Claims

1. A method for processing a service, the method comprising:

receiving, by a server, a service processing request, wherein the service processing request comprises a user identifier and a data identifier of data needed by the service (S301);

determining whether locally stored data corresponds to the data identifier, the locally stored data being in a data set corresponding to the user identifier that is locally stored on the server (S302); and

in response to determining that the locally stored data corresponds to the data identifier, obtaining the locally stored data corresponding to the data identifier, and executing the service based on the obtained data (S303); or

in response to determining that the locally stored data does not correspond to the data identifier, obtaining the data corresponding to the data identifier from a second server, and executing the service based on the obtained data (S304).

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 whether there is the data corresponding to the data identifier in data corresponding to the user identifier that is locally stored on the server comprises:

determining whether a data volume of the data corresponding to the user identifier that is locally stored on the server is not less than the data volume of the data needed by the service (S502); and

in response to determining that the data volume corresponds to the data needed by the service , determining that there is the data corresponding to the data identifier on the server (S503); or

in response to determining that the data volume does not correspond to the data needed by the service, determining that there is no data corresponding to the data identifier on the server (S504).

3. The method according to claim 2, wherein obtaining the data corresponding to the data identifier from the second server comprises:

determining a difference between the data volume of the data needed by the service and the

data volume of the data corresponding to the user identifier that is locally stored on the server (S504); and

obtaining, from the second server, data corresponding to the user identifier and with a data volume being the difference (S504).

4. The method according to claim 3, wherein the obtaining, from the second server, data corresponding to the user identifier and with a data volume being the difference comprises:

sequentially obtaining data corresponding to the user identifier that is on other servers in descending order of data volumes of the data, until an obtained data volume is the difference.

5. The method according to any one of claims 2 to 4, wherein the method further comprises:

updating, by the server, a total data volume of the data corresponding to the user identifier, the data volume of the data corresponding to the user identifier that is locally stored on the server, and the data volumes of the data corresponding to the user identifier that is stored on the other 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 locally stored data comprises a balance amount of a sub-balance corresponding to the user identifier.

7. The method according to claim 6, wherein the obtaining sub-balances totaling the amount of money from the server and the second server comprises:

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

obtaining the whole sub-balance corresponding to the user identifier that is locally stored on the 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 on other 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 server, a total balance corresponding to the user identifier, the balance amount of the sub-balance corresponding to the user identifier that is locally stored on the server, and the balance amounts of the sub-balances corresponding to the user identifier that are stored on the other 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 (S102); 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 (S103).

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.