CLAIMS

1. A computer-implemented method for performing view switching in a blockchain network, wherein the blockchain network comprises a blockchain primary node and a plurality of backup nodes, wherein the blockchain primary node initiates a consensus for a service request within the blockchain network, and wherein the service request is not for initiating a view switching, the method comprising:

receiving, by the blockchain primary node, a trigger of a view switching condition in the blockchain network, wherein the trigger indicates one of:

(a) receiving the service request, initiating the consensus for the service request, and determining a result of the consensus for the service request, or

(b) a failure to initiate the consensus for the service request within a predetermined time;

selecting, by the blockchain primary node, a successor node from the plurality of backup nodes based on the trigger of the view switching condition; and

switching, by the blockchain primary node based on the successor node, a current view to a next view that uses the successor node as a succeeding blockchain primary node, wherein the succeeding blockchain primary node initiates a consensus in the next view.

2. The method according to claim 1, wherein triggering of the view switching condition comprises:

receiving, by the blockchain primary node, the service request; and

determining that a consensus on the service request fails to be initiated within the predetermined time.

3. The method according to claim 2, determining that the consensus on the service request fails to be initiated with the predetermined time comprises:

determining that data included in the service request is incorrect.

4. The method according to claim 2, determining that the consensus on the service request

fails to be initiated with the predetermined time comprises:

determining that the blockchain primary node sent an incorrect notification message indicating a consensus phase to the successor node.

5. The method according to claim 1, wherein receiving, by the blockchain primary node, the trigger of the view switching condition comprises:

receiving, by the blockchain primary node, the service request;

initiating a consensus on the service request; and

determining a consensus result.

6. The method according to claim 1, wherein selecting, by the blockchain primary node, the successor node comprises:

determining, by the blockchain primary node, the next view of the current view; and

selecting the successor node that corresponds to the next view.

7. The method according to any one of claims 1 to 6, wherein a blockchain node in any view comprises a node in a consortium blockchain network or a private blockchain network.

8. An apparatus for blockchain consensus, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 7.