## **UDP simple setup**

Download this freeware utility called Hercules which will be used to emulate your application. It is a single exe file; there is no install to perform.

http://new.hwg.cz/download/sw/version/hercules\_3-2-4.exe

Section 2018 SETUP utility by F	HW-group.com	
UDP Setup   Serial   TCP Client   T Received data	CP Server UDP Test Mode About UDP Module IP Port 192.168.2.13 7000 Local port	
Sent data	Server settings Server echo Redirect to TCP Server Redirect to TCP Client	
	UDP broadcast File name: No file Load file Send	
Send		
123 L. HEX	Send HU group	
abc I HEX	Send Version 3.2.4	

The IP address of the local PC that Hercules is running on is 192.168.2.30. This value is not seen here but the IP address of the local PC must be known to configure the DeviceMaster. The local UDP port that the Hercules application is 'listening' for data on is port 4023 as seen in the "Local Port".

In this example, the DeviceMaster's IP address is 192.168.2.13 and is entered into the "Module IP" field. The UDP port that the DeviceMaster is expecting to receive data on (it's 'listening' port) is 7000 and entered into the "Port" field as shown above.

This screen shows the UDP configuration in the DeviceMaster.

	192,168,2.1	3/ 🎽 🔠 🥶 🗶 🛐 Goo	de Pr
jle <u>E</u> dit <u>V</u> jew F <u>a</u> vor	ites <u>I</u> ools	Help	
🍃 Favorites 🛛 🍰 🔊 T	oshiba 5105	-5501 🙋 EthIP .11 🙋 FTP	
Comtrol Corporation - D	Xev		Page •
UDP Connection C	onfigura	tion Ø	2
Enable Serial To	Etherne	t	
Enable Ethernet	To Seria	1	
Enable Ethernet	Receive	From Any IP Address	
Target IP Address	Target	Port (serial->eth)	Source P
192.168.2.30	4023		0
0	0		0
0	0		0
0	0	1	0
0 0 0	0		0
0 0 0	0		0
0 0 0 0 0	0		0 0 0 0
0 0 0 0 0 0	0		0 0 0 0 0
0 0 0 0 0 0			0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 UDP Listen Port:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 7000	Changes Save He	

The options to "Enable Serial to Ethernet" and "Enable Ethernet to Serial" should both be marked to allow for both receiving and sending data to both end points (serial device and PC). The "Target IP Address" (the IP address of the PC that has Hercules running) is entered as 192.168.2.30. The "Target Port" (the UDP socket port that Hercules is 'listening' on) is 4023. The "UDP Listen Port" on the DeviceMaster for this serial port is 7000.

Attach the Comtrol provided DeviceMaster Loopback Plug to the serial port that is being configured.

In Hercules, click the Listen button. (This will then change to Close as seen in the following picture.



In the "Send" field, enter in some value (123as shown in the screen shot) and click the send button. The same data should then be seen in both the "Sent data" and the "Received data" section as shown in the picture above.

UDP communications are now operational.

The DeviceMaster will send its data to the PC and listening socket specified. This is the PC IP address of 192.168.2.30 with a listening port of port 4023 as seen in the Local Port in Hercules. The DeviceMaster will accept its data on its IP address of 192.168.2.13 using a listening port of 7000.

This is shown in Hercules as the "Module IP" and "Port" numbers.

That's all there is to setting up a *simple* UDP connection.

If you want the data to go to more than 1 PC, then you add in additional target IP address and target ports up to the total supported value of 8 locations.

Depending on the circumstances, this may get much more complicated. For those circumstances you may get additional information from this link: <u>ftp://ftp.comtrol.com/contribs/devicemaster/help\_files/udp\_setup\_examples.pdf</u>