

CLAIMS

1. A computer-implemented method, comprising:
identifying, by a blockchain node in a blockchain network, a data retrieving and
5 recording request to invoke a first smart contract;
obtaining, by the blockchain node and from the data retrieving and recording request,
location information to locate a second smart contract;
executing, by the blockchain node based on the location information, the second smart
contract based on the location information to generate a transaction comprising information of
10 the first smart contract for invoking the first smart contract; and
parsing, by the blockchain node based on instructions comprised in the first smart
contract, metadata comprised in the first smart contract to generate a parsing result, wherein
the parsing result indicates a storage field corresponding to a target object in the data set; and
implementing a data retrieving and recording operation based on the instructions
15 comprised in the first smart contract on the target object in the storage field.
2. The computer-implemented method according to claim 1, further comprising:
retrieving, by the blockchain node, input parameters comprised in a data invoking
request, wherein the input parameters comprise the target object.
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3. The computer-implemented method according to claim 1, wherein the data retrieving
and recording operation comprises:
retrieving a field value in the storage field; and
returning the field value to a sender of the data invoking request.
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4. The computer-implemented method according to claim 3, further comprising:
retrieving, by the blockchain node, input parameters comprised in the data retrieving
and recording request, wherein the input parameters comprise the target object and a target
object value, and wherein the data retrieving and recording operation comprises updating the
30 field value in the storage field based on the target object value before returning the field value
to the sender.
5. The computer-implemented method according to claim 1, further comprising:

responding, by the blockchain node, to the data retrieving and recording request in response to determining that the data retrieving and recording request satisfies an invoking condition of the first smart contract; and

returning, by the blockchain node, target data to a sender of the data retrieving and recording request.

6. The computer-implemented method according to claim 5, wherein the invoking condition comprises the sender of the data retrieving and recording request possessing an invoking permission for the first smart contract.

7. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform one or more operations comprising:

identifying, by a blockchain node in a blockchain network, a data retrieving and recording request to invoke a first smart contract;

obtaining, by the blockchain node and from the data retrieving and recording request, location information to locate a second smart contract;

executing, by the blockchain node based on the location information, the second smart contract based on the location information to generate a transaction comprising information of the first smart contract for invoking the first smart contract; and

parsing, by the blockchain node based on instructions comprised in the first smart contract, metadata comprised in the first smart contract to generate a parsing result, wherein the parsing result indicates a storage field corresponding to a target object in the data set; and

implementing a data retrieving and recording operation based on the instructions comprised in the first smart contract on the target object in the storage field.

8. The non-transitory, computer-readable medium according to claim 7, the one or more operations further comprising:

retrieving, by the blockchain node, input parameters comprised in a data invoking request, wherein the input parameters comprise the target object.

9. The non-transitory, computer-readable medium according to claim 8, wherein the data retrieving and recording operation comprises:

retrieving a field value in the storage field; and

returning the field value to a sender of the data invoking request.

10. The non-transitory, computer-readable medium according to claim 9, the one or more operations further comprising:

retrieving, by the blockchain node, input parameters comprised in the data retrieving
5 and recording request, wherein the input parameters comprise the target object and a target object value, and wherein the data retrieving and recording operation comprises updating the field value in the storage field based on the target object value before returning the field value to the sender.

11. The non-transitory, computer-readable medium according to claim 7, the one or more operations further comprising:

responding, by the blockchain node, to the data retrieving and recording request in
response to determining that the data retrieving and recording request satisfies an invoking condition of the first smart contract; and

15 returning, by the blockchain node, target data to a sender of the data retrieving and recording request.

12. The non-transitory, computer-readable medium according to claim 11, wherein the invoking condition comprises the sender of the data retrieving and recording request possessing
20 an invoking permission for the first smart contract.

13. A computer-implemented system, comprising:

one or more computers; and

one or more computer memory devices interoperably coupled with the one or more
25 computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform operations comprising:

identifying, by a blockchain node in a blockchain network, a data retrieving and
recording request to invoke a first smart contract;

obtaining, by the blockchain node and from the data retrieving and recording request,
30 location information to locate a second smart contract;

executing, by the blockchain node based on the location information, the second smart contract based on the location information to generate a transaction comprising information of the first smart contract for invoking the first smart contract; and

parsing, by the blockchain node based on instructions comprised in the first smart contract, metadata comprised in the first smart contract to generate a parsing result, wherein the parsing result indicates a storage field corresponding to a target object in the data set; and

5 implementing a data retrieving and recording operation based on the instructions comprised in the first smart contract on the target object in the storage field.

14. The computer-implemented system according to claim 13, the operations further comprising:

10 retrieving, by the blockchain node, input parameters comprised in a data invoking request, wherein the input parameters comprise the target object.

15. The computer-implemented system according to claim 14, wherein the data retrieving and recording operation comprises:

15 retrieving a field value in the storage field; and
returning the field value to a sender of the data invoking request.

16. The computer-implemented system according to claim 15, the operations further comprising:

20 retrieving, by the blockchain node, input parameters comprised in the data retrieving and recording request, wherein the input parameters comprise the target object and a target object value, and wherein the data retrieving and recording operation comprises updating the field value in the storage field based on the target object value before returning the field value to the sender.

25 17. The computer-implemented system according to claim 13, the operations further comprising:

responding, by the blockchain node, to the data retrieving and recording request in response to determining that the data retrieving and recording request satisfies an invoking condition of the first smart contract; and
30 returning, by the blockchain node, target data to a sender of the data retrieving and recording request.