

or query fails.

SUMMARY

[0006] An implementation of the present application provides a data storage method, to alleviate problems in the existing technology such as query efficiency is low or query fails when data stored in a blockchain is queried.

[0007] An implementation of the present application provides a data storage method, including: receiving, by a blockchain node, a service request; determining at least one of a service type or identification information corresponding to the service request; parsing the service request to obtain each data type and service data corresponding to each data type; converting, based on a predetermined statement format, at least one of each data type, the service data corresponding to each data type, the service type, or the identification information obtained through parsing, to obtain a data storage statement; and storing, based on a mapping relationship between a data type and service data, the service data that is obtained through parsing in a database corresponding to the blockchain node by executing the data storage statement.

[0008] An implementation of the present application provides a data storage device, to alleviate problems in the existing technology such as query efficiency is low or query fails when data stored in a blockchain is queried.

[0009] An implementation of the present application provides a data storage device, including: a receiving module, configured to receive a service request; a data parsing module, configured to parse the service request to obtain each data type and service data corresponding to each data type; and a storage module, configured to store, based on a mapping relationship between a data type and service data, the service data that is obtained through parsing in a database corresponding to the blockchain node.

[0010] An implementation of the present application provides a data query method, to alleviate problems in the existing technology such as query efficiency is low or query fails when data stored in a blockchain is queried.

[0011] An implementation of the present application provides a data query method, including: receiving, by a blockchain node, a service data query request; determining, based on the service data query request, a data type corresponding to service data to be queried; and querying service data that matches the data type from a

database corresponding to the blockchain node, where the database includes a mapping relationship between a data type and service data.

[0012] An implementation of the present application provides a data query device, to alleviate problems in the existing technology such as query efficiency is low or

CLAIMS

1. A method for data storage, the method comprising:
receiving, by a blockchain node, a service request;
determining at least one of a service type or identification information corresponding to the service request;
parsing the service request to obtain each data type and service data corresponding to each data type;
converting, based on a predetermined statement format, at least one of each data type, the service data corresponding to each data type, the service type, or the identification information obtained through parsing, to obtain a data storage statement; and
storing, based on a mapping relationship between a data type and service data, the service data that is obtained through parsing in a database corresponding to the blockchain node by executing the data storage statement.
2. The method according to claim 1, wherein after parsing the service request, the method further comprises:
converting, based on a predetermined data format, each data type that comprised in the service request and the service data corresponding to each data type, to obtain a data sequence;
performing consensus procedure on the service request by using a consensus network; and
storing the data sequence in a blockchain corresponding to the blockchain node after a consensus is achieved on the service request.
3. The method according to claim 1, wherein the predetermined statement format comprises an identification information field and a service type field.
4. The method according to claim 1, wherein storing the service data that is obtained through parsing in the database by executing the data storage statement comprises:
creating, based on at least one of the service type or the identification information, a

database corresponding to the at least one of service type or the identification information in response to determining, by executing the data storage statement, that no database that matches the at least one of service type or the identification information is identified; and

storing the service data that is obtained through parsing in the created database.

5. The method according to claim 1, wherein storing the service data that is obtained through parsing in the database comprises:

creating each data type that is obtained by parsing the data sequence in the database in response to determining that the database does not comprise the data type; and

storing service data corresponding to the data type in the database.

6. The method according to claim 1, wherein the service request comprises a service data query request.

7. The method according to claim 6, wherein determining, based on the service data query request, the data type corresponding to the service data to be queried comprises determining an index field included in the service data query request.

8. The method according to claim 1, further comprising:

querying the service data that matches the data type from the database corresponding to the blockchain node.

9. The method according to claim 1, wherein the identification information comprises a user public key or a user identity.

10. A device for data storage, the device comprising a plurality of modules configured to perform the method of any one of claims 1 to 9.