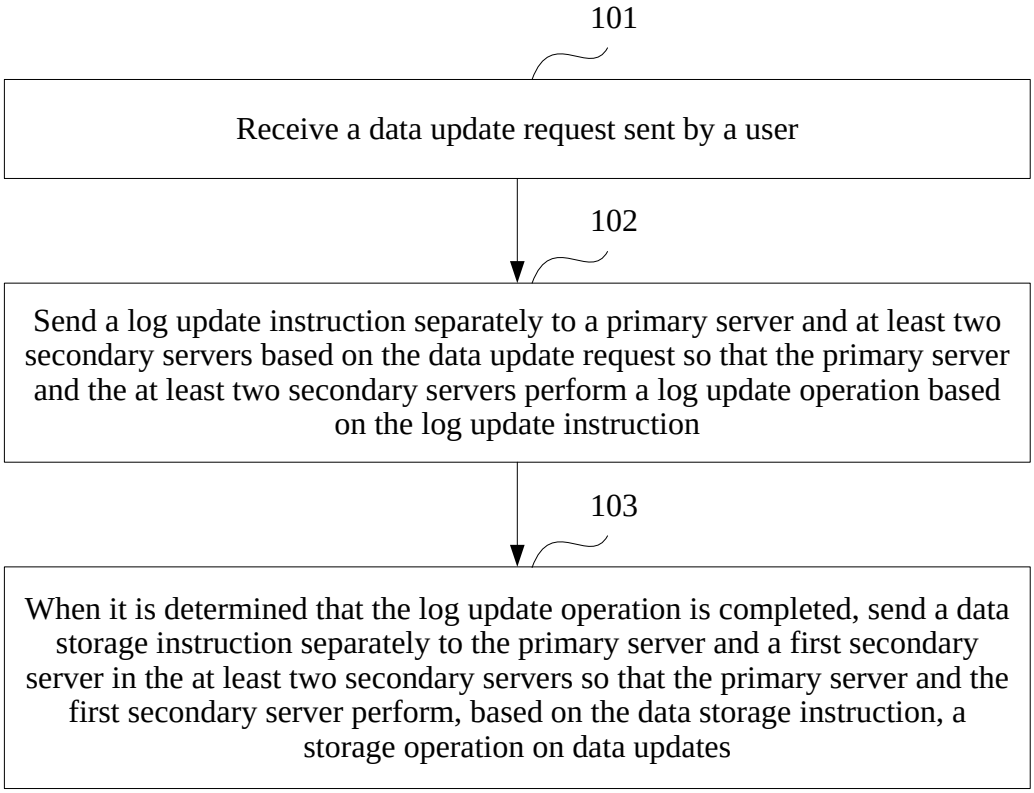
101
Receive a data update request sent by a user
102
Send a log update instruction separately to a primary server and at least two secondary servers based on the data update request so that the primary server and the at least two secondary servers perform a log update operation based on the log update instruction
103
When it is determined that the log update operation is completed, send a data storage instruction separately to the primary server and a first secondary server in the at least two secondary servers so that the primary server and the first secondary server perform, based on the data storage instruction, a storage operation on data updates

FIG. 1

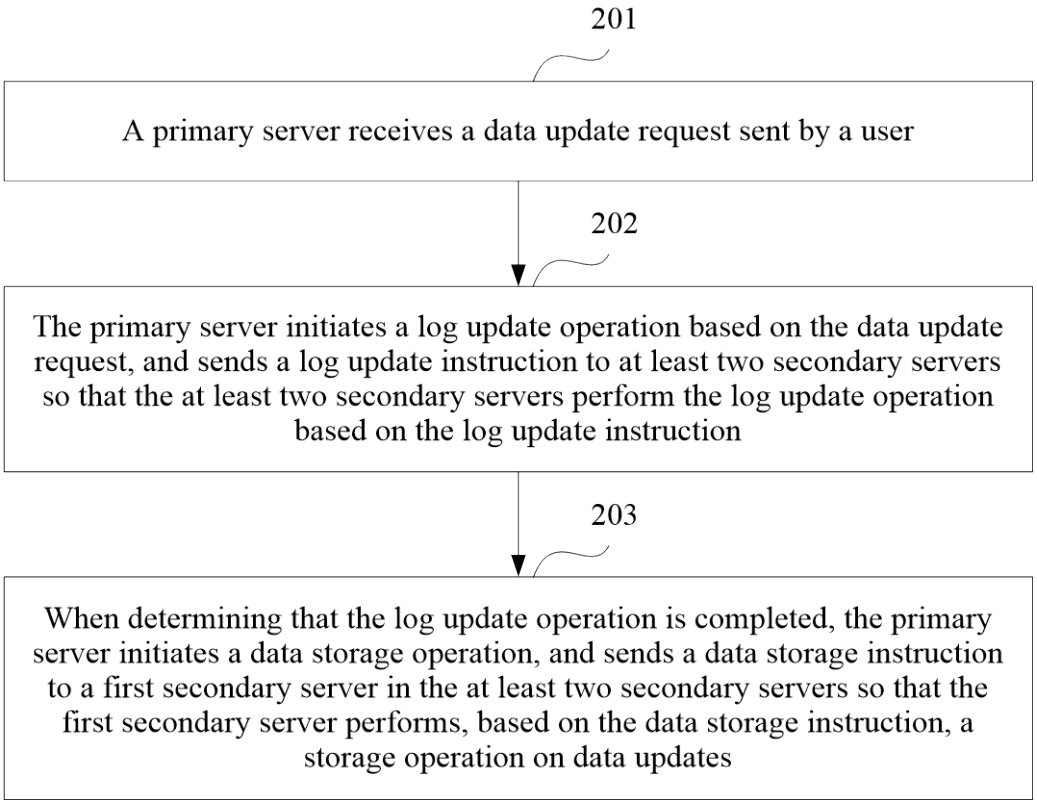
201
A primary server receives a data update request sent by a user
202
The primary server initiates a log update operation based on the data update request, and sends a log update instruction to at least two secondary servers so that the at least two secondary servers perform the log update operation based on the log update instruction
203
When determining that the log update operation is completed, the primary server initiates a data storage operation, and sends a data storage instruction to a first secondary server in the at least two secondary servers so that the first secondary server performs, based on the data storage instruction, a storage operation on data updates

FIG. 2

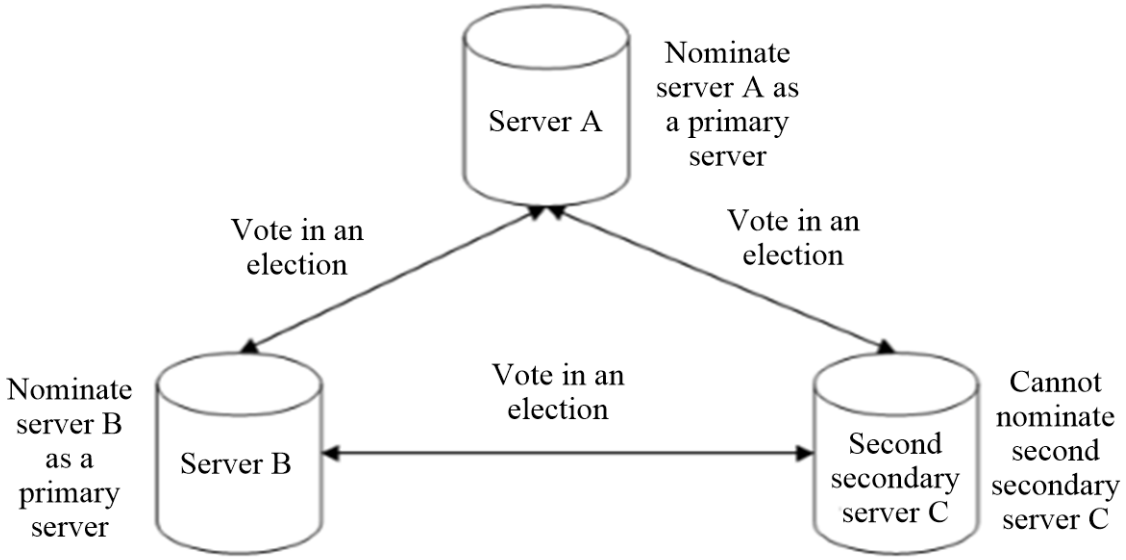
Server A
Nominate server A as a primary server
Vote in an election
Vote in an election
Nominate server B as a primary server
Server B
Vote in an election
Second secondary server C
Cannot nominate second secondary server C

FIG. 3

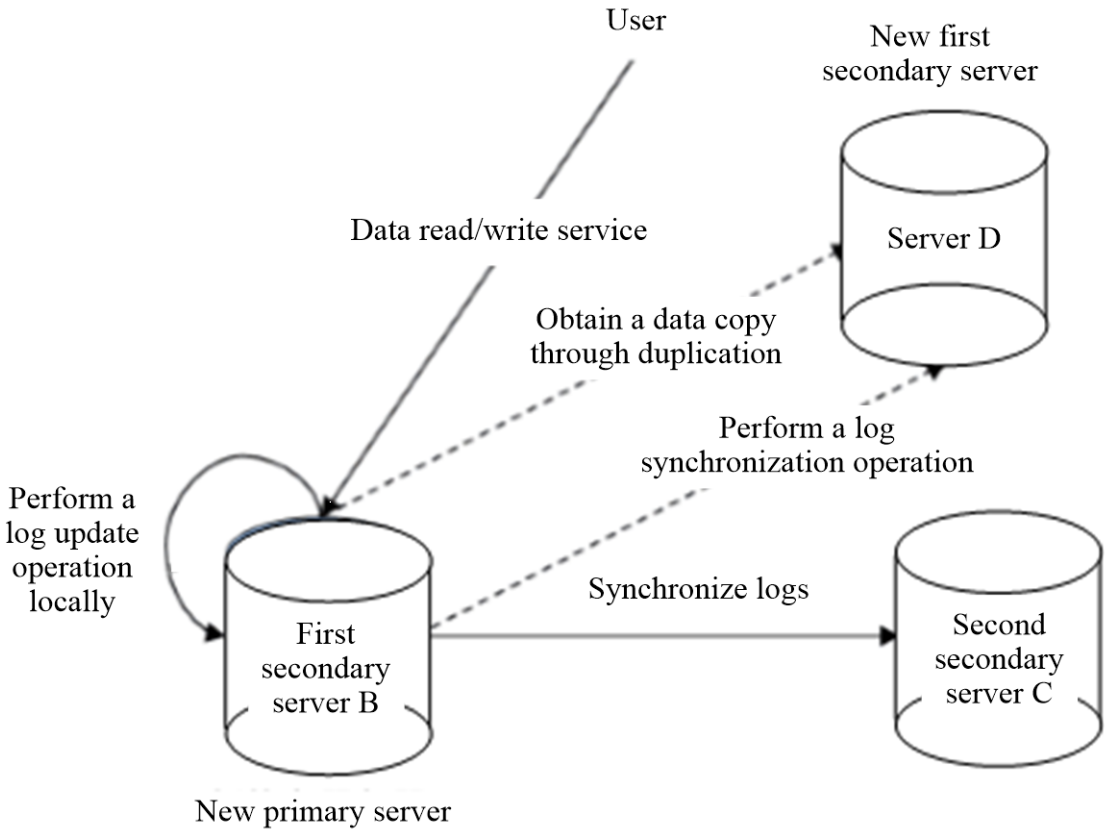
User
New first secondary server
Server D
Data read/write service
Obtain a data copy through duplication
Perform a log synchronization operation
Perform a log update operation locally
First secondary server B
Synchronize logs
Second secondary server C
New primary server

FIG. 4

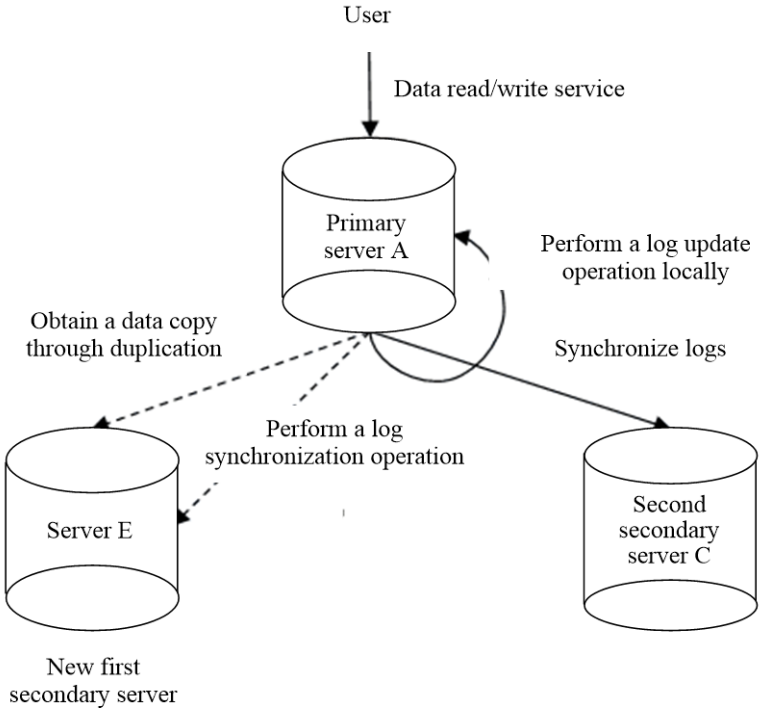
User
Data read/write service
Primary server A
Perform a log update operation locally
Obtain a data copy through duplication
Synchronize logs
Perform a log synchronization operation
Server E
Second secondary server C
New first secondary server

FIG. 5

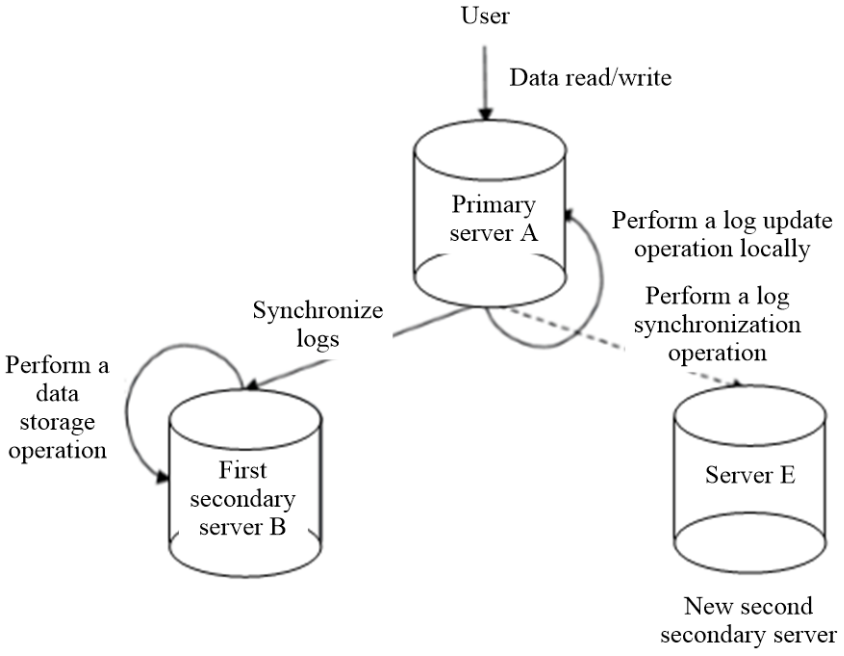
User
Data read/write
Primary server A
Perform a log update operation locally
Synchronize logs
Perform a log synchronization operation
Perform a data storage operation
First secondary server B
Server E
New second secondary server

FIG. 6

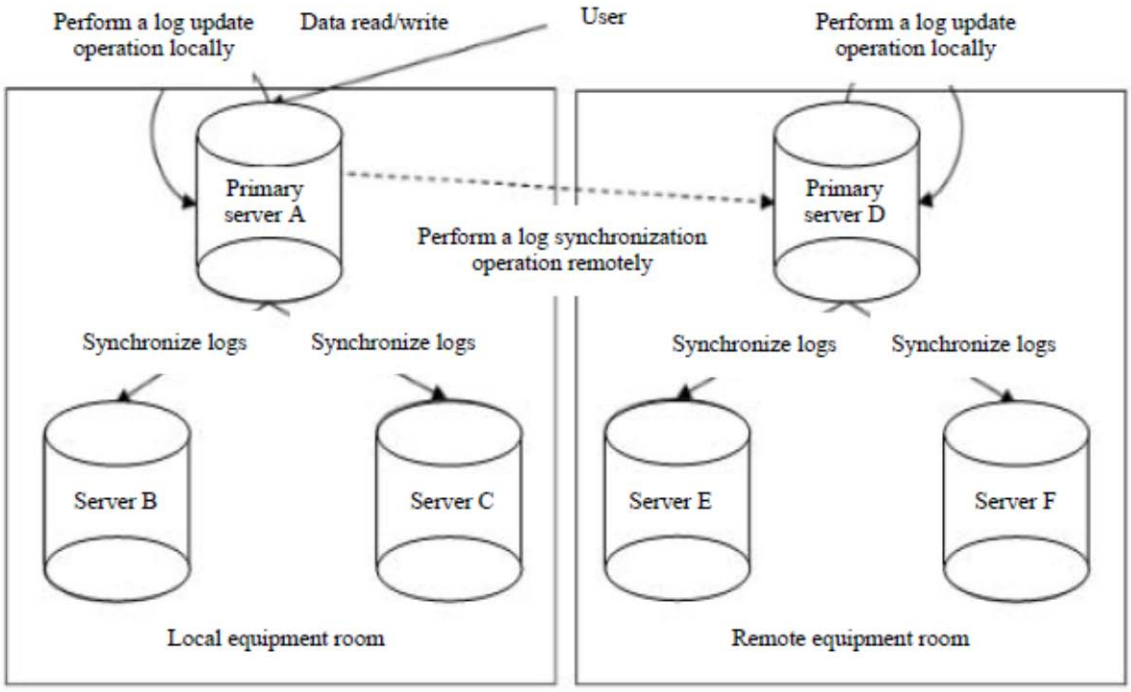

FIG. 7

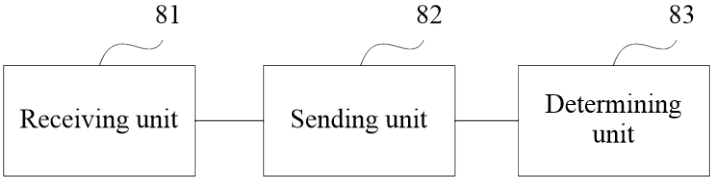

FIG. 8

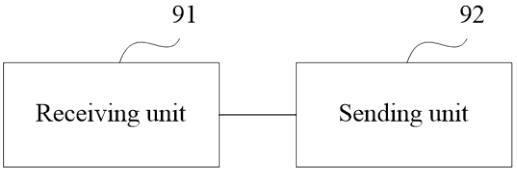

FIG. 9