

CLAIMS:

1. A computer-implemented method for blockchain address mapping, comprising:
obtaining one or more requests for creating a plurality of blockchain addresses in association with one or more local accounts; and
creating the plurality of blockchain addresses respectively in association with the one or more local accounts.

2. The method of claim 1, wherein:
obtaining the one or more requests for creating the plurality of blockchain addresses in association with the one or more local accounts comprises: obtaining the one or more requests for creating the plurality of blockchain addresses in a plurality of blockchains in association with one local account; and
creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises: correspondingly in the plurality of blockchains, creating in a batch the plurality of blockchain addresses in association with the one local account.

3. The method of claim 1, wherein:
obtaining the one or more requests for creating the plurality of blockchain addresses in association with the one or more local accounts comprises: obtaining the one or more requests for creating the plurality of blockchain addresses in one blockchain in association with a plurality of local accounts; and
creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises: in the one blockchain, creating in a batch the plurality of blockchain addresses in association with the plurality of the local accounts.

4. The method of claim 1, wherein:
obtaining the one or more requests for creating the plurality of blockchain addresses in association with the one or more local accounts comprises: obtaining the one or more requests for creating the plurality of blockchain addresses in a plurality of blockchains in association with a plurality of local accounts; and
creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises: correspondingly in the plurality of blockchains, creating in a

batch the plurality of blockchain addresses in association with the plurality of the local accounts.

5. The method of any of claims 1-4, wherein:

obtaining the one or more requests for creating the plurality of blockchain addresses in association with the one or more local accounts comprises: obtaining, from a client, the one or more local accounts, one or more identifications of one or more blockchains, and the one or more requests for creating the plurality of blockchain addresses in the one or more blockchains.

6. The method of claim 5, wherein creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises:

generating a plurality of public-private key pairs respectively for the plurality of blockchain addresses to be created; and

creating the plurality of blockchain addresses respectively in the one or more blockchains, in association with the one or more local accounts and a plurality of public keys of the plurality of public-private key pairs.

7. The method of claim 6, further comprising:

storing a plurality of mapping relationships among the one or more local accounts, the plurality of created blockchain addresses, the plurality of public-private key pairs, and the one or more identifications of the one or more blockchains.

8. The method of any of claims 6-7, wherein creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises:

constructing a blockchain transaction comprising the plurality of public keys; and

sending the blockchain transaction to one or more blockchain nodes of the one or more blockchains according to the one or more identifications to create the plurality of blockchain addresses respectively based on the plurality of public keys.

9. The method of any of claims 5-8, further comprising:

transmitting a notification to the client for the client to correspondingly store the one or more local accounts in association with the one or more identifications of the one or more blockchains, wherein:

the notification comprises the one or more local accounts for which the plurality of blockchain addresses are created and the one or more corresponding identifications of the one or more blockchains; and

the client does not store the one or more created blockchain addresses.

10. The method of any of claims 5-9, wherein creating the plurality of blockchain addresses respectively in association with the one or more local accounts comprises:

for each of the plurality of blockchain addresses, generating a public-private key pair and encrypting a private key of the public-private key pair.

11. The method of claim 10, wherein generating the public-private key pair and encrypting the private key of the public-private key pair comprises:

in a Trusted Execution Environment (TEE), generating the public-private key pair and encrypting the private key of the public-private key pair.

12. The method of any of claims 10-11, wherein creating the plurality of blockchain addresses respectively in association with the one or more local accounts further comprises:

for each of the plurality of blockchain addresses, storing the encrypted private key in a Key Management System (KMS).

13. The method of any of claims 10-12, further comprising:

for each of the plurality of blockchain addresses, storing a mapping relationship among one of the local accounts, the each of the blockchain addresses, a corresponding KMS directory, and one of the identifications, wherein the KMS directory links to the corresponding encrypted private key.

14. The method of claim any of claims 1-13, wherein obtaining the one or more requests for creating the plurality of blockchain addresses in association with the one or more local accounts comprises:

obtaining, from a client, the one or more local accounts in accordance with a Lightweight Directory Access Protocol (LDAP).

15. A system for blockchain address mapping, comprising:

one or more processors; and

one or more computer-readable memories coupled to the one or more processors and having instructions stored thereon that are executable by the one or more processors to perform the method of any of claims 1 to 14.

16. An apparatus for blockchain address mapping, comprising a plurality of modules for performing the method of any of claims 1 to 14.

17. A non-transitory computer-readable medium having stored therein instructions that, when executed by a processor of a device, cause the device to perform the method of any of claims 1 to 14.