

# Setup and test a Winsock Connection in the DeviceMaster

## Setup the DeviceMasters physical serial port in a web browser

**Server Status**

Software: SocketServer 10.06.10  
Host Name: 192.168.2.41  
Serial Number: 8763-000091

**Connection Status**

	Port 1	Port 2	Port 3	Port 4
Port Name:	No	No	No	No
TCP Connection Status	Enabled: Local: []:0 Remote: []:0 Rx bytes: 0 Tx bytes: 0			
Serial Status	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No

**Edit Port 3 Configuration**

Port Name:

**Serial Configuration**

Mode: RS-232  
Baud: 57600  
Parity: none  
Data Bits: 8  
Stop Bits: 1  
Flow: none  
DTR: off  
RTS: off  
Pre/Post RTS Hold Time: 0 / 0 ms  
EOL: disabled  
Input Timeout: 0 ms  
Reset UART After Timeout: 0 ms  
RX FIFO Disable:   
Tx Complete After Close:

**TCP Connection Configuration**

Enable:  Port: 8003  
Listen:   
Connect To:   
Connect On:  Always  Data  DSR  No DSR  CD  
Disconnect On:   
Idle Timer: 300  
Telnet Com Port Control Option (RFC 2217):

Open the web page of the DeviceMaster and click on Port3 for this exercise.

Set the serial port as needed to match the device on the other end of the serial cable.

In the TCP Connection Configuration, checkmark the “Enable” option. Note the “Port” value of 8003. DeviceMasters physical serial port #1 is port 8000 The last physical serial port would be 8003 for the 4 port model, or 8031 for the 32 port model.  
Scroll to the bottom of the page and click ‘Save’

**Port Configuration Updated**

OK

**Server Status**

Software: SocketServer 10.06.10  
Host Name: 192.168.2.41  
Serial Number: 8763-000091

**Connection Status**

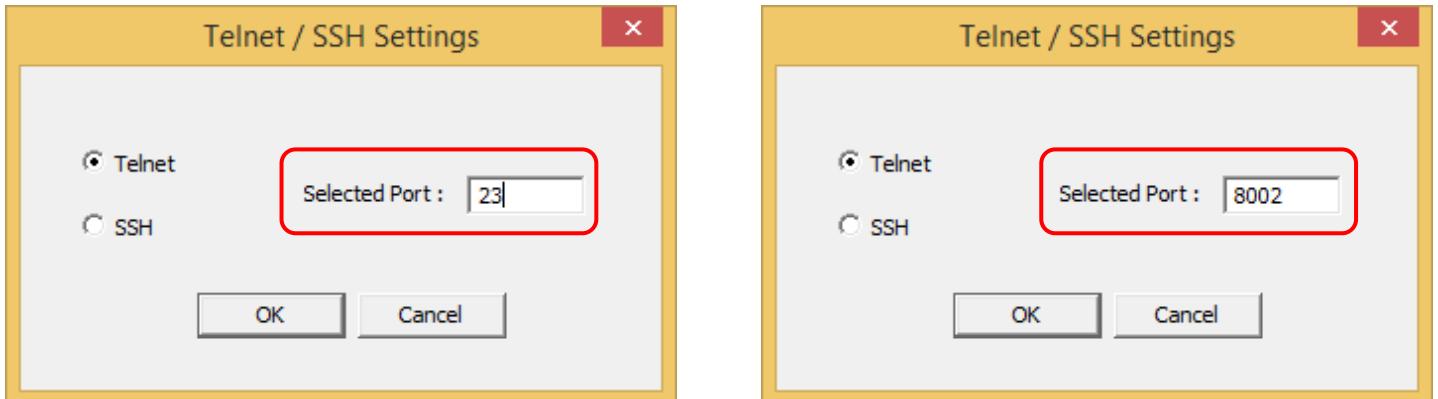
	Port 1	Port 2	Port 3	Port 4
Port Name:	No	No	Yes []:0	No
TCP Connection Status	Enabled: Local: []:0 Remote: []:0 Rx bytes: 0 Tx bytes: 0	Enabled: Local: []:0 Remote: []:0 Rx bytes: 0 Tx bytes: 0	Enabled: Local: []:0 Remote: []:0 Rx bytes: 0 Tx bytes: 0	Enabled: Local: []:0 Remote: []:0 Rx bytes: 0 Tx bytes: 0
Serial Status	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No	RS-232 Baud: 57600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 ms EOL: disabled Input Timeout: 0 ms Reset UART After Timeout: 0 ms RX FIFO Disable: <input type="checkbox"/> Tx Complete After Close: <input type="checkbox"/>	RS-232 Baud: 9600 Parity: none Data Bits: 8 Stop Bits: 1 Flow: none DTR: off RTS: off Pre/Post RTS Hold Time: 0/0 EOL: none Timeout: 0 Reset UART After Timeout: No Rx FIFO Disable: No

Click OK

Notice the word ‘Yes’ under the Port 3 on the enabled line.

These examples will use PuTTY and Test Terminal as examples. Both of these utilities are included in PortVision DX. Place the Comtrol supplied Loopback Plug onto the DeviceMaster physical serial port that will be tested.

## Test using PuTTY (a telnet utility included in PortVision DX)

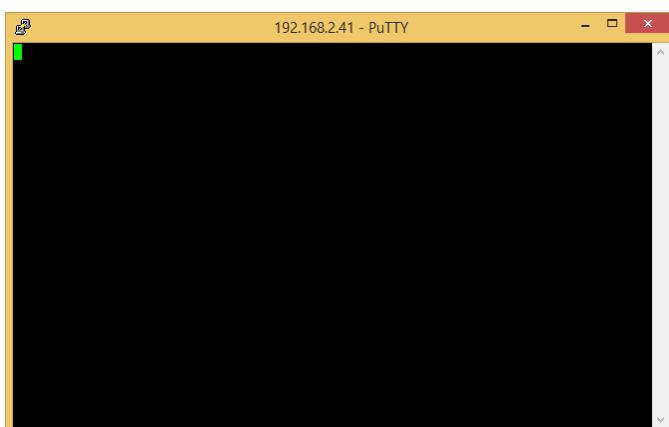


Right Click on the DeviceMaster in PortVision DX and select “Telnet / SSH Session” from the pop-up menu.

Serial ports do not support SSH (Secure Shell) so leave the default Telnet option.

Change the default “Selected Port:” from 23 to the socket listed for the DeviceMasters physical serial port.

In this example the port is 8002.



A PuTTY session will open with a blank window.

	Port 1	Port 2	Port 3	Port 4
<b>Port Name:</b>				
<b>TCP Connection Status</b>				
<b>Enabled:</b>	No	No	Yes	No
<b>Local:</b>	[::]:0	[::]:0	[0.0.0.0]:8002	[::]:0
<b>Remote:</b>	[::]:0	[::]:0	[192.168.2.30]:49865	[::]:0
<b>Rx bytes:</b>	0	0	42	0
<b>Tx bytes:</b>	0	0	42	0
<b>Serial Status</b>				
<b>Mode:</b>	RS-232	RS-232	RS-232	RS-232
<b>Baud:</b>	9600	9600	57600	9600
<b>Parity:</b>	none	none	none	none
<b>Data Bits:</b>	8	8	8	8
<b>Stop Bits:</b>	1	1	1	1
<b>Flow:</b>	none	none	none	none
<b>DTR:</b>	off	off	off	off
<b>RTS:</b>	off	off	off	off
<b>Pre/Post RTS Hold Time:</b>	0/0	0/0	0/0	0/0
<b>EOL:</b>	none	none	none	none
<b>Timeout:</b>	0	0	0	0
<b>Reset UART After Timeout:</b>	No	No	No	No

Refresh the web page and notice Local and Remote. The Remote IP address will be that of the PC, the PuTTY session is running on. Do this as often as you like to see the changes.

	Port 1	Port 2	Port 3	Port 4
<b>Port Name:</b>				
<b>TCP Connection Status</b>				
Enabled:	No	No	Yes	No
Local:	[]:0	[]:0	[0.0.0.0]:8002	[]:0
Remote:	[]:0	[]:0	[192.168.2.30]:49891	[]:0
Rx bytes:	0	0	48	0
Tx bytes:	0	0	48	0
<b>Serial Status</b>				
Mode:	RS-232	RS-232	RS-232	RS-232
Baud:	9600	9600	57600	9600
Parity:	none	none	none	none
Data Bits:	8	8	8	8
Stop Bits:	1	1	1	1
Flow:	none	none	none	none
DTR:	off	off	off	off
RTS:	off	off	off	off
Pre/Post RTS Hold Time:	0/0	0/0	0/0	0/0
EOL:	none	none	none	none
Timeout:	0	0	0	0
Reset UART After Timeout:	No	No	No	No

You now have a connection. When you type something into PuTTY it will be echoed to the PuTTY window.  
(If you get double echoes, this is ok indicating that PuTTY has the 'Local Echo' option turned on)

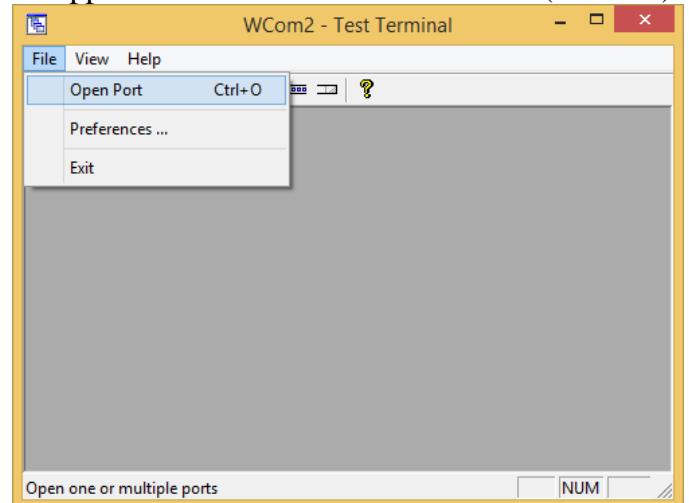
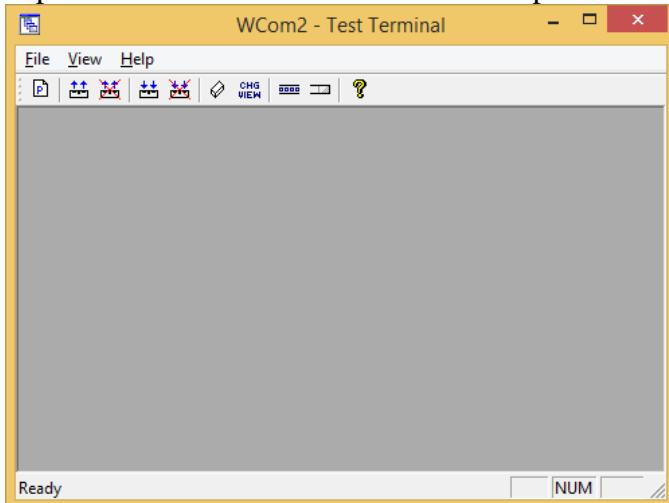
Refresh the web page and you should see data values in the Rx bytes and Tx bytes.

Close PuTTY.

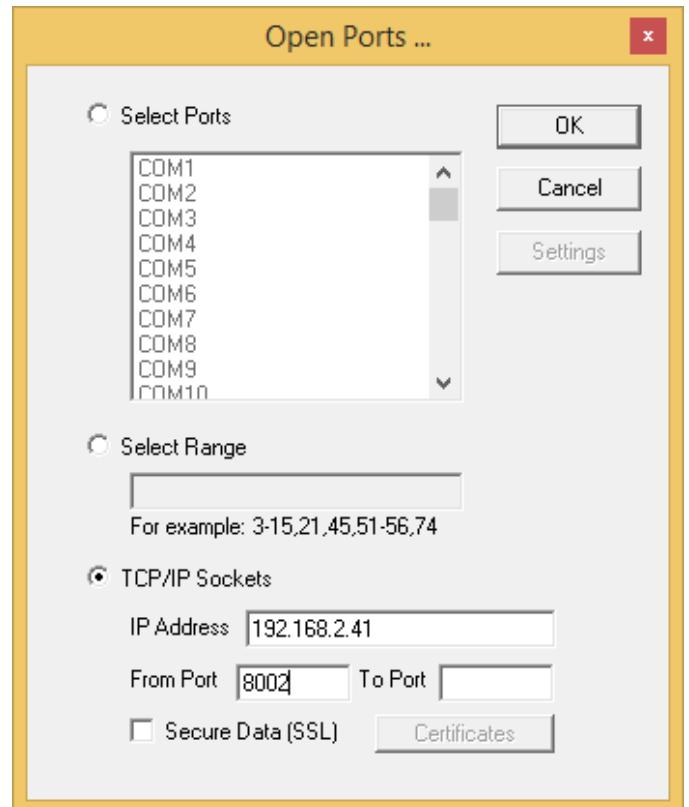
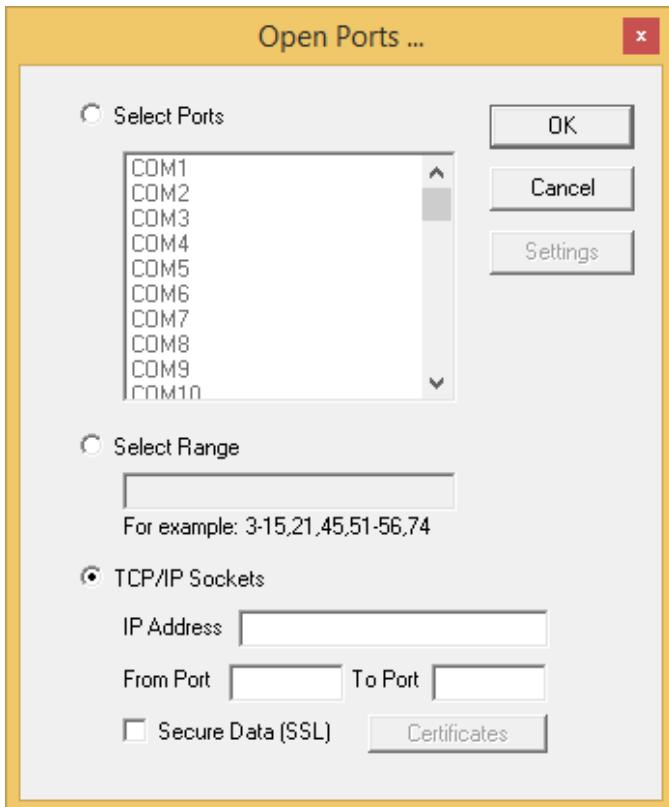
## Test using Test Terminal

(a terminal utility included in PortVision DX)

Open PortVision DX. In the “Tools” drop down menu select Applications and select Test Terminal (WCom2)



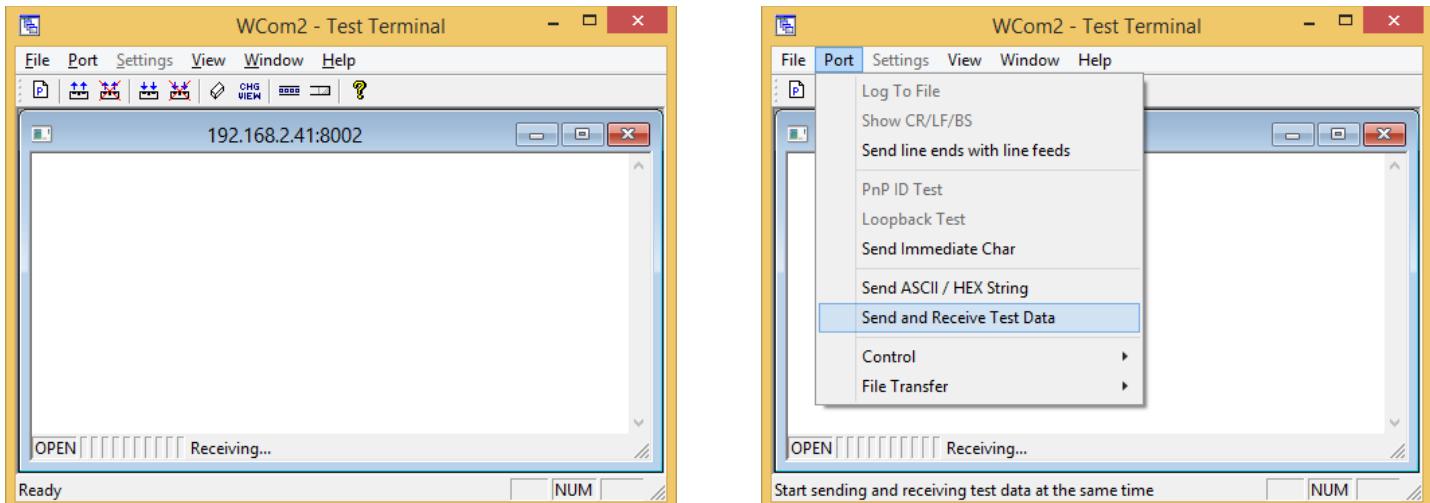
In Test Terminal from the “File” drop down menu select “Open Port”



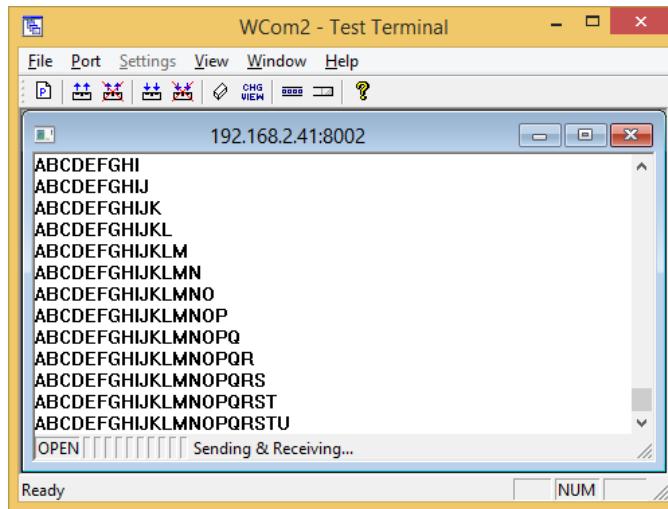
Change from the default of ‘Selected Ports’ to the “TCP/IP Sockets”  
Enter the IP address of the DeviceMaster

In the “From Port” field enter the socket used by the DeviceMasters physical serial port. In this example we are using serial port 3 and socket 8002.

Click OK



The Loopback Plug should be attached to the DeviceMasters physical serial port.  
From the “Port” drop down menu select the option to “Send and Receive Test Data”



The alphabet should be scrolling past in a ‘saw-tooth’ pattern.  
Notice that Test Terminal will show the IP address and the socket number that is currently being connected to,  
which in this example is 192.168.2.41 and socket 8002.

That concludes this basic setup and testing of a Socket Mode (often called Winsock) connection.