

Configure Inbound Load Balance on RV320 and RV325 VPN Routers

Objective

Network load balance distributes network traffic to make the best use of the network bandwidth and to provide network redundancy. Inbound load balance is one of the network load balance techniques where traffic is balanced through an external system or service, or a dynamic DNS system. Inbound load balance provides the flexibility to balance equal network traffic through different WAN ports without any complex routing protocol.

The objective of this document is to show you how to configure inbound load balance on RV32x VPN Router Series.

Applicable Devices

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

Software Version

- v1.1.0.09

Configure Inbound Load Balance

Step 1. Log in to the web configuration utility and choose **Setup > Inbound Load Balance**. The *Inbound Load Balance* page opens:

Inbound Load Balance

Enable Inbound Load Balance

Domain Name Table		
Domain Name	TTL	Admin
<input type="text"/>	7200	<input type="text"/> @yahoo.com

DNS Server Settings (NS Record) Table	
Name Server	Interface
<input type="text"/>	<input checked="" type="radio"/> WAN1: <u>0.0.0.0</u> <input type="radio"/> WAN2: <u>0.0.0.0</u>
<input type="text"/>	<input checked="" type="radio"/> WAN1: <u>0.0.0.0</u> <input type="radio"/> WAN2: <u>0.0.0.0</u>

Host Record (A Record) Table	
Host Name	WAN IP
<input type="text"/>	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input type="checkbox"/> WAN2: <u>0.0.0.0</u>
<input type="text"/>	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input type="checkbox"/> WAN2: <u>0.0.0.0</u>

Alias Record (CName Record) Table	
Alias	Target
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Step 2. Check **Enable Inbound Load Balance** check box to enable network traffic distribution through two WAN ports.

Inbound Load Balance

Enable Inbound Load Balance

Domain Name Table		
Domain Name	TTL	Admin
<input type="text"/>	7200	<input type="text"/> @yahoo.com

DNS Server Settings (NS Record) Table	
Name Server	Interface
<input type="text"/>	<input checked="" type="radio"/> WAN1: <u>0.0.0.0</u> <input type="radio"/> WAN2: <u>0.0.0.0</u>
<input type="text"/>	<input checked="" type="radio"/> WAN1: <u>0.0.0.0</u> <input type="radio"/> WAN2: <u>0.0.0.0</u>

Domain Name Table

Domain Names are registered names of the Domain Name Server (DNS) which are used to identify IP address of any specific web page.

Step 1. Enter the domain name which your Internet Service Provider (ISP) provides you for your service in the *Domain Name* field.

Domain Name Table		
Domain Name	TTL	Admin
example.com	7100	admin@example.com

DNS Server Settings (NS Record) Table	
Name Server	Interface
<input type="text"/> .example.com	<input type="radio"/> WAN1: 0.0.0.0 <input checked="" type="radio"/> WAN2: 0.0.0.0
<input type="text"/> .example.com	<input checked="" type="radio"/> WAN1: 0.0.0.0 <input type="radio"/> WAN2: 0.0.0.0

Step 2. Enter the time, in seconds, that you want to store the DNS information in the cache memory of the DNS server in the *TTL* field. The default is 7200 seconds. The range is from 0 to 65535 seconds.

Step 3. Enter the e-mail address of the administrator to contact in the *Admin* field.

Step 4. If you want to save your configuration so far and leave the other configuration as default, click **Save** to save the settings.

DNS Server Settings (NS Record) Table

Name server translates the human recognizable domain name in to machine recognizable numeric IP address. For equal load balancing, you need to provide the name server for your domain name server and via which WAN port the name server operates.

Step 1. Enter name server (NS) of the DNS in the *Name Server* field.

DNS Server Settings (NS Record) Table	
Name Server	Interface
ns1.example.com	<input type="radio"/> WAN1: 0.0.0.0 <input checked="" type="radio"/> WAN2: 0.0.0.0
<input type="text"/> .example.com	<input checked="" type="radio"/> WAN1: 0.0.0.0 <input type="radio"/> WAN2: 0.0.0.0

Step 2. Click the appropriate WAN interface of the selected name server.

Step 3. If you want to save your configuration so far and leave the other configuration as default, click **Save** to save the settings.

Host Record (A Record) Table

Host name is used to identify any unique user of the domain. For load balancing, you need to provide the host name for whom you want to divide the load equally through the WAN ports.

Step 1. Enter the host name which provides the FTP or mail services in the *Host Name* field.

Inbound Load Balance

Enable Inbound Load Balance

Domain Name Table

Domain Name	TTL	Admin
example.com	7100	admin@example.com

DNS Server Settings (NS Record) Table

Name Server	Interface
ns1.example.com	<input type="radio"/> WAN1: 0.0.0.0 <input checked="" type="radio"/> WAN2: 0.0.0.0
example.com	<input checked="" type="radio"/> WAN1: 0.0.0.0 <input type="radio"/> WAN2: 0.0.0.0

Host Record (A Record) Table

Host Name	WAN IP
user.example.com	<input type="checkbox"/> WAN1: 0.0.0.0 <input checked="" type="checkbox"/> WAN2: 0.0.0.0
example.com	<input type="checkbox"/> WAN1: 0.0.0.0 <input type="checkbox"/> WAN2: 0.0.0.0

Step 2. Check the appropriate check box to choose appropriate WAN interface for the host.

Step 3. If you want to save your configuration so far and leave the other configuration as default, click **Save** to save the settings.

Alias Record (CName Record) Table

Alias is the other name to identify the host of the domain. For equal load balancing, you need to provide the alias name of your host for whom you want to equally divide the load.

Step 1. Enter the Alias name in the *Alias* field. This helps to redirect a specific sub domain to other domain or sub domain according to the need.

Host Record (A Record) Table	
Host Name	WAN IP
<input type="text" value="user"/> .example.com	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input checked="" type="checkbox"/> WAN2: <u>0.0.0.0</u>
<input type="text"/> .example.com	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input type="checkbox"/> WAN2: <u>0.0.0.0</u>

Alias Record (CName Record) Table	
Alias	Target
<input type="text" value="host"/> .example.com	<input type="text" value="user"/> .example.com
<input type="text"/> .example.com	<input type="text"/> .example.com

Step 2. Enter the specific domain name for the alias name in the *Target* field.

Step 3. If you want to save your configuration so far and leave the other configuration as default, click **Save** to save the settings.

Sender Policy Framework (SPF)

SPF provides security from email spoofing through the prevention of email spam through sender IP address verification. This configuration is not mandatory, but it provides security to your system.

Step 1. Click **SPF Settings..** to add email based record test.

Host Record (A Record) Table	
Host Name	WAN IP
<input type="text" value="user"/> .example.com	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input checked="" type="checkbox"/> WAN2: <u>0.0.0.0</u>
<input type="text"/> .example.com	<input type="checkbox"/> WAN1: <u>0.0.0.0</u> <input type="checkbox"/> WAN2: <u>0.0.0.0</u>

Alias Record (CName Record) Table	
Alias	Target
<input type="text" value="host"/> .example.com	<input type="text" value="user"/> .example.com
<input type="text"/> .example.com	<input type="text"/> .example.com

SPF Settings ...

The SPF Settings Table window opens:

SPF Settings Table Items 0-0 of 0 5 per page

<input type="checkbox"/>	SPF TXT
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0 results found!

Add Edit Delete Page 1 of 1

Save Cancel

Step 2. Click Add. A new row is added:

SPF Settings Table Items 0-0 of 0 5 per page

<input type="checkbox"/>	SPF TXT
<input type="checkbox"/>	

Add Edit Delete Page 1 of 1

Save Cancel

Step 3. Enter the name of the mail server in the *SPF TXT* field.

SPF Settings Table Items 0-0 of 0 5 per page

<input type="checkbox"/>	SPF TXT
<input type="checkbox"/>	mail.example.com

Add Edit Delete Page 1 of 1

Save Cancel

Step 4. (Optional) If you want to edit the SPF text, check the check box beside the specific SPF text which you want to edit, click **Edit**, change the desired fields, and click **Save**.

Step 5. (Optional) If you want to delete the SPF Text, check the check box beside the specific SPF Text which you want to delete, and click **Delete**.

Step 6. (Optional) If you want to save your configuration so far and leave the other configuration as default, click **Save** to save the settings.

Mail Server (MX Record) Table

Mail server is the mail server of the host of the domain. For load balancing, you need to provide the mail server of the host for whom you want to equally divide the load.

Step 1. Enter the host name without the domain name of the mail server in the *Host Name* field.

Alias Record (CName Record) Table	
Alias	Target
host .example.com	user .example.com
<input type="text"/> .example.com	<input type="text"/> .example.com

SPF Settings ...

Mail Server(MX Record) Table		
Host Name	Weight	Mail Server
user .example.com	10	mail .example.com
<input type="text"/> .example.com	20	<input type="text"/> .example.com

Save Cancel

- Weight — Represents the number of hosts for the mail server.

Step 2. Enter the name of the internal mail server which is saved in the *Host Record (A Record) Table* section or the external mail server in the *Mail Server* field.

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