

## 知 Client is connected to an AP with relatively weak signal, but not connected to an AP with relatively strong signal with close distance

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### Network Topology

null

### Problem Description

When there are multiple APs that are physically adjacent to each other and have a signal coverage area, the Client is connected to an AP with a relatively weak signal, but not connected to an AP with a relatively strong signal with close distance.

### Process Analysis

It is possible that the load balancing feature has been enabled on the AP that is close to the client and has a strong signal, so it cannot accept new client access requests. If the client is sensitive to AP signal strength, even if the client is forced to connect to the AP with weaker signal because the load balancing feature is enabled on the AP with stronger signal, the client will often try to connect to the AP with stronger signal. That means roaming frequently. Such frequent roaming may cause the connection to be interrupted, which may affect the upper-layer applications of the Client.

### Solution

If the client application is not affected, it is a normal phenomenon and does not need to be resolved. If the client application has been affected, try to solve the problem in the following ways:

- (1) Check whether the AP distribution is reasonable, and don't cause a large number of clients to obviously gather near an AP. In this way, even if the load is balanced to other APs, frequent roaming will be triggered because of the large difference in signal strength.
- (2) If it is obvious that the Client cannot connect, turn off the load balancing and observe it again.
- (3) Load balancing based on traffic is not suitable for control and is not recommended. Especially when some encryption and security configurations limit the number of AP accesses (for example, TKIP encryption allows APs to access only 28 users), it is not applicable. It is recommended to use session-based load balancing.