CLAIMS

1. A method for data interaction, the method comprising:

collecting authorization data for a current interaction between a transaction user end and a transaction processing end, the authorization data being retrieved by a smart terminal from a remote server (101);

recording the authorization data and data of the current interaction (102); and

completing a transaction associated with the current interaction.

2. The method according to claim 1, further comprising: combining the data of the current interaction with a second data of one or more past interactions and checking the authorization data and the data of the current interaction and the second data of the one or more past interactions with the remote server at a predetermined time.

3. The method according to any one of claims 1 to 2, wherein collecting authorization data for current interaction retrieved by an smart terminal from a remote server further comprises:

scanning a barcode generated by the smart terminal based on the authorization data to retrieve the authorization data; or

retrieving the authorization data from the smart terminal through wireless communication.

4. The method according to claim 3, wherein the barcode comprises a one-dimensional barcode or a two-dimensional barcode, and the wireless communication comprises a near field communication (NFC) or a radio frequency identification (RFID).

5. The method according to any one of claims 1 to 4, wherein after the collecting authorization data for current interaction retrieved by an smart terminal from a remote server, the method further comprises: performing one or more of the following operations to verify the authorization data:

comparing time information comprised in the authorization data with a current time, and if the current time is later than the time information comprised in the authorization data, determining that the authorization data has expired, and canceling the current data interaction;

determining whether a random number comprised in the authorization data exists in previous data interaction, and if yes, determining that the authorization data is repeatedly used, and canceling the current data interaction; and

determining whether the data of the current interaction exceeds a threshold of the authorization data, and if yes, canceling the current data interaction.

6. The method according to any one of claims 1 to 5, wherein the collected authorization data for the current interaction retrieved by the smart terminal from the remote server further comprises signature information used by the remote server to sign the authorization data by using a private key; and

after the collecting authorization data for current interaction retrieved by an smart terminal from a remote server, but before the recording the authorization data and data of the current interaction, the method further comprises:

verifying the signature information by using a public key pre-retrieved from the remote server, determining whether the authorization data is sent by the remote server, and in response to determining that the authorization data is sent by the remote server, the authorization data and the data of the current interaction are recorded.

7. The method according to any one of claims 1 to 6, the method further comprising:

processing, by an interaction terminal, the authorization data.

8. The method according to any one of claims 1 to 7, further comprising:

sending a unique identifier of the user to a remote server; and

receiving authorization data that comprises user information and that is generated by the remote server based on the unique identifier.

9. The method according to claim 8, wherein the authorization data further comprises a time information of current authorization, a random number of the current authorization, and a threshold.

10. The method according to any one of claims 1 to 9, wherein the authorization data further

comprises: user information encrypted by using a password and signed by using a private key.

11. The method according to any one of claims 1 to 10, wherein the transaction associated with the current interaction is completed offline.

12. An apparatus for data interaction, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 11.