

AmChain

White Paper

Introduction

Welcome to the exciting world of decentralized finance and blockchain innovation! As pioneers in the ever-evolving digital landscape, we are committed to reshaping the way financial services and technology operate. With an unwavering focus on innovation, security, and accessibility, we are propelling ourselves forward by introducing a range of groundbreaking solutions designed to meet the dynamic demands of the digital economy. Join us as we redefine the future of finance and technology!

In a world defined by swift technological progress and ever-changing financial landscapes, we proudly position ourselves as trailblazers, propelling transformation and enabling both individuals and businesses. With our state-of-the-art blockchain innovations and visionary approaches, we forge a path towards a future where financial services are decentralized, universally accessible, and fortified by the utmost levels of security.



Mission

Our goal is to make financial services accessible to everyone and empower individuals around the globe with revolutionary blockchain technology. We are dedicated to promoting financial inclusion and empowering people economically by offering secure, transparent, and user-friendly solutions that go beyond conventional limitations. By leveraging the potential of blockchain, our aim is to establish a fairer and more efficient financial ecosystem that benefits every participant.



Vision

Our vision is to spearhead the movement towards a decentralized future, empowering individuals with complete autonomy over their financial assets and data. We imagine a world where financial services transcend borders, granting universal access and operating on a foundation of trust and transparency. Through relentless innovation and collaborative efforts, we strive to revolutionize the finance industry, unearthing fresh avenues for growth, prosperity, and liberation for future generations. Embark on this transformative odyssey with us as we forge a path towards a radiant and all-encompassing tomorrow.





AmChain

AmChain (AMC) is the bedrock of our blockchain ecosystem, driving transactions, fortifying the network, and enabling effortless interactions within our decentralized infrastructure. With a solid foundation of ingenuity and dependability, AmChain embodies the future of decentralized finance, delivering unmatched security, scalability, and efficiency to users across the globe.

Proof of Authority (PoA)



AmChain's foundation is built upon the powerful Proof of Authority (PoA) consensus mechanism, a robust algorithm that guarantees the utmost integrity and security of our blockchain network. Unlike conventional Proof of Work (PoW) or Proof of Stake (PoS) protocols, PoA operates on a different principle. It entrusts the validation of transactions and the creation of new blocks to a select group of pre-approved validators. These validators are chosen based on their impeccable reputation, extensive expertise, and unwavering dedication to upholding the network's integrity.

AmChain utilizes the power of PoA to achieve remarkable transaction throughput. Currently, the rate stands at an impressive 80,000 Transactions Per Second (TPS), with capabilities reaching up to a staggering 300,000 TPS. This exceptional level of throughput guarantees swift and efficient transaction processing, resulting in seamless user experiences and the ability to handle high transaction volumes with ease.

Proof of Authority (PoA) Mechanism



Node Identity

Known validators with recognized identities, chosen for reputation or pre-established authority.



No Mining

Unlike PoW and PoS, PoA doesn't involve mining or staking. Validators are selected based on identity and reputation.



Transaction Validation

Validators in PoA confirm transactions through consensus, reducing the risk of malicious activity and ensuring efficient processing.



Centralization Concerns

Criticized for potential centralization as validators are pre-approved, contrasting with PoW and some PoS systems.



Security and Finality

PoA networks offer high security with reputable validators and achieve faster transaction finality compared to PoW networks.



Use Cases

Suitable for private or consortium blockchains with established trust, prioritizing performance and efficiency. Less ideal for public, fully decentralized networks requiring censorship resistance and maximum decentralization.

Gas Limit and Gas Fee

In the AmChain ecosystem, every transaction carries a gas fee. This fee acts as compensation for the computational resources needed to complete the transaction. The gas limit determines the maximum amount of gas that a transaction can consume, while the gas fee represents the cost per unit of gas used.

Calculation of Transaction Fee

In AmChain, the calculation of transaction fees is based on the total number of gas units used, multiplied by the cost of each individual gas unit. To illustrate, let's say a transaction consumes 21,000 gas units and the cost of each gas unit is 0.000001 AMC. In this case, the total transaction cost would be determined as follows:

$$\text{Total transaction cost} = \text{Total gas used} * \text{Cost per gas unit}$$

For a transaction involving the transfer of 100 HEWE tokens, with a gas limit set at 21,000 and a cost of 0.000001 AMC per gas unit, the total transaction cost would be:

$$\text{Total transaction cost} = 21,000 * 0.000001 \text{ AMC}$$



Transaction Charges in AMC

Please note that transaction charges are denominated in AMC. Users can prioritize transactions by adjusting the gas used for each transaction.

Prioritizing Transactions

Consider this scenario: Amy wants to send 1000 HEWE token to Brian. The base fee for the transaction is set at 1, but Amy decides to tip an additional 5 to expedite the process.

To calculate the total gas fee for the transaction, use the following formula:

$$\text{Total gas fee} = \text{Gas limit} * (\text{Base fee} + \text{Priority fee})$$

Based on the given figures, Amy's total gas fee for the transaction would be

$$\text{Total gas fee} = 0.000068584 * (1 + 5) = 0.000411504 \text{ AMC}$$

Users have the power to customize transaction priorities by including a priority fee, guaranteeing quicker processing according to their preferences.

To determine the transaction fee, users must acquire AMC (Ameritec Coin), our platform's designated currency for covering the gas fee linked to transactions.

Our gas fee structure follows industry standards, guaranteeing fairness and predictability for users. Each transaction's gas count is in line with industry norms, ensuring a consistent experience across the blockchain ecosystem. Moreover, users have the freedom to prioritize their transactions by adjusting the gas count as necessary. This enables efficient and prompt processing of transactions, empowering users to customize their activities based on their preferences and needs.



Ameri Coin (AMC)

Ameri Coin (AMC) stands as the cornerstone of our blockchain ecosystem, embodying the principles of decentralization, transparency, and efficiency. As a native cryptocurrency, AMC plays a vital role in powering the decentralized infrastructure that underpins our blockchain network.

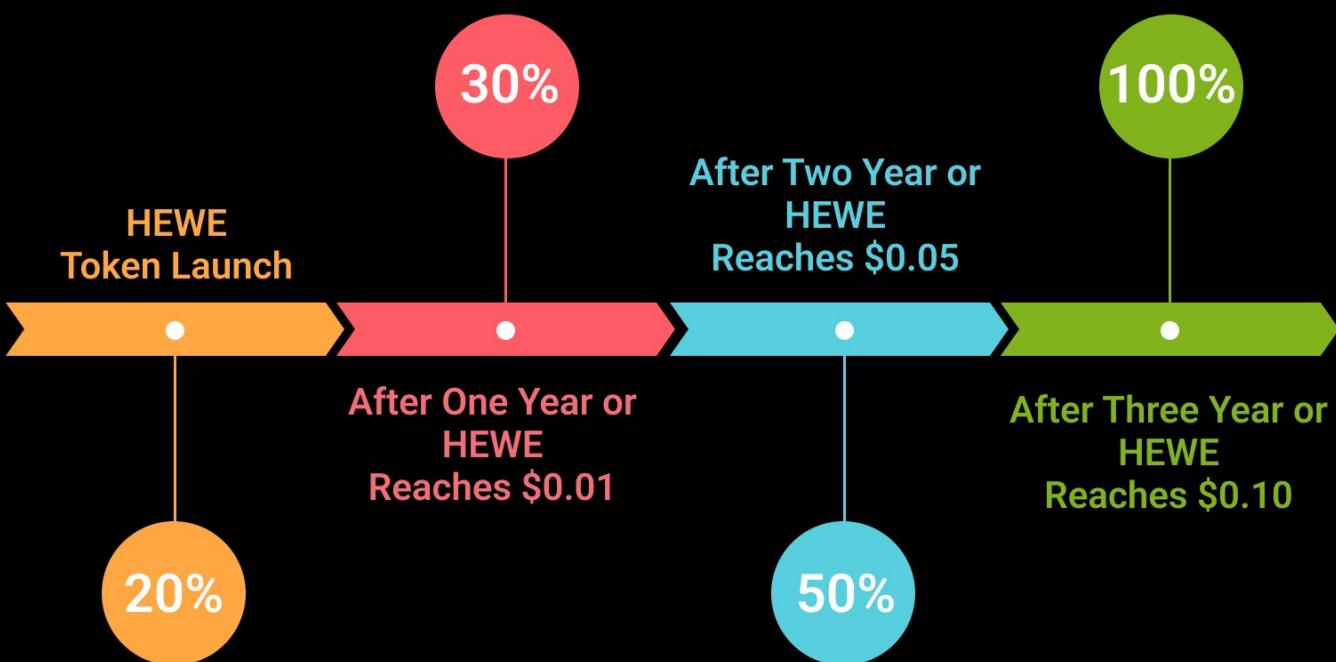


AMC is the beating heart of our blockchain ecosystem, enabling secure and unchangeable transactions across the network. By harnessing the power of blockchain technology, AMC transactions are lightning-fast and completely transparent, guaranteeing smooth interactions between users and applications.

AMC plays a crucial role in powering our blockchain network's consensus mechanism. Through the innovative use of Proof of Authority (PoA), validators are motivated to safeguard the network and verify transactions, all while earning valuable AMC rewards. This dynamic ensures the unwavering integrity and dependability of our blockchain, cultivating a sense of trust among participants and fortifying the decentralized nature of our ecosystem.

AMC20 Token (HEWE)

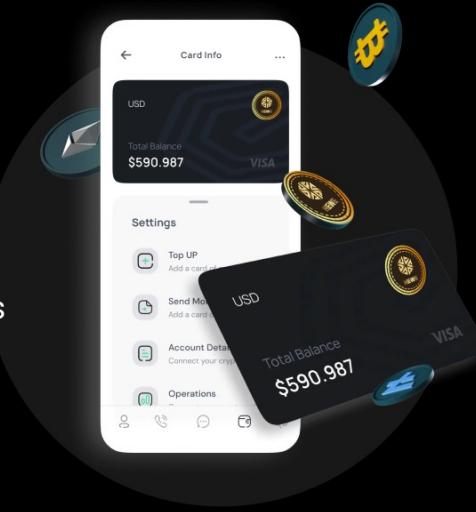
The distribution of HEWE tokens is designed to motivate and compensate token holders in accordance with the token's value growth.



AmChain Explorer

AmChain Explorer, your gateway to the transparent and decentralized realm of blockchain. As trailblazers in the world of digital innovation, we take immense pride in unveiling this groundbreaking tool that empowers users with unrivaled visibility and profound insights into the AmChain network.

The AmChain Explorer is a powerful tool that provides users with a user-friendly interface to delve into the intricate workings of the blockchain. With its intuitive features and comprehensive functionalities, individuals can effortlessly navigate through transactions, blocks, and addresses, gaining profound insights into the network's activities.



Key Features and Functionalities:

Transaction Search: Seamlessly monitor and trace individual transactions, empowering users to stay updated on the movement of assets across the AmChain network in real-time.

Block Exploration: Plunge into the intricate intricacies of each block within the blockchain, unearthing crucial details like transactional data, precise timestamps, and towering block heights.

Address Monitoring: Keep a close eye on specific addresses to track wallet activity. This feature empowers users by providing real-time updates on incoming and outgoing transactions associated with a particular address.

Explore Transaction History: Dive into a detailed and comprehensive record of all transactions ever processed on the blockchain, presented in a clear and chronological order.

Network Statistics: Unlock a treasure trove of knowledge about the AmChain network's performance and health. Delve into the depths of detailed statistics and analytics, where transaction volume, block generation rate, and network hash rate metrics await your exploration.

Transparency: The AmChain Explorer prioritizes transparency, ingrained in our blockchain ecosystem. Users have unrestricted access to transaction data and network metrics, fostering trust, accountability, and confidence in the AmChain network.

AmChain plans AI integration ahead

Welcome to AmChain, the groundbreaking fusion of artificial intelligence (AI) and blockchain technology. Our mission is to revolutionize security standards by harnessing the power of AI within our platform. Through this integration, we are able to elevate security measures, streamline processes, and ensure unwavering reliability.

1. Decentralized Decision-Making with AI:

AI algorithms are being integrated into blockchain networks to enable decentralized decision-making processes. Smart contracts, powered by AI, can autonomously execute tasks based on predefined conditions, reducing the need for intermediaries.

2. Enhanced Data Security and Privacy:

Blockchain's decentralized and cryptographic nature provides a secure and transparent foundation for AI applications. It ensures the integrity and immutability of data, addressing concerns related to data manipulation and unauthorized access. This is particularly crucial in sectors dealing with sensitive information.

3. Tokenized AI Services:

Blockchain facilitates the tokenization of AI services, allowing for seamless and transparent transactions. Users can pay for AI services using cryptocurrencies, and smart contracts ensure the fair execution of agreements between service providers and consumers.

4. Federated Learning on the Blockchain:

Federated learning, a privacy-preserving machine learning approach, can be integrated with blockchain to enable collaborative model training across decentralized networks. This ensures that sensitive data stays localized and secure while contributing to the improvement of AI models.

5. Supply Chain Transparency and Traceability:

Blockchain's distributed ledger technology, when combined with AI, enhances supply chain transparency. AI algorithms can analyze data stored on the blockchain to provide real-time insights into the origin, journey, and conditions of products, ensuring authenticity and traceability.

6. Fraud Detection and Prevention:

AI's predictive analytics and pattern recognition capabilities can be employed on the blockchain to detect and prevent fraudulent activities. By analyzing transaction patterns and behavior, AI algorithms contribute to the creation of a more secure and fraud-resistant financial ecosystem.

7. Democratizing AI with Tokenized Incentives:

Blockchain introduces token economies that can incentivize individuals to contribute their computing power or data for AI model training. This decentralized approach aims to democratize access to AI resources, enabling a more inclusive and collaborative AI development landscape.