CLAIMS

1. A method for blockchain-based consensus, the method comprising:

storing, in a database of a blockchain node, consensus data needed for performing a consensus procedure, wherein the consensus data is retrievable by a first server and a second server during the consensus procedure, wherein the blockchain node is included in a blockchain and comprises the first server, the second server, the database, and a gateway;

receiving, by the second server in place of the first server and from another device, a consensus message that is sent by the another device participating in the consensus procedure, wherein receiving the consensus message comprises receiving, by the second server and from the gateway, the consensus message subsequent to the gateway determining that the first server is faulty;

obtaining, by the second server in place of the first server and based on the consensus message, the consensus data from the database, the consensus data corresponding to the consensus message;

executing the consensus procedure based on the consensus data to generate a consensus result, in response to determining that the first server is faulty before the consensus procedure or during the consensus procedure; and

storing, by the second server, the consensus result in the database.

2. The method according to claim 1, wherein determining that the first server is faulty comprises determining that the first server was restarted.

3. The method according to claim 1, wherein the another device reattempts to send the consensus message when the another device sends the consensus message but receives no response after a specified time.

4. The method according to claim 1, wherein the consensus message comprises a service request identifier.

5. The method according to claim 4, wherein obtaining the consensus data from the database comprises:

searching, by the second server based on the service request identifier comprised in the consensus message, the database and obtaining the consensus data corresponding to the service request identifier.

6. The method according to claim 1, wherein receiving the consensus message that is sent by another device participating in the consensus procedure comprises:

forwarding, by the gateway to the second server that is running normally, the consensus message that is sent by the another device participating in the consensus procedure, in response to determining that the first server is faulty before the consensus procedure.

7. The method according to claim 1, wherein receiving the consensus message that is sent by the another device participating in the consensus procedure comprises:

forwarding, by the gateway to the second server that is running normally, the consensus message that the another device participating in the consensus procedure reattempts to send, in response to determining that the first server is faulty during the consensus procedure; and

receiving, by the second server, the consensus message that the another device participating in the consensus procedure reattempts to send and that is forwarded by the gateway.

8. The method according to claim 7, wherein the gateway determines an operation status of the first server and an operation status of the second server by performing operations comprising:

receiving, by the gateway, operation status messages that are sent by the first server and the second server to the gateway based on a predetermined period; and

determining, by the gateway, the operation status of the first server and the operation status of the second server based on the operation status messages.

9. The method according to claim 1, wherein the blockchain comprises at least one of a consortium chain and a private chain.

10. A device for blockchain-based consensus, the device comprising a plurality of modules

configured to perform the method of any one of claims 1 to 9.