



Xtremcoin Exchange & Native Token (\$XTR)

Open Exchange

www.xtremcoin.com



Abstract

With the emergence of crypto industry, we have seen a significant growth in open financial tools and services and primarily in exchanges. Exchanges are marketplaces that help us discover price in open supply and demand markets. As a result, exchanges create markets that are accessible to large number of participants whom can conduct transactions in a fair and efficient manner.

Exchanges are becoming more accessible today due to cryptocurrency and blockchain demand in the market. Geliyoo Bilişim as a trading and exchange software technology provider introduced a new software, Xtremcoin Exchange, designed to enable businesses and individuals to launch and operate scalable exchange platforms on their own. This is achieved by creating a dynamic trading system with a flexible setup and configuration that can host infinite number of digital assets and cryptocurrencies. The solution provides a full trading platform including matching engine, APIs, real-time data feed and market data stream all available in a customizable trading terminal.

By utilizing blockchain technology based on Ethereum's smart contract, we created an exchange token also named as Xtremcoin Token (\$XTR) which is a utility token for Xtremcoin Exchange. It creates an open ecosystem for businesses and individuals to operate and run a friction-less exchange. It would also create an opportunity for investors and other participants to allocate funds and share liquidity for exchanges through Xtremcoin Token in the distributed exchange network in an autonomous manner.

In this Whitepaper we explain the motivation behind this ecosystem. We then describe the exchange and software specification of Xtremcoin Exchange, its design and architecture as well as its components. Afterwards we discuss about the Xtremcoin open exchange and proceed with the token model and its distribution. Ultimately, future considerations, Roadmap and the conclusion to wrap up.

PLEASE NOTE THIS WHITEPAPER IS ONLY FOR EDUCATIONAL PURPOSE AND BEFORE ANY PURCHASE OF XTREMCOIN TOKEN (\$XTR), YOU ARE REQUIRED TO READ AND ACCEPT THE TOKEN PURCHASE AGREEMENT OF XTREMCOIN FOUNDATION GELIYOO BILISIM - REPUBLIC OF TURKEY INCORPORATION.

Copyright © 2021 Geliyoo Bilişim.

Without permission, anyone may use, reproduce or distribute any material in this white paper for non-commercial and educational use (i.e., other than for a fee or for commercial purposes) provided that the original source and the applicable copyright notice are cited.



DISCLAIMER

This Xtremcoin Technical Whitepaper is for information purposes only. Geliyoo does not guarantee the accuracy of or the conclusions reached in this whitepaper, and this whitepaper is provided "as is". Geliyoo does not make and expressly disclaims all representations and warranties, express, implied, statutory or otherwise, whatsoever, including, but not limited to: (i) warranties of merchantability, fitness for a particular purpose, suitability, usage, title or noninfringement; (ii) that the contents of this whitepaper are free from error; and (iii) that such contents will not infringe third-party rights. Geliyoo and its affiliates shall have no liability for damages of any kind arising out of the use, reference to, or reliance on this whitepaper or any of the content contained herein, even if advised of the possibility of such damages. In no event will Geliyoo or its affiliates be liable to any person or entity for any damages, losses, liabilities, costs or expenses of any kind, whether direct or indirect, consequential, compensatory, incidental, actual, exemplary, punitive or special for the use of, reference to, or reliance on this whitepaper or any of the content contained herein, including, without limitation, any loss of business, revenues, profits, data, use, goodwill or other intangible losses. The information in this document does not constitute a recommendation by any person to purchase Xtremcoin Tokens or any other cryptographic token or currency and Geliyoo has not authorized any person to make any such recommendation. Xtremcoin Tokens are speculative and involve a high degree of risk and uncertainty. The sale of Xtremcoin Tokens is aimed solely at persons who have sufficient knowledge and understanding of blockchain and cryptographic tokens and other digital assets, smart contracts, storage mechanisms (such as digital or token wallets) blockchain-based software systems and blockchain or distributed ledger technology, to be able to evaluate the risks and merits of a purchase of Xtremcoin Tokens and are able to bear the risks thereof, including loss of all amounts paid and loss of Xtremcoin Tokens purchased. Potential purchasers must further make their own independent assessment, after making such investigations as they consider necessary, of the merits of, and their suitability for, purchasing any Xtremcoin Tokens and should consult their accounting, legal and tax representatives and advisers in order to evaluate the economic, legal and tax consequences of purchasing Xtremcoin Tokens. Certain statements contained in this document may constitute forward-looking statements or speak to future events or plans. Such forward-looking statements or information involve known and unknown risks and uncertainties, which may cause actual events to differ materially. No reliance should be placed on any such forward-looking statements or information.



Exchange Specification (Xtremcoin Exchange)

Xtremcoin Exchange is an open exchange software solution that comes in multiple components which are explained in this section in details. Xtremcoin Exchange as software solution is a standalone system.

In this chapter we describe the exchange system specification and how the software in Xtremcoin Exchange works.

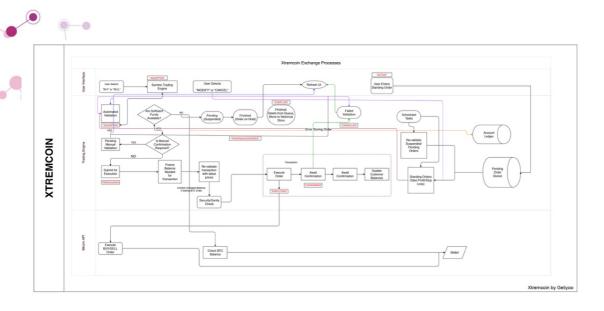
The software has been in production for more than 2 years and is used in many exchanges globally serviced by Geliyoo.

Component

Xtremcoin Exchange consists of 6 components:

- 1. Core: It refers to the main system that comes in binary and includes API, Stream and Engine.
- 2. Gateway: Entrance of the system as a system gateway. It connects external to internal network.
- 3. Plugin: Plugins are modules provided in an open market by developers which are built on top of core system.
- 4. CLI: Command Line Interface which helps communication with core and manages build, deployment and system activation through simple commands.
- 5. Web: Web application client provides a simple intuitive interface to exchange clients as a trading terminal as well as an admin dashboard with special access control. This component is considered as the system front- end. Admin Panel section is embedded in Web component and it is a dashboard for admin which comes with multiple roles and allows admin, support, supervisor to interact and and support the back-bone of the system and its configurations.
- 6. Mobile: Mobile Application provides an interface to the exchange on Android and iOS.





Xtremcoin Core

Core is the main system technology back-end which empowers the exchange system. Core can be accessed and used through Xtremcoin CLI explained later in the whitepaper.

Xtremcoin Core contains three main modules: API, Stream and Engine. It is also flexible to adopt additional modules as a plugin attached to the system.

API is the main worker service in a microservice architecture that manages all the endpoints and requests to the system as a front gate. It's microservice architecture makes it a highly maintainable, testable and scalable service. All services are loosely coupled and are independently deployable. All the communications outside the system use RESTFUL API endpoints and through JSON objects which are managed over Transport Layer Security TLS channels.

API module additionally manages user accounts, authentication scheme and serves as a primary gateway for all major APIs documented on Xtremcoin Exchange.

Stream handles real-time stream and datafeed and is the essential component which manages all websocket communication.

GitHub library provides full abstraction of API and Stream channels for developers and the API documentation is available.

Engine is the core matching engine which takes care of the trading pairs, orderbooks, user orders and real-time trades.

While the exchange is configured with three trading pairs ETH BTC, BCH BTC and XRP BTC. Therefore, we require 3 engines that are configured to each trading pair accordingly.

The full core is packaged through binaries in docker image provided by Geliyoo which can be freely downloaded.

The Core details; dedicated trading engine with queue each created for each trading pair.

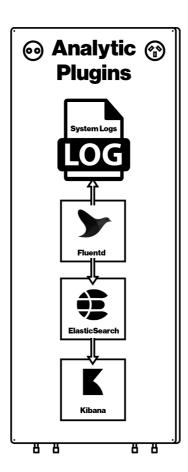
Gateway

Xtremcoin Gateway is the secure entrance gate to the system. It is responsible for all the inbound and outbound traffic to the system. It protects the system against malicious activities as well as managing the security of the system. The Gateway uses standard NGINX for handling SSL/TLS communication as well as traffic routing to different components. Gateway is configured as part of the Xtremcoin CLI and can be customized by the client if its required.

Plugin

Xtremcoin Plugins are additional sidecars that can be attached to Xtremcoin Core. Plugins enable additional functionalities to the basic exchange core technology. Plugin can be added either as a binary file or a custom code.

Custom code allows the exchange operator to make and run their own custom code on top of the system. There is a market place for plugins where developers can create and maintain for their clients.

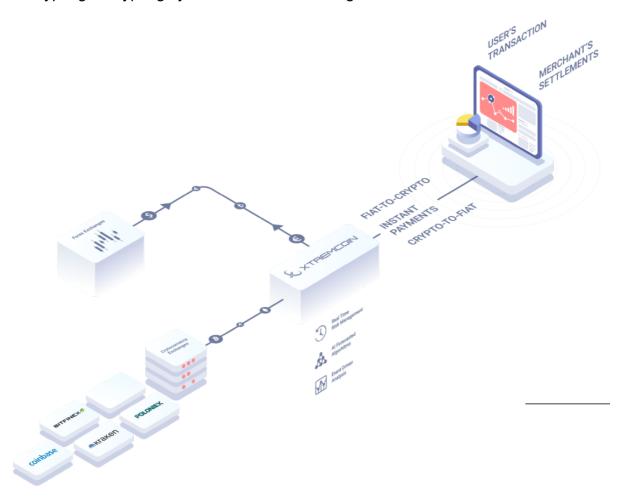


Example of analytics and logging plugin

Some plugins can be obtained directly from Geliyoo such as Vault a crypto wallet system, Cryptofon an automated liquidity provider and Xtremcoin exchange listing that increases the exchanges exposure to traders globally. Moreover, there will be a marketplace where people can develop and provide plugins seamlessly. All plugins built by Geliyoo are designed to plug seamlessly into the exchange solutions.

Xtremcoin CLI

CLI Command-Line Interface) is a command-based tool, used to build, deploy and launch the exchange. CLI initializes an exchange with all settings and configurations, deployment setup using kubernetes helm charts and docker commands as well as the gateway nginx configuration. CLI contains all tools necessary for encoding/decoding and encrypting/decrypting system secrets and configuration.



Demonstration of the deployment of the back-end exchange infrastructure through the 'Xtremcoin start' command.

Xtremcoin CLI is regarded as the main communication tool between the user and the core and takes care of all operations and configuration required for exchange operation. Below you can find an example of command for initializing Xtremcoin CLI

Xtremcoin init --name <NAME_OF_THE_EXCHANGE>

This command would initialize and create the required folders and files in your current directory including settings, templates, plugins and empty folder for user-custom.

User can easily maintain their own exchange's information on settings such as exchange name or API endpoint URLs, able to see and modify settings folder generated templates on plugin folder, such as docker-compose.yaml, based on their own requirements. For custom features specific to exchanges, custom plugins can be developed by the user agnostic to any programming language of user choice, and located in plugin folder. It would seamlessly be integrated with existing exchange system based on traffic routing coming from HTTP protocol to the gateway.

Xtremcoin CLI is built for different operating system and can be downloaded publicly. It can also be utilized and used as a docker image.

Xtremcoin Web

Xtremcoin Web is a ReactJS web application works as a front-end user interface for the exchange clients. Xtremcoin Web uses ReactJS framework for view management along with Redux as a state manager of the client. All designs and UI elements are defined as SCSS files and compiled during application build and run-time.

Communications with Core are done through REST API as well as websocket real-time streaming directly to the Gateway through SSL/TLS channels. Client supports full private websocket channels which can be used for real-time, user specific account updates such as orders being filled and incoming deposits etc. The Web contains two access control which is for user and administrators who can access the admin panel dashboard. Admin can setup different roles to administrate, monitor and manage the system.

Admin Panel can support different access control and permissions for managing different access levels to the system.

Xtremcoin Admin has access to various system reports and allows fine grained reporting for overall system performance as well each user registered on the platform. Reports such as deposit/withdrawal list, list of users, logins and sessions as well as overall performance of the system with filtering are all available on the Admin Panel. Admin can view and modify user data and it can also create roles with any predefined restrictions for accessing admin panel.

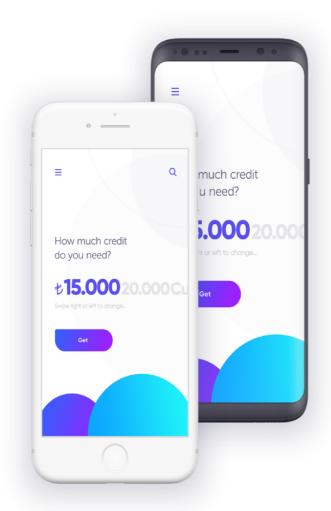
Additionally, admin is capable of configuring the system. From trading fees to the coins that are available and their status, to customizing emails and messages can all be set on the admin panel.

Xtremcoin Web source code is made publicly available by Geliyoo.



Xtremcoin Mobile

Xtremcoin Mobile is the mobile app client version on Xtremcoin web built in React Native for both Android and iOS clients. Xtremcoin Mobile communication is all done through secure TLS channel with the server.



Authentication is done through tokens. These tokens are generated when user logs in and stored through AsyncStorege. On iOS, AsyncStorage is backed by native code that stores small values in a serialized dictionary and larger values in separate files. On Android, AsyncStorage will use either RocksDB or SQLite based on what is available.

Scaling

Each core worker can be replicated for horizontal scaling. More main workers result in scaling API endpoints. Additionally, more stream workers help with the real-time data support to horizontally scale the system. Engine however is not capable of horizontal scaling due to the sequential nature of trading engines. Engine worker is a process that is required for each trading pair. As a result, new trading pairs can be added without any downsides and the system only requires vertical scaling within the trading pair itself.



Communication

Communications are divided into two different types of internal and external communications. All external communications are done through HTTPS and are passed through Xtremcoin Gateway. Internal communications are done through Xtremcoin CLI commands. Inside Core with API, Stream and Engine, the communications are managed by a BUS system that are managed using Redis PUB/SUB infrastructure.

Data Storage

- There are three main databases used primarily in Xtremcoin Exchange: PostgreSQL Persistent data such as user data, trade history etc
- Redis: Cached data and it is the Center of Communication BUS through InfluxDB
- Real-time trade data and historic data processing and analysis.

Coin & Digital Asset

Digital asset custody and coin management is regarded as the most sensitive area with any exchange. Due to the hacks and all the security flaws and issues which resulted in the loss of billions of dollars, we designed the system in a way that takes a special care of coin custody.

Xtremcoin Core is built in a flexible way that can manage different coins and list any digital asset. It can simply be configured to support any digital asset internally.

There are two wallet systems designed in the system: Internal and External. Internal wallet system refers to the user wallet and balance within the system which is designed as an internal ledger for internal purposes. This wallet is used for all trades and internal transfer of assets. The external wallet refers to the custodial wallet which holds the actual crypto assets. Custodial wallet is out of the scope of Xtremcoin Core default coin management. Albeit, there are external custodial wallet management systems including Geliyoo Vault or Bitgo which can be added as a plugin to the system. As a result, the custody service is provided as a separated plugin that connects to a secure service environment that manages all the secure elements and private keys.

On a 100% backed system, internal and external wallet would have a 1 vs 1 ratio however this ratio would vary depending on the nature of the exchange and its operation as a fractional system.

Trading Pairs

Unlimited number of trading pairs can be configured independently from each other. As explained in Xtremcoin Core, each trading pair is run on an Engine.

These engines can be vertically scaled to manage higher traffic and better throughput on the trading engine. On a normal, retail level PC with 8 GB memory on quad core 5 cpu, according to Geliyoo research benchmark, 100 trade activity per second can be managed on average. Trade activities are referred to adding and removing orders from orderbook as well as matching orders where trade occurs.

Shared Liquidity

Exchanges can form a network in a mesh topography and communicate with each other in Xtremcoin liquidity pool at any time in order to share their liquidity. It is optional for the exchange operators to use this feature and allow others to re-market from the exchange while the exchange is also able to take the liquidity from other participants.

Exchange can opt in and opt out from the Xtremcoin liquidity pool at any time and by default are granted the default activation collateral XTR explained in the Token Model section of this paper. This functionality facilitates the communication between these participants and helps the growth of each exchange in the market.

Xtremcoin token XTR is by default set on each exchange and all the share liquidity can be activated for exchanges that list the Xtremcoin XTR trading pair.

Security Design and Considerations

Security due to all the importance and sensitivity of exchanges and the financial aspect of it, plays an important role.

All external traffic to the system is done over TLS channels through the Gateway as a result all external communication channels are secured by TLS standards.

Software Integrity

Exchange software integrity refers to the exchange doing what it is intended to do and preventing any malicious modifications into the system. The Core is provided in the form of executable binary with certain considerations to prevent external access to the code and changing the intention of the software. Any abnormal behavior is detected by the software and results in self lock of the system which would not allow any use of the exchange. All source code is obfuscated and significantly complex challenges are placed to prevent malicious access to the software. Additionally, due to the term of service of Xtremcoin Exchange any external malicious activity could result in legal action and consequences by Geliyoo.

Authentication

All private requests to the system are done through token authentication. There are two authentication mechanism used in this context:

- JWT Web Token JWT
- HMAC Signatur

JWT is used in all private requests and validations on the system. It is attached in the header part of each request by the user sent over TLS. A request example is shown in the example below.

JWT is comprised of three sections, header, payload and signature. User information as well as token expiry is attached on the JWT payload. An example is:

```
"sub": {
    "id": 1,
    "email": "help@xtremcoin.com"
},
    "scopes": [ "user"
],
    "ip": "153.220.230.178",
    "iss": "Xtremcoin.com", "expiry":
    1552961148935,
    "iat": 1552961148
}
```

User roles are specified within the scopes for access control. It's important to note that once the token expires, it cannot be used anymore and requires a new token.

For businesses and developers who seek to get a permanent token, the tokens have the scope specified as "bot" with no expiry date. Those tokens are stored in the database for validation.

It is also possible to apply IP enforcement to make sure that the IP user that sends the request matches with the IP that was initially used to create the token.

JWT is an efficient and fast mechanism for authentication, which improves the performance and scalability of the authentication within the system.

A History of Authentication Tokens

Authentication and authorization are different but related concepts. Before we had authentication tokens, we had passwords and servers. We used traditional methods to ensure that the right people had access to the right things at the right time. It wasn't always effective.

Consider passwords. Typically, they involve:

User generation. Someone comes up with a combination of letters, numbers, and symbols. Memory. The person must keep that unique combination in their mind. Repetition. Whenever the user needs to access something, the password has to be entered. Password theft is common. In fact, one of the first documented cases of password theft happened all the way back in 1962. People can't remember all of their passwords, so they resort to tricks, such as: Writing them all down. Loose pieces of paper filled with passwords are security nightmares. Repeating them. People tend to use the same password in multiple places. If one password is discovered, many accounts may be vulnerable. Slightly changing them. People change one letter or number when prompted to update a password. Passwords also require server authentication. Each time the person logs on, the computer creates a record of the transaction. Memory load increases accordingly.

Token authentication is different.

With token authentication, a secondary service verifies a server request. When verification is complete, the server issues a token and responds to the request.

The user may still have one password to remember, but the token offers another form of access that's much harder to steal or overcome. And the session's record takes up no space on the server.

3 Authentication Token Types

All authentication tokens allow access, but each type works a little differently.

These are three common types of authentication tokens:

Connected: Keys, discs, drives, and other physical items plug into the system for access. If you've ever used a USB device or smartcard to log into a system, you've used a connected token.

Contactless: A device is close enough to a server to communicate with it, but it doesn't plug in. Microsoft's so-called "magic ring" would be an example of this type of token.

Disconnected: A device can communicate with the server across long distances, even if it never touches another device at all. If you've ever used your phone for a two-factor authentication process, you've used this type of token.

In all three of these scenarios, a user must do something to start the process. They may need to enter a password or answer a question. But even when they complete those preliminary steps perfectly, they can't gain access without the help of an access token.

Token Authentication in 4 Easy Steps

Use a token-based authentication system, and visitors will verify credentials just once. In return, they'll get a token that allows access for a time period you define.

The process works like this:

Request: The person asks for access to a server or protected resource. That could involve a login with a password, or it could involve some other process you specify. Verification: The server determines that the person should have access. That could involve checking the password against the username, or it could involve another process you specify.

Tokens: The server communicates with the authentication device, like a ring, key, phone, or similar device. After verification, the server issues a token and passes it to the user. Storage: The token sits within the user's browser while work continues.

If the user attempts to visit a different part of the server, the token communicates with the server again. Access is granted or denied based on the token.

Administrators set limits on tokens. You could allow a one-use token that is immediately destroyed when the person logs out. Or you could set the token to self-destruct at the end of a specified time period.

HMAC Signature

HMAC signature is used for secure communication between third-party services. HMAC is a specific type of message authentication code MAC involving a cryptographic hash function and a secret cryptographic key. It may be used to simultaneously verify both the data integrity and authentication of a message, as with any MAC. The hashing algorithm we use is SHA256.

Data validation

Open API, or Swagger, is used for managing all API requests and endpoint architecture. Open API has a full set of validations, from data type validation and required fields, which would prevent any sorts of unexpected input entering the system, such as SQL injection. As a result, we prevent all unwanted requests by filtering them through Swagger.

OTP

In order to prevent keylogging, weak and stolen passwords, we use One time password based on its Time-based implementation TOTP. Users can easily set that up using Google Authenticator and Authy and its mandatory for all sensitive actions, such as login and fund withdrawals.

OTP is time-based and uses an initial seed created by the server to be scanned on the client's phone. Based on the initial seed and synced devices, client and server generate the same 6 digits code used for authentication.

Email verification

In addition to OTP, for extra security, we also use email verification for highly sensitive actions such as withdrawal and account creation. The Email verification process means a user can only confirm an action by approving it through an email sent to them. Only then can a sensitive action, such as a withdrawal, be requested by the client through the link sent to the email.

Email verification/confirmation achieves the following:

- 1. Ensuring that the email address is typed correctly (used for newly registered individuals)
- 2. Ensuring the emails that are sent to this address can be read and received
- 3. Ensuring the email address really belongs to the person trying to perform said action
- 4. Preventing some automated bots from creating accounts
- 5. Allowing exchange operators to contact the user about topics on security and/or important site issues and announcements.
- 6. Preventing unwarranted withdrawals in cases where the account is left open. Should somebody access the user's exchange account while they are still logged in, the impersonating party will not be able to withdraw funds since they do not have access to the user's email account to confirm a requested withdrawal.

The process of requiring an email confirmation action in order to approve sensitive procedures, such as fund withdrawal, is a common best practice when using cryptocurrencies.

Captcha

In order to prevent brute force attacks for certain important functions such as logins and signups, the login api endpoint requires a captcha provided by Google recaptch. Using this mechanism, an attacker is not able to send unwanted random login requests to the Core and prevents these sorts of attacks.

Insider attacks

Insider attacks make up a significant portion of the hacks on cryptocurrency exchanges. Most attacks are exploited vulnerabilities from insiders who are ignorant or unaware of the security practices and policies in place. The system deployment and CICD through a strict policy would prevent these incidences from occurring. With the usage of Xtremcoin CLI, clients can easily create their own deployment pipelines and prevent rouge internal threats.

Updates and Maintenance

Xtremcoin Exchange is under constant research and development by Geliyoo which would include future patches and updates. Geliyoo according to the roadmap provided in this document has plans to continuously further improvements and upgrades to the system to the technology at the cutting edge in the trading ecosystem. Participants can expect patch updates and upgrades periodically.

Exchange Network

Xtremcoin Network is an exchange network smart contract based on Ethereum's blockchain specification. Xtremcoin Token is the essence of each Xtremcoin exchange and is required as a digital fuel to launch and operate exchanges. It is used as a collateral within exchanges and allows participants to open exchange solution globally, share liquidity among the network, create credit lines and beyond.

XTR is the smallest unit of exchange and it supports up to 8 decimal points. It should be purchased before starting an exchange, collateralized and locked to power the exchange upon its launch.

First of all lets answer these important questions to get a better understanding of Xtremcoin and the token model.

Why uses a token?

Token creates a fair economy and an open market for participants with transparency. As a front leader of open markets and exchanges, we believe in supply and demand as the best economic model. By tokenizing the product, we enable a market where people regardless of our involvement can freely trade and evaluate the product and its usage. Additionally, it would give a fair opportunity to people to participate, use and contribute to the technology.

This is a technology which may reshape the exchange and economic model and pricing the product as such. With all that said, our response would be why not use a token?

Why blockchain?

A blockchain creates an automated and autonomous environment which would streamline some of the process without anyone's direct involvement and would create a fair and transparent environment for all participants. It sets the expectations clear which would result in transparent and clear process and achievements for all participants. We are aware of the high cost of running a blockchain and its inefficient data storage model for Bitcoin, Ethereum and other technologies. However, for very minimal throughput that is required from the blockchain in Xtremcoin Network, Xtremcoin model fits very well on top of the existing solid blockchains such as Ethereum. Xtremcoin Network, uses smart contracts on Ethereum which would guarantee certain attributes in the system. First, it defines the number of tokens and the cap which prevents anyone from creating more tokens on the system. Secondly, exchange operations for activation, deactivation and transfers are done through the smart contracts.

Lastly, it enables numerous functrionalities in the distributed exchange network among participants such as opening credit lines, sharing liquidity and investment opportunities for new exchanges in a seamless manner.

Why the BEP20 and ERC20 blockchain?

Xtremcoin Network requires a blockchain infrastructure with following considerations:

- Network stability
- Network security Hash rate and consensus process)
- Global support (accessibility and its global network support)
- Ethereum fulfills the requirements and provides the best platform for this cause.





What is XTR?

The Xtremcoin Token or XTR is a ERC-20 and BEP20 based token that is used within the Xtremcoin ecosystem. It has an open market, limited supply and used within the Xtremcoin ecosystem for DeFi services as well as staking.

- ERC-20 based token (view contract)
- → Total Supply: 20,231,453 XTR

Who is it for?

XTR is for those are interested in getting involved in the whole Xtremcoin ecosystem. By holding XTR you are contributing to open-source crypto exchange infrastructure. XTR can also be used for staking which is collateral used to back certain exchange projects.

- Distributed via the XTR/USDT market and stakers
- XTR exchange rate is free-floating
- Operators can use XTR to gain membership for extra exchange features.

How does it work?

Similar to any other staking system XTR holders have the choice to lock up their XTR to help contribute to the network. XTR is used as collateral to support liquidity within the network and helps crypto projects that use Xtremcoin Exchange open-source white-label exchange software. XTR is also used as a utility token for discounted payments in services and for unlocking and activation certain features such as coins, pairs and more.

What Makes XTR Unique?

Xtremcoin and the XTR claim to bring revolutionary technology to the financial world in Turkey. As the first company to employ blockchain technology and cryptocurrency platform, Xtremcoin brings crypto exchange to the general public in Turkey.

B y promoting new business opportunities and community growth, the Xtremcoin platform employs blockchain decentralization powers to allow Turkish to be part of a modern-day global financial system. The platform offers a wide array of functionalities that cater to a growing pool of customers.

How Is the XTR Network Secured?

Xtremcoin (XTR) is an ERC-20 and BEP-20 token. As such, it is built on the Ethereum and Binance Smart Chain blockchain. Like any ERC-20/BEP-20 token, XTR is secured by a rigorously tested proof-of-work (POW) consensus algorithm supported by an extensive Ethereum miner network.

This consensus algorithm ensures only valid transactions are confirmed, while the combined work of the Ethereum mining network ensures XTR transactions are essentially irreversible once confirmed.

Launching Exchange

- Launching an exchange and adding it to Xtremcoin Network is quite straight forward. Exchange operator is required to follow these steps:
 - Download Xtremcoin Exchange
 - Initialize exchange through CLI
 - Create an account and wallet
 - Deposit the required amount in the wallet as a collateral
 - Configuring the exchange settings
 - Launching the exchange with Xtremcoin CLI

Your exchange is then up and running and it automatically is added in the Xtremcoin Network.

Exchange Collateral

Exchange collateral starts from 100,000 XTR for the first exchange activation.

Launch

Once an exchange is activated, it needs to be initialized and launched. The initialization process requires configurations and certain settings for the exchange the operator needs to set depending on his exchange through Xtremcoin CLI. The exchange initially checks the blockchain for its status upon initialization during the launch process.

Destruction

Exchange can be destructed in one of these events:

- Manually deactivation of the exchange.
- · Internal malicious activity detection.

This could trigger if anyone tries to break into the Core and manipulate the network environment.

Xtremcoin smart contract is based on BEP20 and ERC20 contract with slight modifications to manage certain activities for the Xtremcoin Network that will be introduced in future.

Token Model

Xtremcoin Token is a smart contract token based on Ethereum's blockchain as explained in the previous chapter. These token fuels are used by exchange operators to run exchanges. Since Xtremcoin Token collateral for each exchange is locked, it is also used as an exchange default liquidity among exchanges as well as a measure for an exchange reputation in the network. In this chapter we explore XTR token model and how it functions based on its use cases for different actors.

Participants

Xtremcoin economy has 3 main actors:

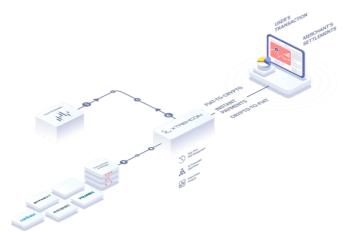
- Exchange Operators
- Investors
- Geliyoo

It is important that all participants in the system are incentivized and as such we are required to go through all participants and their incentive model in the system.

Xtremcoin economy is quite lucrative for exchange operators since it reduces the entry barrier and risk of starting the lucrative business model of running an exchange. The only requirement for Participants is the collateral which upon deactivation can be sold in the market. This means an exchange operator does not have to pay anything to run an exchange in this model other than a collateral. This would help businesses to test out and run the exchange prototypes in an affordable manner.

Investors whom believe and understand the technology can participate over the finite scarce Xtremcoin tokens that represent the limitless exchange economy and contribute to the democratization of our trades and exchanges powered by Xtremcoin. Investors can expect the economy to grow as more exchange operators participate infinitely which would result in the increase of Xtremcoin token price. It is expected to increase on the assumption that as more exchange operators come online, they be required to lock up Xtremcoin and in effect taking out supply and thus increasing scarcity of the Xtremcoin token. As the growth of the network increases so too should the price of the Xtremcoin token.

Geliyoo as the technology service provider benefits from the freely traded Xtremcoin open market through the large participation and exploration of the usefulness of Geliyoo's exchange software and its potential globally. The exchange softwares have significant potential, and besides crypto have not been fully explored in other industries not related to crypto. As a result, Geliyoo believes that it may open up brand new opportunities in other sector that can create their own new and exotic market places with an affordable and open exchange software. Throughout this setup, Geliyoo benefits from its token market share as well as continuous fees and value-added services and plugins.



Xtremcoin Economical Triangle: Xtremcoin acts as a bonding agent between all parties while being utilized as fuel that efficiently powers the exchange network.

Distribution

Total maximum cap of the Xtremcoin tokens are 20,231,453.571. %5 tokens are distributed initially through a private sale for early investors and exchange operators (including current Geliyoo exchange clients). %20 Team.

XTR has a total and maximum supply of 20,231,453.571 XTR tokens. Of these, 20% went towards the Xtremcoin Foundation and will undergo semi-annual distribution over five years. Another 15% were dedicated to marketing and advertising of the XTR and the Xtremcoin platform. 15% of the total token supply was distributed among founding team members as a reward for participating in the project. Partnerships and strategic ecosystem collaborations received another 15% of the supply. Xtremcoin has set aside 3% of all tokens as staking rewards and an additional 2% as rewards for project advisors. The company distributed 10% of the supply through community airdrops and dedicated 5% of tokens for private sales.

Future Considerations Hardware Exchange

In order to protect and safeguard the exchanges, research and development in hardware needs to be done. Geliyoo as an IBM partner will allocate certain resources towards hardware exchange solution. Xtremcoin Exchange could then be placed inside a hardware which then runs a trusted secure environment with HSM for additional built-in security. This would not only increase the security but it would also provide optimized Shell system for specific hardware design which would increase the performance and efficiency of an exchange.

deXtremcoin

Geliyoo has done extensive research into the development of DEX and are looking forward to future technologies and their development where we can process transactions through DEX using Xtremcoin token model. The Decentralized Exchange model, in their current form are not efficient and practical models today. While the current Xtremcoin distributed exchange network model is the more practical solution, we constantly work on improvements in R&D towards improving the technology.

Lending and Derivatives

Another area of interest in future research and development is lending market and support of future contracts and more complex derivative products on the exchange. Derivative products such as future contracts, options, forwards etc work the same way with the matching engine. However they require certain risk calculator for managing user's risk and their collateral which is in the roadmap and are a consideration for Geliyoo's future development.



Roadmap 2018 — First Code

- The Geliyoo company first created the Xtremcoin white-label exchange software to contribute to the trading and adoption of cryptocurrencies.
 - Q1 2019 Xtremcoin Exchange Development Begins
 - Q4 2019 v0.1.0 initial release



2019 — Automation

Development of automated and smart deployment of Xtremcoin, Vault and bots.

- Q1 2019 v1.0 Production release
- Q2 2019 Xtremcoin XTR
- Q2 /2019 Xtremcoin Pro Trade and UI



• Q3 2019 — Vault and Kubernetes deployment

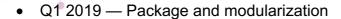


• Q4 2019 — Sleek UI

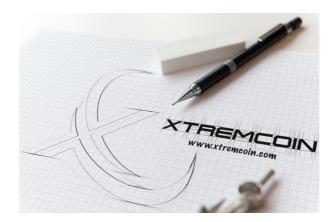
2019 — Synthesis of Digital Fuel

Formulations Xtremcoin the the power source for Geliyoo trading products





- Q2 2019 Xtremcoin CLI
- Q3 2019 Mobile App



• Q4 2019 — XTR Token Distribution



2020 — Exchange Connection

Connecting all exchanges using the Xtremcoin platform and increase trading activity and product exposure.

• Q1 2020 — XTR Official Launch



- Q2 2020 Admin 2.0 dashboard
- Q3 2020 XTR Network and smart contract Launch of the community Exchange
- Q4 2020 Exchange routing and listing with Xtremcoin

2021 — Continuous Upgrades

- Continues upgrades of the Geliyoo products range and a move towards autonomization.
 - Q1 2021 XTR Network trustless lending and credit system
 - Q3 2021 XTR Listing on Cryptofon



2022 — Xtremcoin Network

Move towards an efficient autonomous exchange network model.

- Q1 2022 XTR Autonomous Exchange without operator.
- Q2 2022 Plugin marketplace





Conclusion

Xtremcoin is an open exchange economy, empowering the future of open and online marketplaces. It is used as a type of digital fuel which allows exchange operators to freely run and operate exchange systems.

The technology is already built and is in production globally and we seek to expand and open up the technology to the world through the Xtremcoin Network and model. It helps increasing the transparency, accessibility and the global penetration of one of the most innovative creation of humanity, exchanges.

Xtremcoin forms an exchange network where participants can share and re-route their liquidity and credit lines and investors have the opportunity to boost launching new exchanges and create new venues for trading globally.

Xtremcoin is distributed in the most transparent way following market adoption curve pattern and is distributed on <u>Xtremcoin.com</u> where investors and exchange operators can participate to purchase these tokens.

If you would like to participate and contribute to the future of free and open markets, this is the opportunity.

Who Are the Founders of Xtremcoin?

Hakan Atabas is the founder and CEO of Xtremcoin. Hakan Atabaş studies Computer Engineering at Middle East Technical University and did his PhD at MIT. He has more than 25 certification in inbound online programs such as IBM, MIT, and Google. He has also been involved in nearly 46 projects in the blockchain field since 2011. <u>Linkedin Profile</u>

Fatih Arslan is the co-founder and chief operating officer of Xtremcoin. He graduated with a master's degree in Mechanical Engineering from Texas Tech University in 2010. His professional career started as a product and business development and marketing for Geliyoo in 2012. In 2012, Hakan Atabaş and Fatih Arslan are also the founders of Geliyoo company.

LinkedIn Profile



Useful Links

Website: https://www.xtremcoin.com

Smart Contract:

ERC-20: https://etherscan.io/token/0x619de4f05fe07522de2bdcf2daeb1a23da8c0bb4 BEP-20: https://etherscan.io/token/0x619de4f05fe07522de2bdcf2daeb1a23da8c0bb4 BEP-20: https://etherscan.io/token/0x619de4f05fe07522de2bdcf2daeb1a23da8c0bb4 BEP-20: https://etherscan.com/token/0x927ff4ad97991c1eec44ab02c6970088ffa85250

GitHub:

Project Github Account: https://github.com/xtremcoin

Social Media:

https://twitter.com/xtremcoin

https://www.reddit.com/r/Xtremcoin

https://www.facebook.com/XTRemCoin

https://www.instagram.com/Xtremcoin

https://t.me/xtremcoin

Contact:

Email: info@xtremcoin.com and help@xtremcoin.com

