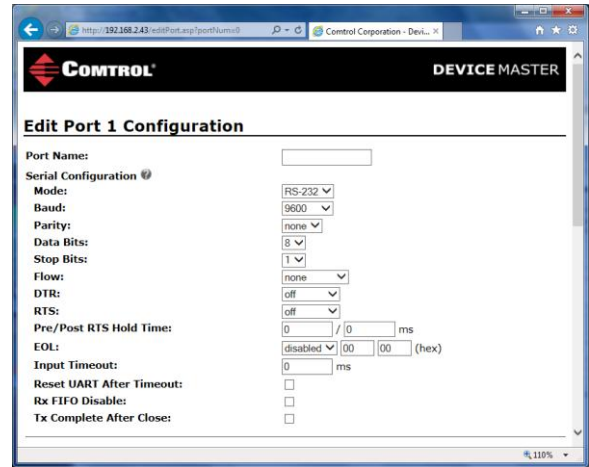
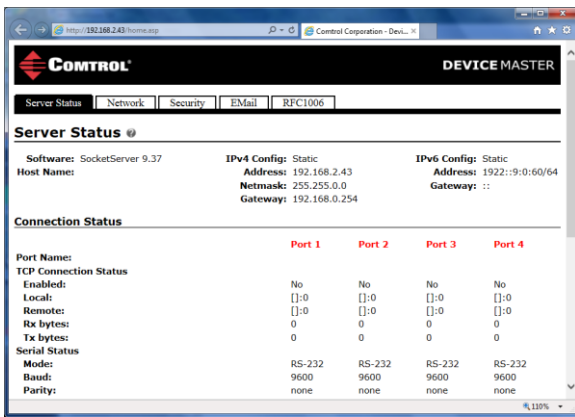
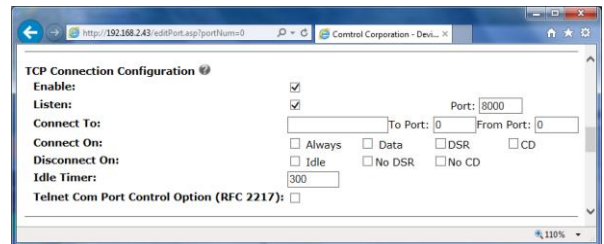
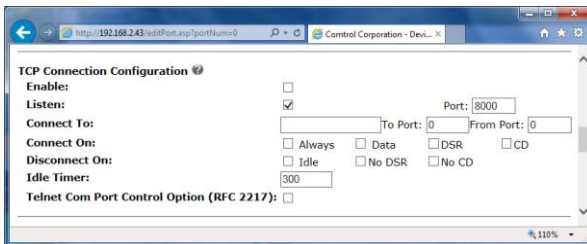


Setup the DeviceMaster for use with SPR (Secure Port Redirector) across a NAT Connection

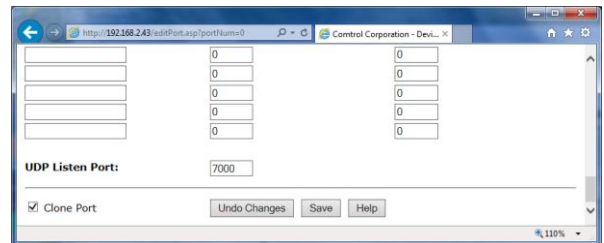
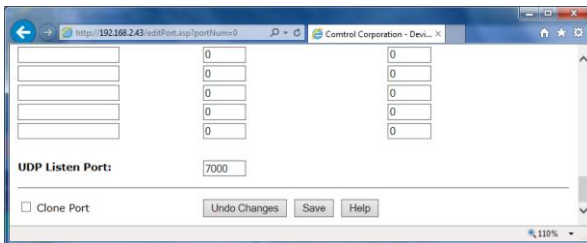
Set everything up locally and test before installing the DeviceMaster in the NAT networked location.



Open a web browser to the DeviceMaster and click on Port 1 to open the set “Edit Port 1 Configuration” page. Set the serial port settings to agree with the device attached to the DeviceMaster physical serial port 1. If the defaults are acceptable you can skip to the next step. If the settings need changing open each serial port individually to make changes as necessary.

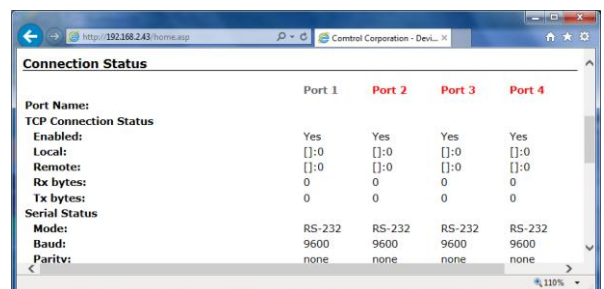
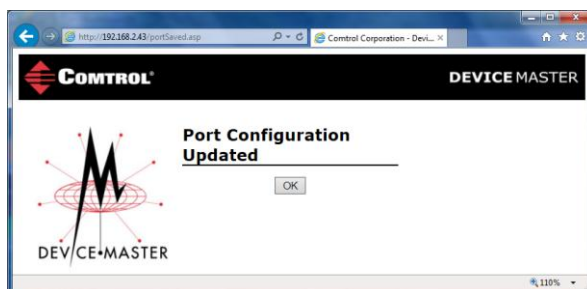


Scroll down to the TCP Connection Configuration and place a check mark in the “Enable:” option. Make no other changes in this section.



Scroll to the bottom of the page. If the serial settings for all ports are the same you make select the “Clone Port” option. Otherwise leave it blank and open each port individually to set the serial settings and Enable options.

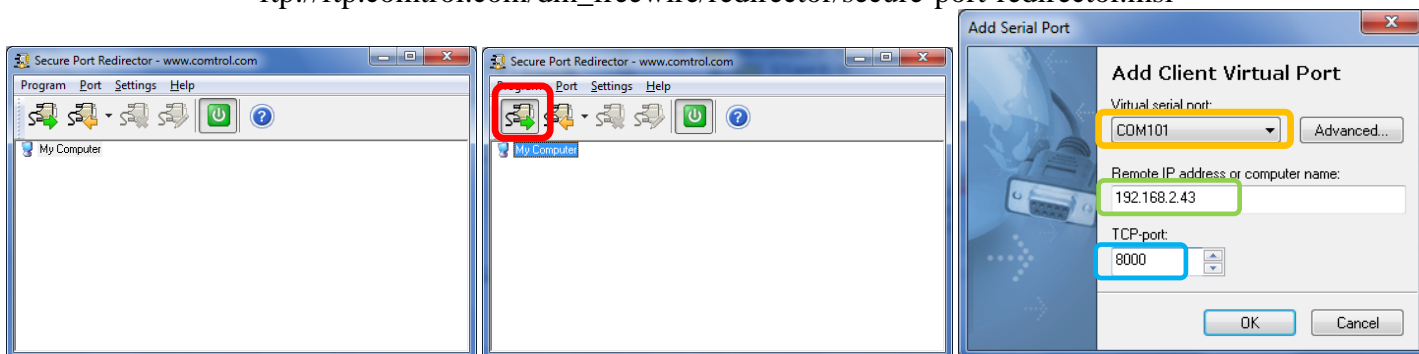
Click the “Save” button



Click the “OK” button. Once completed the web page should say “Yes” under each port.

Setup the SPR (Secure Port Redirector) for use with DeviceMaster across a NAT Connection

Download, install and launch SPR (Secure Port Redirector) using defaults for the installation.
ftp://ftp.control.com/dm_freewire/redirector/secure-port-redirector.msi



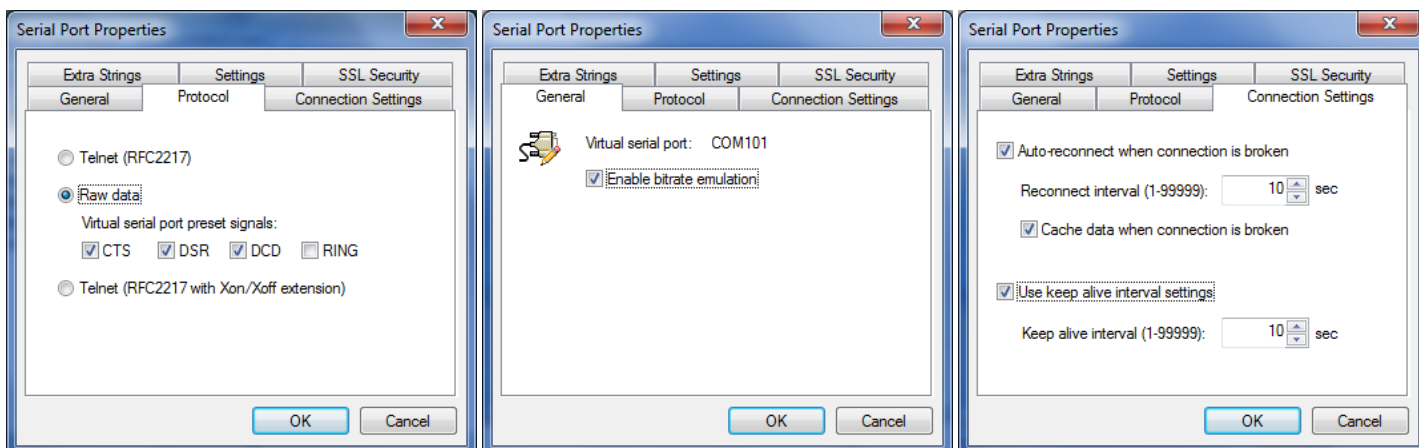
Launch SPR (Secure Port Redirector) and click the highlighted icon to add a new com port.

Select a com port number (we will use 101 through 104) using the drop down arrow.

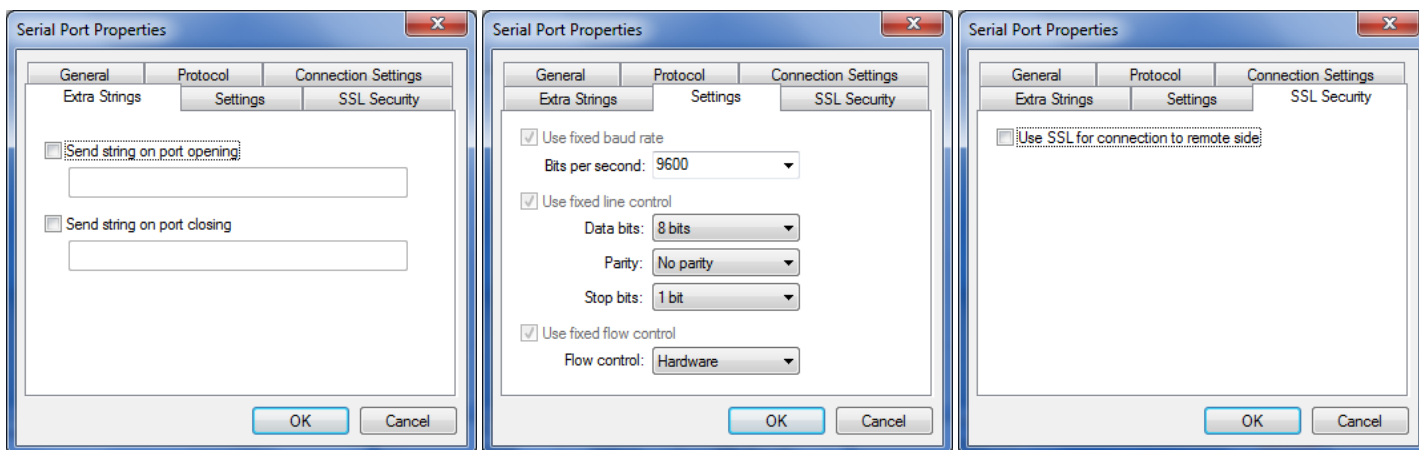
Enter the IP address of the DeviceMaster

Enter the socket number assigned to port 1 (defaults of 8000 through 8003 for physical ports 1 through 4)

Click the “Advanced..” button to configure the properties.

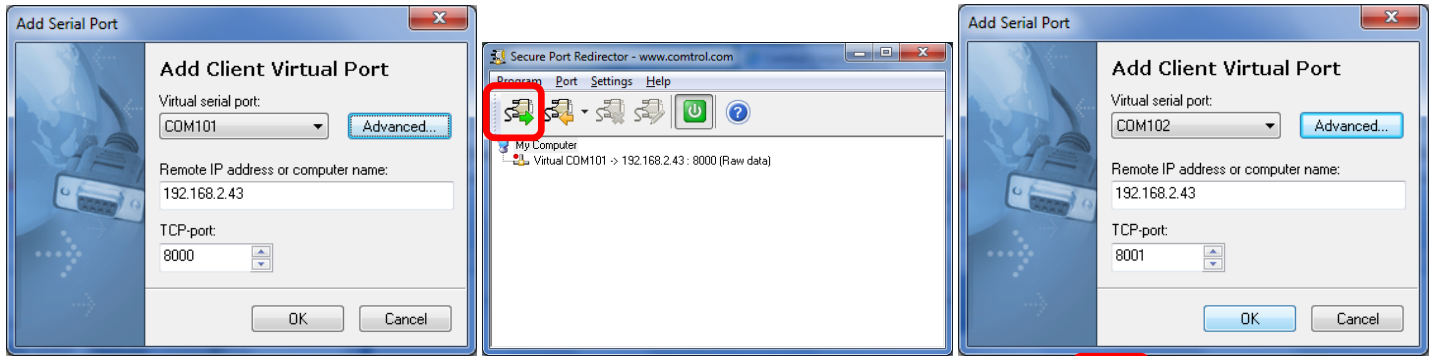


Set all tabs as shown here for initial connections and testing. See the help system if you need to modify these.



Leave these tabs set at default. Make no changes.

Click OK to be returned to the “Add Client Virtual Port” dialog



Click OK. You should now see com101 displayed in the main window. Click the **icon** to add the next port.

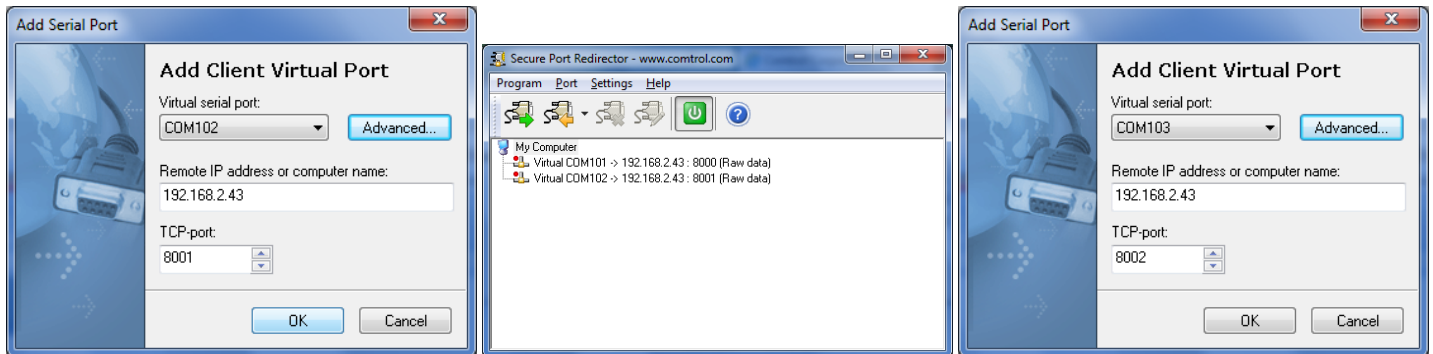
Select the com port number (com102) using the drop down arrow.

The IP address of the DeviceMaster should already be displayed

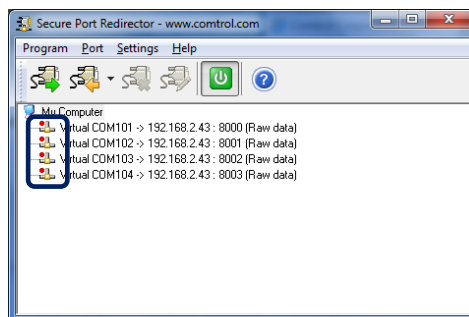
Enter the socket number assigned to port 2 (8001 for physical serial port #2)

Click the “Advanced..” button to configure the properties.

Repeat the tabbed property settings as shown for com101. Once the tabbed settings are correct, click OK to be returned to the “Add Client Virtual Port” dialog



Click OK and now you will have two serial ports entered. Repeat the previous steps for Com103 and com104

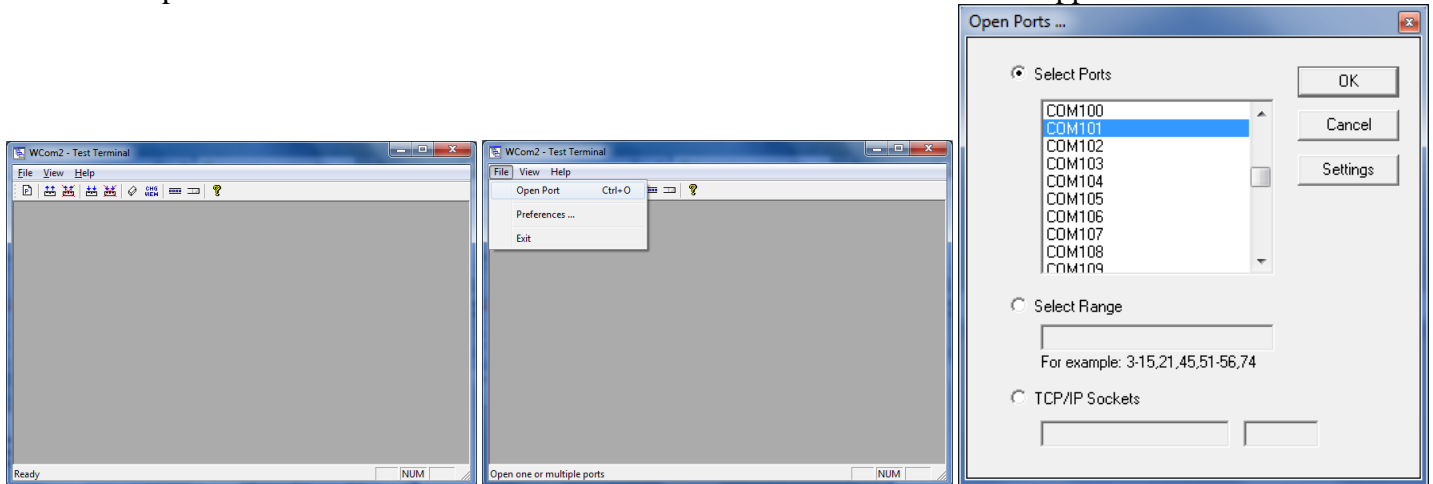


You should now have all 4 ports entered and configured.

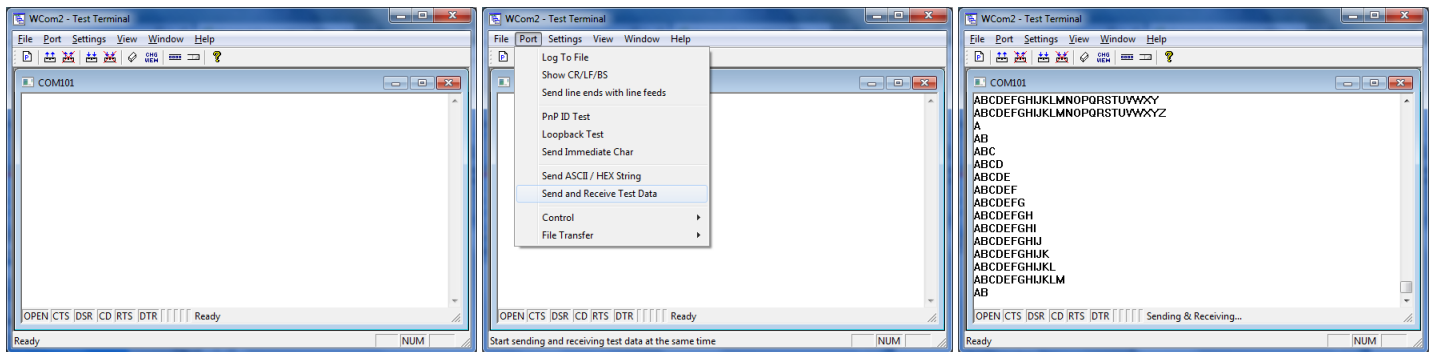
Note the “Red Dot” on each line. This indicates that the port is not currently in use. As ports are opened, different messages will be displayed.

Test the SPR (Secure Port Redirector) and DeviceMaster using Test Terminal

Install the Loopback Plug included with the DeviceMaster onto physical serial port #1.
 Open Test Terminal which is included in PortVision DX in the Tools>Applications> menu



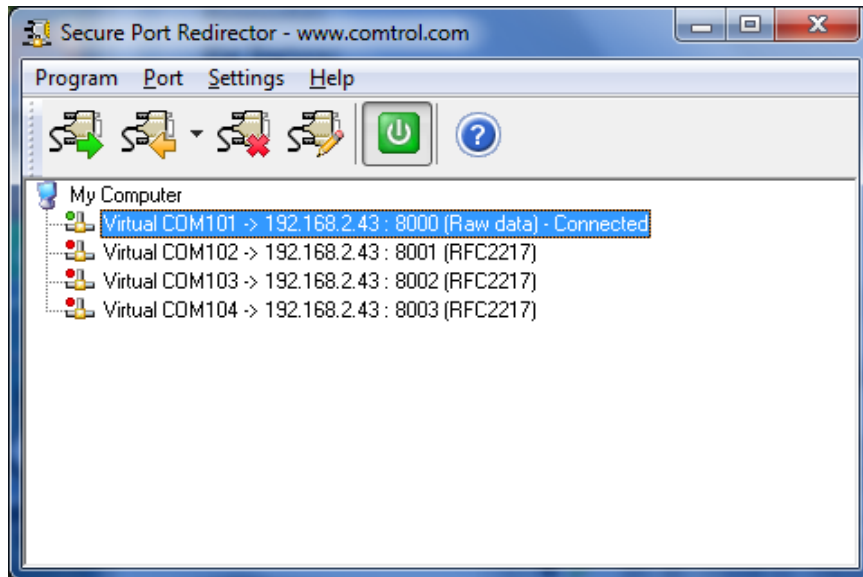
In Test Terminal Select the “File” drop down menu and select “Open Port” and select the first com number added in SPR (Secure Port Redirector).



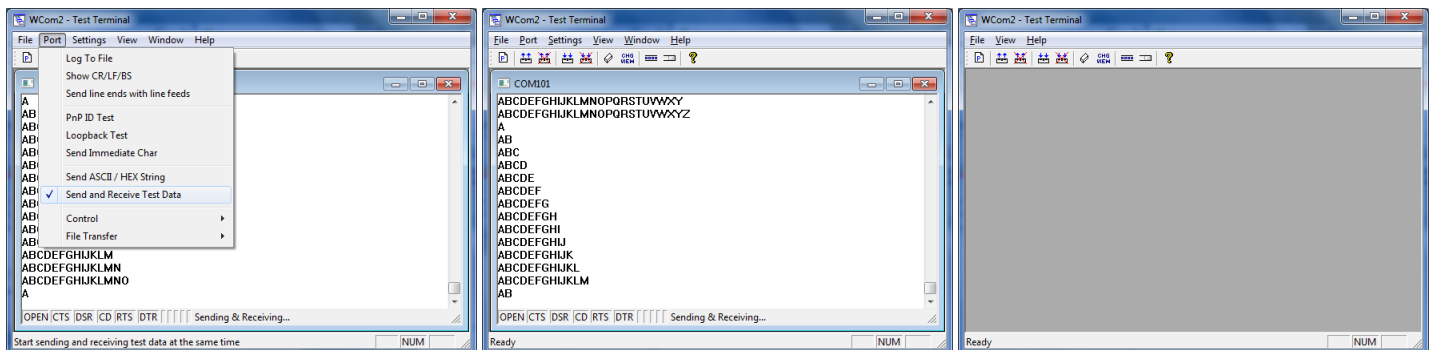
The window will now show a white window and is ready for testing. Select the “Port” drop down menu and select the “Send and Receive Test Data” option. Data should start to scroll in the windows in a ‘sawtooth’ type pattern.

	Port 1	Port 2	Port 3	Port 4
Port Name:				
TCP Connection Status				
Enabled:	Yes	Yes	Yes	Yes
Local:	[0.0.0.0]:8000	[]:0	[]:0	[]:0
Remote:	[192.168.2.10]:1202	[]:0	[]:0	[]:0
Rx bytes:	72000	0	0	0
Tx bytes:	68535	0	0	0
Serial Status				
Mode:	RS-232	RS-232	RS-232	RS-232
Baud:	9600	9600	9600	9600
Parity:	none	none	none	none

Open the web page and you will see the IP address of the PC that Test Terminal is running in and the Rx and Tx bytes should be incrementing. You may need to refresh the web page a few times to see changes take place.



If you return to SPR (Secure Port Redirector) you should see that the port is open. This is showing that we are in the process of testing the first com port using Test Terminal. The Red Dot will now be Green and it will show 'Connected' on ports that are currently in use.



Back to Test Terminal. From the "Ports" drop down menu remove the checkmark on "Send and Receive Test Data" and the data should stop. It may take a few moments for the buffers to clear before the data stops. Close the com101 window, place the Loopback Plug on the next port and repeat the test for the next serial port.

	Port 1	Port 2	Port 3	Port 4
Port Name:				
TCP Connection Status				
Enabled:	Yes	Yes	Yes	Yes
Local:	[]:0	[]:0	[]:0	[]:0
Remote:	[]:0	[]:0	[]:0	[]:0
Rx bytes:	108864	35730	0	0
Tx bytes:	104486	31279	0	0
Serial Status				
Mode:	RS-232	RS-232	RS-232	RS-232
Baud:	9600	9600	9600	9600
Parity:	none	none	none	none

Here you can see that 2 ports have been tested.

Place the DeviceMaster in the desire location, configure NAT and retest. NAT would port forward ports 8001 through 8004 to the internal IP address of the DeviceMaster. You will reconfigure SPR (Secure Port Redirector) for the outside, or public, IP address

This concludes the instructions that Control is able to offer using NAT for this 4 port DeviceMaster.