

Claims

1. A method for providing distribution of transaction data for blockchain consensus, the method comprising:

acquiring the transaction data from a transaction request with no sequence requirements, wherein the transaction request with no sequence requirements does not require processing according to a time factor of when the transaction request was sent by a sender; and

distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in a consensus unit set without considering the time factor of when the transaction request was sent by the sender, causing the plurality of consensus units to perform consensus processing on the distributed transaction data without considering the time factor of when the transaction request was sent by the sender.

2. The method according to claim 1, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

according to a number of sets of the transaction data, determining, in a random manner, a matching number of consensus units from the consensus unit set as the plurality of consensus units; and

distributing the sets of transaction data to the determined consensus units, respectively.

3. The method according to claim 1, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

determining, in a polling manner, consensus units in need of consensus transaction from the consensus unit set as the plurality of consensus units; and

distributing the transaction data to the determined consensus units.

4. The method according to claim 1, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

determining a load capacity of each consensus unit in the consensus unit set; and

distributing, according to a load balancing rule, the transaction data to the plurality of consensus units in the consensus unit set.

5. The method according to claim 1, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

determining a quantity of resources required to process the transaction data and a quantity of idle resources of each consensus unit in the consensus unit set;

in response to that the number of consensus units having a quantity of idle resources greater than the quantity of resources required for processing the transaction data is greater than a set value, determining, in a polling manner, consensus units in need of consensus transaction from the consensus units having more idle resources than the resources required to process the transaction data, and distributing the transaction data to the determined consensus units; and

in response to that the number of consensus units having the quantity of idle resources greater than the quantity of resources required for processing the transaction data is smaller than the set value, determining, according to a load balancing rule, consensus units having a load capacity below a set condition from the consensus units having more idle resources than the resources required to process the transaction data, and distributing the transaction data to the determined consensus units.

6. The method according to claim 1, wherein the distributing different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set, comprises:

determining a working state of each consensus unit in the consensus unit set, the working state comprising at least one of a normal state or an abnormal state; and

determining consensus units from consensus units with the working state being a normal state as the plurality of consensus units.

7. The method according to claim 1, wherein:

the transaction data comprises multiple sets of transaction data; and

the distributing, according to a preset distribution rule, the different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

grouping the multiple sets of transaction data to obtain two or more transaction data groups; and

according to the preset distribution rule, distributing the transaction data groups to

different consensus units in the consensus unit set.

8. The method according to claim 1, wherein:

consensus results from different consensus units are stored into blocks of a blockchain network according to time stamps of the consensus results.

9. The method according to claim 8, wherein the storing the consensus results into blocks of the blockchain network comprises:

storing the consensus results into blocks of nodes in the blockchain network corresponding to consensus units that generate the consensus results.

10. A blockchain consensus system for providing distribution of transaction data for blockchain consensus, the system comprising: a distribution unit and a consensus unit set comprising a plurality of consensus units, wherein:

the distribution unit is configured to acquire the transaction data from a transaction request with no sequence requirements, wherein the transaction request with no sequence requirements does not require processing according to a time factor of when the transaction request was sent by a sender, and distribute, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set without considering the time factor of when the transaction request was sent by the sender; and

the plurality of consensus units are configured to perform consensus processing on the distributed transaction data without considering the time factor of when the transaction request was sent by the sender.

11. The consensus system according to claim 10, wherein the consensus system further comprises: a storage node configured to receive consensus results from different consensus units and sequentially store, according to time stamps of the consensus results, the consensus results.

12. A blockchain consensus apparatus for providing distribution of transaction data for blockchain consensus, the apparatus comprising a processor and a non-transitory computer-readable storage medium storing instructions that, when executed by the processor, cause the block chain consensus apparatus to perform a method, the method comprising:

acquiring the transaction data from a transaction request with no sequence requirements, wherein the transaction request with no sequence requirements does not require processing according to a time factor of when the transaction request was sent by a sender; and

distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in a consensus unit set without considering the time factor of when the transaction request was sent by the sender, causing the plurality of consensus units to perform consensus processing on the distributed transaction data without considering the time factor of when the transaction request was sent by the sender.

13. The apparatus according to claim 12, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

according to a number of sets of the transaction data, determining, in a random manner, a matching number of consensus units from the consensus unit set as the plurality of consensus units; and

distributing the sets of transaction data to the determined consensus units, respectively.

14. The apparatus according to claim 12, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

determining, in a polling manner, consensus units in need of consensus transaction from the consensus unit set as the plurality of consensus units; and

distributing the transaction data to the determined consensus units.

15. The apparatus according to claim 12, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

determining a load capacity of each consensus unit in the consensus unit set; and

distributing, according to a load balancing rule, the transaction data to the plurality of consensus units in the consensus unit set.

16. The apparatus according to claim 12, wherein the distributing, according to a preset distribution rule, different transaction data of the acquired transaction data to each of a

plurality of consensus units in the consensus unit set comprises:

- determining a quantity of resources required to process the transaction data and a quantity of idle resources of each consensus unit in the consensus unit set;

- in response to that the number of consensus units having a quantity of idle resources greater than the quantity of resources required for processing the transaction data is greater than a set value, determining, in a polling manner, consensus units in need of consensus transaction from the consensus units having more idle resources than the resources required to process the transaction data, and distributing the transaction data to the determined consensus units; and

- in response to that the number of consensus units having the quantity of idle resources greater than the quantity of resources required for processing the transaction data is smaller than the set value, determining, according to a load balancing rule, consensus units having a load capacity below a set condition from the consensus units having more idle resources than the resources required to process the transaction data, and distributing the transaction data to the determined consensus units.

17. The apparatus according to claim 12, wherein the distributing different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set, comprises:

- determining a working state of each consensus unit in the consensus unit set, the working state comprising at least one of a normal state or an abnormal state; and

- determining consensus units from consensus units with the working state being a normal state as the plurality of consensus units.

18. The apparatus according to claim 12, wherein:

- the transaction data comprises multiple sets of transaction data; and

- the distributing, according to a preset distribution rule, the different transaction data of the acquired transaction data to each of a plurality of consensus units in the consensus unit set comprises:

- grouping the multiple sets of transaction data to obtain two or more transaction data groups; and

- according to the preset distribution rule, distributing the transaction data groups to different consensus units in the consensus unit set.

19. The apparatus according to claim 12, wherein:

consensus results from different consensus units are stored into blocks of a blockchain network corresponding to consensus units that generate the consensus results.