Catapult DNP3

Native DNP3 Driver for GE Proficy[™] iFIX[™], CIMPLICITY[™] and PowerLink Connect[™] Robust data aquisition and equipment communication solution

What is Catapult DNP3?

The Catapult DNP3 driver provides an easy and reliable method to connect DNP3 devices and controllers to your GE Proficy iFIX or CIMPLICITY HMI SCADA systems.

Catapult DNP3 provides master communications to DNP3 slave devices. The driver provides native support for GE Intelligent Platforms Proficy CIMPLICITY and Proficy iFIX. Catapult DNP3 also operates as an OPC server for other systems.

The DNP3 protocol was developed as a standards-based Interoperability solution between substation computers, RTUs, Intelligent Electronic Devices and master stations and is utilized in many industries including, Electric Utility / Power Distribution and Water / Waste Water Management. Catapult DNP3 will allow you to automatically connect, control, manage and monitor devices locally or from remote substations.



The Catapult DNP3 driver can be deployed to support a range of communication channels.



The Cataplut DNP3 Client

Key Benefits:

- Reliable, secure and auditable operations
- Enhanced operational decision making & safety
- Faster resolution of faults or time to diagnose how faults have occurred
- Reduced configuration & training time
- Reduced downtime & equipment maintenance

Key Features:

- Remote field equipment communication driver
- Robust data acquisition and process control
- Easy to configure and maintain
- High resolution (millisecond) event sequencing





"Catapult DNP is feature rich and allows full control of [DNP3] poll types and poll timing"

Eric J. Mitchell, Manager Utility Systems Engineering and Services NovaTech

Features

Catapult DNP3 enables fast and reliable remote data acquisition and control of field equipment. It provides an intuitive, easy to use interface enabling you to effectively integrate real-time operational intelligence into your HMI SCADA system.

General Functions

- Supports DNP Level 3 for Requests and Responses
- IP UDP & TCP
 Seriel (200, 5766)
- Serial (300-57600 baud), including flow control
- Radio support including PTT control; pre & post-transmission delay setting
- Configurable retries and timeouts
- Sequence of Events
- Report by exception
- Slave supported levels 1, 2, 3
- Up to 200 channels & 1,000
 devices
- Supports fast recovery of SOE data after a communications failure

DNP for both iFIX & CIMPLICITY

- Database addressing supports native iFIX, native CIM-PLICITY and industry standard OPC interfaces
- Driver can be stated as an application of configured to run as a Windows background service

Devices & Channels

- Separate configuration of devices and channels
- Each device can be associated with one or more channels
- Each channel can support one or more devices
- Automatic failover when multiple channels available

Sequence of Events

- SOE Level 3 time mode, supporting Local and UTC
- Each and every SOE detected and written to the SOE log file, time stamped to 1msec using time captured by the I/O device
- Includes time synchronization
- Full support for SOE event display in iPower for iFIX and iPower for Cimplicity

Momentary Change Detect

- Momentary changes (e.g. closed> open>closed) can be latched between read requests to allow the HMI to alarm momentary changes.
- Momentary changes reported using time captured by the I/O device for display in the HMI alarm system.

Configuration

 "On the fly" dynamic configuration without requiring system restart

Logging

- Separate SOE log file
- Communications monitoring in configuration window and to file
- Logging of raw binary data (data link) and decrypted data (application layer)
- Comprehensive statistics for both devices and channels
- All statistics available as standard HMI database tags

Main Logger		Yvexe/DNP_Logs	
Maximum 10			
Active Logs			
Channel	SOE	Trace	
C Device	F Errors	☐ Config	
SOE Logger			
SOE Folder			
Maximum File Size 10	MB Maximum Number of	Logs 10 🗧	
		OK Cancel	

The Catapult DNP3 Client is simple and easy to configure.

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	Class 3	P	30000		9

Different device communication channels enable automatic switching between primary and backup channels for reliable data communication.

About Catapult Software

Catapult Software provides leading-edge technology for HMI SCADA control systems and industrial communications (DNP3). Since 1991, we have enabled electricity, water & wastewater, oil & gas utilities, industrial and manufacturing clients around the world to improve the management of essential services and equipment. Our solutions save time, money and lives.

www.catapultsoftware.com

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