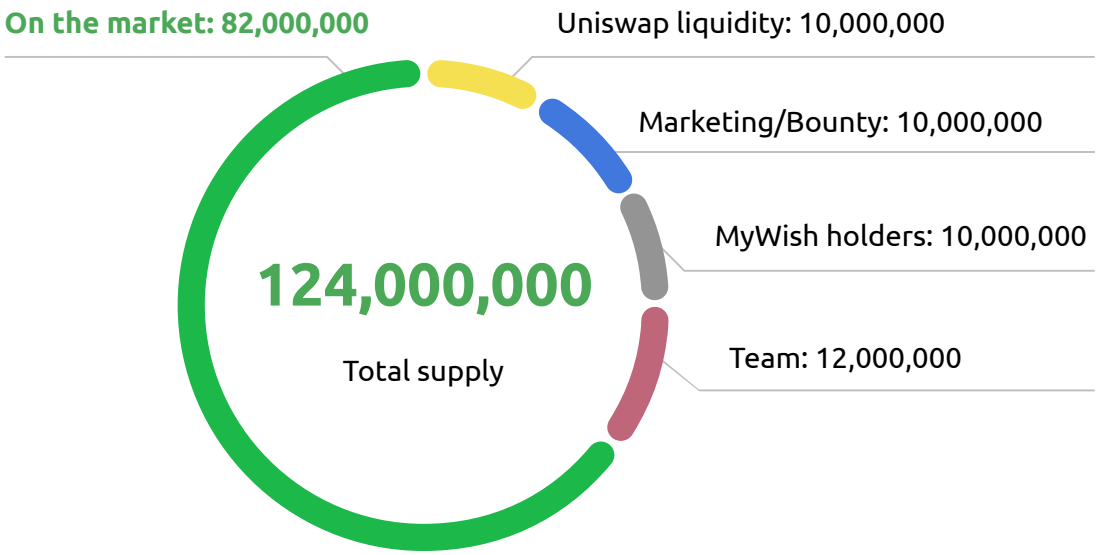
Rubic platform has an ERC-20 token, «RBC», which is used as the fuel within the Platform.

Platform generates revenue from instant trades, brokerage fees and others. 50% of the revenue will be sent to Liquidity, while the other 50% will be used for operational needs.

Our platform will charge the users for the following operations:

- Trade creation
- Brokers function usage
- Token listing
- Crowdsale contract usage
- Others services

Accounting with Relayers, external services, marketing services are made in RBC token.



- 10% of tokens is reserved for the team. All tokens are locked, and every 3 months they will be unlocked by 2% (over a year).
- 8% of tokens is directed at conducting marketing and bounty campaigns. 4% of tokens are frozen for 4 months.
- 8% of tokens are distributed to MyWish holders and will be unlocked every 3 months by 2% (over a year).
- 66% of tokens are put up on the market.
- 8% of tokens are allocated for Uniswap Liquidity.

Use of collected funds

- 50% of the funds raised will be used to develop exchanges for each of the blockchain and cross-exchange chains. This amount includes the payment of work to developers, training, hiring and all other activities associated with the development.
- 40% of the funds raised will be used for marketing and public relations activities, including the costs of building partnerships with exchange services, conferences, and attracting traffic.
- The remaining 10% of the funds raised will be reserved for unpredictable expenses.

Roadmap

Q1. 2021

- New Blockchain & DEX integrations
- Binance Smart Chain instant trades
- Cross-chain solutions for ETH and BSC
- Mobile support
- Limit orders for ETH
- Creating BRBC and creating Rubic bridge for RBC-BRBC
- Custom token support
- Custom bridges feature
- Custom Routing System

Aprill — Q2. 2021

- Custom token support
- Custom bridges feature
- Custom Routing System
- Cross-chain solution for TRON

Q2. 2021 — May

- CoinGecko and Coin Market Cap API for ETH<>RBC
- TRON integration
- BNB Faucet
- Instant trades table
- UI simple update

June — Q2. 2021

- UI update stage 2
- New Wallets support - Wallet Connect + WalletLink (Coinbase)
- Merch Shop
- CoinGecko & CMC all pairs reporting
- FIAT integration
- Uniswap V3
- New blockchain/bridge integrations (candidates: Anyswap/xDai, HECO, Moonbeam, Fantom, Avalanche, renBTC)
- MATIC Faucet
- Usecase updates

Q3. 2021 — July

- Cross-chain routing
- New blockchain/bridge integrations
- UI update stage 3
- Commission in RBC - stage 1

August — Q3. 2021

- Commission in RBC - stage 2
- Anonymizer V1 polygon

Q3. 2021

September

- New bridge integrations
- New blockchain integrations

Q4. 2021

- Staking/Farming introduction
- Governance
- Mobile App
- API for external usage
- New blockchain integration (L2)

Multichain DeFi platform