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INTRODUCTION

The Genesis Blockchain, meticulously designed and meticulously crafted, stands as a groundbreaking platform committed to revolutionizing the realms of speed, cost-effectiveness, and limitless development possibilities within the blockchain ecosystem. Functioning as a dynamic and robust foundation, it not only ensures swift transaction verification but also achieves this with unparalleled cost efficiency, making it an ideal choice for various applications.

This blockchain opens up a world of opportunities for developers, empowering them to materialize their most imaginative ideas on the chain. From the creation and trade of Non-Fungible Tokens (NFTs) to the development of immersive games, cutting-edge applications, decentralized exchange (DEX) tokens, and beyond, the Genesis Blockchain serves as a versatile canvas for innovation.

Leveraging the Proof-of-Authority (PoA) consensus algorithm, this blockchain further enhances its reliability and security, solidifying its position as a trailblazer in the ever-evolving landscape of decentralized technologies. As a result, the Genesis Blockchain stands as a testament to the ongoing evolution of blockchain, promising a future where innovation and efficiency coalesce to shape the next generation of decentralized solutions.

TOKENOMICS

Built by Genesis, \$AGORA is a decentralized public blockchain that has high performance, low fees, and EVM compatibilities.

\$AGORA is fully compatible with the Ethereum Virtual Machine (EVM) for ease of smart contract development. \$AGORA is also compatible with any tools built for Ethereum and other EVM chains.

\$AGORA can be stored on MetaMask, Coinbase Wallet, MathWallet, Elatos Wallet, and any wallet that supports custom EVM chains.

\$AGORA Specs:

- Name - Genesis
- Symbol - AGORA
- Premine - 800 million
- Decimal - 18
- Block time - 7 sec
- ChainID - 1442

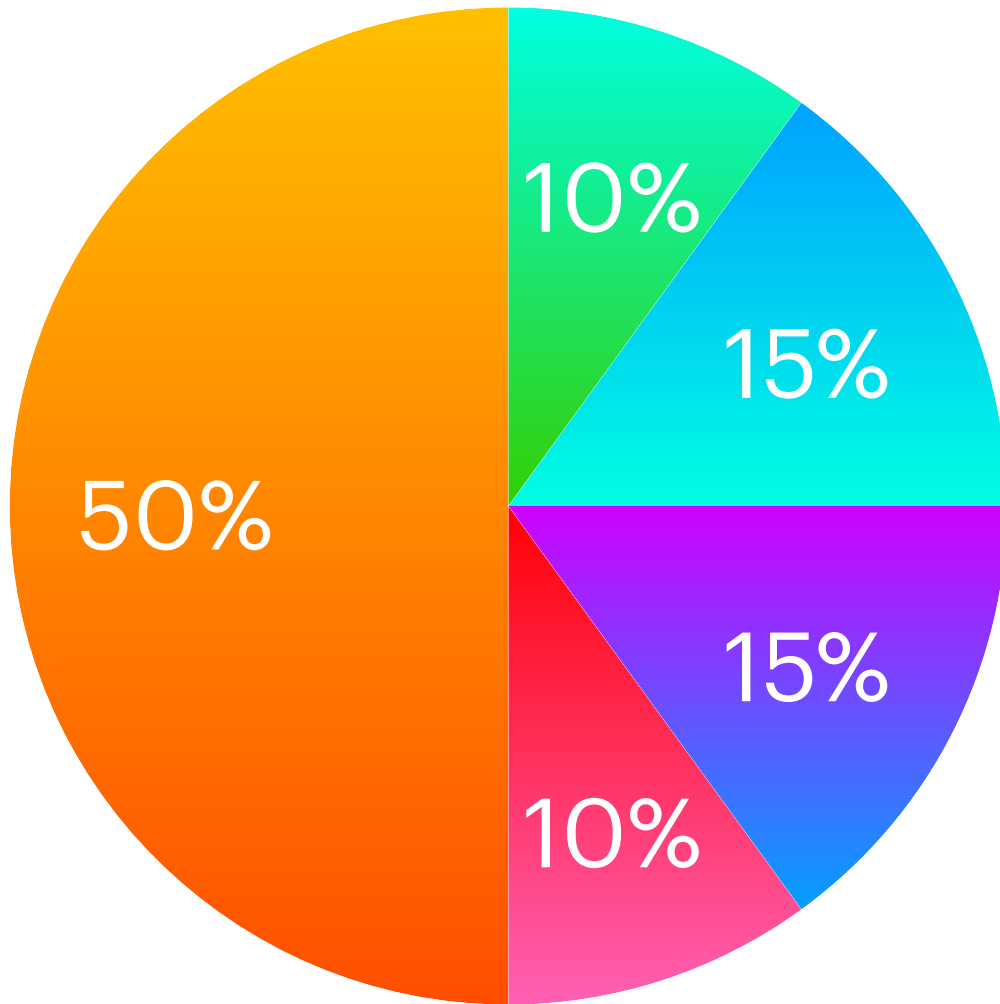
TOKENOMICS Cont.

Below is the information to add Genesis to MetaMask. You can also use this information to add Genesis to other wallets that support custom EVM chains.

- Network name - Genesis
- New RPC URL - <https://rpc.genesiscore.org>
- Chain ID - 1442
- Currency symbol - AGORA
- Block explorer URL - <https://explorer.genesiscore.org>

DISTRIBUTION

Supply = 800 Million



- Team
- CEX Listing
- Staking
- Future Development
- Presale

ROADMAP

The timeline for Genesis (AGORA) encompasses the following key milestones and accomplishments:

Year 1:

Development of the Genesis blockchain infrastructure, including the creation of the mainnet blockchain and smart contract functionality. Establishment of strategic partnerships with educational institutions, content providers, and industry stakeholders. Community building and engagement initiatives to attract and onboard learners, educators, and contributors to the AGORA ecosystem. Creation of iOS and Genesis wallets with staking functionality.

Year 2:

Expansion of the Genesis ecosystem through the integration of additional educational platforms and tools. Implementation of gamification elements to incentivize and reward learner engagement and achievement. Launch of comprehensive analytics and assessment tools to measure learner progress and optimize educational pathways. Further partnerships to foster collaboration between academia and industry, enabling smoother transitions for learners into relevant career pipelines. Creation of a CEX with AGORA as the main currency.

Year 3:

Scaling of the Genesis ecosystem to a global level, encompassing a wide range of educational disciplines and regions. Integration of artificial intelligence and machine learning technologies to personalize learning experiences and provide tailored recommendations for learners. Recognition of AGORA as a valuable digital credential for learners, acknowledged and sought after by employers worldwide.

TECHNICAL INFORMATION

Accounts

In Genesis, the state is comprised of entities known as "accounts," each possessing a 20-byte address. State transitions involve direct transfers of value and information between these accounts. A Genesis account consists of four components:

1. Nonce: A counter utilized to ensure each transaction is processed only once.
2. Current balance of Genesis coins held by the account.
3. Contract code associated with the account, if applicable.
4. Storage space of the account (by default, it is empty).

"Ether" refers to the primary internal cryptocurrency in Genesis and is utilized for paying transaction fees. Generally, there exist two types of accounts within Genesis:

1. Externally owned accounts: These accounts are controlled by private keys. Messages can be sent from externally owned accounts by creating and signing a transaction.
2. Contract accounts: Controlled by their contract code, contract accounts activate their code whenever they receive a message. This activation enables them to read and write to internal storage, send messages, or create contracts in response.

It's important to note that in Genesis, "contracts" should not be viewed as something to be "fulfilled" or "complied with." Instead, they are akin to "autonomous agents" residing within the Genesis execution environment. These contracts consistently execute a specific piece of code when "poked" by a message or transaction. Moreover, they possess direct control over their own Genesis balance and maintain a key/value store to manage persistent variables.

TECHNICAL Cont.

Transactions

The term "transaction" is used in Genesis (AGORA) to refer to the signed data package that stores a message to be sent from an externally owned account.

Transactions contain:

- The recipient of the message
- A signature identifying the sender
- The amount of Genesis to transfer from the sender to the recipient
- An optional data field
- A STARTGAS value, representing the maximum number of computational steps the transaction execution is allowed to take
- A GASPRICE value, representing the fee the sender pays per computational step

The first three are standard fields expected in any cryptocurrency. The data field has no function by default, but the virtual machine has an opcode using which a contract can access the data. For example, if a contract is functioning as an on-blockchain domain registration service, it may interpret the data being passed to it as containing two "fields": the first field being a domain to register and the second field being the IP address to register it to. The contract would read these values from the message data and appropriately store them.

The STARTGAS and GASPRICE fields are crucial for AGORA's anti-denial of service model. To prevent accidental or hostile infinite loops or other computational wastage in code, each transaction is required to set a limit on how many computational steps of code execution it can use. The fundamental unit of computation is "gas." Usually, a computational step costs 1 gas, but some operations cost higher amounts of gas due to increased computational complexity or increased data storage requirements. Additionally, there is a fee of 5 gas for every byte in the transaction data. The fee system is designed to ensure that an attacker pays proportionately for every resource they consume, including computation, bandwidth, and storage. Therefore, any transaction that results in the network consuming a greater amount of these resources must have a gas fee roughly proportional to the increase.

TECHNICAL Cont.

Code

Genesis contracts utilize a low-level bytecode language known as "Genesis Virtual Machine Code" or "GVM code". This code is composed of a sequence of bytes, where each byte represents an operation. Execution of the code follows an infinite loop, wherein the current operation at the program counter (starting at zero) is executed, and the program counter is incremented by one. This process continues until the end of the code is reached or an error, STOP, or RETURN instruction is encountered. Data in the code is stored in three distinct spaces:

- 1. The stack:** A last-in-first-out container that allows values to be pushed and popped.
- 2. Memory:** An expandable byte array with infinite capacity.
- 3. Contract storage:** A persistent key/value store that retains data in the long term, unlike the stack and memory which reset after computation.

Additionally, the code can access the value, sender, and data of the incoming message, as well as block header data. It can also return a byte array of data as an output.

The execution model of EVM code can be described concisely. While the Genesis Virtual Machine is running, its complete computational state can be defined by the tuple (block_state, transaction, message, code, memory, stack, pc, gas). Here, "block_state" represents the global state encompassing all accounts, balances, and storage. At the beginning of each execution round, the current instruction is determined by retrieving the byte at the program counter position (or 0 if $pc \geq \text{len}(\text{code})$). Each instruction has its own definition, specifying how it affects the tuple. For instance, the ADD instruction pops two items from the stack, pushes their sum, reduces gas by 1, and increments the program counter by 1. On the other hand, the SSTORE instruction pops the top two items from the stack and inserts the second item into the contract's storage at the index specified by the first item. While just-in-time compilation offers multiple optimization techniques for Genesis virtual machine execution, a basic implementation of Genesis can be accomplished with a few hundred lines of code.

TECHNICAL Cont.

Signing

Genesis uses the Proof of Authority (PoA) algorithm. PoA is a reputation-based consensus algorithm proposed in 2017 by Ethereum co-founder Gavin Wood. It leverages identities, meaning block verifiers do not stake coins but their reputations. PoA blockchains are secured by validating nodes acting as trusted entities.

Conditions may vary, but typically PoA relies on valid and reliable identities, an investment commitment, and equal standards for approving verifiers. The reputation mechanism ensures certainty behind the identity of the attacker.

The consensus is lightweight and utilizes significantly less electricity than mining. In addition, the consensus allows for lightning fast transactions as well as super cheap fees.

Genesis is 85 times faster than Bitcoin.

SECURITY

SERVER

We prioritize the security and integrity of Genesis and have implemented strategies to address potential risks such as hacking or system failures.

We host our blockchain with a secure and reliable hosting platform. The VPS is protected with various systems to protect and mitigate attacks against Genesis.

PUBIC

Genesis Core is committed to transparency and accountability. The blockchain is public and immutable. All transactions and blockchain related data is visible and tamper-proof. The source-code is open-source as well for security.

WALLET

Genesis is a decentralized cryptocurrency, so you are in charge of keeping your funds safe. It is recommended to store your AGORA in a wallet where you are in-charge of your own private keys. Is important to keep your wallet's private keys safe and never share it with anyone or post it online.

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