COM Port Data Emulator

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1   Introduction

COM Port Data Emulator is a tool for emulating a com port or an Ethernet device, that generates a serial stream of data. The program can create a data flow, wrap it to data packets (RS232, TCP/IP or UDP) and send to a port.

COM Port Data Emulator can help developers or experts test their applications. This program can take into account many of typical processes of your work: receive and transmit free data source and much more.

Our software can read a data stream from a text or a binary file or generate random data packets. You may send data repeatedly.

You without effort can work with any equipment working over RS232/RS485/RS422 interface. It may be as the measuring device, the industrial controller or amateur radio station, so other personal computer connected through a z-modem cable.

COM Port Data Emulator supports: full duplex mode, flexible configuration (you may use our program with miscellaneous baudrates (up to 115200), data bits, stop bits, different types to parity, flow control types and other).

Key features:

- supports COM, RS232, RS485 (with converter), TCP/IP, UDP ports;
- can read a data stream from a file;
- supports a flow control for COM and RS232 ports;
- can operate as a client and a server over TCP/IP;
- can create a log file with data sent;
- displays line status (COM and RS232) and communication errors;
- displays data sent and received.

2   License and technical support

2.1   License

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2.2   Support

Technical questions Common questions Sales questions	https://www.aggsoft.com/support/

3   Installation

3.1   System requirements

Windows 2000 Professional - Windows 11, including x64 and x86 OS, Workstation and Server OS.

It is necessary to have at least one free COM port, not busy by any device (mouse, for example) to connect external device.

3.2   Installation process

If any beta-version was installed on your computer, remove it.

Quit of the working COM Port Data Emulator on installation time.

Run an installation file.

By default, COM Port Data Emulator will be installed to the directory "/Programs Files/COM Port Data Emulator" of your system disk, but you can change this path.

In the standard distributive of COM Port Data Emulator are no additional modules files, which you can download from our site.

4   Usage

Device

When you launch the application, you will see the following:
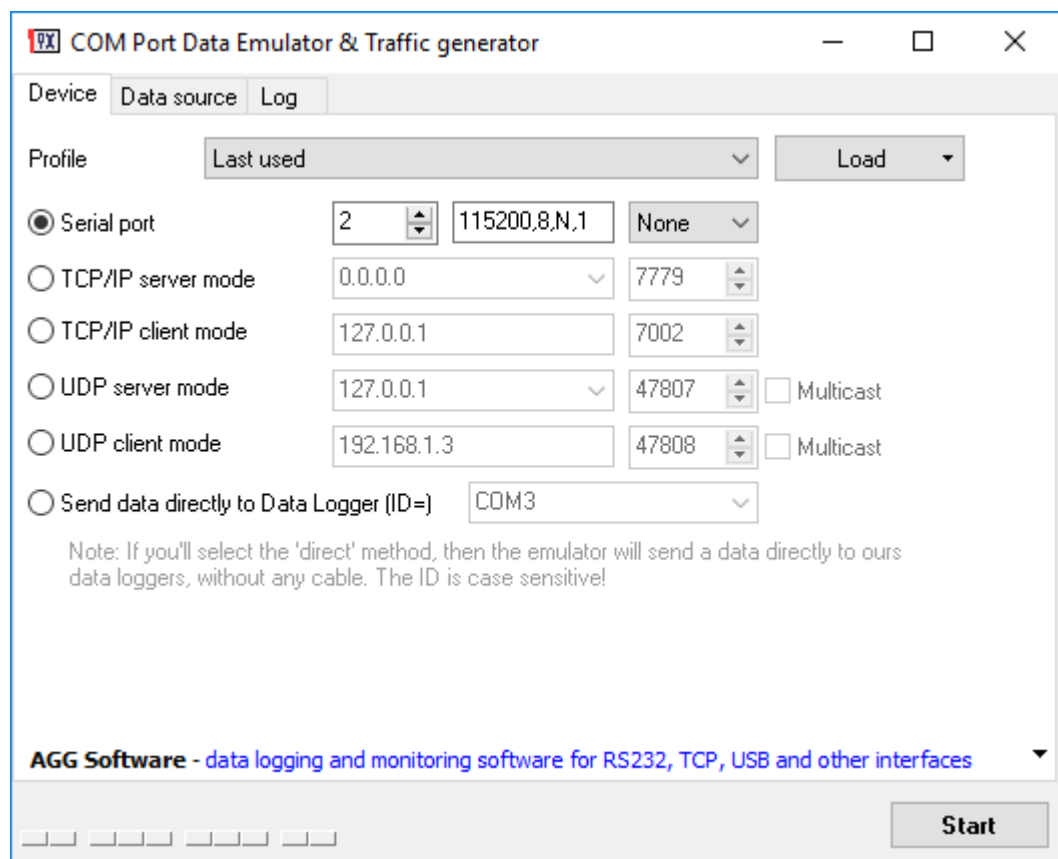
The program interface is very simple:

1. Select a communication port: serial port, TCP/IP server, TCP/IP client, UDP, Direct connection;
2. Configure parameters for the selected port;
3. Click the "Start" button.

The **serial port** requires following communication parameters:

1. Port number;
2. Port configuration in the following form: baudrate, data bits, parity, stop bits. The parity can be: N - none, E - even, O - odd, S - space, M - mark.
3. Flow control: you may select software flow control (XON/XOFF) or hardware flow control (RTS/CTS).

The **TCP/IP and UDP server** mode requires:

1. Local IP or DNS name
2. Local port number

In this mode the program will wait connection from an external devices to this port.
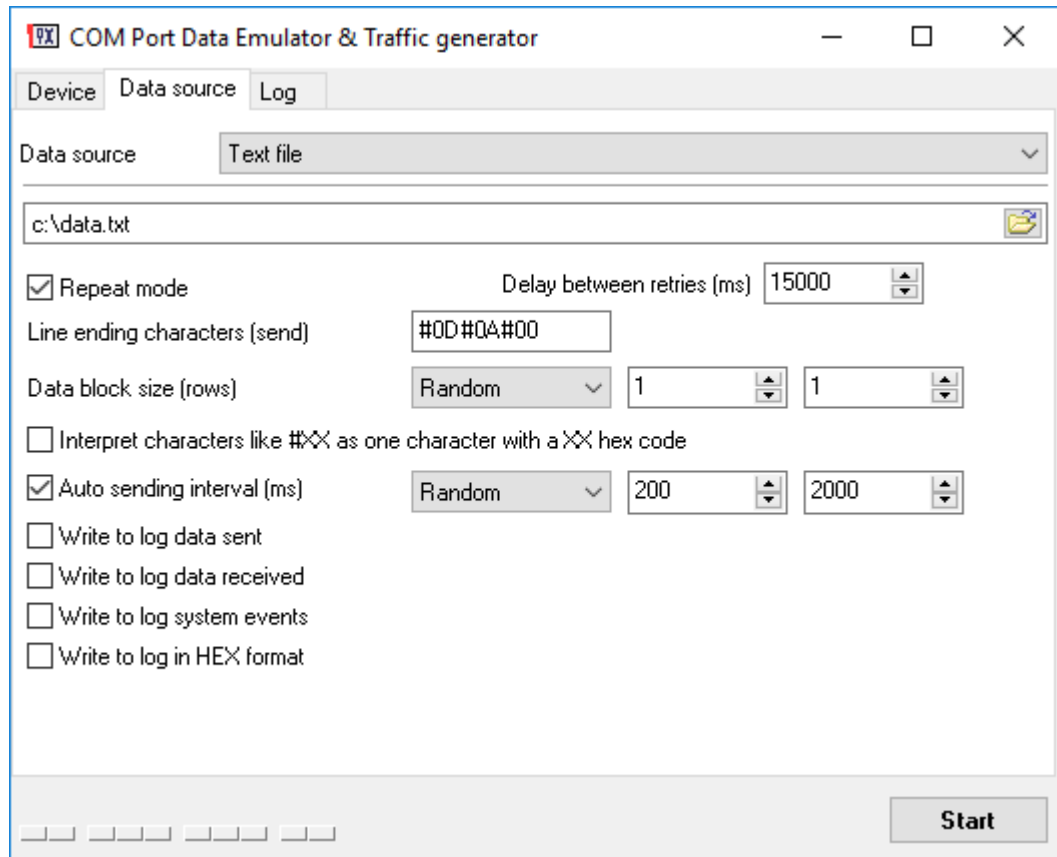
The **TCP/IP and UDP client** mode requires:

1. Remote IP or DNS name
2. Remote port number

In this mode the program will connect to an external device at the specified address.

Note: Please, unblock our software in your firewall!

You may save or load a configuration to/from a file. Please, use "Save" and "Load" buttons for it.

Data source

Data source - allows your select a data source type:
1. **Random text** - the program generates a random string of bytes. The string contains a readable text.
2. **Text file** - the program reads information from a text file, line by line and send the entire line to a port.
3. **Binary file** - the program reads information from a binary file by data blocks. A size of the data block is specified in the "**Data block size**" field.
4. **Random bytes** - the program generates a random string of bytes. The string contains any byte.
5. **Text strings** - instead of the text file several strings can be specified in the program interface.

Repeat mode - the program will send a file repeatedly. The "**Delay between retries**" defines an interval between next sending.

Line ending characters - the program can send strings from a text file with this line ending characters. You may specify any characters. You may specify a hexadecimal code of a non-printable character in the form of #0D, where 0D is the hexadecimal code of the <CR> ASCII code.

Interpret characters like #XX as one characters with a XX hex code - this option allows to specify non-printable characters in a file. You may specify a hexadecimal code of a non-printable character in the form of #0D, where 0D is the hexadecimal code of the <CR> ASCII code. The program reads the file and decode these sequences and send one character to a port.

Auto sending interval (ms) - specifies an interval between data blocks while sending data.

Create a log file with data sent - this option allows to compare a random data later with data received on another side.

Log

The next page allows you see incoming and outgoing data:
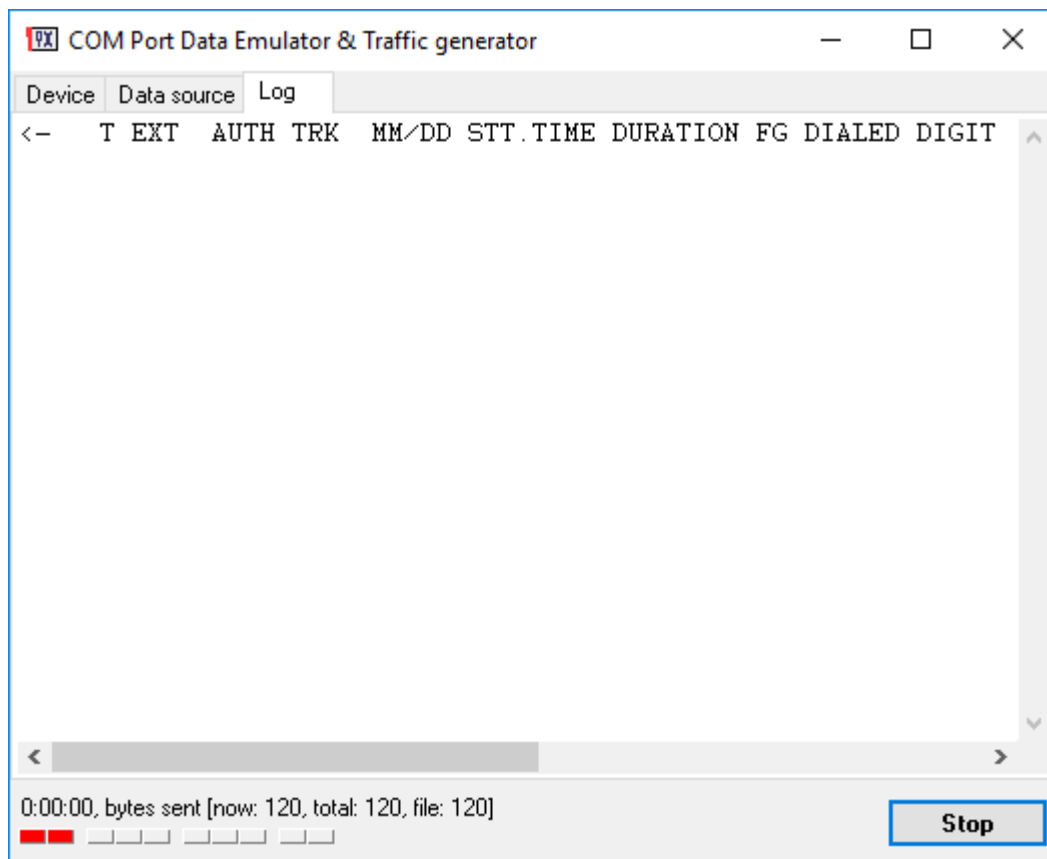
The program adds the "<--" prefix for outgoing data and the ">--" prefix for incoming data. All non-printable characters will be encoded like #00.