CLAIMS

What is claimed is:

1. A blockchain-based cross-chain data access method, applied to a multi-chain system comprising a plurality of blockchains, wherein the method comprises the following:

obtaining an access request that is specific to target data and that is sent by any node device, wherein the access request comprises a uniform resource locator (URL) which comprises an access path of the target data, and wherein the URL comprises a domain field used to record information about a target blockchain that the target data is located in;

determining, based on the access path of the target data and the domain field of the URL, the target blockchain that the target data is located in, wherein a corresponding data access driver is configured for the target blockchain; and

invoking the data access driver to parse the access request, to complete access to the target data.

2. The method according to claim 1, wherein the URL further comprises a feature value field of the target data, used to record a feature value of the target data; and

the invoking the data access driver to parse the access request, to complete access to the target data comprises the following:

invoking the data access driver to parse the URL, and obtaining the target data based on the feature value field of the URL; and

returning the target data to the node device.

3. The method according to claim 2, wherein the URL further comprises a retrieval space field, used to record identification information of data retrieval space used when the feature value of the target data is used as a query index to query the target data on the target blockchain; and

the obtaining the target data based on the feature value field of the URL comprises the following:

obtaining, based on the domain field and the retrieval space field, data retrieval space of the target blockchain that the target data is located in; and

performing retrieval in the data retrieval space based on the feature value of the target data, to obtain the target data.

4. The method according to claim 2 or 3, wherein the URL further comprises a code identification field, used to record an output coding scheme of the target data; and

the returning the target data to the node device comprises the following:

parsing the code identification field to obtain the output coding scheme of the target data;

coding the obtained target data based on the output coding scheme; and

returning the coded target data to the node device.

5. The method according to claim 4, wherein the output coding scheme comprises a JavaScript Object Notation (JSON) scheme or an Extensible Markup Language (XML) scheme.

6. The method according to claim 2, wherein the feature value field of the URL is used to record a digital digest of the target data; and

the invoking the data access driver to parse the access request, to complete access to the target data further comprises the following:

checking whether a digital digest of the obtained target data is the same as the digital digest of the target data recorded in the feature value field of the URL; and

if yes, returning the target data to the node device.

7. The method according to claim 1, wherein the domain field further comprises the following fields:

a protocol field, used to record a protocol name of a blockchain protocol supported by the target blockchain; and

an instance field, used to record an instance name of an instance of the target blockchain when the target blockchain serves as a blockchain supporting the blockchain protocol.

8. The method according to claim 1, wherein the multi-chain system comprises a blockchain system that comprises a main chain and a plurality of subchains corresponding to the main chain.

9. A blockchain-based cross-chain data access apparatus, applied to a multi-chain system comprising a plurality of blockchains, wherein the apparatus comprises the following:

an obtaining unit, configured to obtain an access request that is specific to target data and that is sent by any node device, wherein the access request comprises a URL which comprises an access path of the target data, and wherein the URL comprises a

domain field used to record information about a target blockchain that the target data is located in;

a determining unit, configured to determine, based on the access path of the target data and the domain field of the URL, the target blockchain that the target data is located in, wherein a corresponding data access driver is configured for the target blockchain; and

a data access driver invoking unit, configured to invoke the data access driver to parse the access request, to complete access to the target data.

10. The apparatus according to claim 9, wherein the URL further comprises a feature value field of the target data, used to record a feature value of the target data; and

the data access driver invoking unit is configured to:

invoke the data access driver to parse the URL, and obtain the target data based on the feature value field of the URL; and

return the target data to the node device.

11. The apparatus according to claim 10, wherein the URL further comprises a retrieval space field, used to record identification information of data retrieval space used when the feature value of the target data is used as a query index to query the target data on the target blockchain; and

the data access driver invoking unit is configured to:

obtain, based on the domain field and the retrieval space field, data retrieval space of the target blockchain that the target data is located in; and

perform retrieval in the data retrieval space based on the feature value of the target data, to obtain the target data.

12. The apparatus according to claim 10 or 11, wherein the URL further comprises a code identification field, used to record an output coding scheme of the target data; and

the data access driver invoking unit is configured to:

parse the code identification field to obtain the output coding scheme of the target data;

code the obtained target data based on the output coding scheme; and

return the coded target data to the node device.

13. The apparatus according to claim 12, wherein the output coding scheme comprises a JSON scheme or an XML scheme.

14. The apparatus according to claim 10, wherein the feature value field of the URL is used to record a digital digest of the target data; and

the data access driver invoking unit is configured to:

check whether a digital digest of the obtained target data is the same as the digital digest of the target data recorded in the feature value field of the URL; and

if yes, return the target data to the node device.

15. The apparatus according to claim 9, wherein the domain field further comprises the following fields:

a protocol field, used to record a protocol name of a blockchain protocol supported by the target blockchain; and

an instance field, used to record an instance name of an instance of the target blockchain when the target blockchain serves as a blockchain supporting the blockchain protocol.

16. The apparatus according to claim 9, wherein the multi-chain system comprises a blockchain system that comprises a main chain and a plurality of subchains corresponding to the main chain.

17. A computer device, comprising a memory and a processor, wherein the memory stores a computer program that can be executed by the processor, and the processor executes the computer program to perform the method according to any one of claims 1 to 8.

18. A computer readable storage medium, storing a computer program, wherein when the computer program is executed by a processor, the method according to any one of claims 1 to 8 is performed.