Topics for Standard Serial Connections:

Help for Communications Parameters

Communications Parameters help synchronize the data flow between the host computer system and your PC.   These parameters should be set to match the requirements of the host.

For more information, select:

Baud Rate
Data Bits, Stop Bits, Parity

Baud Rate

This is the transmission speed of the communications link between your PC and the host computer.   The standard choices are 110, 150, 300, 600, 1200, 2400, 4800, and 9600 bits per second.   Additional choices, such as 19200, 38400, and 115200 may be available depending on the hardware of the personal computer.

Data Bits, Stop Bits, Parity

Note: These three parameters are grouped in the only possible valid combinations.   You merely need to select a set.

Data Bits
Selects the number of binary information data bits contained in each character.   The value of this option can be either a 7 or 8. This almost always will be 7 if parity is used and 8 if no parity is used.

Stop Bits
Selects the number of bits which should be appended to each character to detect correct character framing.   The value of this option can be either a 1 or 2.   This setting is dependent on the requirements of the host computer system but usually is 1.

Parity
Parity is used as a method of error detection and is determined by the host computer.   The choices for this option are None, Odd, Even, Mark, and Space.

Help for Flow Control

Flow Control helps to synchronize the data flow between the host computer system and your PC.   These parameters should be set to match the requirements of the host.

For more information, select:

Transmit Pacing
Receive Pacing

Transmit Pacing

This option controls whether or not Softerm responds to pacing while transmitting data to the host computer.   The choices for this option are XON/XOFF, XON/XOFF Pairs, CTS, DSR, DCD and None (the default).

XON/XOFF is selected if Softerm is to perform resume and suspend operations in response to XON (start) and XOFF (stop) characters received from the host computer.   Since most terminals do not have the capability to respond to XON and XOFF characters, this option should be set to None for most terminal communications to host computers.

Caution: If the XON and XOFF character codes used by the host correspond to terminal functions other than start/stop in the terminal emulation, unpredictable results may occur.   This option should be used only if it is a requirement of the host computer system.

The selection of XON/XOFF Pairs is similar to XON/XOFF, except that XON and XOFF characters are treated as pairs.   For example, if a second XON character is received before an XOFF, it is treated as data, rather than as a flow control character.   In like manner, if a second XOFF is received before an XON, it is treated as data.   (**Note:** This option is designed primarily for Hewlett Packard environments.)

Clear To Send, Data Set Ready, and Data Carrier Detect simply are other infrequently-used methods by which transmit pacing can be controlled.   As usual, you should use one of these methods only if required by your host system.

If None is selected, no flow control is used.   Transmissions to the host could overflow its receive buffer and data could become lost and/or garbled.

Receive Pacing

This option defines the type of pacing control Softerm will use when receiving characters from the host computer system.   The choices are None, XON/XOFF (the default), DTR, and RTS.   The specific choice depends on the type of connection and the host system software.   If you are unsure of the host's requirements, check with the System Administrator.

The selection of XON/XOFF specifies the use of start (XON) and stop (XOFF) characters for pacing control.

Selecting DTR allows the Data Terminal Ready signal from the serial interface to be used as a pacing control.   The DTR option is appropriate only when the serial port is directly connected to the host computer system, rather than using a modem.

Request To Send simply is another method by which Data Terminal Equipment can control pacing.   As usual, you should use this method only if required by the host system.

If None is selected, no flow control is used.   Transmissions from the host could overflow this program's receive buffer and data could become lost or garbled.   If this happens, increase the size of the Receive Buffer set in the Terminal Emulation profile.

COM Port

Select the physical serial (COM) port you want to assign to this connection.

Help for System Settings

The Session profile is trying to access a communications port that is not available.   (The port may be in use or it may not be correctly installed and configured.)

So long as you select OK, Softerm will cycle through all the possible COM ports until an unused port is found or until you select Cancel.