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## CHAPTER 8

# Static Route Setup

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### 8.1 Introduction

Static routes in your Vigor router provide a quick and effective 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 that specifies 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 statically. This chapter shows you how to configure static routes with your Vigor router.

### 8.2 Configuration

#### Add Static Routes 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)

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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. 192.168.1.0/24) could be NATed by the router to the Internet, but do IP routing for each other as well.

> Basic Setup > Ethernet TCP/IP and DHCP Setup [<< Main Menu](#)

**LAN IP Network Configuration**

For NAT Usage

1st IP Address : 192.168.1.1

1st Subnet Mask : 255.255.255.0

For IP Routing Usage : ☐ Enable ☒ Disable

2nd IP Address : 192.168.2.1

2nd Subnet Mask : 255.255.255.0

2nd Subnet DHCP Server

RIP Protocol Control : 1st Subnet

**DHCP Server Configuration**

☒ Enable Server ☐ Disable Server ☐ Relay Agent

Start IP Address : 192.168.1.10

IP Pool Counts : 50

Gateway IP Address : 192.168.1.1

DHCP Server IP Address for Relay Agent :

**DNS Server IP Address**

Primary IP Address :

Secondary IP Address :

OK

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.

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> Advanced Setup> Static Route Setup [<<Main Menu](#)

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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

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](#)

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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 ▼

OK

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

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> System Management > Diagnostic Tools << Main Menu

Current Running Routing Table << Back Refresh |

Key: C - connected, S - static, R - RIP, \* - default, ~ - private

S~	192.168.10.0/	255.255.255.0	via 192.168.1.2, IFO
C~	192.168.1.0/	255.255.255.0	is directly connected, IFO
S~	211.100.88.0/	255.255.255.240	via 192.168.1.3, IFO

### 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.

> Advanced Setup> Static Route Setup << Main Menu

Index No. 1 << Back

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

OK