

# Forwarding Point-to-Point Tunneling Protocol (PPTP) to Routing and Remote Access Service (RRAS) on RV016, RV042, RV042G and RV082 VPN Routers

## Objective

Point-to-Point Tunneling Protocol (PPTP) is a method of implementing VPNs. PPTP uses a control channel over Transmission Control Protocol (TCP) and Generic Routing Encapsulation (GRE) on Point-to-Point Protocol (PPP) packets. Routing and Remote Access Service (RRAS) is a server-software that enables the server to function as a network router. When PPTP is forwarded to RRAS, it allows the RRAS server to be able to control the network forwarding the PPTP.

The objective of this document is to explain how to forward Point-to-Point Tunneling Protocol (PPTP) to Routing and Remote Access Service (RRAS).

## Applicable Devices

- RV016
- RV042
- RV042G
- RV082

## Forwarding PPTP to RRAS

Step 1. Log in to the web configuration utility and choose **Setup > Forwarding**. The view of the *Forwarding* page is shown below.

Step 2. From the Service drop-down list, choose **PPTP** for Point-to-Point Tunneling Protocol.

Step 3. In the IP Address field, enter the IP address of the server that hosts the VPN service. The IP address needs to be from the same subnet (you can use a subnet calculator to verify).

Step 4. Check the **Enable** check box to enable Port Range Forwarding on the VPN Router.

Step 5. Click **Add to List**.

**Forwarding**  
Port Range Forwarding

Service : All Traffic [TCP&UDP/1~65535]

IP Address :

Enable :

Step 6. Click **Save**.

## Bandwidth Configuration

Bandwidth management measures and controls the communications on a network link. Bandwidth management is measured in bits per second (bps) or Bytes per second (Bps). Bandwidth Configuration settings allow upstream and downstream traffic, as well as Quality of Service (QoS) settings for various types of traffic.

Step 1. In the web configuration utility, choose **System Management > Bandwidth Management**. The *Bandwidth Management* page opens:

**The Maximum Bandwidth Provided by ISP**

Interface	Upstream (Kbit/sec)	Downstream (Kbit/sec)
WAN1	<input type="text" value="512"/>	<input type="text" value="512"/>
WAN2	<input type="text" value="512"/>	<input type="text" value="512"/>

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**Bandwidth Management Type**

Type :  Rate Control  Priority

Interface :  WAN1  WAN2

Service : GRE [GRE/0~0]

IP :  to

Direction :

Min. Rate :  Kbit/sec

Max. Rate :  Kbit/sec

Enable :

Step 2. For Type, click the **Rate Control** radio button.

Step 3. Check the checkbox of WAN **Interface** in the Interface field you want to apply the configuration

Step 4. From the Service drop-down list, choose **GRE**. GRE is an encapsulating protocol used inside virtual point-to-point links, and is required to forward PPTP to RRAS.

Step 5. In the IP fields, enter the applicable range of IP addresses that the server will use.

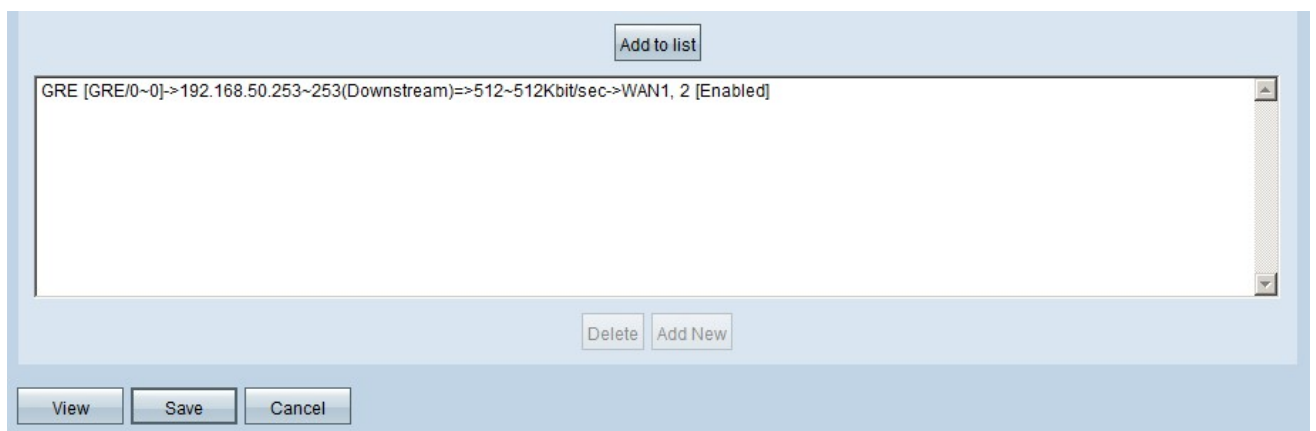
Step 6. From the Direction drop-down list, choose **Downstream**.

Step 7. In the Min. Rate field, enter the minimum rate in Kbit/sec for the bandwidth.

Step 8. In the Max. Rate field, enter the maximum rate in Kbit/sec for the bandwidth.

Step 9. Check **Enable** to enable the Bandwidth Management adjustments created.

Step 10. Click **Add to list**.



The screenshot shows a network configuration window with a light blue border. At the top center is an "Add to list" button. Below it is a large text area containing the text: "GRE [GRE/0~0]->192.168.50.253~253(Downstream)=>512~512Kbit/sec->WAN1, 2 [Enabled]". Below the text area are "Delete" and "Add New" buttons. At the bottom of the window are "View", "Save", and "Cancel" buttons.

Step 11. Click **Save**.