

## The Constitution of the Gnode Blockchain

### Preamble

We, the decentralized community of the Gnode Blockchain, establish a comprehensive and transparent governance system, promote individual freedoms, ensure equitable participation, and foster innovation. Therefore, we adopt this Constitution to guide our collective actions.

### Article I: Principles & Values

#### Article I: Name and Purpose

We name this organization the Gnode Consortia DAO (Decentralized Autonomous Organization), referred to as the Gnode Blockchain.

You can access all functions of the Gnode Blockchain at [www.gnode.io](http://www.gnode.io).

### Vocabulary:

- **Blockchain:** A system where participants process data and transactions across multiple computers.
- **Node:** The software that runs on a participant's device within the blockchain to process data and transactions.
- **Decentralized Blockchain:** A blockchain network that operates without an authority group. Every member of the blockchain controls and makes decisions, each receiving an equal vote.

The Gnode Blockchain serves the following purposes:

- **Decentralization:** We remove the need for a central authority or intermediary.
- **Autonomy:** Users decide how much they will contribute to the community.
- **Transparency:** Transactions record in a transparent ledger accessible to all participants.
- **Security:** Decentralized blockchains resist attacks better because they lack a single point of failure.
- **Efficiency and Cost Reduction:** By eliminating intermediaries, we reduce transaction costs and streamline processes.
- **Censorship Resistance:** No single entity controls our decentralized blockchain, making it less susceptible to censorship.

### How it Works:

- **Purchase License:** Customers purchase a node license from the Gnode Blockchain (for example, \$1000).
- **Run Software:** Node owners run the software in the background of their devices, providing Oracle applications (apps partnered with the Gnode Consortia DAO) with computer power to perform their functions.
- **Receive Rewards:** In return for their contributions, node owners receive Gnode rewards, which they can exchange for material goods within the Gnode Marketplace.
- **Grow the Community:** Node owners can earn additional Gnode digital rewards for increased effort and innovation within the Gnode decentralized ecosystem.

## **Article II: Governance Structure**

### **Article II: Principles and Values**

1. **Autonomy:** The Gnode Blockchain empowers individuals to own, control, and monetize their devices without outside coercion.
2. **Transparency:** All actions and decisions within the Gnode community occur with the highest level of transparency and openness.
3. **Equity:** Every participant within the Gnode community has an equal opportunity to contribute, participate, and benefit.
4. **Innovation:** The Gnode community encourages participants to share new ideas and technologies that improve the organization as a whole.

## **Article III: Roles & Responsibilities**

### **Article III: Roles, Responsibilities, and Rights**

1. **Node Owners**
  - All who own a node in the blockchain.
  - They maintain their nodes, participate in governance and discussions, and propose policies.
2. **The Gnode Consortia DAO:**
  - This supreme decision-making body within the Gnode Blockchain comprises all node owners, each with one vote.
  - It approves major protocol changes, new Oracle applications, and other significant decisions.
3. **The Council of Guardians:**
  - Elected representatives from the community oversee day-to-day governance.
  - This council consists of five members serving one-year terms.
  - Responsibilities include allocating funds, managing disputes, and ensuring adherence to the Constitution.
4. **Developers**
  - Individuals and teams contribute to the development of the Gnode Blockchain.
  - They work on technical advancements such as application development and protocol updates.
  - Developers must adhere to the principles and guidelines set forth by the DAO and the Council of Guardians.

## **Article IV: Decision-Making Process**

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1. **Proposal Submission:**
  - Any node owner can submit a proposal for DAO consideration.
  - Proposals must detail objectives, implementation plans, and resource requirements.
2. **Voting Mechanism:**
  - Each node owner has one vote for each node they own.

- The DAO approves proposals by a majority vote unless adopting a new amendment, which requires a two-thirds majority vote.
  - Voting periods last for a minimum of seven days to ensure adequate participation.
- 3. Implementation:**
- The Council of Guardians and relevant contributors implement approved proposals.
  - They must transparently communicate progress on implementation to the community.

## **Article V: Financial Management**

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- **Treasury Management:**
  - The Council of Guardians manages the Gnode Blockchain's treasury.
  - They use funds for development, community projects, and operational expenses.
- **Financial Reporting:**
  - The Council of Guardians provides regular financial reports to the community.
  - They handle all financial matters transparently to ensure trust and accountability.

## **Article VI: Dispute Resolution**

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- **Mediation and Arbitration:**
  - The Council of Guardians mediates disputes between community members.
  - They may form an independent arbitration panel for unresolved cases.

## **Article VII: Amendments**

### **Article VII: Code of Conduct:**

All community members must adhere to a code of conduct that promotes respect, integrity, and collaboration. As determined by the Council of Guardians, a member's failure to act accordingly may result in that member's expulsion from the community and the revocation of their node. If an expulsion is deemed appropriate, it will be at the sole discretion of the Council of Guardians and will be carried out under their direction. This Constitution, ratified by the Gnode Blockchain community, serves as our guiding document for decentralized governance. It upholds the principles of sovereignty, transparency, equity, and innovation, along with logistical considerations within the organization.

## **Blockchain**

The Gnode Blockchain features a robust and scalable architecture that ensures security, efficiency, and flexibility. The blockchain structure divides into two primary layers: Layer One Validators and Layer Two Oracle Nodes. Each layer plays a crucial role in maintaining the network's functionality, security, and overall performance.

### **Layer One: Validators**

Layer One of the Gnode Blockchain consists of validators that operate using a Proof-of-Stake (PoS) consensus mechanism. These validators secure the network and validate transactions.

## 1. **Proof-of-Stake (PoS) Mechanism:**

- The Gnode Blockchain employs a Proof-of-Stake consensus mechanism that relies on validators staking the Gnode Staking Token (GST) as collateral. This process incentivizes validators to act honestly and secure the network, as they have a financial stake in the system.
- Validators create new blocks and validate transactions based on the amount of GST they stake. The more tokens staked, the higher the likelihood of being chosen as a validator, ensuring a decentralized and secure network.

## 2. **Roles and Responsibilities:**

- **Transaction Validation:** Validators verify the accuracy and legitimacy of transactions, ensuring all comply with the network's rules and record correctly on the blockchain.
- **Block Creation:** Selected validators create new blocks and add them to the blockchain by grouping validated transactions, signing them with their cryptographic key, and broadcasting them to the network.
- **Security and Consensus:** Validators maintain the network's security and achieve consensus by voting on the validity of blocks proposed by others, ensuring the blockchain's integrity and continuity.

## **Layer Two: Oracle Nodes**

Layer Two of the Gnode Blockchain comprises Oracle Nodes, which perform three key functions essential to the network's operation and utility. These nodes enhance the blockchain's functionality by providing services to Oracle applications and ensuring the accurate distribution of the Gnode native utility token.

### 1. **Authentication and Validation for Oracle Apps:**

- Oracle Nodes authenticate and validate interactions with Oracle applications—third-party services that leverage the Gnode Blockchain for various use cases, such as data sharing and digital identity management.
- They ensure that only authorized applications can access the blockchain and that all interactions remain secure and compliant with network standards, protecting the network from unauthorized access and potential breaches.

### 2. **Daily Distribution of Gnode Utility Token:**

- One critical function of Oracle Nodes involves managing the daily distribution of the Gnode utility token. This mechanism rewards participants for their contributions to the network and ensures equitable token allocation.
- Oracle Nodes calculate distribution amounts based on predefined criteria and distribute tokens to eligible participants, ensuring fair and transparent allocation that incentivizes active participation and engagement within the community.

### 3. **Validation of the Proof-of-Impact Protocol:**

- The Proof-of-Impact protocol uniquely validates user data and behavior to determine their contribution to the network. Oracle Nodes validate this data and ensure its accuracy.

- The protocol assesses various metrics, including user activity, contributions to Oracle applications, and overall network impact. Oracle Nodes validate the data based on this assessment and contribute to the daily distribution of Gnode tokens, ensuring merit-based allocation that rewards meaningful contributions.

### **Integration and Coordination**

Integration and coordination between Layer One Validators and Layer Two Oracle Nodes ensure the seamless operation of the Gnode Blockchain. These layers collaborate to provide a secure, scalable, and efficient network that meets the diverse needs of its community.

#### **1. Inter-Layer Communication:**

- Validators and Oracle Nodes communicate through established protocols to ensure the integrity and continuity of the blockchain. Validators provide foundational security and consensus, while Oracle Nodes enhance the network's utility and functionality.
- This inter-layer communication synchronizes all parts of the network, enabling efficient and effective operations.

#### **2. Collaborative Governance:**

- Both Layer One Validators and Layer Two Oracle Nodes participate in the governance of the Gnode Blockchain. They collaborate on decision-making processes, proposal reviews, and the implementation of network upgrades and changes.
- This collaborative approach ensures governance decisions reflect the interests and expertise of all stakeholders, promoting a more equitable and inclusive governance framework.

### **Conclusion**

The Gnode Blockchain serves as a decentralized ecosystem that empowers individuals and communities to participate in a secure and transparent network. Its governance structure, layered architecture, and commitment to principles of autonomy, equity, transparency, and innovation provide the foundation for a thriving digital community. Through continuous improvement, collaboration, and innovation, the Gnode Blockchain aims to redefine the landscape of decentralized technologies and foster a vibrant, equitable digital economy.

### **Tokenomics**

The Gnode Blockchain's tokenomics incentivize participation, ensure fair distribution, and maintain a sustainable economic model. This section explains the daily distribution mechanism, tokenomics, and principles governing the Gnode native utility token.

#### **Tokenomics Overview**

##### **1. Total Supply:**

- The Gnode Blockchain caps its supply at 35 billion Gnode tokens (GPT), ensuring scarcity and potential value appreciation.

## 2. **Initial Distribution:**

- At the genesis block, the network distributes 50% of the total supply (17.5 billion GPT) within the first year to incentivize early participation and drive ecosystem growth.

## 3. **Halving Schedule:**

- The Gnodei Blockchain follows a halving schedule where token distribution halves annually on the genesis block's anniversary, inspired by Bitcoin but adapted for Gnodei's needs. This mechanism slows token inflation, ensuring long-term sustainability and value appreciation.

## **Daily Distribution Mechanism**

The daily distribution mechanism rewards active participation and contributions to the network. Here's how it works:

### 1. **Distribution Pool:**

- In the first year, the distribution pool starts with 17.5 billion GPT, spread evenly over 365 days. Each subsequent year, the pool halves, reducing daily distribution amounts.

### 2. **Daily Allocation:**

- In the first year, 47,945,205 million GPT tokens are distributed daily. After each halving, this daily allocation decreases in line with the reduced annual pool.

### 3. **Distribution Criteria:**

- Gnodei distributes tokens based on criteria that assess network participants' contributions, including:
  - **Node Operation:** Active operation of both Layer One Validators and Layer Two Oracle Nodes.
  - **Application Interaction:** Contributions to Oracle applications through tasks like data validation.
  - **User Activity:** Transaction frequency, smart contract deployment, and governance participation.
  - **Impact Assessment:** Proof-of-Impact protocol validation of user contributions.

## **Proof-of-Impact Protocol**

The Proof-of-Impact protocol validates user activity, contributing to daily distribution. Oracle Nodes verify this data, ensuring the tokens are distributed based on genuine contributions.

## Long-Term Sustainability

The Gnode Blockchain's tokenomics promote sustainability through several principles:

1. **Controlled Inflation:**
  - The halving schedule slows token inflation, ensuring scarcity and supporting value appreciation.
2. **Incentive Alignment:**
  - The token distribution model incentivizes active participation, driving network growth and security.
3. **Transparency and Predictability:**
  - The clear distribution and halving schedule ensure transparency, allowing participants to plan their activities confidently.
4. **Adaptive Mechanisms:**
  - Gnode's governance allows the community to propose adjustments to the distribution model, ensuring flexibility.

This tokenomics model ensures fair distribution and sustainable growth for the Gnode Blockchain ecosystem.

## Gnode Oracles

The Gnode SDK provides an open-source toolkit for developers to build applications that use the Gnode blockchain. These apps, known as Gnode Oracle Applications, natively interoperate with Gnode.

### Interoperability with the Gnode Blockchain

Oracle Apps can interact with the blockchain in two key ways:

- **Access Blockchain Data:** Apps retrieve real-time data such as transaction histories and user activity metrics, allowing them to offer services based on secure blockchain data.
- **Submit Transactions:** Apps can record data entries, initiate token transfers, and interact with smart contracts, securely recording their activities on the blockchain.

### Transforming Apps into Gnode x1 Nodes

By embedding specific code, developers can turn their apps into Gnode x1 nodes, gaining enhanced functionality, security, and decentralization.

### Benefits of Gnode Oracle Apps

1. **Customization:** Developers can tailor Oracle Apps to meet specific needs, creating specialized applications.
2. **Efficiency:** Direct blockchain interaction eliminates intermediaries, reducing latency and improving performance.

3. **Innovation:** Developers can experiment with new features, creating unique applications for users.
4. **Community Growth:** By integrating with the blockchain, Oracle Apps contribute to the network's expansion, attracting more users and developers.

Gnode Oracle Apps empower developers to create innovative, secure applications that enhance the Gnode Blockchain ecosystem.