

CLAIMS

1. A computer-implemented method, comprising:
 - obtaining a user-side authentication parameter of a joint account, wherein the joint account is jointly managed by N joint managers, wherein N is a natural number greater than 1, and wherein the user-side authentication parameter is a private key that corresponds to a public key that is a network-side authentication parameter of the joint account, wherein the user-side authentication parameter is used to perform authentication on operation permissions for the joint account (110);
 - dividing the private key that is the user-side authentication parameter into N parts;
 - generating a different corresponding sequence number for each part of the N parts of the private key;
 - generating a corresponding joint management authentication parameter for each part of the N parts of the private key based on a corresponding part of the N parts of the private key and the different corresponding sequence number of the corresponding part of the N parts; and
 - transmitting each of the N joint management authentication parameters to a different client device, each different client device associated with a different one of the N joint managers (120).
2. The computer-implemented method according to claim 1, wherein obtaining the user-side authentication parameter of the joint account comprises:
 - generating the user-side authentication parameter and the network-side authentication parameter of the joint account, and
 - uploading the network-side authentication parameter to a server.
3. The computer-implemented method according to claim 2, wherein the user-side authentication parameter and the network-side authentication parameter comprise a private key and a public key of an asymmetric encryption algorithm.
4. The computer-implemented method according to claim 1, wherein obtaining the user-side authentication parameter of the joint account comprises receiving the user-side authentication parameter generated by a server from the server.

5. The computer-implemented method according to claim 1, wherein obtaining a user-side authentication parameter of a joint account comprises obtaining the network-side authentication parameter and storing the network-side authentication parameter.

6. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform operations according to the computer-implemented method of any one of claims 1 to 5.

7. A computer-implemented method, comprising:

obtaining N joint management authentication parameters of a joint account wherein each of the N joint management authentication parameters comprises a corresponding part of a private key and a corresponding sequence number different from other sequence numbers, and wherein the joint account is jointly managed by N joint managers, and wherein N is a natural number greater than 1 (610);

restoring one part of a user-side authentication parameter based on each joint management authentication parameter;

combining, according to each corresponding sequence number, N parts of the private key into the user-side authentication parameter (620); and

initiating an authentication request using the user-side authentication parameter, wherein a server performs authentication on operation permission for the joint account based on a network-side authentication parameter, wherein the network-side authentication parameter is the public key that corresponds to the user-side authentication parameter (630).

8. The computer-implemented method according to claim 7, wherein the obtaining N joint management authentication parameters of the joint account comprises:

obtaining the N joint management authentication parameters of the joint account from devices comprising client software of the N joint managers; or

reading the N joint management authentication parameters of the joint account from storage media of the N joint managers.

9. The computer-implemented method according to claim 8, wherein the storage media of the N joint managers comprise a near field communication (NFC) chip of each joint manager.

10. The computer-implemented method according to claim 7, wherein combining according to each corresponding sequence number of the N parts of the private key into the user-side authentication parameter comprises:

connecting the N joint management authentication parameters based on respective sequence numbers to obtain the user-side authentication parameter.

11. The computer-implemented method according to claim 7, wherein the user-side authentication parameter and the network-side authentication parameter comprise a private key and a public key of an asymmetric encryption algorithm, and wherein initiating the authentication request to the server by using the user-side authentication parameter, wherein the server performs authentication on operation permission for the joint account based on a network-side authentication parameter comprises:

performing application of a digital signature on the authentication request initiated to the server by using the private key, wherein the server performs signature authentication on the authentication request by using the public key.

12. The computer-implemented method according to claim 7, wherein obtaining the N joint management authentication parameters of a joint account comprises receiving N joint management authentication parameters uploaded by client software.

13. The computer-implemented method according to claim 7, wherein obtaining the N joint management authentication parameters of a joint account comprises:

receiving a joint account operation request including requested operation content from a first joint manager;

after receiving the joint account operation request from the first joint manager, transmitting a joint management authentication parameter upload request to each of other joint managers of the joint account, the joint management authentication parameter upload request including operation content that the first joint manager initiating the operation request needs to perform; and

receiving N-1 joint management authentication parameters of the joint account from the other joint managers in response to the upload request.

14. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform operations according to the computer-implemented method of any one of claims 7 to 13.