

Manage IP and MAC Binding on RV320 and RV325 VPN Routers

Objective

This article explains how to configure IP and MAC binding on RV32x VPN Router Series.

Introduction

IP and MAC Address binding is a process which links an IP Address to a MAC Address and vice versa. It helps to prevent IP spoofing and enhances network security as it does not allow a user to change IP addresses of devices. The source host IP address and MAC address of the traffic need to always match to be allowed access to the network. If the IP and MAC addresses do not match, the traffic is dropped. For more information on IP and MAC binding, click [here](#).

Applicable Device

- RV320 Dual WAN VPN Router
- RV325 Gigabit Dual WAN VPN Router

Software Version

- 1.1.0.09

Manage IP & MAC Binding

Step 1. Log in to the web configuration utility and choose **DHCP > IP & MAC Binding**. The *IP & MAC Binding* page opens:

IP & MAC Binding

Show Unknown MAC Addresses ...

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
0 results found!				

Add Edit Delete

Block MAC address on the list with wrong IP address

Block MAC address not on the list


Save Cancel

Add a Bound Entry

You can add a bound entry through *Discovery* or *Manual Configuration*. If you do not know the IP address and the MAC address of the device, you can discover them, and then you can add those entries in the IP & MAC Binding Table to bind the IP and MAC addresses. If you know the IP address and its corresponding MAC address, you can easily add those manually in the IP & MAC Binding Table which saves the time needed to discover the IP and MAC.

IP & MAC Binding Through Discovery

Step 1. Click **Show Unknown MAC Address** to list out the IP and MAC addresses of the devices which are connected to the router but not yet added to the IP & MAC Binding Table.



IP & MAC Binding

Show Unknown MAC Addresses ...

IP & MAC Binding Table

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
0 results found!				

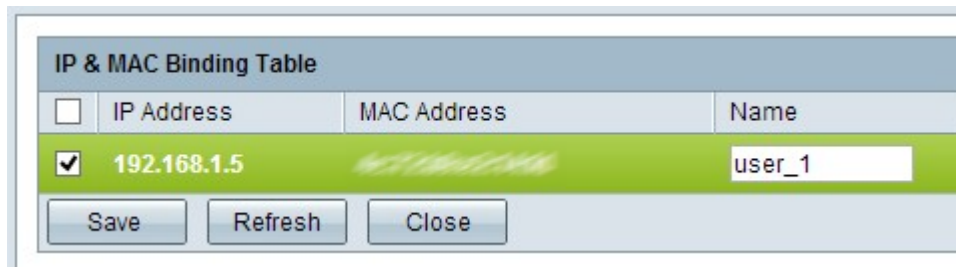
Add Edit Delete

Block MAC address on the list with wrong IP address

Block MAC address not on the list

Save Cancel

Step 2. (Optional) To refresh the IP & MAC Binding Table click **Refresh**.



IP & MAC Binding Table

<input type="checkbox"/>	IP Address	MAC Address	Name
<input checked="" type="checkbox"/>	192.168.1.5		user_1

Save Refresh Close

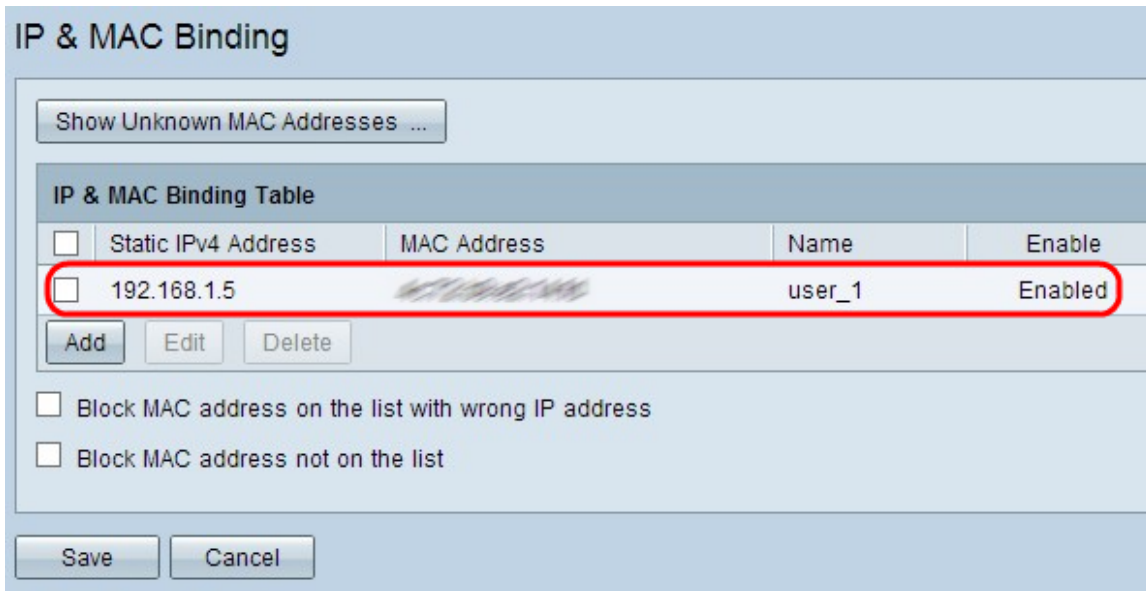
Step 3. Check the check box beside the specific IP address that you want to add to the IP & MAC Binding Table. Enter a user name for the device in the *Name* field for which you want to add the IP and MAC to the IP & MAC Binding Table. The device name helps to easily identify the device instead of by its IP address and MAC address. Click **Save**.



Step 4. Click **OK** if you want to save the entry on the IP & MAC Binding Table. It may take some time. Do not re-log in or refresh the page until the entry adds on the IP & MAC Binding Table.

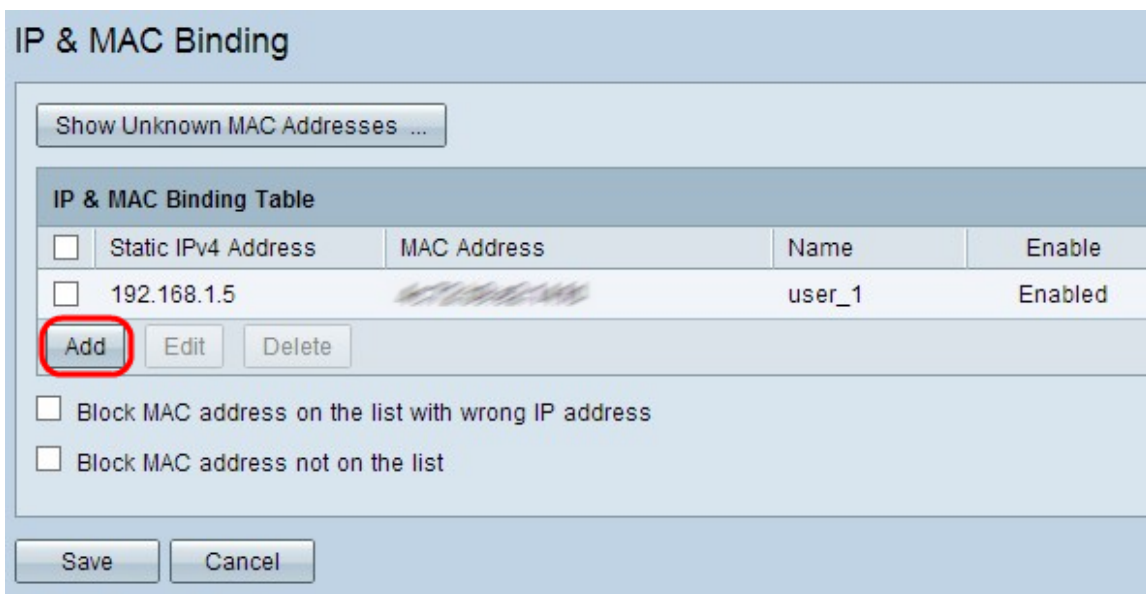


Step 5. The entry appears on the IP & MAC Binding Table:



Manual Configuration of IP & MAC Binding

Step 1. Click **Add** to add a known IP and MAC address to the IP & MAC Binding Table.



A new row is added:

IP & MAC Binding

Show Unknown MAC Addresses ...

IP & MAC Binding Table

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
<input type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1	Enabled
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Add Edit Delete

Block MAC address on the list with wrong IP address

Block MAC address not on the list

Save Cancel

Step 2. Fill out the following fields.

- Enter the known static IP address of the device in the Static IPv4 Address field. If the device does not have any static IP address and obtains the IP address dynamically from a DHCP server, enter **0.0.0.0** to bind the MAC address of the device with the IP address assigned by the DHCP server.
- Enter the known MAC address which corresponds with the IP address in Step 2 in the MAC Address field.
- Enter a user name for the device in the Name field for which you want to add the IP and MAC to the IP & MAC Binding Table. The device name helps to identify the device easily instead of by its IP address and MAC address.
- Check the **Enable** check box if you want to enable binding of the IP and MAC for the device.
- Click **Save** to save the settings.

IP & MAC Binding Table

<input type="checkbox"/>	IP Address	MAC Address	Name
<input checked="" type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1

Save Refresh Close

Edit a Bound Entry

Step 1. Check the check box beside the appropriate IP address in the IP & MAC Binding Table to select the bound entry for which you want to change information.

IP & MAC Binding

Show Unknown MAC Addresses ...

IP & MAC Binding Table

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
<input checked="" type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1	Enabled
<input type="checkbox"/>	192.168.1.2	XXXXXXXXXX	user_2	Enabled

Add Edit Delete

Block MAC address on the list with wrong IP address

Block MAC address not on the list

Save Cancel

Step 2. Click **Edit**.

IP & MAC Binding

Show Unknown MAC Addresses ...

IP & MAC Binding Table

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
<input checked="" type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1	Enabled
<input type="checkbox"/>	192.168.1.2	XXXXXXXXXX	user_2	Enabled

Add Edit Delete

Block MAC address on the list with wrong IP address

Block MAC address not on the list

Save Cancel

Step 3. Change the appropriate information and click **Save** to save the settings.



Delete a Bound Entry

Step 1. Check the check box beside the appropriate IP address of the IP & MAC Binding Table to select the bound entry which you want to delete.

IP & MAC Binding

Show Unknown MAC Addresses ...

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
<input type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1	Enabled
<input checked="" type="checkbox"/>	192.168.1.2	XXXXXXXXXX	user_2	Enabled

Add Edit Delete

Block MAC address on the list with wrong IP address
 Block MAC address not on the list

Save Cancel

Step 2. Click **Delete** to delete the entry.

Add Edit **Delete**

Block Devices through Static IP

IP & MAC Binding

Show Unknown MAC Addresses ...

<input type="checkbox"/>	Static IPv4 Address	MAC Address	Name	Enable
<input type="checkbox"/>	192.168.1.5	XXXXXXXXXX	user_1	Enabled
<input type="checkbox"/>	192.168.1.2	XXXXXXXXXX	user_2	Enabled

Add Edit Delete

Block MAC address on the list with wrong IP address
 Block MAC address not on the list

Save Cancel

Step 1. (Optional) To block devices whose IP address and MAC does not match with IP & MAC Binding Table, check **Block MAC address on the list with wrong IP address**. This makes it difficult for the user to change the IP address of the devices.

Step 2. (Optional) To block unknown devices which are not included in the list check **Block MAC address not on the list**. This helps to provide more security in your network.

Step 3. Click **Save** to save the settings.

