The Network Adopting Policy Routing Breaks Several Times a Day

刘志伟 2007-01-25 发表

Policy routing specifies the next hop IP address and obtains the outbound information by searching the correspondent ARP entry of the next hop IP address in the ARP table. In other words, policy routing depends on ARP entries, and will breaks if the ARP table does not exist.

ARP aging mechanism is as follows: ARP entry aging time is defaulted to 20 minutes. When ARP ages to half of the time specified by the system (defaulted to 10 minutes), S9500 sends an ARP request and updates the ARP aging time to 20 minutes again to prevent ARP aging out if it receives an ARP response. If S9500 receives no ARP response, it continues aging until 20 minutes and sends another ARP request. If S9500 receives a response, it continues the above process. If S9500 still receives no ARP response, the ARP entry will be aged out. ARP may be aged out due to some reason that the peer cannot respond to ARP request of S9500. For this reason, the network adopting policy routing may breaks several times a day but each time only lasts several minutes.

You can avoid this problem by configuring static ARP entry at peer uplink device.