

# Static Route Setup

## Introduction

If you have many private subnets behind the router, or you want to access another public subnet via an inside router, you can configure the router to route IP packets to those inside IP networks using 1st IP address/subnet mask fields on the **LAN TCP/IP and DHCP Setup** page.

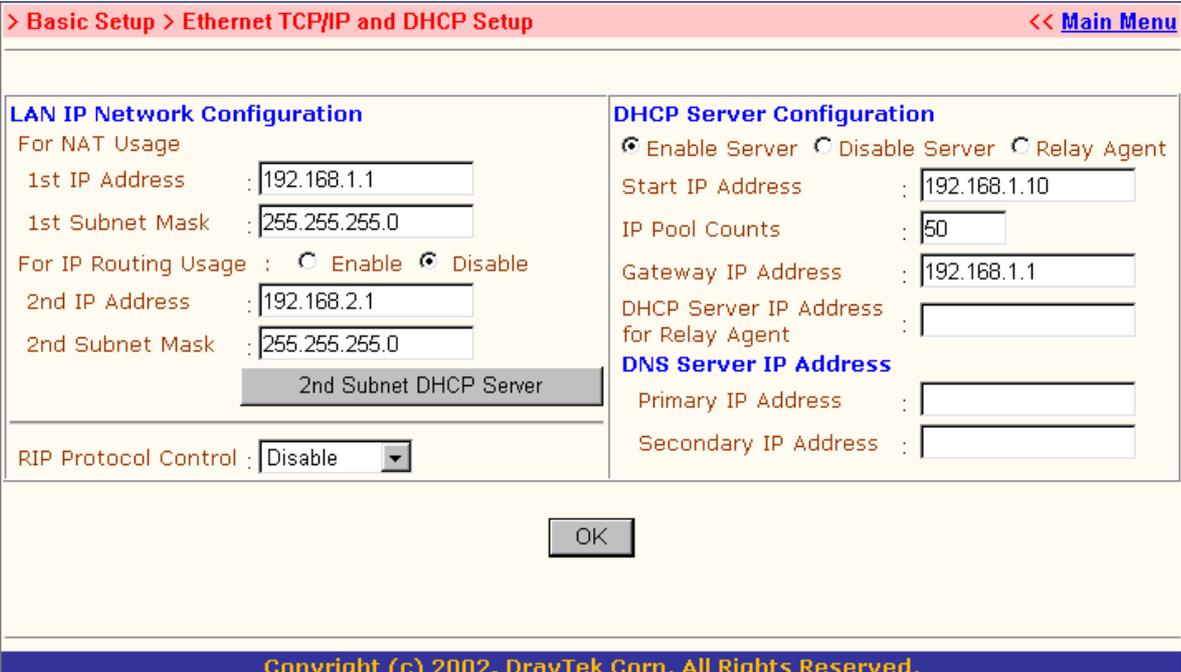
The router also has RIP (Routing Information Protocol) built-in by default. If the neighboring routers have the same protocol, the RIP will be used for exchanging routing information. Here, the **Static Route Setup** just provides a way to guide specified IP packets through specified routers statically.

## Configuration

### - Add Static Routes to Inside Private and Public Networks

Assume the Internet access setup has been configured and worked properly. You use the 1st subnet address 192.168.1.0/24 to surf the Internet and also an internal private subnet 192.168.10.0/24 via an internal router (192.168.1.2/24) and an internal public subnet 211.100.88.0/28 via an internal router (192.168.1.3/24). Also, the router 192.168.1.1/24 is a default gateway for the router 192.168.1.2/24.

1. Click **LAN TCP/IP and DHCP Setup**, select **RIP Protocol Control** as **1st Subnet**, and then click **OK** button.



> Basic Setup > Ethernet TCP/IP and DHCP Setup << Main Menu

LAN IP Network Configuration	DHCP Server Configuration
For NAT Usage	<input checked="" type="radio"/> Enable Server <input type="radio"/> Disable Server <input type="radio"/> Relay Agent
1st IP Address : <input type="text" value="192.168.1.1"/>	Start IP Address : <input type="text" value="192.168.1.10"/>
1st Subnet Mask : <input type="text" value="255.255.255.0"/>	IP Pool Counts : <input type="text" value="50"/>
For IP Routing Usage : <input type="radio"/> Enable <input checked="" type="radio"/> Disable	Gateway IP Address : <input type="text" value="192.168.1.1"/>
2nd IP Address : <input type="text" value="192.168.2.1"/>	DHCP Server IP Address for Relay Agent : <input type="text"/>
2nd Subnet Mask : <input type="text" value="255.255.255.0"/>	<b>DNS Server IP Address</b>
<input type="button" value="2nd Subnet DHCP Server"/>	Primary IP Address : <input type="text"/>
RIP Protocol Control : <input type="text" value="Disable"/>	Secondary IP Address : <input type="text"/>

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**Note:** To set **RIP Protocol Control** as **1st Subnet** has two different meanings. The first one is that the LAN interface could be exchanged RIP packets with neighbor routers via 1st subnet (192.168.1.0/24). The second one is that those inside private subnets (ex. 192.168.10.0/24) could be NATed by the router to the Internet, but do IP routing for each other as well.

2. Add a static route to the inside private subnet 192.168.10.0/24 via the internal router 192.168.1.2/24. Click **Static Route Setup > Index Number** to add a static route to destination subnet 192.168.10.0/24 as below.

> **Advanced Setup** > **Static Route Setup** << **Main Menu**

**Index No. 1** << **Back**

Status/Action:	Active/Add
Destination IP Address:	192.168.10.0
Subnet Mask:	255.255.255.0
Gateway IP Address:	192.168.1.2
Network Interface:	LAN

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3. Add a static route to the inside public subnet 211.100.88.0/28 via 192.168.1.3/24.

> **Advanced Setup** > **Static Route Setup** << **Main Menu**

**Index No. 2** << **Back**

Status/Action:	Active/Add
Destination IP Address:	211.100.88.0
Subnet Mask:	255.255.255.240
Gateway IP Address:	192.168.1.3
Network Interface:	LAN

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**Note:** You should also add a static route in the router 192.168.1.3/24 to route IP packets to 192.168.1.0/24 and 192.168.10.0/24 subnets via the router 192.168.1.1/24.

4. Click **Static Route Setup > View Routing Table** to verify the current routing table.

The screenshot shows the 'Static Route Setup' configuration page for 'Index No. 1'. The page has a light yellow background and a blue header bar with the text '> Advanced Setup > Static Route Setup' on the left and '<< Main Menu' on the right. Below the header, the text 'Index No. 1' is displayed in blue, followed by a '<< Back' link. A central form contains the following fields: 'Status/Action:' with a dropdown menu set to 'Active/Add'; 'Destination IP Address:' with a text box containing '192.168.10.1'; 'Subnet Mask:' with a text box containing '255.255.255.0'; 'Gateway IP Address:' with a text box containing '192.168.1.2'; and 'Network Interface:' with a dropdown menu set to 'LAN'. Below the form is an 'OK' button. At the bottom of the page, a blue footer bar contains the text 'Copyright (c) 2002, DrayTek Corp. All Rights Reserved.'

### - Delete or Deactivate a Static Route

1. Click **Static Route Setup > Index Number** which you want to delete.
2. Select **Status/Action** to **Empty/Clear**. Click **OK** button to delete the route.

The screenshot shows the 'Static Route Setup' configuration page for 'Index No. 1' after the status has been changed. The layout is identical to the previous screenshot, but the 'Status/Action:' dropdown menu is now set to 'Empty/Clear'. The other fields remain the same: 'Destination IP Address:' is '192.168.10.0', 'Subnet Mask:' is '255.255.255.0', 'Gateway IP Address:' is '192.168.1.2', and 'Network Interface:' is 'LAN'. The 'OK' button is still present below the form. The footer bar at the bottom contains the text 'Copyright (c) 2002, DrayTek Corp. All Rights Reserved.'