

for processing a service request, to alleviate a problem of relatively low efficiency when each consensus node performs consensus verification on a service request in the existing method for processing a service request.

[0006] To alleviate the previous technical problem, the implementations of the present application are implemented as follows:

[0007] An implementation of the present application provides a method for processing a service request, comprising: receiving, by a consensus node, a service request corresponding to a target service, wherein the service request comprises service data of the target service and a digest of the service data; performing, by the consensus node, consensus verification on the service request based on the service data and the digest; storing, by the consensus node, the digest in a blockchain in response to determining that the service request passes the consensus verification; and sending, by the consensus node, the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or sending, by the consensus node, a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or sending, by the consensus node, an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node; and sending the service data to another service node so that the another service node stores the service data in a private database corresponding to the another service node, wherein the service node is a blockchain node participating in the target service.

[0008] An implementation of the present application provides another method for processing a service request, comprising: receiving, by a consensus node, a service request corresponding to a target service, wherein the service request comprises service data of the target service and a digest of the service data; performing, by the consensus node, consensus verification on the service request based on the service data and the digest; instructing, by the consensus node, each non-consensus node to store the digest in a blockchain in response to determining that the service request passes the consensus verification; and sending, by the consensus node, the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or sending, by the consensus node, a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or sending, by

the consensus node, an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node; and sending the service data to another service node so that the another service node stores the service data in a private database
 5 corresponding to the another service node, wherein the service node is a blockchain node participating in the target service.

[0009] An implementation of the present application provides an apparatus for processing a service request, comprising: a receiving module, configured to receive a service request corresponding to a target service and received by a consensus node,
 10 wherein the service request comprises service data of the target service and a digest of the service data; a consensus verification module, configured to perform consensus verification on the service request based on the service data and the digest; a storage module, configured to store the digest in a blockchain in response to determining that the service request passes the consensus verification; and a sending module,
 15 configured to: in response to determining that the service request passes the consensus verification, send the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send an
 20 acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node, and send the service data to another service node so that the another service node stores the service data in a private database corresponding to the another service node, wherein the service node is a blockchain node participating in the target service.

[0010] An implementation of the present application provides an apparatus for processing a service request, comprising: a receiving module, configured to receive a service request corresponding to a target service, wherein the service request comprises service data of the target service and a digest of the service data; a consensus module, configured to perform consensus verification on the service
 25 request based on the service data and the digest; a storage module, configured to instruct each non-consensus node to store the digest in a blockchain in response to determining that the service request passes the consensus verification; and a sending module, configured to: send the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service
 30

node; or send a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the

5 service node, and send the service data to another service node so that the another service node stores the service data in a private database corresponding to the another service node, wherein the service node is a blockchain node participating in the target service.

CLAIMS

What is claimed is:

1. A method for processing a service request, comprising:

receiving, by a consensus node, a service request corresponding to a target
 5 service, wherein the service request comprises service data of the target service and a
 digest of the service data;

performing, by the consensus node, consensus verification on the service request
 based on the service data and the digest;

storing, by the consensus node, the digest in a blockchain in response to
 10 determining that the service request passes the consensus verification; and

sending, by the consensus node, the service data to at least one service node so
 that the service node stores the service data in a private database corresponding to the
 service node; or

sending, by the consensus node, a storage instruction to at least one service node
 15 so that the service node stores the service data in a private database corresponding to
 the service node; or

sending, by the consensus node, an acknowledgement instruction to a service
 node initiating the target service so that the service node stores the service data in a
 private database corresponding to the service node; and sending the service data to
 20 another service node so that the another service node stores the service data in a
 private database corresponding to the another service node,

wherein the service node is a blockchain node participating in the target service.

2. A method for processing a service request, comprising:

receiving, by a consensus node, a service request corresponding to a target
 25 service, wherein the service request comprises service data of the target service and a
 digest of the service data;

performing, by the consensus node, consensus verification on the service request
 based on the service data and the digest;

instructing, by the consensus node, each non-consensus node to store the digest
 30 in a blockchain in response to determining that the service request passes the
 consensus verification; and

sending, by the consensus node, the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or

5 sending, by the consensus node, a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or

10 sending, by the consensus node, an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node; and sending the service data to another service node so that the another service node stores the service data in a private database corresponding to the another service node,

wherein the service node is a blockchain node participating in the target service.

15 3. The method according to claim 2, wherein the instructing each non-consensus node to store the digest in a blockchain comprises:

sending the digest to each non-consensus node so that each non-consensus node stores the digest in the blockchain.

20 4. An apparatus for processing a service request, comprising:

a receiving module, configured to receive a service request corresponding to a target service and received by a consensus node, wherein the service request comprises service data of the target service and a digest of the service data;

a consensus verification module, configured to perform consensus verification on the service request based on the service data and the digest;

25 a storage module, configured to store the digest in a blockchain in response to determining that the service request passes the consensus verification; and

30 a sending module, configured to: in response to determining that the service request passes the consensus verification, send the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node, and send the service data

to another service node so that the another service node stores the service data in a private database corresponding to the another service node,

wherein the service node is a blockchain node participating in the target service.

5 5. An apparatus for processing a service request, comprising:

a receiving module, configured to receive a service request corresponding to a target service, wherein the service request comprises service data of the target service and a digest of the service data;

10 a consensus module, configured to perform consensus verification on the service request based on the service data and the digest;

a storage module, configured to instruct each non-consensus node to store the digest in a blockchain in response to determining that the service request passes the consensus verification; and

15 a sending module, configured to: send the service data to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send a storage instruction to at least one service node so that the service node stores the service data in a private database corresponding to the service node; or send an acknowledgement instruction to a service node initiating the target service so that the service node stores the service data in a private database corresponding to the service node, and send the service data to another service node so that the another service node stores the service data in a private database corresponding to the another service node,

wherein the service node is a blockchain node participating in the target service.

25 6. The apparatus according to claim 5, wherein the storage module sends the digest to each non-consensus node so that each non-consensus node stores the digest in the blockchain.