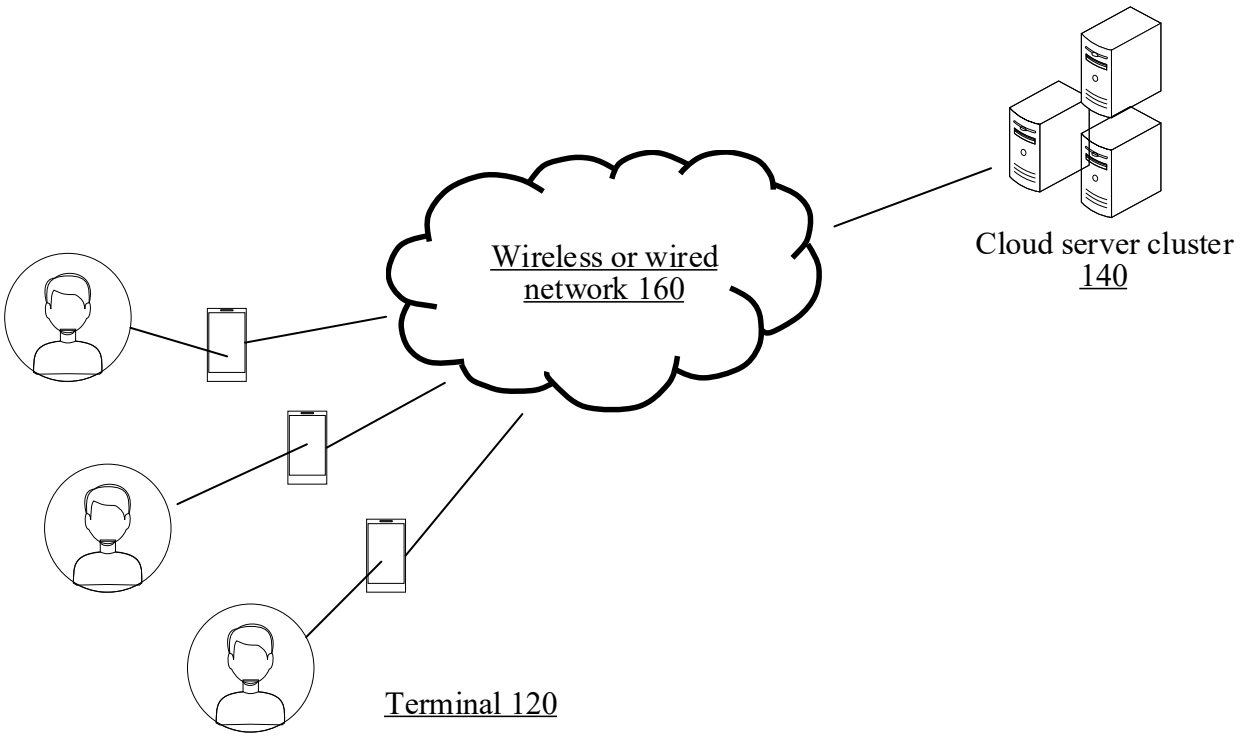
Wireless or wired network 160
Cloud server cluster 140
Terminal 120

FIG. 1

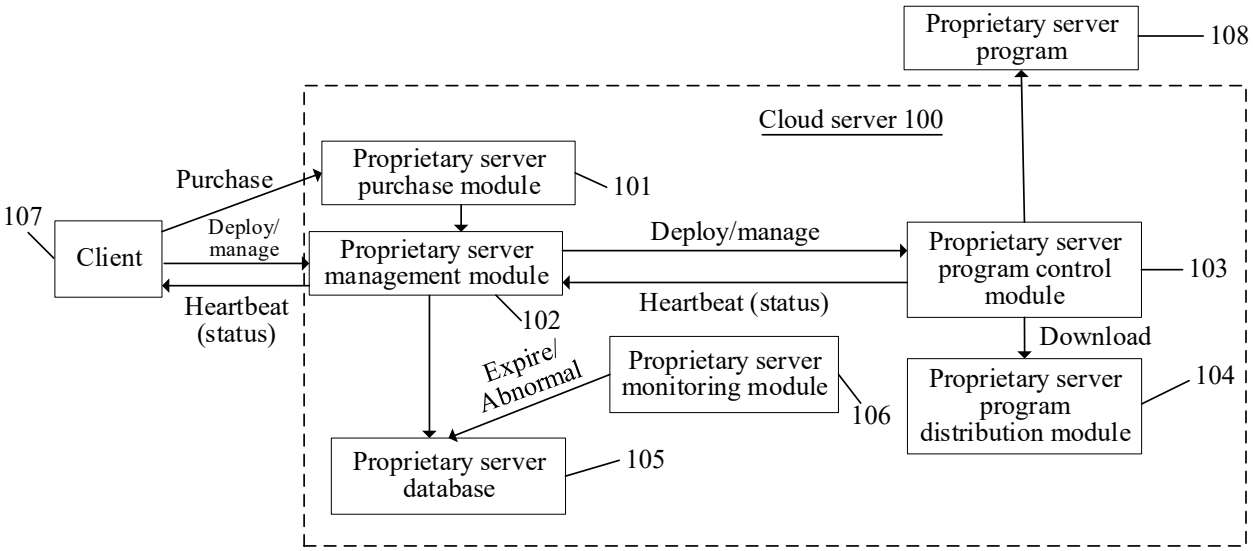
Proprietary server program
108
Cloud server 100
Proprietary server purchase module
101
Purchase
107
Client
Deploy/ manage
Heartbeat (status)
Proprietary server management module
102
Deploy/manage
Heartbeat (status)
Proprietary server program control module
103
Download
Proprietary server program distribution module
104
Expire/ Abnormal
Proprietary server monitoring module
106
Proprietary server database
105

FIG. 2

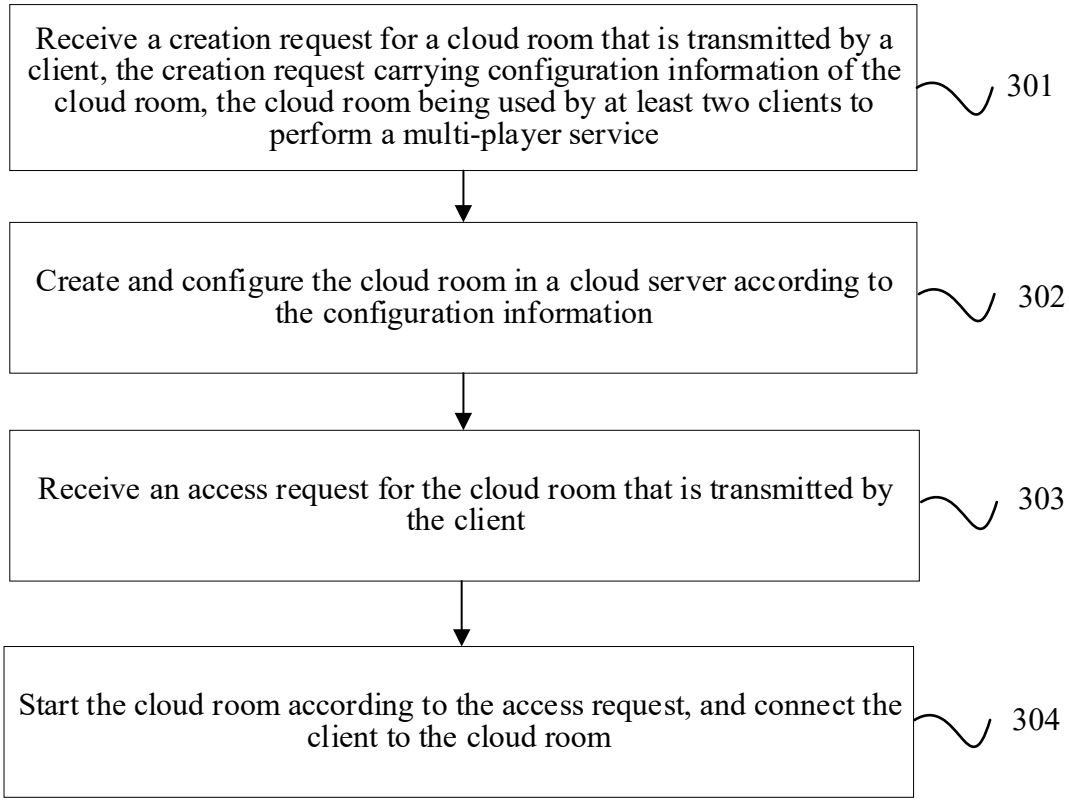
Receive a creation request for a cloud room that is transmitted by a client, the creation request carrying configuration information of the cloud room, the cloud room being used by at least two clients to perform a multi-player service
301
Create and configure the cloud room in a cloud server according to the configuration information
302
Receive an access request for the cloud room that is transmitted by the client
303
Start the cloud room according to the access request, and connect the client to the cloud room
304

FIG. 3

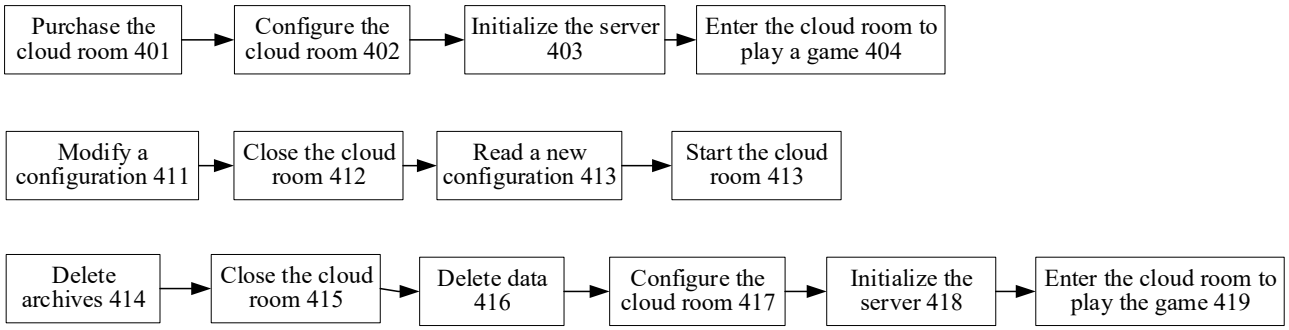
Purchase the cloud room 401
Configure the cloud room 402
Initialize the server 403
Enter the cloud room to play a game 404
Modify a configuration 411
Close the cloud room 412
Read a new configuration 413
Start the cloud room 413
Delete archives 414
Close the cloud room 415
Delete data 416
Configure the cloud room 417
Initialize the server 418
Enter the cloud room to play the game 419

FIG. 4

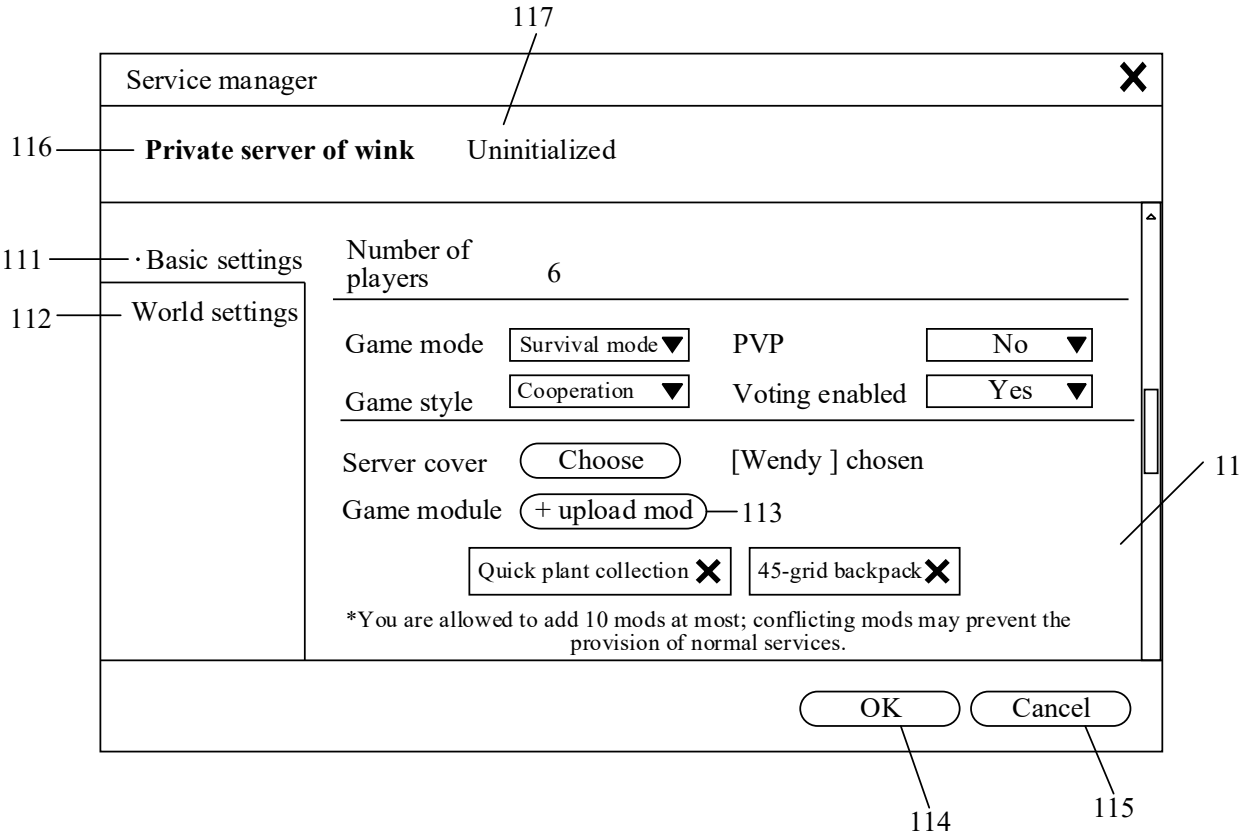
117
Service manager
116
Private server of wink
Uninitialized
111
Basic settings
112
World settings
Number of players
6
Game mode
Survival mode
PVP
No
Game style
Cooperation
Voting enabled
Yes
Server cover
Choose
[Wendy] chosen
Game module
+ upload mod
113
11
Quick plant collection
45-grid backpack
*You are allowed to add 10 mods at most; conflicting mods may prevent the provision of normal services.
OK
Cancel
114
115

FIG. 5

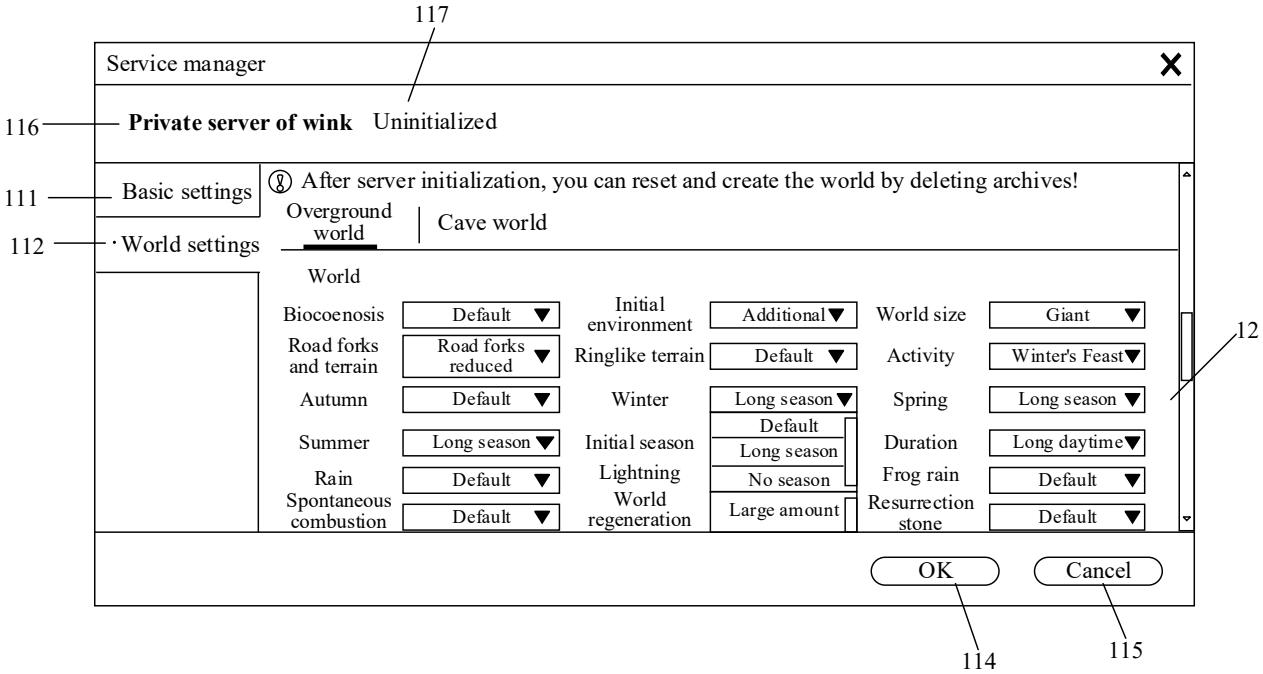
117
Service manager
116
Private server of wink
Uninitialized
111
Basic settings
112
World settings
After server initialization, you can reset and create the world by deleting archives!
Overground world
Cave world
World
Biocoenosis
Default
Initial environment
Additional
World size
Giant
Road forks and terrain
Road forks reduced
Ringlike terrain
Default
Activity
Winter's Feast
Autumn
Default
Winter
Long season
Spring
Long season
Summer
Long season
Initial season
Default
Long season
No season
Large amount
Duration
Long daytime
Rain
Default
Lightning
Frog rain
Default
Spontaneous combustion
Default
World regeneration
Resurrection stone
Default
12
OK
Cancel
114
115

FIG. 6

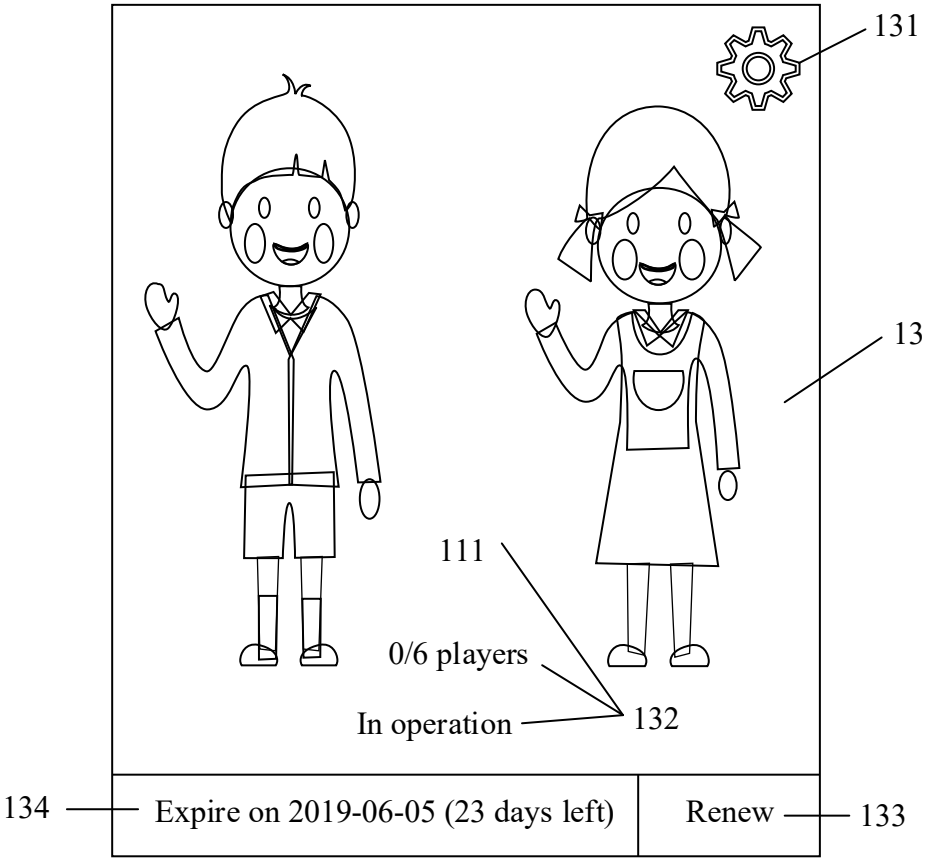
131
13
111
0/6 players
In operation
132
134
Expire on 2019-06-05 (23 days left)
Renew
133

FIG. 7

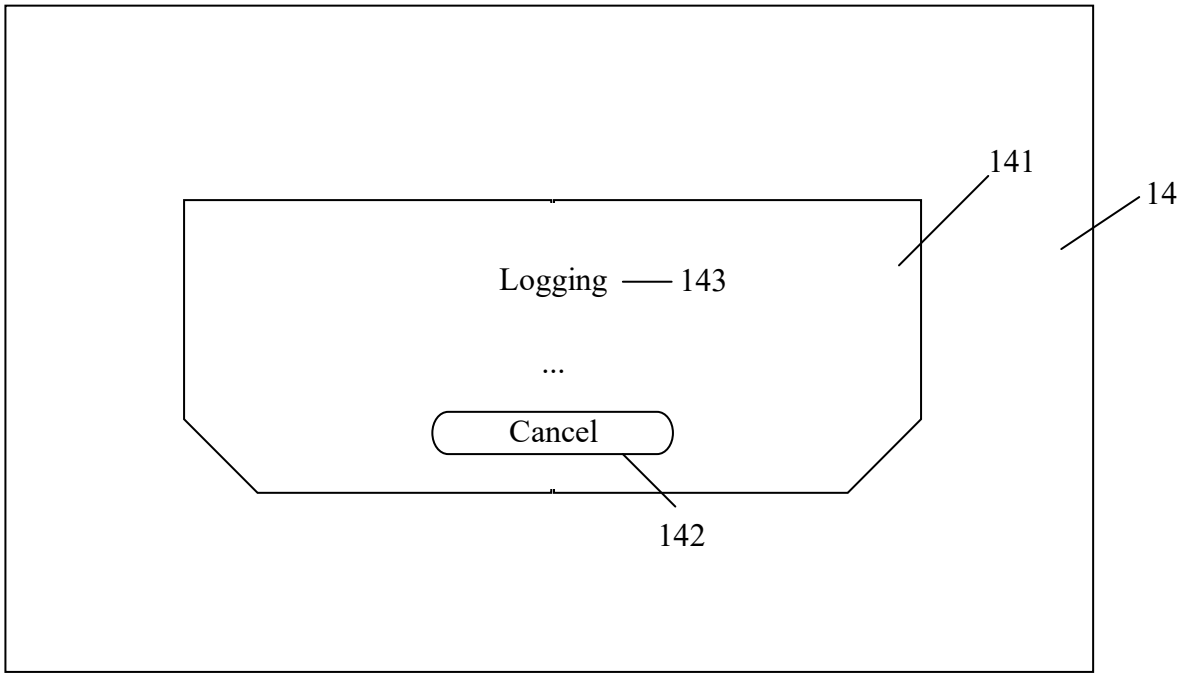
141
14
Logging
143
...
Cancel
142

FIG. 8

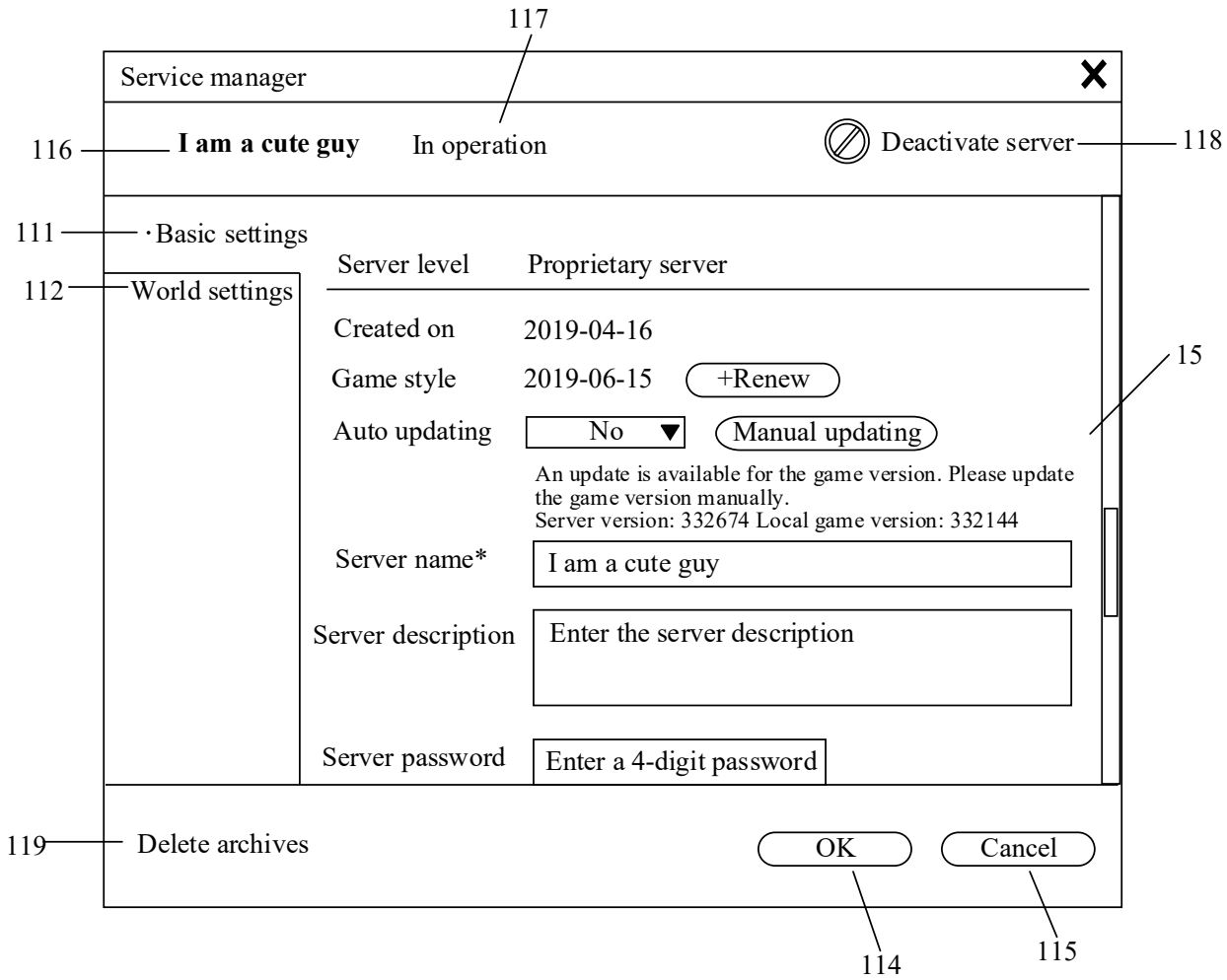
117
Service manager
116
I am a cute guy
In operation
Deactivate server
118
111
·Basic settings
112
World settings
Server level
Proprietary server
Created on
2019-04-16
Game style
2019-06-15
+Renew
15
Auto updating
No
Manual updating
An update is available for the game version. Please update the game version manually.
Server version: 332674 Local game version: 332144
Server name*
I am a cute guy
Server description
Enter the server description
Server password
Enter a 4-digit password
119
Delete archives
OK
Cancel
114
115

FIG. 9

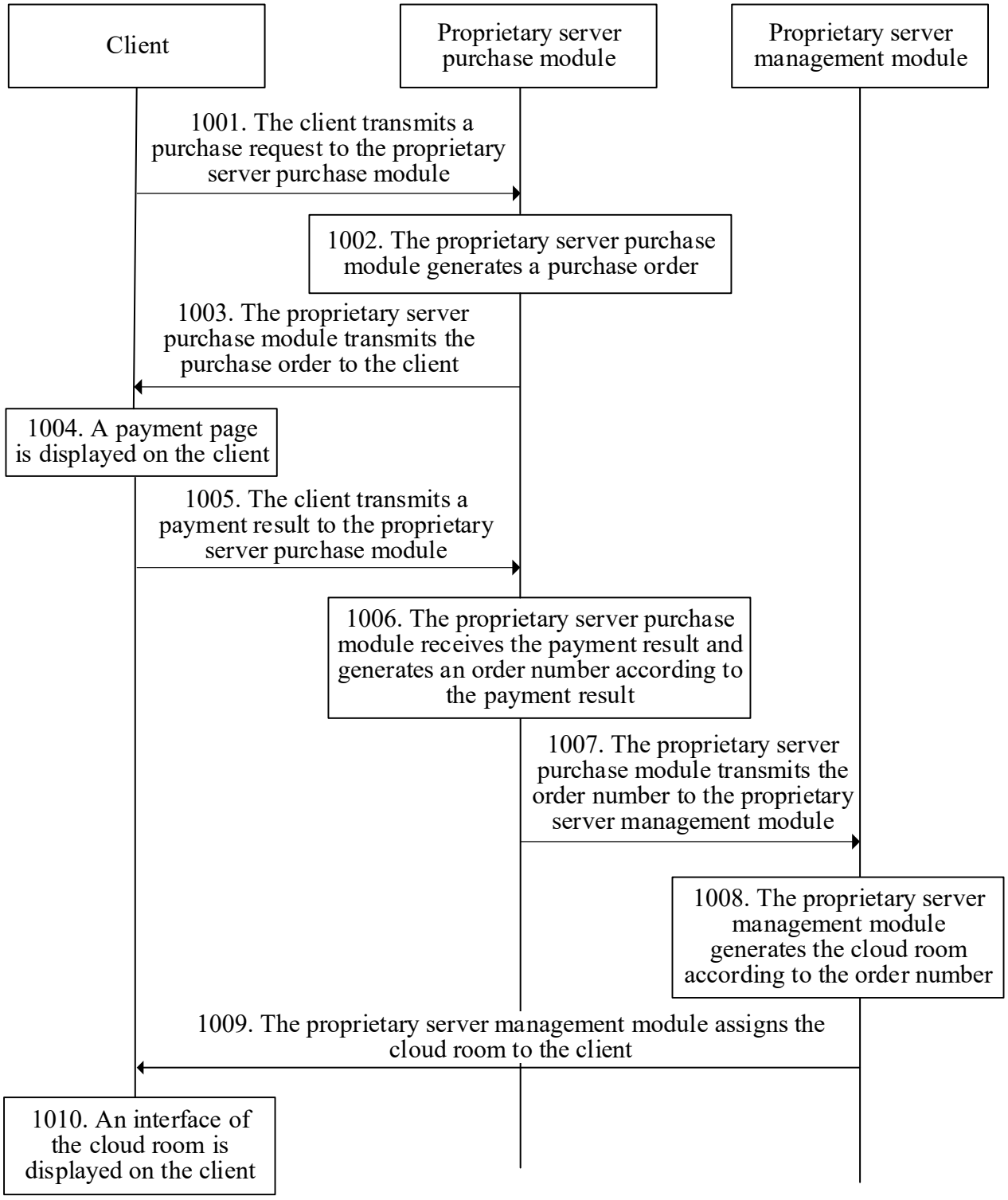
Client
Proprietary server purchase module
Proprietary server management module
1001. The client transmits a purchase request to the proprietary server purchase module
1002. The proprietary server purchase module generates a purchase order
1003. The proprietary server purchase module transmits the purchase order to the client
1004. A payment page is displayed on the client
1005. The client transmits a payment result to the proprietary server purchase module
1006. The proprietary server purchase module receives the payment result and generates an order number according to the payment result
1007. The proprietary server purchase module transmits the order number to the proprietary server management module
1008. The proprietary server management module generates the cloud room according to the order number
1009. The proprietary server management module assigns the cloud room to the client
1010. An interface of the cloud room is displayed on the client

FIG. 10

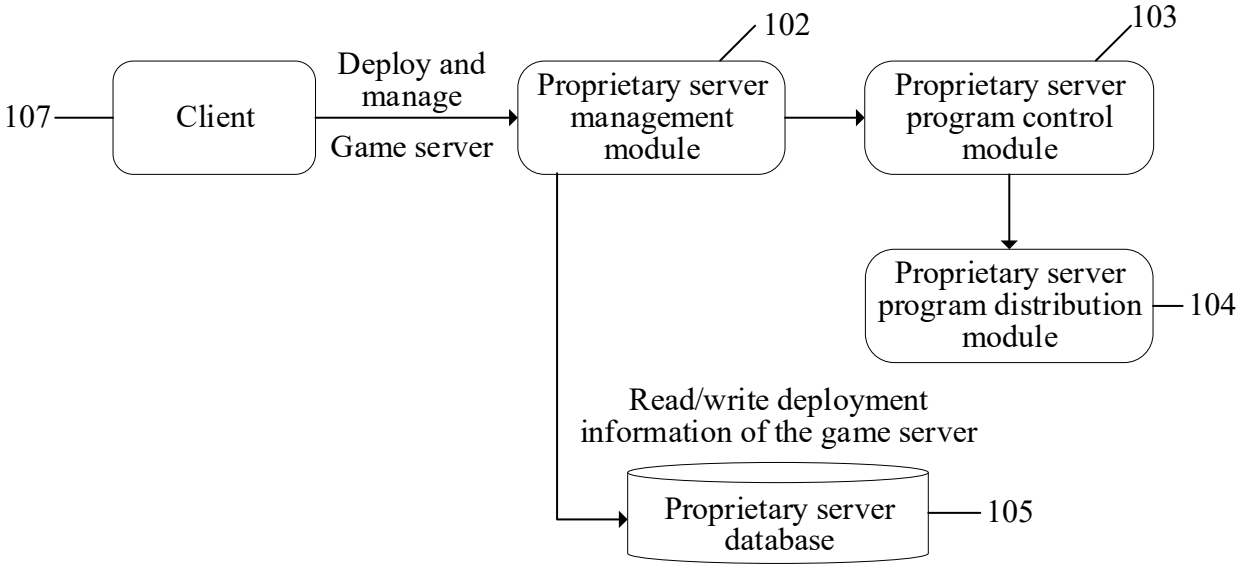
102
103
107
Client
Deploy and manage
Game server
Proprietary server management module
Proprietary server program control module
Proprietary server program distribution module
104
Read/write deployment information of the game server
Proprietary server database
105

FIG. 11

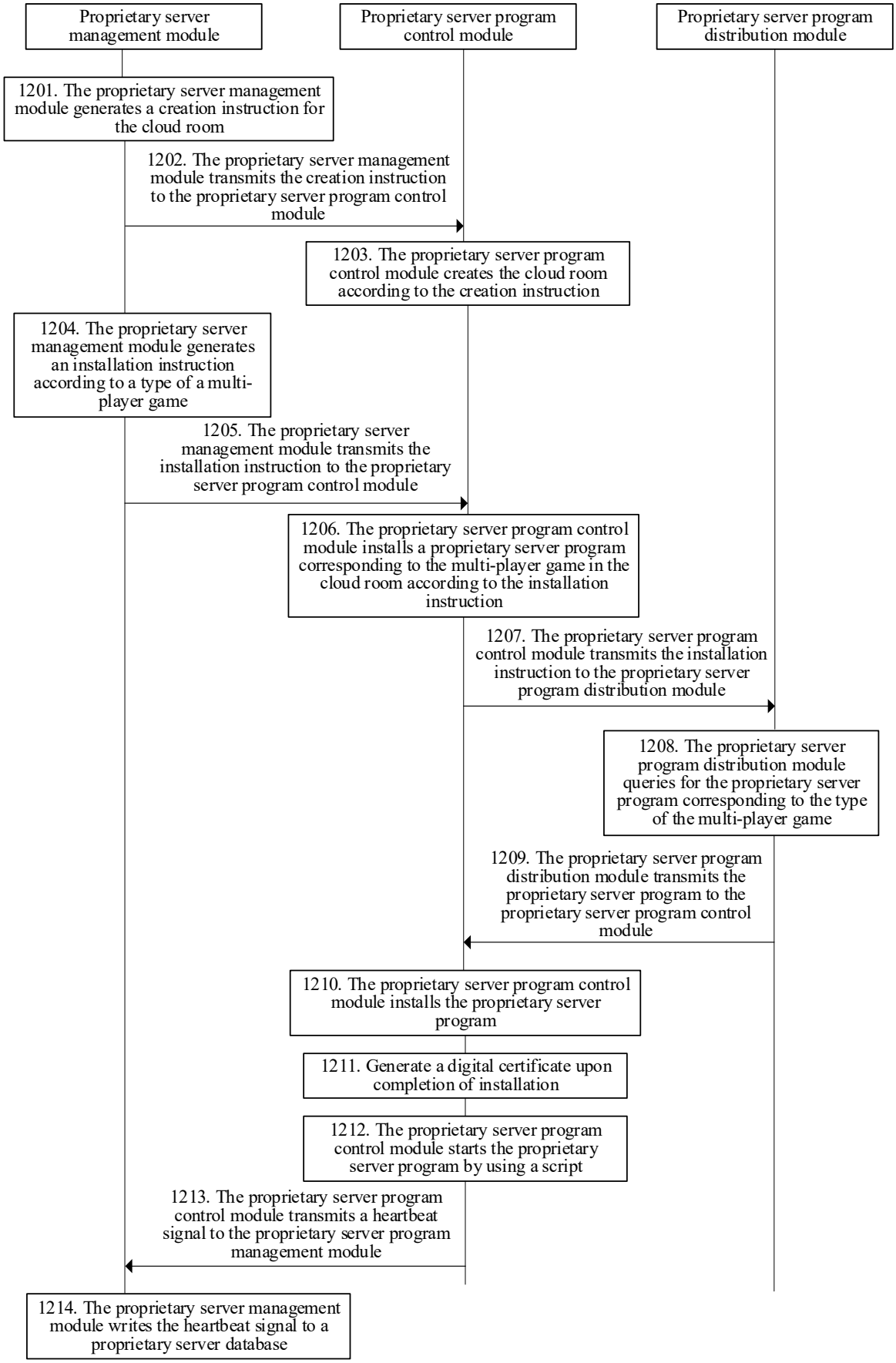
Proprietary server management module
Proprietary server program control module
Proprietary server program distribution module
1201. The proprietary server management module generates a creation instruction for the cloud room
1202. The proprietary server management module transmits the creation instruction to the proprietary server program control module
1203. The proprietary server program control module creates the cloud room according to the creation instruction
1204. The proprietary server management module generates an installation instruction according to a type of a multi-player game
1205. The proprietary server management module transmits the installation instruction to the proprietary server program control module
1206. The proprietary server program control module installs a proprietary server program corresponding to the multi-player game in the cloud room according to the installation instruction
1207. The proprietary server program control module transmits the installation instruction to the proprietary server program distribution module
1208. The proprietary server program distribution module queries for the proprietary server program corresponding to the type of the multi-player game
1209. The proprietary server program distribution module transmits the proprietary server program to the proprietary server program control module
1210. The proprietary server program control module installs the proprietary server program
1211. Generate a digital certificate upon completion of installation
1212. The proprietary server program control module starts the proprietary server program by using a script
1213. The proprietary server program control module transmits a heartbeat signal to the proprietary server program management module
1214. The proprietary server management module writes the heartbeat signal to a proprietary server database

FIG. 12

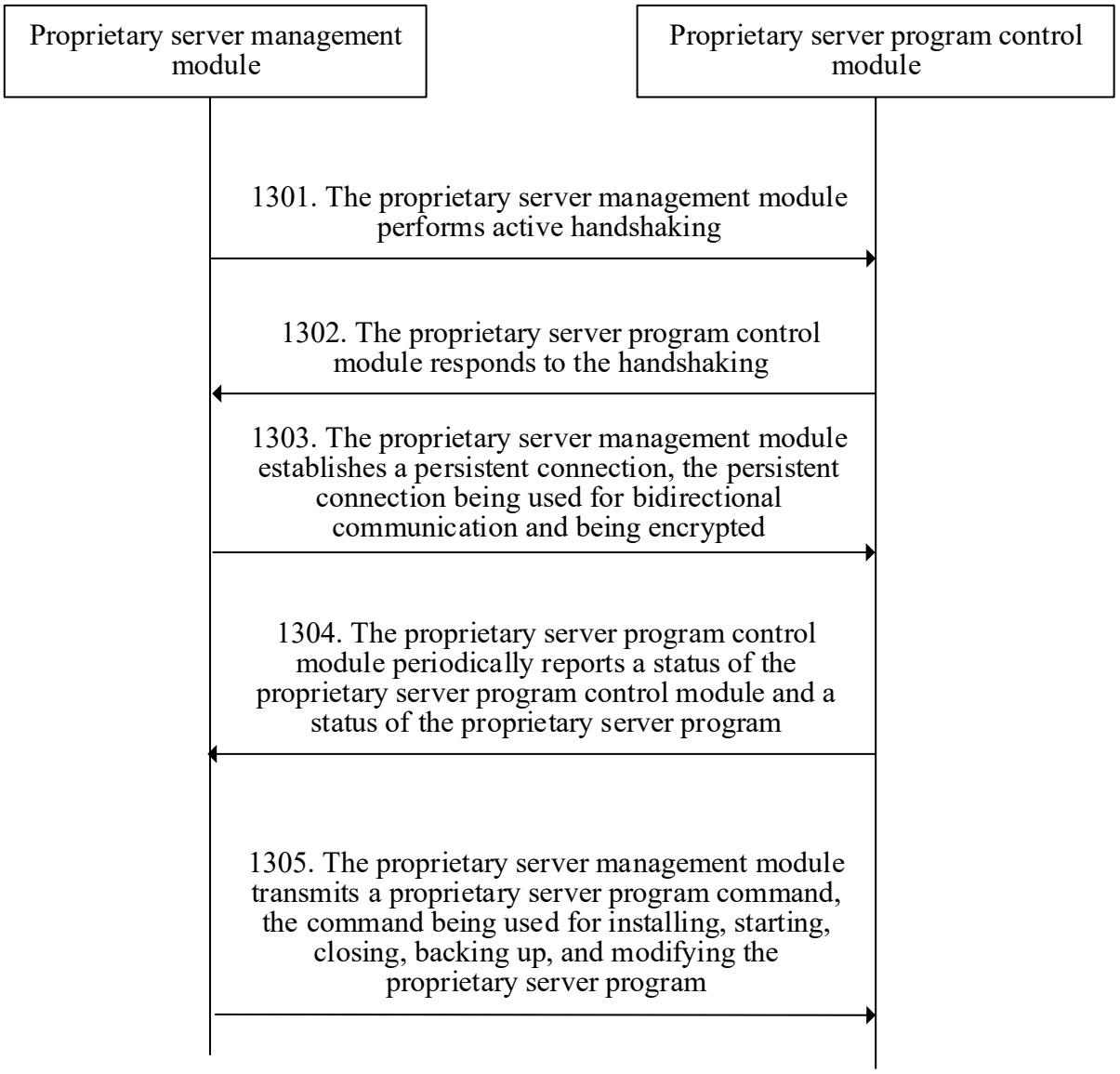
Proprietary server management module
Proprietary server program control module
1301. The proprietary server management module performs active handshaking
1302. The proprietary server program control module responds to the handshaking
1303. The proprietary server management module establishes a persistent connection, the persistent connection being used for bidirectional communication and being encrypted
1304. The proprietary server program control module periodically reports a status of the proprietary server program control module and a status of the proprietary server program
1305. The proprietary server management module transmits a proprietary server program command, the command being used for installing, starting, closing, backing up, and modifying the proprietary server program

FIG. 13

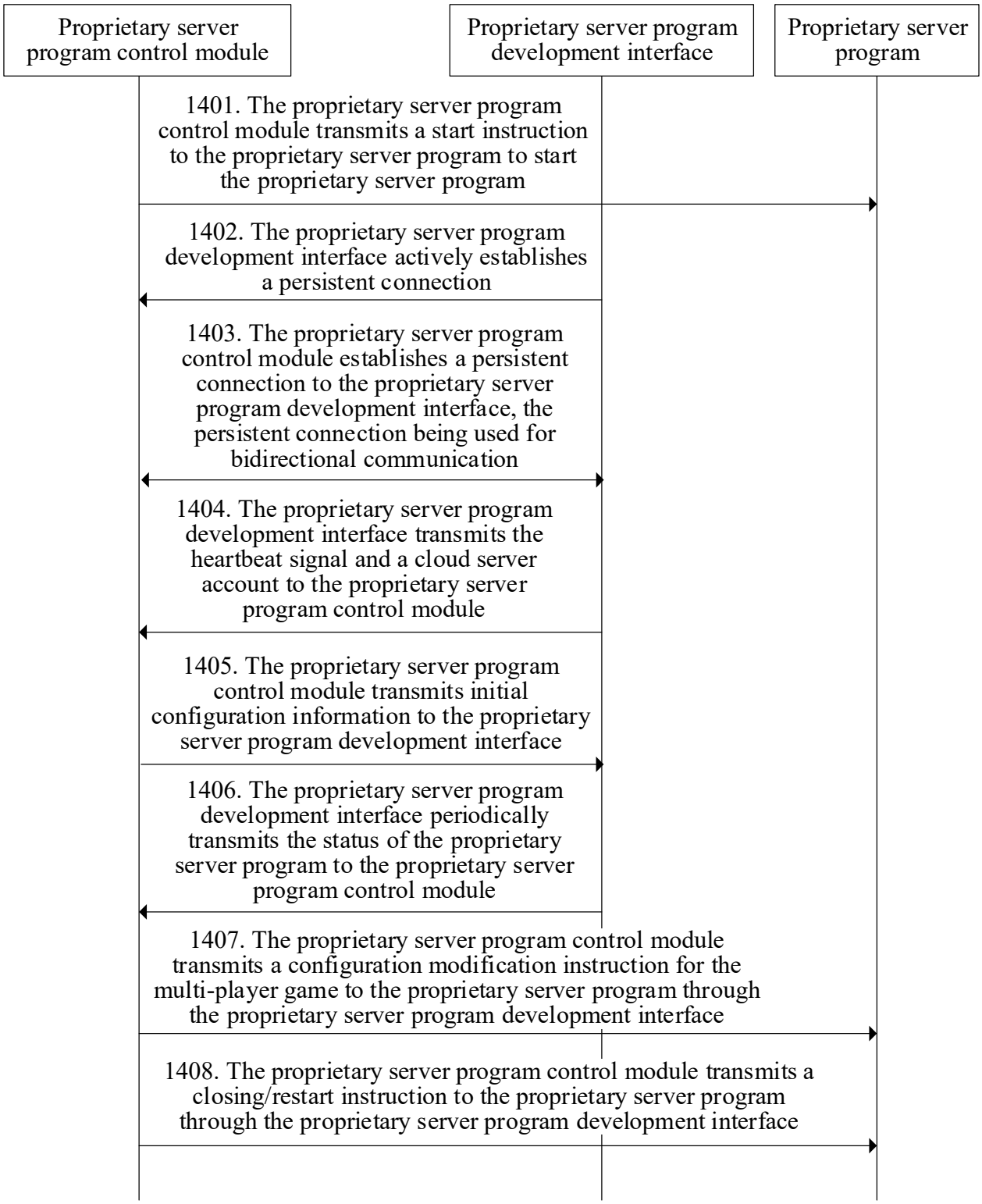
Proprietary server program control module
Proprietary server program development interface
Proprietary server program
1401. The proprietary server program control module transmits a start instruction to the proprietary server program to start the proprietary server program
1402. The proprietary server program development interface actively establishes a persistent connection
1403. The proprietary server program control module establishes a persistent connection to the proprietary server program development interface, the persistent connection being used for bidirectional communication
1404. The proprietary server program development interface transmits the heartbeat signal and a cloud server account to the proprietary server program control module
1405. The proprietary server program control module transmits initial configuration information to the proprietary server program development interface
1406. The proprietary server program development interface periodically transmits the status of the proprietary server program to the proprietary server program control module
1407. The proprietary server program control module transmits a configuration modification instruction for the multi-player game to the proprietary server program through the proprietary server program development interface
1408. The proprietary server program control module transmits a closing/restart instruction to the proprietary server program through the proprietary server program development interface

FIG. 14

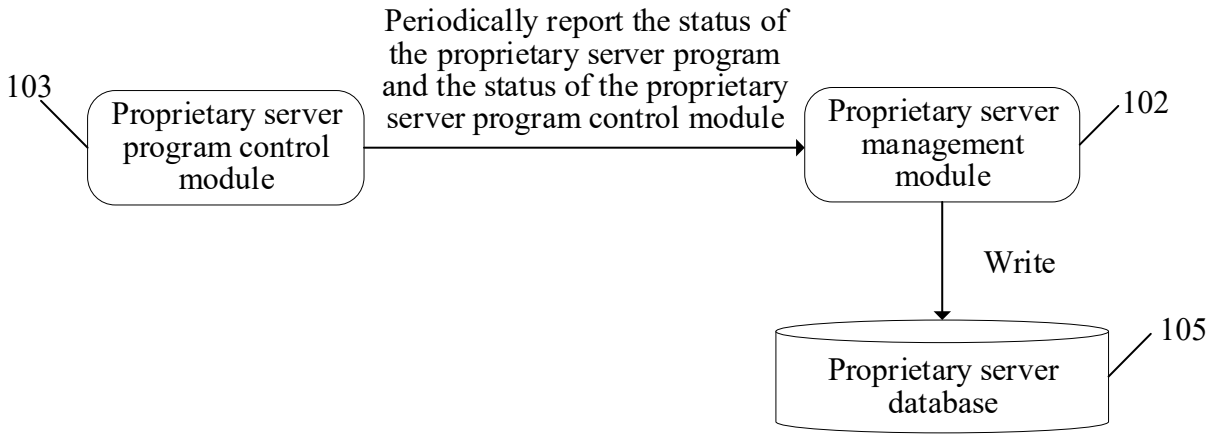
103
Proprietary server program control module
Periodically report the status of the proprietary server program and the status of the proprietary server program control module
Proprietary server management module
102
Write
Proprietary server database
105

FIG. 15

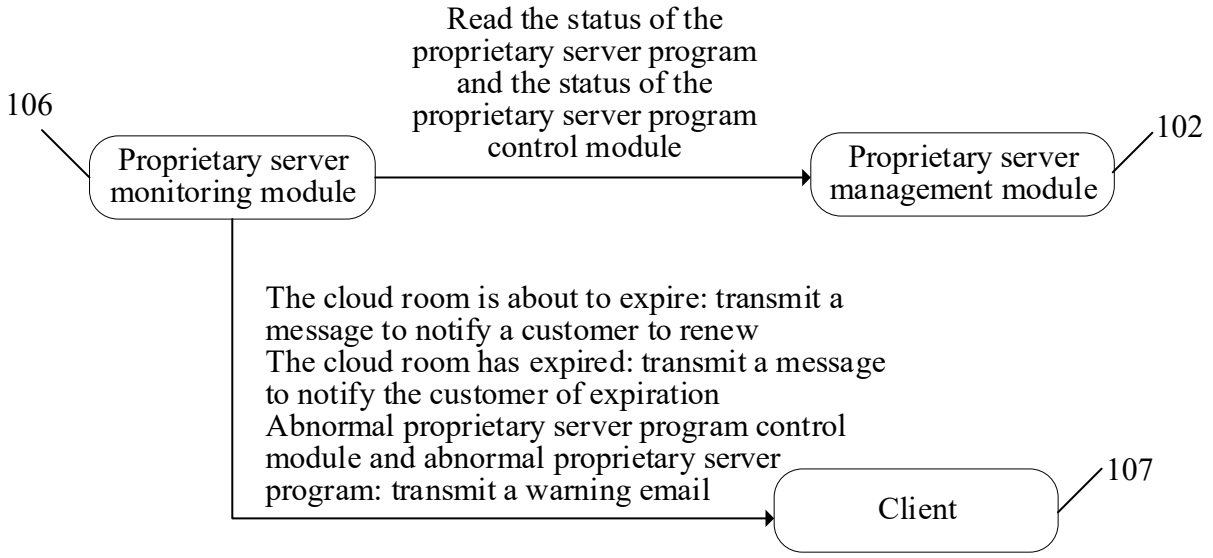
106
Proprietary server monitoring module
Read the status of the proprietary server program and the status of the proprietary server program control module
Proprietary server management module
102
The cloud room is about to expire: transmit a message to notify a customer to renew
The cloud room has expired: transmit a message to notify the customer of expiration
Abnormal proprietary server program control module and abnormal proprietary server program: transmit a warning email
Client
107

FIG. 16

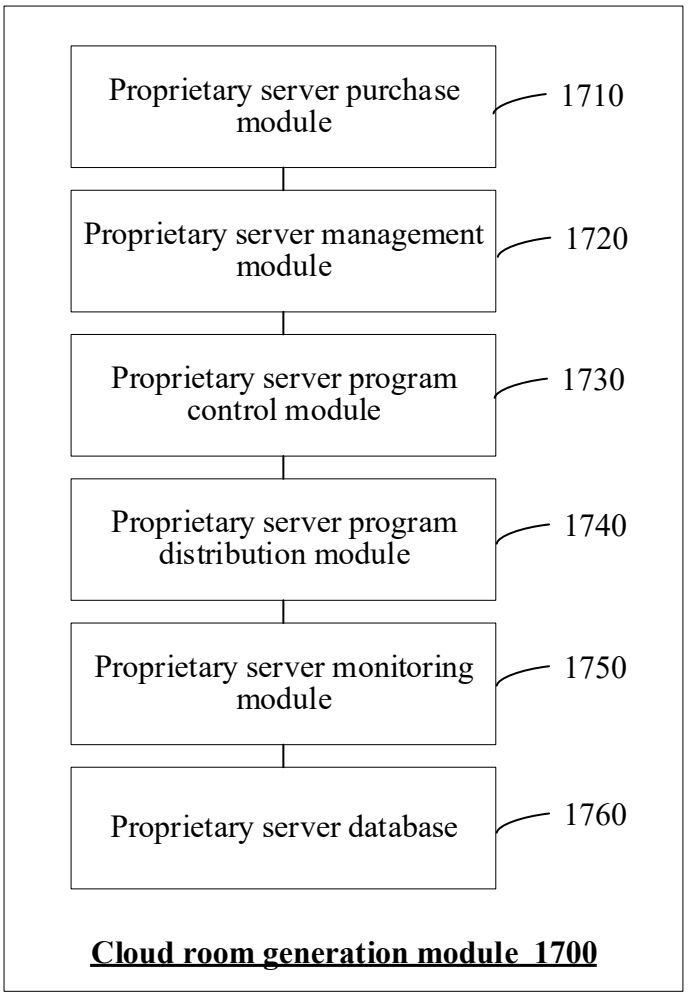
Proprietary server purchase module
1710
Proprietary server management module
1720
Proprietary server program control module
1730
Proprietary server program distribution module
1740
Proprietary server monitoring module
1750
Proprietary server database
1760
Cloud room generation module 1700

FIG. 17

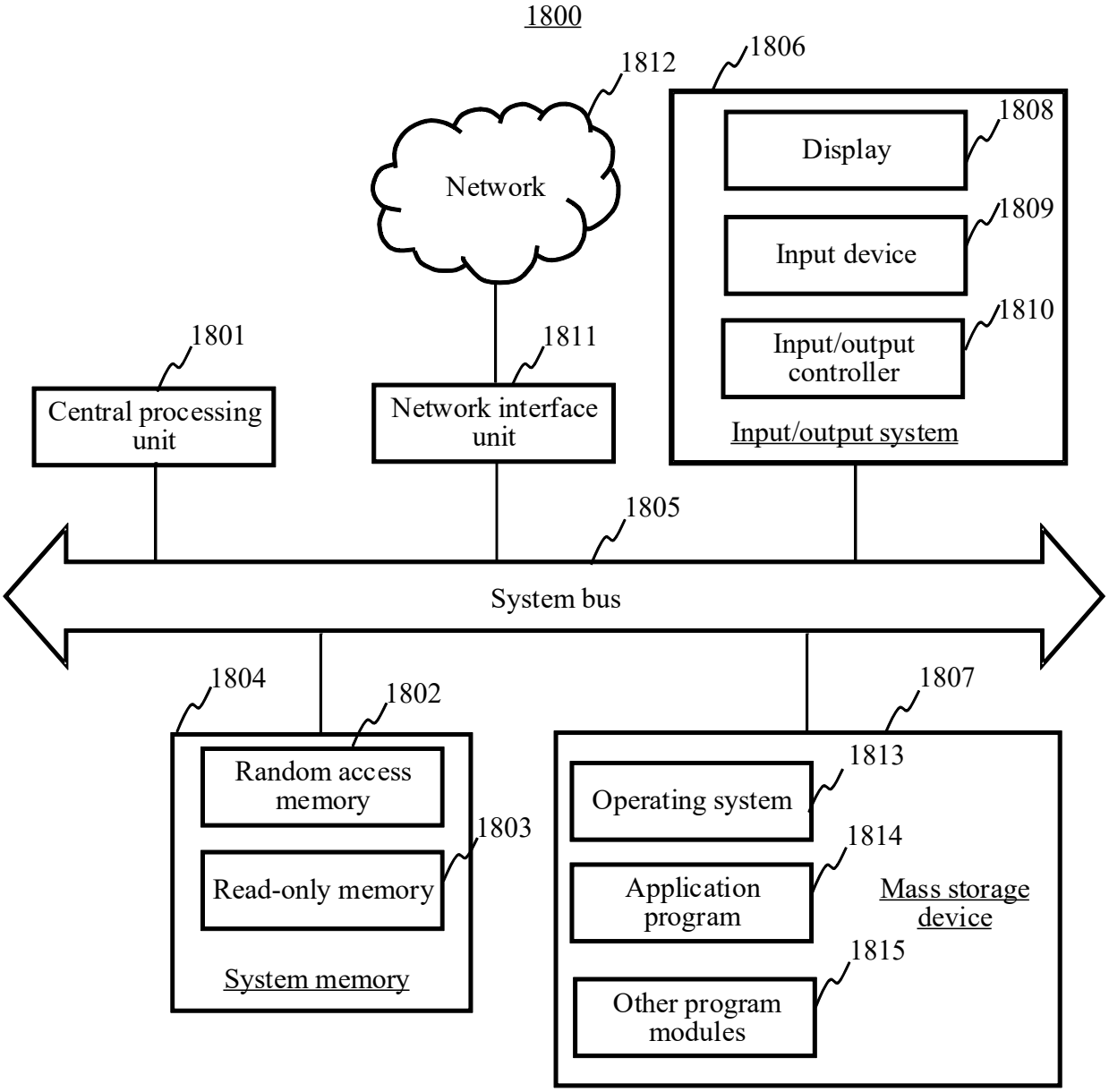
1800
1812
1806
Network
Display
1808
Input device
1809
Input/output controller
1810
Input/output system
1801
Central processing unit
1811
Network interface unit
1805
System bus
1804
1802
Random access memory
Read-only memory
1803
System memory
1807
1813
Operating system
1814
Application program
Mass storage device
1815
Other program modules

FIG. 18