



mIZAR

Powered by token Mizar

White Paper

Version 1.0

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01

Overview

PART ONE



1.1 Birth and Vision of the Project

In the ancient starry sky, Mizar is a double star in the constellation Ursa Major, representing strength and stability. The name means not only brilliance and splendor, but also permanence and eternity. We chose this name not only to reminisce about the ancient legend under the starry sky, but also to convey the idea that the Mizar project is like a bright double star in the cryptocurrency universe, illuminating the way forward for a long time, and creating a legend for the DeFi field.

Vision:

In modern society, finance has gradually evolved from the exchange of material goods to the exchange of trust. We believe that everyone should be able to freely access and use financial services, regardless of geography, identity or economic background, and the core idea of the Mizar project is to break down these barriers and realize universal access to finance.



We are committed to creating an open, transparent and efficient DeFi platform. It's not just a technology platform, it's an ecosystem of innovation. Through technological innovation, we aim to provide everyone with the opportunity for financial freedom, from basic savings and transfers, to complex investments and lending, wherever they are, at their fingertips.

And our mission goes far beyond that. Through Mizar, we hope to promote a fairer and more prosperous global economy. In this ecosystem, every participant can enjoy the dividends of finance, both individuals and partners can find real value here.

1.2 Main Features of the Project

A) Security

The Mizar project excels in security through the use of the time-tested Scrypt algorithm, which is designed to be highly resistant to massive concurrent processing, making attempts to brute-force a costly endeavor through large-scale concurrent attacks. This level of security means that user transactions and funds are secured in a nearly impenetrable fortress.

B) Efficiency

Mizar is optimized for modern trading needs, with a 60-second block rate that not only ensures high system throughput, but also provides users with a fast, real-time trading experience. This speed means that whether it's a business transaction or a personal transfer, Mizar is able to complete it in a fraction of the time, meeting the demands of today's efficient society.

C) Transparency

Mizar strongly believes that real power should be returned to the user. To this end, all transactions are recorded on the blockchain and can be viewed by anyone at any time. This complete transparency ensures that transactions are fair and transparent, allowing each participant to have complete confidence in the Mizar system.

D) Financial Incentives

In order to encourage early participants and miners, Mizar offers an initial 6000 per dollar incentive. This incentive mechanism not only attracts a large number of supporters quickly, but also ensures the safety and stability of the Mizar network in the initial phase. This is a win-win strategy, whereby early users are rewarded generously, while providing a solid foundation for the healthy growth of Mizar.

E) Long-term planning

Mizar is not only concerned with short-term benefits. Through our regular halving strategy, we ensure currency scarcity and value growth, encouraging currency holding and long-term investment. This strategy not only benefits the investor, but also ensures the long-term stability of the Mizar program and the continued activity of the community.



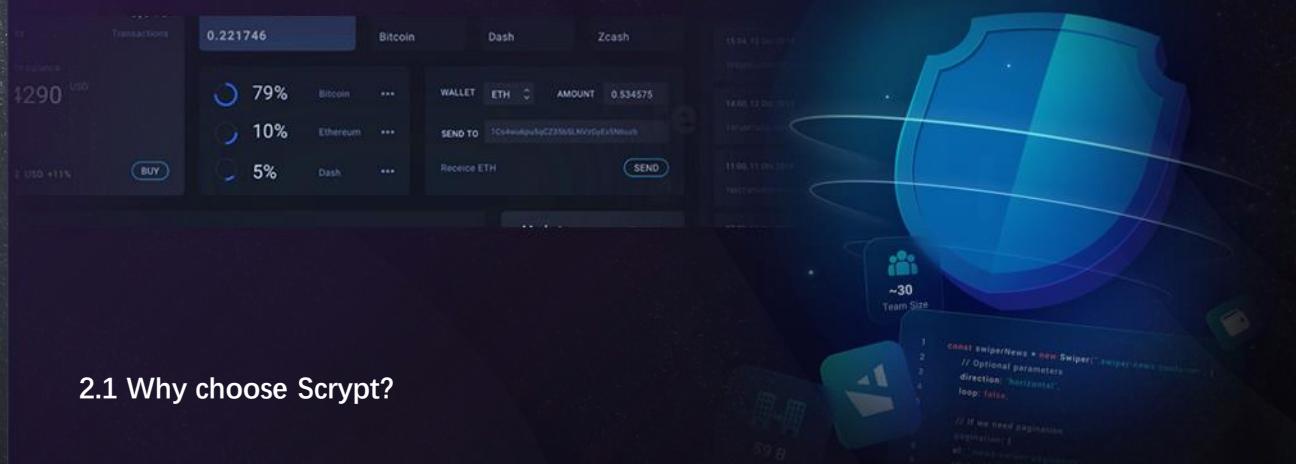
02

Technology

PART TWO



Scrypt is a cryptographic algorithm first designed by Colin Percival for the online backup service Tarsnap. Compared to traditional SHA-256 mining algorithms, Scrypt is characterized by the need for more memory, which makes large-scale parallelization on specific hardware more difficult. In short, it is a memory-based Proof-of-Work algorithm for cryptography.



2.1 Why choose Scrypt?

A) Memory-intensive design

The memory-intensive nature of Scrypt is one of the main differences between it and many other cryptographic algorithms. The need for large amounts of fast RAM means that, despite the power of the computation, mining will not be efficient without enough RAM. The aim is to discourage large-scale ASIC mining and ensure that the wider user community can participate fairly in mining activities. This structure also effectively improves the security of the network and reduces possible external attacks.

B) Reducing the risk of centralization

A common criticism of blockchain projects is that they are susceptible to the threat of centralization; ASIC mining equipment is expensive and is usually only affordable to large mining pools or wealthy individuals. But the benefits of using ASIC equipment are limited by Scrypt's high memory requirements. This means that small-scale miners and everyday users can participate in the maintenance of Mizar's network using their everyday computer hardware. The result is a more decentralized, democratized mining environment that ensures all participants have a voice.

C) Wide range of applications and validations

Scrypt is not a new or unproven algorithm. In fact, several popular cryptocurrencies, such as Litecoin and Dogecoin, have adopted Scrypt as their mining algorithm. This means that Scrypt has been tested and validated in several scenarios. Its performance in the real world proves its stability and resistance to various network attacks. Choosing a proven algorithm for Mizar not only means that we can learn from the experience of other projects, but also ensures that our users and investors can operate in a network that has been proven to be safe and reliable.

2.2 Algorithm security and efficiency

Security:

- ① DESIGN PHILOSOPHY: The design principles of the Scrypt algorithm are based on a simple but powerful idea: make attacks costly. By increasing RAM requirements to meet this goal, Scrypt effectively suppresses the possibility of large-scale parallel attacks.
- ② Protection against 51% attacks: One of the biggest security threats to a blockchain network is the 51% attack. In this attack, if an attacker controls more than half of the network's hash rate, they can potentially double-spend. However, due to the memory-intensive nature of Scrypt, gaining such control would require a significant investment, which greatly increases the cost of conducting such an attack.
- ③ Adaptability and future-proofing: As hardware technology evolves, many algorithms may become vulnerable to attack. However, Scrypt's design allows it to adapt to future technological challenges, ensuring long-term network security.

Efficiency:

- ① Universal: Compared to other mining algorithms that require specific ASIC hardware, Scrypt can run efficiently on standard PC hardware. This not only lowers the entry barrier to mining, but also encourages more users to participate, resulting in a more active and stable network.
- ② Energy efficient: Since Scrypt runs on standard hardware, it is also more energy efficient than other algorithms that require more computing power. This makes Mizar not only an economically viable option, but also an environmentally friendly one.
- ③ Response Speed and Transaction Throughput: The 60 second block rate means that the Mizar network is able to respond quickly to large volumes of transactions, and the Scrypt algorithm ensures that this speed does not come at the expense of security.



03

Release Details

PART THREE



3.1 Issue Volume and Pre-excavation

A) Total Issue Volume Details

The total issuance volume of the Mizar project is set at 21 billion.

A limited supply ensures the scarcity value of Mizar and avoids long-term inflation. At the same time, it provides long-term value protection for investors and users.



B) Rationale and Purpose of Pre-Dredging

The Mizar project will carry out a 2% pre-mining, i.e. 420 million of the total volume. This portion of the currency will be used:

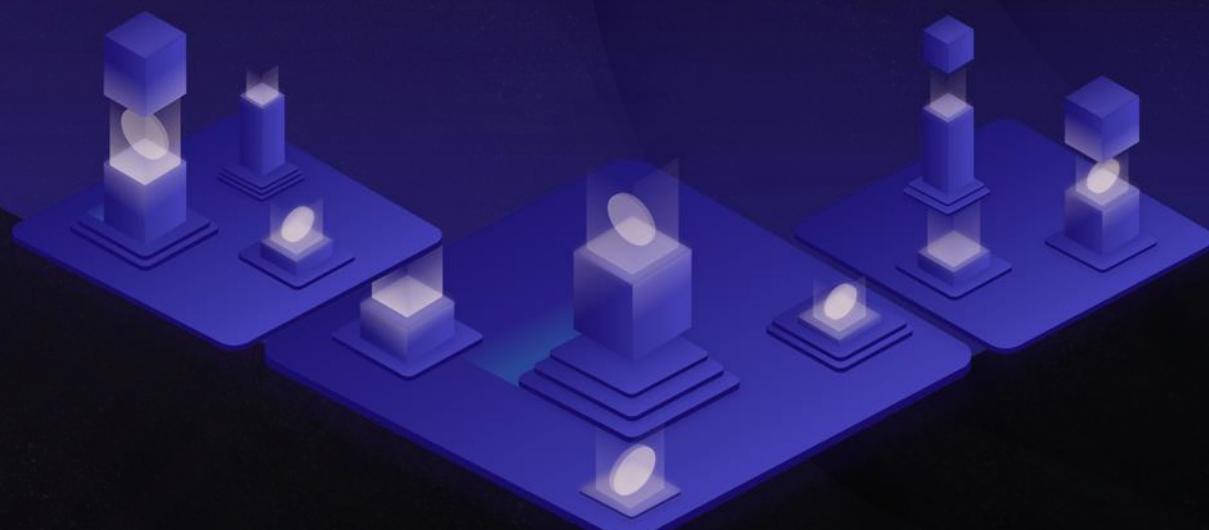
- ① Project Development and Research: The pre-mining funds will finance the ongoing development and optimization of our platform.
- ② Marketing and Collaboration: In order for the Mizar project to be successful in the DeFi space, we will need to conduct extensive marketing
- ③ Contingency: At the beginning of any project, there are always unpredictable risks. Pre-existing funds will provide us with a buffer to help us maintain operations in the face of unforeseen difficulties.
- ④ Community Building and Rewards: In order to encourage more users to participate and contribute to the Mizar community, a portion of the tapped funds will be used to reward those users who make positive contributions to the community.

3.2 Halving cycle

Mizar has a 6 month halving cycle. This means that every 6 months, the reward for a new block is halved. This mechanism encourages miners and investors to participate more actively in the early stages of the project, when the rewards are relatively high. At the same time, the growth of the money supply slows down over time, thus supporting the growth of the value of the currency.

3.3 Block Rate and Per-Block Rewards

Mizar's block rate is set at 60 seconds to ensure that transactions are confirmed quickly and to provide a smooth user experience. The initial per-block reward of 6,000 provides a strong incentive for early miners and backers. This incentive structure not only encourages a large number of users to join the project at an early stage, but also ensures that the network is able to obtain a sufficient hash rate at an early stage to guarantee security.



3.4 Mizar's plan to list tokens on cryptocurrency exchanges

The Mizar team is very clear about the strategic and incremental nature of the token launch. Our goal is to progress from a tier 5 exchange to a tier 2 exchange, ensuring that at every step of the way we stabilize our position in the market and provide the best possible trading experience for our users.

A) Initial Phase

Mizar plans to make its initial launch on a decentralized trading platform such as PancakeSwap. Such platforms offer a fast and flexible go-to-market process, providing us with a smooth start-up and initial liquidity for community members.

B) Mid to Late Stage

As the project matures and market awareness grows, Mizar will seek to partner with larger trading platforms. These include, but are not limited to, LATOKEN, KuCoin, Gate.io and BitMart, where listing on these exchanges will further enhance Mizar's market position and liquidity.



We would like to emphasize that in order to ensure the long-term stability and security of the project, the team is considering algorithmic adjustments and upgrades when the Mizar project reaches a sufficient level of maturity. This will further enhance network security and adapt to the challenges that may arise in the future. We will communicate with the community at the appropriate time and make the best decisions based on feedback and opinions.

04

Network Protocol

PART FOUR



4.1 Block Validation and Consensus Mechanisms



A) Nature of Proof of Work

The core of PoW is to require network participants (miners) to perform a computationally intensive task to prove that they have performed a certain amount of work. In the Mizar network, this task is to solve the mathematical difficulties of the Scrypt algorithm.

B) Validation of transactions

When a miner solves this problem, they can propose a new block and add it to the chain. This new block contains several transactions to be validated. Once other miners have verified and confirmed the legitimacy of these transactions and the correctness of the block's solution, the block will be added to the blockchain.

C) Cost of Malicious Attacks

In order to attack or tamper with the Mizar network's information, a malicious actor would have to recalculate the PoW, which would require significant computational resources and time, a task made even more difficult by the design of Scrypt, which requires a large amount of memory to perform the calculations. This makes any attempt to tamper with confirmed transactions or attack the network costly.

D) Decentralized Network

Due to the memory-intensive nature of Scrypt, dedicated ASIC mining equipment does not have a clear advantage. This means that individual miners and small mining pools are able to compete with large-scale miners, ensuring a decentralized network with broad participation.

E) Network Security and Growth

Each time a new block is added to the chain, it further strengthens the security of the previous blocks, as modifying any of the earlier blocks requires recalculating the PoW of all blocks from that point forward. As the chain grows, the difficulty of attacking or tampering with the chain increases.



4.2 Network Security and Defenses

Security is always a key component of a cryptocurrency network, especially in today's environment of increasing attacks, and Mizar is well aware of this and has taken countermeasures on several levels to ensure the security and stability of its network.

Node Distribution:

- ① Geographic Dispersal: Encouraging the deployment of nodes in a variety of physical locations and network environments prevents single points of failure, such as natural disasters, local network outages, and so on.
- ② Distributed Architecture: In the network design, Mizar avoids centralized single points and adopts a distributed approach, which allows each node to have the opportunity to participate in verification and reach consensus, further improving the stability of the network.

Real-time monitoring:

- ① Anomaly Detection: By monitoring network traffic and behavioral patterns in real-time, the system can automatically detect and warn of any possible malicious behavior or attack attempts.
- ② Response Mechanisms: Once an anomaly is detected, the network has both automatic and manual response mechanisms, such as automatically quarantining suspicious nodes or deploying patches to fix known vulnerabilities.

Regular audits:

- ① Code Audit: Regular code audits conducted by an independent third party ensure that Mizar's code base is secure and free of potential security vulnerabilities or backdoors. This also enhances the community's trust in the project.
- ② Penetration testing: Simulated hacking attacks are used to evaluate the security of the network. This "red team" testing reveals possible weaknesses, allowing the team to remediate before an actual attack occurs.
- ③ Community Involvement: Mizar encourages community members to report any potential security issues and in return offers a vulnerability reward program to reward users who help improve network security.



4.3 Protocol Upgrades and Maintenance

Upgrades are performed in phases:

- ① Test network: Before any upgrade of the main network, new changes are deployed and tested in a test network. This provides an environment for developers and miners to evaluate new features without affecting actual assets.
- ② Upgrade Log: For transparency and traceability, all upgrades are accompanied by a detailed change log explaining each change made and its purpose.

Community Involvement:

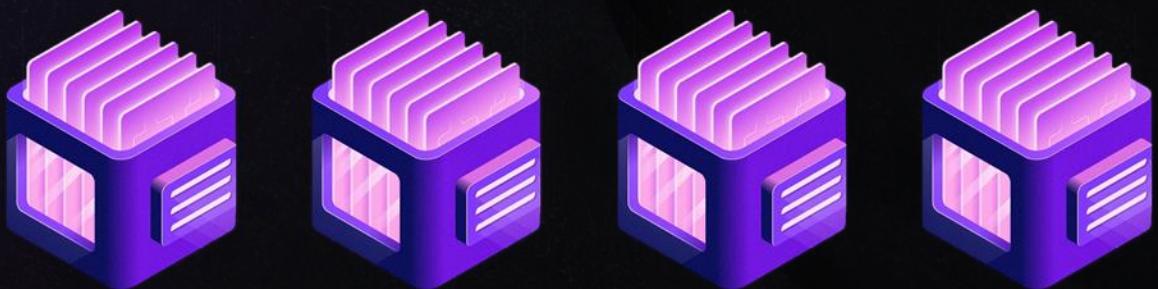
- ① Proposals System: Mizar has a formal proposals system that allows community members to submit and discuss new features and changes.
- ② Voting power: Ensuring truly decentralized decision-making, Mizar's main direction and major changes are determined by community votes.
- ③ Open communication channels: The team maintains open communication with the community through forums, chat rooms, and other platforms.

Backwards compatible:

- ① Seamless migration: New features or changes are always designed with existing applications and tools in mind. Upgrades often provide migration paths to make the transition as smooth as possible.
- ② Documentation Support: Detailed technical documentation and tutorials are provided to help developers and users adapt to new changes.

Regular maintenance:

- ① Quality Assurance: The team continuously reviews and tests code to ensure the highest code quality and network stability.
- ② Performance Optimization: As technology advances, the team is constantly looking for ways to improve the efficiency and speed of protocols to better serve the community.
- ③ Security Audits: External experts conduct regular security audits to ensure the robustness of the Mizar protocol.



05 DEFI Applications PART FIVE



5.1 Definition and Importance of DEFI

DEFI, or Decentralized Finance, advocates the use of blockchain technology and smart contracts to break down the intermediary thresholds in traditional finance in order to provide fairer and more transparent financial services. Unlike traditional centralized financial systems, DEFI runs entirely on an open blockchain network, where every transaction and contract is transparent and traceable, and anyone can participate without the need for third-party permission.



Democratized Finance:

- ① Universal access to financial services: DEFI's openness allows anyone, regardless of geographic location or socioeconomic status, to access financial services. This is a huge opportunity for those who have been marginalized by the traditional financial system because of their status or geography.
- ② The return of financial empowerment: Users are able to take full control of their money without intermediaries. This means less scrutiny and more personal autonomy.

Reduced costs:

- ① Reduced Intermediary Fees: Traditional financial services, such as banks and brokerage firms, typically charge high fees. However, in the DEFI system, fees are greatly reduced due to the absence of intermediaries.
- ② Automated services: Smart contracts can be executed automatically, which further reduces operational costs and makes many financial services cheaper and more efficient.

Increased Transparency:

- ① Open book: DeFi is based on the blockchain and all its transaction records are public and immutable, providing a high level of transparency for all participants.
- ② Openness of Smart Contracts: The code of Smart Contracts is public, which means that anyone can view it and verify its logic, ensuring that there is no malpractice or fraud.

Financial innovation:

- ① Unlimited possibilities: DeFi provides a platform for financial innovators to experiment and build unprecedented financial products and services.
- ② Cross-chain and interoperability: Many DeFi projects are exploring how to work across multiple blockchain networks, which opens up more opportunities and complexity for financial product innovation.

5.2 Mizar's Position in DeFi

Mizar is built for the decentralized financial world of the future. Its core design concept is to solve the many challenges facing DeFi today, and to create a richer, safer and more efficient financial experience for developers and users.

Technology Advancement:

- ① High throughput: Mizar's underlying architecture is optimized for high-frequency financial transactions, ensuring that a large number of transactions can be processed per second to satisfy the most demanding financial applications.
- ② Low Latency: Unique consensus algorithms designed for financial exchanges ensure rapid confirmation of transactions, making high-frequency and algorithmic trading possible.

Security First:

- ① Multiple layers of security: Mizar's security mechanism includes not only traditional PoW authentication, but also a variety of advanced cryptographic technologies, providing rock-solid protection for DeFi applications.
- ② Intelligent Contract Audit: Mizar provides developers with an intelligent contract audit tool to ensure that every uplinked contract is rigorously inspected and verified.

Openness and Collaboration:

- ① Open Development Environment: Mizar encourages developers to innovate on its platform by providing a comprehensive set of development tools and rich documentation to make development easier.
- ② Cross-chain interoperability: Mizar is designed with interoperability with other blockchains in mind, making it easy to move assets and data across multiple chains.

Eco-BUILDER:

- ① Project Support: Mizar provides technical, financial and marketing support for new DeFi projects to help them grow and develop quickly.
- ② Community Building: Mizar understands the importance of the community and actively works with community members to promote the prosperity of the DeFi ecosystem.



5.3 DEFI Application Modules

A) Mizar Lending Platform

The Lending Platform to be built by Mizar is one of Mizar's core DEFI applications designed to redefine the lending experience in decentralized finance. In traditional finance and many DEFI programs, lending is often accompanied by high intermediation fees, opaque interest rates, and limited asset choices.



Core Benefits:

- ① Transparency: Mizar's lending platform records all transactions in a chain, ensuring that every transaction is traceable and tamper-proof. Users can view their lending history, as well as rate changes on the platform, at any time.
- ② Diversified Crypto Asset Options: In addition to the common mainstream assets such as BTC and ETH, Mizar will also support a variety of niche and emerging crypto assets, allowing users to have more choices. This not only provides more liquidity options for asset holders, but also provides opportunities for borrowers looking for higher returns.
- ③ Algorithm-driven interest rates: Interest rates will be automatically adjusted by algorithms to ensure fairness based on supply and demand in the market. This means that borrowing rates may go down when there is an abundant supply of assets, and up when there is not.
- ④ Security: Security is always Mizar's top priority. All assets are stored in highly secure smart contracts protected by multiple encryptions. The platform also conducts regular security audits to ensure the safety of users' assets.

B) Decentralized Exchange (DEX)

In traditional centralized exchanges, users often need to rely on the exchange to manage their funds, a trust model that has been proven to be risky many times over, such as loss of funds due to hacking attacks. mizar's DEX will change this status quo and provide users with true control over their assets.

Core Benefits:

- ① Direct Trading: Mizar's DEX uses an Automated Market Maker (AMM) model that allows users to trade directly with contracts without the need to find a counterparty. This model not only increases trading efficiency, but also reduces slippage.
- ② Security: DEX does not store users' funds. Instead, when a user wants to trade, funds are transferred directly from their wallet to the smart contract and returned when the trade is completed. This eliminates the risk of a single point of failure associated with traditional centralized exchanges.
- ③ Low Fees: Mizar's DEX offers users lower transaction fees due to the lack of centralized management and operational costs. Mizar also offers attractive incentives for liquidity providers to encourage them.
- ④ Privacy: Mizar values the privacy of its users. Unlike many centralized exchanges that require cumbersome KYC and AML verification, Mizar allows users to trade with complete anonymity.



C) Mizar Asset Management

In the new era of digital finance, automated asset management has become an innovative and indispensable tool, especially for investors wishing to maximize their returns, and Mizar understands this and therefore undertakes bold innovations and continuous research and development in the field of asset management.



Core Strengths:

- ① Strategy-driven investing: Mizar's asset management platform not only provides users with traditional liquidity mining opportunities, but also incorporates advanced algorithms that help users automatically adjust asset allocations based on market conditions to achieve optimal returns.
- ② Flexible Liquidity: Users can withdraw or inject funds at any time, enjoying the flexibility of liquidity while benefiting from optimized interest rates and incentives.
- ③ Cross-chain interoperability: Asset management tools are not limited to their own networks. Through advanced cross-chain technology, users can easily manage assets across different blockchains to realize multiple benefits.
- ④ Security First: All asset management strategies are rigorously audited and tested to ensure that there are no security risks. To further enhance security, Mizar also offers an asset insurance option to give users peace of mind when investing.
- ⑤ Intelligent Reporting and Visualization Tools: To give users a better understanding of their investment status, Mizar offers intelligent reporting that presents key information such as investment returns, asset allocation, and more. At the same time, its intuitive dashboard is designed to make it easy for users to track and manage their assets.

06

Technical Team

PART SIX



Technical Team

MIZAR



Lucas Bennett

Lucas received his Ph.D. in Computer Science from MIT and spent over 10 years as a core engineer on Google's Distributed Systems team. He has in-depth research and hands-on experience with blockchain technology and is currently the lead architect of Mizar.



Matthew Nicholson

Matthew, an MS in Software Engineering from Stanford University, was a key member of the Amazon Cloud Services team, with a particular focus on big data processing. He is now a senior backend developer at Mizar.



Nathan Graham

Nathan has over 15 years of experience in the cybersecurity space, having worked as a security consultant at Twitter, specializing in blockchain security. He is a graduate of Carnegie Mellon University and is currently Mizar's lead security expert.



Jeremy Clarke

Jeremy is a distinguished graduate of Harvard University with a degree in Computer Science, and went on to work extensively at Ripple, particularly on blockchain transactions and consensus mechanisms. He is now a blockchain engineer at Mizar.



Ryan Hughes

Ryan has a Master's degree in Information Systems from Yale University and has worked at IBM for over 8 years. As a database expert, he works as a database administrator in Mizar.



Dylan Palmer

Dylan received his Master of Design degree from Savannah College of Art and Design. He has designed a number of application interfaces for Apple and worked as a UX/UI designer at Mizar.



Sebastian Wallace

Sebastian has a Master's degree in Computer Networking from Princeton University and previously worked on the High Performance Network Design team at Cisco. He is now a Network Engineer at Mizar.

07

Disclaimer

PART SEVEN



This disclaimer is intended to clarify the legal relationship between the Mizar project team ("we" or "Mizar") and users. By using Mizar or any service or product associated with it, you agree to the terms of this disclaimer. If you do not agree with any part of this disclaimer, please stop using the service immediately.



A) Limitation of Liability

Mizar provides users with a blockchain-based technology platform. While we are committed to ensuring the continued stability and security of the platform, we cannot guarantee that the platform will be free from attack or failure. Mizar is not responsible for any direct, indirect, incidental, special or consequential damages.

B) Investment Risks

Any investment related to Mizar involves risks, especially in the field of cryptocurrencies and blockchain. The market may be subject to extreme price fluctuations. You should fully understand all the risks and consult a financial advisor before making any investment decision. Mizar does not provide any investment advice and accepts no responsibility for your investment decisions.

C) Third Party Content

Mizar may link to third party websites or services. These links are provided solely as a convenience to users and do not represent an endorsement or approval by us of such third party content. We are not responsible for any Third Party Content and do not guarantee its accuracy, completeness or authenticity.

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E) Laws and Regulations

All users of the Mizar Platform are responsible for ensuring that their behavior is in full compliance with all applicable laws, rules and regulations in their place of residence or business. Users should be aware that digital currency and blockchain business may be subject to specific legal restrictions or requirements in certain jurisdictions, and Mizar strongly recommends that users consult with a qualified legal professional prior to engaging in any activity related to the Platform. Mizar shall not be liable for any losses, penalties or any other consequences resulting from any violation of applicable laws or regulations.

F) Final Interpretation

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