DF1 Serial Communication Driver

This document has the specific information related to the driver configuration. For a generic explanation on Devices, Channels, Nodes and Points configuration, please refer to reference guide.

Content

Section 1 – Summary Information

Communication Driver Name: DF1 Serial
Current Version: 1.0
Implementation DLL: T.ProtocolDriver.DF1_Serial
Protocol: DF1
Interface: Serial
Description: DF1 Serial driver implements communication with Rockwell Allen-Bradley devices using DF1 Protocol (SLC Families, and Micrologix) via Serial communication. It operates as a Master on serial networks. The communications blocks are dynamically created according the pooling cycle defined on the AccessType for each Device Point.
Max number of nodes: user defined

Supported Files:

Files	Read	Write	Data Type	Address size
N	✓	✓	Word	2 bytes
B	✓	✓	Bit	1 bit
F	✓	✓	Single	4 bytes
O	✓	✓	Output	1 bit
I	✓	✓	Input	1 bit

Section 2 – Channel Configuration

Protocol Options
CheckSum: It defines the checksum currently being used by the device, whether it's CRC or BCC.

Settings
Set the fields according to your serial port configuration.

Section 3 – Node Configuration

Station Configuration

SlaveId: Set this field with the address of the slave device in the network.

Section 4 – Point Address Configuration

The syntax for the DF1 Serial communication point is: <File>:<Address>/Parameter

Where <Operand> indicates the memory area, the valid values are:

- N, for Integer
- B, for digital
- F, for real
- O, for digital (output)
- I, for digital (input)

The operand also has a register value, except by I/O.

<Address> indicates the data address for the chosen file.
<Parameter> indicates the specific bit of that address (which is a byte) (for the digital values)

e.g.:

- F8:0
- N21:1
- B21:1/6
- I:0/0

Section 5 – Troubleshoot

The status of the driver execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information

The above tools indicate if the operations have succeeded or have failed where the status 0 (zero) means success. Negative values are internal error codes and positive codes are protocol error codes.

Revision History

Revision	Description	Date
A	Initial Revision	October, 20th 2014