

# LAN Setup on RV016, RV042, RV042G and RV082 VPN Routers

## Objective

This document guides you through the setup of Local Area Network (LAN) parameters on RV016, RV042, RV042G and RV082 VPN Routers. LANs are extremely useful since they allow devices to communicate and share resources between each other. This article shows how to configure the router to properly assign itself an Internet Protocol (IP) address, both IPv4 and IPv6, so that it can be recognized by other devices on the network. It also guides you through the creation of subnets, or the creation of multiple networks within the main network of the router. This is useful when you want to logically separate devices in networks.

## Applicable Devices

- RV016
- RV042
- RV042G
- RV082

## Software Version

- v4.2.1.02

## Network Setup

Step 1. Log in to the Router configuration utility and choose **Setup > Network**. The *Network* page opens:

### Network

Host Name :  (Required by some ISPs)

Domain Name :  (Required by some ISPs)

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#### IP Mode

Mode	WAN	LAN
<input checked="" type="radio"/> IPv4 Only	IPv4	IPv4
<input type="radio"/> Dual-Stack IP	IPv4 and IPv6	IPv4 and IPv6

IPv4

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#### LAN Setting

MAC Address :

Device IP Address :

Subnet Mask :  ▼

Multiple Subnet :  Enable

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#### WAN Setting

Interface	Connection Type	Configuration
WAN1	Obtain an IP automatically	<input type="button" value="Edit"/>
WAN2	Obtain an IP automatically	<input type="button" value="Edit"/>

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#### DMZ Setting

Enable DMZ

### Network

Host Name :  (Required by some ISPs)

Domain Name :  (Required by some ISPs)

**Timesaver:** Some Internet Service Providers (ISPs) require you to assign a host name and domain name to identify the router on the ISP network. If your ISP does not require these values, skip to Step 4.

Step 2. In the Host Name field enter a new host name. Host names are default or user specified names given to the router to be identifiable on the domain and network of the ISP.

Step 3. In the Domain Name field enter a new domain name. Domain names are default or user specified names given to a router to be identifiable on the ISP network. They link names to IP addresses.

IP Mode		
Mode	WAN	LAN
<input checked="" type="radio"/> IPv4 Only	IPv4	IPv4
<input type="radio"/> Dual-Stack IP	IPv4 and IPv6	IPv4 and IPv6

Step 4. Click the **IPv4 Only** radio button to use only IPv4 addressing on the networks of the router or click the **Dual-Stack IP** radio button to use both IPv4 and IPv6 addressing on the networks of the router.

**Note:** Both IPv4 and IPv6 addresses for LAN, WAN, and DMZ settings can be configured only if the Dual-Stack IP radio button in the IP Mode table is clicked

**Note:** The default LAN settings can be sufficient for small businesses. If the need arises, the IPv4 and IPv6 addresses of the router can be changed.

**Note:** Multiple subnets can be created only if you click the IPv4 Only radio button in the IP Mode table.

## IPv4 LAN Settings

The screenshot shows the IPv4 LAN Settings configuration interface. At the top, there are two tabs: 'IPv4' (which is selected and highlighted with a red circle) and 'IPv6'. Below the tabs, the 'LAN Setting' section contains the following fields: 'MAC Address' (displaying a blurred address), 'Device IP Address' (with the value '192.168.1.1' entered), 'Subnet Mask' (with a dropdown menu showing '255.255.255.0'), and 'Multiple Subnet' (with an unchecked checkbox and the label 'Enable'). An 'Add/Edit' button is located at the bottom right of the form.

Step 1. To change IPv4 LAN Settings click the **IPv4** tab.

**Note:** The MAC Address field name displays the Media Access Control (MAC) address of the router. It cannot be changed by the user.

Step 2. In the Device IP Address field, enter an IP address for the router. The device IP address is a default or user specified IP address of the router that logically identifies it in a network. The default IP address is 192.168.1.1. If you change the default IP address, the router will log you off and you may have to login again to the newly configured IP address.

Step 3. From the Subnet Mask drop-down list, choose a subnet mask for the router. The default or user specified subnet mask of the router defines which logical subdivision of the network its IP address is in.

Step 4. (Optional) To enable the subnetting features on the router check the **Enable** box in the Multiple Subnet field. Subnets are useful to logically separate devices that are in the same physical network. By default, the router will not be able to communicate with devices that belong to a different subnet than the router. However, you can enable multiple subnets to allow the router to communicate with devices on different subnets.

**Timesaver:** If you do not need to add or modify subnets, skip to Step 12.

Step 5. Click **Add/Edit** to create or modify the subnets. The *Multiple Subnet Management* window appears.

The screenshot shows a window titled "Multiple Subnet Management". At the top, there are two input fields: "LAN IP Address :" and "Subnet Mask :". Below these fields is a button labeled "Add to list". Underneath the button is a large, empty rectangular area representing a list of subnets. At the bottom of this list area are two buttons: "Delete" and "Add New". At the very bottom of the window are three buttons: "OK", "Cancel", and "Close".

Step 6. Enter a LAN IP address to add a new subnet in the LAN IP Address field. This IP address is used to access the device from a different subnet.

Step 7. Enter the subnet mask for the new LAN IP in the Subnet Mask field. This identifies how large the subnet is.

Step 8. Click **Add to list**. The IP address and subnet mask that were entered appear on the list directly below.

This screenshot is similar to the previous one, but the "LAN IP Address" field now contains "192.168.2.1" and the "Subnet Mask" field contains "255.255.255.0". The "Add to list" button is highlighted with a blue border. The list area below is now highlighted with a red border and contains the text "192.168.2.1/255.255.255.0". The "Delete" and "Add New" buttons are still present below the list area. The "OK", "Cancel", and "Close" buttons are at the bottom.

Step 9. (Optional) To add a new item to the list click **Add New** and follow Steps 6 to 8.

LAN IP Address :

Subnet Mask :

192.168.2.1/255.255.255.0

Step 10. (Optional) To delete an item on the list, click the item on the list and click **Delete**.

Step 11. (Optional) To edit an item, click the item on the list and the LAN IP Address field and Subnet Mask field become editable. Modify the entries as required and click **Update** once finished.

Step 12. Click **OK** to save changes. The *Multiple Subnet Management* window closes.

Step 13. (Optional) To undo changes to the list, click **Cancel**.

Step 14. (Optional) To close the *Multiple Subnet Management* window without any settings being saved click **Close**.

Step 15. On the *Network* page, click **Save** at the bottom to save all the IPv4 configurations that have been made.

## IPv6 LAN Settings

**Note:** The IPv6 LAN Settings are only available if Dual-Stack IP is enabled as described in Step 4 of the *Network Setup* section.

IPv4  IPv6

**LAN Setting**

IPv6 Address :

Prefix Length:

Step 1. To change IPv6 LAN Settings, click the **IPv6** tab.

Step 2. Enter an IPv6 address in the IPv6 Address field to assign a new IPv6 address to the router. The default or user specified IPv6 address of the router logically identifies it on the IPv6 network.

Step 3. Enter a prefix length in the Prefix Length field to assign a new IPv6 prefix length to the router. The default or user specified prefix length of the IPv6 address of the router defines in which logical subdivision of the IPv6 network the device is currently.

Step 4. Click **Save** at the bottom of the page to save the IPv6 configurations that have been made.