

CHAPTER 12

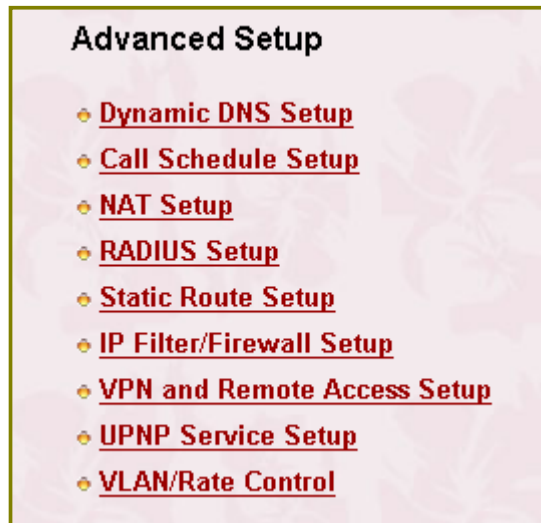
Static Route Setup

12.1 Introduction

Static routes in your Vigor router provide an effective and quick way to route data from one subnet to different subnet without using the Routing Information Protocol (RIP). Basically, a static route is a guiding path in the router to specify how the router will get to a certain subnet by using a certain path. 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 in a static manner. This chapter shows you how to configure static routes within your Vigor routers. Use the following setup link on the Setup Main Menu to configure the Static Route Setup.

Advanced Setup > Static Route Setup



12.2 Configuration

Add Static Routers to Inside Private and Public Networks

Assume the Internet access setup has been configured and the router 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.

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.

Static Route Setup

Basic Setup > Ethernet TCP/IP and DHCP Setup

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 : 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	DHCP Server IP Address for Relay Agent :
2nd Subnet Mask : 255.255.255.0	DNS Server IP Address
<input type="button" value="2nd Subnet DHCP Server"/>	Primary IP Address :
RIP Protocol Control : 1st Subnet	Secondary IP Address :

OK

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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 follows.

Advanced Setup > Static Route Setup

Index No. 1

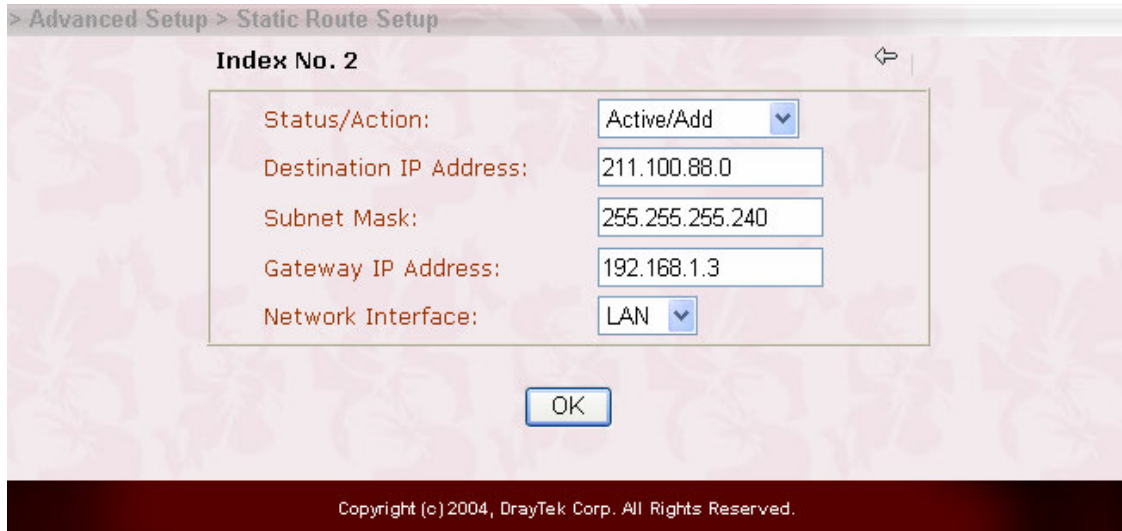
Status/Action:	Active/Add
Destination IP Address:	192.168.10.0
Subnet Mask:	255.255.255.0
Gateway IP Address:	192.168.1.2
Network Interface:	LAN

OK

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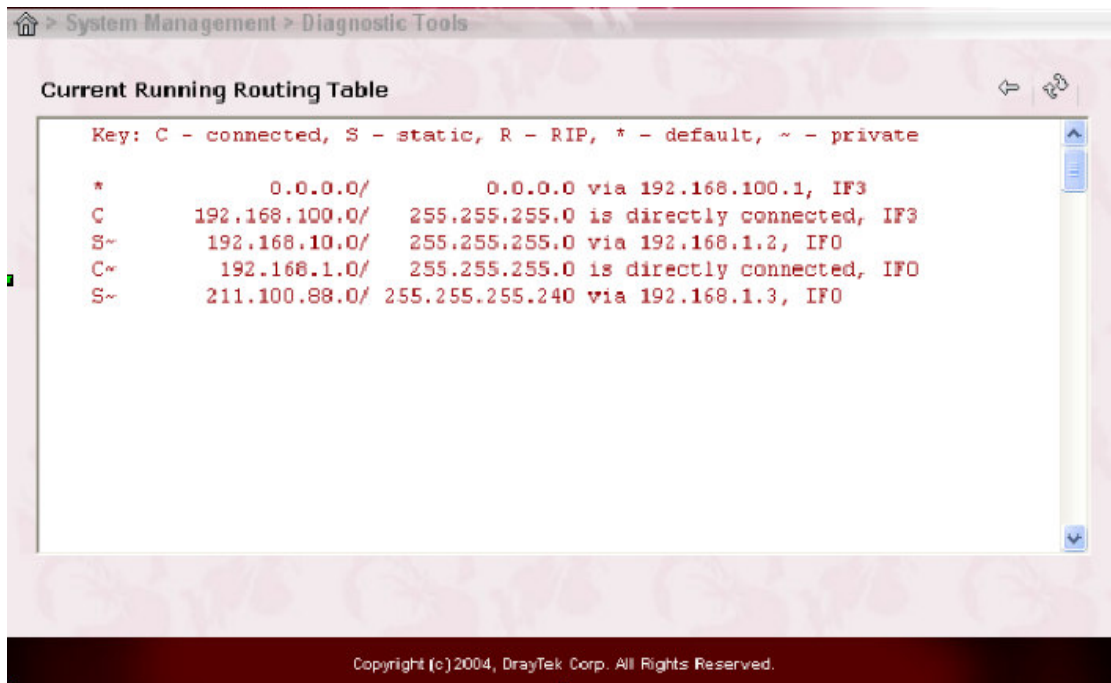
Static Route Setup

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



The image shows a screenshot of the 'Static Route Setup' window in a network management interface. The window title is '> Advanced Setup > Static Route Setup'. Inside, there is a section titled 'Index No. 2'. Below this title is a form with five fields: 'Status/Action:' with a dropdown menu set to 'Active/Add'; 'Destination IP Address:' with a text box containing '211.100.88.0'; 'Subnet Mask:' with a text box containing '255.255.255.240'; 'Gateway IP Address:' with a text box containing '192.168.1.3'; and 'Network Interface:' with a dropdown menu set to 'LAN'. Below the form is an 'OK' button. At the bottom of the window, there is a copyright notice: 'Copyright (c) 2004, DrayTek Corp. All Rights Reserved.'

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



The image shows a screenshot of the 'Current Running Routing Table' window in a network management interface. The window title is '> System Management > Diagnostic Tools'. Inside, there is a section titled 'Current Running Routing Table'. Below this title is a text area displaying the routing table. The text area contains the following information: 'Key: C - connected, S - static, R - RIP, * - default, ~ - private'. Below the key, there are five entries: '* 0.0.0.0/ 0.0.0.0 via 192.168.100.1, IF3', 'C 192.168.100.0/ 255.255.255.0 is directly connected, IF3', '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', and 'S~ 211.100.88.0/ 255.255.255.240 via 192.168.1.3, IF0'. At the bottom of the window, there is a copyright notice: 'Copyright (c) 2004, DrayTek Corp. All Rights Reserved.'

Static Route Setup

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 a web browser window with the address bar displaying "> Advanced Setup > Static Route Setup". The main content area has a light pink background with a subtle floral pattern. At the top left, it says "Index No. 1" with a back arrow icon to its right. Below this is a form with five fields, each with a label in red text and a corresponding input field:

Status/Action:	Empty/Clear ▼
Destination IP Address:	192.168.10.0
Subnet Mask:	255.255.255.0
Gateway IP Address:	192.168.1.2
Network Interface:	LAN ▼

Below the form is an "OK" button. At the bottom of the window, a dark red footer bar contains the text: "Copyright (c) 2004, DrayTek Corp. All Rights Reserved."