

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 neighbor 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		Activate : <input checked="" type="radio"/> Yes <input type="radio"/> No	
1st IP Address	: 192.168.1.1	Start IP Address	: 192.168.1.10
1st Subnet Mask	: 255.255.255.0	IP Pool Counts	: 50
For IP Routing Usage : <input type="radio"/> Enable <input checked="" type="radio"/> Disable		Gateway IP Address	: 192.168.1.1
2nd IP Address	: 192.168.2.1	DNS Server IP Address	
2nd Subnet Mask	: 255.255.255.0	Primary IP Address	
RIP Protocol Control : 1st Subnet ▼		Secondary IP Address	
<input type="button" value="OK"/>			
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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.

The screenshot shows a web browser window with the title bar "> Advanced Setup> Static Route Setup" and a link "<<Main Menu" in the top right. The main content area has a light beige background. At the top left, it says "Index No. 1" in blue, and at the top right, there is a link "<<Back" in blue. In the center, there is a form with a border. The form contains five fields, each with a label on the left and a text input or dropdown on the right: "Status/Action:" with a dropdown menu showing "Active/Add"; "Destination IP Address:" with the text "192.168.10.0"; "Subnet Mask:" with the text "255.255.255.0"; "Gateway IP Address:" with the text "192.168.1.2"; and "Network Interface:" with a dropdown menu showing "LAN". Below the form is a grey "OK" button. At the bottom of the window, there is a dark blue footer bar with the text "Copyright (c) 2002, DrayTek Corp. All Rights Reserved." in yellow.

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

The screenshot shows a web browser window with the title bar "> Advanced Setup> Static Route Setup" and a link "<<Main Menu" in the top right. The main content area has a light beige background. At the top left, it says "Index No. 2" in blue, and at the top right, there is a link "<<Back" in blue. In the center, there is a form with a border. The form contains five fields, each with a label on the left and a text input or dropdown on the right: "Status/Action:" with a dropdown menu showing "Active/Add"; "Destination IP Address:" with the text "211.100.88.0"; "Subnet Mask:" with the text "255.255.255.240"; "Gateway IP Address:" with the text "192.168.1.3"; and "Network Interface:" with a dropdown menu showing "LAN". Below the form is a grey "OK" button. At the bottom of the window, there is a dark blue footer bar with the text "Copyright (c) 2002, DrayTek Corp. All Rights Reserved." in yellow.

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 'Current Running Routing Table' window. The title bar indicates the path '> System Management > Diagnostic Tools' and a '<< Main Menu' link. The window title is 'Current Running Routing Table' with '<< Back | Refresh |' links. A key is provided: 'Key: C - connected, S - static, R - RIP, * - default, ~ - private'. The routing table contains three entries:

Type	Destination IP Address	Subnet Mask	Gateway IP Address	Interface
S~	192.168.10.0/	255.255.255.0	via 192.168.1.2,	IF0
C~	192.168.1.0/	255.255.255.0	is directly connected,	IF0
S~	211.100.88.0/	255.255.255.240	via 192.168.1.3,	IF0

The footer of the window states: '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' window for 'Index No. 1'. The title bar indicates the path '> Advanced Setup> Static Route Setup' and a '<<Main Menu' link. The window title is 'Index No. 1' with '<<Back' link. The 'Status/Action' dropdown is set to 'Empty/Clear'. The other fields are:

Destination IP Address:	192.168.10.0
Subnet Mask:	255.255.255.0
Gateway IP Address:	192.168.1.2
Network Interface:	LAN

An 'OK' button is located below the form. The footer of the window states: 'Copyright (c) 2002, DrayTek Corp. All Rights Reserved.'