WebAccess

Driver Configuration Manual

GE FANUC 90-70

GESNPDrv.dll

Driver date: 2009/7/8

English Version 1.1

Revision History

Date	Version	Author	Reviewer	Description
2018-08-22	1.0	Alger.Tan	ChiRen.Wei	Initial Release
2018-11-02	1.1	Alger.Tan	Neal.Chen	Update Parameter List

Table of Contents

1. Introduction to GESNPDrv Driver

WebAccess SCADA Node provides an interface to the GE FANUC 90-30 and 90-70 series of Programmable using the SNP protocol (Series Ninety Protocol). This manual describes using a Serial RS232 or RS422 connection from the SCADA Node to a GE SNP compatible device.

The WebAccess software configuration of both is identical. Both the 90-30 and 90-70 processors can be used concurrently on the same RS-422 network.

1.1 GESNPDrv

Typically, there are two methods to connect a SCADA Node to the GE Fanuc Series 90 Processor:

1. Point-to-point. A SCADA Node with serial connection a single GE Fanuc Series 90 Processor.

2. Multi-drop. A SCADA Node with serial connection to a maximum of 256 GE Fanuc processors. Sixteen groups of sixteen GE Fanuc processors can be connected to an RS-422 network through the use of isolated repeaters.

Serial Port

- RS485 port on Power Supply of the 90/30
  Power supply of the 90-30 of many models has an RS-485/RS-422 Port. It is usually a 15 pin D-type (F).

- RS485 port on 90/70 Processors
  All CPUs of the 90/70 series have an RS-485/RS-422 compatible interface on the Processor Card. It is usually a 15 pin D-type (F).

- RS232 / RS-422 converter
  The Series 90 processors have an RS485/RS-422 port built-into the front panel. Unless you have an RS-422 internal bus card in your computer, you will have to use an RS-232/RS-422 converter. GE recommends you use their Mini-converter Kit, part No. IC690ACC901. This kit includes an RS-232/RS-422 converter that snaps on the front of the GE Series 90, a serial extension cable, and a 9-pin to 25-pin connector. If using a RS-422 internal bus card, you must use a buffered card.

- CMM Module: RS232 or RS-485
  Some Series 90 Processors use a CIMM module for SNP communications. These are can be either RS-232C or RS-485

1.2 PLC Settings

- Password

  If any data will be written to the PLC, level 2 access rights to the PLC must have password protection removed. There is no provision for passwords in the WebAccess GE9030 or GE9070 device driver.

- Serial Port

  There is an RS-422 port in front of every GE Fanuc Series 90 processor. This port is configured using the “GE Logicmaster 90 Programming Software”, or other software, from GE FANUC. The default port configuration is:

  - Data Bits 8
  - Stop Bits 1
  - Parity Odd
  - Baud Rate 19,200

2. Configure GE Fanuc 90-70 Series connection by using GESNPDrv

The steps, in summary, are:

1. Start Internet Explorer **Web Browser**.
2. Enter IP address of the **Project Node**.
3. Use **WebAccess Configuration**.
4. Open or Create a **Project**.
5. Configure a **SCADA node** (the PC that will connect to the automation hardware).
6. Configure a **Comport** for the SCADA Node that is a Serial type Comport by selecting ADD Comport from SCADA Node Properties.

2.1 Serial Comport Properties

The Serial Comport is associated with an RS232C or RS422A port on the SCADA Node PC (usually an RS232C port). This number must match the actual COM1, COM2, etc. on the SCADA node.

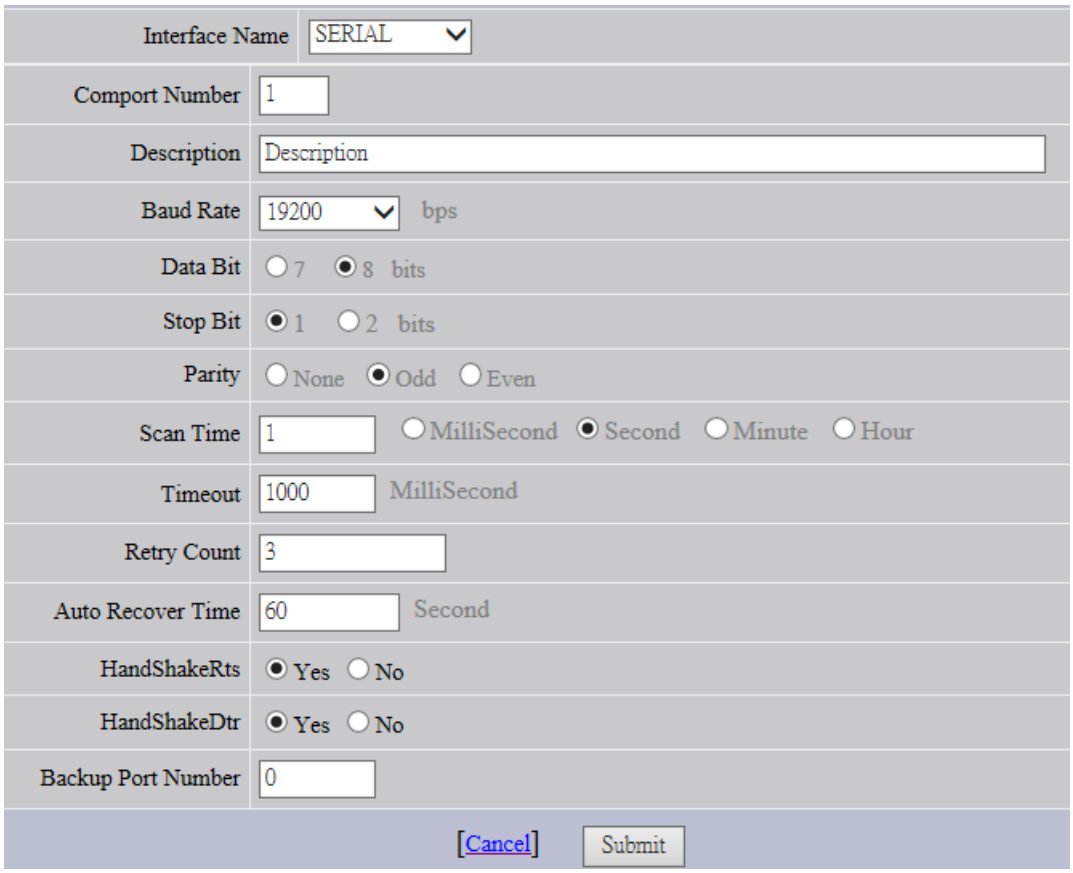

Figure 2.1 Serial Comport properties

2.2 Device Setting

Add your device to the Serial Port, by selecting the Serial Port you have configured, then select Add Device. Or, to modify an existing Device, Select Device Properties

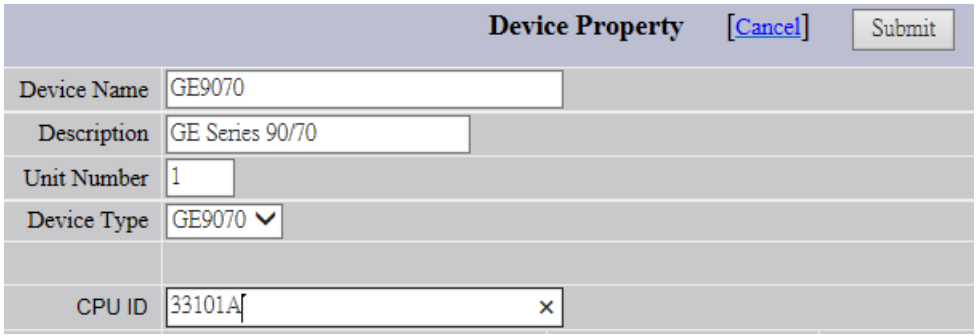

Figure 2.2 GESNPDrv device properties

2.3 Tag property

In the WebAccess SCADA, there are two data types for the analog and discrete tags. The below screenshots are the samples for the tag property setting for the GE Fanuc 90-70.

Analog tag property

This example is to configure a Tag that reads an Analog Input from the AI range of registers (Address AI0001).

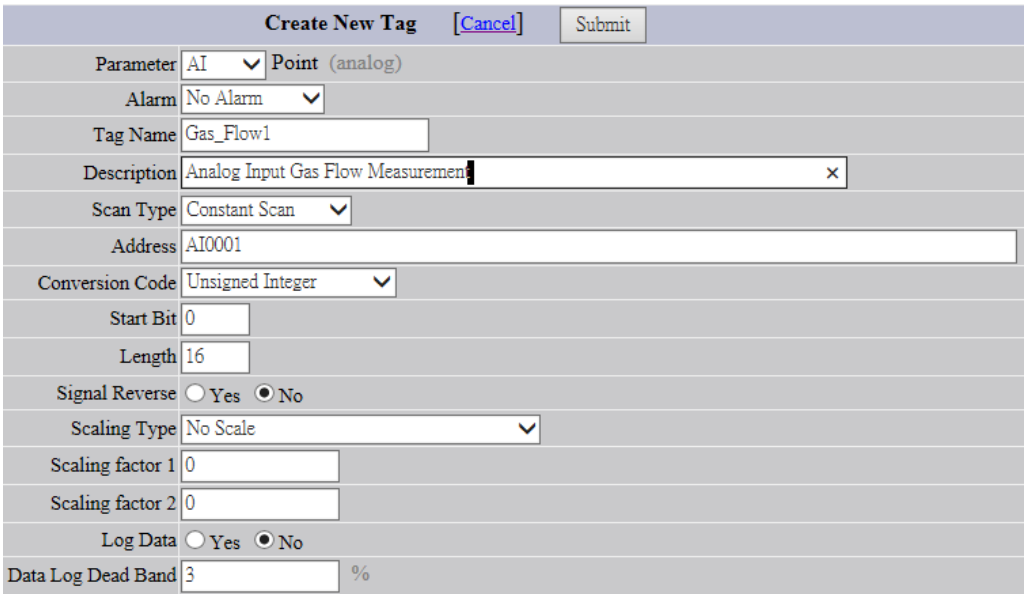

Figure 2.3 The analog tag property

Discrete tag property

This example is to configure a Tag that writes a Digital Output (Address Q0001)

Figure 2.4 The discrete tag property

2.4 Parameter List

Parameter	Date Type	Description	Length	Address format	Read/Write
AI	analog	Analog Input	16	AI0001	Read Only
AQ	analog	Analog Output	16	AQ0001	Read Write
R	analog	Register	16	R0001	Read Write
G	discrete	Global Data	1	G0001	Read Write
I	discrete	Discrete Input	1	I0001	Read Write
M	discrete	Discrete Internal	1	M0001	Read Write
Q	discrete	Discrete Output	1	Q0001	Read Write

S	discrete	S Discrete	1	S0001	Read Write
SA	discrete	SA Discrete	1	SA0001	Read Write
SB	discrete	SB Discrete	1	SB0001	Read Write
SC	discrete	SC Discrete	1	SC0001	Read Write
T	discrete	Discrete Temporary	1	T0001	Read Write

3. Error Code

8100 Open port failed

8900 Incorrect message type received