Modes of Operation

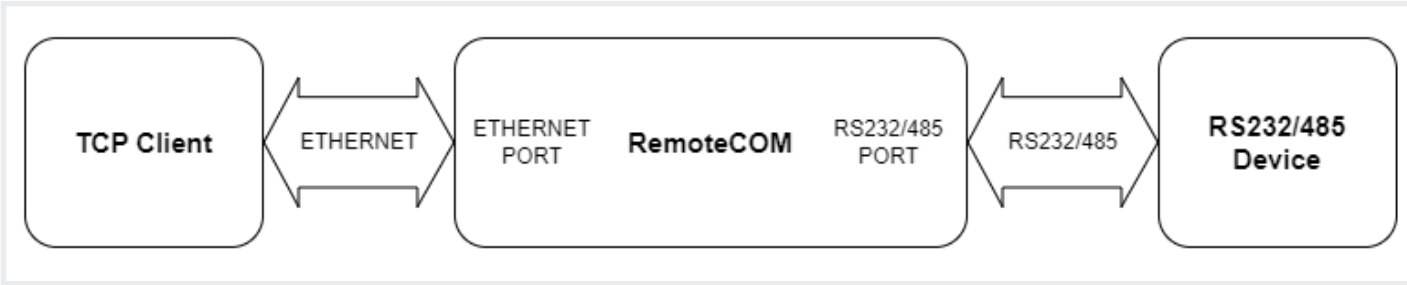
RemoteCOM (C20 - C25)

- TCP Socket Mode
- UDP Socket Mode
- Redisage Configurator Virtual COM Mode

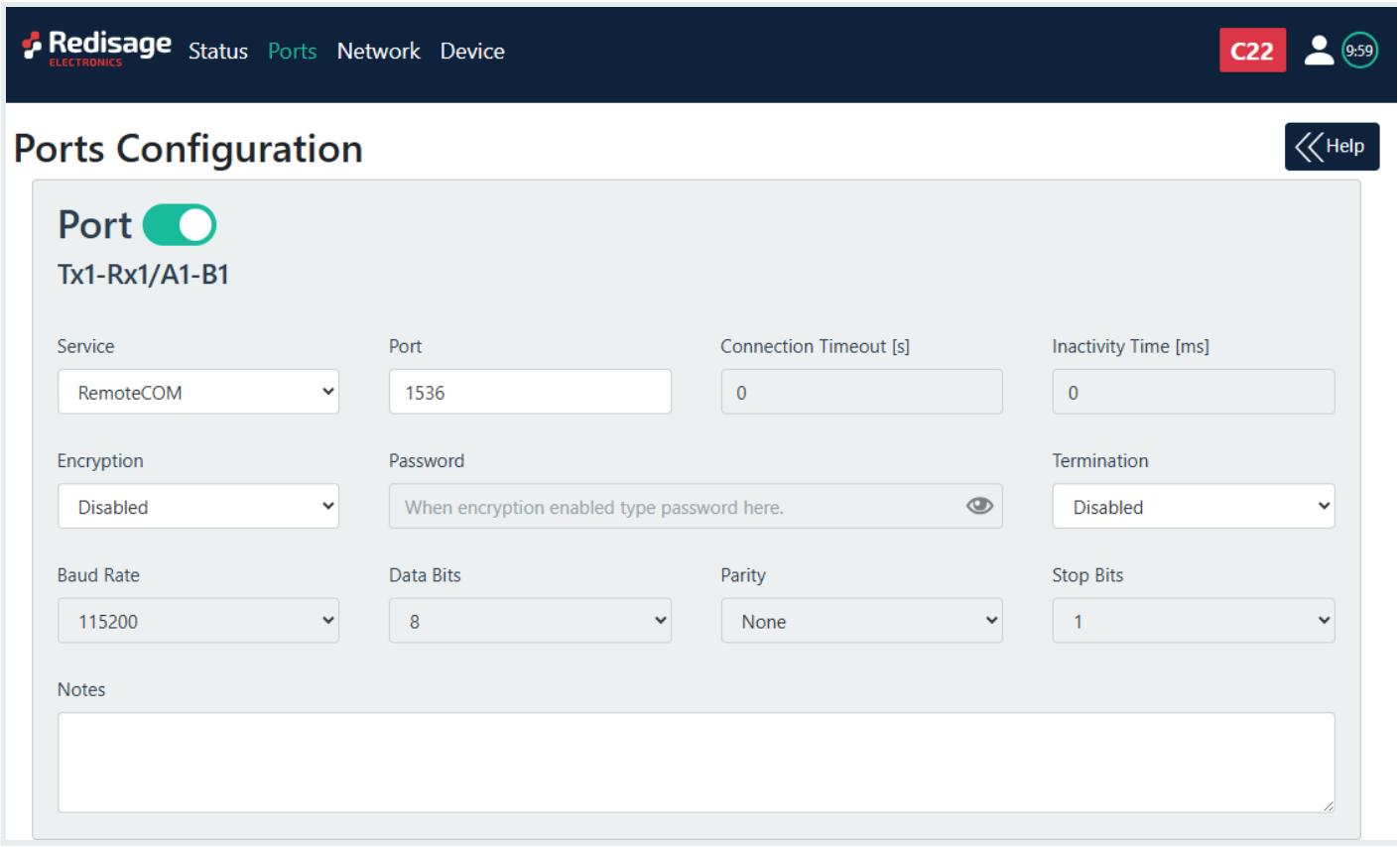
TCP Socket Mode

Serial Port Server (C20 - C25)

This article presents a simple instruction of a first connection between a TCP client and a RS232/485 device through the RemoteCOM. Firstly, connect the RemoteCOM according to the diagram below.



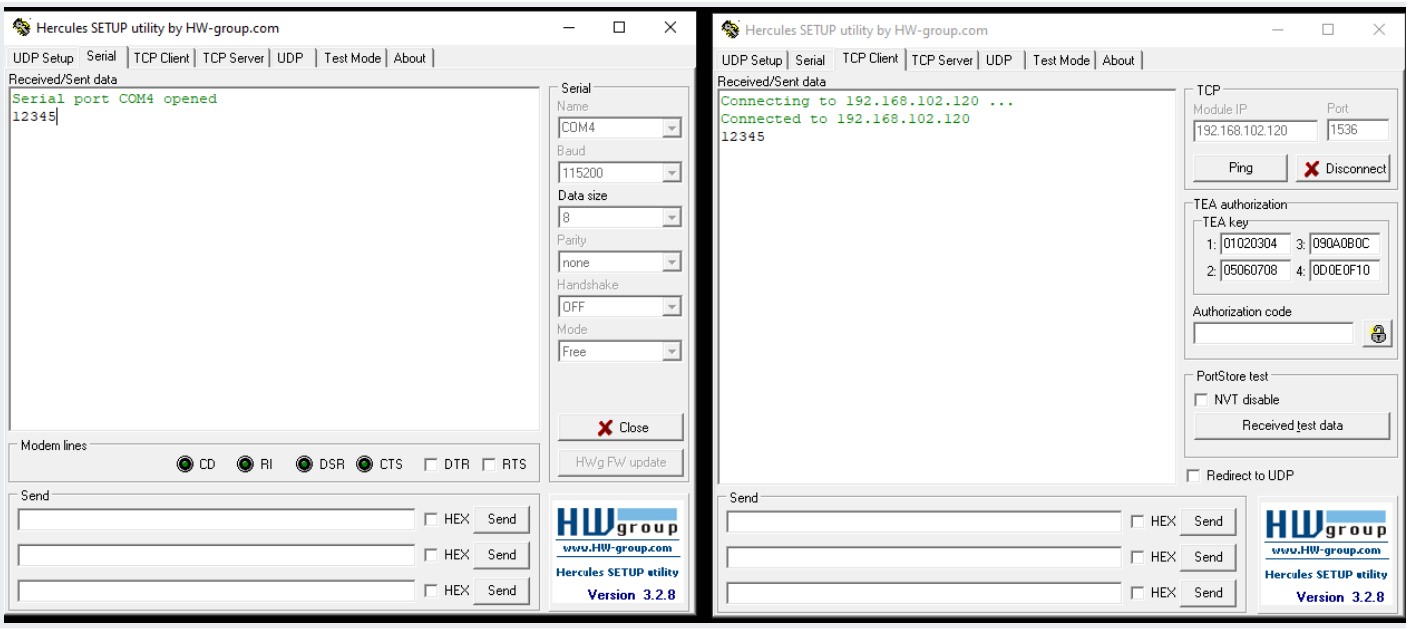
Then, it is necessary to configure the RemoteCOM’s ports. It can be done, for example, via the device’s web page. Ports' configuration can be also done via the Telnet, serial or service console. Set the “**TCP Socket**” option in the “Service” field on the “Port” page. Check also if the port number is set correctly in the “Port” field. Set desired options of the RS232/485 connection (“Baud Rate”, “Data Bits”, “Parity”, “Stop Bits” - these options should be the same as in the RS232/485 device).



Now, the device should be ready to work. Once the TCP Client creates a TCP socket, the bidirectional communication should be available.

Test connection

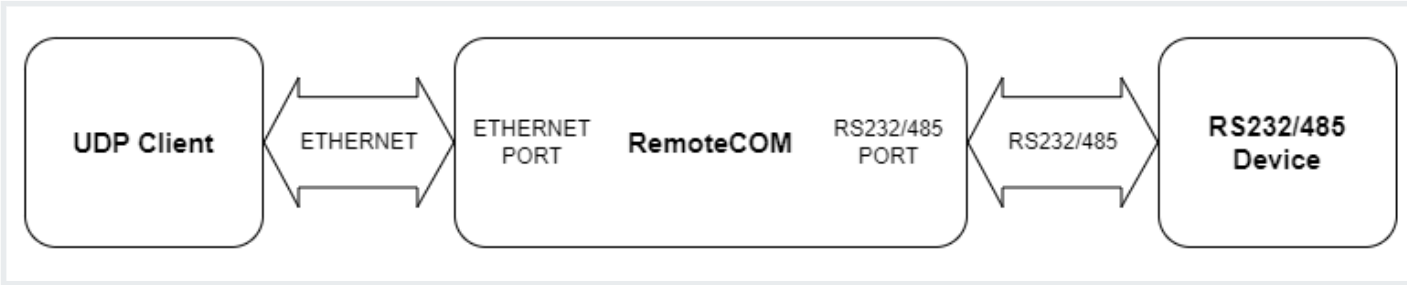
Connection can be easily tested with a USB-RS232/485 converter and Hercules Setup Utility software. Connect the RemoteCOM's RS232/485 port to the USB-RS232/485 converter and plug it in to the USB port of a PC. Open Hercules Setup Utility program and go to the "Serial" page. Set serial connection options according to the previous RemoteCOM's ports configuration and open the COM port. Then, go to the "TCP Client" page and set the device's IP address and port. After a successful connection, there should be the bidirectional communication available.


Hercules SETUP utility by HW-group.com
UDP Setup
Serial
TCP Client
TCP Server
UDP
Test Mode
About
Received/Sent data
Serial port COM4 opened
12345
Serial
Name
COM4
Baud
115200
Data size
8
Parity
none
Handshake
OFF
Mode
Free
Close
HWg FW update
Modem lines
CD
RI
DSR
CTS
DTR
RTS
Send
HEX
Send
www.HW-group.com
Hercules SETUP utility
Version 3.2.8
Hercules SETUP utility by HW-group.com
UDP Setup
Serial
TCP Client
TCP Server
UDP
Test Mode
About
Received/Sent data
Connecting to 192.168.102.120 ...
Connected to 192.168.102.120
12345
TCP
Module IP
192.168.102.120
Port
1536
Ping
Disconnect
TEA authorization
TEA key
1: 01020304
3: 090A0B0C
2: 05060708
4: 0D0E0F10
Authorization code
PortStore test
NVT disable
Received test data
Redirect to UDP
Send
HEX
Send
www.HW-group.com
Hercules SETUP utility
Version 3.2.8

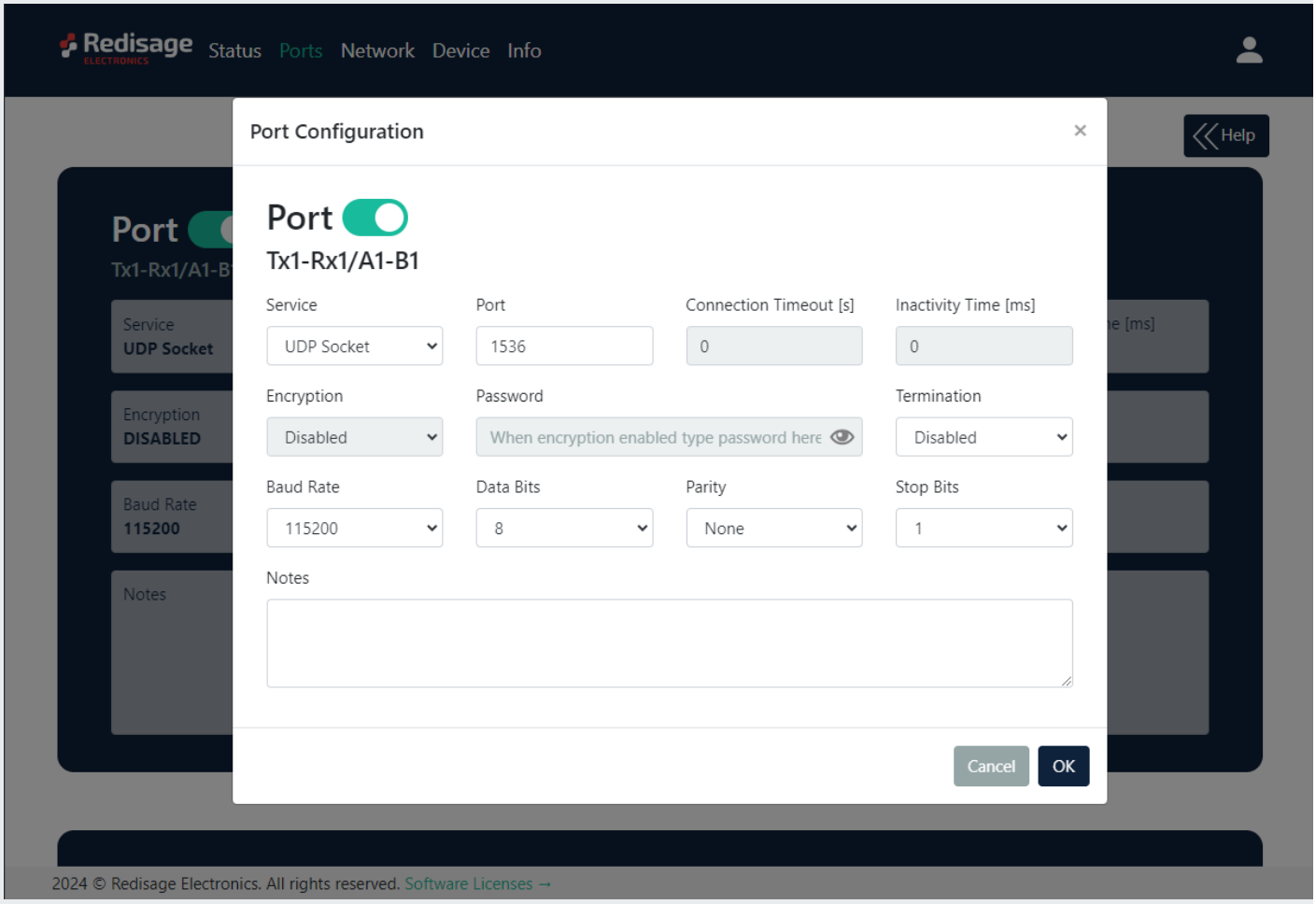
UDP Socket Mode

Serial Port Server (C20 - C25)

This article presents a simple instruction of a first connection between a UDP client and a RS232/485 device through the RemoteCOM. Firstly, connect the RemoteCOM according to the diagram below.



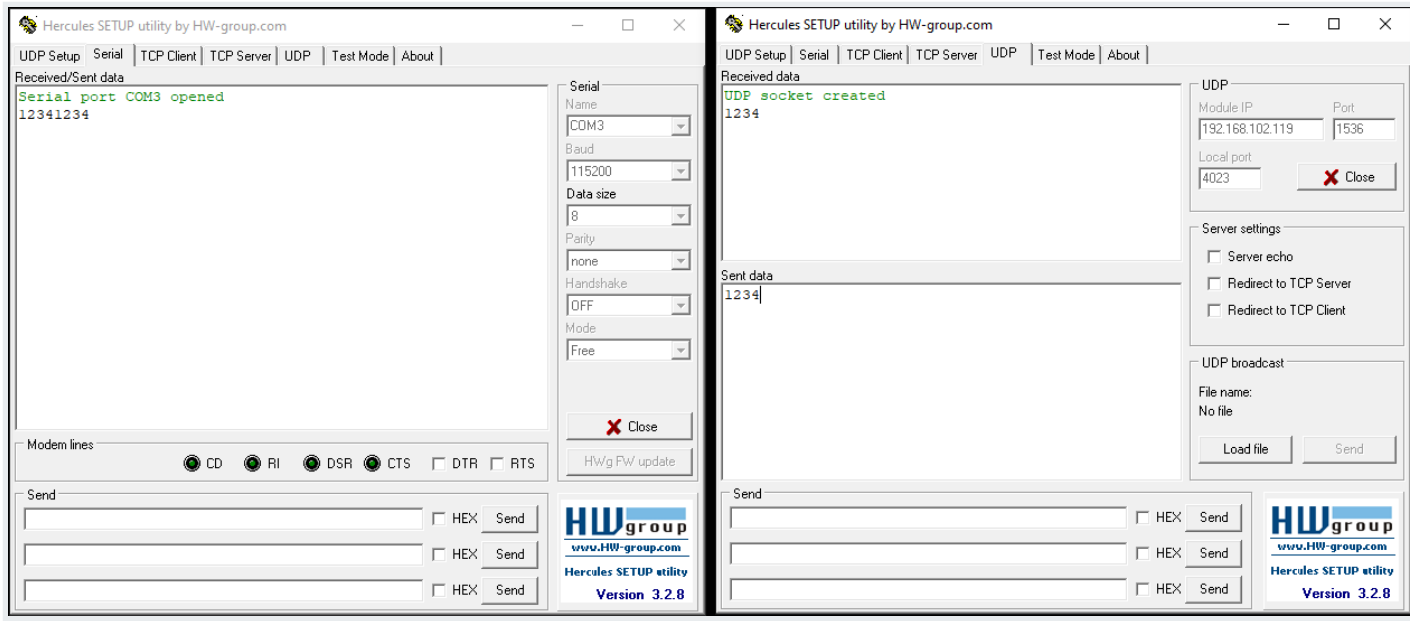
Then, it is necessary to configure the RemoteCOM’s ports. It can be done, for example, via the device’s web page. Ports' configuration can be also done via the Telnet, serial or service console. Set the “UDP Socket” option in the “Service” field on the “Port” page. Check also if the port number is set correctly in the “Port” field. Set desired options of the RS232/485 connection (“Baud Rate”, “Data Bits”, “Parity”, “Stop Bits” - these options should be the same as in the RS232/485 device).



Now, the device should be ready to work. The bidirectional communication should be available after the device receiving a first message from the UDP client. Before that happens, all of the data sent from the device to the UDP client will be buffered and sent later.

Test connection

Connection can be easily tested with a USB-RS232/485 converter and Hercules Setup Utility software. Connect the RemoteCOM's RS232/485 port to the USB-RS232/485 converter and plug it in to a USB port of a PC. Open Hercules Setup Utility program and go to the "Serial" page. Set serial connection options according to the previous RemoteCOM's ports configuration and open the COM port. Then, go to the "UDP" page and set the device's IP address and port. The bidirectional communication should be available after the device receiving a first message from the UDP client. Before that happens, all of the data sent from the device to the UDP client will be buffered and sent later.


Hercules SETUP utility by HW-group.com
UDP Setup
Serial
TCP Client
TCP Server
UDP
Test Mode
About
Received/Sent data
Serial port COM3 opened
12341234
Serial
Name
COM3
Baud
115200
Data size
8
Parity
none
Handshake
OFF
Mode
Free
Close
HWg FW update
Modem lines
CD
RI
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RTS
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HEX
Send
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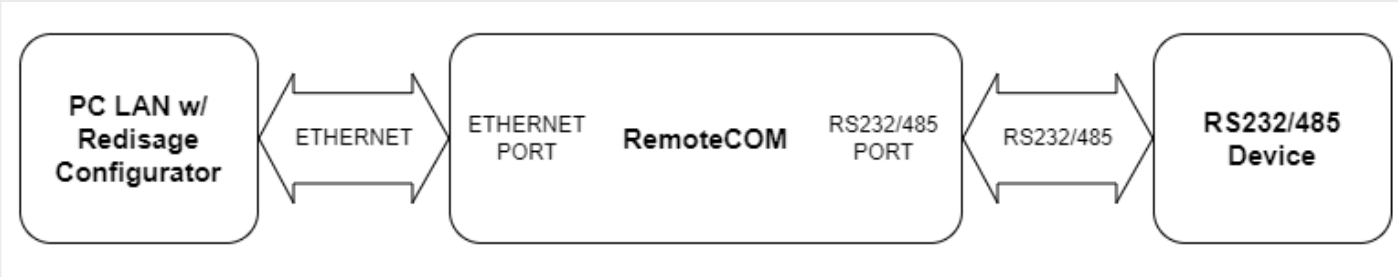
Hercules SETUP utility
Version 3.2.8
Hercules SETUP utility by HW-group.com
UDP Setup
Serial
TCP Client
TCP Server
UDP
Test Mode
About
Received data
UDP socket created
1234
Sent data
1234
UDP
Module IP
192.168.102.119
Port
1536
Local port
4023
Close
Server settings
Server echo
Redirect to TCP Server
Redirect to TCP Client
UDP broadcast
File name:
No file
Load file
Send
Send
HEX
Send
www.HW-group.com
Hercules SETUP utility
Version 3.2.8

Redisage Configurator Virtual COM Mode

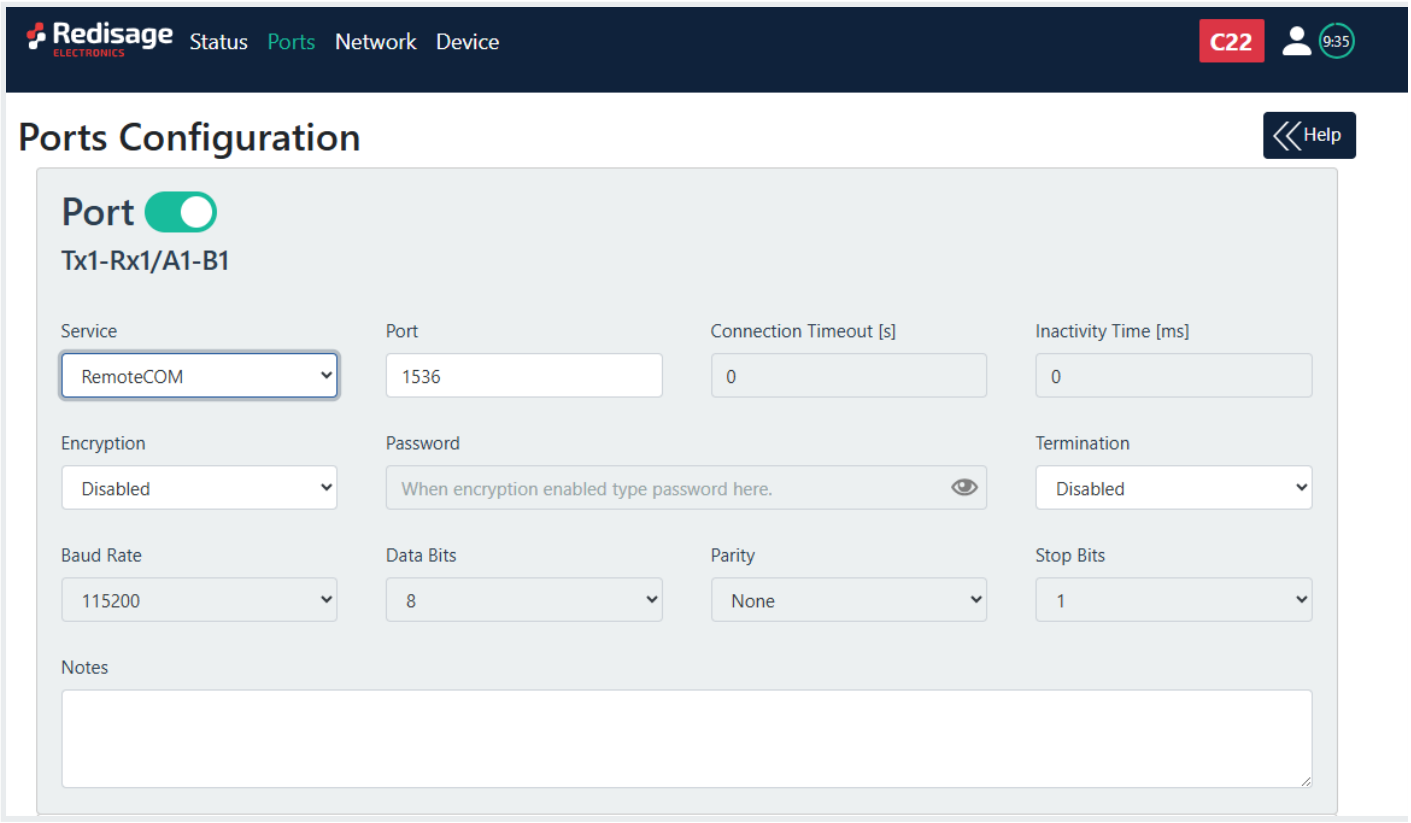
Serial Port Server (C20 - C25)

This article presents a simple instruction of a first connection between a virtual COM port and a RS232/485 device through the RemoteCOM and the Redisage Configurator app. Redisage Configurator is used to emulate connection between converter and a PC as if its RS232/RS485 ports would be connected directly to the COM port. The advantage of that functionality is lack of additional cables. Redisage Configurator can be installed on Windows machine and requires the Redisage VSP Driver to work (it can be installed with RedisageVSPDriver.Installer).

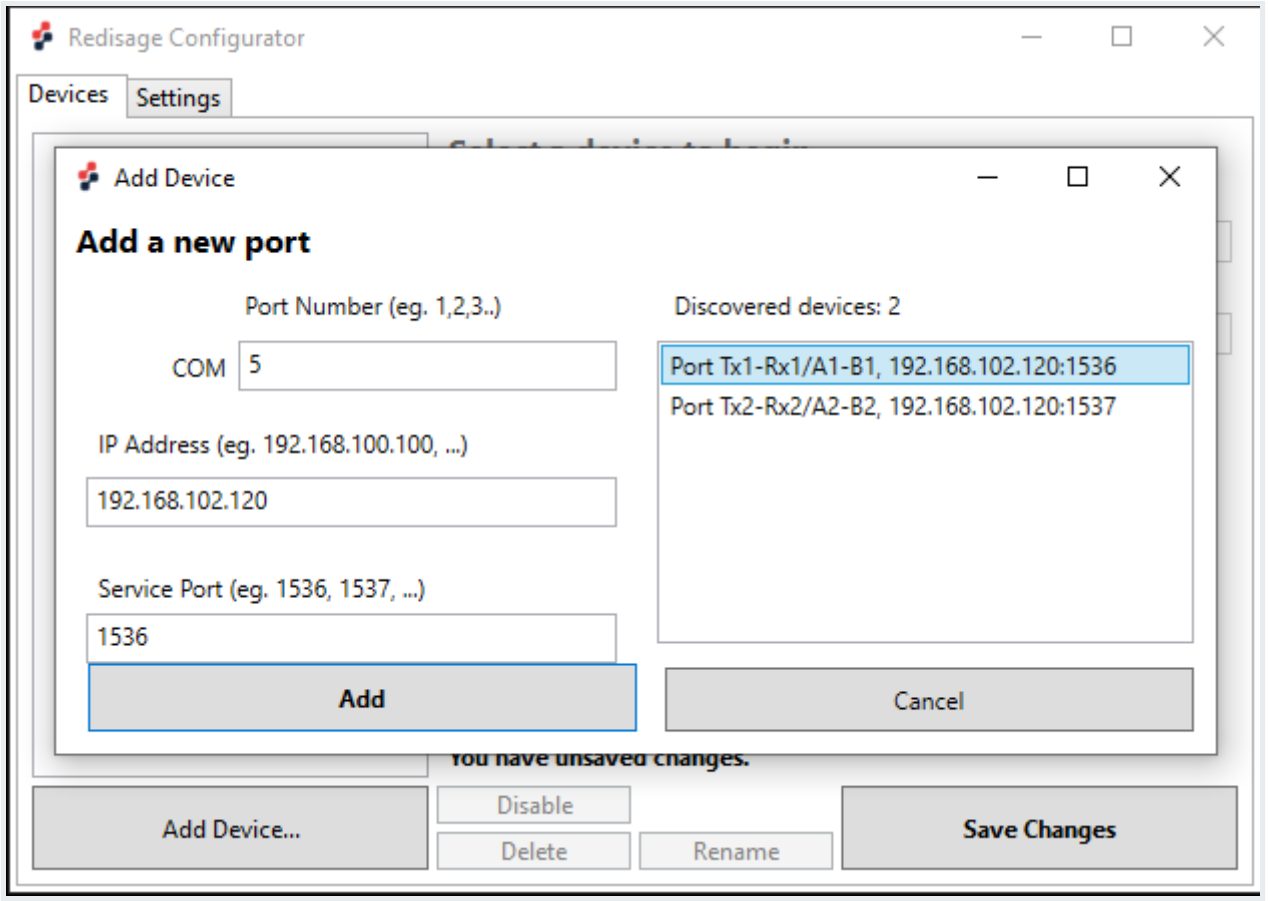
In order to perform a setup, connect the RemoteCOM according to the diagram below (RemoteCOM should be connected via Ethernet to the same local network as the PC).



Then, it is necessary to configure the RemoteCOM’s ports. It can be done, for example, via the device’s web page. Ports' configuration can be also done via Telnet, serial or service console. Set the “RemoteCOM” option in the “Service” field on the “Port” page. Check also if the port number is set correctly in the “Port” field. Additionally, encryption can be set to increase the security (it will also require to set up a password).



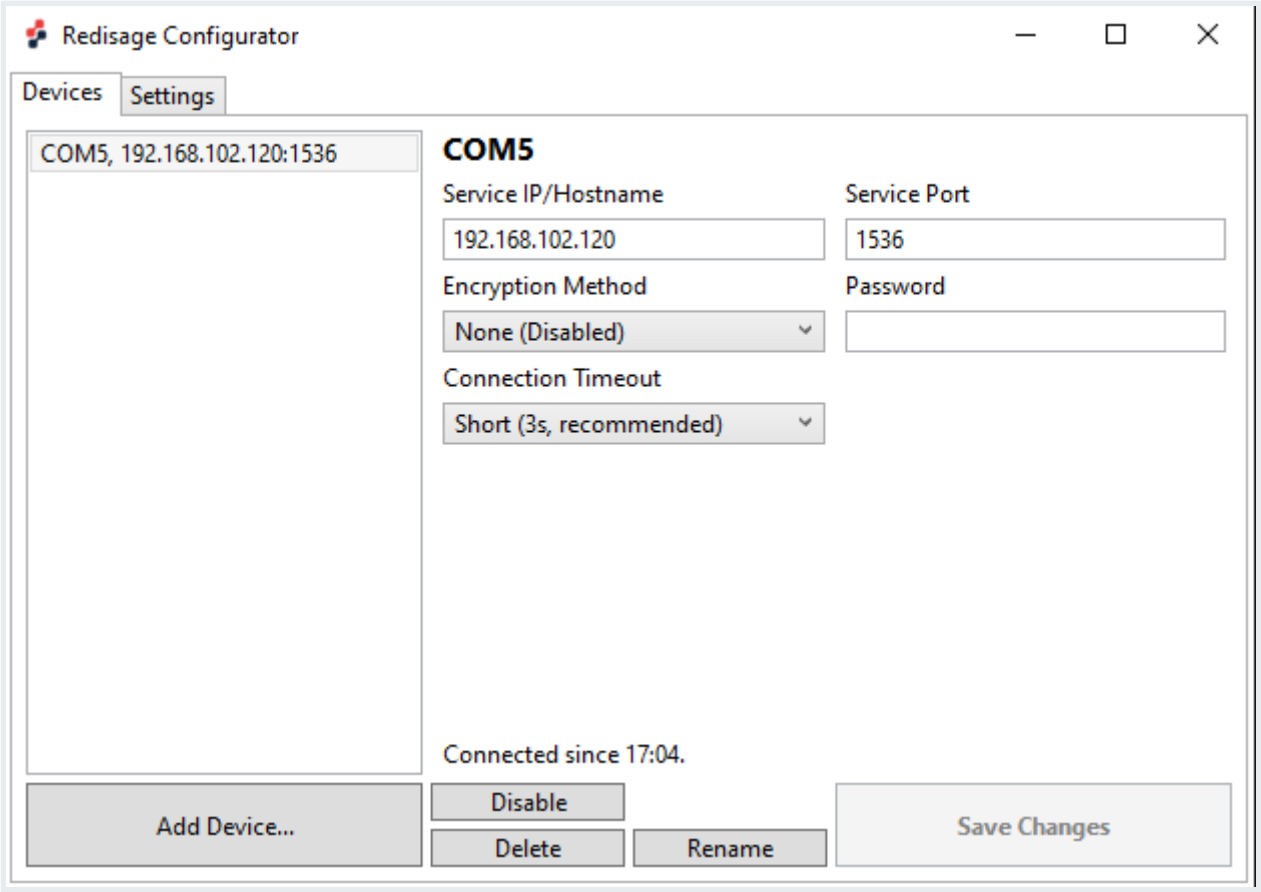
Next, open the Redisage Configurator and click the “Add Device...” button. Available RemoteCOM’s ports should appear on the list. Choose the desired one and click the “Add” button.



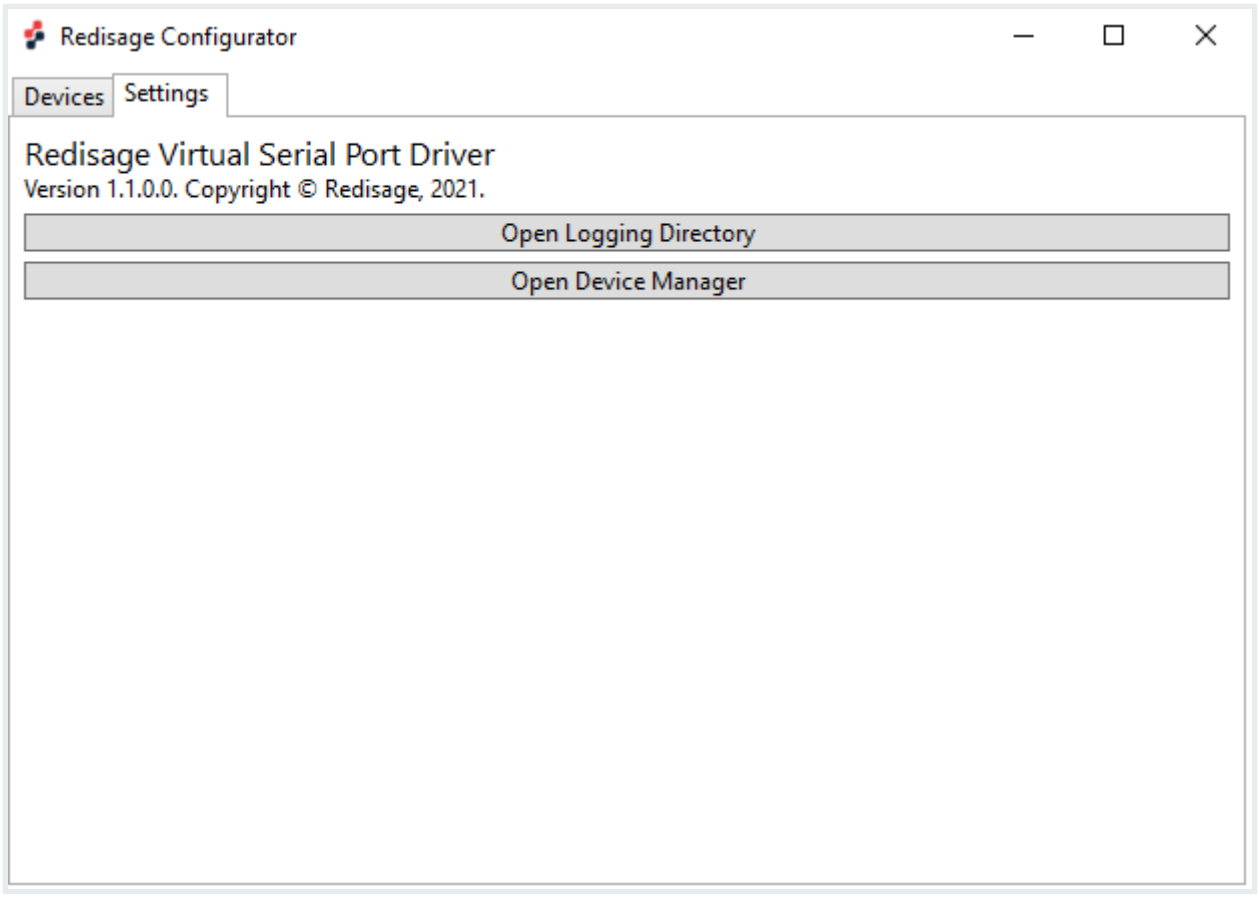
> If a discovered device cannot be added, check if it hadn’t been added before with a different COM port / service port. In that case, delete previous configuration from the Redisage Configurator.

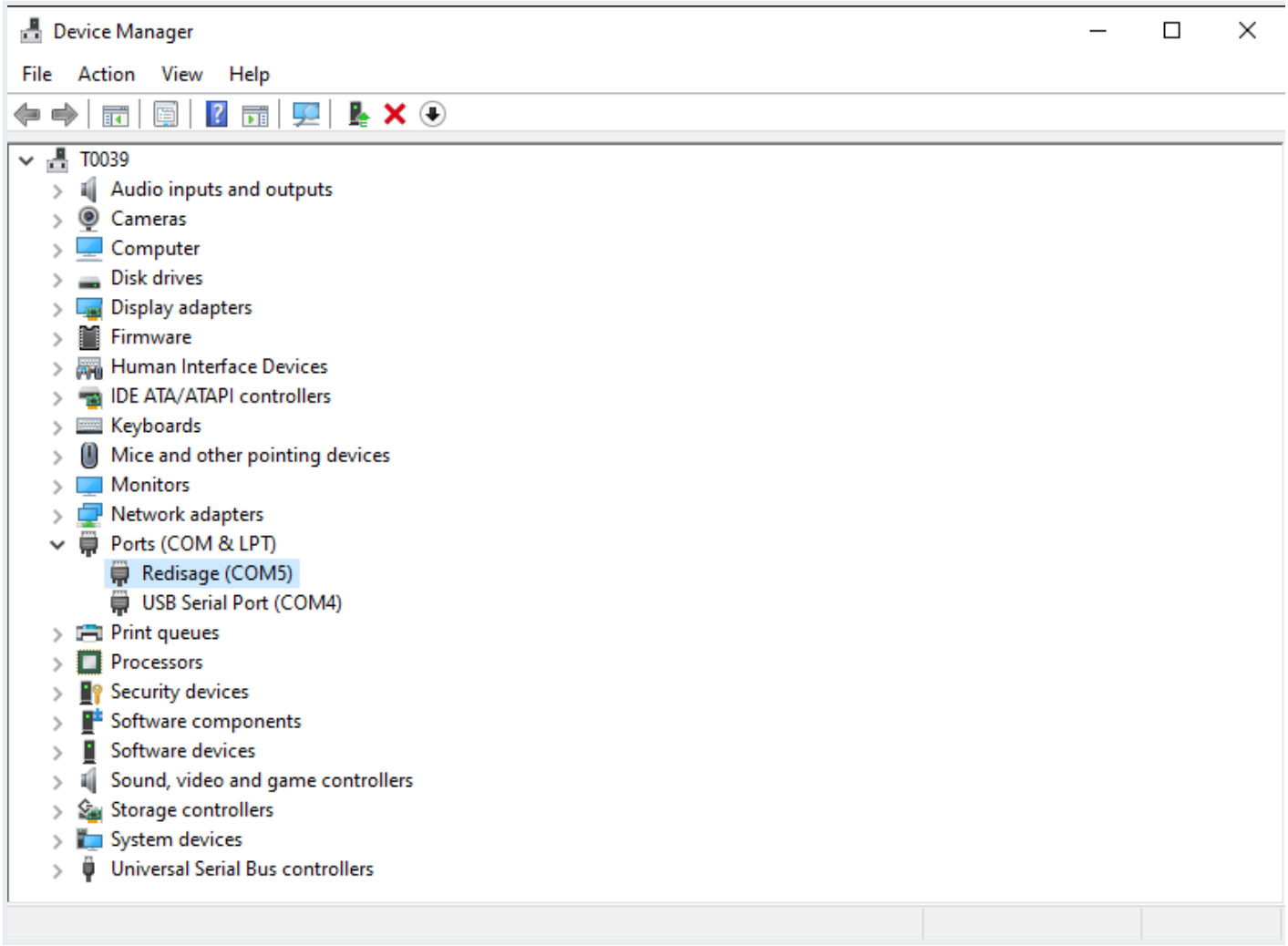
> If that won’t work, check if the port service was configured correctly for the RemoteCOM Service.

Enable the virtual COM port with the “Save changes” button. If a password was set during the configuration, it will be necessary to type it into the “Password” field.



Now, the device should be ready to work. The bidirectional communication should be available from the start. It is possible to check if created virtual COM port is present in the system. Just go to the “Settings” page and choose “Open Device Manager” button. There should be a “Redisage” COM visible.

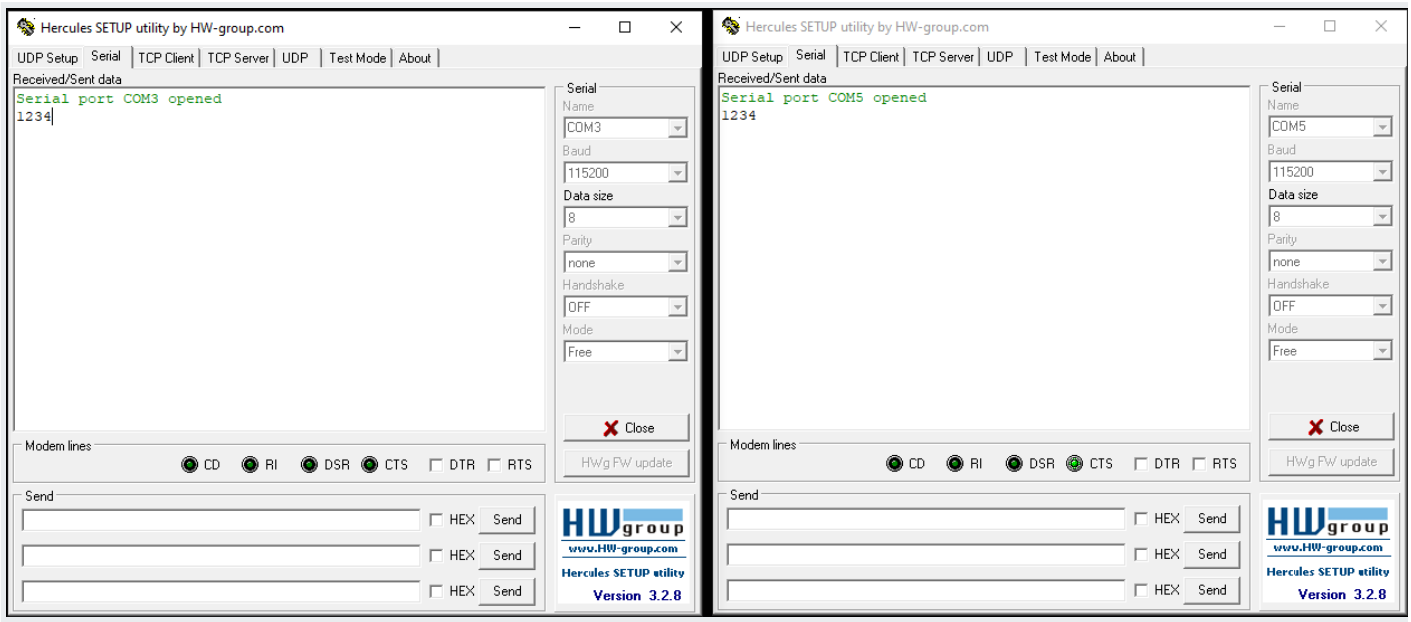

Redisage Configurator
Devices
Settings
Redisage Virtual Serial Port Driver
Version 1.1.0.0. Copyright © Redisage, 2021.
Open Logging Directory
Open Device Manager


Device Manager
File
Action
View
Help
T0039
Audio inputs and outputs
Cameras
Computer
Disk drives
Display adapters
Firmware
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Ports (COM & LPT)
Redisage (COM5)
USB Serial Port (COM4)
Print queues
Processors
Security devices
Software components
Software devices
Sound, video and game controllers
Storage controllers
System devices
Universal Serial Bus controllers

Test connection

Connection can be easily tested with a USB-RS232/485 converter and Hercules Setup Utility software. Connect the RemoteCOM's RS232/485 port to the USB-RS232/485 converter and plug it in to a USB port of a PC. Open 2 instances of Hercules Setup Utility program and go to the "Serial" page of the first one. Set serial connection options according to the previous RemoteCOM's ports configuration and open the COM port (fixed options: Baud Rate 115200; Data Bits: 8; Parity: None; Stop Bits: 1).

Then, go to the "Serial" page of the second Hercules instance and set the virtual COM port in the same way as the serial port of the first Hercules instance. After a successful connection, there should be the bidirectional communication available.



> While changing port service back from RemoteCOM to TCP/UDP Socket make sure to disable RemoteCOM virtual port in the Redisage Configurator first.