

CLAIMS:

1. A repeating method of a wireless repeating device, wherein the method comprises the following steps:

synchronizing (201) network connection information of an upstream Access point, AP, to a downstream Wireless Local Area Network, WLAN, AP interface of the wireless repeating device after the wireless repeating device establishes a connection with the upstream AP;

obtaining (202), according to the downstream WLAN AP interface corresponding to the synchronized upstream AP, downstream wireless station, STA, Medium Access Control, MAC, address information and establishing an upstream WLAN Client interface which is in a mapping relationship with the downstream wireless STA MAC address; and

performing (203), according to the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface, management on data forwarded between the upstream AP and the downstream wireless STA;

wherein when the data is service data and the service data is from the upstream AP to the downstream wireless STA, the step of performing, according to the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface, the management on the data forwarded between the upstream AP and the downstream wireless STA specifically is:

through the upstream WLAN Client interface, receiving service data sent by the upstream AP;

according to the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface, searching for a downstream wireless STA corresponding to the upstream WLAN Client interface, and mapping a destination address corresponding to the service data into the downstream wireless STA MAC address; and

through the downstream WLAN AP interface, sending the mapped service data to the downstream wireless STA.

2. The method according to claim 1, wherein the step of synchronizing the network connection information of the upstream AP to the downstream WLAN AP interface of the wireless repeating device after the wireless repeating device establishes the connection with the upstream AP specifically is:

establishing a WIFI connection between an initialized upstream WLAN Client interface of the wireless repeating device and the upstream AP;

obtaining the network connection information of the upstream AP, and synchronizing the network connection information of the upstream AP to the downstream WLAN AP interface; and

deregistering the initialized upstream WLAN Client interface.

3. The method according to claim 1 or 2, wherein the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface is a reversible single mapping relationship.

4. A wireless repeating device, comprising:

a synchronizing unit (61), configured to synchronize network connection information of an upstream Access point, AP, to a downstream Wireless Local Area Network, WLAN, AP interface of the wireless repeating device after a connection between the wireless repeating device and the upstream AP is established;

a mapping unit (62), configured to obtain, according to the downstream WLAN AP interface corresponding to the synchronized upstream AP, downstream wireless STA MAC address information, and establish an upstream WLAN Client interface which is in a mapping relationship with the downstream wireless STA MAC address; and

a data management unit (63), configured to perform, according to the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface, management on data forwarded between the upstream AP and the downstream wireless STA;

wherein when the data is service data and the service data is from the upstream AP to the downstream wireless STA, the data management unit is specifically configured to:

through the upstream WLAN Client interface, receive service data sent by the upstream AP;

according to the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface, search for a downstream wireless STA corresponding to the upstream WLAN Client interface, and map a destination address corresponding to the service data into the downstream wireless STA MAC address; and

through the downstream WLAN AP interface, send the mapped service data to the downstream wireless STA.

5. The wireless repeating device according to claim 4, wherein the synchronizing unit comprises:
 - a first connection module (611), configured to establish a WIFI connection between an initialized upstream WLAN Client interface of the wireless repeating device and the upstream AP;
 - a synchronizing module (612), configured to obtain the network connection information of the upstream AP, and synchronize the network connection information of the upstream AP to the downstream WLAN AP interface; and
 - a deregistration module (613), configured to deregister the initialized upstream WLAN Client interface.
6. The wireless repeating device according to claim 4 or 5, wherein the mapping relationship between the downstream wireless STA MAC address and the established upstream WLAN Client interface is a reversible single mapping relationship.