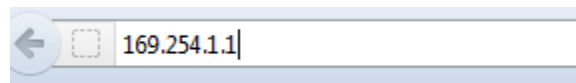
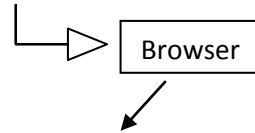


GPS settings and recording data

1. Set the GPS Trimble IP, it must be done in the laptop. See *Edit connexions* in your laptop (It's already done, but just in case...). Set the IPs as follows:

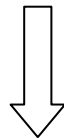
Addresses	Netmask	Gateway	Name (e.g.)
169.254.1.254	255.255.255.0	169.254.1.1	GNSS_1
Make it up!	Standard	IP address	



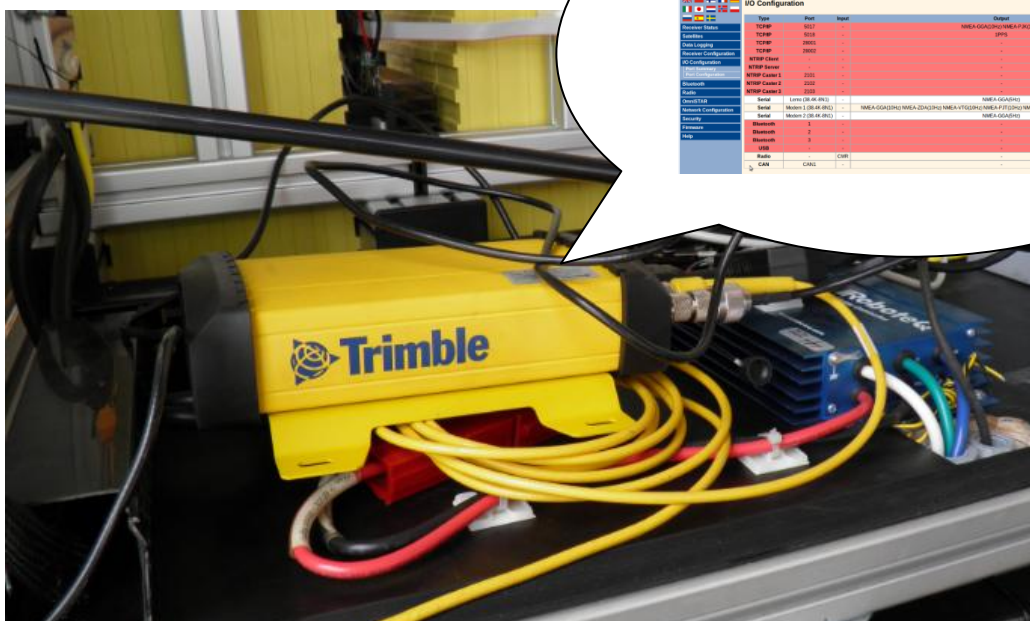
An username and a password will be required:

Username	admin
Password	password

(Standard configuration for Trimble)



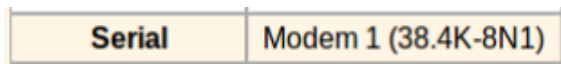
It goes to the website inside the receiver Trimble



- Now the parameters can be set up. See *I/O Configuration*

Type	Port	Input	Output
TCP/IP	5017	-	NMEA-GGA(10Hz) NMEA-PJK(10Hz)
TCP/IP	5018	-	1PPS
TCP/IP	28001	-	-
TCP/IP	28002	-	-
NTRIP Client	-	-	-
NTRIP Server	-	-	-
NTRIP Caster 1	2101	-	-
NTRIP Caster 2	2102	-	-
NTRIP Caster 3	2103	-	-
Serial	Lemo (38.4K-8N1)	-	NMEA-GGA(5Hz)
Serial	Modem 1 (38.4K-8N1)	-	NMEA-GGA(10Hz) NMEA-ZDA(10Hz) NMEA-VTG(10Hz) NMEA-PJT(10Hz) NMEA-GSV(2Hz) NMEA-HDT(10Hz) NMEA-GSA(10Hz)
Serial	Modem 2 (38.4K-8N1)	-	NMEA-GGA(5Hz)
Bluetooth	1	-	-
Bluetooth	2	-	-
Bluetooth	3	-	-
USB	-	-	-
Radio	-	CMR	-
CAN	CAN1	-	-

- Click on Serial / Modem 1 (38.4k – 8N1)



- And now the serial port and the different NMEA messages can be set up:

I/O Configuration

Serial2 / Modem 1 NMEA

Serial Port Setup

Baud: 38,400 Parity: N Flow: Disabled

Input/Output

Output:NMEA-GGA (10 Hz), Output:NMEA-VTG (10 Hz), Output:NMEA-PJT (10 Hz), Output:NMEA-HDT (10 Hz), Output:NMEA-GSA (10 Hz)

NMEA

AVR: Off BPQ: Off DG: Off DP: Off

GBS: Off GGA: 10 Hz GGK: Off GLL: Off

GNS: Off GRS: Off GSA: 10 Hz GST: Off

GSV: 2 Hz HDT: 10 Hz LLQ: Off PJK: Off

PJT: 10 Hz RMC: Off ROT: Off VGK: Off

VHD: Off VTG: 10 Hz ZDA: 10 Hz

Report max DQI=2 in NMEA GGA string
 Report max correction age 9 sec in NMEA GGA string
 Report extended information in NMEA GGA and RMC strings

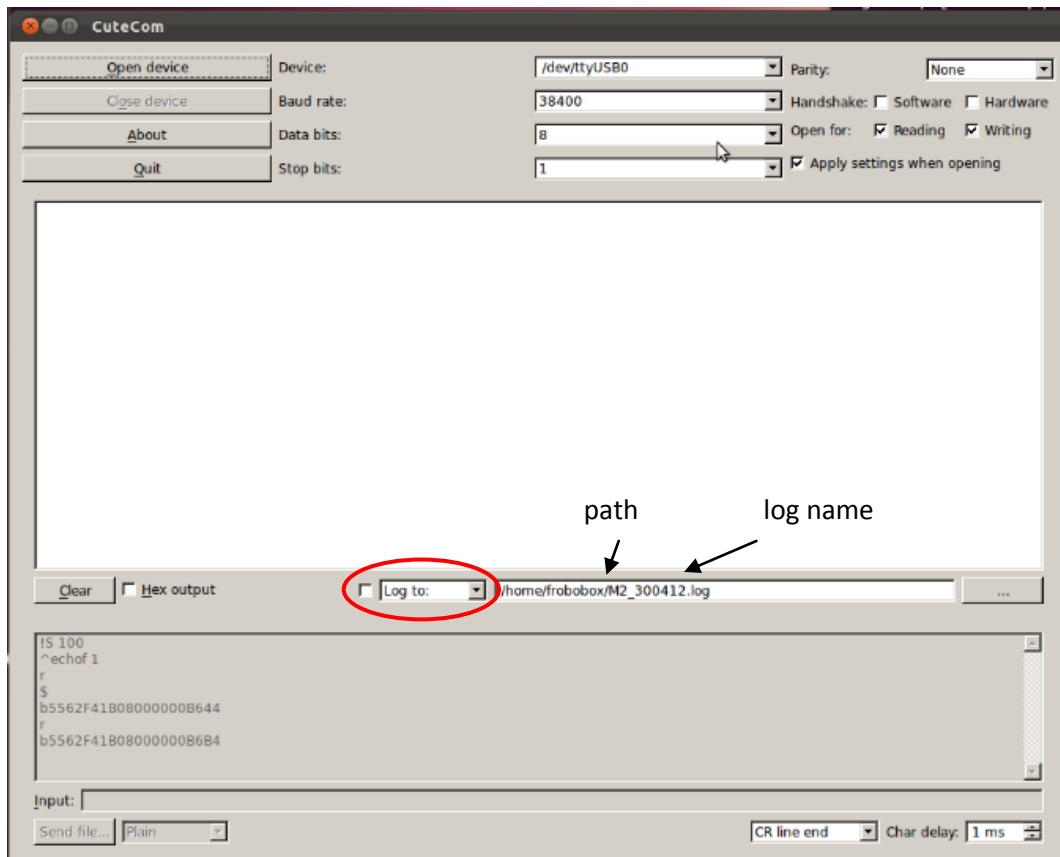
OK

Achtung, Achtung!!! No matter if 10 Hz, 5 Hz or 2 Hz have been entered because the GPS only register data at 1 Hz

5. Once all the parameters have been set up, now the program CuteCom (*it runs in the grey box*) for reading and storing data can be launched. A new terminal has to be opened, and enter: `ssh -X frobobox@192.168.0.2` and next enter: `cutecom`

```
frobobox@frobobox:~$ cutecom
```

6. And immediately after a new dialog box pops up.



Open device: it starts recording and storing data on the path defined by the user. When storing data there are two options (see red circle):

- Log to (it overwrites data)
- Append to (it keeps going from the last string recorded)

7. Once the data have been stored, the log file must be transfer from the Grey box to the laptop. In the terminal the following commands have to be used:
`scp XXXXX.log user@192.168.0.3 : Documents`
and the user's password for the laptop.

In this case the log file will be stored in the folder Documents

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```
frobobox@frobobox:~$ scp M1_300412.log hugo@192.168.0.3:Documents  
hugo@192.168.0.3's password:
```

8. If everything works, the file will be transferred to the Documents folder, and a message appears when it succeeded:

```
frobobox@frobobox:~$ scp M1_300412.log hugo@192.168.0.3:Documents  
hugo@192.168.0.3's password:  
M1_300412.log 100% 117KB 117.2KB/s 00:00  
frobobox@frobobox:~$
```