NI Labview Data Sockets Read-Only Connector

Read-only access to National Instruments DataSocket servers, such as LabVIEW and Lookout.

- Name: **NIDataSocketsRead**
- Version: 1.2.0.0
- Protocol: National Instruments DataSocket
- Interface: TCP/IP
- Runtime: Windows
- Configuration:
  - Devices / Protocols

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Overview

The NI Labview Data Sockets Read-Only connector reads values from National Instruments DataSocket servers, such as LabVIEW and Lookout. It opens each DataSocket item in read mode and rejects write requests, so the tags on this connector are read-only. To read and write the same items, use NI Labview Data Sockets Connector.

Communication Driver Information	
Driver name	NIDataSocketsRead
Assembly Name	T.ProtocolDriver.NIDataSocketsRead
Assembly Version	1.2.0.0
Protocol description	NI Labview Data Sockets Read-Only Connector
Available for Linux	False
Direction	Read only (DataSocket server to FrameworX)
Interface	TCP/IP

Prerequisites

- A Windows computer running the FrameworX runtime.
- The National Instruments DataSocket client components registered on the runtime computer.
- A DataSocket server reachable from the runtime computer.

Procedure

1. In **Devices Channels**, create a channel and select the protocol **NI Labview Data Sockets Read-Only Connector**.
2. Open the channel Protocol Options and set BlockSize and Encoding. See Channel Configuration.
3. In **Devices Nodes**, create a node on the channel and set the Station to the DataSocket server. See Node Configuration.
4. In **Devices Points**, add one point per tag. Set Address to the DataSocket item path and AccessType to a read type, for example Read.
5. Start the runtime.

Channel Configuration

Protocol Options

- **BlockSize**: maximum number of items in a read block. Range: 0 to 250. Default: 250.
- **Encoding**: DataSocket access scheme. Options: DSTP, OPC, LOOKOUT, HTTP, FTP. Default: LOOKOUT.

Settings

TCP/IP:

- **NodeConnections**: maximum number of parallel requests sent to each node. Default: 1.

Node Configuration

Station Configuration

Station syntax: **`<Server>`**

- **Server**: name or IP address of the DataSocket server. Default: localhost.

The connector builds each item URL as `<Encoding>://<Server>/<Address>`. To share a common branch across many points, add it to the Station, for example `192.168.1.1/MyTags`.

Points Configuration

Address syntax: the DataSocket item path on the server, for example `InitialBranch/TagList/Tag1`. When the Station carries the initial branch, the Address holds the rest of the path.

Driver Revision History

NIDataSocketsRead Revision History	
Version	**Notes**
1.2.0.0	Initial documentation release.

Related Pages

- NI Labview Data Sockets Connector
- NI Labview Legacy Connector
- Devices Module
- Devices AccessTypes Reference
- Factory-Floor Interfaces

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