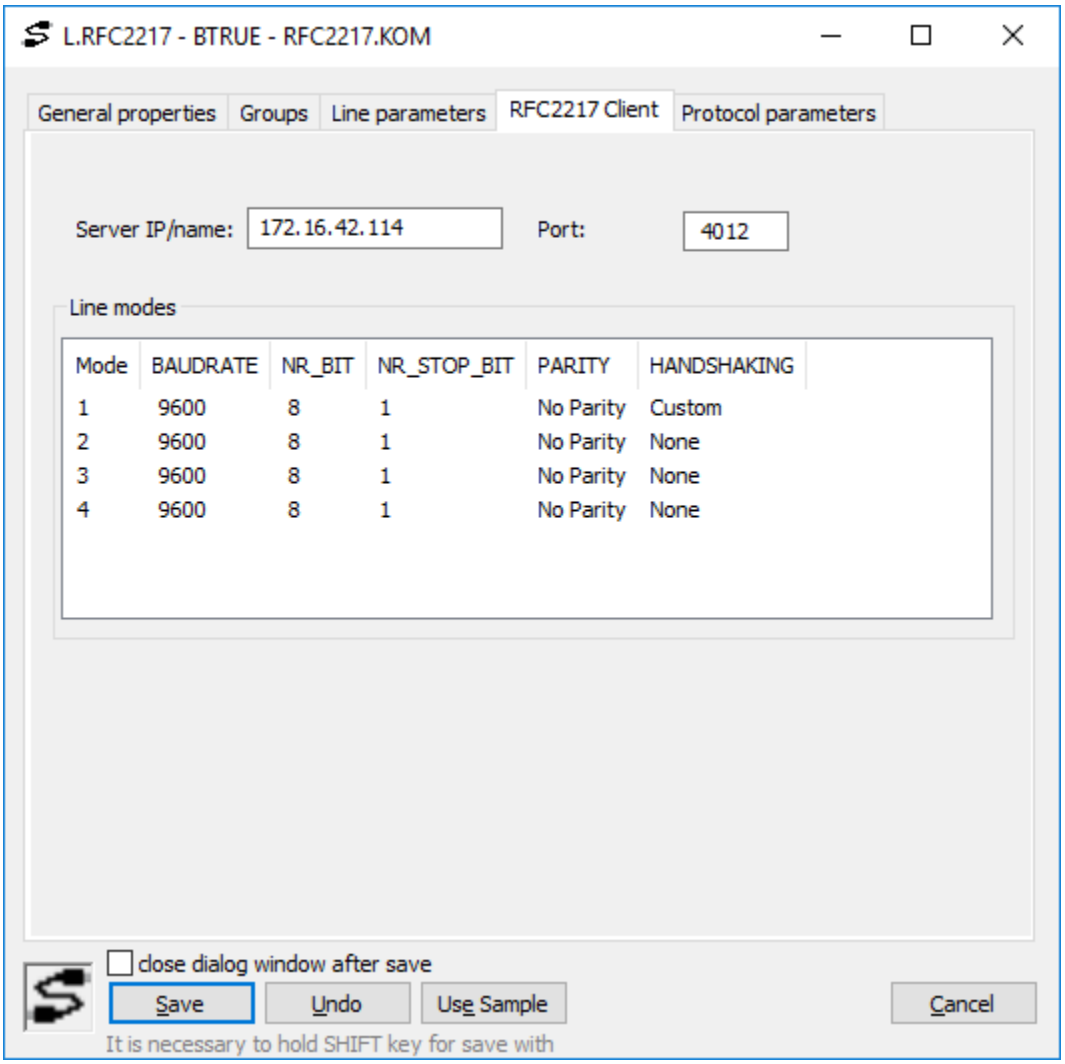
RFC2217 Client

Communication line of "RFC2217 Client" category

The "RFC2217 Client" communication line supports the communication with the converters of serial interfaces (device servers) according to RFC2217 (Telnet Com Port Control Option) standard. It supports a transfer of data and control commands (setting baud rate, number of bits, parity, etc.) over a single TCP connection (NVT - Network Virtual Terminal).
Unlike the "SerialOverUDP Device Redundant" and "SerialOverUDP Line Redundant" lines, the transmission parameters may be set remotely, i.e. from the configuration of the line in the D2000 System. The line of the "RFC2217 Client" category can be used on both Windows and Linux platforms.

Parameters

Configuration parameters of the "RFC2217 Client" line.



Server IP/name

IP address (recommended) or DNS name of the target device (converter of serial interfaces). For redundant devices, multiple IP addresses or names separated by commas or semicolons can also be specified.

Port

The TCP port number (1-65535) on which the device is listening.

Line modes

Transmission parameters can be set for four modes, as when setting the "Serial" and "Serial Line Redundant" lines.

Parameter "ConstOpen"

The meaning of the "ConstOpen" parameter is different from the serial line. The TCP connection is established when the line is used for the first time and remains established (except for behavior in redundancy - see Operation of the line in redundancy).
If "ConstOpen" is checked for Line mode 1, when establishing a connection the KOM process waits for responses to all RFC2217 queries. If all responses are not received, the connection is closed.
If "ConstOpen is unchecked for Line mode 1, when establishing a connection the KOM process does not wait for responses (except for the response to the initial WILL CPO, which detects RFC2217 support), so the connection will also work against servers that ignore some of the queries.
The following RFC2217 parameters are queried when establishing a connection:

- SIGNATURE (device identification, eg "MOXA").
- BAUDRATE (speed, eg 9600 baud)
- DATASIZE (number of bits, eg 8)
- PARITY (parity, e.g. even/odd)
- STOPSIZE (number of stop bits)
- signal states - BREAK, DTR, RTS, flow control (XON / XOFF, hardware, DCD, DTR, DSR)

and the following RFC2217 parameter is set:

- LINESTATE (setting of line status reporting - e.g. timeout error, framing error, parity error, overrun error, break-detect error)

Operation of the line in redundancy

In redundant systems (redundant D2000 servers and/or multiple instances of KOM processes), only the active KOM process connected to the D2000 Server in the HOT state opens a TCP connection. Once it becomes passive, the connection to the device is closed.

Tell command LNSTAT

The tell command LNSTAT OPEN/CLOSE stops communication (CLOSE) and closes the connection to the device. Communication resumes after the LNSTAT OPEN command or when the communication process is restarted.

Related pages:

Communication lines