# 2. High Availability Function

This chapter shows how to setup high availability function.

This chapter is divided into the following sections,

Section 2.1: Introduction

Section 2.2: Examples and Web Configurations

## **2.1 Introduction**

The basic application graph is shown in Figure 2-1. There are two Vigor 3300V routers connected to the Internet. One is as Master and the other one is as Slave. Both are connected to a subnet -192.168.1.x from the LAN port. For the further more settings, please refer to the next section.



Figure 2-1. A Scenario of High Availability

### 2.2 Examples and Web Configurations

At first, we need to configure High Availability in the Master device. Please refer to the Figure 2-2.

Mult	Service	Security	VIGOROUS BROADBAND ACCT:					
Quick Setup	System	Network	Advanced	Firewall	QeS	VPN	VolP	2-23:02 P.M.
Network	- LAN -	High Ava	ilability					
High Availabil	łr:	ODita	tie Enable					
Group Numb	e.	(1)	(Range: 1~255)					
Role.		Mante	r 💌					
Virtrual IP :		192.168	(13 )					
								Apply Cancel

Figure 2-2. Web settings of the Master

Then, we have to configure High Availability in the Slave device. Please refer to the Figure 2-3.

Vigor3	300 s	eries . Security						VIGOROUS BROADBAND ACCES
Quick Setup	System	Network	Advanced	Firewall	QoS	VPN	VolP	2:26-30 P.M.
Network	- LAN -	High Ava	ilability					
High Availabil Group Numb	ity en:		ble 💽 Enable) ] (Range: 1-255)					
Role. Wrtrual IP :		Slave (192.165	<b>1.3</b>					
								Apply Cancel

Figure 2-3. Web settings of the Slave

The most important points are as below -

Both the Master and Slave must share the same Group number value.

The "Role" value of the Master device is different from that of the Slave device.

Both the Master and Slave must share the same Virtual IP value.

#### Master Failure / Shutdown

Once the Master unit is shut down or fails, Slave would be switched from idle state to active state after 3 to 4 seconds and then take over Master.

#### Master Restart

Once Master is back to normal, and then Slave will be restored to be idleness.

#### **Multiple Slaves**

There should be only one Master, but multiple Slaves are allowed. Generally speaking, the Slave with the greater LAN IP address will have higher priority to play the role of Master if the original Master is shut down or fails. For example, the IP address 192.168.1.4 will have higher priority over 192.168.1.3.

#### Reference

The HA function was developed based on VRRP (Virtual Router Redundancy Protocol). For further detailed information about VRRP, please refer to RFC 2338.