

FancyModbus Library & Tools

Overview

fancymodbus is a wrapper library for the libmodbus library, which can be found under <http://libmodbus.org/>

The modbus protocol is an industry standard protocol for controlling switchboards over serial lines or TCP. The standard is maintained at <http://www.modbus.org/>

Location of Packages

SVN: <svn+ssh://fancylibs@svn.clazzes.org/fancylibs/trunk/fancymodbus>

repositories:

- <http://deb.clazzes.org/debian/sources.list.d/wheezy/wheezy-fancylibs-3.list>
- <http://deb.clazzes.org/debian/sources.list.d/jessie/jessie-fancylibs-3.list>

Installation

Tools

These packages are standalone programs to deal with the modbus protocol:

Installing the fancymodbus tools and simulator

```
apt-get install fancymodbus-tool fancymodbus-simulator
```

Library only

If you only need the library, install the following packages:

Install fancymodbus shared library components

```
apt-get install libfancymodbus1 libfancymodbus
```

Debug symbols

All packages have a counterpart containing debug symbols for gdb:

Install fancymodbus debug symbols

```
fancymodbus-tool-dbg fancymodbus-simulator-dbg libfancymodbus-dbg
```

Using the command line tool

Read Output Bits

The fancymodbus-tool client lets you read and write DO output bits/coils using the following commands:

```
fancymodbus-client writeDO 127.0.0.1:1502 1 0x105 1 0 1 0 1  
fancymodbus-client readDO 127.0.0.1:1502 1 0x105 5
```

These example reads and writes 5 output bits starting with address 0x105.

If you do not want to connect to the locally listening fancymodbus-simulator, you need to specify the IP of a real device like 192.168.127.254:502.

Configuring fancymodbus-simulator

Edit `/etc/fancymodbus/simulator.conf` and change the listen port or the number of registers.

For the most part you should not need to edit the default configuration, which listens to 127.0.0.1:1502 and provides for 512 registers of each kind.

Activate the daemon in `/etc/default/fancymodbus-simulator`

Activate fancymodbus-simulator in `/etc/default/fancymodbus-simulator`

```
# set to yes if you want automatic starting
FANCYMODBUS_SIMULATOR_START="yes"
```

Start the daemon

Starting the fancymodbus-simulator daemon

```
/etc/init.d/fancymodbus-simulator start
```

The daemon logs its diagnostics to `/var/log/syslog`