CLAIMS

1. A blockchain data processing method, comprising:

receiving an upload request of target data in a blockchain;

generating, in a predetermined trusted environment, a data read rule corresponding to the target data and read permission index information of the target data according to a preset compliance rule for data reading and the target data;

uploading the target data and the read permission index information of the target data to the blockchain;

receiving a read request for the target data stored the a blockchain;

acquiring the read permission index information of the target data from the blockchain, and acquiring the data read rule corresponding to the target data based on the read permission index information, the data read rule being used to determine readable content in the target data;

determining, in the predetermined trusted environment, the readable content in the target data based on the data read rule; and

providing the readable content in the target data for a sender of the read request.

2. The method according to claim 1, wherein the providing the readable content in the target data for a sender of the read request comprises:

keeping the readable content in the target data unchanged, and processing remaining content in the target data to obtain processed target data; and

displaying the processed target data to the sender of the read request.

3. The method according to claim 1, further comprising:

acquiring a changed compliance rule when it is detected that the compliance rule for data reading is changed;

modifying the data read rule based on the changed compliance rule to obtain a modified data read rule; and

the determining, in a predetermined trusted environment, the readable content in the target data based on the data read rule comprising:

determining, in the predetermined trusted environment, the readable content in the target data based on the modified data read rule.

4. The method according to claim 1, wherein the generating, in the predetermined trusted environment, the data read rule corresponding to the target data and the read permission index information of the target data according to a preset compliance rule for data reading and the target data comprises:

verifying, in the predetermined trusted environment, content of the target data according to a preset data verification rule to obtain a verification result; and

generating, in the predetermined trusted environment, the data read rule corresponding to the target data and the read permission index information of the target data according to the preset compliance rule for data reading and the target data if the verification result is the verification being passed.

5. The method according to claim 1, further comprising:

receiving a modify request for the data read rule corresponding to the target data;

modifying, based on the modify request, the data read rule corresponding to the target data to obtain a modified data read rule; and

the determining, in a predetermined trusted environment, the readable content in the target data based on the data read rule comprising:

determining, in the predetermined trusted environment, the readable content in the target data based on the modified data read rule.

6. The method according to claim 1, wherein the target data is encrypted data, and before the determining, in a predetermined trusted environment, the readable content in the target data based on the data read rule, the method further comprises:

decrypting, in a predetermined trusted execution environment, the encrypted target data to obtain the target data.

7. A blockchain data processing apparatus, comprising:

an upload request module configured to receive an upload request of target data in a blockchain;

a rule generation module configured to generate, in a predetermined trusted environment, a data read rule corresponding to the target data and read permission index information of the target data according to a preset compliance rule for data reading and the target data;

an information uploading module configure to upload the target data and the read permission index information of the target data to the blockchain;

a read request module configured to receive a read request for the target data stored in the blockchain;

an information acquisition module configured to acquire the read permission index information of the target data from the blockchain, and acquire the data read rule corresponding to the target data based on the read permission index information, the data read rule being used to determine readable content in the target data;

a readable content determination module configured to determine, in the predetermined trusted environment, the readable content in the target data based on the data read rule; and

a reading module configured to provide the readable content in the target data for a sender of the read request.

8. The apparatus according to claim 7, wherein the reading module comprises:

a content processing unit configured to keep the readable content in the target data unchanged, and process remaining content in the target data to obtain processed target data; and

a display unit configured to display the processed target data to the sender of the read request.

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9. The apparatus according to claim 7, further comprising:

a rule change detection module configured to acquire a changed compliance rule when it is detected that the compliance rule for data reading is changed;

a rule modification module configured to modify the data read rule based on the changed compliance rule to obtain a modified data read rule; and

the readable content determination module configured to determine, in the predetermined trusted environment, the readable content in the target data based on the modified data read rule.

10. A blockchain data processing device, comprising:

a processor; and

a memory arranged to store computer-executable instructions which, when executed, cause the processor to:

receive an upload request of target data in a blockchain;

generate, in a predetermined trusted environment, a data read rule corresponding to the target data and read permission index information of the target data according to a preset compliance rule for data reading and the target data;

upload the target data and the read permission index information of the target data to the blockchain;

receive a read request for the target data stored in the blockchain;

acquire the read permission index information of the target data from the blockchain, and acquire the data read rule corresponding to the target data based on the read permission index information, the data read rule being used to determine readable content in the target data;

determine, in the predetermined trusted environment, the readable content in the target data based on the data read rule; and

provide the readable content in the target data for a sender of the read request.