

# Configuring the Westell DSL Modem for EchoLink

How I configured my computer system

By David Stansbury, KB3KAI

April 28, 2005

My system:

HP computer with XP Home, Service Pack 2 and all current patches

Windows firewall enabled

ISP-provided DSL modem, Westell model 2200

On my first attempt to use EchoLink I could see the station list but was unable to connect to other stations. Checking the EchoLink website told me:

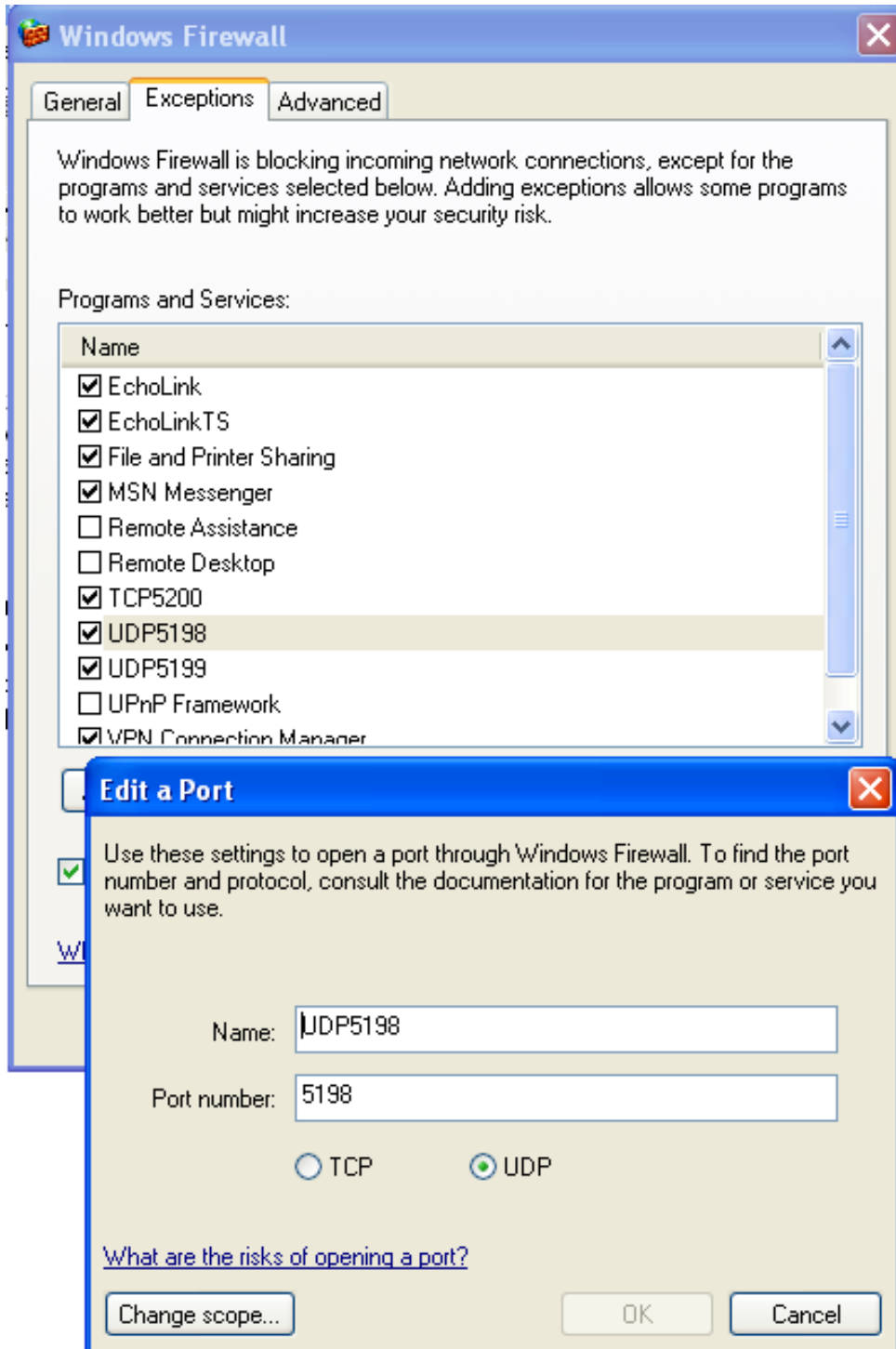
“EchoLink requires that your router or firewall allow inbound and outbound UDP to destination ports 5198 and 5199, and outbound TCP to port 5200. Source ports are dynamically assigned. If you are using a home-network router, you will also need to configure the router to "forward" UDP ports 5198 and 5199 to the PC on which EchoLink is running.”

Most home DSL modems have an internal IP address of <http://192.168.1.1> with a user name and password of “admin”. Once you log in, you can change the firewall settings and other things most people shouldn't mess with! I checked my DSL firewall and it was turned off by default, so I figured it was not blocking EchoLink. I then turned off Windows Firewall and I still couldn't connect to EchoLink stations. Putting the Windows Firewall back on, I added exceptions for UDP ports 5198, 5199 and TCP 5200. See this URL for details on how to do this: <http://support.microsoft.com/kb/843090>

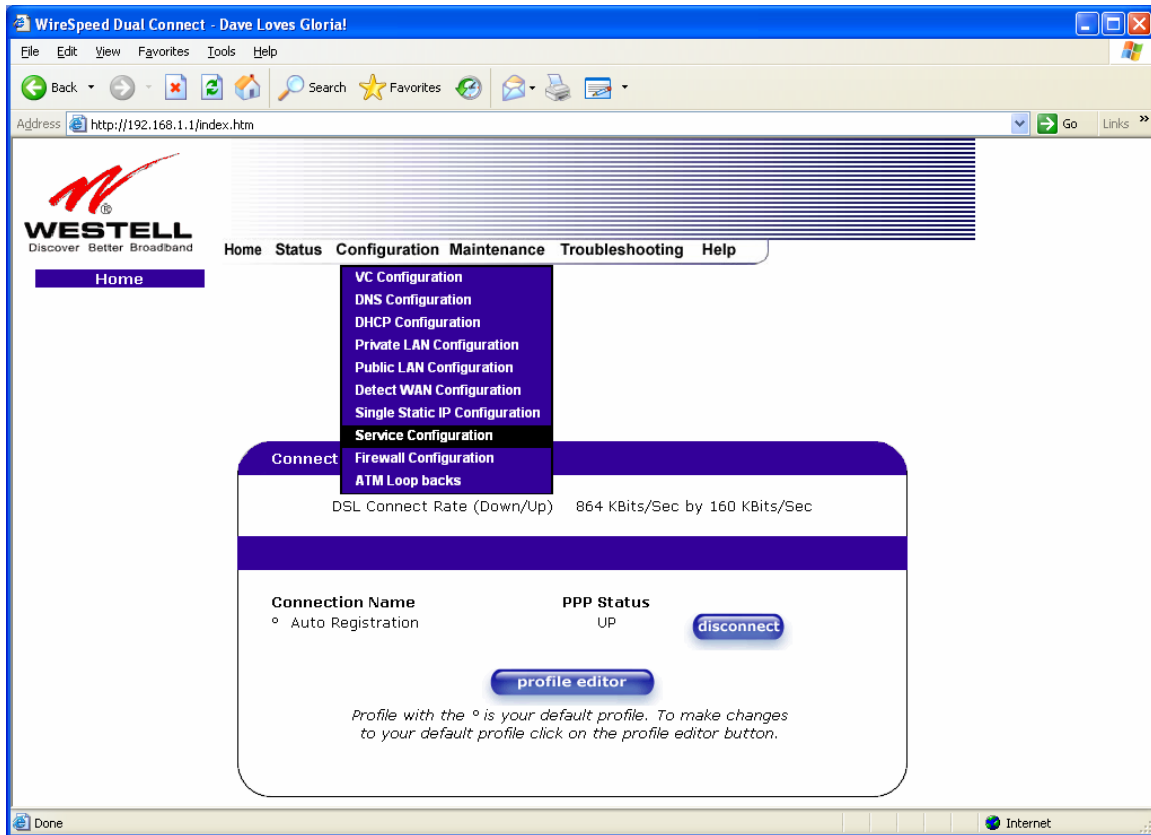
Anyway, this didn't help and I still could not connect to EchoLink. Next I tried the EchoLink Troubleshooter utility <http://www.echolink.org/troubleshooter.htm> and it failed the UDP 5198 test. So somehow, somewhere I was still having a problem!

(Continued on page 3)

Windows Firewall, adding exceptions for EchoLink ports (which didn't solve my problem but might help others).



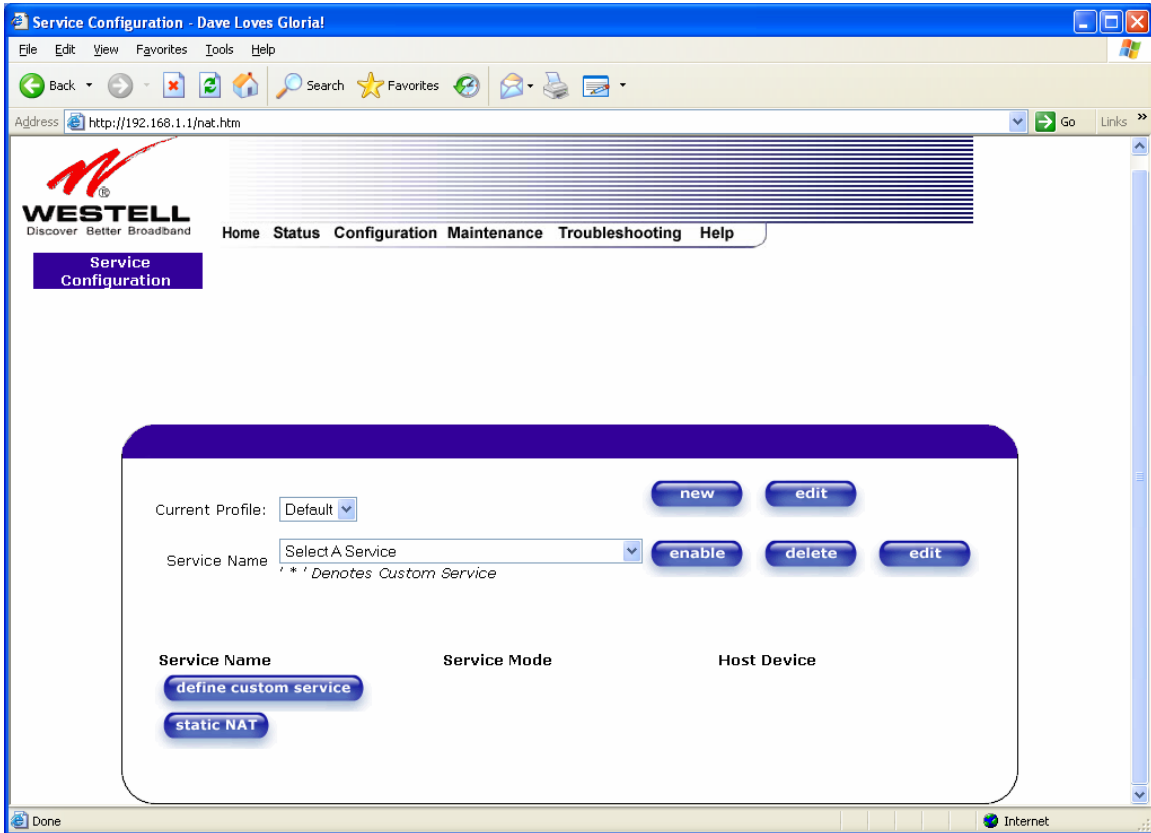
At this point, having ruled out firewall blocking of the UDP ports, I was becoming very frustrated. So I went back to the DSL modem. Like most home DSL modems, it has a built-in router. As previously noted the DSL firewall was turned off (by default, I'll fix that later!). I logged back into the DSL IP address and went to the "Service Configuration" screen. See below:



Quick note – if you turn on the DSL modem/router firewall, put it on the “low” security level. Higher levels will not allow the TCP connection, even if specific TCP port forwarding is enabled (see the following pages).

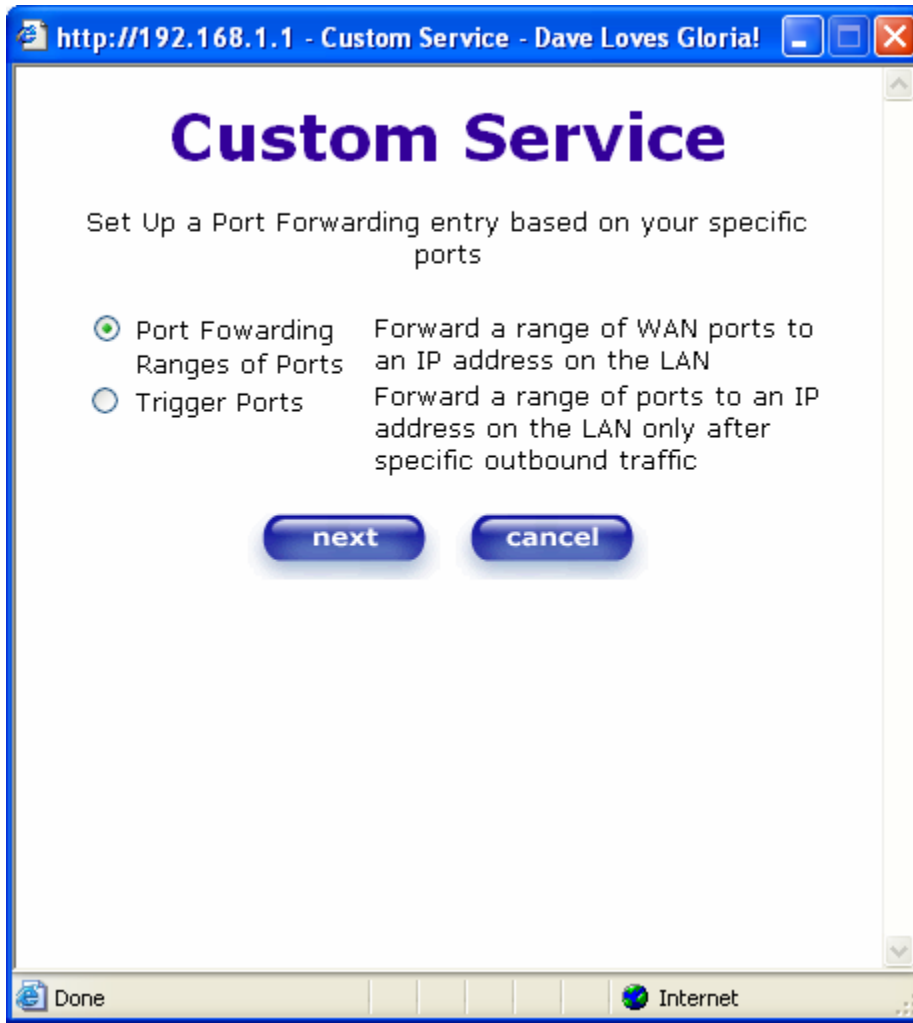
(Continued next page)

On the configuration page you can choose to allow a whole bunch of pre-defined services like online games, chat clients, file sharing applications, etc., see the pull-down list. Naturally, EchoLink isn't one of them. You can click the "define customer service" button to make one for EchoLink. This will allow the required ports to "pass through" to your computer.



(Continued next page)

We will be configuring "Port Forwarding". Be sure to click the little bullet for Port Forwarding and click the next button.



(Continued next page)

Give the Service a suitable name (like EchoLink) and assign your first port range to pass through. Click the UDP bullet then the next button.

http://192.168.1.1 - Port Range - Dave Loves Gloria!

## Port Range

Set Up a Port Forwarding range entry based on your specific ports

Service Name:   
*The above name will be saved as this Services description*

Global Port Range:  -

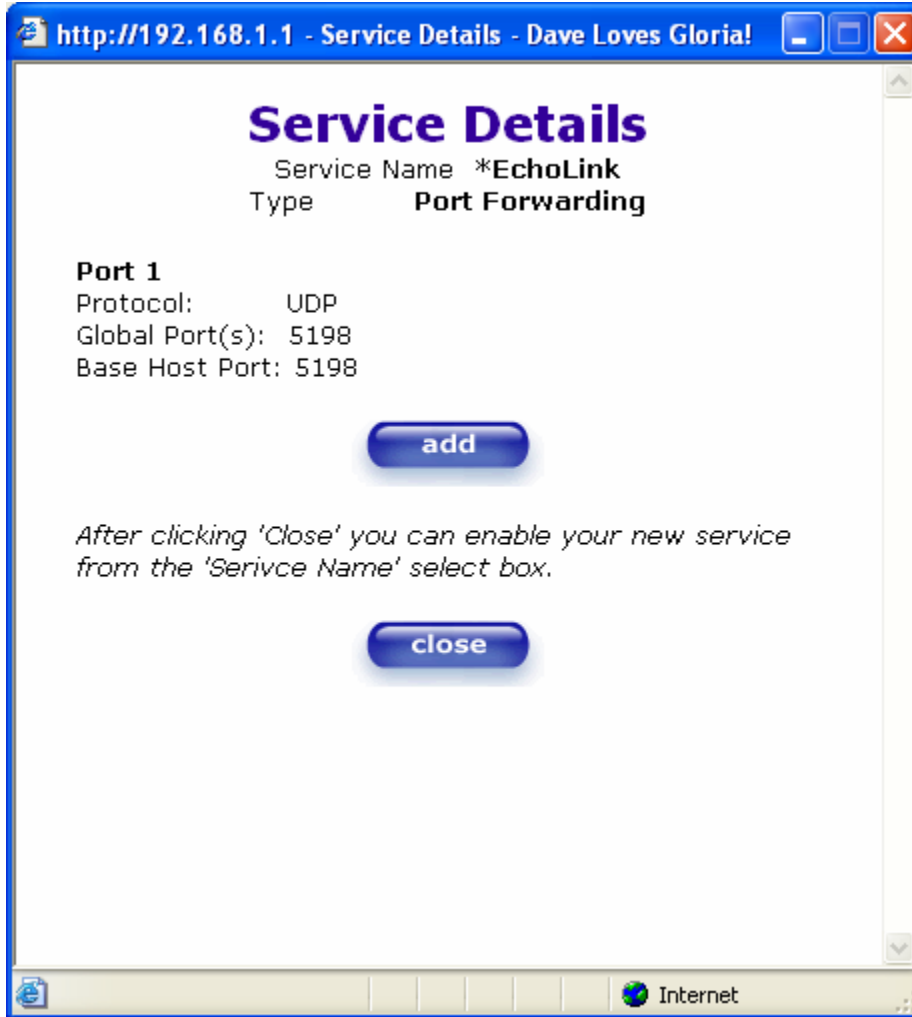
Base Host Port:

Protocol:  TCP  UDP

Done Internet

(Continued next page)

Now that you have a port set up, click the add button to continue.



(Continued next page)

Next we assign port 5199 UDP and click the next button.

http://192.168.1.1 - Port Range - Dave Loves Gloria!

## Port Range

Set Up a Port Forwarding range entry based on your specific ports

Service Name: \*EchoLink  
*The above name will be saved as this Services description*

Global Port Range: 5199 - 5199

Base Host Port: 5199

Protocol:  TCP  UDP

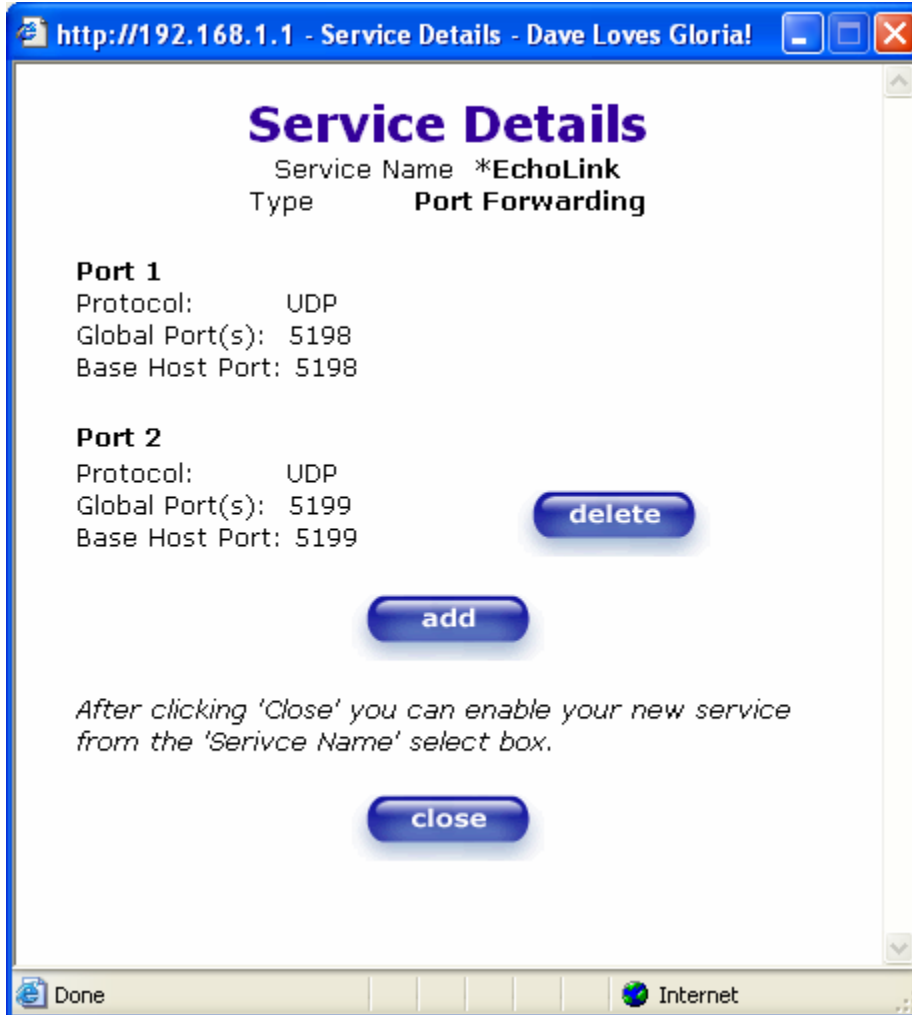
[next](#) [back](#) [cancel](#)

Done Internet

(Continued next page)



Now click the add button continue.



(Continued next page)

Next we add TCP port 5200 to pass through, and then click the next button.

http://192.168.1.1 - Port Range - Dave Loves Gloria!

## Port Range

Set Up a Port Forwarding range entry based on your specific ports

Service Name: \*EchoLink  
*The above name will be saved as this Services description*

Global Port Range: 5200 - 5200

Base Host Port: 5200

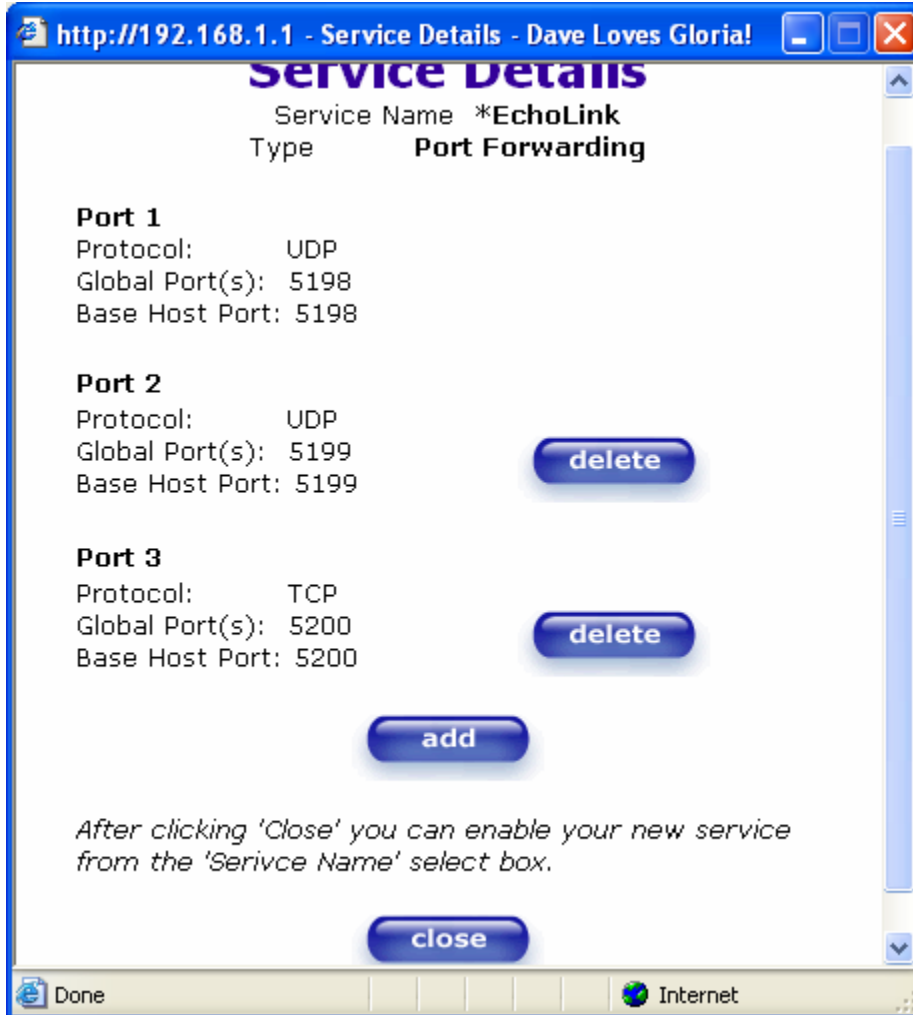
Protocol:  TCP  UDP

[next](#) [back](#) [cancel](#)

Internet

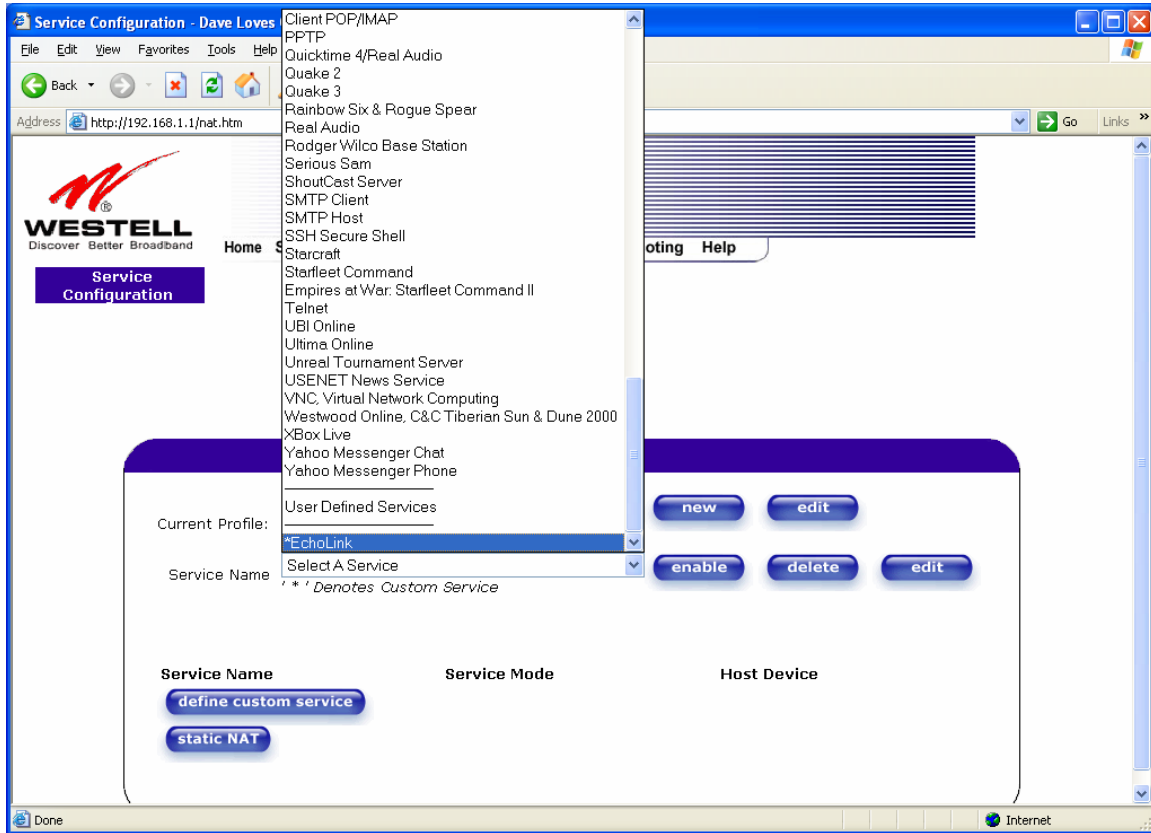
(Continued next page)

Now that our port are assigned, click the close button.



(Continued next page)

Now go to the service list and pick out your custom service (EchoLink) and click the “enable” button.

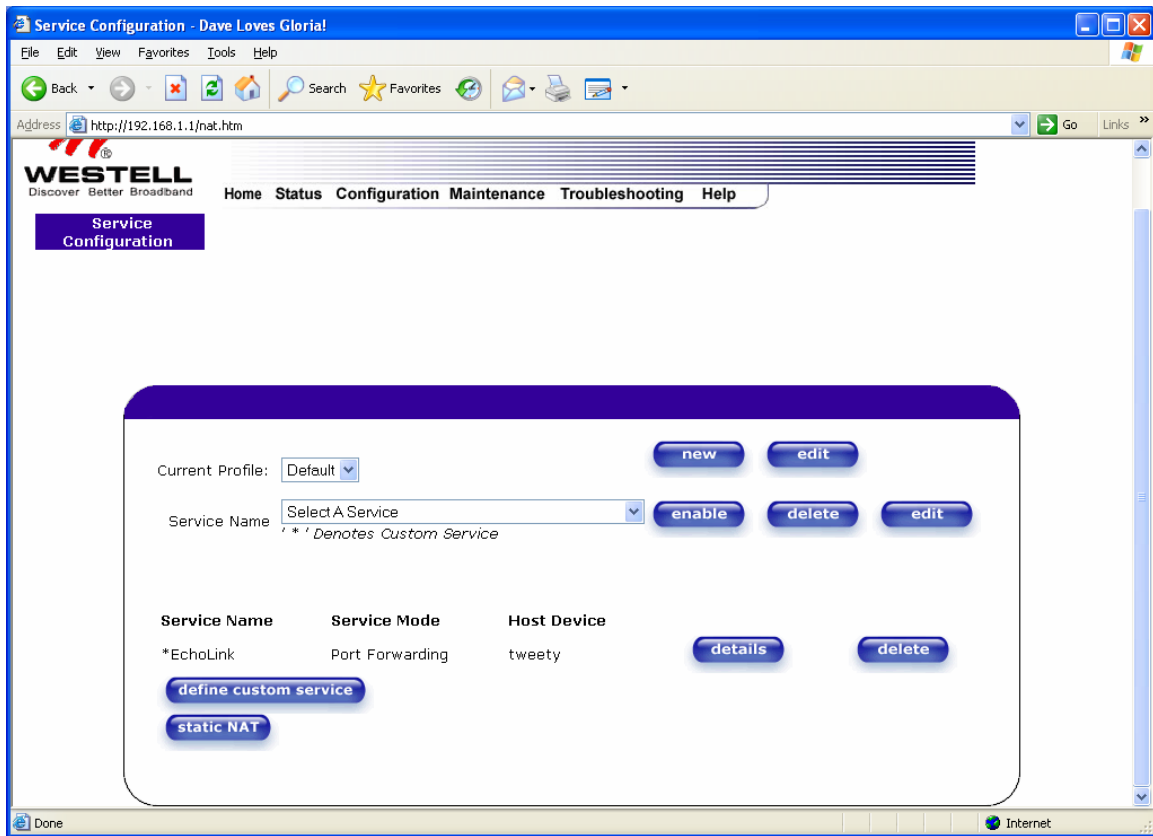


You will need to assign your “computer name” or static IP address. My machine name is “tweety” so now I click the “done” button.



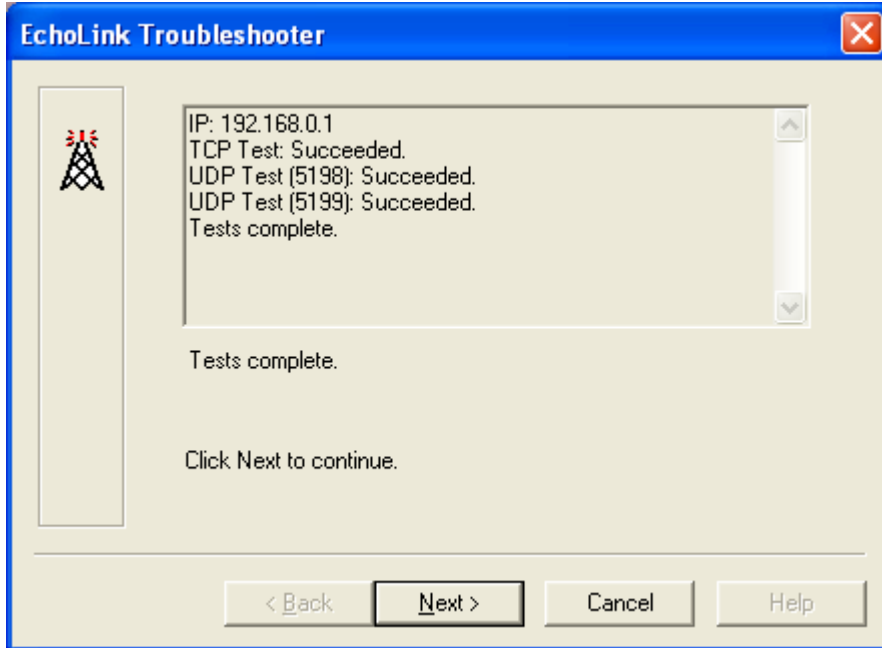
Note – you can find your computer name on Windows XP by:  
Click the start button ... right-click on My Computer ... click on Properties ... click the Computer Name tab ... then note the Full computer name entry.

Now you can see the EchoLink port forwarding is set up in my DSL modem or router:



(Continued next page)

And now my EchoLink ports are working:



Now that the ports are now working, get out of the DSL modem screen and go connect to an EchoLink station! Give me a holler if I'm online!

David Stansbury, KB3KAI  
[dave@kb3kai.com](mailto:dave@kb3kai.com)

Website:  
<http://www.kb3kai.com>