

# Dual WAN Configuration on RV320 and RV325 VPN Router Series

## Objective

WAN is a network that consists of multiple LANs. The RV32x VPN Router Series supports a dual WAN feature that allows both WAN ports to be used simultaneously. The WAN connections can also be configured as a failover setup to ensure continuous Internet connectivity. To further optimize dual WAN use, the RV32x VPN Router Series uses protocol binding. Protocol binding allows for specific traffic to be sent through a specific WAN port.

This article explains how to configure dual WAN on the RV32x VPN Router Series.

## Applicable Devices

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

## Software Version

- v1.1.0.09

## Dual Wan

Step 1. Log in to the Web Configuration Utility and choose **System Management > Dual WAN**. The *Dual WAN* page opens:

Dual WAN

Load Balance

Smart Link Backup : Primary WAN WAN1 ( Specify which WAN is Primary, the other one will be backup )

Load Balance (Auto Mode)

Interface Setting Table	
Interface	Mode
<input type="radio"/> WAN1	Auto
<input type="radio"/> WAN2	Auto

Edit

Save Cancel

## Load Balance

Load Balance

Smart Link Backup : Primary WAN WAN1 ( Specify which WAN is Primary, the other one will be backup )

Load Balance (Auto Mode)

Step 1. Click the radio button that corresponds to the desired dual WAN mode.

- Smart Link Backup — This option ensures continuous WAN connectivity on the router. If the primary WAN loses connection, the backup WAN takes over. Choose the WAN that is designated as the primary WAN from the drop-down list.
- Load Balance — Use both WAN connections simultaneously. This increases the available bandwidth for the router.

Step 2. Click **Save**. The dual WAN mode is configured.

## Edit Wan Interface

Step 1. Log in to the Router Configuration Utility and choose **System Management > Dual WAN**. The *Dual WAN* page opens:

Dual WAN

**Load Balance**

Smart Link Backup : Primary WAN WAN1 ( Specify which WAN is Primary, the other one will be backup )

Load Balance (Auto Mode)

**Interface Setting Table**

Interface	Mode
<input checked="" type="radio"/> WAN1	Auto
<input type="radio"/> WAN2	Auto

Step 2. Click the radio button of the interface you want to edit.

Step 3. Click **Edit**.

### Dual WAN

**Max Bandwidth Provided by ISP**

Interface: WAN1

Upstream: 10000 kb/s

Downstream: 10000 kb/s

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**Network Service Detection**

Enable Network Service Detection

Retry count: 3 (Range: 1 - 99999, Default: 3)

Retry timeout: 10 sec (Range: 1 - 9999999, Default: 10)

When Fail: Keep System Log and Remove the Connection

Default Gateway

ISP Host:

Remote Host:

DNS Lookup Host:

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**Protocol Binding Table** Items 0-0 of 0 5 per page

<input type="checkbox"/>	Service	Source IP	Destination IP	Interface	Status
0 results found!					

Add Edit Delete Service Management ...

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Save Cancel Back

Refer to the following subsections for information about the *blank* window.

- [WAN Bandwidth](#) — How to configure bandwidth for a specified WAN interface.
- [Network Service Detection](#) — How to perform a ping test to detect WAN connectivity.
- [Manage Protocol Binding](#) — How to configure a protocol binding for a specified WAN interface. Protocol bindings determine which WAN interface is used for certain traffic.

## WAN Bandwidth

**Max Bandwidth Provided by ISP**

Interface: WAN1

Upstream: 20000 kb/s

Downstream: 152000 kb/s

Step 1. Enter the maximum upload bandwidth in kilobits per second provided by your ISP in the Upstream field.

Step 2. Enter the maximum download bandwidth in kilobits per second provided by your ISP in the Downstream field.

Step 3. Click **Save**. The bandwidth settings are configured.

## Network Service Detection

Step 1. Check **Enable Network Service Detection** to allow the router to detect connectivity. This is performed through a ping test which is performed on a configured IP address.

Step 2. Enter the number of times the router tries to ping the configured IP address in the Retry Count field.

Step 3. Enter how many seconds the router waits between pings in the Retry Timeout field.

Step 4. From the When Fail drop-down list, choose an action to take place when a ping test fails.

- Keep System Log and Remove the Connection — A failover occurs and the backup WAN interface takes control. The primary WAN resumes control when the connection to the primary WAN is restored.
- Generate the Error Condition in the System Log — A failure is recorded in the system log and no failover takes place.

Step 5. Check the check box of the location that is to be pinged for the ping test.

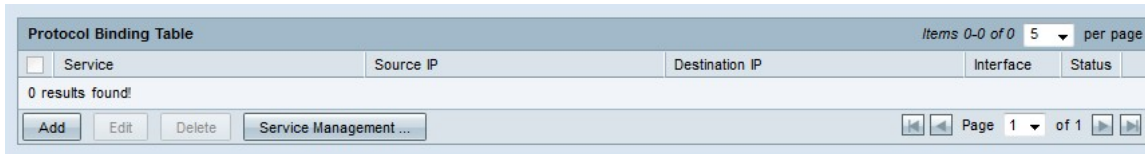
- Default Gateway — The RV320 pings the configured default gateway.
- ISP Host — Enter the IP of the ISP host for the router to ping.
- Remote Host — Enter an IP of a remote host for the router to ping.
- DNS Lookup Host — Enter a host name or domain name for the router to ping.

Step 6. Click **Save**. The network service detection settings are configured.

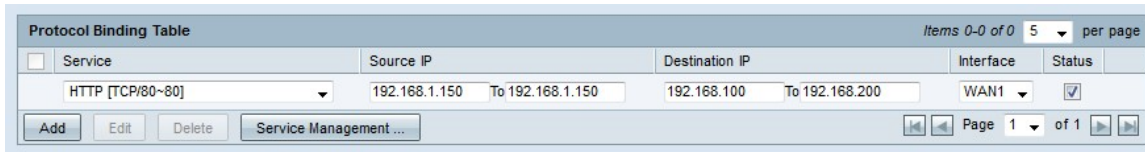
## Manage Protocol Binding

### Add Protocol Binding

Protocol Binding is a feature that is used to send specific traffic through a specific WAN interface. Any traffic that matches the type of traffic and is sent from the configured source IP addresses to the configured destination addresses is sent through the configured WAN interface of the protocol binding rule. Protocol Binding is only available if the dual WAN mode is configured as load balance.



Step 1. Click **Add** in the Protocol Binding Table to add a new protocol binding to the specified WAN interface.



Step 2. From the Service drop-down list choose the type of traffic that will apply to the protocol binding.

Step 3. Enter the source IP addresses that will apply to the protocol binding in the Source IP field.

Step 4. Enter the destination IP address that will apply to the protocol binding in the Destination IP field.

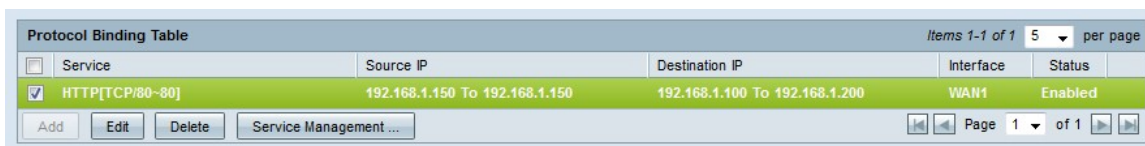
Step 5. From the Interface drop-down list choose the interface that the traffic will go through.

Step 6. Check the check box in the Status field to enable the protocol binding.

**Note:** Click **Service Management** to add a service. Click [here](#) to go to the **Service Management** section.

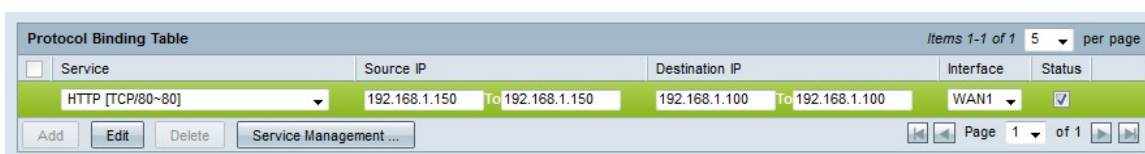
Step 7. Click **Save**. The protocol binding settings are configured.

## Edit Protocol Binding



Step 1. Check the check box of the protocol binding you want to edit.

Step 2. Click **Edit** in the Protocol Binding Table.



Step 3. From the Service drop-down list choose the service that will apply to the protocol binding.

Step 4. Edit the source IP addresses that will apply to the protocol binding in the Source IP field.

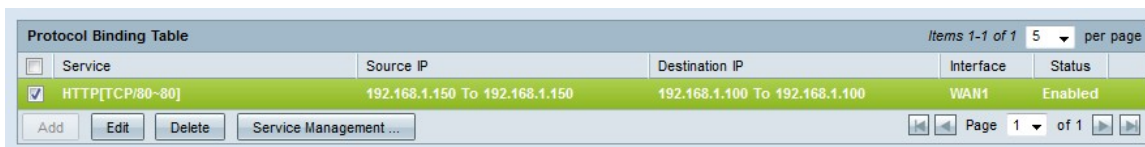
Step 5. Edit the destination IP address that will apply to the protocol binding in the Destination IP field.

Step 6. From the Interface drop-down list choose the interface that the traffic will go through.

Step 7. Check the check box in the Status field to enable the protocol binding.

Step 8. Click **Save**. The protocol binding configuration is updated.

## Delete Protocol Binding



Service	Source IP	Destination IP	Interface	Status
<input checked="" type="checkbox"/> HTTP[TCP/80~80]	192.168.1.150 To 192.168.1.150	192.168.1.100 To 192.168.1.100	WAN1	Enabled

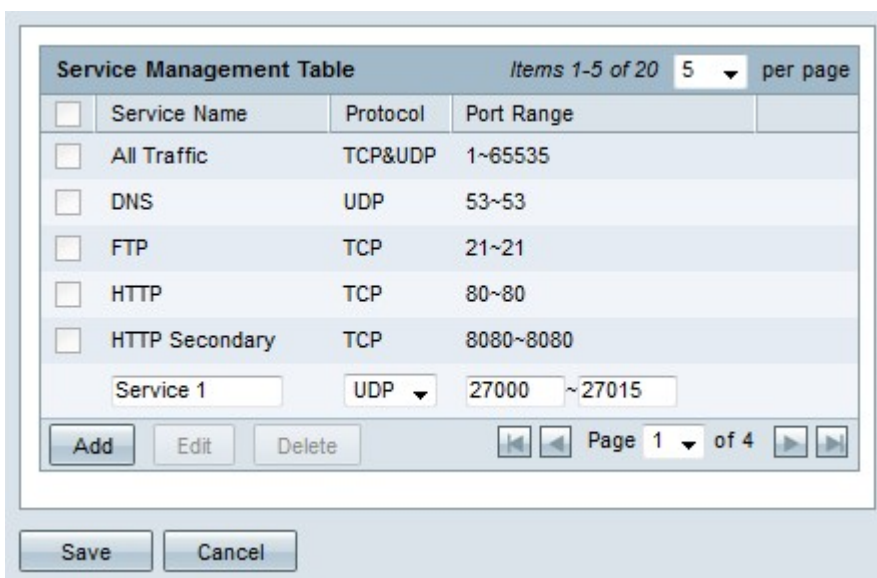
Step 1. Check the check box of the protocol binding you want to delete.

Step 2. Click Delete in the Protocol Binding Table.

Step 3. Click **Save**. The protocol binding configuration is deleted.

## Service Management

Step 1. Click **Service Management**. The *Service Management* window appears.



Service Name	Protocol	Port Range
<input type="checkbox"/> All Traffic	TCP&UDP	1~65535
<input type="checkbox"/> DNS	UDP	53~53
<input type="checkbox"/> FTP	TCP	21~21
<input type="checkbox"/> HTTP	TCP	80~80
<input type="checkbox"/> HTTP Secondary	TCP	8080~8080

Service 1    UDP    27000 ~ 27015

Step 2. Click **Add** to add a new service.

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

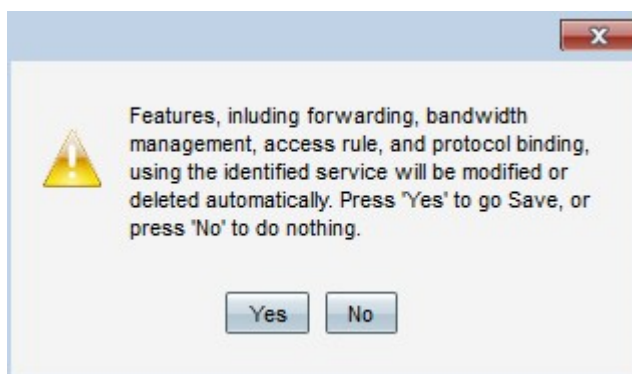
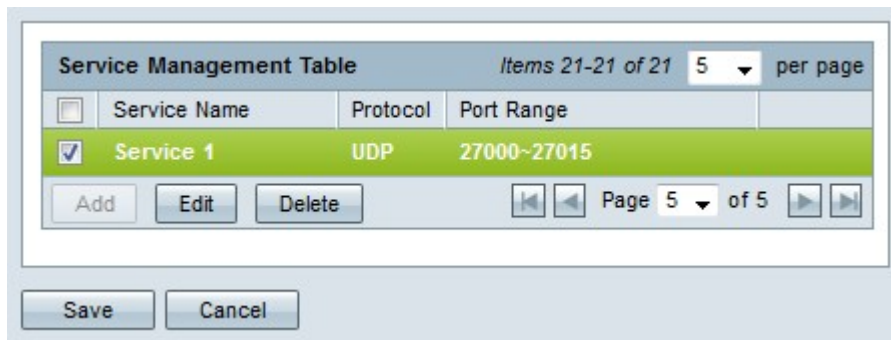
Step 4. From the protocol drop-down list choose the protocol that the service uses.

- TCP — The service forwards Transmission Control Protocol (TCP) packets.
- UDP — The service forwards User Datagram Protocol (UDP) packets.

- IPv6 — The service forwards all IPv6 traffic.

Step 5. If the protocol is either TCP or UDP, enter the range of ports that is reserved for the service in the Port Range field.

Step 6. Click **Save**. The service is saved to the Service Management Table.



Step 7. (Optional) Check the check box of the service you want to edit, click **Edit**, edit the desired fields and click **Save**. A *warning window* appears. Click **Yes**. The service configuration is updated.

**Note:** Any configuration that is associated with the edited service will be automatically updated.

Step 8. (Optional) Check the check box of the service you want to delete, click **Delete** and click **Save**. A warning window appears. Click **Yes**. The service configuration is deleted.

**Note:** Any configuration that is associated with the deleted service will be automatically deleted.