

GROUP MANAGEMENT METHODS AND APPARATUSES, AND ELECTRONIC DEVICE AND STORAGE MEDIUM

[0001] This application claims priority to Chinese patent application No. 202311539137.X filed with the China National Intellectual Property Administration on November 16, 2023 and entitled "GROUP MANAGEMENT METHODS AND APPARATUSES, AND ELECTRONIC DEVICE AND STORAGE MEDIUM", which is hereby incorporated by reference in its entirety.

TECHNICAL FIELD

[0002] The present application relates to the field of computer technology, and in particular, to a group management method and apparatus, an electronic device, and a storage medium.

BACKGROUND

[0003] With the rapid development of Internet technology and mobile payment technology, more and more users purchase goods through online ordering. In the delivery process of delivery parties, it is common for a transaction party to prepare delivery objects slowly, and such situations greatly affect the delivery efficiency. Usually, when a delivery party arrives at the transaction party's side and finds that the delivery object has not been well prepared by the transaction party, there are generally two options: one is to continue waiting at the transaction party's side, but this may easily cause other orders to be overdue; the other is to first pick up delivery objects of other orders, but the delivery party cannot know the preparation progress of the current transaction party. Therefore, how to help delivery parties better understand the preparation status at the transaction party's side and promote information sharing is an urgent problem to be solved.

SUMMARY

[0004] The main objective of the present application is to provide a group management method and apparatus, an electronic device, and a storage medium, aiming to offer a communication channel for delivery parties and increase the possibility of information sharing. The technical solutions are as follows.

[0005] In a first aspect, an embodiment of the present application provides a group management method applied to a server, including:

[0006] obtaining an order delivery status of a target order;

5 [0007] obtaining a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and updating, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set;

10 [0008] generating member update information according to the updated group member set, and sending the member update information to a delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

[0009] In a second aspect, an embodiment of the present application provides a group management method applied to a delivery terminal, including:

15 [0010] in response to an order status change operation for a target order, generating order status change information of the target order and sending the order status change information to a server, where the order status change information causes the server to update a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set; and

20 [0011] receiving member update information sent by the server, and displaying or refraining from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information, where the member update information is generated according to the updated group member set.

[0012] In a third aspect, an embodiment of the present application provides a group management apparatus, including:

25 [0013] an obtaining module, configured to obtain an order delivery status of a target order;

[0014] an updating module, configured to obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status and update,

according to the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set; and

5 **[0015]** a generating module, configured to generate member update information according to the updated group member set and send the member update information to a delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

[0016] In a fourth aspect, an embodiment of the present application provides a group management apparatus, including:

10 **[0017]** an operation receiving module, configured to generate order status change information of a target order in response to an order status change operation for the target order and send the order status change information to a server, where the order status change information causes the server to update a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group
15 member set; and

20 **[0018]** an information receiving module, configured to receive member update information sent by the server and display or refrain from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information, where the member update information is generated according to the updated group member set.

[0019] In a fifth aspect, an embodiment of the present application provides a storage medium which stores a computer program, where when the computer program is executed by one or more processors, the steps of the above method are implemented.

25 **[0020]** In the embodiment of the present application, the server obtains the order delivery status of the target order, obtains the delivery party identifier of the target order in response to determining that the order delivery status satisfies the set status, updates the group member set of the interactive group corresponding to the transaction party related to the target order based on the delivery party identifier to obtain an updated group member set, and generates member update information according to the updated group member set and

sends the member update information to the delivery terminal, so that the delivery terminal displays or refrains from displaying the group entrance of the interactive group according to the member update information. By obtaining the order delivery status of the target order, screening out the target orders that satisfy the set status according to the order delivery status, and adding or removing the delivery parties who need to pick up goods from the same transaction party to or from the same interactive group according to the delivery party identifier corresponding to the target order, the group entrance of the interactive group is displayed or not displayed on the delivery terminal corresponding to the delivery party according to the member update information of the interactive group, so that the delivery parties can view and use the interactive group on demand, which reduces the difficulty of group management and promotes information exchange and sharing among delivery parties.

BRIEF DESCRIPTION OF DRAWINGS

[0021] To more clearly illustrate the technical solutions in the embodiments of the present application or the prior art, the accompanying drawings required for describing the embodiments or the prior art will be briefly introduced below. Obviously, the accompanying drawings described below are only some embodiments of this specification. For those of ordinary skill in the art, other accompanying drawings can also be obtained based on these drawings without creative efforts.

[0022] FIG. 1 is a system architecture diagram of a group management method according to an embodiment of the present application.

[0023] FIG. 2 is a schematic flowchart of a group management method according to an embodiment of the present application.

[0024] FIG. 3 is a schematic flowchart of a group management method according to an embodiment of the present application.

[0025] FIG. 4 is a schematic flowchart of a group management method according to an embodiment of the present application.

[0026] FIG. 5 is a schematic flowchart of a group management method according to an embodiment of the present application.

[0027] FIG. 6 is a schematic diagram of an application homepage of a group management method according to an embodiment of the present application.

[0028] FIG. 7 is a schematic diagram of an example of a contact control in a group management method according to an embodiment of the present application.

5 [0029] FIG. 8 is a schematic diagram of an example of an interactive message control in a group management method according to an embodiment of the present application.

[0030] FIG. 9 is a schematic diagram of an example of an interactive group details page in a group management method according to an embodiment of the present application.

10 [0031] FIG. 10 is a schematic diagram of an example of a contact control in a group management method according to an embodiment of the present application.

[0032] FIG. 11 is a schematic diagram of an example of an interactive message control in a group management method according to an embodiment of the present application.

[0033] FIG. 12 is a schematic structural diagram of a group management apparatus according to an embodiment of the present application.

15 [0034] FIG. 13 is a schematic structural diagram of a group management apparatus according to an embodiment of the present application.

[0035] FIG. 14 is a schematic structural diagram of a group management apparatus according to an embodiment of the present application.

20 [0036] FIG. 15 is a schematic structural diagram of an electronic device according to an embodiment of the present application.

DETAILED DESCRIPTION

[0037] The following will clearly and completely describe the technical solutions in the embodiments of the present application with reference to the accompanying drawings in the embodiments of the present application. Obviously, the described embodiments are only part
25 of the embodiments of this specification, not all of them. Based on the embodiments in this specification, all other embodiments obtained by those skilled in the art without creative

efforts shall fall within the protection scope of this specification. The user information and data involved in the embodiments of the present application (including but not limited to data used for analysis, stored data, displayed data, etc.) are all information and data authorized by users or fully authorized by all parties. Moreover, the collection, use and processing of relevant data shall comply with the relevant laws, regulations and standards of relevant countries and regions, and corresponding operation entrances shall be provided for users to choose to authorize or refuse.

[0038] Reference can be made to FIG. 1, which is a system architecture diagram of a group management method according to an embodiment of the present application. As shown in FIG. 1, the system architecture diagram includes a delivery terminal 101, a network 102, and a server 103. The interaction between the delivery terminal 101 and the server 103 can be realized through the network 102. The delivery terminal 101 can be hardware or software. When the user terminal is hardware, it can be various electronic devices, including but not limited to a smart watch, a smart phone, a tablet computer, a laptop computer and a desktop computer. When the user terminal is software, it can be installed in the above-listed electronic devices, and can be implemented as multiple software or software modules, or as a single software or software module, which is not specifically limited here. In the embodiments of the present application, the delivery terminal refers to a terminal used by a delivery party that provides delivery services. The network 102 may include various types of wired communication links or wireless communication links. For example, wired communication links include optical fiber, twisted pair or coaxial cable, and wireless communication links include Bluetooth communication link, Wireless-Fidelity (Wireless-Fidelity, Wi-Fi) communication link or microwave communication link, etc. The server 103 may be a server or a server cluster that provides various services, such as a server cluster that provides service support for delivery terminals or user terminals.

[0039] In an embodiment, the server can obtain an order delivery status of a target order, and update group members of an interactive group corresponding to a transaction party related to the target order according to whether the order delivery status satisfies a set status. Specifically, when the order delivery status satisfies the set status, the server obtains a delivery party identifier of the target order, updates a group member set of the interactive group corresponding to the transaction party related to the target order based on the delivery

party identifier to obtain an updated group member set, generates member update information according to the updated group member set, and sends the member update information to the corresponding delivery terminal. The delivery terminal displays or refrains from displaying the entrance of the interactive group in response to the member
5 update information sent by the server. By adopting the group management method provided in the embodiment of the present application, group members can be dynamically managed according to the order delivery status of the target order of the transaction party, and the delivery terminal does not need to perform operations of joining or leaving a group, which simplifies the group management process and improves the convenience of group
10 management.

[0040] The group management method provided in this specification will be described in detail below in combination with specific embodiments.

[0041] Reference can be made to FIG. 2, which is a schematic flowchart of a group management method according to an embodiment of the present application. As shown in
15 FIG. 2, this embodiment of the present application describes the specific process of the group management method from both the server side and the delivery terminal side, including steps S101-S104.

[0042] S101: a server obtains an order delivery status of a target order.

[0043] The group management method provided in the embodiment of the present
20 application is used in delivery service scenarios. Delivery services are widely used in scenarios such as online shopping, catering takeout, and errand shopping. In some delivery service scenarios, after a user purchases goods, an order is generated at a transaction party's side. The transaction party provides the delivery object, a delivery party obtains the delivery object from the transaction party, and then delivers the delivery object from the transaction
25 party to the location specified by the user. Delivery parties include but are not limited to delivery personnel, such as riders. Before the delivery party accepts the distribution task of the target order, the order information of the target order can be displayed, for example, the transaction party has accepted the order; after the delivery party accepts the distribution task of the target order, the order delivery status of the target order can be displayed, that is, the
30 logistics status of the order delivered by the delivery party. Exemplarily, the order delivery

status can be simply divided into statuses such as waiting for the delivery party to accept the order, delivery party having accepted the order (waiting for the delivery party to pick up the goods), delivery party having picked up the goods, delivery party being in the process of delivery, and delivery party having delivered the goods. For example, after the transaction party accepts the order, the order status can be "waiting for the delivery party to accept the order"; after the delivery party accepts the order, the order status can be "waiting for the delivery party to pick up the goods" or "delivery party having accepted the order"; after the delivery party arrives at the transaction party's side and takes away the delivery object, the order status can be "delivery party having picked up the goods" or "delivery party being in the process of delivery". It can be understood that the order delivery status can further include information such as the location of the delivery party and the estimated delivery time of the order. The target orders can be obtained according to the transaction party. Each transaction party can have a plurality of orders, all orders of a certain transaction party can be taken as target orders, and the order delivery status of these target orders can be obtained. Optionally, the new orders added by the transaction party within a preset time period can be obtained as target orders, and the order delivery status of these target orders can be obtained.

[0044] S102: the server obtains a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and updates a group member set of an interactive group corresponding to a transaction party related to the target order based on the delivery party identifier to obtain an updated group member set.

[0045] It can be understood that the interactive group is established to facilitate the delivery parties who deliver delivery objects of the same transaction party. Therefore, only the delivery parties corresponding to the target orders that satisfy the set status need to join the interactive group. For example, when the delivery parties have not obtained the distribution objects from the transaction party, these delivery parties can be added to the same interactive group, and the delivery parties can share the preparation status of the distribution objects at the transaction party's side in the group. Exemplarily, the set status can be "delivery party having accepted the order", "delivery party being in the process of delivery", etc. When the order delivery status of a target order satisfies the set status, the delivery party identifier of the target order is obtained. The delivery party identifier is the unique identifier representing the delivery party of the target order. In response to determining that the obtained target

order satisfies the set status, the group member set of the interactive group of the transaction party related to the target order is updated according to the delivery party identifier corresponding to the target order. For example, the delivery party identifier may be added to the group member set of the interactive group. It can be understood that when a delivery party sends a message in the interactive group, the server will receive the message sent by the group member and send the message to all members in the group according to the group chat queue formed by the group member set, so that each member of the interactive group can receive the message.

[0046] S103: the server generates member update information according to the updated group member set, and sends the member update information to the delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

[0047] In an embodiment, after updating the group member set of the interactive group, the server generates member update information according to the updated group member set.

The member update information may include information about members added to or removed from the group. The server sends the member update information to the delivery terminal, and the delivery terminal displays or refrains from displaying the group entrance of the interactive group according to the member update information. It can be understood that after the group members of the interactive group are updated, the group entrance of the interactive group will not be displayed on the delivery terminals corresponding to the delivery parties who are not in the interactive group, so as to reduce the display of redundant information on the delivery terminals; the group entrance of the interactive group will be displayed on the delivery terminals corresponding to the delivery parties in the interactive group, and the delivery parties can enter the group page for communication by clicking the group entrance.

[0048] S104: the delivery terminal receives the member update information sent by the server, and displays or refrains from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information.

[0049] In an embodiment, the delivery terminal receives the member update information and displays or refrains from displaying the group entrance of the interactive group

corresponding to the transaction party according to the member update information. The member update information is determined according to the delivery party identifiers corresponding to the target orders of the same transaction party, and the target orders are orders that the delivery parties have accepted but not yet picked up. Specifically, the delivery order can display or refrain from displaying the group entrance based on a trigger instruction and member update information when receiving the trigger instruction (for example, triggered by clicking a contact control or an interactive message control).

[0050] In the embodiment of the present application, the server obtains the order delivery status of the target order, obtains the delivery party identifier of the target order in response to determining that the order delivery status satisfies the set status, updates the group member set of the interactive group corresponding to the transaction party related to the target order based on the delivery party identifier to obtain an updated group member set, and generates member update information according to the updated group member set and sends the member update information to the delivery terminal, so that the delivery terminal displays or refrains from displaying the group entrance of the interactive group according to the member update information. By obtaining the target orders that the delivery parties have accepted but not yet picked up from the transaction party's orders, the group list of the interactive group is automatically updated, according to the target orders, for the delivery parties who need to pick up goods from the same transaction party, and member update information is generated and sent to the delivery terminals, so that the delivery parties can view and use the interactive group on demand, which reduces the difficulty of group management and promotes information exchange and sharing among delivery parties.

[0051] Reference can be made to FIG. 3, which is a schematic flowchart of a group management method according to an embodiment of the present application. As shown in FIG. 3, this embodiment of the present application describes the specific process of the group management method from both the server side and the delivery terminal side, and the method may include the following steps S201-S205.

[0052] S201: a delivery terminal generates, in response to an order status change operation for a target order, order status change information of the target order and sends the order status change information to the server, where the order status change information causes the server to update a group member set of an interactive group corresponding to a

transaction party related to the target order to obtain an updated group member set.

[0053] Specifically, when the delivery party triggers an order status change operation of a target order on the delivery terminal, order status change information of the target order can be generated. For example, if the delivery party triggers the "Accept Order" button provided
5 on the delivery terminal, the delivery terminal can change the "Accept Order" button to "Order Accepted" to generate the order status information of the target order, so as to feed back the trigger event of the delivery party to the server, and the server changes the order status to an order-accepted status. It can be understood that after the order status change information sent by the delivery terminal is received, the server can obtain the order delivery
10 status to update the group member set of the interactive group corresponding to the transaction party related to the target order.

[0054] Optionally, the order status change information further causes the server to obtain the delivery party identifier of the target order, so as to generate a target member set according to the delivery party identifier and update the group member set of the interactive
15 group corresponding to the transaction party according to the target member set to obtain an updated group member set.

[0055] Optionally, the order status change information further causes the server to determine a first delivery party in the target member set that is not in the group member set and add the first delivery party to the interactive group to obtain an updated group member set.

20 [0056] Optionally, the order status change information further causes the server to determine a second delivery party in the group member set that is not in the target member set and delete the second delivery party from the interactive group to obtain an updated group member set.

[0057] S202: the server obtains an order delivery status of the target order in response to
25 order status update information of the target order.

[0058] In a feasible implementation, the order status update information indicates that the order status of the target order is updated, and when the order status of the target order changes, the order delivery status of the changed target order can be obtained. The order status update information may be sent by the delivery terminal, for example, when the

delivery terminal detects that the location of the delivery party has changed, or the delivery party triggers an order status change operation.

5 [0059] S203: the server obtains a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and updates a group member set of an interactive group corresponding to a transaction party related to the target order based on the delivery party identifier to obtain an updated group member set.

[0060] Reference can be made to the description of step S102 in the above embodiment, which will not be repeated here.

10 [0061] Optionally, if the order delivery status is "delivery party having accepted the order", the delivery party identifier of the target order is obtained. The delivery party identifier is added to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set.

15 [0062] Optionally, if the order delivery status is "delivery party having picked up the goods", the delivery party identifier of the target order is obtained. The delivery party identifier is removed from or added to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set.

20 [0063] Specifically, according to the obtained delivery party identifier, the corresponding delivery party can be added to or removed from the group, that is, the status of "delivery party having picked up the goods" can be either a condition for joining the group or a condition for leaving the group. In a feasible implementation, when the order delivery status is "delivery party having picked up the goods", the delivery party identifier can be removed from the group member set. For example, when the order delivery status of the target order is "delivery party having accepted the order", the delivery party identifier corresponding to the target order is added to the group member set of the interactive group; when the order
25 delivery status changes to "delivery party having picked up the goods", the delivery party identifier is removed from the group member set. In another feasible implementation, when the order delivery status is "delivery party having picked up the goods", the delivery party identifier is added to the group member set, that is, after the delivery party picks up the goods from the transaction party, the delivery party identifier is added to the group member

set of the interactive group.

5 **[0064]** Optionally, if the order delivery status is "delivery party having delivered the goods", the delivery party identifier of the target order is obtained. The delivery party identifier is removed from the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set.

[0065] S204: the server generates member update information according to the updated group member set, and sends the member update information to the delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

10 **[0066]** Reference can be made to the description of step S103 in the above embodiment, which will not be repeated here.

15 **[0067]** S205: the delivery terminal receives the member update information sent by the server, and displays or refrains from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information, where the member update information is generated according to the updated group member set.

20 **[0068]** Specifically, the delivery terminal can receive the member update information sent by the server. The delivery terminal may directly receive the member update information sent by the server, or receive the member update information sent by the server when the delivery terminal receives an operation instruction. In a feasible implementation, in response to an opening operation of the delivery party order management APP or the group entrance page on the delivery terminal, a group acquisition instruction is sent to the server, and the server sends the member update information to the delivery terminal in response to the group acquisition instruction, and the delivery terminal receives the member update information sent by the server.

25 **[0069]** In an embodiment, the method may include the following steps.

[0070] S301: a delivery terminal generates order status change information of a target order and sends order status change information to a server in response to a goods-picked-up confirmation operation or an order-accepted confirmation operation for the target order.

[0071] Specifically, when a goods-picked-up confirmation operation or an order-accepted confirmation operation for the target order is obtained, the delivery terminal generates order status change information of the target order and transmits the order status change information to the server. The goods-picked-up confirmation operation or the order-accepted confirmation operation can be implemented by the delivery party triggering a preset confirmation password through voice on the delivery terminal, or triggering a confirmation option through touch, etc., which is not specifically limited.

[0072] S302: the server obtains an order delivery status of the target order in response to order status update information of the target order.

10 [0073] S303: the server obtains a delivery party identifier of the target order.

[0074] Specifically, if the order delivery status is an order-accepted status or a goods-picked-up status, the delivery party identifier of the target order is obtained. The order-accepted status means that a delivery party has accepted the delivery order for delivering the distribution object from the transaction party to the user. At this time, the delivery party may be on the way to the transaction party's side, and the delivery party identifier can be obtained, so as to add the delivery party to the interactive group according to the delivery party identifier. The goods-picked-up status means that the delivery party has picked up the distribution object, which can be meals, express packages, clothing, flowers, etc., and is not specifically limited.

20 [0075] S304: the server adds the delivery party identifier to a group member set of an interactive group corresponding to a transaction party to obtain an updated group member set.

[0076] Specifically, after obtaining the transaction party identifier of the target order whose order status is an order-accepted status or a goods-picked-up status, the delivery party identifier can be added to the group member set to obtain an updated group member set.

25 [0077] It can be understood that the delivery party identifier corresponding to the target order may change, so the delivery party identifier corresponding to the target order can be obtained in real time. For example, if a first delivery party is temporarily replaced by a second delivery party after accepting the target order, the first delivery party can be removed

from the group chat and the second delivery party can be added to the group.

[0078] S305: the server determines the member update information corresponding to the delivery party identifier as member joining information according to the updated group member set, and sends the member joining information to the delivery terminal
5 corresponding to the delivery party identifier, so that the delivery terminal displays a group entrance of the interactive group according to the member joining information.

[0079] Specifically, after updating the group member set, the member update information corresponding to the newly added delivery party identifier can be set as member joining information, and this information can be sent to the delivery terminal corresponding to the
10 delivery party identifier, so that the delivery terminal displays the group entrance in response to the member joining information.

[0080] S306: the delivery terminal receives the member joining information sent by the server, and displays the group entrance of the interactive group corresponding to the transaction party according to the member joining information.

15 [0081] Specifically, when the member joining information is received, the server displays the group entrance of the interactive group corresponding to the transaction party according to the member joining information. It can be understood that when the delivery terminal receives the member joining information, it indicates that the delivery party corresponding to the delivery terminal has been added to the interactive group, and thus the group entrance
20 can be displayed on the current delivery terminal.

[0082] In an embodiment, the method may include the following steps.

[0083] S401: a delivery terminal generates order status change information of a target order and sends the order status change information to a server in response to a goods-picked-up confirmation operation or a good-delivered confirmation operation for the target order.

25 [0084] Specifically, when a goods-picked-up confirmation operation or a goods-delivered confirmation operation for the target order is received, the delivery terminal can generate order status change information of the target order and send the order status change information to the server. Similarly, the goods-picked-up confirmation operation or the

goods-delivered confirmation operation may be triggered by the delivery party through the status confirmation options provided on the delivery terminal.

[0085] S402: the server obtains an order delivery status of the target order in response to order status update information of the target order.

5 [0086] S403: the server obtains a delivery party identifier of the target order.

[0087] Specifically, if the order delivery status satisfies a goods-delivered status or a goods-picked-up status, the delivery party identifier of the target order is obtained.

[0088] S404: the server removes the delivery party identifier from the group member set of the interactive group corresponding to the transaction party to obtain an updated group
10 member set.

[0089] Specifically, when the order delivery status is a goods-delivered status, it indicates that the delivery party has completed the delivery task of the target order, so there is no need for communication in the interactive group of the transaction party corresponding to the target order. Therefore, the delivery party identifier of the target order can be obtained and
15 removed from the group member set. It can be understood that when the order delivery status is goods-picked-up,

[0090] S405: the server determines member update information corresponding to the delivery party identifier as member leaving information according to the updated group member set, and sends the member leaving information to the delivery terminal
20 corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying a group entrance of an interactive group according to the member leaving information.

[0091] In an embodiment, after updating the group member set, the member update information corresponding to the delivery party identifier removed from the interactive
25 group can be set as member leaving information, and this information can be sent to the delivery terminal corresponding to the delivery party identifier, so that the corresponding delivery terminal refrains from displaying the group entrance according to the member leaving information.

[0092] S406: when the member leaving information sent by the server is received, the delivery party refrains from displaying the group entrance of the interactive group corresponding to the transaction party according to the member leaving information.

5 [0093] Specifically, when the delivery terminal receives the member leaving information, it indicates that the delivery party corresponding to the delivery terminal has been removed from the interactive group, and thus the group entrance may not be displayed on the delivery terminal.

[0094] In the embodiment of the present application, the server obtains the order delivery status of the target order in response to the order status update information of the target order;
10 in response to determining that the order delivery status is an order-accepted status, the server obtains the delivery party identifier of the target order and adds the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set; in response to determining that the order delivery status is a goods-picked-up status, the server obtains the delivery party identifier of
15 the target order and removes the delivery party identifier from or adds the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set; in response to determining that the order delivery status is a goods-delivered status, the server obtains the delivery party identifier of the target order and removes the delivery party identifier from the group member set of the
20 interactive group corresponding to the transaction party to obtain an updated group member set. The server determines the member update information corresponding to the delivery party identifier as member joining information according to the updated group member set, and sends the member joining information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays the group entrance of the
25 interactive group according to the member joining information; the server determines the member update information corresponding to the delivery party identifier as member leaving information according to the updated group member set, and sends the member leaving information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying the group entrance of the interactive group
30 according to the member leaving information. By screening out the delivery party identifiers that need to be added to or removed from the group according to the set status, the group

members of the interactive group are updated, and corresponding member update information is generated and sent to the corresponding delivery terminals. Thus, the group chat entrance can be displayed on the delivery terminals of the delivery parties who have joined the group, and the group chat entrance can be automatically not displayed on the delivery terminals of the delivery parties who have left the group. The management of the interactive group can be realized without the delivery terminals performing operations of joining or leaving the group.

[0095] Reference can be made to FIG. 4, which is a schematic flowchart of a group management method according to an embodiment of the present application. As shown in FIG. 4, this embodiment of the present application describes the specific process of the group management method from the server side, and the method may include the following steps S501-S504.

[0096] S501: obtaining an order delivery status of a target order in response to a polling instruction for the target order.

[0097] In a feasible implementation, the order delivery status of the target order can be obtained according to a preset polling instruction. For example, if the target orders are all orders of a certain transaction party, the order delivery status of all orders of the transaction party can be obtained according to the polling time (e.g., 2 minutes) indicated by the polling instruction.

[0098] S502: obtaining a delivery party identifier of the target order in response to that the order delivery status satisfies a set status, and generating a target member set according to the delivery party identifier.

[0099] In an embodiment, when a transaction party has target orders, each target order corresponds to a delivery party, and the delivery party has a delivery party identifier. A target member set is generated according to the delivery party identifiers bound to the target orders.

[0100] It should be noted that when there are multiple target orders, communication and information sharing among multiple delivery parties can be realized in the interactive group. However, when there is only one target order, a target member set can also be generated according to the delivery party identifier corresponding to the single target order, the

delivery party in the target member set can be added to the interactive group, and members in the interactive group who do not belong to the target member set can be removed. When there is only one target order, there is only one delivery party in the group, and the transaction party can be added to the interactive group for easy communication. When multiple target
5 orders are obtained next time, only the newly added members may be added to the group.

[0101] S503: updating a group member set of an interactive group corresponding to a transaction party according to the target member set to obtain an updated group member set.

[0102] In an embodiment, after generating the target member set for the delivery party identifiers of the target orders, the target member set is compared with the group member
10 set of the interactive group, and the group member set is updated to obtain an updated group member set. Updating the group member set involves not only updating the set but also performing corresponding update operations, so that only members corresponding to the target member set are in the updated group. Exemplarily, members in the target member set who are not yet in the group member set are added to the interactive group, and members in
15 the group member set who do not appear in the target member set are removed from the group. It can be understood that the updated group member set is consistent with the target member set.

[0103] S504: generating member update information according to the updated group member set, and sending the member update information to a delivery terminal, so that the
20 delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

[0104] Specifically, reference can be made to the description of step S103 in the above embodiment, which will not be repeated here.

[0105] In an embodiment, updating the group member set of the interactive group
25 corresponding to the transaction party according to the target member set to obtain an updated group member set may include the following steps.

[0106] S5031: determining a first delivery party in the target member set that is not in the group member set.

[0107] In an embodiment, the first delivery party not in the group member set is screened out according to the target member set. The first delivery party is a delivery party that needs to be added to the group member set.

5 [0108] S5032: adding the first delivery party to the interactive group to obtain an updated group member set.

[0109] It can be understood that the nickname or number of the delivery party can be displayed in the group, such as the name of the delivery party. However, for the convenience of management, a delivery party identifier is stored corresponding to each delivery party. Therefore, in a feasible implementation, the target member set and the group member set
10 store identifiers corresponding to delivery parties. After determining the first delivery party, the first delivery party is added to the interactive group according to the first delivery party identifier corresponding to the first delivery party.

[0110] Optionally, the target member set and the group member set can store delivery party identifiers corresponding to delivery parties in the form of lists. The target member set may
15 correspond to a first list, and the group member set may correspond to a second list. Delivery party identifiers in the first list that are not in the second list are screened out, and then the first delivery party is determined according to the delivery party identifier.

[0111] Optionally, the group member set can be displayed in the form of a list on the group details page of the delivery terminal.

20 [0112] In an embodiment, generating the member update information according to the updated group member set and sending the member update information to the delivery terminal so that the delivery terminal displays or refrains from displaying the group entrance of the interactive group according to the member update information may include:

[0113] S5033: determining member update information of the first delivery party as member
25 joining information according to the updated group member set, and sending the member joining information to a first delivery terminal corresponding to the first delivery party, so that the first delivery terminal displays the group entrance of the interactive group according to the member joining information.

[0114] In an embodiment, after updating the group member set, the member update information corresponding to the first delivery party can be set as member joining information, and this information can be sent to the first delivery party, so that the delivery terminal corresponding to the first delivery party can display the group entrance according to the member joining information.

[0115] In an embodiment, updating the group member set of the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set may include the following steps.

[0116] S5034: determine a second delivery party in the group member set that is not in the target member set.

[0117] In an embodiment, the second delivery party not in the target member set is screened out according to the group member set. The second delivery party is a delivery party that needs to be removed from the group member set. It should be noted that there is no limit to the number of the first delivery party and the second delivery party. For example, the number of the first delivery party can be 0, and if no delivery party is obtained, the above step S302 is not performed.

[0118] S5035: deleting the second delivery party from the interactive group to obtain an updated group member set.

[0119] In an embodiment, after determining the second delivery party, the second delivery party is removed from the interactive group according to the second delivery party identifier corresponding to the second delivery party.

[0120] In an embodiment, generating the member update information according to the updated group member set and sending the member update information to the delivery terminal so that the delivery terminal displays or refrains from displaying the group entrance of the interactive group according to the member update information may include:

[0121] S5036: determining member update information of the second delivery party as member leaving information according to the updated group member set, and sending the member leaving information to the second delivery terminal corresponding to the second

delivery party, so that the second delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.

5 **[0122]** In an embodiment, after updating the group member set, the member update information corresponding to the second delivery party can be set as member leaving information, and this information can be sent to the second delivery party, so that the delivery terminal corresponding to the second delivery party can refrain from displaying the group entrance according to the member leaving information.

10 **[0123]** In the embodiment of the present application, the order delivery status of the target order is obtained in response to a polling instruction for the target order. In response to determining that the order delivery status satisfies the set status, the delivery party identifier of the target order is obtained, a target member set is generated according to the delivery party identifier, and the group member set of the interactive group corresponding to the transaction party is updated according to the target member set to obtain an updated group member set. By comparing the group member set with the target member set, the first
15 delivery party and/or the second delivery party are obtained. The first delivery party is added to the interactive group, and the second delivery party is removed from the interactive group, to obtain an updated group member list. Corresponding member joining information is generated for the first delivery party, and member leaving information is generated for the second delivery party, which are sent to the corresponding delivery terminals. By generating
20 member update information corresponding to member update operations and sending the member update information to the corresponding delivery terminals, the delivery terminals can accurately receive member update information related to the delivery parties and perform corresponding operations of displaying or refraining from displaying the group entrance accordingly.

25 **[0124]** Reference can be made to FIG. 5, which is a schematic flowchart of a group management method according to an embodiment of the present application. As shown in FIG. 5, this embodiment of the present application describes the specific process of the group management method from the server side, and the method may include the following steps S601-S605.

30 **[0125]** S601: determining a transaction party identifier of a transaction party.

[0126] In an embodiment, before obtaining target orders of a transaction party, the server pre-generates corresponding transaction party identifiers for all managed transaction parties or pre-generates a corresponding transaction party identifier for the current transaction party, and the transaction parties have a one-to-one correspondence with the transaction party identifiers.

[0127] S602: constructing an interactive group corresponding to the transaction party based on the transaction party identifier of the transaction party, and determining a group identifier corresponding to the interactive group.

[0128] In an embodiment, the server constructs a corresponding interactive group for the transaction party and assigns a group identifier to the interactive group.

[0129] Optionally, the server may pre-construct interactive groups for all managed transaction parties and assign corresponding group identifiers to them.

[0130] S603: establishing a mapping relationship between the transaction party identifier and the group identifier.

[0131] In an embodiment, the transaction party identifier is bound to the group identifier, so that there is a one-to-one correspondence between the interactive group and the transaction party.

[0132] In a feasible implementation, multiple interactive groups can be established for a transaction party. For example, different interactive groups can be created according to the types of delivery objects provided by the transaction party, and a mapping relationship between the transaction party and the multiple interactive groups can be established. For instance, if the delivery objects provided by a transaction party include beverages and furniture (which are picked up at different windows of the transaction party and have different dispatch times), two interactive groups can be generated for the transaction party: one for beverage preparation and one for furniture dispatch, with each interactive group corresponding to a unique group identifier. After obtaining a target order, the corresponding group identifier is determined according to the type of delivery object in the target order, and then the group member set of the corresponding group is obtained.

[0133] S604: in response to determining that an order delivery status satisfies a set status, determining the group identifier corresponding to the transaction party according to the transaction party identifier of the transaction party and the mapping relationship.

5 [0134] In an embodiment, an update instruction is used to instruct the transaction party to update the group member set of the interactive group. The server generates an update instruction for an indication of obtaining the group member set of the transaction party. The update instruction can be generated at set time intervals (e.g., once every 1 minute) or whenever the transaction party receives a new order. The group identifier bound to the transaction party identifier is determined according to the determined transaction party
10 identifier corresponding to the transaction party and the mapping relationship.

[0135] S605: obtaining the group member set of the interactive group of the transaction party according to the group identifier.

[0136] In an embodiment, after obtaining the group identifier, the group member set of the interactive group corresponding to the group identifier is determined.

15 [0137] In the embodiment of the present application, by determining the transaction party identifier of the transaction party, constructing an interactive group corresponding to the transaction party, determining the group identifier of the interactive group, and establishing a mapping relationship between the transaction party identifier and the group identifier, when an update instruction for the group member set of the transaction party is received, the
20 group identifier corresponding to the transaction party is determined according to the transaction party identifier of the transaction party and the mapping relationship, and the group member set of the transaction party is determined according to the group identifier. By assigning unique identifiers to the transaction party and the interactive group and establishing a mapping relationship, the acquisition of group member information is
25 facilitated.

[0138] Further, this embodiment of the present application describes the specific process of the group management method from the delivery terminal side, and the method may include the following step S701.

[0139] S701: receiving member update information sent by a server, and in response to an

opening operation of a page or a pop-up window where a group entrance function is located, displaying or refraining from displaying a group entrance of an interactive group corresponding to a transaction party according to the member update information.

[0140] Specifically, the delivery terminal may first receive the member update information sent by the server, and when a user triggers an opening operation of the page or pop-up window where the group entrance function is located, the group entrance is displayed or not displayed based on the member update information. In practical applications, the group entrance can be displayed in multiple ways as needed, and the current description shows two implementation methods: configuring the group entrance function in a page and in a pop-up window.

[0141] Reference can be made to FIG. 6, which is a schematic diagram of an application homepage of a group management method according to an embodiment of the present application. The application is a delivery terminal order management application. The upper part of the application homepage can classify the orders of the delivery party into three categories: to be grabbed, to be picked up, and to be delivered. When the delivery party touches the order-grabbing control on the "to be grabbed" page, the delivery terminal grabs the order for the delivery party in response to the touch operation. After the order is successfully grabbed, the order status changes to "to be picked up", and the order can be seen under the "to be picked up" category on the application homepage. At the same time, the information of successful order grabbing is synchronized to the server. When the server polls the target order, the delivery party is automatically added to the interactive group.

[0142] In a feasible implementation, an order details page is displayed, a trigger operation is received based on the contact control in the order details page, and in response to the trigger operation, the group entrance of the interactive group is displayed or not displayed in the pop-up window according to the member update information. Specifically, the order details page may be a page in the delivery terminal order management application (e.g., the details page under the "to be picked up" category on the application homepage). When a user clicks the contact control, in response to the trigger operation, the group entrance of the interactive group is displayed or not displayed in the pop-up window where the group entrance function is located according to the member update information.

[0143] Reference can be made to FIG. 7, which is a schematic diagram of an example of a contact control in a group management method according to an embodiment of the present application. As shown in the left part of FIG. 7, a contact control is generated at the indicated position on the order details page, and in response to a touch operation on the contact control, the page jumps to a contact information display pop-up window as shown in the right part of FIG. 7. The chat method display pop-up window is the pop-up window where the group entrance function is located, and FIG. 7 shows the case where the delivery terminal displays the group entrance. Specifically, the chat method display pop-up window can display a customer phone number, a merchant phone number, and a "same-merchant rider group". When the delivery party clicks the "same merchant rider group", the page jumps to the details page of the interactive group as shown in FIG. 9. FIG. 9 is a schematic diagram of an example of an interactive group details page in a group management method according to an embodiment of the present application.

[0144] In a feasible implementation, an order details page is displayed, a trigger operation is received based on an interactive message control in the order details page, and in response to the trigger operation, the group entrance of the interactive group is displayed or not displayed on the page where the group entrance function is located according to the member update information. Specifically, the page where the group entrance function is located can be opened by the delivery party clicking the interactive message control in the order details page, and the delivery terminal, in response to the trigger operation of the interactive message control, displays or refrains from displaying the group entrance of the interactive group on the page where the group entrance function is located according to the member update information.

[0145] Reference can be made to FIG. 8, which is a schematic diagram of an example of an interactive message control in a group management method according to an embodiment of the present application. As shown in FIG. 8, an extended function control is generated at the indicated position on the order details page, and in response to a trigger operation on the extended function control, an extended control display floating window is displayed. The extended control display floating window can display an interactive message control, a system message control, etc., and in response to a touch operation on the interactive message control, the page jumps to an interactive message display page (i.e., the group entrance page)

as shown in FIG. 8. The group entrance is displayed or not displayed on the interactive message display page, and FIG. 8 shows the case where the group entrance is displayed. When a trigger operation on the group entrance in the interactive message display page is triggered, the page jumps to the details page of the interactive group as shown in FIG. 9. It should be noted that the interactive message display page shown in FIG. 8 can display interactive messages with merchants, customers, other delivery parties, etc., and can further display the number of group members, for example, "5 riders are waiting for order preparation of the merchant", where the 5 waiting riders are all in the interactive group. Additionally, remark information (such as an address of a customer) can be displayed below the interactive messages with the customer, which is not specifically limited. It should be noted that both the contact control and the interactive message control can be displayed on the order details page at the same time, allowing the delivery party to choose the desired way to enter the chat entrance page.

[0146] Reference can be made to FIG. 10, which is a schematic diagram of an example of a contact control in a group management method according to an embodiment of the present application, showing the case where the entrance is not displayed. After the delivery party picks up the delivery object, the order status changes to "to be delivered", and the order is classified under the "to be delivered" category. At this time, if the delivery party clicks the contact control at the indicated position on the order details page, in response to the touch operation on the contact control, the page jumps to a contact information display floating window as shown in the right part of FIG. 10. The chat method display floating window is the group entrance page, and the group entrance is no longer displayed in the chat method display floating window at this time.

[0147] Reference can be made to FIG. 11 again, which is a schematic diagram of an example of an interactive message control in a group management method according to an embodiment of the present application, also showing the case where the entrance is not displayed. After the delivery party picks up the delivery object, the order status changes to "to be delivered", and the order is classified under the "to be delivered" category. At this time, if the delivery party clicks the extended function control at the indicated position on the order details page, in response to the trigger operation on the extended function control, the extended control display floating window is displayed. The extended control display

floating window can display an interactive message control, a system message control, etc., and in response to a touch operation on the interactive message control, the page jumps to an interactive message display page (i.e., the group entrance page) as shown in FIG. 11, and the group entrance is no longer displayed in the chat box with the merchant on the interactive message display page.

[0148] In the embodiment of the present application, by receiving member update information, corresponding operations of displaying or refraining from displaying the chat entrance are performed for different member update information. The group entrance of the interactive group corresponding to the transaction party is not displayed according to the member leaving information, and the group entrance of the interactive group corresponding to the transaction party is displayed according to the member joining information. In addition, two ways to open the group entrance are provided, a trigger operation is received based on the contact control or interactive message control in the order details page. In response to the trigger operation, the group entrance of the interactive group is displayed or not displayed on the group entrance page according to the member update information, which enriches the operation experience of the delivery party.

[0149] The following will introduce the group management apparatuses provided in the embodiments of the present application in detail with reference to FIG. 12 to FIG. 14. It should be noted that the group management apparatuses in FIG. 12 to FIG. 14 are used to perform the methods in the embodiments shown in FIG. 2 to FIG. 11 of this specification. For ease of explanation, only the parts related to the embodiments of the present application are shown, and for specific technical details not disclosed, reference can be made to the embodiments shown in FIG. 2 to FIG. 11 of this specification.

[0150] Reference can be made to FIG. 12, which shows a schematic structural diagram of a group management apparatus according to an exemplary embodiment of the present application. The group management apparatus can be implemented as all or part of a device through software, hardware, or a combination of both. The apparatus 1 includes an obtaining module 11, a determining module 12, and a generating module 13.

[0151] The obtaining module 11 is configured to obtain an order delivery status of a target order.

[0152] The updating module 12 is configured to obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set.

[0153] The generating module 13 is configured to generate member update information according to the updated group member set, and send the member update information to a delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

10 [0154] Optionally, the updating module 12 is specifically configured to: obtain the delivery party identifier of the target order in response to determining that the order delivery status is an order-accepted status; and

[0155] add the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

15 [0156] Optionally, the updating module 12 is specifically configured to: obtain the delivery party identifier of the target order in response to determining that the order delivery status is a goods-picked-up status; and

[0157] remove or add the delivery party identifier from the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

[0158] Optionally, the updating module 12 is specifically configured to: obtain the delivery party identifier of the target order in response to determining that the order delivery status is a goods-delivered status; and

25 [0159] remove the delivery party identifier from the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

[0160] Optionally, the generating module 13 is specifically configured to determine, according to the updated group member set, member update information corresponding to the delivery party identifier as member joining information, and send the member joining

information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays a group entrance of the interactive group according to the member joining information.

[0161] Optionally, the generating module 13 is specifically configured to determine, according to the updated group member set, the member update information corresponding to the delivery party identifier as member leaving information, and send the member leaving information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.

[0162] Optionally, reference can be made to FIG. 13, which is a schematic structural diagram of a group management apparatus according to an embodiment of the present application. As shown in FIG. 13, the group management apparatus further includes a setting module 14 configured to: construct the interactive group corresponding to the transaction party based on a transaction party identifier of the transaction party, and determine a group identifier corresponding to the interactive group; and

[0163] establish a mapping relationship between the transaction party identifier and the group identifier.

[0164] Optionally, the setting module 14 is further configured to: in response to determining that the order delivery status satisfies the set status, determine a group identifier corresponding to the transaction party according to a transaction party identifier of the transaction party and the mapping relationship; and

[0165] obtain the group member set of the interactive group of the transaction party according to the group identifier.

[0166] Optionally, the updating module 12 is specifically configured to: in response to determining that the order delivery status satisfies the set status, obtain a delivery party identifier of the target order, and generate a target member set according to the delivery party identifier; and

[0167] update the group member set of the interactive group corresponding to the

transaction party according to the target member set to obtain the updated group member set.

[0168] Optionally, the updating module 12 is specifically configured to: determine a first delivery party in the target member set that is not in the group member set; and

5 [0169] add the first delivery party to the interactive group to obtain the updated group member set.

[0170] Optionally, the generating module 13 is specifically configured to: determine member update information of the first delivery party as member joining information according to the updated group member set, and send the member joining information to a first delivery terminal corresponding to the first delivery party, so that the first delivery
10 terminal displays the group entrance of the interactive group according to the member joining information.

[0171] Optionally, the updating module 12 is specifically configured to: determine a second delivery party in the group member set that is not in the target member set; and

15 [0172] delete the second delivery party from the interactive group to obtain the updated group member set.

[0173] Optionally, the generating module 13 is specifically configured to: determine member update information of the second delivery party as member leaving information according to the updated group member set, and send the member leaving information to a second delivery terminal corresponding to the second delivery party, so that the second
20 delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.

[0174] Optionally, the obtaining module 11 is specifically configured to: obtain the order delivery status of the target order in response to order status update information of the target order.

25 [0175] Optionally, the obtaining module 11 is specifically configured to: obtain the order delivery status of the target order in response to a polling instruction for the target order.

[0176] Optionally, reference can be made to FIG. 14, which shows a schematic structural

diagram of a group management apparatus according to an exemplary embodiment of the present application. The group management apparatus can be implemented as all or part of a device through software, hardware, or a combination of both. The apparatus 2 includes an operation receiving module 21 and an information receiving module 22.

5 **[0177]** The operation receiving module 21 is configured to: in response to an order status change operation for a target order, generate order status change information of the target order and send the order status change information to a server, where the order status change information causes the server to update a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group
10 member set.

[0178] The information receiving module 22 is configured to: receive member update information sent by the server, and display or refrain from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information, where the member update information is generated according to the updated
15 group member set.

[0179] Optionally, the operation receiving module 21 is specifically configured to: in response to a goods-picked-up confirmation operation or an order-accepted confirmation operation for the target order, generate the order status change information of the target order and send the order status change information to the server.

20 **[0180]** Optionally, the information receiving module 22 is specifically configured to: receive member joining information sent by the server, and display the group entrance of the interactive group corresponding to the transaction party according to the member joining information.

[0181] Optionally, the operation receiving module 21 is specifically configured to: in
25 response to a goods-picked-up confirmation operation or a goods-delivered confirmation operation for the target order, generate the order status change information of the target order and send the order status change information to the server.

[0182] Optionally, the information receiving module 22 is specifically configured to: receive member leaving information sent by the server, and refrain from displaying the

group entrance of the interactive group corresponding to the transaction party according to the member leaving information.

5 [0183] Optionally, the information receiving module 22 is specifically configured to: receive the member update information sent by the server, and in response to an opening operation of a page or a pop-up window where a group entrance function is located, display or refrain from displaying the group entrance of the interactive group corresponding to the transaction party according to the member update information.

10 [0184] Optionally, the information receiving module 22 is specifically configured to: display an order details page, receive a trigger operation based on a contact control in the order details page, and in response to the trigger operation, display or refrain from displaying the group entrance of the interactive group in the pop-up window according to the member update information.

15 [0185] Optionally, the information receiving module 22 is specifically configured to: display an order details page, receive a trigger operation based on an interactive message control in the order details page, and in response to the trigger operation, display or refrain from displaying the group entrance of the interactive group in the page according to the member update information.

20 [0186] Optionally, the order status change information further causes the server to obtain a delivery party identifier of the target order, so as to generate a target member set according to the delivery party identifier and update the group member set of the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set.

25 [0187] Optionally, the order status change information further causes the server to determine a first delivery party that is in the target member set but not in the group member set, and add the first delivery party to the interactive group to obtain the updated group member set.

[0188] Optionally, the order status change information further causes the server to determine a second delivery party that is in the group member set but not in the target member set, and delete the second delivery party from the interactive group to obtain the updated group member set.

[0189] It should be noted that when the group management apparatus provided in the above embodiment performs the group management method, the division of the above functional modules is only used as an example for illustration. In practical applications, the above functions can be allocated to different functional modules as needed, that is, the internal structure of the device is divided into different functional modules to complete all or part of the functions described above. In addition, the group management apparatus provided in the above embodiment and the group management method embodiment belong to the same concept, and the specific implementation process thereof can be referred to the method embodiment, which will not be repeated here.

[0190] The serial numbers of the embodiments of the present application are only for description and do not represent the advantages or disadvantages of the embodiments. In some cases, the actions or steps recorded in the claims can be performed in an order different from that in the embodiments and still achieve the desired results. In addition, the processes depicted in the accompanying drawings do not necessarily require the specific order or sequential order shown to achieve the desired results. In some implementations, multitasking and parallel processing are also possible or may be advantageous.

[0191] The embodiments of the present application further provide a storage medium, where a computer program is stored on the storage medium. When the computer program is executed by one or more processors, the methods in the embodiments shown in FIG. 2 to FIG. 11 are implemented. For the specific execution process, reference can be made to the detailed description of the embodiments shown in FIG. 2 to FIG. 11, which will not be repeated here.

[0192] Reference can be made to FIG. 15, which shows a schematic structural diagram of an electronic device according to an exemplary embodiment of this specification. The electronic device in this specification may include one or more of the following components: a processor 110, a memory 120, an input apparatus 130, an output apparatus 140, and a bus 150. The processor 110, the memory 120, the input apparatus 130, and the output apparatus 140 can be connected through the bus 150.

[0193] The processor 110 may include one or more processing cores. The processor 110 connects various parts of the entire electronic device using various interfaces and circuits,

and performs various functions of the terminal 100 and processes data by running or executing instructions, programs, code sets, or instruction sets stored in the memory 120 and invoking data stored in the memory 120. Optionally, the processor 110 may be implemented using at least one hardware form among Digital Signal Processing (Digital Signal Processing, DSP), Field-Programmable Gate Array (Field-Programmable Gate Array, FPGA), and Programmable Logic Array (Programmable Logic Array, PLA). The processor 110 may integrate one or a combination of a Central Processing Unit (Central Processing Unit, CPU), a Graphics Processing Unit (Graphics Processing Unit, GPU), a modem, etc. Among them, the CPU mainly processes the operating system, user interfaces, application programs, etc., the GPU is responsible for rendering and drawing of display content, and the modem is configured for processing wireless communication. It can be understood that the modem may also be implemented independently through a communication chip instead of being integrated into the processor 110.

[0194] The memory 120 may include a Random Access Memory (Random Access Memory, RAM), and may also include a Read-Only Memory (Read-Only Memory, ROM). Optionally, the memory 120 includes a Non-Transitory Computer-Readable Storage Medium (Non-Transitory Computer-Readable Storage Medium). The memory 120 can be configured to store instructions, programs, codes, code sets, or instruction sets. The memory 120 may include a program storage area and a data storage area. The program storage area may store instructions for implementing an operating system, instructions for implementing at least one function (such as a touch function, a sound playback function, an image playback function, etc.), instructions for implementing the above method embodiments, and the like. The operating system may be an Android (Android) system (including systems developed based on the Android system), an IOS system developed by Apple Inc. (including systems developed based on the IOS system), or other systems.

[0195] The memory 120 may be divided into an operating system space and a user space. The operating system runs in the operating system space, and native and third-party applications run in the user space. To ensure that different third-party applications can achieve good operating effects, the operating system allocates corresponding system resources to different third-party applications. However, different application scenarios of the same third-party application have different requirements for system resources. For

example, in a local resource loading scenario, a third-party application has higher requirements for disk reading speed; in an animation rendering scenario, a third-party application has higher requirements for GPU performance. Since the operating system and a third-party application are independent of each other, the operating system often cannot promptly sense the current application scenario of the third-party application, resulting in the operating system being unable to perform targeted system resource adaptation according to the specific application scenario of the third-party application.

[0196] To enable the operating system to distinguish the specific application scenarios of the third-party application, it is necessary to establish data communication between the third-party application and the operating system, so that the operating system can obtain the current scenario information of the third-party application at any time, and then perform targeted system resource adaptation based on the current scenario.

[0197] The input apparatus 130 is configured to receive input instructions or data, and the input apparatus 130 includes but is not limited to a keyboard, a mouse, a camera, a microphone, or a touch device. The output apparatus 140 is configured to output instructions or data, and the output apparatus 140 includes but is not limited to a display device and a speaker. In one example, the input apparatus 130 and the output apparatus 140 may be integrated into a touch display screen.

[0198] The touch display screen may be designed as a full-screen, a curved screen, or a special-shaped screen. The touch display screen may also be designed as a combination of a full-screen and a curved screen, or a combination of a special-shaped screen and a curved screen, which is not limited in the embodiments of the present application.

[0199] In addition, those skilled in the art can understand that the above structure of the electronic device shown in the figure does not constitute a limitation on the electronic device. The electronic device may include more or fewer components than those shown in the figure, combine some components, or have different component arrangements. For example, the electronic device may further include components such as a radio frequency circuit, an input unit, a sensor, an audio circuit, a WiFi module, a power supply, and a Bluetooth module, which will not be repeated here.

[0200] In the electronic device shown in FIG. 15, the processor 110 can be configured to invoke a computer application stored in the memory 120 and specifically perform the following operations: obtain an order delivery status of a target order; obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set; and generate member update information according to the updated group member set, and send the member update information to a delivery terminal, so that the delivery terminal displays or refrains from displaying a group entrance of the interactive group according to the member update information.

[0201] In an embodiment, when performing the operation "obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set", the processor 110 specifically performs the following operations: obtain the delivery party identifier of the target order in response to determining that the order delivery status is an order-accepted status; and add the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

[0202] In an embodiment, when performing the operation "obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set", the processor 110 specifically performs the following operations: obtain the delivery party identifier of the target order in response to determining that the order delivery status is a goods-picked-up status; and remove or add the delivery party identifier from the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

[0203] In an embodiment, when performing the operation "obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an

interactive group corresponding to a transaction party related to the target order to obtain an updated group member set", the processor 110 specifically performs the following operations: obtain the delivery party identifier of the target order in response to determining that the order delivery status is a goods-delivered status; and remove the delivery party
5 identifier from the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set.

[0204] In an embodiment, when performing the operation "generate member update information according to the updated group member set, and send the member update information to a delivery terminal", the processor 110 specifically performs the following
10 operations: determine, according to the updated group member set, member update information corresponding to the delivery party identifier as member joining information, and send the member joining information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays a group entrance of the interactive group according to the member joining information.

[0205] In an embodiment, when performing the operation "generate member update information according to the updated group member set, and send the member update information to a delivery terminal", the processor 110 specifically performs the following
15 operations: determine, according to the updated group member set, the member update information corresponding to the delivery party identifier as member leaving information, and send the member leaving information to the delivery terminal corresponding to the
20 delivery party identifier, so that the delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.

[0206] In an embodiment, before performing the operation "update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction
25 party related to the target order to obtain an updated group member set", the processor 110 further performs the following operations: construct the interactive group corresponding to the transaction party based on a transaction party identifier of the transaction party, and determine a group identifier corresponding to the interactive group; and

[0207] establish a mapping relationship between the transaction party identifier and the
30 group identifier.

[0208] In an embodiment, the processor 110 further performs the following operations: in response to determining that the order delivery status satisfies the set status, determine a group identifier corresponding to the transaction party according to a transaction party identifier of the transaction party and the mapping relationship; and obtain the group member set of the interactive group of the transaction party according to the group identifier.

[0209] In an embodiment, when performing the operation "obtain a delivery party identifier of the target order in response to determining that the order delivery status satisfies a set status, and update, based on the delivery party identifier, a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set", the processor 110 specifically performs the following operations: in response to determining that the order delivery status satisfies the set status, obtain a delivery party identifier of the target order, and generate a target member set according to the delivery party identifier; and update the group member set of the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set.

[0210] In an embodiment, when performing the operation "update the group member set of the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set", the processor 110 specifically performs the following operations: determine a first delivery party in the target member set that is not in the group member set; and add the first delivery party to the interactive group to obtain the updated group member set.

[0211] In an embodiment, when performing the operation "generate member update information according to the updated group member set, and send the member update information to a delivery terminal", the processor 110 specifically performs the following operations: determine member update information of the first delivery party as member joining information according to the updated group member set, and send the member joining information to a first delivery terminal corresponding to the first delivery party, so that the first delivery terminal displays the group entrance of the interactive group according to the member joining information.

[0212] In an embodiment, when performing the operation "update the group member set of

the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set", the processor 110 specifically performs the following operations: determine a second delivery party in the group member set that is not in the target member set; and delete the second delivery party from the interactive group to obtain the updated group member set.

[0213] In an embodiment, when performing the operation "generate member update information according to the updated group member set, and send the member update information to a delivery terminal", the processor 110 specifically performs the following operations: determine member update information of the second delivery party as member leaving information according to the updated group member set, and send the member leaving information to a second delivery terminal corresponding to the second delivery party, so that the second delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.

[0214] In an embodiment, when performing the operation "obtain an order delivery status of a target order", the processor 110 specifically performs the following operation:

[0215] obtain the order delivery status of the target order in response to order status update information of the target order.

[0216] In an embodiment, when performing the operation "obtain an order delivery status of a target order", the processor 110 specifically performs the following operation:

[0217] obtain the order delivery status of the target order in response to a polling instruction for the target order.

[0218] In an embodiment, the processor 110 performs the following operations: in response to an order status change operation for a target order, generate order status change information of the target order and send the order status change information to a server, where the order status change information causes the server to update a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set; and receive member update information sent by the server, and display or refrain from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information, where

the member update information is generated according to the updated group member set.

[0219] In an embodiment, when performing the operation "in response to an order status change operation for a target order, generate order status change information of the target order and send the order status change information to a server", the processor 110
5 specifically performs the following operations: in response to a goods-picked-up confirmation operation or an order-accepted confirmation operation for the target order, generate the order status change information of the target order and send the order status change information to the server.

[0220] In an embodiment, when performing the operation "receive member update
10 information sent by the server, and display or refrain from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information", the processor 110 specifically performs the following operations: receive member joining information sent by the server, and display the group entrance of the interactive group corresponding to the transaction party according to the member joining
15 information.

[0221] In an embodiment, when performing the operation "in response to an order status change operation for a target order, generate order status change information of the target order and send the order status change information to a server", the processor 110 specifically performs the following operations: in response to a goods-picked-up
20 confirmation operation or a goods-delivered confirmation operation for the target order, generate the order status change information of the target order and send the order status change information to the server.

[0222] In an embodiment, when performing the operation "receive member update information sent by the server, and display or refrain from displaying a group entrance of
25 the interactive group corresponding to the transaction party according to the member update information", the processor 110 specifically performs the following operations: receive member leaving information sent by the server, and refrain from displaying the group entrance of the interactive group corresponding to the transaction party according to the member leaving information.

[0223] In an embodiment, when performing the operation of "receive member update information sent by the server, and display or refrain from displaying a group entrance of the interactive group corresponding to the transaction party according to the member update information", the processor 110 specifically performs the following operations: receive the member update information sent by the server, and in response to an opening operation of a page or a pop-up window where a group entrance function is located, display or refrain from displaying the group entrance of the interactive group corresponding to the transaction party according to the member update information.

[0224] In an embodiment, when performing the operation "in response to an opening operation of a pop-up window where a group entrance function is located, display or refrain from displaying the group entrance of the interactive group corresponding to the transaction party according to the member update information", the processor 110 specifically performs the following operations: display an order details page, receive a trigger operation based on a contact control in the order details page, and in response to the trigger operation, display or refrain from displaying the group entrance of the interactive group in the pop-up window according to the member update information.

[0225] In an embodiment, when performing the operation of "in response to an opening operation of a page where a group entrance function is located, display or refrain from displaying the group entrance of the interactive group corresponding to the transaction party according to the member update information", the processor 110 specifically performs the following operations: display an order details page, receive a trigger operation based on an interactive message control in the order details page, and in response to the trigger operation, display or refrain from displaying the group entrance of the interactive group in the page according to the member update information.

[0226] In an embodiment, the order status change information further causes the server to obtain a delivery party identifier of the target order, so as to generate a target member set according to the delivery party identifier and update the group member set of the interactive group corresponding to the transaction party according to the target member set to obtain the updated group member set.

[0227] In an embodiment, the order status change information further causes the server to

determine a first delivery party that is in the target member set but not in the group member set, and add the first delivery party to the interactive group to obtain the updated group member set.

5 **[0228]** In an embodiment, the order status change information further causes the server to determine a second delivery party that is in the group member set but not in the target member set, and delete the second delivery party from the interactive group to obtain the updated group member set.

10 **[0229]** In the embodiment of the present application, the server obtains the order delivery status of the target order, obtains the delivery party identifier of the target order in response to determining that the order delivery status satisfies the set status, updates the group member set of the interactive group corresponding to the transaction party related to the target order based on the delivery party identifier to obtain an updated group member set, and generates member update information according to the updated group member set and sends the member update information to the delivery terminal, so that the delivery terminal
15 displays or refrains from displaying the group entrance of the interactive group according to the member update information. By obtaining the target orders that the delivery parties have accepted but not yet picked up from the transaction party's orders, the group list of the interactive group is automatically updated, according to the target orders, for the delivery parties who need to pick up goods from the same transaction party, and member update
20 information is generated and sent to the delivery terminals, so that the delivery parties can view and use the interactive group on demand, which reduces the difficulty of group management and promotes information exchange and sharing among delivery parties.

25 **[0230]** Further, the server obtains the order delivery status of the target order in response to the order status update information of the target order; in response to determining that the order delivery status is an order-accepted status, the server obtains the delivery party identifier of the target order and adds the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set; in response to determining that the order delivery status is a goods-picked-up status, the server obtains the delivery party identifier of the target order and removes the
30 delivery party identifier from or adds the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain an updated group

member set; in response to determining that the order delivery status is a goods-delivered status, the server obtains the delivery party identifier of the target order and removes the delivery party identifier from the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set. The server determines the member update information corresponding to the delivery party identifier as member joining information according to the updated group member set, and sends the member joining information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays the group entrance of the interactive group according to the member joining information; the server determines the member update information corresponding to the delivery party identifier as member leaving information according to the updated group member set, and sends the member leaving information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information. By screening out the delivery party identifiers that need to be added to or removed from the group according to the set status, the group members of the interactive group are updated, and corresponding member update information is generated and sent to the corresponding delivery terminals. Thus, the group chat entrance can be displayed on the delivery terminals of the delivery parties who have joined the group, and the group chat entrance can be automatically not displayed on the delivery terminals of the delivery parties who have left the group. The management of the interactive group can be realized without the delivery terminals performing operations of joining or leaving the group.

[0231] Further, the order delivery status of the target order is obtained in response to a polling instruction for the target order. In response to determining that the order delivery status satisfies the set status, the delivery party identifier of the target order is obtained, a target member set is generated according to the delivery party identifier, and the group member set of the interactive group corresponding to the transaction party is updated according to the target member set to obtain an updated group member set. By comparing the group member set with the target member set, the first delivery party and/or the second delivery party are obtained. The first delivery party is added to the interactive group, and the second delivery party is removed from the interactive group, to obtain an updated group member list. Corresponding member joining information is generated for the first delivery party, and member leaving information is generated for the second delivery party, which are

sent to the corresponding delivery terminals. By generating member update information corresponding to member update operations and sending the member update information to the corresponding delivery terminals, the delivery terminals can accurately receive member update information related to the delivery parties and perform corresponding operations of displaying or refraining from displaying the group entrance accordingly.

[0232] Further, by determining the transaction party identifier of the transaction party, constructing an interactive group corresponding to the transaction party, determining the group identifier of the interactive group, and establishing a mapping relationship between the transaction party identifier and the group identifier, when an update instruction for the group member set of the transaction party is received, the group identifier corresponding to the transaction party is determined according to the transaction party identifier of the transaction party and the mapping relationship, and the group member set of the transaction party is determined according to the group identifier. By assigning unique identifiers to the transaction party and the interactive group and establishing a mapping relationship, the acquisition of group member information is facilitated.

[0233] Further, by receiving member update information, corresponding operations of displaying or refraining from displaying the chat entrance are performed for different member update information. The group entrance of the interactive group corresponding to the transaction party is not displayed according to the member leaving information, and the group entrance of the interactive group corresponding to the transaction party is displayed according to the member joining information. In addition, two ways to open the group entrance are provided, a trigger operation is received based on the contact control or interactive message control in the order details page. In response to the trigger operation, the group entrance of the interactive group is displayed or not displayed on the group entrance page according to the member update information, which enriches the operation experience of the delivery party.

[0234] Those skilled in the art can understand that all or part of the processes in the methods of the above embodiments can be implemented by instructing relevant hardware through a computer program. The program can be stored in a computer-readable storage medium. When the program is executed, it may include the processes of the above method embodiments. The storage medium may be a magnetic disk, an optical disk, a Read-Only

Memory (Read-Only Memory, ROM), or a Random Access Memory (Random Access Memory, RAM), etc. The above disclosures are merely preferred embodiments of this specification, and of course, they should not be used to limit the scope of this specification. Therefore, equivalent changes made according to the claims of this specification still fall

5 within the scope of this specification.

CLAIMS

1. A group management method, applied to a server, comprising:
 - obtaining an order delivery status of a target order;
 - 5 obtaining a delivery party identifier of the target order in response to determining that the order delivery status is an order-accepted status;
 - adding the delivery party identifier to a group member set of an interactive group corresponding to a transaction party to obtain an updated group member set; and
 - determining, according to the updated group member set, member update
 - 10 information corresponding to the delivery party identifier as member joining information, and sending the member joining information to a delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays a group entrance of the interactive group according to the member joining information.
- 15 2. The method according to claim 1, further comprising:
 - in response to determining that the order delivery status is a goods-picked-up status, removing the delivery party identifier from the group member set to obtain an updated group member set; and
 - determining, according to the updated group member set, member update
 - 20 information corresponding to the delivery party identifier as member leaving information, and sending the member leaving information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying the group entrance of the interactive group according to the member leaving information.
- 25 3. The method according to claim 1, further comprising:
 - in response to determining that the order delivery status is a goods-delivered status, removing the delivery party identifier from the group member set to obtain an updated group member set; and
 - determining, according to the updated group member set, member update
 - 30 information corresponding to the delivery party identifier as member leaving information, and sending the member leaving information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal refrains from displaying the group

entrance of the interactive group according to the member leaving information.

4. The method according to claim 1, after obtaining the order delivery status of the target order, further comprising:

5 in response to determining that the order delivery status is a goods-picked-up status, obtaining the delivery party identifier of the target order;

adding the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain an updated group member set; and

10 determining, according to the updated group member set, member update information corresponding to the delivery party identifier as member joining information, and sending the member joining information to the delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays the group entrance of the interactive group according to the member joining information.

15 5. The method according to claim 1, before adding the delivery party identifier to the group member set of the interactive group corresponding to the transaction party to obtain the updated group member set, further comprising:

constructing the interactive group corresponding to the transaction party based on a transaction party identifier of the transaction party, and determining a group identifier
20 corresponding to the interactive group; and

establishing a mapping relationship between the transaction party identifier and the group identifier.

6. A group management method, applied to a delivery terminal, comprising:

25 in response to an order-accepted confirmation operation for a target order, generating order status change information of the target order and sending the order status change information to a server, wherein the order status change information causes the server to update a group member set of an interactive group corresponding to a transaction party related to the target order to obtain an updated group member set; and

30 receiving member joining information sent by the server, and displaying a group entrance of the interactive group corresponding to the transaction party according to the member joining information, wherein the member joining information is generated

according to the updated group member set.

7. A group management apparatus, comprising:

an obtaining module, configured to obtain an order delivery status of a target order;

5 an updating module, configured to obtain a delivery party identifier of the target order in response to determining that the order delivery status is an order-accepted status and add the delivery party identifier to a group member set of an interactive group corresponding to a transaction party to obtain an updated group member set; and

10 a generating module, configured to determine, according to the updated group member set, member update information corresponding to the delivery party identifier as member joining information and send the member joining information to a delivery terminal corresponding to the delivery party identifier, so that the delivery terminal displays a group entrance of the interactive group according to the member joining information.

15 8. A group management apparatus, comprising:

an operation receiving module, configured to generate order status change information of a target order in response to an order-accepted confirmation operation for the target order and send the order status change information to a server, wherein the order status change information causes the server to update a group member set of an interactive group
20 corresponding to a transaction party related to the target order to obtain an updated group member set; and

an information receiving module, configured to receive member joining information sent by the server and display a group entrance of the interactive group corresponding to the transaction party according to the member joining information, wherein the member joining
25 information is generated according to the updated group member set.

9. An electronic device, comprising: one or more processors and a memory; wherein the memory stores a computer program, and the computer program is adapted to be loaded by the one or more processors to perform steps of the method according to any one
30 of claims 1 to 6.

10. A storage medium, storing a computer program, wherein when the computer

program is executed by one or more processors, steps of the method according to any one of claims 1 to 6 are implemented.