

National Instruments 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.

Contents

Section 1 – Summary Information	2
Section 2 – Channel Configuration.....	2
Protocol Options	2
Settings.....	2
Section 3 – Node Configuration	2
Station Configuration	3
Section 4 – Point Configuration	3
Section 5 – Troubleshoot	3
Revision History	4

Section 1 – Summary Information

Communication Driver Name: NIDataSockets

Implementation DLL: T.ProtocolDriver.NIDataSockets.dll

Protocol: National Instruments Data Sockets

Interface: TCP/IP

Description: NIDataSockets communication driver implements communication with National Instruments softwares, including LabView and others which are compatible with the National Instruments Data Sockets interface.

PLC types supported: National Instruments Labview

Multi-threading: user defined

Max number of nodes: user defined

PC Hardware requirements: Standard PC Ethernet interface board

Supported Operands: Any tag defined on target system

Section 2 – Channel Configuration

Protocol Options

- **Maximum size of blocks:** Defines the maximum of addresses in a read block.
- **Message Format:** defines the protocol used for the Data Sockets communication
Options: DSTP, OPC, LOOKOUT, HTTP and FTP

Settings

TCP/IP:

- **NodeConnections:** Defines the maximum number of parallel requests that will be sent to each node (asynchronous communication)

Section 3 – Node Configuration

Station Configuration

TCP/IP:

- Station syntax: <IP address>

Where : <IP address> = IP address of the slave device in the network

You can also add /<Branch> at the Station name

Ex: 192.168.1.1

Ex.: 122:168.1.1/MyTags

Section 4 – Point Configuration – Address field

The syntax for the communication point is:

InitialBranch/TagList/Tag1

Note: If you have many tags sharing the initial branches, you can also remove the InitialBranch from the Point address and move it to the Node-Station address

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 values are protocol error codes.

Revision History

Revision	Description	Date
A	Initial Revision	September, 2014