What is Bind IP to MAC?

DHCP assigns IP address to each device randomly. Therefore, to avoid the IP address of the host from changing and result in unable to filter, manage bandwidth for the packets, the administrator must configure Bind IP to MAC to assure the management. Once the IP address and MAC address are bound for a computer, the router can obtain the specified IP address according to the rules in IP Bind List after identifying MAC address of a computer. Thus, effective management and control can be reached in network easily.

There are two modes for Bind IP to MAC.

Normal mode

- PC with the MAC address listed in IP Bind List will get static IP address from the router for each request according to the Bind IP to MAC rule set in this page.

Strict mode

- PC with the MAC address listed in IP Bind List will get static IP address from the router for each request according to the Bind IP to MAC rule set in this page. However, only the PCs listed in the IP Bind List are allowed to pass through the router and access Internet.

Assuming there are 4 users in LAN. In the Vigor router, User A and User D are added in the IP-MAC binding list. User B and User C are not contained in that list (see figure shown below).
Below, Vigor2110 series is chosen for explaining how to set Bind IP to MAC.

**In Normal mode**

For User A and User D are listed in IP Bind List, they can get static IP always. However, User B and User C are not listed in IP Bind List. They will get dynamic IP address for each request.

1. Access into the WUI of Vigor2110.
2. Open **LAN>>Bind IP to MAC**.

   **LAN >> Bind IP to MAC**

   ![ARP Table](image)

3. Click **Refresh** to list the ARP information (IP address allocated by DHCP server) of the devices in LAN, which is taken from the router’s ARP cache.

4. To set the IP Bind List, you can manually type IP address and MAC address in the field of **Add and Edit**. Or, after referring to the ARP table, just select the one you want. In this example, we choose "172.17.1.4"(User A) and "172.17.1.17"(User D) from the **ARP Table** and press **Add** button to move them to the **IP Bind List** on the right.

5. Select **Enable** and press **OK** to apply the configuration.

6. After finishing the configuration, once the users with MAC addresses of 00-50-7F-27E-21 and 00-16-76-01-14-FE ask for IP addresses from the router, the router will specify the bound IP
address for them to use.

**In Strict mode**

Only the user whose IP-MAC entry is in the binding table can be passed through the Vigor router. So both User A and User D can access the Internet.

1. Select the entries of "172.17.1.4" and "172.17.1.17" from the ARP Table and press **Add** button to move them to the IP Bind List on the right. Or manually enter the MAC address and desired IP allocation manually in the box on the bottom left.

2. Select **Strict Bind** and press **OK** to apply the configuration.

3. After finishing the settings, only User A (172.17.1.4) and User D (172.17.1.17) in LAN can access Internet. Other users (listed in ARP table) not included in IP Bind List will be blocked by the router and cannot access Internet.