GeDaD MCS

Marine Control Server

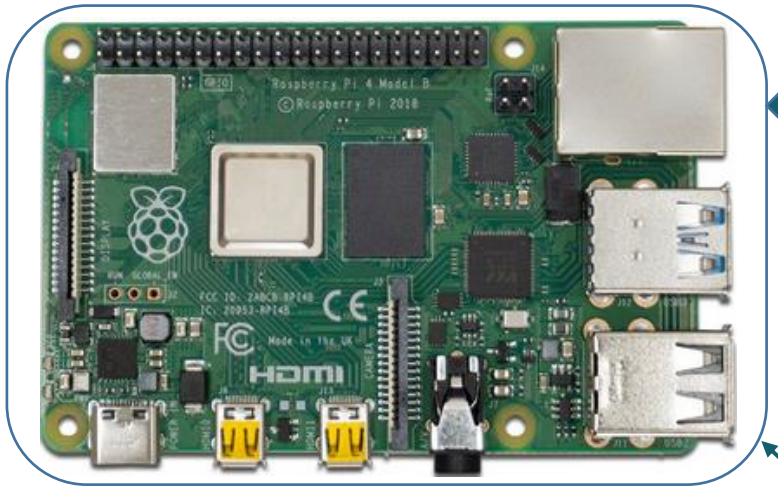
Installation guide

GeDaD
Gersmann Development and Design

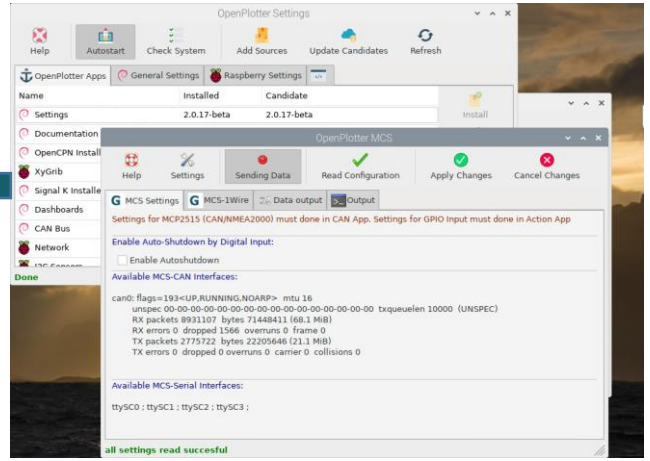
www.GeDaD.de

Software scheme

Raspberry



configuration



communication

40 Pol Cable

MCS-board

sensors, actuators // GPS AIS WIND etc.

Supported by:

OPENPLOTTER

“The open-source sailing platform for ARM computers”
Openplotter is a great project and is made fully open source. Openplotter handles and configures all necessary resources of the Pi that you need to integrate different Sensors. An App is available witch supports the MCS Board completely so all effort to use the board is done by a few clicks.
Openplotter can handle furthermore features for a great experience with marine application.
See further Information: http://sailoog.com/openplotter

Supported by:

Signal K

The Open Marine Data Standard

A Free and Open Source universal marine data exchange format
“Signal K is a modern and open data format for marine use. Built on standard web technologies including JSON, WebSockets and HTTP, Signal K provides a method for sharing information in a way that is friendly to WiFi, cellphones, tablets and the Internet. A format available to everyone, where anyone can contribute, Signal K is the first truly open data format for the marine industry and is set to revolutionize how we consume and interact with data on boats.”
For more Information see: http://signalk.org/

www.gedad.de

First steps

1. Install openplotter Img.:

See Open Plotter Docs: https://openplotter.readthedocs.io/en/latest/getting_started/downloading.html

2. After installing Openplotter, install the latest MCS-App-deb package: (Supported all Raspberry´s with „Buster“)

There are 2 ways to do this:

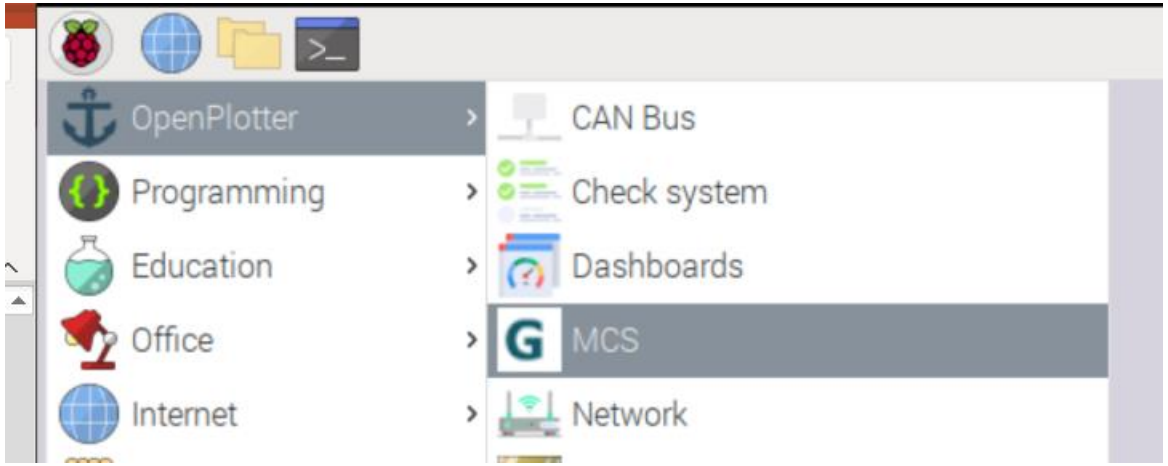
1. Download the latest .deb Package on cloudsmith:
   https://cloudsmith.io/~thomas-gersmann/repos/openplotter-mcs/groups/
   After downloading, install the package on your Pi.
2. Open your terminal and type:

   wget https://dl.cloudsmith.io/public/thomas-gersmann/openplotter-mcs/deb/debian/pool/buster/main/o/op/openplotter-mcs_x.x.x-stable_all.deb
   sudo dpkg -i openplotter-mcs_x.x.x-dev_all.deb
   The x.x.x is the actual Version. For example replace them wit 2.1.3

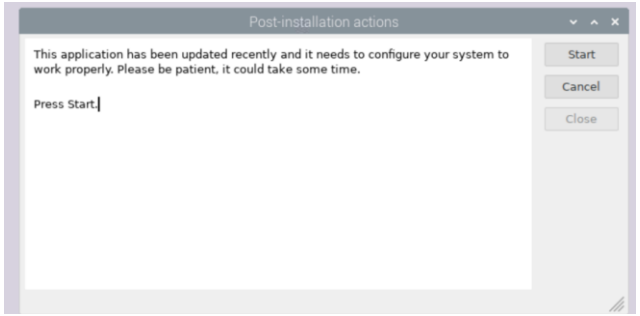
3. Yeah, that's it. You have installed the app. If you have any problems, let me know

First steps

4. After installing, you find the app in the Main Menu on your Raspbian System. Here it depends on how you installed Open Plotter where it is. Either under OpenPlotter or under other. In my case under OpenPlotter:

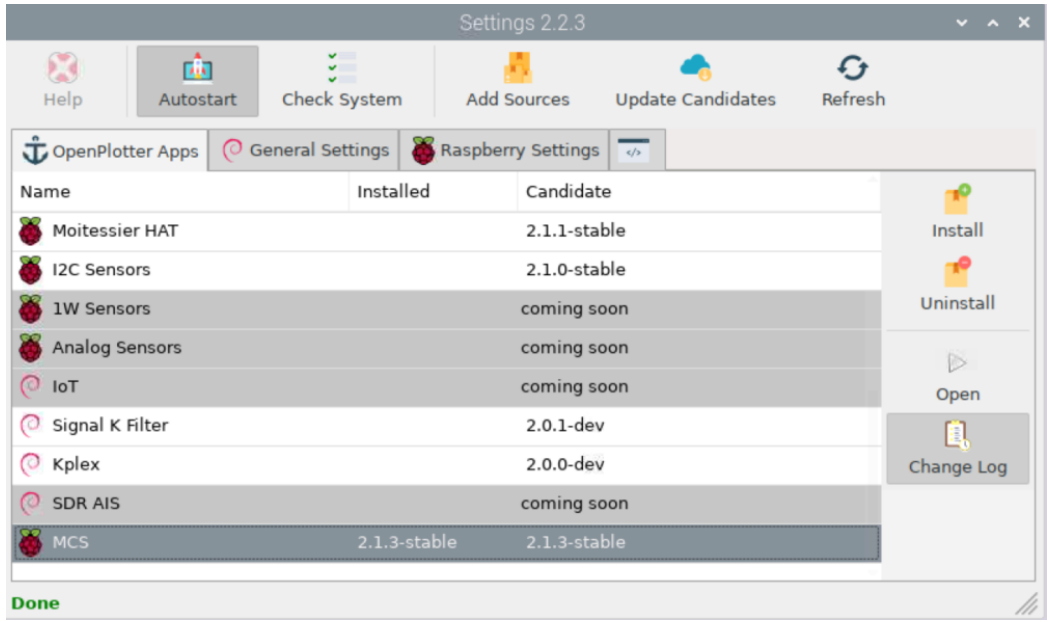


4. Start the MCS App. At the first start you get a window for the Post-installation. Klick on Start:

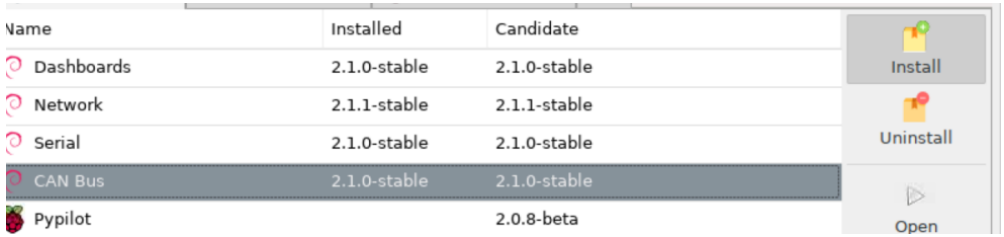


First steps

6. After finishing you can start the Openplotter Settings App. You find the MCS App also here now:

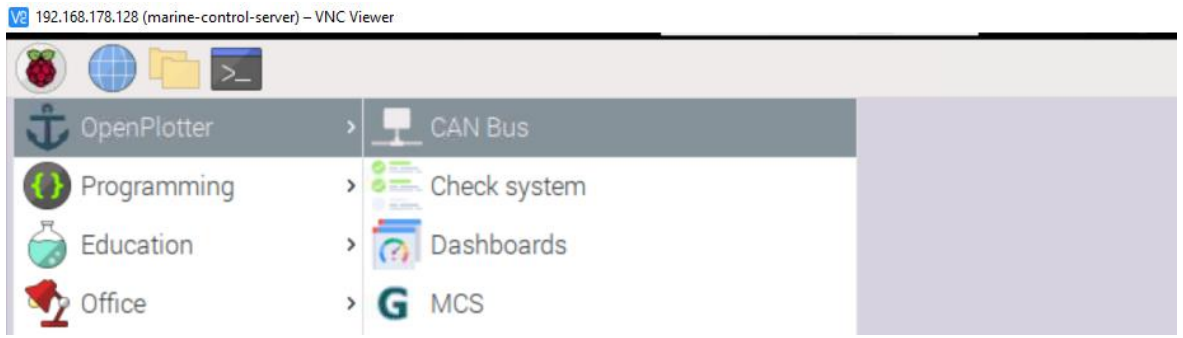


7. Install the „CAN Bus“ App for the CAN Interface on the Board. For this, select the CAN Bus App and klick install.

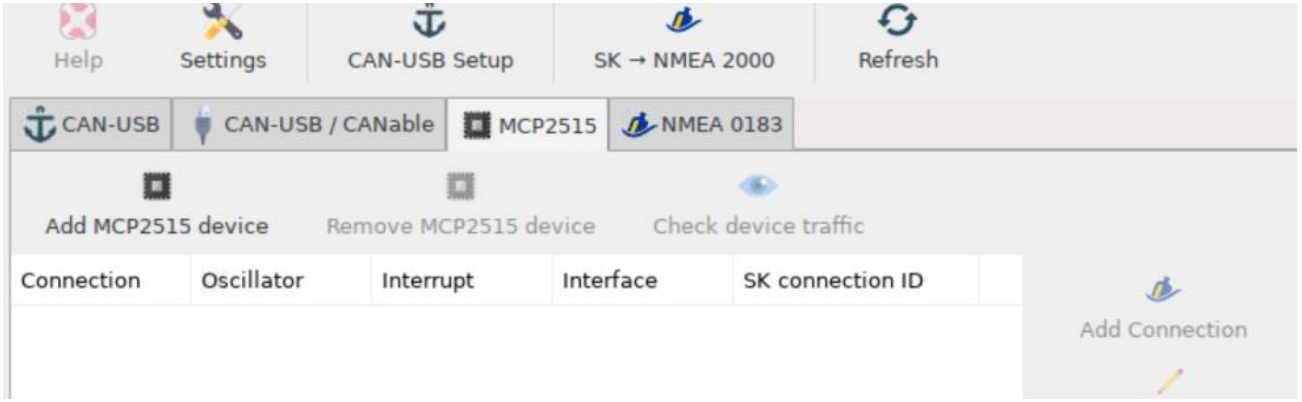


First steps

8. Now Start the CAN Bus App

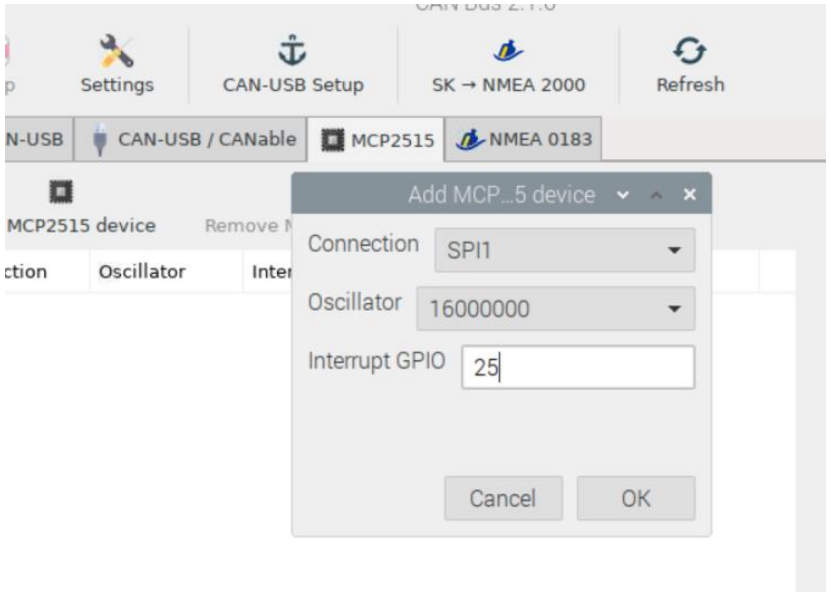


9. Select the MCP2515 tab and choose „Add MCP2515 device“:



First steps

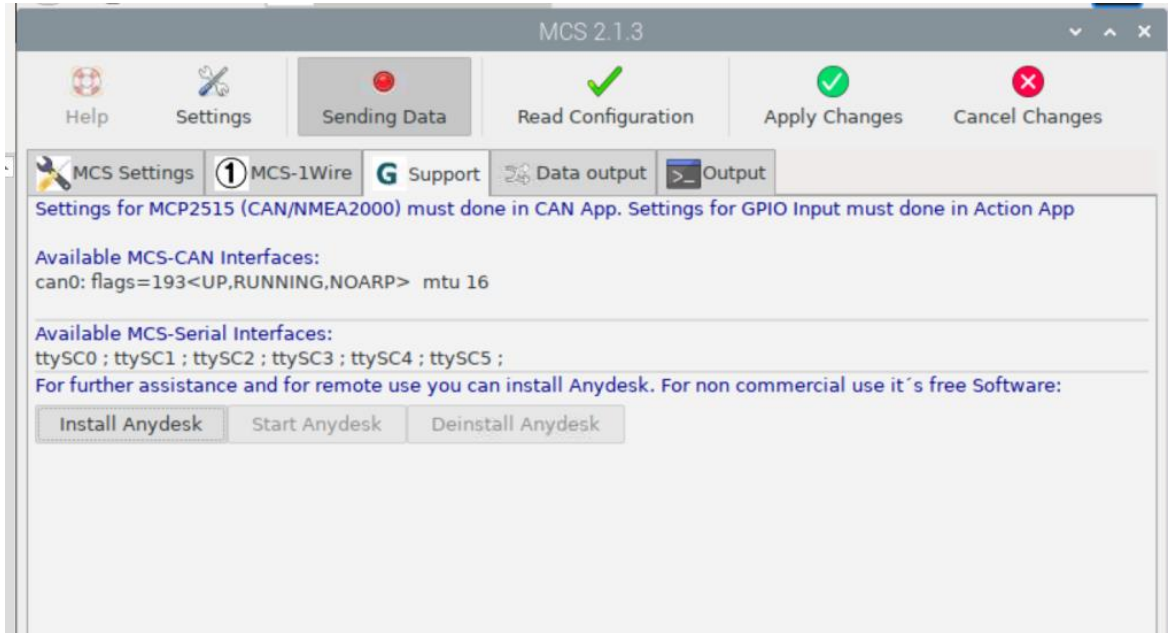
10. Select SPI1, 16000000 and Interrupt Pin 25. Klick OK:



11. Now Restart your Pi!!!!

First steps

12. Now all is ready, you can start the MCS App. Go to the Support tab. Here should now be 1 CAN interface (can0) and 6 serial Interfaces (ttySC0-ttySC5)



13. If that´s not the case, somthing went wrong. Let me know or do the steps again…. All Updates can be done by the Openplotter Settings app.