

5. VoIP NAT Traversal Function

The following flow chart shows the way to setup VoIP NAT Traversal function.

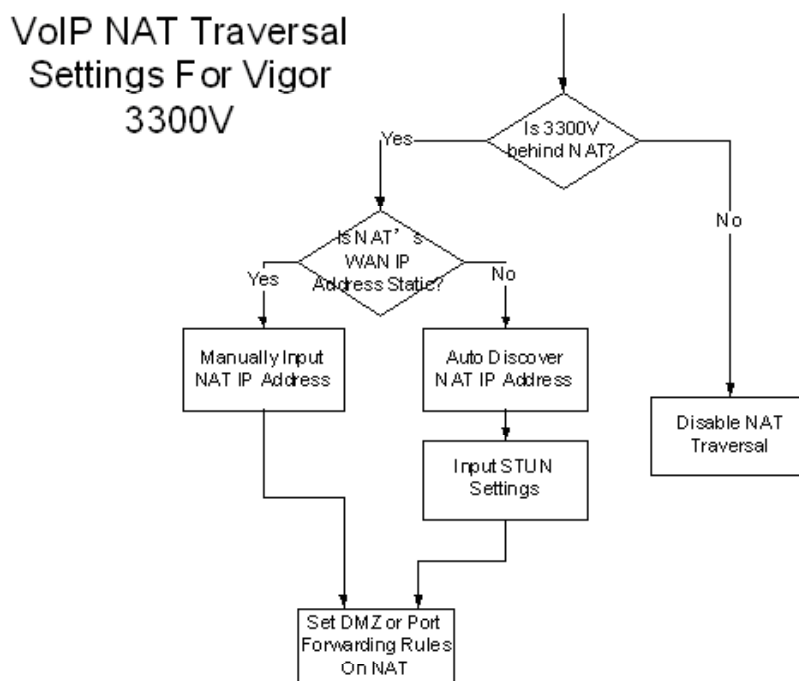


Figure 5-1. Flowchart of setting VoIP NAT Traversal function

5.1 Example and Web configurations

There are several cases listed as below.

5.1.1 Vigor 3300V with Static WAN IP

Vigor 3300V has a public IP address in WAN1, it is not behind any NAT router. Figure 5-2 shows the scenario.

Case 1: Vigor3300V Has Public WAN IP Address (Not Behind NAT)

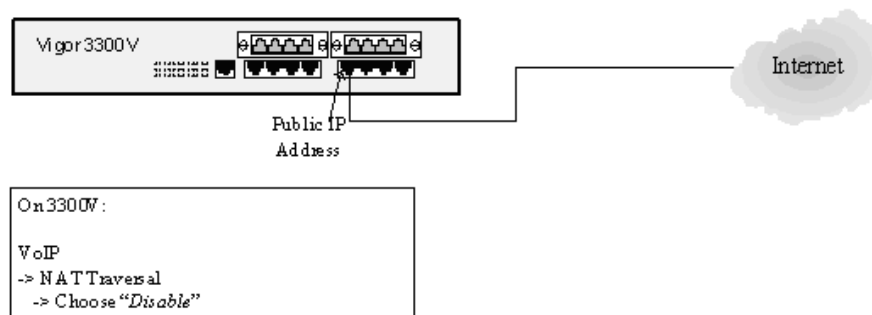


Figure 5-2. Case 1 Scenario

In this case, the users don't need to enable NAT Traversal function, so we left it "Disable", please refer to Figure 5-3.

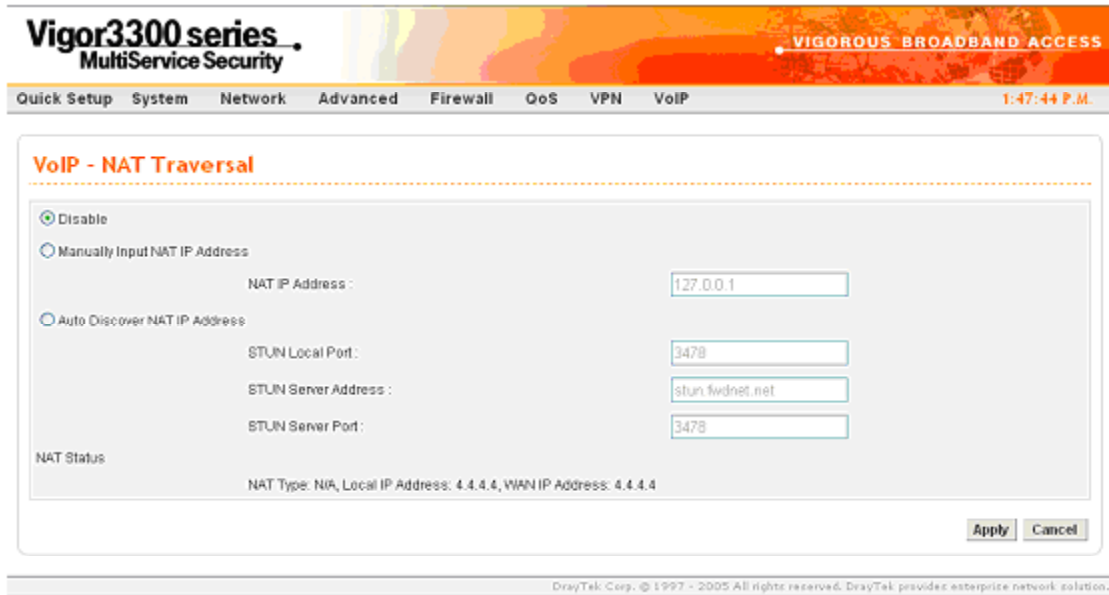


Figure 5-3. Case 1 settings

5.1.2 Vigor 3300V Behind NAT, Static WAN IP

Vigor 3300V is behind a NAT router, the NAT router has a static Public WAN IP Address; please refer to Figure 5-4.

Case 2: Vigor3300 V Behind NAT, NAT Uses Static WAN IP Address

NAT Static WAN IP Address: 1.1.1.1
 3300V WAN IP address: 192.168.1.10
 3300V SIP Local Port: 5060
 3300V RTP Port: 13456 (Beginning)
 3300V T.38 Port: 49170 (Beginning)

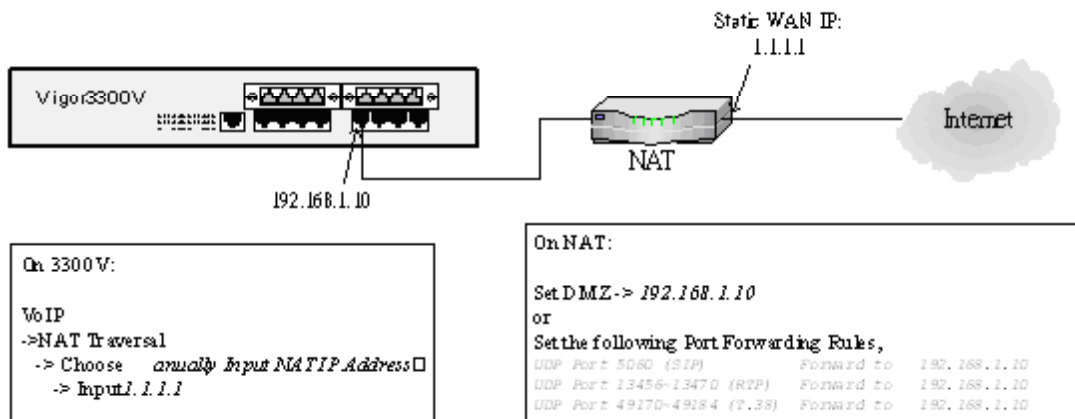


Figure 5-4. Case 2 Scenario

In this case, the user should choose “Manually Input NAT IP Address” then input 1.1.1.1 (NAT router’s WAN IP).

Then, the user should configure DMZ or Port forwarding Rules on the NAT router.

Set DMZ -> 192.168.1.10	OR	Set the following Port Forwarding Rules, UDP Port 5060 (SIP) Forward to 192.168.1.10 UDP Port 13456~13470 (RTP) Forward to 192.168.1.10 UDP Port 49170~49184 (T.38) Forward to 192.168.1.10
--------------------------------------	----	--

Figure 5-5 shows the Web settings on Vigor 3300V.



Figure 5-5. Case 2 settings (NAT Traversal)

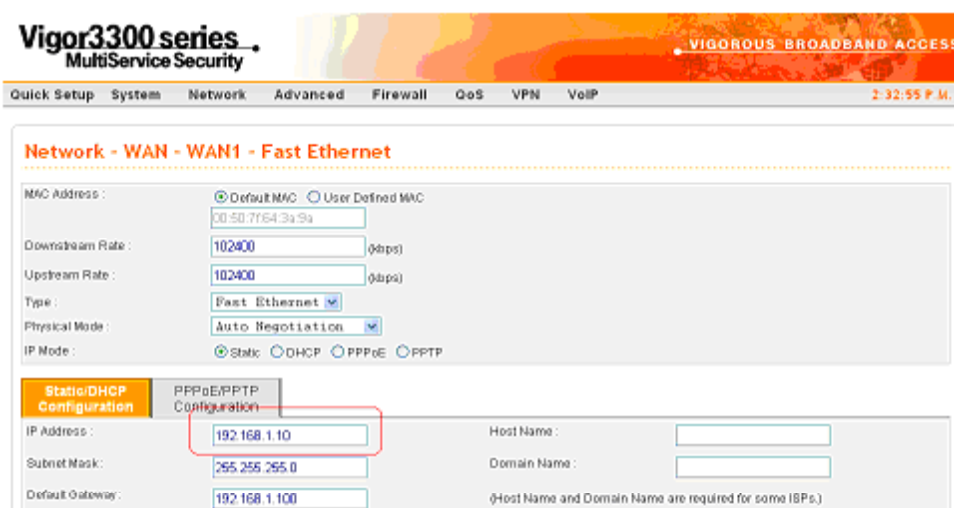


Figure 5-6. Case 2 settings (WAN)

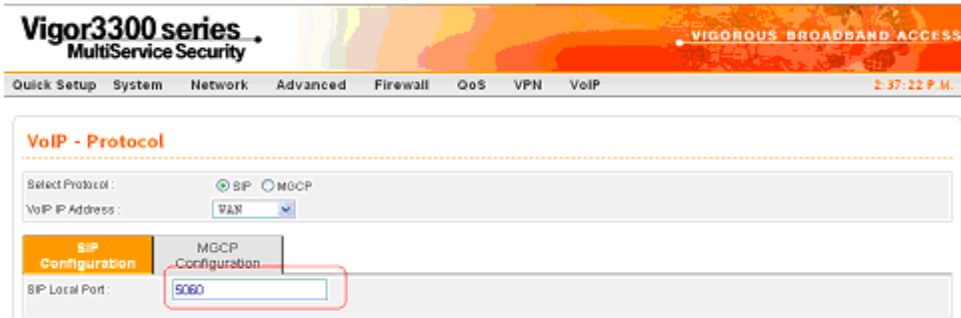


Figure 5-7. Case 2 settings (SIP Local Port)

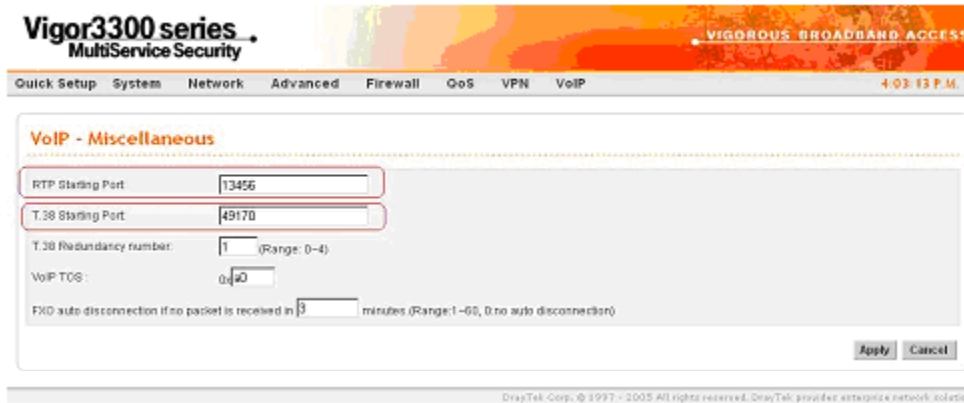


Figure 5-8. Case 2 settings (RTP and T.38 Ports)

5.1.3 Vigor 3300V Behind NAT, NAT Uses Dynamic Public WAN IP Address (Via DHCP or PPPoE Client)

Like case 2, Vigor 3300V is behind a NAT router. However the NAT router uses a Dynamic Public WAN IP address (via DHCP or PPPoE client). Because the user may have no idea what Public IP is being used, “Manually Input NAT IP Address” will not work in this case, so the user should specify a STUN Server for Vigor 3300V to detect the NAT router’s WAN IP automatically. Figure 5-9 shows the scenario.

Case 3: Vigor3300V Behind NAT, NAT Uses Dynamic WAN IP Address (Via DHCP or PPPoE Client)

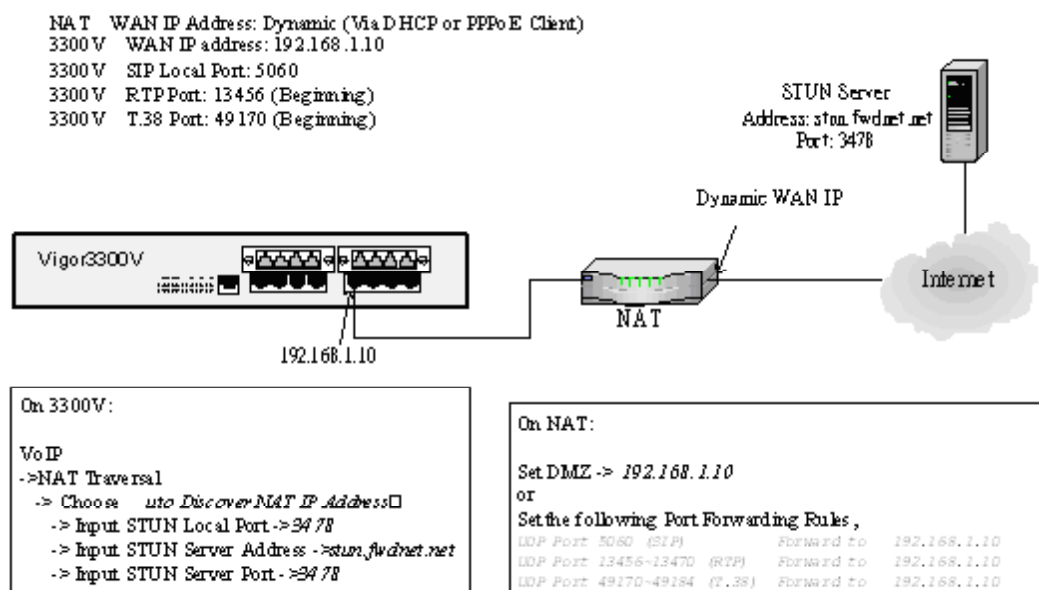


Figure 5-9. Case 3 scenario of NAT Traversal

After the user has set up the STUN server on Vigor 3300V, the user should then configure DMZ or Port forwarding Rules on the NAT router.

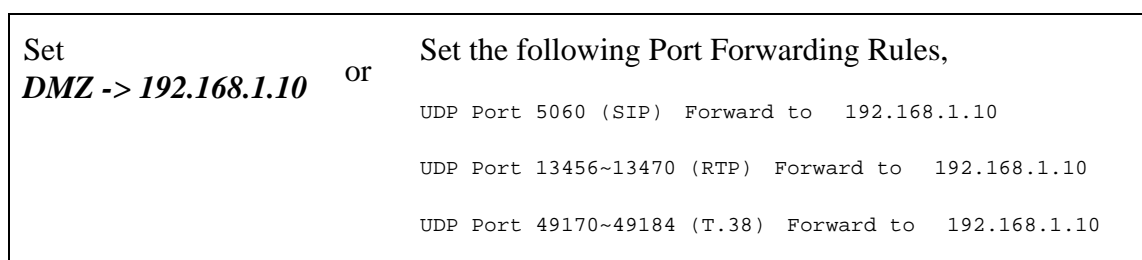


Figure 5-10 shows the Web configurations on Vigor 3300V for NAT Traversal. For the SIP Local Port, RTP and T.38 Ports Settings please refer Figure 5-5.



Figure 5-10. Case 3 settings of NAT Traversal

Note: --- stun.fwd.net is a free, well-know STUN server