

Dimension(EON) Project Planetary Landing (Phase 2)



In-Depth Analysis of Dynamic Node — Inside of Dimension
C.H.A.O.S. Core Modules (Part 2)

Proposal Applicant

The applicant for the proposal can only be a governance account. The governance account can support a callable contract by initiating a transaction statement, and agree on the details of the proposal, the voting deadline, the effective height, and so on.

Voters

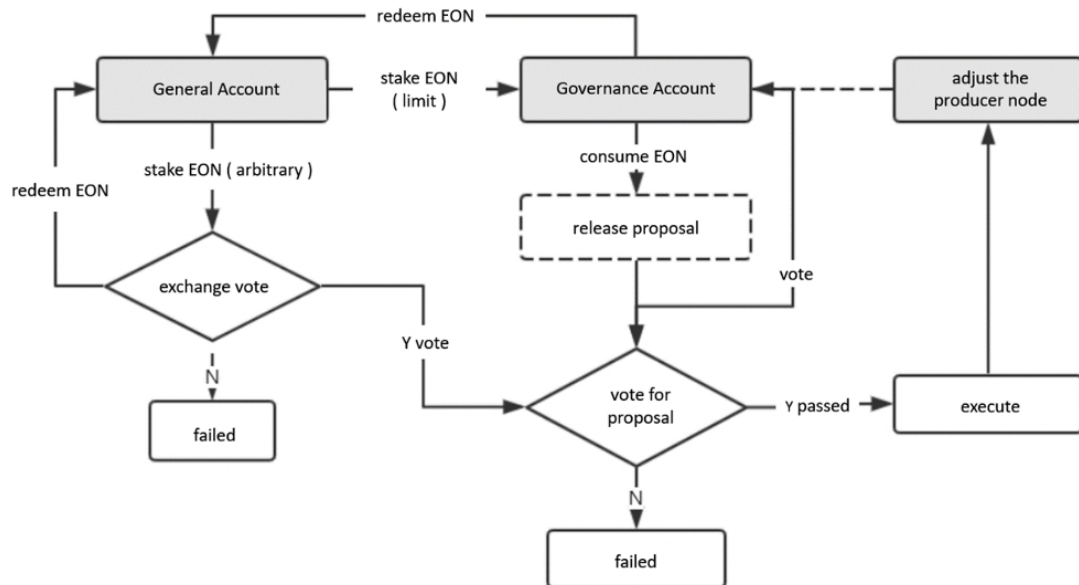
General accounts stake a certain number of EON in exchange for a corresponding number of votes, and initiate a transaction to vote on the proposal. When the system's agreed vote rate is reached and the rate of block production reaches the effective height of the contract, the contract is automatically called by the network according to agreed conditions. The account only needs to stake EON and will have voting rights on the proposal, regardless of whether the account is a governance account.

Producer Node

In Dimension network, some governance accounts act as producer nodes. These are responsible for the entire network block production and maintenance. Producer nodes are responsible for both block production and verification. They are generated by a founding node or by dynamic voting. Concurrently, the producer node can be canceled by proposal voting. The production information of the producer nodes is open to the whole network and is supervised by the committee. For nodes that cannot guarantee production, the node will be voted out, ceasing to be a producer node. At the same time, Dimension has reserved part of the EON token supply for stake reward, and rewards the node according to the number of blocks it produces. Communities that intends to participate in staking pools can also participate in the "Dimension node co-construction plan" through staking to obtain rewards.

Technical Solution

The dynamic node contract is deployed on the chain to store all the state information of the current producer nodes. The dynamic node contract supports multiple types of operation interfaces, such as initiating the governance account proposal, voting, updating the status of the proposal, removing the producer node, querying the status of the proposal, etc., covering the closed loop from proposal to execution.



Proposal Initiation of Governance Account

Dimension specifies that only governance accounts have the right to apply to become a producer node. After the governance account initiates the proposal and applies to become a producer node, all current accounts of Dimension network can vote on the valid proposal after obtaining the corresponding voting weight through staking EON.

Create governance proposal

```

1 new governance proposal
2 Usage: ./cleos system newproposal [OPTIONS] owner account block_height
   type status
  
```

Vote for Proposal

All general accounts and governance accounts can stake a certain amount of EON in exchange for the corresponding number of votes. The accounts with voting rights can vote on the proposal. The necessary proposal information such as the deadline for voting and the effective time after voting is described in the proposal. Once the proposal is published, it cannot be modified or cancelled. After the proposal applicant adjusts the proposal, the new proposal is re-released. The information of the whole network proposal can be publicly disclosed and accepted by the node governance committee.

Vote for governance proposal

```
1 Vote governance proposal
2 Usage: ./cleos system voteproposal [OPTIONS] owner proposal_id vote
3
```

Proposal passed

After the proposal has reached the deadline, the proposal will be automatically settled and be voted on according to the pre-made algorithm. For the proposal of dynamic node applications, if passed, the specified governance account in the proposal will be added to the schedule in the next block out cycle. In the next production period, the newly added producer node can perform production operations, becoming a fully verified producer node.

Execute governance proposal

```
1 Execute governance proposal
2 Usage: ./cleos system execproposal [OPTIONS] owner proposal_id
```

Node Removing

The removal process of producer node is similar to the dynamic node application mechanism. The governance account initiates the request for node removal proposal and removes the designated node from the schedule of the next production node cycle when the proposal is approved.

Basic data query:

Query governance node

```
1 get table eonio eonio gnode
```

Query proposal

```
1 get table eonio eonio proposals
```

Query proposal votes

```
1 get table eonio [proposal_id] propvote
```

Conclusion

For the addition and removal of each dynamic node, all accounts in the network shall participate in the voting, and the schedule shall be updated after the agreement is reached.

Then, the new schedule shall be executed in the next block production cycle. This dynamic adjustment of nodes in the continuous operation of the blockchain network not only improves the flexibility of the blockchain network, but also ensures the orderly operation of the blockchain network under efficient management. This greatly reduces maintenance costs and effectively avoids potential risks. The dynamic node scheme provides comprehensive assurance and best practices for the operation of commercial blockchain networks.