Claims

1. A method for processing a service with a plurality of servers, the plurality of servers comprising a first server and a second server, the method comprising:

dividing the data of a user into a plurality of data sets;

storing each of the plurality of data sets separately in one of the plurality of servers with mapping information, the mapping information indicating a distribution of the plurality of data sets among the plurality of servers;

receiving, by the first server, a service processing request, wherein the service processing request comprises a user identifier and a data identifier of data needed by the service;

determining that the data sets stored in the first server correspond to the user identifier;

determining whether the data sets stored in the first server correspond to the data identifier; and

in response to determining that the data sets stored in the first server correspond to the data identifier, obtaining the data sets stored in the first server or

in response to determining that the data sets stored in the first server do not correspond to the data identifier, referencing the mapping information on the first server to identify the second server; obtaining the data sets stored in the second server that correspond to the user identifier; and

executing the service based on the obtained data sets.

2. The method according to claim 1, wherein the data identifier of the data needed by the service comprises a data volume of the data needed by the service; and determining that the data sets stored in the first server do not correspond to the data identifier when the data volume of the data needed by the service exceeds a data volume of the data sets stored in the first server.

3. The method according to claim 1 wherein the data identifier of the data needed by the service comprises a data volume of the data needed by the service; the method further comprising the steps:

determining that the data volume of the data needed by the service exceeds a data volume of the data sets stored in the first server;

obtaining the data sets stored in the first server;

determining a difference between the data volume of the data needed by the service and a data volume of the data sets stored in the first server; and

obtaining the difference from the data sets stored in the second server that correspond to the user identifier.

4. The method according to claim 3, wherein obtaining the difference from the data sets stored in the second server comprises:

sequentially obtaining data from the data sets of other servers in the plurality of servers in descending order of data volumes of the data, until an obtained data volume is the difference.

5. The method according to claim 4, wherein the method further comprises:

updating, by the first server, a total data volume of the data sets corresponding to the user identifier, the data volume of the data sets corresponding to the user identifier that is stored in the first server, and the data volumes of the data sets corresponding to the user identifier that is stored in the other servers in the plurality of servers.

6. The method according to any one of claims 1 to 5, wherein the data needed by the service comprises:

an amount of money and the data sets stored in the first server comprises a balance amount of a sub-balance corresponding to the user identifier.

7. The method according to claim 6 further comprising:

determining a difference between the amount of money and the balance amount of the sub-balance corresponding to the user identifier that is stored in the first server; and

obtaining the whole sub-balance corresponding to the user identifier that is stored in the first server, and obtaining a sub-balance with a balance amount being the difference from the second server.

8. The method according to claim 7, wherein the obtaining a sub-balance with a balance amount being the difference from the second server comprises:

sequentially obtaining sub-balances corresponding to the user identifier that are in other

servers in the plurality of servers in descending order of balance amounts of the sub-balances, until an obtained balance amount is the difference.

9. The method according to any one of claims 6 to 8, wherein the method further comprises:

updating, by the first server, a total balance corresponding to the user identifier, the balance amount of the sub-balance corresponding to the user identifier that is stored in the first server, and the balance amounts of the sub-balances corresponding to the user identifier that are stored in the other servers in the plurality of servers.

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

dividing the data of the user into a plurality of data sets with the same data volume; and

separately storing the plurality of data sets on at least two servers, and storing, on each server, the user identifier of the user, a total data volume of the data of the user, a server identifier of each server, and a data volume of a data set stored on each server.

11. An apparatus for processing a service, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 10.