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One-to-One Network Address Translation (NAT) on RV130 and RV130W VPN Routers

Objective

One-to-one Network Address Translation (NAT) maps local IP addresses behind your firewall to global IP addresses. By allowing systems configured with private IP addresses behind a firewall to appear to have public IP addresses, they can become visible to external networks and available for inbound connections.

The objective of this document is to explain how to configure One-to-One NAT on the RV130 and RV130W Router.

Applicable Devices

- RV130
- RV130W

Software Version

- v1.0.1.3

Create One-to-One NAT

Adding a New One-to-One NAT Rule

Step 1. Log into the web configuration utility and choose **Firewall > One-to-One NAT**. The *One-to-One NAT* page opens:

One-to-One NAT

<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	No data to display			
<input type="button" value="Add Row"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Configure Services"/>				

Step 2. Click **Add Row** to add a new One-To-One NAT rule.

One-to-One NAT

<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	No data to display			
<input type="button" value="Add Row"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Configure Services"/>				

Step 3. In the *Private Range Begin* field, enter the starting IP address of the private (LAN) IP address range that you want to be available to public networks.

One-to-One NAT

You must save before you can edit or delete.

<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	192.168.1.5			All Traffic [All]
<input type="button" value="Add Row"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Configure Services"/>				

Note: The LAN IP address of the router should not be included in the range you specify.

Step 4. In the *Public Range Begin* field, enter the starting IP address of the public (WAN) IP address range. This IP address is usually provided by your Internet Service Provider. The first public IP address you enter will be matched with the first private IP address you entered, the second public IP address will be paired with the second private IP address, and so on.

One-to-One NAT

You must save before you can edit or delete.

<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	192.168.1.5			All Traffic [All]
<input type="button" value="Add Row"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Configure Services"/>				

Note: The WAN IP address of the router should not be included in the range you specify.

Step 5. In the *Range Length* field, enter the number of public IP addresses that should be mapped to private addresses, given the private and public beginning ranges previously entered. The range length cannot exceed the number of valid IP addresses. To map a single address, enter “1”.

One-to-One NAT

You must save before you can edit or delete.

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Buttons: Add Row, Edit, Delete, Configure Services, Save, Cancel

Step 6. In the *Service* drop-down list, choose which service will be accepted by the private IP (LAN) address when traffic is sent to the corresponding public IP address.

One-to-One NAT

You must save before you can edit or delete.

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Buttons: Add Row, Edit, Delete, Configure Services, Save, Cancel

- All Traffic [All]
- DNS [UDP/53-53]
- FTP [TCP/21-21]
- HTTP [TCP/80-80]
- HTTP Secondary [TCP/8080-8080]
- HTTPS [TCP/443-443]
- HTTPS Secondary [TCP/8443-8443]
- TFTP [UDP/69-69]
- IMAP [TCP/143-143]
- NNTTP [TCP/119-119]
- POP3 [TCP/110-110]
- SNMP [UDP/161-161]
- SMTP [TCP/25-25]
- TELNET [TCP/23-23]
- TELNET Secondary [TCP/8023-8023]
- TELNET SSL [TCP/992-992]
- Voice(SIP) [TCP & UDP/5060-5061]

Note: If you want to change the services available in this field, click the **Configure Services** button to open the *Service Management* page. For more information, refer to the article [Service Management on the RV130 and RV130W](#).

Step 7. Click **Save** to save your configuration for your one-to-one NAT rule.

One-to-One NAT

You must save before you can edit or delete.

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Add Row Edit Delete Configure Services

Save Cancel

Note: A maximum of ten rules can be made.

Editing/Deleting a One-to-One NAT Rule

Step 1. Check the check box(s) corresponding to the desired rule(s) you want to edit or delete.

One-to-One NAT

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input checked="" type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Add Row Edit Delete Configure Services

Save Cancel

Step 2. If you want to edit the selected rule(s), click **Edit**. If you want to delete the selected rule(s), click **Delete**. If you click **Delete**, skip to [Step 4](#).

One-to-One NAT

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input checked="" type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Add Row Edit Delete Configure Services


Save Cancel

Note: Clicking **Delete** will cause a warning to appear saying that you must click **Save** to save your changes.

Step 3. If you clicked **Edit**, the fields of the rule(s) you selected will become available. Make any necessary changes.

One-to-One NAT

You must save before you can edit or delete.

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input checked="" type="checkbox"/>	192.168.1.5		3	All Traffic [All]

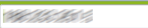
Add Row Edit Delete Configure Services

Save Cancel

Step 4. Click **Save** to apply your changes or delete the specified rule(s).

One-to-One NAT

You must save before you can edit or delete.

One-to-One NAT Rule Table				
<input type="checkbox"/>	Private Range Begin	Public Range Begin	Range Length	Service
<input checked="" type="checkbox"/>	192.168.1.5		3	All Traffic [All]

Add Row Edit Delete Configure Services

Save Cancel