

Edit WAN Connection on RV016, RV042, RV042G and RV082 VPN Routers

Objective

A Wide Area Network (WAN) is a network that is made up of multiple LANs, such as the Internet. The WAN port on the RV0XX series VPN routers is generally used to connect to the Internet. RV0XX series routers support multiple connection types for the WAN port. The connection type you need will depend on your ISP.

This article guides on how to edit the WAN connection type on RV016, RV042, RV042G and RV082 Series VPN Routers.

Applicable Devices

- RV016
- RV042
- RV042G
- RV082

Software Version

- v4.2.2.08

Edit WAN Connection for IPv4

Note: To edit the WAN connection for IPv6 addresses, go to the [IPv6](#) section.

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)

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

LAN Setting

MAC Address : 54:75:D0:F7:FC:38



Device IP Address :

Subnet Mask : ▼

Multiple Subnet : Enable

WAN Setting

Please choose how many WAN ports you prefer to use : ▼ (Default value is 2)

Interface	Connection Type	Configuration
WAN1	Obtain an IP automatically	
WAN2	Obtain an IP automatically	

Step 2. Scroll down to *WAN Setting* section and click the **Configuration** icon for the specific WAN interface which you want to edit. The *Network* page displays additional information:

Network

Edit WAN Connection

Interface : WAN1

WAN Connection Type : ▼

Use the Following DNS Server Address

DNS Server (Required) 1 :

2 :

MTU : Auto Manual bytes

Note: The Interface is a read only field which indicates the WAN interface which you want to

edit.

The screenshot shows the 'Network' configuration window for 'Edit WAN Connection'. The interface is set to 'WAN1'. The 'WAN Connection Type' dropdown menu is open, showing options: 'Obtain an IP automatically' (highlighted), 'Static IP', 'PPPoE', 'PPTP', and 'Transparent Bridge'. The 'DNS Server (Required) 1' field is empty, and '2' is set to '0.0.0.0'. The 'MTU' is set to 'Auto' with a value of '1500' bytes. 'Save' and 'Cancel' buttons are at the bottom.

Step 3. In the WAN Connection Type field, choose your Internet connection type:

- [Obtain an IP Automatically](#) — Choose this option if your ISP dynamically assigns an IP address.
- [Static IP](#) — Choose this option if your ISP assigned a permanent IP address to your account.
- [PPPoE](#) (Point-to-Point Protocol over Ethernet) — Choose this option if your ISP uses PPPoE to establish Internet connections (typical for DSL lines).
- [PPTP](#) (Point-to-Point Tunneling Protocol) — Choose this option if your ISP uses PPTP.
- [Transparent Bridge](#) — Choose this option if you are using this router to connect two network segments.

Obtain an IP automatically

The screenshot shows the 'Network' configuration window for 'Edit WAN Connection'. The 'WAN Connection Type' is set to 'Obtain an IP automatically'. The 'Use the Following DNS Server Address' checkbox is checked. 'DNS Server (Required) 1' is set to '209.165.200.225' and '2' is set to '0.0.0.0'. The 'MTU' is set to 'Manual' with a value of '1400' bytes. 'Save' and 'Cancel' buttons are at the bottom.

Note: With this connection type, your ISP automatically assigns you an IP address and DNS server IP addresses. The following steps are optional.

Step 1. If you know the IP address of your DNS server and you want to specify the DNS server, check **Use the Following DNS Server Address** check box.

Step 2. Enter the IP address of the DNS server in the DNS Server (Required) 1 field.

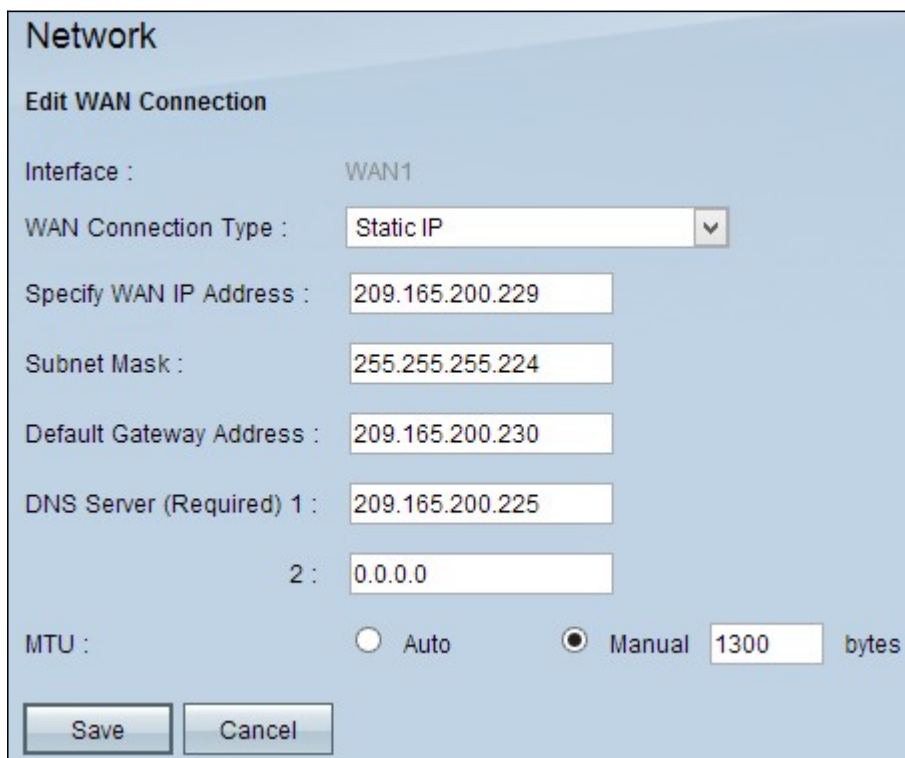
Step 3. Enter the IP address of the second DNS server in the DNS Server 2 field.

Step 4. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 5. Click **Save** to save the settings.

Static IP



The screenshot shows a 'Network' configuration window titled 'Edit WAN Connection'. The interface is set to 'WAN1'. The 'WAN Connection Type' is set to 'Static IP'. The 'Specify WAN IP Address' field contains '209.165.200.229'. The 'Subnet Mask' field contains '255.255.255.224'. The 'Default Gateway Address' field contains '209.165.200.230'. The 'DNS Server (Required) 1' field contains '209.165.200.225' and the 'DNS Server (Required) 2' field contains '0.0.0.0'. The 'MTU' section has two radio buttons: 'Auto' (unselected) and 'Manual' (selected). The 'Manual' option has a text input field containing '1300' followed by the unit 'bytes'. At the bottom, there are 'Save' and 'Cancel' buttons.

Step 1. Enter the external IP address for the WAN interface in the Specify WAN IP Address field. Your ISP provides you the WAN IP address.

Step 2. Enter the subnet mask for the WAN IP address in the Subnet Mask field.

Step 3. Enter the IP address of the default gateway in the Default Gateway Address field.

Step 4. Enter the IP address of the domain name server in the DNS Server (Required) 1 field.

Step 5. (Optional) If you know the IP address of the secondary domain name server, enter the IP address in the DNS Server 2 field.

Step 6. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option, enter the maximum size of the packet in bytes in the field beside the Manual field. The default value is 1500 bytes.

Step 7. Click **Save** to save the settings.

PPPoE

The screenshot shows a 'Network' configuration window titled 'Edit WAN Connection'. The interface is set to 'WAN1'. The 'WAN Connection Type' is 'PPPoE'. The 'Username' is 'user1', the 'Password' is masked with dots, and the 'Service Name' is 'service1'. There are three radio button options: 'Connect on Demand : Max Idle Time 5 Min.' (unselected), 'Keep Alive : Redial Period 20 Sec.' (selected), and 'Use the Following DNS Server Address' (checked). The 'DNS Server (Required) 1' is '209.165.200.225' and 'DNS Server (Required) 2' is '0.0.0.0'. The 'MTU' is set to 'Manual 1300 bytes'. At the bottom are 'Save' and 'Cancel' buttons.

Step 1. Enter the username of your ISP account in the Username field.

Step 2. Enter the password of your ISP account in the Password field.

Step 3. Enter the service name in the Service Name field.

Step 4. Click the appropriate radio button to choose the service type.

- Connect on Demand — Connection to the Internet becomes disconnected after a specific amount of inactivity. Enter a period of time in minutes in the Max Idle Time after which the connection to the Internet becomes disconnected. The default value is 5 minutes.

- Keep Alive — The Internet connection is always on. The router will periodically sent out data packets to ensure the connection is always maintained. Enter a time period in seconds in the Redial Period field that the router will wait before it sends another data packet.

Step 5. (Optional) If you want to specify the IP address of your DNS server, check the **Use the Following DNS Server Address** check box. If you do not want to specify the IP address of your DNS server, skip to Step 8.

Step 6. Enter the IP address of the domain name server in the DNS Server (Required) 1 field.

Step 7. (Optional) If you know the IP address of the secondary domain name server, enter the IP address of the secondary domain name server in the DNS Server 2 field.

Step 8. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 9. Click **Save** to save the settings.

PPTP

Network

Edit WAN Connection

Interface : WAN1

WAN Connection Type : PPTP

Specify WAN IP Address : 209.165.200.335

Subnet Mask : 255.255.255.224

Default Gateway Address : 209.165.200.209

Username : user1

Password :

Connect on Demand : Max Idle Time 5 Min.

Keep Alive : Redial Period 20 Sec.

MTU : Auto Manual 1300 bytes

Save Cancel

Step 1. Enter the external IP address for the WAN interface in the Specify WAN IP Address

field. Your ISP provides you with the WAN IP address.

Step 2. Enter the subnet mask for the WAN IP address in the Subnet Mask field.

Step 3. Enter the IP address of the default gateway in the Default Gateway Address field.

Step 4. Enter the username of your ISP account in the Username field.

Step 5. Enter the password of your ISP account in the Password field.

Step 6. Click the appropriate radio button to choose the service type.

- **Connect on Demand** — Connection to the Internet becomes disconnected after a specific amount of inactivity. Enter a period of time in minutes in the Max Idle Time after which the connection to the Internet becomes disconnected. The default value is 5 minutes.
- **Keep Alive** — The Internet connection is always on. The router will periodically send out data packets to ensure the connection is always maintained. Enter a time period in seconds in the Redial Period field that the router will wait before it sends another data packet.

Step 7. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- **Auto** — Automatically specifies the transmission packet size according to the network.
- **Manual** — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 8. Click **Save** to save the settings.

Transparent Bridge

Network

Edit WAN Connection

Interface : WAN1

WAN Connection Type : Transparent Bridge

Specify WAN IP Address : 209.165.200.335

Subnet Mask : 255.255.255.224

Default Gateway Address : 209.165.200.209

DNS Server (Required) 1 : 209.165.200.225

2 : 0.0.0.0

Internal LAN IP Range : 209.165.200.229 to 209.165.200.232

MTU : Auto Manual 1300 bytes

Save Cancel

Step 1. Enter the external IP address for the WAN interface in the Specify WAN IP Address field. Your ISP provides you with the WAN IP address.

Step 2. Enter the subnet mask for the WAN IP address in the Subnet Mask field.

Step 3. Enter the IP address of the default gateway in the Default Gateway Address field.

Step 4. Enter the IP address of the domain name server in the DNS Server (Required) 1 field.

Step 5. (Optional) If you know the IP address of the secondary domain name server, enter the IP address in the DNS Server 2 field.

Step 6. Enter the IP address range of the internal LAN address in the Internal LAN IP Range field.

Step 7. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 8. Click **Save** to save the settings.

Edit WAN Connection for IPv6

Note: Dual-Stack IP must be enabled in the *IP Mode* area in order to configure IPv6

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)

IP Mode

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

LAN Setting


MAC Address : 1C:DF:0F:36:F1:10

Device IP Address :

Subnet Mask : ▼

Multiple Subnet : Enable

WAN Setting


Interface	Connection Type	Configuration
WAN1	Obtain an IP automatically	

LAN Setting

IPv6 Address :

Prefix Length:

WAN Setting

Interface	Connection Type	Configuration
WAN1	Obtain an IP automatically	

Step 2. Scroll down to WAN Setting section and click the **IPv6** tab.

The screenshot shows a configuration window with two tabs: IPv4 and IPv6. The IPv6 tab is active. Under 'LAN Setting', the IPv6 Address is 'fc00::1' and the Prefix Length is '7'. Under 'WAN Setting', there is a table with columns 'Interface', 'Connection Type', and 'Configuration'. The table contains one row: WAN1, Obtain an IP automatically, and a configuration icon (a pencil inside a square) which is circled in red.

Step 3. Click the Configuration icon for the specific WAN interface which you want to edit. The Network page displays additional information:

Note: The Interface is a read only field which indicates the WAN interface which you want to edit.

The screenshot shows the 'Network' page with the title 'Edit WAN Connection'. The 'Interface' is 'WAN1'. The 'WAN Connection Type' dropdown menu is open, showing three options: 'Obtain an IP automatically' (highlighted in blue), 'Static IP', and 'PPPoE'. Below this, there are fields for 'DNS Server (Required) 1' and '2', both containing '...'. The 'MTU' is set to 'Auto' (selected) with a 'Manual' option and a value of '1500 bytes'. At the bottom, there is an 'Enable DHCP-PD' checkbox (unchecked) and a 'LAN IPv6 Address' field containing '.../64'. 'Save' and 'Cancel' buttons are at the bottom.

Step 4. In the WAN Connection Type field, choose your Internet connection type:

- [Obtain an IP Automatically](#) — Choose this option if your ISP dynamically assigns an IP address.
- [Static IP](#) — Choose this option if your ISP assigned a permanent IP address to your account.
- [PPPoE](#) (Point-to-Point Protocol over Ethernet) — Choose this option if your ISP uses

PPPoE to establish Internet connections (typical for DSL lines).

Obtain an IP automatically

The screenshot shows a 'Network' configuration window titled 'Edit WAN Connection'. The interface is set to 'WAN1'. The 'WAN Connection Type' is set to 'Obtain an IP automatically'. The 'Use the Following DNS Server Address' checkbox is checked. The 'DNS Server (Required) 1' field contains '::1278:ca32' and the 'DNS Server 2' field is empty. The 'MTU' is set to 'Manual' with a value of '1200' bytes. The 'Enable DHCP-PD' checkbox is checked. The 'LAN IPv6 Address' field is empty. At the bottom, there are 'Save' and 'Cancel' buttons.

Note: With this connection type, your ISP automatically assigns you an IP address and DNS server IP addresses. The following steps are optional.

Step 1. If you know the IP address of your DNS server and you want to specify the DNS server, check **Use the Following DNS Server Address** check box.

Step 2. Enter the IP address of the DNS server in the DNS Server (Required) 1 field.

Step 3. Enter the IP address of the second DNS server in the DNS Server 2 field.

Step 4. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 5. (Optional) If you want to enable IPv6 of DHCP client process check **Enable DHCP-PD** check box. It is used if the ISP is able to send LAN prefix via DHCPv6.

Step 6. (Optional) If you know the LAN IP address, enter the LAN IPv6 prefix in the LAN IPv6 Address field.

Step 7. Click **Save** to save the settings.

Static IP

Network

Edit WAN Connection

Interface : WAN1

WAN Connection Type : Static IP

Specify WAN IP Address : ::1287:acb5:58aa

Prefix Length : 64

Default Gateway Address : ::1287:1cac:58ac

DNS Server (Required) 1 : ::1278:ca32

2 : ::

MTU : Auto Manual 1100 bytes

LAN IPv6 Address : ::1245:1285 /64

Save Cancel

Step 1. Enter the external IP address for the WAN interface in the Specify WAN IP Address field. Your ISP provides you with the WAN IP address.

Step 2. Enter the prefix for the WAN IP address in the Prefix Length field.

Step 3. Enter the IP address of the default gateway in the Default Gateway Address field.

Step 4. Enter the IP address of the domain server in the Domain Server (Required) 1 field.

Step 5. (Optional) If you know the IP address of the secondary domain name server, enter the IP address in the DNS Server 2 field.

Step 6. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 7. (Optional) If you know the LAN IP address, enter the LAN IPv6 prefix in the LAN IPv6 Address field.

Step 8. Click **Save** to save the settings.

PPPoE

Network

Edit WAN Connection

Interface : WAN1

WAN Connection Type : PPPoE

Username : admin

Password :

Service Name : service1

Connect on Demand : Max Idle Time 3 Min.
 Keep Alive : Redial Period 30 Sec.

MTU : Auto Manual 1100 bytes

Enable DHCP-PD :

LAN IPv6 Address : ::1245:1285/64

Save Cancel

Step 1. Enter the username of your ISP account in the Username field.

Step 2. Enter the password of your ISP account in the Password field.

Step 3. Enter the service name in the Service Name field.

Step 4. Click the appropriate radio button to choose the service type.

- Connect on Demand — Connection to the Internet becomes disconnected after a specific amount of inactivity. Enter a period of time in minutes in the Max Idle Time after which the connection to the Internet becomes disconnected. The default value is 5 minutes.
- Keep Alive — The Internet connection is always on. The router will periodically sent out data packets to ensure the connection is always maintained. Enter a time period in seconds in the Redial Period field that the router will wait before it sends another data packet.

Step 5. Click the appropriate radio button to choose the size of the transmission unit for the WAN connection. MTU (Maximum Transmission Unit) indicates the maximum size of packet that can go over the network.

- Auto — Automatically specifies the transmission packet size according to the network.
- Manual — Manually specify the transmission packet size. If you choose this option enter the maximum size of the packet in bytes in the field beside Manual. The default value is 1500 bytes.

Step 6. (Optional) If you want to enable IPv6 of DHCP client process check the **Enable DHCP-PD** check box. Your ISP may use DHCP-PD to send LAN prefixes via DHCPv6.

Step 7. (Optional) If you know the LAN IP address, enter the LAN IPv6 prefix in the LAN IPv6 Address field.

Step 8. Click **Save** to save the settings.