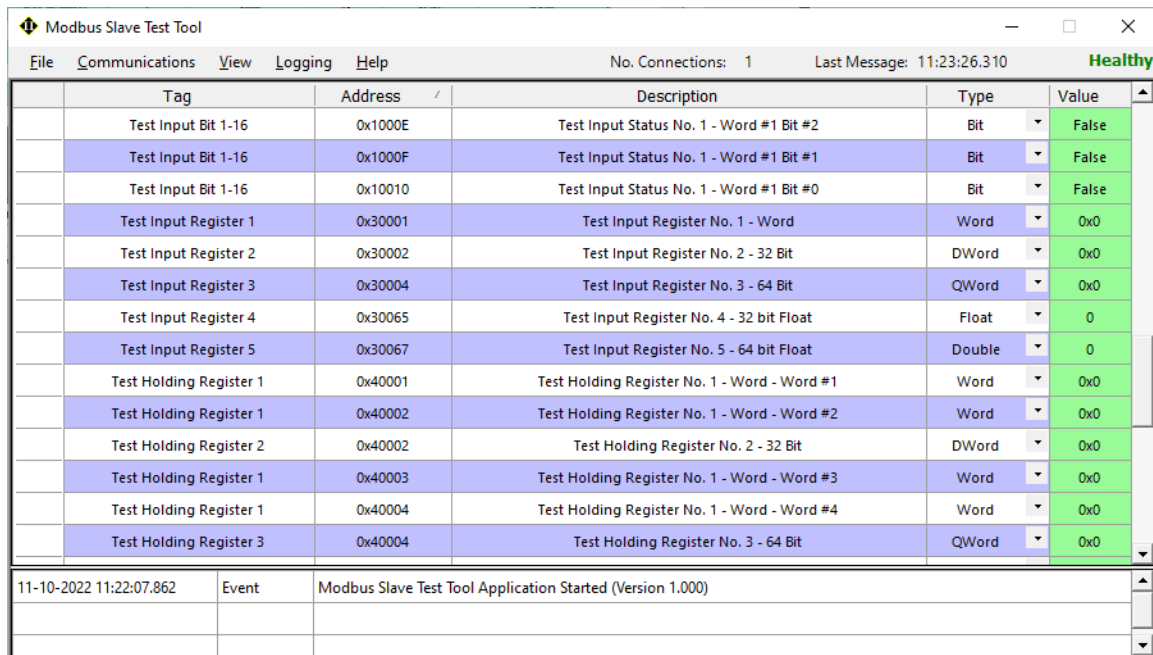


# Intelligent Information: Modbus Slave Test Tool



Tag	Address	Description	Type	Value
Test Input Bit 1-16	0x1000E	Test Input Status No. 1 - Word #1 Bit #2	Bit	False
Test Input Bit 1-16	0x1000F	Test Input Status No. 1 - Word #1 Bit #1	Bit	False
Test Input Bit 1-16	0x10010	Test Input Status No. 1 - Word #1 Bit #0	Bit	False
Test Input Register 1	0x30001	Test Input Register No. 1 - Word	Word	0x0
Test Input Register 2	0x30002	Test Input Register No. 2 - 32 Bit	DWord	0x0
Test Input Register 3	0x30004	Test Input Register No. 3 - 64 Bit	QWord	0x0
Test Input Register 4	0x30065	Test Input Register No. 4 - 32 bit Float	Float	0
Test Input Register 5	0x30067	Test Input Register No. 5 - 64 bit Float	Double	0
Test Holding Register 1	0x40001	Test Holding Register No. 1 - Word - Word #1	Word	0x0
Test Holding Register 1	0x40002	Test Holding Register No. 1 - Word - Word #2	Word	0x0
Test Holding Register 2	0x40002	Test Holding Register No. 2 - 32 Bit	DWord	0x0
Test Holding Register 1	0x40003	Test Holding Register No. 1 - Word - Word #3	Word	0x0
Test Holding Register 1	0x40004	Test Holding Register No. 1 - Word - Word #4	Word	0x0
Test Holding Register 3	0x40004	Test Holding Register No. 3 - 64 Bit	QWord	0x0

11-10-2022 11:22:07.862	Event	Modbus Slave Test Tool Application Started (Version 1.000)

*Modbus Slave Test Tool Application*

## Overview

This application was part of a research project to determine if a Rapid Application Development environment (e.g., .NET) could be used to develop communication gateways.

Using interrupts and events the development environment proved suitable for communication gateways and these drivers could be written in a very rapid timescale. As part of this project two test tools were developed; Modbus Master and Modbus Slave.

The Modbus Slave test tool was developed to determine the capabilities of a 'foreign' Modbus Master device. Scan cycle times, bit order, word order, support of multi-word register formats and exception support can all be investigated.

This tool supports both serial and Ethernet communication and all configuration files, for both communication and Modbus message configuration, can be saved and re-loaded.

To download the demo version, click [here](#).

## Main Features

- Bits can be forced to determine if the Master device uses least (LSB) or most (MSB) order
- Word order within multi-word register formats can be swapped to determine order in Master device
- For bit addresses, byte or word alignment can be forced to determine if required by Master device
- Register values can be set to determine the word order within multi-word register formats and if they are supported e.g., 32 and 64-bit signed and unsigned integers, 32 and 64-bit floating point
- Exception responses can be forced to check if they are supported
- Message diagnostics and data can be logged for further analysis

